

FOREWORD

New style wiring harness is designed upon *chery sedan wiring harness-updating plan* approved by Chery Auto Co., LTD in July 2001. According to updated plan, concentrated control in central electrical box is replaced with a nearby control method in design, enhancing circuit performance, avoiding internal resistance and heat sources interference between electrical devices and increasing the whole vehicle wiring harness reliability and endurance.

During updating, some structures and features on home and abroad famous brand name vehicles are used for reference or equivalently taken as follows:

1. Adding whole vehicle electrical devices problem automatic safety-protect unit, which ensure whole circuit system being cut off when sudden accident occurs to avoid possible fire hazard or other injury from short problem.

2. Selecting a new central electrical box mainly used for whole vehicle control circuit, in which there are 6 built-in mini relays, 24 type fuses, 3 intensive safety protect units and 58 external connecting points.

3. High current and power electrical devices are nearby controlled, such as fan and A/C control circuit are directly completed at front compartment harness, shortening the current path.

Comparing with old wiring harness, main changes in wiring harness and electrical devices are as follows:

Interior harness, front compartment harness, I/P (instrument panel) harness, battery positive harness, central electrical box, two front and rear fog light switches instead of one switch on old vehicle, and also relevant changes in ABS harness connector.

But control theory and whole vehicle harness routing mainly keep unchanged.

Only whole vehicle electrical devices theory illustrations are available in this manual and there exists difference with actual electrical devices circuit. For convenience of compiling and printing, some big circuits page are divided into several small pages, which will take inconveniences when reading and therefore will require the user have a good command of circuits on SQR710 sedan.

For compilers' knowledge and time limits as well as rapid technology updating, some errors and oversights are hard to avoid and kindly appreciate for users' pointing out with the idea of improving together. Electrical system are rapidly updated, therefore some new circuit are not compiled on this manual on the time of publishing and will be supplemented timely.

This manual is compiled by Chang Yongjiu, Yao Shen and reference books are supplied by product department.

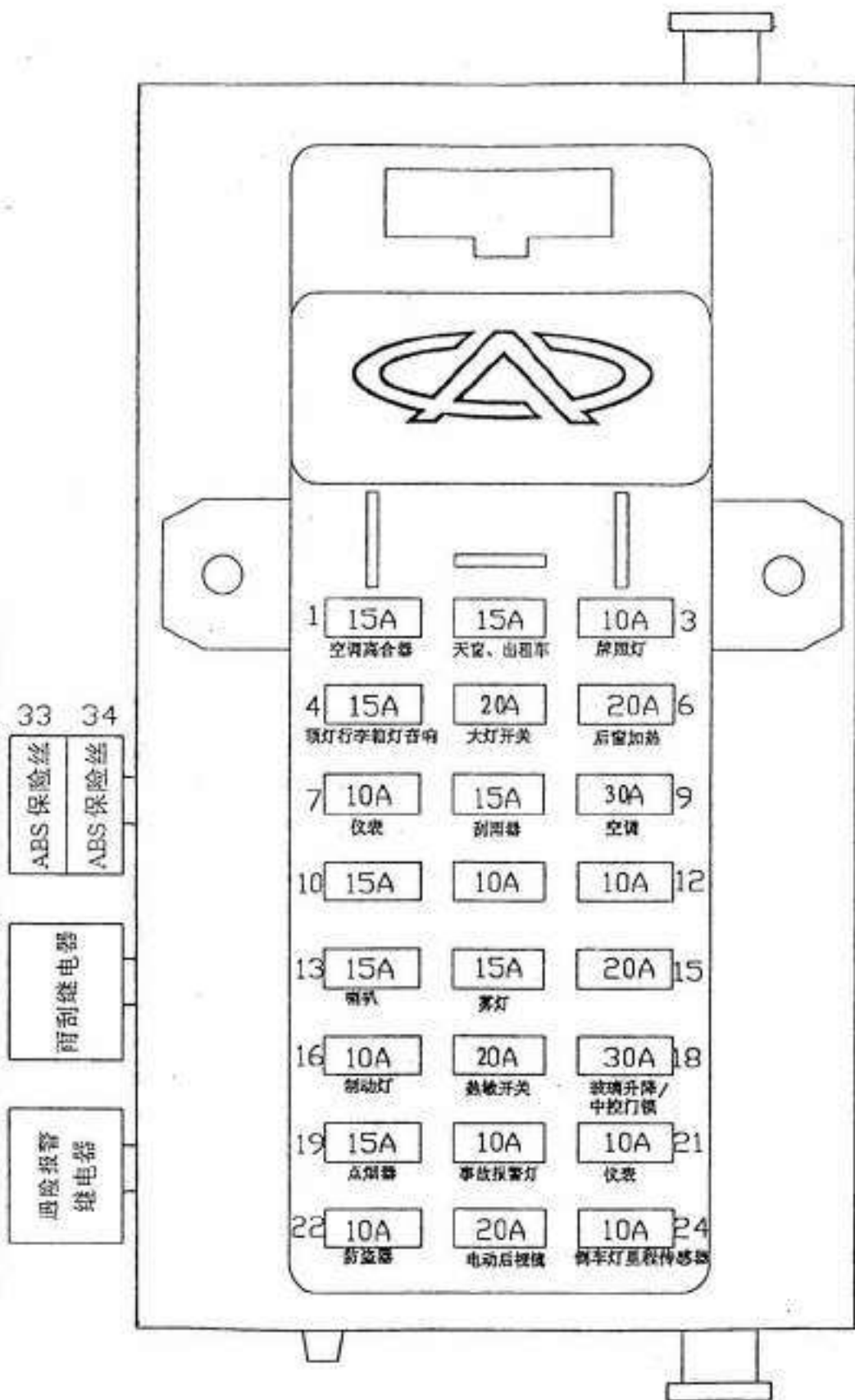
Written by compilers

November 2002

TOTAL CONTENT

No.1	Central Electrical Box Fuse And Relay Position	(2 Pages)
No.2	Central Electrical Box Connector Position And Function	(3 Pages)
No.3	Circuit Manual Explanation	(2 Pages)
No.4	Circuit	(23 Pages)
No.5	ET Vehicle Circuit	(25 Pages)

中央电器盒继电器位置图(室内方向盘下)



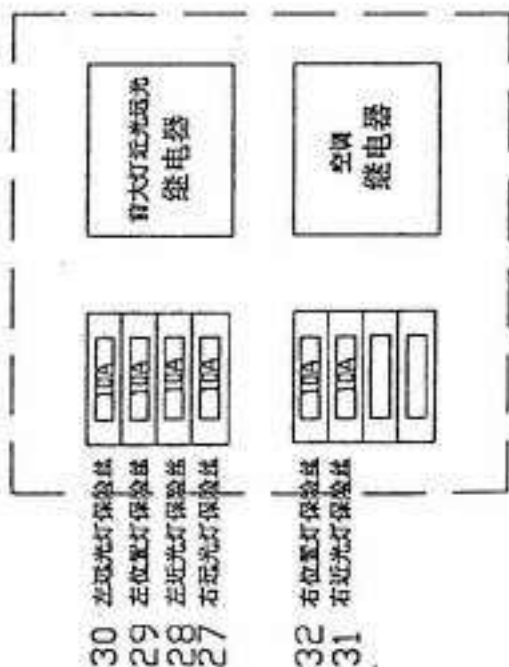
继电器、保险丝位置图

散热器风扇控制 (一) 清洗液罐旁



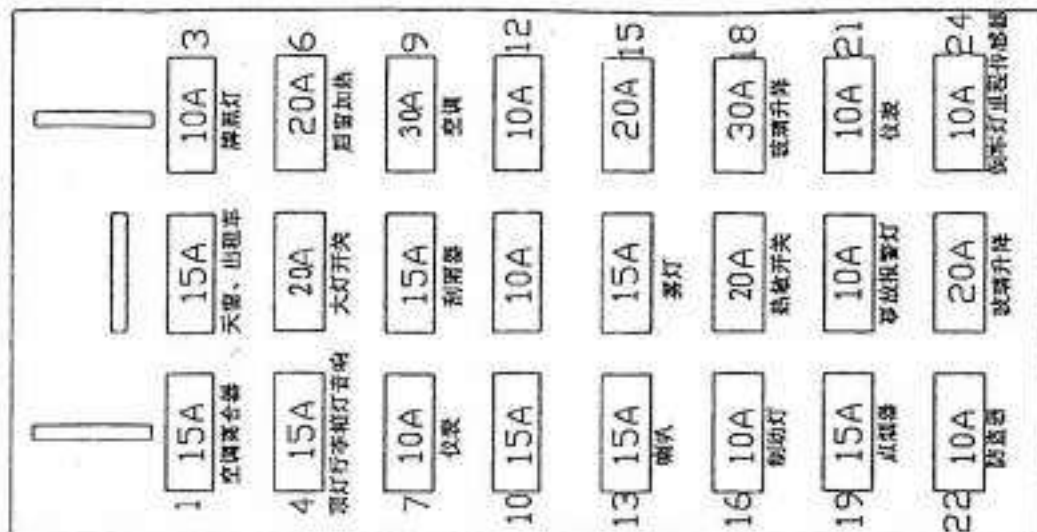
注: 双风扇时高速用 50A 保险丝

继电器盒保险丝位置 (二) 前舱右边



中央电器盒保险丝位置

(室内方向盘下)

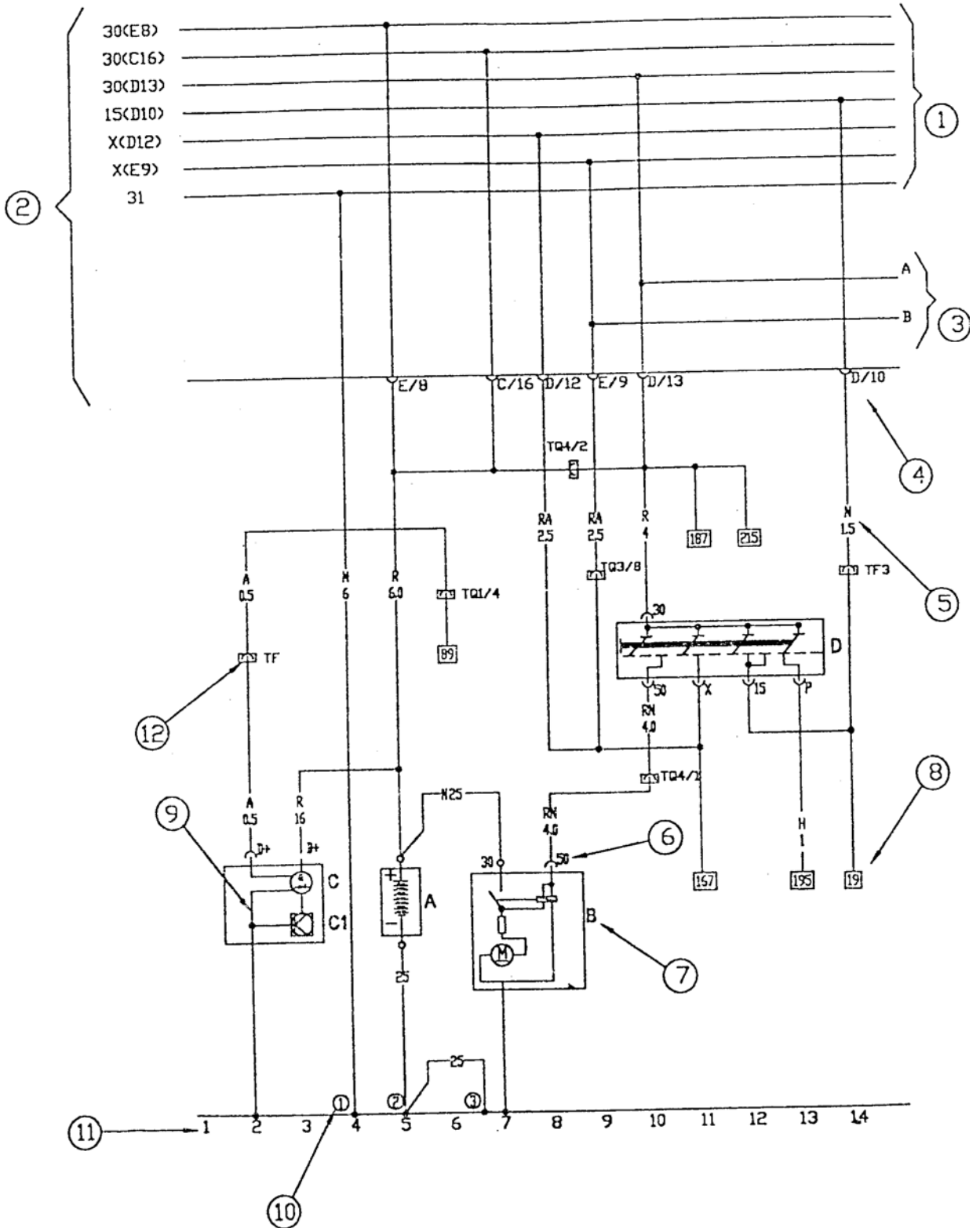


Connector	Connector Pin Function	Circuit No.
A	01.Sunroof, Cab Freight Calculator (+15)	—
	02.ECUA/C Signal Input	138
	03.—	—
	04.Luggage Compartment Lamp, Radio, Ceiling Lamp	247
	05.—	—
	06.—	—
	07.—	—
	08.—	—
	09.Rear Window Preheat Switch, Rear Mirror Defrost Switch	134
	10.—	—
	11.Lamp Switch Illumination, ABS Diagnostic Power (+15)	132
	12.—	—
	13.Combination Instrument Power Positive (+30)	114
	14. Brake Switch	192
B	01.—	—
	02.—	—
	03.—	—
	04.A/C Relay, Blower, Interior Circulate Solenoid Switch	51
C	01.Horn Switch	142
	02.Fog Lamp Relay (Positive)	219
	03.Fog Lamp Switch	220
	04.Horn Relay Signal (30)	140
	05.Dual Pitch Horn	141
	06.Wiper Motor (Positive)	154
	07.Panel Indicator, Switch Illumination Light, Light Switch Variable Resistor	209
	08.Back Light Switch	83
	09.—	152
	10.—	—
	11.—	—
	12.Fog Lamp Relay (Positive)	215
	13.—	—
	14.—	—
	15.Thermo Switch, A/C High Pressure Switch	47
	16.Central Electrical Box Power Positive (+30)	6

