



owner.lincoln.com



lincolncanada.com



February 2016  
First Printing  
Owner's Manual  
Lincoln MKC  
Litho in U.S.A.

HJ7J19A321 AA



2017 MKC Owner's Manual

2017 MKC



Owner's Manual



The information contained in this publication was correct at the time of going to print. In the interest of continuous development, we reserve the right to change specifications, design or equipment at any time without notice or obligation. No part of this publication may be reproduced, transmitted, stored in a retrieval system or translated into any language in any form by any means without our written permission. Errors and omissions excepted.

© Ford Motor Company 2016

All rights reserved.

Part Number: 01/2016 20160119162841



# Table of Contents

## Introduction

About This Manual.....	7
Symbols Glossary.....	7
Data Recording.....	9
California Proposition 65.....	11
Perchlorate.....	12
Lincoln Automotive Financial Services.....	12
Replacement Parts Recommendation.....	12
Special Notices.....	13
Mobile Communications Equipment.....	14
Export Unique Options.....	14

## Environment

Protecting the Environment.....	16
---------------------------------	----

## Child Safety

General Information.....	17
Installing Child Restraints.....	19
Booster Seats.....	25
Child Restraint Positioning.....	28
Child Safety Locks.....	29

## Seatbelts

Principle of Operation.....	31
Fastening the Seatbelts.....	32
Seatbelt Height Adjustment.....	35
Seatbelt Warning Lamp and Indicator Chime.....	35
Seatbelt Reminder.....	36
Child Restraint and Seatbelt Maintenance.....	38
Seatbelt Extension.....	39

## Personal Safety System™

Personal Safety System™.....	40
------------------------------	----

## Supplementary Restraints System

Principle of Operation.....	41
Driver and Passenger Airbags.....	42
Front Passenger Sensing System.....	44
Side Airbags.....	47
Driver Knee Airbag.....	48
Safety Canopy™.....	48
Crash Sensors and Airbag Indicator.....	49

Airbag Disposal.....	51
----------------------	----

## Keys and Remote Controls

General Information on Radio Frequencies.....	52
Remote Control.....	53
Replacing a Lost Key or Remote Control.....	57

## MyKey™

Principle of Operation.....	58
Creating a MyKey.....	59
Clearing All MyKeys.....	60
Checking MyKey System Status.....	60
Using MyKey With Remote Start Systems.....	61
MyKey Troubleshooting.....	61

## Locks

Locking and Unlocking.....	63
Power Liftgate.....	68
Keyless Entry.....	71

# Table of Contents

## Security

Passive Anti-Theft System.....	75
Anti-Theft Alarm.....	76

## Steering Wheel

Adjusting the Steering Wheel.....	78
Audio Control.....	79
Voice Control.....	80
Cruise Control.....	80
Information Display Control.....	80
Heated Steering Wheel.....	81

## Wipers and Washers

Windshield Wipers.....	82
Autowipers.....	83
Windshield Washers.....	84
Rear Window Wiper and Washers.....	84

## Lighting

General Information.....	86
Lighting Control.....	86
Autolamps.....	87
Instrument Lighting Dimmer.....	88

Headlamp Exit Delay.....	89
Daytime Running Lamps.....	89
Automatic High Beam Control.....	90
Direction Indicators.....	91
Welcome Lighting.....	91
Interior Lamps.....	92
Ambient Lighting.....	92

## Windows and Mirrors

Power Windows.....	93
Global Opening and Closing.....	94
Exterior Mirrors.....	94
Interior Mirror.....	97
Sun Visors.....	98
Moonroof.....	98

## Instrument Cluster

Gauges.....	101
Warning Lamps and Indicators.....	103
Audible Warnings and Indicators.....	107

## Information Displays

General Information.....	108
--------------------------	-----

Information Messages.....	114
---------------------------	-----

## Climate Control

Automatic Climate Control.....	133
Hints on Controlling the Interior Climate.....	135
Heated Windows and Mirrors.....	136
Cabin Air Filter.....	137
Remote Start.....	137

## Seats

Sitting in the Correct Position.....	138
Head Restraints.....	138
Power Seats.....	141
Memory Function.....	143
Rear Seats.....	144
Heated Seats.....	145
Climate Controlled Seats.....	146
Rear Seat Armrest.....	147

## Universal Garage Door Opener

Universal Garage Door Opener.....	148
-----------------------------------	-----

# Table of Contents

---

## **Auxiliary Power Points**

Auxiliary Power Points.....153

## **Storage Compartments**

Center Console.....155

Overhead Console.....155

Ticket Holders.....155

## **Starting and Stopping the Engine**

General Information.....156

Keyless Starting.....156

Starting a Gasoline Engine.....157

Engine Block Heater.....160

## **Unique Driving Characteristics**

Auto-Start-Stop.....161

## **Fuel and Refueling**

Safety Precautions.....164

Fuel Quality.....165

Fuel Filler Funnel Location.....166

Running Out of Fuel.....166

Refueling.....167

Fuel Consumption.....169

Emission Control System.....170

## **Transmission**

Automatic Transmission.....173

## **All-Wheel Drive**

Using All-Wheel Drive.....179

## **Brakes**

General Information.....184

Hints on Driving With Anti-Lock Brakes.....184

Electric Parking Brake.....185

Auto Hold.....187

## **Traction Control**

Principle of Operation.....190

Using Traction Control.....190

## **Stability Control**

Principle of Operation.....192

Using Stability Control.....193

## **Parking Aids**

Principle of Operation.....194

Rear Parking Aid.....195

Front Parking Aid.....195

Active Park Assist - Vehicles With: Active Park Assist.....196

Rear View Camera.....204

## **Cruise Control**

Principle of Operation.....208

Using Cruise Control.....208

Using Adaptive Cruise Control.....209

## **Driving Aids**

Driver Alert.....217

Lane Keeping System.....218

Blind Spot Information System.....223

Cross Traffic Alert.....225

Steering.....229

Collision Warning System.....230

Drive Control.....233

# Table of Contents

---

## Load Carrying

Rear Under Floor Storage.....	235
Luggage Covers.....	235
Roof Racks and Load Carriers.....	235
Load Limit.....	236

## Towing

Towing a Trailer.....	241
Trailer Sway Control.....	242
Recommended Towing Weights.....	242
Essential Towing Checks.....	245
Towing the Vehicle on Four Wheels.....	247

## Driving Hints

Breaking-In.....	249
Economical Driving.....	249
Driving Through Water.....	250
Floor Mats.....	250

## Roadside Emergencies

Roadside Assistance.....	252
Hazard Warning Flashers.....	253
Fuel Shutoff.....	253

Jump Starting the Vehicle.....	254
Post-Crash Alert System.....	256
Transporting the Vehicle.....	257

## Customer Assistance

Getting the Services You Need.....	259
In California (U.S. Only).....	260
The Better Business Bureau (BBB) Auto Line Program (U.S. Only).....	261
Utilizing the Mediation/Arbitration Program (Canada Only).....	262
Getting Assistance Outside the U.S. and Canada.....	263
Ordering Additional Owner's Literature.....	264
Reporting Safety Defects (U.S. Only).....	265
Reporting Safety Defects (Canada Only).....	265

## Fuses

Fuse Specification Chart.....	267
Changing a Fuse.....	283

## Maintenance

General Information.....	286
Opening and Closing the Hood.....	286
Under Hood Overview.....	288
Engine Oil Dipstick.....	290
Engine Oil Check.....	290
Oil Change Indicator Reset.....	291
Engine Coolant Check.....	291
Automatic Transmission Fluid Check.....	295
Brake Fluid Check.....	295
Washer Fluid Check.....	296
Fuel Filter.....	296
Changing the 12V Battery.....	296
Checking the Wiper Blades.....	298
Changing the Wiper Blades.....	298
Adjusting the Headlamps.....	299
Removing a Headlamp.....	300
Changing a Bulb.....	300
Bulb Specification Chart.....	301
Changing the Engine Air Filter.....	303

## Vehicle Care

General Information.....	305
--------------------------	-----

# Table of Contents

Cleaning Products.....	305
Cleaning the Exterior.....	306
Waxing.....	307
Cleaning the Engine.....	307
Cleaning the Windows and Wiper Blades.....	308
Cleaning the Interior.....	308
Cleaning the Instrument Panel and Instrument Cluster Lens.....	310
Cleaning Leather Seats.....	311
Repairing Minor Paint Damage.....	311
Cleaning the Alloy Wheels.....	312
Vehicle Storage.....	312

## Wheels and Tires

General Information.....	315
Tire Care.....	317
Using Snow Chains.....	331
Tire Pressure Monitoring System.....	332
Changing a Road Wheel.....	336
Technical Specifications.....	342

## Capacities and Specifications

Engine Specifications - 2.0L EcoBoost™.....	344
Engine Specifications - 2.3L EcoBoost™.....	345
Motorcraft Parts - 2.0L EcoBoost™.....	346
Motorcraft Parts - 2.3L EcoBoost™.....	347
Vehicle Identification Number.....	348
Vehicle Certification Label.....	348
Transmission Code Designation.....	349
Capacities and Specifications - 2.0L EcoBoost™.....	350
Capacities and Specifications - 2.3L EcoBoost™.....	356

## Audio System

General Information.....	362
Audio Unit - Vehicles With: Premium AM/ FM/CD.....	363
Media Hub.....	365

## SYNC™ 3

General Information.....	366
Home Screen.....	384

Using Voice Recognition.....	385
Entertainment.....	396
Climate.....	409
Phone.....	413
Navigation.....	420
Apps.....	431
Settings.....	434
SYNC™ 3 Troubleshooting.....	451

## Accessories

Accessories.....	468
------------------	-----

## Lincoln Protect

Lincoln Protect.....	470
----------------------	-----

## Scheduled Maintenance

General Maintenance Information.....	472
Normal Scheduled Maintenance.....	476
Special Operating Conditions Scheduled Maintenance.....	480
Scheduled Maintenance Record.....	484



# Table of Contents

---

## **Appendices**

End User License Agreement.....	504
---------------------------------	-----

# Introduction

## ABOUT THIS MANUAL

Thank you for choosing Lincoln. We recommend that you take some time to get to know your vehicle by reading this manual. The more that you know about it, the greater the safety and pleasure you will get from driving it.

### WARNING



Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

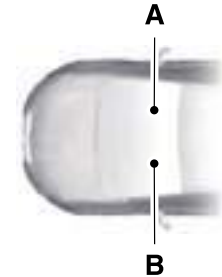
**Note:** *This manual describes product features and options available throughout the range of available models, sometimes even before they are generally available. It may describe options not fitted to the vehicle you have purchased.*

**Note:** *Some of the illustrations in this manual may show features as used in different models, so may appear different to you on your vehicle.*

**Note:** *Always use and operate your vehicle in line with all applicable laws and regulations.*

**Note:** *Pass on this manual when selling your vehicle. It is an integral part of your vehicle.*

This manual may qualify the location of a component as left-hand side or right-hand side. The side is determined when facing forward in the seat.



E154903

- A Right-hand side.
- B Left-hand side.

## SYMBOLS GLOSSARY

These are some of the symbols you may see on your vehicle.



Safety alert



See Owner's Manual

# Introduction



Air conditioning system



Anti-lock braking system



Avoid smoking, flames or sparks



Battery



Battery acid



Brake fluid - non petroleum based



Brake system



Cabin air filter



Check fuel cap



Child safety door lock or unlock



Child seat lower anchor



Child seat tether anchor



Cruise control



Do not open when hot



Engine air filter



Engine coolant



Engine coolant temperature



Engine oil



Explosive gas



Fan warning



Fasten seatbelt



Front airbag



Front fog lamps



Fuel pump reset



Fuse compartment



Hazard warning flashers



Heated rear window

# Introduction



Heated windshield



Interior luggage compartment release



Jack



Keep out of reach of children



Lighting control



Low tire pressure warning



Maintain correct fluid level



Note operating instructions



Panic alarm



Parking aid



Parking brake



Power steering fluid



Power windows front/rear



Power window lockout



Service engine soon



Side airbag



Shield the eyes



Stability control



Windshield wash and wipe

## DATA RECORDING

### Service Data Recording

Service data recorders in your vehicle are capable of collecting and storing diagnostic information about your vehicle. This potentially includes information about the performance or status of various systems and modules in the vehicle, such as engine, throttle, steering or brake systems. In order to properly diagnose and service your vehicle, Ford Motor Company, Ford of Canada, and service and repair facilities may access or share among them vehicle diagnostic information received through a direct connection to your vehicle when diagnosing or servicing your vehicle. Additionally, when your vehicle is in for service or repair, Ford Motor Company, Ford of Canada, and service and repair facilities may access or share among them data for vehicle improvement purposes. For U.S. only (if equipped), if you choose to use the SYNC

# Introduction

---

Vehicle Health Report, you consent that certain diagnostic information may also be accessed electronically by Ford Motor Company and Ford authorized service facilities, and that the diagnostic information may be used for any purpose. See **SYNC™ 3** (page 366).

## Event Data Recording

This vehicle is equipped with an event data recorder. The main purpose of an event data recorder is to record, in certain crash or near crash-like situations, such as an airbag deployment or hitting a road obstacle; this data will assist in understanding how a vehicle's systems performed. The event data recorder is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less.

The event data recorder in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was depressing the accelerator and/or the brake pedal; and
- How fast the vehicle was traveling; and
- Where the driver was positioning the steering wheel.

This data can help provide a better understanding of the circumstances in which crashes and injuries occur.

**Note:** *Event data recorder data is recorded by your vehicle only if a non-trivial crash situation occurs; no data is recorded by the event data recorder under normal driving conditions and no personal data or information (e.g., name, gender, age, and crash location) is recorded (see limitations regarding 911 Assist and Traffic, directions and Information privacy below). However, parties, such as law enforcement, could combine the event data recorder data with the type of personally identifying data routinely acquired during a crash investigation.*

To read data recorded by an event data recorder, special equipment is required, and access to the vehicle or the event data recorder is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have such special equipment, can read the information if they have access to the vehicle or the event data recorder. Ford Motor Company and Ford of Canada do not access event data recorder information without obtaining consent, unless pursuant to court order or

# Introduction

where required by law enforcement, other government authorities or other third parties acting with lawful authority. Other parties may seek to access the information independently of Ford Motor Company and Ford of Canada.

**Note:** *Including to the extent that any law pertaining to Event Data Recorders applies to SYNC or its features, please note the following: Once 911 Assist (if equipped) is enabled (set ON), 911 Assist may, through any paired and connected cell phone, disclose to emergency services that the vehicle has been in a crash involving the deployment of an airbag or, in certain vehicles, the activation of the fuel pump shut-off. Certain versions or updates to 911 Assist may also be capable of being used to electronically or verbally provide to 911 operators the vehicle location (such as latitude and longitude), and/or other details about the vehicle or crash or personal information about the occupants to assist 911 operators to provide the most appropriate emergency services. If you do not want to disclose this information, do not activate the 911 Assist feature. See SYNC™ 3 (page 366).*

Additionally, when you connect to Traffic, Directions and Information (if equipped, U.S. only), the service uses GPS technology and advanced vehicle sensors to collect the vehicle's current location, travel direction, and speed ("vehicle travel information"), only to help provide you with the directions, traffic reports, or business searches that you request. If you do not want Ford or its vendors to receive this information, do not activate the service. For more information, see Traffic, Directions and Information, Terms and Conditions. See SYNC™ 3 (page 366).

## CALIFORNIA PROPOSITION 65

### WARNINGS



Some constituents of engine exhaust, certain vehicle components, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

# Introduction

## WARNINGS



Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Batteries also contain other chemicals known to the State of California to cause cancer. Wash your hands after handling.

## PERCHLORATE

Certain components in your vehicle such as airbag modules, seatbelt pretensioners and remote control batteries may contain perchlorate material. Special handling may apply for service or vehicle end of life disposal.

**For more information visit:**

Web Address
<a href="http://www.dtsc.ca.gov/hazardouswaste/perchlorate">www.dtsc.ca.gov/hazardouswaste/perchlorate</a>

## LINCOLN AUTOMOTIVE FINANCIAL SERVICES

Lincoln Automotive Financial Services offers a full range of financing and lease plans to help you acquire your vehicle. We are dedicated to providing answers, information and a truly extraordinary experience.

**Use the options below to contact us with questions about your account or financing and we will respond promptly:**

Web Address
<a href="http://www.LincolnAFS.com">www.LincolnAFS.com</a>

Phone: 1-888-498-8801

Mail: Lincoln Automotive Financial Services

P.O. Box 542000

Omaha, NE 68154-8000

## REPLACEMENT PARTS RECOMMENDATION

We have built your vehicle to the highest standards using quality parts. We recommend that you demand the use of genuine Ford and Motorcraft parts whenever your vehicle requires scheduled maintenance or repair. You can clearly identify genuine Ford and Motorcraft parts by looking for the Ford, FoMoCo or Motorcraft branding on the parts or their packaging.

## Scheduled Maintenance and Mechanical Repairs

One of the best ways for you to make sure that your vehicle provides years of service is to have it maintained in line with our recommendations using parts that conform to the specifications detailed in this Owner's Manual. Genuine Ford and Motorcraft parts meet or exceed these specifications.

# Introduction

## Collision Repairs

We hope that you never experience a collision, but accidents do happen. Genuine Ford replacement collision parts meet our stringent requirements for fit, finish, structural integrity, corrosion protection and dent resistance. During vehicle development we validate that these parts deliver the intended level of protection as a whole system. A great way to know for sure you are getting this level of protection is to use genuine Ford replacement collision parts.

## Warranty on Replacement Parts

Genuine Ford and Motorcraft replacement parts are the only replacement parts that benefit from a Lincoln Warranty. Damage caused to your vehicle as a result of the failure of non-Ford parts may not be covered by the Lincoln Warranty. For additional information, refer to the terms and conditions of the Lincoln Warranty.

## SPECIAL NOTICES

### New Vehicle Limited Warranty

For a detailed description of what is covered and what is not covered by your vehicle's New Vehicle Limited Warranty, refer to the Warranty Manual that is provided to you along with your Owner's Manual.

### Special Instructions

For your added safety, your vehicle is fitted with sophisticated electronic controls.

#### WARNINGS



You risk death or serious injury to yourself and others if you do not follow the instruction highlighted by the warning symbol. Failure to follow the specific warnings and instructions could result in personal injury.



**Never** place front seat mounted rear-facing child or infant seats in front of an active passenger airbag.

## On Board Diagnostics Data Link Connector

#### WARNING



Use of wireless plug-in devices in the OBD Data Link Connector (DLC) may allow unauthorized third parties to gain access to vehicle systems and data which could impair the function of various vehicle systems, including safety-related systems. The DLC should only be used by a repair facility that operates in accordance with Ford's service and repair instructions.

Your vehicle has an OBD Data Link Connector (DLC) that is used in conjunction with a diagnostic scan tool for vehicle diagnostics, repairs and reprogramming services. Installing an aftermarket device that uses the DLC during normal driving for purposes such as remote insurance company monitoring, transmission of vehicle data to other devices or entities, or altering the performance of the vehicle, may cause




# Introduction

---

interference with or even damage to vehicle systems. We do not recommend or endorse the use of aftermarket plug-in devices unless approved by Ford. The vehicle Warranty will not cover damage caused by an aftermarket plug-in device.

## Notice to Owners of Pickup Trucks and Utility Type Vehicles

### WARNING

 Utility vehicles have a significantly higher rollover rate than other types of vehicles.

---

Before you drive your vehicle, please read this Owner's Guide carefully. Your vehicle is not a passenger car. As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of vehicle control, vehicle rollover, personal injury or death.

## Using Your Vehicle With a Snowplow

### Do not use this vehicle for snowplowing.

Your vehicle is not equipped with a snowplowing package.


## Using Your Vehicle as an Ambulance

### Do not use this vehicle as an ambulance.

Your vehicle is not equipped with the Ford Ambulance Preparation Package.

## MOBILE COMMUNICATIONS EQUIPMENT

### WARNING

 Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

---

Using mobile communications equipment is becoming increasingly important in the conduct of business and personal affairs. However, you must not compromise your own or others' safety when using such equipment. Mobile communications can enhance personal safety and security when appropriately used, particularly in emergency situations. Safety must be paramount when using mobile communications equipment to avoid negating these benefits. Mobile communication equipment includes, but is not limited to, cellular phones, pagers, portable email devices, text messaging devices and portable two-way radios.

## EXPORT UNIQUE OPTIONS

For your particular global region, your vehicle may be equipped with features and options that are different from the features and options that are described in this Owner's Manual. A market unique supplement may be supplied that complements this book. By referring to the market unique supplement, if provided, you can properly identify those features, recommendations and

# Introduction

---

specifications that are unique to your vehicle. This Owner's Manual is written primarily for the U.S. and Canadian Markets. Features or equipment listed as standard may be different on units built for Export. **Refer to this Owner's Manual for all other required information and warnings.**

# Environment

---

## **PROTECTING THE ENVIRONMENT**

You must play your part in protecting the environment. Correct vehicle usage and the authorized disposal of waste, cleaning and lubrication materials are significant steps toward this aim.


# Child Safety

---


## GENERAL INFORMATION

See the following sections for directions on how to properly use safety restraints for children.

### WARNINGS


 Always make sure your child is secured properly in a device that is appropriate for their height, age and weight. Child safety restraints must be bought separately from your vehicle. Failure to follow these instructions and guidelines may result in an increased risk of serious injury or death to your child.

### WARNINGS

 All children are shaped differently. The recommendations for safety restraints are based on probable child height, age and weight thresholds from the National Highway Traffic Safety Administration and other safety organizations, or are the minimum requirements of law. We recommend checking with a NHTSA Certified Child Passenger Safety Technician (CPST) and consult your pediatrician to make sure your child seat is appropriate for your child, and is compatible with and properly installed in your vehicle. To locate a child seat fitting station and CPST, contact NHTSA toll free at 1-888-327-4236 or go to <http://www.nhtsa.dot.gov>. In Canada, contact

### WARNINGS

Transport Canada toll free at 1-800-333-0371 or go to [www.tc.gc.ca](http://www.tc.gc.ca) to find a Child Car Seat Clinic in your area. Failure to properly restrain children in safety seats made especially for their height, age, and weight may result in an increased risk of serious injury or death to your child.

 Do not leave children or animals unattended in the vehicle. On hot days, the temperature in the trunk or vehicle interior can rise very quickly. Exposure of people or animals to these high temperatures for even a short time can cause death or serious heat-related injuries, including brain damage. Small children are particularly at risk.

---

# Child Safety

## Recommendations for Safety Restraints for Children

Child	Child size, height, weight, or age	Recommended restraint type
Infants or toddlers	Children weighing 40 lb (18 kg) or less (generally age four or younger).	Use a child safety seat (sometimes called an infant carrier, convertible seat, or toddler seat).
Small children	Children who have outgrown or no longer properly fit in a child safety seat (generally children who are less than 4 ft. 9 in. (1.45 m) tall, are greater than age four and less than age 12, and between 40 lb (18 kg) and 80 lb (36 kg) and upward to 100 lb (45 kg) if recommended by your child restraint manufacturer).	Use a belt-positioning booster seat.
Larger children	Children who have outgrown or no longer properly fit in a belt-positioning booster seat (generally children who are at least 4 ft. 9 in. (1.45 m) tall or greater than 80 lb (36 kg) or 100 lb (45 kg) if recommended by child restraint manufacturer).	Use a vehicle safety belt having the lap belt snug and low across the hips, shoulder belt centered across the shoulder and chest, and seat back upright.

# Child Safety

- You are required by law to properly use safety seats for infants and toddlers in the United States and Canada.
- Many states and provinces require that small children use approved booster seats until they reach age eight, a height of 4 feet 9 inches (1.45 meters) tall, or 80 pounds (36 kilograms). Check your local and state or provincial laws for specific requirements about the safety of children in your vehicle.
- When possible, always properly restrain children 12 years of age and under in a rear seating position of your vehicle. Accident statistics suggest that children are safer when properly restrained in the rear seating positions than in a front seating position. See **Front Passenger Sensing System** (page 44).

## INSTALLING CHILD RESTRAINTS

### Child Seats





E142594


Use a child safety seat (sometimes called an infant carrier, convertible seat, or toddler seat) for infants, toddlers, or children weighing 40 pounds (18 kilograms) or less (generally age four or younger).

## Using Lap and Shoulder Belts

### WARNINGS

 Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat upon which the child seat is installed all the way back.

 Airbags can kill or injure a child in a child seat. Children 12 and under should be properly restrained in the rear seat whenever possible.

 Depending on where you secure a child restraint, and depending on the child restraint design, you may block access to certain safety belt buckle assemblies and LATCH lower anchors, rendering those features potentially unusable. To avoid risk of injury, occupants should only use seating positions where they are able to be properly restrained.

# Child Safety

When installing a child safety seat with combination lap and shoulder belts:

- Use the correct safety belt buckle for that seating position.
- Insert the belt tongue into the proper buckle until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.
- Keep the buckle release button pointing up and away from the safety seat, with the tongue between the child seat and the release button, to prevent accidental unbuckling.
- Place the vehicle seat upon which the child seat will be installed in the upright position.
- Put the safety belt in the automatic locking mode. See Step 5. This vehicle does not require the use of a locking clip.

Perform the following steps when installing the child seat with combination lap and shoulder belts:

**Note:** Although the child seat illustrated is a forward facing child seat, the steps are the same for installing a rear facing child seat.



E142528

1. Position the child safety seat in a seat with a combination lap and shoulder belt.



E142529

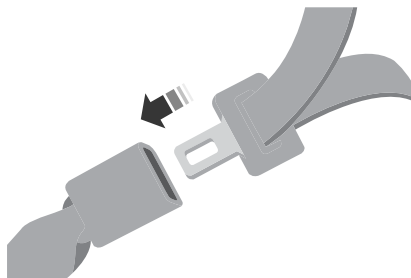
2. Pull down on the shoulder belt and then grasp the shoulder belt and lap belt together.



E142530

3. While holding the shoulder and lap belt portions together, route the tongue through the child seat according to the child seat manufacturer's instructions. Be sure the belt webbing is not twisted.

# Child Safety



E142531

4. Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) for that seating position until you hear a snap and feel the latch engage. Make sure the tongue is latched securely by pulling on it.



E142875

5. To put the retractor in the automatic locking mode, grasp the shoulder portion of the belt and pull downward until all of the belt is pulled out.

**Note:** *The automatic locking mode is available on the front passenger and rear seats.*

6. Allow the belt to retract to remove slack. The belt will click as it retracts to indicate it is in the automatic locking mode.

7. Try to pull the belt out of the retractor to make sure the retractor is in the automatic locking mode (you should not be able to pull more belt out). If the retractor is not locked, unbuckle the belt and repeat Steps 5 and 6.



E142533

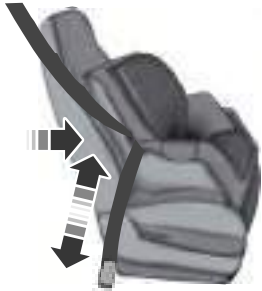
8. Remove remaining slack from the belt. Force the seat down with extra weight, for example, by pressing down or kneeling on the child restraint while pulling up on the shoulder belt in order to force slack from the belt. This is necessary to remove the remaining slack that will exist once the extra weight of



# Child Safety

the child is added to the child restraint. It also helps to achieve the proper snugness of the child seat to your vehicle. Sometimes, a slight lean toward the buckle will additionally help to remove remaining slack from the belt.

9. Attach the tether strap (if the child seat is equipped).




E142534

10. Before placing the child in the seat, forcibly move the seat forward and back to make sure the seat is securely held in place. To check this, grab the seat at the belt path and attempt to move it side to side and forward and back. There should be no more than 1 inch (2.5 centimeters) of movement for proper installation.


We recommend checking with a NHTSA Certified Child Passenger Safety Technician to make certain the child restraint is properly installed. In Canada, check with Transport Canada for referral to a Child Car Seat Clinic.

## Using Lower Anchors and Tethers for Children (LATCH)

### WARNINGS

 Never attach two child safety seats to the same anchor. In a crash, one anchor may not be strong enough to hold two child safety seat attachments and may break, causing serious injury or death.

### WARNINGS

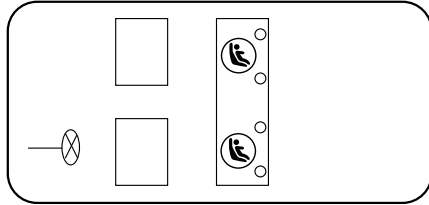
 Depending on where you secure a child restraint, and depending on the child restraint design, you may block access to certain safety belt buckle assemblies or LATCH lower anchors, rendering those features potentially unusable. To avoid risk of injury, occupants should only use seating positions where they are able to be properly restrained.

The LATCH system is composed of three vehicle anchor points: two lower anchors located where the seatback and seat cushion meet (called the seat bight) and one top tether anchor located behind that seating position.

LATCH compatible child safety seats have two rigid or webbing mounted attachments that connect to the two lower anchors at the LATCH equipped seating positions in your vehicle. This type of attachment method eliminates the need to use safety belts to

# Child Safety

attach the child seat, however the safety belt can still be used to attach the child seat. For forward-facing child seats, the top tether strap must also be attached to the proper top tether anchor, if a top tether strap has been provided with your child seat.




E142535

Your vehicle has LATCH lower anchors for child seat installation. The LATCH anchors are located at the rear section of the rear seat between the cushion and seatback. Follow the child seat manufacturer's instructions to properly install a child seat with LATCH attachments. Follow the instructions on attaching child safety seats with tether straps.

Attach LATCH lower attachments of the child seat only to the anchors.

## Use of Inboard Lower Anchors from the Outboard Seating Positions (Center Seating Use)

### WARNING

 The standardized spacing for LATCH lower anchors is 11 inches (28 centimeters) center to center. Do not use LATCH lower anchors for the center seating position unless the child seat manufacturer's instructions permit and specify using anchors spaced at least as far apart as those in this vehicle.

The lower anchors at the center of the second row rear seat are spaced 18 inches (46 centimeters) apart. A child seat with rigid LATCH attachments cannot be installed at the center seating position. LATCH compatible child seats (with attachments on

belt webbing) can only be used at this seating position provided that the child seat manufacturer's instructions permit use with the anchor spacing stated. Do not attach a child seat to any lower anchor if an adjacent child seat is attached to that anchor.

Each time you use the safety seat, check that the seat is properly attached to the lower anchors and tether anchor, if applicable. Tug the child seat from side to side and forward and back where it is secured to your vehicle. The seat should move less than one inch when you do this for a proper installation.

If the safety seat is not anchored properly, the risk of a child being injured in a crash greatly increases.

## Combining Safety Belt and LATCH Lower Anchors for Attaching Child Safety Seats

When used in combination, either the safety belt or the LATCH lower anchors may be attached first, provided a proper installation is achieved. Attach the tether strap afterward, if included with the child seat.

# Child Safety

## Using Tether Straps

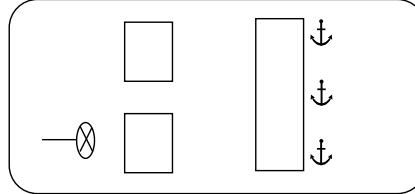


Many forward-facing child safety seats include a tether strap which extends from the back of the child safety seat and hooks to an anchoring point called the top tether anchor. Tether straps are available as an accessory for many older safety seats.

Contact the manufacturer of your child seat for information about ordering a tether strap, or to obtain a longer tether strap if the tether strap on your safety seat does not reach the appropriate top tether anchor in your vehicle.

Once the child safety seat has been installed using either the safety belt, the lower anchors of the LATCH system, or both, you can attach the top tether strap.

The tether strap anchors in your vehicle are in the following positions (shown from top view):

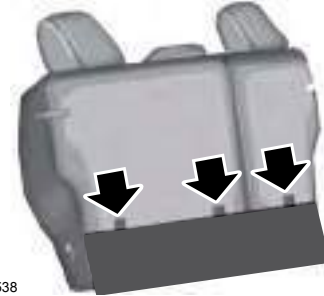


E142537

Perform the following steps to install a child safety seat with tether anchors:

**Note:** *If you install a child seat with rigid LATCH attachments, do not tighten the tether strap enough to lift the child seat off your vehicle seat cushion when the child is seated in it. Keep the tether strap just snug without lifting the front of the child seat. Keeping the child seat just touching your vehicle seat gives the best protection in a severe crash.*

1. Route the child safety seat tether strap over the back of the seat. For outboard seating positions, route the tether strap under the head restraint and between the head restraint posts. For the center seating positions, route the tether strap over the top of the head restraint. If needed, the head restraints can also be removed.



E142538

2. Locate the correct anchor on the back panel of the rear seat for the selected seating position. The anchors are labeled with the tether strap symbol and are partially covered by the gap panel. Pull the panel back to fully expose the anchors.

# Child Safety



E142539

3. Clip the tether strap to the anchor as shown.
4. Tighten the child safety seat tether strap according to the manufacturer's instructions. If your child restraint system is equipped with a tether strap, and the child restraint manufacturer recommends its use, we also recommend its use.

## BOOSTER SEATS

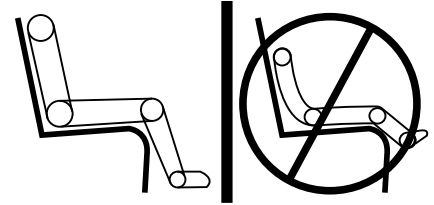
### WARNING



Never place, or allow a child to place, the shoulder belt under a child's arm or behind the back because it reduces the protection for the upper part of the body and may increase the risk of injury or death in a crash.

Use a belt-positioning booster seat for children who have outgrown or no longer properly fit in a child safety seat (generally children who are less than 4 feet 9 inches (1.45 meters) tall, are greater than age four (4) and less than age twelve (12), and between 40 pounds (18 kilograms) and 80 pounds (36 kilograms) and upward to 100 pounds (45 kilograms) if recommended by your child restraint manufacturer). Many state and provincial laws require that children use approved booster seats until they reach age eight, a height of 4 feet 9 inches (1.45 meters) tall, or 80 pounds (36 kilograms).

Booster seats should be used until you can answer YES to ALL of these questions when seated without a booster seat:



E142595

- Can the child sit all the way back against their vehicle seat back with knees bent comfortably at the edge of the seat cushion?
- Can the child sit without slouching?
- Does the lap belt rest low across the hips?
- Is the shoulder belt centered on the shoulder and chest?
- Can the child stay seated like this for the whole trip?

# Child Safety

Always use booster seats in conjunction with your vehicle lap and shoulder belt.

## Types of Booster Seats



E68924

- Backless booster seats

If your backless booster seat has a removable shield, remove the shield. If a vehicle seating position has a low seat back or no head restraint, a backless booster seat may place your child's head (as measured at the tops of the ears) above the top of the seat. In this case, move the backless booster to another seating position with a higher seat back or head restraint and lap and shoulder belts, or consider using a high back booster seat.



E70710

- High back booster seats

If, with a backless booster seat, you cannot find a seating position that adequately supports your child's head, a high back booster seat would be a better choice.

Children and booster seats vary in size and shape. Choose a booster that keeps the lap belt low and snug across the hips, never up across the stomach, and lets you adjust the shoulder belt to cross the chest and rest snugly near the center of the shoulder. The following drawings compare the ideal fit (center) to a shoulder belt uncomfortably close to the neck and a shoulder belt that could slip off the shoulder. The drawings also show how the lap belt should be low and snug across the child's hips.

# Child Safety



E142596



E142597




# Child Safety


If the booster seat slides on the vehicle seat upon which it is being used, placing a rubberized mesh sold as shelf or carpet liner under the booster seat may improve this condition. Do not introduce any item thicker than this under the booster seat. Check with the booster seat manufacturer's instructions.


## CHILD RESTRAINT POSITIONING

### WARNINGS


 Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the vehicle seat upon which the child seat is installed all the way back. When possible, all children age 12 and under should be properly restrained in a rear seating position. If all children cannot be seated and restrained properly in a rear seating position, properly restrain the largest child in the front seat.


### WARNINGS


 Always carefully follow the instructions and warnings provided by the manufacturer of any child restraint to determine if the restraint device is appropriate for your child's size, height, weight, or age. Follow the child restraint manufacturer's instructions and warnings provided for installation and use in conjunction with the instructions and warnings provided by your vehicle manufacturer. A safety seat that is improperly installed or utilized, is inappropriate for your child's height, age, or weight or does not properly fit the child may increase the risk of serious injury or death.


 Never let a passenger hold a child on his or her lap while your vehicle is moving. The passenger cannot protect the child from injury in a crash, which may result in serious injury or death.

### WARNINGS

 Never use pillows, books, or towels to boost a child. They can slide around and increase the likelihood of injury or death in a crash.

 Always restrain an unoccupied child seat or booster seat. These objects may become projectiles in a crash or sudden stop, which may increase the risk of serious injury.

 Never place, or allow a child to place, the shoulder belt under a child's arm or behind the back because it reduces the protection for the upper part of the body and may increase the risk of injury or death in a crash.

 To avoid risk of injury, do not leave children or pets unattended in your vehicle.

# Child Safety

## Recommendations for attaching child safety restraints for children

Restraint Type	Combined weight of child and child seat	Use any attachment method as indicated below by X				
		LATCH (lower anchors and top tether anchor)	LATCH (lower anchors only)	Safety belt and top tether anchor	Safety belt and LATCH (lower anchors and top tether anchor)	Safety belt only
Rear facing child seat	Up to 65 lb (29.5 kg)		X			X
Rear facing child seat	Over 65 lb (29.5 kg)					X
Forward facing child seat	Up to 65 lb (29.5 kg)	X		X	X	
Forward facing child seat	Over 65 lb (29.5 kg)			X	X	

**Note:** *The child seat must rest tightly against the vehicle seat upon which it is installed. It may be necessary to lift or remove the head restraint. See **Seats** (page 138).*

## CHILD SAFETY LOCKS

When these locks are set, the rear doors cannot be opened from the inside.



# Child Safety

---



## Right-Hand Side

Turn clockwise to lock and counterclockwise to unlock.

E112197

The childproof locks are located on the rear edge of each rear door and must be set separately for each door.





## Left-Hand Side

Turn counterclockwise to lock and clockwise to unlock.





# Seatbelts

## PRINCIPLE OF OPERATION



### WARNINGS

-  Always drive and ride with your seatback upright and the lap belt snug and low across the hips.
-  To reduce the risk of injury, make sure children sit where they can be properly restrained.
-  Never let a passenger hold a child on his or her lap while your vehicle is moving. The passenger cannot protect the child from injury in a crash.
-  All occupants of your vehicle, including the driver, should always properly wear their safety belts, even when an airbag supplemental restraint system is provided.

### WARNINGS

-  It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a crash, people riding in these areas are more likely to be seriously injured or killed. Do not allow people to ride in any area of your vehicle that is not equipped with seats and safety belts. Be sure everyone in your vehicle is in a seat and using a safety belt properly.
-  In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a safety belt.
-  Each seating position in your vehicle has a specific safety belt assembly which is made up of one buckle and one tongue that are designed to be used as a pair. 1) Use the shoulder belt on the outside shoulder only. Never wear the shoulder belt under the arm. 2) Never swing the safety belt around your neck over the inside shoulder. 3) Never use a single belt for more than one person.
-  When possible, all children 12 years old and under should be properly restrained in a rear seating position.

### WARNINGS

-  Safety belts and seats can become hot in a vehicle that has been closed up in sunny weather; they could burn a small child. Check seat covers and buckles before you place a child anywhere near them.
-  Front and rear seat occupants, including pregnant women, should wear safety belts for optimum protection in an accident.

All seating positions in this vehicle have lap and shoulder safety belts. All occupants of the vehicle should always properly wear their safety belts, even when an airbag supplemental restraint system is provided.

The safety belt system consists of:

- lap and shoulder safety belts
- shoulder safety belt with automatic locking mode, (except driver safety belt)
- height adjuster at the front outboard seating positions

# Seatbelts

- retractor and anchor pretensioner at the front outboard seating positions
- belt tension sensor at the front outboard passenger seating position



- safety belt warning light and chime



- crash sensors and monitoring system with readiness indicator.

The safety belt pretensioners are designed to activate in frontal, near-frontal and side crashes, and in rollovers. The safety belt pretensioners on the retractor and anchor at the front seating positions are designed to tighten the safety belts firmly against the occupant's body when activated. This helps increase the effectiveness of the safety belts. In frontal crashes, the safety belt pretensioners can be activated alone or, if the crash is of sufficient severity, together with the front airbags.

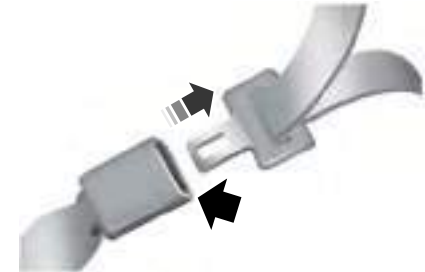
## FASTENING THE SEATBELTS

The front outboard and rear safety restraints in the vehicle are combination lap and shoulder belts.



E142587

1. Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.



E142588

2. To unfasten, press the release button and remove the tongue from the buckle.

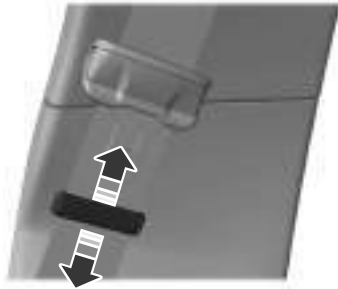


E142589

# Seatbelts

When in use, the rear seatbelts should be placed in the belt guides on the outboard seatbacks.

## Using a Sliding Clip (If Equipped)




E200788

Slide the clip away from the tongue so there is no loose webbing when an occupant or child seat is buckled up. You can also use the sliding clip to raise the tongue and prevent it from rattling or to ease access to the tongue.

## Using Seatbelts During Pregnancy

### WARNING

 Always ride and drive with your seatback upright and the seatbelt properly fastened. The lap portion of the seatbelt should fit snug and be positioned low across the hips. The shoulder portion of the seatbelt should be positioned across the chest. Pregnant women should also follow this practice. See the following figure.





E142590

Pregnant women should always wear their seatbelt. The lap belt portion of a combination lap and shoulder belt should be positioned low across the hips below the belly and worn as tight as comfort will allow. The shoulder belt should be positioned to cross the middle of the shoulder and the center of the chest.

## Seatbelt Locking Modes

### WARNINGS

 After any vehicle crash, the seatbelt system at all passenger seating positions must be checked by an authorized dealer to verify that the automatic locking retractor feature for child seats is still functioning properly. In addition, all seatbelts should be checked for proper function.

 The belt and retractor assembly must be replaced if the seatbelt assembly automatic locking retractor feature or any other seatbelt function is not operating properly when checked by an authorized dealer. Failure to replace the belt and retractor assembly could increase the risk of injury in crashes.

# Seatbelts

All safety restraints in the vehicle are combination lap and shoulder belts. The driver seatbelt has the first type of locking mode, and the front outboard passenger and rear seatbelts have both types of locking modes described as follows:

## Vehicle Sensitive Mode

This is the normal retractor mode, which allows free shoulder belt length adjustment to your movements and locking in response to vehicle movement. For example, if the driver brakes suddenly or turns a corner sharply, or the vehicle receives an impact of about 5 mph (8 km/h) or more, the combination seatbelts will lock to help reduce forward movement of the driver and passengers.

In addition, the retractor is designed to lock if the webbing is pulled out too quickly. If this occurs, let the belt retract slightly and pull webbing out again in a slow and controlled manner.

## Automatic Locking Mode

In this mode, the shoulder belt is automatically pre-locked. The belt will still retract to remove any slack in the shoulder belt. The automatic locking mode is not available on the driver seatbelt.

## When to Use the Automatic Locking Mode

This mode should be used any time a child safety seat, except a booster, is installed in passenger front or rear seating positions. Children 12 years old and under should be properly restrained in a rear seating position whenever possible. See **Child Safety** (page 17).

## How to Use the Automatic Locking Mode



E142591

1. Buckle the combination lap and shoulder belt.
2. Grasp the shoulder portion and pull downward until the entire belt is pulled out.

Allow the belt to retract. As the belt retracts, you will hear a clicking sound. This indicates the seatbelt is now in the automatic locking mode.

# Seatbelts

## How to Disengage the Automatic Locking Mode

Unbuckle the combination lap and shoulder belt and allow it to retract completely to disengage the automatic locking mode and turn on the vehicle sensitive (emergency) locking mode.

## How to Extract Seatbelts in the Rear Outboard Positions

Seatbelts in the rear outboard positions can lock if the seatback is returned firmly to its upright position. You can unlock the seatbelts using the following procedures.

For vehicles where the rear seats recline:

1. Recline the seat to its full rear recline position.
2. The seatbelt should then unlock.
3. Return the seatback to its desired upright position.

For vehicles with rear seats that do not recline or are locked with the seat in its full rear recline position:

1. Grasp the seatbelt webbing at the top of the seatback.
2. Pull the seatbelt webbing forward, firmly.
3. After pulling the seatbelt forward, allow the seatbelt to feed back into the seatbelt retractor as much as possible. If necessary, press the seatback down to allow the seatbelt webbing to retract further.
4. The seatbelt should then unlock.
5. If the seatbelt does not unlock, repeat steps 1-3.

## SEATBELT HEIGHT ADJUSTMENT

### WARNING



Position the seatbelt height adjuster so that the belt rests across the middle of your shoulder. Failure to adjust the seatbelt properly could reduce the effectiveness of the seatbelt and increase the risk of injury in a crash.



E146191

To adjust the shoulder belt height, squeeze the button and slide the height adjuster up or down. Release the button and pull down on the height adjuster to make sure it is locked in place.

## SEATBELT WARNING LAMP AND INDICATOR CHIME



This lamp illuminates and an audible warning will sound if the driver's safety belt has not been fastened when the vehicle's ignition is turned on.

# Seatbelts

## Conditions of operation

If...	Then...
The driver's safety belt is not buckled before the ignition switch is turned to the on position...	The safety belt warning light illuminates 1-2 minutes and the warning chime sounds 4-8 seconds.
The driver's safety belt is buckled while the indicator light is illuminated and the warning chime is sounding...	The safety belt warning light and warning chime turn off.
The driver's safety belt is buckled before the ignition switch is turned to the on position...	The safety belt warning light and indicator chime remain off.

## SEATBELT REMINDER

### Belt-Minder™

This feature supplements the safety belt warning function by providing additional reminders that intermittently sound a tone and illuminate the safety belt warning light when you are in the driver seat or you have a front seat passenger and a safety belt is unbuckled.

The system uses information from the front passenger sensing system to determine if a front seat passenger is present and therefore potentially in need of a warning. To avoid activating the Belt-Minder feature for objects you place in the front passenger seat, only the front seat passengers receive warnings as determined by the front passenger sensing system.

If the Belt-Minder warnings expire (warnings for about five minutes) for one passenger (driver or front passenger), the other passenger can still cause the Belt-Minder feature to turn on.

# Seatbelts

---

<b>If...</b>	<b>Then...</b>
You and the front seat passenger buckle your safety belts before you switch the ignition on or less than 1-2 minutes elapse after you switch the ignition on...	The Belt-Minder feature will not activate.
You or the front seat passenger do not buckle your safety belts before your vehicle reaches at least 6 mph (9.7 km/h) and 1-2 minutes elapse after you switch the ignition on...	The Belt-Minder feature activates, the safety belt warning light illuminates and a warning tone sounds for 6 seconds every 25 seconds, repeating for about 5 minutes or until you and the front seat passenger buckle your safety belts.
The safety belt for the driver or front passenger is unbuckled for about 1 minute while the vehicle is traveling at least 6 mph (9.7 km/h) and more than 1-2 minutes elapse after you switch the ignition on...	The Belt-Minder feature activates, the safety belt warning light illuminates and a warning tone sounds for 6 seconds every 25 seconds, repeating for about 5 minutes or until you and the front seat passenger buckle your safety belts.



# Seatbelts

## Deactivating and Activating the Belt-Minder Feature

### WARNING



While the system allows you to deactivate it, this system is designed to improve your chances of being safely belted and surviving an accident. We recommend you leave the system activated for yourself and others who may use the vehicle.

**Note:** *The driver and front passenger warnings switch on and off independently. When you perform this procedure for one seating position, do not buckle the other position as this will terminate the process.*

Read Steps 1 - 4 thoroughly before proceeding with the programming procedure.

Before following the procedure, make sure that:

- The parking brake is set.
- The transmission is in park (P) or neutral (N).

- The ignition is off.
  - The driver and front passenger safety belts are unbuckled.
1. Switch the ignition on. Do not start the vehicle.
  2. Wait until the safety belt warning light turns off (about one minute). After Step 2, wait an additional 5 seconds before proceeding with Step 3. Once you start Step 3, you must complete the procedure within 30 seconds.
  3. For the seating position you are switching off, buckle then unbuckle the safety belt three times at a moderate speed, ending in the unbuckled state. After Step 3, the safety belt warning light turns on.
  4. While the safety belt warning light is on, buckle and then unbuckle the safety belt. After Step 4, the safety belt warning light flashes for confirmation.
- This will switch the feature off for that seating position if it is currently on.
  - This will switch the feature on for that seating position if it is currently off.

## CHILD RESTRAINT AND SEATBELT MAINTENANCE

Inspect the vehicle safety belts and child safety seat systems periodically to make sure they work properly and are not damaged. Inspect the vehicle and child seat safety belts to make sure there are no nicks, tears or cuts. Replace if necessary. All vehicle safety belt assemblies, including retractors, buckles, front safety belt buckle assemblies, buckle support assemblies (slide bar-if equipped), shoulder belt height adjusters (if equipped), shoulder belt guide on seat back (if equipped), child safety seat LATCH and tether anchors, and attaching hardware, should be inspected after a crash. Read the child restraint manufacturer's instructions for additional inspection and maintenance information specific to the child restraint.


# Seatbelts

Ford Motor Company recommends that all safety belt assemblies in use in vehicles involved in a crash be replaced. However, if the crash was minor and an authorized dealer finds that the belts do not show damage and continue to operate properly, they do not need to be replaced. Safety belt assemblies not in use during a crash should also be inspected and replaced if either damage or improper operation is noted.


Properly care for safety belts. See **Vehicle Care** (page 305).


## SEATBELT EXTENSION


### WARNINGS


 Persons who fit into the vehicle's seatbelt should not use an extension. Unnecessary use could result in serious personal injury in the event of a crash.

### WARNINGS

 Only use extensions provided free of charge by Lincoln Motor Company dealers. The dealer will provide an extension designed specifically for this vehicle, model year and seating position. The use of an extension intended for another vehicle, model year or seating position may not offer you the full protection of your vehicle's seatbelt restraint system.

 Never use seatbelt extensions to install child restraints.

 Do not use a seatbelt extension with an inflatable seatbelt.

 Do not use extensions to change the fit of the belt across the torso, over the lap or to make the seatbelt buckle easier to reach.

seatbelt extensions made by the same company which made the original equipment seatbelts, should be used with Lincoln seatbelts. Ask your authorized dealer if your extension is compatible with your Lincoln vehicle restraint system.

If, because of body size or driving position, it is not possible to properly fasten the seatbelt over your lap and shoulder, an extension that is compatible with the seatbelts is available free of charge from Lincoln Motor Company dealers. Only Lincoln

# Personal Safety System™

---

The Personal Safety System provides an improved overall level of frontal crash protection to front seat occupants and is designed to help further reduce the risk of airbag-related injuries. The system is able to analyze different occupant conditions and crash severity before activating the appropriate safety devices to help better protect a range of occupants in a variety of frontal crash situations.

The Vehicle Personal Safety System consists of:

- Driver and passenger dual-stage airbag supplemental restraints.
- Front seat outboard safety belts with pretensioners, energy management retractors and safety belt usage sensors.
- Driver seat position sensor.
- Front passenger sensing system.
- Passenger airbag off and on indicator lamp.
- Front crash severity sensors.
- Restraints control module with impact and safing sensors.

- Restraint system warning light and backup tone.
- The electrical wiring for the airbags, crash sensors, safety belt pretensioners, front safety belt usage sensors, driver seat position sensor, front passenger sensing system and indicator lights.


## **How Does the Personal Safety System Work?**


The Personal Safety System can adapt the deployment strategy of the safety devices according to crash severity and occupant conditions. A collection of crash and occupant sensors provides information to the restraints control module. During a crash, the restraints control module may deploy the safety belt pretensioners, one or both stages of the dual-stage airbags based on crash severity and occupant conditions.


# Supplementary Restraints System


## PRINCIPLE OF OPERATION

### WARNINGS


 Airbags do not inflate slowly or gently, and the risk of injury from a deploying airbag is the greatest close to the trim covering the airbag module.


 All occupants of your vehicle, including the driver, should always properly wear their safety belts, even when an airbag supplemental restraint system is provided. Failure to properly wear your safety belt could seriously increase the risk of injury or death.


 Always transport children 12 years old and under in the back seat and always properly use appropriate child restraints. Failure to follow this could seriously increase the risk of injury or death.


 Never place your arm over the airbag module as a deploying airbag can result in serious arm fractures or other injuries.

### WARNINGS

 Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat upon which the child seat is installed all the way back.

 Do not attempt to service, repair, or modify the airbag supplemental restraint systems or its fuses as you could be seriously injured or killed. Contact your authorized dealer as soon as possible.

 Several airbag system components get hot after inflation. Do not touch them after inflation as this may result in serious injury.

 If the airbag has deployed, the airbag will not function again and must be replaced immediately. If the airbag is not replaced, the unrepaired area will increase the risk of injury in a crash.

The airbags are a supplemental restraint system and are designed to work with the safety belts to help protect the driver and right front passenger from certain upper body injuries. Airbags do not inflate slowly; there is a risk of injury from a deploying airbag.

**Note:** *You will hear a loud bang and see a cloud of harmless powdery residue if an airbag deploys. This is normal.*

The airbags inflate and deflate rapidly upon activation. After airbag deployment, it is normal to notice a smoke-like, powdery residue or smell the burnt propellant. This may consist of cornstarch, talcum powder (to lubricate the bag) or sodium compounds (for example, baking soda) that result from the combustion process that inflates the airbag. Small amounts of sodium hydroxide may be present which may irritate the skin and eyes, but none of the residue is toxic.

# Supplementary Restraints System

While the system is designed to help reduce serious injuries, contact with a deploying airbag may also cause abrasions or swelling. Temporary hearing loss is also a possibility as a result of the noise associated with a deploying airbag. Because airbags must inflate rapidly and with considerable force, there is the risk of death or serious injuries such as fractures, facial and eye injuries or internal injuries, particularly to occupants who are not properly restrained or are otherwise out of position at the time of airbag deployment. Thus, it is extremely important that occupants be properly restrained as far away from the airbag module as possible while maintaining vehicle control.

Routine maintenance of the airbags is not required.

## DRIVER AND PASSENGER AIRBAGS

### WARNINGS



Never place your arm or any objects over an airbag module. Placing your arm over a deploying airbag can result in serious arm fractures or other injuries. Objects placed on or over the airbag inflation area may cause those objects to be propelled by the airbag into your face and torso causing serious injury.



Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat upon which the child seat is installed all the way back.



E151127

The driver and front passenger airbags will deploy during significant frontal and near frontal crashes.

The driver and passenger front airbag system consists of:

- Driver and passenger airbag modules.
- Front passenger sensing system.




• Crash sensors and monitoring system with readiness indicator. See **Crash Sensors and Airbag Indicator** (page 49).

# Supplementary Restraints System

## Proper Driver and Front Passenger Seating Adjustment

### WARNING

 National Highway Traffic Safety Administration (NHTSA) recommends a minimum distance of at least 10 inches (25 centimeters) between an occupant's chest and the driver airbag module.

To properly position yourself away from the airbag:


- Move your seat to the rear as far as you can while still reaching the pedals comfortably.
- Recline the seat slightly (one or two degrees) from the upright position.

After all occupants have adjusted their seats and put on safety belts, it is very important that they continue to sit properly. A properly seated occupant sits upright, leaning against the seat back, and centered on the seat cushion, with their feet comfortably extended on the floor. Sitting improperly can increase

the chance of injury in a crash event. For example, if an occupant slouches, lies down, turns sideways, sits forward, leans forward or sideways, or puts one or both feet up, the chance of injury during a crash is greatly increased.

## Children and Airbags

### WARNING

 Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat upon which the child seat is installed all the way back.




E142846


Children must always be properly restrained. Accident statistics suggest that children are safer when properly restrained in the rear seating positions than in the front seating position. Failure to follow these instructions may increase the risk of injury in a crash.


# Supplementary Restraints System

## FRONT PASSENGER SENSING SYSTEM

### WARNINGS

 Even with Advanced Restraints Systems, children 12 and under should be properly restrained in a rear seating position. Failure to follow this could seriously increase the risk of injury or death.

 Sitting improperly out of position or with the seatback reclined too far can take off weight from the seat cushion and affect the decision of the front passenger sensing system, resulting in serious injury or death in a crash. Always sit upright against your seatback, with your feet on the floor.

 Any alteration or modification to the front passenger seat may affect the performance of the front passenger sensing system which could seriously increase the risk of injury or death.

This system works with sensors that are part of the front passenger seat and safety belt to detect the presence of a properly-seated occupant and determine if the front passenger frontal airbag should be enabled (may inflate) or not.



E181984

The front passenger sensing system uses a passenger airbag status indicator that will illuminate indicating that the front passenger frontal airbag is either ON (enabled) or OFF (disabled).

The indicator lamp is located in the center stack of the instrument panel.

**Note:** *The passenger airbag status indicator OFF and ON indicator lamps will illuminate for a short period of time when the ignition is first turned on to confirm it is functional.*

The front passenger sensing system is designed to disable (will not inflate) the front passenger frontal airbag when the front passenger seat is unoccupied, or a rear facing infant seat, a forward-facing child restraint, or a booster seat is detected. Even with this technology, parents are **strongly** encouraged to always properly restrain children in the rear seat. The sensor also turns off the passenger front airbag and seat-mounted side airbag when the passenger seat is empty.

- When the front passenger sensing system disables (will not inflate) the front passenger frontal airbag, the passenger airbag status indicator will illuminate the OFF lamp and stay lit to remind you that the front passenger frontal airbag is disabled.
- If the child restraint has been installed and the passenger airbag status indicator illuminates the ON lamp, then turn the vehicle off, remove the child restraint from the vehicle and reinstall the restraint following the child restraint manufacturer's instructions.

# Supplementary Restraints System

The front passenger sensing system is designed to enable (may inflate) the front passenger frontal airbag anytime the system senses that a person of adult size is sitting properly in the front passenger seat.

- When the front passenger sensing system enables the front passenger frontal airbag (may inflate), the passenger airbag status indicator will illuminate the ON lamp and remain illuminated.

If a person of adult size is sitting in the front passenger seat, but the airbag off indicator lamp is lit, it is possible that the person is not sitting properly in the seat. If this happens:

- Turn the vehicle off and ask the person to place the seatback in the full upright position.
- Have the person sit upright in the seat, centered on the seat cushion, with the person's legs comfortably extended.

- Restart the vehicle and have the person remain in this position for about two minutes. This will allow the system to detect that person and enable the passenger frontal airbag.
- If the indicator OFF lamp remains lit even after this, the person should be advised to ride in the rear seat.

Occupant	Passenger airbag status indicator	Passenger airbag
Empty	OFF: Lit	Disabled
	ON: Unlit	
Child	OFF: Lit	Disabled
	ON: Unlit	
Adult	OFF: Unlit	Enabled
	ON: Lit	



## Supplementary Restraints System

**Note:** When the passenger airbag status indicator OFF light is illuminated, the passenger (seat mounted) side airbag may be disabled to avoid the risk of airbag deployment injuries.

After all occupants have adjusted their seats and put on seatbelts, it is very important that they continue to sit properly. A properly seated occupant sits upright, leaning against the seatback, and centered on the seat cushion, with their feet comfortably extended on the floor. Sitting improperly can increase the chance of injury in a crash event. For example, if an occupant slouches, lies down, turns sideways, sits forward, leans forward or sideways, or puts one or both feet up, the chance of injury during a crash is greatly increased.

If you think that the status of the passenger airbag off indicator lamp is incorrect, check for the following:

- Objects lodged underneath the seat.
- Objects between the seat cushion and the center console.
- Objects hanging off the seatback.

- Objects stowed in the seatback map pocket.
- Objects placed on the occupant's lap.
- Cargo interference with the seat
- Other passengers pushing or pulling on the seat.
- Rear passenger feet and knees resting or pushing on the seat.

The conditions listed above may cause the weight of a properly seated occupant to be incorrectly interpreted by the front passenger sensing system. The person in the front passenger seat may appear heavier or lighter due to the conditions described in the list above.



Make sure the front passenger sensing system is operating properly. See **Crash Sensors and Airbag Indicator** (page 49).

**If the airbag readiness light is lit, do the following:**

The driver and adult passengers should check for objects lodged underneath the front passenger seat, or cargo interfering with the seat.

If there are lodged objects, or cargo is interfering with the seat, take the following steps to remove the obstruction:

- Pull the vehicle over.
- Turn the vehicle off.
- Driver and adult passengers should check for any objects lodged underneath the front passenger seat or cargo interfering with the seat.
- Remove the obstruction(s) (if found).
- Restart the vehicle.
- Wait at least two minutes and verify that the airbag readiness light is no longer illuminated.
- If the airbag readiness light remains illuminated, this may or may not be a problem due to the front passenger sensing system.


Do not attempt to repair or service the system. Take your vehicle immediately to an authorized dealer.


# Supplementary Restraints System


If it is necessary to modify an advanced front airbag system to accommodate a person with disabilities, contact the Ford Customer Relationship Center. See **Getting the Services You Need** (page 259).

## SIDE AIRBAGS


### WARNINGS


 Do not place objects or mount equipment on or near the airbag cover, on the side of the seatbacks (of the front seats), or in front seat areas that may come into contact with a deploying airbag. Failure to follow these instructions may increase the risk of personal injury in the event of a crash.

 Do not use accessory seat covers. The use of accessory seat covers may prevent the deployment of the side airbags and increase the risk of injury in an accident.

 Do not lean your head on the door. The side airbag could injure you as it deploys from the side of the seatback.

### WARNINGS


 Do not attempt to service, repair, or modify the airbag, its fuses or the seat cover on a seat containing an airbag as you could be seriously injured or killed. Contact your authorized dealer as soon as possible.

 If the side airbag has deployed, the airbag will not function again. The side airbag system (including the seat) must be inspected and serviced by an authorized dealer. If the airbag is not replaced, the unrepaired area will increase the risk of injury in a crash.

The side airbags are located on the outboard side of the seatbacks of the front seats. In certain sideways crashes, the airbag on the side affected by the crash will be inflated. The airbag was designed to inflate between the door panel and occupant to further enhance the protection provided occupants in side impact crashes.



The system consists of the following:

- A label or embossed side panel indicating that side airbags are fitted to your vehicle.
  - Side airbags located inside the driver and front passenger seatbacks.
  - Front passenger sensing system.
- 
- Crash sensors and monitoring system with readiness indicator. See **Crash Sensors and Airbag Indicator** (page 49).

# Supplementary Restraints System

**Note:** *The passenger sensing system will deactivate the passenger seat-mounted side airbag if it detects an empty passenger seat.*

The design and development of the side airbag system included recommended testing procedures that were developed by a group of automotive safety experts known as the Side Airbag Technical Working Group. These recommended testing procedures help reduce the risk of injuries related to the deployment of side airbags.

## DRIVER KNEE AIRBAG

A driver's knee airbag is located under the instrument panel. During a crash, the restraints control module may activate the driver's knee airbag based on crash severity and occupant conditions. Under certain crash and occupant conditions, the driver's knee airbag may deploy but the driver's front airbag may not activate. As with front and side airbags, it is important to be properly seated and restrained to reduce the risk of death or serious injury.



Make sure the knee airbag is operating properly. See **Crash Sensors and Airbag Indicator** (page 49).

## SAFETY CANOPY™

### WARNINGS



Do not place objects or mount equipment on or near the headliner at the siderail that may come into contact with a deploying curtain airbag. Failure to follow these instructions may increase the risk of personal injury in the event of a crash.



Do not lean your head on the door. The curtain airbag could injure you as it deploys from the headliner.



Do not attempt to service, repair, or modify the curtain airbags, its fuses, the A, B, or C pillar trim, or the headliner on a vehicle containing curtain airbags as you could be seriously injured or killed. Contact your authorized dealer as soon as possible.

### WARNINGS



All occupants of your vehicle including the driver should always wear their safety belts even when an airbag supplemental restraint system and curtain airbag is provided. Failure to properly wear your safety belt could seriously increase the risk of injury or death.



To reduce risk of injury, do not obstruct or place objects in the deployment path of the curtain airbag.

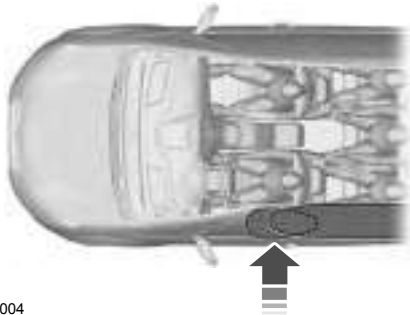


If the curtain airbags have deployed, the curtain airbags will not function again. The curtain airbags (including the A, B and C pillar trim and headliner) must be inspected and serviced by an authorized dealer. If the curtain airbag is not replaced, the unrepaired area will increase the risk of injury in a crash.

The Safety Canopy will deploy during significant side crashes or when a certain likelihood of a rollover event is detected by the rollover sensor. The Safety Canopy is mounted to the roof side-rail sheet metal, behind the headliner, above each row of

# Supplementary Restraints System

seats. In certain sideways crashes or rollover events, the Safety Canopy will be activated, regardless of which seats are occupied. The Safety Canopy is designed to inflate between the side window area and occupants to further enhance protection provided in side impact crashes and rollover events.



E75004

The system consists of the following:

- Safety canopy curtain airbags located above the trim panels over the front and rear side windows identified by a label or wording on the headliner or roof-pillar trim.
- A flexible headliner which opens above the side doors to allow air curtain deployment



• Crash sensors and monitoring system with a readiness indicator. See **Crash Sensors and Airbag Indicator** (page 49).

Children 12 years old and under should always be properly restrained in the rear seats. The Safety Canopy will not interfere with children restrained using a properly installed child or booster seat because it is designed to inflate downward from the headliner above the doors along the side window opening.

The design and development of the Safety Canopy included recommended testing procedures that were developed by a group of automotive safety experts known as the Side Airbag Technical Working Group. These recommended testing procedures help reduce the risk of injuries related to the deployment of side airbags (including the Safety Canopy).

## CRASH SENSORS AND AIRBAG INDICATOR

### WARNING



Modifying or adding equipment to the front end of your vehicle (including frame, bumper, front end body structure and tow hooks) may affect the performance of the airbag system, increasing the risk of injury. Do not modify the front end of your vehicle.

# Supplementary Restraints System

Your vehicle has a collection of crash and occupant sensors which provide information to the restraints control module which deploys (activates) the front safety belt pretensioners, driver airbag, passenger airbag, knee airbag(s), seat mounted side airbags, and the Safety Canopy. Based on the type of accident (frontal impact, side impact or rollover) the restraints control module will deploy the appropriate safety devices.

The restraints control module also monitors the readiness of the above safety devices plus the crash and occupant sensors. A warning indicator light in the instrument cluster indicates the readiness of the safety system. If this warning indicator light is not functioning and there is another fault within the system, the message cluster may display an airbag failure warning. See **Information Displays** (page 108). You will hear five tones that repeat periodically until you repair the problem, the warning indicator light or both. Routine maintenance of the airbag is not required.

A difficulty with the system is indicated by one or more of the following:



- The readiness light will not illuminate immediately after the ignition is turned on.
- The readiness light will either flash or stay lit.
- A series of five beeps will be heard. The tone pattern will repeat periodically until the problem, the light or both are repaired.

If any of these things happen, even intermittently, have the supplemental restraint system serviced at an authorized dealer immediately. Unless serviced, the system may not function properly in the event of a crash.

The safety belt pretensioners and the airbag supplemental restraint system is designed to activate when your vehicle sustains frontal or sideways deceleration sufficient to cause the restraints control module to deploy a safety device or when a certain likelihood of a rollover event is detected by the rollover sensor.

The fact that the safety belt pretensioners or airbags did not activate for both front seat occupants in a crash does not mean that something is wrong with the system. Rather, it means the restraints control module determined the accident conditions (for example, crash severity, belt usage) were not appropriate to activate these safety devices.

- The design of the front airbags is to activate only in frontal and near-frontal crashes (not rollovers, side impacts or rear impacts) unless the crash causes sufficient frontal deceleration.
- The safety belt pretensioners are designed to activate in frontal, near-frontal, side and rollover crashes.
- The design of the side airbags is to inflate in certain side crashes. Side airbags may activate in other types of crashes if the vehicle experiences sufficient sideways motion or deformation.

# Supplementary Restraints System

---

- The knee airbag(s) may deploy based on crash severity and occupant conditions.
- The design of the Safety Canopy is to inflate in certain side impact crashes and when a certain likelihood of rollover is detected by the rollover sensor. The Safety Canopy may activate in other types of crashes if the vehicle experiences sufficient sideways motion or deformation, or a certain likelihood of rollover.

## **AIRBAG DISPOSAL**

Contact your authorized dealer as soon as possible. Airbags must be disposed of by qualified personnel.

# Keys and Remote Controls

---

## GENERAL INFORMATION ON RADIO FREQUENCIES

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

**Note:** *Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The term IC before the radio certification number only signifies that Industry Canada technical specifications were met.*

The typical operating range for your transmitter is approximately 33 feet (10 meters). Vehicles with the remote start feature will have a greater range. One of the following could cause a decrease in operating range:

- weather conditions
- nearby radio towers
- structures around the vehicle
- other vehicles parked next to your vehicle

Other short-distance radio transmitters, such as amateur radios, medical equipment, wireless headphones, remote controls and alarm systems may operate on the same frequency as your remote control. If other transmitters are operating on those frequencies, you may not be able to use your remote control. Using your remote control near some types of electronic equipment, such as USB devices, computers or cell phones can interfere with remote operation. Operating your remote control near metal or metallic-finished purses, bags or clothing can interfere with remote operation. You can lock and unlock the doors with the key.

**Note:** *Make sure to lock your vehicle before leaving it unattended.*

**Note:** *If you are in range, the remote control will operate if you press any button unintentionally.*

## Intelligent Access

The system uses a radio frequency signal to communicate with your vehicle and authorize your vehicle to unlock when one of the following conditions are met:

- You touch the inside of any exterior door handle within 3 ft (1 m) proximity of an intelligent access key.
- You press the luggage compartment button.
- You press a button on the transmitter.

If excessive radio frequency interference is present in the area or if the transmitter battery is low, you may need to mechanically unlock your door. You can use the mechanical key blade in your intelligent access key to open the driver door in this situation. See **Remote Control** (page 53).

# Keys and Remote Controls

## REMOTE CONTROL

### Intelligent Access Key



E218688

The intelligent access keys operate the power locks and the remote start system. The key must be in your vehicle to use the push button start.



E151795

**Note:** Your vehicle keys came with a security label that provides important key cut information. Keep the label in a safe place for future reference.

### Removable Key Blade

The intelligent access key also contains a removable key blade that you can use to unlock your vehicle.



E218689

Push the release button and pull the key blade out.

### Replacing the Battery

**Note:** Refer to local regulations when disposing of transmitter batteries.

**Note:** Do not wipe off any grease on the battery terminals or on the back surface of the circuit board.



## Keys and Remote Controls

**Note:** Replacing the battery does not erase the programmed key from your vehicle. The transmitter should operate normally.

A message appears in the information display when the remote control battery is low. See **Information Messages** (page 114).

The remote control uses one coin-type three-volt lithium battery CR2032 or equivalent.

1. Push the release button and pull the key blade out.



E218690

2. Twist a thin coin under the tab hidden behind the key blade head to remove the battery cover.



E218691

3. Insert a suitable tool, for example a screwdriver, in the position shown and carefully remove the battery.
4. Install a new battery with the + facing upward.



E218689

# Keys and Remote Controls

5. Reinstall the battery cover and the key blade.

## Car Finder



Press the button twice within three seconds. A tone sounds and the direction indicators will flash. We recommend you use this method to locate your vehicle, rather than using the panic alarm.

## Sounding the Panic Alarm

**Note:** *The panic alarm only operates when the ignition is off.*



Press the button to sound the panic alarm. Press the button again or switch the ignition on to turn it off.

## Remote Start

### WARNING



To avoid exhaust fumes, do not use remote start if your vehicle is parked indoors or in areas that are not well ventilated.

**Note:** *Do not use remote start if your fuel level is low.*



The remote start button is on the transmitter.

This feature allows you to start your vehicle from the outside. The transmitter has an extended operating range.

If your vehicle has automatic climate control, you can configure it to operate when you remote start your vehicle. See **Climate Control** (page 133).

Many states and provinces have restrictions for the use of remote start. Check your local and state or provincial laws for specific requirements regarding remote start systems.

The remote start system does not work if any of the following occur:

- The ignition is on.
- The anti-theft alarm triggers.
- You switch the feature off in the information display.
- The hood is open.
- The transmission is not in park (P).
- The battery voltage is below the minimum operating voltage.

## Remote Control Feedback (If Equipped)

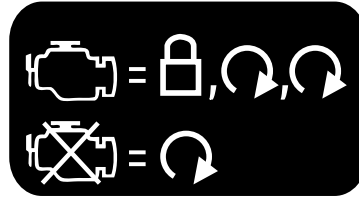
An LED on the remote control provides status feedback of remote start or stop commands.

# Keys and Remote Controls

LED.	Status
Solid green.	Remote start or extension successful.
Solid red.	Remote stop successful; vehicle off.
Blinking red.	Remote start or stop failed.
Blinking green.	Waiting for status update.

## Remote Starting your Vehicle

**Note:** You must press each button within three seconds of each other. Your vehicle will not remote start if you do not follow this sequence.



E138626

The label on your transmitter details the starting procedure.

1. Press the lock button to lock all the doors.
2. Press the remote start button twice. The exterior lamps flash twice.

A tone sounds if the system fails to start, unless quiet start is on. Quiet start runs the blower fan at a slower speed to reduce noise. You can switch this feature on or off in the information display. See **General Information** (page 108).

**Note:** You must press the push button ignition switch on the instrument panel once while applying the brake pedal before driving your vehicle.

The power windows do not work during remote start and the radio does not turn on automatically.

The parking lamps remain on and your vehicle will run for 5, 10 or 15 minutes, depending on the setting.

## Extending the Engine Running Time

To extend the engine running time duration of your vehicle during remote start, repeat steps 1 and 2 while the engine is running. If the duration is set to 10 minutes, the duration extends by another 10 minutes. For example, if your vehicle had been running from the first remote start for 5 minutes, your vehicle continues to run now for a total of 20 minutes. You can extend the engine running time duration to a maximum of 30 minutes.

Wait at least five seconds before remote starting after the engine stops running.

## Turning Your Vehicle Off After Remote Starting



Press the button once. Your vehicle and the parking lamps turn off.

# Keys and Remote Controls

---

You may have to be closer to your vehicle than when starting due to ground reflection and the added noise of your running vehicle.

You can switch this feature on or off in the information display. See **General Information** (page 108).

## ***Memory Feature***

You can program your intelligent access key to recall memory positions. See **Memory Function** (page 143).

## **REPLACING A LOST KEY OR REMOTE CONTROL**

Replacement keys or remote controls can be purchased from an authorized dealer. Authorized dealers can program remote controls for your vehicle. See **Passive Anti-Theft System** (page 75).

## PRINCIPLE OF OPERATION

MyKey allows you to program keys with restricted driving modes to promote good driving habits. You can program the restrictions to all keys but one. Any keys that you did not program are administrator keys or admin keys.

You can use admin keys to:

- Create a MyKey with certain vehicle restrictions.
- Program certain MyKey settings.
- Clear all MyKey restrictions.

After you program a MyKey, you can view the following information through the information display:

- The total number of admin keys and MyKeys for your vehicle.
- The total distance a MyKey driver traveled with your vehicle.

**Note:** *Every MyKey receives the same restrictions and settings. You cannot program them individually.*

**Note:** *For vehicles equipped with a push-button start switch: When both a MyKey and an admin key are present when you start your vehicle, the system recognizes the admin key only.*

## Standard Settings

Not every vehicle includes the features listed below. If your vehicle has this equipment, then you cannot change the following settings when using a MyKey:

- Seatbelt reminder or Belt-Minder™. MyKey mutes the audio system until drivers, and in some instances, passengers, fasten their seatbelts. **Note:** If your vehicle includes an AM/FM radio or a very basic audio system, then the radio may not mute.
- Earlier low-fuel warning. The low-fuel warning activates earlier for MyKey drivers, giving them more time to refuel.

- Certain driver alerts, stability systems or parking aids turn on automatically when you use the MyKey system. For example, Blind Spot Information System (BLIS), cross traffic alert, lane departure warning or forward collision warning. **Note:** MyKey drivers may be able to turn the lane departure warning feature off, but this feature turns back on automatically with every new key cycle.
- Restricted touchscreen operation in some markets. For example, MyKey may prevent manual navigation destination input while the vehicle is in any gear other than park (P) or when the vehicle reaches a certain rate of speed.
- Satellite radio adult content restrictions, if this feature is available in your market.

## Optional Settings

You can configure certain vehicle feature settings when you first create a MyKey. You can also change the settings afterward with an admin key.

**Note:** *Not every feature applies to every vehicle in every market. When they are available for your vehicle, then they appear in your information display, providing choices to switch them on or off, or to select a more specific setting.*

- Various vehicle speed limits so the MyKey driver cannot exceed certain speeds. The information display shows warnings followed by an audible tone when the MyKey driver reaches the set speed. You cannot override the set speed by fully depressing the accelerator pedal.

## WARNING



Do not set MyKey maximum speed limit to a limit that will prevent the driver from maintaining a safe speed considering posted speed limits and prevailing road conditions. The driver is always responsible to drive in accordance with local laws and prevailing conditions. Failure to do so could result in accident or injury.

- Various vehicle speed reminders so MyKey drivers know when their vehicle speed approaches the limits. Warnings appear in your information display and a tone sounds when the MyKey drivers exceed the set vehicle speed.
- The audio system's maximum volume limits to 45% so MyKey drivers can concentrate on the road. A message appears in the information display when MyKey drivers attempt to exceed the limited volume. MyKey also disables the automatic volume control. **Note:** If your vehicle includes an AM/FM radio or a very basic audio system, then the radio may not limit.
- Always on setting. This setting forces certain features to remain on and active for MyKey drivers. For example, traction control, AdvanceTrac, E911 or emergency assistance and the do not disturb features stay on even if a MyKey driver uses the feature's control to switch it off.

## CREATING A MYKEY

Use the information display to create a MyKey.

1. Switch the ignition on using the key or the transmitter you want to program.
2. Access the main menu in the information display and then scroll through the menus to begin programming your MyKey. See **Information Displays** (page 108).
3. Follow the instructions in the display.
4. A confirmation message appears in the display after you finish programming your MyKey. The programmed restrictions apply when you restart your vehicle with the programmed key or transmitter.

**Note:** *Make sure you label the programmed MyKey so you can distinguish it from the admin keys.*

You can also program the optional MyKey settings.

## Programming or Changing Configurable Settings

Use the information display to program or change your optional MyKey settings.

1. Switch the ignition on using the key or the transmitter you want to program.
2. Access the main menu in the information display and then scroll through the menus to change the settings of your MyKey. See **Information Displays** (page 108).
3. Follow the instructions in the display.
4. A confirmation message appears in the display after you finish programming your MyKey. The programmed restrictions apply when you restart your vehicle with the programmed key or transmitter.

**Note:** *You can clear or change your MyKey settings at any time during the same key cycle as you created the MyKey. If you switch the engine off, you must use an admin key to change or clear your optional MyKey settings.*

## CLEARING ALL MYKEYS

When you clear your MyKeys, you remove all restrictions and return all MyKeys to their original admin key status at once. To clear all MyKeys of all MyKey settings, use the information display.

1. Switch the ignition on using an admin key.
2. Access the main menu in the information display and then scroll through the menus to begin clearing your MyKey programming. See **Information Displays** (page 108).
3. Follow the instructions in the display.
4. A confirmation message appears in the display after you finish clearing your MyKeys.

**Note:** *When you clear your MyKeys, you remove all restrictions and return all MyKeys to their original admin key status. You cannot remove the MyKey restrictions individually.*

## CHECKING MYKEY SYSTEM STATUS

You can find information about your programmed MyKeys by using the information display. See **Information Displays** (page 108).

### MyKey Distance

Tracks the distance when drivers use a MyKey. The only way to delete the accumulated distance is by using an admin key to clear all MyKeys. If the distance does not accumulate as expected, then the intended user is not using the MyKey, or an admin key user recently cleared and then recreated a MyKey.

### Number of MyKeys

Indicates the number of MyKeys programmed to your vehicle. Use this feature to detect how many MyKeys you have for your vehicle and determine when all MyKeys have been deleted.

## Number of Admin Keys

Indicates how many admin keys are programmed to your vehicle. Use this feature to determine how many admin keys you have for your vehicle, and detect if an additional MyKey has been programmed.

## USING MYKEY WITH REMOTE START SYSTEMS

MyKey is not compatible with non Ford-approved, aftermarket remote start systems. If you choose to install a remote start system, see an authorized dealer for a Ford-approved remote start system.

## MYKEY TROUBLESHOOTING

Condition	Potential causes
I cannot create a MyKey.	<ul style="list-style-type: none"> <li>· The key or transmitter used to start the vehicle does not have admin privileges.</li> <li>· Vehicles with keyless start: Make sure you place the transmitter into the backup position. See <b>Starting a Gasoline Engine</b> (page 157).</li> <li>· The key or transmitter used to start the vehicle is the only admin key. There always has to be at least one admin key.</li> <li>· SecuriLock passive anti-theft system is disabled or in unlimited mode.</li> </ul>
I cannot program the configurable settings.	<ul style="list-style-type: none"> <li>· The key or transmitter used to start the vehicle does not have admin privileges.</li> </ul>



# MyKey™

Condition	Potential causes
	<ul style="list-style-type: none"> <li>· There are no MyKeys programmed to the vehicle. See <b>Creating a MyKey</b> (page 59).</li> </ul>
For vehicles with keyless start: No MyKey restrictions are available when starting the vehicle.	<ul style="list-style-type: none"> <li>· An admin transmitter is present when you started your vehicle.</li> <li>· There are no MyKeys programmed to the vehicle. See <b>Creating a MyKey</b> (page 59).</li> </ul>
I cannot clear the MyKeys.	<ul style="list-style-type: none"> <li>· The key or transmitter used to start the vehicle does not have admin privileges.</li> <li>· No MyKeys are created. See <b>Creating a MyKey</b> (page 59).</li> </ul>
I lost the only admin key.	<ul style="list-style-type: none"> <li>· Purchase a new key or transmitter from your authorized dealer.</li> </ul>
I lost a key.	<ul style="list-style-type: none"> <li>· Program a spare key or transmitter. You may need to see your authorized dealer. See <b>Passive Anti-Theft System</b> (page 75).</li> </ul>
MyKey distances do not accumulate.	<ul style="list-style-type: none"> <li>· The MyKey user is not using the MyKey.</li> <li>· An admin key holder cleared the MyKeys and created new MyKeys.</li> <li>· The key system has been reset.</li> </ul>

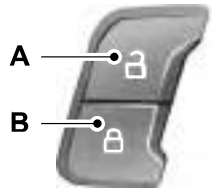
# Locks

## LOCKING AND UNLOCKING

You can use the power door lock or the remote control to lock and unlock your vehicle.

### Power Door Locks

The power door lock is on the driver and front passenger door panels.



E138628

- A Unlock
- B Lock

### Door Lock Indicator

An LED on each door window trim lights when you lock the door. It remains on for up to five minutes after you switch the ignition off.

### Switch Inhibitor

When you electronically lock your vehicle, the power door lock and interior luggage compartment release switch will no longer operate after 20 seconds. You must unlock your vehicle with the remote control or keyless keypad, or switch the ignition on, to restore function to these switches. You can switch this feature on or off in the information display. See **General Information** (page 108).

### Remote Control

You can use the remote control at any time. The luggage compartment release button only works when your vehicle speed is less than 5 mph (8 km/h).

### Unlocking the Doors (Two-Stage Unlock)



Press the button to unlock the driver door. Press the button again within three seconds to unlock all doors. The direction indicators will flash.

Press and hold both the lock and unlock buttons on the remote control for four seconds to disable or enable two-stage unlocking. Disabling two-stage unlocking allows all vehicle doors to unlock with one press of the button. The direction indicators will flash twice to indicate a change to the unlocking mode. The unlocking mode applies to the remote control, keyless entry keypad and intelligent access.

Intelligent access at the driver door will unlock all doors when you disable two-stage unlocking.

### Locking the Doors



Press the button to lock all the doors. The direction indicators will flash.

