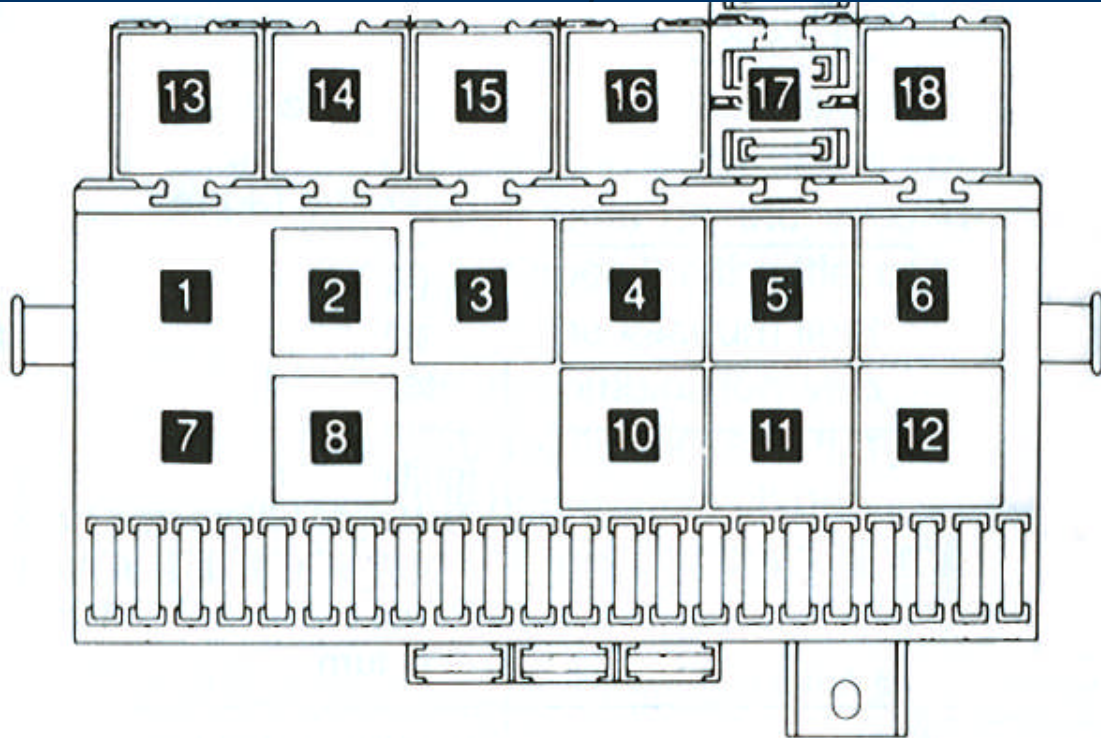


# Volkswagen Cabriolet DIY Guide

## Electrical System

This guide is a repair manual supplement. For electric system troubleshooting procedures and complete wiring diagrams, please refer to your Bentley Service Manual.

### Relays



#### 1983-1989, K-Jetronic

- 1: *open*
- 2: Fuel pump
- 3: Seat belt warning; key-in-ignition warning
- 4: Up-shift control unit (1983-1987)
- 5: Air conditioning
- 6: Horns
- 7: *open*
- 8: Load reduction
- 9: *open (up through 1986); fuse puller (1987+)*
- 10: Intermittent wipers
- 11: *open*
- 12: Turn signals; Emergency flashers
- 13: *open*
- 14: Cold-start enrichment
- 15: Fuel injection power supply (aka Lambda relay)
- 16: Hot-start pulse relay
- 17: A/C thermo-fuse
- 18: Idle stabilizer control unit
- 23: *open*

Radiator after-run control unit: Mounted to driver's side fender  
 Heated seat relays: under each seat