CIRCUIT__Central Electrical Box Connector, Pin and Function

Connector	Connector Pin Function	Circuit No.
C	17. —	—
	18. Wiper Intermittent Relay	149
	19. License Plate Lamp	210
	20. Mileage Gauge Sensor	81
D	01. —	—
	02. Cigar Lighter	—
	03. Turn Light Switch, Headlight Adjustment Switch	129
	04. —	175
	05. Combination Instrument Positive (+15)	—
	06. Sunroof, Cab Freight Calculator (+30)	116
	07. Ground	—
	08. —	53
	09. Rear View Mirror, Lifter Module, Position Select Box (+15)	—
	10. Ignition Switch (+15)	14
	11. Central Locking Controller, Glass Lifter Module (+30)	260
	12. Ignition Switch, Wiper Switch (+15)	8
	13. Central Electrical Box Power Positive (+30)	10
	14. —	—
15. —	248	
16. —	—	
E	01. —	—
	02. —	—
	03. —	—
	04. A/C Compressor Magnetic Clutch	137
	05. —	—
	06. —	—
	07. —	—
	08. Central Electrical Power Positive (+30)	5
	09. Ignition Switch (+15)	9
	10. Lamp Switch	207
	11. —	—
	12. Horn Relay	139
	13. —	—
	14. —	—

CIRCUIT MANUAL EXPLANATION



Compiling Explanation

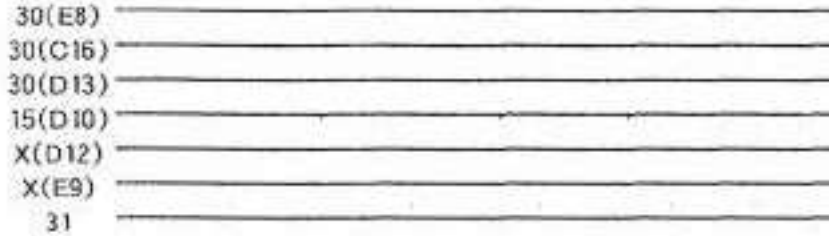
1. Central Electrical Box Main Circuit Board Circuit No.
 - 30 : No Fuse, Positive Goes Directly From Battery
 - 15 : No Fuse, Positive Goes To Ignition----Start Switch
 - X : No Fuse, Positive Goes To Ignition ----Start Switch, And Being Cut Off During Starting
 - 31 : Fictitious Ground, This wire actually exists or does not actually exist.
Example: 30(E8) defines these 30 hot wires are directly from battery, and come from central electrical box socket E pin No. 8.
30(C16)、 15(D10)、 X(D12)...are similar as 30 (E8)
2. Central Electrical Box Main Circuit Board Block
This block on main circuit board includes fuse, relay and connection interface.
3. Wire routes as follows:
 - coming from right side on previous page
 - going to left side on next page
4. Central Electrical Box Main Circuit Board Pins No.
It will be helpful for locating main circuit board circuit, such as E/8 indicates the 8th pin on central electrical box socket E.
5. Wire colors and cross-area, square millimeter
6. Connection Symbol
This symbol is signed on component.
7. Parts or components name (illustrated on left bottom of each page).
8. symbol for wire continuing
Number in square form indicates wire number or appropriate extending wire no.
9. Internal wire
Used for locating internal wire. This wire may actually exist or does not exist.
10. Ground point
Indicated by number in circle, and the point is also indicated on circuit.
11. Circuit number
Used to locating component and interrupted wire connecting point.
12. Multi-hole connector connecting points
Socket terminal numbers are given.

CONTENT

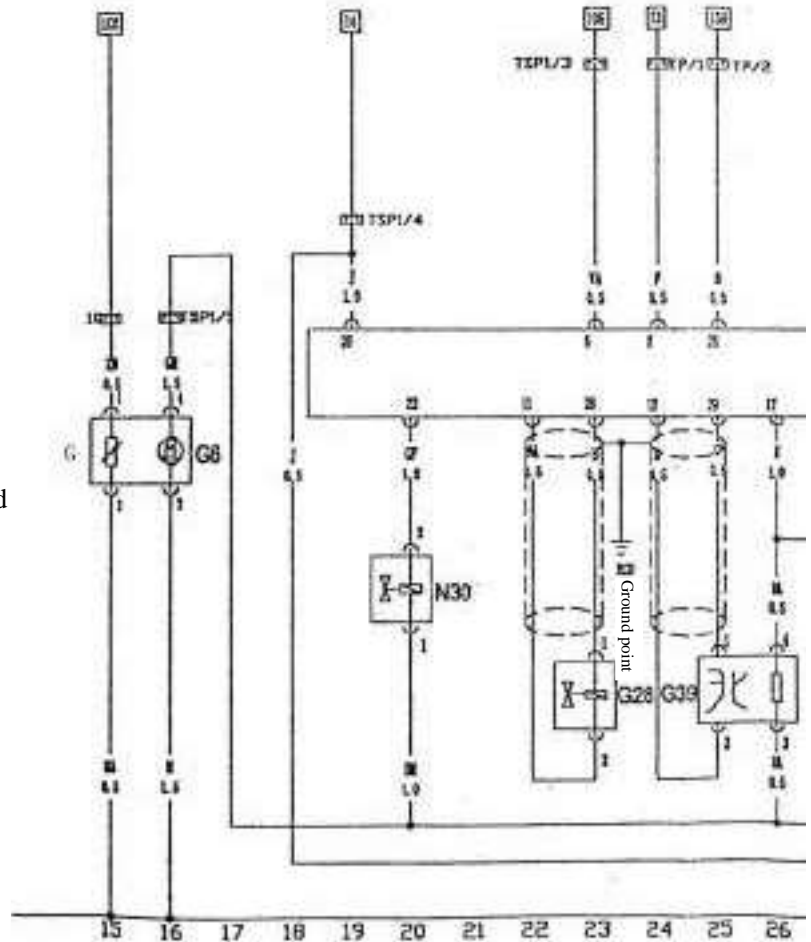
—Battery, Alternator, Starter Motor, Ignition Switch.....	01
—SPI EI System (MARELLI).....	02
—MPI EI(Electronic Injection) (MARELLI)	02
—A/C Unit, Control Head, Cooling System.....	03
—A/C Switch, Interior Circulate Solenoid, High & Low Pressure Switch.....	04
—Oil Pressure Switch, Coolant Temperature Sensor, Manual Brake Indicator Switch, Mileage Gauge Sensor.....	05
—Radio and 6 Speakers	06
—IP (Instrument Panel) and MFA	07
—Front Fog Light, Cigar Lighter, A/C Panel Indicator.....	08
—Rear Window Heating System, Dual Pitch Horn, Compressor Magnetic Clutch.....	09
—Wiper, Horn Button, Washer.....	10
—Headlight, Front Position Light, Light Relay.....	11
—Turn Light, Parking Light Switch, Emergency Warning Relay	12
—Taillight, Side Light, Brake Light	13
—Light Switch	14
—Back Light, Rear Fog Light.....	15
—Headlight Adjuster.....	16
—Front & Rear Interior Light, Luggage Compartment Illumination Light, Sun Visor Light, License Plate Light, Door Touch Switch.....	17
—Central Locking.....	18
—Power Mirror.....	19
—ABS.....	20
—Power Glass Lifter Control Unit	21
—Power Glass Lifter Control Switch.....	22

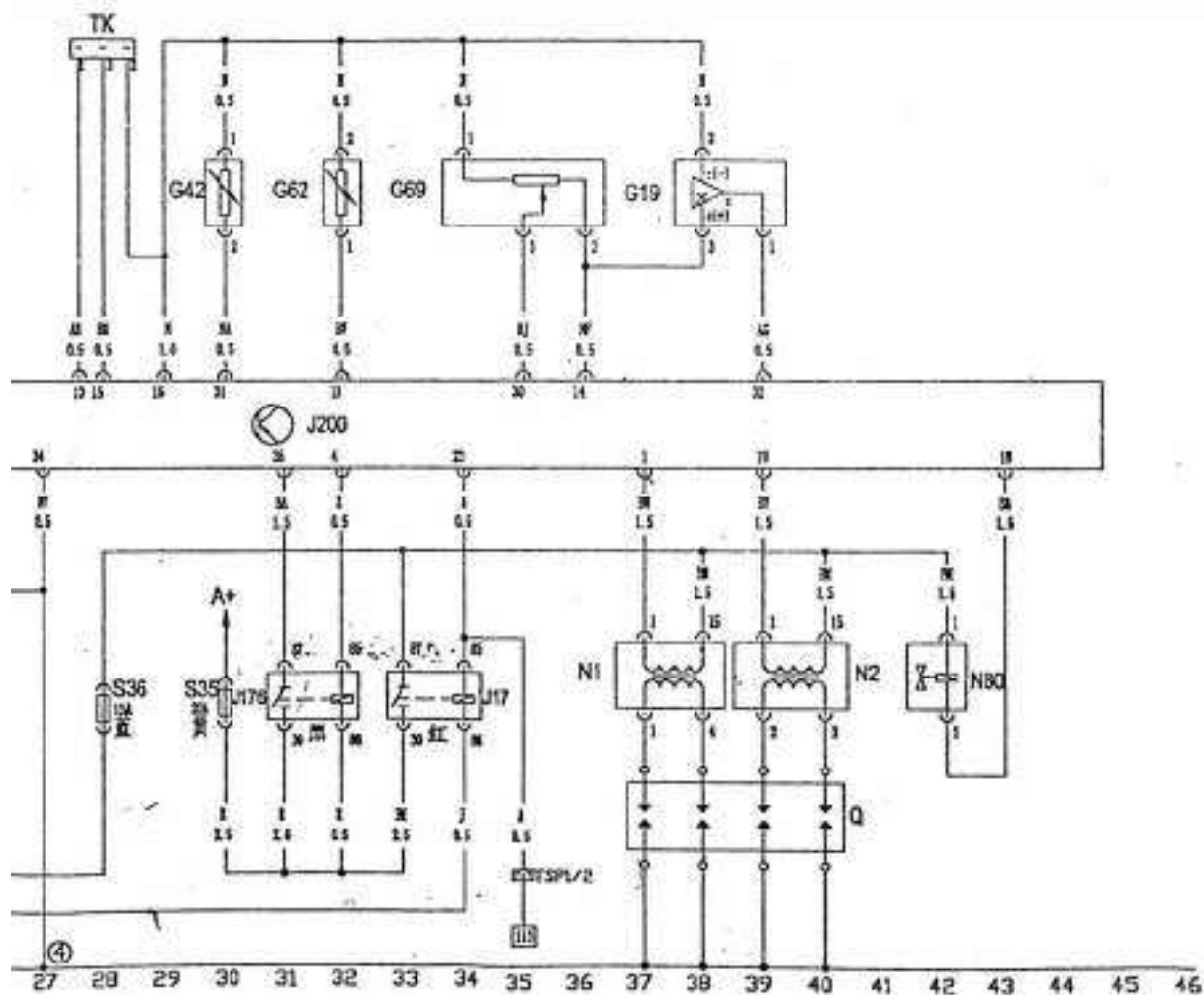
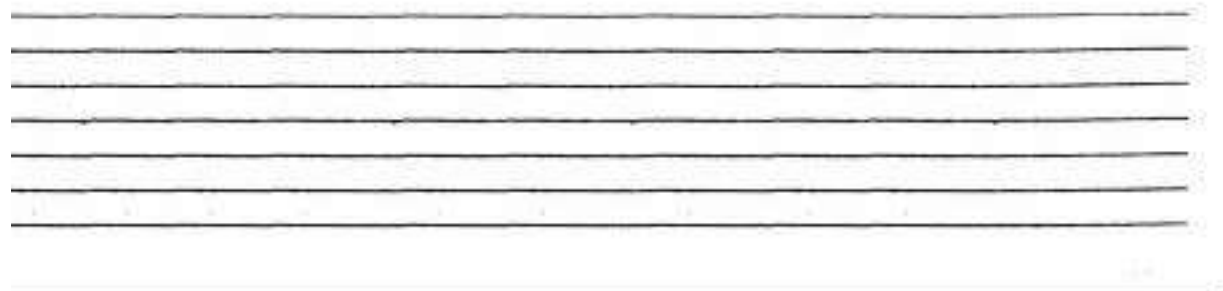
SPI Electronic Injection (Marelli)

