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

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TOTAL CONTENT

No.1 Central Electrical Box Fuse And Relay Position (2 Pages)

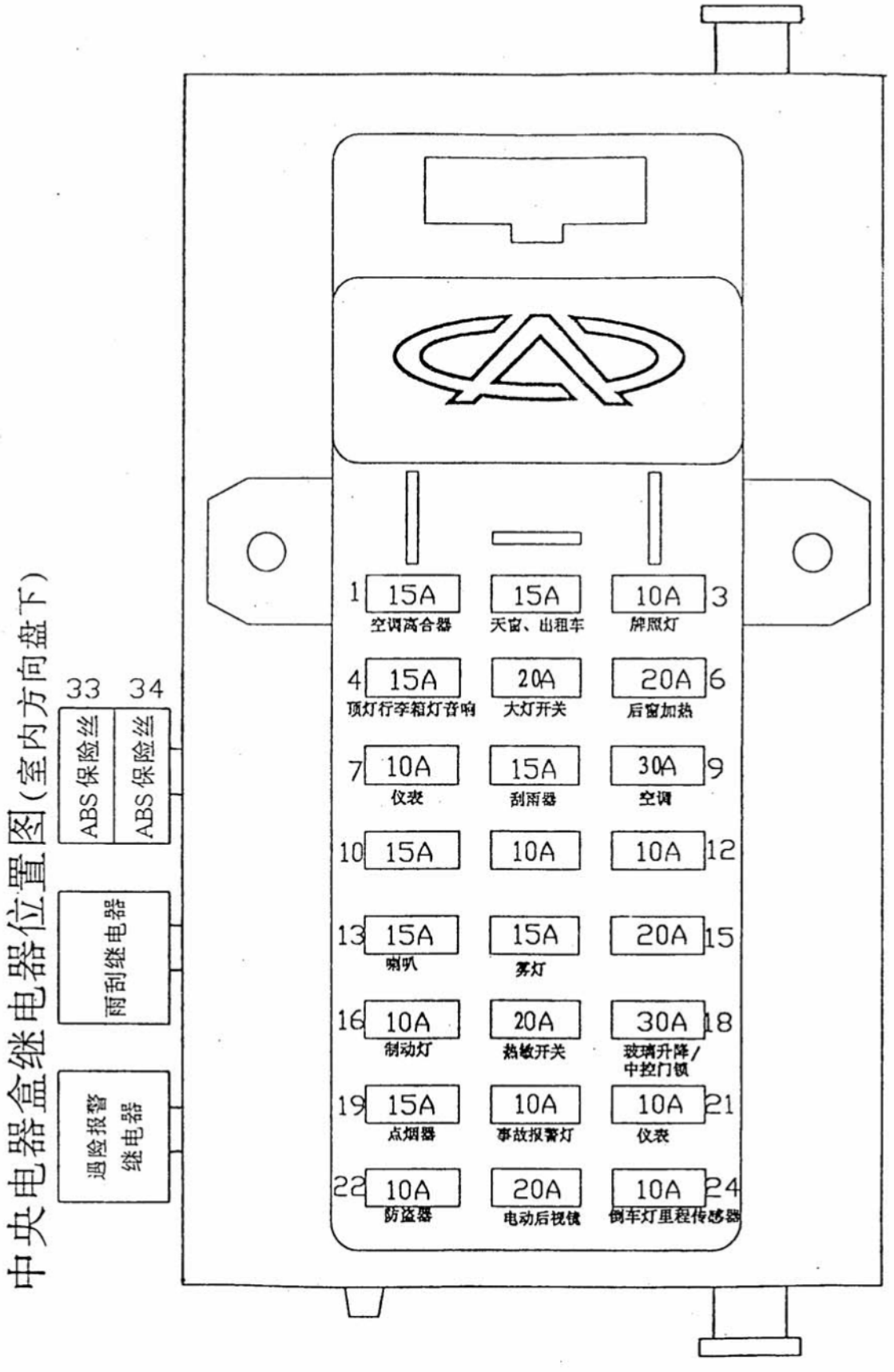
No.2 Central Electrical Box Connector Position And Function (3 Pages)

No.3 Circuit Manual Explanation (2 Pages)

No.4 Circuit (23 Pages)

No.5 ET Vehicle Circuit (25 Pages)

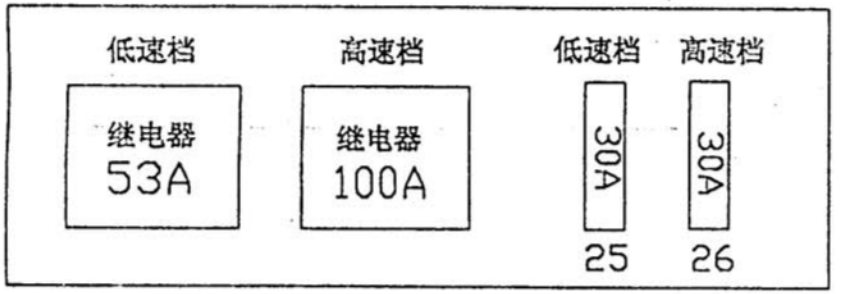
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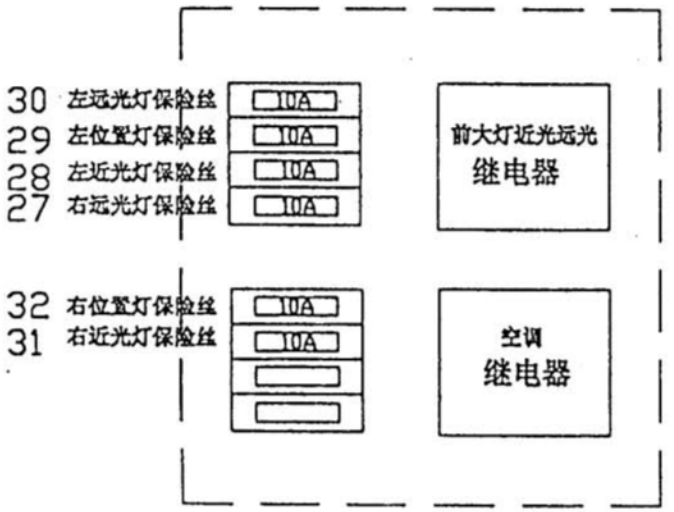
继电器、保险丝位置图

散热器风扇控制 (一)清洗液罐旁



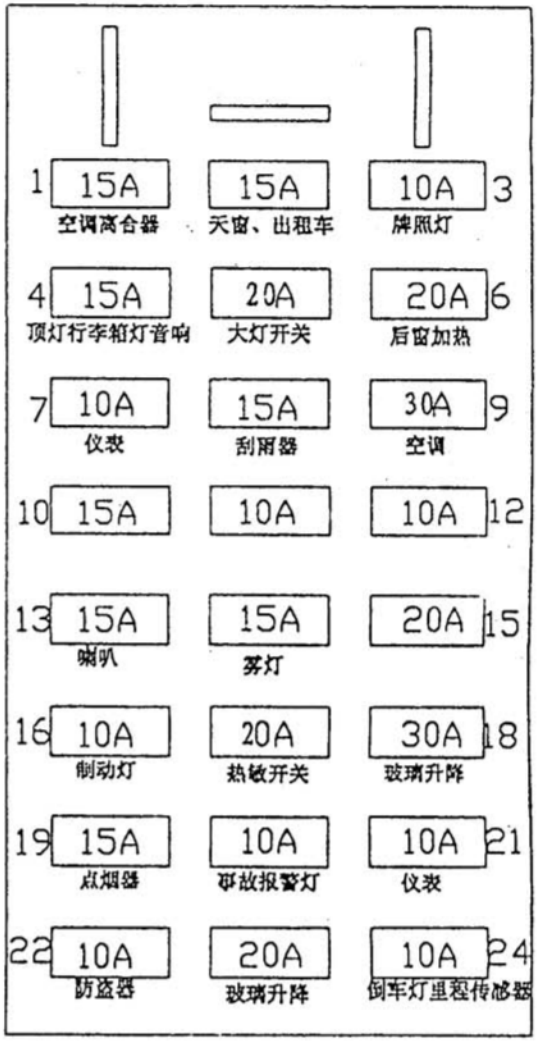
注:双风扇时高速用 50A 保险丝

继电器盒保险丝位置 (二)前舱右边



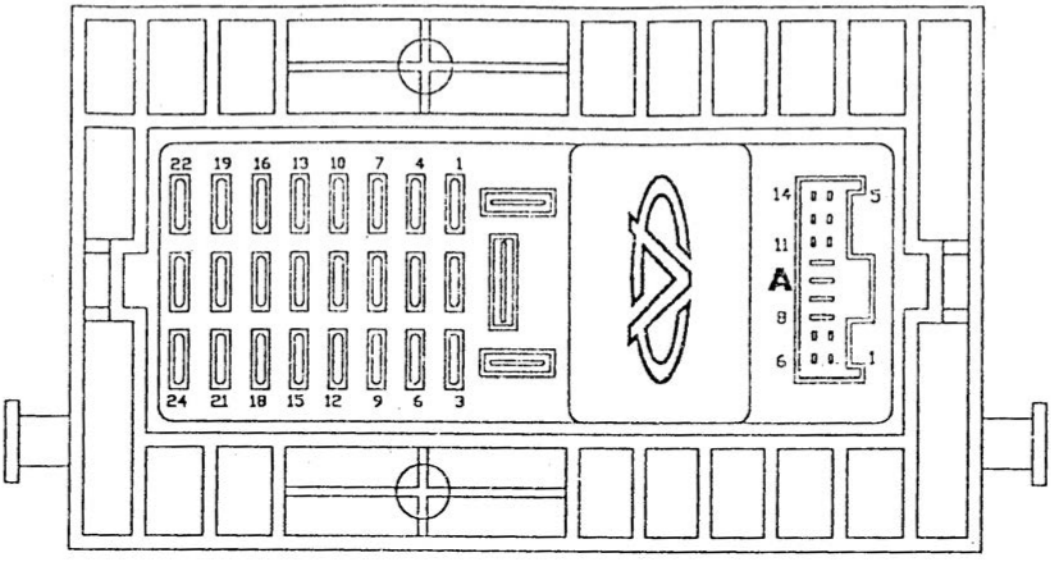
中央电器盒保险丝位置

(室内方向盘下)

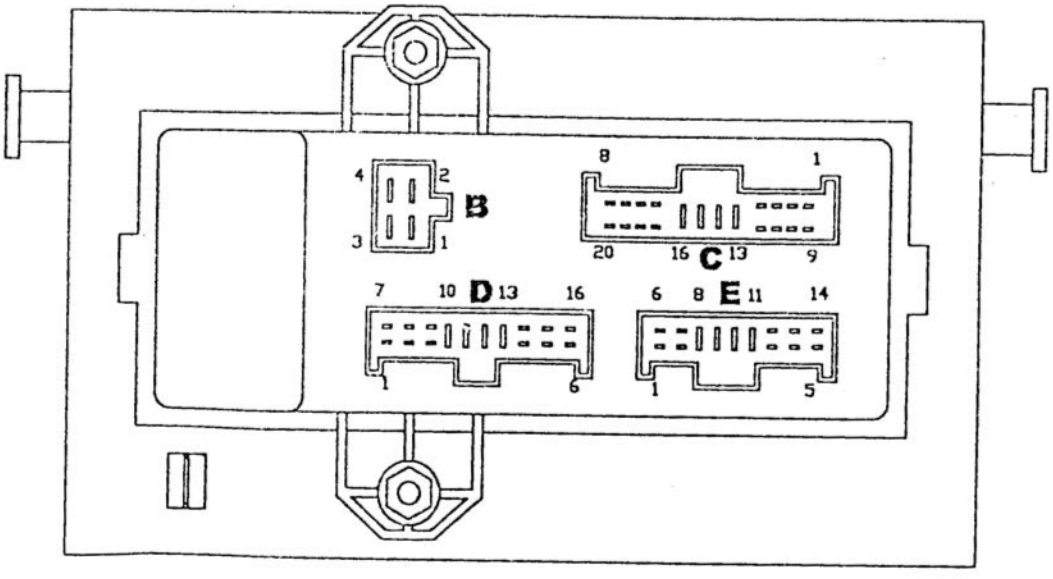


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Central Electrical Box Connector Position



(FRONT SIDE VIEW)



(BACK SIDE VIEW)

Central Electrical Box Connector, Pin and Function

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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