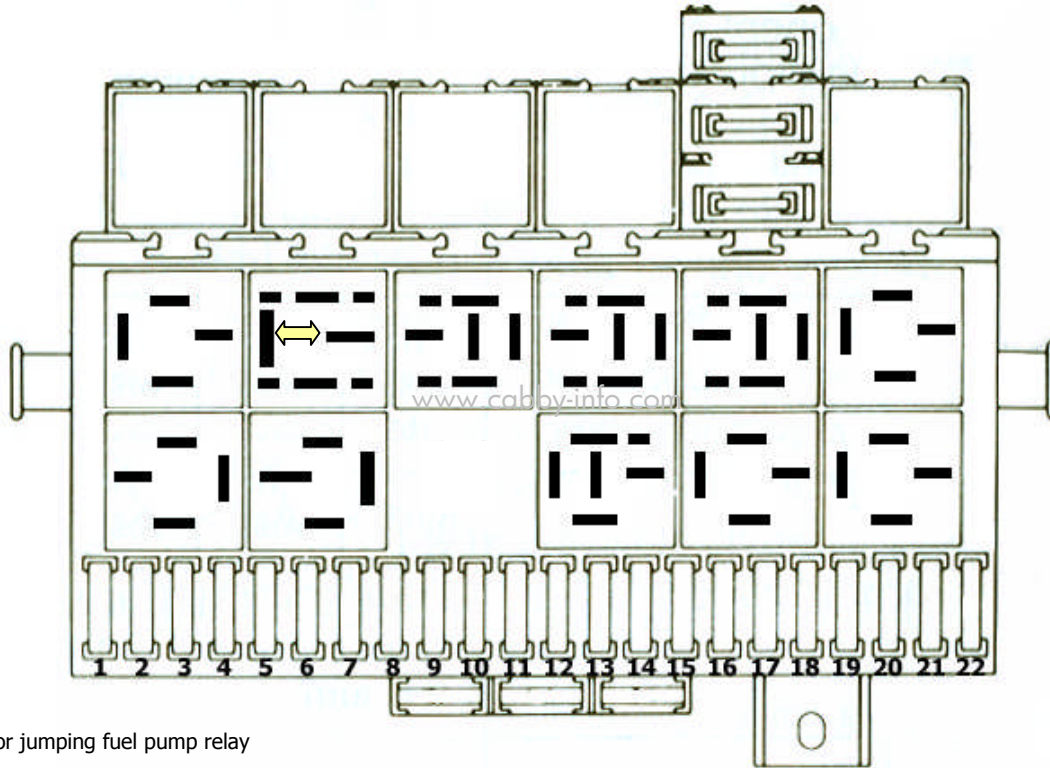
#### 1990-1993, Digifant

- 1: Digifant control unit
- 2: Fuel pump
- 3: Seat belt warning; key-in-ignition warning
- 4: *open*
- 5: Air conditioning
- 6: Horns
- 7: *open*
- 8: Load reduction
- 9: *fuse puller*
- 10: Intermittent wipers
- 11: *open*
- 12: Turn signals; Emergency flashers
- 13: *open; daytime running lights (Canada 1991+)*
- 14: Radiator fan after-run control unit\*
- 15: Automatic transmission starter interlock\*\*
- 16: Coolant low-level warning control unit
- 17: A/C thermo-fuse; Power window fuse
- 18: *open*
- 23: Power convertible top thermo-fuse

Heated seat relays: under each seat

\*If not in this location it is mounted to the driver's side fender  
 \*\*If not in this location, there are two interlock relays mounted to the back side of the kneebar

# Fuses



↔ = slots for jumping fuel pump relay

## 1983-1989

- 1: Radiator cooling fan
- 2: Brake lights; Cruise control
- 3: Cigarette lighter; Radio; Clock; Interior lights
- 4: Emergency flashers
- 5: Fuel pump
- 6: *open*
- 7: Tail lights, running lights, side-marker lights ~ left
- 8: Tail lights, running lights, side-marker lights ~ right
- 9: Hi-beam headlight ~ right; hi-beam indicator
- 10: Hi-beam headlight ~ left
- 11: Windshield wipers/washers
- 12: Heated seats (if installed)
- 13: Rear window defroster
- 14: HVAC blower fan
- 15: Back-up lights; Shift console light (A/T only)
- 16: Horns
- 17: *open*
- 18: Seat belt warning light; Horn relay; Coolant level/temp warning light; Console gauges; Cruise control (M/T)
- 19: Turn signals; E-brake warning light
- 20: License plate lights; Trunk light (1987+)
- 21: Lo-beam headlight ~ left
- 22: Lo-beam headlight ~ right