- B=White
- N=Black
- R=Red
- M=Brown
- V=Green
- A=Blue
- H=Grey
- Z=Purple
- G=Yellow
- J=Orange
- F=Pink

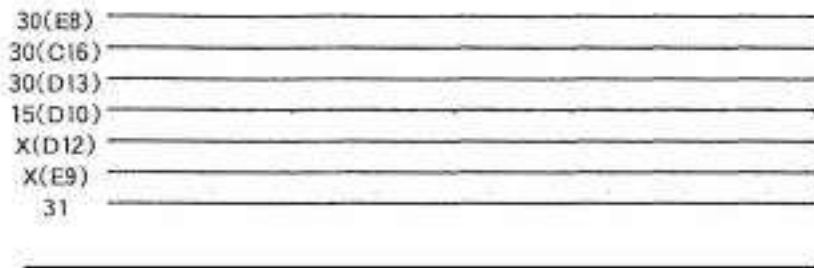


- J200 SPI controller unit
- G42 Air Intake Temperature Sensor
- G62 Water Temperature Sensor
- G69 Throttle Position Sensor
- G19 Air Intake Pressure Sensor
- N30 Active Carbon Canister Solenoid
- G28 Crankshaft Position Sensor
- G39 Oxygen Sensor
- G35 System Fuse
- S36 Oil Pump Fuse
- A+ Battery Positive
- J176 ECU Relay
- J17 Power Relay
- N1 Cylinder 1—4 Ignition Coil
- N2 Cylinder 2---3 Ignition Coil
- Q Spark Plug
- N80 Fuel Injector
- G Fluid Level Sensor
- G6 Fuel Pump
- TK Diagnostic Socket
- (4) Ground On Engine



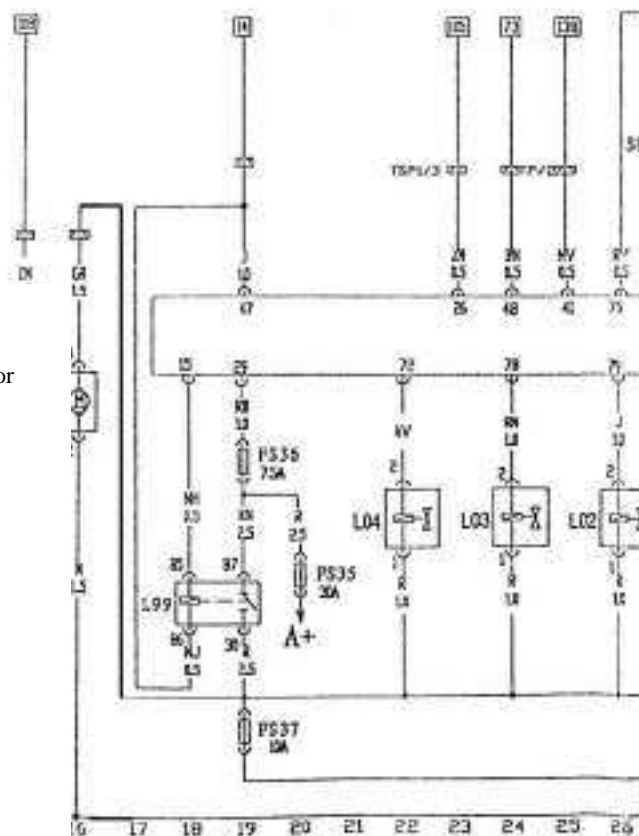


MPI Electronic Injection (Marelli)



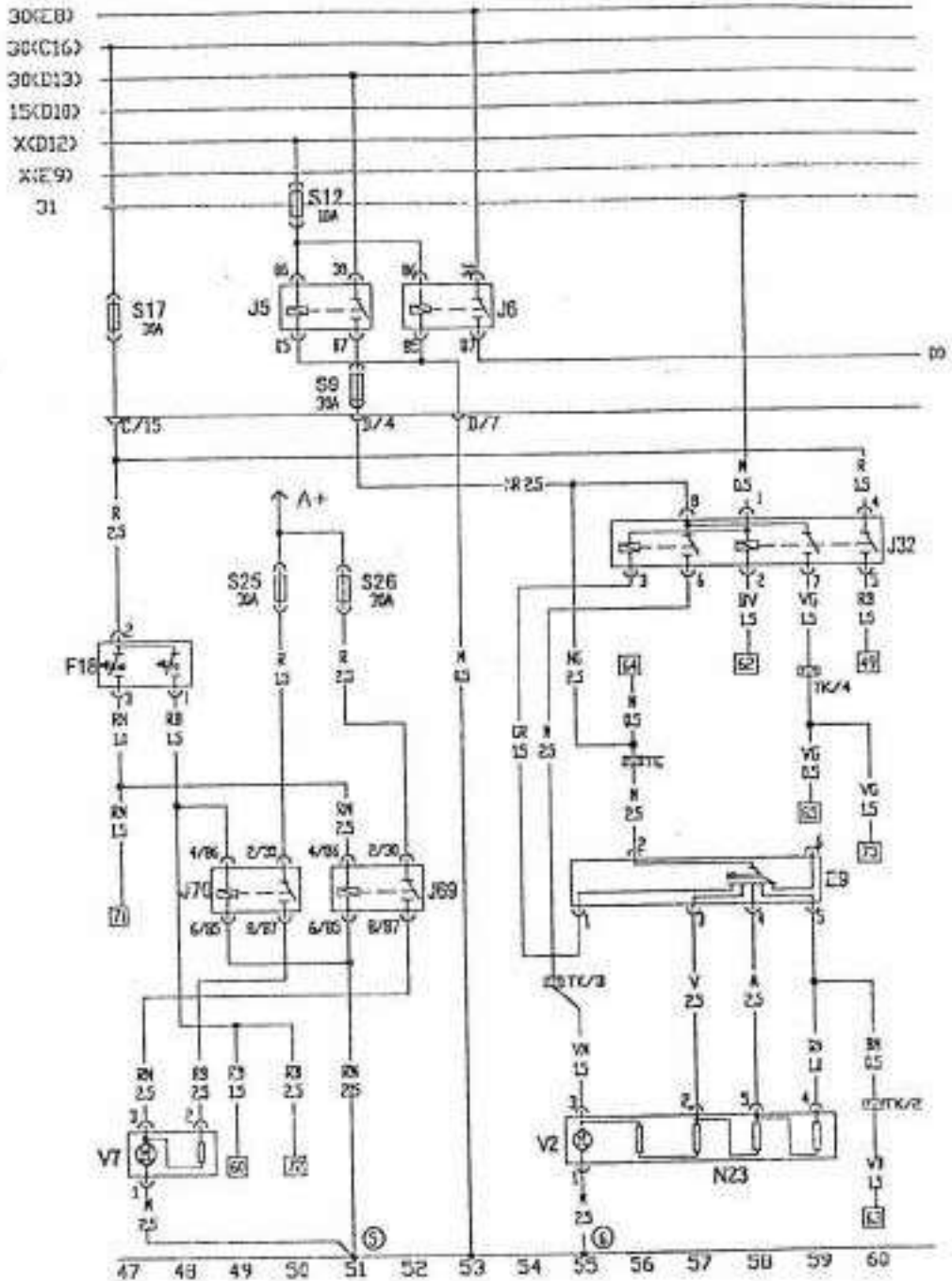
- B=White
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- G=Yellow
- J=Orange
- F=Pink

- J300 MPI Controller Unit
- S81 Air Intake Pressure Sensor
- G69 Air Intake Temperature Sensor
- JS14 Water Temperature Sensor
- S42 Knock Sensor
- S12 Crankshaft Position Sensor
- L99 Power Relay
- FS 35 System Fuse
- FS 36 ECU Power Fuse
- FS 37 Oxygen Sensor Fuse
- A+ Battery Positive
- L01-04 Fuel Injector
- L05 Ignition Coil
- Q Spark Plug
- S71 Oxygen Sensor
- L07 Carbon Canister Solenoid
- TK Diagnostic Connector
- M27 Idle Step Motor
- G Fuel Level Sensor
- G6 Fuel Pump
- 4 Ground on Engine
- TSPI Connector
- TP Connector
- TD Connector



Note: ECU CONNECTOR 1-(1-52 PIN)
 ECU CONNECTOR 2-(53-80 PIN)

A/C Unit, Control Head, Cooling System

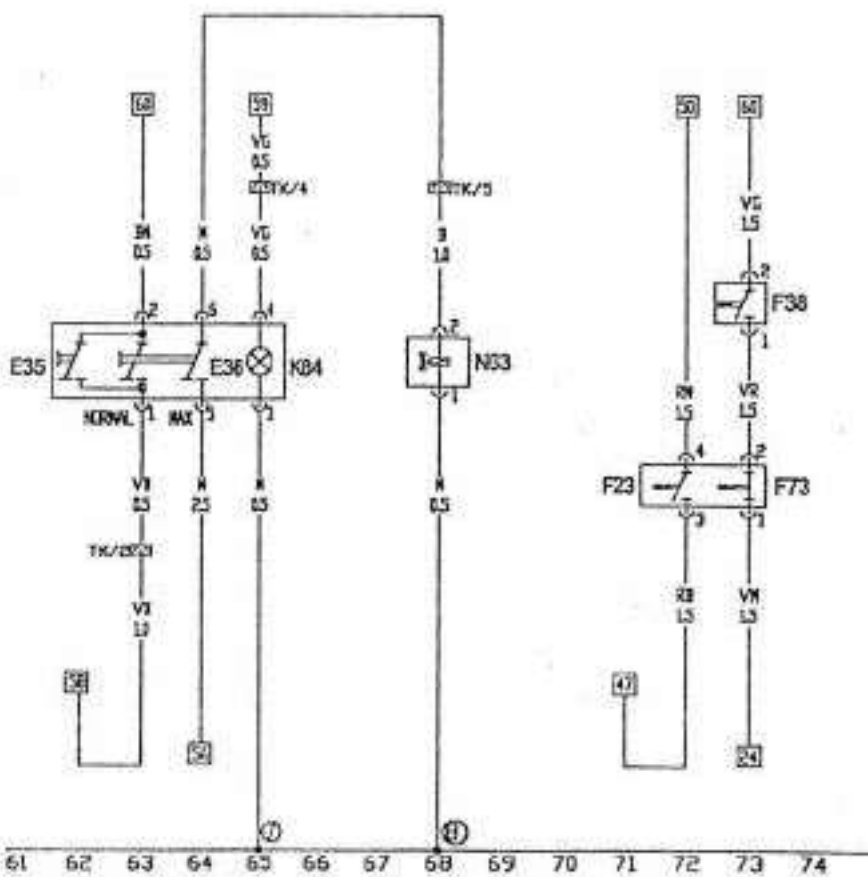
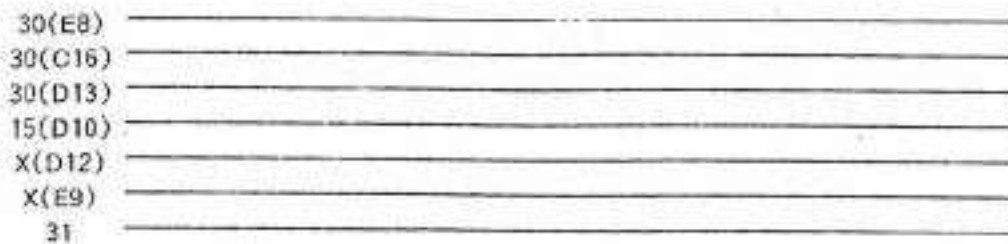


- B=White
- N=Black
- R=Red
- M=Brown
- V=Green
- A=Blue
- H=Grey
- Z=Purple
- G=Yellow

- A+ battery positive
- E9 blower switch
- F18 thermo switch
- N23 blower in-line speed regulator resistance
- V2 blower
- V7 fan motor
- J32 A/C relay
- J69 Cooling fan high speed relay
- J70 Cooling fan low speed relay

- J5 A/C blower relay (in electrical box)
- J6 Rear Window preheat relay
- 5 ground, in wiring harness in boot I
- 6 ground, on ground carrier beside central electrical box

