

# REDCAT-RACING

*1/10 4WD ELECTRIC-POWERED ON-ROAD CAR*

*MODEL: PAGANI EPX*

*MODEL: PAGANI EPX PRO*



*Specification:*

*Length: 475mm*

*Width: 210mm*

*Height: 120mm*

*ESC: 60A ESC*

*Radio: 2.4G radio system*

*Motor: KV4300*

*Battery: 7.4V 3200mAh Li-po battery*

## Instruction Manual

### Highlights:

- 4 wheel drive system
- Ready assemble ready to run
- Belt drive (Bando belts from Japan)
- Full ball bearing
- New designed , the body can change any color you love .

### ⚠ SAFETY PRECAUTIONS

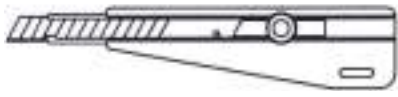
- This radio controlled racing truck is not a toy!
- This high-performance R/C vehicle is recommended for ages 14 and older.
- First-time builders should seek the advice of experienced modellers before commencing assembly.
- Take enough safety precautions prior to operating this vehicle.
- You are responsible for this R/C vehicle's assembly and safe operation!

**[www.redcatracing.com](http://www.redcatracing.com)**



# Required equipment for operation

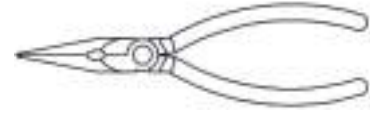
## 1. Tools required for building and maintenance:



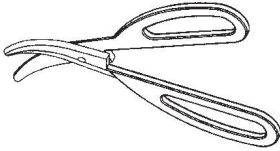
● Hobby knife



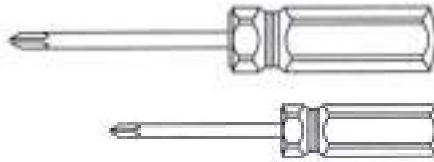
● Precision ruler



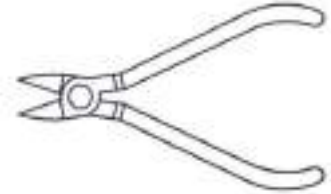
● Needle nose pliers



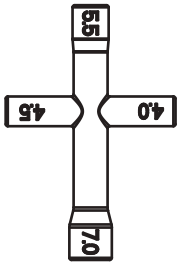
● Lexan scissors



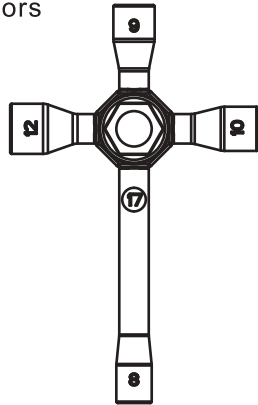
● Flat and Philips screwdriver



● Wire cutters



● Cross wrench



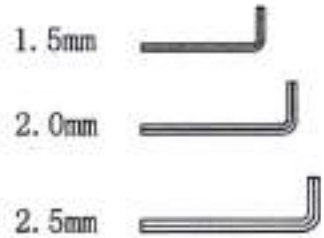
● Cross wrench



● CA glue & rubber cement



● Thread locking compound

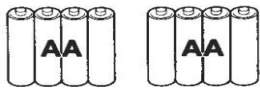


● Hex wrench

## WARNING!

Do not use a power screw driver to install screws into nylon or plastic materials. The fast locking may heat up the screws being installed that may break the molded parts or strip the threads during installation.

## 2. Additional items needed for operation:



8 pcs AA alkaline batteries for transmitter

## IMPORTANT!

Check all the screws are tight before playing the vehicle!  
Use thread lock on all screws that work loose.

# Please read the instruction carefully before starting the assembly.

1. Please assemble and install this car without children's reach. As it includes small and sharp parts.
2. Do not run the car on public streets or highways. As it might cause serious accidents, personal injuries and property damage etc.
3. During the middle of racing and after operation, the engine and exhaust will become HOT. Therefore please do not touch them before cooling down.
4. Please make sure everyone is using different frequencies while racing the car in the same area.


## 2.4GHz radio instructions

### Special symbols

Please pay attention to the following symbols, and read them carefully.

 **Danger:** If the operator does not operate according to the instructions, it may lead to serious injuries, even mortal danger.

 **Warning:** If the operator does not operate according to the instructions, it may lead to serious injuries, even mortal danger.

 **Attention:** If the operator does not operate according to the instructions, it may lead to serious injuries, even mortal danger. but generally it will not cause serious injuries to the operator.

### Safety guidelines

Don't drive the truck at night, bad weather such as rainy or thundering days. It will interfere the transmitter signal. Thereby it will cause out of control and unexpected accident.


Before you drive, please make sure the movement of servo corresponds with the direction of joysticks. If inconsistent, please adjust before drive.

You need to turn the throttle channel(ch2) and inching switch to the lowest before use. Then switch on the transmitter power, finally connect the receiver.

The sequence to shutdown is to turn off the receiver power first, and then the transmitter power.

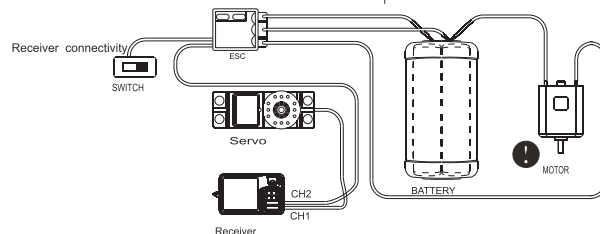
If the above operations are reversed, it might lead to out of control and cause accident.

### Battery charging

 If your transmitter, receiver use a nickel-cadmium, nickel-metal hydride rechargeable battery, you have to check it before use. If lack of electricity, it could cause inadequate control or out of control, resulting in accident. So please charge it immediately when the battery power is low.