A/C thermofuse: *relay* position 17

■ =30A   ■ =20A   ■ =15A   ■ =10A

## 1990-1993

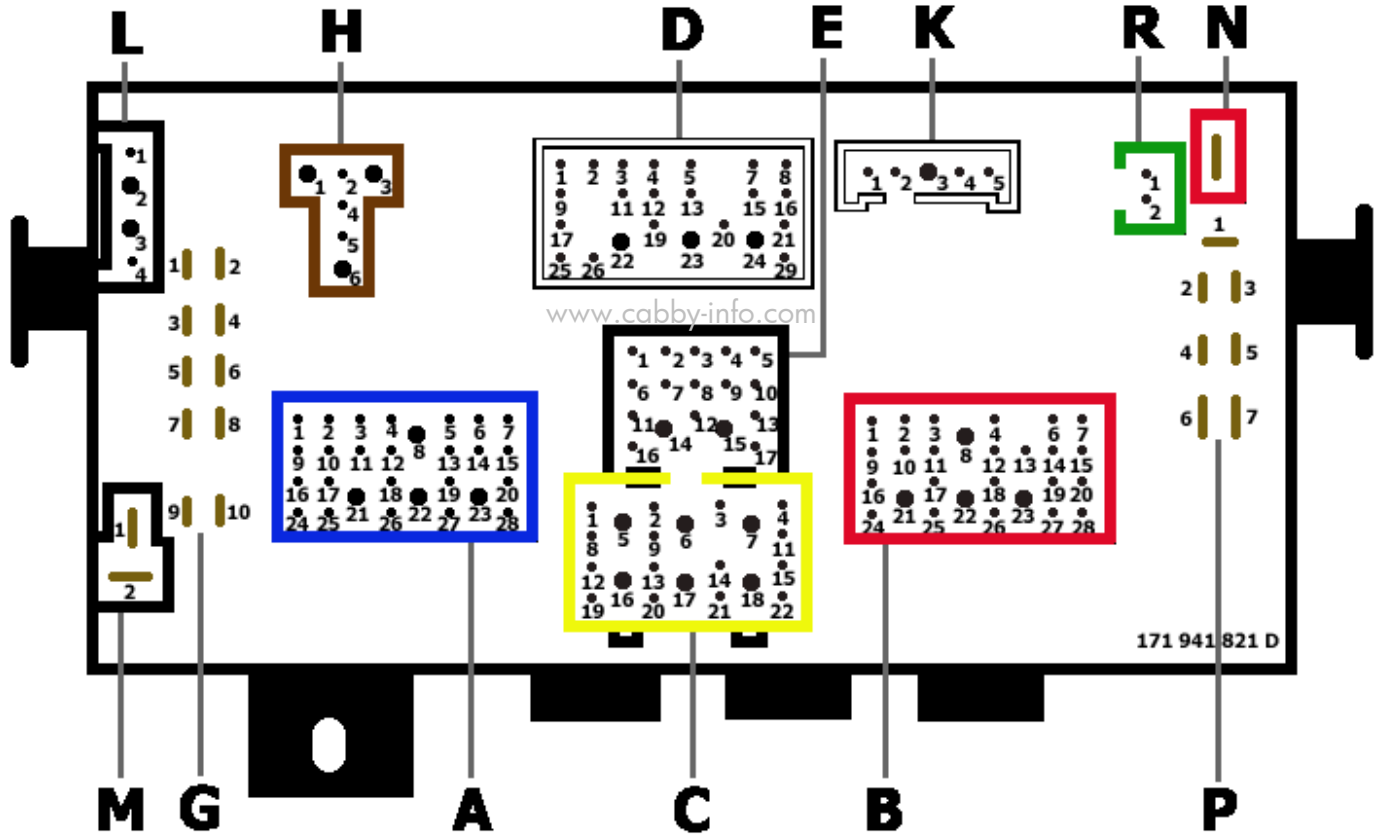
- 1: Radiator cooling fan
- 2: Brake lights; Cruise control (1991-1993)
- 3: Cigarette lighter; Radio; Clock; Interior lights (1990)
- 4: Emergency flashers
- 5: Fuel pump; Heated oxygen sensor
- 6: *open*
- 7: Tail lights, running lights, side-marker lights ~ left
- 8: Tail lights, running lights, side-marker lights ~ right
- 9: Hi-beam headlight ~ right; hi-beam indicator
- 10: Hi-beam headlight ~ left
- 11: Windshield wipers/washers
- 12: *open*
- 13: Rear window defroster
- 14: HVAC blower fan
- 15: Back-up lights; Shift console light (A/T only); Cruise control (1990 M/T only)
- 16: Horns
- 17: Power windows (switch current)
- 18: Seat belt warning light; Horn relay; Coolant level/temp warning light; Heated seats; Console gauges; Cruise control (1990 A/T only)
- 19: Turn signals; E-brake warning light
- 20: License plate lights; Trunk light; Instrument panel lights (1991+)
- 21: Lo-beam headlight ~ left
- 22: Lo-beam headlight ~ right