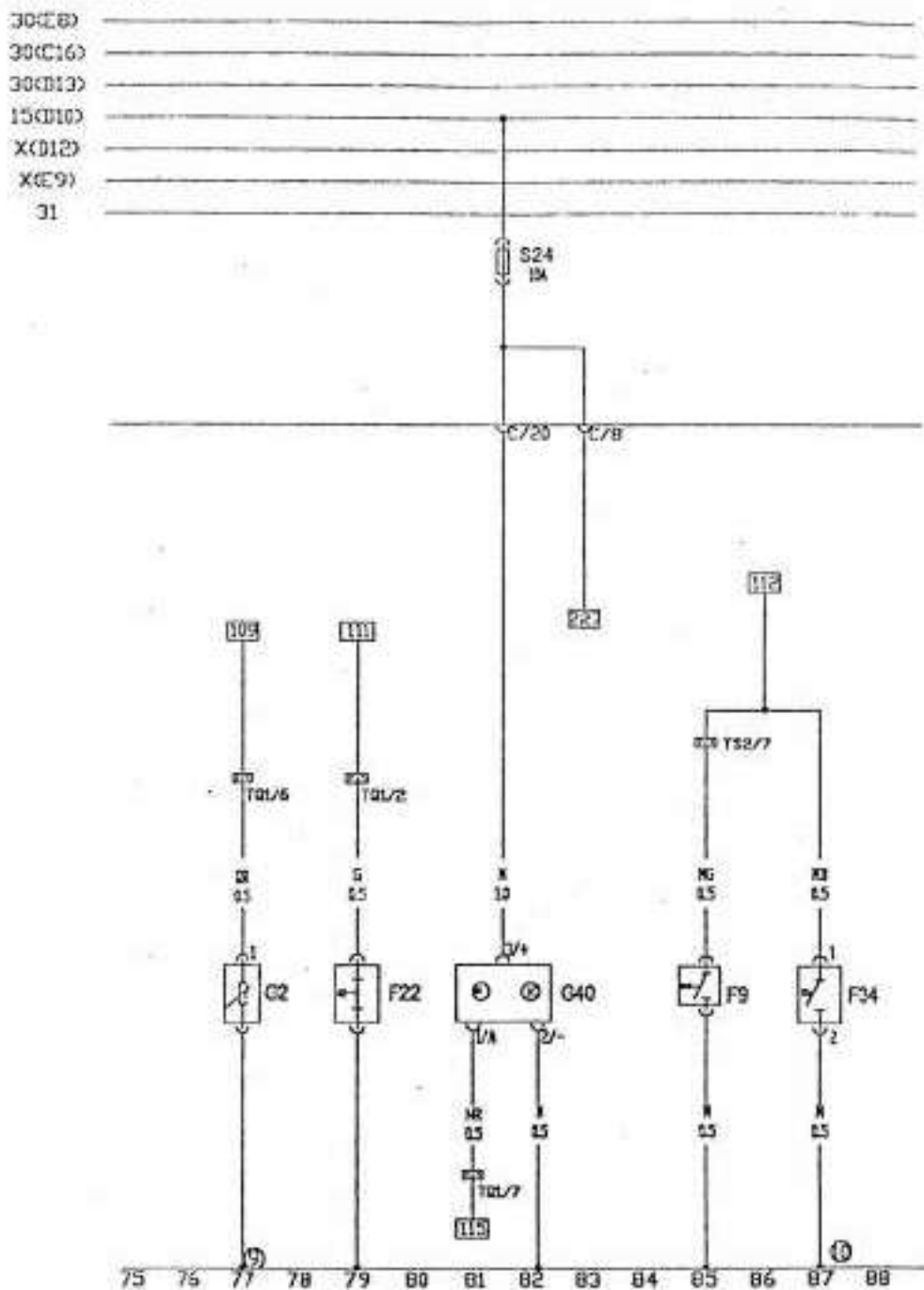
A/C UNIT SWITCH, INTERIOR CIRCULATION SOLENOID, HIGH & LOW PRESSURE SWITCH



- B=White
- N=Black
- R=Red
- M=Brown
- V=Green
- A=Blue
- H=Grey
- Z=Purple
- G=Yellow

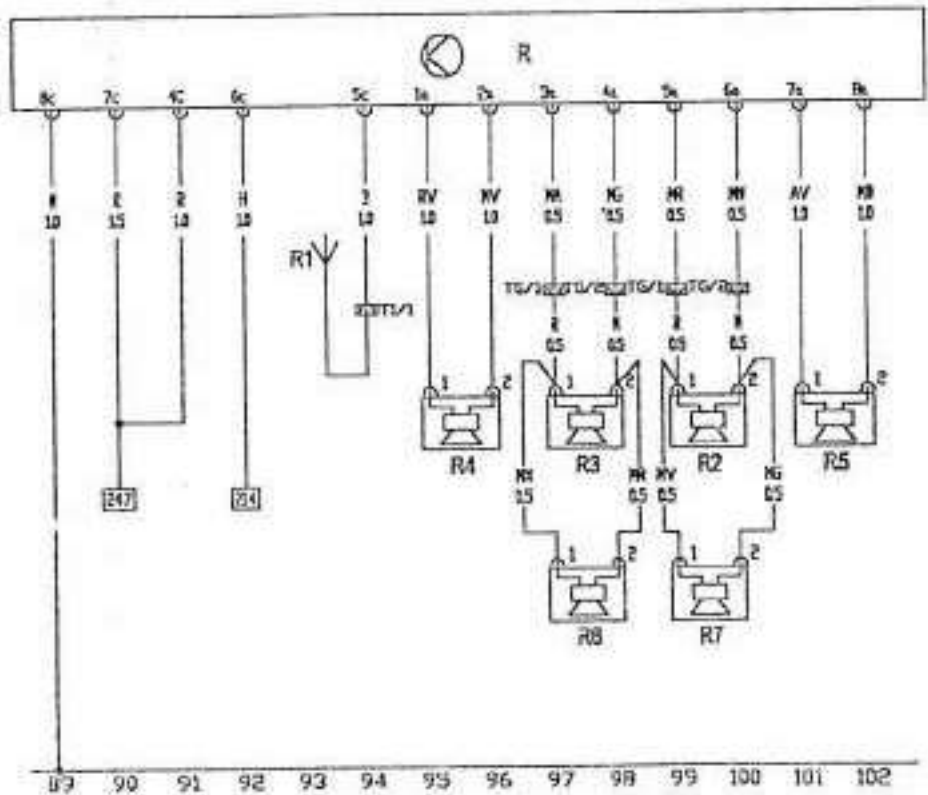
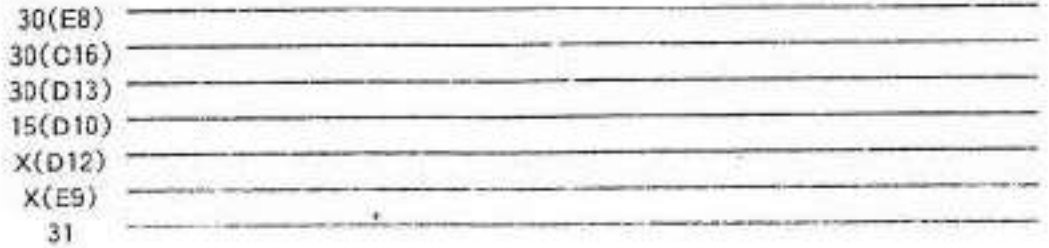
- E35 A/C unit switch
- E36 Interior circulation switch
- K84 A/C operating illumination switch
- N63 Interior circulation solenoid
- F38 Outside temperature switch
- F23 High pressure switch
- F73 Low pressure switch
- 7 8 Main circuit ground
- TK 5 holes connector

OIL PRESSURE SWITCH, COOLANT TEMPERATURE SENSOR, MANUAL BRAKE INDICATOR SWITCH, ODOMETER SENSOR



- | | | | |
|-----|------------------------------------|-----|--|
| G2 | Coolant temperature sensor | 9 | ground, on engine cylinder |
| F22 | Oil pressure switch (low pressure) | 10 | ground connection, in headlight wiring harness |
| F9 | Manual brake indicator switch | TQ1 | 10 holes connector |
| F34 | Brake fluid level warning switch | TS2 | 10 holes match connector |
| G40 | odometer sensor | | |

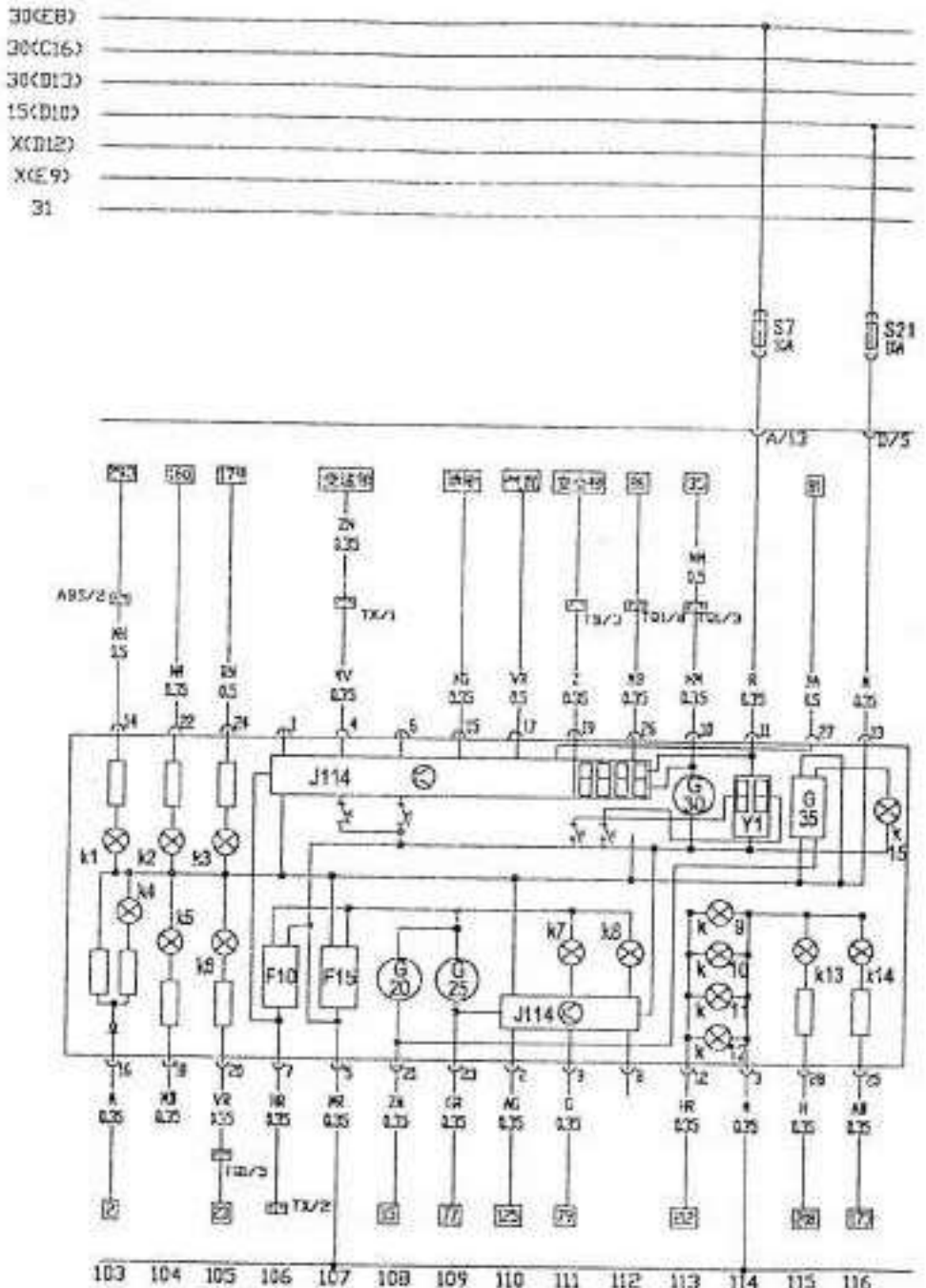
RADIO AND 6 SPEAKERS



- B=WHITE
- N=BLACK
- R=RED
- M=BROWN
- V=GREEN
- A=BLUE
- H=GREY
- Z=PURPLE
- G=YELLO

- R radio
- R2 front left speaker
- R3 front right speaker
- R4 right rear speaker
- R5 left rear speaker
- R6 left front speaker
- R7 right front speaker
- R1 antenna
- T8 8 holes connector
- T1 single hole connector