# Locks

Press the button again within three seconds to confirm that all the doors are closed. The doors lock again, a tone sounds and the direction indicators flash if all the doors and the luggage compartment are closed.

## Mislock

If any door or the luggage compartment is open, or if the hood is open on vehicles with an anti-theft alarm or remote start, a tone sounds and the direction indicators will not flash. You can switch this feature on or off in the information display. See **General Information** (page 108).

## Audible and Visual Locking Confirmation

If audible and visual locking confirmation is configurable, you can turn it on or off using the information display. See **General Information** (page 108).

## Power Liftgate (If Equipped)

### WARNINGS



Make sure all persons are clear of the power liftgate area before using the power liftgate control.

### WARNINGS



Make sure to close and latch the liftgate to prevent drawing exhaust fumes into your vehicle. This will also prevent passengers and cargo from falling out. If you must drive with the liftgate open, keep the vents or windows open so outside air comes into your vehicle. Failure to follow this warning could result in serious personal injury.

**Note:** *Be careful when opening or closing the liftgate in a garage or other enclosed area to avoid damaging the liftgate.*



Press twice within three seconds to open, close or stop the movement of a power liftgate. See **Power Liftgate** (page 68).

## Mechanical Key

The intelligent access key also contains a removable key blade that you can use to lock and unlock your vehicle. See **Remote Control** (page 53).

Turn the top of the key toward the front of your vehicle once to lock all doors.

Turn the top of the key toward the rear of your vehicle once to unlock the driver door only.

## Locking the Doors Individually

If the power locks fail to operate, lock the doors individually using the key in the position shown.

# Locks



E180643

## Left-Hand Side

Turn clockwise to lock.

## Right-Hand Side

Turn counterclockwise to lock.

## Opening a Rear Door from Inside

Pull the interior door handle twice to unlock and open a rear door. The first pull unlocks the door and the second pull will unlatch the door.

## Activating Intelligent Access

The intelligent access key must be within 3 ft (1 m) of the door or luggage compartment you intend to lock or unlock.

## Locking the Doors



E146044

The locking sensors are on the front and rear door handles.

Press and hold the lock sensor area for about a second to lock your vehicle. To avoid unlocking the door inadvertently, make sure you only touch the lock sensor and not other areas of the door handle.

After locking the doors with the lock sensor, there is a brief delay before you can unlock your vehicle. This delay lets you pull the handle to make sure it locked.

**Note:** *Keep the door handle surface clean to avoid issues with operation.*

# Locks

---

## Unlocking the Doors

Pull an exterior door handle to unlock and open the door. The unlock sensor is on the back of the handle. Make sure not to touch the lock sensor area on the front of the handle.

## At the Liftgate

Press the exterior liftgate release button inside the top of the liftgate pull-cup handle.

## Smart Unlocks

This feature helps to prevent you from unintentionally locking your intelligent access key inside the passenger compartment or rear cargo area.

When you lock your vehicle with the door open and the ignition off, your vehicle will search for an intelligent access key in the passenger compartment after you close the door. If your vehicle finds a key, all of the doors will immediately unlock.

You can override the smart unlock feature and intentionally lock the intelligent access key inside your vehicle. To do this, lock your vehicle after you have closed all the doors by:

- Using the keyless entry keypad.
- Pressing the lock button on another intelligent access key.
- Touching the locking area on the handle with another intelligent access key in your hand.

When you open one of the front doors with the ignition on, and lock your vehicle using the power door lock, all doors will lock then unlock.

## Autolock Feature

The autolock feature will lock all the doors when all of the following occur:

- All doors are closed.
- The ignition is on.
- You shift into any gear putting your vehicle in motion.
- Your vehicle attains a speed greater than 12 mph (20 km/h).

The autolock feature repeats when both of the following occur:

- You open then close any door while the ignition is on and your vehicle speed is less than 9 mph (15 km/h).
- Your vehicle then attains a speed greater than 12 mph (20 km/h).

## Enabling or Disabling

To enable or disable the autolock feature, contact an authorized dealer.

## Autounlock Feature

The autounlock feature unlocks all the doors when all of the following occur:

- The ignition is on, all the doors are closed, and your vehicle has been in motion at a speed greater than 4 mph (7 km/h).
- Your vehicle comes to a stop and you switch the ignition off or to accessory.
- You open the driver door within 10 minutes of switching the ignition off or to accessory.

# Locks

---

**Note:** *The doors will not autounlock if you electronically lock your vehicle after you switch the ignition off and before you open the driver door.*

## Enabling or Disabling

You can enable or disable the autounlock feature in the information display or an authorized dealer can do it for you. See **General Information** (page 108).

## Illuminated Entry

The interior lamps and select exterior lamps will light when you unlock the doors with the remote control.

The system turns off the lights if:

- You start your vehicle.
- You press the remote control lock button.
- They are on for 25 seconds.

The lights will not turn off if:

- You switch them on with the lamp control.
- Any door is open.

## Illuminated Exit

The interior lamps and select exterior lamps will light when all doors are closed and you switch the ignition off.

The lamps turn off if all the doors remain closed and either of the following occurs:

- After 25 seconds elapse.
- You lock your vehicle from the outside.

## Battery Saver

If you leave the courtesy lamps or dome lamps on and switch the ignition off, this feature turns them off after some time.

## Accessory Mode Battery Saver for Intelligent Access Keys

If you leave your vehicle with the ignition on, it will turn off 15 minutes after you close all of the doors.

## Welcome Lighting

This feature lights select exterior lighting as you approach your vehicle. You must have an intelligent access key with you. The feature turns off when you open a door, liftgate, or unlock your vehicle. Welcome lighting remains on for 25 seconds or until you start your vehicle.

The feature is active when:

- The feature is configured on in the information display. See **General Information** (page 108).
- The ignition is off.
- All doors and the liftgate are closed.
- You lock your vehicle.

The feature is not active when:

- Your vehicle detects the intelligent access key is inside.
- The intelligent access key is in close range of the vehicle for more than two minutes.
- The anti-theft alarm triggers.

# Locks


- You do not start your vehicle for more than five days.
- The vehicle battery charge is low.

**Note:** *When this feature is disabled, you must switch the ignition on to reset it.*


**Note:** *This feature may not correctly operate if the intelligent access key is stored within 8–15 ft (2.4–4.6 m) of your vehicle while not in use.*


## POWER LIFTGATE

### WARNINGS

 It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a crash, people riding in these areas are more likely to be seriously injured or killed. Do not allow people to ride in any area of your vehicle that is not equipped with seats and seatbelts. Make sure everyone in your vehicle is in a seat and properly using a seatbelt. Failure to follow this warning could result in serious personal injury or death.

### WARNINGS

 Make sure to close and latch the liftgate to prevent drawing exhaust fumes into your vehicle. This will also prevent passengers and cargo from falling out. If you must drive with the liftgate open, keep the vents or windows open so outside air comes into your vehicle. Failure to follow this warning could result in serious personal injury.

 Keep keys out of reach of children. Do not allow children to operate or play near an open or moving power liftgate. You should supervise the operation of the power liftgate at all times.

**Note:** *Make sure that you close the liftgate before operating or moving your vehicle, especially in an enclosure, like a garage or a parking structure. This could damage the liftgate and its components.*

**Note:** *Do not hang anything, for example a bike rack, from the glass or liftgate. This could damage the liftgate and its components.*

The liftgate only operates with the transmission in park (P).

Three warning tones sound as the liftgate begins to power close. One short chime indicates a problem with the open or close request, caused by:

- The ignition is on and the transmission is not in park (P).
- The battery voltage is below the minimum operating voltage.
- The vehicle speed is at or above 3 mph (5 km/h).

If the liftgate starts to close after it has fully opened, this indicates there may be excessive weight on the liftgate or a possible strut failure. A repetitive chime sounds and the liftgate closes under control. Remove any excessive weight from the liftgate. If the liftgate continues to close after opening, have the system checked by an authorized dealer.

# Locks

## Opening and Closing the Liftgate

### WARNING



Make sure all persons are clear of the power liftgate area before using the power liftgate control.

**Note:** Make sure the area behind your vehicle is free from obstruction and that there is enough room for you to operate the liftgate. Objects too close to your vehicle, for example a wall, garage door or another vehicle may come into contact with the moving liftgate. This could damage the liftgate and its components.

**Note:** Be careful when opening or closing the liftgate in a garage or other enclosed area to avoid damaging the liftgate.

**Note:** Do not leave the liftgate open while driving. This could damage the liftgate and its components.

### From the Instrument Panel



Press the button on the instrument panel.

### With the Remote Control



Press the button twice within three seconds.

### With the Outside Control Button

#### Opening the Liftgate

1. Unlock the liftgate with the remote control or power door unlock control. If an intelligent access key is within 3 ft (1 m) of the liftgate, the liftgate unlocks when you press the liftgate release button.



E180684

2. Press the button to unlatch the liftgate.




# Locks

**Note:** Allow the power system to open the liftgate. Manually pushing or pulling the liftgate may activate the system's obstacle detection feature and stop the power operation or reverse its direction. Manually interfering with the liftgate motion may also replicate a strut failure.

## Closing the Liftgate

### WARNING

 Keep clear of the liftgate when activating the rear switch.



Press and release the liftgate control button.

## Stopping the Liftgate Movement

**Note:** Do not apply sudden excessive force to the liftgate while it is in motion. This could damage the power liftgate and its components.

You can stop the liftgate movement by doing any of the following:

- Pressing the liftgate control button.
- Pressing the liftgate button on the remote control twice.
- Pressing the liftgate button on the instrument panel.
- Moving your foot under and away from the center rear bumper in a single-kick motion.

This method only works for vehicles with the hands-free liftgate feature.

## Setting the Liftgate Open Height

1. Open the liftgate.
2. Stop the liftgate movement by pressing the control button on the liftgate when it reaches the desired height.

**Note:** Once the liftgate has stopped moving, you can also manually move it to the desired height.

3. Press and hold the liftgate control button on the liftgate until you hear a chime, indicating programming is complete.

**Note:** You can only use the liftgate control button to program the height.

**Note:** You cannot program the height if the liftgate position is too low.

The new open liftgate height is recalled when the power liftgate is opened. To change the programmed height, repeat the above procedure. Once you open the power liftgate, you can manually move it to a different height.

**Note:** The system recalls the new programmed height, even if you disconnect the battery.

When operating the power liftgate after you have programmed a lower height than fully open, you can fully open the liftgate by manually pushing it upward to the maximum open position.

# Locks

## Obstacle Detection

### When Closing

The system stops when it detects an obstacle. Three tones sound and the system reverses to open. Once you remove the obstacle, you can power close the liftgate.

**Note:** Entering your vehicle while the liftgate is closing can cause your vehicle to bounce and activate obstacle detection. To prevent this, let the power liftgate close completely before you enter your vehicle. Before driving off, check the instrument cluster for a liftgate or door ajar message or warning indicator. Failure to do this could result in unintentionally leaving the liftgate open while driving.

### When Opening

The system stops when it detects an obstacle and three tones sound. Once you remove the obstacle, you can continue to operate the liftgate.

## Hands-Free Feature

Make sure you have an intelligent access transmitter within 3 ft (1 m) of the liftgate.



1. Move your foot under and away from the rear bumper detection area in a single-kick motion. Do not move your foot sideways or the sensors may not detect the motion. For vehicles with both the hands-free liftgate and trailer tow, move your foot under the bumper between the trailer hitch and the exhaust.
2. The liftgate will power open or close.

**Note:** Allow the power system to open the liftgate. Manually pushing or pulling the liftgate may activate the system's obstacle detection feature and stop the power operation or reverse its direction. Manually interfering with the liftgate motion may also replicate a strut failure.

**Note:** Splashing water may cause the hands-free liftgate to open. Keep the intelligent access key away from the rear bumper detection area when washing your vehicle.

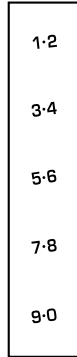
## KEYLESS ENTRY

### SECURICODE™ KEYLESS ENTRY KEYPAD

The keypad is located near the driver window. It is invisible until touched and then it lights up so you can see and touch the appropriate buttons.

**Note:** If you enter your entry code too fast on the keypad, the unlock function may not work. Re-enter your entry code more slowly.

# Locks



E138637

You can use the keypad to do the following:

- Lock or unlock the doors.
- Recall memory seat and mirror positions.
- Program and erase user codes.
- Arm and disarm the anti-theft alarm.

You can operate the keypad with the factory-set five-digit entry code. The code is located on the owner's wallet card in the glove box and is available from an authorized dealer. You can also create up to five of your own five-digit personal entry codes.

The Keyless Entry Keypad will only work if the driver door is closed and transmission is in park (P).

## Programming a Personal Entry Code

To create your own personal entry code:

1. Enter the factory-set code.
2. Press **1•2** on the keypad within five seconds.
3. Enter your personal five-digit code. You must enter each number within five seconds of each other.
4. Press **1•2** on the keypad to save personal code 1.

The doors will lock then unlock to confirm that programming was successful.

To program additional personal entry codes, repeat Steps 1-3, then for Step 4:

- Press **3•4** to save personal code 2.
- Press **5•6** to save personal code 3.
- Press **7•8** to save personal code 4.
- Press **9•0** to save personal code 5.

## Tips:

- Do not set a code that uses five of the same number.
- Do not use five numbers in sequential order.
- The factory-set code will work even if you have set your own personal code.

## Recalling Memory Positions

The programmed entry codes will recall driver memory positions as follows:

- Entry code 1 will recall driver 1 memory positions.
- Entry code 2 will recall driver 2 memory positions.
- Entry code 3 will recall driver 3 memory positions.

# Locks

**Note:** *Personal entry codes 4 and 5 will not recall memory positions.*

## Erasing a Personal Code

1. Enter the factory-set five-digit code.
2. Press and release **1•2** on the keypad within five seconds.
3. Press and hold **1•2** for two seconds. You must do this within five seconds of completing Step 2.

All personal codes will erase and only the factory-set five-digit code will work.

## Anti-Scan Feature

The keypad will go into an anti-scan mode if you enter the wrong code seven times (35 consecutive button presses). This mode disables the keypad for one minute and the keypad lamp will flash.

The anti-scan feature turns off after any of the following occur:

- One minute of keypad inactivity passes.
- You press the unlock button on the remote control.

- You switch the ignition on.
- You unlock the vehicle using intelligent access.

## Unlocking and Locking the Doors

### To Unlock the Driver Door

Enter the factory-set five-digit code or your personal code. You must press each number within five seconds of each other. The interior lamps will illuminate.

**Note:** *All doors will unlock if the two-stage unlocking feature is disabled. See **Locking and Unlocking** (page 63).*

### To Unlock All Doors

Enter the factory-set code or your personal code, then press **3•4** control within five seconds.

### To Lock All Doors

Press and hold **7•8** and **9•0** at the same time with the driver door closed. You do not need to enter the keypad code first.

## Displaying the Factory-Set Code

**Note:** *You will need to have two programmed intelligent access keys for this procedure.*

To display the factory-set code in the information display:



1. Open the center console lid.
2. Insert the first programmed key in the backup slot.
3. Press the push button ignition switch once and wait a few seconds.
4. Press the push button ignition switch again and remove the key.

# Locks

---

5. Within 10 seconds, place a second programmed intelligent access key in the backup slot and press the push button ignition switch.

The factory-set code will appear in the information display for a few seconds.

**Note:** *The code may not display until after any other warning messages first display.*

# Security

---

## PASSIVE ANTI-THEFT SYSTEM

**Note:** *The system is not compatible with non-Lincoln aftermarket remote start systems. Use of these systems may result in engine starting problems and a loss of security protection.*

**Note:** *Metallic objects, electronic devices or a second coded key on the same key chain may result in vehicle starting problems, especially if they are too close to the key when starting your vehicle. Prevent these objects from touching the coded key when starting your vehicle. Switch the ignition off, move all objects on the key chain away from the coded key and restart your vehicle if a problem occurs.*

**Note:** *Do not leave a duplicate coded key in your vehicle. Always take your keys and lock all doors when leaving your vehicle.*

## SecuriLock®

The system helps prevent the engine from starting unless you use a coded key programmed to your vehicle. Using the wrong key may prevent your vehicle from starting. A message may appear in the information display.

If you are unable to start your vehicle with a coded key, it is not operating correctly. A message may appear in the information display.

### Automatic Arming

The system arms when you switch the ignition off.

### Automatic Disarming

The system disarms when you switch the ignition on with a coded key.

### Replacement Keys

**Note:** *Your vehicle comes with two keys.*

The intelligent access key functions as a programmed key that operates the driver door lock and turns on the intelligent access with push button start system, as well as a remote control.

If your programmed transmitters are lost or stolen and you do not have an extra coded key, you will need to have your vehicle towed to an authorized dealer to program new coded keys.

Store a spare intelligent access key away from your vehicle in a safe place. You can purchase replacement keys or remote controls from an authorized dealer.

### Programming a Spare Key

**Note:** *You can program a maximum of four keys to your vehicle.*

You must have two previously programmed intelligent access keys inside your vehicle and the new unprogrammed intelligent access keys readily accessible. Contact an authorized dealer to have the spare key programmed if two previously programmed keys are not available.

# Security

Make sure that the ignition is switched off before beginning this procedure. Make sure that you close all the doors before beginning and that they remain closed throughout the procedure. Carry out all steps within 30 seconds of starting the sequence. Stop and wait for at least one minute before starting again if you carry out any steps out of sequence.

Read and understand the entire procedure before you begin.

1. Open the center console lid.



2. Insert the first programmed key in the backup slot.

3. Press the push button ignition switch.
4. Wait five seconds and then press the push button ignition switch again.
5. Remove the intelligent access key.
6. Within 10 seconds, place a second programmed intelligent access key in the backup slot and press the push button ignition switch.
7. Wait five seconds and then press the push button ignition switch again.
8. Remove the intelligent access key.
9. Wait five seconds, then place the unprogrammed intelligent access key in the backup slot and press the push button ignition switch.

Programming is now complete. Check that the remote control functions operate and your vehicle starts with the new intelligent access key.

If programming was unsuccessful, wait 10 seconds and repeat Steps 1 through 7. If programming remains unsuccessful, contact an authorized dealer.

## ANTI-THEFT ALARM

The system will warn you of an unauthorized entry to your vehicle. It will be triggered if any door, the luggage compartment or the hood is opened without using the key, remote control or keyless entry keypad.

The direction indicators will flash and the horn will sound if unauthorized entry is attempted while the alarm is armed.

Take all remote controls to an authorized dealer if there is any potential alarm problem with your vehicle.

### Arming the Alarm

The alarm is ready to arm when there is not a key in your vehicle. Electronically lock your vehicle to arm the alarm.

### Disarming the Alarm

Disarm the alarm by any of the following actions:

# Security

---

- Unlock the doors or luggage compartment with the remote control or keyless entry keypad.
- Switch your vehicle on or start your vehicle.
- Use a key in the driver door to unlock your vehicle, then switch your vehicle on within 12 seconds.


**Note:** *Pressing the panic button on the remote control will stop the horn and signal indicators, but will not disarm the system.*



# Steering Wheel

## ADJUSTING THE STEERING WHEEL

### WARNING

 Do not adjust the steering wheel when your vehicle is moving.

**Note:** Make sure that you are sitting in the correct position. See **Sitting in the Correct Position** (page 138).



E95178

1. Unlock the steering column.
2. Adjust the steering wheel to the desired position.




E95179

3. Lock the steering column.

## Power Tilt and Telescope Steering Column (If Equipped)

### WARNING

 Do not adjust the steering wheel when your vehicle is moving.

**Note:** Make sure that you are sitting in the correct position. See **Sitting in the Correct Position** (page 138).



E161834

# Steering Wheel

Use the control on the side of the steering column to adjust the position.

To adjust:

- Tilt: press the top or bottom of the control.
- Telescope: press the front or rear of the control.

## Memory Feature

You can save and recall the steering column position with the memory function. See **Memory Function** (page 143).

Pressing the adjustment control during memory recall cancels the operation. The column responds to the adjustment control.

The steering column sets a stopping position just short of the end of the column position to prevent damage to the steering column. A new stopping position sets if the steering column encounters an object when tilting or telescoping.

To reset the steering column to its normal stopping position:

1. Press the steering column control again after encountering the new stopping position.
2. Continue pressing the control until it reaches the end of the column position.

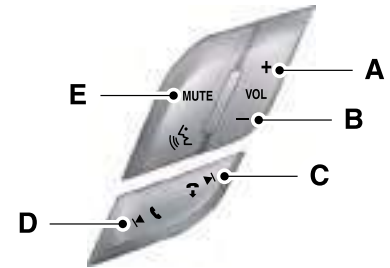
A new stopping position is set. The next time you tilt or telescope the steering column, it will stop just short of the end of the column position.

## Easy Entry and Exit Feature

When you switch the ignition off, the steering column will move to the full up position to allow extra room to exit your vehicle. The column will return to the previous setting when you switch the ignition on. You can enable or disable this feature in the information display. See **Information Displays** (page 108).

## AUDIO CONTROL

You can operate the following functions with the control:



E145979

- A Volume up.
- B Volume down.
- C Seek up or next.
- D Seek down or previous.
- E Mute.

## Seek, Next or Previous

Press the seek button to:

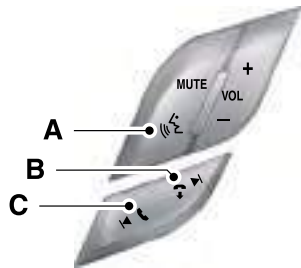
- Tune the radio to the next or previous stored preset.
- Play the next or the previous track.

# Steering Wheel

Press and hold the seek button to:

- Tune the radio to the next station up or down the frequency band.
- Seek through a track.

## VOICE CONTROL



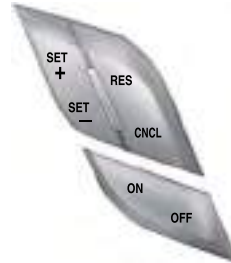
E145980

- A Voice recognition.
- B End call.
- C Answer call.

See your SYNC information.

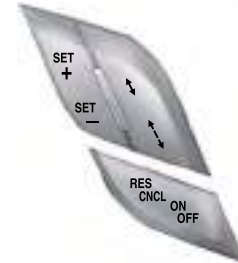
## CRUISE CONTROL

### Type 1



E145976

### Type 2



E145977

See **Cruise Control** (page 208).

## INFORMATION DISPLAY CONTROL



E145981

See **Information Displays** (page 108).

# Steering Wheel

---

## **HEATED STEERING WHEEL** (If Equipped)

See your SYNC information.

# Wipers and Washers

## WINDSHIELD WIPERS

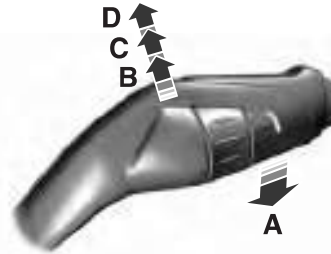
**Note:** Fully defrost the windshield before you switch the windshield wipers on.

**Note:** Make sure you switch the windshield wipers and vehicle power off before using an automatic car wash.

**Note:** If streaks or smears appear on the windshield, clean the windshield and the wiper blades. See **Checking the Wiper Blades** (page 298). If that does not resolve the issue, install new wiper blades. See **Changing the Wiper Blades** (page 298).

**Note:** Do not operate the wipers on a dry windshield. This may scratch the glass, damage the wiper blades or cause the wiper motor to burn out. Always use the windshield washers before wiping a dry windshield.

**Note:** When wiping on dry glass, the wipers may switch to the next lower operating mode (low-speed or intermittent). The previous operation mode may resume after the windshield becomes wet again.

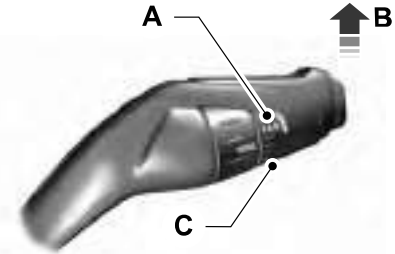


E197525

- A Single wipe.
- B Intermittent wipe.
- C Normal wipe.
- D High-speed wipe.

**Note:** Move to position **O** marked on the wiper lever to switch off.

## Intermittent Wipe



E197526

- A Short-wipe interval.
- B Intermittent wipe.
- C Long-wipe interval.

Push the wiper lever up to switch the wipers on, and then use the rotary control to adjust the intermittent wipe interval.

## Speed Dependent Wipers (If Equipped)

When your vehicle speed increases, the interval between wipes decreases.

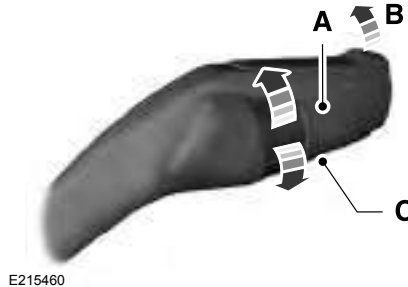
# Wipers and Washers

## AUTOWIPERS (If Equipped)

**Note:** Fully defrost the windshield before you switch the windshield wipers on.

**Note:** Make sure you switch the windshield wipers and ignition off before using an automatic car wash.

Autowipers uses a rain sensor located in the area around the interior mirror. The rain sensor monitors the amount of moisture on the windshield and automatically turns the wipers on. It will adjust the wiper speed by the amount of moisture that the sensor detects on the windshield.



E215460

- A Highest sensitivity.
- B On.
- C Lowest sensitivity.

Switch the autowipers on by moving the wiper lever up to the first position.

Switch the autowipers off by moving the wiper lever down.

Use the rotary control to adjust the sensitivity of the autowipers. When you select low sensitivity, the wipers will operate when the sensor detects a large amount of water on the windshield. When you select high sensitivity, the wipers will operate when the sensor detects a small amount of water on the windshield.

The autowipers feature is active and ready when the wiper lever is in the first position and selected in the information display. You can change the autowipers feature to intermittent wipers through the information display. See **General Information** (page 108).

**Note:** Check your wiper function in the information display. See **General Information** (page 108). The autowipers feature functions only when you select the menu choice in the information display and you move the wiper lever up to the first position. The autowipers feature then remains on in the information display menu until you change it to intermittent wipe.

# Wipers and Washers

**Note:** If you switch autolamps on in conjunction with autowipers, your low beam headlamps turn on automatically when the rain sensor activates the windshield wipers continuously. See **General Information** (page 108).

Keep the outside of the windshield clean. The rain sensor is very sensitive and the wipers may operate if dirt, mist or insects hit the windshield.

Wet or winter driving conditions with ice, snow or salty road mist can cause inconsistent and unexpected wiping or smearing. In these conditions, you can do the following to help keep your windshield clear:

- Lower the sensitivity of the autowipers to reduce the amount of smearing.
- Switch to normal or high-speed wipe by moving the wiper lever up.
- Switch the autowipers off and switch intermittent mode on through the information display. See **General Information** (page 108).
- Switch the autowipers off by moving the wiper lever down.

**Note:** Clean the windshield and wiper blades if they begin to leave streaks or smears. If that does not resolve the issue, install new wiper blades. See **Changing the Wiper Blades** (page 298).

## WINDSHIELD WASHERS

**Note:** Do not operate the washers when the washer reservoir is empty. This may cause the washer pump to overheat.



E197528

To operate the washers and spray the windshield, pull the lever toward you. When you release the lever, the wipers will operate for a short time.

## REAR WINDOW WIPER AND WASHERS

### Rear Window Wiper

**Note:** Make sure you switch the rear window wiper and ignition off before using an automatic car wash.



E197647

- A Intermittent wipe.
- B Low speed wipe.
- C Off.

Press the top of the button to switch intermittent wipe on. Press the top of the button again to switch low speed wipe on. Press the bottom of the button to switch the rear window wiper off.

# Wipers and Washers

---

When you shift into reverse (R) and the front wipers are on, the rear wiper may automatically turn on to intermittent wipe.

## Rear Window Washer



E197529

Push the lever away from you to operate the rear window washer. When you release the lever, wiping continues for a short period of time.



# Lighting

## GENERAL INFORMATION

### Condensation in Lamp Assemblies

Exterior lamps have vents to accommodate normal changes in air pressure.

Condensation can be a natural by-product of this design. When moist air enters the lamp assembly through the vents, there is a possibility that condensation can occur when the temperature is cold. When normal condensation occurs, a fine mist can form on the interior of the lens. The fine mist eventually clears and exits through the vents during normal operation.

Clearing time may take as long as 48 hours under dry weather conditions.

Examples of acceptable condensation are:

- The presence of a fine mist (no streaks, drip marks or large droplets).
- A fine mist covers less than 50% of the lens.

Examples of unacceptable condensation are:

- A water puddle inside the lamp.
- Streaks, drip marks or large droplets present on the interior of the lens.

If you see any unacceptable condensation, have your vehicle checked by an authorized dealer.

## LIGHTING CONTROL



E142449

- A Off
- B Parking lamps, instrument panel lamps, license plate lamps and tail lamps
- C Headlamps

# Lighting

## High Beams



E162679

Push the lever forward to switch the high beams on.

Push the lever forward again or pull the lever toward you to switch the high beams off.

## Headlamp Flasher




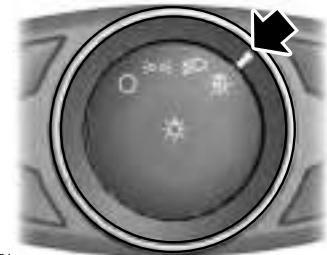
E162680

Pull the lever toward you slightly and release it to flash the headlamps.

## AUTOLAMPS

### WARNING

 The daytime running lamps system does not activate the tail lamps and may not provide adequate lighting during low visibility driving conditions. Also, the autolamps switch position may not activate the headlamps in all low visibility conditions, such as daytime fog. Always ensure that your headlamps are switched to auto or on, as appropriate, during all low visibility conditions. Failure to do so may result in a collision.



E142451

# Lighting

When the lighting control is in the autolamps position, the headlamps will automatically turn on in low light situations or when wipers activate.

If equipped, the following also activate when the lighting control is in the autolamps position and you switch them on in the information display:

- Configurable daytime running lamps.
- Automatic high beam control.
- Adaptive headlamp control.

The headlamps remain on for a period of time after you switch the ignition off. Use the information display controls to adjust the period of time that the headlamps remain on. See **Information Displays** (page 108).

**Note:** *With the headlamps in the autolamps position, you cannot switch the high beam headlamps on until the autolamps system turns the headlamps on.*

**Note:** *If the lighting control switch is in the autolamps position and the headlamps are off, the parking lamps will light as signature lighting. If the headlamps are on, or the lighting control switch is in the parking lamps position, the parking lamps will not light as signature lighting.*

## Windshield Wiper Activated Headlamps

The windshield wiper activated headlamps turn on within 10 seconds when you switch the windshield wipers on and the lighting control switch is in the autolamps position. They will turn off approximately 60 seconds after you switch the windshield wipers off.

The headlamps will not turn on by wiper activation:

- During a mist wipe.
- When the wipers are on to clear washer fluid during a wash condition.
- If the wipers are in intermittent mode.

**Note:** *If you have autolamps and autowipers switched on, the low beam headlamps will turn on automatically when the windshield wipers operate continuously.*

## INSTRUMENT LIGHTING DIMMER

**Note:** *If you disconnect the battery or it becomes discharged, the illuminated components will switch to the maximum setting.*



E165366

- A Press repeatedly or press and hold to dim.
- B Press repeatedly or press and hold to brighten.

# Lighting

## HEADLAMP EXIT DELAY

After you switch the ignition off, you can switch the headlamps on by pulling the direction indicator lever toward you. You will hear a short tone. The headlamps will switch off automatically after three minutes with any door open or 30 seconds after the last door has been closed. You can cancel this feature by pulling the direction indicator toward you again or switching the ignition on.

## DAYTIME RUNNING LAMPS (if

Equipped)

### WARNING



The daytime running lamps system does not activate the rear lamps and may not provide adequate lighting during low visibility driving conditions. Also, the autolamps switch position may not activate the headlamps in all low visibility conditions, such as daytime fog. Make sure the headlamps are switched to auto or on, as appropriate, during all low visibility conditions. Failure to do so may result in a crash.

### Type 1 - Conventional (Non-Configurable)

The daytime running lamps turn on when:

1. The ignition is switched to the on position.
2. The transmission is not in park (P) for vehicles with automatic transmissions or the parking brake is released for vehicles with manual transmissions.

3. The lighting control is in the off, parking lamp or autolamps positions.
4. The headlamps are off.

### Type 2 - Configurable

Switch the daytime running lamps on or off using the information display controls. See **Information Displays** (page 108).

The daytime running lamps turn on when:

1. They are switched on in the information display. See **Information Displays** (page 108).
2. The ignition is switched to the on position.
3. The transmission is not in park (P) for vehicles with automatic transmissions or the parking brake is released for vehicles with manual transmissions.
4. The lighting control is in the autolamps position.
5. The headlamps are off.

The other lighting control switch positions do not activate the daytime running lamps, and you can use them to temporarily override autolamp control.

# Lighting

When switched off in the information display, the daytime running lamps are off in all lighting control switch positions.

## **AUTOMATIC HIGH BEAM CONTROL** (If Equipped)

The system automatically turns on the high beams if it is dark enough and no other traffic is present. When it detects the headlights of an approaching vehicle, the rear lamps of the preceding vehicle or street lighting, the system turns off the high beams before they distract other drivers. The low beams remain on.

**Note:** *If it appears that automatic high beam is not functioning properly, check the windshield in front of the camera for a blockage. A clear view of the road is required for proper system operation. Make sure that authorized personnel repair any windshield damage in the area of the camera's field of view.*

**Note:** *If the system detects a blockage such as bird droppings, bug splatter, snow or ice, and you do not observe changes, the system may go into low beam mode until you clear the blockage. A message may also appear in the information display noting the front camera is blocked.*

**Note:** *Typical road dust, dirt and water spots do not affect the performance of the automatic high beam control. However, in cold or inclement weather conditions, you may notice a decrease in the availability of the automatic high beam control, especially at start up. If you want to change the beam state independently of the system, you may switch the high beams on or off using the lighting control switch. Automatic high beam control resumes when conditions are correct.*

**Note:** *Modification of your vehicle ride height such as using much larger tires, may degrade feature performance.*

A camera sensor, centrally mounted behind the windshield of your vehicle, continuously monitors conditions to decide when to switch the high beams off and on.

Once the system is active, the high beams switch on if:

- The ambient light level is low enough.
- There is no traffic in front of the vehicle.
- The vehicle speed is greater than approximately 31 mph (50 km/h).

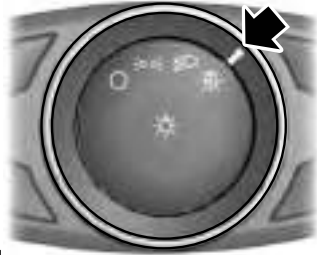
The high beams turn off if:

- The system detects the headlamps of an approaching vehicle or the rear lamps of a preceding vehicle.
- Vehicle speed falls below approximately 26 mph (42 km/h).
- The ambient light level is high enough that high beams are not required.
- The system detects severe rain, snow or fog.
- The camera is blocked.

## **Activating the System**

Switch on the system in the information display and switch the lighting control to the autolamps position. See **Information Displays** (page 108). See **Autolamps** (page 87).

# Lighting



E142451

## Manually Overriding the System



E169254

Push or pull the lever to switch between high and low beam.

## DIRECTION INDICATORS



E170427

Push the lever up or down to use the direction indicators.

**Note:** Tap the lever up or down to make the direction indicators flash three times to indicate a lane change.

## WELCOME LIGHTING

The Lincoln welcome mat projection lights are on the bottom of the exterior mirror housings. They will project an image onto the ground a short distance from your vehicle when welcome lighting or lighted entry turns on.

For auto-fold mirrors, the Lincoln welcome mat will turn on when welcome lighting or lighted entry turns on and the mirrors have been automatically folded in upon locking or using the switch on the door.

**Note:** Moisture, frost and ice build-up or other types of contamination on the surface of the light lens can cause non-permanent distortion or reduced brightness of the image. Do not use abrasive materials to clean the lens.

**Note:** If you enable auto-fold and then you fold the mirrors in manually to the door window glass, then the welcome mats will not turn on.

# Lighting

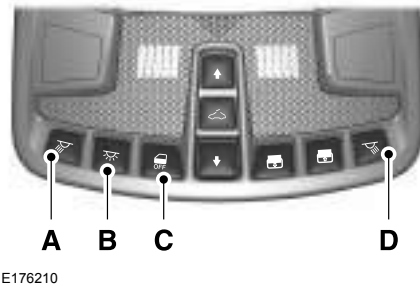
## INTERIOR LAMPS

The interior lamps turn on when:

- You open any door.
- You press a remote control button.

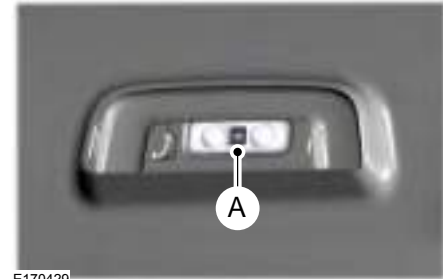
### Front Interior Lamp

**Note:** Touch the door function switch to switch the door function off when you open any door. The indicator lamp will illuminate amber when the door function is off. When the door function is off and you open a door, the courtesy and door lamps will stay off. Touch the switch again to switch the door function back on. The indicator lamp will illuminate blue when the door function is on. When the door function is on and you open a door, the courtesy and door lamps will switch on.



- A. Map lamp switch.
- B. All lamps on switch.
- C. Door function switch.
- D. Map lamp switch.

### Rear Interior Lamp (If Equipped)



The rear interior lamps are located in the headliner by the grab handles.

- You can switch individual rear lamps on independently by pressing the switch (A).

### AMBIENT LIGHTING (If Equipped)


The ambient lighting system is adjusted with the touchscreen.


See SYNC supplement.

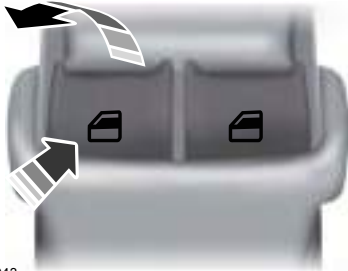
# Windows and Mirrors

## POWER WINDOWS

### WARNINGS

 Do not leave children unattended in your vehicle and do not let them play with the power windows. They may seriously injure themselves.

 When closing the power windows, you should verify they are free of obstructions and make sure that children and pets are not in the proximity of the window openings.



E146043

**Note:** You may hear a pulsing noise when just one of the windows is open. Lower the opposite window slightly to reduce this noise.

Press the switch to open the window.

Lift the switch to close the window.

### One-Touch Down

Press the switch fully and release it. Press again or lift it to stop the window.

### One-Touch Up


Lift the switch fully and release it. Press or lift it again to stop the window.

### Bounce-Back

The window will stop automatically while closing. It reverses some distance if there is an obstacle in the way.

## Overriding the Bounce-Back Feature

### WARNING

 When you override the bounce-back feature the window will not reverse if it detects an obstacle. Take care when closing the windows to avoid personal injury or damage to your vehicle.

Pull up the window switch and hold within a few seconds of the window reaching the bounce-back position. The window travels up with no bounce-back protection. The window stops if you release the switch before the window closes fully.



# Windows and Mirrors

## Window Lock



E144072

Press the control to lock or unlock the rear window controls. It will illuminate when you lock the rear window controls.

## Accessory Delay

You can use the window switches for several minutes after you switch the ignition off or until you open either front door.

## GLOBAL OPENING AND CLOSING

You can use the remote control to operate the windows with the ignition off.

**Note:** You can switch this feature on and off in the information display or contact an authorized dealer. See **General Information** (page 108).

**Note:** To operate this feature, make sure the accessory delay is not switched on.

## Opening the Windows

You can open the windows only for a short time after you unlock your vehicle with the remote control. After you unlock your vehicle, press and hold the remote control unlock button to open the windows. Release the button once movement starts. Press the lock or unlock button to stop movement.

## Closing the Windows

### WARNING



When closing the windows, you should verify they are free of obstructions and make sure that children and pets are not in the proximity of the window openings.

To close the windows, press and hold the remote control lock button. Release the button once movement starts. Press the lock or unlock button to stop movement.

## EXTERIOR MIRRORS

### Power Exterior Mirrors

#### WARNING



Do not adjust the mirrors when your vehicle is moving. This could result in the loss of control of your vehicle, serious personal injury or death.

# Windows and Mirrors



E144073

- A Left-hand mirror.
- B Adjustment control.
- C Right-hand mirror.

To adjust a mirror:

1. Select the mirror you want to adjust. The control will light.
2. Adjust the position of the mirror.
3. Press the mirror control again.

## Fold-Away Exterior Mirrors

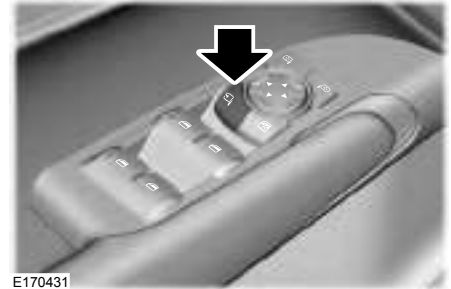
Push the mirror toward the door window glass. Make sure that you fully engage the mirror in its support when returning it to its original position.

## Auto-Folding Mirrors (if Equipped)

The exterior mirrors automatically fold in toward the glass after you place the transmission into park (P), turn off the vehicle, open and close the driver's side door and lock the vehicle. The exterior mirrors automatically unfold and return to their driving position after you unlock the vehicle and open and close the driver's side door.

You can switch this feature on and off through the information display. See **General Information** (page 108).

**Note:** If you switch this feature off through the information display, the welcome lighting also switches off.



E170431

You can fold the mirrors on demand by pressing the power-folding mirror control located on the door. The control lights and the mirrors fold in toward the glass. Press the control again to unfold the mirrors. The control light turns off.

**Note:** If you use the power-folding control to fold the mirrors on demand and the auto fold feature is switched on, you must use the control again to unfold them.

# Windows and Mirrors

---

## Loose Mirror

If your power-folding mirrors are manually folded, they may not work properly even after you re-position them. You need to reset them if:

- The mirrors vibrate when you drive.
- The mirrors feel loose.
- The mirrors do not stay in the folded or unfolded position.
- One of the mirrors is not in its normal driving position.

To reset the power-fold feature, use the power-folding mirror control to fold and unfold the mirrors. You may hear a loud noise as you reset the power-folding mirrors. This sound is normal. Repeat this process as needed each time the mirrors are manually folded.

## Heated Exterior Mirrors

See **Heated Windows and Mirrors** (page 136).

## Memory Mirrors

You can save and recall the mirror positions through the memory function. See **Memory Function** (page 143).

## Auto-Dimming Feature (If Equipped)

The driver's exterior mirror automatically dims when the interior auto-dimming mirror turns on.

## Lincoln Welcome Mat

Projection lights, on the bottom of the mirror housings, project an image onto the ground a short distance from the vehicle. See **Lighting** (page 86).

## Integrated Blind Spot Mirrors (If Equipped)

### WARNING

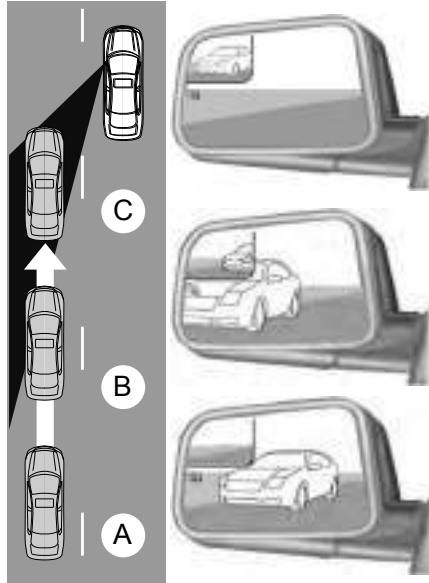


Objects in the blind spot mirror are closer than they appear.

The blind spot mirror has a wide-angle mirror inside the exterior mirror that can increase visibility along the side of your vehicle.

Check the main mirror first before a lane change, then check the blind spot mirror. If no vehicles are present in the blind spot mirror and the traffic in the adjacent lane is at a safe distance, signal that you intend to change lanes. Glance over your shoulder to verify traffic is clear and carefully change lanes.

# Windows and Mirrors



E138665

The image of the approaching vehicle is small and near the inboard edge of the main mirror when it is at a distance. The image becomes larger and begins to move outboard across the main mirror as the vehicle approaches (A). The image will transition from the main mirror and begin to appear in the blind spot mirror as the vehicle approaches (B). The vehicle will transition to your peripheral field of view as it leaves the blind spot mirror (C).

## Blind Spot Monitor (If Equipped)

See **Blind Spot Information System** (page 223).

## INTERIOR MIRROR

### WARNING



Do not adjust the mirror when your vehicle is moving.

**Note:** Do not clean the housing or glass of any mirror with harsh abrasives, fuel or other petroleum or ammonia-based cleaning products.

You can adjust the interior mirror to your preference. Some mirrors also have a second pivot point. This lets you move the mirror head up or down and from side to side.

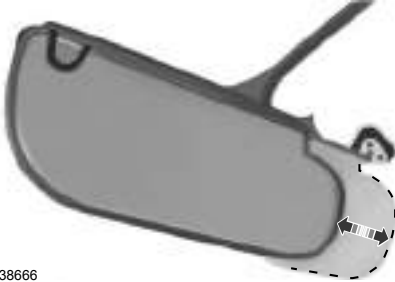
## Auto-Dimming Mirror

**Note:** Do not block the sensors on the front and back of the mirror. Mirror performance may be affected. A rear center passenger or raised rear center head restraint may also block light from reaching the sensor.

The mirror will dim automatically to reduce glare when bright lights are detected from behind your vehicle. It will automatically return to normal reflection when you select reverse gear to make sure you have a clear view when backing up.

# Windows and Mirrors

## SUN VISORS



E138666

Rotate the sun visor toward the side window and extend it rearward for extra shade.

## Illuminated Vanity Mirror (If Equipped)




E162197


Lift the cover to switch the lamp on.

## MOONROOF (If Equipped)

### WARNINGS

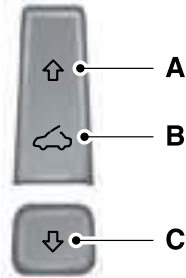
 Do not let children play with the moonroof or leave them unattended in the vehicle. They may seriously hurt themselves.

### WARNINGS

 When closing the moonroof, you should verify that it is free of obstructions and make sure that children and pets are not in the proximity of the roof opening.

The moonroof and sunscreen controls are on the overhead console and have a one-touch open and close feature. To stop the motion during a one-touch operation, touch the control a second time.

# Windows and Mirrors



E144499

- A Open
- B Vent
- C Close

## Opening and Closing the Moonroof

Touch (A) to open the moonroof. It will stop short of the fully opened position.

**Note:** *This position helps to reduce wind noise or rumbling which may happen with the moonroof fully open. Touch (A) again to fully open the moonroof.*

Touch (C) to close the moonroof.

## Bounce-Back

The moonroof will stop automatically and reverse some distance if an obstacle is detected while closing.

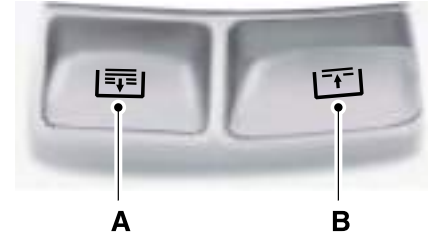
Touch and hold (C) within two seconds of a bounce-back event to override this function.

## Venting the Moonroof

Touch (B) to vent the moonroof.

Touch (C) to close it.

## Power Sunscreen



E145985

- A Close
- B Open

Touch the associated control to operate the sunscreen.

Press and release the rear of the control to open the moonroof. If the sunscreen is closed, it will automatically open before the moonroof opens. The moonroof will stop short of the fully opened position.

# Windows and Mirrors

---

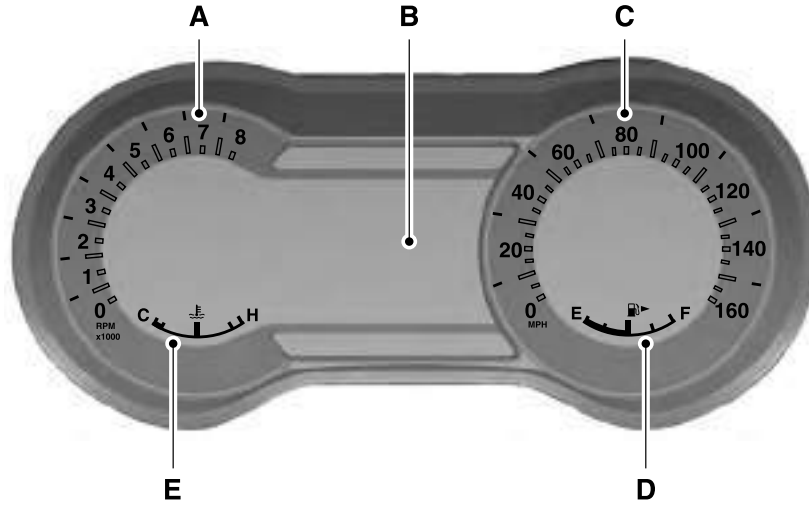
**Note:** *This position helps to reduce wind noise or rumbling which may happen with the moonroof fully open. Press and hold the control again to fully open the moonroof.*

Press and release the front of the control to close the moonroof.

The sunscreen must be open before opening the moonroof. If you touch the moonroof open control while the sunscreen is in its closed position, the sunscreen will open first followed by the moonroof. If both the sunscreen and moonroof are open and you touch the moonroof close control, the moonroof will close first followed by the sunscreen.

# Instrument Cluster

## GAUGES



E170368



# Instrument Cluster

---

- A Tachometer
- B Information display
- C Speedometer
- D Fuel gauge
- E Engine coolant temperature gauge

## Information Display

### Vehicle Settings and Personalization

See **General Information** (page 108).

### Fuel Gauge

**Note:** *The fuel gauge may vary slightly when your vehicle is moving or on a gradient.*

Switch the ignition on. The fuel gauge will indicate approximately how much fuel is left in the fuel tank. The arrow adjacent to the fuel pump symbol indicates on which side of your vehicle the fuel filler door is located.

The needle should move toward F when you refuel your vehicle. If the needle points to E after adding fuel, this indicates your vehicle needs service soon.

After refueling some variability in needle position is normal:

- It may take a short time for the needle to reach F after leaving the gas station. This is normal and depends upon the slope of pavement at the gas station.
- The fuel amount dispensed into the tank is a little less or more than the gauge indicated. This is normal and depends upon the slope of pavement at the gas station.
- If the gas station nozzle shuts off before the tank is full, try a different gas pump nozzle.

### Low Fuel Reminder

A low fuel reminder triggers when the fuel gauge needle is at 1/16th.

# Instrument Cluster

## Variations:

Driving type (fuel economy conditions)	Fuel gauge position	Distance-to-empty
Highway driving	1/16th	35 miles to 80 miles (56 km to 129 km)
Severe duty driving (trailer towing, extended idle)	1/16th	35 miles (56km)

## Engine Coolant Temperature Gauge

Indicates engine coolant temperature. At normal operating temperature, the level indicator will be in the normal range. If the engine coolant temperature exceeds the normal range, stop your vehicle as soon as safely possible, switch off the engine and let the engine cool.

### WARNING



Never remove the coolant reservoir cap while the engine is running or hot.

## WARNING LAMPS AND INDICATORS

The following warning lamps and indicators will alert you to a vehicle condition that may become serious. Some lamps will illuminate when you start your vehicle to make sure they work. If any lamps remain on after starting your vehicle, refer to the respective system warning lamp for further information.

**Note:** *Some warning indicators appear in the information display and function the same as a warning lamp, but do not display when you start your vehicle.*

## Adaptive Cruise Control (If Equipped)



The speed control system indicator light changes color to indicate what mode the system is in: See

### Using Adaptive Cruise Control (page 209).

**On (white light):** Illuminates when you turn the adaptive cruise control system on. Turns off when you turn the speed control system off.

**Engaged (green light):** Illuminates when the adaptive cruise control system engages. Turns off when the speed control system is disengaged.

# Instrument Cluster

## Anti-Lock Braking System



If it illuminates when you are driving, this indicates a malfunction. You will continue to have normal braking (without Anti-lock braking system) unless the brake system warning lamp is also illuminated. Have the system checked by an authorized dealer.

## Auto Hold Active



It illuminates when the system holds your vehicle stationary.

## Auto Hold Unavailable



It illuminates when the system is on, but unavailable to hold your vehicle stationary.

## Auto Start-stop (If Equipped)



It will illuminate to inform you when the engine shuts down or in conjunction with a message.

## Battery



If it illuminates while driving, it indicates a malfunction. Switch off all unnecessary electrical equipment and have the system checked by an authorized dealer immediately.

## Blind Spot Monitor (If Equipped)



It will illuminate when you switch this feature off or in conjunction with a message. See **Blind Spot Information System** (page 223).

## Brake System



It will illuminate when you engage the parking brake with the ignition on.

If it illuminates when you are driving, check that you do not have the parking brake engaged. If you do not have the parking brake engaged, this indicates low brake fluid level or a brake system malfunction. Have the system checked immediately by an authorized dealer.

## WARNING



Driving your vehicle with the warning lamp on is dangerous. A significant decrease in braking performance may occur. It will take you longer to stop your vehicle. Have your vehicle checked as soon as possible. Driving extended distances with the parking brake engaged can cause brake failure and the risk of personal injury.

## Cruise Control



It will illuminate when you switch this feature on.

## Direction Indicator



Illuminates when you turn the left or right direction indicator or the hazard warning flasher on. If the indicators stay on or flash faster, check for a burned out bulb. See **Changing a Bulb** (page 300).

# Instrument Cluster

## Door Ajar



Displays when the ignition is on and any door is not completely closed.

## Electric Park Brake



It will illuminate or flash when the electric parking brake has a malfunction. See **Electric Parking Brake** (page 185).

## Engine Coolant Temperature



Illuminates when the engine coolant temperature is high. Stop the vehicle as soon as possible, switch off the engine and let cool. See **Engine Coolant Check** (page 291).

## Engine Oil



If it illuminates with the engine running or when you are driving, this indicates a malfunction. Stop your vehicle as soon as it is safe to do so and switch the engine off. Check the engine oil level. See **Engine Oil Check** (page 290).

**Note:** *Do not resume your journey if it illuminates despite the level being correct. Have the system checked by your authorized dealer immediately.*

## Fasten Safety Belt



It will illuminate and a chime will sound to remind you to fasten your safety belt. See **Seatbelt Reminder** (page 36).

## Front Airbag



If it fails to illuminate when you start your vehicle, continues to flash or remains on, it indicates a malfunction. Have the system checked by an authorized dealer.

## Heads Up Display (If Equipped)



A red beam of lights will illuminate on the windshield in certain instances when using adaptive cruise control or the collision warning system. It will also illuminate momentarily when you start your vehicle to make sure the display works.

## High Beam



It will illuminate when you switch the high beam headlamps on. It will flash when you use the headlamp flasher.

## Hood Ajar



Displays when the ignition is on and the hood is not completely closed.

## Low Fuel Level



It will illuminate when the fuel level is low or the fuel tank is nearly empty. Refuel as soon as possible.

# Instrument Cluster

## Low Tire Pressure Warning



It will illuminate when your tire pressure is low. If the lamp remains on with the engine running or when driving, check your tire pressure as soon as possible.

It will also illuminate momentarily when you switch the ignition on to confirm the lamp is functional. If it does not illuminate when you switch the ignition on, or begins to flash at any time, have the system checked by an authorized dealer.

## Low Washer Fluid



It will illuminate when the windshield washer fluid is low.

## Parking Lamps



It will illuminate when you switch the parking lamps on.

## Powertrain Fault



Illuminates when the system has detected a powertrain or an all-wheel drive fault. Contact an authorized dealer as soon as possible.

## Service Engine Soon



If the service engine soon indicator light stays illuminated after you start the engine, it indicates that the On Board Diagnostics system (OBD) has detected a malfunction of your vehicle emissions control system. Refer to On board diagnostics (OBD) in the Fuel and Refueling chapter for more information about having your vehicle serviced. See **Emission Control System** (page 170).

If the light is blinking, engine misfire is occurring which could damage your catalytic converter. Drive in a moderate fashion (avoid heavy acceleration and deceleration) and have your vehicle serviced immediately.

## WARNING



Under engine misfire conditions, excessive exhaust temperatures could damage the catalytic converter, the fuel system, interior floor coverings or other vehicle components, possibly causing a fire. Have your vehicle checked as soon as possible.

When you first switch the ignition on, before engine start, the service engine soon indicator light illuminates to check the bulb and to indicate whether your vehicle is ready for inspection maintenance testing.

Normally, the service engine soon light will stay on until you crank the engine, and then turn itself off if no malfunctions are present. However, if after 15 seconds the service engine soon light blinks eight times, it means that your vehicle is not ready for inspection maintenance testing. See **Emission Control System** (page 170).

# Instrument Cluster

---

## Stability Control



It will flash when the system is active. If it remains illuminated or does not illuminate when you switch the ignition on, this indicates a malfunction. During a malfunction, the system will switch off. Have the system checked by an authorized dealer immediately. See **Using Stability Control** (page 193).

## Stability Control Off



It will illuminate when you switch the system off. It will go out when you switch the system back on or when you switch the ignition off. See **Using Stability Control** (page 193).

## AUDIBLE WARNINGS AND INDICATORS

### Keyless Warning Alert

The horn will sound twice when you exit your vehicle with the intelligent access key and your vehicle is in RUN, indicating your vehicle is still on.

### Headlamps On Warning Chime

Sounds when you remove the key from the ignition and open the driver's door and you have left the headlamps or parking lamps on.


### Parking Brake On Warning Chime

Sounds when you have left the parking brake on and drive your vehicle. If the warning chime remains on after you have released the parking brake, have the system checked by your authorized dealer immediately.

# Information Displays

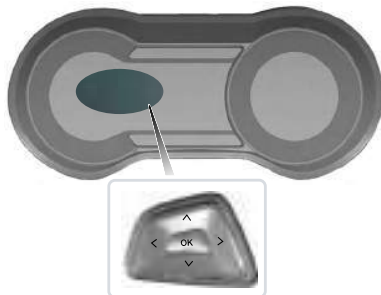
## GENERAL INFORMATION

### WARNING

 Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

You can control various systems on your vehicle using the information display controls on the steering wheel. The information display provides the corresponding information.

## Information Display Controls



E170369

- Press the up and down arrow buttons to scroll through and highlight the options within a menu.
- Press the right arrow button to enter a sub-menu.
- Press the left arrow button to exit a menu.

- Press and hold the left arrow button at any time to return to the main menu display (escape button).
- Press the **OK** button to choose and confirm settings or messages.



This icon gives you the ability to switch a feature on or off. A check in the box indicates the feature is enabled, and unchecked indicates the feature is disabled.

### Main menu

From the main menu bar on the left side of the information display, you can choose from the following categories:



Trip 1 & 2



Fuel Economy



Driver Assist



Settings

# Information Displays

Scroll up or down to highlight one of the categories and then press the right arrow key or **OK** to enter into that category. Press

the left arrow key as needed to exit back to the main menu.

## Trip 1 & 2



Choose between the standard or enhanced trip display.

**Note:** *Some items are optional and may not appear.*

Trip 1 & 2	
Distance to E	Normal or Towing
Average fuel economy	
Trip timer	
Press and hold OK to reset the currently displayed trip information.	

- Trip odometer — shows the accumulated trip distance.
- Trip Timer— when you switch your vehicle off the timer stops and then restarts when you restart your vehicle.
- Average fuel economy — shows the average fuel economy for a given trip.

## Fuel Economy



Use the left or right arrow buttons to choose the desired fuel economy display.



# Information Displays

Fuel Economy
Instantaneous Fuel Economy
Auto StartStop

- Instantaneous Fuel Economy: This display shows a visual graph of your instantaneous fuel economy.
- Auto StartStop - Available Auto Start-Stop messaging will provide details about what is happening with your system. See **Information Messages** (page 114).

## Driver Assist



Use the up or down arrow buttons to choose between the following display options.

Driver Assist		
Traction Control		
Blindspot		
Collision Warning	Sensitivity	High, Normal or Low
Cross Traffic		
Cruise Control	Adaptive or Normal	—
Driver Alert	On or Display	—

# Information Displays

Driver Assist		
Intelligent AWD		
Lane Keeping Sys	Mode	Alert, Aid or Alert + Aid
	Intensity	High, Normal or Low
Front Park Aid		
Rear Park Aid		

**Note:** *Some items are optional and may not appear.*

## Settings



In this mode, you can configure different driver setting choices.

**Note:** *Some MyKey items will only appear if a MyKey is set.*

Settings			
Vehicle	Drive Control	Handling in D	Comfort, Normal or Sport
		Handling in S	Normal or Sport
		Performance in S	Normal or Sport
	DTE Calculation	Normal or Towing	
	Easy Entry/Exit		

# Information Displays

Settings		
	Auto Engine Off	
Lighting	Auto Highbeam	
	Autolamp Delay	Select time interval
	Daytime Lights	
	Welcome Lighting	
Locks	Autounlock	
	Feedback	Audible
		Exterior Lights
	Mislock	
	Remote Unlock	All Doors or Driver's Door
Switches Inhibit		
Mirror	Autofold	
Oil Life	Remaining Life XXX% - Hold OK to Reset	
Power Liftgate	Enable Switch or Disable Switch	
Remote Start	Climate Control	Auto or Last Settings
	Front Seats & Wheel	Auto Heated or Off

# Information Displays

Settings			
		Duration	5, 10 or 15 minutes
		System	
	Windows	Remote	
	Wipers	Courtesy Wipe	
		Rain Sensing	
MyKey	Create MyKey	Hold OK to Create MyKey	
	911 Assist	Always On or User Selectable	
	Do Not Disturb		
	Traction Control		
	Max Speed	Choose desired speed or off	
	Speed Minder		
	Volume Limiter		
	Clear MyKeys	Hold OK to Clear All MyKeys	
Display	Distance Unit	Choose your applicable setting	

# Information Displays

Settings		
	Temperature Unit	
	Language	
	Speedo in km/h	

## INFORMATION MESSAGES

**Note:** Depending on your vehicle options and instrument cluster type, not all of the messages will display or be available. The information display may abbreviate or shorten certain messages.

E145981



Press the OK button to acknowledge and remove some messages from the information display. The information display will automatically remove other messages after a short time.

You need to confirm certain messages before you can access the menus.

## Active Park

Message	Action
Active Park Fault	The system requires service due to a malfunction. Have the system checked by an authorized dealer.

# Information Displays

## Adaptive Cruise Control

Message	Action
Adaptive Cruise Malfunction	A radar malfunction is preventing the adaptive cruise control from engaging. See <b>Using Adaptive Cruise Control</b> (page 209).
Adaptive Cruise Not Available	A condition exists such that the adaptive cruise cannot function properly. See <b>Using Adaptive Cruise Control</b> (page 209).
Adaptive Cruise Not Available Sensor Blocked See Manual	You have a blocked sensor due to bad weather, ice, mud or water in front of the radar sensor. You can typically clean the sensor to resolve. See <b>Using Adaptive Cruise Control</b> (page 209).
Normal Cruise Active Automatic Braking Turned Off	The system has disabled the automatic braking.
Front Sensor Not Aligned	A radar malfunction is preventing the adaptive cruise control from engaging.
Adaptive Cruise - Driver Resume Control	The adaptive cruise has reinstated controls to the driver.
Adaptive Cruise Speed Too Low to Activate	The vehicle speed is too slow to activate the adaptive cruise.
Adaptive Cruise Shift Down	The adaptive cruise is automatically adjusting the gap distance and the driver needs to shift the transmission into a lower gear.

# Information Displays

## AdvanceTrac™

Message	Action
Service AdvanceTrac	The system detects a malfunction due to a blocked sensor.
AdvanceTrac Off On	The driver has disabled or enabled the traction control.

## Airbag

Message	Action
Occupant Sensor BLOCKED Remove Objects Near Passenger Seat	The system detects a malfunction due to a blocked sensor. Remove blockage.

## Alarm

Message	Action
Vehicle Alarm To Stop Alarm, Start Vehicle.	Alarm triggered due to unauthorized entry. See <b>Anti-Theft Alarm</b> (page 76).

# Information Displays

## All-Wheel Drive

Message	Action
AWD Temporarily Disabled	The all-wheel drive system temporarily turns off to protect itself from overheating.
AWD OFF	The all-wheel drive system temporarily turns off to protect itself from overheating or if you are using the temporary spare tire.
AWD Restored	The all-wheel drive system will resume normal function and clear this message after driving a short distance with the road tire re-installed or after the system cools.
AWD Malfunction Service Required	The all-wheel drive system is not operating properly. If the warning stays on or continues to come on, contact an authorized dealer as soon as possible.

## Automatic Engine Shutdown

Message	Action
Engine Shuts Off In {seconds to shut off:#0} Seconds	The engine is getting ready to shut off.
Engine Shut Off For Fuel Economy	The engine has shut off to help increase fuel economy.
Engine Shuts Off in {seconds to shut off:#0} Seconds Press Ok to Override	The engine is getting ready to shut off. You can press OK on the left steering wheel button to override the shut down.



# Information Displays

## Auto Start-Stop

Message	Action
Auto StartStop Press Brake to Start Engine	The engine needs to be restarted, press the brake pedal to start.
Auto StartStop Press Brake Harder to Activate	The engine needs to be restarted, press the brake pedal harder to start.
Auto StartStop Press a Pedal to Start Engine	The engine needs to be restarted, press any pedal to start.
Auto StartStop Select Neutral To Start Engine	Select neutral for the system to restart the engine.
Auto StartStop Shift to P, then Restart Engine	Select park for the system to restart the engine.
Auto StartStop Manual Restart Required	The system is not functioning. A manual restart is required.
Auto StartStop Not Available	Conditions are not met for the Auto StartStop system to function properly.

# Information Displays

## Battery and Charging System

<b>Message</b>	<b>Action</b>
Check Charging System	The charging system needs servicing. If the warning stays on or continues to come on, contact an authorized dealer as soon as possible.
Low Battery Features Temporarily Turned Off	The battery management system detects an extended low-voltage condition. Your vehicle will disable various features to help preserve the battery. Turn off as many of the electrical loads as soon as possible to improve system voltage. If the system voltage has recovered, the disabled features will operate again as normal.
Turn Power Off To Save Battery	The battery management system determines that the battery is at a low state of charge. Turn your ignition off as soon as possible to protect the battery. This message will clear once you restart your vehicle and the battery state of charge has recovered. Turning off unnecessary electrical loads will allow faster battery state-of-charge recovery.

# Information Displays

## Blind Spot Information and Cross Traffic Alert System

Message	Action
Blindspot System Fault	A fault with the system has occurred. Contact an authorized dealer as soon as possible.
Blindspot Not Available Sensor Blocked See Manual	The system sensors are blocked. See <b>Blind Spot Information System</b> (page 223).
Vehicle Coming From X	The system detects a vehicle. See <b>Blind Spot Information System</b> (page 223).
Cross Traffic Not Available Sensor Blocked See Manual	The blind spot information system and cross traffic alert system sensors are blocked. See <b>Blind Spot Information System</b> (page 223).
Cross Traffic System Fault	A fault with the system has occurred. Contact an authorized dealer as soon as possible.

## Collision Warning System

Message	Action
Collision Warning Malfunction	A fault with the system has occurred. Contact an authorized dealer as soon as possible.
Collision Warning Not Available Sensor Blocked See Manual	You have a blocked sensor due to bad weather, ice, mud or water in front of the radar sensor. You can typically clean the sensor to resolve. See <b>Collision Warning System</b> (page 230).
Collision Warning Not Available	A fault with the system has occurred. Contact an authorized dealer as soon as possible.

# Information Displays

## Doors and Locks

Message	Action
X Door Ajar	The door(s) listed is not completely closed.
Trunk Ajar	The luggage compartment is not completely closed.
Hood Ajar	The hood is not completely closed.
Switches Inhibited Security Mode	The system has disabled the door switches.
Child Lock Malfunction Service Required	There is a system malfunction with the child locks. Contact an authorized dealer as soon as possible.
Factory Keypad Code {X X X X X}	The factory keypad code displays in the information display after system resets the keypad. See <b>Keyless Entry</b> (page 71).

## Driver Alert

Message	Action
Driver Alert Warning Rest Now	Stop and rest as soon as it is safe to do so.
Driver Alert Warning Rest Suggested	Take a rest soon.

# Information Displays

## Fuel

Message	Action
Fuel Level Low	An early reminder of a low fuel condition.
Check Fuel Fill Inlet	The fuel fill inlet may not be properly closed.

## Hill Start Assist

Message	Action
Hill Start Assist Not Available	Hill start assist is not available. Contact an authorized dealer. See <b>Auto Hold</b> (page 187).

## Keys and Intelligent Access

Message	Action
To START Press Brake	A reminder to press the brake while starting the vehicle.
No Key Detected	The system does not detect a key in your vehicle. See <b>Keyless Starting</b> (page 156).
Restart Now or Key is Needed	You pressed the start/stop button to switch off the engine and your vehicle does not detect your intelligent access key inside your vehicle.
Full Accessory Power Active	Your vehicle is in the run ignition state.
Starting System Fault	There is a problem with your vehicle's starting system. See an authorized dealer for service.

# Information Displays

Message	Action
Key Program Successful	You have successfully programmed an intelligent access key to the system.
Key Program Failure	You have failed to program an intelligent access key to the system.
Max Number of Keys Learned	You have programmed the maximum number of keys to the system.
Not Enough Keys Learned	You have not programmed enough keys to the system.
Key Battery Low Replace Soon	The key battery is low. Change the battery as soon as possible.
Engine ON	Inform the driver that they are exiting the vehicle and the engine is on.

## Lane Keeping System

Message	Action
Lane Keeping Sys. Malfunction Service Required	The system has malfunctioned. Contact an authorized dealer as soon as possible.
Front Camera Temporarily Not Available	The system has detected a condition that has caused the system to be temporarily unavailable.
Front Camera Low Visibility Clean Screen	The system has detected a condition that requires you to clean the windshield in order for it to operate properly.
Front Camera Malfunction Service Required	The system has malfunctioned. Contact an authorized dealer as soon as possible.
Keep Hands on Steering Wheel	The system requests the driver to keep their hands on the steering wheel.

# Information Displays

## Maintenance

Message	Action
Low Engine Oil Pressure	Stop your vehicle as soon as safely possible and turn off the engine. Check the oil level. If the warning stays on or continues to come on with your engine running, contact an authorized dealer as soon as possible.
Change Engine Oil Soon	The engine oil life remaining is 10% or less. See <b>Engine Oil Check</b> (page 290).
Oil Change Required	The oil life left is at 0%. See <b>Engine Oil Check</b> (page 290).
Brake Fluid Level Low	The brake fluid level is low, inspected the brake system immediately. See <b>Brake Fluid Check</b> (page 295).
Check Brake System	The brake system needs servicing. Stop your vehicle in a safe place. Contact an authorized dealer.
Engine Coolant Over Temperature	The engine coolant temperature is excessively high.
Washer Fluid Level Low	The washer fluid is low, refill washer fluid.
Power Reduced to Lower Engine Temp	The engine has reduced power to help reduce high engine temperature.
Transport / Factory Mode Contact Dealer	Your vehicle is still in Transport or Factory mode. This may not allow some features to operate properly. See an authorized dealer.
See Manual	The powertrain needs service due to a powertrain malfunction.

# Information Displays

## MyKey

Message	Action
MyKey not Created	You cannot program a MyKey.
MyKey Active Drive Safely	MyKey is active.
Speed Limited to XX MPH/km/h	When switching on your vehicle and MyKey is in use, displays that the MyKey speed limit is on.
Near Vehicle Top Speed	MyKey is in use and the MyKey speed limit is on and the vehicle speed is approaching 80 mph (130 km/h).
Vehicle at Top Speed of MyKey Setting	You have reached the speed limit set for your MyKey.
Check Speed Drive Safely	You have an active MyKey with a programmed set speed limit.
Buckle Up to Unmute Audio	Belt-Minder turns on with a MyKey in use.
AdvanceTrac On - MyKey Setting	With a MyKey in use, AdvanceTrac turns on.
Traction Control On - MyKey Setting	With a MyKey in use, traction control turns on.
MyKey Park Aid Cannot be Deactivated	With a MyKey in use, park aid is always on.
Lane Keeping Alert On MyKey Setting	With a MyKey in use, lane keeping alert turns on.



# Information Displays

## Park Aid

Message	Action
Check Front Park Aid	The system has detected a condition that requires service. Contact an authorized dealer. See <b>Front Parking Aid</b> (page 195).
Check Rear Park Aid	The system has detected a condition that requires service. Contact an authorized dealer. See <b>Rear Parking Aid</b> (page 195).
Front Park Aid On Off	Displays the park aid status.
Rear Park Aid On Off	Displays the park aid status.

## Park Brake

Message	Action
Park Brake Engaged	You have set the parking brake and you have driven the vehicle more than 3 mph (5 km/h). If the warning stays on after you have released the parking brake, contact an authorized dealer.
Park Brake Malfunction Service Now	The electric parking brake system has detected a condition that requires service. See an authorized dealer.
Park Brake Not Applied	The electric parking brake is not set.
Park Brake Maintenance Mode	The electric parking brake is running a diagnostic check.
Park Brake Use Switch to Release	The electric parking brake is set but you have not released it.

## Information Displays

Message	Action
To Release: Press Brake and Switch	The electric parking brake is set but you have not released it and your vehicle is moving.
Park Brake Limited Function Service Required	The electric park brake system has detected a condition that requires service. See an authorized dealer.
Park Brake System Overheated	You have not released the electric parking brake causing it to overheat.
Release Park Brake	The electric parking brake is set and you have started your vehicle.
Park Brake Applied	The electric parking brake is set.
Park Brake Released	You have released the electric parking brake.

### Power Steering

Message	Action
Steering Fault Service Now	The power steering system has detected a condition that requires service. See an authorized dealer.
Steering Loss Stop Safely	The power steering system is not working. Stop your vehicle in a safe place. Contact an authorized dealer.
Steering Assist Fault Service Required	The power steering system has detected a condition within the power steering system or passive entry or passive start system requires service. Contact an authorized dealer.

# Information Displays

## Remote Start

Message	Action
To Drive: Press Brake and Gear Shift Button	A reminder to apply the brake and push the gearshift button to drive your vehicle after a remote start.

## Seats

Message	Action
Memory Recall Not Permitted While Driving	A reminder that memory seats are not available while driving.
Memory {0} Saved	Shows where you have saved your memory setting.

## Starting System

Message	Action
To START Press Brake	A reminder to apply the brake when starting your vehicle .
Cranking Time Exceeded	The starter has exceeded its cranking time in attempting to start your vehicle.
Engine Start Pending Please Wait	The starter is attempting to start your vehicle.
Pending Start Cancelled	The system has cancelled the pending start.

# Information Displays

## Tire Pressure Monitoring System

Message	Action
Tire Pressure Low	One or more tires on your vehicle has low tire pressure. See <b>Tire Pressure Monitoring System</b> (page 332).
Tire Pressure Monitor Fault	The tire pressure monitoring system is malfunctioning. If the warning stays on or continues to come on, contact an authorized dealer. See <b>Tire Pressure Monitoring System</b> (page 332).
Tire Pressure Sensor Fault	A tire pressure sensor is malfunctioning or your spare tire is in use. See <b>Tire Pressure Monitoring System</b> (page 332). If the warning stays on or continues to come on, contact an authorized dealer as soon as possible.

## Traction Control

Message	Action
Traction Control Off / Traction Control On	The status of the traction control system after you switched it off or on. See <b>Using Traction Control</b> (page 190).
Spinout Detected Hazards Activated	A spinout has occurred and the hazards are on.

# Information Displays

## Trailer

Message	Action
Trailer Sway Reduce Speed	Displays when the trailer sway control has detected a trailer sway. See <b>Trailer Sway Control</b> (page 242).

## Transmission

Message	Action
Transmission Malfunction Service Now	See an authorized dealer.
Transmission Overheating Stop Safely	The transmission is overheating and needs to cool. Stop in a safe place as soon as possible.
Transmission Service Required	See an authorized dealer.
Transmission Too Hot Press Brake	The transmission is overheating and needs to cool. Stop in a safe place as soon as possible.
Transmission Limited Function See Manual	The transmission has limited functionality. See an authorized dealer.
Transmission Warming Up Please Wait	The transmission is too cold. Wait for it to warm up before you drive.
Transmission Not in Park	A reminder to shift into park. In addition, this message is typical after reconnecting or recharging the battery until you cycle the ignition to the on mode. See <b>Changing the 12V Battery</b> (page 296).
Transmission Adjusted	The transmission has adjusted the shift strategy.
Transmission AdaptMode	The transmission is adjusting the shift strategy.

## Information Displays

Message	Action
Transmission IndicatMode Lockup On	The transmission is locked and unable to select gears.
Transmission IndicatMode Lockup Off	The transmission is unlocked and free to select gears.
Invalid Gear Selection	You have selected an invalid gear.
Press Brake Pedal	You need to depress the brake pedal.
Depress Brake to Shift from Park	You need to depress the brake pedal before you can shift from <b>P</b> park.
To Stay in Neutral When Exiting Vehicle Select N Again	You need to press the <b>N</b> neutral button again to enter neutral hold. See <b>Automatic Transmission</b> (page 173).
Stay in Neutral Mode Engaged	Neutral hold is active. See <b>Automatic Transmission</b> (page 173).
Stay in Neutral Tow Engaged See Manual to Disable	Neutral hold is active. See <b>Towing the Vehicle on Four Wheels</b> (page 247).
SHIFT SYS FAULT Confirm Park Brake Apply Before Exiting the Vehicle	There is a system fault and you need to depress the park brake before you exit your vehicle. See an authorized dealer.
SHIFT SYS FAULT Cannot Shift Trans Use Park Brake to Secure Vehicle	There is a system fault and you need to depress the park brake before you exit your vehicle. See an authorized dealer.
SHIFT SYS FAULT Service Required	See an authorized dealer.
SHIFT SYS FAULT Vehicle is Shifting to Park	There is a system fault while you are shifting your vehicle to <b>P</b> park. See an authorized dealer.

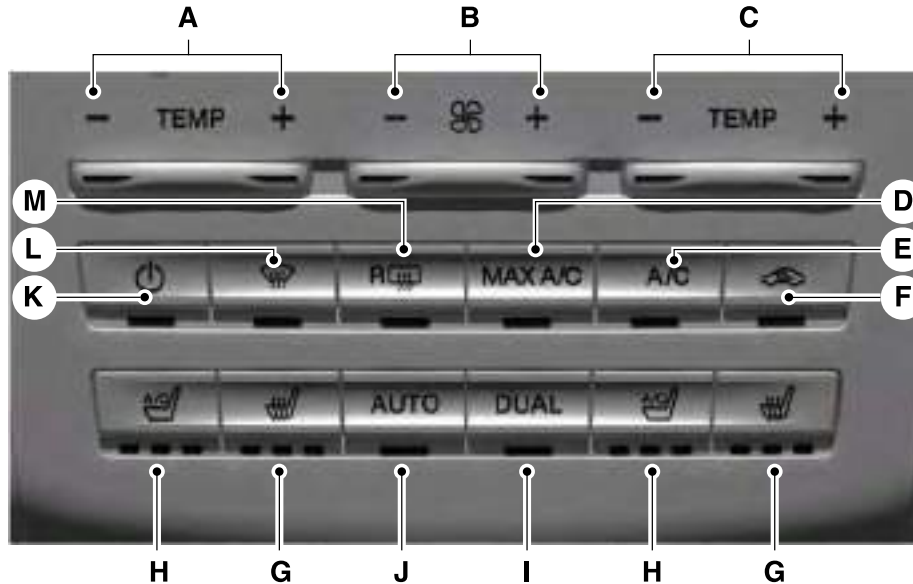
## Information Displays

Message	Action
SHIFT SYS FAULT Reverse Unavailable Service Required	There is a system fault while you are shifting your vehicle to <b>R</b> reverse. See your authorized dealer.
SHIFT SYS FAULT Drive Unavailable Select S for Drive Service Required	See an authorized dealer.
SHIFT SYS FAULT Neutral Unavailable Service Required	See an authorized dealer.
SHIFT SYS FAULT Neutral Unavailable Service Required	See an authorized dealer.
Neutral Tow Engaged Turn Ignition Off for Towing	Neutral tow is active and you need to turn the ignition off. See <b>Towing the Vehicle on Four Wheels</b> (page 247).
Neutral Tow Engaged Depress Brake and Select Park to Exit Neutral Tow	While attempting to exit neutral tow, you need to depress the brake pedal and select the <b>P</b> park button to deactivate. See <b>Towing the Vehicle on Four Wheels</b> (page 247).
Neutral Tow Remove Park Brake for Towing	Neutral tow is active and you need to release the park brake. See <b>Towing the Vehicle on Four Wheels</b> (page 247).
Neutral Tow Disengaged	You have switched off Neutral tow.

# Climate Control

## AUTOMATIC CLIMATE CONTROL

**Note:** You can switch temperature units between Fahrenheit and Celsius. See your SYNC information.



E211718



# Climate Control

---

- A **Driver temperature control:** Adjust the temperature setting on the driver side. This control also adjusts the passenger side temperature when you switch off dual zone mode.
- B **Fan speed control:** Adjust the volume of air circulated in the vehicle.
- C **Passenger temperature control:** Adjust the temperature setting on the passenger side.
- D **MAX A/C:** Press for maximum cooling. The driver and passenger temperature settings are set to LO. Recirculated air flows through the instrument panel vents, air conditioning automatically turns on, and the fan automatically adjusts to the highest speed.
- E **A/C:** Press to switch the air conditioning on or off. To improve the time to reach a comfortable temperature in hot weather, drive with the windows open until you feel cold air through the air vents. You can use A/C with recirculated air to improve performance and efficiency.  
**Note:** In certain conditions (for example, maximum defrost), the air conditioning may continue to operate even though the air conditioning is switched off.
- F **Recirculated air:** Press to switch between outside air and recirculated air. The air currently in the passenger compartment recirculates. This can reduce the time needed to cool the interior and reduce unwanted odors from entering your vehicle.  
**Note:** Recirculated air may also turn on and off automatically in instrument panel or instrument panel and floor airflow modes during hot weather to improve cooling efficiency and reduce risk of fogging.
- G **Heated seats:** Press to switch the heated seats on and off. See **Heated Seats** (page 145).
- H **Climate controlled seats:** Press to switch the climate controlled seats on and off. See **Climate Controlled Seats** (page 146).
- I **DUAL:** Press to switch separate passenger side temperature control on and off. When dual zone is off, passenger temperature settings remain the same as the driver settings.
- J **AUTO:** Press to switch on automatic operation. Adjust to select the desired temperature. Fan speed, air distribution, air conditioning operation, and outside or recirculated air are automatically adjusted to heat or cool the vehicle to maintain the desired temperature. You can also switch off dual zone mode by pressing and holding for more than two seconds.

# Climate Control

---

- K **Power:** Press to switch the system on and off. When the system is off, it prevents outside air from entering the vehicle.
- L **Defrost:** Select to distribute air through the windshield air vents. Air distribution to the instrument panel and footwell vents turns off. You can also use this setting to defrost and clear the windshield of a thin covering of ice.
- M **Heated rear window:** Press to switch the heated rear window on and off. See **Heated Windows and Mirrors** (page 136).

## HINTS ON CONTROLLING THE INTERIOR CLIMATE

### General Hints

**Note:** Prolonged use of recirculated air may cause the windows to fog up.

**Note:** You may feel a small amount of air from the footwell air vents regardless of the air distribution setting.

**Note:** To reduce humidity build-up inside your vehicle, do not drive with the system switched off or with recirculated air always switched on.

**Note:** Do not place objects under the front seats as this may interfere with the airflow to the rear seats.

**Note:** Remove any snow, ice or leaves from the air intake area at the base of the windshield.

**Note:** To improve the time to reach a comfortable temperature in hot weather, drive with the windows open until you feel cold air through the air vents.

### Automatic Climate Control

**Note:** Adjusting the settings when your vehicle interior is extremely hot or cold is not necessary. The system automatically adjusts to heat or cool the cabin to your selected temperature as quickly as possible. For the system to function efficiently, the instrument panel and side air vents should be fully open.

**Note:** If you select **AUTO** during cold outside temperatures, the system directs airflow to the windshield and side window vents. In addition, the fan may run at a slower speed until the engine warms up.

**Note:** If you select **AUTO** during hot outside temperatures, or when the inside of the vehicle is hot, the system automatically uses recirculated air to maximize interior cooling. When the interior reaches the selected temperature, the system automatically switches to using outside air.

### Heating the Interior Quickly

1. Select the **AUTO** function.
2. Adjust the temperature function to the desired setting.

### Recommended Settings for Heating

1. Select the **AUTO** function.

# Climate Control

2. Adjust the temperature function to the desired setting. Use 72°F (22°C) as a starting point, then adjust the setting as necessary.