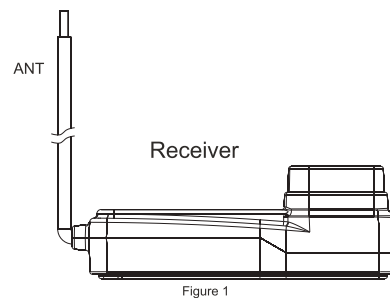
# Transmitter specifications

- Channels: 2 channels
- Model Type: Car/boat
- RF Power: Less than 20dbm
- Modulation: GFSK
- Code Type: Digital
- Sensitivity: 1024
- Low Voltage Warning: Yes (less than 9V)
- DSC Port: Yes (3.5mm)
- Charger Port: Yes
- Power: 12vdc (1.5AA\*8)
- Weight: 328g
- ANT Length: 26mm
- Size: 159\*99\*315mm
- Color: Black
- Certificate: CE FCC



## Note:

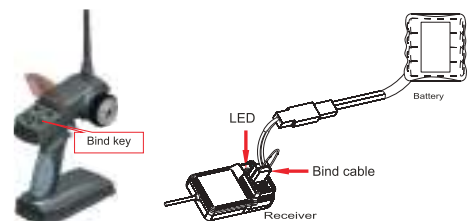
Place the antenna of the receiver vertically, and do not have contact with metal component. (See Figure1)



## Binding:

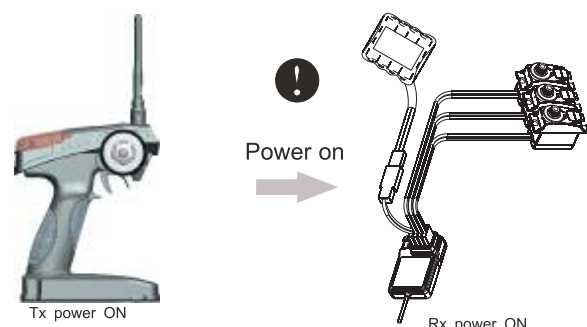
The transmitter and receiver should be already bound by the factory by default .

1. Install batteries into the transmitter and shut it down.
2. Insert the bind cable on to the bind channel (Ch3) on the receiver. (Figure.2)
3. Connect the receiver battery to the VCC port on the receiver .The two LEDs on the receiver should flash rapidly, indicating the receiver is in binding state .
4. Press and hold the bind button on the transmitter , and then turn on the transmitter.
5. The LED on the receiver should stop flashing when the binding process completed (about 5 second)
6. Release the bind button on the transmitter , remove the bind cable from the receiver.
7. Install the servo and then test.
8. If the test succeeds , then remove the power supply from the VCC port.
9. The binding process completed.



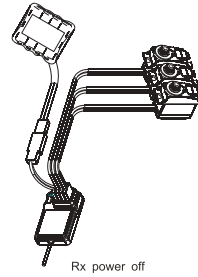
## Turn On:

1. Turn on the transmitter.
2. Connect the power supply of the receiver.
3. Receiver LED light should turn solid.
4. Ready to use.



## Shut Down:

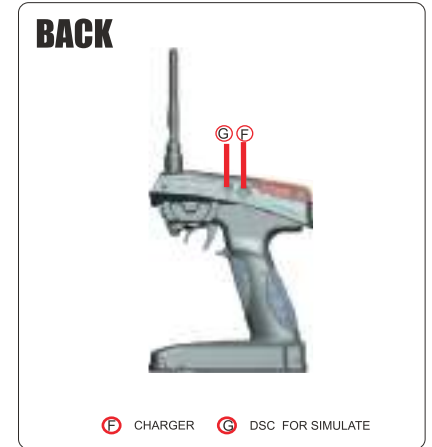
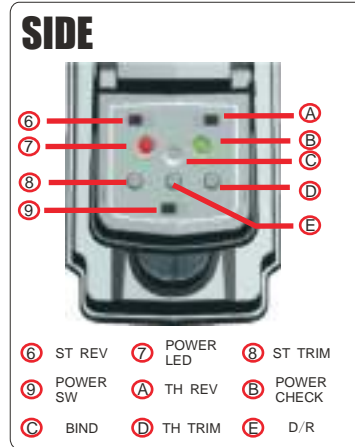
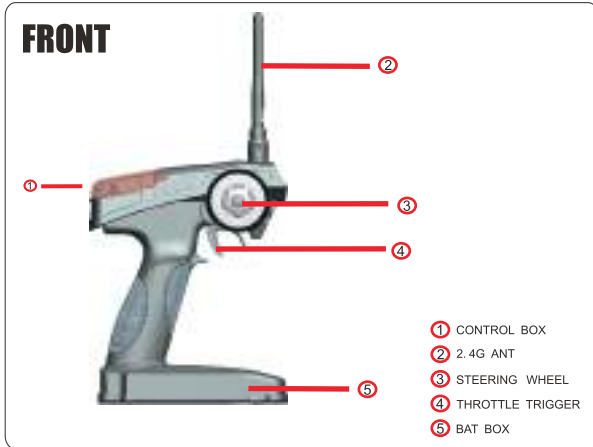
1. Disconnect the receiver's power supply.
2. Turn off the transmitter .



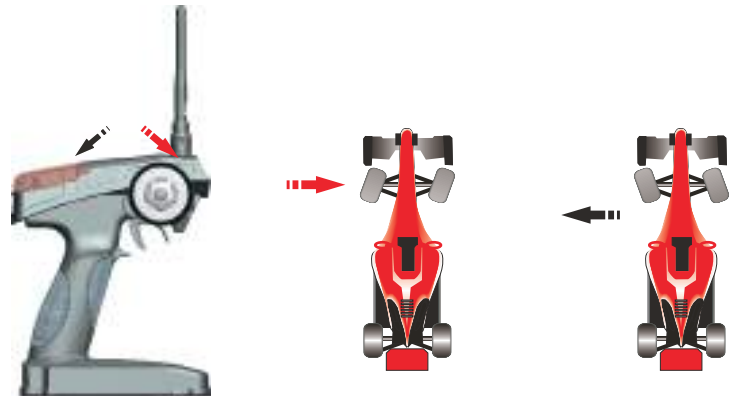
! Shut down  
→



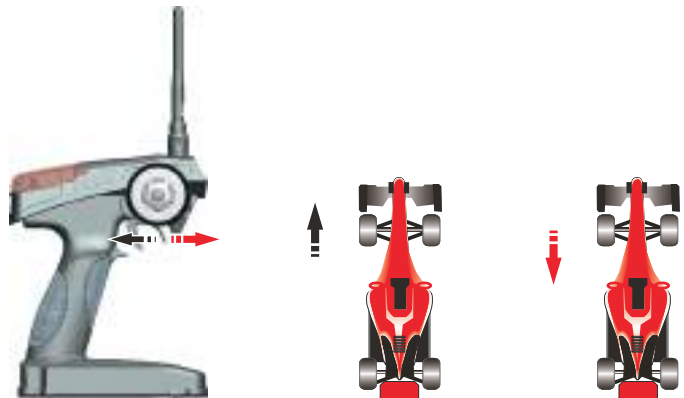
## Transmitter Functions:



This function is to control the direction of the vehicle



This function is to control the throttle speed of the vehicle



# Brushed Verison Parts List

## PAGANI EPX

Item No.	Description	Item No.	Description
BS205-001	Chassis 1pcs	BS502-022	B-Head Hex Screws HM3*10 12 pcs
BS205-002	Side guard plate L/R 1pcs	BS502-027	T-Head Hex Screws HM3*10 12 pcs
BS205-003	Diff. Box Holder L/F 1pcs	BS502-026	B-Head Hex Screws HM3*8 12 pcs
BS205-004	Suspension Arm Mount Block Set 1pcs	BS903-086	Ball Bearing(5*10*4) 2pcs
BS205-005	Diff. Gearbox Unit 2pcs	BS901-046	Ball Bearing(4*8*3) 2pcs
BS205-006	Diff. gearbox Cover Assembly 1pcs	BS903-016	Ball Bearing(10*15*4) 2pcs
BS205-007	Pin(3*45) 5pcs	BS701-041	6# Pin 6pcs
BS205-008	Fr.Brace 1pcs	BS901-066	M3 Self-lock Nut
BS205-009	Fr. Bumper Assembly	BS701-035	7.2V charger
BS205-010	Body Pin Set 4pcs	BS701-036	7.2V 2100Mah battery
BS205-011	Tire Unit	BS201-020	Pagani wheel hub 2pcs
BS205-012	M4 Flange Nut M4 6pcs		
BS205-013	Shock Absorber Unit		
BS205-014	B-Head Cross Screw(BM3*15) 12pcs		
BS205-015	Suspension Arm Linkage Set		
BS205-016	Knuckle Arm Set(L) 1pcs		
BS205-017	Steering Linkage Set 2pcs		
BS205-018	Fr. Axle W/Pin		
BS205-019	Suspension Arm Pin-Short		
BS205-020	Fr. Suspension Unit		
BS205-021	Knuckle Arm Set(R )		
BS205-022	Steering System		
BS203-001	Servo Assembly		
BS205-024	Battery Cover w/Pin		
BS205-025	Fr.Drive Belt Adjusting Unit		
BS205-026	Fr.Upper Deck 1pcs		
BS205-027	Fr.Drive Belt S3M324 1pcs		
BS205-028	Motor Bracket Assembly		
BS203-002	Brushed Motor 540 1pcs		
BS205-030	Motor Gear 27T/M3 Screw		
BS205-031	88T Spur Gear Set		
BS205-032	Rr.Upper Deck 1pcs		
BS205-033	Rr.Drive Belt Adjusting Unit		
BS205-034	Rr.Drive Belt S3M387 1pcs		
B7003	Brushed ESC		
BS205-036	Rr. Axle w/Pin		
BS205-037	Rr.Transverse Drive Shaft Set 2pcs		
BS205-038	Rr. Suspension Unit		
BS205-039	Rr.Brace Set		
BS205-040	Body 1pcs		
BS205-041	Angle Gauge Block/ Washer Set		
BS205-042	Flange Bearing(3*6*2.5) 2pcs		
BS205-043	Ball Head Screw(Φ4.7*12) 6pcs		
BS205-044	Ball Head Screw(Φ4.7*17) 6pcs		
BS205-045	88T Spur Gear		
BS205-046	17T Center Pulley		
B7053	Transmitter 2.4G 1pcs		
B7054	Receiver 2.4G 1pcs		



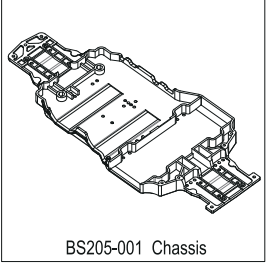
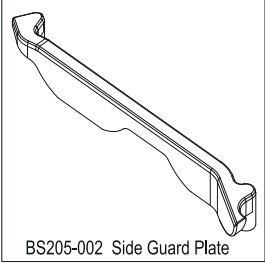
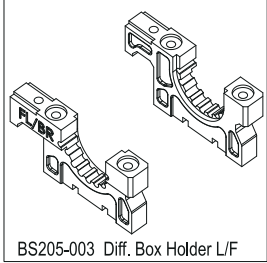
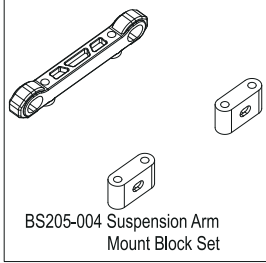
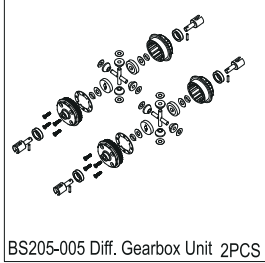
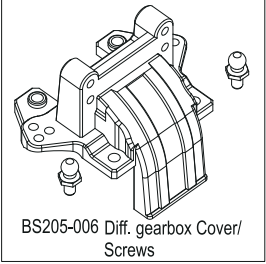
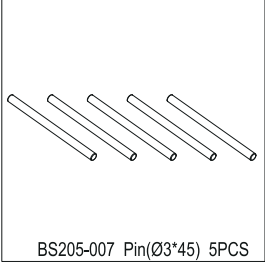
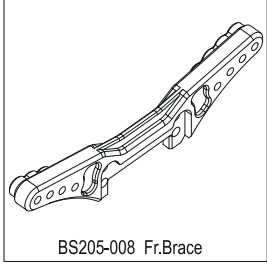
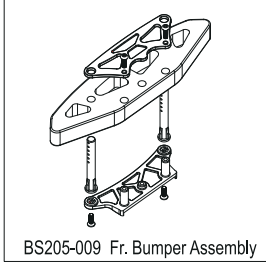
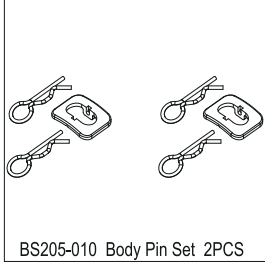
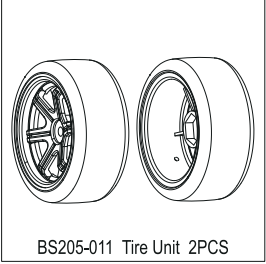
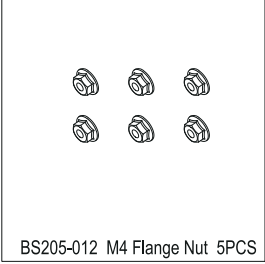
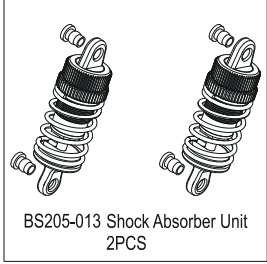
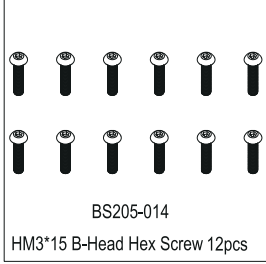