A/C thermofuse: *relay* position 17

Power window fuse: *relay* position 17

Power convertible top: *relay* position 23

## Relay Panel Pin-Outs



Dashboard Wiring Harness			Blue Plug
Pin	Description	Goes To	Wire Color
A01	Dash Lights	G8; Dash Wiring Harness; Dimmer Switch Terminal 58b (A/T only)	Gray/Blue
A02	Wiper Switch	Intermittent Wiper Relay Terminal 53S; Intermittent Wiper Switch Terminal 53	Green
A03	Instrument Cluster	Up-shift Relay Terminal L; Up-shift Indicator Light	Blue/Yellow
A04	Instrument Cluster	Oil Pressure Warning System; G6; D1	Blue/Black
A05	Wiper Switch ~ High Speed Signal	D9; Intermittent Wiper Switch Terminal 53b	Green/Yellow
A06	Wiper Motor Switch	D17; Intermittent Wiper Switch Terminal 53e	Green/Black
A07	Emergency Flashers/Turn Signals	Emergency Flasher Switch Terminal R to Turn Signal Switch; C8; D25; E11	Black/Green
A08	Ignition System	Ignition Switch Terminal 15; Airbag Control Unit Terminal 18 (1990+)	Black
A09	-	M1, G7	White/Black
A10	Emergency Flashers	Emergency Flasher Switch Terminal 49a to Turn Signal Switch; Flasher Relay Terminal 49a	Black/White/Green
A11	-	Emergency Flasher Relay (internal)	-
A12	Wiper Switch ~ Intermittent Signal	Intermittent Wiper Relay Terminal J; Intermittent Wiper Switch Terminal J	Brown/Black
A13	Emergency Flasher Switch	Fuse 19; Emergency Flasher Switch Terminal 15	Black/Blue
A14	-	E7	-
A15	E-brake Warning Light	C12; E-brake Warning Light Switch	Blue/Brown
A16	Instrument Cluster	Battery Warning Light; G4; C2; D4	Blue
A17	Instrument Cluster	Turn Signal Indicator Light; A10	Blue/Red
A18	Emergency Flashers	Emergency Flasher Switch Terminal 49; Flasher Relay Terminal 49	White
A19	Wiper Switch ~ Washer	Intermittent Wiper Relay Terminal T; Intermittent Wiper Switch Terminal T; D5; G10; C9	Green/Red
A20	Emergency Flashers/Turn Signals	Emergency Flasher Switch Terminal L to Turn Signal Switch; C19; E6; D11	Black/White