## Cooling the Interior Quickly

1. Select the **MAX A/C** function.

## Recommended Settings for Cooling

1. Select the **AUTO** function.
2. Adjust the temperature function to the desired setting. Use 72°F (22°C) as a starting point, then adjust the setting as necessary.

## Side Window Defogging in Cold Weather

1. Press the defrost button.
2. Adjust the temperature control to the desired setting. Use 72°F (22°C) as a starting point, then adjust the setting as necessary.

## HEATED WINDOWS AND MIRRORS

**Note:** *Make sure the engine is running before operating the heated windows.*

**Note:** *Depending on your remote start settings, the heated windows, mirrors and wipers may remain on after remote starting the vehicle.*

### Heated Rear Window



Press the button to clear the heated rear window of thin ice and fog. The heated rear window will automatically turn off after a short period of time. Press the button again to switch it off.

**Note:** *An indicator on the button illuminates when active.*

**Note:** *Do not use razor blades or other sharp objects to clean or remove decals from the inside of the heated rear window. The vehicle warranty does not cover damage caused to the heated rear window grid lines.*

### Heated Exterior Mirrors (If Equipped)

When you switch the heated rear window on, the heated exterior mirrors will automatically turn on.

**Note:** *Do not remove ice from the mirrors with a scraper or adjust the mirror glass when it is frozen in place.*

**Note:** *Do not clean the mirror housing or glass with harsh abrasives, fuel or other petroleum-based cleaning products.*

### Heated Wiper Park (If Equipped)

When you switch the heated rear window on, the heated wiper park automatically turns on.

# Climate Control

## CABIN AIR FILTER

Your vehicle is equipped with a cabin air filter, which gives you and your passengers the following benefits:

- It improves your driving comfort by reducing particle concentration.
- It improves the interior compartment cleanliness.
- It protects the climate control components from particle deposits.

Your cabin air filter is located inside the instrument panel and left of the glove box.

**Note:** *Make sure you have a cabin air filter installed at all times. This prevents foreign objects from entering the system. Running the system without a filter in place could result in degradation or damage to the system.*

Replace the filter at regular intervals. See **Maintenance** (page 286).

For additional cabin air filter information, or to replace the filter, see an authorized dealer.

## REMOTE START

The remote start feature allows you to pre-condition the interior of your vehicle. The climate control system works to achieve comfort according to your pre-selected settings.

**Note:** *You cannot adjust the system during remote start operation. You cannot switch on the displays or indicators during remote start.*

Switch the ignition on to return the system to its previous settings. The following features remain on if they automatically turned on during remote start, or remain off if they did not turn on during remote start.

- Heated seats.
- Cooled seats.
- Heated steering wheel.
- Heated mirrors.
- Heated rear window.

**Note:** *Passenger heated and cooled seats only remain on during remote start if they were on when you switched the vehicle off.*

You can adjust the default remote start settings using the information display controls. See **Information Displays** (page 108).

## Automatic Settings

In hot weather, the system is set to 72°F (22°C). The cooled seats are set to high (if available, and selected to AUTO in the information display).


In moderate weather, the system either heats or cools (based on pre-selected settings). The rear defroster, heated mirrors and heated seats do not automatically switch on.


In cold weather, the system is set to 72°F (22°C). The heated and cooled seats and heated steering wheel are set to high (if available, and selected to AUTO in the information display). The rear defroster and heated mirrors automatically switch on.


# Seats

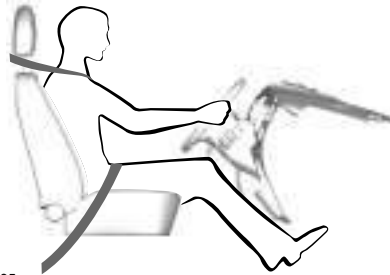
## SITTING IN THE CORRECT POSITION

### WARNINGS

 Sitting improperly, out of position or with the seatback reclined too far can take weight off the seat cushion and affect the decision of the passenger sensing system, resulting in serious injury or death in the event of a crash. Always sit upright against your seat back, with your feet on the floor.

 Do not recline the seatback as this can cause the occupant to slide under the safety belt, resulting in serious injury in the event of a crash.

 Do not place objects higher than the seatback to reduce the risk of serious injury in the event of a crash or during heavy braking.



E68595

When you use them properly, the seat, head restraint, safety belt and airbags will provide optimum protection in the event of a crash.

We recommend that you follow these guidelines:


- Sit in an upright position with the base of your spine as far back as possible.
- Do not recline the seatback more than 30 degrees.
- Adjust the head restraint so that the top of it is level with the top of your head and as far forward as possible. Make sure that you remain comfortable.

- Keep sufficient distance between yourself and the steering wheel. We recommend a minimum of 10 in (25 cm) between your breastbone and the airbag cover.
- Hold the steering wheel with your arms slightly bent.
- Bend your legs slightly so that you can press the pedals fully.
- Position the shoulder strap of the safety belt over the center of your shoulder and position the lap strap tightly across your hips.

Make sure that your driving position is comfortable and that you can maintain full control of your vehicle.


## HEAD RESTRAINTS


### WARNINGS

 Fully adjust the head restraint before you sit in or operate your vehicle. This will help minimize the risk of neck injury in the event of a crash. Do not adjust the head restraint when your vehicle is moving.

# Seats

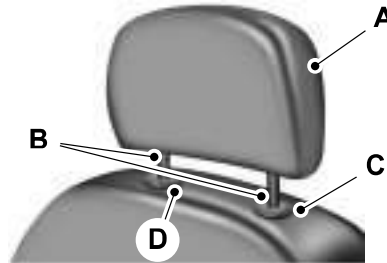
## WARNINGS

 The head restraint is a safety device. Whenever possible it should be installed and properly adjusted when the seat is occupied. Failure to adjust the head restraint properly could reduce its effectiveness during certain impacts.

 Install the head restraint properly to help minimize the risk of neck injury in the event of a crash.

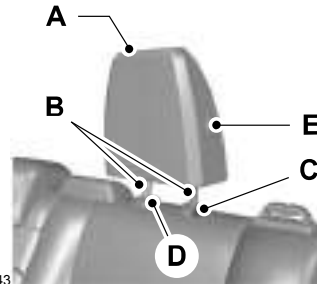
**Note:** *Adjust the seatback (front seats only) to an upright driving position before adjusting the head restraint. Adjust the head restraint so that the top of it is level with the top of your head and as far forward as possible. Make sure that you remain comfortable. If you are extremely tall, adjust the head restraint to its highest position.*

## Front seat head restraint



E138642

## Rear seat outboard head restraints

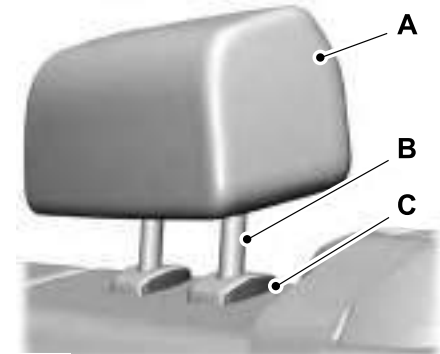


E138643

The head restraints consist of:

- A An energy absorbing head restraint.
- B Two steel stems.
- C Guide sleeve adjust (front seat only) and unlock button.
- D Guide sleeve unlock and remove button.
- E Fold button.

## Rear center head restraint



E211925

# Seats

The rear center head restraint consists of:

- A An energy absorbing head restraint.
- B Two steel stems.
- C Guide sleeve unlock and remove button.

## Adjusting the Head Restraint

### Raising the Front Seat Head Restraint

Pull the head restraint up.

### Lowering the Front Seat Head Restraint

1. Press and hold button C.
2. Push the head restraint down.

### Removing the Head Restraint

1. Pull the head restraint up until it reaches its highest position.
2. Press and hold buttons C and D.
3. Pull the head restraint up.

### Installing the Head Restraint

Align the steel stems into the guide sleeves and push the head restraint down until it locks.

### Folding the Rear Seat Head Restraint

1. Press and hold button E.
2. Pull it back up to reset.

### Tilting Head Restraints

The front seat head restraints tilt for extra comfort. To tilt the head restraint, do the following:



E144727

1. Adjust the seatback to an upright driving or riding position.
2. Pivot the head restraint forward toward your head to the desired position.

After the head restraint reaches the forward-most tilt position, pivot it forward again to release it to the rearward, un-tilted position.

# Seats

---

## POWER SEATS

### WARNINGS



Do not adjust the driver's seat or

### WARNINGS

seatback when your vehicle is moving. Adjusting your seatback while your vehicle is in motion may cause loss of control of your vehicle.

### WARNINGS

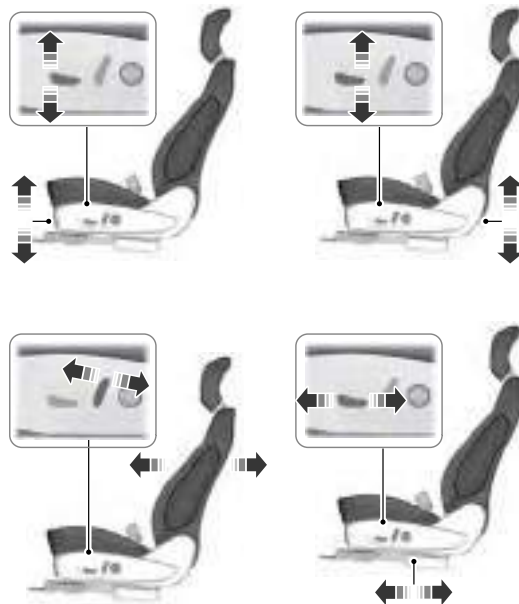


Do not place cargo or any objects behind the seatback before returning it to the original position.

---



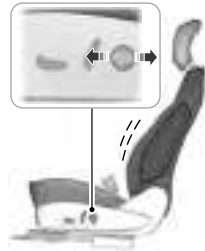
# Seats



E144632

# Seats


## Power Lumbar




E165608

## MEMORY FUNCTION

### WARNINGS

 Before activating the seat memory, make sure that the area immediately surrounding the seat is clear of obstructions and that all occupants are clear of moving parts.

 Do not use the memory function when your vehicle is moving.

This feature will automatically recall the position of the driver seat, power mirrors and optional power steering column. The memory control is located on the driver door.



E142554

### Saving a PreSet Position

1. Switch the ignition on.
2. Adjust the seat, exterior mirrors and power steering column to your desired position.
3. Press and hold the desired preset button until you hear a single tone.

**Note:** A confirmation that a memory preset is saved will appear in the information display.

You can save up to three preset memory positions. You can save a memory preset at any time.

### Recalling a PreSet Position

Press and release the preset button associated with your desired driving position. The seat, mirrors and steering column will move to the position stored for that preset.

**Note:** You can only recall a preset memory position when the ignition is off, or when you place the transmission in park (P) or neutral (N) if the ignition is on.

**Note:** Press any seat or mirror adjustment switch (or any memory button) during a memory recall to cancel the operation.

# Seats

You can also recall a preset memory position by:

- Pressing the unlock button on your intelligent access key fob if it is linked to a preset position.
- Unlocking the intelligent driver door handle if a linked key fob is present.
- Entering a personal entry code on the Securicode keypad. See **Keyless Entry** (page 71).

**Note:** Using a linked key fob to recall your memory position when the ignition is off will move the seat and steering column to the *Easy Entry position*.

## Linking a PreSet Position to your Remote Control or Intelligent Access Key

Your vehicle can save the preset memory positions for up to three remote controls or intelligent access (IA) keys.

1. With the ignition on, move the memory positions to the desired positions.

2. Press and hold the desired preset button for about five seconds. A tone will sound after about two seconds. Continue holding until a second tone is heard.
3. Within three seconds, press the lock button on the remote control you are linking.

To unlink a remote control, follow the same procedure – except in Step 3, press the unlock button on the remote control.

## Easy Entry and Exit Feature

If you enable the easy entry and exit feature, it automatically moves the driver seat position rearward up to two inches (five centimeters) when you switch the ignition off. The driver seat will return to the previous position when you switch the ignition on.

You can enable or disable this feature in the information display. See **Information Displays** (page 108).

## REAR SEATS



E171298

# Seats

## Folding the Seatback

With the seat empty, pull the lever up to fold the seatback forward. You may need to fold the outboard head restraints and lower the center head restraint first.

## Unfolding the Seatback

Pull the seatback upward to unfold the seatback.

## Recline Adjustment

With the seat occupied, pull the lever up to recline the seatback.

## HEATED SEATS

### Front Seats

#### WARNING



People who are unable to feel pain to their skin because of advanced age, chronic illness, diabetes, spinal cord injury, medication, alcohol use, exhaustion or other physical conditions, must exercise care when using the heated seat. The heated seat may cause burns even at low temperatures, especially if used for long periods of time. Do not place anything on the seat that insulates against heat, such as a blanket or cushion. This may cause the heated seat to overheat. Do not puncture the seat with pins, needles or other pointed objects. This may damage the heating element which may cause the heated seat to overheat. An overheated seat may cause serious personal injury.

Do not do the following:

- Place heavy objects on the seat.
- Operate the heated seat if water or any other liquid spills on the seat. Allow the seat to dry thoroughly.

**Note:** *The heated seats will only function when the engine is running.*



E146322

Press the heated seat symbol to cycle through the various heat settings and off. More indicator lights indicate warmer settings.


**Note:** *After 90 minutes of operation, the heated seats switch off. Press the heated seat symbol to switch the heated seats on.*

# Seats

**Note:** Depending on your remote start settings, the heated seats may remain on after you remote start your vehicle. The heated seats may also turn on when you start your vehicle if they were on when your vehicle was turned off.

## Rear Seats (If Equipped)

### WARNING

 Persons who are unable to feel pain to the skin because of advanced age, chronic illness, diabetes, spinal cord injury, medication, alcohol use, exhaustion, or other physical conditions, must exercise care when using the seat heater. The seat heater may cause burns even at low temperatures, especially if used for long periods of time. Do not place anything on the seat that insulates against heat, such as a blanket or cushion, because this may cause the seat heater to overheat. Do not puncture the seat with pins, needles, or other pointed objects because this may damage the heating element which may cause the seat heater to overheat. An overheated seat may cause serious personal injury.

Do not do the following:

- Place heavy objects on the seat.
- Operate the seat heater if water or any other liquid spills on the seat. Allow the seat to dry thoroughly.

**Note:** The heated seats will only function when the engine is running.

The rear seat heat controls are located on the rear of the center console.



E146322


Press the heated seat symbol to cycle through the various heat settings and off. More indicator lights indicate warmer settings.

## CLIMATE CONTROLLED SEATS (If

Equipped)

### Heated Seats

#### WARNING

 Persons who are unable to feel pain to the skin because of advanced age, chronic illness, diabetes, spinal cord injury, medication, alcohol use, exhaustion, or other physical conditions, must exercise care when using the seat heater. The seat heater may cause burns even at low temperatures, especially if used for long periods of time. Do not place anything on the seat that insulates against heat, such as a blanket or cushion, because this may cause the seat heater to overheat. Do not puncture the seat with pins, needles, or other pointed objects because this may damage the heating element which may cause the seat heater to overheat. An overheated seat may cause serious personal injury.

Do not do the following:

# Seats

- Place heavy objects on the seat.
- Operate the seat heater if water or any other liquid spills on the seat. Allow the seat to dry thoroughly.

**Note:** The heated seats will only function when the engine is running.



E146322

Press the heated seat symbol to cycle through the various heat settings and off. More indicator lights indicate warmer settings.

**Note:** After 90 minutes of operation, the heated seats switch off. Press the heated seat symbol to switch the heated seats on.

**Note:** Depending on your remote start settings, the heated seats may remain on after you remote start your vehicle. The heated seats may also turn on when you start your vehicle if they were on when your vehicle was turned off.

## Cooled Seats (If Equipped)

**Note:** The cooled seats will only function when the engine is running.



E146309

Press the cooled seat symbol to cycle through the various cool settings and off. More indicator lights indicate cooler settings.

**Note:** Depending on your remote start settings, the cooled seats may remain on after you remote start your vehicle. The cooled seats may also turn on when you start your vehicle if they were on when your vehicle was turned off.

## REAR SEAT ARMREST (If Equipped)



E138656


Fold the armrest down to use the armrest and cupholder.


# Universal Garage Door Opener (If Equipped)

(If Equipped)

## HomeLink Wireless Control System

### WARNINGS

 Make sure that the garage door and security device are free from obstruction when you are programming. Do not program the system with the vehicle in the garage.

 Do not use the system with any garage door opener that does not have the safety stop and reverse feature as required by U.S. Federal Safety Standards (this includes any garage door opener manufactured before April 1, 1982). A garage door opener which cannot detect an object, signaling the door to stop and reverse, does not meet current federal safety standards. Using a garage door opener without these features increases the risk of serious injury or death.

**Note:** Make sure you keep the original remote control transmitter for use in other vehicles as well as for future system programming.

**Note:** We recommend that upon the sale or lease termination of your vehicle, you erase the programmed function buttons for security reasons. See **Erasing the Function Button Codes**.

**Note:** You can program a maximum of three devices. To change or replace any of the three devices after it has been initially programmed, you must first erase the current settings. See **Erasing the Function Button Codes**.



E142657

The universal garage door opener replaces the common hand-held garage door opener with a three-button transmitter that is integrated into the driver's sun visor.

The system includes two primary features, a garage door opener and a platform for remote activation of devices within the home. As well as being programmed for garage doors, the system transmitter can be programmed to operate entry gate operators, security systems, entry door locks and home or office lighting.

Additional system information can be found online at [www.homelink.com](http://www.homelink.com), [www.youtube.com/HomeLinkGentex](http://www.youtube.com/HomeLinkGentex) or by calling the toll-free help line on 1-800-355-3515.

### In-Vehicle Programming

This process is to program your hand-held transmitter and your in-vehicle HomeLink button.

**Note:** The programming steps below assume you will be programming HomeLink that was not previously programmed.

**Note:** Put a new battery in the hand-held transmitter. This will ensure quicker training and accurate transmission of the radio-frequency signal.

# Universal Garage Door Opener (If Equipped)



E142658

1. With your vehicle parked outside of the garage, turn your ignition to the **on** position, but do not start your vehicle.
2. Hold your hand-held garage door transmitter 2–6 in (5–14 cm) away from the HomeLink button you want to program.
3. Using both hands, simultaneously, press and hold the desired HomeLink button and the hand-held transmitter button. DO NOT release either one until the HomeLink indicator light flashes slowly and then rapidly. When the indicator light flashes rapidly, both buttons may be released. The rapid flashing indicates successful training.

**Note:** You may need to use a different method if you live in Canada or have difficulties programming your gate operator or garage door opener. See **Gate Operator / Canadian Programming**.

4. Press and hold the HomeLink button you programmed for two seconds, then release. You may need to do this twice to activate the door. If your garage door does not operate, watch the HomeLink indicator light.

**If the indicator light stays on, the programming is complete. No further action is needed.**

If the indicator light flashes rapidly for 2 seconds and then turns to a constant light, the HomeLink button is not programmed yet. See **Programming Your Garage Door Opener Motor**.

To program additional buttons, repeat Steps 1 – 4.

For questions or comments, please contact HomeLink at [www.homelink.com](http://www.homelink.com), [www.youtube.com/HomeLinkGentex](http://www.youtube.com/HomeLinkGentex) or 1-800-355-3515.

## Programming Your Garage Door Opener Motor

**Note:** You may need a ladder to reach the unit and you may need to remove the cover or lamp lens on your garage door opener.



E142659

1. Press the learn button on the garage door opener motor and then you have 30 seconds to complete the next two steps.
2. Return to your vehicle.



# Universal Garage Door Opener (If Equipped)



E142658

3. Press and hold the function button you want to program for 2 seconds, then release. Repeat this step. Depending on your brand of garage door opener, you may need to repeat this sequence a third time.

## Gate Operator / Canadian Programming

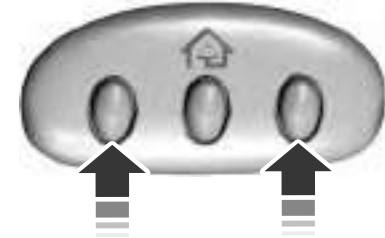
Canadian radio-frequency laws require transmitter signals to “time-out” (or quit) after several seconds of transmission – which may not be long enough for HomeLink to pick up the signal during programming. Similar to this Canadian law, some U.S. gate operators are designed to “time-out” in the same manner.

**Note:** *If programming a garage door opener or gate operator, it is advised to unplug the device during the “cycling” process to prevent possible overheating.*

1. Press and hold the HomeLink button while you press and release, **every two seconds**, your hand-held transmitter until the HomeLink indicator light changes from a slow to a rapidly blinking light.
2. Release both the HomeLink and hand-held transmitter buttons.
3. Continue programming HomeLink. See **In-Vehicle Programming**.

## Erasing the Function Button Codes

**Note:** *You cannot erase individual buttons.*



E142660

1. Press and hold the outer two function buttons simultaneously for approximately 20 seconds until the indicator lights above the buttons flash rapidly.
2. When the indicator lights flash, release the buttons. The codes for all buttons are erased.

## Reprogramming a Single Button

To program a device to a previously trained button, follow these steps:

1. Press and hold the desired button. Do NOT release the button.

# Universal Garage Door Opener (If Equipped)

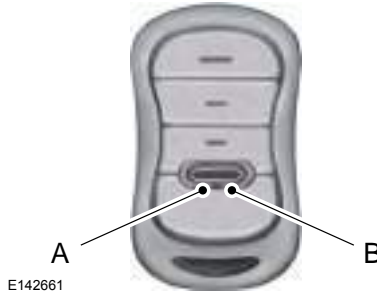
2. The indicator light will begin to flash after 20 seconds. Without releasing the button, follow Step 1 in the Programming section.

For questions or comments, contact HomeLink at [www.homelink.com](http://www.homelink.com), [www.youtube.com/HomeLinkGentex](http://www.youtube.com/HomeLinkGentex) or 1-800-355-3515.

## Programming to a Genie Intellicode 2 Garage Door Opener

**Note:** *The Genie Intellicode 2 transmitter must already be programmed to operate with the garage door opener.*

**Note:** *To program HomeLink to the transmitter you must first put the transmitter into programming mode.*



- A. Red indicator light
- B. Green indicator light

1. Press and hold one of the buttons on the hand-held transmitter for 10 seconds. The indicator light will change from green to red and green.
2. Press the same button twice to confirm the change to programming mode. If done properly the indicator light will appear red.
3. Hold the transmitter within 1–3 inches (2–8 centimeters) of the button on the visor you want to program.

4. Press and hold both the programmed Genie button on the hand-held transmitter and the button you want to program. The indicator light on the visor will flash rapidly when the programming is successful.

**Note:** *The Genie transmitter will transmit for up to 30 seconds. If HomeLink does not program within 30 seconds the Genie transmitter will need to be pressed again. If the Genie transmitter indicator light displays green and red, release the button until the indicator light turns off before pressing the button again.*

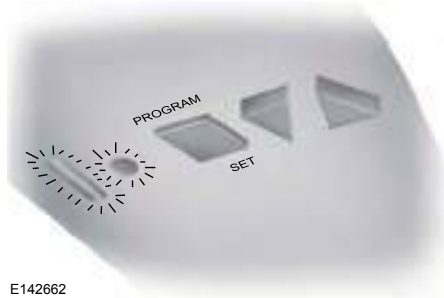
Once HomeLink has been programmed successfully, the Genie transmitter must be changed out of program mode. To do this:

1. Press and hold the previously programmed Genie button on the hand-held transmitter for 10 seconds. The indicator light will change from red to red and green.
2. Press the same button twice to confirm the change. If done correctly the indicator light will turn green.

# Universal Garage Door Opener (If Equipped)

## Programming HomeLink to the Genie Intellicode Garage Door Opener Motor

**Note:** You may need a ladder to access the garage door opener motor.



E142662

1. Press and hold the program button on the garage door opener motor until both blue indicator lights turn on.
2. Release the program button. Only the smaller round indicator light should be on.
3. Press and release the program button. The larger purple indicator light will flash.

**Note:** The next two steps must be completed in 30 seconds.

4. Press and release the Genie Intellicode 2 hand-held transmitter's previously programmed button. Both indicator lights on the garage door opener motor unit should now flash purple.
5. Press and hold the previously programmed button on the visor for 2 seconds. Repeat this step up to 3 times until the garage door moves.

Programming is now complete.

### Clearing a HomeLink Device

To erase programming from the three HomeLink buttons press and hold the two outer HomeLink buttons until the indicator light begins to flash. The indicator light will begin flashing in 10 to 20 seconds, at which time both buttons should be released. Programming has now been erased, and the indicator light should blink slowly to indicate the device is in train mode when any of the three HomeLink buttons are pressed.

## FCC and RSS-210 Industry Canada Compliance

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications to your device not expressly approved by the party responsible for compliance can void the user's authority to operate the equipment.

# Auxiliary Power Points

## 12 Volt DC Power Point

### WARNINGS



Do not plug optional electrical accessories into the cigar lighter socket. Incorrect use of the cigar lighter can cause damage not covered by the vehicle warranty, and can result in fire or serious injury.



Do not use a power point for operating a cigar lighter. Incorrect use of the power points can cause damage not covered by the vehicle warranty, and can result in fire or serious injury.

**Note:** When you switch the ignition on, you can use the socket to power 12 volt appliances with a maximum current rating of 15 amps.

If the power supply does not work after you switch the ignition off, switch the ignition on.

**Note:** Do not hang any accessory from the accessory plug.

**Note:** Do not use the power point over the vehicle capacity of 12 volt DC 180 watts or a fuse may blow.

**Note:** Always keep the power point caps closed when not in use.

Do not insert objects other than an accessory plug into the power point. This will damage the power point and blow the fuse.

Run the vehicle for full capacity use of the power point.

To prevent the battery from running out of charge:

- Do not use the power point longer than necessary when the vehicle is not running.
- Do not leave devices plugged in overnight or when you park your vehicle for extended periods.

### Locations

Power points may be in the following locations:

- On the front of the center console.
- Inside the center console.
- On the rear of the center console.
- Inside the luggage compartment.

## 110 Volt AC Power Point (If Equipped)

### WARNING



Do not keep electrical devices plugged in the power point whenever the device is not in use. Do not use any extension cord with the 110 volt AC power point, since it will defeat the safety protection design. Doing so may cause the power point to overload due to powering multiple devices that can reach beyond the 150 watt load limit and could result in fire or serious injury.

**Note:** The power point will turn off when the ignition is switched off or the battery voltage drops below 11 volts.

Use the power point for powering electric devices that require up to 150 watts. It is on the rear of the center console.

# Auxiliary Power Points

---

When the indicator light on the power point is:

- On: The power point is working, the ignition is on and a device is plugged in.
- Off: The power point is off, the ignition is off or no device is plugged in.
- Flashing: The power point is in fault mode.

The power outlet temporarily turns off power when in fault mode if the device exceeds the 150 watt limit. Unplug your device and switch the ignition off. Switch the ignition back on, but do not plug your device back in. Let the system cool off and switch the ignition off to reset the fault mode. Switch the ignition back on and make sure the indicator light remains on.

Do not use the power point for certain electric devices, including:

- Cathode-ray, tube-type televisions.
- Motor loads, such as vacuum cleaners, electric saws and other electric power tools or compressor-driven refrigerators.

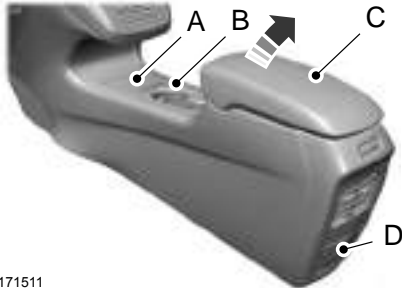
- Measuring devices, which process precise data, such as medical equipment or measuring equipment.
- Other appliances requiring an extremely stable power supply such as microcomputer-controlled electric blankets or touch-sensor lamps.

# Storage Compartments

## CENTER CONSOLE

Stow items in the cup holder carefully as items may become loose during hard braking, acceleration or crashes, including hot drinks which may spill.

Available console features include:



E171511

- A Front storage bin with auxiliary power point and media hub.
- B Cup holder.

- C Storage compartment with auxiliary power point.
- D Auxiliary power point, 110 volt AC power outlet (if equipped).

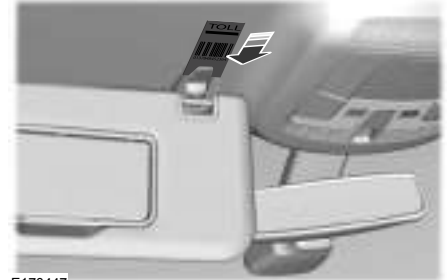
## OVERHEAD CONSOLE



E224352

Press near the rear edge of the door to open it.

## TICKET HOLDERS




E170447


Slide your toll ticket in the space provided.


# Starting and Stopping the Engine


## GENERAL INFORMATION

### WARNINGS

 Extended idling at high engine speeds can produce very high temperatures in the engine and exhaust system, creating the risk of fire or other damage.

 Do not park, idle or drive your vehicle on dry grass or other dry ground cover. The emission system heats up the engine compartment and exhaust system, creating the risk of fire.

 Do not start the engine in a closed garage or in other enclosed areas. Exhaust fumes can be toxic. Always open the garage door before you start the engine.

 If you smell exhaust fumes inside your vehicle, have your vehicle checked by an authorized dealer immediately. Do not drive your vehicle if you smell exhaust fumes.

If you disconnect the battery, your vehicle may exhibit some unusual driving characteristics for approximately 5 miles (8 kilometers) after you reconnect it. This is because the engine management system must realign itself with the engine. You can disregard any unusual driving characteristics during this period.

The powertrain control system meets all Canadian interference-causing equipment standard requirements regulating the impulse electrical field or radio noise.

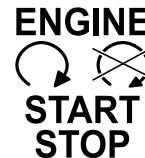
When you start the engine, avoid pressing the accelerator pedal before and during operation. Only use the accelerator pedal when you have difficulty starting the engine.

## KEYLESS STARTING

**Note:** *The keyless starting system may not function if the key is close to metal objects or electronic devices such as cellular phones.*

**Note:** *A valid key must be located inside your vehicle to switch the ignition on and start the engine.*

## Ignition Modes



E191075

The keyless starting system has three modes:

**Off:** Turns the ignition off.

- Without applying the brake pedal, press and release the button once when the ignition is in the on mode, or when the engine is running but the vehicle is not moving.

**On:** All electrical circuits are operational and the warning lamps and indicators illuminate.

- Without applying the brake pedal, press and release the button once.

# Starting and Stopping the Engine

**Note:** You may have to press the push button ignition switch twice to switch the ignition on.

**Start:** Starts the engine.

- Press the brake pedal, and then press the button for any length of time. An indicator light on the button illuminates when then ignition is on and when the engine starts.

## STARTING A GASOLINE ENGINE

When you start the engine, the idle speed increases, this helps to warm up the engine. If the engine idle speed does not slow down automatically, have your vehicle checked by an authorized dealer.

**Note:** If your vehicle is equipped with remote start, you can start your vehicle with the remote, and then drive away by pressing the brake pedal and pushing a button on the transmission. This allows you to drive away without pressing the engine start button.

Before starting the engine, check the following:

- Make sure all occupants have fastened their safety belts.
- Make sure the headlamps and electrical accessories are off.
- Make sure the parking brake is on.
- Put the transmission in **P**.

**Note:** Do not touch the accelerator pedal.

1. Fully press the brake pedal.
2. Press the button.

The system does not function if:

- The key frequencies are jammed.
- The key battery has no charge.

If you are unable to start the engine, do the following:



E170454

1. Open the center console lid.
2. Slide the remote into the back-up slot.
3. With the key in this position, press the brake pedal, then the START button to switch the ignition on and start your vehicle.

## Fast Restart

The fast restart feature allows you to restart the engine within 20 seconds of switching it off, even if a valid key is not present.



# Starting and Stopping the Engine

---

Within 20 seconds of switching the engine off, press the brake pedal and press the button. After 20 seconds have expired, you can no longer restart the engine without the key present inside your vehicle.

Once the engine has started, it remains running until you press the button, even if the system does not detect a valid key. If you open and close a door while the engine is running, the system searches for a valid key. You cannot restart the engine if the system does not detect a valid key within 20 seconds.

## Failure to Start

If you cannot start the engine after three attempts, wait 10 seconds and follow this procedure:

1. Fully press the brake pedal.
2. Fully press the accelerator pedal and hold it there.
3. Start the engine.

**Note:** *You can crank the engine for a total of 60 seconds (without the engine starting) before the starting system temporarily disables. The 60 seconds does not have to be all at once. For example, if you crank the engine three times for 20 seconds each time, without the engine starting, you reached the 60-second time limit. A message appears in the information display alerting you that you exceeded the cranking time. You cannot attempt to start the engine for at least 15 minutes. After 15 minutes, you are limited to a 15-second engine cranking time. You need to wait 60 minutes before you can crank the engine for 60 seconds again.*

## Automatic Engine Shutdown

If your vehicle is equipped with a keyless ignition, it has a feature that automatically shuts down the engine if it has been idling for an extended period. The ignition also turns off in order to save battery power. Before the engine shuts down, a message appears in the information display showing a timer counting down from 30 seconds. If

you do not intervene within 30 seconds, the engine shuts down. Another message appears in the information display to inform you that the engine has shut down in order to save fuel. Start your vehicle as you normally do.

## Automatic Engine Shutdown Override

**Note:** *You cannot permanently switch off the automatic engine shutdown feature. When you switch it off temporarily, it turns on at the next ignition cycle.*

You can stop the engine shutdown, or reset the timer, at any point before the 30-second countdown has expired by doing any of the following:

# Starting and Stopping the Engine

- You can reset the timer by interacting with your vehicle (such as pressing the brake pedal or accelerator pedal).
- You can temporarily switch off the shutdown feature any time the ignition is on (for the current ignition cycle only). Use the information display to do so. See **Information Displays** (page 108).
- During the countdown before engine shutdown, you are prompted to press OK or RESET (depending on your type of information display) to temporarily switch the feature off (for the current ignition cycle only).

## Stopping the Engine When Your Vehicle is Stationary

1. Put the transmission in position **P**.
2. Press the button once.
3. Apply the parking brake.

**Note:** *This switches off the ignition, all electrical circuits, warning lamps and indicators.*

**Note:** *If the engine is idling for 30 minutes, the ignition and engine automatically shut down.*

## Stopping the Engine When Your Vehicle is Moving

### WARNING



Switching off the engine when the vehicle is still moving will result in a loss of brake and steering assistance. The steering will not lock, but higher effort will be required. When the ignition is switched off, some electrical circuits, including air bags, warning lamps and indicators may also be off. If the ignition was turned off accidentally, you can shift into neutral (N) and re-start the engine.

1. Put the transmission in position **N** and use the brakes to bring your vehicle to a safe stop.
2. When your vehicle has stopped, put the transmission in position **P**.
3. Press and hold the button for one second, or press it three times within two seconds.

4. Apply the parking brake.

## Guarding Against Exhaust Fumes

### WARNING



If you smell exhaust fumes inside your vehicle, have your vehicle checked by your authorized dealer immediately. Do not drive your vehicle if you smell exhaust fumes. Carbon monoxide is present in exhaust fumes. Take precautions to avoid its dangerous effects.

## Important Ventilating Information


If you stop your vehicle and leave the engine idling for long periods, we recommend that you do one of the following:


- Open the windows at least 1 in (2.5 cm).
- Set your climate control to outside air.


# Starting and Stopping the Engine

## ENGINE BLOCK HEATER (If Equipped)

### WARNINGS

 Failure to follow engine block heater instructions could result in property damage or serious personal injury.

 Do not use your heater with ungrounded electrical systems or two-pronged adapters. There is a risk of electrical shock.

 Do not fully close the hood, or allow it to drop under its own weight when using the engine block heater. This could damage the power cable and may cause an electrical short resulting in fire, injury and property damage.

**Note:** *The heater is most effective when outdoor temperatures are below 0°F (-18°C).*

The heater acts as a starting aid by warming the engine coolant. This allows the climate control system to respond quickly. The equipment includes a heater element (installed in the engine block) and a wire harness. You can connect the system to a grounded 120-volt AC electrical source.

We recommend that you do the following for a safe and correct operation:

- Use a 16-gauge outdoor extension cord that is product certified by Underwriter's Laboratory (UL) or Canadian Standards Association (CSA). This extension cord must be suitable for use outdoors, in cold temperatures, and be clearly marked Suitable for Use with Outdoor Appliances. Do not use an indoor extension cord outdoors. This could result in an electric shock or become a fire hazard.
- Use as short an extension cord as possible.
- Do not use multiple extension cords.
- Make sure that when in operation, the extension cord plug and heater cord plug connections are free and clear of water. This could cause an electric shock or fire.
- Make sure your vehicle is parked in a clean area, clear of combustibles.
- Make sure the heater, heater cord and extension cord are firmly connected.

- Check for heat anywhere in the electrical hookup once the system has been operating for approximately 30 minutes.
- Make sure the system is unplugged and properly stowed before starting and driving your vehicle. Make sure the protective cover seals the prongs of the block heater cord plug when not in use.
- Make sure the heater system is checked for proper operation before winter.

### Using the Engine Block Heater

Make sure the receptacle terminals are clean and dry prior to use. Clean them with a dry cloth if necessary.

The heater uses 0.4 to 1.0 kilowatt-hours of energy per hour of use. The system does not have a thermostat. It achieves maximum temperature after approximately three hours of operation. Using the heater longer than three hours does not improve system performance and unnecessarily uses electricity.

# Unique Driving Characteristics

## AUTO-START-STOP

The system helps reduce fuel consumption by automatically shutting off and restarting the engine while your vehicle is stopped. The engine will restart automatically when you release the brake pedal. In some situations, your vehicle may restart automatically, for example:

- To maintain interior comfort
- To recharge the battery

**Note:** *Power assist steering is turned off when the engine is off.*

### WARNINGS



The engine may restart automatically if required by the system.



Switch the ignition off before opening the hood or performing any maintenance. Failure to do so may result in serious injuries due to automatic engine restart.

### WARNINGS



Always switch the ignition off before leaving your vehicle, as the system may have turned the engine off, but the ignition will still be on and automatic restart may occur.

The Auto StartStop system status is available at a glance within the information display. See **Information Displays** (page 108).

### Enabling Auto StartStop

The system is automatically enabled every time you start your vehicle if the following conditions are met:

- The Auto StartStop button is not pressed (not illuminated).
- Your vehicle exceeds an initial speed of 3 mph (5 km/h) after the vehicle has been initially started.
- Your vehicle is stopped.
- Your foot is on the brake pedal.
- The transmission is in drive (D).
- The driver's door is closed.
- There is adequate brake vacuum.

- The interior compartment has been cooled or warmed to an acceptable level.
- The front windshield defroster is off.
- The steering wheel is not turned rapidly or is not at a sharp angle.
- The vehicle is not on a steep road grade.
- The battery is within optimal operating conditions (battery state of charge and temperature in range).
- The engine coolant is at operating temperature.
- Elevation is below approximately 10,000 ft (3,048 m).
- Ambient temperature is moderate.

**Note:** *The system allows multiple successive Auto StartStop events, but it may not operate in conditions of heavy traffic or in extended low speed operation.*



The green Auto StartStop indicator light on the instrument cluster will illuminate to indicate when the automatic engine stop occurs.

## Unique Driving Characteristics



If the instrument cluster is equipped with a grey Auto Start/Stop indicator light, it is illuminated when automatic engine stop is not available due to one of the above noted conditions not being met.

### Automatic Engine Restart

Any of the following conditions will result in an automatic restart of the engine:

- Your foot is removed from the brake pedal.
- You press the accelerator pedal.
- You press the accelerator and the brake pedal at the same time.
- The driver safety belt becomes unfastened or the driver door is ajar.
- The transmission is moved from drive (D).
- Your vehicle is moving.
- The interior compartment does not meet customer comfort when air conditioning or heat is on.
- Fogging of the windows could occur and the air conditioning is on.

- The battery is not within optimal operating conditions.
- The maximum engine off time is exceeded.
- When you press the Auto Start/Stop button while the engine is stopped automatically.
- The heated windshield is turned on.

Any of the following conditions may result in an automatic restart of the engine:

- The blower fan speed is increased or the climate control temperature is changed.
- An electrical accessory is turned on or plugged in.

### Disabling Auto Start/Stop



E223639

Press the Auto Start/Stop button located on the center console to switch the system off. The button will illuminate. The system will only be deactivated for the current ignition cycle. Press the button again to restore Auto Start/Stop function.

# Unique Driving Characteristics

---


If your vehicle is in an Auto StartStop state and you shift the transmission to reverse while the brake is not depressed, a message telling you to press the brake will appear. You must press the brake pedal within 10 seconds, or a shift to park and a manual restart will be required.


**Note:** *If the Shift to P, Restart Engine message appears and the amber Auto StartStop indicator light is flashing, automatic restart is not available. The vehicle must be restarted manually. See **Information Displays** (page 108).*


# Fuel and Refueling


## SAFETY PRECAUTIONS


### WARNINGS

 Do not overfill the fuel tank. The pressure in an overfilled tank may cause leakage and lead to fuel spray and fire.


 The fuel system may be under pressure. If you hear a hissing sound near the fuel filler inlet, do not refuel until the sound stops. Otherwise, fuel may spray out, which could cause serious personal injury.

 Fuels can cause serious injury or death if misused or mishandled.

 Flow of fuel through a fuel pump nozzle can produce static electricity. This can cause a fire if you are filling an ungrounded fuel container.

 Fuel may contain benzene, which is a cancer-causing agent.

### WARNINGS

 When refueling always shut the engine off and never allow sparks or open flames near the fuel tank filler valve. Never smoke or use a cell phone while refueling. Fuel vapor is extremely hazardous under certain conditions. Avoid inhaling excess fumes.

Observe the following guidelines when handling automotive fuel:

- Extinguish all smoking materials and any open flames before refueling your vehicle.
- Always turn off the vehicle before refueling.
- Automotive fuels can be harmful or fatal if swallowed. Fuel such as gasoline is highly toxic and if swallowed can cause death or permanent injury. If fuel is swallowed, call a physician immediately, even if no symptoms are immediately apparent. The toxic effects of fuel may not be visible for hours.

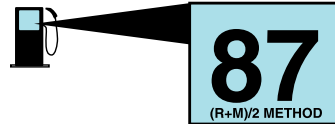
- Avoid inhaling fuel vapors. Inhaling too much fuel vapor of any kind can lead to eye and respiratory tract irritation. In severe cases, excessive or prolonged breathing of fuel vapor can cause serious illness and permanent injury.
- Avoid getting fuel liquid in your eyes. If fuel is splashed in the eyes, remove contact lenses (if worn), flush with water for 15 minutes and seek medical attention. Failure to seek proper medical attention could lead to permanent injury.

# Fuel and Refueling

- Fuels can also be harmful if absorbed through the skin. If fuel is splashed on the skin, clothing or both, promptly remove contaminated clothing and wash skin thoroughly with soap and water. Repeated or prolonged skin contact with fuel liquid or vapor causes skin irritation.
- Be particularly careful if you are taking Antabuse or other forms of Disulfiram for the treatment of alcoholism. Breathing gasoline vapors could cause an adverse reaction, serious personal injury or sickness. If fuel is splashed on the skin, wash the affected areas immediately with plenty of soap and water. Consult a physician immediately if you experience any adverse reactions.

## FUEL QUALITY

### Choosing the Right Fuel



E161513

We recommend regular unleaded gasoline with a minimum pump (R+M)/2 octane rating of 87. Some stations offer fuels posted as regular with an octane rating below 87, particularly in high altitude areas. We do not recommend fuels with an octane rating below 87. To provide improved performance, we recommend premium fuel for severe duty usage such as trailer tow.

Do not use any fuel other than those recommended because they could lead to engine damage that may not be covered by the vehicle Warranty.

**Note:** Use of any fuel other than those recommended can impair the emission control system and cause a loss of vehicle performance.

Do not use:

- Diesel fuel.
- Fuels containing kerosene or paraffin.
- Fuel containing more than 15% ethanol or E85 fuel.
- Fuels containing methanol.
- Fuels containing metallic-based additives, including manganese-based compounds.
- Fuels containing the octane booster additive, methylcyclopentadienyl manganese tricarbonyl (MMT).
- Leaded fuel (using leaded fuel is prohibited by law).

The use of fuels with metallic compounds such as methylcyclopentadienyl manganese tricarbonyl (commonly known as MMT), which is a manganese-based fuel additive, will impair engine performance and affect the emission control system.



# Fuel and Refueling

Do not be concerned if the engine sometimes knocks lightly. However, if the engine knocks heavily while using fuel with the recommended octane rating, contact an authorized dealer to prevent any engine damage.

## FUEL FILLER FUNNEL LOCATION

The fuel filler funnel is located in the spare wheel storage tray.

## RUNNING OUT OF FUEL

Running out of fuel can cause damage not covered by the vehicle Warranty.

If your vehicle runs out of fuel:

- Add a minimum of 1.3 gal (5 L) of fuel to restart the engine. If your vehicle is out of fuel and on a steep slope, more fuel may be required.
- You may need to switch the ignition from off to on several times after refueling to allow the fuel system to pump the fuel from the tank to the engine. When restarting, cranking time takes a few seconds longer than normal.

## Filling a Portable Fuel Container


Use the following guidelines to avoid electrostatic charge build-up, which can produce a spark, when filling an ungrounded fuel container:


- Only use an approved fuel container to transfer fuel to your vehicle. Place the container on the ground when filling it.
- Do not fill a fuel container when it is inside your vehicle (including the cargo area).


- Keep the fuel pump nozzle in contact with the fuel container when filling it.
- Do not use a device that holds the fuel pump nozzle lever in the fill position.

## Adding Fuel From a Portable Fuel Container

### WARNINGS

 Do not insert the nozzle of a fuel container or an aftermarket funnel into the fuel system filler neck. This may damage the fuel system filler neck or its seal and cause fuel to run onto the ground.

 Do not try to pry open or push open the capless fuel system with foreign objects. This could damage the fuel system and its seal and cause injury to you or others.

 Do not dispose of fuel in the household refuse or the public sewage system. Use an authorized waste disposal facility.

When refueling the vehicle fuel tank from a fuel container, use the plastic funnel included with your vehicle. See **Fuel Filler Funnel Location** (page 166).

# Fuel and Refueling

**Note:** Do not use aftermarket funnels as they will not work with the capless fuel system and can damage it.

When refueling the vehicle fuel tank from a fuel container, do the following:

1. Fully open the fuel tank filler door until it engages.
2. Fully insert the plastic funnel into the fuel tank filler pipe opening.






3. Add fuel to your vehicle from the fuel container.

4. Remove the plastic funnel from the fuel tank filler pipe opening.
5. Fully close the fuel tank filler door.
6. Clean the plastic funnel and place it back in your vehicle or properly dispose of it.


**Note:** Extra funnels can be purchased from an authorized dealer if you choose to dispose of the funnel.


## REFUELING


### WARNINGS

-  Do not overfill the fuel tank. The pressure in an overfilled tank may cause leakage and lead to fuel spray and fire.
-  Do not try to pry open or push open the capless fuel system with foreign objects. This could damage the fuel system and its seal and cause injury to you or others.
-  Do not remove the fuel pump nozzle from its fully inserted position when refueling.

### WARNINGS

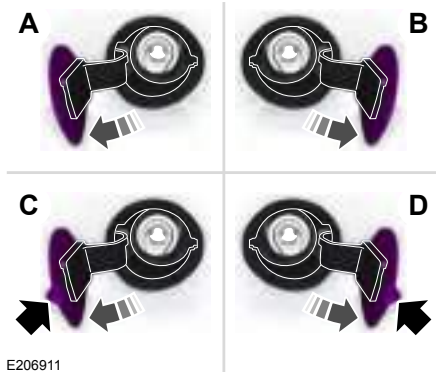
 When refueling always shut the engine off and never allow sparks or open flames near the fuel tank filler valve. Never smoke or use a cell phone while refueling. Fuel vapor is extremely hazardous under certain conditions. Avoid inhaling excess fumes.

 Wait at least 10 seconds before removing the fuel pump nozzle to allow any residual fuel to drain into the fuel tank.

 Stop refueling when the fuel pump nozzle automatically shuts off for the first time. Failure to follow this will fill the expansion space in the fuel tank and could lead to fuel overflowing.

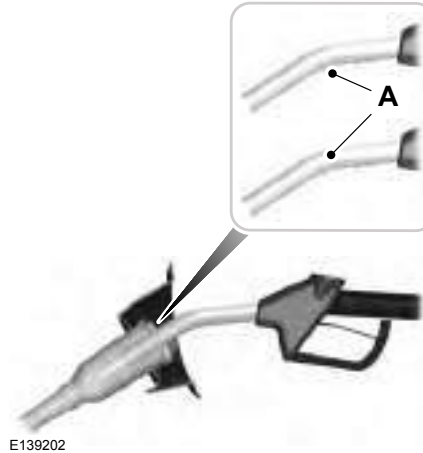
**Note:** Your vehicle does not have a fuel filler cap.

# Fuel and Refueling



E206911

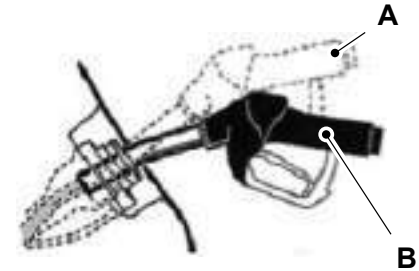
- A Type 1: Left hand side - press the fuel tank filler door to open it.
  - B Type 1: Right hand side - press the fuel tank filler door to open it.
  - C Type 2: Left hand side - pull the fuel tank filler door to open it.
  - D Type 2: Right hand side - pull the fuel tank filler door to open it.
1. Fully open the fuel tank filler door until it engages.



E139202

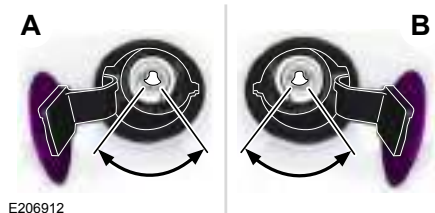
**Note:** When you insert the correct size fuel pump nozzle a spring loaded inhibitor will open.

2. Insert the fuel pump nozzle up to the first notch on the nozzle A. Keep it resting on the cover of the fuel tank filler pipe opening.



E139203

3. Hold the fuel pump nozzle in the lower position B when refueling. Holding the fuel pump nozzle in the higher position A may affect the flow of fuel and shut off the fuel pump nozzle before the fuel tank is full.



E206912

# Fuel and Refueling

4. Operate the fuel pump nozzle within the area shown.



E119081

5. Slightly raise the fuel pump nozzle and then slowly remove it.
6. Fully close the fuel tank filler door.

**Note:** Do not attempt to start the engine if you have filled the fuel tank with incorrect fuel. Incorrect fuel use can cause damage not covered by the vehicle Warranty. Have your vehicle checked immediately.

## FUEL CONSUMPTION

**Note:** The amount of usable fuel in the empty reserve varies and should not be relied upon to increase driving range. When refueling your vehicle after the fuel gauge indicates empty, you might not be able to refuel the full amount of the advertised capacity of the fuel tank due to the empty reserve still present in the tank.

Empty reserve is the amount of fuel remaining in the tank after the fuel gauge indicates empty. Do not rely on this fuel for driving. The usable capacity of the fuel tank is the amount of fuel that can be put into the tank after the gauge indicates empty. The advertised capacity is the total fuel tank size – it is the combined usable capacity plus the empty reserve.

## Filling the Tank

For consistent results when filling the fuel tank:

- Turn the ignition off before fueling; an inaccurate reading results if the engine is left running.
- Use the same fill rate (low-medium-high) each time the tank is filled.
- Allow no more than two automatic click-offs when filling.

Results are most accurate when the filling method is consistent.

## Calculating Fuel Economy

Do not measure fuel economy during the first 1000 miles (1600 kilometers) of driving (this is your engine's break-in period); a more accurate measurement is obtained after 2000 miles - 3000 miles (3200 kilometers - 4800 kilometers). Also, fuel expense, frequency of fill ups or fuel gauge readings are not accurate ways to measure fuel economy.

1. Fill the fuel tank completely and record the initial odometer reading.
2. Each time you fill the tank, record the amount of fuel added.

# Fuel and Refueling

3. After at least three to five tank fill ups, fill the fuel tank and record the current odometer reading.
4. Subtract your initial odometer reading from the current odometer reading.
5. Calculate fuel economy by dividing miles traveled by gallons used (For Metric: Multiply liters used by 100, then divide by kilometers traveled).

Keep a record for at least one month and record the type of driving (city or highway). This provides an accurate estimate of the vehicle's fuel economy under current driving conditions. Additionally, keeping records during summer and winter show how temperature impacts fuel economy. In general, lower temperatures mean lower fuel economy.

## EMISSION CONTROL SYSTEM

### WARNINGS



Do not park, idle, or drive your vehicle in dry grass or other dry ground cover.

The emission system heats up the engine compartment and exhaust system, which can start a fire.



Exhaust leaks may result in entry of harmful and potentially lethal fumes into the passenger compartment. If you smell exhaust fumes inside your vehicle, have your dealer inspect your vehicle immediately. Do not drive if you smell exhaust fumes.

Your vehicle is equipped with various emission control components and a catalytic converter that will enable your vehicle to comply with applicable exhaust emission standards. To make sure that the catalytic converter and other emission control components continue to work properly:

- Use only the specified fuel listed.
- Avoid running out of fuel.

- Do not turn off the ignition while your vehicle is moving, especially at high speeds.
- Have the items listed in scheduled maintenance information performed according to the specified schedule.

The scheduled maintenance items listed in scheduled maintenance information are essential to the life and performance of your vehicle and to its emissions system. See **Scheduled Maintenance** (page 472).

If you use parts other than Ford, Motorcraft or Ford-authorized parts for maintenance replacements, or for service of components affecting emission control, such non-Ford parts should be the equivalent to genuine Ford Motor Company parts in performance and durability.

Illumination of the service engine soon indicator, charging system warning light or the temperature warning light, fluid leaks, strange odors, smoke or loss of engine power could indicate that the emission control system is not working properly.

# Fuel and Refueling

An improperly operating or damaged exhaust system may allow exhaust to enter the vehicle. Have a damaged or improperly operating exhaust system inspected and repaired immediately.

Do not make any unauthorized changes to your vehicle or engine. By law, vehicle owners and anyone who manufactures, repairs, services, sells, leases, trades vehicles, or supervises a fleet of vehicles are not permitted to intentionally remove an emission control device or prevent it from working. Information about your vehicle's emission system is on the Vehicle Emission Control Information Decal located on or near the engine. This decal also lists engine displacement

Please consult your warranty information for complete details.

## On-Board Diagnostics (OBD-II)

Your vehicle has a computer known as the on-board diagnostics system (OBD-II) that monitors the engine's emission control system. The system protects the environment by making sure that your vehicle continues to meet government emission standards. The OBD-II system also assists a service technician in properly servicing your vehicle.



When the service engine soon indicator illuminates, the OBD-II system has detected a malfunction. Temporary malfunctions may cause the service engine soon indicator to illuminate.

Examples of temporary malfunctions are:

- the vehicle has run out of fuel—the engine may misfire or run poorly
- poor fuel quality or water in the fuel—the engine may misfire or run poorly
- the fuel fill inlet may not have closed properly. See **Refueling** (page 167).
- driving through deep water—the electrical system may be wet.

You can correct these temporary malfunctions by filling the fuel tank with good quality fuel, properly closing the fuel fill inlet or letting the electrical system dry out. After three driving cycles without these or any other temporary malfunctions present, the service engine soon indicator should stay off the next time you start the engine. A driving cycle consists of a cold engine startup followed by mixed city/highway driving. No additional vehicle service is required.

If the service engine soon indicator remains on, have your vehicle serviced at the first available opportunity. Although some malfunctions detected by the OBD-II may not have symptoms that are apparent, continued driving with the service engine soon indicator on can result in increased emissions, lower fuel economy, reduced engine and transmission smoothness, and lead to more costly repairs.

# Fuel and Refueling

---

## Readiness for Inspection/Maintenance (I/M) Testing

Some state/provincial and local governments may have Inspection/Maintenance (I/M) programs to inspect the emission control equipment on your vehicle. Failure to pass this inspection could prevent you from getting a vehicle registration.



If the service engine soon indicator is on or the bulb does not work, you may need to have the vehicle serviced. See On-Board Diagnostics (OBD-II).

Your vehicle may not pass the I/M test if the service engine soon indicator is on or not working properly (bulb is burned out), or if the OBD-II system has determined that some of the emission control systems have not been properly checked. In this case, your vehicle is not ready for I/M testing.

If the vehicle's engine or transmission has just been serviced, or the battery has recently run down or been replaced, the OBD-II system may indicate that the vehicle is not ready for I/M testing. To determine if the vehicle is ready for I/M testing, turn the

ignition key to the on position for 15 seconds without cranking the engine. If the service engine soon indicator blinks eight times, it means that the vehicle is not ready for I/M testing; if the service engine soon indicator stays on solid, it means that the vehicle is ready for I/M testing.

The OBD-II system monitors the emission control system during normal driving. A complete check may take several days. If the vehicle is not ready for I/M testing, you may need to perform the following driving cycle consisting of mixed city and highway driving:


Drive on an expressway or highway for a steady 15 minutes, followed by 20 minutes of stop-and-go driving with at least four 30-second idle periods.


Allow the vehicle to sit for at least eight hours without starting the engine. Then, start the engine and complete the above driving cycle. The engine must warm up to its normal operating temperature. Once started, do not turn off the engine until the above driving cycle is complete. If the vehicle is still not ready for I/M testing, you will have to repeat the above driving cycle.

# Transmission

## AUTOMATIC TRANSMISSION

### WARNINGS

 Always set the parking brake fully and make sure your vehicle is in park (P). Turn the ignition off whenever you leave your vehicle.

 Do not apply the brake pedal and accelerator pedal simultaneously. Applying both pedals simultaneously for more than three seconds will limit engine rpm, which may result in difficulty maintaining speed in traffic and could lead to serious injury.

### Push Button Shift Transmission

Your vehicle is equipped with an electronic transmission. The shift buttons are located on the instrument panel next to the touchscreen. The gears are selected by pressing and releasing the **PRNDS** buttons.



E146223

Every time a gear is selected, the selected button will light up. You will also see the gear selected appear in the instrument cluster.



E155989

### Understanding the Positions of your Electronic Transmission

**Note:** Always come to a complete stop before putting your vehicle into and out of park (P).

### Putting your vehicle in gear:

1. Fully press down the brake pedal.
2. Press and release the button on the instrument panel of the gear you want to select.



# Transmission

---

3. The gearshift button you select will illuminate and the selected gear will appear in the instrument cluster.
4. Release the brake pedal and your transmission will remain in the selected gear.

**Note:** *If you attempt to leave your vehicle while it is in gear, the vehicle will automatically shift into park (P). Safety belt and door monitors determine your intent and make the shift for you. During this time, a message will appear in the information display screen prompting you to make the shift.*

**Note:** *To put your vehicle in gear with the door open, perform steps 1-4. See the **Automatic Return to Park** section in this chapter for more information on this feature.*

## **Park (P)**

With the transmission in park (P), your vehicle locks the transmission and prevents the front wheels from turning. Always come to a complete stop before putting your vehicle into and out of park (P). An audible chime sounds once you select park (P).

When the ignition is turned off, the vehicle will automatically shift into park (P). If the ignition is turned off while the vehicle is moving, it will first shift into neutral (N) until a slow enough speed is reached. The vehicle will then shift into park (P) automatically.

## **Automatic Return to Park**

**Note:** *This feature will not operate when your vehicle is in Stay in Neutral mode or neutral tow.*

Your vehicle has a safety feature that will automatically shift your vehicle into park (P) when any of the following conditions occur:

- You turn the ignition off
- You open the driver's door with your safety belt unlatched
- Your safety belt is unlatched while the driver's door is open

If you turn the ignition off while your vehicle is moving, your vehicle will first shift into neutral (N) until it slows down enough to shift into park (P) automatically.

**Note:** *If you have waited an extended period of time, (2-15 minutes) before starting your vehicle, unlatching your safety belt will cause this feature to activate, even with the driver's door closed.*

**Note:** *This feature may not work properly if the door ajar switch is malfunctioning. If your door ajar indicator does not illuminate when you open the driver's door or the indicator illuminates with the driver's door closed, see your authorized dealer.*

## **Reverse (R)**

With the transmission in reverse (R), your vehicle will move backward. Always come to a complete stop before shifting into and out of reverse (R).

## **Neutral (N)**

With the transmission in neutral (N), you can start your vehicle and it is free to roll. Hold the brake pedal down while in this position.

# Transmission

## Stay in Neutral mode

Stay in Neutral mode allows your vehicle to stay in neutral (N) when you exit the vehicle. Your vehicle must be stationary to enter this mode.

To enter Stay in Neutral mode:

1. Press the neutral (N) button on your shifter assembly.
2. A message will appear in your information display.
3. Press the neutral (N) button again to enter Stay in Neutral mode.

A message will appear in your information display screen when your vehicle has entered Stay in Neutral mode.

**Note:** During this mode the **N** button will flash continuously and your instrument cluster will display **N** as the selected gear.

## Exiting Stay in Neutral mode

To disable Stay in Neutral mode select another gear. See the **Putting the Vehicle in Gear** for instructions on how to do this.

## Entering a Carwash

**Note:** Always put your vehicle in Stay in Neutral mode when entering an automatic car wash. Failure to do this could result in vehicle damage not covered by warranty.

## Drive (D)

The normal driving position for the best fuel economy.

## Sport (S)

Putting the vehicle in sport (S):

- Provides additional engine braking and extends lower gear operation to enhance performance for uphill climbs, hilly terrain or mountainous areas. This will increase engine RPM during engine braking
- Provides additional lower gear operation through the automatic transmission shift strategy
- Provides gear selection more quickly and at higher engine speeds

## SelectShift Automatic™ Transmission

Your SelectShift Automatic transmission gives you the ability to change gears manually.

## Paddle Shifters

With your vehicle in drive (D), the paddle shifters provide temporary manual control. They allow you the ability to shift gears quickly, without taking your hands off the steering wheel.

You can achieve extensive manual control by pressing the sport (S) button.

- Pull the right paddle (+) to upshift.
- Pull the left paddle (-) to downshift.



Upshift to the recommended shift speeds according to the following chart:

# Transmission

Upshifts when accelerating (recommended for best fuel economy)		
Gear Upshift		mph (km/h)
From	To	
1	2	15 mph (24 km/h)
2	3	25 mph (40 km/h)
3	4	40 mph (64 km/h)
4	5	45 mph (72 km/h)
5	6	50 mph (80 km/h)

The instrument cluster will display your currently selected gear.



E155990

The transmission will automatically upshift if your engine speed is too high or downshift if your engine speed is too low.

**Note:** *The system will stay in manual control until you make another shift button selection. For example, drive (D).*

## Brake-Shift Interlock Override


### WARNINGS




Do not drive your vehicle until you verify that the brake lamps are working.

# Transmission

## WARNINGS

 When doing this procedure, you will be taking the vehicle out of park which means the vehicle can roll freely. To avoid unwanted vehicle movement, always fully set the parking brake prior to doing this procedure. Use wheel chocks if appropriate.

 If the parking brake is fully released, but the brake warning lamp remains illuminated, the brakes may not be working properly. See your authorized dealer.

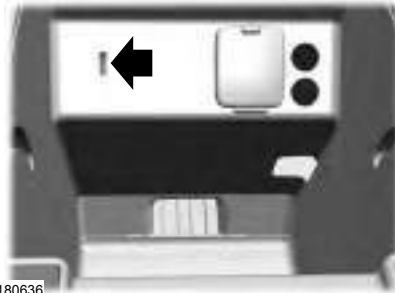
**Note:** See your authorized dealer as soon as possible if this procedure is used.

**Note:** For some markets this feature is disabled.

**Note:** This feature will only function if your 12-volt battery has power. If vehicle battery voltage is not sufficient, an external 12-volt power source (for example, jumper cables, battery charger or jump pack) may be required to function the interlock override switch.

Use the brake-shift interlock override to move your transmission from the park position in the event of an electrical malfunction. If your vehicle has a dead battery, an external power source will be required.

1. Apply the parking brake and turn your ignition off before performing this procedure.



E180636

2. Locate your brake-shift interlock access slot. The slot is located in your center console storage bin. The access slot does not have a label.

**Note:** Make sure that you correctly identify the access hole as not to damage the media hub.

3. Using a tool, press and hold the brake shift interlock switch. The shift buttons on the instrument panel will flash when your vehicle is in override mode.
4. With the override switch still held, press the neutral button (N) to shift from park.
5. Release the override button.
6. Your vehicle will remain in Stay in Neutral mode for wrecker towing purposes or can be shifted to the desired gear and driven (if possible).
7. Release the parking brake.

# Transmission

---

## **Automatic Transmission Adaptive Learning**

This feature increases durability and provides consistent shift feel over the life of your vehicle. A new vehicle or transmission may have firm or soft shifts. This operation will not affect function or durability of your transmission and is normal. Over time, the adaptive learning process will fully update transmission operation. Additionally, the strategy must be relearned whenever the battery is disconnected or a new battery is installed.

## **If Your Vehicle Gets Stuck In Mud or Snow**

**Note:** *Do not rock your vehicle if your engine is not at normal operating temperature or damage to your transmission may occur.*

**Note:** *Do not rock your vehicle for more than a minute or damage to your transmission and tires may occur, or your engine may overheat.*

If your vehicle gets stuck in mud or snow, you can help rock your vehicle out by shifting between forward and reverse gears, stopping between shifts in a steady pattern. Press lightly on the accelerator in each gear.

## All-Wheel Drive (If Equipped)

### USING ALL-WHEEL DRIVE

**Note:** When a system malfunction is present, a warning message appears in the information display. See **Information Messages** (page 114). This means the system is not functioning correctly and only front-wheel drive is available. Have your vehicle checked by an authorized dealer.

**Note:** When the system overheats and switches to front-wheel drive, a warning message appears in the information display. This may occur if you operate your vehicle in extreme high load conditions or with excessive wheel spin (for example, deep sand). To resume all-wheel drive function, stop your vehicle in a safe location and turn off the ignition. When the system cools, normal all-wheel drive function will return. The information display indicates, for about five seconds, this return.

**Note:** When using the spare tire, a warning message may appear in the information display. This message turns off after reinstalling the repaired or replaced road tire and you switch on the ignition.

**Note:** Re-install the repaired tire or replace the tire as soon as possible. Different tire sizes between the front and rear axles can cause system damage, or turn off the all-wheel drive.

This system anticipates wheel spin and transfers power to the rear wheels before the spin occurs. Even when wheel spin is not occurring, the system is continuously adjusting power distribution to the wheels, in an attempt to improve straight line and cornering, both on and off road.

The system automatically turns on every time you switch on the ignition.

The all-wheel drive system does not require maintenance.

The all-wheel drive system gives your vehicle some limited off-road capabilities. Operating your vehicle in conditions other than moderate sand, snow, mud or rough roads could subject it to excessive stress and heat. This could result in system damage. Your vehicle warranty will not cover this damage.



E142669

The information display indicates the power distribution between the front and rear wheels. The more the area is filled the more power is being distributed to that wheel.

### Driving in Special Conditions With All-Wheel Drive

All-wheel drive vehicles are capable of driving on moderate sand, snow, mud and rough roads. All-wheel drive has operating characteristics that are somewhat different from two-wheel drive, both on and off the freeway.

**Note:** It may be useful to switch the traction control off. This allows for more wheel spin and engine torque in certain off road conditions or if your vehicle becomes stuck.

## All-Wheel Drive (If Equipped)

---

When driving at slow speeds off road under high load conditions, use a low gear when possible. Low gear operation will maximize the engine and transmission cooling capability.

Under severe operating conditions, the air conditioning may cycle on and off to prevent the engine from overheating.

### Basic Operating Principles

- Drive slower in strong crosswinds that can affect the normal steering characteristics of your vehicle.
- When driving your vehicle on surfaces made slippery by loose sand, water, gravel, snow or ice proceed with care.

### If Your Vehicle leaves the Road

If your vehicle leaves the road, reduce your vehicle speed and avoid severe braking. Once you have reduced your vehicle speed, ease your vehicle back onto the road. Do not turn the steering wheel sharply while returning your vehicle to the road.

It may be safer to stay on the shoulder of the road and slow down gradually before returning to the road. You may lose control if you do not slow down or if you turn the steering wheel too sharply or abruptly.

It may be less risky to strike small objects, such as freeway reflectors, with minor damage to your vehicle rather than attempt an abrupt dangerous direction change. Remember, your primary concern should be your safety and the safety of others.

### Emergency Maneuvers

If you must make a sudden emergency direction change, avoid over-driving your vehicle. Turn the steering wheel only as rapidly and as far as you need to avoid the emergency. Apply smooth pressure to the accelerator pedal or brake pedal as needed. Avoid abrupt steering, acceleration and braking changes. Abrupt changes could increase the risk of vehicle roll over, loss of vehicle control and personal injury. Use all available road surface to bring your vehicle to under control.

In the event of an emergency stop, avoid skidding and do not attempt any sharp steering wheel movements.

Your vehicle responds differently to steering, accelerating and braking on different road surfaces when changing from one type of surface to another.

### Sand

When driving over sand, avoid driving at excessive speeds. This will cause your vehicle momentum to work against you. Your vehicle could become stuck that may require assistance from another vehicle. Remember, if you proceed with caution you may be able to back out the way you came.

Do not drive in deep sand for an extended period. This will cause the all-wheel drive system to overheat. You will see a warning message in the information display. See **Information Messages** (page 114).

## All-Wheel Drive (If Equipped)

To resume operation, switch the ignition off and allow the system to cool down for a minimum of 15 minutes. After the system has cooled down, you will see a brief message display in the information display. See **Information Messages** (page 114).

When driving at slow speeds in deep sand under high outside temperatures, use a low gear when possible. Low gear operation will maximize the engine and transmission cooling capability.

Tips when driving over sand:

- Keep all four wheels on the most solid area of the trail.
- Shift to a lower gear.
- Apply the accelerator slowly.
- Drive steadily through the terrain.
- Avoid excessive wheel spin.
- Avoid reducing the tire pressures.

### Mud and Water

#### Mud

Avoid sudden changes in vehicle speed or direction when you are driving in mud. Even all-wheel drive vehicles can lose traction in mud. If your vehicle does slide, steer in the direction of the slide until you regain control of your vehicle.

After driving through mud, clean off excess mud stuck to rotating driveshafts and tires. Excess mud stuck on tires and rotating driveshafts can cause an imbalance that could damage drive components.

#### Water

Drive slowly through high water. Traction or brake capability may be limited.

When driving through water, determine the depth and avoid water higher than the bottom of the wheel rims. If the ignition system gets wet, your vehicle may stall.

Once through water, always try the brakes. Wet brakes will not stop your vehicle as quickly as dry brakes. Apply light pressure to the brake pedal while slowly moving the vehicle to dry the brakes.

**Note:** *Driving through deep water may damage the transmission. If the front or rear axle is submerged in water, have the power transfer unit (PTU) or rear axle serviced by an authorized dealer.*

### Driving on Hilly or Sloping Terrain

Although natural obstacles may make it necessary to travel diagonally up or down a hill or steep incline, always try to drive straight up or straight down the sloping terrain.

**Note:** *To maintain traction and avoid possibly rolling your vehicle, avoid turning on steep slopes or hills. When you drive on a hill, determine beforehand the route you will use. Do not drive over a hill without first seeing what is on the other side. Do not drive in reverse over a hill without the aid of an observer.*



## All-Wheel Drive (If Equipped)

Start climbing a steep slope or hill in a low gear rather than downshifting to a low gear from a high gear after you have started your climb. This reduces strain on the engine and the possibility of stalling.

If your vehicle stalls, do not try to turn around. Turning could cause the vehicle to roll over. Instead, reverse back to a safe location.

Apply just enough power to the wheels to climb the hill. Too much power will cause the tires to slip, spin or lose traction, and you could lose control of your vehicle.



To avoid brake overheating, come down a hill in the same gear you used to go up the hill. Do not come down in neutral. Move the transmission selector lever to a lower gear. When descending a steep hill, avoid sudden hard braking to keep the front wheels rolling and to maintain your vehicle's steering.

Your vehicle has anti-lock brakes. Apply the brakes steadily. Do not pump the brake pedal.

### Driving on Snow and Ice

#### WARNING



If you are driving in slippery conditions that require tire chains or cables, then it is critical that you drive cautiously. Keep speeds down, allow for longer stopping distances and avoid aggressive steering to reduce the chances of a loss of vehicle control which can lead to serious injury or death. If the rear end of your vehicle slides while cornering, steer in the direction of the slide until you regain control of your vehicle.

**Note:** *Excessive tire slippage can cause transmission damage.*

In snow and ice, all-wheel drive vehicles have advantages over two-wheel drive vehicles but can still skid. When driving on snowy or icy roads, should you start to slide, turn the steering wheel in the direction of the slide until you regain control.

On snow and ice, avoid suddenly applying power and avoid quick change of direction. Apply the accelerator slowly and steadily when starting from a stop.

Avoid sudden braking. An all-wheel drive vehicle may accelerate better than a two-wheel drive vehicle in snow and ice. However, an all-wheel drive vehicle will not stop any faster, as braking occurs at all four wheels. Do not become overconfident to road conditions.

## All-Wheel Drive (If Equipped)

---

Make sure that you allow sufficient distance between your vehicle and other vehicles for stopping. On ice and snow, you should drive more slowly than usual, and consider using one of the lower gears. In emergency stopping situations, steadily apply the brake. Your vehicle has a four wheel anti-lock brake system, do not pump the brake pedal. See **Hints on Driving With Anti-Lock Brakes** (page 184).

### **If Your Vehicle Gets Stuck In Mud or Snow**

If your vehicle becomes stuck in mud or snow, shift between forward and reverse gears, and, in a steady pattern, stop between shifts. Press lightly on the accelerator with each shift. Rocking your vehicle this way may dislodge your vehicle.

**Note:** *Do not rock your vehicle if the engine is not at normal operating temperature, damage to the transmission may occur.*

**Note:** *Do not rock your vehicle for more than a minute, damage to the transmission and tires may occur or the engine may overheat.*

### **Maintenance and Modifications**

The suspension and steering systems on your vehicle provides predictable performance whether your vehicle is loaded or empty. For this reason, we recommend that you do not make modifications to your vehicle (lift kits or stabilizer bars) or use replacement parts not equivalent to the original factory equipment.

We recommend that you use caution when your vehicle has either a high load or device (ladder or luggage racks). Modifications to your vehicle that raise the center of gravity may cause your vehicle to tip if you should lose vehicle control.

Failure to maintain your vehicle correctly may void the warranty, increase your repair cost, reduce vehicle performance and operational capabilities, and adversely affect you and your passenger's safety. We recommend that you frequently inspect your vehicle's chassis components if your vehicle is subject to off-road use.

# Brakes

## GENERAL INFORMATION

**Note:** Occasional brake noise is normal. If a metal-to-metal, continuous grinding or continuous squeal sound is present, the brake linings may be worn-out. Have the system checked by an authorized dealer. If your vehicle has continuous vibration or shudder in the steering wheel while braking, have it checked by an authorized dealer.

**Note:** Brake dust may accumulate on the wheels, even under normal driving conditions. Some dust is inevitable as the brake wear and does not contribute to brake noise. See **Cleaning the Alloy Wheels** (page 312).

**Note:** Depending on applicable laws and regulations in the country for which your vehicle was originally built, your brake lamps may flash during heavy braking. Following this, your hazard lights may also flash when your vehicle comes to a stop.



See **Warning Lamps and Indicators** (page 103).

Wet brakes result in reduced braking efficiency. Gently press the brake pedal a few times when driving from a car wash or standing water to dry the brakes.

## Brake Over Accelerator

In the event the accelerator pedal becomes stuck or entrapped, apply steady and firm pressure to the brake pedal to slow the vehicle and reduce engine power. If you experience this condition, apply the brakes and bring your vehicle to a safe stop. Move the transmission to park (P), switch the engine off and apply the parking brake. Inspect the accelerator pedal for any interference. If none are found and the condition persists, have your vehicle towed to the nearest authorized dealer.

## Brake Assist

Brake assist detects when you brake rapidly by measuring the rate at which you press the brake pedal. It provides maximum braking efficiency as long as you press the pedal, and can reduce stopping distances in critical situations.

## Anti-lock Brake System

This system helps you maintain steering control during emergency stops by keeping the brakes from locking.



This lamp momentarily illuminates when you turn the ignition on. If the light does not illuminate during start up, remains on or flashes, the system may be disabled. Have the system checked by an authorized dealer. If the anti-lock brake system is disabled, normal braking is still effective.



If the brake warning lamp illuminates when you release the parking brake, have the system checked by an authorized dealer.

## HINTS ON DRIVING WITH ANTI-LOCK BRAKES

**Note:** When the system is operating, the brake pedal may pulse and may travel further. Maintain pressure on the brake pedal. You may also hear a noise from the system. This is normal.

# Brakes

The anti-lock braking system will not eliminate the risks when:

- You drive too closely to the vehicle in front of you.
- Your vehicle is hydroplaning.
- You take corners too fast.
- The road surface is poor.

## ELECTRIC PARKING BRAKE

The electric parking brake replaces the conventional handbrake. The operating switch is located on the instrument panel to the left of the steering wheel.

### WARNING



Always set the parking brake and leave your vehicle with the transmission in position **P**.

**Note:** When you apply the electric parking brake in certain conditions, for example on a steep hill, the electric parking brake may reapply the brakes within three to ten minutes.

**Note:** You may notice various noises when you apply and release the electric parking brake. This is normal and no cause for concern.

## Applying the electric parking brake

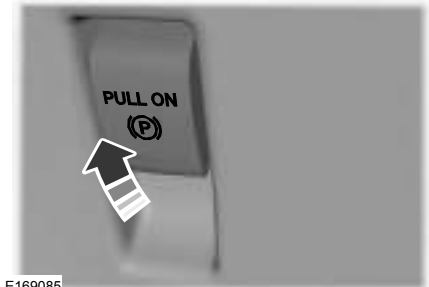
### WARNING



The brake system warning lamp will flash during an electric brake apply. If the brake system warning lamp continues to flash there could be a problem with your electric parking brake. Have the system checked by an authorized dealer as soon as possible.

**Note:** The brake system warning lamp will illuminate for ten seconds if you have turned the ignition off after the electric parking brake has been applied, or the electric parking brake has been applied after the ignition has been turned off.

**Note:** The electric parking brake will not automatically apply. You must apply the electric parking brake using the electric parking brake switch.



E169085


Pull the switch to apply the electric parking brake.


The brake system warning lamp will flash for approximately 2 seconds then illuminate to confirm that the electric parking brake has been applied. See **Instrument Cluster** (page 101).

# Brakes

## Applying the electric parking brake when the vehicle is moving

### WARNINGS

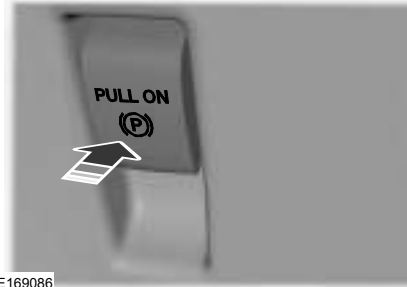
 Applying the electric parking brake while moving will result in use of the anti-lock braking system. Do not use the electric parking brake system when the vehicle is moving unless the normal brake system is unable to stop the vehicle.

 With the exception of emergency conditions (for example, the brake pedal does not work or is blocked), do not apply the electric parking brake while the vehicle is moving. On bends, or poor road surfaces or weather conditions, emergency braking can cause the vehicle to skid out of control or off the road.

If you apply the electric parking brake when your vehicle is moving, the brake system warning lamp will illuminate and a warning chime will sound. See **Instrument Cluster** (page 101).

If your vehicle speed is above 4 mph (6 km/h), the braking force is applied as long as the switch is applied. Release or press the switch or press the accelerator pedal to stop the braking force.


## Releasing the electric parking brake



You can release the electric parking brake either manually by pressing the bottom of the switch or automatically.

## Manual release

### WARNING

 If the brake system warning light remains illuminated or flashes after you have released the parking brake, there could be a problem with your braking system. Have the system checked by an authorized dealer as soon as possible.

You can manually release the electric parking brake by turning the ignition on, pressing the brake pedal and then pressing the electric parking brake switch down.

When the electric parking brake is released, the brake system warning lamp will turn off.

## Driving with a Trailer

Depending on the grade and the weight of the trailer, your vehicle and trailer may roll backwards slightly when you start on a slope. To prevent this from happening, do the following:

# Brakes

1. Pull the switch and hold it in this position.
2. Drive your vehicle, then release the switch when you notice that the engine has developed sufficient driving force.

## Automatic release - drive away release

Your vehicle will automatically release the parking brake if all of the following conditions exist:

- The driver door is closed.
- The vehicle is accelerated.
- There are no faults detected in the parking brake system.

**Note:** *The driver door must be closed and the driver safety belt must be fastened before this feature will operate.*

**Note:** *If the electric parking brake warning lamp stays illuminated, the electric parking brake will not automatically release. You must release the electric parking brake using the electric parking brake switch.*

**Note:** *The engine must be running and the accelerator pedal must be pressed before the drive away release feature will operate.*

The brake system warning lamp will go off to confirm that the electric parking brake has been released.

**Note:** *The electric parking brake drive away release makes starting on a hill easier. This feature will release the parking brake automatically when the vehicle has sufficient drive force to move up the hill. To assure drive away release when starting uphill, press the accelerator pedal quickly.*

## Battery With No Charge

### WARNING



You will not be able to apply or release the electric parking brake if the battery is low or has no charge.

If the battery is low or has no charge, use jumper cables and a booster battery.

## AUTO HOLD

### WARNINGS



The system does not replace the parking brake. When you leave your vehicle, always apply the parking brake.



You must remain in your vehicle when the system turns on. At all times, you are responsible for controlling your vehicle, supervising the system and intervening, if required. Failure to take care may result in the loss of control of your vehicle, serious personal injury or death.



The system will turn off if a malfunction is apparent. Failure to take care may result in the loss of control of your vehicle, serious personal injury or death.

Auto Hold is a feature that uses your vehicle's brake to hold your vehicle at a stop once your vehicle has reached a standstill condition. For example, Auto Hold can assist you while stopping at traffic lights or while in traffic jams by holding the brake pressure for you once you bring your vehicle to a stop.

# Brakes

Switch Auto Hold off during vehicle or trailer towing.

**Note:** In case of a malfunction in the system while Auto Hold actively holds the vehicle (for example, low power supply), a message appears in the information display. If you see this message, press the brake pedal immediately.

**Note:** Auto Hold only activates if the system recognizes it is applying enough brake pressure. On a steep hill or incline, you may need to press the brake pedal to activate the Auto Hold system.

**Note:** When the parking brake automatically applies, the red brake lamp appears. This is normal. When you press the accelerator pedal, the drive away release feature automatically releases the parking brake.

**Note:** Auto Hold works on all road gradients and in reverse (R).



E227185

Press the Auto Hold button to switch the system on and off. The Auto Hold indicator light illuminates in the Auto Hold button when the system is on.

**Note:** You can only switch Auto Hold on if you close the door and fasten your safety belt.

**Note:** Auto Hold turns off every time you power down your vehicle.

When Auto Hold is off, your vehicle behaves the same as a vehicle without Auto Hold.

There is an Auto Hold indicator lamp in the instrument cluster that has two modes, active and unavailable:

**AUTO HOLD** The Auto Hold (ACTIVE) indicator light illuminates in the information display when the system holds your vehicle stationary. When in active mode, press the brake pedal and the Auto Hold button to switch Auto Hold off.

**AUTO HOLD** The Auto Hold (UNAVAILABLE) indicator light illuminates in the information display when the system is on but unavailable to hold your vehicle (for example, during Active Park Assist, Car Wash Mode, or when you do not fasten your safety belt).

# Brakes

---

## Using Auto Hold

1. Bring your vehicle to a stop by pressing the brake pedal. After coming to a stop, the green Auto Hold (ACTIVE) indicator lamp illuminates in the information display.
2. Release the brake pedal. The Auto Hold (ACTIVE) indicator light remains illuminated in the information display and Auto Hold will hold your vehicle at a stop.
3. When you press the accelerator pedal, Auto Hold will release the brakes and you will be able to drive off. Once you drive off, the green Auto Hold (ACTIVE) indicator no longer illuminates in the information display.

**Note:** *The Stop/Start system (if equipped) may stop the engine when you press the brake pedal. If this occurs, it will restart once you press the accelerator pedal. Auto Hold still holds your vehicle at a standstill with the engine off.*



# Traction Control

## PRINCIPLE OF OPERATION

The traction control system helps avoid drive wheel spin and loss of traction.

If your vehicle begins to slide, the system applies the brakes to individual wheels and, when needed, reduces engine power at the same time. If the wheels spin when accelerating on slippery or loose surfaces, the system reduces engine power in order to increase traction.