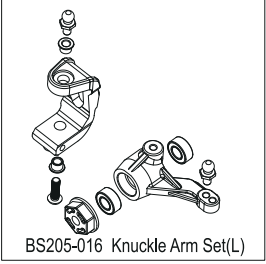
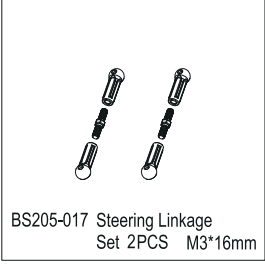
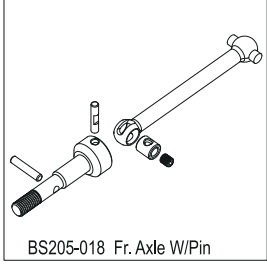
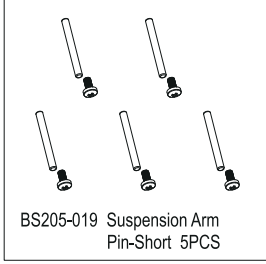
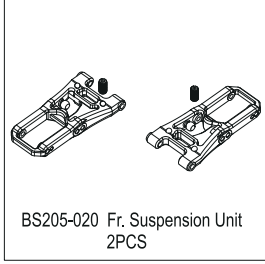
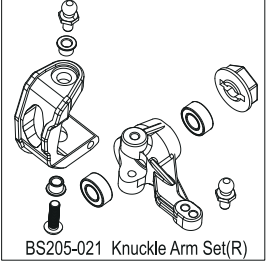
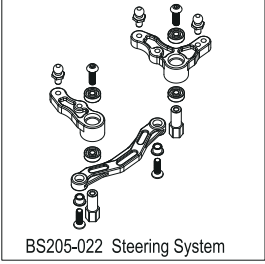
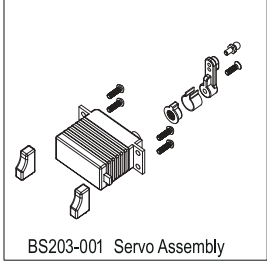
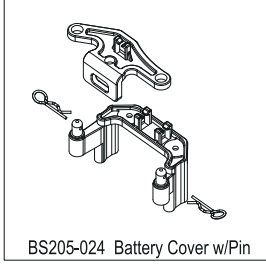
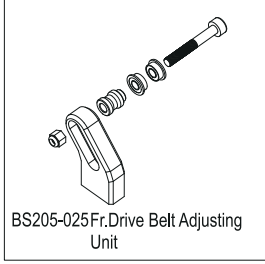
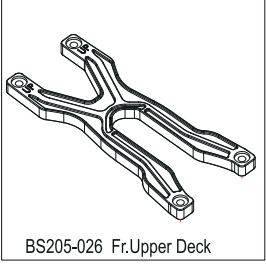
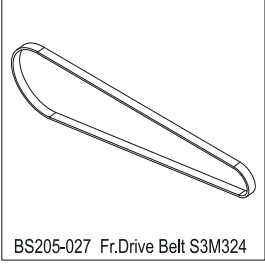
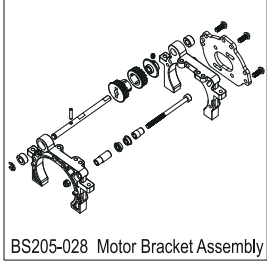
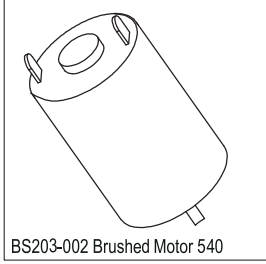

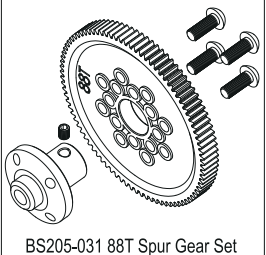
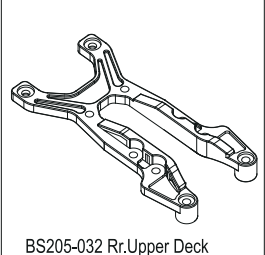
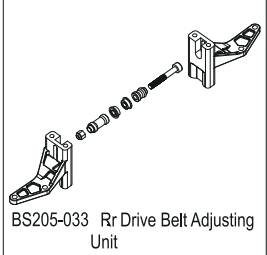
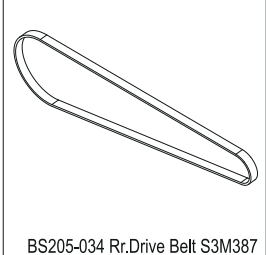
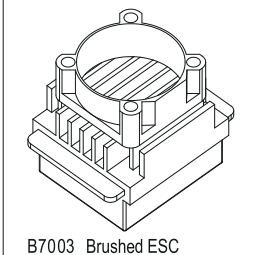
# Brushless Version Parts List