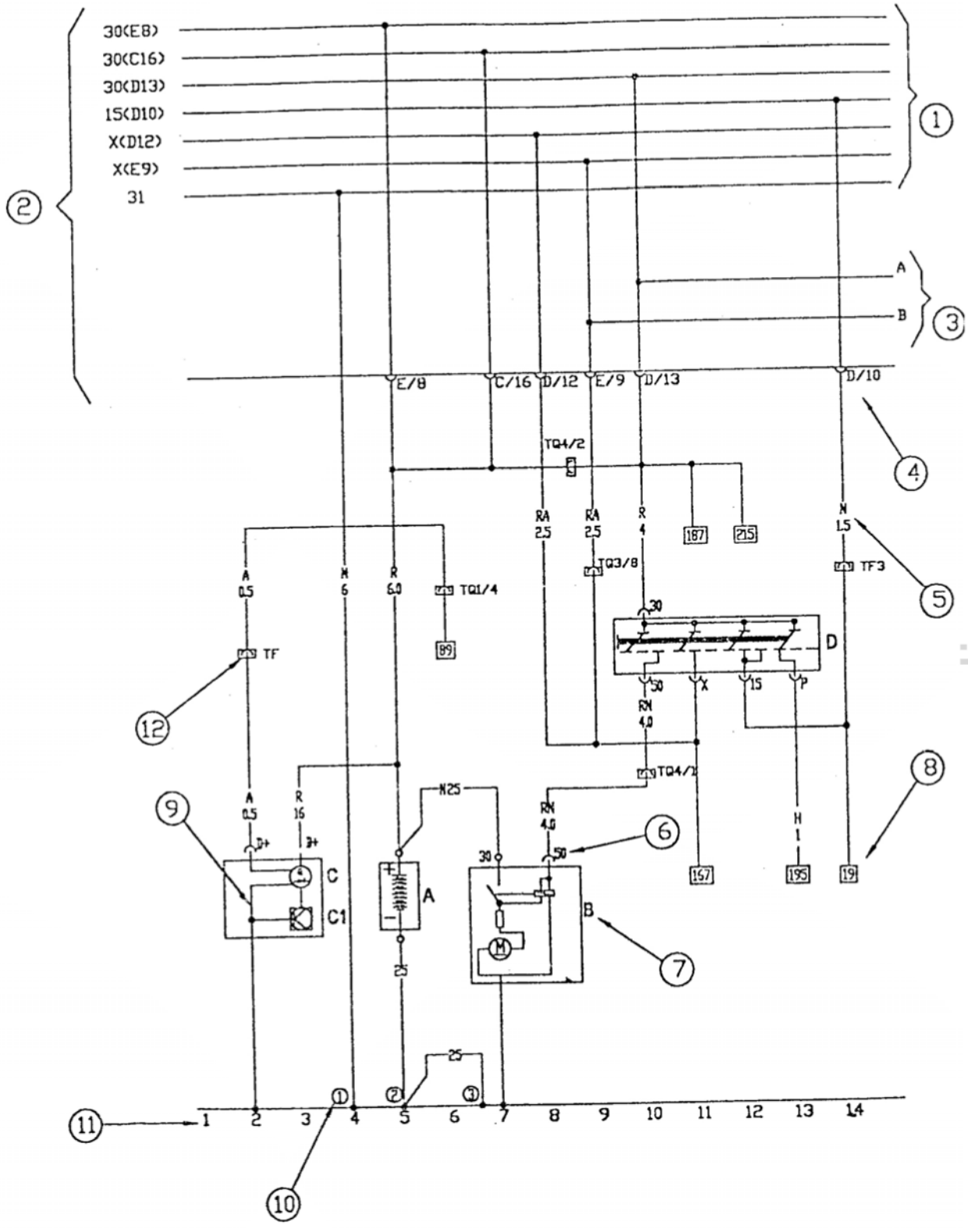
CIRCUIT__Central Electrical Box Connector, Pin and Function

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Connector	Connector Pin Function	Circuit No.
C	17. —— 18. Wiper Intermittent Relay 19. Lincense Plate Lamp 20. Mileage Gauge Sensor	— 149 210 81
D	01. —— 02. Cigar Lighter 03. Turn Light Switch, Headlight Adjustment Switch 04. —— 05. Combination Instrument Positive (+15) 06. Sunroof, Cab Freight Calculator (+30) 07. Ground 08. —— 09. Rear View Mirror、Lifter Module、 Position Select Box (+15) 10. Ignition Switch (+15) 11. Central Locking Controller, Glass Lifter Module (+30) 12. Ignition Switch, Wiper Switch (+15) 13. Central Electrical Box Power Positive (+30) 14. —— 15. —— 16. ——	 — 129 175 — 116 — 53 — 272 14 260 8 10 — — 248
E	01. —— 02. —— 03. —— 04. A/C Compressor Magnetic Clutch 05. —— 06. —— 07. —— 08. Central Electrical Power Positive (+30) 09. Ignition Switch (+15) 10. Lamp Switch 11. —— 12. Horn Relay 13. —— 14. ——	— — — 137 — — — 5 9 207 — 139 — —

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CIRCUIT MANUAL EXPLANATION



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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.

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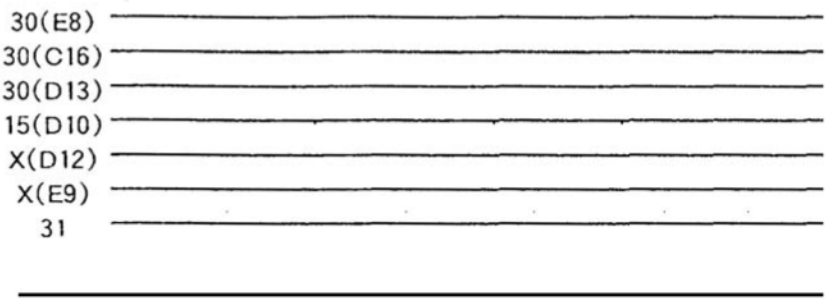
CONTENT

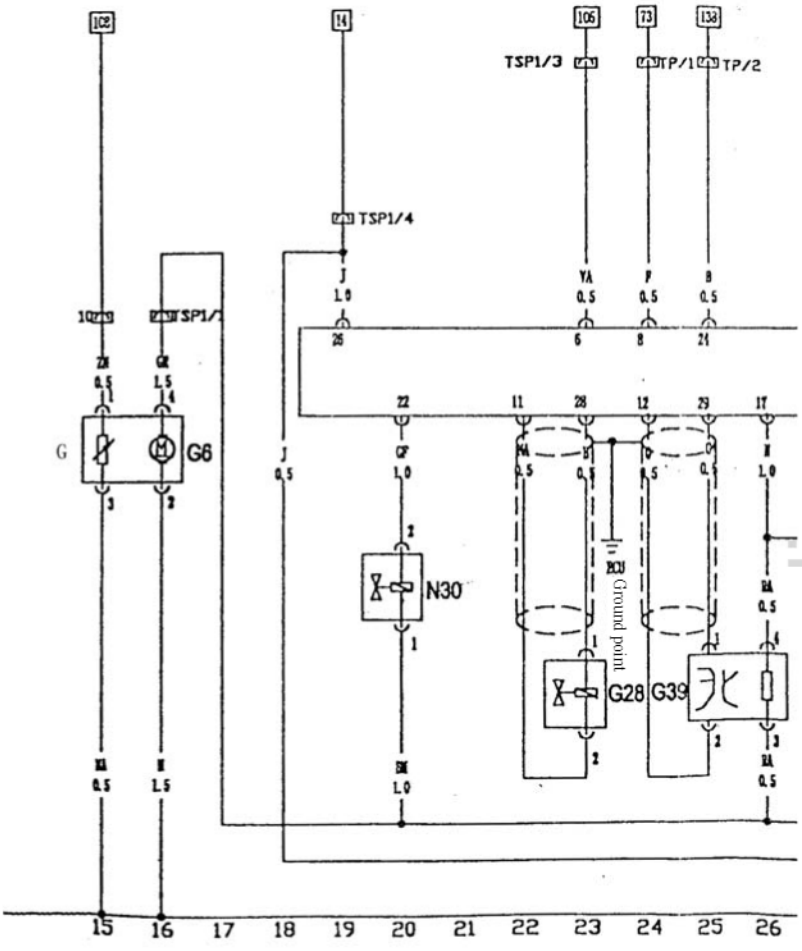
——Battery, Alternator, Starter Motor, Ignition Switch ····· 01
——SPI EI System (MARELLI)····· 02
——MPI EI(Electronic Injection) (MARELLI) ····· 02
——A/C Unit, Control Head, Cooling System ····· 03
——A/C Switch, Interior Circulate Solenoid, High & Low Pressure Switch ····· 04
——Oil Pressure Switch, Coolant 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

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SPI Electronic Injection (Marelli)

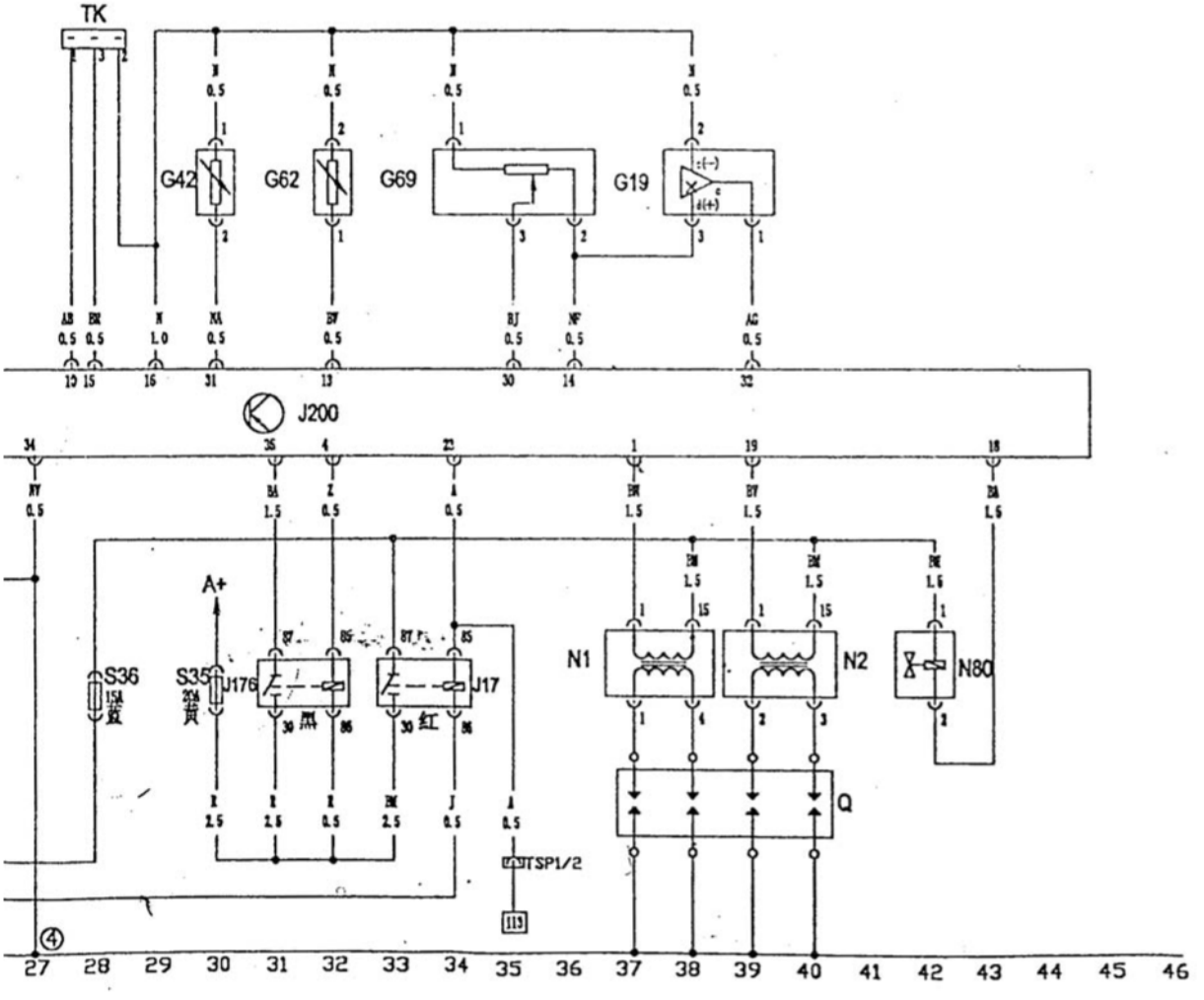
B=White
N=Black
R=Red
M=Brown
V=Green
A=Blue
H=Grey
Z=Purple
G=Yellow
J=Orange
F=Pink





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

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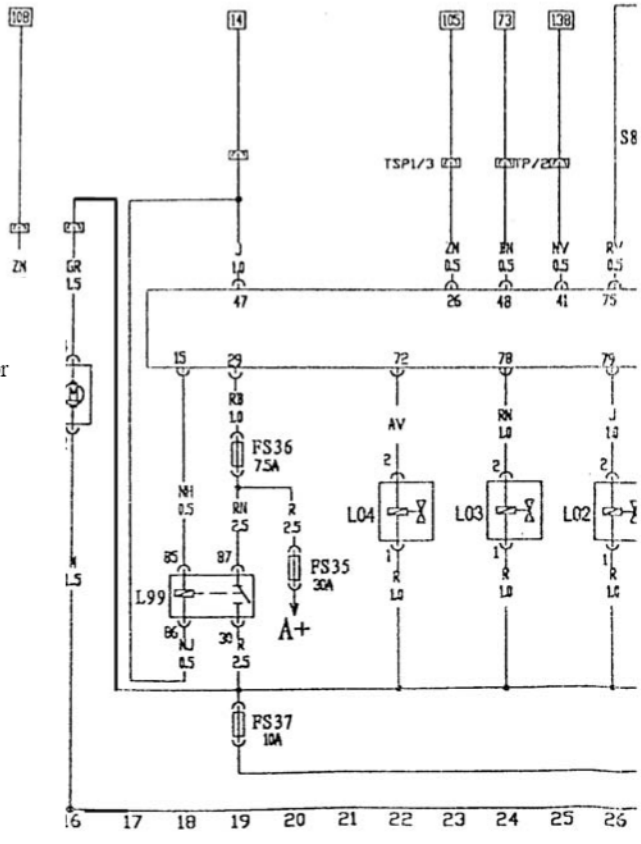


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MPI Electronic Injection (Marelli)