## USING TRACTION CONTROL

### WARNING



The stability and traction control light illuminates steadily if the system detects a failure. Make sure you did not manually disable the traction control system using the information display controls or the switch. If the stability control and traction control light is still illuminating steadily, have the system serviced by an authorized dealer immediately. Operating your vehicle with the traction control disabled could lead to an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.

The system automatically turns on each time you switch the ignition on.

If your vehicle is stuck in mud or snow, switching traction control off may be beneficial as this allows the wheels to spin.

**Note:** *When you switch traction control off, stability control remains fully active.*

## Switching the System Off

When you switch the system off or on, a message appears in the information display showing system status.

You can switch the system off by either using the information display controls or the switch.

## Using the Information Display Controls

You can switch this feature off or on in the information display. See **General Information** (page 108).

## Using a Switch (If Equipped)

Use the traction control switch on the instrument panel to switch the system off or on.

## System Indicator Lights and Messages



The stability and traction control light:

# Traction Control

---

- Temporarily illuminates on engine start-up.
- Flashes when a driving condition activates either of the systems.
- Illuminates if a problem occurs in either of the systems.



The stability and traction control off light temporarily illuminates on engine start-up and stays on when you switch the traction control system off.

# Stability Control

## PRINCIPLE OF OPERATION

### WARNINGS



Vehicle modifications involving braking system, aftermarket roof racks, suspension, steering system, tire construction and wheel and tire size may change the handling characteristics of your vehicle and may adversely affect the performance of the electronic stability control system. In addition, installing any stereo loudspeakers may interfere with and adversely affect the electronic stability control system. Install any aftermarket stereo loudspeaker as far as possible from the front center console, the tunnel, and the front seats in order to minimize the risk of interfering with the electronic stability control sensors. Reducing the effectiveness of the electronic stability control system could lead to an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.

### WARNINGS



Remember that even advanced technology cannot defy the laws of physics. It's always possible to lose control of a vehicle due to inappropriate driver input for the conditions. Aggressive driving on any road condition can cause you to lose control of your vehicle increasing the risk of personal injury or property damage. Activation of the electronic stability control system is an indication that at least some of the tires have exceeded their ability to grip the road; this could reduce the operator's ability to control the vehicle potentially resulting in a loss of vehicle control, vehicle rollover, personal injury and death. If your electronic stability control system activates, **SLOW DOWN**.

The system automatically turns on each time you switch the ignition on.

If a fault occurs in either the stability control or the traction control system, you may experience the following conditions:

- The stability and traction control light illuminates steadily.
- The stability control and traction control systems do not enhance your vehicle's ability to maintain traction of the wheels.

If a driving condition activates either the stability control or the traction control system you may experience the following conditions:

- The stability and traction control light flashes.
- Your vehicle slows down.
- Reduced engine power.
- A vibration in the brake pedal.
- The brake pedal is stiffer than usual.
- If the driving condition is severe and your foot is not on the brake, the brake pedal may move as the system applies higher brake force.

The stability control system has several features built into it to help you maintain control of your vehicle:

# Stability Control

## Electronic Stability Control

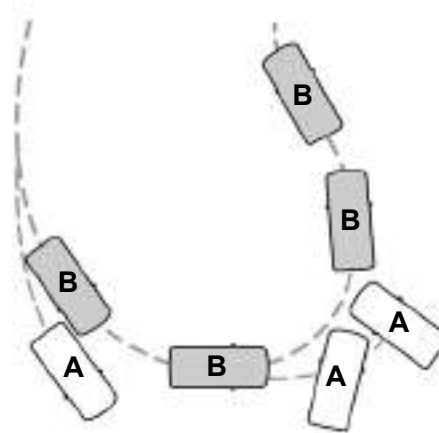
The system enhances your vehicle's ability to prevent skids or lateral slides by applying brakes to one or more of the wheels individually and, if necessary, reducing engine power.

## Roll Stability Control

The system enhances your vehicle's ability to prevent rollovers by detecting your vehicle's roll motion and the rate at which it changes by applying the brakes to one or more wheels individually.

## Traction Control

The system enhances your vehicle's ability to maintain traction of the wheels by detecting and controlling wheel spin. See **Using Traction Control** (page 190).



E72903

- A Vehicle without stability control skidding off its intended route.
- B Vehicle with stability control maintaining control on a slippery surface.

## USING STABILITY CONTROL

The system automatically turns on each time you switch the ignition on.


You cannot switch the stability control and roll stability control systems off, but when you shift into reverse (R), the systems deactivate.


You can switch the traction control system off or on. See **Using Traction Control** (page 190).

# Parking Aids


## PRINCIPLE OF OPERATION


### WARNINGS

 To help avoid personal injury, please read and understand the limitations of the system as contained in this section. Sensing is only an aid for some (generally large and fixed) objects when moving on a flat surface at parking speeds. Certain objects with surfaces that absorb ultrasonic waves, surrounding vehicle's parking aid systems, traffic control systems, fluorescent lamps, inclement weather, air brakes, and external motors and fans may also affect the function of the sensing system; this may include reduced performance or a false activation.

 To help avoid personal injury, always use caution when in reverse (R) and when using the sensing system.

### WARNINGS

 This system is not designed to prevent contact with small or moving objects. The system is designed to provide a warning to assist the driver in detecting large stationary objects to avoid damaging your vehicle. The system may not detect smaller objects, particularly those close to the ground.

 Certain add-on devices such as large trailer hitches, bike or surfboard racks and any device that may block the normal detection zone of the system, may create false beeps.

**Note:** *Keep the sensors, located on the bumper or fascia, free from snow, ice and large accumulations of dirt. If the sensors are covered, the system's accuracy can be affected. Do not clean the sensors with sharp objects.*

**Note:** *If your vehicle sustains damage to the bumper or fascia, leaving it misaligned or bent, the sensing zone may be altered causing inaccurate measurement of obstacles or false alarms.*

**Note:** *The sensing system cannot be turned off when a MyKey is present. See **Principle of Operation** (page 58).*

**Note:** *If you attach certain add-on devices such as a trailer or bike rack, the rear sensing system may detect that add-on device and therefore provide warnings. It is suggested that you disable the rear sensing system when you attach an add-on device to your vehicle to prevent these warnings.*

The sensing system warns the driver of obstacles within a certain range of your vehicle. The system turns on automatically whenever you switch the ignition on.

The system can be switched off through the information display menu or from the pop-up message that appears once you shift the transmission into reverse (R). See **General Information** (page 108).

If a fault is present in the system, a warning message appears in the information display. See **Information Messages** (page 114).

# Parking Aids

## REAR PARKING AID

The rear sensors are only active when the transmission is in reverse (R). As your vehicle moves closer to the obstacle, the rate of the audible warning increases. When the obstacle is less than 12 in (30 cm) away, the warning sounds continuously. If the system detects a stationary or receding object farther than 12 in (30 cm) from the corners of the bumper, the tone sounds for only three seconds. Once the system detects an object approaching, the warning sounds again.



E130178

Coverage area of up to 6 ft (1.8 m) from the rear bumper. There may be decreased coverage area at the outer corners of the bumper.

The system detects certain objects while the transmission is in reverse (R) :

- Your vehicle is moving toward a stationary object at a speed of 3 mph (5 km/h) or less.
- Your vehicle is not moving, but a moving object is approaching the rear of your vehicle at a speed of 3 mph (5 km/h) or less.
- Your vehicle is moving at a speed of less than 3 mph (5 km/h) and a moving object is approaching the rear of your vehicle at a speed of less than 3 mph (5 km/h).

The system provides audio warnings only when your vehicle is moving or when your vehicle is stationary and the detected obstacle is less than 12 in (30 cm) away from the bumper.

## FRONT PARKING AID

The front sensors are active when the transmission is in any position other than park (P) or neutral (N), and your vehicle is moving but at a speed below 6 mph (10 km/h).



E187330

Coverage area of up to 28 in (70 cm) from the front bumper. The coverage area decreases at the outer corners.

# Parking Aids

When your vehicle approaches an object, a warning tone sounds. When your vehicle moves closer to an object, the warning tone repeat rate increases. The warning tone sounds continuously when an object is 12 in (30 cm) or less from the front bumper.

If the transmission is in reverse (R), the front sensing system provides audio warnings when your vehicle is moving and the detected obstacle is stationary or moving towards your vehicle.

If the transmission is in drive (D) or any other forward gear (for example, low (L), sport (S) or any forward gear in a manual transmission), the front sensing system provides audio warnings when your vehicle is moving below a speed of 7 mph (12 km/h) and an obstacle is located inside the detection area.

## ACTIVE PARK ASSIST - VEHICLES WITH: ACTIVE PARK ASSIST

### Parallel Parking, Perpendicular Parking, Park Out Assist

#### WARNINGS



You must remain in your vehicle when the system turns on. You are responsible at all times for controlling your vehicle, supervising the system and intervening if required. Failure to take care may result in the loss of control of your vehicle, serious personal injury or death.



The sensors may not detect objects in heavy rain or other conditions that cause disruptive reflections.



Active Park Assist does not apply the brakes under any circumstances.

**Note:** *The driver is always responsible for controlling the vehicle, supervising the system and intervening if required by grabbing the steering wheel or pushing the active park assist button.*

The system detects an available parallel or perpendicular parking space and automatically steers your vehicle into the space (hands-free) while you control the accelerator, gearshift and brakes. The system visually and audibly guides you to park your vehicle.

If you are uncomfortable with the proximity to any vehicle or object, you may choose to override the system.

Park Out Assist automatically steers your vehicle out of a parallel parking space (hands-free) while you control the accelerator, gearshift and brakes. The system visually and audibly guides you to enter traffic.

**Note:** *The Blind Spot Information System does not detect traffic alongside or behind your vehicle during a park assist maneuver.*

The system may not correctly operate in any of the following conditions:

- You use a spare tire or a tire significantly worn more than the other tires.
- One or more tires are improperly inflated.
- You try to park on a tight curve.

# Parking Aids

- Something passes between the front bumper and the parking space (a pedestrian or cyclist).
- The edge of the neighboring parked vehicle is high off the ground (for example, a bus, tow truck or flatbed truck).
- The weather conditions are poor (heavy rain, snow, fog, etc).

**Note:** *Keep the sensors, located on the bumper or fascia, free from snow, ice and large accumulations of dirt. Covered sensors can affect the system's accuracy. Do not clean the sensors with sharp objects.*

**Note:** *The sensors may not detect objects with surfaces that absorb ultrasonic waves or cause ultrasonic interference (motorcycle exhaust, truck air brakes or horns).*

Do not use the system if:

- You have attached a bike rack, trailer or other object near the sensors on the front or rear of your vehicle.
- You have attached an overhanging object (surfboard) to the roof.
- A foreign object damages or obstructs the front or rear bumper or side sensors.
- The correct tire size is not in use on your vehicle (for example, a mini-spare tire).

## Using Active Park Assist - Parallel Parking

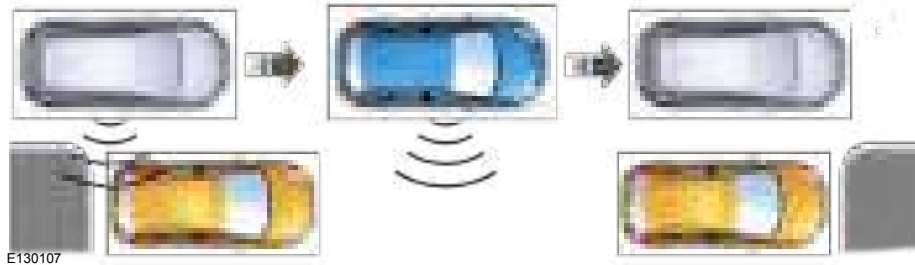


Press the button located on the center console near the gearshift lever or the right side of the center stack once.

When driving at a speed less than 22 mph (35 km/h) the system automatically scans both sides of your vehicle for an available parking space. The system displays a message and a corresponding graphic to indicate it is searching for a parking space. Use the direction indicator to select searching either to the left-hand side or right-hand side of your vehicle. If the direction indicators are not used, the system defaults to the passenger side of your vehicle.



# Parking Aids



**Note:** You can also activate the Active Park Assist system after you have already driven partially or completely past a parking space. To do so, press the Active Park button and the system will inform you if you have recently passed a suitable parking space.

When the system finds a suitable space, it displays a message and a tone sounds. Stop your vehicle and follow the instructions on the screen. If your vehicle is moving very slowly, you may need to pull forward a short distance before the system is ready to park.

**Note:** You must observe that the selected space remains clear of obstructions at all times during the maneuver.

**Note:** You should drive your vehicle within 5 ft (1.5 m) and as parallel as possible to the other vehicles while passing a parking space.

**Note:** The system always offers the last detected parking space (for example, if your vehicle detects multiple spaces while you are driving, it offers the last one).

**Note:** If driven above approximately 22 mph (35 km/h), the system shows a message to alert you to reduce your vehicle speed.

## Automatic Steering into Parking Space

**Note:** If your vehicle speed exceeds approximately 6 mph (10 km/h) or the maneuver is interrupted (driver input), the system switches off and you need to take full control of your vehicle.

When you shift the transmission into reverse (R), with your hands off the wheel (and nothing obstructing its movement), your vehicle steers itself into the space. The system displays instructions to move your vehicle back and forth in the space.

# Parking Aids



When you think your vehicle is properly parked, or you hear a solid tone from the parking aid (accompanied by a display message and a chime), bring your vehicle to a complete stop.

When automatic steering is complete, the system displays a message and a tone sounds, indicating that the active park assist process is finished. You are responsible for checking the parking job and making any necessary corrections before leaving your vehicle.

## Using Active Park Assist - Perpendicular Parking



Press the button located on the center console near the gearshift lever or the right side of the center stack twice.

The system displays a message and a corresponding graphic to indicate it is searching for a parking space. Use the direction indicator to select searching either to the left-hand side or right-hand side of your vehicle.

**Note:** *If you do not make a selection the system will default to the passenger's side.*

# Parking Aids



When the system finds a suitable space, it displays a message and a tone sounds. Stop your vehicle and follow the instructions on the screen. If your vehicle is moving very slowly, you may need to pull forward a short distance before the system is ready to park.

**Note:** You must observe that the selected space remains clear of obstructions at all times during the maneuver.

**Note:** You should drive your vehicle within 5 ft (1.5 m) and as perpendicular as possible to the other vehicles while passing a parking space.

**Note:** The system always offers the last detected parking space (for example, if your vehicle detects multiple spaces while you are driving, it offers the last one).

**Note:** If driven above approximately 19 mph (30 km/h), the system shows a message to alert you to reduce your vehicle speed.

## Automatic Steering into Parking Space

**Note:** If your vehicle speed exceeds 6 mph (10 km/h) or the maneuver is interrupted (driver input), the system switches off and you need to take full control of your vehicle.



# Parking Aids

When you shift the transmission into reverse (R), with your hands off the wheel (and nothing obstructing its movement), your vehicle steers itself into the space. The system displays instructions to move your vehicle back and forth in the space.

When you think your vehicle is properly parked, or you hear a solid tone from the parking aid (accompanied by a display message and a chime), bring your vehicle to a complete stop.

When automatic steering is complete, the system displays a message and a tone sounds, indicating that the active park assist process is finished. You are responsible for checking the parking job and making any necessary corrections before leaving your vehicle.

## Using Active Park Assist - Park Out Assist



While your vehicle is at rest in a parallel parking space, press the active park assist button.

The system displays a message requesting an indication of direction. Use the direction indicator to signal which side of your vehicle you want to exit the parking space.



# Parking Aids

The system determines the clearance to the front and rear of your vehicle and automatically steers your vehicle out of a parallel parking space (hands-free) while you control the accelerator, gearshift and brakes. The system visually and audibly guides you to enter traffic.

After the system has directed your vehicle past the adjacent vehicle or object, it guides you to take control of the steering to complete the exit from the parking spot.

**Note:** *If the clearance in front of your vehicle allows easy departure, the Park Out Assist feature might not be available.*

**Note:** *You are responsible for controlling your vehicle and making sure the path is clear prior to pulling into traffic.*

## Troubleshooting the System

The system does not look for a space
The traction control system may be off.
The transmission is in reverse (R). Your vehicle must be moving forward to be able to detect a parking space.

**Note:** *This system is not intended to assist in exiting perpendicular parking spaces, damages to your vehicle may occur.*

**Note:** *If your vehicle speed exceeds 3 mph (5 km/h) or the maneuver is interrupted (driver input), the system switches off and you need to take full control of your vehicle.*

### Deactivating the Active Park Assist Feature

Manually deactivate the system by:

- Pressing the active park assist button during an active maneuver.
- Grabbing the steering wheel during an active maneuver.

- Driving above approximately 22 mph (35 km/h) for 30 seconds during an active park search.
- Driving above approximately 6 mph (10 km/h) during automatic steering.
- Switching off the traction control system.

Certain vehicle conditions can also deactivate the system, such as:

- Traction control has activated.
- There is an anti-lock brake system activation or failure.

If a problem occurs with the system, a warning message displays accompanied by a tone. Occasional system messages may occur in normal operation. For recurring or frequent system faults, contact an authorized dealer to have your vehicle serviced.

# Parking Aids

---

<b>The system does not offer a particular space</b>
The sensors may be covered (for example, snow, ice or dirt buildup). Covered sensors can affect the system's functionality.
There is not enough room in the parking space for your vehicle to safely park.
There is not enough space for the parking maneuver on the opposite side of the parking space.
The parking space is farther than 5 ft (1.5 m) or closer than 16 in (0.4 m) away.
Your vehicle is going faster than 22 mph (35 km/h) for parallel and 19 mph (30 km/h) for perpendicular parking.

<b>The system does not position the vehicle where I want in the space</b>
Your vehicle is rolling in the opposite direction of the transmission (rolling forward with reverse [R] selected).
An irregular curb along the parking space prevents the system from aligning your vehicle properly.
Vehicles or objects bordering the space may not be positioned correctly.
You pulled your vehicle too far past the parking space.
The tires may not be installed or maintained correctly (not inflated correctly, improper size, or of different sizes).
A repair or alteration has changed detection capabilities.

# Parking Aids

## The system does not position the vehicle where I want in the space


A parked vehicle has a high attachment (salt sprayer, snowplow or moving truck bed).


The parking space length or position of parked objects changed after your vehicle passed.


The temperature around your vehicle changes quickly (driving from a heated garage into the cold, or after leaving a car wash).

## REAR VIEW CAMERA


### WARNINGS


 The rear view camera system is a reverse aid supplement device that still requires the driver to use it in conjunction with the interior and exterior mirrors for maximum coverage.

 Objects that are close to either corner of the bumper or under the bumper, might not be seen on the screen due to the limited coverage of the camera system.

 Back up as slow as possible since higher speeds might limit your reaction time to stop your vehicle.

### WARNINGS

 Use caution when using the rear video camera and the luggage compartment door is ajar. If the luggage compartment door is ajar, the camera will be out of position and the video image may be incorrect. All guidelines disappear when the luggage compartment door is ajar.

 Use caution when turning camera features on or off. Make sure your vehicle is not moving.

The rear view camera system provides a video image of the area behind your vehicle. During operation, lines appear in the display which represent your vehicle's path and proximity to objects behind your vehicle.



E142435

The camera is located on the luggage compartment door.

## Using the Rear View Camera System

The rear view camera system displays what is behind your vehicle when you place the transmission in reverse (R).

# Parking Aids

---

**Note:** *The reverse sensing system is not effective at speeds above 3 mph (5 km/h) and may not detect certain angular or moving objects.*

The system uses three types of guides to help you see what is behind your vehicle:

- Active guidelines (if equipped): Show the intended path of your vehicle when reversing.
- Fixed guidelines: Show the actual path your vehicle is moving in while reversing in a straight line. This can be helpful when backing into a parking space or aligning your vehicle with another object behind you.
- Centerline: Helps align the center of your vehicle with an object (for example, a trailer).

**Note:** *If the transmission is in reverse (R) and the luggage compartment door or liftgate is open, no rear view camera features will display.*

**Note:** *When towing, the camera only sees what you are towing. This might not provide adequate coverage as it usually provides in normal operation and some objects might not be seen. In some vehicles, the guidelines may disappear when you connect the trailer tow connector.*

The camera may not operate correctly under the following conditions:

- Nighttime or dark areas if one or both reverse lamps are not operating.
- Mud, water or debris obstructs the camera's view. Clean the lens with a soft, lint-free cloth and non-abrasive cleaner.
- The rear of your vehicle is hit or damaged, causing the camera to become misaligned.

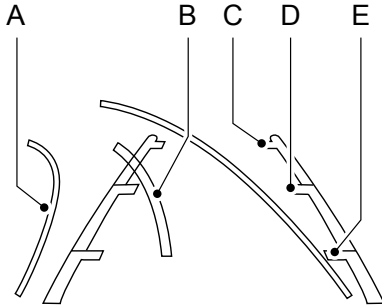
## Camera Guidelines

**Note:** *Active guidelines are only available when the transmission is in reverse (R).*

**Note:** *Whenever the battery is disconnected or a new battery installed, you need to drive your vehicle a short distance and your speed must exceed 12 mph (20 km/h) so the system can recalibrate the steering angle data in order to reactivate active guidelines.*



# Parking Aids



- D Fixed guideline: Yellow zone
- E Fixed guideline: Red zone
- F Rear bumper

Active guidelines are only shown with fixed guidelines. To use active guidelines, turn the steering wheel to point the guidelines toward an intended path. If you change the steering wheel position while reversing, your vehicle might deviate from the original intended path.

The fixed and active guidelines fade in and out depending on the steering wheel position. The active guidelines do not display when the steering wheel position is straight.

Always use caution while reversing. Objects in the red zone are closest to your vehicle and objects in the green zone are farther away. Objects are getting closer to your vehicle as they move from the green zone to the yellow or red zones. Use the side view mirrors and rear view mirror to get better coverage on both sides and rear of the vehicle.

E142436

- A Active guidelines
- B Centerline
- C Fixed guideline: Green zone

## Manual Zoom

### WARNING



When manual zoom is on, the full area behind your vehicle may not show. Be aware of your surroundings when using the manual zoom feature.

**Note:** Manual zoom is only available when the transmission is in reverse (R).

**Note:** When you enable manual zoom, only the centerline is shown.

Selectable settings for this feature are Zoom in (+) and Zoom out (-). Press the symbol in the camera screen to change the view. The default setting is Zoom OFF.

This allows you to get a closer view of an object behind your vehicle. The zoomed image keeps the bumper in the image to provide a reference. The zoom is only active while the transmission is in reverse (R).

# Parking Aids

---

## Camera System Settings

To access any of the rear view camera system settings, make the following selections in the multifunctional display when the transmission is not in reverse (R):

<b>Main Menu</b>
Settings
Vehicle
Camera Settings

## ***Enhanced Park Aids or Park Pilot***

Selectable settings for this feature are ON and OFF.

The system uses red, yellow and green highlights that appear on top of the video image when any of the sensing systems detect an object.

## ***Rear Camera Delay***

Selectable settings for this feature are ON and OFF.

The default setting for the rear camera delay is OFF.

When shifting the transmission out of reverse (R) and into any gear other than park (P), the camera image remains in the display until:

- Your vehicle speed sufficiently increases.
- You shift your vehicle into park (P).


# Cruise Control


## PRINCIPLE OF OPERATION

Cruise control lets you maintain a set speed without keeping your foot on the accelerator pedal. You can use cruise control when your vehicle speed is greater than 20 mph (30 km/h).

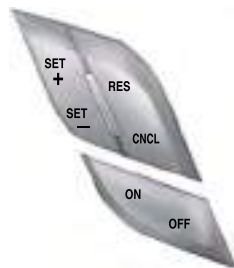
## USING CRUISE CONTROL

### WARNINGS

 Do not use cruise control on winding roads, in heavy traffic or when the road surface is slippery. This could result in loss of vehicle control, serious injury or death.

 When you are going downhill, your vehicle speed may increase above the set speed. The system will not apply the brakes but a warning displays.

**Note:** *Cruise control will disengage if the vehicle speed decreases more than 10 mph (16 km/h) below the set speed while driving uphill.*



E145976

The cruise controls are on the steering wheel.

### Switching Cruise Control On

Press and release **ON**.



The indicator appears in the instrument cluster.

### Setting a Speed

1. Drive to desired speed.
2. Press and release **SET+**.
3. Take your foot off the accelerator pedal.

The indicator changes color in the instrument cluster.

### Changing the Set Speed

**Note:** *If you accelerate by pressing the accelerator pedal, the set speed will not change. When you release the accelerator pedal, your vehicle returns to the speed that you previously set.*

- Press the accelerator or brake pedal until you reach the desired speed. Press and release **SET+**.
- Press and hold **SET+** or **SET-**. Release the control when you reach the desired speed.
- Press and release **SET+** or **SET-**. When you select **kph** as the display measurement in the information display, the set speed changes in approximately 2 **kph** increments. When you select **mph** as the display measurement in the information display, the set speed changes in approximately 1 **mph** increments.

# Cruise Control

## Canceling the Set Speed

Press **CNCL** or tap the brake pedal. You will not erase the set speed.

## Resuming the Set Speed

Press and release **RES**.


## Switching Cruise Control Off

**Note:** *You will erase the set speed if you switch the system off.*







Press and release **OFF** or switch the ignition off.

## USING ADAPTIVE CRUISE CONTROL (If Equipped)


### WARNINGS

 Always pay close attention to changing road conditions when using adaptive cruise control. The system does not replace attentive driving. Failing to pay attention to the road may result in a crash, serious injury or death.

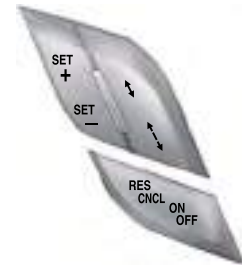
### WARNINGS

-  Adaptive cruise control is not a crash warning or avoidance system.
-  Adaptive cruise control does not detect pedestrians or objects in the road.
-  Adaptive cruise control does not detect oncoming vehicles in the same lane.
-  Do not use adaptive cruise control on winding roads, in heavy traffic or when the road surface is slippery. This could result in loss of vehicle control, serious injury or death.
-  Do not use the system in poor visibility, for example fog, heavy rain, spray or snow.
-  Do not use adaptive cruise control when towing a trailer that has trailer brakes. The auto-brake component of the adaptive cruise control system does not operate the trailer brakes. Using adaptive cruise control when towing a trailer that has trailer brakes may result in the loss of vehicle control, which could result in serious injury.

### WARNINGS

 Do not use tire sizes other than those recommended because this can affect the normal operation of the system. Failure to do so may result in a loss of vehicle control, which could result in serious injury.

The system adjusts your vehicle speed to maintain the set gap between you and the vehicle in front of you in the same lane. You can select four gap settings.



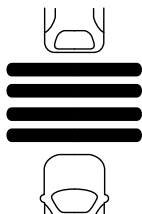
E145977

The adaptive cruise controls are on the steering wheel.

# Cruise Control

## Switching Adaptive Cruise Control On

Press and release **ON**.

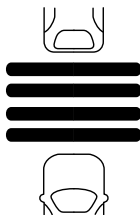


E164805

The indicator, current gap setting and set speed appear in the information display.

## Setting the Adaptive Cruise Speed

1. Drive to desired speed.
2. Press and release **SET+**.
3. A green indicator light, the current gap setting and your set speed appear in the information display.
4. Take your foot off the accelerator pedal.




E164805

5. A vehicle graphic illuminates if there is a vehicle detected in front of you.


**Note:** When adaptive cruise control is active, the speedometer may vary slightly from the set speed displayed in the information display.

## Following a Vehicle

### WARNINGS

 When following a vehicle, your vehicle does not decelerate automatically to a stop, nor does your vehicle always decelerate quickly enough to avoid a crash without driver intervention. Always apply the brakes when necessary. Failing to do so may result in a crash, serious injury or death.

### WARNINGS

 Adaptive cruise control only warns of vehicles detected by the radar sensor. In some cases there may be no warning or a delayed warning. You should always apply the brakes when necessary. Failure to do so may result in a crash, serious injury or death.

**Note:** The brakes may emit noise when applied by the system.

When a vehicle ahead of you enters the same lane or a slower vehicle is ahead in the same lane, the vehicle speed adjusts to maintain a preset gap distance. A vehicle graphic illuminates in the instrument cluster.

The system may provide slight temporary acceleration when you use your driver side direction indicator while following a lead vehicle, for example to overtake.

Your vehicle maintains a consistent gap from the vehicle ahead until:

- The vehicle in front of you accelerates to a speed above the set speed.
- The vehicle in front of you moves out of the lane you are in.

# Cruise Control

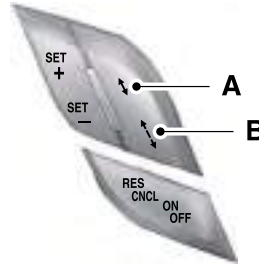
- The vehicle speed falls below 12 mph (20 km/h).
- You set a new gap distance.

The system applies the brakes to slow your vehicle to maintain a safe gap distance from the vehicle in front. The system only applies limited braking. You can override the system by applying the brakes.

If the system determines that its maximum braking level will not be sufficient, an audible warning sounds when the system continues to brake. A red warning bar displays on the windshield and you must take immediate action.

## Setting the Gap Distance

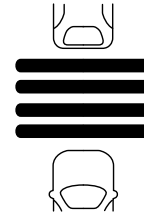
**Note:** *It is your responsibility to select a gap appropriate to the driving conditions.*



E145978

- A Gap decrease.
- B Gap increase.

You can decrease or increase the distance between your vehicle and the vehicle in front by pressing the gap control.



E164805

The selected gap appears in the information display as shown by the bars in the image.

# Cruise Control

## Adaptive Cruise Control Gap Settings

Set speed mph ( km/h)	Graphic display, bars indicated between vehicles	Time gap, seconds	Distance gap yd (m)	Dynamic behavior
62 (100)	1	1	31 (28)	Sport.
62 (100)	2	1.4	43 (39)	Normal.
62 (100)	3	1.8	55 (50)	Normal.
62 (100)	4	2.2	67 (61)	Comfort.

Each time you switch the system on, it selects the last chosen gap setting.

### Canceling the Set Speed

Press and release **CNCL** or tap the brake pedal. The set speed does not erase. The last set speed displays with a strikethrough.

### Overriding the Set Speed

#### WARNING



If you override the system by pressing the accelerator pedal, it does not automatically apply the brakes to maintain a gap from any vehicle ahead.

When you press the accelerator pedal, you override the set speed and gap distance.



When you override the system, the green indicator light remains on, but the vehicle graphic does not appear in the information display.

The system resumes operation when you release the accelerator pedal. The vehicle speed decreases to the set speed, or a lower speed if following a slower vehicle.

# Cruise Control

---

## Changing the Set Speed

- When you select km/h as the display measurement in the information display the set speed changes in approximately 2 km/h increments. When you select mph as the display measurement in the information display the set speed changes in approximately 1 mph increments.
- Press the accelerator or brake pedal until you reach the desired speed. Press and release **SET+**.
- Press and hold **SET+** or **SET-**. Release the control when you reach the desired speed. The set speed changes in approximately 5 mph/10 km/h increments.

The system may apply the brakes to slow the vehicle to the new set speed. The set speed displays continuously in the information display when the system is active.

## Resuming the Set Speed

Press and release **RES**. Your vehicle speed returns to the previously set speed and gap setting. The set speed displays continuously in the information display when the system is active.

**Note:** Only use resume if you are aware of the set speed and intend to return to it.

## Automatic Cancellation

The system does not operate below 12 mph (20 km/h). An audible warning sounds and the automatic braking releases if the vehicle drops below this speed.

Automatic cancellation can also occur if:

- The tires lose traction.
- The engine speed is too low.
- You apply the parking brake.

**Note:** If the engine speed drops too low a message appears in the information display.

## Hilly Condition Usage

**Note:** An audible alarm sounds and the system shuts down if it applies brakes for an extended period of time. This allows the brakes to cool. The system functions normally again when the brakes have cooled.

You should select a lower gear when the system is active in situations such as prolonged downhill driving on steep grades, for example in mountainous areas. The system needs additional engine braking in these situations to reduce the load on the vehicle's regular brake system to prevent it from overheating.

## Switching Adaptive Cruise Control Off

Press and release **OFF** when the system is in stand by mode or switch the ignition off.

**Note:** You erase the set speed and gap setting when you switch the system off.



# Cruise Control

## Detection Issues

### WARNING



On rare occasions, detection issues can occur due to the road infrastructures, for example bridges, tunnels and safety barriers. In these cases, the system may brake late or unexpectedly. At all times, you are responsible for controlling your vehicle, supervising the system and intervening, if required.

The radar sensor has a limited field of vision. It may not detect vehicles at all or detect a vehicle later than expected in some situations. The lead vehicle graphic does not illuminate if the system does not detect a vehicle in front of you.

**A**



**B**



**C**



E71621

Detection issues can occur:

- A When driving on a different line than the vehicle in front.
- B With vehicles that edge into your lane. The system can only detect these vehicles once they move fully into your lane.
- C There may be issues with the detection of vehicles in front when driving into and coming out of a bend or curve in the road.

In these cases the system may brake late or unexpectedly. You should stay alert and take action when necessary.

If something hits the front end of your vehicle or damage occurs, the radar-sensing zone may change. This could cause missed or false vehicle detections. See an authorized dealer to have the radar checked for proper coverage and operation.

# Cruise Control

## System Not Available

Conditions that can cause the system to deactivate or prevent the system from activating when requested include:

- A blocked sensor.
- High brake temperature.
- A failure in the system or a related system.

## Blocked Sensor



E145632

A message displays if something obstructs the radar signals from the sensor. The sensor is located behind a cover near the driver side of the lower grille. The system cannot detect a vehicle ahead and do not function when something obstructs the radar signals.

**Note:** *You cannot see the sensor, it is behind a fascia panel.*

The following table lists possible causes and actions for this message displaying.

Cause	Action
The surface of the radar in the grille is dirty or obstructed in some way.	Clean the grille surface in front of the radar or remove the object causing the obstruction.
The surface of the radar in the grille is clean but the message remains in the display.	Wait a short time. It may take several minutes for the radar to detect that it is free from obstruction.
Heavy rain or snow is interfering with the radar signals.	Do not use the system in these conditions because it may not detect any vehicles ahead.
Swirling water, or snow or ice on the surface of the road may interfere with the radar signals.	Do not use the system in these conditions because it may not detect any vehicles ahead.
You are in a desert or remote area with no other vehicles and no roadside objects.	Wait a short time or switch to normal cruise control.

# Cruise Control

---

Due to the nature of radar technology, it is possible to get a blockage warning and not be blocked. This can happen, for example, when driving in sparse rural or desert environments. A false blocked condition either self clears or clears after a key cycle.

## Switching to Normal Cruise Control

### WARNING



Normal cruise control will not brake when your vehicle is approaching slower vehicles. Always be aware of which mode you have selected and apply the brakes when necessary.



The cruise control indicator light replaces the adaptive cruise control indicator light if you select normal cruise control. The gap setting does not display, the system does not automatically respond to vehicles ahead and automatic braking is not active. The system remembers the last setting when you start your vehicle.

You can manually change from adaptive cruise control to normal cruise control through the information display.

# Driving Aids

## DRIVER ALERT (If Equipped)

### WARNING



The system is designed to aid the driver. It is not intended to replace your attention and judgment. You are still responsible to drive with due care and attention.

**Note:** The system will store the on or off setting in the information display menu through ignition cycles.

**Note:** If enabled in the menu, the system will be active at speeds above 40 mph (64 km/h). When below the activation speed, the information display will inform you that the system is unavailable.

**Note:** The system works as long as one lane marking can be detected by the camera.

**Note:** If the camera is blocked or if the windshield is damaged, the system may not function.

**Note:** The system may not be available in poor weather or other low visibility conditions.

The system automatically monitors your driving behavior using various inputs including the front camera sensor.

If the system detects that your driving alertness is reduced below a certain threshold, the system will alert you using a chime and a message in the information display.

### Using Driver Alert

#### Switching the system on and off

You may switch the system on or off through the information display. See **General Information** (page 108). When activated, the system will monitor your alertness level based upon your driving behavior in relation to the lane markings, and other factors.

#### System Warnings

**Note:** The system will not issue warnings below approximately 40 mph (64 km/h).

The warning system is in two stages. At first the system issues a temporary warning that you need to take a rest. This message will only appear for a short time. If the system detects further reduction in driving alertness, another warning may be issued which will remain in the information display for a longer time. Press OK on the steering wheel control to clear the warning.

### System Display

When active the system will run automatically in the background and only issue a warning if required. You can view the status at any time using the information display. See **General Information** (page 108).

The alertness level is shown by six steps in a colored bar.



E131358

# Driving Aids

The current assessment of your alertness is within a typical range.



E131359

The current assessment of your alertness indicates that you should rest as soon as safely possible.

The status bar will travel from left to right as the calculated alertness level decreases. As the rest icon is approached the color turns from green to yellow to red. The yellow position indicates the first warning is active and the red position indicates the second warning is active.

**Note:** *If you have recently received a warning; you should consider resting, even if the current assessment is within the typical range.*

**Note:** *If the camera sensor cannot track the road lane markings or if your vehicle speed drops below approximately 40 mph (64 km/h), the alertness level will change to grey for a short time and the information display will inform you that the system is unavailable.*

## Resetting the System

You can reset the system by either:

- Switching the ignition off and on.
- Stopping the vehicle and then opening and closing the driver's door.

## LANE KEEPING SYSTEM (If Equipped)

### WARNING



The system is designed to aid the driver. It is not intended to replace the driver's attention and judgment. The driver is still responsible to drive with due care and attention.

**Note:** *The system works above 40 mph (64 km/h).*

**Note:** *The system works as long as the camera can detect one lane marking.*

**Note:** *The system may not function if the camera is blocked or there is damage to the windshield.*

**Note:** *When Aid mode is on and the system detects no steering activity for a short period, the system will alert you to put your hands on the steering wheel. The system may detect a light grip or touch on the steering wheel as hands off driving.*

The system detects unintentional drifting toward the outside of the lane and alerts or aids you to stay in the lane through the steering system and instrument cluster display. The system automatically detects and tracks the road lane markings using a camera mounted behind the interior rear view mirror.

## Switching the System On and Off

**Note:** *The system on or off setting is stored until it is manually changed, unless a MyKey® is detected. If the system detects a MyKey®, it defaults to on and the mode is set to alert.*

# Driving Aids

**Note:** If a MyKey® is detected, pressing the button will not affect the on or off status of the system. You can only change the mode and intensity settings.



Press the button located on the left steering wheel stalk to switch the system on or off.

## System Settings

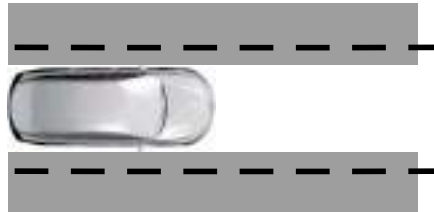
The system has two optional setting menus available. To view or adjust them, select Settings > Driver Assist > Lane Keeping Sys in the information display using the OK button on the steering wheel. The system stores the last known selection for each of these settings. You do not need to readjust your settings each time you turn on the system.

**Mode:** This setting allows you to select which of the system features to enable.



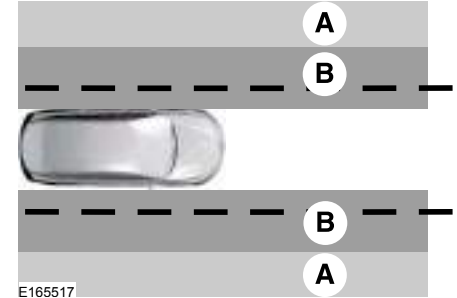
E165515

**Alert only** – Provides a steering wheel vibration when the system detects an unintended lane departure.



E165516

**Aid only** – Provides an assistance steering torque input toward the lane center when the system detects an unintended lane departure.



E165517

- A Alert
- B Aid

**Alert + Aid** – Provides an assistance steering torque input toward the lane center. If your vehicle continues drifting out of the lane, the system will provide a steering wheel vibration.

# Driving Aids

**Note:** *The alert and aid diagrams illustrate general zone coverage. They do not indicate the exact zone coverage area.*

**Intensity:** This setting affects the intensity of the steering wheel vibration used for the alert and alert + aid modes. This setting is not valid for the aid mode.

- Low
- Medium
- High

## System Display



E151660

When you turn the system on, an overhead graphic of a vehicle with lane markings will display in the information display. If you turn the system on and select aid mode, arrows will display along with the lane markings.

When you turn the system off, the lane marking graphics will not display.

**Note:** *If adaptive cruise control is enabled the overhead vehicle graphic may still be displayed.*

While the system is on, the color of the lane markings will change to indicate the system status.

Gray: Indicates that the system is temporarily unable to provide a warning or intervention on the indicated side(s). This may be because:

- Your vehicle is under the activation speed.
- Your turn indicator is active.
- Your vehicle is in a dynamic maneuver.

- The road has no or poor lane markings in the camera field-of-view.
- The camera is obscured or unable to detect the lane markings due to environmental conditions (significant sun angles, shadows, snow, heavy rain, fog), traffic conditions (following a large vehicle that is blocking or shadowing the lane), or vehicle conditions (poor headlamp illumination).

See **Troubleshooting** for additional information.

Green: Indicates that the system is available or ready to provide a warning or intervention, on the indicated side(s).

Yellow: Indicates that the system is providing or has just provided a lane keeping aid intervention.

Red: Indicates that the system is providing or has just provided a lane keeping alert warning.

You can temporarily disable the system at any time by doing the following:

- Quick braking.
- Fast acceleration.

# Driving Aids

- Using the turn signal indicator.
- Evasive steering maneuver.

## Troubleshooting

Why is the feature not available (line markings are gray) when I can see the lane markings on the road?
Vehicle speed is outside the operational range of the feature
Sun is shining directly into the camera lens
Quick intentional lane change
Staying too close to the lane marking
Driving at high speeds in curves
Previous feature activation happened within the last one second
Ambiguous lane markings (mainly in construction zones)
Rapid transition from light to dark or vice versa
Sudden offset in lane markings
ABS or AdvanceTrac activation
Camera blockage due to dirt, grime, fog, frost or water on the windshield
Driving too close to the vehicle in front of you
Transitioning between no lane markings to lane markings or vice versa
Standing water on the road



# Driving Aids

---


<b>Why is the feature not available (line markings are gray) when I can see the lane markings on the road?</b>
Faint lane markings (partial yellow lane markings on concrete roads)
Lane width too narrow or too wide
Camera not calibrated after a windshield replacement
Driving on tight roads or on uneven roads

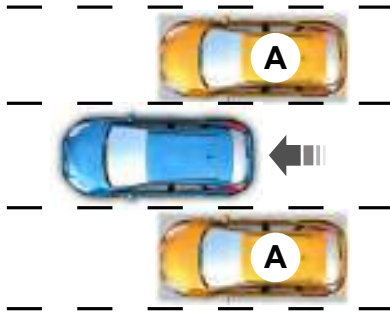
<b>Why does the vehicle not come back into the middle of the lane always, as expected, in the Aid or Aid + Alert mode?</b>
High cross winds
Large road crown
Rough roads, grooves, shoulder drop-offs
Heavy uneven loading of the vehicle or improper tire inflation pressure
If the tires have been exchanged (including snow tires), or the suspension has been modified

# Driving Aids

## BLIND SPOT INFORMATION SYSTEM (If Equipped)

### WARNING

 To help avoid injuries, NEVER use the Blind Spot Information System as a replacement for using the interior and exterior mirrors or looking over your shoulder before changing lanes. The Blind Spot Information System is not a replacement for careful driving.



E124788

The Blind Spot Information System is designed to aid you in detecting vehicles that may have entered the blind spot zone (A). The detection area is on both sides of your vehicle, extending rearward from the exterior mirrors to approximately 13 ft (4 m) beyond the bumper. The system is designed to alert you if certain vehicles enter the blind spot zone while driving.

**Note:** *The Blind Spot Information System does not prevent contact with other vehicles or objects; nor detect parked vehicles, people, animals or infrastructure (fences, guardrails, trees). It's only designed to alert you to vehicles in the blind spot zones.*

**Note:** *When a vehicle passes quickly through the blind spot zone, typically fewer than two seconds, the system does not trigger.*

### Using the System

The Blind Spot Information System turns on when you start the engine and you drive your vehicle forward above 5 mph (8 km/h).

For automatic transmissions, the Blind Spot Information System remains on while the transmission is in drive (D). If shifted into reverse (R) or park (P) the Blind Spot Information System turns off. Once shifted back into drive (D), the Blind Spot Information System turns back on when you drive your vehicle above 5 mph (8 km/h).

For manual transmissions, the Blind Spot Information System is on for all gears except the reverse (R).

**Note:** *The Blind Spot Information System does not function in reverse (R) or park (P).*

### System Lights and Messages



E142442

# Driving Aids

The Blind Spot Information System illuminates an amber alert indicator in the outside mirror on the side of your vehicle the approaching vehicle is coming from. When the Blind Spot Information System is alerting on a vehicle and the corresponding turn signal is ON, the Blind Spot Information System alert indicator flashes as an increased warning level.

The alert indicator dims when the system detects nighttime darkness.

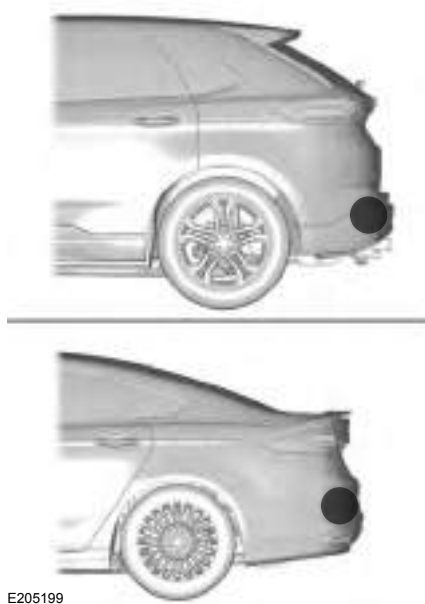
**Note:** *The alert indicator flashes in case of an alert and the turn signal is set to that side at the same time.*

## System Sensor Blockage

### WARNING



To help avoid injuries, NEVER use the Blind Spot Information System as a replacement for using the interior and exterior mirrors or looking over your shoulder before changing lanes. The Blind Spot Information System is not a replacement for careful driving.



E205199

The system uses radar sensors that are located behind the bumper fascia on each side of your vehicle. Any dirt, mud and snow in front of the sensors and/or driving in heavy rain can cause system degradation. Also, other types of obstructions in front of the sensor can cause system degradation. This is referred to as a 'blocked' condition.

**Note:** *Do not apply bumper stickers and/or repair compound to these areas, this can cause degraded system performance.*

If the system detects a degraded performance condition, a message warning of a blocked sensor will appear in the information display. Also the BLIS alert indicators will remain ON and BLIS will no longer provide any vehicle warnings. You can clear the information display warning but the alert indicators will remain illuminated.

# Driving Aids

A "blocked" condition can be cleared in two ways:

- After the blockage in front of the sensors is removed or the rainfall/snowfall rate decreases or stops, drive for a few minutes in traffic to allow the sensors to detect passing vehicles.
- By cycling the ignition from ON to OFF and then back ON.

**Note:** *If your vehicle has a tow bar with a factory equipped trailer tow module and it is towing a trailer, the sensors will automatically turn the Blind Spot Information System off. If your vehicle has a tow bar but no factory equipped trailer tow module, it is recommended to turn the Blind Spot Information System off manually. Operating the Blind Spot Information System with a trailer attached will cause poor system performance.*

## System Errors

If the system senses a problem with the left or right sensor, the telltale will illuminate and a message will appear in the information display. See **Information Messages** (page 114).

## Switching the System Off and On

You can temporarily switch the Blind Spot Information System off in the information display. See **General Information** (page 108). When the Blind Spot Information System switches off, you will not receive alerts and the information display shows a system off message. The telltale in the cluster also illuminates. When you switch the Blind Spot Information System on or off, the alert indicators flash twice.

**Note:** *The Blind Spot Information System remembers the last selected on or off setting.*

You can also have the Blind Spot Information System switched off permanently at an authorized dealer. Once switched off permanently, the system can only be switched back on at an authorized dealer.

## CROSS TRAFFIC ALERT (If Equipped)

### WARNING



To help avoid personal injury, NEVER use the Cross Traffic Alert system as a replacement for using the interior and exterior mirrors and looking over your shoulder before backing out of a parking space. Cross Traffic Alert is not a replacement for careful driving.

Cross Traffic Alert is designed to warn you of vehicles approaching from the sides when the transmission is in reverse (R).

## Using the System

Cross Traffic Alert turns on when you start the engine and you shift into reverse (R). Once shifted out of reverse (R), Cross Traffic Alert turns off.

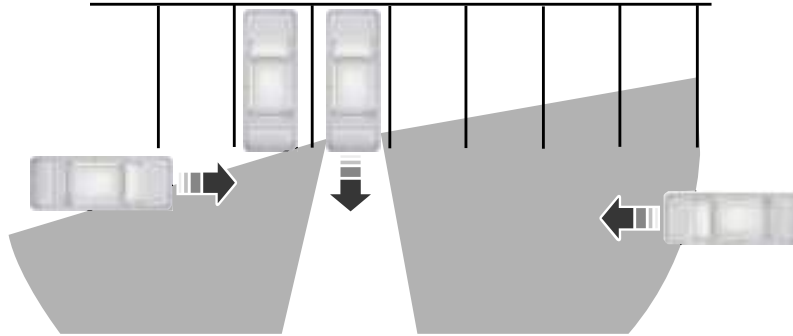
**Note:** *Cross Traffic Alert only functions while your transmission is in reverse (R).*

# Driving Aids

---

Cross Traffic Alert is designed to detect vehicles that approach with a speed up to 37 mph (60 km/h). Coverage decreases when

the sensors are partially, mostly or fully obstructed. Reversing slowly helps increase the coverage area and effectiveness.

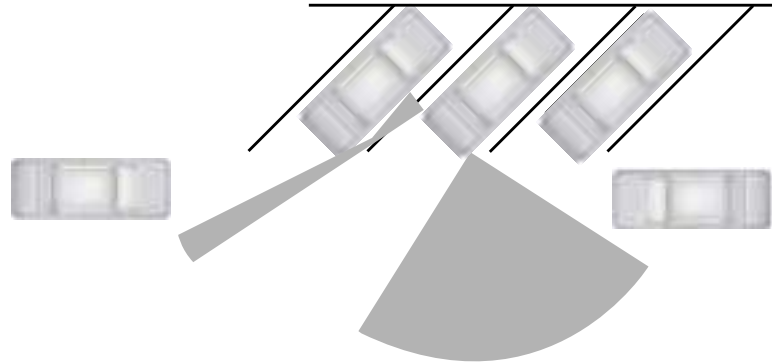


E142440

In this first example, the left sensor is only partially obstructed; zone coverage to the right is nearly maximized.

# Driving Aids

---



E142441

Zone coverage also decreases when parking at shallow angles. Here, the left sensor is mostly obstructed; zone coverage on that side is severely limited.

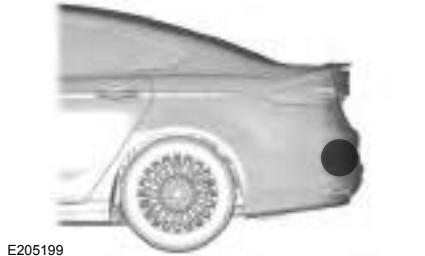
# Driving Aids

## System Lights, Messages and Audible Alerts



E142442

The Cross Traffic Alert illuminates an amber alert indicator in the outside mirror on the side of your vehicle the approaching vehicle is coming from. Cross Traffic Alert also sounds an audible alert and a message appears in the information display indicating a vehicle is coming from the right or left. Cross Traffic Alert works with the reverse sensing system that sounds its own series of tones. See **Rear Parking Aid** (page 195).



E205199

The system uses radar sensors that are located behind the bumper fascia on each side of your vehicle. Do not allow mud, snow or bumper stickers to obstruct these areas, this can cause degraded system performance. See **Blind Spot Information System** (page 223). If the Blind Spot Information System is blocked, Cross Traffic Alert is also blocked. A corresponding message appears in the information display as soon as you shift the transmission into reverse (R).

## System Limitations

Cross Traffic Alert has its limitations; situations such as severe weather conditions or debris build-up on the sensor area may limit vehicle detection.

The following are other situations that may limit the Cross Traffic Alert performance:

- Adjacently parked vehicles or objects obstructing the sensors.
- Approaching vehicles passing at speeds greater than 37 mph (60 km/h).

# Driving Aids

- Driving in reverse faster than 7 mph (12 km/h).
- Backing out of an angled parking spot.

## False Alerts

**Note:** *If your vehicle has a tow bar with a factory equipped trailer tow module and it is towing a trailer, the sensors will automatically turn the Cross Traffic Alert off. If your vehicle has a tow bar but no factory equipped trailer tow module, it is recommended to turn the Cross Traffic Alert off manually. Operating Cross Traffic Alert with a trailer attached will cause poor Cross Traffic Alert performance.*

There may be certain instances when there is a false alert by the Cross Traffic Alert system that illuminates the alert indicator with no vehicle in the coverage zone. Some amount of false alerts are normal; they are temporary and self-correct.

## System Errors

If Cross Traffic Alert senses a problem with the left or right sensor a message will appear in the information display. See **Information Messages** (page 114).

## Switching the System Off and On

You can temporarily switch Cross Traffic Alert off in the information display. See **General Information** (page 108). When you switch Cross Traffic Alert off, you will not receive alerts and the information display will display a system off message.

**Note:** *The Cross Traffic Alert switches on whenever the ignition is switched on and ready to provide appropriate alerts when the transmission is in reverse (R). Cross Traffic Alert will not remember the last selected on or off setting.*

You can also have Cross Traffic Alert switched off permanently at an authorized dealer. Once switched off permanently, the system can only be switched back on at an authorized dealer.

## STEERING

### Electric Power Steering

#### WARNINGS



The electric power steering system has diagnostic checks that continuously monitor the system. If a fault is detected, a message displays in the information display. Stop your vehicle as soon as it is safe to do so. Switch the ignition off. After at least 10 seconds, switch the ignition on and watch the information display for a steering system warning message. If a steering system warning message returns, have the system checked by an authorized dealer.



If the system detects an error, you may not feel a difference in the steering, however a serious condition may exist. Obtain immediate service from an authorized dealer, failure to do so may result in loss of steering control.

Your vehicle has an electric power steering system. There is no fluid reservoir. No maintenance is required.



# Driving Aids

If your vehicle loses electrical power while you are driving, electric power steering assistance is lost. The steering system still operates and you can steer your vehicle manually. Manually steering your vehicle requires more effort.

Extreme continuous steering may increase the effort required for you to steer your vehicle. This increased effort prevents overheating and permanent damage to the steering system. You do not lose the ability to steer your vehicle manually. Typical steering and driving maneuvers allow the system to cool and return to normal operation.

## Steering Tips

If the steering wanders or pulls, check for:

- Correct tire pressures.
- Uneven tire wear.
- Loose or worn suspension components.
- Loose or worn steering components.
- Improper vehicle alignment.

**Note:** *A high crown in the road or high crosswinds may also make the steering seem to wander or pull.*

## Adaptive Learning

The electronic power steering system adaptive learning helps correct road irregularities and improves overall handling and steering feel. It communicates with the brake system to help operate advanced stability control and accident avoidance systems. Additionally, whenever the battery is disconnected or a new battery installed, you must drive your vehicle a short distance before the system relearns the strategy and reactivates all systems.

## COLLISION WARNING SYSTEM (if

Equipped)

### Principle Of Operation (If Equipped)

#### WARNINGS



This system is an extra driving aid. It does not replace your attention and judgment, or the need to apply the brakes. This system does NOT automatically brake your vehicle. If you fail to press the brake pedal when necessary, you may collide with another vehicle.



The collision warning system with brake support cannot help prevent all collisions. Do not rely on this system to replace your judgment and the need to maintain correct distance and speed.

**Note:** *The system does not detect, warn or respond to potential collisions with vehicles to the rear or sides of your vehicle.*

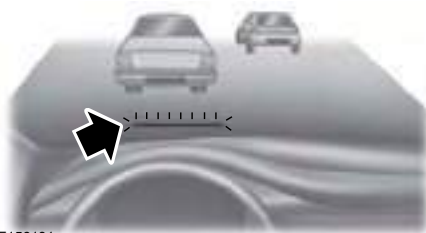
**Note:** *The collision warning system is active at speeds above approximately 5 mph (8 km/h).*

# Driving Aids



E156130

The system alerts you of certain collision risks. The system's sensor detects your vehicle's rapid approach to other vehicles traveling in the same direction as your vehicle.



E156131

When your vehicle rapidly approaches another vehicle, a red warning light flashes and a tone sounds.

The brake support system assists you in reducing any collision speed by pre-charging the brakes. If the risk of collision continues to increase after the audio-visual warning, the brake support prepares the brake system for rapid braking. The system does not automatically activate the brakes, but if the brake pedal is pressed even lightly, the brakes apply full stopping power.

## Using the Collision Warning System

### WARNING



The collision warning system's brake support reduces collision speed only if you brake your vehicle before any collision. As in any typical braking situation, you must press your brake pedal.

You can use your information display control to adjust the warning system's sensitivity to any one of three possible settings. See **General Information** (page 108).

**Note:** When possible, the manufacturer recommends using the highest sensitivity setting. If warnings are too frequent, you can reduce your system's sensitivity. Reduced sensitivity causes fewer and later system warnings. See **General Information** (page 108).

## Blocked Sensors



E145632

If a blocked sensor message appears in the information display, dirt, water, or an object is blocking the sensor. The sensor is located behind a cover near the driver side of the lower grille. If anything blocks the sensor, your vehicle cannot see through the sensor, and the collision warning system will not work. Possible causes for the blocked sensor message and corrective actions are listed below.

# Driving Aids

Cause	Action
The radar sensor cover in the grille is dirty or obstructed	Clean the radar sensor cover or remove the obstruction
The surface of the radar sensor cover is clean but the message remains in the display	Wait a short time. The radar may take several minutes to reset after you remove the obstruction
Heavy rain, spray, snow or fog in the air interferes with the radar signals	The collision warning system is temporarily disabled. Shortly after weather conditions improve, the collision warning system automatically reactivates
Swirling water, snow or ice on the road surface interferes with the radar signals	The collision warning system is temporarily disabled. Shortly after weather conditions improve, the collision warning system automatically reactivates

## System Limitations

### WARNING



The collision warning system's brake support only reduces collision speed if you first apply your brakes. You must brake as you would in any typical braking situation.

Due to the nature of radar technology, there may be certain instances where vehicles do not provide a collision warning. These include:

- Stationary vehicles or vehicles moving below 6 mph (10 km/h).
- Pedestrians or objects in the roadway.
- Oncoming vehicles in the same lane.
- Severe weather conditions (see blocked sensor section).
- Debris build-up on the grille near the headlamps (see blocked sensor section).
- Small distance to vehicle ahead.
- Large steering wheel and pedal movements (very active driving style).

Damage to the front end of the vehicle may alter the radar sensor's coverage area. This may result in missed or false collision warnings. Have an authorized dealer check your radar sensor for proper coverage and operation.

# Driving Aids

---

## **DRIVE CONTROL** (If Equipped)

### **LINCOLN DRIVE CONTROL**

Lincoln Drive Control delivers the Lincoln driving experience through a suite of sophisticated electronic vehicle systems. These systems continuously monitor your driving inputs and the road conditions to optimize ride comfort, steering, handling, powertrain response and sound. You can preset your preferences for these systems within the information display. Lincoln Drive Control will respond to your preferences based on what gear position you select. This provides a single location to control multiple systems performance settings.

Lincoln Drive Control consists of the following systems:

- Continuously controlled damping dynamically adjusts the shock absorbers stiffness in real time to match the road surface and driver inputs. This system continuously monitors your vehicle's motion (roll, pitch, bounce), suspension position, load, speed, road conditions, and steering to adjust the suspension damping for optimal vehicle control.
- Electronically power-assisted steering adjusts steering effort and feel based on your vehicle speed and your inputs.
- Adaptive steering optimizes your vehicle's steering response based on your steering wheel input, changes in vehicle speed and other conditions.
- Active noise control utilizes your vehicle electronics to enhance the acoustic experience.

- Electronic stability control and traction control maintain your vehicle control in adverse conditions or high performance driving.
- Electronic throttle control enhances the powertrain response to your inputs.

### **Using Lincoln Drive Control**

You can configure which of the Drive Control modes are active when your vehicle is in drive (D) or in Sport (S). The configuration remains active until modified from the main menu on the information display.

# Driving Aids

---

These systems have a range of modes which you can choose from in order to customize your ideal driving experience:

- **Comfort** – Provides a more relaxed driving experience, maximizing comfort. Your steering effort decreases and the suspension movement is more fluid. Comfort mode is ideal when you desire enhanced traveling comfort.
- **Normal** – Delivers a balanced combination of comfortable, controlled ride and confident handling. This mode provides an engaging drive experience and a direct connection to the road without sacrificing any of the composure demanded from a luxury vehicle.
- **Sport** – Provides a sportier driving experience. The suspension stiffens, with an emphasis on handling and control. The engine responds more directly to your inputs and takes on a more powerful tone. Sport mode is ideal for use during more spirited driving.

You can change your vehicle's Drive Control settings from the main menu on the information display. See **General Information** (page 108).

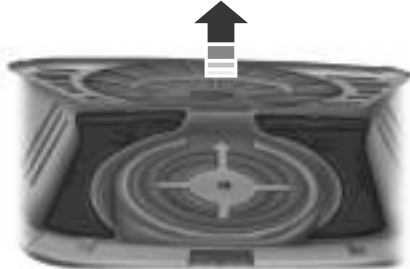
**Note:** *Not all settings may be available.*

**Note:** *Lincoln Drive Control has diagnostic checks that continuously monitor the system to ensure proper operation. Certain types of system errors will gray out the mode selections within the information display, preventing you from changing states when the gear position is changed. Other types of errors will produce a temporary message that states Drive Control Malfunction. If either condition persists for multiple key cycles, have your vehicle checked by an authorized dealer.*

# Load Carrying

## REAR UNDER FLOOR STORAGE

### Cargo Management System (If Equipped)




E142445


The system is located in the floor of the cargo area. Lift the handle to open.

## LUGGAGE COVERS

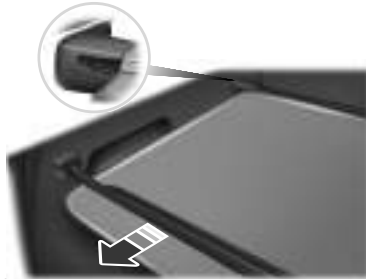
### WARNINGS

 Make sure that the posts are properly latched in mounting features. The cover may cause injury in a sudden stop or accident if it is not securely installed.

### WARNINGS

 Do not place any objects on the cargo area shade. They may obstruct your vision or strike occupants of your vehicle in a sudden stop or crash.

Use the cargo shade to cover items in the cargo area of your vehicle.



E142447


Insert the ends of the cargo shade into the mounting features located behind the rear seat on the rear trim panels to install the cargo shade.

To operate the cargo shade:

1. Pull the rear edge of the cargo shade rearward.
2. Secure both ends of the support rod into the retention slots located on the rear quarter trim panels.

## ROOF RACKS AND LOAD CARRIERS

### WARNING

 When loading the roof racks, we recommend you evenly distribute the load, as well as maintain a low center of gravity. Loaded vehicles, with higher centers of gravity, may handle differently than unloaded vehicles. Take extra precautions, such as slower speeds and increased stopping distance, when driving a heavily loaded vehicle.

# Load Carrying

The maximum recommended load is 50 lb (22 kg) for vehicles with a panoramic roof, and 80 lb (36 kg) for vehicles without a panoramic roof. For vehicles with Continuously Controlled Damping suspension, the maximum recommended load is 80 lb (36 kg), regardless of roof type. Evenly distribute the load on the roof rack.

**Note:** *Never place loads directly on the roof panel. The intended design of the roof panel is not to directly carry a load.*

Make sure that you securely fasten the load. Check the tightness of the load before driving and at each fuel stop.


## LOAD LIMIT

### Vehicle Loading - with and without a Trailer

This section guides you in the proper loading of your vehicle, trailer, or both. Keep your loaded vehicle weight within its design rating capability, with or without a trailer. Properly loading your vehicle provides maximum return of vehicle design performance. Before you load your vehicle, become familiar with the following terms for determining your vehicle's weight rating, with or without a trailer, from the vehicle's Tire and Loading Information label or Safety Compliance Certification label.

## Tire and Loading Label Information


Example:

 **TIRE AND LOADING INFORMATION**

SEATING CAPACITY TOTAL: 5 FRONT: 2 REAR: 3

The combined weight of occupants and cargo should never exceed: **385 kg or 850 lbs.**

TIRE	SIZE	COLD TIRE PRESSURE	SEE OWNERS MANUAL FOR ADDITIONAL INFORMATION
FRONT	235/45R18 94V	235 KPA, 34 PSI	
REAR	235/45R18 94V	235 KPA, 34 PSI	
SPARE	NONE	NONE	

 **TIRE AND LOADING INFORMATION**  
**RENSEIGNEMENTS SUR LES PNEUS ET LE CHARGEMENT**

SEATING CAPACITY / NOMBRE DE PLACES TOTAL: 5 FRONT: 2 REAR: 3

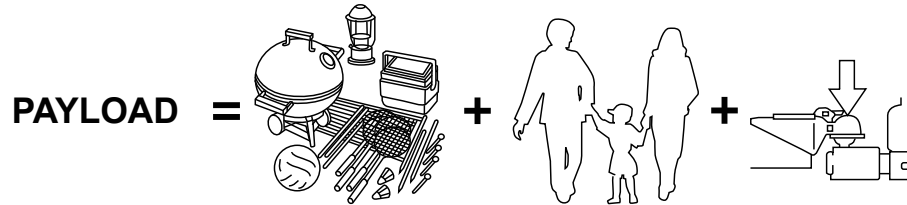
The combined weight of occupants and cargo should never exceed 396 kg or 875 lbs.  
Le poids total des occupants et du chargement ne doit jamais dépasser 396 kg ou 875 lb.

TIRE / PNEU	SIZE / DIMENSIONS	COLD TIRE PRESSURE / PRESSION DES PNEUS À FROID	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION  VOIR LE MANUEL DE L'USAGER POUR PLUS DE RENSEIGNEMENTS
FRONT / AVANT	235/40R19 96V	255 KPA, 37 PSI	
REAR / ARRIERE	235/40R19 96V	255 KPA, 37 PSI	
SPARE / SECOURS	T125/80R16 97M	415 KPA, 60 PSI	

E198719

# Load Carrying

## Payload



E143816

Payload is the combined weight of cargo and passengers that your vehicle is carrying. The maximum payload for your vehicle appears on the Tire and Loading label. The label is either on the B-pillar or the edge of the driver door. Vehicles exported outside the US and Canada may not have a tire and loading label. Look for “The combined weight of occupants and cargo should never exceed XXX kg OR XXX lb” for maximum payload. The payload listed on the Tire and Loading Information label is the maximum payload for your vehicle as built by the assembly plant. If

you install any additional equipment on your vehicle, you must determine the new payload. Subtract the weight of the equipment from the payload listed on the Tire and Loading label. When towing, trailer tongue weight or king pin weight is also part of payload.

### WARNING



The appropriate loading capacity of your vehicle can be limited either by volume capacity (how much space is available) or by payload capacity (how much weight the vehicle should carry). Once you have reached the maximum payload of your vehicle, do not add more cargo, even if there is space available. Overloading or improperly loading your vehicle can contribute to loss of vehicle control and vehicle rollover.



# Load Carrying

## GAWR (Gross Axle Weight Rating)

GAWR is the maximum allowable weight that a single axle (front or rear) can carry. These numbers are on the Safety Compliance Certification label. The label is located on the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver seating position.

The total load on each axle must never exceed its Gross Axle Weight Rating.

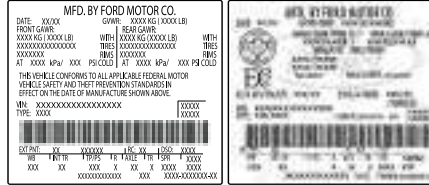
## GVWR (Gross Vehicle Weight Rating)

GVWR is the maximum allowable weight of the fully loaded vehicle. This includes all options, equipment, passengers and cargo. It appears on the Safety Compliance Certification label. The label is located on the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver seating position.

The gross vehicle weight must never exceed the Gross Vehicle Weight Rating.

## Safety Compliance Certification Label

### Example:



E-108828

## WARNING



Exceeding the Safety Compliance Certification label vehicle weight rating limits could result in substandard vehicle handling or performance, engine, transmission and/or structural damage, serious damage to the vehicle, loss of control and personal injury.

## Maximum Loaded Trailer Weight

Maximum loaded trailer weight is the highest possible weight of a fully loaded trailer the vehicle can tow. Consult an authorized dealer (or the RV and Trailer Towing Guide available at an authorized dealer) for more detailed information.

## GCWR (Gross Combined Weight Rating)

GCWR is the maximum allowable weight of the vehicle and the loaded trailer, including all cargo and passengers, that the vehicle can handle without risking damage. (Important: The towing vehicle's braking system is rated for operation at Gross Vehicle Weight Rating, not at Gross Combined Weight Rating.) Separate functional brakes should be used for safe control of towed vehicles and for trailers where the Gross Combined Weight of the towing vehicle plus the trailer exceed the Gross Vehicle Weight Rating of the towing vehicle.

# Load Carrying

The gross combined weight must never exceed the Gross Combined Weight Rating.

**Note:** For trailer towing information refer to the *RV and Trailer Towing Guide* available at an authorized dealer.

## WARNINGS



Do not exceed the GVWR or the GAWR specified on the Safety Compliance Certification label.



Do not use replacement tires with lower load carrying capacities than the original tires because they may lower your vehicle's GVWR and GAWR limitations. Replacement tires with a higher limit than the original tires do not increase the GVWR and GAWR limitations.



Exceeding any vehicle weight rating limitation could result in serious damage to your vehicle, personal injury or both.

## Steps for determining the correct load limit:

1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lb." on your vehicle's placard.
2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX kg or XXX lb.
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1,400 lb. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lb. (1400-750 (5 x 150) = 650 lb.)

5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

## ***Helpful examples for calculating the available amount of cargo and luggage load capacity***

Suppose your vehicle has a 1400-pound (635-kilogram) cargo and luggage capacity. You decide to go golfing. Is there enough load capacity to carry you, four of your friends and all the golf bags? You and four friends average 220 pounds (99 kilograms) each and the golf bags weigh approximately 30 pounds (13.5 kilograms) each. The calculation would be:  $1400 - (5 \times 220) - (5 \times 30) =$

# Load Carrying

$1400 - 1100 - 150 = 150$  pounds. Yes, you have enough load capacity in your vehicle to transport four friends and your golf bags. In metric units, the calculation would be:  $635 \text{ kilograms} - (5 \times 99 \text{ kilograms}) - (5 \times 13.5 \text{ kilograms}) = 635 - 495 - 67.5 = 72.5$  kilograms.

Suppose your vehicle has a 1400-pound (635-kilogram) cargo and luggage capacity. You and one of your friends decide to pick up cement from the local home improvement store to finish that patio you have been planning for the past two years. Measuring the inside of the vehicle with the rear seat folded down, you have room for twelve 100-pound (45-kilogram) bags of cement. Do you have enough load capacity to transport the cement to your home? If you and your friend each weigh 220 pounds (99 kilograms), the calculation would be:  $1400 - (2 \times 220) - (12 \times 100) = 1400 - 440 - 1200 = -240$  pounds. No, you do not have enough cargo capacity to carry that much weight. In metric units, the calculation would be:  $635 \text{ kilograms} - (2 \times 99$

$\text{kilograms}) - (12 \times 45 \text{ kilograms}) = 635 - 198 - 540 = -103$  kilograms. You will need to reduce the load weight by at least 240 pounds (104 kilograms). If you remove three 100-pound (45-kilogram) cement bags, then the load calculation would be:  $1400 - (2 \times 220) - (9 \times 100) = 1400 - 440 - 900 = 60$  pounds. Now you have the load capacity to transport the cement and your friend home. In metric units, the calculation would be:  $635 \text{ kilograms} - (2 \times 99 \text{ kilograms}) - (9 \times 45 \text{ kilograms}) = 635 - 198 - 405 = 32$  kilograms.

The above calculations also assume that the loads are positioned in your vehicle in a manner that does not overload the front or the rear gross axle weight rating specified for your vehicle on the Safety Compliance Certification label.

## Special Loading Instructions for Owners of Pick-up Trucks and Utility-type Vehicles

### WARNING



Loaded vehicles may handle differently than unloaded vehicles. Take extra precautions, such as slower speeds and increased stopping distance, when driving a heavily loaded vehicle.

# Towing

## TOWING A TRAILER

### WARNINGS



Do not exceed the GVWR or the GAWR specified on the certification label.



Towing trailers beyond the maximum recommended gross trailer weight exceeds the limit of the vehicle and could result in engine damage, transmission damage, structural damage, loss of vehicle control, vehicle rollover and personal injury.

Your vehicle may have electrical items, such as fuses or relays, related to towing. See **Fuses** (page 267).

Your vehicle's load capacity designation is by weight, not by volume, so you cannot necessarily use all available space when loading a vehicle or trailer.

Towing a trailer places an extra load on your vehicle's engine, transmission, axle, brakes, tires and suspension. Inspect these components periodically during, and after, any towing operation.

### Load Placement

To help minimize how trailer movement affects your vehicle when driving:

- Load the heaviest items closest to the trailer floor.
- Load the heaviest items centered between the left and right side trailer tires.

- Load the heaviest items above the trailer axles or just slightly forward toward the trailer tongue. Do not allow the final trailer tongue weight to go above or below 10-15% of the loaded trailer weight.
- Select a ball mount with the correct rise or drop. When both the loaded vehicle and trailer are connected, the trailer frame should be level, or slightly angled down toward your vehicle, when viewed from the side.

When driving with a trailer or payload, a slight takeoff vibration or shudder may be present due to the increased payload weight. Additional information regarding proper trailer loading and setting your vehicle up for towing is located in another chapter of this manual. See **Load Limit** (page 236).

You can also find information in the **RV & Trailer Towing Guide** available at your authorized dealer, or online.

# Towing

## RV & Trailer Towing Guide Online

Website

<http://www.fleet.ford.com/towing-guides/>

### TRAILER SWAY CONTROL (If Equipped)

#### WARNING



Turning off trailer sway control increases the risk of loss of vehicle control, serious injury or death. Ford does not recommend disabling this feature except in situations where speed reduction may be detrimental (such as hill climbing), the driver has significant trailer towing experience, and can control trailer sway and maintain safe operation.

**Note:** *This feature does not prevent trailer sway, but reduces it when it begins.*

**Note:** *This feature cannot stop all trailers from swaying.*

**Note:** *In some cases, if your vehicle speed is too high, the system may turn on multiple times, gradually reducing your vehicle speed.*

The system applies the brakes to the individual wheels and reduces engine torque to aid vehicle stability. If the trailer begins to sway, the stability control warning lamp flashes and a message appears in the information display. See **Information Messages** (page 114). Slow your vehicle down, pull safely to the side of the road and check for correct load distribution.

You can switch this feature off in the information display. When you switch the ignition on, the system automatically turns on.

### RECOMMENDED TOWING WEIGHTS

**Note:** *Do not exceed the trailer weight for your vehicle configuration listed in the chart below.*

**Note:** *Be sure to take into consideration trailer frontal area. Do not exceed 20 feet (1.86 meters) if your vehicle is not equipped with a towing package or 30 feet (2.79 meters) if your vehicle is equipped with a towing package.*

**Note:** *For high altitude operation, reduce the gross combined weight by 2% per 1,000 ft (300 m) starting at the 1,000 ft (300 m) elevation point.*

# Towing

**Note:** *Certain states require electric trailer brakes for trailers over a specified weight. Be sure to check state regulations for this specified weight. The maximum trailer weights listed may be limited to this specified weight, as the vehicle's electrical system may not include the wiring connector needed to activate electric trailer brakes.*

Your vehicle may tow a trailer provided the maximum trailer weight is less than or equal to the maximum trailer weight listed for your vehicle configuration on the following chart.

<b>Powertrain</b>	<b>Maximum GCWR</b>	<b>Maximum trailer weight<sup>1</sup></b>
2.0L GTDI FWD <sup>2</sup>	6220 lb (2821 kg)	2000 lb (907 kg)
2.0L GTDI AWD <sup>2</sup>	6400 lb (2903 kg)	2000 lb (907 kg)
2.3L GTDI AWD <sup>2</sup>	6420 lb (2912 kg)	2000 lb (907 kg)
2.0L GTDI FWD <sup>3</sup>	7220 lb (3275 kg)	3000 lb (1361 kg)

# Towing

<b>Powertrain</b>	<b>Maximum GCWR</b>	<b>Maximum trailer weight<sup>1</sup></b>
2.0L GTDI AWD <sup>3</sup>	7400 lb (3357 kg)	3000 lb (1361 kg)
2.3L GTDI AWD <sup>3</sup>	7420 lb (3366 kg)	3000 lb (1361 kg)

<sup>1</sup> Calculated with SAE J2807 method.

<sup>2</sup> Without trailer towing package.

<sup>3</sup> With trailer towing package.

# Towing

## ESSENTIAL TOWING CHECKS

Follow these guidelines for safe towing:

- Do not tow a trailer until you drive your vehicle at least 1000 miles (1600 kilometers).
- Consult your local motor vehicle laws for towing a trailer.
- See the instructions included with towing accessories for the proper installation and adjustment specifications.
- Service your vehicle more frequently if you tow a trailer. See your scheduled maintenance information.
- If you use a rental trailer, follow the instructions the rental agency gives you.

You can find information on load specification terms found on the tire label and Safety Compliance label as well as instructions on calculating your vehicle's load in the Load Carrying chapter. See **Load Limit** (page 236).

Remember to account for the trailer tongue weight as part of your vehicle load when calculating the total vehicle weight.

## Hitches

Do not use a hitch that either clamps onto the bumper or attaches to the axle.

Distribute the trailer load so 10-15% of the total trailer weight is on the tongue.

## Safety Chains

**Note:** *Never attach safety chains to the bumper.*

Always connect the safety chains to the hook retainers of your vehicle hitch.

To connect the safety chains, cross them under the trailer tongue and allow enough slack for turning tight corners. Do not allow the chains to drag on the ground.

## Trailer Brakes

### WARNING



Do not connect a trailer's hydraulic brake system directly to your vehicle's brake system. Your vehicle may not have enough braking power and your chances of having a collision greatly increase.

Electric brakes and manual, automatic or surge-type trailer brakes are safe if you install them properly and adjust them to the manufacturer's specifications. The trailer brakes must meet local and federal regulations.

**The rating for the tow vehicle's braking system operation is at the gross vehicle weight rating, not the gross combined weight rating.**

**Separate functioning brake systems are required for safe control of towed vehicles and trailers weighing more than 1500 pounds (680 kilograms) when load.**

## Trailer Lamps

### WARNING



Never connect any trailer lamp wiring to the vehicle's tail lamp wiring; this may damage the electrical system resulting in fire. Contact your authorized dealer as soon as possible for assistance in proper trailer tow wiring installation. Additional electrical equipment may be required.



# Towing

---

Trailer lamps are required on most towed vehicles. Make sure all running lights, brake lights, turn signals and hazard lights are working.

## Before Towing a Trailer

Practice turning, stopping and backing up to get the feel of your vehicle-trailer combination before starting on a trip. When turning, make wider turns so the trailer wheels clear curbs and other obstacles.

## When Towing a Trailer

- Do not drive faster than 70 mph (113 km/h) during the first 500 miles (800 kilometers).
- Do not make full-throttle starts.
- Check your hitch, electrical connections and trailer wheel lug nuts thoroughly after you have traveled 50 miles (80 kilometers).
- When stopped in congested or heavy traffic during hot weather, place the gearshift in position **P** to aid engine and transmission cooling and to help A/C performance.

- Turn off the speed control with heavy loads or in hilly terrain. The speed control may turn off automatically when you are towing on long, steep grades.
- Shift to a lower gear when driving down a long or steep hill. Do not apply the brakes continuously, as they may overheat and become less effective.
- If your transmission is equipped with a Grade Assist or Tow/Haul feature, use this feature when towing. This provides engine braking and helps eliminate excessive transmission shifting for optimum fuel economy and transmission cooling.
- Allow more distance for stopping with a trailer attached. Anticipate stops and brake gradually.
- Avoid parking on a grade. However, if you must park on a grade:
  1. Turn the steering wheel to point your vehicle tires away from traffic flow.
  2. Set your vehicle parking brake.
  3. Place the automatic transmission in position **P**.

4. Place wheel chocks in front and back of the trailer wheels. (Chocks not included with vehicle.)

## Launching or Retrieving a Boat or Personal Watercraft (PWC)

**Note:** *Disconnect the wiring to the trailer before backing the trailer into the water.*

**Note:** *Reconnect the wiring to the trailer after removing the trailer from the water.*

When backing down a ramp during boat launching or retrieval:

- Do not allow the static water level to rise above the bottom edge of the rear bumper.
- Do not allow waves to break higher than 6 inches (15 centimeters) above the bottom edge of the rear bumper.

Exceeding these limits may allow water to enter vehicle components:

- Causing internal damage to the components.
- Affecting driveability, emissions, and reliability.

# Towing

Replace the rear axle lubricant anytime you submerge the rear axle in water. Water may contaminate the rear axle lubricant, which is not a normal maintenance inspection item unless there is a possibility of a leak or other axle repair is required.

## TOWING THE VEHICLE ON FOUR WHEELS

### Emergency Towing

#### WARNING



If your vehicle has a steering wheel lock make sure the ignition is in the accessory or on position when being towed.

If your vehicle becomes inoperable (without access to wheel dollies, car-hauling trailer, or flatbed transport vehicle), it can be flat-towed (all wheels on the ground, regardless of the powertrain and transmission configuration) under the following conditions:

- Your vehicle is facing forward for towing in a forward direction.
- You place the vehicle in Stay in Neutral mode. See **Placing Your Vehicle in Stay in Neutral Mode**. In addition, make sure to read the brake-shift interlock override procedure. See **Automatic Transmission** (page 173).
- Maximum speed is 35 mph (56 km/h).
- Maximum distance is 50 mi (80 km).

#### Placing Your Vehicle in Stay in Neutral Mode

1. Press the **N** button on the shifter assembly.
2. When **Press N again to Enter Stay in Neutral Mode** appears in the information display, press the **N** button again.

**Note:** The message **Stay in Neutral Mode Engaged** appears in the information display when you successfully complete the procedure.

**Note:** Keeping the vehicle in Stay in Neutral mode eventually causes your vehicle battery to lose charge. Exit the mode as soon as safely possible.

#### Recreational Towing

**Note:** Put your climate control system in recirculated air mode to prevent exhaust fumes from entering the vehicle. See **Climate Control** (page 133).

Follow these guidelines if you have a need for recreational (RV) towing. An example of recreational towing would be towing your vehicle behind a motorhome. We designed these guidelines to prevent damage to your transmission.

# Towing

---

Front-wheel drive vehicles **CANNOT** be flat-towed (all wheels on the ground) as vehicle or transmission damage may occur. You must place the front wheels on a two-wheel tow dolly. If you are using a tow dolly, follow the instructions specified by the equipment provider.

All-wheel drive vehicles **CANNOT** be flat-towed (all wheels on the ground), as vehicle or transmission damage may occur. It is recommended to tow your vehicle with all four (4) wheels off the ground such as when using a car-hauling trailer. Otherwise, you cannot recreational tow your vehicle.

# Driving Hints

---

## BREAKING-IN

You need to break in new tires for approximately 300 miles (480 kilometers). During this time, your vehicle may exhibit some unusual driving characteristics.

Avoid driving too fast during the first 1000 miles (1600 kilometers). Vary your speed frequently and change up through the gears early. Do not labor the engine.

Do not tow during the first 1000 miles (1600 kilometers).

## ECONOMICAL DRIVING

Your fuel economy is affected by several things, such as how you drive, the conditions you drive under, and how you maintain your vehicle.

You may improve your fuel economy by keeping these things in mind:

- Accelerate and slow down in a smooth, moderate fashion.
- Drive at steady speeds without stopping.

- Anticipate stops; slowing down may eliminate the need to stop.
- Combine errands and minimize stop-and-go driving.
- Close the windows for high-speed driving.
- Drive at reasonable speeds (traveling at 55 mph [88 km/h] uses 15% less fuel than traveling at 65 mph [105 km/h]).
- Keep the tires properly inflated and use only the recommended size.
- Use the recommended engine oil.
- Perform all regularly scheduled maintenance.