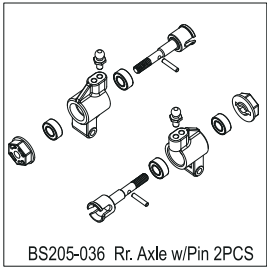
## PAGANI EPX PRO

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BS205-003	Diff. Box Holder L/F 1pcs	BS502-026	B-Head Hex Screws HM3*8 12 pcs
BS205-004	Suspension Arm Mount Block Set 1pcs	BS803-028	7.4V 3200mAh LiPo Battery 1pcs
BS205-005	Diff. Gearbox Unit 2pcs	BS903-086	Ball Bearing(5*10*4) 2pcs
BS205-006	Diff. gearbox Cover Assembly 1pcs	BS901-046	Ball Bearing(4*8*3) 2pcs
BS205-007	Pin(3*45) 5pcs	BS903-016	Ball Bearing(10*15*4) 2pcs
BS205-008	Fr.Brace 1pcs	BS701-041	6# Pin 6pcs
BS205-009	Fr. Bumper Assembly	BS901-066	M3 Self-lock Nut
BS205-010	Body Pin Set 4pcs	BS201-020	O Pagani wheel hub 2pcs
BS205-011	Tire Unit		
BS205-012	M4 Flange Nut M4 6 pcs		
BS205-013	Shock Absorber Unit		
BS205-014	B-Head Cross Screw(BM3*15) 12pcs		
BS205-015	Suspension Arm Linkage Set		
BS205-016	Knuckle Arm Set(L) 1pcs		
BS205-017	Steering Linkage Set		
BS205-018	Fr. Axle W/Pin		
BS205-019	Suspension Arm Pin-Short		
BS205-020	Fr. Suspension Unit		
BS205-021	Knuckle Arm Set(R )		
BS205-022	Steering System		
BS205-023	Servo Assembly		
BS205-024	Battery Cover w/Pin		
BS205-025	Fr.Drive Belt Adjusting Unit		
BS205-026	Fr.Upper Deck 1pcs		
BS205-027	Fr.Drive Belt S3M324 1pcs		
BS205-028	Motor Bracket Assembly		
BS205-029	Brushless MotorKV4500		
BS205-030	Motor Gear 27T/M3 Screw		
BS205-031	88T Spur Gear Set		
BS205-032	Rr.Upper Deck 1pcs		
BS205-033	Rr.Drive Belt Adjusting Unit		
BS205-034	Rr.Drive Belt S3M387 1pcs		
BS205-035	Brushless ESC 60A 1pcs		
BS205-036	Rr. Axle w/Pin		
BS205-037	Rr.Transverse Drive Shaft Set 2pcs		
BS205-038	Rr. Suspension Unit		
BS205-039	Rr.Brace Set		
BS205-040	Body 1pcs		
BS205-041	Angle Gauge Block/ Washer Set		
BS205-042	Flange Bearing(3*6*2.5) 2pcs		
BS205-043	Ball Head Screw(Φ4.7*12) 6pcs		
BS205-044	Ball Head Screw(Φ4.7*17) 6pcs		
BS205-045	88T Spur Gear		
BS205-046	17T Center Pulley		
B7053	Transmitter 2.4G 1pcs		
B7054	Receiver 2.4G 1pcs		

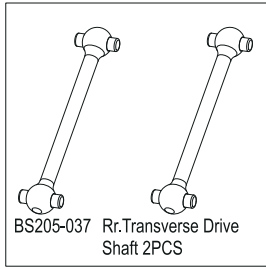


# PAGANI EPX

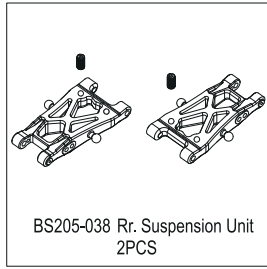
 BS205-001 Chassis	 BS205-002 Side Guard Plate	 BS205-003 Diff. Box Holder L/F	 BS205-004 Suspension Arm Mount Block Set	 BS205-005 Diff. Gearbox Unit 2PCS
 BS205-006 Diff. gearbox Cover/ Screws	 BS205-007 Pin(Ø3*45) 5PCS	 BS205-008 Fr.Brace	 BS205-009 Fr. Bumper Assembly	 BS205-010 Body Pin Set 2PCS
 BS205-011 Tire Unit 2PCS	 BS205-012 M4 Flange Nut 5PCS	 BS205-013 Shock Absorber Unit 2PCS	 BS205-014 HM3*15 B-Head Hex Screw 12pcs	 BS205-015 Suspension Arm Linkage Set 4PCS M3*28mm
 BS205-016 Knuckle Arm Set(L)	 BS205-017 Steering Linkage Set 2PCS M3*16mm	 BS205-018 Fr. Axle W/Pin	 BS205-019 Suspension Arm Pin-Short 5PCS	 BS205-020 Fr. Suspension Unit 2PCS
 BS205-021 Knuckle Arm Set(R)	 BS205-022 Steering System	 BS203-001 Servo Assembly	 BS205-024 Battery Cover w/Pin	 BS205-025 Fr. Drive Belt Adjusting Unit
 BS205-026 Fr. Upper Deck	 BS205-027 Fr. Drive Belt S3M324	 BS205-028 Motor Bracket Assembly	 BS203-002 Brushed Motor 540	 BS205-030 Motor Gear 27T/M3 Screw
 BS205-031 88T Spur Gear Set	 BS205-032 Rr. Upper Deck	 BS205-033 Rr Drive Belt Adjusting Unit	 BS205-034 Rr. Drive Belt S3M387	 B7003 Brushed ESC



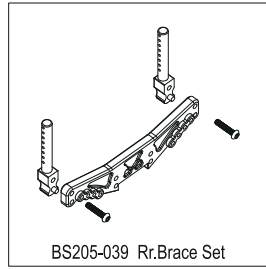
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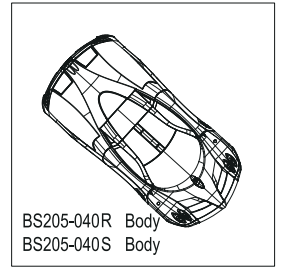
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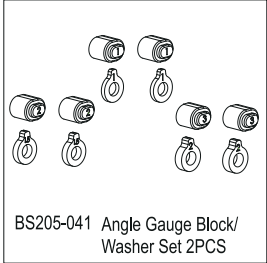
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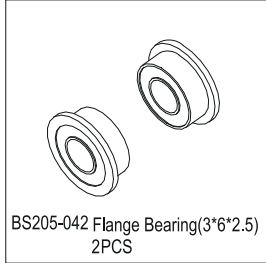
BS205-039 Rr. Brace Set



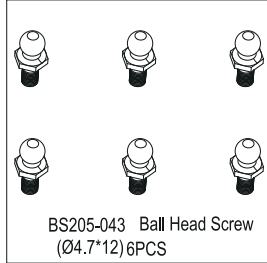
BS205-040R Body  
BS205-040S Body



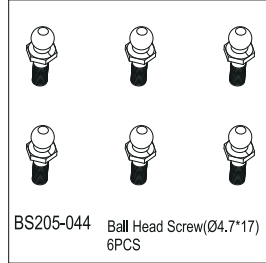
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BS205-042 Flange Bearing (3\*6\*2.5) 2PCS