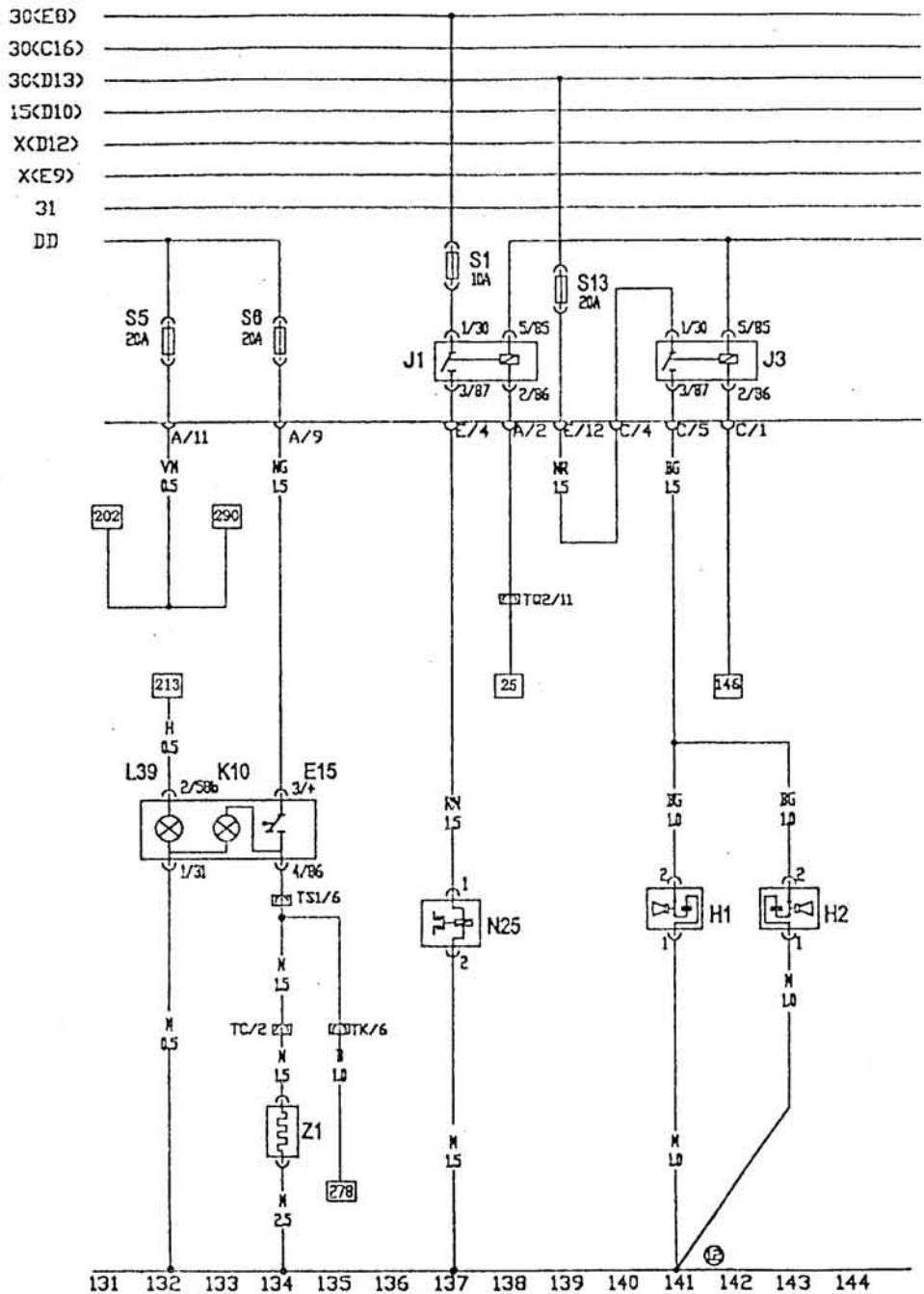
INSTRUMENT PANEL AND MFA



- B=WHITE
- N=BLACK
- R=RED
- M=BROWN
- V=GREEN
- A=BLUE
- H=GREY
- Z=PURPLE
- G=YELLOW

- | | | |
|--------------------------------------|--|--------------------------|
| F10 multi way converter | K3 right turn indicator | Y1 digital clock |
| F15 voltage stabilizer | K4 engine charging indicator | T1 single hole connector |
| G20 fuel sensor | K5 manual brake warning light | |
| G25 coolant temperature sensor | K6 engine self-check indicator | |
| G30 RPM sensor | K7 oil pressure warning light | |
| G35 preset fluid level compare meter | K8 engine overheat warning light | |
| J114 control unit | K9/K10/K11/K12 instrument panel illumination light | |
| J119 multi function display | K13 low beam headlight, position warning light | |
| K1 ABS warning indicator | K14 high beam warning light | |
| K2 left turn indicator | K15 fuel warning light | |

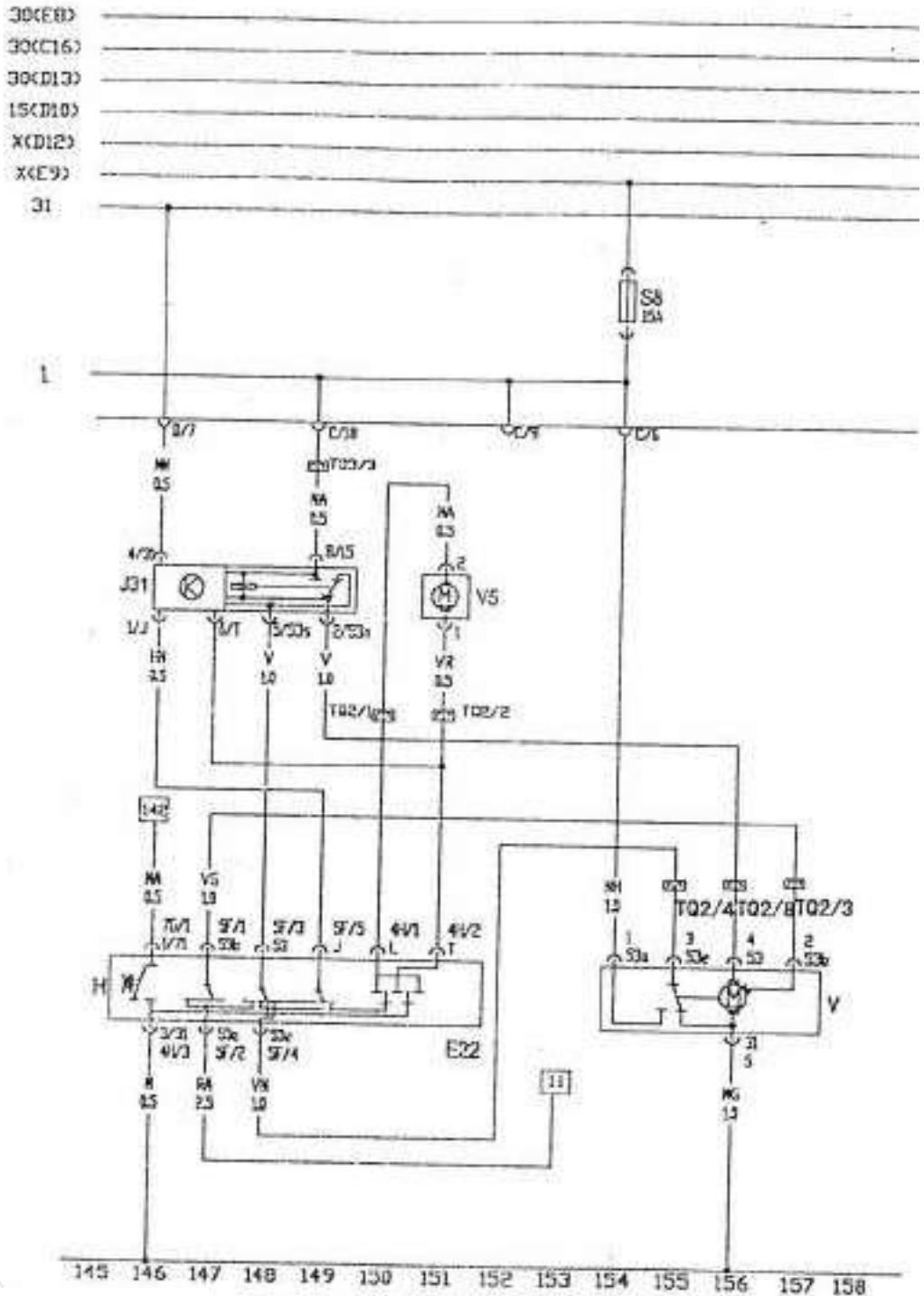
REAR WINDOW HEATING SYSTEM, DUAL PITCH HORN, A/C COMPRESSOR
MAGENETIC CLUTCH



- B=WHITE
- N=BLACK
- R=RED
- M=BROWN
- V=GREEN
- A=BLUE
- H=GREY
- Z=PURPLE
- G=YELLOW

- J1 Idle Up Relay (in electrical box)
- J3 Dual Pitch Horn
- J39 Rear Window Heating Switch Illumination Light
- K10 Rear Window Heating Indicator
- E15 Rear Window Heater Switch
- H1(2) Dual Pitch Horn
- Z1 Rear Window Heater
- 12 Ground point, in dual tone horn wiring harness

WIPER, HORN BUTTON, WASHER



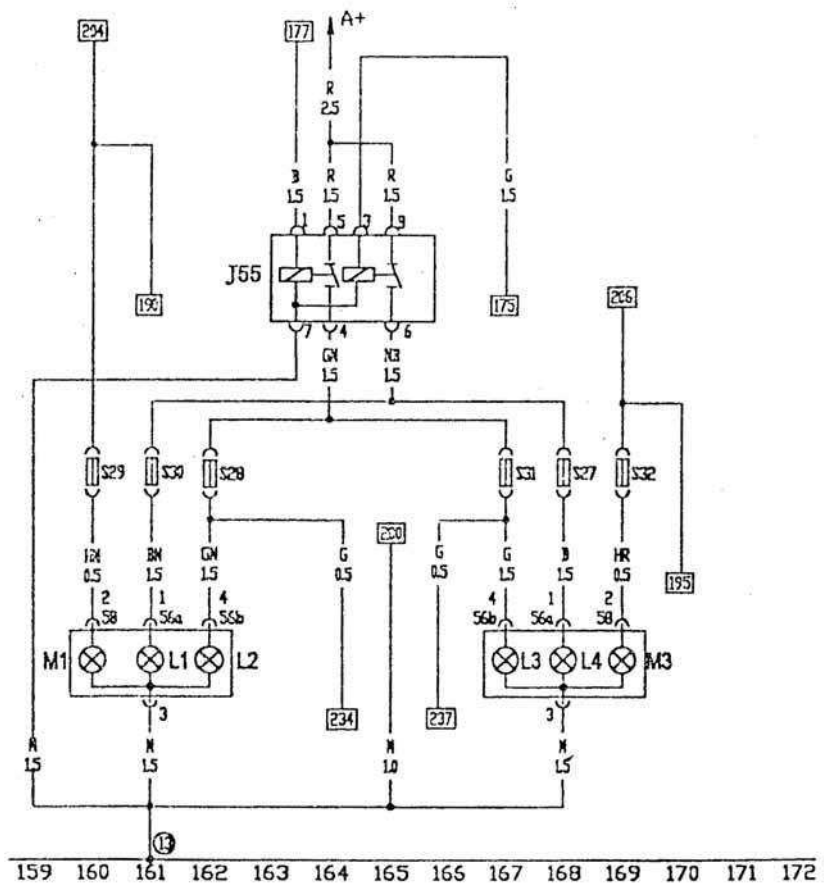
- B=WHITE
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- V=GREEN
- A=BLUE
- H=GREY
- Z=PURPLE
- G=YELLOW

- E22 wiper switch
- H horn button
- J31 intermittent wiper relay
- S5 fuse 15A
- V wiper motor
- V5 washer

HEADLIGHT, FRONT POSITION LIGHT, LIGHT RELAY

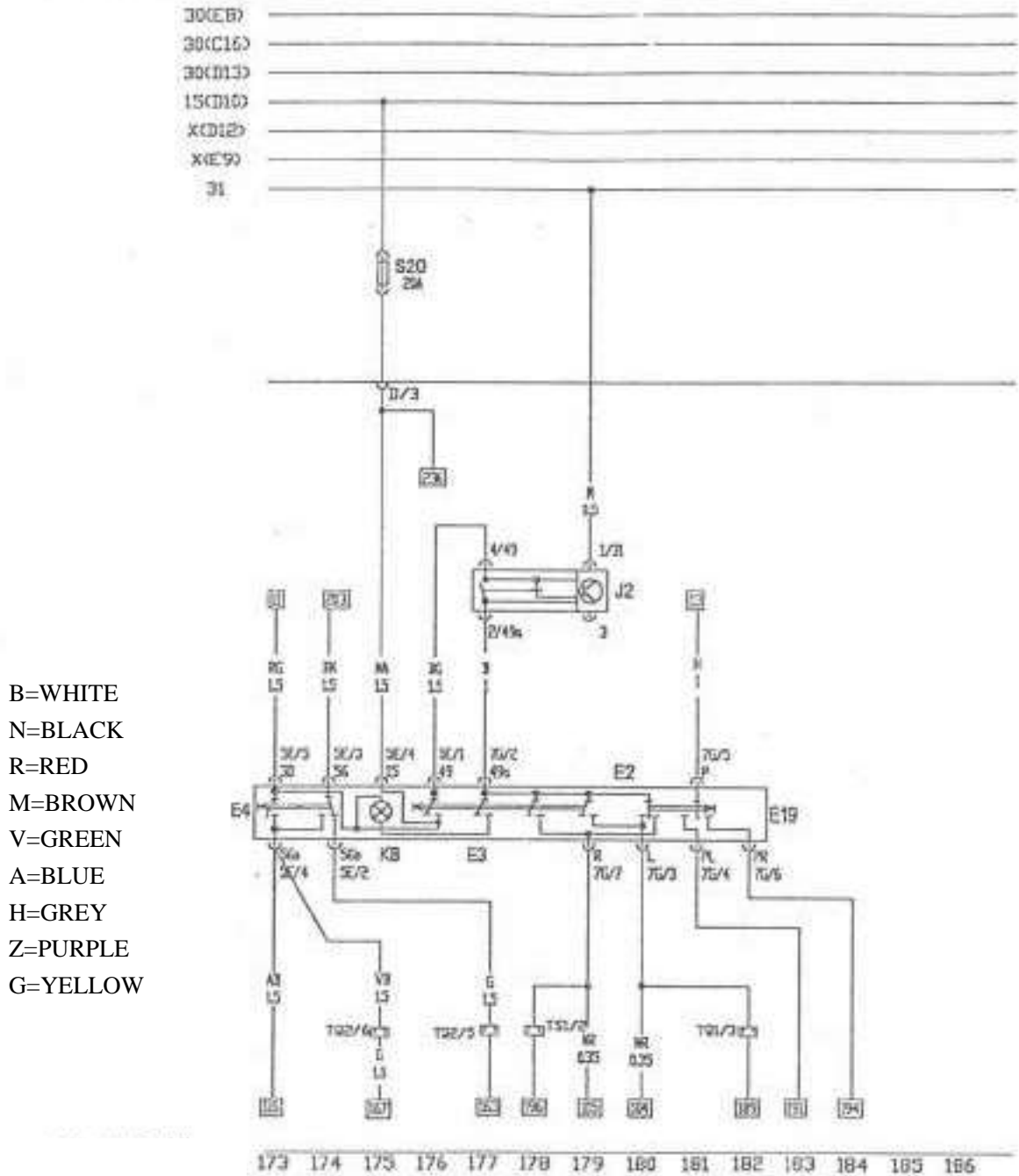
30(E8)	_____
30(C16)	_____
30(D13)	_____
15(D10)	_____
X(D12)	_____
X(E9)	_____
31	_____