Avoid these actions; they reduce your fuel economy:

- Sudden accelerations or hard accelerations.
- Revving the engine before turning it off.
- Idle for periods longer than one minute.
- Warm up your vehicle on cold mornings.
- Use the air conditioner or front defroster.
- Use the speed control in hilly terrain.

- Rest your foot on the brake pedal while driving.
- Drive a heavily loaded vehicle or tow a trailer.
- Carry unnecessary weight (approximately 1 mpg [0.4 km/L] is lost for every 400 lb [180 kilogram] of weight carried).
- Driving with the wheels out of alignment.

### Conditions


- Heavily loading a vehicle or towing a trailer may reduce fuel economy at any speed.
- Adding certain accessories to your vehicle (for example bug deflectors, rollbars, light bars, running boards, ski racks or luggage racks) may reduce fuel economy.
- To maximize the fuel economy, drive with the tonneau cover installed (if equipped).
- Using fuel blended with alcohol may lower fuel economy.
- Fuel economy may decrease with lower temperatures during the first 8–10 miles (12–16 kilometers) of driving.

# Driving Hints

- Driving on flat terrain offers improved fuel economy as compared to driving on hilly terrain.
- Transmissions give their best fuel economy when operated in the top cruise gear and with steady pressure on the gas pedal.
- Four-wheel-drive operation (if equipped) is less fuel efficient than two-wheel-drive operation.
- Close the windows for high-speed driving.

## DRIVING THROUGH WATER

### WARNING

 Do not drive through flowing or deep water as you may lose control of your vehicle.

**Note:** *Driving through standing water can cause vehicle damage.*

**Note:** *Engine damage can occur if water enters the air filter.*

Before driving through standing water, check the depth. Never drive through water that is higher than the bottom of the front rocker area of your vehicle.



E176360


When driving through standing water, drive very slowly and do not stop your vehicle. Your brake performance and traction may be limited. After driving through water and as soon as it is safe to do so:


- Lightly press the brake pedal to dry the brakes and to check that they work.
- Check that the horn works.


- Check that the exterior lights work.
- Turn the steering wheel to check that the steering power assist works.

## FLOOR MATS

### WARNINGS


 Always use floor mats that are designed to fit the foot well of your vehicle. Only use floor mats that leave the pedal area unobstructed. Only use floor mats that are firmly secured to retention posts so that they cannot slip out of position and interfere with the pedals or impair safe operation of your vehicle in other ways.


 Pedals that cannot move freely can cause loss of vehicle control and increase the risk of serious personal injury.


 Always make sure that the floor mats are properly attached to the retention posts in the carpet that are supplied with your vehicle. Floor mats must be properly secured to both retention posts to make sure mats do not shift out of position.


# Driving Hints

## WARNINGS


 Never place floor mats or any other covering in the vehicle foot well that cannot be properly secured to prevent them from moving and interfering with the pedals or the ability to control the vehicle.

 Never place floor mats or any other covering on top of already installed floor mats. Floor mats should always rest on top of vehicle carpeting surface and not another floor mat or other covering. Additional floor mats or any other covering will reduce the pedal clearance and potentially interfere with pedal operation.

 Check attachment of floor mats on a regular basis. Always properly reinstall and secure floor mats that have been removed for cleaning or replacement.

 Always make sure that objects cannot fall into the driver foot well while the vehicle is moving. Objects that are loose can become trapped under the pedals causing a loss of vehicle control.

## WARNINGS

 Failure to properly follow floor mat installation or attachment instructions can potentially cause interference with pedal operation causing a loss of vehicle control.



To install floor mats, position the floor mat so that the eyelet is over the retention post and press down to lock in.

To remove the floor mat, reverse the installation procedure.

# Roadside Emergencies

## ROADSIDE ASSISTANCE

### Vehicles Sold in the United States: Getting Roadside Assistance

If you ever need help on the road, the Lincoln Motor Company is there for you with nationwide, 24-hours-a-day, seven-days-a-week assistance.

The service is available:

- Throughout the life of the vehicle for original owners.
- For six years or 68,351 mi (110,000 km) (whichever comes first) within the extended powertrain warranty coverage period for subsequent owners.
- For the coverage period listed on the Roadside Assistance Card included in your Owner's Manual portfolio.

This complimentary Roadside Assistance program is separate from the New Vehicle Limited Warranty, and includes:

- A flat tire change with a good spare (except vehicles supplied with a tire inflation kit).
- Battery jump start.

- Lock-out assistance (key replacement cost is the client's responsibility).
- Fuel delivery — independent service contractors, if not prohibited by state, local or municipal law shall deliver up to 2 gal (8 L) of gasoline or 5 gal (20 L) of diesel fuel to a disabled vehicle. Roadside Assistance limits fuel delivery service to two no-charge occurrences within a 12-month period.
- Winch out — available within 98 ft (30 m) of a paved or county maintained road, no recoveries.
- Towing — independent service contractors, if not prohibited by state, local or municipal law shall tow Lincoln eligible vehicles to the client's selling or preferred dealer within 99 mi (160 km) of the disablement location or to the nearest Lincoln dealer. If a client requests a tow to a selling or preferred dealer that is more than 99 mi (160 km) from the disablement location, the client shall be responsible for any mileage costs in excess of 99 mi (160 km).

Roadside Assistance includes up to \$200 coverage for a towed trailer if the disabled eligible vehicle requires service at the nearest authorized dealer. If the towing vehicle is operational but the trailer is not, then the trailer does not qualify for any roadside services.

### Vehicles Sold in the United States: Using Roadside Assistance

United States Lincoln vehicle clients who require Roadside Assistance, call 1-800-521-4140.

If you need to arrange roadside assistance for yourself, Lincoln Motor Company will reimburse a reasonable amount for towing to the nearest Lincoln dealership within 99 mi (160 km). To obtain reimbursement information, United States Lincoln vehicle clients, call 1-800-521-4140. Lincoln Motor Company will ask you to submit your original receipts.

# Roadside Emergencies

## Vehicles Sold in Canada: Getting Roadside Assistance

To fully assist you should you have a vehicle concern, Lincoln Motor Company offers a complimentary roadside assistance program. This program is eligible within Canada or the continental United States.

This program is separate from the New Vehicle Limited Warranty, but the coverage is concurrent with the powertrain coverage period of your vehicle.

Canadian customers who require roadside assistance, call 1-800-387-5333.

## Vehicles Sold in Canada: Using Roadside Assistance

Complete the roadside assistance identification card and place it in your wallet for quick reference.

In Canada, this card is found in the Warranty Guide in the glove compartment of your vehicle.

## Vehicles Sold in Canada: Roadside Assistance Program Coverage

The service is available 24 hours a day, seven days a week.

Canadian roadside coverage and benefits may differ from the U.S. coverage.

For complete program coverage details review your warranty guide, contact your dealer, call us in Canada at 1-800-387-9333, or visit our website at [www.lincolncanada.com](http://www.lincolncanada.com).

## HAZARD WARNING FLASHERS

**Note:** *If used when the vehicle is not running, the battery will lose charge. There may be insufficient power to restart your vehicle.*



The hazard warning button is located on the instrument panel. Use it when your vehicle is creating a safety hazard for other motorists.

- Press the button to turn on the hazard warning function, and the front and rear direction indicators will flash.
- Press the button again to turn them off.

## FUEL SHUTOFF

### WARNING



Failure to inspect and, if necessary, repair fuel leaks after a collision may increase the risk of fire and serious injury. Ford Motor Company recommends that the fuel system be inspected by an authorized dealer after any collision.

In the event of a moderate to severe collision, this vehicle includes a fuel pump shutoff feature that stops the flow of fuel to the engine. Not every impact will cause a shutoff.



# Roadside Emergencies

Should your vehicle shut off after a collision, you may restart your vehicle. For vehicles equipped with a key system:

1. Switch off the ignition.
2. Switch on the ignition.
3. Repeat Steps 1 and 2 to re-enable the fuel pump.

For vehicles equipped with a push button start system:

1. Press the **START/STOP** button to switch off the ignition.
2. Press the brake pedal and press the **START/STOP** button to switch on the ignition.
3. Remove your foot from the brake pedal and press the **START/STOP** button to switch off the ignition.
4. You can either attempt to start the engine by pressing the brake pedal and the **START/STOP** button, or switch on the ignition only by pressing the **START/STOP** button without pressing the brake pedal. Both ways re-enable the fuel system.

**Note:** *When you try to restart your vehicle after a fuel shutoff, the vehicle makes sure that various systems are safe to restart. Once your vehicle determines that the systems are safe, then the vehicle will allow you to restart.*

**Note:** *In the event that your vehicle does not restart after your third attempt, contact an authorized dealer.*

## JUMP STARTING THE VEHICLE

### WARNINGS



The gases around the battery can explode if exposed to flames, sparks, or lit cigarettes. An explosion could result in personal injury or vehicle damage.



Batteries contain sulfuric acid which can burn skin, eyes and clothing, if contacted.



Use only an adequate-sized cable with insulated clamps.

## Preparing Your Vehicle

**Note:** *Do not attempt to push-start your automatic transmission vehicle. Automatic transmissions do not have push-start capability. Attempting to push-start a vehicle with an automatic transmission may cause transmission damage.*

**Note:** *Use only a 12-volt supply to start your vehicle.*


**Note:** *Do not disconnect the battery of the disabled vehicle as this could damage the vehicle's electrical system.*

Park the booster vehicle close to the hood of the disabled vehicle, making sure the two vehicles do not touch. Turn all accessories off.

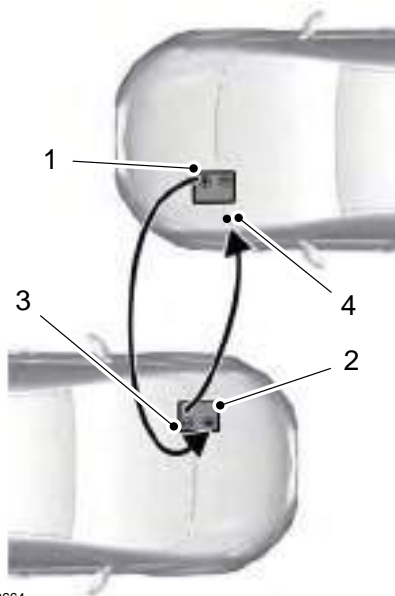
# Roadside Emergencies

## Connecting the Jumper Cables

### WARNING

 Do not attach the cables to fuel lines, engine rocker covers, the intake manifold or electrical components as grounding points. Stay clear of moving parts. To avoid reverse polarity connections, make sure that you correctly identify the positive (+) and negative (-) terminals on both the disabled and booster vehicles before connecting the cables. Battery positions may vary.

**Note:** *In the illustration, the bottom vehicle represents the booster vehicle.*



E142664

1. Connect the positive (+) jumper cable to the positive (+) terminal of the discharged battery.

2. Connect the other end of the positive (+) cable to the positive (+) terminal of the assisting battery.
3. Connect the negative (-) cable to the negative (-) terminal of the assisting battery.




E152134

4. Make the final connection of the negative (-) cable to an exposed metal part of the stalled vehicle's engine, or connect the negative (-) cable to the ground connection point, if available.

# Roadside Emergencies

## WARNING

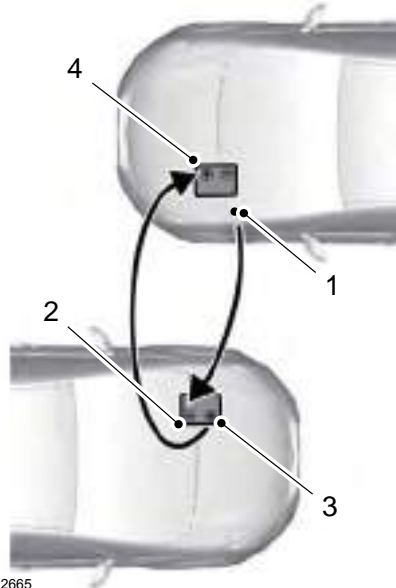
 Do not connect the end of the second cable to the negative (-) terminal of the battery to be jumped. A spark may cause an explosion of the gases that surround the battery.

## Jump Starting

1. Start the engine of the booster vehicle and rev the engine moderately, or press the accelerator gently to keep your engine speed between 2000 and 3000 rpms, as shown in your tachometer.
2. Start the engine of the disabled vehicle.
3. After starting the disabled vehicle, run both vehicle engines for an additional three minutes before disconnecting the jumper cables.

## Removing the Jumper Cables

Remove the jumper cables in the reverse order that they were connected.



1. Remove the jumper cable from the ground metal surface or connecting point, if available.
2. Remove the jumper cable on the negative (-) terminal of the booster vehicle's battery.
3. Remove the jumper cable from the positive (+) terminal of the booster vehicle's battery.
4. Remove the jumper cable from the positive (+) terminal of the disabled vehicle's battery.

After starting your disabled vehicle and removing the jumper cables, allow your vehicle to idle for several minutes so the battery can recharge.

## POST-CRASH ALERT SYSTEM

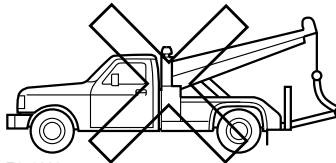
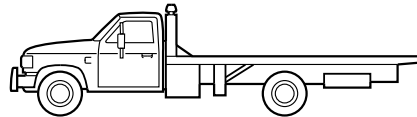
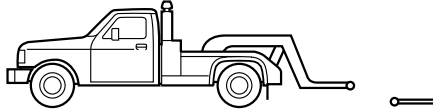
The system flashes the direction indicators and sounds the horn (intermittently) in the event of a serious impact that deploys an airbag (front, side, side curtain or Safety Canopy) or the safety belt pretensioners.

# Roadside Emergencies

The horn and indicators will turn off when:

- You press the hazard control button.
- You press the panic button on the remote entry transmitter (if equipped).
- Your vehicle runs out of power.

## TRANSPORTING THE VEHICLE



E143886

If you need to have your vehicle towed, contact a professional towing service, or if you are a member of a roadside assistance program, your roadside assistance service provider.

We recommend the use of a wheel lift and dollies or flatbed equipment to tow your vehicle. Do not tow with a slingbelt. Lincoln Motor Company has not approved a slingbelt towing procedure. Vehicle damage may occur if towed incorrectly, or by any other means.

Lincoln Motor Company produces a towing manual for all authorized tow truck operators. Have your tow truck operator refer to this manual for proper hook-up and towing procedures for your vehicle.

It is acceptable to have your front-wheel drive vehicle towed from the front if using proper wheel lift equipment to raise the front wheels off the ground. When towing in this manner, the rear wheels can remain on the ground.

# Roadside Emergencies

---

Front-wheel drive vehicles must have the front wheels placed on a tow dolly when towing your vehicle from the rear using wheel lift equipment. This prevents damage to the transmission.

Towing an all-wheel drive vehicle requires that all wheels be off the ground, such as using a wheel lift and dollies or flatbed equipment. This prevents damage to the transmission, all-wheel drive system and vehicle.

# Customer Assistance

## GETTING THE SERVICES YOU NEED

Warranty repairs to your vehicle must be performed by an authorized dealer. While any authorized dealer handling your vehicle line provides warranty service, we recommend you return to your selling authorized dealer who wants to ensure your continued satisfaction.

Please note that certain warranty repairs require special training and equipment, so not all authorized dealers are authorized to perform all warranty repairs. This means that, depending on the warranty repair needed, you may have to take your vehicle to another authorized dealer.

A reasonable time must be allowed to perform a repair after taking your vehicle to the authorized dealer. Repairs are made using Lincoln or Motorcraft parts, or remanufactured or other parts that are authorized by Lincoln.

## Away From Home

If you are away from home when your vehicle needs service, contact the Lincoln Client Relationship Center or use the online resources listed below to find the nearest authorized dealer.

In the United States:

### Mailing address

Lincoln Motor Company  
Client Relationship Center  
P.O. Box 6248  
Dearborn, MI 48126

### Telephone

1-800-521-4140  
TDD for the hearing impaired:  
1-800-232-5952

Web Address
<a href="http://www.LincolnOwner.com">www.LincolnOwner.com</a>

These are some of the items that can be found online:

- United States dealer locator by Dealer Name, City, State or ZIP Code.
- Owner Manuals.
- Maintenance Schedules.
- Recalls.
- Lincoln Extended Service Plans.
- Lincoln Original Accessories.
- Service specials and promotions.

In Canada:

### Mailing address

Lincoln Client Relationship Centre  
Lincoln Motor Company of Canada, Limited  
P.O. Box 2000  
Oakville, Ontario L6K 1C8

### Telephone

1-800-387-9333

# Customer Assistance

Web Address
<a href="http://www.LincolnCanada.com">www.LincolnCanada.com</a>

## Online Resources

### Twitter English

@LincolnMotorCA

### Twitter French

@LincolnQC

### Instagram

@LincolnMotorCA

### Facebook

/LincolnMotorCA

## Additional Assistance

If you have questions or concerns, or are unsatisfied with the service you are receiving, follow these steps:

1. Contact your Sales Representative or Service Advisor at your selling or servicing authorized dealer.

2. If your inquiry or concern remains unresolved, contact the Sales Manager, Service Manager or Customer Relations Manager.
3. If you require assistance or clarification on Lincoln Motor Company policies, please contact the Lincoln Client Relationship Center.

In order to help us serve you better, please have the following information available when contacting a Client Relationship Center:

- Vehicle Identification Number.
- Your telephone number (home and business).
- The name of the authorized dealer and city where located.
- The vehicle's current odometer reading.

In some states, you must directly notify Lincoln in writing before pursuing remedies under your state's warranty laws. Lincoln is also allowed a final repair attempt in some states.

In the United States, a warranty dispute must be submitted to the BBB AUTO LINE before taking action under the Magnuson-Moss Warranty Act, or to the extent allowed by state law, before pursuing replacement or repurchase remedies provided by certain state laws. This dispute handling procedure is not required prior to enforcing state created rights or other rights which are independent of the Magnuson-Moss Warranty Act or state replacement or repurchase laws.

## IN CALIFORNIA (U.S. ONLY)

California Civil Code Section 1793.2(d) requires that, if a manufacturer or its representative is unable to repair a motor vehicle to conform to the vehicle's applicable express warranty after a reasonable number of attempts, the manufacturer shall be required to either replace the vehicle with one substantially identical or repurchase the

## Customer Assistance

---

vehicle and reimburse the buyer in an amount equal to the actual price paid or payable by the consumer (less a reasonable allowance for consumer use). The consumer has the right to choose whether to receive a refund or replacement vehicle.

California Civil Code Section 1793.22(b) presumes that the manufacturer has had a reasonable number of attempts to conform the vehicle to its applicable express warranties if, within the first 18 months of ownership of a new vehicle or the first 18000 miles (29 000 km), whichever occurs first:

1. Two or more repair attempts are made on the same non-conformity likely to cause death or serious bodily injury OR
2. Four or more repair attempts are made on the same nonconformity (a defect or condition that substantially impairs the use, value or safety of the vehicle) OR
3. The vehicle is out of service for repair of nonconformities for a total of more than 30 calendar days (not necessarily all at one time).

In the case of 1 or 2 above, the consumer must also notify the manufacturer of the need for the repair of the nonconformity at the following address:

Ford Motor Company  
16800 Executive Plaza Drive  
Mail Drop 3NE-B  
Dearborn, MI 48126

You are required to submit your warranty dispute to BBB AUTO LINE before asserting in court any rights or remedies conferred by California Civil Code Section 1793.22(b). You are also required to use BBB AUTO LINE before exercising rights or seeking remedies created by the Federal Magnuson-Moss Warranty Act, 15 U.S.C. sec. 2301 et seq. If you choose to seek redress by pursuing rights and remedies not created by California Civil Code Section 1793.22(b) or the Magnuson-Moss Warranty Act, resort to BBB AUTO LINE is not required by those statutes.

### **THE BETTER BUSINESS BUREAU (BBB) AUTO LINE PROGRAM (U.S. ONLY)**

Your satisfaction is important to Ford Motor Company and to your dealer. If a warranty concern has not been resolved using the three-step procedure outlined earlier in this chapter in the Getting the Services you need section, you may be eligible to participate in the BBB AUTO LINE program.

The BBB AUTO LINE program consists of two parts – mediation and arbitration. During mediation, a representative of the BBB will contact both you and Ford Motor Company to explore options for settlement of the claim. If an agreement is not reached during mediation or you do not want to participate in mediation, and if your claim is eligible, you may participate in the arbitration process. An arbitration hearing will be scheduled so that you can present your case in an informal setting before an impartial person. The arbitrator will consider the testimony provided and make a decision after the hearing.



# Customer Assistance

---

Disputes submitted to the BBB AUTO LINE program are usually decided within forty days after you file your claim with the BBB. You are not bound by the decision, and may reject the decision and proceed to court where all findings of the BBB Auto Line dispute, and decision, are admissible in the court action. Should you choose to accept the BBB AUTO LINE decision, Ford is then bound by the decision, and must comply with the decision within 30 days of receipt of your acceptance letter.

**BBB AUTO LINE Application:** Using the information provided below, please call or write to request a program application. You will be asked for your name and address, general information about your new vehicle, information about your warranty concerns, and any steps you have already taken to try to resolve them. A Customer Claim Form will be mailed that will need to be completed, signed and returned to the BBB along with proof of ownership. Upon receipt, the BBB will review the claim for eligibility under the Program Summary Guidelines.

**You can get more information by calling BBB AUTO LINE at 1-800-955-5100, or writing to:**

**BBB AUTO LINE  
3033 Wilson Boulevard, Suite 600  
Arlington, Virginia 22201**

BBB AUTO LINE applications can also be requested by calling the Ford Motor Company Customer Relationship Center at 1-800-392-3673.

**Note:** *Ford Motor Company reserves the right to change eligibility limitations, modify procedures, or to discontinue this process at any time without notice and without obligation.*

## **UTILIZING THE MEDIATION/ARBITRATION PROGRAM (CANADA ONLY)**

For vehicles delivered to authorized Canadian dealers. In those cases where you continue to feel that the efforts by Ford of Canada and the authorized dealer to resolve a factory-related vehicle service concern have been unsatisfactory, Ford of Canada participates in an impartial third party mediation/arbitration program administered by the Canadian Motor Vehicle Arbitration Plan (CAMVAP).

The CAMVAP program is a straight forward and relatively speedy alternative to resolve a disagreement when all other efforts to produce a settlement have failed. This procedure is without cost to you and is designed to eliminate the need for lengthy and expensive legal proceedings.

# Customer Assistance

---

In the CAMVAP program, impartial third-party arbitrators conduct hearings at mutually convenient times and places in an informal environment. These impartial arbitrators review the positions of the parties, make decisions and, when appropriate, render awards to resolve disputes. CAMVAP decisions are fast, fair, and final as the arbitrator's award is binding on both you and Ford of Canada.

CAMVAP services are available in all Canadian territories and provinces. For more information, without charge or obligation, call your CAMVAP Provincial Administrator directly at 1-800-207-0685 or visit [www.camvap.ca](http://www.camvap.ca).

## **GETTING ASSISTANCE OUTSIDE THE U.S. AND CANADA**

Before exporting your vehicle to a foreign country, contact the appropriate foreign embassy or consulate. These officials can inform you of local vehicle registration regulations and where to find unleaded fuel.

If you cannot find unleaded fuel or can only get fuel with an anti-knock index lower than is recommended for your vehicle, contact our Customer Relationship Center.

The use of leaded fuel in your vehicle without proper conversion may damage the effectiveness of your emission control system and may cause engine knocking or serious engine damage. Ford Motor Company or Ford of Canada is not responsible for any damage caused by use of improper fuel. Using leaded fuel may also result in difficulty importing your vehicle back into the United States.

If your vehicle must be serviced while you are traveling or living in Asia-Pacific Region, Sub-Saharan Africa, U.S. Virgin Islands, Central America, the Caribbean, and Israel, contact the nearest authorized dealer. If the authorized dealer cannot help you, contact:

FORD MOTOR COMPANY  
Customer Relationship Center  
1555 Fairlane Drive  
Fairlane Business Park #3  
Allen Park, Michigan 48101  
U.S.A.  
Telephone: (313) 594-4857  
Fax: (313) 390-0804  
Email: [expcac@ford.com](mailto:expcac@ford.com)

For customers in Guam, the Commonwealth of the Northern Mariana Islands (CNMI), America Samoa, and the U.S. Virgin Islands, please feel free to call our Toll-Free Number: (800) 841-FORD (3673).

If your vehicle must be serviced while you are traveling or living in Puerto Rico, contact the nearest authorized dealer. If the authorized dealer cannot help you, contact:

# Customer Assistance

---

FORD MOTOR COMPANY  
Customer Relationship Center  
1555 Fairlane Drive  
Fairlane Business Park #3  
Allen Park, Michigan 48101  
U.S.A.  
Telephone: (800) 841-FORD (3673)  
FAX: (313) 390-0804  
Email: prcac@ford.com  
www.ford.com.pr

If your vehicle must be serviced while you are traveling or living in the Middle East, contact the nearest authorized dealer. If the authorized dealer cannot help you, contact:

FORD MOTOR COMPANY  
Customer Relationship Center  
1555 Fairlane Drive  
Fairlane Business Park #3  
Allen Park, Michigan 48101  
U.S.A.

**Ford:** 80004443673

**Lincoln:** 80004441067

**If calling from the UAE:** 80004441066

**If calling from the Kingdom of Saudi Arabia:**  
8008443673

**If calling from Kuwait:** 22280384

FAX: +971 4 3327266  
Email: menacac@ford.com  
www.me.ford.com

If you buy your vehicle in North America and then relocate to any of the above locations, register your vehicle identification number (VIN) and new address with Ford Motor Company Export Operations & Global Growth Initiatives by emailing **expcac@ford.com**.

If you are in another foreign country, contact the nearest authorized dealer. In the event your inquiry is unresolved, communicate your concern with the dealership's Sales Manager, Service Manager or Customer Relations Manager. If you require additional assistance or clarification, please contact the respective Customer Relationship Center as previously listed.

**Customers in the U.S. should call  
1-800-392-3673.**

## **ORDERING ADDITIONAL OWNER'S LITERATURE**

To order the publications in this portfolio, contact Helm, Incorporated at:

HELM, INCORPORATED  
47911 Halyard Drive  
Plymouth, Michigan 48170  
Attention: Customer Service

Or to order a free publication catalog, call toll free: 1-800-782-4356

Monday-Friday 8:00 a.m. - 6:00 p.m. EST

Helm, Incorporated can also be reached by their website:

www.helminc.com

(Items in this catalog may be purchased by credit card, check or money order.)

## **Obtaining a French Owner's Manual**

French Owner's Manual can be obtained from your authorized dealer or by contacting Helm, Incorporated using the contact information listed previously in this section.

# Customer Assistance

## REPORTING SAFETY DEFECTS (U.S. ONLY)



E142557

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Ford Motor Company.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Ford Motor Company.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to <http://www.safercar.gov>; or write to:

Administrator

1200 New Jersey Avenue, Southeast  
Washington, D.C. 20590

You can also obtain other information about motor vehicle safety from <http://www.safercar.gov>.

## REPORTING SAFETY DEFECTS (CANADA ONLY)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform Transport Canada and Ford of Canada.

### Transport Canada Contact Information

Website	<a href="http://www.tc.gc.ca/eng/motorvehiclesafety/safevehicles-defectinvestigations-index-76.htm">www.tc.gc.ca/eng/motorvehiclesafety/safevehicles-defectinvestigations-index-76.htm</a> (English)
Website	<a href="http://www.tc.gc.ca/fra/securiteautomobile/VehiculesSecuritaires-Enquetes-index-76.htm">www.tc.gc.ca/fra/securiteautomobile/VehiculesSecuritaires-Enquetes-index-76.htm</a> (French)
Phone	1-800-333-0510

## Customer Assistance

---

<b>Ford of Canada Contact Information</b>	
Website	<a href="http://www.ford.ca">www.ford.ca</a>
Phone	1-800-565-3673

# Fuses

---

## FUSE SPECIFICATION CHART

### Pre-Fuse Box

The pre-fuse box is in the engine compartment attached to the positive battery post. This box contains several high current fuses. If you need to replace one of these high current fuses, see an authorized dealer.

### Power Distribution Box

#### WARNINGS



Always disconnect the battery before servicing high current fuses.



To reduce risk of electrical shock, always replace the cover to the power distribution box before reconnecting the battery or refilling fluid reservoirs.

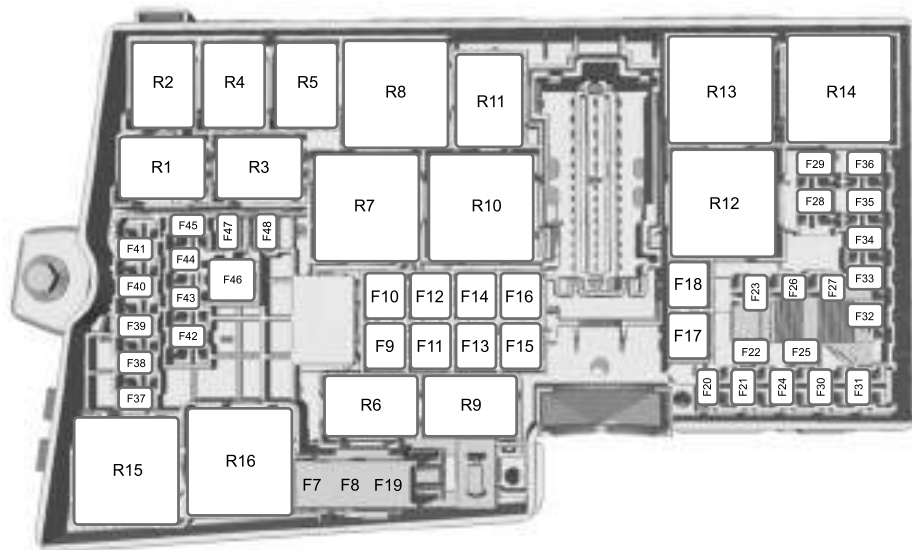
---

The power distribution box is in the engine compartment. It has high-current fuses that protect your vehicle's main electrical systems from overloads.

You will need to reset some features if you disconnect and reconnect the battery. See **Changing the 12V Battery** (page 296).

Lift the release lever at the rear of the cover to remove it.

# Fuses



E157389

# Fuses

<b>Fuse</b>	<b>Fuse amp rating</b>	<b>Protected components</b>
F7	50A <sup>2</sup>	Anti-lock brake system module.
F8	30A <sup>2</sup>	Anti-lock brake system module.
F9	20A <sup>2</sup>	Fuel pump relay.
F10	40A <sup>2</sup>	Blower motor relay.
F11	30A <sup>2</sup>	Run start relay.
F12	40A <sup>2</sup>	Powertrain control module relay.
F13	30A <sup>2</sup>	Starter relay.
F14	30A <sup>2</sup>	Memory seat.
F15	30A <sup>2</sup>	Wipers and washers relay.
F16	25A <sup>2</sup>	Cooling fan.
F17	40A <sup>2</sup>	Cooling fan 1 (600W).



# Fuses

Fuse	Fuse amp rating	Protected components
	50A <sup>2</sup>	Cooling fan 1 (750W).
F18	40A <sup>2</sup>	Cooling fan 2 (600W).
	50A <sup>2</sup>	Cooling fan 2 (750W).
F19	5A <sup>1</sup>	Anti-lock brake system module run/start.
F20	20A <sup>1</sup>	Horn relay.
F21	10A <sup>1</sup>	Brake pedal switch.
F22	25A <sup>1</sup>	Windshield wipers and washer.
F23	5A <sup>1</sup>	Run/start relay coil.
F24	20A <sup>1</sup>	Transmission range control module.
F25	10A <sup>1</sup>	Air conditioning clutch relay.
F26	5A <sup>1</sup>	Powertrain control module relay coil.
F27	10A <sup>1</sup>	Washer pump relay.

## Fuses

Fuse	Fuse amp rating	Protected components
F28	10A <sup>1</sup>	Alternator sensor.
F29	15A <sup>1</sup>	Rain sensor. Rear wiper. Washer pump relay coil.
F30	20A <sup>1</sup>	Left-hand headlamp.
F31	20A <sup>1</sup>	Right-hand headlamp.
F32	15A <sup>1</sup>	Vehicle power 1 (powertrain control module).
F33	15A <sup>1</sup>	Vehicle power 2 (canister vent solenoid, universal exhausted gas oxygen sensor, variable camshaft timing, catalyst monitor sensor, canister purge solenoid).
F34	15A <sup>1</sup>	Vehicle power 3 (A/C clutch control relay coil, variable A/C compressor, fan control relay coil, engine charge air bypass valve solenoid, active grill shutters).
F35	15A <sup>1</sup>	Vehicle power 4 (ignition coils).
F36	—	Not used.
F37	—	Not used.

# Fuses

Fuse	Fuse amp rating	Protected components
F38	15A <sup>1</sup>	Voltage quality module run/start (vehicles equipped with stop/start).
F39	5A <sup>1</sup>	Powertrain control ignition start power - run.
F40	10A <sup>1</sup>	Electronic power assist steering run/start.
F41	10A <sup>1</sup>	Extended power module run/start.
F42	10A <sup>1</sup>	Adaptive cruise control. Blind spot information system. Heads-up display. Rear video camera. (vehicles not equipped with stop/start)
F43	—	Not used.
F44	5A <sup>1</sup>	Heated rear window relay coil. Heated wiper park. Electronic transmission pump run/stop feed (vehicles equipped with stop/start).
F45	5A <sup>1</sup>	Transmission range control module run/start.
F46	40A <sup>2</sup>	Heated rear window relay. Heated wiper park.

# Fuses

Fuse	Fuse amp rating	Protected components
F47	30A <sup>1</sup>	Electronic transmission pump B+ feed (vehicles equipped with stop/start).
F48	—	Not used.

<sup>1</sup> Mini fuse.

<sup>2</sup> J-case fuse.

Relay	Circuits switched
R1	Run start.
R2	Horn.
R3	Fuel pump.
R4	Rear window washer pump.
R5	Cooling fan relay 3 (750W).
R6	Windshield wipers.
R7	Cooling fan relay 1 (600W). Cooling fan relay 5 (750W).
R8	Starter.
R9	Not used.

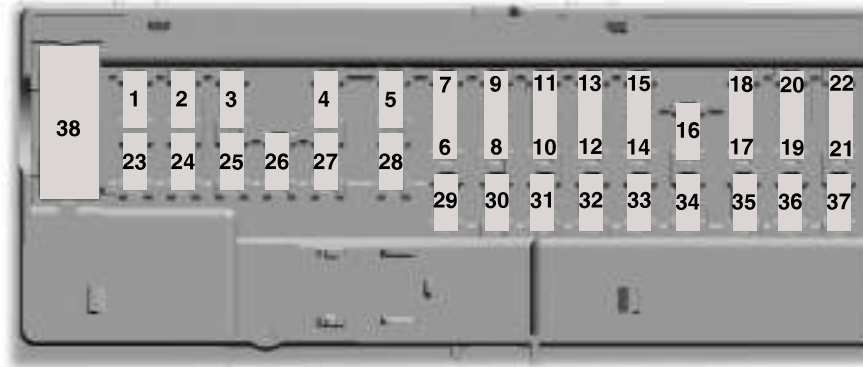
# Fuses

Relay	Circuits switched
R10	Cooling fan relay 4 (750W).
R11	Air conditioning clutch.
R12	Cooling fan relay 1 (750W). Cooling fan relay 3 (600W).
R13	Cooling fan relay 2.
R14	Powertrain control module.
R15	Heated rear window. Heated wiper park.
R16	Blower motor.

## Passenger Compartment Fuse Box

The fuse panel is behind the lower end of the glove box.

# Fuses



E145984

Fuse	Fuse amp rating	Protected components
1	10A <sup>1</sup>	Lighting (ambient, glove box, vanity, dome, cargo).
2	7.5A <sup>1</sup>	Memory seats.
3	20A <sup>1</sup>	Driver door unlock.

# Fuses

Fuse	Fuse amp rating	Protected components
4	5A <sup>1</sup>	Not used (spare).
5	20A <sup>1</sup>	Subwoofer amplifier. THX amplifier.
6	10A <sup>2</sup>	Not used (spare).
7	10A <sup>2</sup>	Not used (spare).
8	10A <sup>2</sup>	Not used (spare).
9	10A <sup>2</sup>	Not used (spare).
10	5A <sup>2</sup>	Keypad. Power liftgate logic.
11	5A <sup>2</sup>	Not used (spare).
12	7.5A <sup>2</sup>	Climate control. Gear shift control. Push-button ignition.
13	7.5A <sup>2</sup>	Cluster. Datalink module logic. Steering column module logic.

## Fuses

Fuse	Fuse amp rating	Protected components
14	10A <sup>2</sup>	Not used (spare).
15	10A <sup>2</sup>	Datalink module.
16	15A <sup>1</sup>	Not used (spare).
17	5A <sup>2</sup>	Cellphone passport module.
18	5A <sup>2</sup>	Not used (spare).
19	7.5A <sup>2</sup>	Not used (spare).
20	7.5A <sup>2</sup>	Not used (spare).
21	5A <sup>2</sup>	Humidity and in-car temperature.
22	5A <sup>2</sup>	Occupant classification system.
23	10A <sup>1</sup>	Delayed accessory (driver window switch, moonroof logic, power inverter logic).
24	20A <sup>1</sup>	Central lock and unlock.



# Fuses

Fuse	Fuse amp rating	Protected components
25	30A <sup>1</sup>	Driver door (window, mirror).
26	30A <sup>1</sup>	Front passenger door (window, mirror).
27	30A <sup>1</sup>	Moonroof.
28	20A <sup>1</sup>	THX amplifier.
29	30A <sup>1</sup>	Rear driver side door (window).
30	30A <sup>1</sup>	Rear passenger side door (window).
31	15A <sup>1</sup>	Not used (spare).
32	10A <sup>1</sup>	Display. GPS. Radio frequency receiver. Voice control.
33	20A <sup>1</sup>	Radio and active noise control.
34	30A <sup>1</sup>	Run/start bus (fuse #19, 20, 21, 22, 35, 36, 37, circuit breaker).

# Fuses

Fuse	Fuse amp rating	Protected components
35	5A <sup>1</sup>	Restraints control module.
36	15A <sup>1</sup>	Auto-dimming rear view mirror. Continuous control damping suspension. Lane keeping system module. Rear heated seats module.
37	20A <sup>1</sup>	All-wheel drive relay. Heated steering wheel.
38	30A	Not used (spare).

<sup>1</sup> Micro fuse.

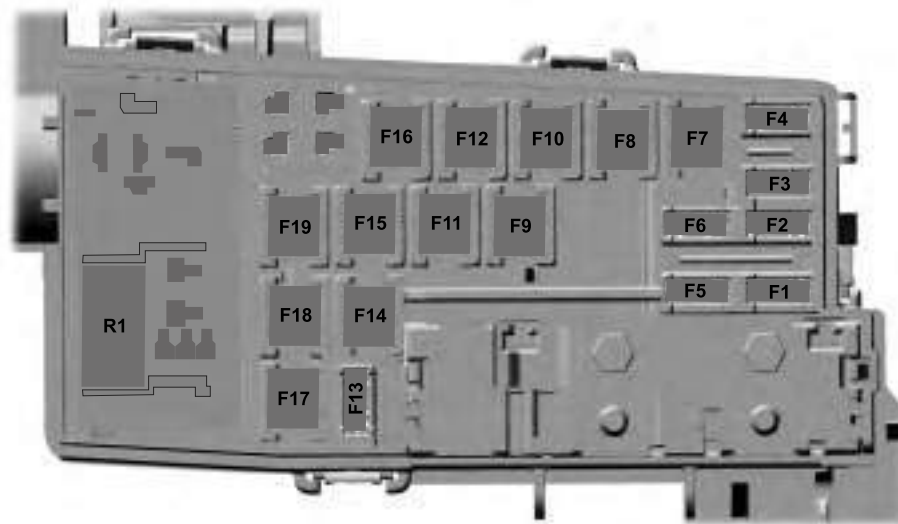
<sup>2</sup> Dual micro fuse.

## Rear Cargo Fuse Box

The fuse panel is located in the cargo area on the passenger side. Open the fuse panel cover to gain access to the fuses.

# Fuses

---



E228853

## Fuses

Fuse	Fuse amp rating	Protected components
F1	—	Not used.
F2	—	Not used.
F3	5A <sup>1</sup>	Hands-free liftgate module.
F4	—	Not used.
F5	—	Not used.
F6	—	Not used.
F7	30A <sup>2</sup>	Rear heated seats.
F8	30A <sup>2</sup>	Power cinch latch. Power liftgate.
F9	20A <sup>2</sup>	Heated front seats.
F10	40A <sup>2</sup>	Trailer tow.
F11	30A <sup>2</sup>	Climate control seats.
F12	20A <sup>2</sup>	Auxiliary power point - instrument panel.
F13	—	Not used.

# Fuses

Fuse	Fuse amp rating	Protected components
F14	30A <sup>2</sup>	Power seats.
F15	20A <sup>2</sup>	Auxiliary power point - inside of floor console.
F16	20A <sup>2</sup>	Auxiliary power point - rear of floor console.
F17	—	Not used.
F18	20A <sup>2</sup>	Auxiliary power point - cargo area.
F19	40A <sup>2</sup>	Inverter power outlet.

<sup>1</sup> Mini fuse.

<sup>2</sup> J-case fuse.

Relay	Circuits switched
R1	Not used.

# Fuses

---

## CHANGING A FUSE

### Fuses

#### WARNING



Always replace a fuse with one that has the specified amperage rating. Using a fuse with a higher amperage rating can cause severe wire damage and could start a fire.

---

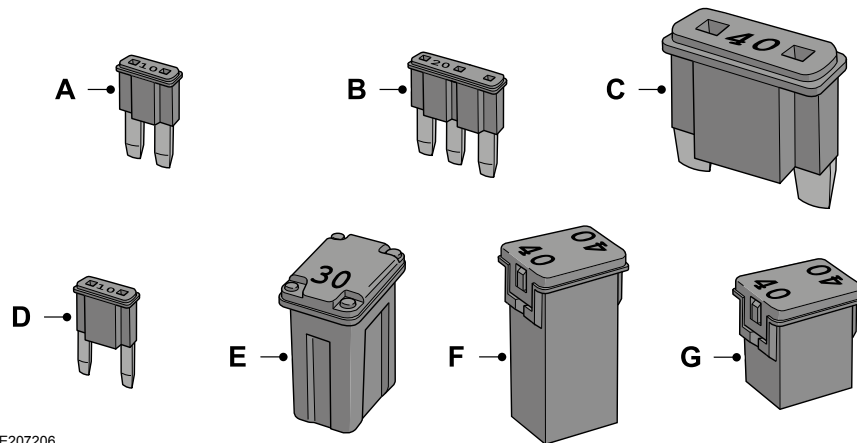


E217331

If electrical components in the vehicle are not working, a fuse may have blown. Blown fuses are identified by a broken wire within the fuse. Check the appropriate fuses before replacing any electrical components.

# Fuses

## Fuse Types



E207206

Callout	Fuse Type
A	Micro 2
B	Micro 3
C	Maxi

# Fuses

---

<b>Callout</b>	<b>Fuse Type</b>
D	Mini
E	M Case
F	J Case
G	J Case Low Profile



# Maintenance

## GENERAL INFORMATION

Have your vehicle serviced regularly to help maintain its roadworthiness and resale value. There is a large network of authorized dealers that are there to help you with their professional servicing expertise. We believe that their specially trained technicians are best qualified to service your vehicle properly and expertly. They are supported by a wide range of highly specialized tools developed specifically for servicing your vehicle.

If your vehicle requires professional service, an authorized dealer can provide the necessary parts and service. Check your warranty information to find out which parts and services are covered.

Use only recommended fuels, lubricants, fluids and service parts conforming to specifications. Motorcraft® parts are designed and built to provide the best performance in your vehicle.

## Precautions

- Do not work on a hot engine.
- Make sure that nothing gets caught in moving parts.
- Do not work on a vehicle with the engine running in an enclosed space, unless you are sure you have enough ventilation.
- Keep all open flames and other burning material (such as cigarettes) away from the battery and all fuel related parts.

## Working with the Engine Off

1. Set the parking brake and shift to park (P).
2. Switch off the engine.
3. Block the wheels.

## Working with the Engine On

### WARNING



To reduce the risk of vehicle damage and/or personal burn injuries, do not start your engine with the air cleaner removed and do not remove it while the engine is running.

1. Set the parking brake and shift to park (P).
2. Block the wheels.

## OPENING AND CLOSING THE HOOD

### Opening the Hood



E142457

1. Inside your vehicle, pull the hood release handle located under the left-hand side of the instrument panel.

# Maintenance

---

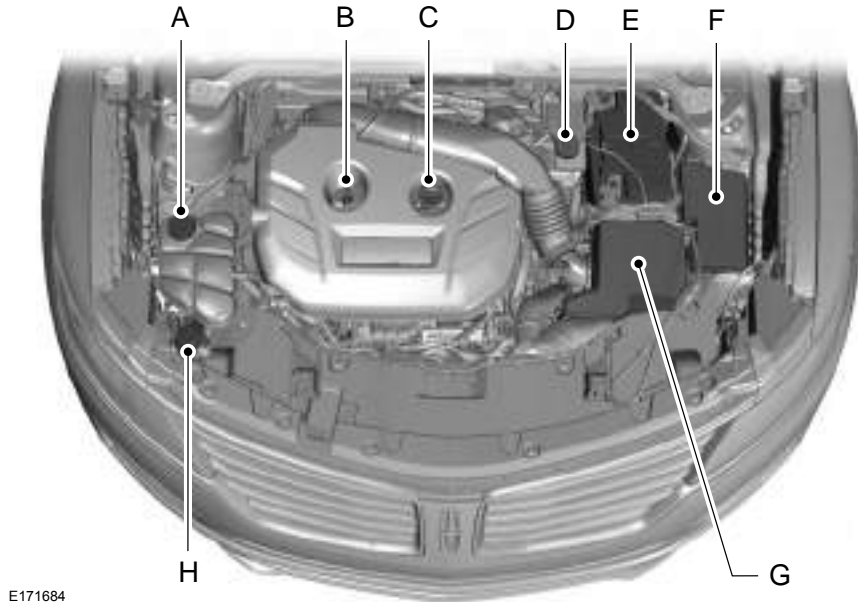


E142458

2. Go to the front of your vehicle and release the auxiliary latch.
3. Lift the hood until the lift cylinders hold it open.
4. To close the hood, lower the hood and apply closing force as it drops the last 8 to 11 inches (20 to 30 centimeters).

# Maintenance

## UNDER HOOD OVERVIEW



E171684

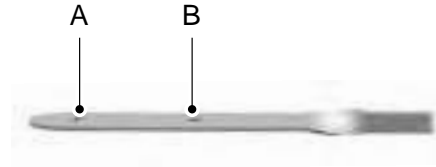
# Maintenance

---

- A Engine coolant reservoir
- B Engine oil dipstick
- C Engine oil filler cap
- D Brake fluid reservoir
- E Battery
- F Power distribution box
- G Air filter assembly
- H Windshield washer fluid reservoir

# Maintenance

## ENGINE OIL DIPSTICK



E170468

A MIN  
B MAX

## ENGINE OIL CHECK

1. Make sure that your vehicle is on level ground.
2. Check the oil level before starting the engine, or switch the engine off and wait 15 minutes for the oil to drain into the oil pan.

3. Remove the dipstick and wipe it with a clean, lint free cloth. Replace the dipstick and remove it again to check the oil level.

If the oil level is at the minimum mark, add oil immediately. See **Capacities and Specifications** (page 344).

Do not use supplemental engine oil additives because they are unnecessary and could lead to engine damage that may not be covered by your vehicle warranty.

**Note:** Make sure that the oil level is between the minimum and the maximum marks.

**Note:** The oil consumption of new engines reaches its normal level after approximately 3,000 mi (5,000 km).



## Adding Engine Oil



E142732

Only use oils certified for gasoline engines by the American Petroleum Institute (API). An oil with this trademark symbol conforms to the current engine and emission system protection standards and fuel economy requirements of the International Lubricants Specification Advisory Committee (ILSAC).

### WARNINGS

-  Only add oil when the engine is cold. If the engine is hot, wait 10 minutes for the engine to cool down.
-  Do not remove the filler cap when the engine is running.

# Maintenance

1. Remove the engine oil filler cap.
2. Add engine oil that meets Ford specifications. See **Capacities and Specifications** (page 344).
3. Wipe off any spilled oil.
4. Replace the engine oil filler cap. Turn it clockwise until you feel a strong resistance.

**Note:** Do not add oil further than the maximum mark. Oil levels above the maximum mark may cause engine damage.

**Note:** Soak up any spillage with an absorbent cloth immediately.

## OIL CHANGE INDICATOR RESET

Use the information display controls on the steering wheel to reset the oil change indicator.

### From the main menu scroll to:


Message	Action and description
Settings	Press the right arrow button, then from this menu scroll to the following message.
Vehicle	Press the right arrow button, then from this menu scroll to the following message.
Oil Life	Press the right arrow button, then from this menu scroll to the following message.
Hold OK to Reset	Press and hold the <b>OK</b> button until the instrument cluster displays the following message.  Reset Successful
	When the oil change indicator resets the instrument cluster displays 100%.  Remaining Life {00}%


Message	Action and description
	If the instrument cluster displays one of the following messages, repeat the process.  Not Reset  Reset Cancelled

## ENGINE COOLANT CHECK

### Checking the Engine Coolant

#### WARNINGS

 Do not add engine coolant when the engine is hot. Steam and scalding liquids released from a hot cooling system can burn you badly. Also, you can be burned if you spill coolant on hot engine parts.

 Do not put engine coolant in the windshield washer fluid container. If sprayed on the windshield, engine coolant could make it difficult to see through the windshield.

# Maintenance

## WARNINGS



To reduce the risk of personal injury, make sure the engine is cool before unscrewing the coolant pressure relief cap. The cooling system is under pressure; steam and hot liquid can come out forcefully when the cap is loosened slightly.



Do not add coolant further than the MAX mark.

**Note:** *Automotive fluids are not interchangeable. Do not use engine coolant or windshield washer fluid outside of its specified function and vehicle location.*

**Note:** *Do not use stop leak pellets, cooling system sealants, or additives as they can cause damage to the engine cooling or heating systems. This damage would not be covered under your vehicle's warranty.*

**Note:** *During normal vehicle operation, the engine coolant may change color from orange to pink or light red. As long as the engine coolant is clear and uncontaminated, this color change does not indicate the engine coolant has degraded nor does it require the engine coolant to be drained, the system to be flushed, or the engine coolant to be replaced.*

When the engine is cold, check the concentration and level of the engine coolant at the intervals listed in the scheduled maintenance information. See **Scheduled Maintenance** (page 472).

**Note:** *Make sure that the level is between the MIN and MAX marks on the coolant reservoir.*

**Note:** *Coolant expands when it is hot. The level may extend beyond the MAX mark.*

**Note:** *If the level is at the MIN mark, below the MIN mark, or empty, add coolant immediately. See **Adding Engine Coolant** in this chapter.*

The coolant concentration should be maintained within 48% to 50%, which equates to a freeze point between -30°F (-34°C) and -34°F (-37°C).

**Note:** *For best results, coolant concentration should be tested with a refractometer such as Robinair® Coolant and Battery Refractometer 75240. We do not recommend the use of hydrometers or coolant test strips for measuring coolant concentrations.*

# Maintenance

---

## Adding Engine Coolant

- Do not mix different colors or types of coolant in your vehicle. Make sure the correct coolant is used. Mixing of engine coolants may harm your engine's cooling system. The use of an improper coolant may harm engine and cooling system components and may void the warranty. Use prediluted engine coolant meeting the Ford specification. See **Capacities and Specifications** (page 344).
- In case of emergency, a large amount of water without engine coolant may be added in order to reach a vehicle service location. In this instance, the cooling system must be drained, chemically cleaned with Motorcraft Premium Cooling System Flush, and refilled with engine coolant as soon as possible. Water alone (without engine coolant) can cause engine damage from corrosion, overheating or freezing.

- Do not use alcohol, methanol, brine or any engine coolants mixed with alcohol or methanol antifreeze (coolant). Alcohol and other liquids can cause engine damage from overheating or freezing.
- Do not add extra inhibitors or additives to the coolant. These can be harmful and compromise the corrosion protection of the engine coolant.

Unscrew the cap slowly. Any pressure will escape as you unscrew the cap.

Add prediluted engine coolant meeting the Ford specification. See **Capacities and Specifications** (page 344).

Whenever coolant has been added, the coolant level in the coolant reservoir should be checked the next few times you drive the vehicle. If necessary, add enough prediluted engine coolant to bring the coolant level to the proper level.

## Recycled Engine Coolant

We do not recommend the use of recycled engine coolant since a Ford-approved recycling process is not yet available.

Used engine coolant should be disposed of in an appropriate manner. Follow your community's regulations and standards for recycling and disposing of automotive fluids.

## Severe Climates

If you drive in extremely cold climates:

- It may be necessary to have a Ford authorized dealer increase the coolant concentration above 50%.
- A coolant concentration of 60% will provide improved freeze point protection. Engine coolant concentrations above 60% will decrease the overheat protection characteristics of the engine coolant and may cause engine damage.



# Maintenance

If you drive in extremely hot climates:

- It may be necessary to have a Ford authorized dealer decrease the coolant concentration to 40%.
- A coolant concentration of 40% will provide improved overheat protection. Engine coolant concentrations below 40% will decrease the freeze and corrosion protection characteristics of the engine coolant and may cause engine damage.

Vehicles driven year-round in non-extreme climates should use prediluted engine coolant for optimum cooling system and engine protection.

## What You Should Know About Fail-Safe Cooling

If the engine coolant supply is depleted, this feature allows the vehicle to be driven temporarily before incremental component damage is incurred. The “fail-safe” distance depends on ambient temperatures, vehicle load and terrain.

## How Fail-Safe Cooling Works

If the engine begins to overheat, the engine coolant temperature gauge will move to the red (hot) area and:



A high engine temperature message will appear in the information display.



The service engine soon indicator will light.

If the engine reaches a preset over-temperature condition, the engine will automatically switch to alternating cylinder operation. Each disabled cylinder acts as an air pump and cools the engine.

When this occurs the vehicle will still operate. However:

- The engine power will be limited.
- The air conditioning system will be disabled.

Continued operation will increase the engine temperature and the engine will completely shut down, causing steering and braking effort to increase.

Once the engine temperature cools, the engine can be re-started. Take your vehicle to an authorized dealer as soon as possible to minimize engine damage.

## When Fail-Safe Mode Is Activated

### WARNINGS



Fail-safe mode is for use during emergencies only. Operate your vehicle in fail-safe mode only as long as necessary to bring your vehicle to rest in a safe location and seek immediate repairs. When in fail-safe mode, the vehicle will have limited power, will not be able to maintain high-speed operation, and may completely shut down without warning, potentially losing engine power, power steering assist, and power brake assist, which may increase the possibility of a crash resulting in serious injury.



Never remove the coolant reservoir cap while the engine is running or hot.

# Maintenance

You have limited engine power when in the fail-safe mode, so drive your vehicle with caution. Your vehicle will not be able to maintain high-speed operation and the engine will run rough. Remember that the engine is capable of completely shutting down automatically to prevent engine damage, therefore:

1. Pull off the road as soon as safely possible and switch the engine off.
2. Arrange for your vehicle to be taken to an authorized dealer.
3. If this is not possible, wait a short period for the engine to cool.
4. Check the coolant level and replenish if low.
5. Re-start the engine and take your vehicle to an authorized dealer.

**Note:** *Driving your vehicle without repairing the engine problem increases the chance of engine damage. Take your vehicle to an authorized dealer as soon as possible.*

## AUTOMATIC TRANSMISSION FLUID CHECK

The automatic transmission does not have a transmission fluid dipstick.

The automatic transmission does not consume fluid. However, the fluid level should be checked if the transmission is not working properly, for example if the transmission slips or shifts slowly or if you notice some sign of fluid leakage.

**Note:** *Transmission fluid should be checked by an authorized dealer. If required, fluid should be added by an authorized dealer.*

Do not use supplemental transmission fluid additives, treatments or cleaning agents. The use of these materials may affect transmission operation and result in damage to internal transmission components.

## BRAKE FLUID CHECK

### WARNINGS



Do not use any fluid other than the recommended brake fluid as this will reduce brake efficiency. Use of incorrect fluid could result in the loss of vehicle control, serious personal injury or death.



Only use brake fluid from a sealed container. Contamination with dirt, water, petroleum products or other materials may result in brake system damage or failure. Failure to adhere to this warning could result in the loss of vehicle control, serious personal injury or death.



Do not allow the fluid to touch your skin or eyes. If this happens, rinse the affected areas immediately with plenty of water and contact your physician.



A fluid level between the **MAX** and **MIN** lines is within the normal operating range and there is no need to add fluid. A fluid level not in the normal operating range could compromise the performance of the system. Have your vehicle checked immediately.


# Maintenance

To avoid fluid contamination, the reservoir cap must remain in place and fully tight, unless you are adding fluid.

Only use fluid that meets Ford specifications. See **Capacities and Specifications** (page 344).

## WASHER FLUID CHECK

### WARNING

 If you operate your vehicle in temperatures below 40°F (5°C), use washer fluid with antifreeze protection. Failure to use washer fluid with antifreeze protection in cold weather could result in impaired windshield vision and increase the risk of injury or accident.

**Note:** *The front and rear washer systems are supplied from the same reservoir.*

Add fluid to fill the reservoir if the level is low. Only use a washer fluid that meets Ford specifications. See **Capacities and Specifications** (page 344).


State or local regulations on volatile organic compounds may restrict the use of methanol, a common windshield washer antifreeze additive. Washer fluids containing non-methanol antifreeze agents should be used only if they provide cold weather protection without damaging the vehicle's paint finish, wiper blades or washer system.

## FUEL FILTER


Your vehicle is equipped with a lifetime fuel filter that is integrated with the fuel tank. Regular maintenance or replacement is not needed.


## CHANGING THE 12V BATTERY


### WARNINGS

 Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow flames, sparks or lighted substances to come near the battery. When working near the battery, always shield your face and protect your eyes. Always provide correct ventilation.

### WARNINGS

 When lifting a plastic-cased battery, excessive pressure on the end walls could cause acid to flow through the vent caps, resulting in personal injury and damage to the vehicle or battery. Lift the battery with a battery carrier or with your hands on opposite corners.

 Keep batteries out of reach of children. Batteries contain sulfuric acid. Avoid contact with skin, eyes or clothing. Shield your eyes when working near the battery to protect against possible splashing of acid solution. In case of acid contact with skin or eyes, flush immediately with water for a minimum of 15 minutes and get prompt medical attention. If acid is swallowed, call a physician immediately.

 Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.

Your vehicle is fitted with a Motorcraft maintenance-free battery which normally does not require additional water.

# Maintenance

---

When a battery replacement is required, you must use a recommended replacement battery that matches the electrical requirements of the vehicle.

**Note:** *If your vehicle has a battery cover, after cleaning or replacing the battery, make sure you reinstall it.*

**Note:** *See an authorized dealer for battery access, testing, or replacement.*

To make sure the battery management system works correctly, do not connect an electrical device ground connection directly to the battery negative post. This can cause inaccurate measurements of the battery condition and potential incorrect system operation.

**Note:** *If you add electrical accessories or components to the vehicle, it may adversely affect battery performance and durability. This may also affect the performance of other electrical systems in the vehicle.*

If you see any corrosion on the battery or terminals, remove the cables from the terminals and clean with a wire brush. You can neutralize the acid with a solution of baking soda and water.

Because your vehicle's engine is electronically-controlled by a computer, some engine control settings are maintained by power from the battery. Some engine computer settings, like the idle trim and fuel trim strategy, optimize the driveability and performance of the engine. The clock and radio station presets are also maintained in memory by power from the low-voltage battery. These settings are erased when a technician disconnects and connects the low-voltage battery.

To restore the settings, do the following:

**Note:** *Until you switch the ignition to the on position, you will receive a message in your information display stating that your vehicle is not in park.*

1. Apply the parking brake.
2. Shift into park (P) or neutral (N).
3. Switch off all accessories.
4. Press the brake pedal and start your vehicle.

5. Run the engine until it reaches normal operating temperature. While the engine is warming up, complete the following: Reset the clock. See **Audio System** (page 362). Reset the power windows bounce-back feature. See **Windows and Mirrors** (page 93). Reset the radio station presets. See **Audio System** (page 362).
6. Allow the engine to idle for at least one minute.
7. Drive the vehicle at least 10 mi (16 km) to completely relearn the idle trim and fuel trim strategy.

**Note:** *If you do not allow the engine to relearn the idle and fuel trim strategy, the idle quality of your vehicle may be adversely affected until the engine computer eventually relearns the idle trim and fuel trim strategy.*

**Note:** *Certain features may not operate if the battery monitor system is not reset with a scan tool following a jump start or battery replacement. Normal electrical accessory operation should resume after your vehicle is left undisturbed for 8 hours.*

# Maintenance

Make sure that you dispose of old batteries in an environmentally friendly way. Seek advice from your local authority about recycling old batteries.

If storing your vehicle for more than 30 days without recharging the battery, we recommend that you disconnect the battery cables to maintain battery charge for quick starting.

## CHECKING THE WIPER BLADES



E142463

Run the tip of your fingers over the edge of the blade to check for roughness.

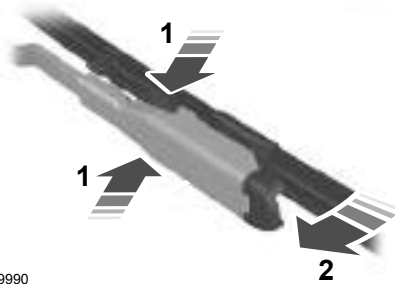
Clean the wiper blades with washer fluid or water applied with a soft sponge or cloth.

## CHANGING THE WIPER BLADES

You can improve poor wiper quality by cleaning the wiper blades and the windshield.

Replace the wiper blades at least annually for optimum performance.

### Front Wiper Blades



E129990

1. Lift the wiper arm and then press the wiper blade locking buttons together.

**Note:** Do not hold the wiper blade when lifting the wiper arm.

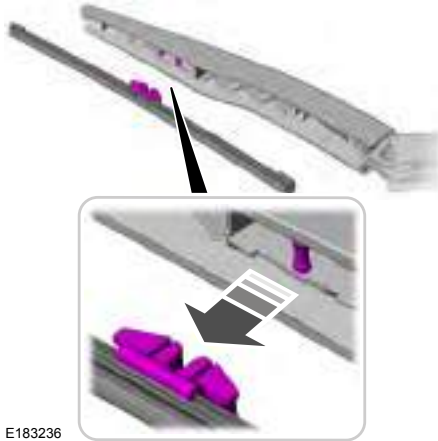
**Note:** Make sure that the wiper arm does not spring back against the glass when the wiper blade is not attached.

2. Slightly rotate the wiper blade.
3. Remove the wiper blade.
4. Install in the reverse order.

**Note:** Make sure that the wiper blade locks into place.

# Maintenance

## Rear Window Wiper Blade



E183236

1. Lift the wiper arm.

**Note:** Do not hold the wiper blade when lifting the wiper arm.

**Note:** Make sure that the wiper arm does not spring back against the glass when the wiper blade is not attached.

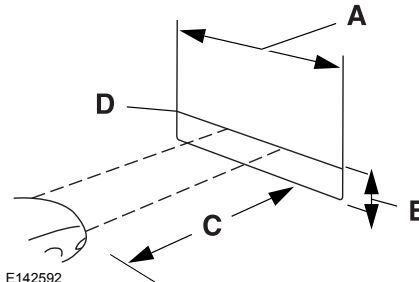
2. Remove the wiper blade.

**Note:** Make sure that the wiper blade locks into place.

## ADJUSTING THE HEADLAMPS

### Vertical Aim Adjustment

The assembly plant properly aims the headlamps on your vehicle. If your vehicle has been in an accident, have the alignment of your headlamps checked by your authorized dealer.



E142592

- A 8 feet (2.4 meters)
- B Center height of lamp to ground
- C 25 feet (7.6 meters)
- D Horizontal reference line

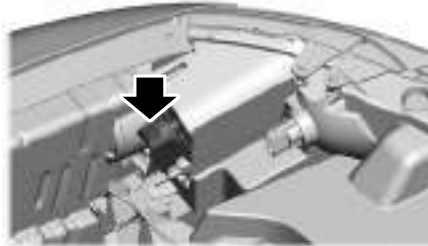
1. Park the vehicle directly in front of a wall or screen on a level surface, approximately 25 feet (7.6 meters) away.
  2. Measure the height of the headlamp bulb center from the ground and mark an 8 foot (2.4 meter) horizontal reference line on the vertical wall or screen at this height.
- Note:** To see a clearer light pattern for adjusting, you may want to block the light from one headlamp while adjusting the other.
3. Switch on the low beam headlamps to light the wall or screen and open the hood.

# Maintenance



E142465

4. On the wall or screen, you will observe a flat zone of high intensity light located at the top of the right hand portion of the beam pattern. If the top edge of the high intensity light zone is not at the horizontal reference line, you will need to adjust the headlamp.



E171165

5. Locate the vertical adjuster on each headlamp. Turn the adjuster either clockwise or counterclockwise in order to aim the headlamp.
6. Close the hood and switch off the lamps.

## Horizontal Aim Adjustment

Horizontal aim is not required for this vehicle and is non-adjustable.

## REMOVING A HEADLAMP

To gain access to the headlamp securing bolts and to remove the headlamp assembly, you must first remove the front fascia and front bumper assemblies. We recommend you see an authorized dealer.

## CHANGING A BULB

### WARNINGS



Switch all of the lamps and the ignition off. Failure to follow this warning could result in serious personal injury.



Bulbs can become hot. Let the bulb cool down before removing it. Failure to do so could result in personal injury.

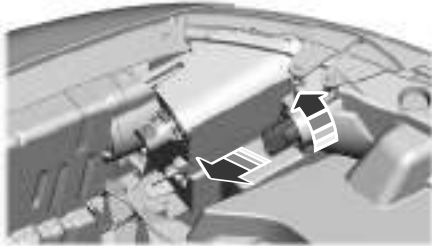
Install in the reverse order unless otherwise stated.

## High Intensity Discharge Headlamp (if Equipped)

These lamps operate at a high voltage. See an authorized dealer if they fail.

# Maintenance

## Front Direction Indicator



E171167

1. Remove the headlamp. See **Removing a Headlamp** (page 300).
2. Turn the bulb holder counterclockwise and remove it.
3. Remove the bulb by pulling it straight out.

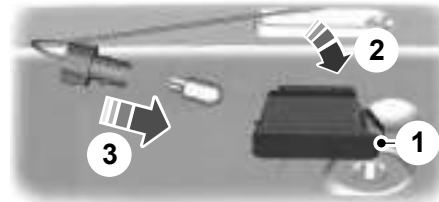
## LED Lamps

LED lamps are not serviceable items. See an authorized dealer if they fail.

The following lamps are LED:

- Side direction indicators.
- Approach lamp.
- Brake and rear lamps.
- Rear direction indicators.
- Reversing lamps.
- Central high mounted brake lamp.

## License Plate Lamp



E72789

1. Use a suitable tool, for example a screwdriver, to carefully remove the lamp.
2. Remove the lamp.
3. Turn the bulb holder counterclockwise and remove it.
4. Remove the bulb by pulling it straight out.

## BULB SPECIFICATION CHART

The specified replacement bulbs are in the chart below. Headlamp bulbs must be marked with an authorized D.O.T. (Department of Transportation) for North America to affirm lamp performance, light brightness and pattern and safe visibility. The correct bulbs will not damage the lamp assembly or void the lamp assembly warranty and will provide quality bulb burn time.



# Maintenance

---

Function	Trade number
* Headlamp (high intensity discharge) Low/High	D3S
* Sidemarker - front	LED
* Park lamp - front	LED
* Turn lamp - front	7444NA
Signal indicator mirror lamp	LED
Welcome light	LED
Approach lamp	LED
* Tail/brake lamp	LED
* Turn lamp - rear	LED
* Backup lamp	LED
License plate lamp	W5W
* High-mount brake lamp	LED
* Interior lamps	LED

\* To replace these lamps, see your authorized dealer.

To replace instrument panel lights, see your authorized dealer.

# Maintenance

## CHANGING THE ENGINE AIR FILTER

### WARNING



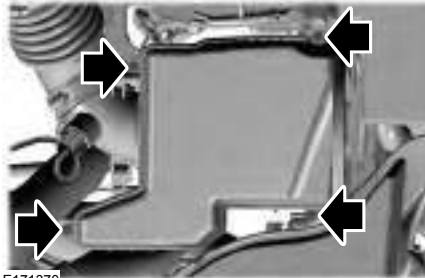
To reduce the risk of vehicle damage and personal burn injuries, do not start your engine with the air cleaner removed. Do not remove the air cleaner while the engine is running.

When changing the air filter element, use only the air filter element listed in the Motorcraft Parts table. See **Motorcraft Parts** (page 346).

For EcoBoost equipped vehicles: When servicing the air cleaner, it is important that no foreign material enter the air induction system. The engine and turbocharger are susceptible to damage from even small particles.

Change the air filter element at the proper interval. See **Scheduled Maintenance** (page 472).

**Note:** Failure to use the correct air filter element may result in severe engine damage. The customer warranty may be void for any damage to the engine if the correct air filter element is not used.



E171370

1. Loosen the four fasteners and remove the air cleaner assembly lid.
2. Remove the air filter element from the air filter housing.
3. Wipe any dirt or debris from the air cleaner assembly to make sure no dirt gets in the engine and to make sure you have a good seal.



E170433

# Maintenance

---

4. Install the new air filter element. Slide the open end of the air filter element in first, below the tab. Then push the closed end of the air filter into the bottom of the tray. The closed end should fit inside the groove in the tray. The tab of the closed end of the air filter should be oriented down and fit between the forks on the tray as shown at the arrow above.

**Note:** *Make sure you align the tab in the air filter element with the fork in the air cleaner assembly tray.*

5. Install the air cleaner assembly lid and tighten the four fasteners.

# Vehicle Care

## GENERAL INFORMATION

vehicle and protect its finishes.

Your Ford or Lincoln authorized dealer has many quality products available to clean your

### Materials

Name	Specification
Motorcraft Bug and Tar Remover ZC-42	-
Motorcraft Custom Bright Metal Cleaner ZC-15	-
Motorcraft® Detail Wash ZC-3-A	ESR-M14P4-A
Motorcraft Engine Shampoo and Degreaser (U.S.) ZC-20 (U.S.)	-
Engine Shampoo	-
Motorcraft Leather and Vinyl Cleaner ZC-56	-
Multi-Purpose Cleaner	-
Motorcraft® Premium Windshield Wash Concentrate with Bitterant (U.S.) ZC-32-B2 (U.S.)	WSS-M14P19-A
Professional Strength Carpet and Upholstery Cleaner ZC-54	-
Motorcraft Spot and Stain Remover (U.S.) ZC-14 (U.S.)	-
Motorcraft® Ultra-Clear Spray Glass Cleaner (U.S.)	ESR-M14P5-A

## CLEANING PRODUCTS

For best results, use the following products or products of equivalent quality:

# Vehicle Care

Name	Specification
ZC-23 (U.S.)	
Motorcraft® Wheel and Tire Cleaner ZC-37-A	-

## CLEANING THE EXTERIOR

Wash your vehicle regularly with cool or lukewarm water and a neutral pH shampoo, we recommend Motorcraft Detail Wash.

- Never use strong household detergents or soap, for example dish washing or laundry liquid. These products can discolor and spot painted surfaces.
- Never wash your vehicle when it is hot to the touch, or during strong or direct sunlight.
- Dry your vehicle with a chamois or soft terry cloth towel to eliminate water spotting.

- Immediately remove fuel spillages, bird droppings, insect deposits and road tar. These may cause damage to your vehicle's paintwork or trim over time. We recommend Motorcraft Bug and Tar Remover.
- Remove any exterior accessories, for example antennas, before entering a car wash.

**Note:** *Suntan lotions and insect repellents can damage painted surfaces. If these substances come in contact with your vehicle, wash the affected area as soon as possible.*

## Exterior Chrome Parts

- Apply a high quality-cleaning product to bumpers and other chrome parts. Follow the manufacturer's instructions. We recommend Motorcraft Custom Bright Metal Cleaner.
- Do not apply the cleaning product to hot surfaces. Do not leave the cleaning product on chrome surfaces longer than the time recommended.
- Using other non-recommended cleaners can result in severe and permanent cosmetic damage.

**Note:** *Never use abrasive materials, for example steel wool or plastic pads as they can scratch the chrome surface.*

**Note:** *Do not use chrome cleaner, metal cleaner or polish on wheels or wheel covers.*

# Vehicle Care

---

## Exterior Plastic Parts

For routine cleaning we recommend Motorcraft Detail Wash. If tar or grease spots are present, we recommend Motorcraft Bug and Tar Remover.

## Stripes or Graphics (If Equipped)

Hand washing your vehicle is preferred however, pressure washing may be used under the following conditions:

- Do not use water pressure higher than 2,000 psi (14,000 kPa).
- Do not use water hotter than 179°F (82°C).
- Use a spray with a 40° wide spray angle pattern.
- Keep the nozzle at a 12 in (305 mm) distance and 90° angle to your vehicle's surface.

**Note:** *Holding the pressure washer nozzle at an angle to the vehicle's surface may damage graphics and cause the edges to peel away from the vehicle's surface.*

## Underbody

Flush the complete underside of your vehicle frequently. Keep body and door drain holes free of debris or foreign material.

## Under Hood

For removing black rubber marks from under the hood we recommend Motorcraft Wheel and Tire Cleaner or Motorcraft Bug and Tar Remover.

## WAXING

Regular waxing is necessary to protect your car's paint from the elements. We recommend that you wash and wax the painted surface once or twice a year.

When washing and waxing, park your vehicle in a shaded area out of direct sunlight. Always wash your vehicle before applying wax.

- Use a quality wax that does not contain abrasives.
- Follow the manufacturer's instructions to apply and remove the wax.

- Apply a small amount of wax in a back-and-forth motion, not in circles.
- Do not allow wax to come in contact with any non-body (low-gloss black) colored trim. The wax will discolor or stain the parts over time.
  - Roof racks.
  - Bumpers.
  - Grained door handles.
  - Side moldings.
  - Mirror housings.
  - Windshield cowl area.
- Do not apply wax to glass areas.
- After waxing, your car's paint should feel smooth, and be free of streaks and smudges.

## CLEANING THE ENGINE

Engines are more efficient when they are clean because grease and dirt buildup keep the engine warmer than normal.

# Vehicle Care

When washing:

- Take care when using a power washer to clean the engine. The high-pressure fluid could penetrate the sealed parts and cause damage.
- Do not spray a hot engine with cold water to avoid cracking the engine block or other engine components.
- Spray Motorcraft Engine Shampoo and Degreaser on all parts that require cleaning and pressure rinse clean. In Canada, use Motorcraft Engine Shampoo.
- Never wash or rinse the engine while it is hot or running; water in the running engine may cause internal damage.
- Never wash or rinse any ignition coil, spark plug wire or spark plug well, or the area in and around these locations.
- Cover the battery, power distribution box, and air filter assembly to prevent water damage when cleaning the engine.

## CLEANING THE WINDOWS AND WIPER BLADES

Car wash chemicals and environmental fallout can result in windshield and wiper blade contamination. Dirty windshield and wipers will result in poor windshield wiper operation. Keep the windshield and wiper blades clean to maintain windshield wiper performance.

To clean the windshield and wiper blades:

- Clean the windshield with a non-abrasive glass cleaner. When cleaning the interior of the windshield, avoid getting any glass cleaner on the instrument panel or door panels. Wipe any glass cleaner off these surfaces immediately.
- For windshields contaminated with tree sap, chemicals, wax or bugs, clean the entire windshield using steel wool (no greater than 0000 grade) in a circular motion and rinse with water.
- Clean the wiper blades with isopropyl rubbing alcohol or windshield washer concentrate.

**Note:** Do not use razor blades or other sharp objects to clean or remove decals from the inside of the heated rear window. The vehicle warranty does not cover damage caused to the heated rear window grid lines.

## CLEANING THE INTERIOR

### WARNINGS



Do not use cleaning solvents, bleach or dye on the vehicle's safety belts, as these actions may weaken the belt webbing.



On vehicles equipped with seat-mounted airbags, do not use chemical solvents or strong detergents. Such products could contaminate the side airbag system and affect performance of the side airbag in a collision.

**Note:** Follow the same procedure for cleaning leather seats when cleaning leather interior. See **Cleaning Leather Seats** (page 311).

# Vehicle Care

**Note:** Do not use household cleaning products or glass cleaners, which can stain and discolor the fabric and affect the flame retardant abilities of the seat materials.

For fabric, carpets, cloth seats, safety belts and seats equipped with side airbags:

- Remove dust and loose dirt with a vacuum cleaner.
- Remove light stains and soil with Motorcraft Professional Strength Carpet & Upholstery Cleaner.

For grease or tar stains:

- Spot clean the area with Motorcraft Spot and Stain Remover (Motorcraft Multi-Purpose Cleaner in Canada).
- If a ring forms on the fabric after spot cleaning, clean the entire area immediately (but do not oversaturate) or the ring will set.

## Cleaning Black Label or Presidential Interior (If Equipped)

**Note:** Alcantara microfiber cloth fabric is made of polyester microfiber with micro-porous polyurethane. Using commercially available fabric cleaners can cause permanent damage.

**Note:** Do not use commercially available leather and vinyl cleaning products on Alcantara microfiber cloth fabric.

**Note:** Lincoln Black Label or Presidential vehicles may have Alcantara microfiber cloth fabric on the seats, headliner, floor mats and door panels.

Depending on the type of stain, use water, lemon juice or pure ethyl alcohol when cleaning. For cleaning Alcantara microfiber cloth, refer to the following chart:

Type of Stain	Cleaning Procedure
Fruit juice, jam, jelly, syrup or ketchup.	Use lukewarm water and rinse by dabbing with clean water.
Blood, egg, excrement or urine.	Use cold water and rinse by dabbing with clean water. Avoid warm water because it makes these substances coagulate.
Liquor, alcoholic beverages, wine, beer, cola and tea.	Use lukewarm water. If the color remains, treat with lemon juice and then rinse.



# Vehicle Care

Type of Stain	Cleaning Procedure
Indelible pencil, cocoa, chocolate, pastry with cream or chocolate, ice cream or mustard.	Use lukewarm water and rinse by dabbing with clean water.
Vinegar, hair gel, tomato sauce or coffee with sugar.	Use lemon juice, wipe with lukewarm water and rinse by dabbing with clean water.
Dye transfer and all other stains.	Use ethyl alcohol, then dab with water.

## CLEANING THE INSTRUMENT PANEL AND INSTRUMENT CLUSTER LENS

### WARNING



Do not use chemical solvents or strong detergents when cleaning the steering wheel or instrument panel to avoid contamination of the airbag system.

**Note:** Follow the same procedure as cleaning leather seats for cleaning leather instrument panels and leather interior trim surfaces. See **Cleaning Leather Seats** (page 311).

Clean the instrument panel and cluster lens with a clean, damp and soft cloth, then use a clean, dry and soft cloth to dry these areas.

- Avoid cleaners or polishes that increase the gloss of the upper portion of the instrument panel. The dull finish in this area helps protect you from undesirable windshield reflection.
- Do not use any household cleaning products or glass cleaners as these may damage the finish of the instrument panel, interior trim and cluster lens.

- Wash or wipe your hands clean if you have been in contact with certain products such as insect repellent and suntan lotion to avoid possible damage to the interior painted surfaces.
- Do not allow air fresheners and hand sanitizers to spill onto interior surfaces. If a spill occurs, wipe off immediately. Your warranty may not cover these damages.

If a staining liquid like coffee or juice has been spilled on the instrument panel or on interior trim surfaces:

1. Wipe up spilled liquid using a clean, soft cloth as quickly as possible.

# Vehicle Care

---

2. Use Motorcraft Premium Leather and Vinyl Cleaner or a commercially available leather cleaning product for automotive interiors. Test any cleaner or stain remover on an inconspicuous area.
3. Alternatively, wipe the surface with a clean, soft cloth and a mild soap and water solution. Dry the area with a clean, soft cloth.
4. If necessary, apply more soap and water solution or cleaning product to a clean, soft cloth and press it onto the soiled area. Allow this to set at room temperature for 30 minutes.
5. Remove the soaked cloth, then with a clean, damp cloth, use a rubbing motion for 60 seconds on the soiled area.
6. Dry the area with a clean, soft cloth.

## **CLEANING LEATHER SEATS** (If

Equipped)

**Note:** *Follow the same procedure as cleaning leather seats for cleaning leather instrument panels and leather interior trim surfaces.*

For routine cleaning, wipe the surface with a soft, damp cloth and a mild soap and water solution. Dry the area with a clean, soft cloth.

For cleaning and removing stains such as dye transfer, use Motorcraft Premium Leather and Vinyl Cleaner or a commercially available leather cleaning product for automotive interiors.

**Note:** *Test any cleaner or stain remover on an inconspicuous area.*

You should:

- Remove dust and loose dirt with a vacuum cleaner.
- Clean and treat spills and stains as soon as possible.

Do not use the following products as these may damage the leather:

- Oil and petroleum or silicone-based leather conditioners.
- Household cleaners.
- Alcohol solutions.
- Solvents or cleaners intended specifically for rubber, vinyl and plastics.

## **REPAIRING MINOR PAINT DAMAGE**

Authorized dealers have touch-up paint to match your vehicle's color. Your vehicle color code is printed on a sticker on the front, left-hand side door jamb. Take your color code to your authorized dealer to make sure you get the correct color.

Before repairing minor paint damage, use a cleaner such as Motorcraft Bug and Tar Remover to remove particles such as bird droppings, tree sap, insect deposits, tar spots, road salt and industrial fallout.

Always read the instructions before using cleaning products.

# Vehicle Care

---

## CLEANING THE ALLOY WHEELS (If

Equipped)

**Note:** Do not apply a cleaning chemical to warm or hot wheel rims and covers.

**Note:** Some automatic car washes may cause damage to the finish on your wheel rims and covers.

**Note:** Industrial-strength or heavy-duty cleaners in combination with brush agitation to remove brake dust and dirt, could wear away the clear coat finish over a period time.

**Note:** Do not use hydrofluoric acid-based or high caustic-based wheel cleaners, steel wool, fuels or strong household detergents.

**Note:** If you intend parking your vehicle for an extended period after cleaning the wheels with a wheel cleaner, drive your vehicle for a few minutes before doing so. This will reduce the risk of increased corrosion of the brake discs.

Alloy wheels and wheel covers are coated with a clear coat paint finish. To maintain their condition we recommend that you:

- Clean the wheels weekly using Motorcraft Wheel and Tire Cleaner. Apply using manufacturer's instructions.
- Use a sponge to remove heavy deposits of dirt and brake dust accumulation.
- Rinse thoroughly with a strong stream of water when you have completed the cleaning process.
- To remove tar and grease, use Motorcraft Bug and Tar Remover.

## VEHICLE STORAGE

If you plan on storing your vehicle for 30 days or more, read the following maintenance recommendations to make sure your vehicle stays in good operating condition.

We engineer and test all motor vehicles and their components for reliable, regular driving. Under various conditions, long-term storage may lead to degraded engine performance or failure unless you use specific precautions to preserve engine components.

## General

- Store all vehicles in a dry, ventilated place.
- Protect from sunlight, if possible.
- If vehicles are stored outside, they require regular maintenance to protect against rust and damage.

## Body

- Wash your vehicle thoroughly to remove dirt, grease, oil, tar or mud from exterior surfaces, rear-wheel housing and the underside of front fenders.
- Periodically wash your vehicle if it is stored in exposed locations.
- Touch-up exposed or primed metal to prevent rust.
- Cover chrome and stainless steel parts with a thick coat of auto wax to prevent discoloration. Re-wax as necessary when you wash your vehicle.
- Lubricate all hood, door and luggage compartment hinges and latches with a light grade oil.

# Vehicle Care

---

- Cover interior trim to prevent fading.
- Keep all rubber parts free from oil and solvents.

## Engine

- Change the engine oil and filter prior to storage because used engine oil contains contaminants which may cause engine damage.
- Start the engine every 15 days for a minimum of 15 minutes. Run at fast idle with the climate controls set to defrost until the engine reaches normal operating temperature.
- With your foot on the brake, shift through all the gears while the engine is running.
- We recommend that you change the engine oil before you use your vehicle again.

## Fuel system

- Fill the fuel tank with high-quality fuel until the first automatic shutoff of the fuel pump nozzle.

## Cooling system

- Protect against freezing temperatures.
- When removing your vehicle from storage, check coolant fluid level. Confirm that there are no cooling system leaks and that fluid is at the recommended level.

## Battery

- Check and recharge as necessary. Keep connections clean.
- If storing your vehicle for more than 30 days without recharging the battery, we recommend that you disconnect the battery cables to maintain battery charge for quick starting.