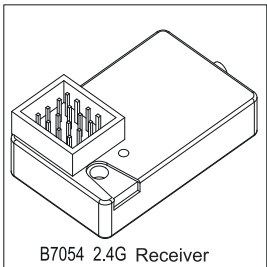
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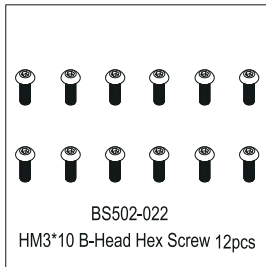
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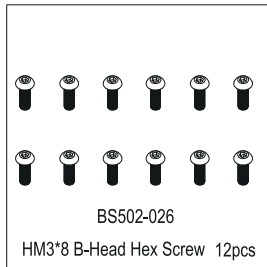
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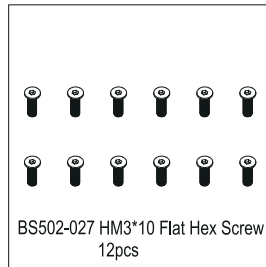
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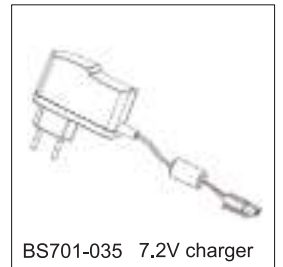
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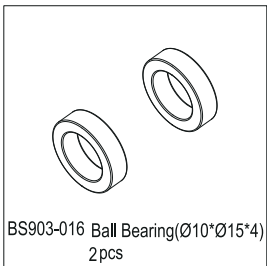
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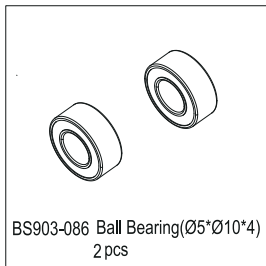
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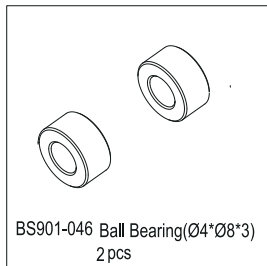
BS701-035 7.2V charger



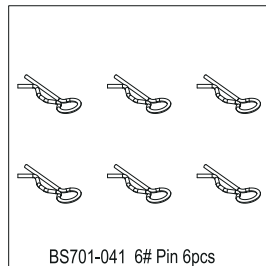
BS903-016 Ball Bearing (Ø10\*Ø15\*4) 2pcs



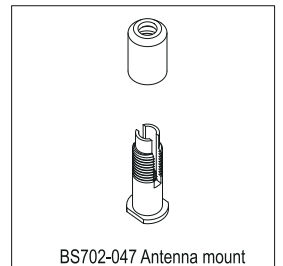
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BS901-046 Ball Bearing (Ø4\*Ø8\*3) 2pcs



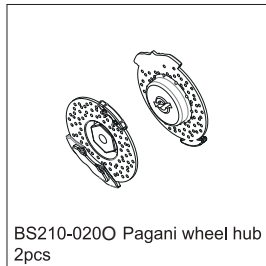
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BS702-047 Antenna mount

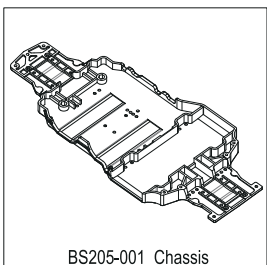


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7.2V 2100Mah battery

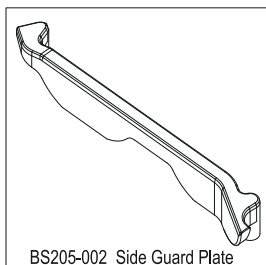


BS210-0200 Pagani wheel hub 2pcs

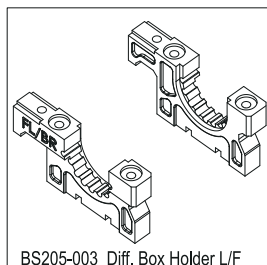
## PAGANI EPX PRO



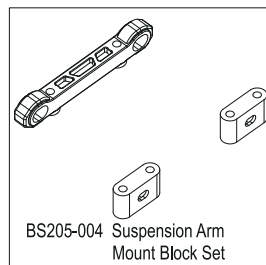
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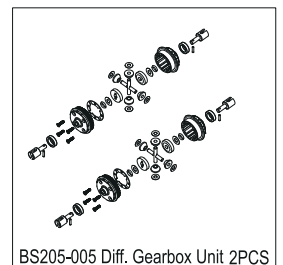
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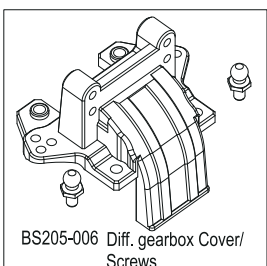
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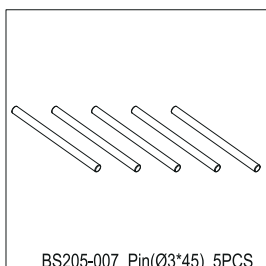
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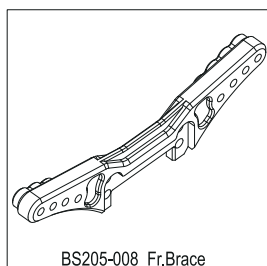
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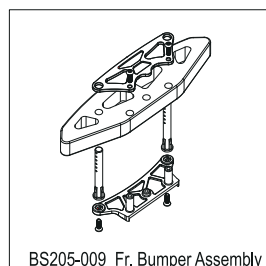
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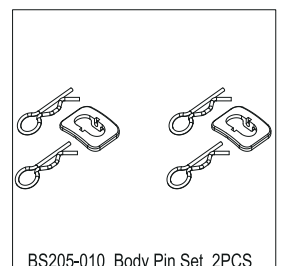
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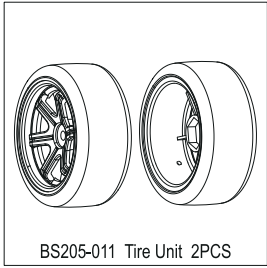
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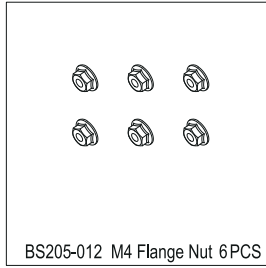
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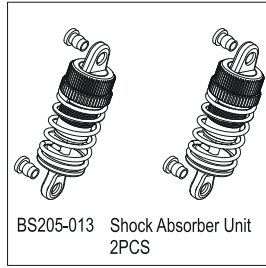
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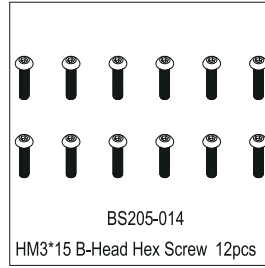
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BS205-012 M4 Flange Nut 6PCS