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

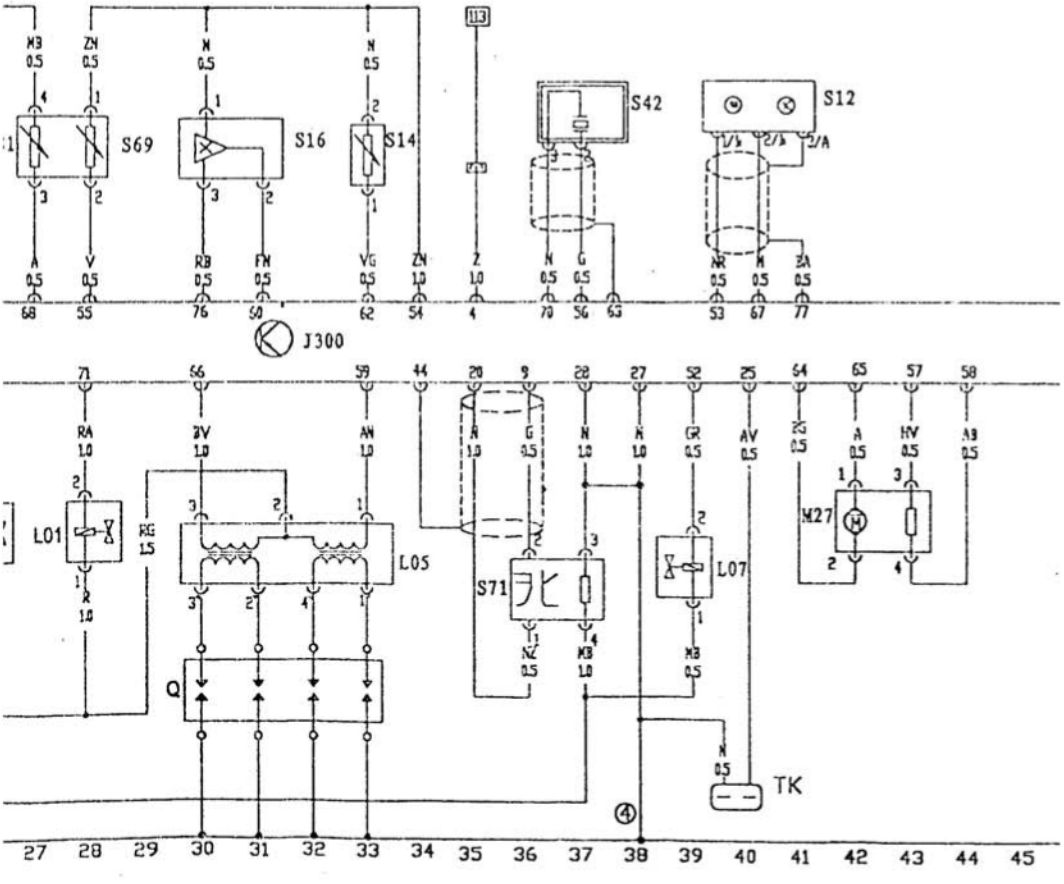
B=White
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M=Brown
V=Green
A=Blue
H=Grey
Z=Purple
G=Yellow
J=Orange
F=Pink



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

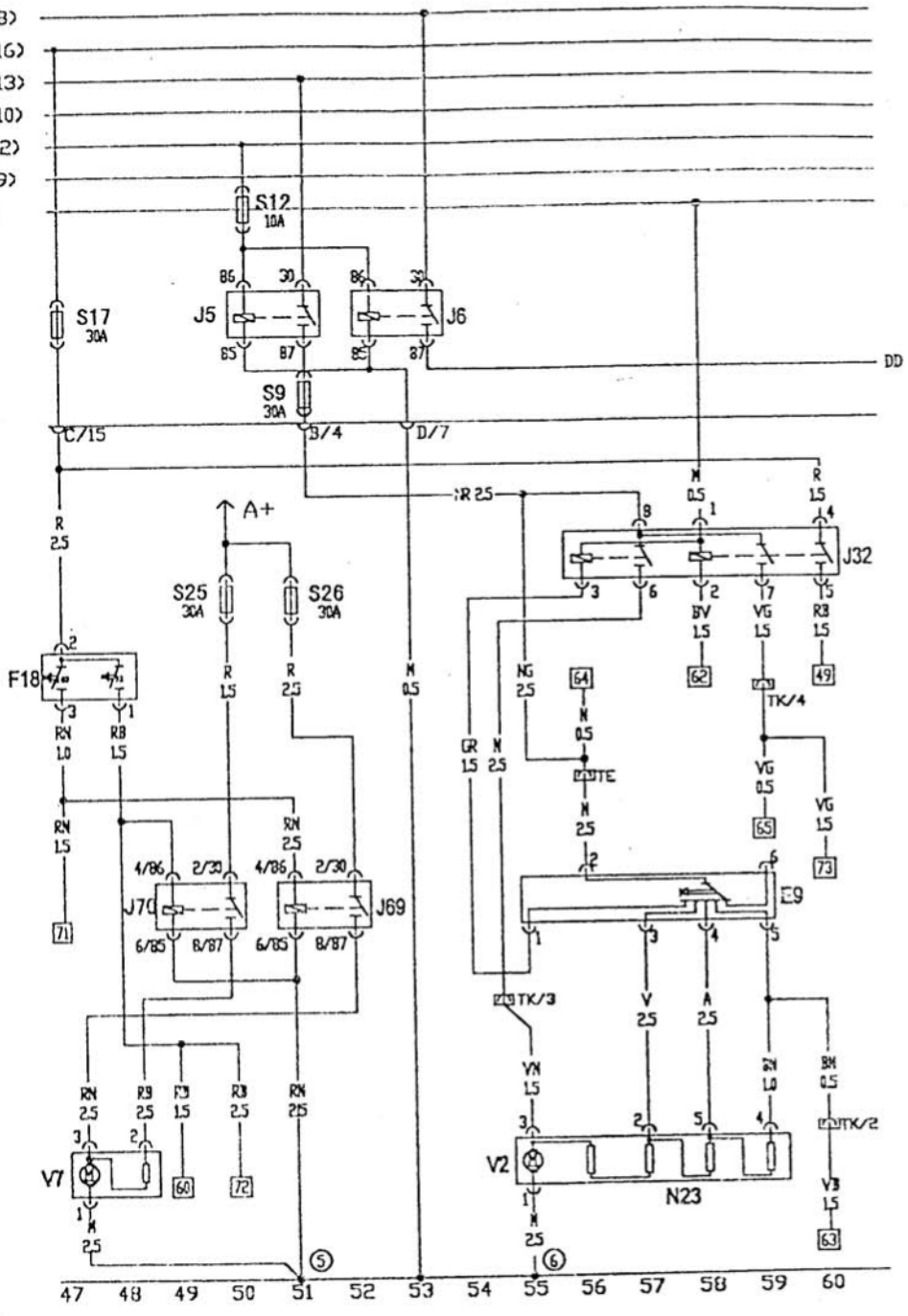
Note: ECU CONNECTOR 1-(1-52 PIN)
ECU CONNECTOR 2-(53-80 PIN)

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A/C Unit, Control Head, Cooling System



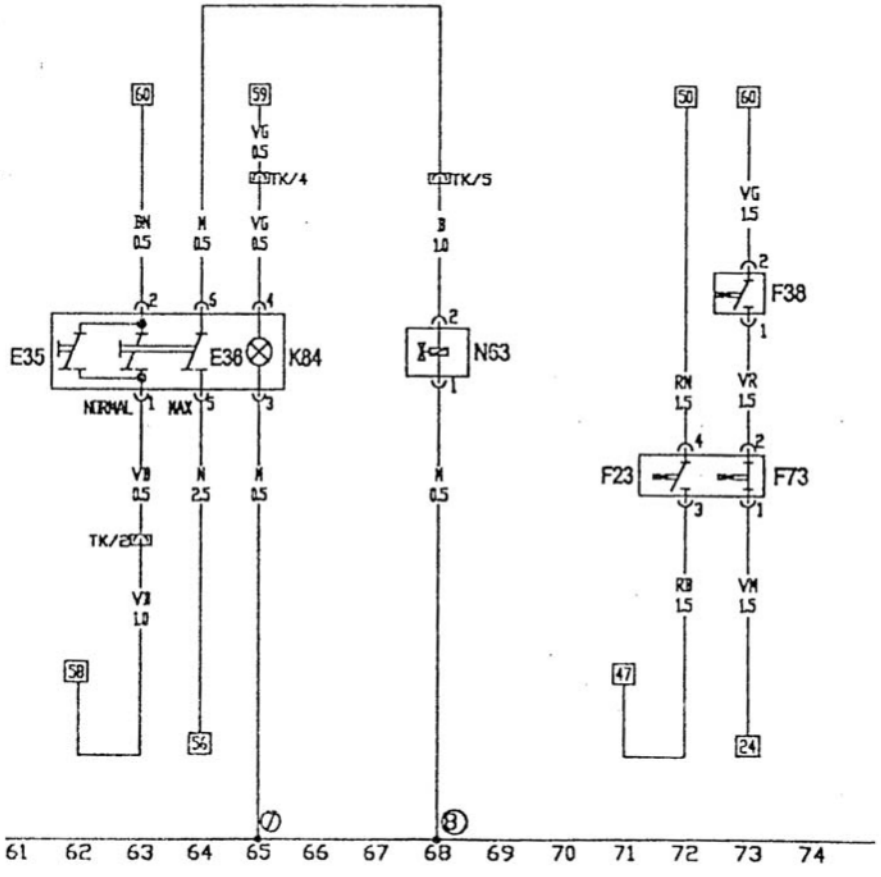
B=White
N=Black
R=Red
M=Brown
V=Green
A=Blue
H=Grey
Z=Purple
G=Yellow

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

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

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



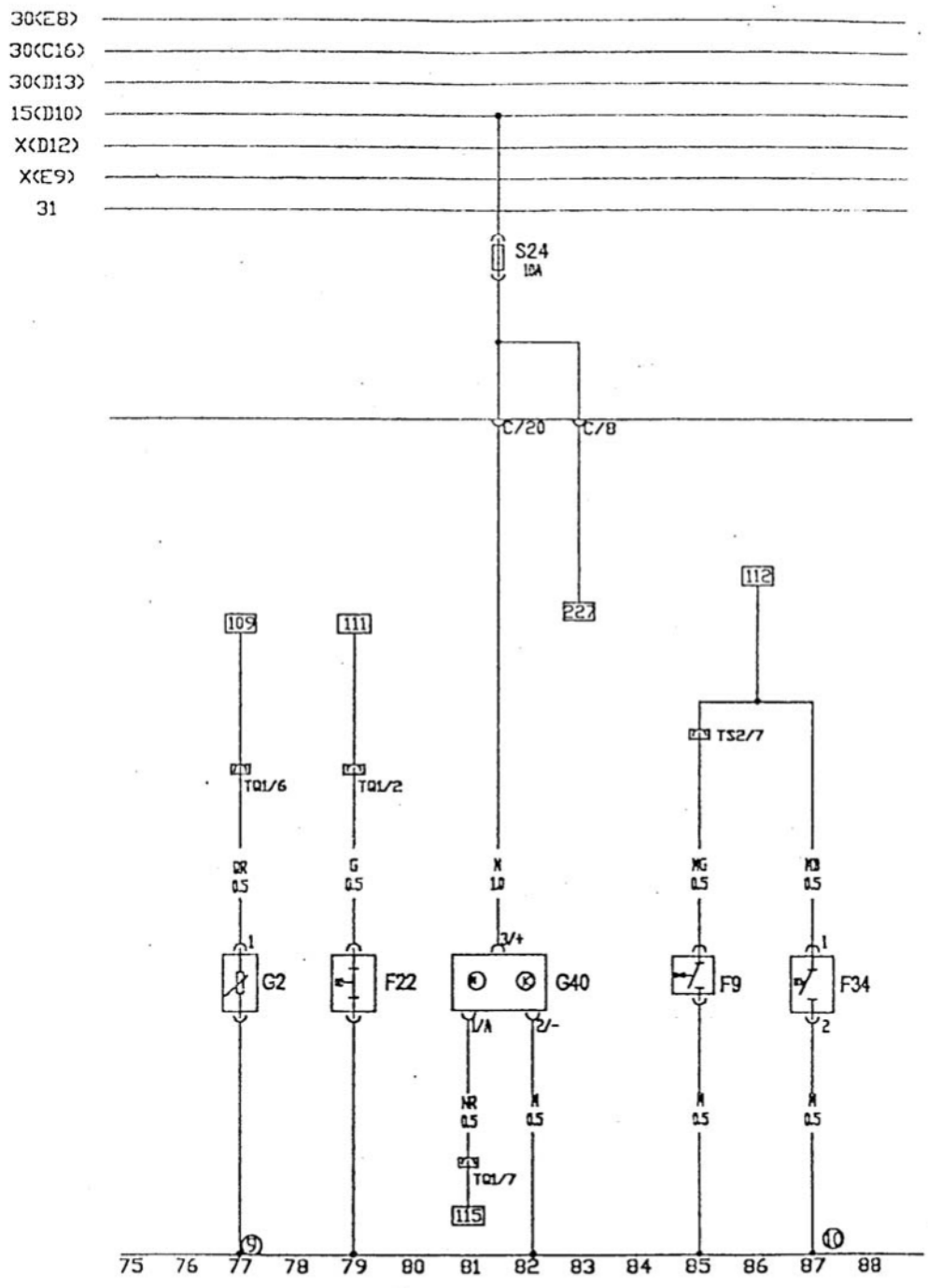
B=White
N=Black
R=Red
M=Brown
V=Green
A=Blue
H=Grey
Z=Purple
G=Yellow