**Note:** *It is necessary to reset memory features if battery cables are disconnected.*

## Brakes

- Make sure the brakes and parking brake release fully.

## Tires

- Maintain recommended air pressure.

## Miscellaneous

- Make sure all linkages, cables, levers and pins under your vehicle are covered with grease to prevent rust.
- Move vehicles at least 25 ft (7.5 m) every 15 days to lubricate working parts and prevent corrosion.

## Removing Vehicle From Storage

When your vehicle is ready to come out of storage, do the following:

- Wash your vehicle to remove any dirt or grease film build-up on window surfaces.
- Check windshield wipers for any deterioration.
- Check under the hood for any foreign material that may have collected during storage such as mice or squirrel nests.
- Check the exhaust for any foreign material that may have collected during storage.
- Check tire pressures and set tire inflation per the Tire Label.

# Vehicle Care

---

- Check brake pedal operation. Drive your vehicle 15 ft (4.5 m) back and forth to remove rust build-up.
- Check fluid levels (including coolant, oil and gas) to make sure there are no leaks, and fluids are at recommended levels.
- If you remove the battery, clean the battery cable ends and check for damage.


Contact an authorized dealer if you have any concerns or issues.


# Wheels and Tires

## GENERAL INFORMATION

### Notice to utility vehicle and truck owners

#### WARNINGS

 Utility vehicles have a significantly higher rollover rate than other types of vehicles. To reduce the risk of serious injury or death from a rollover or other crash you must avoid sharp turns and abrupt maneuvers, drive at safe speeds for the conditions, keep tires properly inflated, never overload or improperly load your vehicle, and make sure every passenger is properly restrained.

 In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. All occupants must wear seat belts, and children and infants must use appropriate restraints to minimize the risk of injury or ejection.




E145298

Utility vehicles and trucks handle differently than passenger cars in the various driving conditions that are encountered on streets, highways and off-road. Utility vehicles and trucks are not designed for cornering at speeds as high as passenger cars any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions.

Study your owner's manual and any supplements for specific information about equipment features, instructions for safe driving and additional precautions to reduce the risk of an accident or serious injury.

### All-wheel drive system (if equipped)

#### WARNING

 Do not become overconfident in the ability of all-wheel-drive vehicles. Although an all-wheel-drive vehicle may accelerate better than a two-wheel drive vehicle in low traction situations, it will not stop any faster than two-wheel drive vehicles. Always drive at a safe speed.

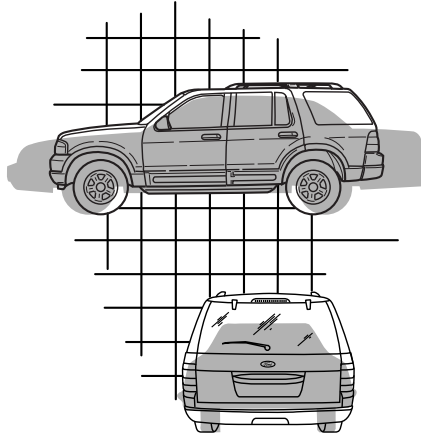
A vehicle equipped with all-wheel drive has the ability to use all four wheels to power itself. This increases traction which may enable you to safely drive over terrain and road conditions that a conventional two-wheel drive vehicle cannot.

For all-wheel-drive vehicles, a spare tire of a different size other than the tire provided should never be used. A dissimilar spare tire size (other than the spare tire provided) or major dissimilar tire sized between the front and rear axles could cause the all-wheel-drive system to stop functioning and default to front-wheel drive.

# Wheels and Tires

## How your vehicle differs from other vehicles

Sport utility vehicles and trucks can differ from some other vehicles in a few noticeable ways. Your vehicle may be:

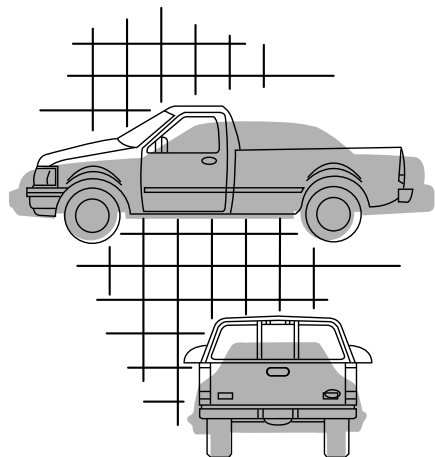


E145299

- Higher - to allow higher load carrying capacity and to allow it to travel over rough terrain without getting hung up or damaging underbody components.
- Shorter - to give it the capability to approach inclines and drive over the crest of a hill without getting hung up or damaging underbody components. All other things held equal, a shorter wheelbase may make your vehicle quicker to respond to steering inputs than a vehicle with a longer wheelbase.
- Narrower - to provide greater maneuverability in tight spaces, particularly in off-road use.

# Wheels and Tires

As a result of the above dimensional differences, Sport utility vehicles and trucks often will have a higher center of gravity and a greater difference in center of gravity between the loaded and unloaded condition. These differences that make your vehicle so versatile also make it handle differently than an ordinary passenger car.



E168583

## TIRE CARE

### Information About Uniform Tire Quality Grading



E142542

Tire Quality Grades apply to new pneumatic passenger car tires. The Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example: **Treadwear 200 Traction AA Temperature A.**

These Tire Quality Grades are determined by standards that the United States Department of Transportation has set.

Tire Quality Grades apply to new pneumatic passenger car tires. They do not apply to deep tread, winter-type snow tires, space-saver or temporary use spare tires, light truck or LT type tires, tires with nominal rim diameters of 10 to 12 inches or limited production tires as defined in Title 49 Code of Federal Regulations Part 575.104 (c)(2).

**U.S. Department of Transportation Tire quality grades:** The U.S. Department of Transportation requires Ford Motor Company to give you the following information about tire grades exactly as the government has written it.



# Wheels and Tires

## Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear 1½ times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices, and differences in road characteristics and climate.

## Traction AA A B C

### WARNING



The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning or peak traction characteristics.

The traction grades, from highest to lowest are AA, A, B, and C. The grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

## Temperature A B C

### WARNING



The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

The temperature grades are A (the highest), B and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause

the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 139. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

## Glossary of Tire Terminology

**\*Tire label:** A label showing the original equipment tire sizes, recommended inflation pressure and the maximum weight the vehicle can carry.

**\*Tire Identification Number (TIN):** A number on the sidewall of each tire providing information about the tire brand and manufacturing plant, tire size and date of manufacture. Also referred to as DOT code.

**\*Inflation pressure:** A measure of the amount of air in a tire.

# Wheels and Tires

---

**\*Standard load:** A class of P-metric or Metric tires designed to carry a maximum load at set pressure. For example: For P-metric tires 35 psi (2.4 bar) or 36 psi (2.5 bar) depending on tires size and for Metric tires 36 psi (2.5 bar). Increasing the inflation pressure beyond this pressure will not increase the tire's load carrying capability.

**\*Extra load:** A class of P-metric or Metric tires designed to carry a heavier maximum load at 42 psi (2.9 bar). Increasing the inflation pressure beyond this pressure will not increase the tire's load carrying capability.

**\*kPa:** Kilopascal, a metric unit of air pressure.

**\*PSI:** Pounds per square inch, a standard unit of air pressure.

**\*Cold tire pressure:** The tire pressure when the vehicle has been stationary and out of direct sunlight for an hour or more and prior to the vehicle being driven for 1 mi (1.6 km).

**\*Recommended inflation pressure:** The cold inflation pressure found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label located on the B-Pillar or the edge of the driver door.

**\* B-pillar:** The structural member at the side of the vehicle behind the front door.

**\*Bead area of the tire:** Area of the tire next to the rim.

**\* Sidewall of the tire:** Area between the bead area and the tread.

**\*Tread area of the tire:** Area of the perimeter of the tire that contacts the road when mounted on the vehicle.

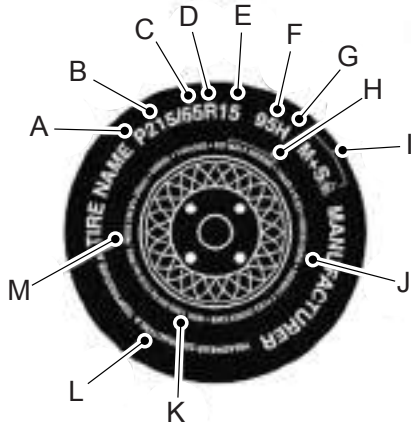
**\*Rim:** The metal support (wheel) for a tire or a tire and tube assembly upon which the tire beads are seated.

## Information Contained on the Tire Sidewall

Both United States and Canada Federal regulations require tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a U.S. DOT Tire Identification Number for safety standard certification and in case of a recall.

# Wheels and Tires

## Information on P Type Tires



E142543

P215/65R15 95H is an example of a tire size, load index and speed rating. The definitions of these items are listed below. (Note that the tire size, load index and speed rating for your vehicle may be different from this example.)

A. **P:** Indicates a tire, designated by the Tire and Rim Association, that may be used for service on cars, sport utility vehicles, minivans and light trucks. **Note:** If your tire size does not begin with a letter this may mean it is designated by either the European Tire and Rim Technical Organization or the Japan Tire Manufacturing Association.

B. **215:** Indicates the nominal width of the tire in millimeters from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

C. **65:** Indicates the aspect ratio which gives the tire's ratio of height to width.

D. **R:** Indicates a radial type tire.

E. **15:** Indicates the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

F. **95:** Indicates the tire's load index. It is an index that relates to how much weight a tire can carry. You may find this information in your owner's manual. If not, contact a local tire dealer.

**Note:** You may not find this information on all tires because it is not required by federal law.

G. **H:** Indicates the tire's speed rating. The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time under a standard condition of load and inflation pressure. The tires on your vehicle may operate at different conditions for load and inflation pressure. These speed ratings may need to be adjusted for the difference in conditions. The ratings range from 81 mph (130 km/h) to 186 mph (299 km/h). These ratings are listed in the following chart.

**Note:** You may not find this information on all tires because it is not required by federal law.

# Wheels and Tires

Letter rating	Speed rating
M	81 mph (130 km/h)
N	87 mph (140 km/h)
Q	99 mph (159 km/h)
R	106 mph (171 km/h)
S	112 mph (180 km/h)
T	118 mph (190 km/h)
U	124 mph (200 km/h)
H	130 mph (210 km/h)
V	149 mph (240 km/h)

Letter rating	Speed rating
W	168 mph (270 km/h)
Y	186 mph (299 km/h)

**Note:** For tires with a maximum speed capability over 149 mph (240 km/h), tire manufacturers sometimes use the letters ZR. For those with a maximum speed capability over 186 mph (299 km/h), tire manufacturers always use the letters ZR.

**H. U.S. DOT Tire Identification Number (TIN):** This begins with the letters DOT and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code designating where it was manufactured, the next two are the tire size code and the last four numbers represent the week and year the tire was built. For example, the numbers 317 mean the 31st week of 1997. After 2000, the numbers

go to four digits. For example, 2501 means the 25th week of 2001. The numbers in between are identification codes used for traceability. This information is used to contact customers if a tire defect requires a recall.

**I. M+S or M/S:** Mud and Snow, or

**AT:** All Terrain, or

**AS:** All Season.

**J. Tire Ply Composition and Material Used:** Indicates the number of plies or the number of layers of rubber-coated fabric in the tire tread and sidewall. Tire manufacturers also must indicate the ply materials in the tire and the sidewall, which include steel, nylon, polyester, and others.

# Wheels and Tires

---

**K. Maximum Load:** Indicates the maximum load in kilograms and pounds that can be carried by the tire. See the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), for the correct tire pressure for your vehicle.

## **L. Treadwear, Traction and Temperature Grades:**

**\*Treadwear** The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and one-half times as well on the government course as a tire graded 100.

**\*Traction:** The traction grades, from highest to lowest are AA, A, B, and C. The grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

**\*Temperature:** The temperature grades are A (the highest), B and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

**M. Maximum Inflation Pressure:** Indicates the tire manufacturers' maximum permissible pressure or the pressure at which the maximum load can be carried by the tire. This pressure is normally higher than the vehicle manufacturer's recommended cold inflation pressure which can be found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to

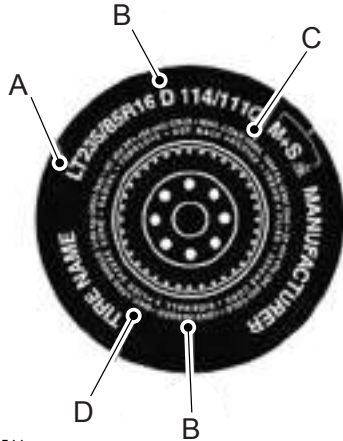
the driver's seating position), or Tire Label which is located on the B-Pillar or the edge of the driver's door. The cold inflation pressure should never be set lower than the recommended pressure on the vehicle label.

The tire suppliers may have additional markings, notes or warnings such as standard load or radial tubeless.

## **Additional Information Contained on the Tire Sidewall for LT Type Tires**

**Note:** *Tire Quality Grades do not apply to this type of tire.*

# Wheels and Tires



E142544

LT type tires have some additional information beyond those of P type tires; these differences are described below.

**A. LT:** Indicates a tire, designated by the Tire and Rim Association, that is intended for service on light trucks.

## B. Load Range and Load Inflation

**Limits:** Indicates the tire's load-carrying capabilities and its inflation limits.

**C. Maximum Load Dual lb (kg) at psi (kPa) cold:** Indicates the maximum load and tire pressure when the tire is used as a dual, defined as four tires on the rear axle (a total of six or more tires on the vehicle).

**D. Maximum Load Single lb (kg) at psi (kPa) cold:** Indicates the maximum load and tire pressure when the tire is used as a single, defined as two tires (total) on the rear axle.

## Information on T Type Tires

T145/80D16 is an example of a tire size.

**Note:** *The temporary tire size for your vehicle may be different from this example. Tire Quality Grades do not apply to this type of tire.*



E142545

T type tires have some additional information beyond those of P type tires; these differences are described below:

# Wheels and Tires

---

**A. T:** Indicates a type of tire, designated by the Tire and Rim Association, that is intended for temporary service on cars, sport utility vehicles, minivans and light trucks.

**B. 145:** Indicates the nominal width of the tire in millimeters from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

**C. 80:** Indicates the aspect ratio which gives the tire's ratio of height to width. Numbers of 70 or lower indicate a short sidewall.

**D. D:** Indicates a diagonal type tire.

**R:** Indicates a radial type tire.

**E. 16:** Indicates the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

## Location of the Tire Label

You will find a Tire Label containing tire inflation pressure by tire size and other important information located on the B-Pillar or the edge of the driver door.

## Inflating Your Tires

Safe operation of your vehicle requires that your tires are properly inflated. Remember that a tire can lose up to half of its air pressure without appearing flat.

Every day before you drive, check your tires. If one looks lower than the others, use a tire gauge to check pressure of all tires and adjust if required.

At least once a month and before long trips, inspect each tire and check the tire pressure with a tire gauge (including spare, if equipped). Inflate all tires to the inflation pressure recommended by Ford Motor Company.

You are strongly urged to buy a reliable tire pressure gauge, as automatic service station gauges may be inaccurate. Ford recommends the use of a digital or dial-type tire pressure gauge rather than a stick-type tire pressure gauge.

Use the recommended cold inflation pressure for optimum tire performance and wear. Under-inflation or over-inflation may cause uneven treadwear patterns.

### WARNING



Under-inflation is the most common cause of tire failures and may result in severe tire cracking, tread separation or blowout, with unexpected loss of vehicle control and increased risk of injury. Under-inflation increases sidewall flexing and rolling resistance, resulting in heat buildup and internal damage to the tire. It also may result in unnecessary tire stress, irregular wear, loss of vehicle control and accidents. A tire can lose up to half of its air pressure and not appear to be flat!

---

# Wheels and Tires

---

Always inflate your tires to the Ford recommended inflation pressure even if it is less than the maximum inflation pressure information found on the tire. The Ford recommended tire inflation pressure is found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label which is located on the B-Pillar or the edge of the driver's door. Failure to follow the tire pressure recommendations can cause uneven treadwear patterns and adversely affect the way your vehicle handles.

**Maximum Inflation Pressure** is the tire manufacturer's maximum permissible pressure and the pressure at which the maximum load can be carried by the tire. This pressure is normally higher than the manufacturer's recommended cold inflation pressure which can be found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge

that meets the door-latch post, next to the driver's seating position), or Tire Label which is located on the B-Pillar or the edge of the driver's door. The cold inflation pressure should never be set lower than the recommended pressure on the Safety Compliance Certification Label or Tire Label.

When weather temperature changes occur, tire inflation pressures also change. A 11°F (6°C) temperature drop can cause a corresponding drop of 1 psi (7 kPa) in inflation pressure. Check your tire pressures frequently and adjust them to the proper pressure which can be found on the Safety Compliance Certification Label or Tire Label.

To check the pressure in your tire(s):

1. Make sure the tires are cool, meaning they are not hot from driving even a mile.

**Note:** *If you are checking tire pressure when the tire is hot, (for example, driven more than 1 mi (1.6 km), never bleed or reduce air pressure. The tires are hot from driving and it is normal for pressures to increase above recommended cold pressures. A hot tire at or below recommended cold inflation pressure could be significantly under-inflated.*

**Note:** *If you have to drive a distance to get air for your tire(s), check and record the tire pressure first and add the appropriate air pressure when you get to the pump. It is normal for tires to heat up and the air pressure inside to go up as you drive.*

2. Remove the cap from the valve on one tire, then firmly press the tire gauge onto the valve and measure the pressure.
3. Add enough air to reach the recommended air pressure.



# Wheels and Tires

**Note:** If you overfill the tire, release air by pressing on the metal stem in the center of the valve. Then recheck the pressure with your tire gauge.

4. Replace the valve cap.
5. Repeat this procedure for each tire, including the spare.

**Note:** Some spare tires operate at a higher inflation pressure than the other tires. For T type mini-spare tires, see the Dissimilar spare wheel and tire assembly information for a description. Store and maintain at 60 psi (4.15 bar). For full-size and dissimilar spare tires, see the Dissimilar spare wheel and tire assembly information for a description. Store and maintain at the higher of the front and rear inflation pressure as shown on the Tire Label.

6. Visually inspect the tires to make sure there are no nails or other objects embedded that could poke a hole in the tire and cause an air leak.

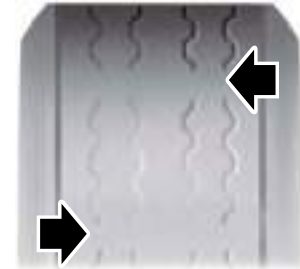
7. Check the sidewalls to make sure there are no gouges, cuts or bulges.

## Inspecting Your Tires and Wheel Valve Stems

Periodically inspect the tire treads for uneven or excessive wear and remove objects such as stones, nails or glass that may be wedged in the tread grooves. Check the tire and valve stems for holes, cracks, or cuts that may permit air leakage and repair or replace the tire and replace the valve stem. Inspect the tire sidewalls for cracking, cuts, bruises and other signs of damage or excessive wear. If internal damage to the tire is suspected, have the tire demounted and inspected in case it needs to be repaired or replaced. For your safety, tires that are damaged or show signs of excessive wear should not be used because they are more likely to blow out or fail.

Improper or inadequate vehicle maintenance can cause tires to wear abnormally. Inspect all your tires, including the spare, frequently, and replace them if one or more of the following conditions exist:

## Tire Wear



E142546

# Wheels and Tires

---

When the tread is worn down to one sixteenth of an inch (2 mm), tires must be replaced to help prevent your vehicle from skidding and hydroplaning. Built-in treadwear indicators, or wear bars, which look like narrow strips of smooth rubber across the tread will appear on the tire when the tread is worn down to one sixteenth of an inch (2 mm).

When the tire tread wears down to the same height as these wear bars, the tire is worn out and must be replaced.

## Damage

Periodically inspect the tire treads and sidewalls for damage (such as bulges in the tread or sidewalls, cracks in the tread groove and separation in the tread or sidewall). If damage is observed or suspected, have the tire inspected by a tire professional. Tires can be damaged during off-road use, so inspection after off-road use is also recommended.

## Age

### WARNING



Tires degrade over time depending on many factors such as weather, storage conditions, and conditions of use (load, speed, inflation pressure) the tires experience throughout their lives.

In general, tires should be replaced after six years regardless of tread wear. However, heat caused by hot climates or frequent high loading conditions can accelerate the aging process and may require tires to be replaced more frequently.

You should replace your spare tire when you replace the road tires or after six years due to aging even if it has not been used.

---

## U.S. DOT Tire Identification Number

Both United States and Canada Federal regulations require tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a U.S. DOT Tire Identification Number for safety standard certification and in case of a recall.

This begins with the letters DOT and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code designating where it was manufactured, the next two are the tire size code and the last four numbers represent the week and year the tire was built. For example, the numbers 317 mean the 31st week of 1997. After 2000, the numbers go to four digits. For example, 2501 means the 25th week of 2001. The numbers in between are identification codes used for traceability. This information is used to contact customers if a tire defect requires a recall.

# Wheels and Tires

## Tire Replacement Requirements

Your vehicle is equipped with tires designed to provide a safe ride and handling capability.

### WARNINGS



Only use replacement tires and wheels that are the same size, load index, speed rating and type (such as P-metric versus LT-metric or all-season versus all-terrain) as those originally provided by Ford. The recommended tire and wheel size may be found on either the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or the Tire Label which is located on the B-Pillar or edge of the driver's door. If this information is not found on these labels then you should contact your authorized dealer as soon as possible. Use of any tire or wheel not recommended by Ford can affect the safety and performance of your vehicle, which could result in an increased risk

### WARNINGS

of loss of vehicle control, vehicle rollover, personal injury and death. Additionally the use of non-recommended tires and wheels could cause steering, suspension, axle, transfer case or power transfer unit failure. If you have questions regarding tire replacement, contact your authorized dealer as soon as possible.



To reduce the risk of serious injury, when mounting replacement tires and wheels, you should not exceed the maximum pressure indicated on the sidewall of the tire to set the beads without additional precautions listed below. If the beads do not seat at the maximum pressure indicated, re-lubricate and try again.

When inflating the tire for mounting pressures up to 20 psi (1.38 bar) greater than the maximum pressure on the tire sidewall, the following precautions must be taken to protect the person mounting the tire:

### WARNINGS

1. Make sure that you have the correct tire and wheel size.
2. Lubricate the tire bead and wheel bead seat area again.
3. Stand at a minimum of 12 feet (3.66 meters) away from the wheel and tire assembly.
4. Use both eye and ear protection.

For a mounting pressure more than 20 psi (1.38 bar) greater than the maximum pressure, a Ford dealer or other tire service professional should do the mounting.

Always inflate steel carcass tires with a remote air fill with the person inflating standing at a minimum of 12 feet (3.66 meters) away from the wheel and tire assembly.

# Wheels and Tires

**Important:** Remember to replace the wheel valve stems when the road tires are replaced on your vehicle.

It is recommended that the two front tires or two rear tires generally be replaced as a pair.

The tire pressure sensors mounted in the wheels (originally installed on your vehicle) are not designed to be used in aftermarket wheels.

The use of wheels or tires not recommended by Ford Motor Company may affect the operation of your tire pressure monitoring system.

If the tire pressure monitoring system indicator is flashing, your system is malfunctioning. Your replacement tire might be incompatible with your tire pressure monitoring system, or some component of the system may be damaged.

## Safety Practices

### WARNINGS



If your vehicle is stuck in snow, mud, or sand, do not rapidly spin the tires. Spinning the tires can tear the tire and cause an explosion. A tire can explode in as little as three to five seconds.



Do not spin the wheels over 35 mph (56 km/h). The tires may fail and injure a passenger or bystander.

### Driving habits have a great deal to do with your tire mileage and safety.

- \*Observe posted speed limits
- \*Avoid fast starts, stops and turns
- \*Avoid potholes and objects on the road
- \*Do not run over curbs or hit the tire against a curb when parking

## Highway Hazards

No matter how carefully you drive, there is always the possibility that you may eventually have a flat tire on the highway. Drive slowly to the closest safe area out of traffic. This may further damage the flat tire, but your safety is more important.

If you feel a sudden vibration or ride disturbance while driving, or you suspect your tire or vehicle has been damaged, immediately reduce your speed. Drive with caution until you can safely pull off the road. Stop and inspect the tires for damage. If a tire is under-inflated or damaged, deflate it, remove wheel and replace it with your spare tire and wheel. If you cannot detect a cause, have the vehicle towed to the nearest repair facility or tire dealer to have the vehicle inspected.

# Wheels and Tires

## Tire and Wheel Alignment

A bad jolt from hitting a curb or pothole can cause the front end of your vehicle to become misaligned or cause damage to your tires. If your vehicle seems to pull to one side when you are driving, the wheels may be out of alignment. Have an authorized dealer check the wheel alignment periodically.

Wheel misalignment in the front or the rear can cause uneven and rapid treadwear of your tires and should be corrected by an authorized dealer. Front-wheel drive vehicles and those with an independent rear suspension (if equipped) may require alignment of all four wheels.

The tires should also be balanced periodically. An unbalanced tire and wheel assembly may result in irregular tire wear.

## Tire Rotation

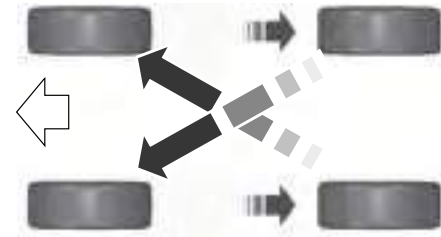
**Note:** *If your tires show uneven wear, ask an authorized dealer to check for and correct any wheel misalignment, tire imbalance or mechanical problem involved before tire rotation.*

**Note:** *Your vehicle may be equipped with a dissimilar spare wheel and tire assembly. A dissimilar spare wheel and tire assembly is defined as a spare wheel and tire assembly that is different in brand, size or appearance from the road tires and wheels. If you have a dissimilar spare wheel and tire assembly, it is intended for temporary use only and should not be used in a tire rotation.*

**Note:** *After having your tires rotated, inflation pressure must be checked and adjusted to the vehicle requirements.*

Rotating your tires at the recommended interval (as indicated in the Scheduled Maintenance chapter) will help your tires wear more evenly, providing better tire performance and longer tire life. Sometimes irregular tire wear can be corrected by rotating the tires.

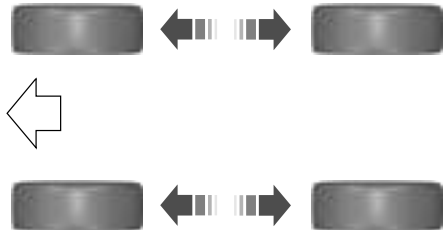
### Non-directional tires



E142547

# Wheels and Tires


## Directional tires



E70415

## USING SNOW CHAINS

### WARNING

 Snow tires must be the same size, load index, speed rating as those originally provided by Ford. Use of any tire or wheel not recommended by Ford can affect the safety and performance of your vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death. Additionally, the use of non-recommended tires and wheels could cause steering, suspension, axle, transfer case or power transfer unit failure.

The tires on your vehicle have all-weather treads to provide traction in rain and snow. However, in some climates, you may need to use snow tires and cables. If you need to use cables, it is recommended that steel wheels (of the same size and specifications) be used, as cables may chip aluminum wheels.

Follow these guidelines when using snow tires and traction devices

- If possible, avoid fully loading your vehicle
- Purchase chains or cables from a manufacturer that clearly labels body to tire dimension restrictions.
- Use 10 mm cables or chains only on front axle with 235/50R18 tires.
- Not all S-class snow chains or cables meet these restrictions. Chains of this size restriction will include a tensioning device.
- The snow chains or cables must be mounted in pairs on the front axle.
- Do not use chains or cables on 235/45R19 and 245/45R19 tires.

- Install cables securely, verifying that the cables do not touch any wiring, brake lines or fuel lines.
- When driving with tire cables do not exceed 30 mph (48 km/h) or the maximum speed recommended by the chain manufacturer, whichever is less.
- Drive cautiously. If you hear the cables rub or bang against the vehicle, stop and retighten them. If this does not work, remove the cables to prevent vehicle damage.
- Remove the cables when they are no longer needed. Do not use cables on dry roads.

If you have any questions regarding snow chains or cables, please contact your authorized dealer.

# Wheels and Tires

## TIRE PRESSURE MONITORING SYSTEM

### WARNING



The tire pressure monitoring system is not a substitute for manually checking tire pressure. The tire pressure should be checked periodically (at least monthly) using a tire gauge, see *Inflating your tires* in this chapter. Failure to properly maintain your tire pressure could increase the risk of tire failure, loss of control, vehicle rollover and personal injury.



Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a Tire Pressure Monitoring System (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists.

When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

# Wheels and Tires

The tire pressure monitoring system complies with part 15 of the FCC rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

## Changing Tires With a Tire Pressure Monitoring System



E142549

**Note:** *Each road tire is equipped with a tire pressure sensor located inside the wheel and tire assembly cavity. The pressure sensor is attached to the valve stem. The pressure sensor is covered by the tire and is not visible unless the tire is removed. Take care when changing the tire to avoid damaging the sensor*

You should always have your tires serviced by an authorized dealer.

Check the tire pressure periodically (at least monthly) using an accurate tire gauge. See *Inflating Your Tires* in this chapter.

## Understanding Your Tire Pressure Monitoring System

The tire pressure monitoring system measures pressure in your four road tires and sends the tire pressure readings to your vehicle. The low tire pressure warning light will turn on if the tire pressure is significantly low. Once the light is illuminated, your tires are under-inflated and need to be inflated to the manufacturer's recommended tire pressure. Even if the light turns on and a short time later turns off, your tire pressure still needs to be checked.

## When Your Temporary Spare Tire is Installed

When one of your road tires needs to be replaced with the temporary spare, the system will continue to identify an issue to remind you that the damaged road wheel and tire assembly needs to be repaired and put back on your vehicle.

To restore the full function of the tire pressure monitoring system, have the damaged road wheel and tire assembly repaired and remounted on your vehicle.



# Wheels and Tires

---

## **When You Believe Your System is Not Operating Properly**

The main function of the tire pressure monitoring system is to warn you when your

tires need air. It can also warn you in the event the system is no longer capable of functioning as intended. See the following chart for information concerning your tire pressure monitoring system:

## Wheels and Tires

Low tire pressure warning light	Possible cause	Customer action required
Solid warning light	Tire(s) under-inflated	Make sure tires are at the proper pressure. See <a href="#">Inflating your tires</a> in this chapter. After inflating your tires to the manufacturer's recommended pressure as shown on the Tire Label (located on the edge of driver's door or the B-Pillar), the vehicle must be driven for at least two minutes over 20 mph (32 km/h) before the light turns off.
	Spare tire in use	Repair the damaged road wheel and tire assembly and reinstall it on the vehicle to restore system function. For a description on how the system functions, see <b>When your temporary spare tire is installed</b> in this section.
	TPMS malfunction	If the tires are properly inflated and the spare tire is not in use but the light remains on, contact your authorized dealer as soon as possible.
Flashing warning light	Spare tire in use	Repair the damaged road wheel and tire assembly and reinstall it on the vehicle to restore system function. For a description on how the system functions, see <b>When your temporary spare tire is installed</b> in this section.
	TPMS malfunction	If the tires are properly inflated and the spare tire is not in use but the light remains on, contact your authorized dealer as soon as possible.

# Wheels and Tires

## When Inflating Your Tires

When putting air into your tires (such as at a gas station or in your garage), the tire pressure monitoring system may not respond immediately to the air added to your tires.

It may take up to two minutes of driving over 20 mph (32 km/h) for the light to turn off after you have filled your tires to the recommended inflation pressure

## How Temperature Affects Your Tire Pressure

The tire pressure monitoring system monitors tire pressure in each pneumatic tire. While driving in a normal manner, a typical passenger tire inflation pressure may increase about 2 to 4 psi (14 to 28 kPa) from a cold start situation. If the vehicle is stationary overnight with the outside temperature significantly lower than the daytime temperature, the tire pressure may decrease about 3 psi (21 kPa) for a drop of 30°F (17°C) in ambient temperature. This lower pressure value may be detected by the tire pressure monitoring system as being significantly lower than the recommended

inflation pressure and activate the system warning light for low tire pressure. If the low tire pressure warning light is on, visually check each tire to verify that no tire is flat. If one or more tires are flat, repair as necessary. Check the air pressure in the road tires. If any tire is under-inflated, carefully drive the vehicle to the nearest location where air can be added to the tires. Inflate all the tires to the recommended inflation pressure.

## CHANGING A ROAD WHEEL

### WARNINGS



The use of tire sealant may damage your tire pressure monitoring system and should only be used in roadside emergencies. If you must use a sealant, the Ford Tire Mobility Kit sealant should be used. The tire pressure monitoring system sensor and valve stem on the wheel must be replaced by an authorized dealer after use of the sealant.

### WARNINGS



See **Tire Pressure Monitoring System** (page 332). If the tire pressure monitor sensor becomes damaged, it will no longer function.

**Note:** *The tire pressure monitoring system indicator light will illuminate when the spare tire is in use. To restore the full function of the monitoring system, all road wheels equipped with tire pressure monitoring sensors must be mounted on the vehicle.*

If you get a flat tire while driving, do not apply the brake heavily. Instead, gradually decrease your speed. Hold the steering wheel firmly and slowly move to a safe place on the side of the road.

Have a flat serviced by an authorized dealer in order to prevent damage to the tire pressure monitoring system sensors. See **Tire Pressure Monitoring System** (page 332). Replace the spare tire with a road tire as soon as possible. During repairing or replacing of the flat tire, have the authorized dealer inspect the tire pressure monitoring system sensor for damage.

# Wheels and Tires

## Dissimilar Spare Wheel and Tire Assembly Information

### WARNING



Failure to follow these guidelines could result in an increased risk of loss of vehicle control, injury or death.

If you have a dissimilar spare wheel and tire, then it is intended for temporary use only. This means that if you need to use it, you should replace it as soon as possible with a road wheel and tire assembly that is the same size and type as the road tires and wheels that were originally provided by Ford. If the dissimilar spare tire or wheel is damaged, it should be replaced rather than repaired.

A dissimilar spare wheel and tire assembly is defined as a spare wheel and tire assembly that is different in brand, size or appearance from the road tires and wheels and can be one of three types:

**1. T-type mini-spare:** This spare tire begins with the letter T for tire size and may have Temporary Use Only molded in the sidewall.

**2. Full-size dissimilar spare with label on wheel:** This spare tire has a label on the wheel that states: THIS WHEEL AND TIRE ASSEMBLY FOR TEMPORARY USE ONLY.

When driving with one of the dissimilar spare tires listed above, do not:

- Exceed 50 mph (80 km/h).
- Load the vehicle beyond maximum vehicle load rating listed on the Safety Compliance Label.
- Tow a trailer.
- Use snow chains on the end of the vehicle with the dissimilar spare tire.
- Use more than one dissimilar spare tire at a time.
- Use commercial car washing equipment.
- Try to repair the dissimilar spare tire.

Use of one of the dissimilar spare tires listed above at any one wheel location can lead to impairment of the following:

- Handling, stability and braking performance.
- Comfort and noise.
- Ground clearance and parking at curbs.

- Winter weather driving capability.
- Wet weather driving capability.
- All-wheel driving capability

**3. Full-size dissimilar spare without label on wheel**

When driving with the full-size dissimilar spare wheel and tire assembly, do not:

- Exceed 70 mph (113 km/h).
- Use more than one dissimilar spare wheel and tire assembly at a time.
- Use commercial car washing equipment.
- Use snow chains on the end of the vehicle with the dissimilar spare wheel and tire assembly.

The usage of a full-size dissimilar spare wheel and tire assembly can lead to impairment of the following:

- Handling, stability and braking performance.
- Comfort and noise.
- Ground clearance and parking at curbs.
- Winter weather driving capability.

# Wheels and Tires

- Wet weather driving capability.
- All-wheel driving capability


When driving with the full-size dissimilar spare wheel and tire assembly additional caution should be given to:

- Towing a trailer.
- Driving vehicles equipped with a camper body.
- Driving vehicles with a load on the cargo rack.


Drive cautiously when using a full-size dissimilar spare wheel and tire assembly and seek service as soon as possible.


## Tire Change Procedure


### WARNINGS


 When one of the front wheels is off the ground, the transmission alone will not prevent your vehicle from moving or slipping off the jack, even if the transmission is in park (P) or neutral (N).

### WARNINGS

 To help prevent your vehicle from moving when you change a tire, be sure to place the transmission in park (P) or neutral (N), set the parking brake, and block (in both directions) the wheel that is diagonally opposite (other side and end of your vehicle) to the tire being changed.

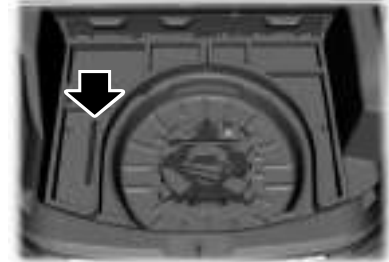
 Never get underneath a vehicle that is supported only by a jack. If the vehicle slips off the jack, you or someone else could be seriously injured.

 Do not attempt to change a tire on the side of the vehicle close to moving traffic. Pull far enough off the road to avoid the danger of being hit when operating the jack or changing the wheel.

 Always use the jack provided as original equipment with your vehicle. If using a jack other than the one provided as original equipment with your vehicle, make sure the jack capacity is adequate for the vehicle weight, including any vehicle cargo or modifications.

**Note:** *Passengers should not remain in your vehicle when the vehicle is being jacked.*

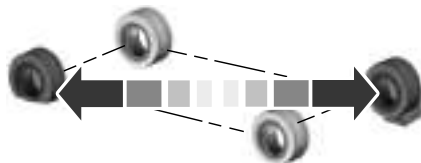
1. Park on a level surface, set the parking brake and activate the hazard flashers.
2. Place the transmission in park (P) and turn the engine off.
3. Remove the carpeted wheel cover.
4. Remove the wing nut that secures the spare tire by turning it counterclockwise.



E160855

5. Remove the jack from the foam holder. The lug wrench is located in the left side storage foam next to the spare tire. Remove the flat tire retainer strap from the jack base.

# Wheels and Tires



E142551

6. Block the diagonally opposite wheel.
7. Loosen each wheel lug nut one-half turn counterclockwise, but do not remove them until the wheel is raised off the ground.

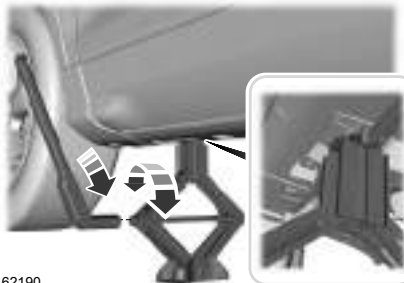
**Note:** Jack at the specified locations to avoid damage to the vehicle.

8. The vehicle jacking points are shown here, and are depicted on the warning label on the jack.



E145908

9. Small arrow-shaped marks on the sills show the location of the jacking points.

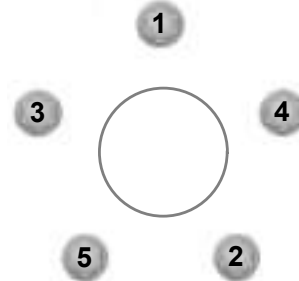


E162190

10. Remove the lug nuts with the lug wrench.

**Note:** If equipped with full wheel covers with exposed wheel nuts, remove the wheel nuts prior to removing the wheel cover or damage to the wheel cover may occur.

11. Replace the flat tire with the spare tire, making sure the valve stem is facing outward. Reinstall the lug nuts until the wheel is snug against the hub. Do not fully tighten the lug nuts until the wheel has been lowered.
12. Lower the wheel by turning the jack handle counterclockwise.



E75442

# Wheels and Tires

13. Remove the jack and fully tighten the lug nuts in the order shown. See **Technical Specifications** (page 342).

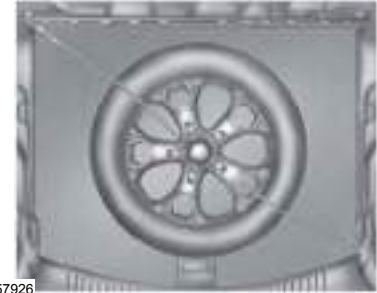
## Stowing the flat tire

1. Put the jack and lug wrench away. Make sure the jack is fastened so it does not rattle when you drive.
2. Unblock the wheels.
3. Stow the flat tire on the floor in the cargo area. Secure with the flat tire retainer strap by following the next steps:



E142906

4. Locate the cargo tie-down near the seatback. Push the loop of the retainer strap through the tie-down. Thread the non-loop end through the loop.



E157926

5. Weave the retainer strap through the wheel openings.
6. Locate the front cargo tie-down at the opposite corner of the cargo area to the tie-down used in Step 4. Thread the retainer strap through the tie-down and pull tight.
7. Secure by tying a 2-half hitch knot.

# Wheels and Tires

---

1



E143746

2



3






# Wheels and Tires

## TECHNICAL SPECIFICATIONS

### Wheel Lug Nut Torque Specifications

#### WARNING

 When a wheel is installed, always remove any corrosion, dirt or foreign materials present on the mounting surfaces of the wheel or the surface of the wheel hub, brake drum or brake disc that contacts the wheel. Make sure that any fasteners that attach the rotor to the hub are secured so they do not interfere with the mounting surfaces of the wheel. Installing wheels without correct metal-to-metal contact at the wheel mounting surfaces can cause the wheel nuts to loosen and the wheel to come off while your vehicle is in motion, resulting in loss of control.

Bolt size	lb-ft (Nm)
M12 x 1.5	100 (135)

Torque specifications are for nut and bolt threads free of dirt and rust. Use only Ford recommended replacement fasteners.

Retighten the lug nuts to the specified torque within 100 miles (160 kilometers) after any wheel disturbance (such as tire rotation, changing a flat tire, wheel removal).

# Wheels and Tires

---



E145950

A Wheel pilot bore.

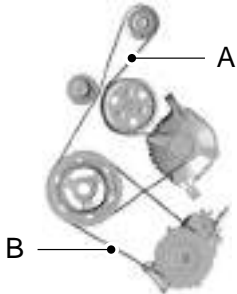
Inspect the wheel pilot bore and mounting surface prior to installation. Remove any visible corrosion or loose particles.

# Capacities and Specifications

## ENGINE SPECIFICATIONS - 2.0L ECOBOOST™

Measurement	Specification
Cubic inches.	122
Firing order.	1-3-4-2
Ignition system.	Coil on plug
Spark plug gap.	0.027-0.031 in. (0.70-0.80 mm)
Compression ratio.	9.3:1

### Drivebelt Routing



E161383

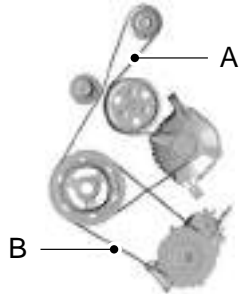
- A. The **long** drivebelt is on the first pulley groove closest to the engine.
- B. The **short** drivebelt is on the second pulley groove farthest from the engine.

# Capacities and Specifications

## ENGINE SPECIFICATIONS - 2.3L ECOBOOST™

Measurement	Specification
Cubic inches.	138
Compression ratio.	9.5:1
Spark plug gap.	0.027-0.031 in. (0.70-0.80 mm)

### Drivebelt Routing



E161383

- A. The **long** drivebelt is on the first pulley groove closest to the engine.
- B. The **short** drivebelt is on the second pulley groove farthest from the engine.

## Capacities and Specifications

### MOTORCRAFT PARTS - 2.0L ECOBOOST™

Component	Motorcraft part number
Air filter element	FA-1908
Oil filter	FL-910-S
Battery (without start/stop)	BXT-48H6-610
Battery (with start/stop)	BAGM-48H6-760
Spark plugs	SP-537
Cabin air filter	FP70
Windshield wiper blade	WW-2550 (driver side) WW-1575 (passenger side) WW-1106 (rear window)

We recommend Motorcraft replacement parts available at your Ford dealer or at [fordparts.com](http://fordparts.com) for scheduled maintenance. These parts meet or exceed Ford Motor Company's specifications and are engineered for your vehicle. Use of other parts may impact vehicle performance, emissions and durability. Your warranty may be void for any damage related to use of other parts.

If a Motorcraft oil filter is not available, use an oil filter that meets industry performance specification SAE/USCAR-36.

For spark plug replacement, contact an authorized dealer. Replace the spark plugs at the appropriate intervals. See **Scheduled Maintenance** (page 472).

# Capacities and Specifications

## MOTORCRAFT PARTS - 2.3L ECOBOOST™

Component	Motorcraft part number
Air filter element	FA-1908
Oil filter	FL-910-S
Battery	BXT-48H6-610
Spark plugs	SP-537
Cabin air filter	FP70
Windshield wiper blade	WW-2550 (driver side) WW-1575 (passenger side) WW-1106 (rear window)

We recommend Motorcraft replacement parts available at your Ford dealer or at [fordparts.com](http://fordparts.com) for scheduled maintenance. These parts meet or exceed Ford Motor Company's specifications and are engineered for your vehicle. Use of other parts may impact vehicle performance, emissions and durability. Your warranty may be void for any damage related to use of other parts.

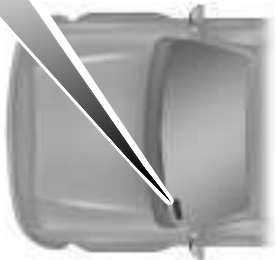
If a Motorcraft oil filter is not available, use an oil filter that meets industry performance specification SAE/USCAR-36.

For spark plug replacement, contact an authorized dealer. Replace the spark plugs at the appropriate intervals. See **Scheduled Maintenance** (page 472).

# Capacities and Specifications

## VEHICLE IDENTIFICATION NUMBER

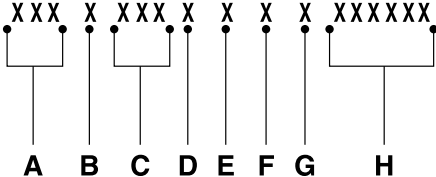
The vehicle identification number is located on the left-hand side of the instrument panel.



E142476

Please note that in the graphic, XXXX is representative of your vehicle identification number.

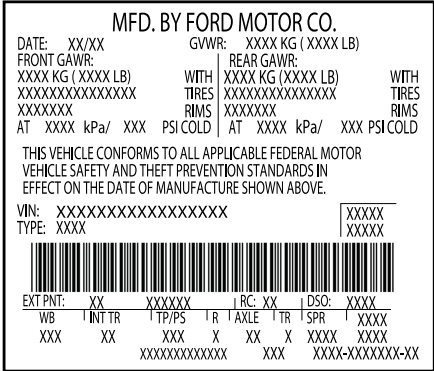
The Vehicle Identification Number contains the following information:



E142477

- A World manufacturer identifier
- B Brake system, Gross Vehicle Weight Rating, Restraint Devices and their locations
- C Make, vehicle line, series, body type
- D Engine type
- E Check digit
- F Model year
- G Assembly plant
- H Production sequence number

## VEHICLE CERTIFICATION LABEL

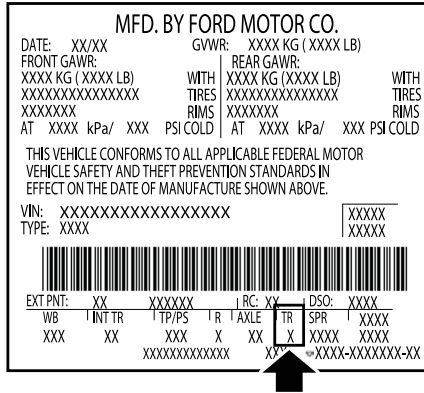


E167469

The National Highway Traffic Safety Administration Regulations require that a Safety Compliance Certification Label be affixed to a vehicle and prescribe where the Safety Compliance Certification Label may be located. The Safety Compliance Certification Label shall be affixed to either the door hinge pillar, the door latch post, or the edge of the door near the door latch, next to the driver's seating position.

# Capacities and Specifications

## TRANSMISSION CODE DESIGNATION



The transmission code is on the Safety Compliance Certification Label. The following table shows the transmission code along with the transmission description.

E167814

Description	Code
Six-speed automatic transmission 6F35	6



# Capacities and Specifications

## CAPACITIES AND SPECIFICATIONS - 2.0L ECOBOOST™

### Capacities

#### WARNING



The air conditioning refrigerant system contains refrigerant under high pressure. Only qualified personnel should service the air conditioning refrigerant system. Opening the air conditioning refrigerant system can cause personal injury.

Item	Capacity
Engine oil (with oil filter)	5.7 qt (5.4 L)
Engine coolant	8.6 qt (8.1 L)
Brake fluid	Between MIN/MAX on brake fluid reservoir
Rear differential (All Wheel Drive) fluid	2.4 pt (1.15 L)
Power Transfer Unit (PTU) fluid (All Wheel Drive)	17.9 fl oz (0.53 L)
Automatic transmission fluid	9.0 qt (8.5 L)
Windshield washer fluid	Fill as required
Fuel tank	16.2 gal (61.3 L)

# Capacities and Specifications

Item	Capacity
A/C refrigerant	24 oz (0.68 kg)
A/C refrigerant compressor oil	2.7 fl oz (80.32 ml)

Approximate dry fill capacity. Actual amount may vary during fluid changes.

## Specifications

### Materials

Name	Specification
Recommended motor oil (U.S.): Motorcraft® SAE 5W-30 Premium Synthetic Blend Motor Oil XO-5W30-QSP	WSS-M2C946-A
Recommended motor oil (Canada): Motorcraft® SAE 5W-30 Super Premium Motor Oil CXO-5W30-LSP12	WSS-M2C946-A
Recommended motor oil (Mexico): Motorcraft® SAE 5W-30 Synthetic Motor Oil MXO-5W30-QSP	WSS-M2C946-A
Optional motor oil (U.S. and Mexico): Motorcraft® SAE 5W-30 Full Synthetic Motor Oil XO-5W30-QFS	WSS-M2C946-A

## Capacities and Specifications

Name	Specification
Optional motor oil (Canada): Motorcraft® SAE 5W-30 Synthetic Motor Oil CXO-5W30-LFS12	WSS-M2C946-A
Engine coolant (U.S.): Motorcraft® Orange Prediluted Antifreeze/Coolant VC-3DIL-B	WSS-M97B44-D2
Engine coolant (Canada): Motorcraft® Orange Prediluted Antifreeze/Coolant CVC-3DIL-B	WSS-M97B44-D2
Engine coolant (Mexico): Motorcraft® Orange Prediluted Antifreeze/Coolant VC-3DIL-B	WSS-M97B44-D2
Brake fluid: Motorcraft® DOT 4 Low Viscosity (LV) High Performance Motor Vehicle Brake Fluid PM-20	WSS-M6C65-A2
Rear differential (All Wheel Drive) fluid: Motorcraft® SAE 80W-90 Premium Rear Axle Lubricant XY-80W90-QL	WSP-M2C197-A
Power Transfer Unit (PTU) fluid (All Wheel Drive) (U.S. and Mexico) : Motorcraft® SAE 75W-140 Synthetic Rear Axle Lubricant XY-75W140-QL	WSL-M2C192-A

## Capacities and Specifications

Name	Specification
Power Transfer Unit (PTU) fluid (All Wheel Drive) (Canada): Motorcraft® SAE 75W-140 Synthetic Rear Axle Lubricant CXY-75W140-1L	WSL-M2C192-A
Automatic transmission fluid (U.S. and Mexico): Motorcraft® MERCON LV Automatic Transmission Fluid XT-10-QLVC	WSS-M2C938-A MERCON LV
Automatic transmission fluid (Canada): Motorcraft® MERCON LV Automatic Transmission Fluid CXT-10-LV12	WSS-M2C938-A MERCON LV
Windshield washer fluid (U.S. and Mexico): Motorcraft® Premium Windshield Wash Concentrate with Bitterant ZC-32-B2	WSS-M14P19-A
Windshield washer fluid (Canada): Motorcraft® Premium Quality Windshield Washer Fluid CXC-37-(A, B, D, F)	WSS-M14P19-A
A/C refrigerant (U.S.): Motorcraft® R-134a Refrigerant YN-19	WSH-M17B19-A
A/C refrigerant (Canada): Motorcraft® R-134a Refrigerant CYN-16-R	WSH-M17B19-A

## Capacities and Specifications

Name	Specification
A/C refrigerant (Mexico): Motorcraft® R-134a Refrigerant MYN-19	WSH-M17B19-A
A/C refrigerant compressor oil: Motorcraft® PAG Refrigerant Compressor Oil YN-12-D	WSH-M1C231-B
Multi-purpose grease: Motorcraft® Multi-Purpose Grease Spray XL-5-A	ESB-M1C93-B
Lock cylinders (U.S.): Penetrating and Lock Lubricant XL-1	--
Lock cylinders (Canada): Penetrating Fluid CXC-51-A	--
Lock cylinders (Mexico): Penetrating and Lock Lubricant MXL-1	--

# Capacities and Specifications

If you use oil and fluids that do not meet the defined specification and viscosity grade, this may lead to:

- Component damage which is not covered by the vehicle warranty.
- Longer engine cranking periods.
- Increased emission levels.
- Reduced engine performance.
- Reduced fuel economy.
- Degraded brake performance.

We recommend Motorcraft® motor oil for your vehicle. If Motorcraft® oil is not available, use motor oils of the recommended viscosity grade that meet API SN requirements and display the API Certification Mark for gasoline engines. Do not use oil labeled with API SN service category unless the label also displays the API certification mark.



E142732

An oil that displays this symbol conforms to current engine, emission system and fuel economy performance standards of the International Lubricants Specification Advisory Committee (ILSAC).

Do not use supplemental engine oil additives because they are unnecessary and could lead to engine damage that may not be covered by your vehicle warranty.

**Note:** *Ford recommends using DOT 4 Low Viscosity (LV) High Performance Brake Fluid or equivalent meeting WSS-M6C65-A2. Use of any fluid other than the recommended fluid may cause degraded brake performance and not meet the Ford performance standards. Keep brake fluid clean and dry. Contamination with dirt, water, petroleum products or other materials may result in brake system damage and possible failure.*

**Note:** *Automatic transmissions that require MERCON LV transmission fluid should only use MERCON LV transmission fluid. The use of any other fluid may cause transmission damage.*

# Capacities and Specifications

## CAPACITIES AND SPECIFICATIONS - 2.3L ECOBOOST™

### Capacities

#### WARNING



The air conditioning refrigerant system contains refrigerant under high pressure. Only qualified personnel should service the air conditioning refrigerant system. Opening the air conditioning refrigerant system can cause personal injury.

Item	Capacity
Engine oil (with oil filter)	5.7 qt (5.4 L)
Engine coolant	8.1 qt (7.7 L)
Brake fluid	Between MIN/MAX on brake fluid reservoir
Rear differential (All Wheel Drive) fluid	2.4 pt (1.15 L)
Power Transfer Unit (PTU) fluid (All Wheel Drive)	17.9 fl oz (0.53 L)
Automatic transmission fluid	9.0 qt (8.5 L)
Windshield washer fluid	Fill as required
Fuel tank	16.2 gal (61.3 L)

# Capacities and Specifications

Item	Capacity
A/C refrigerant	24 oz (0.68 kg)
A/C refrigerant compressor oil	2.7 fl oz (80.32 ml)

Approximate dry fill capacity. Actual amount may vary during fluid changes.

## Specifications

### Materials

Name	Specification
Recommended motor oil (U.S.): Motorcraft® SAE 5W-30 Premium Synthetic Blend Motor Oil XO-5W30-QSP	WSS-M2C946-A
Recommended motor oil (Canada): Motorcraft® SAE 5W-30 Super Premium Motor Oil CXO-5W30-LSP12	WSS-M2C946-A
Recommended motor oil (Mexico): Motorcraft® SAE 5W-30 Synthetic Motor Oil MXO-5W30-QSP	WSS-M2C946-A
Optional motor oil (U.S. and Mexico): Motorcraft® SAE 5W-30 Full Synthetic Motor Oil XO-5W30-QFS	WSS-M2C946-A



## Capacities and Specifications

Name	Specification
Optional motor oil (Canada): Motorcraft® SAE 5W-30 Synthetic Motor Oil CXO-5W30-LFS12	WSS-M2C946-A
Engine coolant (U.S.): Motorcraft® Orange Prediluted Antifreeze/Coolant VC-3DIL-B	WSS-M97B44-D2
Engine coolant (Canada): Motorcraft® Orange Prediluted Antifreeze/Coolant CVC-3DIL-B	WSS-M97B44-D2
Engine coolant (Mexico): Motorcraft® Orange Prediluted Antifreeze/Coolant VC-3DIL-B	WSS-M97B44-D2
Brake fluid: Motorcraft® DOT 4 Low Viscosity (LV) High Performance Motor Vehicle Brake Fluid PM-20	WSS-M6C65-A2
Rear differential (All Wheel Drive) fluid: Motorcraft® SAE 80W-90 Premium Rear Axle Lubricant XY-80W90-QL	WSP-M2C197-A
Power Transfer Unit (PTU) fluid (U.S. and Mexico): Motorcraft® SAE 75W-140 Synthetic Rear Axle Lubricant XY-75W140-QL	WSL-M2C192-A

## Capacities and Specifications

Name	Specification
Power Transfer Unit (PTU) fluid (Canada): Motorcraft® SAE 75W-140 Synthetic Rear Axle Lubricant CXY-75W140-1L	WSL-M2C192-A
Automatic transmission fluid (U.S. and Mexico): Motorcraft® MERCON LV Automatic Transmission Fluid XT-10-QLVC	WSS-M2C938-A MERCON LV
Automatic transmission fluid (Canada): Motorcraft® MERCON LV Automatic Transmission Fluid CXT-10-LV12	WSS-M2C938-A MERCON LV
Windshield washer fluid (U.S. and Mexico): Motorcraft® Premium Windshield Wash Concentrate with Bitterant ZC-32-B2	WSS-M14P19-A
Windshield washer fluid (Canada): Motorcraft® Premium Quality Windshield Washer Fluid CXC-37-(A, B, D, F)	WSS-M14P19-A
A/C refrigerant (U.S.): Motorcraft® R-134a Refrigerant YN-19	WSH-M17B19-A
A/C refrigerant (Canada): Motorcraft® R-134a Refrigerant CYN-16-R	WSH-M17B19-A

## Capacities and Specifications

Name	Specification
A/C refrigerant (Mexico): Motorcraft® R-134a Refrigerant MYN-19	WSH-M17B19-A
A/C refrigerant compressor oil: Motorcraft® PAG Refrigerant Compressor Oil YN-12-D	WSH-M1C231-B
Multi-purpose grease: Motorcraft Multi-Purpose Grease Spray XL-5-A	ESB-M1C93-B
Lock cylinders (U.S.): Penetrating and Lock Lubricant XL-1	--
Lock cylinders (Canada): Penetrating Fluid CXC-51-A	--
Lock cylinders (Mexico): Penetrating and Lock Lubricant MXL-1	--

# Capacities and Specifications

If you use oil and fluids that do not meet the defined specification and viscosity grade, this may lead to:

- Component damage which is not covered by the vehicle warranty.
- Longer engine cranking periods.
- Increased emission levels.
- Reduced engine performance.
- Reduced fuel economy.
- Degraded brake performance.

We recommend Motorcraft® motor oil for your vehicle. If Motorcraft® oil is not available, use motor oils of the recommended viscosity grade that meet API SN requirements and display the API Certification Mark for gasoline engines. Do not use oil labeled with API SN service category unless the label also displays the API certification mark.



E142732

An oil that displays this symbol conforms to current engine, emission system and fuel economy performance standards of the International Lubricants Specification Advisory Committee (ILSAC).

Do not use supplemental engine oil additives because they are unnecessary and could lead to engine damage that may not be covered by your vehicle warranty.

**Note:** Ford recommends using DOT 4 Low Viscosity (LV) High Performance Brake Fluid or equivalent meeting WSS-M6C65-A2. Use of any fluid other than the recommended fluid may cause degraded brake performance and not meet the Ford performance standards. Keep brake fluid clean and dry. Contamination with dirt, water, petroleum products or other materials may result in brake system damage and possible failure.

**Note:** Automatic transmissions that require MERCON LV transmission fluid should only use MERCON LV transmission fluid. The use of any other fluid may cause transmission damage.

# Audio System

## GENERAL INFORMATION

### Radio Frequencies and Reception Factors

AM and FM frequencies are established by the Federal Communications Commission (FCC) and the Canadian Radio and Telecommunications Commission (CRTC). Those frequencies are:

- AM: 530, 540-1700, 1710 kHz
- FM: 87.9-107.7, 107.9 MHz

Radio Reception Factors	
<b>Distance and strength</b>	The further you travel from an AM or FM station, the weaker the signal and the weaker the reception.
<b>Terrain</b>	Hills, mountains, tall buildings, bridges, tunnels, freeway overpasses, parking garages, dense tree foliage and thunderstorms can interfere with the reception.
<b>Station overload</b>	When you pass a ground-based broadcast repeating tower, a stronger signal may overtake a weaker one and result in the audio system muting.

### CD and CD Player Information

**Note:** CD units play commercially pressed 4.7 in (12 cm) audio compact discs only. Due to technical incompatibility, certain recordable and re-recordable compact discs may not function correctly when used in Ford CD players.

**Note:** Do not insert CDs with homemade paper (adhesive) labels into the CD player as the label may peel and cause the CD to become jammed. You should use a permanent felt tip marker rather than adhesive labels on your homemade CDs. Ballpoint pens may damage CDs. Please contact an authorized dealer for further information.

**Note:** Do not use any irregularly shaped discs or discs with a scratch protection film attached.

Always handle discs by their edges only. Clean the disc with an approved CD cleaner only. Wipe it from the center of the disc toward the edge. Do not clean in a circular motion.

# Audio System

Do not expose discs to direct sunlight or heat sources for extended periods.

## MP3 and WMA Track and Folder Structure

Audio systems capable of recognizing and playing MP3 and WMA individual tracks and folder structures work as follows:

- There are two different modes for MP3 and WMA disc playback: MP3 and WMA track mode (system default) and MP3 and WMA folder mode.
- MP3 and WMA track mode ignores any folder structure on the MP3 and WMA disc. The player numbers each MP3 and WMA track on the disc (noted by the MP3 or WMA file extension) from T001 to a maximum of T255. The maximum number of playable MP3 and WMA files may be less depending on the structure of the CD and exact model of radio present.
- MP3 and WMA folder mode represents a folder structure consisting of one level of folders. The CD player numbers all MP3 and WMA tracks on the disc (noted by the MP3 or WMA file extension) and all folders containing MP3 and WMA files, from F001 (folder) T001 (track) to F253 T255.
- Creating discs with only one level of folders helps with navigation through the disc files.

If you are burning your own MP3 and WMA discs, it is important to understand how the system reads the structures you create. While various files may be present (files with extensions other than MP3 and WMA), only files with the MP3 and WMA extension are played; other files are ignored by the system. This enables you to use the same MP3 and WMA disc for a variety of tasks on your work computer, home computer and your in-vehicle system.

In track mode, the system displays and plays the structure as if it were only one level deep (all MP3 and WMA files play, regardless of being in a specific folder). In folder mode, the system only plays the MP3 and WMA files in the current folder.

## AUDIO UNIT - VEHICLES WITH: PREMIUM AM/FM/CD

### WARNING

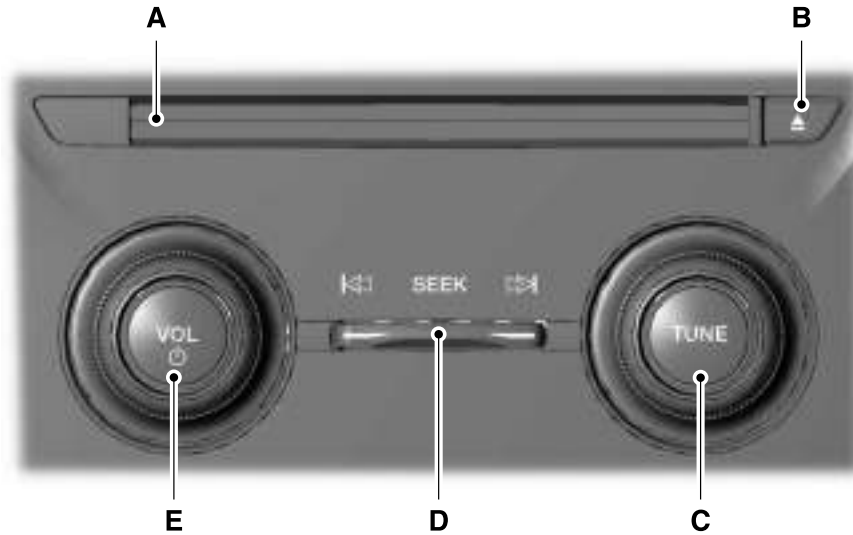


Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

# Audio System

---

**Note:** *The touch system controls most of the audio features. See your SYNC information.*



E223457

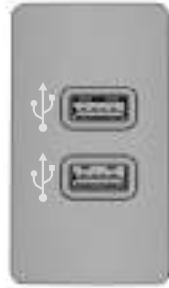
# Audio System

---

- A **CD slot:** Insert a CD.
- B **Eject:** Press to eject a CD.
- C **TUNE:** In radio mode, adjust to manually search through the radio frequency band. In SIRIUS mode, the system selects the previous or next channel. If you select a specific category (Jazz, Rock, News, etc.), turn to find the previous or next channel in the selected category.
- D **Seek, Fast Forward and Reverse:** In radio mode, select a frequency band and press either button. The system stops at the first station it finds in that direction. In CD mode, press to select the next or previous track. Press and hold to move quickly forward or backward through the current track.
- E **Volume and Power:** Press to switch the system on and off. Turn to adjust the volume.

## **MEDIA HUB** (If Equipped)

You can locate the media hub inside the center console or on the instrument panel.



E211463

See your SYNC information.



## GENERAL INFORMATION

### WARNING



Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

---

## Getting to Know Your System

The SYNC 3 system allows you to interact with a variety of features using the touchscreen and voice commands. By integrating with your Bluetooth-enabled phone, the touchscreen provides easy interaction with audio, multimedia, climate control, navigation, and your phone's SYNC 3 compatible apps.

### Using the Touchscreen

To operate the touchscreen, you can simply touch the item or option that you want to select. The button changes color when you select it.

The SYNC 3 layout allows you to quickly select the feature you wish to use.

# SYNC™ 3



E205444

Item	Menu Item	Action and Description
A	Status Bar	This bar displays icons and messages pertaining to current system activities including climate settings, voice commands and phone functions such as text messages.
B	Home	This button is available on the main screens. Pressing it takes you to the home screen view.
C	Clock	This shows the current time. You can set the clock manually or have it controlled by the vehicle's GPS location. See <b>Settings</b> (page 434).
D	Outside Temperature	This displays the current outside temperature.
E	Feature Bar	You can touch any of the buttons on this bar to select a feature.

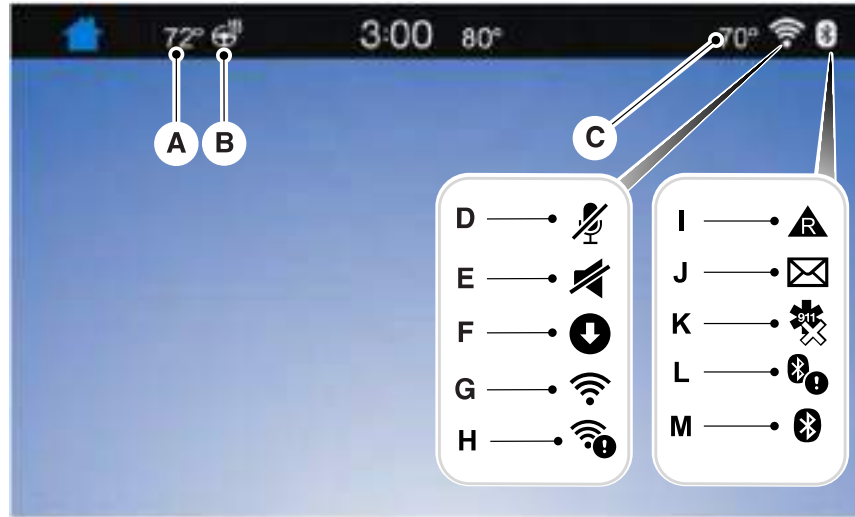
The touchscreen allows you quick access to all of your comfort, navigation, communication and entertainment options. Using the status and feature bar you can quickly select the feature you want to use.

**Note:** *Your system is equipped with a feature that allows you to access and control audio features for 10 minutes after you switch the ignition off (and no doors open).*

### The Status Bar

Additional icons also display in the status bar depending on market, vehicle options and current operation. If a feature is not active, the icon does not display. Certain icons may move to the left or right depending on what options are active.

# SYNC™ 3



E223130

## SYNC™ 3

Callout	Item	Description
A	Driver Temperature	This shows the temperature the driver selects through the climate control system.
B	Heated steering wheel (If equipped)	When you activate the heated steering wheel option on the touch screen, this icon displays. It only displays when there is not a physical button for the heated steering wheel.
C	Passenger Temperature	When the passenger's temperature has been adjusted and is no longer linked to the driver's temperature, it displays here. If Dual is turned off and the temperatures are linked, the passenger's temperature does not display.
D	Microphone Mute	This icon displays when your phone's microphone is muted. A caller cannot hear you.
E	Mute	This icon displays when the audio system is muted.
F	Download	This icon appears when SYNC 3 receives a software update. Pressing the icon shows more details about the new software.
G	Wi-Fi	This icon appears if a Wi-Fi network is connected.
H	Wi-Fi in Range	An available Wi-Fi network is within range.
I	Roaming	This icon displays when your cell phone is roaming.
J	Text Message	This icon displays when you receive a text message on your phone.

Callout	Item	Description
K	911 Assist Off	This icon displays when 911 Assist is set to off and your phone is connected to SYNC.
L	Bluetooth Alert	The Bluetooth alert icon displays when there is an active Bluetooth alert.
M	Bluetooth	This icon displays to show an active Bluetooth connection.

Messages may also appear in the status bar to provide you with notifications. You can select the message to view the associated feature.

## Feature Bar

Feature Bar Item	Functions
Audio	Allows you to control the media playing in your vehicle. You can control all audio features including AM, FM and satellite radio, CDs, and media streaming over a Bluetooth device or through a USB connection.
Climate	Allows you to adjust the temperature, fan speed and airflow within the vehicle.
Phone	Allows you to make calls, receive calls, and access the phonebook of your connected device.

Feature Bar Item	Functions
Navigation (If equipped)	Allows you to see your vehicle's location on a virtual road map, get driving directions to your destination and find points of interest along your route.
Apps	Connect and control SYNC 3 compatible apps running on your iPhone or Android device. Also, access built-in additional features such as SiriusXM Traffic and Travel Link (if equipped).
	If your vehicle is a hybrid, plug-in hybrid, or electric this is also where your settings and power information is located.
Settings	You can customize your system with various settings for the touchscreen display, feature preferences, and how you want to interact with your vehicle.

## Cleaning the Touchscreen

You can remove fingerprints with a dry, clean, soft cloth.

If dirt or fingerprints are still on the screen, apply a small amount of alcohol to the cloth and try to clean it again.

**Note:** *Do not use detergent or any type of solvent to clean the touchscreen.*

**Note:** *Do not pour or spray alcohol onto the touchscreen.*

## Using Voice Recognition

Using voice commands allows you to keep your hands on the wheel and focus on what is in front of you. The system provides feedback through audible tones, prompts, questions and spoken confirmations depending on the situation and the chosen level of interaction (voice settings).

The system also asks short questions (confirmation prompts) when it is not sure of your request or when there are multiple possible responses to your request.

When using voice commands, words and icons may appear in the status bar indicating the status of the voice command session. See **Using Voice Recognition** (page 385).

## **Accessing and Adjusting Modes Through Your Vehicle Information Display** (If Equipped)

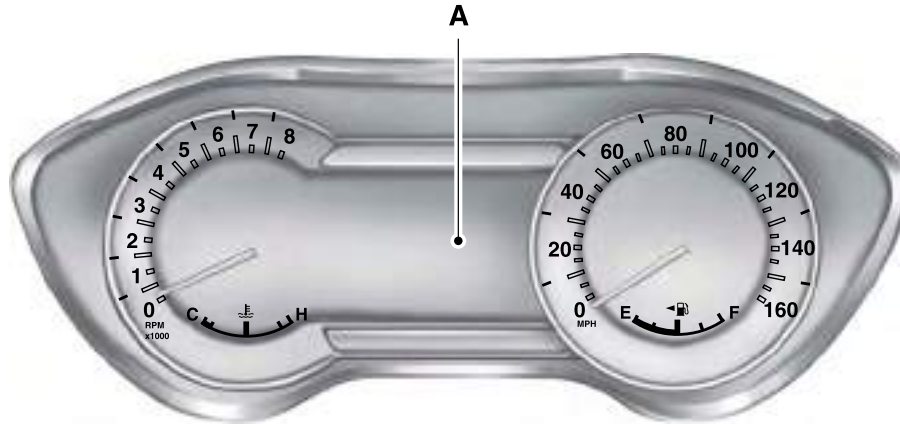
Depending on your vehicle and selected

options you may be able to control some of the SYNC 3 features on your information display. The features are visible in the center of the display (A).



# SYNC™ 3

---



E185883

You can make the following adjustments  
using the information display SYNC 3 screen:

Option	Information				
Audio	Information for current audio playing.				
	Select source.				
Navigation	View current road and speed limit (if information is available).				
	View current route, next turn, time to your destination (depending on cluster level), distance to destination (depending on cluster level), and ability to cancel route.				
	If you do not have an active navigation route programed, the compass is shown.				
Phone	If you are not on a call, a call can be made by selecting: *				
	Quick dial	All calls	Incoming calls	Outgoing calls	Missed calls
	If you are on a call, the call information is displayed on the information display.				
	If you are receiving a call, you can accept it by selecting OK on the right-hand steering wheel controls.				

\* Depending on your vehicle options, all of these choices may not display.

Use the **OK** and arrow buttons on the right side of your steering wheel to scroll through the available modes.

The selection menu expands and different options appear.

- Press the up and down arrows to scroll through the modes.
- Press the right arrow to enter the mode, use the left arrow to exit the mode.

- Press the up and down arrows to make adjustments within the chosen mode.
- Press **OK** to confirm your selection.

**Note:** If your vehicle is not equipped with navigation, compass appears in the display instead of navigation. If you press the right arrow to go into the compass menu, you can see the compass graphic. The compass displays the direction in which the vehicle is traveling, not true direction (for example, if the vehicle is traveling west, the middle of the compass graphic displays west; north displays to the left of west though its true direction is to the right of west).

## Using the Steering Wheel Controls

Depending on your vehicle and option package, you can use different controls on your steering wheel to interact with the touchscreen system in different ways.

**VOL:** Control the volume of audio output.

**Mute:** Mute the audio output.

**Voice:** Press to start a voice session. Press again to stop the voice prompt and immediately begin speaking. Press and hold to end a voice session.

## SEEK NEXT:

- While in radio mode, press to seek between memory presets.
- While in USB, Bluetooth Audio or CD mode, press to seek between songs or press and hold to fast seek.

## SEEK PREVIOUS:

- While in radio mode, press to seek between memory presets.
- While in USB, Bluetooth Audio or CD mode, press to seek between songs or press and hold to fast seek.

**PHONE ACCEPT:** Press to answer a call or switch between calls.

**PHONE REJECT:** Press to end a call or reject an incoming call.

**Note:** On some models, **SEEK NEXT** may be combined with **PHONE REJECT** and **SEEK PREVIOUS** may be combined with **PHONE ACCEPT**.

**M:** Touch the control repeatedly to switch between media sources (modes).

See **Steering Wheel** (page 78).

## Using Your Bezel Controls

Depending on your vehicle and option package, you may also have these controls on your instrument panel:

- **Power:** Switch the audio system on and off.
- **VOL:** Control the volume of playing audio.
- **Seek and Tune:** Use as you normally would in audio modes.
- **Eject:** Eject a CD from the audio system.
- **SOURCE or MEDIA:** Press repeatedly to advance through available media modes.
- **SOUND:** Press to access the Sound menu where you can adjust sound and other audio settings.
- **1-6:** Press and hold to store or press to select an AM, FM or SIRIUS memory preset. See **Audio System** (page 362).

- **DISP:** Switch the display on or off. You can also touch the screen to switch the display back on.
- **Temperature, fan and climate control buttons:** Control the temperature, fan speed or settings of the climate control system. See **Climate Control** (page 133).

## 911 Assist

### WARNINGS



Unless the 911 Assist setting is set on before a crash, the system will not dial for help which could delay response time, potentially increasing the risk of serious injury or death after a crash.



Do not wait for 911 Assist to make an emergency call if you can do it yourself. Dial emergency services immediately to avoid delayed response time which could increase the risk of serious injury or death after a crash. If you do not hear 911 Assist within five seconds of the crash, the system or phone may be damaged or non-functional.

### WARNINGS



Always place your phone in a secure location in your vehicle so it does not become a projectile or get damaged in a crash. Failure to do so may cause serious injury to someone or damage the phone which could prevent 911 Assist from working properly.

**Note:** *The SYNC 911 Assist feature must be set on before the incident.*

**Note:** *The SYNC 911 Assist feature only operates in the U.S., Canada or in a territory in which 911 is the emergency number.*

**Note:** *Before setting this feature on, make sure that you read the 911 Assist Privacy Notice later in this section for important information.*

**Note:** *If any user sets 911 Assist to on or off, that setting applies for all paired phones. If 911 Assist is switched off and the phone is connected to SYNC, an icon displays on the status bar.*

**Note:** *Every phone operates differently. While SYNC 911 Assist works with most cellular phones, some may have trouble using this feature.*

If a crash deploys an airbag (excluding knee airbags and rear inflatable safety belts [if equipped]) or activates the fuel pump shut-off, your SYNC-equipped vehicle may be able to contact emergency services by dialing 911 through a paired and connected Bluetooth-enabled phone. You can learn more about the 911 Assist feature, by visiting:

Website
<p>owner.lincoln.com www.syncmyride.ca www.syncmaroute.ca</p>

For important information about airbag deployment and the fuel pump shut-off please see the Supplementary Restraints and Roadside Emergencies sections of your owner manual.

To switch 911 Assist on and off please view the settings information. See **Settings** (page 434).

To make sure that 911 Assist works correctly:

- SYNC must be powered and working properly at the time of the incident and throughout feature activation and use.
- The 911 Assist feature must be set on before the incident.
- You must pair and connect a Bluetooth-enabled and compatible cell phone to SYNC.
- A connected Bluetooth-enabled phone must have the ability to make and maintain an outgoing call at the time of the incident.
- A connected Bluetooth-enabled phone must have adequate network coverage, battery power and signal strength.
- The vehicle must have battery power and be located in the U.S., Canada or in a territory in which 911 is the emergency number.

## In the Event of a Crash

Not all crashes will deploy an airbag or activate the fuel pump shut-off (the triggers for 911 Assist). If a connected cell phone sustains damage or loses its connection to SYNC during a crash, SYNC will search for and try to connect to a previously paired cell phone; SYNC will then attempt to call the emergency services.

Before making the call:

- SYNC provides a short window of time (about 10 seconds) to cancel the call. If you fail to cancel the call, SYNC attempts to dial 911.
- SYNC says the following, or a similar message: "SYNC will attempt to call 911, to cancel the call, press Cancel on your screen or press and hold the phone button on your steering wheel."

If you do not cancel the call, and SYNC makes a successful call, a pre-recorded message plays for the 911 operator, and then the occupant(s) in your vehicle is able to talk with the operator. Be prepared to provide your name, phone number and location immediately, because not all 911 systems are capable of receiving this information electronically.

## 911 Assist May Not Work If

- Your cellular phone or 911 Assist hardware sustains damage in a crash.
- The vehicle's battery or the SYNC system has no power.
- The phone(s) thrown from your vehicle are the ones paired and connected to the system.

## 911 Assist Privacy Notice

When you switch on 911 Assist, it may disclose to emergency services that your vehicle has been in a crash involving the deployment of an airbag or activation of the fuel pump shut-off. Certain versions or updates to 911 Assist may also be capable

of electronically or verbally disclosing to 911 operators your vehicle location or other details about your vehicle or crash to assist 911 operators to provide the most appropriate emergency services. If you do not want to disclose this information, do not switch the feature on.

## Safety Information

### WARNING



Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

- Do not attempt to service or repair the system. Have an authorized dealer check your vehicle.
- Do not operate playing devices if the power cords or cables are broken, split or damaged. Place cords and cables out of the way, so they do not interfere with the operation of pedals, seats, compartments or safe driving abilities.
- Do not leave playing devices in your vehicle during extreme conditions as it could cause them damage. See your device's user guide for further information.
- For your safety, some SYNC 3 functions are speed-dependent. Their use is limited to when your vehicle is traveling at speeds under 3 mph (5 km/h). Make sure that you review your device's manual before using it with SYNC 3.

## Speed-restricted Features

Some features of this system may be too difficult to use while your vehicle is moving so they are restricted from use unless your vehicle is stationary.

- Screens crowded with information, such as Point of Interest reviews and ratings, SiriusXM Traffic and Travel Link sports scores, movie times or ski conditions.
- Any action that requires you to use a keyboard is restricted, such as entering a navigation destination or editing information.
- All lists are limited so the user can view fewer entries (such as phone contacts or recent phone call entries).

See the following chart for more specific examples.

<b>Restricted features</b>	
Cellular Phone	Pairing a Bluetooth phone.
	Browsing of list entries is limited for phone contacts and recent phone calls.
System Functionality	Editing the keypad code.
	Enabling Valet Mode.
	Editing settings while the rear view camera or active park assist are active.
Wi-Fi	Editing Wi-Fi settings.
	Editing the list of wireless networks.
	Connecting to a new Wi-Fi network.
Text Messages	Viewing received text messages.
Navigation	Using the keyboard to enter a destination.
	Demo navigation route.
	Adding or editing Navigation Favorites entries or Avoid Areas.

## Creating a SYNC Owner Account

Why do I need a SYNC owner account?

- Essential for keeping up with the latest software and connected features.
- Access to customer support for any questions you may have.
- Maintain account permissions.

Visit the website to sign up and register.

Website
owner.lincoln.com www.syncmyride.ca www.syncmaroute.ca

### MyLincoln Mobile™ with Embedded Modem (If Equipped)

Connect to your vehicle using the MyLincoln Mobile app on your smartphone. The embedded modem in your vehicle communicates with the app and allows you to start, lock, unlock and locate your vehicle remotely. The app also connects you with other vehicle resources like a parking locator, roadside assistance, dealer locations and Lincoln Support. MyLincoln Mobile is

supported by Android and iPhone and it is available through the App Store and Google Play. The MyLincoln mobile app is available through a free download. Services included for four years. Text and data rates apply to usage.

### Updating Your System

You can choose to download the update onto a USB drive or use Wi-Fi to deliver automatic updates.

### USB Updates

To use the USB update you need to log into your owner account and visit the SYNC software update page.

Website
owner.lincoln.com www.syncmyride.ca www.syncmaroute.ca

The website notifies you if an update is available. You can then select to download the update.

You will need an empty USB drive. Please check the website for minimum requirements. Once you have inserted the USB drive into your computer, choose to start the download. Follow the instructions provided to download the files to the USB drive.

The installation of most files occurs in the background, and does not interrupt your use of the system. Navigation updates cannot be installed in the background, because the files are too large.

To install the update in your vehicle, remove anything that is plugged in the USB ports on the media hub and plug in the USB drive containing the update. When the USB drive is plugged in, the installation should begin immediately. After a successful installation, the update is available the next time the vehicle is started.



When the installation is complete, take the USB drive back to the computer to report the update. Log into your owner account and return to the SYNC software update page and confirm that you have installed the update. Insert the USB drive used for the update into your computer and choose to report your update. The website updates your records to reflect your current software version.

## Updating Over Wi-Fi

To update your System over Wi-Fi your vehicle must be within the range of a Wi-Fi access point. Data rates may apply.

### To connect your system to Wi-Fi, select:

Menu Item	
Settings	
Wi-Fi	
Available Wi-Fi Networks	You can then select your Wi-Fi network. You may have to enter the security code if the network is secured. The system confirms when it has connected to the network.

You must also give the system permission to update automatically. Upon vehicle delivery, the System asks you if you would like to use the automatic update feature. If you agree to automatic updates, you can press OK to confirm. If this selection does not appear upon vehicle delivery you can access it through the General Settings. See **Settings** (page 434). You can also perform a master reset. See **SYNC™ 3 Troubleshooting** (page 451).

### If you would like to switch this feature on later, select:

Menu Item	
Settings	
General	
Automatic System Updates	From this menu, you can enable automatic updates. If you have not done so already, the system prompts you to set up a Wi-Fi connection when you enable this feature.