A21	Headlights	Fuse 21; Fuse 22; Headlight Dimmer/Flasher Switch Terminal 56b Canada 1990: M2; Headlight Switch Terminal TFL via DRL Resistor Canada 1991+: M2; DRL Relay via DRL Resistor; Headlight Switch Terminal TFL	Yellow
A22	Rear Window Defroster Switch Power	Fuse 13; Rear Defroster Switch	Black/Yellow
A23	HVAC System	Fuse 14; HVAC Blower Fan; Headlight Switch Light	Black/Red
A24	Light Switch	Light Switch Terminal 58; Fuse 7	Gray/Green
A25	Horns; Gauges	G5; G2; D7; L1; Console Gauges A/T 1990+: Relay 6	Black
A26	Lights	G9; E1	-
A27	Up-shift System	Up-shift Relay Terminal 2 (internal)	-
A28	Instrument Cluster	Hi-beam Indicator Light; C16	Blue/White
<b>B</b>	<b>Dashboard Wiring Harness</b>		<b>Red Plug</b>
<b>Pin</b>	<b>Description</b>	<b>Goes To</b>	<b>Wire Color</b>
B01	-	E13	-
B02	Fog Light Switch (Europe Only)	E10	Green/White
B03	Instrument Cluster	Fuel Gauge; E5	Violet/Black
B04	-	E4	-
B05	-	(no pin)	-
B06	Fuel System	Fuel Pump Relay Terminal 8 (internal)	-
B07	Coolant Temperature Warning System	Coolant Temperature Gauge; D29	Yellow/Red
B08	Ignition System	Ignition Switch Terminal 50; Fuel Pump Relay Terminal 7 (internal); Airbag Control Unit (1990+); C18; D24	Red/Black
B09	Wiper Switch Power	D20; Intermittent Wiper Relay Terminal 15; Intermittent Wiper Switch Terminal 53a	Black/Gray
B10	Load Reduction/Ignition System	Load Reduction Relay Terminal 86; Light Switch Terminal X	Black/Yellow
B11	Cigarette Lighter, Radio, Amplified Speakers	Fuse 3; E3; B12; Cigarette Lighter; Radio	Red/Gray
B12	Instrument Cluster	Digital Clock; E3; B11	Red
B13	Headlights	Headlight Dimmer/Flasher Switch	Red/Yellow
B14	Key-In Power	K5	-
B15	Gauge Cluster (Oil Pressure Light Controller)	High Oil Pressure Switch	Yellow
B16	Fog Light Switch	Fuse 6, C22	White/Yellow
B17	Seat Belt Warning System	Seat Belt Relay Terminal L; Seat Belt Warning Light	White/Violet
B18	Up-shift System	Upshift Relay Terminal G (internal); D3	-
B19	Instrument Cluster	Up-shift Relay Terminal 1; Tachometer; Fuel Pump Relay (internal); D26	Red/Black
B20	Fog Light Switch	Fog Light Relay Output	Green/Yellow
B21	Rear Window Defroster	E15; Rear Window Defroster Switch Terminal 86	White/Green
B22	High Beam Switch, high beam output	Fuse 9; Fuse 10; Headlight Dimmer/Flasher Switch Terminal 56a	White
B23	Light Switch Power	Light Switch Terminal 30	Red
B24	-	C11	-
B25	Horns	C15; L2	Brown/Black
B26	Light Switch	B27; A24; Fuse 8	Gray/Green
B27	Light Switch	B26; A24; Light Switch Terminal 58; Fuse 20; Relay 7 (internal)	Gray/Green
B28	Emergency Flasher Switch Power	Fuse 4; Emergency Flasher Switch Terminal 30	Red/White
<b>C</b>	<b>Engine Compartment/Management, Left</b>		<b>Yellow Plug</b>
<b>Pin</b>	<b>Description</b>	<b>Goes To</b>	<b>Wire Color</b>
C01	Brake Light Switch, Cruise Control, A/T Shiftlock Control Unit	E16; Brake Light Switch A/T 1990+: Shift Lock Control Unit; E16; Brake Light Switch Cruise Control: E16; Brake Light Switches; Vacuum Valve; Cruise Control Control Unit	Red/Black
C02	Alternator Exciter Circuit/Charging System	D+ on Alternator; A16; D4	Blue
C03	Brake Lights	Fuse 2; Brake Light Switch Cruise Control: C1; Fuse 2; Brake Light Switches	Red/Yellow
C04	Running Lights ~ Left	E9; Front Parking Light; Side-marker Lights	Gray/Black & Gray
C05	Headlights ~ Lo-beam	Fuse 21; Left Headlight	Yellow/Black
C06	Headlights ~ Lo-beam	Fuse 22; Right Headlight	Yellow
C07	Radiator Cooling Fan	Fuse 1; Air Conditioning Relay Terminal 4 (internal); Radiator Fan Thermo Switch	Red