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

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



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

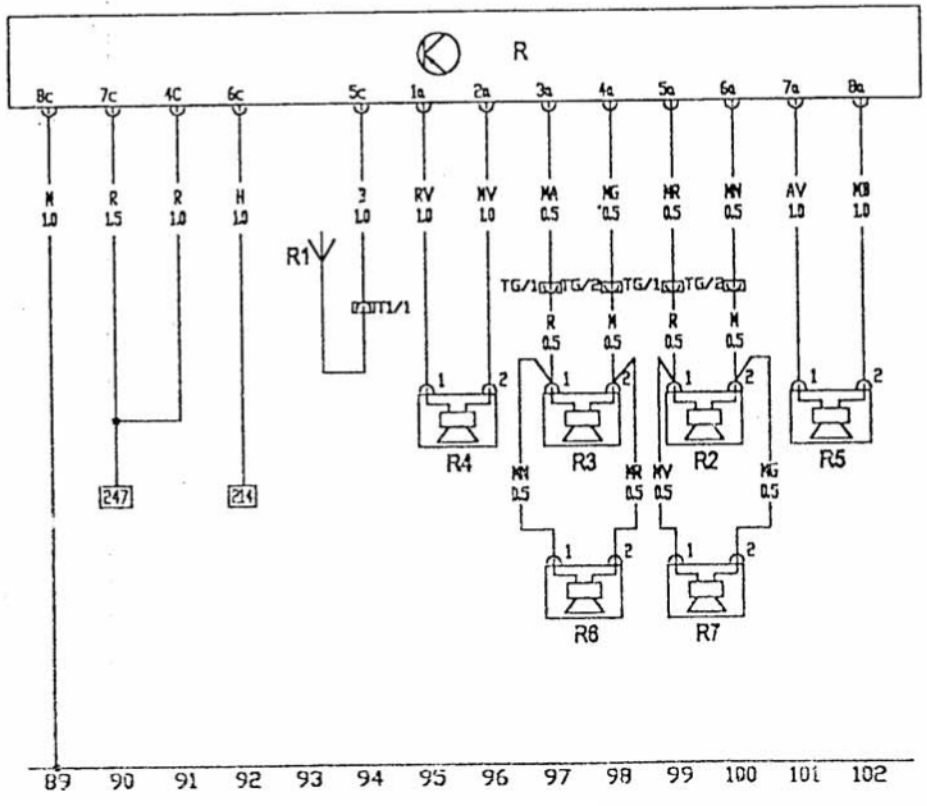
G2 Coolant temperature sensor
F22 Oil pressure switch (low pressure)
F9 Manual brake indicator switch
F34 Brake fluid level warning switch
G40 odometer sensor

⑨ ground, on engine cylinder
⑩ ground connection, in headlight wiring harness
TQ1 10 holes connector
TS2 10 holes match connector

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RADIO AND 6 SPEAKERS

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



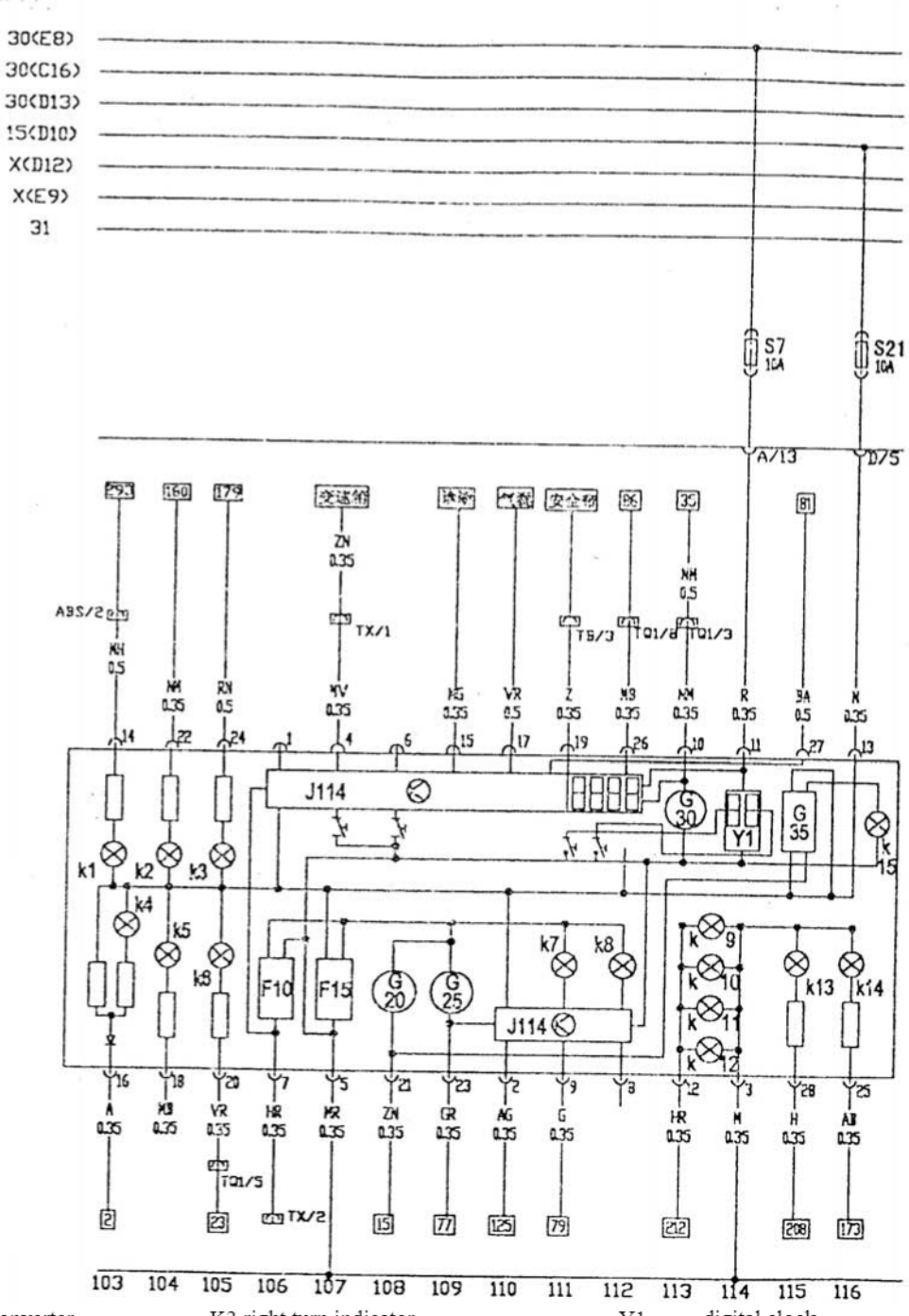
B=WHITE
N=BLACK
R=RED
M=BROWN
V=GREEN
A=BLUE
H=GREY
Z=PURPLE
G=YELLO

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

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INSTRUMENT PANEL AND MFA

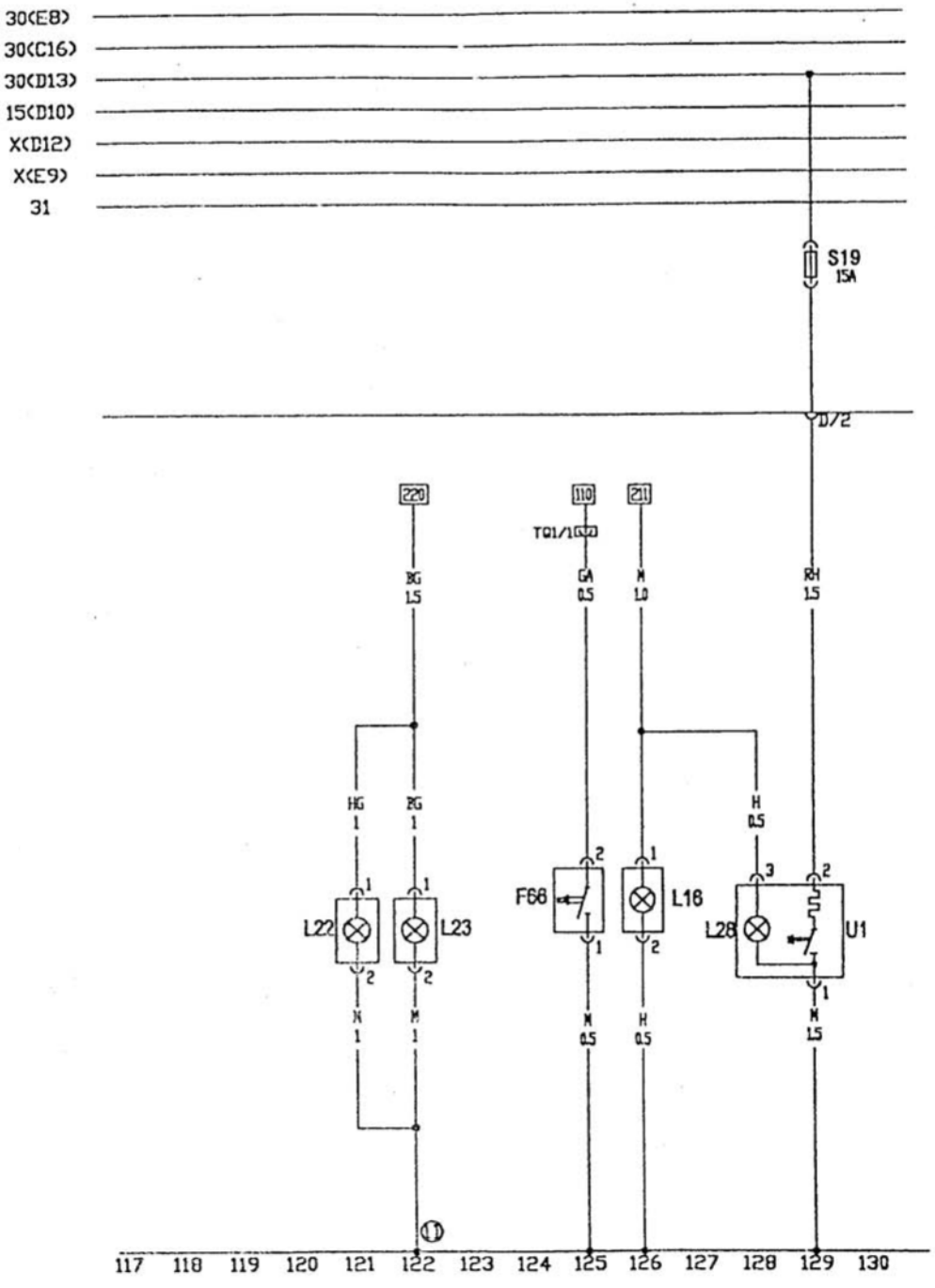


B=WHITE
N=BLACK
R=RED
M=BROWN
V=GREEN
A=BLUE
H=GREY
Z=PURPLE
G=YELLOW

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

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FRONT FOG LIGHT, CIGAR LIGHTER, A/C PANEL INDICATOR



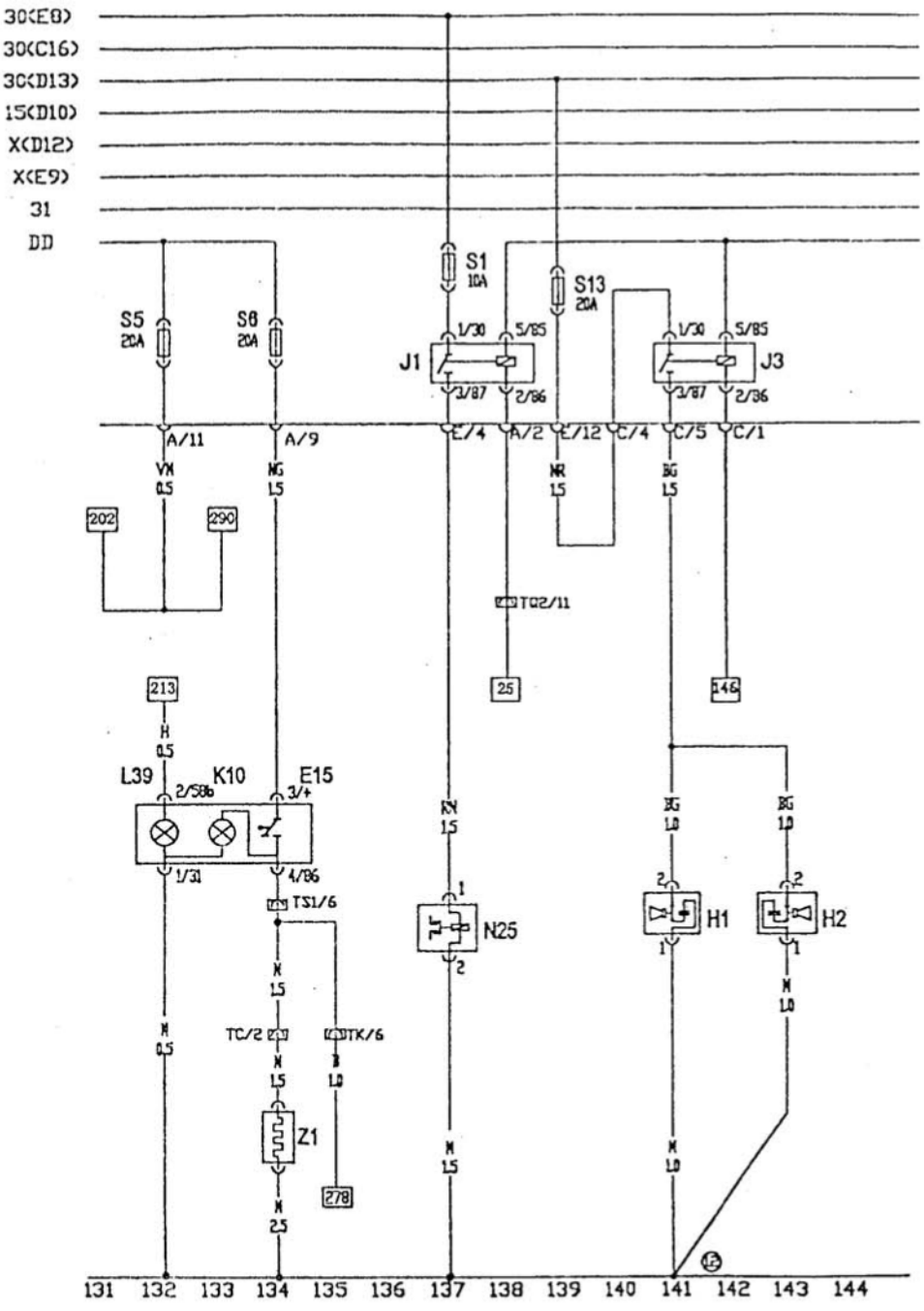
B=WHITE
N=BLACK
R=RED
M=BROWN
V=GREEN
A=BLUE
H=GREY
Z=PURPLE
G=YELLOW

L16 A/C Control Panel Indicator
L22 Left Front Fog Light
L23 Right Front Fog Light
F66 Coolant Level Switch
L28 Cigar Lighter Illumination Light
U1 Cigar Lighter