When Wi-Fi and automatic updates are enabled, your system checks for software updates periodically. If a new version is available, it downloads at that time. Software downloads can take place for up to 30 minutes after you have switched your vehicle off. The updates do not interrupt the normal use of your SYNC 3 system. If a download does not complete for any reason, the

download continues where it left off at the next Wi-Fi connected opportunity. Upon activation of an update, a banner displays on the touchscreen indicating the system update. Select the icon to see more detail. This icon displays for two ignition cycles.

### To switch this feature off:

Menu Item	
Settings	
General	
Automatic System Updates	In this menu selection, you can change the selection for automatic updates to OFF.

### Support

The SYNC support team is available to help you with any questions you are not able to answer on your own.

Monday-Saturday, 8:30am-8:00pm EST.

United States: 1-800-521-4140.

Canada: 1-800-387-9333.

Times are subject to change due to holidays.

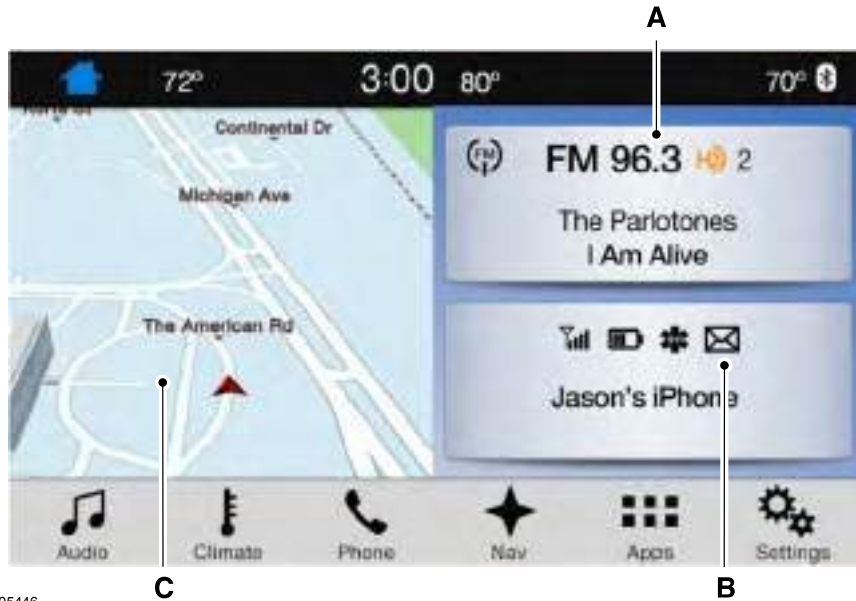
### Privacy Information

When you connect a cellular phone to SYNC 3, the system creates a profile within your vehicle that links to that cellular phone. This profile helps in offering you more cellular features and operating more efficiently. Among other things, this profile may contain data about your cellular phone book, text messages (read and unread), and call history, including history of calls when your cell phone was not connected to the system. In addition, if you connect a media device, the system creates and retains an index of supported media content. The system also records a short diagnostic log of approximately 10 minutes of all recent system activity. The log profile and other system data may be used to improve the system and help diagnose any problems that may occur.

The cellular profile, media device index, and diagnostic log remain in your vehicle unless you delete them and are generally accessible only in your vehicle when the cellular phone or media player is connected.

If you no longer plan to use the system or your vehicle, we recommend you perform a Master Reset to erase all stored information. You can find more information about the Master Reset in General Settings. See **Settings** (page 434). System data cannot be accessed without special equipment and access to your vehicle's SYNC 3 module. The Lincoln Motor Company does not access the system data for any purpose other than as described absent consent, a court order, or where required by law enforcement, other government authorities, or other third parties acting with lawful authority. Other parties may seek to access the information independently of The Lincoln Motor Company.

## HOME SCREEN



E205446

Item	Tile	Home screen display
A	Audio	Shows the active media source. If your vehicle does not have navigation, this space contains the compass.
B	Phone	The name of the connected phone appears on the screen. The status of the phone features also appear. This includes signal strength, battery charge, 911 assist setting state (On or Off), text messaging and roaming.
C	Navigation	This map displays your current location or current route in real time. When you have navigation active, you also see the next turn and the length of time and distance to your destination. If your vehicle does not have navigation, this space contains the audio information.

If equipped.

You can touch any of the feature displays to access that feature.

Anytime you select the home button, the system returns you to this screen.

## USING VOICE RECOGNITION

The SYNC 3 system allows you to use voice commands, to control features like audio and climate controls. By using voice commands, you can keep your hands on the wheel and your eyes on the road.

You can access each feature controlled by SYNC 3 through a variety of commands.



To activate the SYNC 3 voice commands push the voice button on the steering wheel and wait for the prompt.

\_\_\_ is a dynamic listing, meaning that it can be the name of anything, such as artist, the name of contact or number. The context and the description of the command tell you what to say for this dynamic option.

There are some commands that work for every feature, these commands are:

Voice Command	Action and Description
Main Menu	Brings you to the main menu.
Go back	Returns you to the previous screen.
Cancel	Ends the voice session.
List of Commands	Gives you a list of possible voice commands.
___ List of Commands	You can name any feature and the system gives a list of commands available for the feature. For example, you could say:
	Phone List of Commands
	Navigation List of Commands
Next Page	You can use this command to view the next page of options on any screen where multiple pages of choices are given.
Previous Page	You can use this command to view the previous page of options on any screen where multiple pages of choices are given.
Help	Gives you available commands you can use on the current screen.

Included here are some of the most popular commands for each SYNC 3 feature.

## Audio Voice Commands

\_\_\_ is a dynamic listing, meaning that for audio voice commands it can be the name

of a Sirius channel or a channel number, a radio frequency number, or the name of an artist, album, song or a genre.

**To control the media features, press the voice button and when prompted, say:**

Voice command	Description
Sirius Channel ___ *	You can say the Sirius channel name or number such as "Sirius channel 16". You can also just say the name of a Sirius station such as "The Pulse".
AM ___ FM ___	Allows you to tune to a specific FM or AM frequency such as "88.7 FM" or "1580 AM".
FM ___ HD ___ *	Allows you to tune to a specific HD frequency such as "88.7 FM HD 1".
Bluetooth Audio	Allows you to listen to music on your Bluetooth-connected device.
USB	Allows you to listen to music on your USB connected device.
Play Genre ___ Play Playlist ___ Play Artist ___ Play Album ___ Play Podcast ___ Play Song ___	For USB audio only, you can say the name of an artist, album, song or a genre to listen to that selection. Your system must finish indexing before this option is available. For example, you could say "Play artist, The Beatles" or "Play song, Penny Lane".

Voice command	Description
Play Audiobook ____	
Browse ____	For USB audio only, you can say the name of an artist, album, or a genre to browse by that selection. Your system must finish indexing before this option is available. For example you can say "Browse The Beatles" or "Browse folk".

\* This option may not be available in all markets or may require a subscription.

## Climate Voice Commands

You can control the temperature of the vehicle using voice commands.

\_\_\_\_ is a dynamic listing, meaning that for climate voice commands it can be the desired degrees for the temperature setting.

### To adjust the temperature, say:

Voice command	Description
Climate Set Temperature ____	Adjust the temperature between 59.0°F (15°C)-86.0°F (30°C).
Climate Help	

## Phone Voice Commands

### Pairing a Phone

You can use voice commands to connect your Bluetooth-enabled phone to the system.

**To pair your phone, press the voice button and when prompted, say:**

Voice command	Description
Pair Phone	Follow the on-screen instructions to complete the pairing process. See <b>Settings</b> (page 434).

## Making Calls

\_\_\_ is a dynamic listing, meaning that for phone voice commands it can be the name of the contact you wish to call or the digits you want to dial.

**Press the voice button and say a command similar to the following:**

Voice command	Description
Call ___	Allows you to call a specific contact from your phonebook such as "Call Jenny".
Call ___ at ___	Allows you to call a specific contact from your phonebook at a specific location such as "Call Jenny at Home".
Dial ___	Allows you to dial a specific number such as "Dial 867-5309".

Please make sure that you are saying the contact name exactly as it appears in your contact list.



**Once you have provided the digits of the phone number, you can say the following commands:**

Voice Command	Description
<0-9>	If the full number was not entered with the first command, you can continue saying the number.
Dial	Tells SYNC 3 to make the phone call.
Delete	Tells SYNC 3 to erase the last block of digits stated.
Clear	Tells SYNC 3 to erase the entire number.

## Text Message Voice Commands

**To access text message options, press the voice button and say:**

Voice command	Description
Listen to Message	
Listen to text message ____	You can say the number of the message you would like to hear.
Reply to Message	

**Navigation Voice Commands**

You can use any of the following commands to set a destination or find a point of interest.

\_\_\_ is a dynamic listing, meaning that for navigation voice commands it can be a POI category or an address.

**Setting a Destination**

**You can find an address, a point of interest (POI), or search for points of interest by category:**

Voice command	Description
Find an Address	Allows you to enter the address search functionality.
Find a ___	State the name of the POI category you would like to search for such as "Find restaurants".
Find POI	Allows you to enter the POI search functionality.
Find Intersection	Allows you to enter the intersection search functionality.
Destination Nearest ___	State the name of the POI category you would like to search for nearby such as "Destination nearest restaurants".
Destination Previous Destination	Allows you to see a list of your previous destinations.
Destination Home	Allows you to route to your home address.

**In addition, you can say these commands when a route is active:**

Voice command	Description
Cancel Route	Cancels the current route.
Detour	Allows you to select an alternate route.
Repeat Instruction	Repeats the last guidance prompt.
Show Route	Displays the active route.
Where Am I	Provides current location.
Zoom in	Allows you to zoom in on the map.
Zoom out	Allows you to zoom out from the map.

## **Mobile App Voice Commands** (If Equipped)

**The following voice commands are always available:**

Voice command	Description
Mobile Apps	SYNC 3 will prompt you to say the name of an app to start it on SYNC 3.
List Mobile Apps	SYNC 3 will list all of the currently available Mobile Apps.
Find New Apps	SYNC 3 will search and connect to compatible app(s) running on your mobile device.

**There are also voice commands that you can use when app(s) are connected to SYNC 3:**

Voice command	Description
Say the name of an app	At any time, you can say the name of a mobile app to start the mobile app on SYNC 3.
Say the name of an app, followed by help	SYNC 3 will list the available voice commands for the specified app if the app is running on SYNC 3.

## **SiriusXM Traffic and Travel Link Voice Commands** (If Equipped)

SiriusXM Traffic and Travel Link may not be available in all markets. Activation and a subscription are required.

**You can say the following commands to access SiriusXM Traffic and Travel Link:**

Voice command	Description
Show Traffic	Displays a list of traffic incidents.
Show Weather Map	Displays the current weather map.
Show Fuel Prices	Displays a list of fuel prices.
Show 5 Day Forecast	Displays the 5 day weather forecast.
Help	

## Voice Settings Commands

You can say the following commands to access the voice settings:

Voice command	Description
Voice Settings	Allows you to enter the voice settings functionality.
Interaction Mode Standard	Sets standard prompting with longer prompts.
Interaction Mode Advanced	Sets advanced prompting with shorter prompts.
Phone Confirmation On	Allows the system to confirm before making a phone call.
Phone Confirmation Off	The system does not confirm before placing a call.
Voice Command Lists On	The system displays a short list of available commands.
Voice Command Lists Off	The system does not display the list of commands.

**Note:** Depending on the current climate control settings, the fan speed may automatically go down while issuing voice commands or while making and receiving phone calls via SYNC to reduce the amount of background noise in the vehicle. The fan speed will automatically return to normal operation once the voice session ends. Fan speed can also be adjusted normally during a voice session, simply press fan buttons (or turn fan knob) to increase or decrease fan speed to desired setting.

To disable this automatic fan speed reduction feature during voice sessions, press and hold the climate control AC and Recirculated air buttons simultaneously, release and then increase fan speed within 2 seconds. To re-enable this feature, repeat the above sequence.

ENTERTAINMENT



E205443

Message	Message and description
A	Sources
B	Direct Tune

Message	Message and description
C	Presets

## Sources

Press this button to select the source of media you want to listen to.

You can access these options using the touchscreen or voice commands.

Menu item	
AM	
FM	
SIRIUS	*
CD	*
USB	The name of the USB that is plugged in displays here.
Bluetooth Stereo	
Apps	If you have SYNC 3 compatible apps on your connected smart phone, they display here as individual source selections.

\* This feature may not be available in all markets and requires an active subscription.



## AM/FM Radio

### Tuning a Station

You can use the tune or seek controls on the radio bezel to select a station.

**To tune a station using the touchscreen, select:**

Menu item
Direct Tune

A pop up appears, allowing you to type in the frequency of a station. You can only enter a valid station for the source you are currently listening to.

You can press the backspace button to delete the previously entered number.

**Once you have entered the station's call numbers, you can select:**

Menu item	Action and description
Enter	Press to begin playing the station you have entered.
Cancel	Press to exit without changing the station.

### Presets

To set a new preset, tune to the station and then press and hold one of the memory preset buttons. The audio mutes briefly while the system saves the station and then returns.

There are two preset banks available for AM and three banks for FM. To access additional presets, tap the preset button. The indicator on the preset button shows which bank of presets you are currently viewing.

## SIRIUS® Satellite Radio (If Activated)

**Note:** *This feature may not be available in all markets and requires an active subscription.*



E142593

SIRIUS satellite radio is a subscription-based satellite radio service that broadcasts a variety of music, sports, news, weather, traffic and entertainment programming. Your factory-installed SIRIUS satellite radio system includes hardware and a limited subscription term that begins on the date of sale or lease of your vehicle. See an authorized dealer for availability.

For more information on extended subscription terms (a service fee is required), the online media player and a list of SIRIUS satellite radio channels, and other features, please visit [www.siriusxm.com](http://www.siriusxm.com) in the United States, [www.siriusxm.ca](http://www.siriusxm.ca) in Canada, or call SIRIUS at 1-888-539-7474.

**Note:** SIRIUS reserves the unrestricted right to change, rearrange, add or delete programming. This includes canceling, moving or adding particular channels, and its prices, at any time, with or without notice to you. Ford Motor Company shall not be responsible for any such programming changes.

**Note:** This receiver includes the eCos real-time operating system. eCos is published under the eCos License.

**The following buttons are available for Sirius:**

Menu item	Action and description	
Browse	Touch this button to see a list of available stations.	
Direct Tune	A pop-up appears, allowing you to type in the call numbers of a station. Once you enter the stations call numbers, you can select:	
	Enter	The system tunes to the station you select.
	Cancel	You exit the pop-up and the current station continues to play.
	You can press the backspace button to delete the previous number.	

Menu item	Action and description	
Replay	Replay audio on the current channel. You can replay approximately 45 minutes of audio as long as you remain tuned to the current station. Changing stations erases the previous audio.	
	Live	When you are in replay mode, you are not able to select a different preset until you return to live audio. Pressing this button returns you to the live broadcast.
ALERT	Save the current song, artist, or team as a favorite. The system alerts you when it plays again on any channel. Selecting this button allows you to enable and edit alerts. See <b>Settings</b> (page 434).	

## Memory Presets

To set a preset, tune to the station then press and hold one of the memory preset buttons. The audio mutes briefly while the system saves the station and returns once the station is stored.

There are three preset banks available for SIRIUS. To access additional presets, tap the preset button. The indicator on the preset button shows which bank of presets you are currently viewing.

## Satellite Radio Electronic Serial Number (ESN)

You need your ESN to activate, modify or track your satellite radio account. See **Settings** (page 434).

**SIRIUS Satellite Radio Reception Factors and Troubleshooting**

<b>Potential reception issues</b>	
Antenna obstructions	For optimal reception performance, keep the antenna clear of snow and ice build-up and keep luggage and other materials as far away from the antenna as possible.
Terrain	Hills, mountains, tall buildings, bridges, tunnels, freeway overpasses, parking garages, dense tree foliage and thunderstorms can interfere with your reception.
Station overload	When you pass a ground-based broadcast-repeating tower, a stronger signal may overtake a weaker one and the audio system may mute.
Satellite radio signal interference	Your display may show ACQUIRING... to indicate the interference and the audio system may mute.

<b>Troubleshooting tips</b>		
<b>Message</b>	<b>Cause</b>	<b>Action</b>
Acquiring Signal	Radio requires more than two seconds to produce audio for the selected channel.	No action required. This message should disappear shortly.
Satellite antenna fault SIRIUS system failure	There is an internal module or system failure present.	If this message does not clear shortly, or with an ignition key cycle, your receiver may have a fault. See an authorized dealer for service.
Invalid Channel	The channel is no longer available.	Tune to another channel or choose another preset.

Troubleshooting tips		
Message	Cause	Action
Unsubscribed Channel	Your subscription does not include this channel.	Contact SIRIUS at 1-888-539-7474 to subscribe to the channel, or tune to another channel.
Satellite acquiring signal...	The signal is lost from the SIRIUS satellite or SIRIUS tower to your vehicle antenna.	The signal is blocked. When you move into an open area, the signal should return.
Updating...	Update of channel programming in progress.	No action required. The process may take up to three minutes.
Questions? Call 1-888-539-7474	Your satellite service is no longer available.	Contact SIRIUS at 1-888-539-7474 to resolve subscription issues.
None found. Check channel guide.	All the channels in the selected category are either skipped or locked.	Use the channel guide to turn off the Lock or Skip function on that station.
SIRIUS Subscription updated	SIRIUS has updated the channels available for your vehicle.	No action required.

**Note:** *HD Radio broadcasts are not available in all markets.*

## HD Radio™ Information (If Available)

**Note:** *This feature may not be available in all markets.*

To activate HD radio, please see the Radio Settings in the Settings Chapter. See **Settings** (page 434).

HD Radio technology is the digital evolution of analog AM/FM radio. Your system has a special receiver that allows it to receive digital broadcasts (where available) in addition to the analog broadcasts, it already receives. Digital broadcasts provide a better sound quality than analog broadcasts with free, crystal-clear audio and no static or distortion. For more information, and a guide to available stations and programming, please visit:

<b>Website</b>
<a href="http://www.hdradio.com">www.hdradio.com</a>

When HD Radio is on and you tune to a station broadcasting HD Radio technology, you may notice the following indicators on your screen:



E142616

The HD logo is grey when acquiring a digital station, and then changes to orange when digital audio is playing. When this logo is available, you may also see Title and Artist fields on-screen.

The multicast indicator appears in FM mode (only) if the current station is broadcasting multiple digital broadcasts. The highlighted numbers signify available digital channels where new or different content is available. HD1 signifies the main programming status and is available in analog and digital broadcasts. Other multicast stations (HD2 through HD7) are only available digitally.

**Note:** *There is also an additional feature for stations that have more than 1 HD multicast (For example, HD1 or HD2). The HD logo and Radio text appears as a button. Pressing this button allows you cycle through all of the HD stations on that specific frequency. For example, if you are on 101.1 and it has HD1, HD2, HD3, pressing the button repeatedly causes the radio to cycle through the HD stations in a cyclic increasing order.*

**When HD Radio broadcasts are active, you can access the following functions:**

Message	Action and description
Presets	Allows you to save an active channel as a memory preset. Touch and hold a memory preset slot until the sound returns. There is a brief mute while the radio saves the station. Sound returns when the channel saves. When switching to an HD2 or HD3 memory preset, the sound mutes before the digital audio plays, because the system has to reacquire the digital signal.

**Note:** *As with any station you save, you cannot access the saved station if your vehicle is outside the station's reception area.*

## HD Radio Reception and Station Troubleshooting

Potential reception issues	
Reception area	If you are listening to a multicast station and you are on the fringe of the reception area, the station may mute due to weak signal strength.
	If you are listening to HD1, the system changes back to the analog broadcast until the digital broadcast is available again. However, if you are listening to any of the possible HD2-HD7 multicast channels, the station mutes and stays muted unless it is able to connect to the digital signal again.
Station blending	When the system first receives a station (aside from HD2-HD7 multicast stations), it first plays the station in the analog version. Once the receiver verifies the station is an HD Radio station, it shifts to the digital version. Depending on the station quality, you may hear a slight sound change when the station changes from analog to digital. Blending is the shift from analog to digital sound or digital back to analog sound.

In order to provide the best possible experience, use the contact form to report any station issues found while listening to a station broadcasting with HD Radio

technology. Independent entities own and operate each station. These stations are responsible for ensuring all audio streams and data fields are accurate.

<b>Potential station issues</b>		
<b>Issues</b>	<b>Cause</b>	<b>Action</b>
Echo, stutter, skip or repeat in audio. Increase or decrease in audio volume.	This is poor time alignment by the radio broadcaster.	No action required. This is a broadcast issue.
Sound fading or blending in and out.	The radio is shifting between analog and digital audio.	No action required. The reception issue may clear up as you continue to drive.
There is an audio mute delay when selecting HD2 or HD3, multicast preset or Direct Tune.	The digital multicast is not available until the HD Radio broadcast is decoded. Once decoded, the audio is available.	No action required. This is normal behavior. Wait until the audio is available.
Cannot access HD2 or HD3 multicast channel when recalling a preset or from a direct tune.	The previously stored multicast preset or direct tune is not available in your current reception area.	No action required. The station is not available in your current location.
Text information does not match currently playing audio.	Data service issue by the radio broadcaster.	Fill out the station issue form. *
There is no text information shown for currently selected frequency.	Data service issue by the radio broadcaster.	Fill out the station issue form. *



HD Radio Technology manufactured under license from iBiquity Digital Corp. U.S. and foreign patents. HD Radio and the HD and HD Radio logos are proprietary trademarks of iBiquity Digital Corp. Ford Motor Company and iBiquity Digital Corp. are not responsible for the content sent using HD Radio technology. Content may be changed, added or deleted at any time at the station owner's discretion.

\* You can find the form here:

Website
<a href="http://www.ibiquity.com/automotive/report_radio_station_experiences">http://www.ibiquity.com/automotive/report_radio_station_experiences</a>

The current audio information appears on the screen.

### CD (If equipped)

Once you select this option, the system returns you to the main audio screen.

**The following buttons are also available:**

Button	Function
Browse	You can use the browse button to select a track.
Repeat	Select this button and a small number one displays to indicate the track is set to repeat. For MP3 CDs, this button allows you to toggle through repeat off, repeat one track (a small number one displays), and repeat current folder (a small folder displays).
Shuffle	Select the shuffle symbol to have the audio on the disk play in random order.

You can use the forward, reverse, pause or play buttons to control the audio playback.

## Bluetooth Stereo or USB

Bluetooth Stereo and USB allow you to

access media that you store on your Bluetooth device or USB device such as music, audio books or podcasts.

The following buttons are available for **Bluetooth and USB**:

Button	Function
Repeat	Pressing the repeat button toggles the repeat setting through three modes: repeat off (button not highlighted), repeat all (button highlighted) and repeat track (button highlighted with a small number one).
Shuffle	Play the tracks in random order.

You can use the forward, reverse, pause or play buttons to control the audio playback.

To get more information about the currently playing track, press the cover art or Info button.

For some devices, SYNC 3 is able to provide 30-second skip buttons when you listen to audio books or podcasts. These buttons allow you to skip forward or backward within a track.

While playing audio from a USB device you can look for certain music by selecting the following:

Button	Function
Browse	If available, displays the list of tracks in the Now Playing playlist.
New Search	This option, which is available under browse, allows you to play all tracks or to filter the available media into one of the below categories.
	Play All

Button	Function
	Playlists
	Artists
	Albums
	Songs
	Genres
	Podcasts
	Audio books
	Composers
A-Z Jump	This button allows you to choose a specific letter to view within the category you are browsing.
Explore Device	If available, this allows you to browse the folders and files on your USB device.

## USB Ports



E211463

The USB ports are in the center console or behind a small access door in the instrument panel.

This feature allows you to plug in USB media devices, memory sticks, flash drives or thumb drives, and charge devices if they support this feature.

Select this option to play audio from your USB device.

## Apps

The system supports the use of certain audio apps such as iHeartRadio through a USB or bluetooth-enabled device.

Each app gives you different on-screen options depending on the app's content. See **Apps** (page 431).

## Supported Media Players, Formats and Metadata Information

The system is capable of hosting nearly any digital media player, including iPod, iPhone, and most USB drives.

Supported audio formats include MP3, WMA, WAV, AAC, and FLAC.

Supported audio file extensions include MP3, WMA, WAV, M4A, M4B, AAC, and FLAC.

Supported USB file systems include: FAT, exFAT, and NTFS.

SYNC 3 is also able to organize the media from your USB device by metadata tags. Metadata tags, which are descriptive software identifiers embedded in the media files, provide information about the file.

If your indexed media files contain no information embedded in these metadata tags, SYNC 3 may classify the empty metadata tags as unknown.

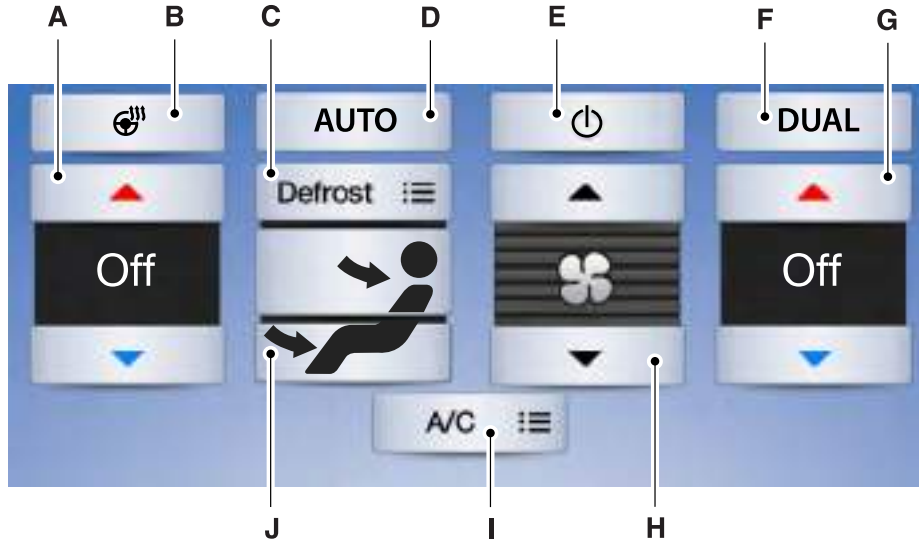
SYNC 3 is capable of indexing up to 50,000 songs per USB device, for up to 10 devices.

## CLIMATE

Touch the climate button on the touchscreen to access your climate control features. Depending on your vehicle line and option package, your climate screen may look different from one of the screens shown below. Your screen may not contain all of the features shown.

**Note:** You can switch temperature units between Fahrenheit and Celsius. See **Settings** (page 434).

# SYNC™ 3



E206820

- A **Driver temperature:** Touch up or down to adjust the temperature.
- B **Heated steering wheel:**

**Note:** This feature only functions when you switch the engine on.

Touch this icon to switch the heated steering wheel on and off. It takes about 5 minutes to warm the steering wheel to 74°F in temperatures as low as -4°F. The wheel maintains an approximate temperature of 90°F and operates independently from the heated seats and other climate-control functions. The heating element is in between the leather covering and foam core to help provide maximum heat without adversely affecting the feel of the steering wheel.

**Note:** The heated steering wheel may remain on after remote starting the vehicle, based on your remote start settings. The heated steering wheel may also turn on when you start your vehicle, if it was on when you switched your vehicle off.

**Note:** For steering wheels with wood trim, the heating feature will not heat the wheel between the 10 and 2 o'clock positions.

C **Defrost:** A pop up appears on the screen to display the defrost options.

**MAX Defrost:** Touch the button to maximize defrosting. Air flows through the windshield vents, the fan automatically adjusts to the highest speed and the driver and passenger temperatures are set to HI. You can use this setting to defog or clear a thin covering of ice from the windshield. The heated rear window also automatically turns on when you select MAX Defrost.

**Defrost:** Distributes air through the windshield defroster vents and demister vents.

**Heated rear window:** Turns the heated rear window on and off. See **Heated Windows and Mirrors** (page 136).

D **AUTO:** Touch the button to switch on automatic operation. Select the desired temperature using the temperature control. The system adjusts fan speed, air distribution, air conditioning operation, and selects outside air or recirculated air to heat or cool the vehicle in order to maintain the desired temperature.

E **Power:** Touch the button to switch the system on and off. Switching off the climate control system prevents outside air from entering the vehicle.

F **DUAL:** This button lights up when the passenger controls are active. To switch the off and link the passenger temperature to the driver temperature, touch the DUAL button.

**Note:** the passenger side temperature and the DUAL indication automatically turn on when you or your passenger adjust the passenger temperature.

- G Passenger temperature:** Touch up or down to adjust the temperature.
- H Fan speed:** Touch up or down to increase or decrease the volume of air that circulates in your vehicle.  
**Note:** You cannot adjust the fan speed when the system is set to AUTO or MAX A/C.
- I A/C:** A pop-up appears on the screen to display the air conditioning options.  
**MAX A/C:** Touch the button to activate and maximize cooling. The driver and passenger temperatures are set to LO, recirculated air flows through the instrument panel vents, air conditioning automatically turns on and the fan automatically adjusts to the highest speed.  
**A/C:** Touch to switch the air conditioning on or off. Use A/C with recirculated air to improve cooling performance and efficiency.  
**Note:** In certain conditions (for example, Max Defrost), the air conditioning compressor may continue to operate even when you switch the air conditioning A/C button off.  
**Recirculated air:** Touch to switch the recirculated air on or off. When recirculated air is on, it may reduce the amount of time needed to cool down the interior (when used with A/C) and help reduce odors from reaching the interior.  
**Note:** Recirculated air may turn off automatically (or the system may prevent it from turning on) in all airflow modes except MAX A/C to reduce risk of fogging. It may also turn on and off automatically in Panel or Panel/Floor airflow modes during hot weather in order to improve cooling efficiency.
- J Manual airflow distribution controls:** Select these controls individually, together, or with Defrost to direct the air flow to the area you desire.  
**Panel:** Distributes air through the instrument panel vents.  
**Floor:** Distributes air through the demister vents, floor vents and rear seat floor vents.

**PHONE**

**WARNING**



Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

Hands-free calling is one of the main features of the system. Once you pair your cell phone, you can access many options using the touchscreen or voice commands. While the system supports a variety of features, many are dependent on your cell phone's functionality.

**Pairing Your Cell Phone for the First Time**

Pair your Bluetooth-enabled phone with the system before using the functions in hands-free mode.

Switch on Bluetooth on your device to begin pairing. See your phone's manual if necessary.

**To add a phone, select:**

Menu Item
Add Phone

1. Follow the on-screen instructions.
2. A prompt alerts you to search for the system on your phone.
3. Select your vehicle's make and model as it displays on your phone.
4. Confirm that the six-digit number appearing on your phone matches the six-digit number on the touchscreen.
5. The touchscreen indicates when the pairing is successful.

6. Your phone may prompt you to give the system permission to access information. To check your phone's compatibility, see your phone's manual or visit the website.

**Alternatively, to add a phone, select:**

Menu Item
Add Phone
<b>Then select:</b>
Discover Other Bluetooth Devices

1. Follow the on-screen instructions.
2. A prompt alerts you to search for the system on your phone.
3. Select your phone's name when it appears on the touchscreen.
4. Confirm that the six-digit number appearing on your phone matches the six-digit number on the touchscreen.
5. The touchscreen indicates when the pairing is successful.



6. Your phone may prompt you to give the system permission to access information. To check your phone's compatibility, see your phone's manual or visit the website.

At a minimum, most cell phones with Bluetooth wireless technology support the following functions:

- Answering an incoming call.
- Ending a call.
- Dialing a number.

- Call waiting notification.
- Caller identification.

Other features, such as text messaging using Bluetooth and automatic phonebook download, are phone-dependent features.

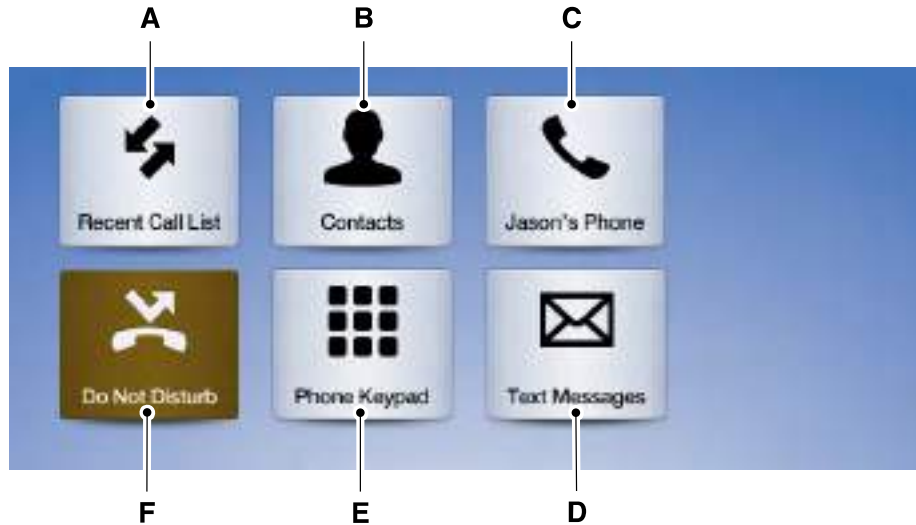
**To check your phone's compatibility, see your phone's manual or visit the website:**

Websites
<a href="http://owner.lincoln.com">owner.lincoln.com</a>

Websites
<a href="http://www.syncmyride.ca">www.syncmyride.ca</a> <a href="http://www.syncmaroute.ca">www.syncmaroute.ca</a>

## Phone Menu

This menu becomes available when a phone is paired and connected.



E205447

Item	Menu Item	Action and Description
A	Recent Call List	Displays your recent calls.

Item	Menu Item	Action and Description				
		<p>You can place a call by selecting an entry from this list.                      You can also sort the calls by selecting the drop down menu at the top of the screen. You can choose:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">All</td> <td style="width: 25%;">Incoming</td> <td style="width: 25%;">Outgoing</td> <td style="width: 25%;">Missed</td> </tr> </table>	All	Incoming	Outgoing	Missed
All	Incoming	Outgoing	Missed			
B	Contacts	All of your contacts from your phone display in alphabetical order.				
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">A-Z Jump</td> <td>Selecting this button allows you to choose a specific letter to view.</td> </tr> </table>	A-Z Jump	Selecting this button allows you to choose a specific letter to view.		
A-Z Jump	Selecting this button allows you to choose a specific letter to view.					
C	Phone Settings	Displays the name of your phone and takes you to the phone settings options. From this menu, you can pair subsequent devices, set ring tones and alerts. See <b>Settings</b> (page 434).				
D	Text Messages	Displays all recent text messages.				
E	Phone Keypad	Use this keypad to dial in a phone number. Use the backspace button to delete numbers.				
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Call</td> <td>Press this button to begin a call.</td> </tr> </table>	Call	Press this button to begin a call.		
Call	Press this button to begin a call.					
F	Do Not Disturb	Touch this button to send all calls directly to your voicemail. New text message notifications are not displayed on the screen and all ringtones and alerts are set to silent.				

Users with phones having voice services may see a button to access the feature. For example, iPhone users see a Siri button. A press and hold of the voice button on the steering wheel also accesses this feature.

## **Making Calls**

There are many ways to make calls from the SYNC 3 system, including using voice commands. See **Using Voice Recognition** (page 385). You can use the touchscreen to place calls as well.

## To call a number in your contacts, select:

Menu Item	Action and Description
Contacts	You can then select the name of the contact you want to call. Any numbers stored for that contact display along with any stored contact photos. You can then select the number that you want to call. The system begins the call.

## To call a number from your recent calls, select:

Menu Item	Action and Description
Recent Call List	You can then select an entry that you want to call. The system begins the call.

## To call a number that is not stored in your phone, select:

Menu Item	Action and Description

Menu Item	Action and Description
Phone Keypad	Select the digits of the number you wish to call.
Call	The system begins the call.

Pressing the backspace button deletes the last digit you typed.

## Receiving Calls

During an incoming call, an audible tone sounds. Caller information appears in the display if it is available.

## To accept the call, select:

Menu Item
Accept

**Note:** *You can also accept the call by pressing the phone button on the steering wheel.*

## To reject the call, select:

Menu Item
Reject

**Note:** *You can also reject the call by pressing the phone button on the steering wheel.*

Ignore the call by doing nothing. SYNC 3 logs it as a missed call.

## During a Phone Call

During a phone call, the contacts name and number display on the screen along with the call duration.

The phone status items are also visible:

- Signal Strength.
- Battery.
- 911 Assist (United States and Canada Only). See **Settings** (page 434).

You can select any of the following during an active phone call:

Item	
End Call	Immediately end a phone call. You can also press the button on the steering wheel.
Keypad	Press this to access the phone keypad.

Item	
Mute	You can switch the microphone off so the caller does not hear you.
Privacy	Transfer the call to the cell phone or back to SYNC 3.

## Text Messaging

**Note:** *Downloading and sending text messages using Bluetooth are cell phone-dependent features.*

**Note:** *Certain features in text messaging are speed-dependent and not available when your vehicle is traveling at speeds over 3 mph (5 km/h).*

### Receiving a Text Message

**When a new message arrives, an audible tone sounds and the screen displays a pop-up with the caller name and ID, if supported by your cell phone. You can select:**

Menu Item	Action and Description
Hear It	Have SYNC 3 read the message to you.
View	View the text on the touchscreen.
Call	To call the sender.
Reply	You can select from 15 preset messages. Press the message that you would like to use and confirm to send the message. SYNC 3 confirms when the message is sent successfully.
Close	To exit the screen.

## Smartphone Connectivity (If Equipped)

The system allows you to use Apple CarPlay and Android Auto to access your phone.

When you use Apple CarPlay or Android Auto, you can:

- Make calls.
- Send and receive messages.
- Listen to music.
- Use your phone's voice assistant.

Apple CarPlay and Android Auto disables some system features.

Most Apple CarPlay and Android Auto features use mobile data.

### Apple CarPlay

Apple CarPlay requires an iPhone 5 or newer with iOS 7.1 or newer. We recommend updating to the latest iOS version.

1. Plug your phone into a USB port.
2. Select Apple CarPlay on the touchscreen.

**To disable Apple CarPlay on your phone, go to the settings on the touchscreen and select:**

Menu Item
Apple CarPlay Preferences
<b>Select the name of your device and then select:</b>
Disable

To return to the system, go to the Apple CarPlay home screen and select the SYNC app.

### Android Auto

Android Auto is compatible with most devices with Android 5.0 or newer.

1. Download the Android Auto app to your device from Google Play.
2. Plug your phone into a USB port.
3. Select Android Auto on the touchscreen.

**To disable Android Auto on your phone, go to settings on the touchscreen and select:**

Menu Item
Android Auto Preferences
<b>Select the name of your device and then select:</b>
Disable

To return to the system, select the speedometer icon in the Android Auto menu bar at the bottom of the touchscreen, and then touch the option to return to SYNC.

## NAVIGATION

Your navigation system is comprised of two main features, destination mode and map mode.

## Map Mode

Map mode shows advanced viewing comprised of 2D city maps, 3D landmarks and 3D city models (when available). 2D city maps show detailed outlines of buildings, visible land use, landscape features, and detailed railroad infrastructure for the most essential cities around the globe.

3D landmarks appear as clear, visible objects that are typically recognizable and have a certain tourism value.

3D city models are complete 3D models of entire city areas including navigable roads, parks, rivers and rendered buildings. 3D landmarks and city models appear in 3D map mode only. Coverage of these varies and improves with updated map releases.



Select the zoom in icon to see a closer view of the map.



Select the zoom out icon to see a farther away view of the map.

You can adjust the view in preset increments. You can also pinch to zoom in or out of the map.

The information bar tells you the names of streets, cities or landmarks as you hover over them with the crosshair cursor.

You can change your view of the map by tapping on the location indicator icon on the right hand side of the screen. You can choose from the following options:



**Heading up (2D map)** This always shows the direction of forward travel to be upward on the screen. This view is available for map scales up to 3 mi (5 km).



**North up (2D map)** always shows the northern direction to be upward on the screen.



**3D map mode** provides an elevated perspective of the map. Adjust this viewing angle and rotate the map 180 degrees by touching the map twice, and then dragging your finger along the shaded bar with arrows at the bottom of the map.



Re-center the map by pressing this icon whenever you scroll the map away from your vehicle's current location.



**Points of Interest (POI) grouping icon:** You can choose up to three POI icons to display on the map. If the chosen POIs are located close

together or are at the same location a box is used to display a single category icon instead of repeating the same icon, in order to reduce clutter. When you select the box on the map, a pop-up appears indicating how many POIs are in this location. Select the pop up to see a list of the available POIs. You can scroll through and select POIs from this list.

If your vehicle is low on charge or fuel, station icons automatically display on the map.

If you have subscribed to SiriusXM Traffic and Travel Link (where available), traffic flow will be indicated on the map by green (clear), yellow (slowing), and red (stopped) road highlights. Traffic flow is indicated where the information is available and varies across the US.



You can choose to display traffic icons on the map representing twelve different types of incidents. See **Settings** (page 434).

You can set a destination by hovering above a location and selecting:

<b>Button</b>
Start

## Destination Mode

To set a destination, press:

Menu Item	Description
Destination	Enter a navigation destination in any of the following formats:
Search	<p>Street Address (number, street, city, state) For example "12 Mainstreet Dearborn MI"</p>
	<p>Partial Address (number, street) if searching in current state (number, street and zip code (or postal code in Canada)) if searching out of state You can enter unique addresses that contain door number prefixes with or without the prefix. For example, you could enter "6N340 Fairway Lane" or "340 Fairway Lane".</p>
	<p>City (name or zip code)</p>

Menu Item	Description
	<p>Point of Interest (name or category)</p>
	<p>Intersection (street 1 / street 2) (street 1 and street 2) (street 1 &amp; street 2) (street 1 @ street 2) (street 1 at street 2)</p>
	<p>Latitude and Longitude (#.##### , ##.#####) One to six decimal places are accepted.</p>
	<p>You are given autocomplete options below the address bar to select as you type. If you do not give an exact destination, a menu displays with your possible selections.</p>
Previous Destinations	<p>Collections of your last 40 navigation destinations display here. You can select any option from the list to select it as your destination. These locations cannot be deleted individually. To delete them, preform a master reset. See <b>SYNC™ 3 Troubleshooting</b> (page 451).</p>
Home	<p>Select to navigate to your set Home destination. The time it takes to travel from your current location to Home displays. To set your Home, press:</p>

# SYNC™ 3

Menu Item	Description	
	Home	A prompt appears asking if you would like to create a favorite for home. Select:
	Yes	Enter a location into the search bar and press:
	Save	
Work	Select to navigate to your set Work destination. The time it takes to travel from your current location to Work displays. To set your Work:	
	Work	A prompt appears asking if you would like to create a favorite for work. Select:
	Yes	Enter a location into the search bar and press:
	Save	
Favorites	Favorites include any location you have previously saved. To add Favorites:	
	Add a Favorite	Select this button and enter a location into the destination bar.
	Search	Select this option to have the system locate the address you have entered.
	Save	Select this button when the address you have entered appears on the screen.
	The address saves as a favorite and you see the favorites screen. You can now select this address from the favorites screen.	
Point of Interest (POI) Categories	POI categories that may display (based on market and vehicle configuration):	

# SYNC™ 3

Menu Item	Description
	Food
	Fuel
	hotel
	ATM
See All	Press to view additional categories. Once you have selected a category, follow the menus to find what you are looking for.
	Inside of these categories you can search by:
	Nearby
	Along Route
	Near Destination
	In a City

**Once you have chosen your destination, press:**

Menu Item	Action and Description	
Save	This saves the destination to your favorites.	
Start	This shows you a map of your entire route. You can then choose your route from three different options.	
	Fastest	Uses the fastest moving roads possible.
	Shortest	Uses the shortest distance possible.
	Economical Route	Uses the most fuel-efficient route.
	The time and distance for each route also displays.	
Cancel	On the route screen, you can choose to cancel the current navigation. The system asks for confirmation then returns you to the map mode screen.	

**Once you have chosen you destination, press:**

Menu Item	Action and Description
Start	<p>The system uses a variety of screens and prompts to guide you to your destination. During Route guidance, you can press the maneuver arrow icon on the map if you want the system to repeat route guidance instructions. When the system repeats the last guidance instruction, it updates the distance to the next guidance instruction, since it detects that the vehicle is moving.</p> <p>The navigation map shows your estimated time of arrival, remaining travel time and the distance to your destination.</p>

Menu Item	Action and Description
	SYNC 3 may not always announce vehicle arrival at the exact point of your destination and you may have to cancel a route manually.

## Navigation Menu

In map mode and during active navigation you can access the navigation menu.

During active navigation, touch the bottom of the screen to view the menu and other buttons.

**To access the Navigation menu, press:**

Button		
Menu		
<b>You can then select:</b>		
Screen View	Full Map	A full screen map displays during navigation.
	Highway Exit Info	Highway exit information displays on the right hand side of the screen during navigation. Points of interest icons display for restaurants, hotels, fuel stations and ATMs when they are present at the exit. You can select the POI icons to receive a listing of specific locations. You can select the POI location as a waypoint or destination if desired.
	Turn List	Only available during an active route. Displays all of the turns on the current route. You can choose to avoid any road on the turn list by selecting the road from the list. A screen then appears and you can press:

<b>Button</b>	
	<p><b>Avoid</b></p> <p>The system calculates a new route and displays a new turn list.</p>
<b>Traffic List</b>	<p>You can find the SiriusXM Traffic and Travel Link information by pressing this button. This information requires an active subscription to SiriusXM Traffic and Travel Link.</p> <p>When a route is not active, a list of nearby traffic incidents displays (if any are present).</p> <p>When a route is active, you can choose to display a list of traffic nearby or on the route.</p>
<b>Navigation Settings</b>	<p>Press this button to adjust your preferences. See <b>Settings</b> (page 434).</p>
<b>Where Am I?</b>	<p>Provides your current location city, longitude and latitude and the nearest road.</p>
<p>The following are only available on the menu during an active navigation route:</p>	
<b>Cancel Route</b>	<p>The system asks for confirmation and then returns you to the map mode screen.</p>
<b>Mute Guidance</b>	<p>Selecting this option switches off the audio navigation guidance. Press the button again to un-mute guidance.</p>
<b>View Route</b>	<p>Press this to see a map of the full route.</p>
<b>Detour</b>	<p>An alternate route displays in comparison with the current route.</p>
<b>Edit Waypoints</b>	<p>Only available if you have an active waypoint on your route. See <b>Waypoints</b> later in this section for information on how to set waypoints.</p>

Button	
	Use this button to re-order or remove your waypoints.
You can also have the system set the order for you by pressing:	Optimize Order
To return to your route press:	Go

## Waypoints

You can add a waypoint to a navigation route as a destination along your route.

To add a waypoint:

1. Select the search icon (magnifying glass) while on an active route. This brings up the destination menu.

2. Set your destination using any of the given methods. Once the destination has been selected, the screen allows you to set the destination as a waypoint by selecting:

Menu Item	
Add Waypoint	The waypoint list then appears and you are able to re-order all of your waypoints by selecting the menu icon on the right hand side of the location. You can select up to five waypoints.
You can also have the system set the order for you by pressing:	Optimize Order
To return to your route, press:	Go



**cityseeker** (If Equipped)

**Note:** *cityseeker point of interest (POI) information is limited to approximately 1110 cities (1049 in the United States, 36 in Canada and 15 in Mexico).*



E225487

cityseeker, when available, is a service that provides more information about certain points of interest such as restaurants, hotels and attractions.

When you have selected a point of interest, the location and information appear, such as address, phone number and a star rating.

Press **More Information** to see a photo, a review, a list of services and facilities, the average room or meal price and the web address. This screen displays the point of interest icons.

For restaurants, cityseeker can provide information such as star rating, average cost, review, handicap access, hours of operation, and website address.

For hotels, cityseeker can provide information such as star rating, price category, review, check-in and checkout times, hotel service icons and website address. Hotel service icons include:

- Restaurant
- Business center
- Handicap facilities
- Laundry
- Refrigerator
- 24 hour room service
- Fitness center
- Internet access
- Pool
- Wi-Fi

Attractions include nearby landmarks, amusement parks, historic buildings and more. cityseeker can provide information such as star rating, reviews, hour of operation and admission price.

**SiriusXM Traffic and Travel Link**

SiriusXM Traffic and Travel Link is available on vehicles equipped with navigation and only in select markets. You must activate and subscribe to receive SiriusXM Traffic and Travel Link information. It helps you locate the best gas prices, find movie listings, get current traffic alerts, view the weather map, get accurate ski conditions and see current sports scores. See **Apps** (page 431).

The system calculates a reasonable efficient route based on available speed limits, traffic, and road conditions. You may know a local short cut that is more efficient at a given time than the route provided by SYNC 3, but you should expect a slight difference in minutes or miles with the SYNC 3 route.

**Navigation Map Updates**

Annual navigation map updates are available for purchase through your dealership, by calling 1-866-462-8837 in the United States and Canada or 01-800-557-5539 in Mexico. You can also visit:

Website
<a href="http://www.navigation.com/sync">www.navigation.com/sync</a>

You need to specify the make and model of your vehicle to determine if there is an update available.

HERE is the digital map provider for the navigation application. If you find map data errors, you may report them directly to HERE by going to [www.here.com/mapcreator](http://www.here.com/mapcreator). HERE evaluates all reported map errors and responds with the result of their investigation by e-mail.

Map coverage includes the USA (including Puerto Rico and the US Virgin Islands), Canada and Mexico.

## APPS

The system enables voice, steering wheel, and touch screen control of SYNC 3 AppLink enabled smartphone apps. Once an app is running through AppLink, you can control main features of the app through voice commands and steering wheel controls.

**Note:** Available AppLink enabled apps will vary by market.

**Note:** You must pair and connect your smartphone via Bluetooth to SYNC 3 to access AppLink.

**Note:** iPhone users need to connect the phone to the USB port.

**Note:** For information on available apps, supported smartphone devices and troubleshooting tips please visit:

Websites
<a href="http://owner.lincoln.com">owner.lincoln.com</a> <a href="http://www.syncmyride.ca">www.syncmyride.ca</a>

Websites
<a href="http://www.syncmaroute.ca">www.syncmaroute.ca</a>

**Note:** Make sure you have an active account for the app that you have downloaded. Some apps will work automatically with no setup. Other apps will want you to configure your personal settings and personalize your experience by creating stations or favorites. We recommend you do this at home or outside of your vehicle.

**Note:** We encourage you to review the smartphone app's terms of service and privacy policies because Ford is not responsible for your app or its use of data.

**Note:** In order to use an app with SYNC 3, the App needs to be running in the background of your phone. If you shut down the app on your phone, it shuts down the app on SYNC 3 as well.

**Note:** If a SYNC 3 AppLink compatible app is not shown in the Apps Domain, make sure the required app is running on the mobile device.

Menu Item	Action and Description
Connect Mobile Apps	SYNC 3 will search and connect to compatible app(s) running on your mobile device.

## Enabling SYNC 3 Mobile Apps

In order to enable mobile apps, SYNC 3 requires user consent to send and receive app authorization information and updates using the data plan associated with the connected device.

The connected device sends data to Ford in the United States. The information is encrypted and includes your VIN, SYNC 3 module number, anonymous usage statistics and debugging information. Updates may take place automatically.

**Note:** *You must enable mobile apps for each connected device the first time you select a mobile app using the system.*

**Note:** *Ford reserves the right to limit functionality or deactivate mobile apps at any time.*

**Note:** *Standard data rates apply. Ford is not responsible for any additional charges you may receive from your service provider, when your vehicle sends or receives data through the connected device. This includes any additional charges incurred due to driving in areas when roaming out of a home network.*

You can enable and disable apps through settings. See **Settings** (page 434).

## App Permissions

The system organizes the App permissions into groups. You can grant these group permissions individually. You can change a permission group status any time when not driving, by using the settings menu. While in the settings menu, you can also see the data included in each group.

When you launch an app using SYNC 3, the system may ask you to grant certain permissions, for example Vehicle information, Driving characteristics, GPS and Speed, and/or Push notifications. You can enable all groups or none of them during the initial app permissions prompts. The settings menu offers individual group permission control.

**Note:** *You are only prompted to grant permissions the first time you use an app with SYNC 3.*

**Note:** *If you disable group permissions, apps will still be enabled to work with SYNC 3 unless you deactivate All Apps in the settings menu.*

**SiriusXM Traffic and Travel Link** (if

Equipped)

**WARNING**



Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any handheld device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

**Note:** *SiriusXM Traffic and Travel Link may not be available in all markets.*

**Note:** *In order to use SiriusXM Traffic and Travel Link, your vehicle must have navigation.*

**Note:** *A paid subscription is required to access and use these features. Go to [www.siriusxm.com/travellink](http://www.siriusxm.com/travellink) for more information.*

**Note:** *Visit [www.siriusxm.com/traffic](http://www.siriusxm.com/traffic) and click on Coverage map and details for a complete listing of all traffic areas covered by SiriusXM Traffic and Travel Link.*

**Note:** *Neither Sirius nor Ford is responsible for any errors or inaccuracies in the SiriusXM Traffic and Travel Link services or its use in vehicles.*

When you subscribe to SiriusXM Traffic and Travel Link, it can help you locate the best gas prices, find movie listings, get current traffic alerts, view the current weather map, get accurate ski conditions and see scores to current sports games.

Menu Item	Action and Description
Traffic on Route	Touch these buttons to identify traffic incidents on your route, near your vehicle's current location or near any of your favorite places, if programmed.
Traffic Nearby	
Fuel Prices	Touch this button to view fuel prices at stations close to your vehicle's location or on an active navigation route.
Movie Listings	Touch this button to view nearby movie theaters and their show times, if available.

Menu Item	Action and Description	
Weather	Touch this button to view the nearby weather, current weather, or the five-day forecast for the chosen area.	
	Map	Select to see the weather map, which can show storms, radar information, charts and winds.
	Area	Select to choose from a listing of weather locations.
Sports Info	Touch this button to view scores and schedules from a variety of sports. You can also save up to 10 favorite teams for easier access. The score automatically refreshes when a game is in progress.	
Ski Conditions	Touch this button to view ski conditions for a specific area.	

## Sound

Pressing this button allows you to adjust the following:

## SETTINGS

Under this menu, you can access and adjust the settings for many of the system features. To access additional settings, swipe the screen left or right.

<b>Sound Settings</b>	
Reset All	Returns Treble, Midrange, and Bass sound settings to factory levels.
Treble	Adjusts the high frequency level.
Midrange	Adjusts the middle frequency level.
Bass	Adjusts the low frequency level.
Balance / Fade	Adjusts the sound ratio from side to side or front to back.
Speed Adaptive Volume	Adjusts the amount the audio system volume increases with speed, or turns the feature off.
Occupancy Mode	Optimizes the sound based on the location of the listeners.
Sound Settings	Stereo
	Surround

Your vehicle might not have all of these features.

## Media Player

This button is available when a media device such as a Bluetooth Stereo or USB device is the active audio source. Pressing the button allows you to access the following options for active devices only.

# SYNC™ 3

Menu Item	Action and Description		
Podcast Speed	For some Apple devices, SYNC 3 can adjust the playback speed of podcasts. When a podcast is playing, you can choose:		
	Slower	Normal	Faster
Audiobook Speed	For some Apple devices, SYNC 3 can adjust the playback speed of audiobooks. When an audiobook is playing, you can choose:		
	Slower	Normal	Faster
Cover Art Priority	Media Player	Cover art displays from your device's music files. If no cover art for the files exists on the device, then the Gracenote Database provides cover art.	
	Gracenote®	The Gracenote Database supplied cover art is used for your music files. This overrides any cover art from your device.	
Reset Media	Erase the stored media information in order to re-index.		
Gracenote® Database Info	This allows you to view the version level of the Gracenote Database.		
Device Information	This allows you to view the manufacturer and model number of your media device.		

## Clock

To adjust the time, select the up and down arrows on either side of the screen. The

arrows on the left adjust the hour and arrows on the right adjust the minute. You can then select AM or PM.

You can adjust the following features:

Menu Item	Action and Description
Clock Format	Select how time displays.
Auto Time Zone Update	When active, the clock adjusts to time zone changes. This feature is only available in vehicles with navigation.
Reset Clock to GPS Time	When selected, the vehicle clock resets to GPS satellite time.

The system automatically saves any updates you make to the settings.

## Bluetooth

Pressing this button allows you to access the following:

Menu Item	Action
Bluetooth	On
	Off

You must activate Bluetooth to pair a Bluetooth-enabled device.

The processes of pairing a Bluetooth device is the same as pairing a phone. **See Pairing a Device** in Phone settings for how to pair a device and the available options.



## Phone

Pair your Bluetooth-enabled phone with the system before using the functions in hands-free mode.

Switch on Bluetooth on your device to begin pairing. See your phone's manual if necessary.

### To add a phone, select:

Menu Item
Add Phone

1. Follow the on-screen instructions.
2. A prompt alerts you to search for the system on your phone.
3. Select your vehicle's make and model as it displays on your phone.
4. Confirm that the six-digit number appearing on your phone matches the six-digit number on the touchscreen.

5. The touchscreen indicates when the pairing is successful.
6. Your phone may prompt you to give the system permission to access information. To check your phone's compatibility, see your phone's manual or visit the website.

### Alternatively, to add a phone, select:

Menu Item
Add Phone
<b>Then select:</b>
Discover Other Bluetooth Devices

1. Follow the on-screen instructions.
2. A prompt alerts you to search for the system on your phone.
3. Select your phone's name when it appears on the touchscreen.
4. Confirm that the six-digit number appearing on your phone matches the six-digit number on the touchscreen.

5. The touchscreen indicates when the pairing is successful.
6. Your phone may prompt you to give the system permission to access information. To check your phone's compatibility, see your phone's manual or visit the website.

Other features, such as text messaging using Bluetooth and automatic phonebook download, are phone-dependent features.

Once you have paired a device you can adjust the following options.

### To check your phone's compatibility, see your phone's manual or visit the website:

Website
owner.lincoln.com www.syncmyride.ca www.syncmaroute.ca

Once you have paired a device you can adjust the following options.

Menu Item	Action and Description
View Devices	
<b>You can then select:</b>	
Add a Bluetooth Device	You can add a Bluetooth-enabled device by following the steps in the previous table.
You can select a phone by touching the name of the phone on the screen. You then have the following options:	
Connect	Depending on the status of the device, you can select either of these options to interact with the selected device.
Disconnect	
Device Information	Allows you to see phone and device information.
Make Primary	Allows you to select this device to be your preferred device.
Delete	Removes the selected device from the system.

Menu Item	Action and Description
Manage Contacts	
<b>You can then select:</b>	
Automatic Contact Download On/Off	Enable this option to have SYNC 3 periodically re-download your phonebook to keep your contact list up to date.
Sort By:	Choose how you would like the system to display your contacts. You can choose:

Menu Item	Action and Description	
	First Name	Last Name
Re-download Contacts	Select this option to re-download your contact list manually.	
Delete Contacts	Select this option to delete the in vehicle contact list. Deleting the in vehicle list does not erase the contact list on the connected phone.	

Menu Item	Action and Description	
Set Phone Ringtone		
<b>You can then select:</b>		
No Ringtone	No sound plays when a call comes to your phone.	
Use Phone Ringtone	The currently selected ringtone on your phone plays when you receive a call. This option may not be available for all phones. If this option is available, it is the default setting.	
You can also select one of the three available ringers.		

Menu Item	Action and Description
Text Messaging	
<b>You can then select:</b>	
No Alert (Silence)	No sound plays when a message comes to your phone.
You can select one of the three available notification sounds.	
Voice Readout	When enabled, a voice prompt alerts you when you receive a new message.

**You can enable and disable the following options as well:**

Menu Item	Action and Description
Mute Audio in Privacy	When enabled, vehicle audio (such as radio or apps) is muted for the duration of the phone call even when the phone call is in privacy.
Roaming Warning	When enabled, an alert displays that your phone is roaming when you attempt to place a call.
Low Battery Notification	When enabled, a message displays when the battery on your phone is running low.

## 911 Assist

**Note:** *This service is only available in the United States and Canada.*

Select this button to modify the on or off setting for this feature. If the mobile phone's contacts have been downloaded, you can adjust the following option:

Menu Item	Action and Description
Set Emergency Contacts	You can select up to two numbers from your mobile device's phonebook as emergency contacts for quick access at the end of the 911 Assist call process.

## Radio

This button is available if a Radio source such as AM or FM is the active media source.

Pressing the button allows you to access the following features:

Menu Item	Action and Description
FM HD Radio AM HD Radio (Dependent on current radio source, If Available)	Activation of this feature allows you to listen to HD radio broadcasts.
Radio Text	This feature is available when FM Radio is your active media source. Activate this feature to have the system display radio text.
Autoset Presets (AST)	Refresh
	Selecting this option stores the six strongest stations in your current location to the last preset bank of the currently tuned source.

## Navigation

You can adjust many of the Navigation

preferences by selecting the following menus.

### Map Preferences

Menu Item	Action and Description	
Map Preferences		
<b>Then select any of the following:</b>		
3D City Model	When this option is active, the system shows 3D renderings of buildings.	
Breadcrumbs	When enabled, your vehicle's previously traveled route displays with white dots.	
POI Icons	Enable this feature to display up to 3 POI icons on the navigation map.	
	Once this feature is activated you can select the icons you want displayed by selecting:	Select POIs
Incident Map Icons	This menu allows you to choose which incident icons you would like to have displayed on the navigation map.	

**Route Preferences**

Menu Item	Second Level Messages, Actions and Descriptions		
Route Preferences			
<b>Then select any of the following:</b>			
Preferred Route	Choose to have the system display your chosen route type.		
	Shortest	Fastest	Eco
Always Use ___ Route	Bypass route selection in destination programming. The system only calculates one route based on your preferred route setting. When activated, the system uses your selected route type to calculate only one route to the desired destination.		
Use HOV Lanes	The system selects High Occupancy Vehicle or car pool lanes when providing route guidance.		
Automatically Find Parking	The system searches for and displays available parking locations as you approach your destination.		
Eco Time Penalty	Select a level of cost for the calculated Eco Route. The higher the setting, the longer the time allotment is for the route.		
Dynamic Route Guidance	Enable or disable considering traffic information when planning a route. The system can find a faster route based on heavy traffic flow information or detect a Road Closed incident and find a detour route if possible.		

## Navigation Preferences

Menu Item	Action and Description
Navigation Preferences	
Guidance Prompts	You can adjust how the system provides prompts.
<b>Then select any of the following:</b>	
Voice and Tones	
Voice Only	
Tones Only	

## Mobile Apps

You can enable the control of compatible mobile apps running on your Bluetooth or USB device on SYNC 3. In order to enable mobile apps, SYNC 3 requires user consent to send and receive app authorization information and updates using the data plan associated with the connected device.

The connected devices sends data to Ford in the United States. The encrypted information includes your VIN, SYNC 3 module number, anonymous usage statistics and debugging information. Updates may take place automatically.

**Note:** *Standard data rates will apply. Ford is not responsible for any additional charges you may receive from your service provider, when your vehicle sends or receives data through the connected device. This includes any additional charges incurred due to driving in areas when roaming out of a home network.*



Menu Item	Action and Description		
Mobile Apps	On	Enable or disable the use of mobile apps on SYNC 3. Disabling mobile apps in the settings menu disables automatic updates and the use of mobile apps on SYNC 3.	
	Off		
	You can view the status of mobile app permissions in the settings menu.		
Once Mobile Apps is enabled, you have the following options:			
Update Mobile Apps	This provides information on the current state of available app updates.		
	There are three possible statuses:		
	Update Needed	Up-To-Date	Updating Mobile Apps...
	The system has detected a new app requiring authorization or a general permissions update is required.	No update is required.	The system is trying to receive an update.
	Request Update		Select this button if an update is required and you want to request this update manually. For example, when your mobile device is connected to a Wi-Fi hotspot, select:

# SYNC™ 3

Menu Item	Action and Description
	Request Update
All Apps	Grant or deny permissions to all apps at once.
There may also be SYNC 3 enabled apps listed under these options.	Grant or deny an individual app particular permissions. App permissions are organized into groups. By pressing the info book icon, you can see which signals are included in each group.

**Note:** *Ford and Lincoln are not responsible or liable for any damages or loss of privacy relating to usage of an app, or dissemination of any vehicle data that you approve Ford and Lincoln to provide to an app.*

## General

Access and adjust the system settings, voice features, as well as phone, navigation and wireless settings.

Menu Item	
Language	Select to have the touchscreen display in English, Spanish or French.
Distance	Select to display units in kilometers or miles.
Temperature	Select to display units in Celsius or Fahrenheit.
Touch Screen Beep	Select to have the system beep to confirm choices made through the touchscreen.
Automatic System Updates	When you activate this option, the system automatically updates when you have an available Internet connection through a Wi-Fi network or mobile connection.

# SYNC™ 3

Menu Item	
About	Information pertaining to the system and its software.
Software Licenses	Documentation of the software license for the system.
Master Reset	Select to restore factory defaults. This erases all personal settings and personal data.

## Wi-Fi

You can adjust the following:

Menu Item	Action and Description
Wi-Fi	Enable this option to connect to Wi-Fi for SYNC 3 vehicle software updates.
View Available Networks	This provides you with a list of available Wi-Fi networks within range.
	Clicking on a network from the list allows you to connect or disconnect from that network. The system may require a security code to connect.
	When you click the information button next to a network, more information about the network displays such as the signal strength, connection status and security type.
Wi-Fi Available Notifications	The system alerts you when your vehicle is parked and a Wi-Fi network is within range if SYNC is not already connected.

**Ambient Lighting** (If Equipped)

Tap a color once to activate ambient lighting. This sets the color to the highest intensity.

You can drag the colors up and down to increase or decrease the intensity.

To switch ambient lighting off, press the active color once or drag the active color all the way down to zero intensity.

**Camera Settings**

To make adjustments using the touchscreen, select:

Message	Action and Description
Camera Settings	
<b>Then select from the following:</b>	
Rear Camera Delay	You can enable or disable this option using the slider.

You can find more information on the rear-view camera system in the parking aids chapter of your owner manual.

**Vehicle**

**Note:** *You vehicle may not have all of these features.*

You can select the following features to update their settings.

**Door Keypad Code**

Select this button to add or erase a personal door keypad code. To add or erase a personal code, you first need to enter the five-digit factory set code. You can find this code on the owner's wallet card in the glove box or from your authorized dealer.

## Onboard Modem Serial Number (ESN)

Selecting this button on the settings menu

shows you the ESN number for your system.  
You need this number for certain registrations such as Satellite Radio.

## Display

To make adjustments using the touchscreen, select:

Menu Item	Action and Description	
Brightness	Make the screen display brighter or dimmer.	
Mode	You can select:	
	Auto	The screen automatically switches between day and night modes based on the outside light level.
	Day	The screen displays with a light background to enhance daytime viewing.
	Night	The screen displays with a darker background to make nighttime viewing easier.
	Off	The screen goes black and does not display anything. To switch the screen back on, simply tap the screen.
Auto Dim	Enable this option to automatically dim the display brightness based on ambient lighting conditions.	

## Voice Control

You can adjust the voice control settings by selecting the following options.

Menu Item	
Advanced Mode	Enable this option to remove additional voice prompts and confirmations.
Phone Confirmation	Enable this option to have the system confirm a contacts name with you before making a call.
Voice Command List	Enable this option to have the system display a list of available voice commands when the voice button is pressed.

## Valet Mode

Valet mode allows you to lock the system. No information is accessible until the system is unlocked with the correct PIN.

When you select valet mode a pop up appears informing you that a four digit code must be entered to enable and disable valet mode. You can use any PIN you chose but you must use the same PIN to disable valet mode. The system asks you to input the code.

**Note:** *If the system is locked and you cannot remember the PIN, please contact the Customer Relationship Center.*

### For Lincoln

*United States: 1-800-521-4140*

*Canada: 1-800-387-9333*

To enable valet mode, enter your chosen PIN. The system then asks to confirm your PIN by reentering it. The system then locks.

To unlock the system, enter the same pin number. The system reconnects to your phone and all of your options are available again.

## SYNC™ 3 TROUBLESHOOTING

Your SYNC 3 system is easy to use. However, should questions arise, please refer to the tables below.

To check your cell phone's compatibility, visit the Ford or Lincoln website.

Website
<a href="http://owner.lincoln.com">owner.lincoln.com</a> <a href="http://www.syncmyride.ca">www.syncmyride.ca</a> <a href="http://www.syncmaroute.ca">www.syncmaroute.ca</a>

<b>Cell phone issues</b>		
<b>Issue</b>	<b>Possible cause</b>	<b>Possible solution</b>
There is background noise during a phone call.	The audio control settings on your cell phone may be affecting SYNC 3 performance.	Refer to your device's manual about audio adjustments.
During a call, I can hear the other person but they cannot hear me.	Possible cell phone malfunction.	Try switching your cell phone off, resetting it or removing the battery, then try again.
		Make sure that the microphone for SYNC 3 is not set to off. Look for the microphone icon on the phone screen.
During a call, I cannot hear the other person and they cannot hear me.	The system may need to be restarted.	To restart your system, shut down the engine, open and close the door, and then lock the door and wait for 2-3 minutes. Make sure that your SYNC 3 screen is black and the lighted USB port is off.
SYNC 3 is not able to download my phonebook.	This is a cell phone-dependent feature.	Check your cell phone's compatibility.
	Possible cell phone malfunction.	Make sure you allow SYNC 3 to retrieve contacts from your phone. Refer to your cell manual.
		You must switch on your cell phone and the automatic phonebook download feature on SYNC 3.
		Try switching your cell phone off, resetting it or removing the battery, then try again.

# SYNC™ 3

Cell phone issues		
Issue	Possible cause	Possible solution
The system says "Phonebook downloaded" but my SYNC 3 phonebook is empty or is missing contacts.	Limitations on your cell phone's capability.	Make sure you allow SYNC 3 to retrieve contacts from your phone. Refer to your cell manual.
		If the missing contacts are stored on your SIM card, move them to your cell phone's memory.
		You must switch on your cell phone and the automatic phonebook download feature on SYNC 3.
I am having trouble connecting my cell phone to SYNC 3.	This is a cell phone-dependent feature.	Check your cell phone's compatibility.
	Possible cell phone malfunction.	Try switching your cell phone off, resetting it or removing the battery, then try again.
		Try deleting your device from SYNC 3 and deleting SYNC from your device, then trying again.
		Always check the security and auto accept prompt settings relative to the SYNC 3 Bluetooth connection on your cell phone.
		Update your cell phone's firmware.
Switch the auto download setting off.		
Text messaging is not working on SYNC 3.	This is a cell phone-dependent feature.	Check your cell phone's compatibility.
	Possible cell phone malfunction.	Try switching your cell phone off, resetting it or removing the battery, then try again.



# SYNC™ 3

Cell phone issues		
Issue	Possible cause	Possible solution
	iPhone	<ul style="list-style-type: none"><li>• Go to your cell phone's Settings.</li><li>• Go to the Bluetooth Menu.</li><li>• Press the blue circle to the right of the device named with the your vehicle make and model to enter the next menu.</li><li>• Turn Show Notifications on.</li><li>• Disconnect then reconnect your iPhone from the SYNC 3 system to activate this settings update.</li></ul> <p>Your iPhone is now set up to forward incoming text messages to SYNC 3. Repeat these steps for every other SYNC 3 vehicle that you connect. Your iPhone will only forward incoming text messages to SYNC 3 if the iPhone is not unlocked in the messaging application. Replying to text messages using SYNC 3 is not supported by iPhone.</p>

# SYNC™ 3

Cell phone issues		
Issue	Possible cause	Possible solution
		Text messages from WhatsApp and Facebook Messenger are not supported.
Audible text messages do not work on my cell phone.	This is a cell phone-dependent feature.	Your cell phone must support downloading text messages through Bluetooth to receive incoming text messages.
	This is a cell phone limitation.	Because each cell phone is different, refer to your device's manual for the specific cell phone you are pairing. In fact, there can be differences between cell phones due to brand, model, service provider and software version.

USB and Bluetooth Stereo issues		
Issue	Possible cause	Possible solution
I am having trouble connecting my device.	Possible device malfunction.	Disconnect the device from SYNC 3. Try switching your device off, resetting it or removing the battery, then reconnect it to SYNC 3.
		Make sure you are using the manufacturer's cable.
		Make sure to correctly insert the USB cable into the device and your vehicle's USB port.
		Make sure that the device does not have an auto-install program or active security settings.

# SYNC™ 3

## USB and Bluetooth Stereo issues

Issue	Possible cause	Possible solution
	The device has a lock screen enabled.	Make sure your device is unlocked before connecting it to SYNC 3.
SYNC 3 does not recognize my device when I start my vehicle.	This is a device limitation.	Make sure you are not leaving the device in your vehicle during very hot or cold temperatures.
Bluetooth audio does not stream.	This is a device-dependent feature.	Make sure you connect the device to SYNC 3 and that you have started the media player on your device.
	The device is not connected.	
SYNC 3 does not recognize music that is on my device.	Your music files may not contain the correct artist, song title, album or genre information.	Make sure that all song details are populated.
	The file may be corrupted.	Try replacing the corrupt file with a new version.
	The song may have copyright protection that does not allow it to play.	Some devices require you to change the USB settings from mass storage to media transfer protocol class.
	The file format is not supported by SYNC 3.	Convert the file to a supported format. See <b>Entertainment</b> (page 396).
	The device needs to be re-indexed.	Perform a master reset. See <b>Settings</b> (page 434).
	The device has a lock screen enabled.	Make sure your device is unlocked before connecting it to SYNC 3.

USB and Bluetooth Stereo issues		
Issue	Possible cause	Possible solution
When I connect my device, I sometimes do not hear any sound.	This is a device limitation.	Disconnect the device from SYNC 3. Try switching your device off, resetting it or removing the battery, then connect it back to SYNC 3.
		To listen to Apple devices through USB, select AirPlay from the devices Control Center, then select Dock Connector.
		To listen to Apple devices through Bluetooth Stereo, select AirPlay from the devices Control Center, then select SYNC.

Wi-Fi Issues		
Issue	Possible cause	Possible solution
Failed connection.	Password error.	Verify password.
	Weak signal.	Check for a poor Wi-Fi signal.
	Multiple Access points within range with the same SSID.	Use a unique name for your SSID, don't use the default name unless it contains a unique identifier, such as part of the MAC address.

# SYNC™ 3

Wi-Fi Issues		
Issue	Possible cause	Possible solution
Disconnecting after successful connection.	Weak signal probably due to distance from the hotspot, obstruction or high interference.	Position the vehicle close to the hotspot with the front of the vehicle facing the hotspot direction and remove obstacles if possible. Other Wi-Fi, Bluetooth, microwave and cordless phones may cause interference.
Poor signal seen by Sync despite being near a hotspot.	There may be an obstruction between SYNC 3 and the hotspot.	If the vehicle is equipped with heated windshield, try positioning the vehicle so that the windshield is not facing the hotspot. If you have metallic window tinting but not on the windshield, position the vehicle to face the hotspot. If all windows are tinted, you can open the windows in the direction of the hotspot if that is feasible. Try to remove other obstructions that may impact signal quality such as opening the garage door.
A hotspot is not listed in the list of available networks.	The hotspot was defined as a hidden network.	Please set the network to visible and try again.

# SYNC™ 3

<b>Wi-Fi Issues</b>		
<b>Issue</b>	<b>Possible cause</b>	<b>Possible solution</b>
SYNC 3 is not seen when searching for Wi-Fi networks from your phone or other devices.	SYNC 3 does not provide a hotspot.	SYNC 3 currently does not provide a hotspot.
Software download takes too long.	Poor signal strength, too far from the hotspot, hotspot is supporting multiple connections, slow Internet connection or other problems.	Check the signal quality (under network details), if SYNC 3 indicates good or excellent, test with another high-speed equipped hotspot where the environment is more predictable.
SYNC 3 seems to connect with a hotspot and the signal strength is excellent but the software is not being updated.	It is possible that there is no new software. The connected hotspot may be a managed one and it requires either a subscription or agreeing to the terms and conditions.	Test the connection with another device, if the hotspot requires a subscription, you may contact the service provider.

<b>AppLink issues</b>		
<b>Issue</b>	<b>Possible cause(s)</b>	<b>Possible solution(s)</b>
<p>AppLink Mobile Applications: When I select "Connect Mobile Apps," SYNC 3 does not find any applications.</p>	<p>You did not connect an Applink Compatible phone to SYNC 3.</p>	<p>Make sure you have a compatible smartphone; an Android with OS 2.3 or higher or an iPhone 3GS or newer with iOS 5.0 or higher. Additionally, make sure you pair and connect your phone to SYNC 3 in order to find AppLink-capable apps on your device. iPhone users must also connect to a USB port with an Apple USB cable.</p>
<p>My phone is connected, but I still cannot find any apps.</p>	<p>AppLink-enabled apps are not installed and running on your mobile device.</p>	<p>Make sure you have downloaded and installed the latest version of the app from your phone's app store. Make sure the app is running on your phone. Some apps require you to register or login to the app on the phone before using them with AppLink. Also, some may have a "Ford SYNC" setting, so check the app's settings menu on the phone.</p>
<p>My phone is connected, my app(s) are running, but I still cannot find any apps.</p>	<p>Sometimes apps do not properly close and re-open their connection to SYNC 3, over ignition cycles, for example.</p>	<p>Closing and restarting apps may help SYNC 3 find the application if you cannot discover it inside the vehicle. On an Android device, if apps have an 'Exit' or 'Quit' option, then select it and restart the app. If the app does not have that option, select the phone's settings menu</p>

<b>AppLink issues</b>		
<b>Issue</b>	<b>Possible cause(s)</b>	<b>Possible solution(s)</b>
		<p>and select 'Apps', then find the particular app and choose 'Force stop'. Do not forget to restart the app afterward, then select "Connect Mobile Apps" on SYNC 3.</p> <p>On an iPhone with iOS7+, to force close an app, double tap the home button then swipe up on the app to close it. Tap the home button again, then select the app again to restart it. After a few seconds, the app should then appear in SYNC 3's Mobile App's Menu.</p>
<p>My Android phone is connected, my app(s) are running, I restarted them, but I still cannot find any apps.</p>	<p>There is a Bluetooth issue on some older versions of the Android operating system that may cause apps that were found on your previous vehicle drive to not be found again if you did not switch Bluetooth off.</p>	<p>Switch Bluetooth off and then on to reset it on your phone. If you are in your vehicle, SYNC 3 should be able to automatically re-connect to your phone if you press the "Phone" button.</p>



# SYNC™ 3

AppLink issues		
Issue	Possible cause(s)	Possible solution(s)
My iPhone is connected, my app is running, I restarted the app but I still cannot find it on SYNC 3.	You may need to reset the USB connection to SYNC 3.	Unplug the USB cable from the phone, wait a moment, and plug the USB cable back in to the phone. After a few seconds, the app should appear in SYNC 3's Mobile Apps Menu. If not, "Force Close" the application and restart it.
I have an Android phone. I found and started my media app on SYNC 3, but there is no sound or the sound is very low.	The Bluetooth volume on the phone may be low.	Increase the Bluetooth volume of the device by using the device's volume control buttons which are most often found on the side of the device.
I can only see some of the AppLink apps running on my phone listed in the SYNC 3 Mobile Apps Menu.	Some Android devices have a limited number of Bluetooth ports that apps can use to connect. If you have more AppLink apps on your phone than the number of available Bluetooth ports, you will not see all of your apps listed in the SYNC 3 mobile apps menu.	Force close or uninstall the apps you do not want SYNC 3 to find. If the app has a "Ford SYNC" setting, disable that setting in the app's settings menu on the phone.

<b>Voice command issues</b>		
<b>Issue</b>	<b>Possible cause</b>	<b>Possible solution</b>
SYNC 3 does not understand what I am saying.	You may be using the wrong voice commands.	Review the cell phone voice commands and the media voice commands at the beginning of their respective sections. Refer to the audio display during an active voice session to find a list of voice commands there.
	You may be speaking too soon or at the wrong time.	Wait for the system to prompt you before you state your command.
SYNC 3 does not understand the name of a song or artist.	You may be using the wrong voice commands.	Review the media voice commands at the beginning of the media section.
	You may not be saying the name exactly as it appears on your device.	Say the song or artist name exactly as it is displayed on your device. For example, say "Play Artist Prince" or "Play song Purple Rain".
		Make sure you are saying the complete title such as "California remix featuring Jennifer Nettles".
		If there are any abbreviations in the name, like ESPN or CNN, you have to spell those: "E-S-P-N" or "C-N-N".
The song or artist name may have some special characters that are not being recognized by SYNC 3.	Make sure that song titles, artists, album, and playlists names do not have any special characters like *, - or +.	

# SYNC™ 3

Voice command issues		
Issue	Possible cause	Possible solution
SYNC 3 does not understand or is calling the wrong contact when I want to make a call.	You may not be saying the name exactly as it appears on your phonebook.	Make sure that you are saying the name exactly as it appears on your phone. For example, if your contact is "Joe Wilson", say "Call Joe Wilson". If your contact name is "Mom", say "Call Mom".
	The contact name may contain special characters.	Make sure that your contact names do not have any special characters like *, - or +.
The SYNC 3 voice control system is having trouble recognizing foreign names stored on my cell phone.	You may not be saying the name exactly as it appears on your phonebook.	SYNC 3 applies the phonetic pronunciation rules of the selected language to the contact names stored on your cell phone.
		<b>Helpful Hint:</b> You can select your contact manually. Press <b>PHONE</b> . Select the option for phonebook and then contact name. Press the soft-key option to hear it. SYNC 3 will read the contact name to you, giving you some idea of the pronunciation it is expecting.

Voice command issues		
Issue	Possible cause	Possible solution
The SYNC 3 voice control system is having trouble recognizing foreign tracks, artists, albums, genres and playlist names from my media player or USB flash drive.	You may be saying the foreign names using the currently selected language for SYNC 3.	SYNC 3 applies the phonetic pronunciation rules of the selected language to the names stored on your media player or USB flash drive. It is able to make some exceptions for very popular artist names (for example, U2) such that you can always use the English pronunciation for these artists.
The system generates voice prompts and the pronunciation of some words may not be accurate for my language.	SYNC 3 uses text-to-speech voice prompt technology.	SYNC 3 uses a synthetically generated voice rather than pre-recorded human voice.
		SYNC 3 offers several new voice control features for a wide range of languages. Dialing a contact name directly from the phonebook without pre-recording (for example, "call John Smith") or selecting a track, artist, album, genre or playlist directly from your media player (for example, "play artist Madonna").

# SYNC™ 3

General		
Issue	Possible cause	Possible solution
The language selected for the instrument cluster and information and entertainment display does not match the SYNC 3 language (phone, USB, Bluetooth audio, voice control and voice prompts).	SYNC 3 does not support the currently selected language for the instrument cluster and information and entertainment display.	SYNC 3 only supports four languages in a single module for text display, voice control and voice prompts. The country where you bought your vehicle dictates the four languages based on the most popular languages spoken. If the selected language is not available, SYNC 3 remains in the current active language.
		SYNC 3 offers several new voice control features for a wide range of languages. Dialing a contact name directly from the phonebook without pre-recording (for example, "call John Smith") or selecting a track, artist, album, genre or playlist directly from your media player (for example, "play artist Madonna").

SYNC 3 System Reset
The system has a System Reset feature that can be performed if the function of a SYNC 3 feature is lost. This reset is intended to restore functionality and will not erase any information previously stored in the system (such as paired devices, phonebook, call history, text messages, or user settings). To perform a System Reset, press and hold the Seek Up (>>) button while pressing and holding the Radio Power button. After approximately 5 seconds the screen will go black. Allow 1-2 minutes for the system reset to complete. You may then resume using the SYNC 3 system.

# SYNC™ 3

---

For additional assistance with SYNC 3 troubleshooting please call or visit the

Lincoln Website.

<b>Lincoln Support</b>	
Customer Relationship Center	United States: 1-800-521-4140
	Canada: 1-800-387-9333
Website	<a href="http://owner.lincoln.com">owner.lincoln.com</a> <a href="http://www.syncmyride.ca">www.syncmyride.ca</a> <a href="http://www.syncmaroute.ca">www.syncmaroute.ca</a>

# Accessories

**For a complete listing of the accessories that are available for your vehicle, please contact your authorized dealer or visit our online store at:**

<b>Web Address (United States)</b>
------------------------------------

<a href="http://www.Accessories.Lincoln.com">www.Accessories.Lincoln.com</a>
--

<b>Web Address (Canada)</b>
-----------------------------

<a href="http://www.LincolnCanada.com">www.LincolnCanada.com</a>
--

Lincoln Accessories are available for your vehicle through an authorized Lincoln dealer. Lincoln Motor Company will repair or replace any properly authorized dealer-installed Lincoln Original Accessory found to be defective in factory-supplied materials or workmanship during the warranty period, as well as any component damaged by the defective accessories.

Lincoln Motor Company will warrant your accessory through the warranty that provides the greatest benefit:

- 24 months, unlimited mileage.
- The remainder of your new vehicle limited warranty.

Contact an authorized dealer for details and a copy of the warranty.

## Exterior style

- Side-window deflectors.
- Splash guards.