B=WHITE
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 V=GREEN
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 H=GREY
 Z=PURPLE
 G=YELLOW



- | | | |
|------------------------------|--|--|
| A+ Battery Positive | J55 Light Relay | 13 Ground, In headlight wiring harness |
| L1 Left High Beam Headlight | S27 Right High Beam Headlight Fuse 10A | |
| L2 Left Low Beam Headlight | S28 Left Low Beam Headlight Fuse 10A | |
| L3 Right Low Beam Headlight | S29 Left Position Light Fuse 10A | |
| L4 Right High Beam Headlight | S30 Left High Beam Headlight Fuse 10A | |
| M1 Left Position Light | S31 Right Low Beam Headlight Fuse 10A | |
| M3 Right Position Light | S32 Right Position Light Fuse 10A | |

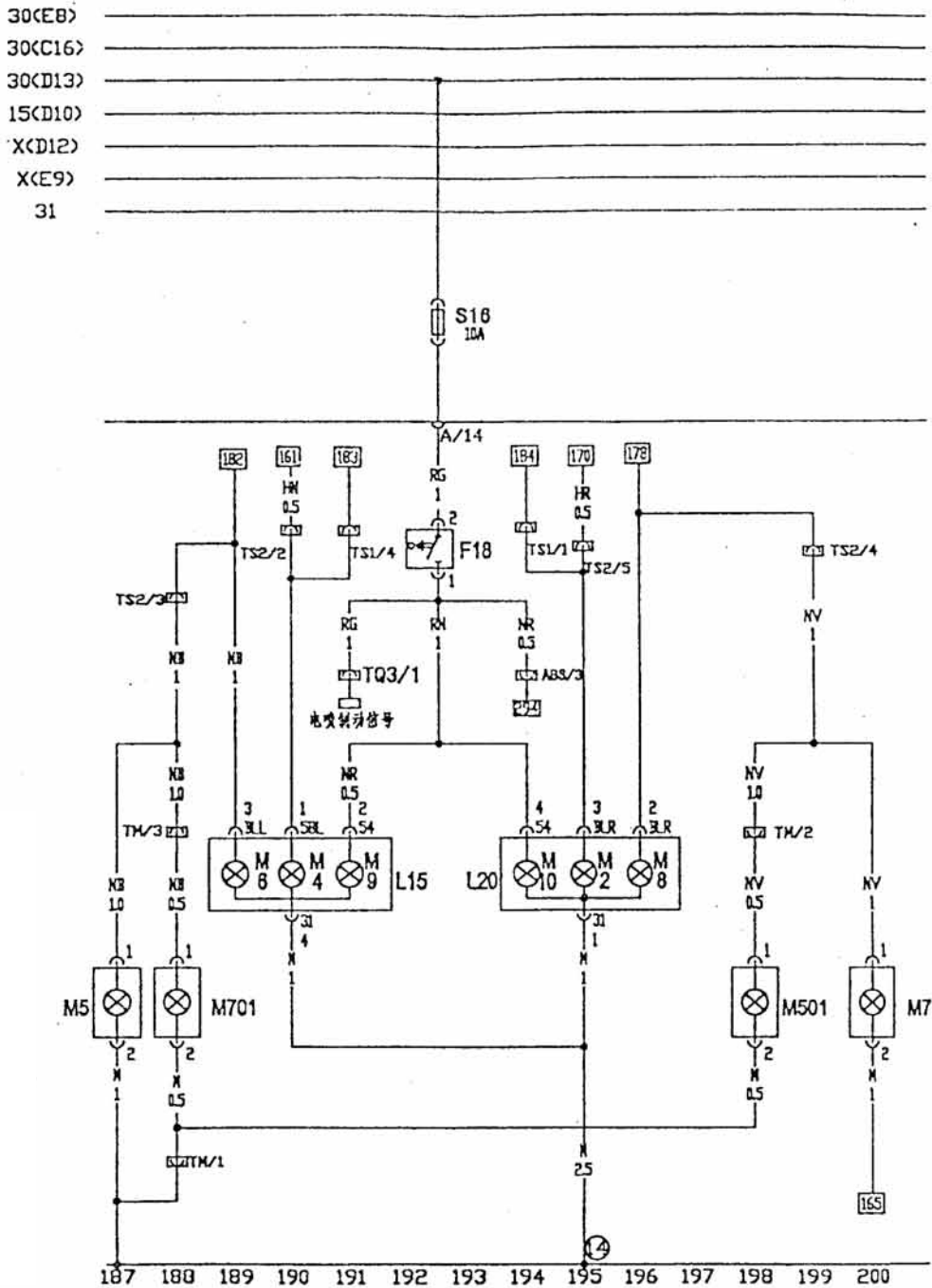
TURN LIGHT, PARKING LIGHT SWITCH, EMERGENCY WARNING RELAY



- B=WHITE
- N=BLACK
- R=RED
- M=BROWN
- V=GREEN
- A=BLUE
- H=GREY
- Z=PURPLE
- G=YELLOW

- E2 Turn Light Switch
- E3 Emergency Warning Light Switch
- E4 Dimmer and Turn Light Switch
- E19 Parking Light Switch
- J2 Emergency Warning Light Relay
- K6 Emergency Warning Light
- S17 Fuse 10A

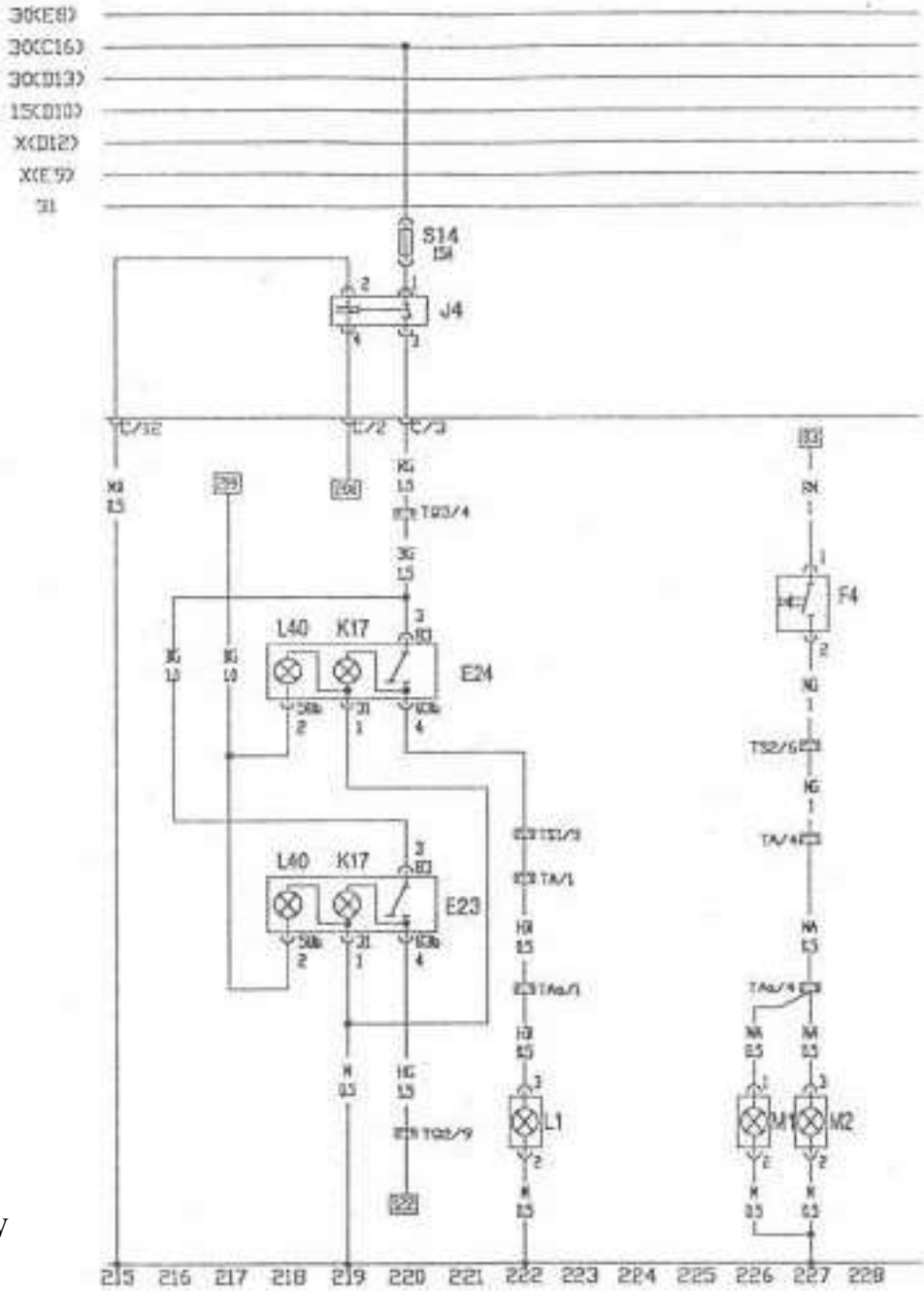
TAILLIGHT, SIDELIGHT, BRAKELIGHT



B=WHITE
 N=BLACK
 R=RED
 M=BROWN
 V=GREEN
 A=BLUE
 H=GREY
 Z=PURPLE
 G=YELLOW

- | | | | | | |
|-----|---------------------------|------|-----------------------|-----|-----------------------|
| F18 | brake light switch | M9 | left brake light | S20 | Fuse 10A |
| L15 | left taillight | M10 | right brake light | S7 | Fuse 10A |
| L20 | right taillight | M501 | right side turn light | S8 | Fuse 10A |
| M2 | rear right position light | M701 | left side turn light | T3 | 3 holes connector |
| M4 | rear left position light | | | T1 | single hole connector |
| M5 | front left turn light | | | 14 | ground in rear light |
| M6 | rear left turn light | | | | |
| M7 | front right turn light | | | | |
| M8 | rear right turn light | | | | |

BACKLIGHT, REAR FOG LIGHT



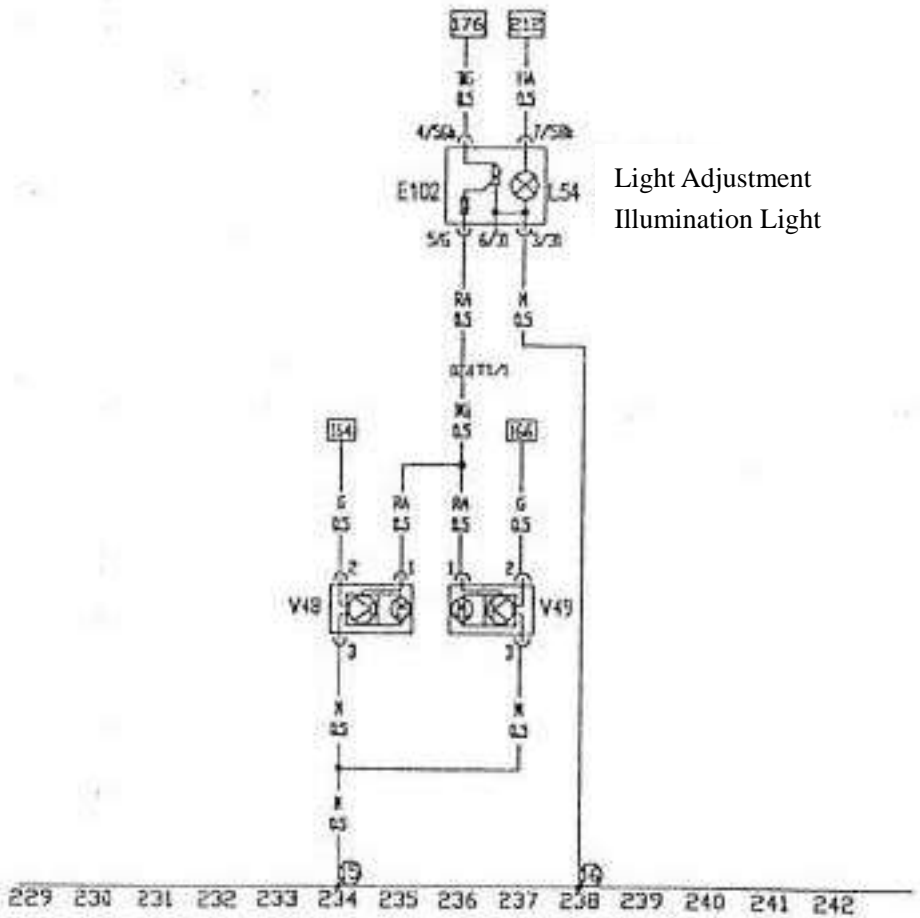
- B=WHITE
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- V=GREEN
- A=BLUE
- H=GREY
- Z=PURPLE
- G=YELLOW