⑪ Ground, In headlight wiring harness

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



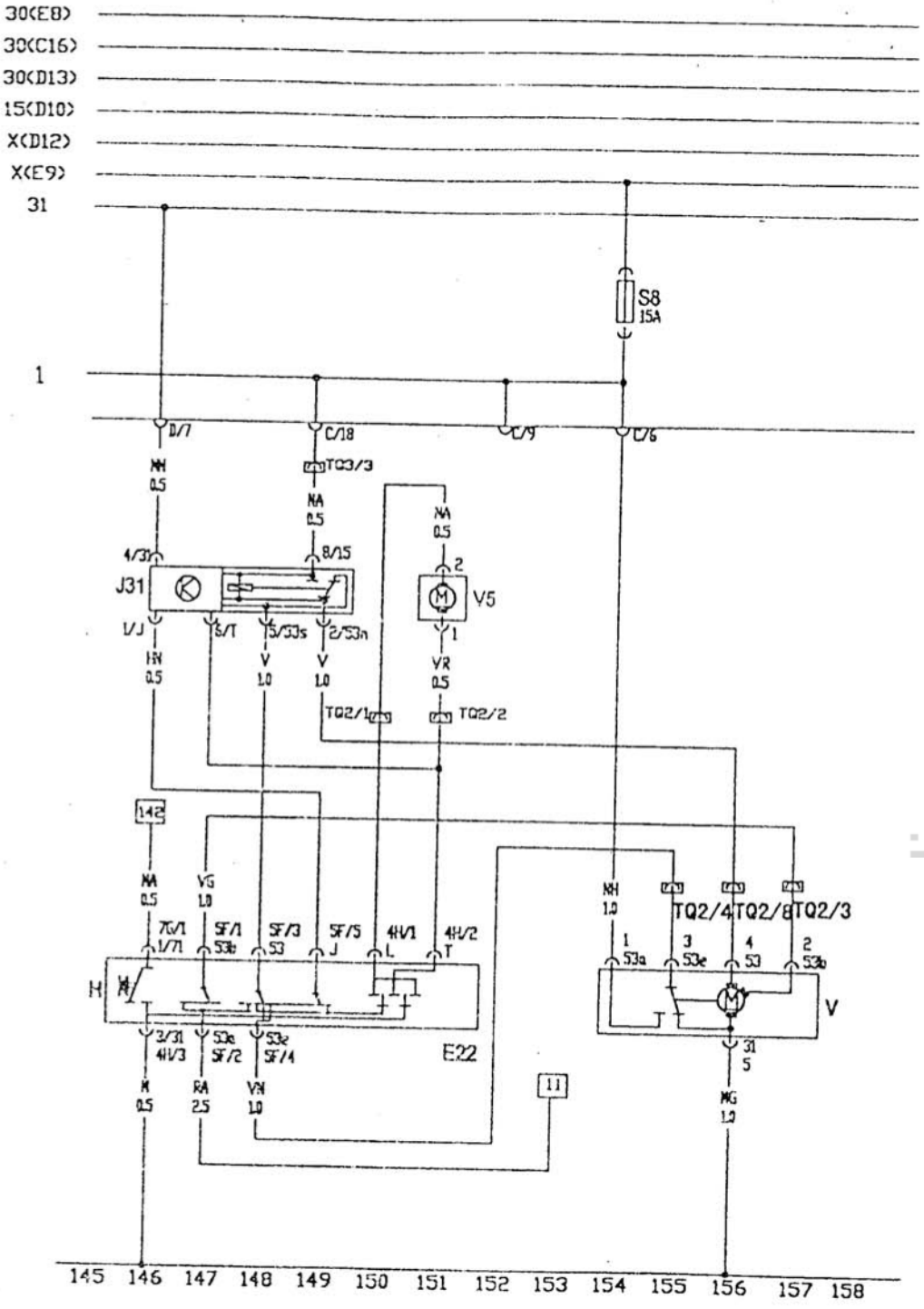
B=WHITE
N=BLACK
R=RED
M=BROWN
V=GREEN
A=BLUE
H=GREY
Z=PURPLE
G=YELLOW

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

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WIPER, HORN BUTTON, WASHER



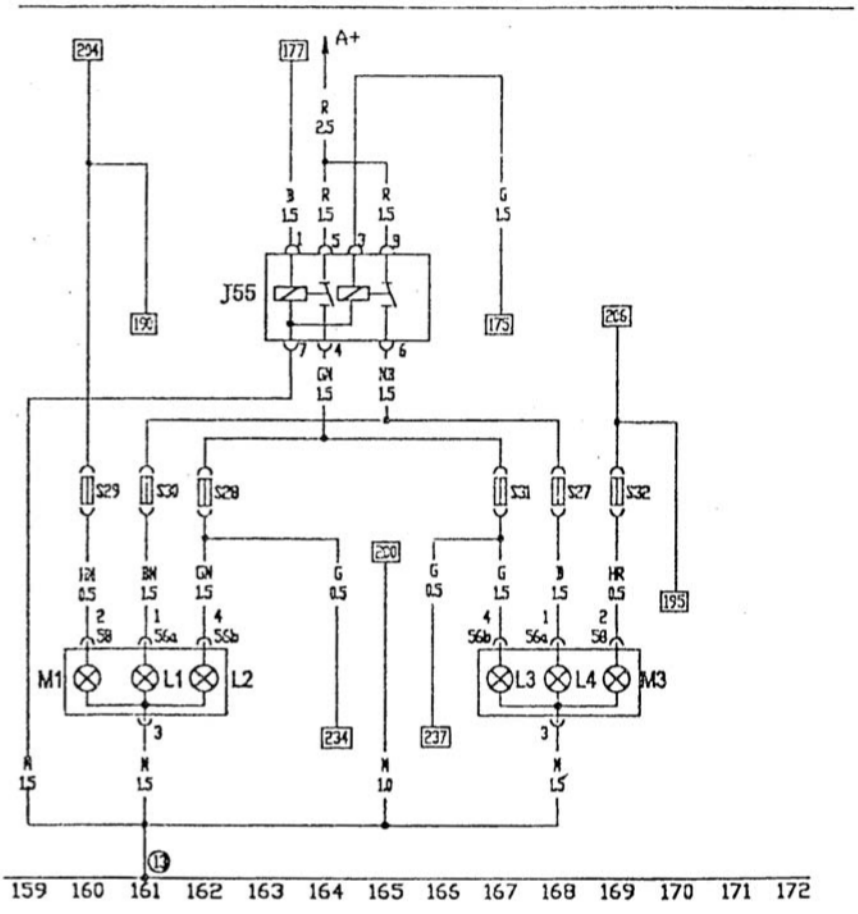
B=WHITE
N=BLACK
R=RED
M=BROWN
V=GREEN
A=BLUE
H=GREY
Z=PURPLE
G=YELLOW

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

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HEADLIGHT, FRONT POSITION LIGHT, LIGHT RELAY

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



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

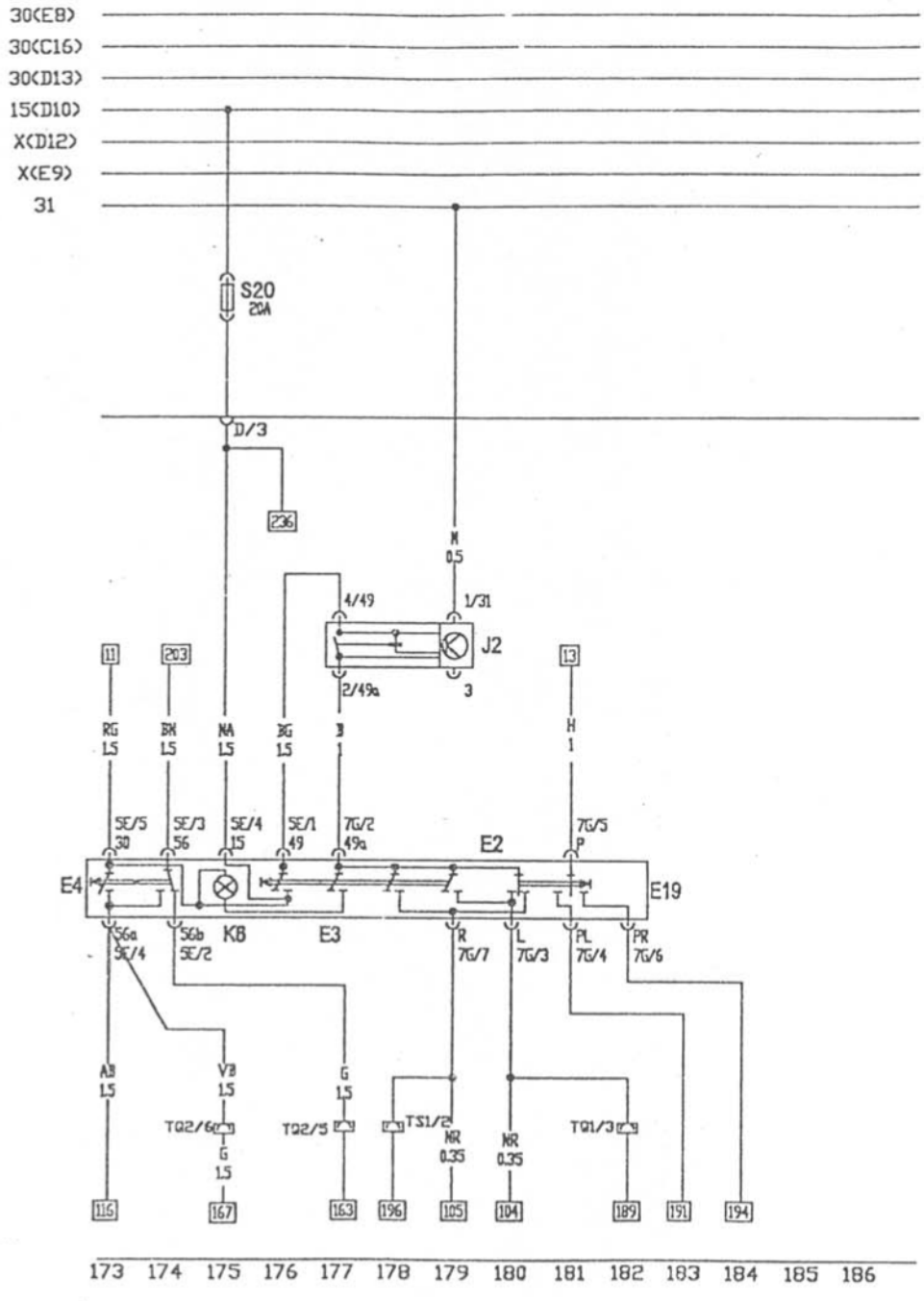
A+ Battery Positive
L1 Left High Beam Headlight
L2 Left Low Beam Headlight
L3 Right Low Beam Headlight
L4 Right High Beam Headlight
M1 Left Position Light
M3 Right Position Light

J55 Light Relay
S27 Right High Beam Headlight Fuse 10A
S28 Left Low Beam Headlight Fuse 10A
S29 Left Position Light Fuse 10A
S30 Left High Beam Headlight Fuse 10A
S31 Right Low Beam Headlight Fuse 10A
S32 Right Position Light Fuse 10A