## Interior style

- All-weather floor mats.
- Premium carpeted floor mats.

## Lifestyle

- Ash cup (smoker's packages).
- Camping tent\*.
- Cargo area protector.
- Cargo net.
- Cargo organizer.

- Luggage cover.
- Recovery hook (towing eye).
- Roof racks and carriers\*.
- Tablet cradle\*.
- Trailer hitch.
- Trailer hitch accessories.

## Peace of mind

- Car cover\*.
- Remote start.
- Roadside assistance kit\*.
- Vehicle security.
- Wheel locks.

\*Lincoln Licensed Accessory. The accessory manufacturer designs, develops and therefore warrants Lincoln Licensed Accessories, and does not design or test these accessories to Lincoln Motor Company engineering requirements. Contact an authorized Lincoln dealer for the manufacturer's limited warranty details and request a copy of the Lincoln Licensed Accessories product limited warranty from the accessory manufacturer.

## Accessories

---

For maximum vehicle performance, keep the following information in mind when adding accessories, equipment, passengers and luggage to your vehicle:

- Do not exceed the total weight capacity of the vehicle or of the front or rear axle (GVWR or GAWR as indicated on the Safety Compliance Certification label). Consult an authorized dealer for specific weight information.
- The Federal Communications Commission (FCC) and Canadian Radio Telecommunications Commission (CRTC) regulate the use of radio transmitter-equipped mobile communications systems, for example, two-way radios, telephones and theft alarms. Any such equipment should comply with the Federal Communications Commission (FCC) and Canadian Radio Telecommunications Commission (CRTC) regulations, and an authorized dealer should install this equipment.
- An authorized dealer should install mobile communications systems. Improper installation may harm the operation of your vehicle, particular if their manufacturer did not design the mobile communication system specifically for automotive use.
- If you or an authorized dealer add any non-Lincoln electrical or electronic accessories or components to your vehicle, you may adversely affect battery performance and durability. In addition, you may also adversely affect the performance of other electrical systems in the vehicle.



# Lincoln Protect

---

## **PROTECT YOURSELF FROM THE RISING COST OF VEHICLE REPAIRS WITH LINCOLN PROTECT.**

### **Lincoln Protect (U.S. Only)**

Lincoln Protect means peace of mind. It's the extended service plan backed by the Lincoln Motor Company, and provides more protection beyond the New Vehicle Limited Warranty coverage.

### **Lincoln Protect Can Quickly Pay for Itself**

One trip to the Service Center could easily exceed the price of your Lincoln Extended Service Plan. With Lincoln Protect you minimize your risk for unexpected repair bills and rising repair costs.

### **Up to 1000+ Covered Vehicle Components**

There are four core Lincoln Protect plans with different levels of coverage. Ask your authorized dealer for details.

1. PremiumCARE - Our most comprehensive coverage. With over 1,000 covered components, this plan is so complete it's probably easier to list what's not covered.

2. ExtraCARE - Covers 113 components, and includes many high-tech items.
3. BaseCARE - Covers 84 components.
4. PowertrainCARE - Covers 29 critical components.

Lincoln Extended Service Plans are honored by all authorized Lincoln dealers in the U.S., Canada and Mexico.

That means you get:

- Reliable, quality service at any Lincoln or Ford dealership.
- Repairs performed by factory trained technicians, using genuine parts.

### **Rental Car Reimbursement**

#### ***1st day Rental Benefit***

If you bring your car into your dealer for service, we'll give you a loaner to use for the day.

### ***Extended Rental Benefits***

If your vehicle is kept overnight for covered repairs, you are eligible for rental car coverage, including bumper to bumper warranty repairs, and Field Service Actions.

### **Roadside Assistance**

Exclusive 24/7 roadside assistance, including:

- Towing, flat-tire change and battery jump starts.
- Out of fuel and lock-out assistance.
- Travel expense reimbursement for lodging, meals and rental car.
- Assistance for taxi, shuttle, rental car coverage and other transportation.

### **Transferable Coverage**

If you sell your vehicle before your Lincoln Protect plan coverage expires, you can transfer any remaining coverage to the new owner. Which should give you and your potential buyer a little more peace of mind.

# Lincoln Protect

---

## Less Cost to Properly Maintain Your Vehicle

Lincoln Protect also offers a Premium Maintenance Plan that covers all scheduled maintenance, and selected wear items. The coverage is prepaid, so you never have to worry about the cost of your vehicle's maintenance.

Covered maintenance includes:

- Windshield wiper blades.
- Spark plugs.
- The clutch disc.
- Brake pads and linings.
- Shock absorbers and struts.
- Engine cooling hoses, clamps and o-rings.
- Engine belts.
- Diesel exhaust fluid replenishment.

## Interest Free Finance Options

Just a 10% down payment will provide you with an affordable, no interest, no fee payment program allowing you all the security and benefits Lincoln Protect has to offer while paying over time. You are pre-approved with no credit check or hassles. To learn more, call our Lincoln Protect Extended Service Plan specialists at 800-367-3377.

Complete the information below and mail to:

Lincoln Protect Extended Service Plan  
P.O. Box 321067  
Detroit, MI 48232

## EXTENDED SERVICE PLANS (CANADA ONLY)

You can get more protection for your vehicle by purchasing a Lincoln Extended Service Plan. Lincoln Extended Service Plan is the only service contract backed by Lincoln Motor Company of Canada, Limited. Depending on the plan you purchase, Lincoln Extended Service Plan provides benefits such as:

- Rental reimbursement.
- Coverage for certain maintenance and wear items.
- Protection against repair costs after your New Vehicle Limited Warranty Coverage expires.
- Roadside Assistance benefits.

There are several Lincoln Extended Service Plans available in various time, distance and deductible combinations. Each plan is tailored to fit your own driving needs, including reimbursement for towing and rental. When you purchase Lincoln Extended Service Plan, you receive added peace-of-mind protection throughout Canada, the United States and Mexico, provided by a network of participating authorized Lincoln Motor Company dealers.

**Note:** *Repairs performed outside of Canada, the United States and Mexico are not eligible for Lincoln Extended Service Plan coverage.*

This information is subject to change. For more information, visit your local Lincoln of Canada dealer or [www.Lincoln.ca](http://www.Lincoln.ca) to find the Lincoln Extended Service Plan that is right for you.

# Scheduled Maintenance

---

## GENERAL MAINTENANCE INFORMATION

### Why Maintain Your Vehicle?

Carefully following the maintenance schedule helps protect against major repair expenses resulting from neglect or inadequate maintenance and may help to increase the value of your vehicle when you sell or trade it. Keep all receipts for completed maintenance with your vehicle.

We have established regular maintenance intervals for your vehicle based upon rigorous testing. It is important that you have your vehicle serviced at the proper times. These intervals serve two purposes; one is to maintain the reliability of your vehicle and the second is to keep your cost of owning your vehicle down.

It is your responsibility to have all scheduled maintenance performed and to make sure that the materials used meet the specifications identified in this owner's manual. See **Capacities and Specifications** (page 344).

Failure to perform scheduled maintenance invalidates warranty coverage on parts affected by the lack of maintenance.

### Why Maintain Your Vehicle at Your Dealership?

#### Factory-Trained Technicians

Service technicians participate in extensive factory-sponsored certification training to help them become experts on the operation of your vehicle. Ask your dealership about the training and certification their technicians have received.

#### Genuine Ford and Motorcraft® Replacement Parts

Dealerships stock Ford, Motorcraft and Ford-authorized branded re-manufactured replacement parts. These parts meet or exceed our specifications. Parts installed at your dealership carry a nationwide 24-month or unlimited mile (kilometer) parts and labor limited warranty.

If you do not use Ford authorized parts they may not meet our specifications and depending on the part, it could affect emissions compliance.

#### Convenience

Many dealerships have extended evening and Saturday hours to make your service visit more convenient and they offer one stop shopping. They can perform any services that are required on your vehicle, from general maintenance to collision repairs.

**Note:** *Not all dealers have extended hours or body shops. Please contact your dealer for details.*

#### Protecting Your Investment

Maintenance is an investment that pays dividends in the form of improved reliability, durability and resale value. To maintain the proper performance of your vehicle and its emission control systems, make sure you have scheduled maintenance performed at the designated intervals.

# Scheduled Maintenance

---

Your vehicle is equipped with the Intelligent Oil-Life Monitor system, which displays a message in the information display at the proper oil change interval. This interval may be up to one year or 10000 miles (16000 kilometers).

When the oil change message appears in the information display, it is time for an oil change. Make sure you perform the oil change within two weeks or 500 miles (800 kilometers) of the message appearing. Make sure you reset the Intelligent Oil-Life Monitor after each oil change. See **Oil Change Indicator Reset** (page 291).

If your information display resets prematurely or becomes inoperative, you should perform the oil change interval at six months or 5000 miles (8000 kilometers) from your last oil change. Never exceed one year or 10000 miles (16000 kilometers) between oil change intervals.

Your vehicle is very sophisticated and built with multiple, complex, performance systems. Every manufacturer develops these systems using different specifications and performance features. That is why it is important to rely upon your dealership to properly diagnose and repair your vehicle.

Ford Motor Company has recommended maintenance intervals for various parts and component systems based upon engineering testing. Ford Motor Company relies upon this testing to determine the most appropriate mileage for replacement of oils and fluids to protect your vehicle at the lowest overall cost to you and recommends against maintenance schedules that deviate from the scheduled maintenance information.

We strongly recommend the use of only genuine Ford, Motorcraft or Ford-authorized re-manufactured replacement parts engineered for your vehicle.

## Additives and Chemicals

This owner's manual and the Ford Workshop Manual list the recommended additives and chemicals for your vehicle. We do not recommend using chemicals or additives not approved by us as part of your vehicle's normal maintenance. Please consult your warranty information.

## Oils, Fluids and Flushing

In many cases, fluid discoloration is a normal operating characteristic and, by itself, does not necessarily indicate a concern or that the fluid needs to be changed. However, a qualified expert, such as the factory-trained technicians at your dealership, should inspect discolored fluids that also show signs of overheating or foreign material contamination immediately.

# Scheduled Maintenance

Make sure to change your vehicle's oils and fluids at the specified intervals or in conjunction with a repair. Flushing is a viable way to change fluid for many vehicle sub-systems during scheduled maintenance.

It is critical that systems are flushed only with new fluid that is the same as that required to fill and operate the system or using a Ford-approved flushing chemical.

## Owner Checks and Services

Make sure you perform the following basic maintenance checks and inspections every month or at six-month intervals.

<b>Check every month</b>
Engine oil level.
Function of all interior and exterior lights.
Tires (including spare) for wear and proper pressure.
Windshield washer fluid level.

<b>Check every six months</b>
Battery connections. Clean if necessary.
Body and door drain holes for obstructions. Clean if necessary.
Cooling system fluid level and coolant strength.
Door weatherstrips for wear. Lubricate if necessary.
Hinges, latches and outside locks for proper operation. Lubricate if necessary.
Parking brake for proper operation.

# Scheduled Maintenance

Check every six months
Safety belts and seat latches for wear and function.
Safety warning lamps (brake, ABS, airbag and safety belt) for operation.
Washer spray and wiper operation. Clean or replace blades as necessary.

## Multi-Point Inspection

In order to keep your vehicle running right, it is important to have the systems on your vehicle checked regularly. This can help identify potential issues and prevent major problems. We recommend having the following multi-point inspection performed at every scheduled maintenance interval to help make sure your vehicle keeps running great.

Multi-Point inspection	
Accessory drive belt(s)	Hazard warning system operation
Battery performance	Horn operation
Engine air filter	Radiator, cooler, heater and air conditioning hoses
Exhaust system	Suspension components for leaks or damage

# Scheduled Maintenance

Multi-Point inspection	
Exterior lamps operation	Steering and linkage
Fluid levels ; fill if necessary	Tires (including spare) for wear and proper pressure **
For oil and fluid leaks	Windshield for cracks, chips or pits
Half-shaft dust boots	Washer spray and wiper operation

Brake, coolant recovery reservoir, automatic transmission and window washer

\*\* If your vehicle is equipped with a temporary mobility kit, check the tire sealant expiration Use By date on the canister. Replace as needed.

Be sure to ask your dealership service advisor or technician about the multi-point vehicle inspection. It is a comprehensive way to perform a thorough inspection of your vehicle. Your checklist gives you immediate feedback on the overall condition of your vehicle.

## NORMAL SCHEDULED MAINTENANCE

### Intelligent Oil-Life Monitor™

Your vehicle is equipped with an Intelligent Oil-Life Monitor that determines when you should change the engine oil based on how your vehicle is used. By using several important factors in its calculations, the monitor helps reduce the cost of owning your vehicle and reduces environmental waste at the same time.

This means you do not have to remember to change the oil on a mileage-based schedule. Your vehicle lets you know when an oil change is due by displaying a message in the information display.

The following table provides examples of vehicle use and its impact on oil change intervals. It is a guideline only. Actual oil change intervals depend on several factors and generally decrease with severity of use.

# Scheduled Maintenance

When to expect the message prompting you to change your oil	
Interval	Vehicle use and example
7500-10000 miles (12000-16000 km)	<b>Normal</b>
	Normal commuting with highway driving No, or moderate, load or towing Flat to moderately hilly roads No extended idling
5000-7499 miles (8000-11999 km)	<b>Severe</b>
	Moderate to heavy load or towing Mountainous or off-road conditions Extended idling Extended hot or cold operation
3000-4999 miles (5000-7999 km)	<b>Extreme</b>
	Maximum load or towing Extreme hot or cold operation



# Scheduled Maintenance

## Maintenance Intervals

At every oil change interval as indicated by the information display
Change engine oil and filter.**
Rotate the tires.
Perform a multi-point inspection (recommended).
Inspect the automatic transmission fluid level. Consult your dealer for requirements.
Inspect the brake pads, rotors, hoses and parking brake.
Inspect the engine cooling system strength and hoses.
Inspect the exhaust system and heat shields.
Inspect the rear axle and U-joints (AWD).
Inspect the half-shaft boots.
Inspect the steering linkage, ball joints, suspension, tie-rod ends, driveshaft and U-joints.
Inspect the tires, tire wear and measure the tread depth.
Inspect the wheels and related components for abnormal noise, wear, looseness or drag.

Do not exceed one year or 10000 miles (16000 kilometers) between service intervals.

\*\* Reset the Intelligent Oil-Life Monitor after engine oil and filter changes. See **Engine Oil Check** (page 290).

# Scheduled Maintenance

Other maintenance items <sup>1</sup>	
Every 20000 miles (32000 km)	Replace cabin air filter.
Every 30000 miles (48000 km)	Replace engine air filter.
At 100000 miles (160000 km)	Change engine coolant. <sup>2</sup>
Every 100000 miles (160000 km)	Replace spark plugs.
	Inspect accessory drive belt(s). <sup>3</sup>
Every 150000 miles (240000 km)	Change automatic transmission fluid.

# Scheduled Maintenance

Other maintenance items <sup>1</sup>	
	Replace accessory drive belt(s). <sup>4</sup>
	Change the PTU and rear axle fluid (AWD). See <b>Special Operating Conditions Scheduled Maintenance</b> (page 480).

<sup>1</sup> Perform these maintenance items within 3000 miles (4800 kilometers) of the last engine oil and filter change. Do not exceed the designated distance for the interval.

<sup>2</sup> Initial replacement at six years or 100000 miles (160000 kilometers), then every three years or 50000 miles (80000 kilometers).

<sup>3</sup> After initial inspection, inspect every other oil change until replaced.

<sup>4</sup> If not replaced within the last 100000 miles (160000 kilometers).

## SPECIAL OPERATING CONDITIONS SCHEDULED MAINTENANCE

If you operate your vehicle **primarily** in any of the following conditions, you need to perform extra maintenance as indicated. If you operate your vehicle **occasionally** under any of these conditions, it is not necessary to perform the extra maintenance. For specific recommendations, see your dealership service advisor or technician.

## Scheduled Maintenance

Perform the services shown in the following tables when specified or within 3000 miles (4800 kilometers) of the message appearing in the information display, prompting you to change your oil.

- **Example 1:** The message comes on at 28751 miles (46270 kilometers). Perform the 30000-mile (48000-kilometer) automatic transmission fluid replacement.

- **Example 2:** The message has **not** come on, but the odometer reads 30000 miles (48000 kilometers) (for example, the Intelligent Oil-Life Monitor was reset at 25000 miles [40000 kilometers]). Perform the engine air filter replacement.

Towing a trailer or using a car-top carrier	
As required	Change engine oil and filter as indicated by the information display and perform services listed in the Normal Scheduled Maintenance chart.
Inspect frequently, service as required	Inspect rear axle and U-joints (AWD).
Every 30000 miles (48000 km)	Change automatic transmission fluid.
	Change the PTU and rear axle fluid (AWD). See Axle and PTU Maintenance items under <b>Exceptions</b> later in this section.
Every 60000 miles (96000 km)	Replace spark plugs.

## Scheduled Maintenance

<b>Extensive idling or low-speed driving for long distances, as in heavy commercial use (such as delivery, taxi, patrol car or livery)</b>	
As required	Change engine oil and filter as indicated by the information display and perform services listed in the Normal Scheduled Maintenance chart.
Inspect frequently, service as required	Replace cabin air filter.
	Replace engine air filter.
Every 30000 miles (48000 km)	Change automatic transmission fluid.
	Change the PTU and rear axle fluid (AWD). See Axle and PTU Maintenance items under <b>Exceptions</b> later in this section.
Every 60000 miles (96000 km)	Replace spark plugs.

This is an optional feature.

<b>Operating in dusty or sandy conditions (such as unpaved or dusty roads)</b>	
Inspect frequently, service as required	Replace cabin air filter.
	Replace engine air filter.
Every 5000 miles (8000 km)	Inspect the wheels and related components for abnormal noise, wear, looseness or drag.
	Rotate tires, inspect tires for wear and measure tread depth.

# Scheduled Maintenance

Operating in dusty or sandy conditions (such as unpaved or dusty roads)	
Every 5000 miles (8000 km) or six months	Change engine oil and filter.**
	Perform multi-point inspection.
Every 30000 miles (48000 km)	Change automatic transmission fluid.
	Change the PTU and rear axle fluid (AWD). See Axle and PTU Maintenance items under <b>Exceptions</b> later in this section.

\* This is an optional feature.

\*\* Reset your Intelligent Oil-Life Monitor after engine oil and filter changes. See **Engine Oil Check** (page 290).

## Exceptions

There are several exceptions to the Normal Schedule:

### Axle and PTU Maintenance

The Power Transfer Unit (PTU) and rear axle (AWD only) in your vehicle does not require any normal scheduled maintenance unless the vehicle has experienced extended periods of extreme/severe duty cycle driving or the PTU and/or the rear axle has been submerged in water. Checking the PTU and rear axle fluid is not necessary unless the unit shows signs of leakage. Contact an authorized dealer for service.

### California Fuel Filter Replacement

If you register your vehicle in California, the California Air Resources Board has determined that the failure to perform this maintenance item does not nullify the emission warranty or limit recall liability before the completion of your vehicle's useful life. Ford Motor Company, however, urges you to have all recommended maintenance services performed at the specified intervals and to record all vehicle service.

# Scheduled Maintenance

## Hot Climate Oil Change Intervals

Vehicles operating in the Middle East, North Africa, Sub-Saharan Africa or locations with similar climates using an American Petroleum Institute (API) Certified for Gasoline Engines (Certification mark) oil of SM or SN quality, the normal oil change interval is 3000 miles (5000 kilometers).

If the available API SM or SN oils are not available, then the oil change interval is 1800 miles (3000 kilometers).

## Engine Air Filter and Cabin Air Filter Replacement

The life of the engine air filter and cabin air filter is dependent on exposure to dusty and dirty conditions. Vehicles operated in these conditions require frequent inspection and replacement of the engine air filter and cabin air filter.

## SCHEDULED MAINTENANCE RECORD

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	



# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	



# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	



# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Scheduled Maintenance

---

<input type="radio"/> Repair Order #:	<p>Dealer stamp</p>
<input type="radio"/> Distance:	
<input type="radio"/> Engine hours (optional):	
<input type="radio"/> Multi-point inspection (recommended): <input type="checkbox"/>	
<input type="radio"/> Signature:	

# Appendices

---

## END USER LICENSE AGREEMENT

### VEHICLE SOFTWARE END USER LICENSE AGREEMENT (EULA)

- You ("You" or "Your" as applicable) have acquired a vehicle having several devices, including SYNC<sup>®</sup> and various control modules, ("DEVICES") that include software licensed or owned by Ford Motor Company and its affiliates ("FORD MOTOR COMPANY"). Those software products of FORD MOTOR COMPANY origin, as well as associated media, printed materials, and "online" or electronic documentation ("SOFTWARE") are protected by international intellectual property laws and treaties. The SOFTWARE is licensed, not sold. All rights reserved.
- The SOFTWARE may interface with and/or communicate with, or may be later upgraded to interface with and/or communicate with additional software and/or systems provided by FORD MOTOR COMPANY.

**IF YOU DO NOT AGREE TO THIS END USER LICENSE AGREEMENT ("EULA") DO NOT USE THE DEVICES OR COPY THE SOFTWARE. ANY USE OF THE SOFTWARE, INCLUDING BUT NOT LIMITED TO USE ON THE DEVICES, WILL CONSTITUTE YOUR AGREEMENT TO THIS EULA (OR RATIFICATION OF ANY PREVIOUS CONSENT).**

**GRANT OF SOFTWARE LICENSE:** This EULA grants you the following license:

- You may use the SOFTWARE as installed on the DEVICES and as otherwise interfacing with systems and/or services provide by or through FORD MOTOR COMPANY or its third party software and service providers.

#### Description of Other Rights and Limitations

- **Speech Recognition:** If the SOFTWARE includes speech recognition component(s), you should understand that speech recognition is an inherently statistical process and that recognition errors are inherent in the process. Neither FORD MOTOR COMPANY nor

its suppliers shall be liable for any damages arising out of errors in the speech recognition process. It is your responsibility to monitor any speech recognition functions included in the system.

- **Limitations on Reverse Engineering, Decompilation and Disassembly:** You may not reverse engineer, decompile, translate, disassemble or attempt to discover any source code or underlying ideas or algorithms of the SOFTWARE nor permit others to reverse engineer, decompile or disassemble the SOFTWARE, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation or to the extent as may be permitted by the licensing terms governing use of any open source components included with the SOFTWARE.

# Appendices

---

- **Limitations on Distributing, Copying, Modifying and Creating Derivative Works:** You may not distribute, copy, make modifications to or create derivative works based on the SOFTWARE, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation or to the extent as may be permitted by the licensing terms governing use of any open source components included with the SOFTWARE.
- **Single EULA:** The end user documentation for the DEVICES and related systems and services may contain multiple EULAs, such as multiple translations and/or multiple media versions (e.g., in the user documentation and in the software). Even if you receive multiple EULAs, you are licensed to use only one (1) copy of the SOFTWARE.
- **SOFTWARE Transfer:** You may permanently transfer your rights under this EULA only as part of a sale or transfer of the DEVICES, provided you retain no copies, you transfer all of the SOFTWARE (including all component parts, the media and printed materials, any upgrades, and, if applicable, the Certificate(s) of Authenticity), and the recipient agrees to the terms of this EULA. If the SOFTWARE is an upgrade, any transfer must include all prior versions of the SOFTWARE.
- **Termination:** Without prejudice to any other rights, FORD MOTOR COMPANY may terminate this EULA if you fail to comply with the terms and conditions of this EULA.
- **Internet-Based Services Components:** The SOFTWARE may contain components that enable and facilitate the use of certain Internet-based services. You acknowledge and agree that FORD MOTOR COMPANY, third party software and service suppliers, its affiliates and/or its designated agent may automatically check the version of the SOFTWARE and/or its components that you are utilizing and may provide upgrades or supplements to the SOFTWARE that may be automatically downloaded to your DEVICES.
- **Additional Software/Services:** The SOFTWARE may permit FORD MOTOR COMPANY, third party software and service suppliers, its affiliates and/or its designated agent to provide or make available to you SOFTWARE updates, supplements, add-on components, or Internet-based services components of the SOFTWARE after the date you obtain your initial copy of the SOFTWARE ("Supplemental Components".) SOFTWARE updates may cause you to incur additional charges from your wireless service provider. If FORD MOTOR COMPANY or third party software and services suppliers provide or make available to you Supplemental Components and no other EULA terms are provided along with the Supplemental Components, then the terms of this EULA shall apply. FORD

# Appendices

---

MOTOR COMPANY, its affiliates and/or its designated agent reserve the right to discontinue without liability any Internet-based services provided to you or made available to you through the use of the SOFTWARE.

# Appendices

---

- **Links to Third Party Sites:** The SOFTWARE may provide you with the ability to link to third party sites. The third party sites are not under the control of FORD MOTOR COMPANY, its affiliates and/or its designated agent. Neither FORD MOTOR COMPANY nor its affiliates nor its designated agent are responsible for (i) the contents of any third party sites, any links contained in third party sites, or any changes or updates to third party sites, or (ii) webcasting or any other form of transmission received from any third party sites. If the SOFTWARE provides links to third party sites, those links are provided to you only as a convenience, and the inclusion of any link does not imply an endorsement of the third party site by FORD MOTOR COMPANY, its affiliates and/or its designated agent.
- **Obligation to Drive Responsibly:** You recognize your obligation to drive responsibly and keep attention on the road. You will read and abide with the DEVICES operating instructions particularly as they pertain to safety and you agree to assume any risk associated

with the use of the DEVICES.

**UPGRADES AND RECOVERY MEDIA:** If the SOFTWARE is provided by FORD MOTOR COMPANY separate from the DEVICES on media such as a ROM chip, CD ROM disk(s) or via web download or other means, and is labeled "For Upgrade Purposes Only" or "For Recovery Purposes Only" you may install one (1) copy of such SOFTWARE onto the DEVICES as a replacement copy for the existing SOFTWARE, and use it in accordance with this EULA, including any additional EULA terms accompanying the upgrade SOFTWARE.

**INTELLECTUAL PROPERTY RIGHTS:** All title and intellectual property rights in and to the SOFTWARE (including but not limited to any images, photographs, animations, video, audio, music, text and "applets" incorporated into the SOFTWARE), the accompanying printed materials, and any copies of the SOFTWARE, are owned by FORD MOTOR COMPANY, or its affiliates or suppliers. The SOFTWARE is licensed, not sold. You may not copy the printed materials accompanying the SOFTWARE. All title and intellectual property rights in and to the content which

may be accessed through use of the SOFTWARE is the property of the respective content owner and may be protected by applicable copyright or other intellectual property laws and treaties. This EULA grants you no rights to use such content outside its intended use. All rights not specifically granted under this EULA are reserved by FORD MOTOR COMPANY, its affiliates, and third party software and service providers and suppliers. Use of any on-line services which may be accessed through the SOFTWARE may be governed by the respective terms of use relating to such services. If this SOFTWARE contains documentation that is provided only in electronic form, you may print one copy of such electronic documentation.

# Appendices

---

**EXPORT RESTRICTIONS:** You acknowledge that the SOFTWARE is subject to U.S. and European Union export jurisdiction. You agree to comply with all applicable international and national laws that apply to the SOFTWARE, including the U.S. Export Administration Regulations, as well as end-user, end-use and destination restrictions issued by U.S. and other governments.

**TRADEMARKS:** This EULA does not grant you any rights in connection with any trademarks or service marks of FORD MOTOR COMPANY, its affiliates, and third party software and service providers.

**PRODUCT SUPPORT:** Please refer to FORD MOTOR COMPANY instructions provided in the documentation for the DEVICES product support, such as the vehicle owner guide.

Should you have any questions concerning this EULA, or if you desire to contact FORD MOTOR COMPANY for any other reason, please refer to the address provided in the documentation for the DEVICES.

**No Liability for Certain Damages:** EXCEPT AS PROHIBITED BY LAW, FORD MOTOR COMPANY, ANY THIRD PARTY SOFTWARE OR SERVICES SUPPLIERS, AND THEIR AFFILIATES SHALL HAVE NO LIABILITY FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE SOFTWARE. THIS LIMITATION SHALL APPLY EVEN IF ANY REMEDY FAILS OF ITS ESSENTIAL PURPOSE. THERE ARE NO WARRANTIES OTHER THAN THOSE THAT MAY BE EXPRESSLY PROVIDED FOR YOUR NEW VEHICLE.

**SYNC® Automotive Important Safety Information Read and follow instructions:**

- Before using your SYNC® system, read and follow all instructions and safety information provided in this end user manual ("Owner Guide.") Not following precautions found in the Owner Guide can lead to an accident or other serious injuries.

General Operation

- **Voice Command Control:** Certain functions within the SYNC® system may be accomplished using voice commands. Using voice commands while driving helps you to operate the system without removing your hands from the wheel or eyes from the road.
- **Prolonged Views of Screen:** Do not access any function requiring a prolonged view of the screen while you are driving. Pull over in a safe and legal manner before attempting to access a function of the system requiring prolonged attention.
- **Volume Setting:** Do not raise the volume excessively. Keep the volume at a level where you can still hear outside traffic and emergency signals while driving. Driving while unable to hear these sounds could cause an accident.

# Appendices

---

- **Navigation Features:** Any navigation features included in the system are intended to provide turn by turn instructions to get you to a desired destination. Please make certain all persons using this system carefully read and follow instructions and safety information fully.
- **Distraction Hazard:** Any navigation features may require manual (non-verbal) setup. Attempting to perform such set-up or insert data while driving can distract your attention and could cause an accident or other serious injury. Stop the vehicle in a safe and legal manner before attempting these operations.
- **Let Your Judgment Prevail:** Any navigation features are provided only as an aid. Make your driving decisions based on your observations of local conditions and existing traffic regulations. Any such feature is not a substitute for your personal judgment. Any route suggestions made by this system should never replace any local traffic regulations or your personal judgment or knowledge of safe driving practices.
- **Route Safety:** Do not follow the route suggestions if doing so would result in an unsafe or illegal maneuver, if you would be placed in an unsafe situation, or if you would be directed into an area that you consider unsafe. The driver is ultimately responsible for the safe operation of the vehicle and therefore, must evaluate whether it is safe to follow the suggested directions.
- **Potential Map Inaccuracy:** Maps used by this system may be inaccurate because of changes in roads, traffic controls or driving conditions. Always use good judgment and common sense when following the suggested routes.
- **Emergency Services:** Do not rely on any navigation features included in the system to route you to emergency services. Ask local authorities or an emergency services operator for these locations. Not all emergency services such as police, fire stations, hospitals and clinics are likely to be contained in the map database for such navigation features.



# Appendices

---

Your Responsibilities and Assumptions of  
Risk

# Appendices

---

- You agree to each of the following:(a) Any use of the SOFTWARE while driving an automobile or other vehicle in violation of applicable law or otherwise driving in an unsafe manner presents a significant risk of distracted driving and should not be attempted under any circumstances;(b) Use of the SOFTWARE at excessive volume poses a significant risk of hearing damage and should not be attempted under any circumstances;(c) The SOFTWARE may not be compatible with new or different versions of an operating system, third party software, or third party services, and the SOFTWARE may potentially cause a critical failure of an operating system, third party software, or third party service.(d) Any third party service accessed by or third party software used with the SOFTWARE (i) may charge an additional fee for access, (ii) may not work correctly, on an uninterrupted basis, or error free, (iii) may change streaming formats or discontinue operation, (iv) may contain adult, profane or offensive content; and (v) may contain inaccurate, false or misleading traffic, weather,

financial or safety information or other content; and (e) Use of the SOFTWARE may cause you to incur additional charges from your wireless service provider (WSP) and any data or minute calculators that may be included in the software program are for reference only, are not warranted in any way and should not be relied upon in anyway.

- When using the SOFTWARE, you agree to be responsible for and assume the entire risk to the items set forth in Section (a) – (e) above.

## **Disclaimer of Warranty**

YOU EXPRESSLY ACKNOWLEDGE AND AGREE THAT USE OF THE DEVICES AND SOFTWARE IS AT YOUR SOLE RISK AND THAT THE ENTIRE RISK AS TO SATISFACTORY QUALITY, PERFORMANCE, COMPATIBILITY, ACCURACY AND EFFORT IS WITH YOU. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE SOFTWARE AND ANY THIRD PARTY SOFTWARE OR THIRD-PARTY SERVICES ARE PROVIDED "AS IS" AND "AS AVAILABLE", WITH ALL FAULTS AND

WITHOUT WARRANTY OF ANY KIND, AND FORD MOTOR COMPANY HEREBY DISCLAIMS ALL WARRANTIES AND CONDITIONS WITH RESPECT TO THE SOFTWARE, THIRD PARTY SOFTWARE, AND THIRD-PARTY SERVICES, EITHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES AND/OR CONDITIONS OF MERCHANTABILITY, OF SATISFACTORY QUALITY, OF FITNESS FOR AN ARTICULAR PURPOSE, OF ACCURACY, OF QUIET ENJOYMENT, AND NON-INFRINGEMENT OF THIRD-PARTY RIGHTS. FORD MOTOR COMPANY DOES NOT WARRANT (a) AGAINST INTERFERENCE WITH YOUR ENJOYMENT OF THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES, (b) THAT THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES WILL MEET YOUR REQUIREMENTS, (c) THAT THE OPERATION OF THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES WILL BE UNINTERRUPTED OR ERROR-FREE, (d) OR THAT DEFECTS IN THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES WILL BE CORRECTED. NO ORAL

# Appendices

OR WRITTEN INFORMATION OR ADVICE GIVEN BY FORD MOTOR COMPANY OR ITS AUTHORIZED REPRESENTATIVE SHALL CREATE A WARRANTY. SHOULD THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES PROVE DEFECTIVE, YOU ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION. SOME JURISDICTIONS DO NOT ALLOW THE DISCLAIMER OF IMPLIED WARRANTIES OR LIMITATIONS ON APPLICABLE STATUTORY RIGHTS OF A CONSUMER, SO THE ABOVE DISCLAIMER MAY NOT FULLY APPLY TO YOU. THE SOLE WARRANTY PROVIDED BY FORD MOTOR COMPANY SHALL BE FOUND IN THE WARRANTY INFORMATION INCLUDING WITH YOUR OWNER GUIDE. TO THE EXTENT THAT THERE IS ANY CONFLICT BETWEEN THE TERMS OF THIS SECTION AND THE WARRANTY BOOKLET, THE WARRANTY BOOKLET SHALL CONTROL.

## **Applicable Law, Venue, Jurisdiction**

- The laws of the State of Michigan govern this EULA and Your use of the SOFTWARE. Your use of the SOFTWARE may also be subject to other local, state, national, or international laws. Any litigation arising out of or related to this EULA shall be brought and maintained exclusively in a court of the State of Michigan located in Wayne County or in the United States District Court for the Eastern District of Michigan. You hereby consent to submit to the personal jurisdiction of a court in the State of Michigan located in Wayne County and the United States District Court for the Eastern District of Michigan for any dispute arising out of or relating to this EULA.

## **Binding Arbitration and Class Action Waiver**

**(a) Application.** This Section applies to any dispute EXCEPT IT DOES NOT INCLUDE A DISPUTE RELATING TO COPYRIGHT INFRINGEMENT, OR TO THE ENFORCEMENT OR VALIDITY OF YOUR, FORD MOTOR COMPANY, OR ANY OF

FORD MOTOR COMPANY'S LICENSORS' INTELLECTUAL PROPERTY RIGHTS. Dispute means any dispute, action, or other controversy between You and FORD MOTOR COMPANY, other than the exceptions listed above, concerning the SOFTWARE (including its price) or this EULA, whether in contract, warranty, tort, statute, regulation, ordinance, or any other legal or equitable basis.

**(b) Notice of Dispute.** In the event of a Dispute, You or FORD MOTOR COMPANY must give the other a "Notice of Dispute", which is a written statement of the name, address, and contact information of the party giving it, the facts giving rise to the dispute, and the relief requested. You and FORD MOTOR COMPANY will attempt to resolve any dispute through informal negotiation within 60 days from the date the Notice of Dispute is sent. After 60 days, You or FORD MOTOR COMPANY may commence arbitration.

# Appendices

---

**(c) Small claims court.** You may also litigate any dispute in small claims court in your county of residence or FORD MOTOR COMPANY'S principal place of business, if the dispute meets all requirements to be heard in the small claims court. You may litigate in small claims court whether or not You negotiated informally first.

**(d) Binding arbitration.** If You and FORD MOTOR COMPANY, do not resolve any dispute by informal negotiation or in small claims court, any other effort to resolve the dispute will be conducted exclusively by binding arbitration. You are giving up the right to litigate (or participate in as a party or class member) all disputes in court before a judge or jury. Instead, all disputes will be resolved before a neutral arbitrator, whose decision will be final except for a limited right of appeal under the Federal Arbitration Act. Any court with jurisdiction over the parties may enforce the arbitrator's award.

**(e) Class action waiver.** Any proceedings to resolve or litigate any dispute in any forum will be conducted solely on an individual basis. Neither you nor FORD MOTOR COMPANY, will seek to have any dispute heard as a class action, as a private attorney general action, or in any other proceeding in which any party acts or proposes to act in a representative capacity. No arbitration or proceeding will be combined with another without the prior written consent of all parties to all affected arbitrations or proceedings.

**(f) Arbitration procedure.** Any arbitration will be conducted by the American Arbitration Association (the "AAA"), under its Commercial Arbitration Rules. If You are an individual and use the SOFTWARE for personal or vehicle use, or if the value of the dispute is \$75,000 or less whether or not You are an individual or how You use the SOFTWARE, the AAA Supplementary Procedures for Consumer-Related Disputes will also apply. To commence arbitration, submit a Commercial Arbitration Rules Demand for Arbitration form to the AAA. You may request a telephonic or in-person hearing by following the AAA rules. In a

dispute involving \$10,000 or less, any hearing will be telephonic unless the arbitrator finds good cause to hold an in-person hearing instead. For more information, see [adr.org](http://adr.org) or call 1-800-778-7879. You agree to commence arbitration only in your county of residence or FORD MOTOR COMPANY'S principal place of business. The arbitrator may award the same damages to You individually as a court could. The arbitrator may award declaratory or injunctive relief only to You individually, and only to the extent required to satisfy Your individual claim. **Arbitration fees and incentives.**

- i. Disputes involving \$75,000 or less. FORD MOTOR COMPANY will promptly reimburse your filing fees and pay the AAA's and arbitrator's fees and expenses. If you reject FORD MOTOR COMPANY'S last written settlement offer made before the arbitrator was appointed ("last written offer"), your dispute goes all the way to an arbitrator's decision (called an "award"), and the arbitrator awards you more than the last written offer, FORD MOTOR COMPANY will give

# Appendices

---

you three incentives: (1) pay the greater of the award or \$1,000; (2) pay twice your reasonable attorney's fees, if any; and (3) reimburse any expenses (including expert witness fees and costs) that your attorney reasonably accrues for investigating, preparing, and pursuing your claim in arbitration. The arbitrator will determine the amounts.

- ii. Disputes involving more than \$75,000. The AAA rules will govern payment of filing fees and the AAA's and arbitrator's fees and expenses.
- iii. Disputes involving any amount. In any arbitration you commence, FORD MOTOR COMPANY will seek its AAA or arbitrator's fees and expenses, or Your filing fees it reimbursed, only if the arbitrator finds the arbitration frivolous or brought for an improper purpose. In any arbitration FORD MOTOR COMPANY commences, it will pay all filing, AAA, and arbitrator's fees and expenses. It will not seek its attorney's fees or expenses from you in any arbitration. Fees and expenses are not counted in determining how much a dispute involves.

**(h) Claims or disputes must be filed within one year.** To the extent permitted by law, any claim or dispute under this EULA to which this Section applies must be filed within one year in small claims court (Section c) or in arbitration (Section d). The one-year period begins when the claim or dispute first could be filed. If such a claim or dispute is not filed within one year, it is permanently barred.

**(i) Severability.** If the class action waiver (Section e) is found to be illegal or unenforceable as to all or some parts of a dispute, then that portion of Section e will not apply to those parts. Instead, those parts will be severed and proceed in a court of law, with the remaining parts proceeding in arbitration. If any other provision of that portion Section e is found to be illegal or unenforceable, that provision will be severed with the remainder of Section e remaining in full force and effect.

## **Telenav Software End User License Agreement**

Please read these terms and conditions carefully before you use the TeleNav Software. Your use of the TeleNav Software indicates that you accept these terms and conditions. If you do not accept these terms and conditions, do not break the seal of the package, launch, or otherwise use the TeleNav Software. TeleNav may revise this Agreement and the privacy policy at any time, with or <http://www.telenav.com> from time to time to review the then current version of this Agreement and of the privacy policy.

### **1. Safe and Lawful Use**

You acknowledge that devoting attention to the TeleNav Software may pose a risk of injury or death to you and others in situations that otherwise require your undivided attention, and you therefore agree to comply with the following when using the TeleNav Software:

- (a) observe all traffic laws and otherwise drive safely;

# Appendices

---

(b) use your own personal judgment while driving. If you feel that a route suggested by the TeleNav Software instructs you to perform an unsafe or illegal maneuver, places you in an unsafe situation, or directs you into an area that you consider to be unsafe, do not follow such instructions;

(c) do not input destinations, or otherwise manipulate the TeleNav Software, unless your vehicle is stationary and parked;

(d) do not use the TeleNav Software for any illegal, unauthorized, unintended, unsafe, hazardous, or unlawful purposes, or in any manner inconsistent with this Agreement;

(e) arrange all GPS and wireless devices and cables necessary for use of the TeleNav Software in a secure manner in your vehicle so that they will not interfere with your driving and will not prevent the operation of any safety device (such as an airbag).

You agree to indemnify and hold TeleNav harmless against all claims resulting from any dangerous or otherwise inappropriate use of the TeleNav Software in any moving vehicle, including as a result of your failure to comply with the directions above.

## 2. Account Information

You agree: (a) when registering the TeleNav Software, to provide TeleNav with true, accurate, current, and complete information about yourself, and (b) to inform TeleNav promptly of any changes to such information, and to keep it true, accurate, current and complete.

## 3. Software License

- Subject to your compliance with the terms of this Agreement, TeleNav hereby grants to you a personal, non-exclusive, non-transferable license (except as expressly permitted below in connection with your permanent transfer of the TeleNav Software license), without the right to sublicense, to use the TeleNav Software (in object code form only) in order to access and use the TeleNav Software. This license shall terminate upon any termination or expiration of this Agreement. You agree that you will use the TeleNav Software only for your personal business or leisure purposes, and not to provide commercial navigation services to other parties.

## 3.1 License Limitations

- **(a)** reverse engineer, decompile, disassemble, translate, modify, alter or otherwise change the TeleNav Software or any part thereof; **(b)** attempt to derive the source code, audio library or structure of the TeleNav Software without the prior express written consent of TeleNav; **(c)** remove from the TeleNav Software, or alter, any of TeleNav's or its suppliers' trademarks, trade names, logos, patent or copyright notices, or other notices or markings; **(d)** distribute, sublicense or otherwise transfer the TeleNav Software to others, except as part of your permanent transfer of the TeleNav Software; or **(e)** use the TeleNav Software in any manner that
  - i. infringes the intellectual property or proprietary rights, rights of publicity or privacy or other rights of any party,
  - ii. violates any law, statute, ordinance or regulation, including but not limited to laws and regulations related to spamming, privacy, consumer and child protection, obscenity or defamation, or

# Appendices

---

iii. is harmful, threatening, abusive, harassing, tortuous, defamatory, vulgar, obscene, libelous, or otherwise objectionable; and (f) lease, rent out, or otherwise permit unauthorized access by third parties to the TeleNav Software without advanced written permission of TeleNav.

## 4. Disclaimers

- To the fullest extent permissible pursuant to applicable law, in no event will TeleNav, its licensors and suppliers, or agents or employees of any of the foregoing, be liable for any decision made or action taken by you or anyone else in reliance on the information provided by the TeleNav Software. TeleNav also does not warrant the accuracy of the map or other data used for the TeleNav Software. Such data may not always reflect reality due to, among other things, road closures, construction, weather, new roads and other changing conditions. You are responsible for the entire risk arising out of your use of the TeleNav Software. For example but without limitation, you agree not to rely

on the TeleNav Software for critical navigation in areas where the well-being or survival of you or others is dependent on the accuracy of navigation, as the maps or functionality of the TeleNav Software are not intended to support such high risk applications, especially in more remote geographical areas.

- TELENAV EXPRESSLY DISCLAIMS AND EXCLUDES ALL WARRANTIES IN CONNECTION WITH THE TELENAV SOFTWARE, WHETHER STATUTORY, EXPRESS OR IMPLIED, INCLUDING ALL WARRANTIES WHICH MAY ARISE FROM COURSE OF DEALING, CUSTOM OR TRADE AND INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS WITH RESPECT TO THE TELENAV SOFTWARE.
- Certain jurisdictions do not permit the disclaimer of certain warranties, so this limitation may not apply to you.

## 5. Limitation of Liability

- TO THE EXTENT PERMITTED UNDER APPLICABLE LAW, UNDER NO CIRCUMSTANCES SHALL TELENAV OR ITS LICENSORS AND SUPPLIERS BE LIABLE TO YOU OR TO ANY THIRD PARTY FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL OR EXEMPLARY DAMAGES (INCLUDING IN EACH CASE, BUT NOT LIMITED TO, DAMAGES FOR THE INABILITY TO USE THE EQUIPMENT OR ACCESS DATA, LOSS OF DATA, LOSS OF BUSINESS, LOSS OF PROFITS, BUSINESS INTERRUPTION OR THE LIKE) ARISING OUT OF THE USE OF OR INABILITY TO USE THE TELENAV SOFTWARE, EVEN IF TELENAV HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING ANY DAMAGES THAT YOU MIGHT INCUR FOR ANY REASON WHATSOEVER (INCLUDING, WITHOUT LIMITATION, ALL DAMAGES REFERENCED HEREIN AND ALL DIRECT OR GENERAL DAMAGES IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR

# Appendices

---

OTHERWISE), THE ENTIRE LIABILITY OF TELENV AND OF ALL OF TELENV'S SUPPLIERS SHALL BE LIMITED TO THE AMOUNT ACTUALLY PAID BY YOU FOR THE TELENV SOFTWARE. SOME STATES AND/OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

## **6. Arbitration and Governing Law**

- You agree that any dispute, claim or controversy arising out of or relating to this Agreement or the TeleNav Software shall be settled by independent arbitration involving a neutral arbitrator and administered by the American Arbitration Association in the County of Santa Clara, California. The arbitrator shall apply the Commercial Arbitration Rules of the American Arbitration Association, and the judgment upon the award rendered by the arbitrator may be entered by any court having jurisdiction. Note that there is no judge or jury in an

arbitration proceeding and the decision of the arbitrator shall be binding upon both parties. You expressly agree to waive your right to a jury trial. This Agreement and performance hereunder will be governed by and construed in accordance with the laws of the State of California, without giving effect to its conflict of law provisions. To the extent judicial action is necessary in connection with the binding arbitration, both TeleNav and you agree to submit to the exclusive jurisdiction of the courts of the County of Santa Clara, California. The United Nations Convention on Contracts for the International Sale of Goods shall not apply.

## **7. Assignment**

- You may not resell, assign, or transfer this Agreement or any of your rights or obligations, except in totality, in connection with your permanent transfer of the TeleNav Software, and expressly conditioned upon the new user of the TeleNav Software agreeing to be bound by the terms and conditions of this

Agreement. Any such sale, assignment or transfer that is not expressly permitted under this paragraph will result in immediate termination of this Agreement, without liability to TeleNav, in which case you and all other parties shall immediately cease all use of the TeleNav Software. Notwithstanding the foregoing, TeleNav may assign this Agreement to any other party at any time without notice, provided the assignee remains bound by this Agreement.

## **8. Miscellaneous**

### **8.1**

This Agreement constitutes the entire agreement between TeleNav and you with respect to the subject matter hereof.

### **8.2**

Except for the limited licenses expressly granted in this Agreement, TeleNav retains all right, title and interest in and to the TeleNav Software, including without limitation all related intellectual property rights. No licenses or other rights which are



# Appendices

---

not expressly granted in this Agreement are intended to, or shall be, granted or conferred by implication, statute, inducement, estoppel or otherwise, and TeleNav and its suppliers and licensors hereby reserve all of their respective rights other than the licenses explicitly granted in this Agreement.

## **8.3**

By using the TeleNav Software, you consent to receive from TeleNav all communications, including notices, agreements, legally required disclosures or other information in connection with the TeleNav Software (collectively, "Notices") electronically. TeleNav may provide such Notices by posting them on TeleNav's Website or by downloading such Notices to your wireless device. If you desire to withdraw your consent to receive Notices electronically, you must discontinue your use of the TeleNav Software.

## **8.4**

TeleNav's or your failure to require performance of any provision shall not affect that party's right to require performance at any time thereafter, nor shall a waiver of any breach or default of this Agreement constitute a waiver of any subsequent breach or default or a waiver of the provision itself.

## **8.5**

If any provision herein is held unenforceable, then such provision will be modified to reflect the intention of the parties, and the remaining provisions of this Agreement will remain in full force and effect.

## **8.6**

The headings in this Agreement are for convenience of reference only, will not be deemed to be a part of this Agreement, and will not be referred to in connection with the construction or interpretation of this Agreement. As used in this Agreement, the words "include" and "including" and variations thereof, will not be deemed to be terms of limitation, but rather will be deemed to be followed by the words "without limitation".

## **9. Other Vendors Terms and Conditions**

- The Telenav Software utilizes map and other data licensed to Telenav by third party vendors for the benefit of you and other end users. This Agreement includes end-user terms applicable to these companies (included at the end of this Agreement), and thus your use of the Telenav Software is also subject to such terms. You agree to comply with the following additional terms and conditions, which are applicable to Telenav's third party vendor licensors::

# Appendices

---

## 9.1 End User Terms Required by HERE North America, LLC

The data (“Data”) is provided for your personal, internal use only and not for resale. It is protected by copyright, and is subject to the following terms and conditions which are agreed to by you, on the one hand, and Telenav (“Telenav”) and its licensors (including their licensors and suppliers) on the other hand.

© 2013 HERE. All rights reserved.

The Data for areas of Canada includes information taken with permission from Canadian authorities, including: © Her Majesty the Queen in Right of Canada, © Queen’s Printer for Ontario, © Canada Post Corporation, GeoBase®, © Department of Natural Resources Canada.

HERE holds a non-exclusive license from the United States Postal Service® to publish and sell ZIP+4® information.

©United States Postal Service® 2014. Prices are not established, controlled or approved by the United States Postal Service®. The following trademarks and registrations are owned by the USPS: United States Postal Service, USPS, and ZIP+4

The Data for Mexico includes certain data from Instituto Nacional de Estadística y Geografía.

### ***Terms and Conditions***

**Permitted Use.** You agree to use this Data together with the Telenav Software solely for the internal business and personal purposes for which you were licensed, and not for service bureau, time-sharing or other similar purposes. Accordingly, but subject to the restrictions set forth in the following paragraphs, you agree not to otherwise reproduce, copy, modify, decompile, disassemble, create any derivative works of, or reverse engineer any portion of this Data, and may not transfer or distribute it in any form, for any purpose, except to the extent permitted by mandatory laws.

**Restrictions.** Except where you have been specifically licensed to do so by Telenav, and without limiting the preceding paragraph, you may not use this Data (a) with any products, systems, or applications installed or otherwise connected to or in communication with vehicles, capable of vehicle navigation, positioning, dispatch, real time route guidance, fleet management or similar applications; or (b) with or in communication with any positioning devices or any mobile or wireless-connected electronic or computer devices, including without limitation cellular phones, palmtop and handheld computers, pagers, and personal digital assistants or PDAs.

**Warning.** The Data may contain inaccurate or incomplete information due to the passage of time, changing circumstances, sources used and the nature of collecting comprehensive geographic data, any of which may lead to incorrect results.

# Appendices

---

**No Warranty.** This Data is provided to you “as is,” and you agree to use it at your own risk. Telenav and its licensors (and their licensors and suppliers) make no guarantees, representations or warranties of any kind, express or implied, arising by law or otherwise, including but not limited to, content, quality, accuracy, completeness, effectiveness, reliability, fitness for a particular purpose, usefulness, use or results to be obtained from this Data, or that the Data or server will be uninterrupted or error-free.

**Disclaimer of Warranty:** TELENAV AND ITS LICENSORS (INCLUDING THEIR LICENSORS AND SUPPLIERS) DISCLAIM ANY WARRANTIES, EXPRESS OR IMPLIED, OF QUALITY, PERFORMANCE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. Some States, Territories and Countries do not allow certain warranty exclusions, so to that extent the above exclusion may not apply to you.

**Disclaimer of Liability:** TELENAV AND ITS LICENSORS (INCLUDING THEIR LICENSORS AND SUPPLIERS) SHALL NOT BE LIABLE TO YOU: IN RESPECT OF ANY CLAIM, DEMAND OR ACTION, IRRESPECTIVE OF THE NATURE OF THE CAUSE OF THE CLAIM, DEMAND OR ACTION ALLEGING ANY LOSS, INJURY OR DAMAGES, DIRECT OR INDIRECT, WHICH MAY RESULT FROM THE USE OR POSSESSION OF THE INFORMATION; OR FOR ANY LOSS OF PROFIT, REVENUE, CONTRACTS OR SAVINGS, OR ANY OTHER DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF YOUR USE OF OR INABILITY TO USE THIS INFORMATION, ANY DEFECT IN THE INFORMATION, OR THE BREACH OF THESE TERMS OR CONDITIONS, WHETHER IN AN ACTION IN CONTRACT OR TORT OR BASED ON A WARRANTY, EVEN IF TELENAV OR ITS LICENSORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Some States, Territories and Countries do not allow certain liability exclusions or damages limitations, so to that extent the above may not apply to you.

**Export Control.** You shall not export from anywhere any part of the Data or any direct product thereof except in compliance with, and with all licenses and approvals required under, applicable export laws, rules and regulations, including but not limited to the laws, rules and regulations administered by the Office of Foreign Assets Control of the U.S. Department of Commerce and the Bureau of Industry and Security of the U.S. Department of Commerce. To the extent that any such export laws, rules or regulations prohibit HERE from complying with any of its obligations hereunder to deliver or distribute Data, such failure shall be excused and shall not constitute a breach of this Agreement.

**Entire Agreement.** These terms and conditions constitute the entire agreement between Telenav (and its licensors, including their licensors and suppliers) and you pertaining to the subject matter hereof, and supersedes in their entirety any and all written or oral agreements previously existing between us with respect to such subject matter.

# Appendices

**Governing Law.** The above terms and conditions shall be governed by the laws of the State of Illinois [insert "Netherlands" where European HERE Data is used], without giving effect to (i) its conflict of laws provisions, or (ii) the United Nations Convention for Contracts for the International Sale of Goods, which is explicitly excluded. You agree to submit to the jurisdiction of the State of Illinois [insert "The Netherlands" where European HERE Data is used] for any and all disputes, claims and actions arising from or in connection with the Data provided to you hereunder.

**Government End Users.** If the Data is being acquired by or on behalf of the United States government or any other entity seeking or applying rights similar to those customarily claimed by the United States government, this Data is a "commercial item" as that term is defined at 48 C.F.R. ("FAR") 2.101, is licensed in accordance with these End-User Terms, and each copy of Data delivered or otherwise furnished shall be marked and embedded as appropriate with the following "Notice of Use," and shall be treated in accordance with such Notice:

NOTICE OF USE
CONTRACTOR (MANUFACTURER/ SUPPLIER) NAME: HERE
CONTRACTOR (MANUFACTURER/ SUPPLIER) ADDRESS: c/o Nokia, 425 West Randolph Street, Chicago, Illinois 60606
This Data is a commercial item as defined in FAR 2.101 and is subject to these End- User Terms under which this Data was provided.
© 1987 – 2014 HERE – All rights reserved.

If the Contracting Officer, federal government agency, or any federal official refuses to use the legend provided herein, the Contracting Officer, federal government agency, or any federal official must notify HERE prior to seeking additional or alternative rights in the Data.

### Gracenote® Copyright

CD and music-related data from Gracenote, Inc., copyright©

2000-2007 Gracenote. Gracenote Software, copyright © 2000-2007 Gracenote. This product and service may practice one or more of the following U.S. Patents 5,987,525; 6,061,680; 6,154,773; 6,161,132; 6,230,192; 6,230,207; 6,240,459; 6,330,593 and other patents issued or pending. Some services supplied under license from Open Globe, Inc. for U.S. Patent 6,304,523.

Gracenote and CDDB are registered trademarks of Gracenote. The Gracenote logo and logotype, and the "Powered by Gracenote" logo are trademarks of Gracenote.

### Gracenote® End User License Agreement (EULA)

This device contains software from Gracenote, Inc. of 2000 Powell Street Emeryville, California 94608 ("Gracenote").

The software from Gracenote (the "Gracenote Software") enables this device to do disc and music file identification and obtain music-related information, including name, artist, track, and title information ("Gracenote Data") from online servers ("Gracenote Servers"), and to perform other

# Appendices

---

functions. You may use Gracenote Data only by means of the intended End User functions of this device. This device may contain content belonging to Gracenote's providers. If so, all of the restrictions set forth herein with respect to Gracenote Data shall also apply to such content and such content providers shall be entitled to all of the benefits and protections set forth herein that are available to Gracenote. You agree that you will use the content from Gracenote ("Gracenote Content"), Gracenote Data, the Gracenote Software, and Gracenote Servers for your own personal, non-commercial use only. You agree not to assign, copy, transfer or transmit the Gracenote Content, Gracenote Software or any Gracenote Data (except in a Tag associated with a music file) to any third party. **YOU AGREE NOT TO USE OR EXPLOIT GRACENOTE CONTENT, GRACENOTE DATA, THE GRACENOTE SOFTWARE, OR GRACENOTE SERVERS, EXCEPT AS EXPRESSLY PERMITTED HEREIN.**

You agree that your non-exclusive licenses to use the Gracenote Content, Gracenote Data, the Gracenote Software, and Gracenote Servers will terminate if you violate these restrictions. If your licenses terminate, you agree to cease any and all use of the Gracenote Content, Gracenote Data, the Gracenote Software, and Gracenote Servers.

Gracenote, respectively, reserve all rights in Gracenote Data, the Gracenote Software, and the Gracenote Servers and Gracenote Content, including all ownership rights. Under no circumstances will either Gracenote become liable for any payment to you for any information that you provide, including any copyrighted material or music file information. You agree that Gracenote may enforce its respective rights, collectively or separately, under this agreement against you, directly in each company's own name.

Gracenote uses a unique identifier to track queries for statistical purposes. The purpose of a randomly assigned numeric identifier is to allow Gracenote to count queries without knowing anything about who you are. For more information, see the web page at [www.gracenote.com](http://www.gracenote.com) for the Gracenote Privacy Policy.

**THE GRACENOTE SOFTWARE, EACH ITEM OF GRACENOTE DATA AND THE GRACENOTE CONTENT ARE LICENSED TO YOU "AS IS". NEITHER GRACENOTE MAKES ANY REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, REGARDING THE ACCURACY OF ANY GRACENOTE DATA FROM THE GRACENOTE SERVERS OR GRACENOTE CONTENT. GRACENOTE COLLECTIVELY AND SEPARATELY RESERVE THE RIGHT TO DELETE DATA AND/OR CONTENT FROM THE COMPANIES' RESPECTIVE SERVERS OR, IN THE CASE OF GRACENOTE, CHANGE DATA CATEGORIES FOR ANY CAUSE THAT GRACENOTE DEEMS SUFFICIENT. NO WARRANTY IS MADE THAT EITHER GRACENOTE CONTENT OR THE GRACENOTE SOFTWARE OR GRACENOTE SERVERS ARE**

# Appendices

---

ERROR-FREE OR THAT THE FUNCTIONING OF THE GRACENOTE SOFTWARE OR GRACENOTE SERVERS WILL BE UNINTERRUPTED. GRACENOTE IS NOT OBLIGATED TO PROVIDE YOU WITH ANY ENHANCED OR ADDITIONAL DATA TYPES THAT GRACENOTE MAY CHOOSE TO PROVIDE IN THE FUTURE AND IS FREE TO DISCONTINUE ITS ONLINE SERVICES AT ANY TIME. GRACENOTE DISCLAIMS ALL WARRANTIES EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, AND NON-INFRINGEMENT. NEITHER GRACENOTE WARRANTS THE RESULTS THAT WILL BE OBTAINED BY YOUR USE OF THE GRACENOTE SOFTWARE OR ANY GRACENOTE SERVER. IN NO CASE WILL GRACENOTE BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES OR FOR ANY LOST PROFITS OR LOST REVENUES FOR ANY REASON WHATSOEVER. © Gracenote 2007.

FCC ID: ACJ-SYNCG3-L

IC: 216B-SYNCG3-L

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

## WARNING



Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. The term "IC" before the radio certification number only signifies that Industry Canada technical specifications were met.

---

The antenna used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.



# Index

<b>A</b>		
A/C		
See: Climate Control.....	133	
About This Manual.....	7	
ABS		
See: Brakes.....	184	
ABS driving hints		
See: Hints on Driving With Anti-Lock Brakes.....	184	
Accessories.....	468	
Exterior style.....	468	
Interior style.....	468	
Lifestyle.....	468	
Peace of mind.....	468	
Accessories		
See: Replacement Parts Recommendation.....	12	
ACC		
See: Using Adaptive Cruise Control.....	209	
Active Park Assist - Vehicles With: Active Park Assist.....	196	
Deactivating the Active Park Assist Feature.....	202	
Parallel Parking, Perpendicular Parking, Park Out Assist.....	196	
Troubleshooting the System.....	202	
Adjusting the Headlamps.....	299	
Horizontal Aim Adjustment.....	300	
Vertical Aim Adjustment.....	299	
Adjusting the Steering Wheel.....	78	
Power Tilt and Telescope Steering Column.....	78	
Airbag Disposal.....	51	
Air Conditioning		
See: Climate Control.....	133	
Air Filter		
See: Changing the Engine Air Filter.....	303	
Alarm		
See: Anti-Theft Alarm.....	76	
All-Wheel Drive.....	179	
Ambient Lighting.....	92	
Anti-Theft Alarm.....	76	
Arming the Alarm.....	76	
Disarming the Alarm.....	76	
Appendices.....	504	
Apps.....	431	
.....	431	
SiriusXM Traffic and Travel Link.....	433	
Audible Warnings and Indicators.....	107	
Headlamps On Warning Chime.....	107	
Keyless Warning Alert.....	107	
Parking Brake On Warning Chime.....	107	
Audio Control.....	79	
Seek, Next or Previous.....	79	
Audio System.....	362	
General Information.....	362	
Audio Unit - Vehicles With: Premium AM/ FM/CD.....	363	
Auto Hold.....	187	
Using Auto Hold.....	189	
Autolamps.....	87	
Windshield Wiper Activated Headlamps.....	88	
Automatic Climate Control.....	133	
Automatic High Beam Control.....	90	
Activating the System.....	90	
Manually Overriding the System.....	91	
Automatic Transmission.....	173	
Automatic Transmission Adaptive Learning.....	178	
Brake-Shift Interlock Override.....	176	
If Your Vehicle Gets Stuck In Mud or Snow.....	178	
Push Button Shift Transmission.....	173	
SelectShift Automatic™ Transmission.....	175	
Automatic Transmission Fluid		
Check.....	295	
Auto-Start-Stop.....	161	
Disabling Auto StartStop.....	161	
Enabling Auto StartStop.....	161	
Autowipers.....	83	
Auxiliary Power Points.....	153	
110 Volt AC Power Point.....	153	
12 Volt DC Power Point.....	153	
Locations.....	153	



# Index

AWD			
See: All-Wheel Drive.....	179		
<b>B</b>			
Battery			
See: Changing the 12V Battery.....	296		
Blind Spot Information System.....	223		
Switching the System Off and On.....	225		
System Errors.....	225		
Using the System.....	223		
Bonnet Lock			
See: Opening and Closing the Hood.....	286		
Booster Seats.....	25		
Types of Booster Seats.....	26		
Brake Fluid Check.....	295		
Brakes.....	184		
General Information.....	184		
Breaking-In.....	249		
Bulb Specification Chart.....	301		
<b>C</b>			
Cabin Air Filter.....	137		
California Proposition 65.....	11		
Capacities and Specifications - 2.0L			
EcoBoost™.....	350		
Specifications.....	351		
Capacities and Specifications - 2.3L			
EcoBoost™.....	356		
Specifications.....	357		
Capacities and Specifications.....	344		
Car Wash			
See: Cleaning the Exterior.....	306		
Center Console.....	155		
Changing a Bulb.....	300		
Front Direction Indicator.....	301		
High Intensity Discharge Headlamp.....	300		
LED Lamps.....	301		
License Plate Lamp.....	301		
Changing a Fuse.....	283		
Fuses.....	283		
Changing a Road Wheel.....	336		
Dissimilar Spare Wheel and Tire Assembly			
Information.....	337		
Tire Change Procedure.....	338		
Changing the 12V Battery.....	296		
Changing the Engine Air Filter.....	303		
Changing the Wiper Blades.....	298		
Front Wiper Blades.....	298		
Rear Window Wiper Blade.....	299		
Checking MyKey System Status.....	60		
MyKey Distance.....	60		
Number of Admin Keys.....	61		
Number of MyKeys.....	60		
Checking the Wiper Blades.....	298		
Child Restraint and Seatbelt			
Maintenance.....	38		
Child Restraint Positioning.....	28		
Child Safety.....	17		
General Information.....	17		
Child Safety Locks.....	29		
Left-Hand Side.....	30		
Right-Hand Side.....	30		
Cleaning Leather Seats.....	311		
Cleaning Products.....	305		
Cleaning the Alloy Wheels.....	312		
Cleaning the Engine.....	307		
Cleaning the Exterior.....	306		
Exterior Chrome Parts.....	306		
Exterior Plastic Parts.....	307		
Stripes or Graphics.....	307		
Underbody.....	307		
Under Hood.....	307		
Cleaning the Instrument Panel and			
Instrument Cluster Lens.....	310		
Cleaning the Interior.....	308		
Cleaning Black Label or Presidential			
Interior.....	309		
Cleaning the Windows and Wiper			
Blades.....	308		
Clearing All MyKeys.....	60		
Climate.....	409		
Climate Control.....	133		

# Index

Climate Controlled Seats.....	146
Cooled Seats.....	147
Collision Warning System.....	230
Principle Of Operation.....	230
Coolant Check	
See: Engine Coolant Check.....	291
Crash Sensors and Airbag Indicator.....	49
Creating a MyKey.....	59
Programming or Changing Configurable Settings.....	60
Cross Traffic Alert.....	225
False Alerts.....	229
Switching the System Off and On.....	229
System Errors.....	229
System Lights, Messages and Audible Alerts.....	228
System Limitations.....	228
Using the System.....	225
Cruise Control.....	80
Principle of Operation.....	208
Type 1.....	80
Type 2.....	80
Cruise control	
See: Using Cruise Control.....	208
Customer Assistance.....	259

## D

Data Recording.....	9
Event Data Recording.....	10
Service Data Recording.....	9
Daytime Running Lamps.....	89
Type 1 - Conventional (Non-Configurable).....	89
Type 2 - Configurable.....	89
Direction Indicators.....	91
Drive Control.....	233
LINCOLN DRIVE CONTROL.....	233
Driver Alert.....	217
Using Driver Alert.....	217
Driver and Passenger Airbags.....	42
Children and Airbags.....	43
Proper Driver and Front Passenger Seating Adjustment.....	43
Driver Knee Airbag.....	48
Driving Aids.....	217
Driving Hints.....	249
Driving Through Water.....	250
DRL	
See: Daytime Running Lamps.....	89

## E

Economical Driving.....	249
-------------------------	-----

Electric Parking Brake.....	185
Applying the electric parking brake.....	185
Applying the electric parking brake when the vehicle is moving.....	186
Battery With No Charge.....	187
Releasing the electric parking brake.....	186
Emission Control System.....	170
On-Board Diagnostics (OBD-II).....	171
Readiness for Inspection/Maintenance (I/M) Testing.....	172
End User License Agreement.....	504
VEHICLE SOFTWARE END USER LICENSE AGREEMENT (EULA) .....	504
Engine Block Heater.....	160
Using the Engine Block Heater.....	160
Engine Coolant Check.....	291
Adding Engine Coolant.....	293
Checking the Engine Coolant.....	291
Recycled Engine Coolant.....	293
Severe Climates.....	293
What You Should Know About Fail-Safe Cooling.....	294
Engine Immobilizer	
See: Passive Anti-Theft System.....	75
Engine Oil Check.....	290
Adding Engine Oil.....	290
Engine Oil Dipstick.....	290

# Index

Engine Specifications - 2.0L		
EcoBoost™.....	344	
Drivebelt Routing.....	344	
Engine Specifications - 2.3L		
EcoBoost™.....	345	
Drivebelt Routing.....	345	
Entertainment.....	396	
AM/FM Radio.....	398	
Apps.....	409	
Bluetooth Stereo or USB.....	407	
CD (If equipped).....	406	
HD Radio™ Information (If Available).....	402	
SIRIUS® Satellite Radio (If Activated).....	398	
Sources.....	397	
Supported Media Players, Formats and Metadata Information.....	409	
USB Ports.....	409	
Environment.....	16	
EPB		
See: Electric Parking Brake.....	185	
Essential Towing Checks.....	245	
Before Towing a Trailer.....	246	
Hitches.....	245	
Launching or Retrieving a Boat or Personal Watercraft (PWC).....	246	
Safety Chains.....	245	
Trailer Brakes.....	245	
Trailer Lamps.....	245	
When Towing a Trailer.....	246	
Event Data Recording		
See: Data Recording.....	9	
Export Unique Options.....	14	
Exterior Mirrors.....	94	
Auto-Dimming Feature.....	96	
Auto-Folding Mirrors.....	95	
Blind Spot Monitor.....	97	
Fold-Away Exterior Mirrors.....	95	
Heated Exterior Mirrors.....	96	
Integrated Blind Spot Mirrors.....	96	
Lincoln Welcome Mat.....	96	
Memory Mirrors.....	96	
Power Exterior Mirrors.....	94	
<b>F</b>		
Fastening the Seatbelts.....	32	
How to Extract Seatbelts in the Rear Outboard Positions.....	35	
Seatbelt Locking Modes.....	33	
Using a Sliding Clip.....	33	
Using Seatbelts During Pregnancy.....	33	
Floor Mats.....	250	
Front Parking Aid.....	195	
Front Passenger Sensing System.....	44	
Fuel and Refueling.....	164	
Fuel Consumption.....	169	
Calculating Fuel Economy.....	169	
Filling the Tank.....	169	
Fuel Filler Funnel Location.....	166	
Fuel Filter.....	296	
Fuel Quality.....	165	
Choosing the Right Fuel.....	165	
Fuel Shutoff.....	253	
Fuses.....	267	
Fuse Specification Chart.....	267	
Passenger Compartment Fuse Box.....	274	
Power Distribution Box.....	267	
Pre-Fuse Box.....	267	
Rear Cargo Fuse Box.....	279	
<b>G</b>		
Garage Door Opener		
See: Universal Garage Door Opener.....	148	
Gauges.....	101	
Engine Coolant Temperature Gauge.....	103	
Fuel Gauge.....	102	
Information Display.....	102	
General Information on Radio		
Frequencies.....	52	
Intelligent Access.....	52	
General Maintenance Information.....	472	
Multi-Point Inspection.....	475	

# Index

Owner Checks and Services.....	474	Heated Windows and Mirrors.....	136	Information Messages.....	114
Protecting Your Investment.....	472	Heated Exterior Mirrors.....	136	Active Park.....	114
Why Maintain Your Vehicle?.....	472	Heated Rear Window.....	136	Adaptive Cruise Control.....	115
Why Maintain Your Vehicle at Your		Heated Wiper Park.....	136	AdvanceTrac™.....	116
Dealership?.....	472	Heating		Airbag.....	116
Getting Assistance Outside the U.S. and		See: Climate Control.....	133	Alarm.....	116
Canada.....	263	Hints on Controlling the Interior		All-Wheel Drive.....	117
Getting the Services You Need.....	259	Climate.....	135	Automatic Engine Shutdown.....	117
Away From Home.....	259	Cooling the Interior Quickly.....	136	Auto Start-Stop.....	118
Global Opening and Closing.....	94	General Hints.....	135	Battery and Charging System.....	119
Closing the Windows.....	94	Heating the Interior Quickly.....	135	Blind Spot Information and Cross Traffic Alert	
Opening the Windows.....	94	Recommended Settings for Cooling.....	136	System.....	120
<b>H</b>		Recommended Settings for Heating.....	135	Collision Warning System.....	120
Hazard Warning Flashers.....	253	Side Window Defogging in Cold		Doors and Locks.....	121
Headlamp Adjusting		Weather.....	136	Driver Alert.....	121
See: Adjusting the Headlamps.....	299	Hints on Driving With Anti-Lock		Fuel.....	122
Headlamp Exit Delay.....	89	Brakes.....	184	Hill Start Assist.....	122
Headlamp Removal		Home Screen.....	384	Keys and Intelligent Access.....	122
See: Removing a Headlamp.....	300	Hood Lock		Lane Keeping System.....	123
Head Restraints.....	138	See: Opening and Closing the Hood.....	286	Maintenance.....	124
Adjusting the Head Restraint.....	140	<b>I</b>		MyKey.....	125
Heated Seats.....	145	In California (U.S. Only).....	260	Park Aid.....	126
Front Seats.....	145	Information Display Control.....	80	Park Brake.....	126
Rear Seats.....	146	Information Displays.....	108	Power Steering.....	127
Heated Steering Wheel.....	81	General Information.....	108	Remote Start.....	128
				Seats.....	128
				Starting System.....	128
				Tire Pressure Monitoring System.....	129

# Index

Traction Control.....	129
Trailer.....	130
Transmission.....	130
Installing Child Restraints.....	19
Child Seats.....	19
Using Lap and Shoulder Belts.....	19
Using Lower Anchors and Tethers for Children (LATCH).....	22
Using Tether Straps.....	24
Instrument Cluster.....	101
Instrument Lighting Dimmer.....	88
Interior Lamps.....	92
Front Interior Lamp.....	92
Rear Interior Lamp.....	92
Interior Mirror.....	97
Auto-Dimming Mirror.....	97
Introduction.....	7
<b>J</b>	
Jump Starting the Vehicle.....	254
Connecting the Jumper Cables.....	255
Jump Starting.....	256
Preparing Your Vehicle.....	254
Removing the Jumper Cables.....	256

## K

Keyless Entry.....	71
SECURICODE™ KEYLESS ENTRY KEYPAD.....	71
Keyless Starting.....	156
Ignition Modes.....	156
Keys and Remote Controls.....	52

## L

Lane Keeping System.....	218
Switching the System On and Off.....	218
Lighting Control.....	86
Headlamp Flasher.....	87
High Beams.....	87
Lighting.....	86
General Information.....	86
Lincoln Automotive Financial Services.....	12
Lincoln Protect.....	470
EXTENDED SERVICE PLANS (CANADA ONLY).....	471
Lincoln Protect (U.S. Only).....	470
Load Carriers	
See: Roof Racks and Load Carriers.....	235
Load Carrying.....	235

Load Limit.....	236
Special Loading Instructions for Owners of Pick-up Trucks and Utility-type Vehicles.....	240
Vehicle Loading - with and without a Trailer.....	236
Locking and Unlocking.....	63
Activating Intelligent Access.....	65
Autolock Feature.....	66
Autounlock Feature.....	66
Battery Saver.....	67
Illuminated Entry.....	67
Illuminated Exit.....	67
Mechanical Key.....	64
Opening a Rear Door from Inside.....	65
Power Door Locks.....	63
Remote Control.....	63
Smart Unlocks.....	66
Welcome Lighting.....	67
Locks.....	63
Luggage Covers.....	235
Lug Nuts	
See: Changing a Road Wheel.....	336

## M

Maintenance.....	286
General Information.....	286



# Index

Bounce-Back.....	93
One-Touch Down.....	93
One-Touch Up.....	93
Window Lock.....	94
Protecting the Environment.....	16

## R

Rear Parking Aid.....	195
Rear Seat Armrest.....	147
Rear Seats.....	144
Folding the Seatback.....	145
Recline Adjustment.....	145
Unfolding the Seatback.....	145
Rear Under Floor Storage.....	235
Cargo Management System.....	235
Rear View Camera.....	204
Using the Rear View Camera System.....	204
Rear View Camera	
See: Rear View Camera.....	204
Rear Window Wiper and Washers.....	84
Rear Window Washer.....	85
Rear Window Wiper.....	84
Recommended Towing Weights.....	242
Refueling.....	167
Remote Control.....	53
Car Finder.....	55
Intelligent Access Key.....	53
Remote Start.....	55
Replacing the Battery.....	53
Sounding the Panic Alarm.....	55
Remote Start.....	137
Automatic Settings.....	137
Removing a Headlamp.....	300
Repairing Minor Paint Damage.....	311
Replacement Parts Recommendation.....	12
Collision Repairs.....	13
Scheduled Maintenance and Mechanical Repairs.....	12
Warranty on Replacement Parts.....	13
Replacing a Lost Key or Remote Control.....	57
Reporting Safety Defects (Canada Only).....	265
Reporting Safety Defects (U.S. Only).....	265
Roadside Assistance.....	252
Vehicles Sold in Canada: Getting Roadside Assistance.....	253
Vehicles Sold in Canada: Roadside Assistance Program Coverage.....	253
Vehicles Sold in Canada: Using Roadside Assistance.....	253
Vehicles Sold in the United States: Getting Roadside Assistance.....	252
Vehicles Sold in the United States: Using Roadside Assistance.....	252

Roadside Emergencies.....	252
Roof Racks and Load Carriers.....	235
Running-In	
See: Breaking-In.....	249
Running Out of Fuel.....	166
Adding Fuel From a Portable Fuel Container.....	166
Filling a Portable Fuel Container.....	166

## S

Safety Canopy™.....	48
Safety Precautions.....	164
Scheduled Maintenance Record.....	484
Scheduled Maintenance.....	472
Seatbelt Extension.....	39
Seatbelt Height Adjustment.....	35
Seatbelt Reminder.....	36
Belt-Minder™.....	36
Seatbelts.....	31
Principle of Operation.....	31
Seatbelt Warning Lamp and Indicator Chime.....	35
Conditions of operation.....	36
Seats.....	138
Security.....	75
Settings.....	434
911 Assist.....	441

# Index

Ambient Lighting.....	449	Special Operating Conditions Scheduled Maintenance.....	480	Supplementary Restraints System.....	41
Bluetooth.....	437	Exceptions.....	483	Principle of Operation.....	41
Clock.....	437	Speed Control		Symbols Glossary.....	7
Display.....	450	See: Cruise Control.....	208	SYNC™ 3.....	366
General.....	447	Stability Control.....	192	General Information.....	366
Media Player.....	435	Principle of Operation.....	192	SYNC™ 3 Troubleshooting.....	451
Mobile Apps.....	445	Starting a Gasoline Engine.....	157		
Navigation.....	443	Automatic Engine Shutdown.....	158	<b>T</b>	
Phone.....	438	Failure to Start.....	158	Tailgate	
Radio.....	442	Fast Restart.....	157	See: Power Liftgate.....	68
Sound.....	434	Guarding Against Exhaust Fumes.....	159	Technical Specifications	
Valet Mode.....	451	Important Ventilating Information.....	159	See: Capacities and Specifications.....	344
Vehicle.....	449	Stopping the Engine When Your Vehicle is Moving.....	159	The Better Business Bureau (BBB) Auto Line Program (U.S. Only).....	261
Voice Control.....	450	Stopping the Engine When Your Vehicle is Stationary.....	159	Ticket Holders.....	155
Wi-Fi.....	448	Starting and Stopping the Engine.....	156	Tire Care.....	317
Side Airbags.....	47	General Information.....	156	Glossary of Tire Terminology.....	318
Sitting in the Correct Position.....	138	Steering.....	229	Information About Uniform Tire Quality Grading.....	317
Snow Chains		Electric Power Steering.....	229	Information Contained on the Tire	
See: Using Snow Chains.....	331	Steering Wheel.....	78	Sidewall.....	319
Special Notices.....	13	Storage Compartments.....	155	Temperature A B C.....	318
New Vehicle Limited Warranty.....	13	Sunroof		Traction AA A B C.....	318
Notice to Owners of Pickup Trucks and Utility Type Vehicles.....	14	See: Moonroof.....	98	Treadwear.....	318
On Board Diagnostics Data Link		Sun Visors.....	98	Tire Pressure Monitoring System.....	332
Connector.....	13	Illuminated Vanity Mirror.....	98	Changing Tires With a Tire Pressure Monitoring System.....	333
Special Instructions.....	13				
Using Your Vehicle as an Ambulance.....	14				
Using Your Vehicle With a Snowplow.....	14				



# Index

Understanding Your Tire Pressure Monitoring System .....	333	Canceling the Set Speed.....	212	Using Voice Recognition.....	385
Tires		Changing the Set Speed.....	213	Audio Voice Commands.....	387
See: Wheels and Tires.....	315	Detection Issues.....	214	Climate Voice Commands.....	388
Towing a Trailer.....	241	Following a Vehicle.....	210	Mobile App Voice Commands.....	392
Load Placement.....	241	Hilly Condition Usage.....	213	Navigation Voice Commands.....	391
Towing the Vehicle on Four Wheels.....	247	Overriding the Set Speed.....	212	Phone Voice Commands.....	388
Emergency Towing.....	247	Resuming the Set Speed.....	213	SiriusXM Traffic and Travel Link Voice Commands.....	393
Recreational Towing.....	247	Setting the Adaptive Cruise Speed.....	210	Voice Settings Commands.....	394
Towing.....	241	Setting the Gap Distance.....	211	Utilizing the Mediation/Arbitration Program (Canada Only).....	262
Traction Control.....	190	Switching Adaptive Cruise Control Off.....	213		
Principle of Operation.....	190	Switching Adaptive Cruise Control On.....	210	<b>V</b>	
Trailer Sway Control.....	242	Switching to Normal Cruise Control.....	216	Vehicle Care.....	305
Transmission Code Designation.....	349	System Not Available.....	215	General Information.....	305
Transmission.....	173	Using All-Wheel Drive.....	179	Vehicle Certification Label.....	348
See: Transmission.....	173	Driving in Special Conditions With All-Wheel Drive.....	179	Vehicle Identification Number.....	348
Transporting the Vehicle.....	257	Using Cruise Control.....	208	Vehicle Storage.....	312
<b>U</b>		Switching Cruise Control Off.....	209	Battery.....	313
Under Hood Overview.....	288	Switching Cruise Control On.....	208	Body.....	312
Unique Driving Characteristics.....	161	Using MyKey With Remote Start Systems.....	61	Brakes.....	313
Universal Garage Door Opener.....	148	Using Snow Chains.....	331	Cooling system.....	313
HomeLink Wireless Control System.....	148	Using Stability Control.....	193	Engine.....	313
Using Adaptive Cruise Control.....	209	Using Traction Control.....	190	Fuel system.....	313
Automatic Cancellation.....	213	Switching the System Off.....	190	General.....	312
Blocked Sensor.....	215	System Indicator Lights and Messages.....	190	Miscellaneous.....	313
		Using a Switch.....	190	Removing Vehicle From Storage.....	313
		Using the Information Display Controls.....	190		

# Index

---

Tires.....	313	Hood Ajar.....	105
Ventilation		Low Fuel Level.....	105
See: Climate Control.....	133	Low Tire Pressure Warning.....	106
VIN		Low Washer Fluid.....	106
See: Vehicle Identification Number.....	348	Parking Lamps.....	106
Voice Control.....	80	Powertrain Fault.....	106
<b>W</b>		Service Engine Soon.....	106
Warning Lamps and Indicators.....	103	Stability Control.....	107
Adaptive Cruise Control.....	103	Stability Control Off.....	107
Anti-Lock Braking System.....	104	Washer Fluid Check.....	296
Auto Hold Active.....	104	Washers	
Auto Hold Unavailable.....	104	See: Cleaning the Exterior.....	306
Auto Start-stop.....	104	See: Wipers and Washers.....	82
Battery.....	104	Waxing.....	307
Blind Spot Monitor.....	104	Welcome Lighting.....	91
Brake System.....	104	Wheel Nuts	
Cruise Control.....	104	See: Changing a Road Wheel.....	336
Direction Indicator.....	104	Wheels and Tires.....	315
Door Ajar.....	105	General Information.....	315
Electric Park Brake.....	105	Technical Specifications.....	342
Engine Coolant Temperature.....	105	Windows and Mirrors.....	93
Engine Oil.....	105	Windshield Washers.....	84
Fasten Safety Belt.....	105	Windshield Wipers.....	82
Front Airbag.....	105	Intermittent Wipe.....	82
Heads Up Display.....	105	Speed Dependent Wipers.....	82
High Beam.....	105	Wiper Blades	
		See: Checking the Wiper Blades.....	298
		Wipers and Washers.....	82