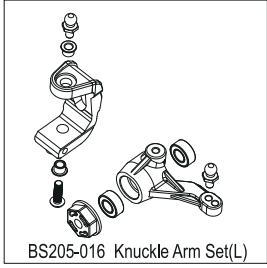
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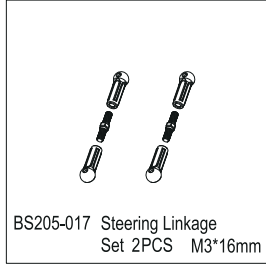
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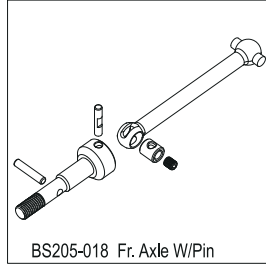
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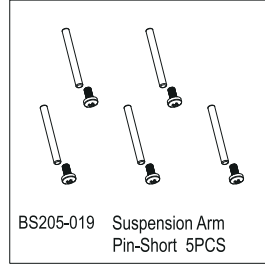
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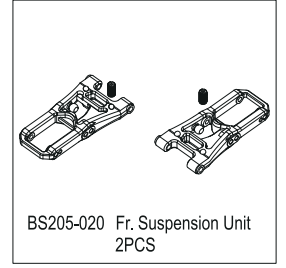
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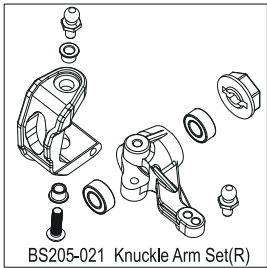
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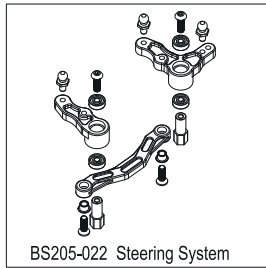
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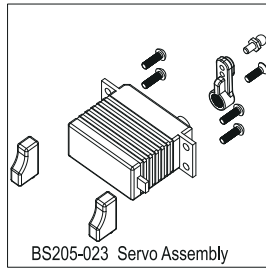
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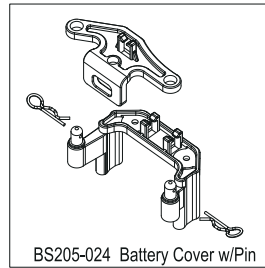
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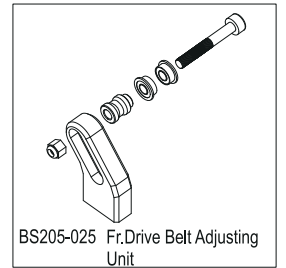
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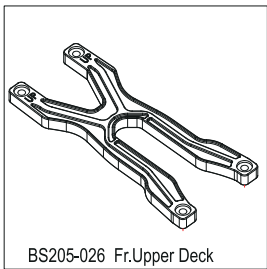
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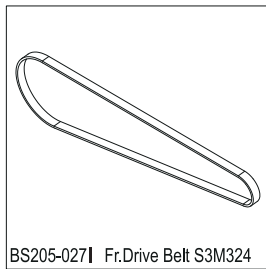
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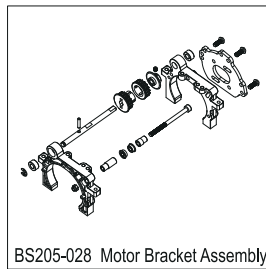
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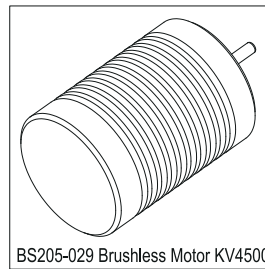
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BS205-027 Fr. Drive Belt S3M324



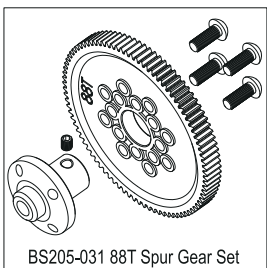
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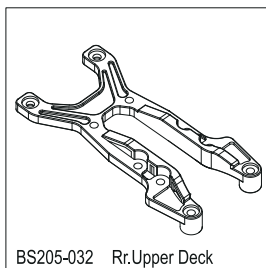
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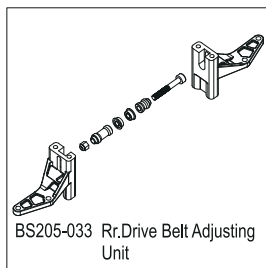
BS205-030 Motor Gear 27T/M3 Screw



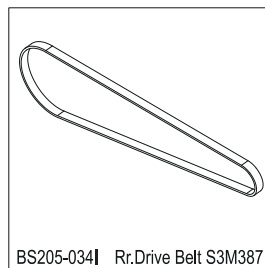
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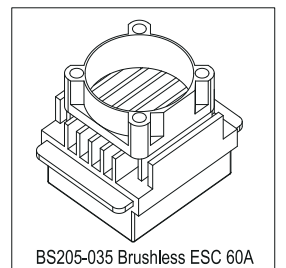
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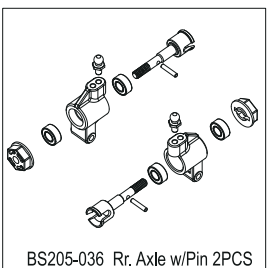
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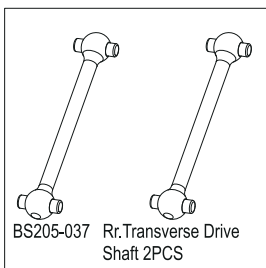
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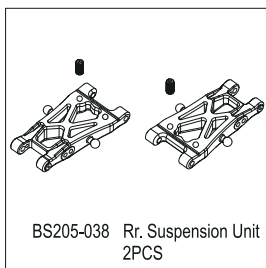
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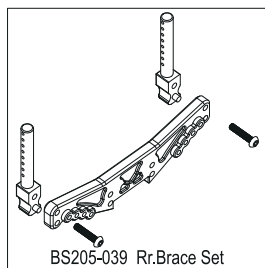
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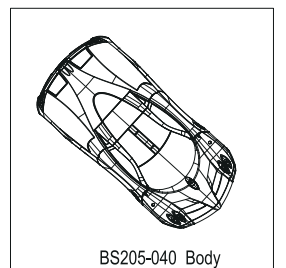
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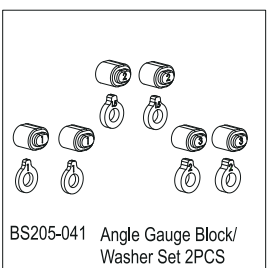
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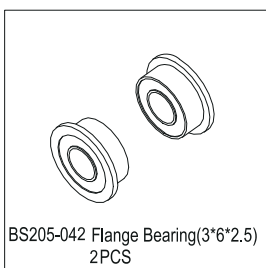
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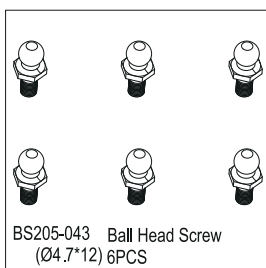
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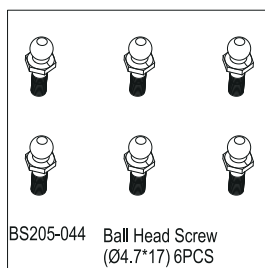
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BS205-042 Flange Bearing(3\*6\*2.5) 2PCS