⑬ Ground, In headlight wiring harness

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TURN LIGHT, PARKING LIGHT SWITCH, EMERGENCY WARNING RELAY

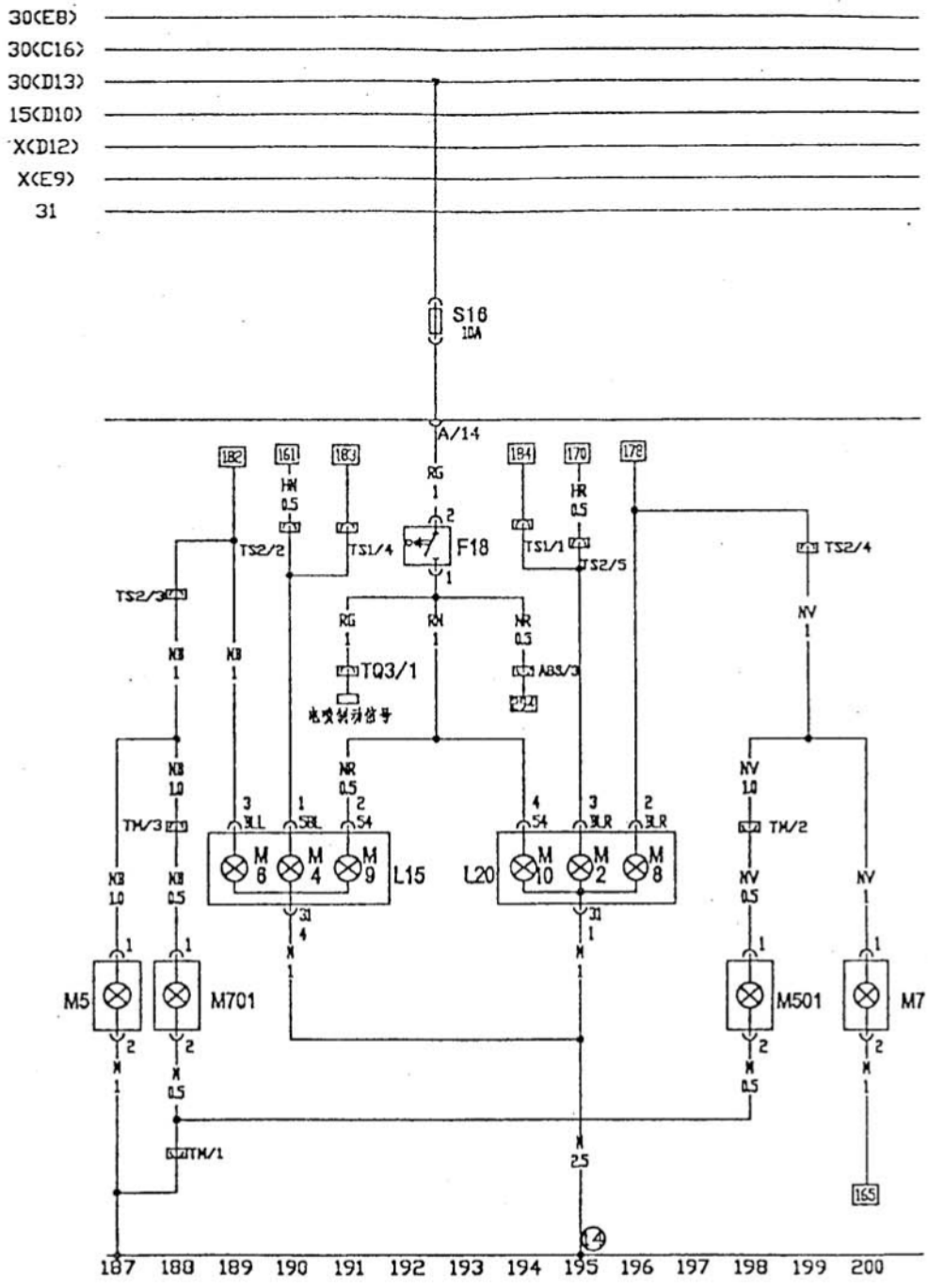


B=WHITE
N=BLACK
R=RED
M=BROWN
V=GREEN
A=BLUE
H=GREY
Z=PURPLE
G=YELLOW

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

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TAILLIGHT, SIDELIGHT, BRAKELIGHT

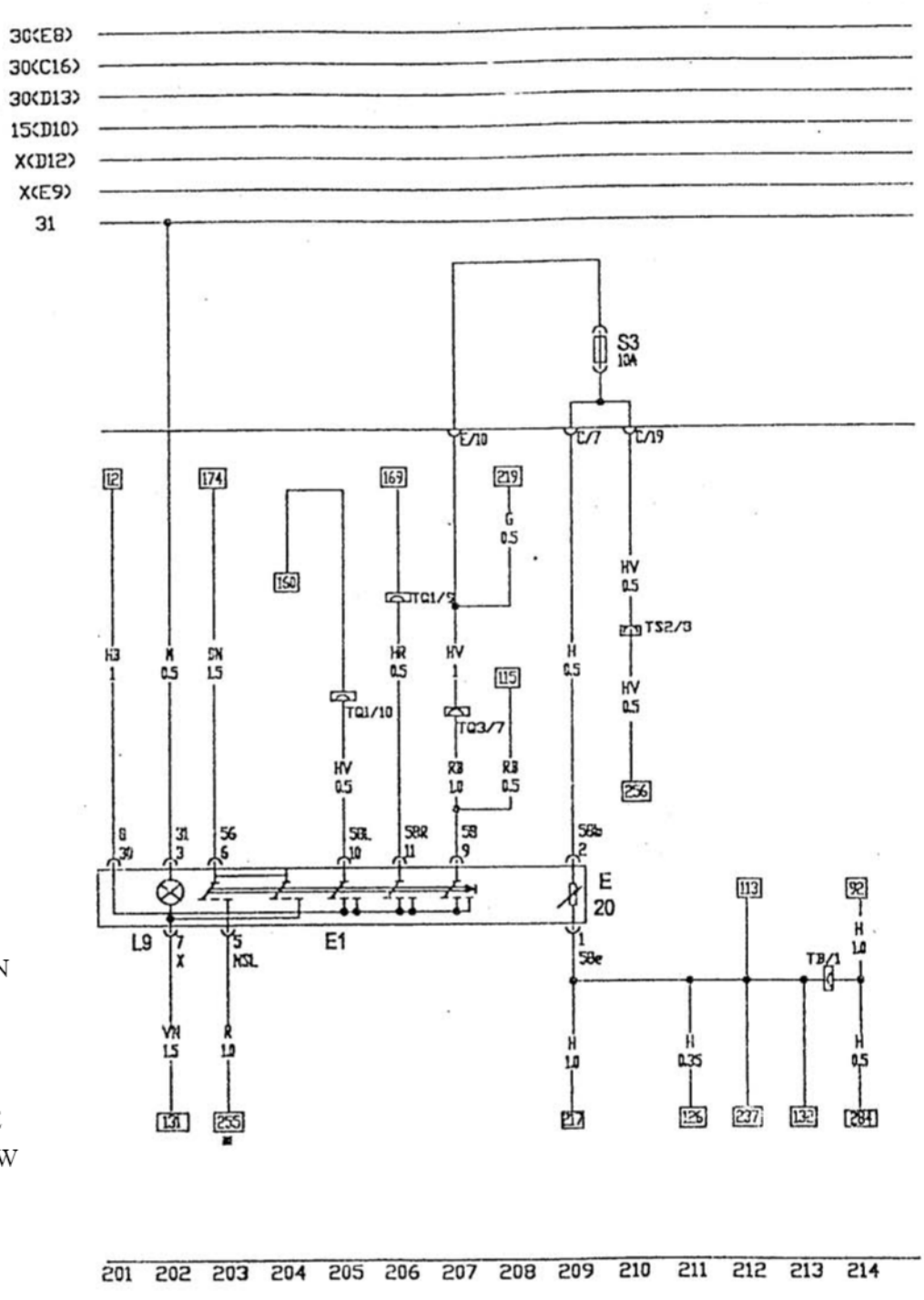


B=WHITE
N=BLACK
R=RED
M=BROWN
V=GREEN
A=BLUE
H=GREY
Z=PURPLE
G=YELLOW

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

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LIGHT SWITCH

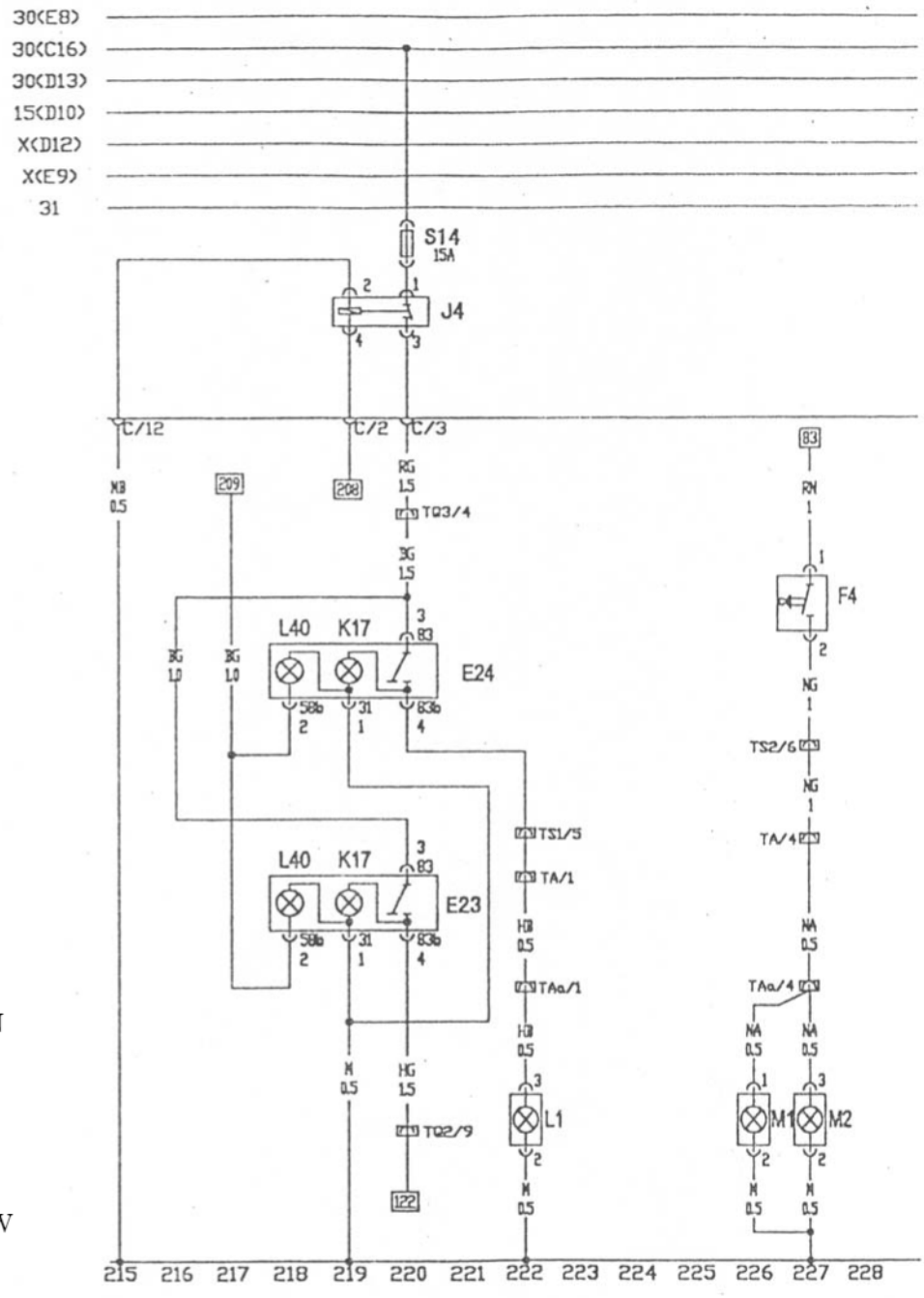


B=WHITE
N=BLACK
R=RED
M=BROWN
V=GREEN
A=BLUE
H=GREY
Z=PURPLE
G=YELLOW

E1 Light Switch
E20 Panel indicator / instruments illumination light variable resistance
L9 Panel indicator
S3 Fuse 10A

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BACKLIGHT, REAR FOG LIGHT



B=WHITE
N=BLACK
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M=BROWN
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E23 Front Fog Lamp Switch
F4 Back Light Switch
J4 Fog Lamp Relay (in electrical box)
K17 Rear Fog Lamp Indicator
L1 Rear Fog Lamp
L40 Front & Rear Fog Lamp Switch Illumination Light
M1 Left Back Light
M2 Right Back Light