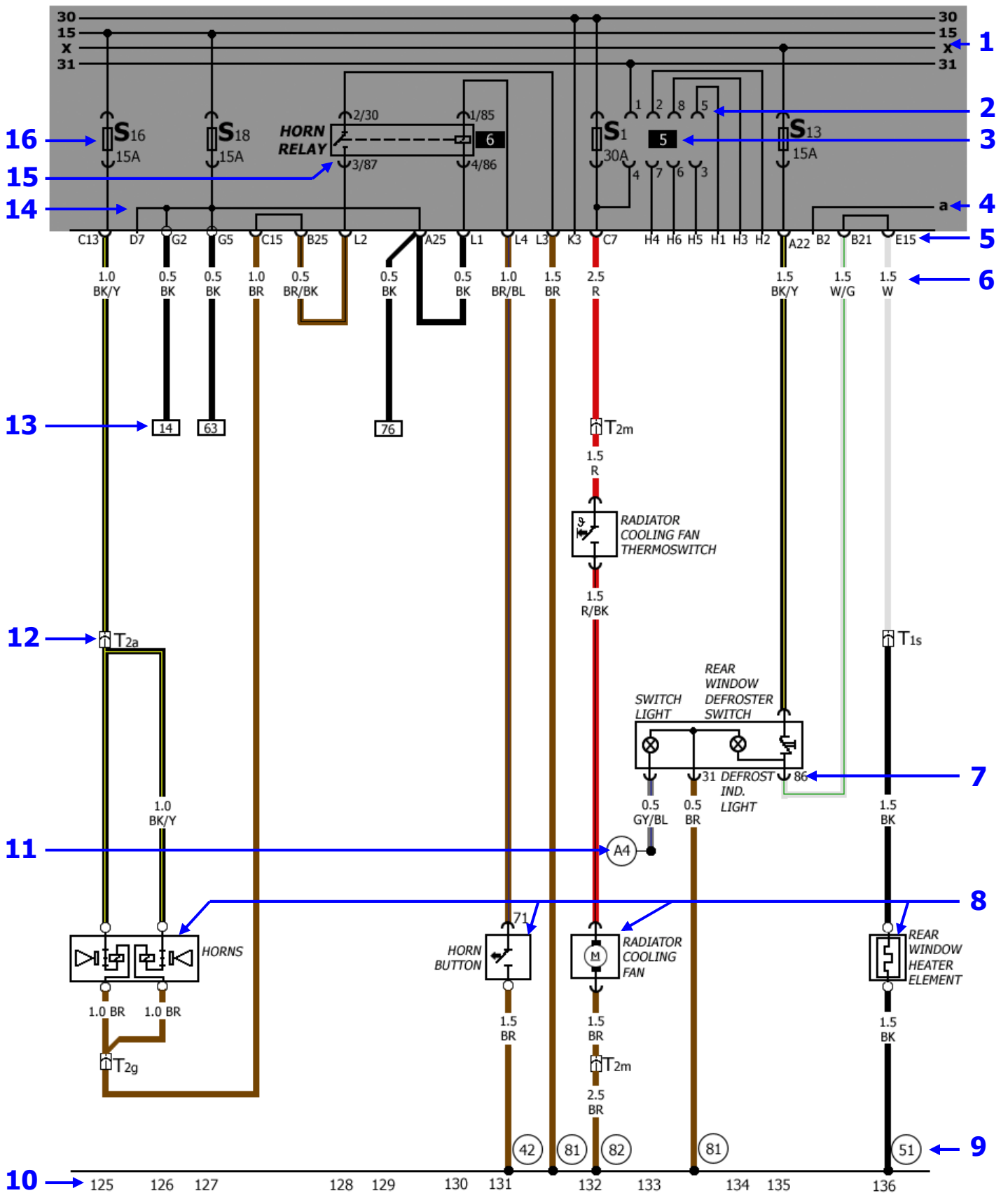
C08	Emergency Flashers/Turn Signals	Turn Signal Light ~ Right Front	Black/Green
C09	Windshield Washer	G10; D5; A19; Windshield Washer Pump	Green/Red
C10	-	(no pin)	-
C11	-	B24	-
C12	Brake Warning System	A15; Brake Fluid Level Switch	Blue/Red or Blue/Brown
C13	Horns	Fuse 16; Horns	Black/Yellow
C14	Running Lights ~ Right	Fuse 8; E18; Front Parking Light; Side-marker Lights	Gray/Red & Gray
C15	Horns	B25; Horns (ground)	Brown
C16	Headlights ~ Hi-beam	Fuse 9; Right Headlight(s)	White
C17	Headlights ~ Hi-beam	Fuse 10; Left Headlight(s)	White/Black
C18	Warning Lights	Hot-start Pulse Relay Terminal 50; E-brake Warning Light; Thermo Time Switch; Fuel Pump Relay (internal); B8; D24	Red/Black
C19	Emergency Flashers/Turn Signals	Turn Signal Light ~ Left Front; A20; E6; D11	Black/White
C20	Back-up Lights	Fuse 15; D16; Back-up Light Switch; Cooling Fan After-run Control Unit (1990+)	Black
C21	Back-up Lights	Back-up Light Switch; E12 (A/T 1990+); D19 (A/T 1990+)	Black/Blue
C22	Fog Lights	Fuse 6, B16	White/Yellow
<b>D</b>	<b>Engine Compartment/Management, Right</b>		<b>White Plug</b>
<b>Pin</b>	<b>Description</b>	<b>Goes To</b>	<b>Wire Color</b>
D01	Low Oil Pressure Switch	Oil Pressure Switch (1.8 bar); G6; A4	Blue/Black
D02	Fuel System	Fuse 17 Digifant I: Fuse 17; R1	Black
D03	Up-shift Indicator	Up-shift Switch Terminal 5; B18	White/Green
D04	Alternator Exciter Circuit/Charging System	Oxygen Sensor Mileage Counter Box; A16; G4; C2	Blue
D05	Intermittent Wipers	A19; G10; C9	-
D06	-	(no pin)	-
D07	Idle Stabilizer Control Unit; Seat Belt Warning; Oil Temperature Gauge	G2; G5; A25; Coolant Low-level Control Unit (A/T 1990+)	Black/Blue