E23	Front Fog Lamp Switch	S10	Fuse 15A	8	In Rear Taillight Moving Parts Wiring
F4	Back Light Switch	S14	Fuse 10A	T3	3 Holes Connector
J4	Fog Lamp Relay (in electrical box)	E24	Rear Fog Lamp Switch	T3a	3 Holes Connector
K17	Rear Fog Lamp Indicator			T2	2 Holes Connector
L1	Rear Fog Lamp			T1	Single Hole Connector
L40	Front & Rear Fog Lamp Switch Illumination Light			T1a	Single Hole Connector
M1	Left Back Light				
M2	Right Back Light				

HEADLIGHT ADJUSTMENT

30(E8)	_____
30(C16)	_____
30(D13)	_____
15(D10)	_____
X(D12)	_____
X(E9)	_____
31	_____

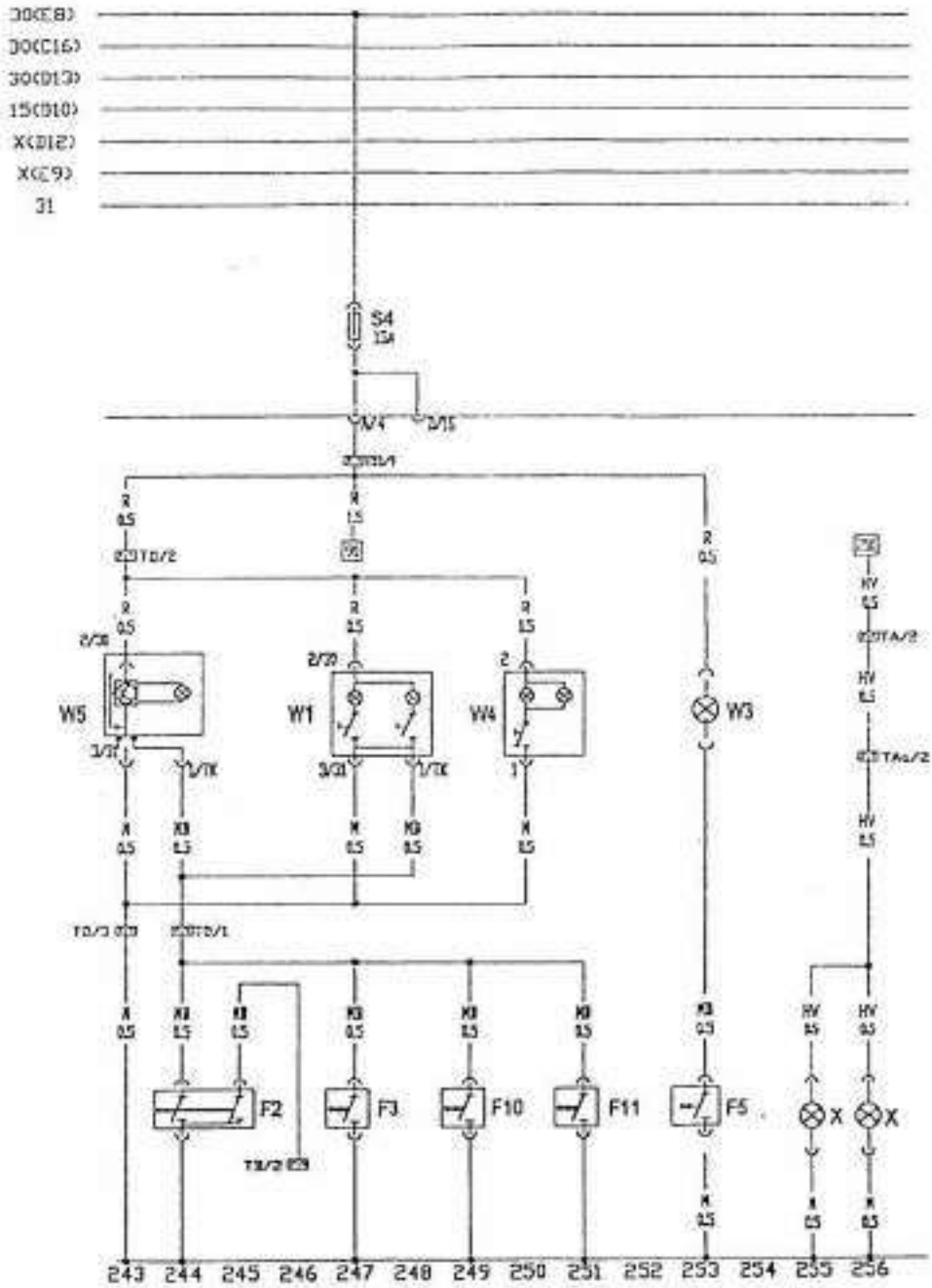
- B=WHITE
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- R=RED
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- A=BLUE
- H=GREY
- Z=PURPLE
- G=YELLOW



Light Adjustment
Illumination Light

- | | | | |
|------|--|----|---|
| E102 | Headlight Height Adjustment Switch | 16 | Ground, Located Beside Central Electrical Box |
| L54 | Light Adjustment Illumination Light | 15 | Ground, at headlight |
| V48 | Left Front Headlight Adjustment Motor | T1 | Single Hole Connector |
| V49 | Right Front Headlight Adjustment Motor | | |

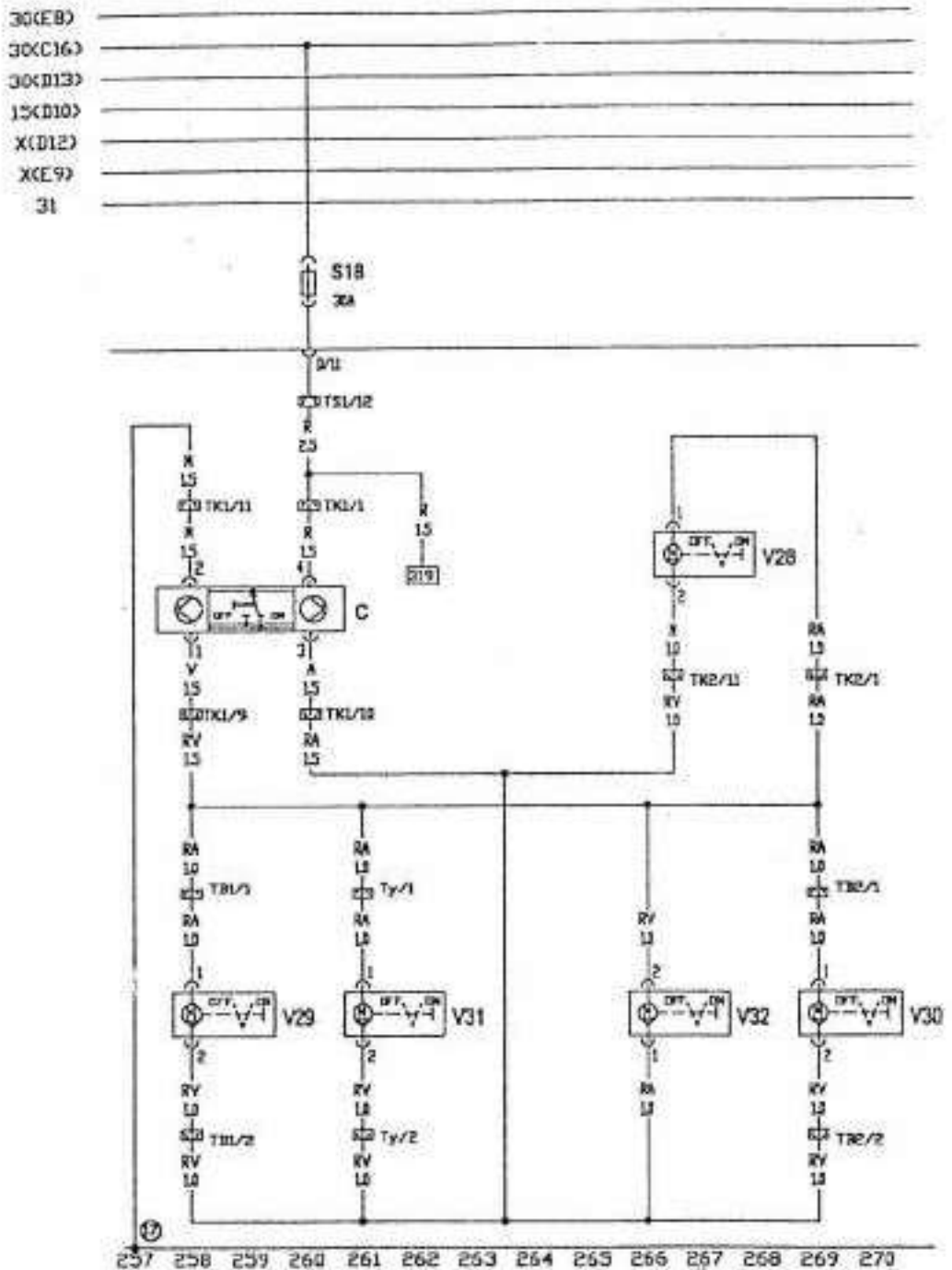
FRONT AND REAR INTERIOR LIGHT, LUGGAGE COMPARTMENT LIGHT, SUN VISOR LIGHT, LICENSE PLATE LAMP, DOOR TOUCH SWITCH



- B=WHITE
- N=BLACK
- R=RED
- M=BROWN
- V=GREEN
- A=BLUE
- H=GREY
- Z=PURPLE
- G=YELLOW

- | | | | |
|-----|---|-----|--|
| F2 | Left Front Door Touch Switch | TAa | 2 Holes Connector, on left side of luggage compartment |
| F3 | Right Front Door Touch Switch | W1 | Rear Interior Ceiling Lamp |
| F5 | Luggage Compartment Illumination Light Switch | W3 | Luggage Compartment Light |
| F10 | Left Rear Door Touch Switch | W4 | Sun Visor Light |
| F11 | Right Rear Door Touch Switch | W5 | Front Interior Ceiling Lamp With Delay Close |
| T8 | 2 Holes Connector | X | License Plate Lamp |
| TD | 4 Holes Connector | | |

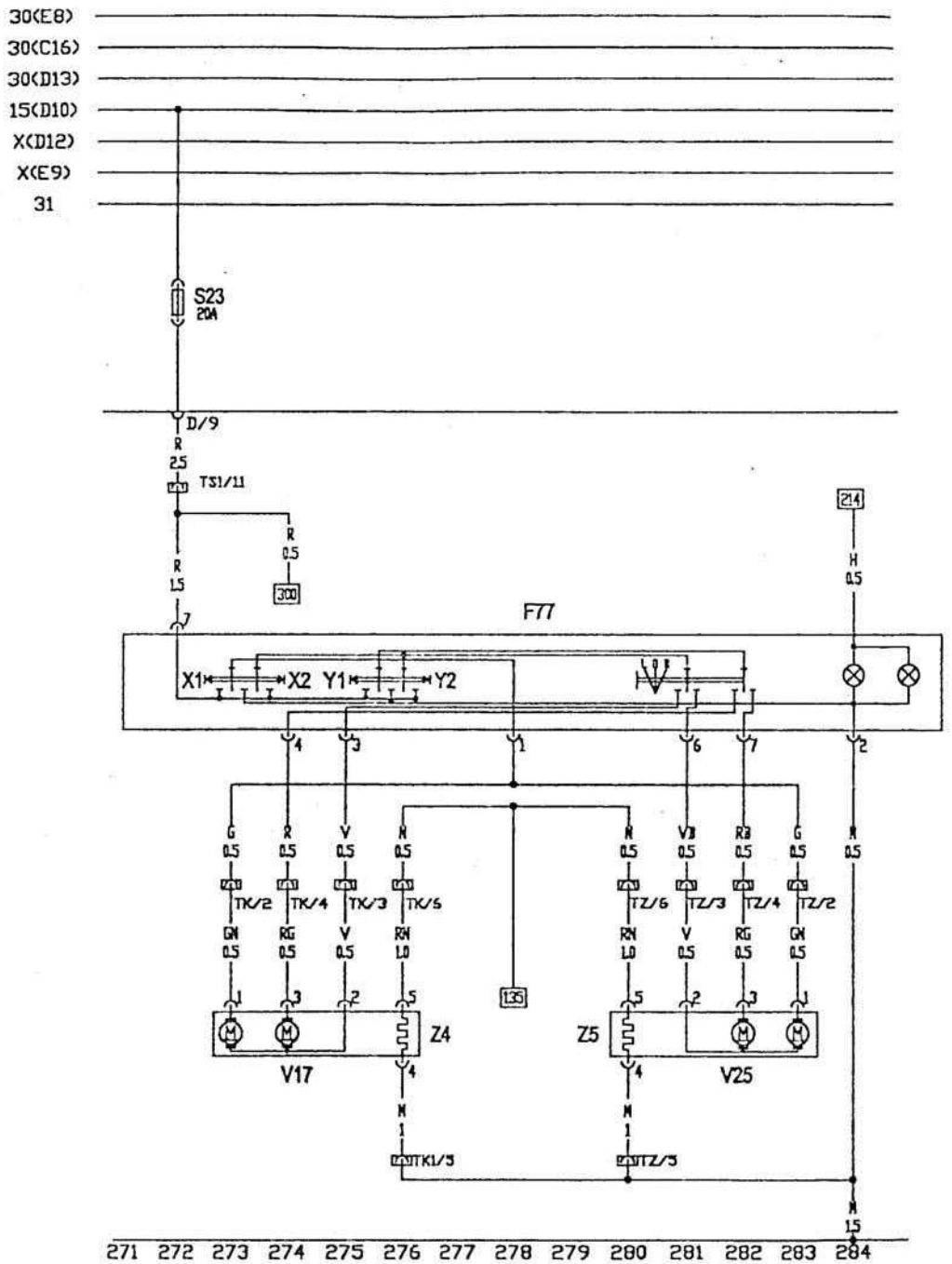
CENTRAL LOCKING



- B=WHITE
- N=BLACK
- R=RED
- M=BROWN
- V=GREEN
- A=BLUE
- H=GREY
- Z=PURPLE
- G=YELLOW

- | | | | |
|-----|--|-----|--|
| C | Central Locking Control Unit (in left front door) | TB1 | 4 Holes Connector (left B pillar side) |
| V28 | Right Front Door Lock Control Motor | TB2 | 4 Holes Connector (right B pillar side) |
| V29 | Left Rear Door Lock Control Motor | TK1 | 12 Holes Connector (left A pillar Side) |
| V30 | Right Rear Door Lock Control Motor | TK2 | 12 Holes Connector (right A pillar Side) |
| V31 | Luggage Compartment Lock Control Motor | Ty | 2 Holes Connector (Left C pillar side) |
| V32 | Fuel Tank Door Control Motor | 17 | Ground Point Beside Central Electrical |