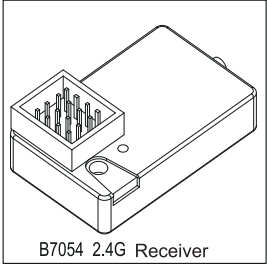
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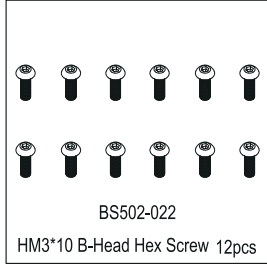
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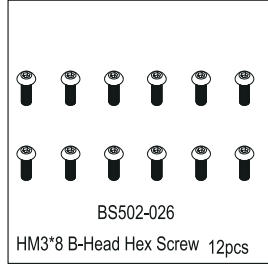
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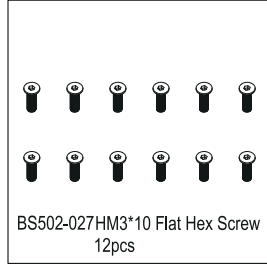
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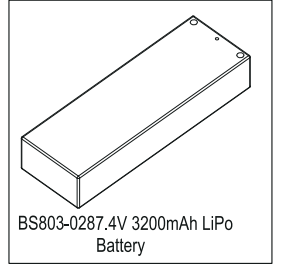
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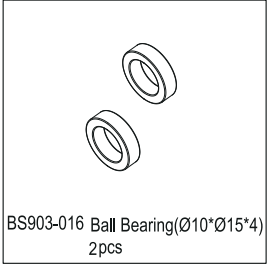
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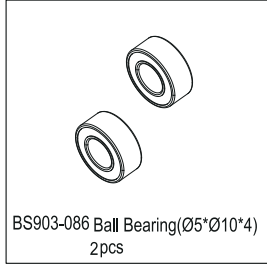
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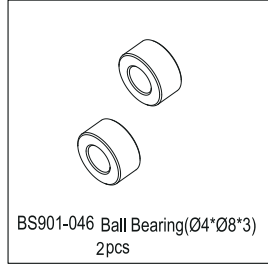
BS803-0287.4V 3200mAh LiPo  
Battery



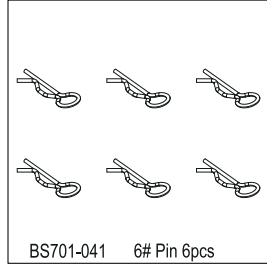
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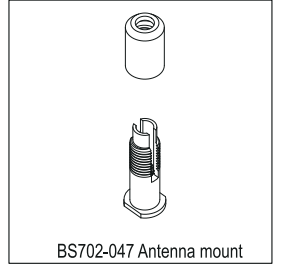
BS903-086 Ball Bearing(Ø5\*Ø10\*4)  
2pcs



BS901-046 Ball Bearing(Ø4\*Ø8\*3)  
2pcs



BS701-041 6# Pin 6pcs



BS702-047 Antenna mount



BS210-0200 Pagani wheel hub  
2pcs

# Precautions and Warnings for Use and Handling of Lithium Polymer Battery

## Preface

In order to get the optimum performance and reliable safety, consumers shall read and take the following instructions and precautions when use and handle the Lithium Polymer (Li-Po) batteries.

## 1. Charging

1-1 Charging current should not be more than the maximum charge current specified in the Product Specification (normally 0.5C-1.0C or lower). Charging with higher current may damage the cell or even lead to safety problem, e.g. overheating or leakage.

1-2 Charging voltage shall not be more than that specified in the Product Specification (4.2V/cell). 4.25V is the maximum charging voltage for each cell. Never charge the battery in series and be sure that each single cell has a separated charging circuit with a max. charging voltage of 4.25V. Or the battery may be overcharged, and lead to fire or explosion. The user is fully responsible to the result of misusing the battery.

1-3 Charging temperature: The cell should be charged within the range of temperatures specified in the Product Specification. Stop charging immediately when the surface temperature of the battery is over 50°C.

1-4 Reverse charging: Please make sure the polarities of cells are connected properly before charging. Reverse charging is strictly prohibited. Reverse charging cannot charge the cells but will deteriorate their charging/discharging and safety characteristics, or even lead to fire or explosion.

## 2. Discharging

2-1 Discharging current: The cell shall be discharged at the current no more than the maximum discharging current specified in the Product Specification. Over current discharging may damage the battery and cause over-heat.

2-2 Operation temperature: Use the battery within the temperature range specified in the Product Specification. Stop using when temperature is over 70°C.

2-3 Over-discharging: Over-discharging will deteriorate the cell's performance and characteristics. Do not over-discharge a battery below 2.75V/cell.

## 3. Storage

If you intend to keep the battery for a long time (3 months or longer), it is strongly recommended that the battery shall be stored under the environment with temperature 10-25°C, low humidity and without corrosive gas. The battery should be charged every six months to ensure that each cell's storage voltage is 3.6~3.9V.

## Others

>The aluminum packing foil is very soft that it will be easily left scratches. Please do not hit the cell with any sharp edge parts.

>Don't fall, hit or bend the battery. It may cause fire or explosion.

>Short circuit the battery is strictly prohibited, it may damage the battery seriously.

>Never disassemble the battery. It may cause fire.

>Never dispose of the battery in fire. It is very dangerous and strictly prohibited.

>To place the battery into liquid such as water is strictly prohibited.

>Always remove battery from car when charging. Charging the battery in a car is forbidden and is dangerous.

>Avoid vibration, shock or extruding the battery. Handle carefully when moving it.

# **Redcat Racing**

**<http://www.redcatracing.com>**