D08	Up-shift Indicator	Up-shift Vacuum Switch; Up-shift Control Unit Terminal US	White/Red
D09	Wiper Motor ~ High Speed	A5; Wiper Motor Terminal 53b	Green/Yellow
D10	-	(no pin)	-
D11	Emergency Flashers/Turn Signals	E6; C19; A20	-
D12	Wiper Motor ~ Low Speed	Wiper Motor Terminal 53; Intermittent Wiper Relay Terminal 53	Green
D13	Fuel System	Fuel Pump Relay Terminal 6 (internal); Digifant Control Unit Terminal 3	Yellow/Blue and Red/Yellow
D14	-	(no pin)	-
D15	Resistance Wire, Coil Pin 15 (Europe only)	D23	White/Violet
D16	Back-up Lights	C20 1990+ A/T: Fuse 15; Back-up Light/Starter Cut-out Switch; Shift Lock Control Unit; Starter Interlock Relay	Black
D17	Wiper Motor Switch	A6; Wiper Motor Terminal 53e	Green/Black
D18	-	(no pin)	-
D19	Back-up Lights	E12; C21; Back-up Light Switch/Starter Cut-out Switch (A/T only)	Black/Blue
D20	Wiper Motor Switch	Fuse 11; Wiper Motor Terminal 53a	Black/Gray
D21	Oil Pressure Warning System	Oil Pressure Switch (.3 bar); B15	Yellow
D22	Wiper Motor	Main Panel Ground	Brown
D23	Ignition System	Coil Terminal 15; D15 Digifant I: D25; Ignition Coil Power Stage	Black
D24	Ignition System	B8; C18; Fuel Pump Relay Terminal 7; Starter Terminal 50, or Auto. Trans. Starter Interlock Relay Terminal 31	Red/Black or Red
D25	Emergency Flashers/Turn Signals	C8; E11; A7	-
D26	Ignition System	Ignition Coil Terminal 1; Idle Stabilizer Relay Terminal 1; Fuel Pump Relay (internal); B19	Red/Black
D27	-	(no pin)	-
D28	-	(no pin)	-
D29	Coolant Temperature Warning System	Coolant Temperature Gauge Sender; Coolant Low-level Control Unit (1990+); B7	Yellow/Red or Yellow/Blue