POWER MIRROR



- B=WHITE
- N=BLACK
- R=RED
- M=BROWN
- V=GREEN
- A=BLUE
- H=GREEN
- Z=PURPLE
- G=YELLOW

F77 Mirror Switch

X1 Left Adjust

X2 Right Adjust

Y1 Up Adjust

Y2 Down Adjust

V17 Left Mirror Control Motor

V25 Right Mirror Control Motor

Z4 Left Mirror Defogger

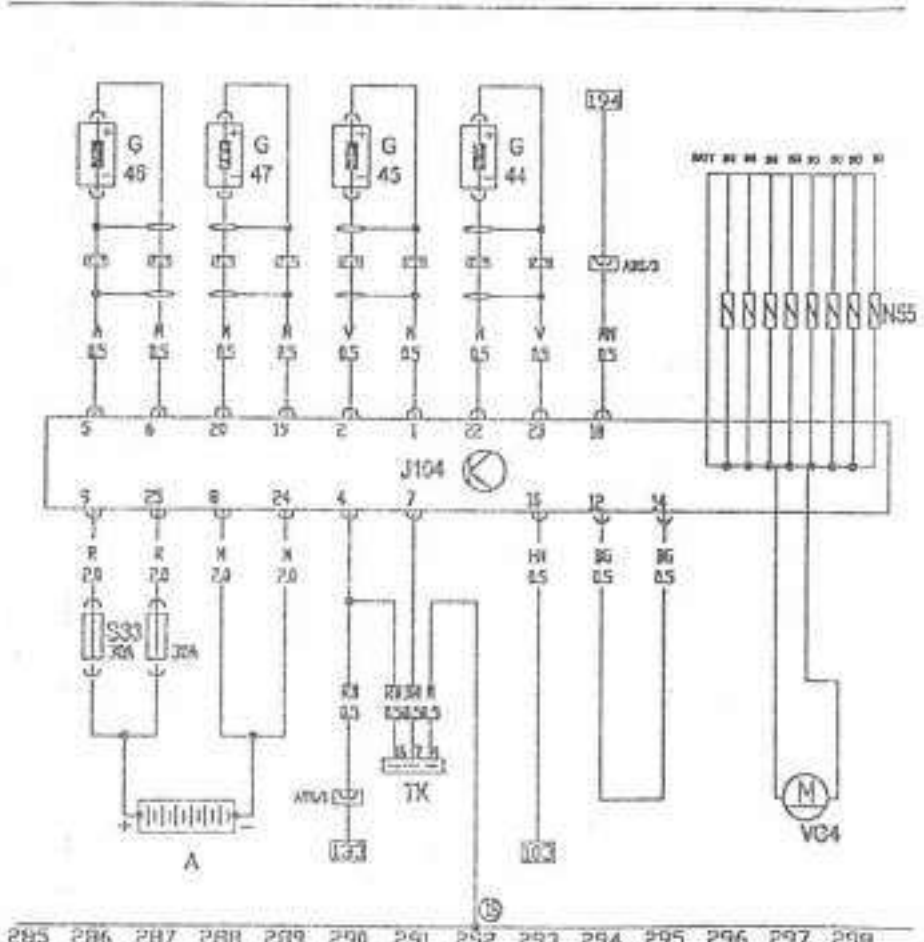
Z5 Right Mirror Defogger

TK1 12 Holes Connector (left A pillar side)

TK2 12 Holes Connector (right A pillar side)

TZ 2 Holes Connector (beside central electrical box)

ABS



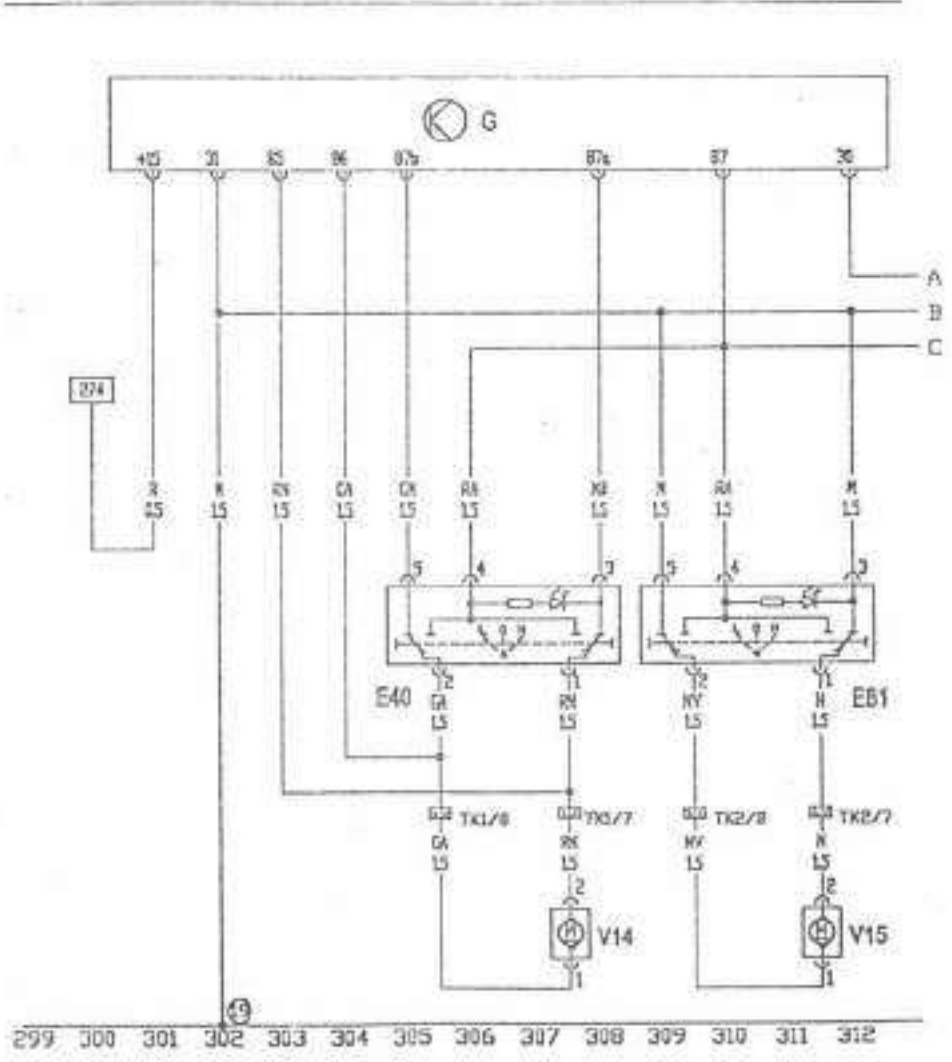
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- J104 ABS Controller
- A Battery
- N55 ABS Solenoid
- VG4 ABS Hydraulic Pump
- G44 Right Rear Wheel RPM Sensor
- G45 Left Front Wheel RPM Sensor
- G46 Left Rear Wheel RPM Sensor
- G47 Right Front Wheel RPM Sensor
- S33 ABS Solenoid Valve Power Fuse
- S34 ABS Hydraulic Pump Power Fuse
- TK Diagnosis Connector

18 Ground point, at ground carrier on central electrical box

POWER GLASS LIFTER CONTROL UNIT

30(C8)	_____
30(C16)	_____
30(D13)	_____
15(D10)	_____
X(D12)	_____
X(E9)	_____
31	_____

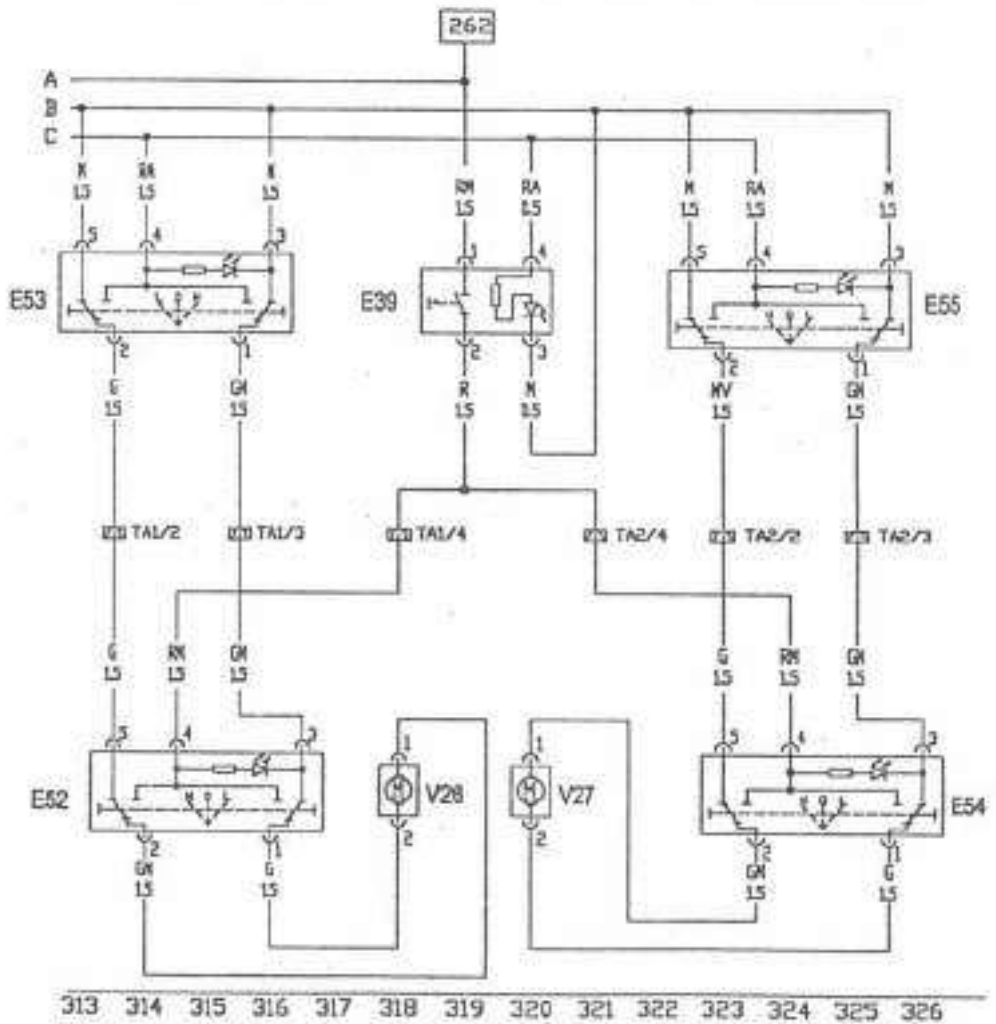


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G	Window Glass Lifter Module	19	Beside Central Electrical Box
E40	Left Front Window Lifter Switch	TK1	12 Holes Connector (Left B Pillar Side)
E81	Right Front Window Lifter Switch	TK2	12 Holes Connector (Right B Pillar Side)
V14	Left Front Window Lifter Motor		
V15	Right Front Window Lifter Motor		

POWER GLASS LIFTER CONTROL SWITCH

30(E8)	_____
30(C16)	_____
30(D13)	_____
15(D10)	_____
X(D12)	_____
X(E9)	_____
31	_____



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- | | | | |
|-----|--|-----|---|
| E39 | Rear Window Glass Lifter Lock -Out Switch | V26 | Left Rear Window Glass Lifter Motor |
| E52 | Left Rear Dorr Upper Window Lifter Switch | V27 | Right Rear Window Glass Lifter Motor |
| E54 | Right Rear Dorr Upper Window Lifter Switch | TA1 | 4 Holes Connector Glass (Left B Pillar Side) |
| E53 | Left Rear Window Glass Lifter Switch | TA2 | 4 Holes Connector Glass (Right B Pillar Side) |
| E55 | Right Rear Window Glass Lifter Switch | | |