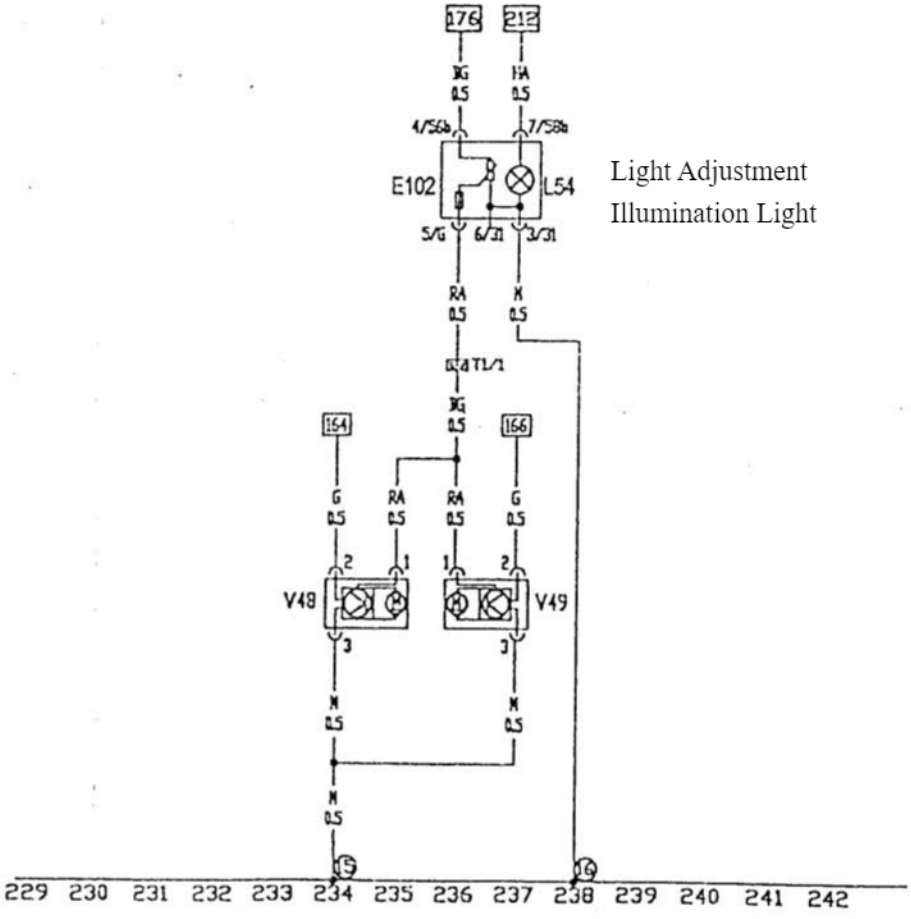
S10 Fuse 15A
S14 Fuse 10A
E24 Rear Fog Lamp Switch

⑧ In Rear Taillight Moving Parts Wiring
T3 3 Holes Connector
T3a 3 Holes Connector
T2 2 Holes Connector
T1 Single Hole Connector
T1a Single Hole Connector

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HEADLIGHT ADJUSTMENT

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

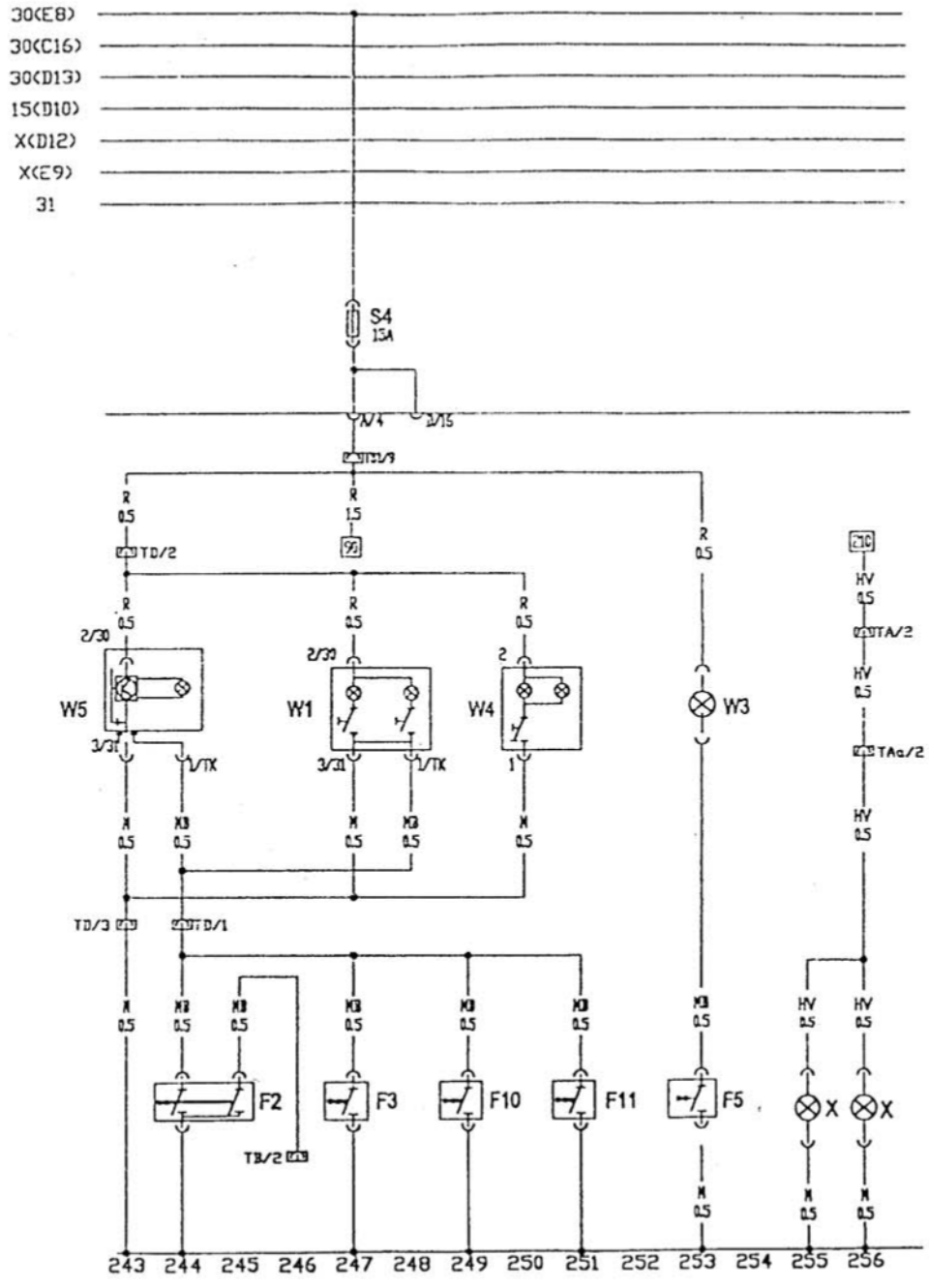


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E102 Headlight Height Adjustment Switch
L54 Light Adjustment Illumination Light
V48 Left Front Headlight Adjustment Motor
V49 Right Front Headlight Adjustment Motor
⑯ Ground, Located Beside Central Electrical Box
⑮ Ground, at headlight
T1 Single Hole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

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

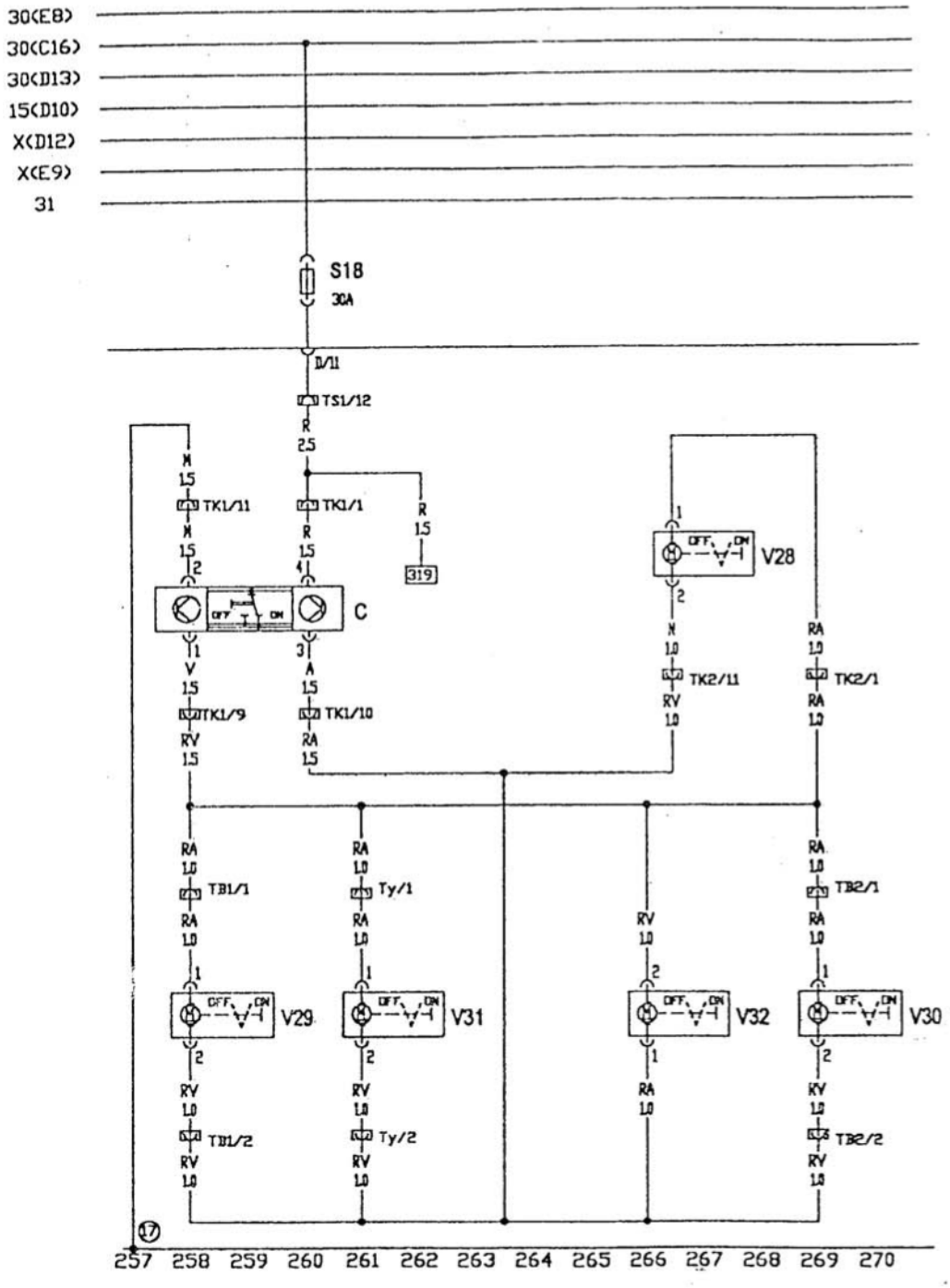


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F2	Left Front Door Touch Switch	TAa	2 Holes Connector, on left side of luggage compartment
F3	Right Front Door Touch Switch	W1	Rear Interior Ceiling Lamp
F5	Luggage Compartment Illumination Light Switch	W3	Luggage Compartment Light
F10	Left Rear Door 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		

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CENTRAL LOCKING

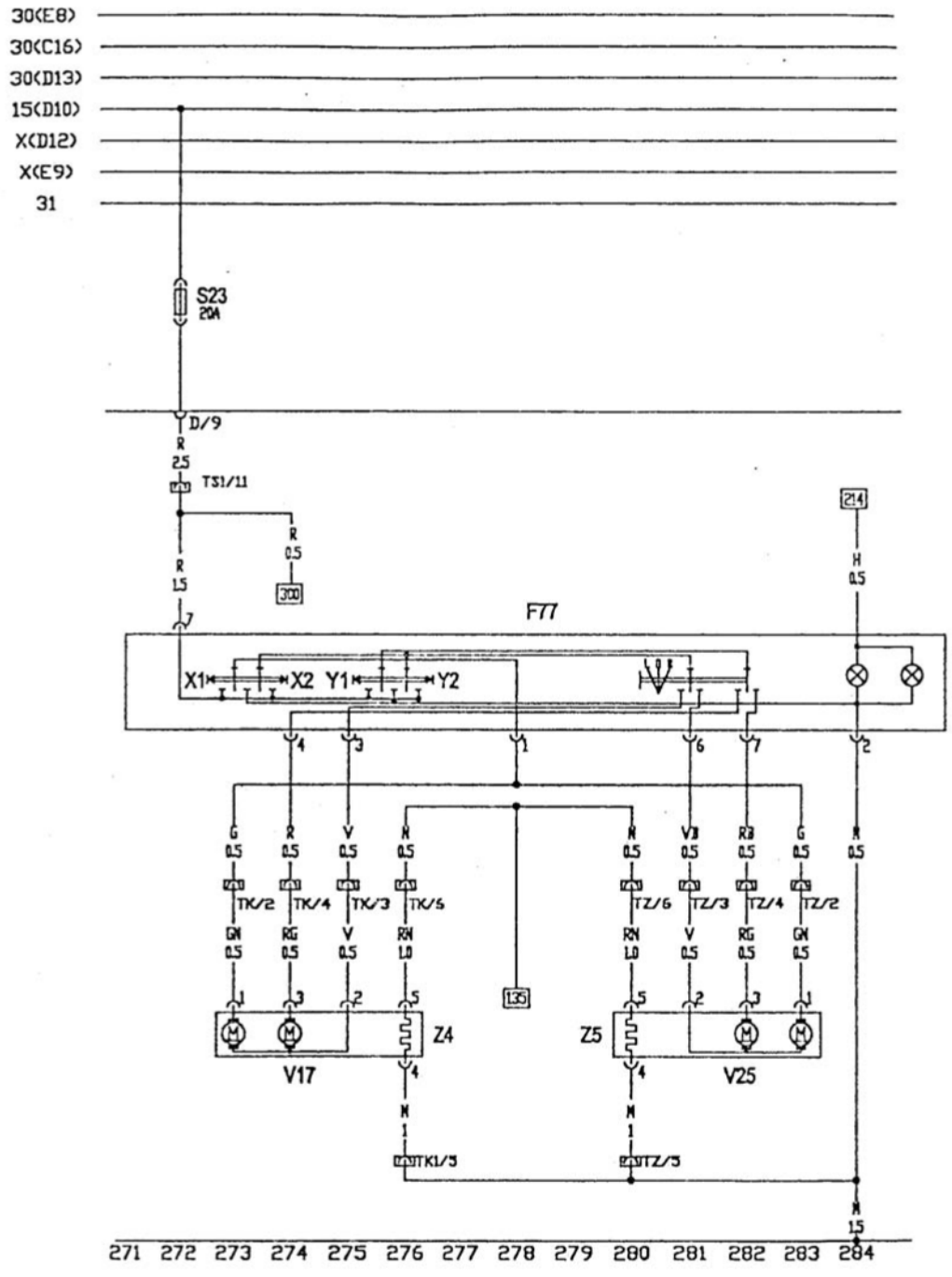


B=WHITE
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C	Central Locking Control Unit (in left front door)	TB1	4 Holes Connector (left B pillar side)
V28	Right Front Door Lock Control Motor	TB2	4 Holes Connector (right B pillar side)
V29	Left Rear Door Lock Control Motor	TK1	12 Holes Connector (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

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POWER MIRROR



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

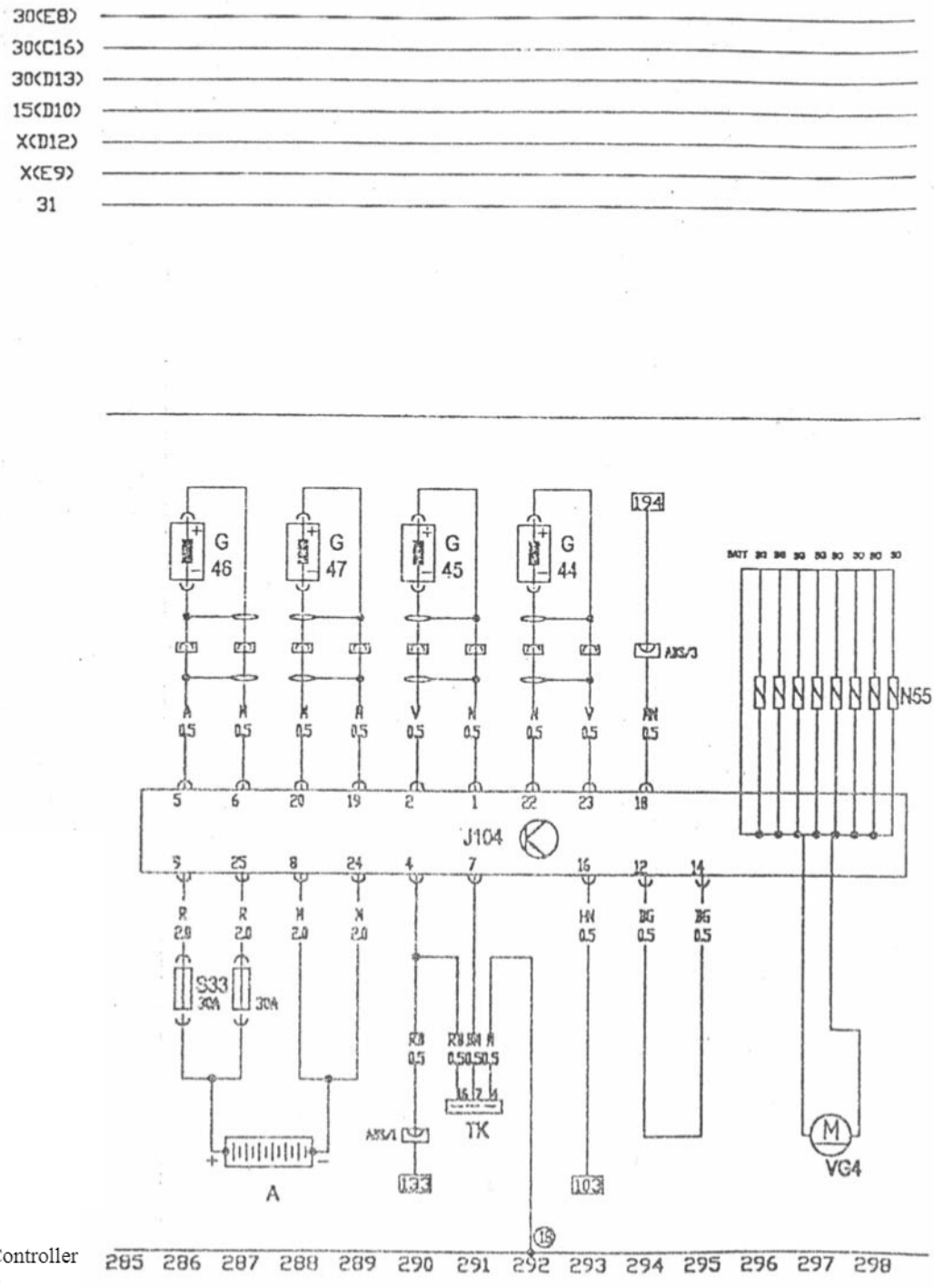
F77 Mirror Switch
X1 Left Adjust
X2 Right Adjust
Y1 Up Adjust
Y2 Down Adjust
V17 Left Mirror Control Motor
V25 Right Mirror Control Motor

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)

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ABS



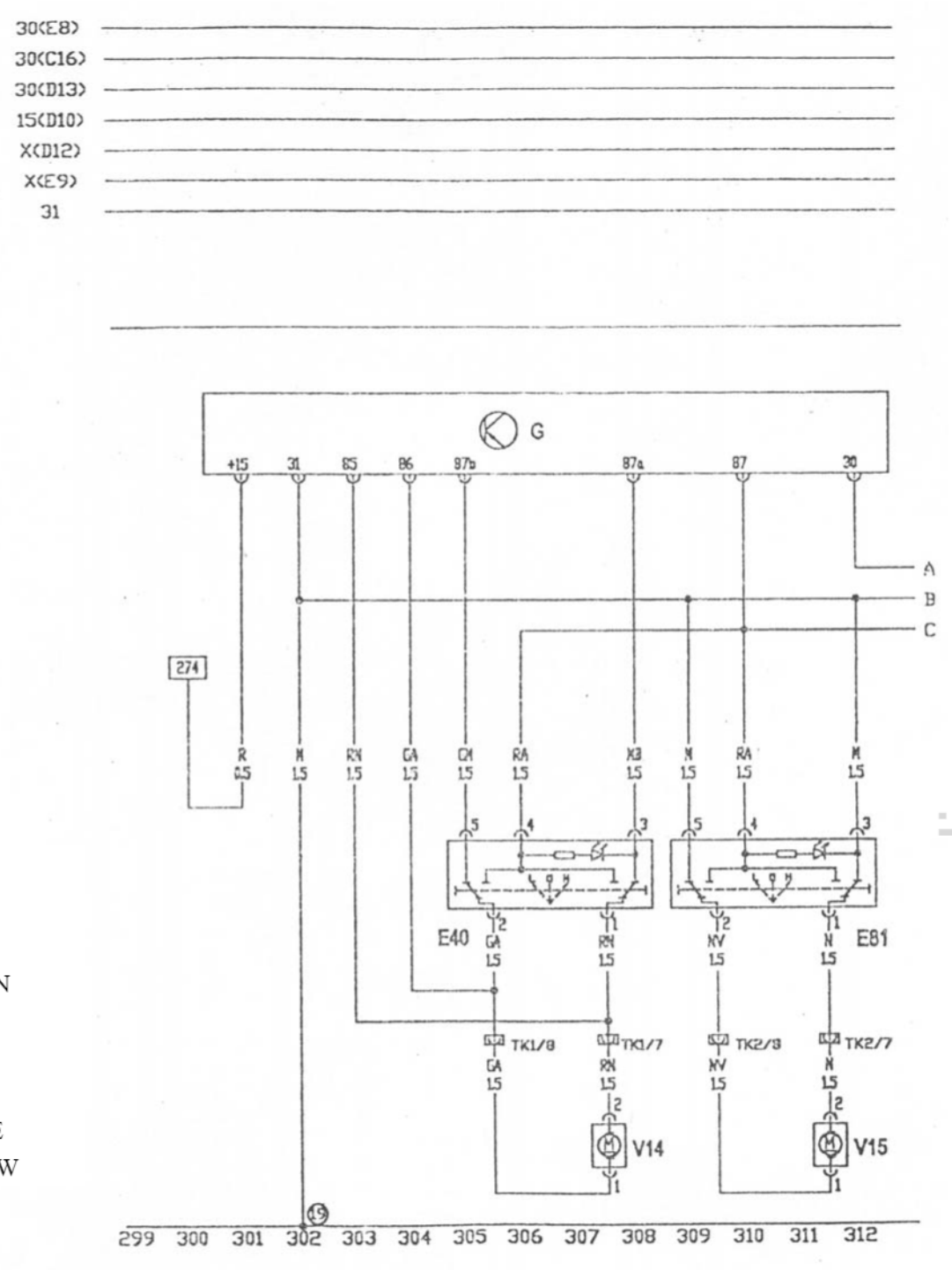
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J104 ABS Controller
A Battery
N55 ABS Solenoid
VG4 ABS Hydraulic Pump
G44 Right Rear Wheel RPM Sensor
G45 Left Front Wheel RPM Sensor
G46 Left Rear Wheel RPM Sensor
G47 Right Front Wheel RPM Sensor
S33 ABS Solenoid Valve Power Fuse
S34 ABS Hydraulic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

⑱ Ground point, at ground carrier on central electrical box

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POWER GLASS LIFTER CONTROL UNIT

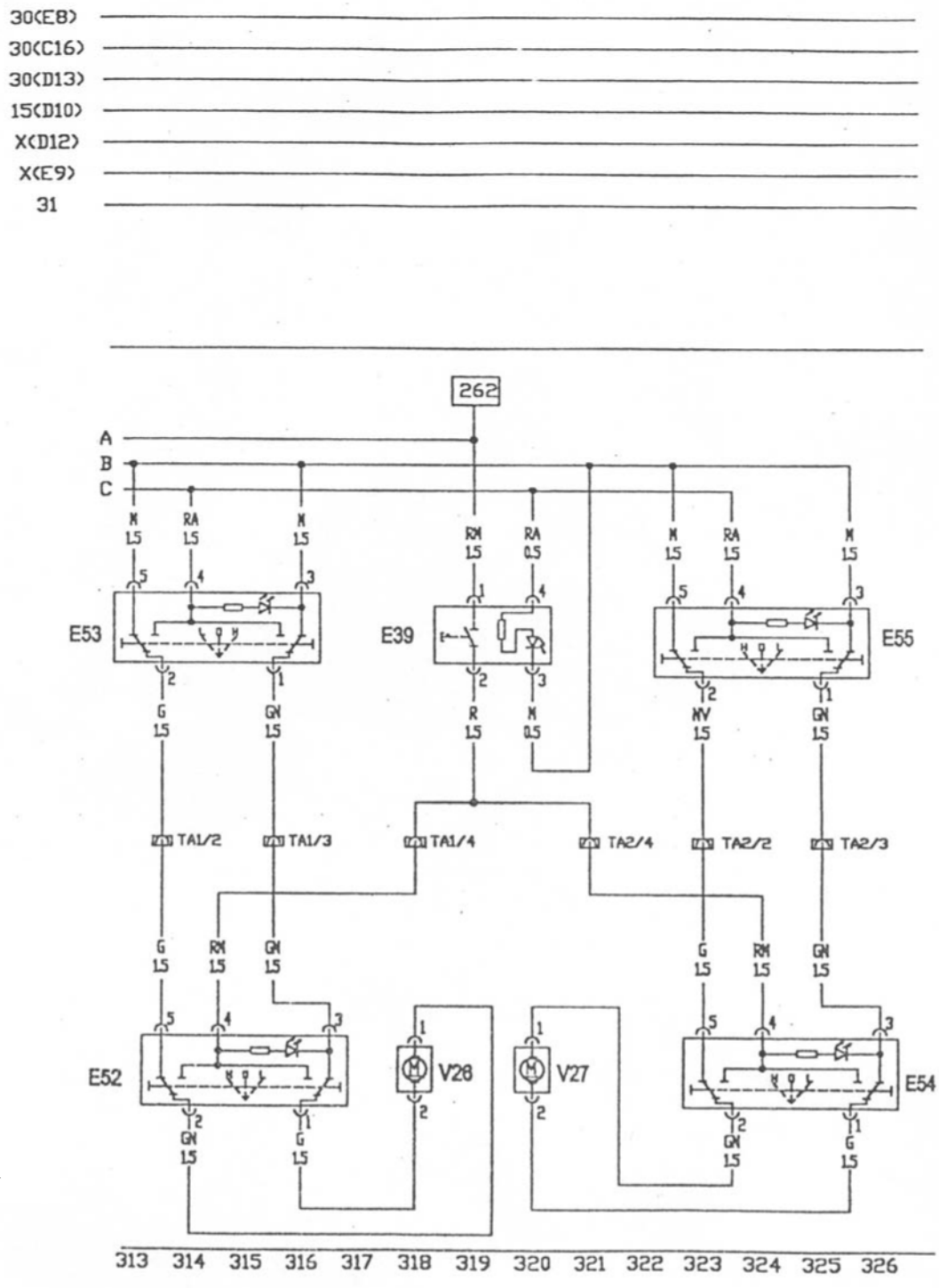


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G	Window Glass Lifter Module	⑲	Beside Central Electrical Box
E40	Left Front Window Lifter Switch	TK1	12 Holes Connector (Left B Pillar Side)
E81	Right Front Window Lifter Switch	TK2	12 Holes Connector (Right B Pillar Side)
V14	Left Front Window Lifter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

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POWER GLASS LIFTER CONTROL SWITCH



B=WHITE
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H=GREY
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G=YELLOW

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		

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