<b>E Rear Wiring Harness</b>				<b>Black Plug</b>
<b>Pin</b>	<b>Description</b>	<b>Goes To</b>	<b>Wire Color</b>	
E01	Lights	License Plate Lights; Trunk Light; Fuse 20	Gray/Green	
E02	-	Relay 11	-	
E03	Interior Lighting	Courtesy Light; B11; B12	Red	
E04	-	B4	-	
E05	Instrument Cluster	Fuel Gauge Sending Unit; B3	Violet/Black	
E06	Emergency Flashers/Turn Signals	Turn Signal Light ~ Left Rear	Black/White	
E07	-	A14; Relay 11	-	
E08	Heated Seats	Relay 11; G3; G1	Black/Gray	
E09	Running Lights ~ Left	Fuse 7; C4; Tail Light	Gray/Black	
E10	Rear Fog Light (Europe Only)	B2	Green/White	
E11	Emergency Flashers/Turn Signals	Turn Signal Light ~ Right Rear	Black/Green	
E12	Back-up Lights	D19; C21; Back-up Lights; C21 (A/T 1990+)	Black	
E13	-	B1	-	
E14	Fuel System	Fuel Pump; Transfer Fuel Pump; Aux. Air Regulator; Control Pressure Regulator; Fuse 5 to Fuel Pump Relay; Oxygen Sensor (1988+)	Red/Yellow and Red/White	
E15	Rear Window Defroster	B21; Rear Window Defroster Element	White & Black	
E16	Brake Lights	C1; Brake Lights ~ Left, Right, High-Mount in Trunk Lid	Black/Red	
E17	-	-	-	
E18	Running Lights ~ Right	C14; Tail Light	Gray/Red	
<b>G Individual Circuits</b>				<b>-</b>
<b>Pin</b>	<b>Description</b>	<b>Goes To</b>	<b>Wire Color</b>	
G01	Power Windows; Heated Seats	Fuse 12; E8; G3	-	
G02	Idle Boost Control	D7; G5; A25; Idle Boost Control Unit A/T only: G5; D7; A25; Fuse 18; Back-up Light/Starter Cut-out Switch	Black	
G03	Heated Seat Control Units	Fuse 12; E8; G1; Heated Seats Control Units; Heated Seats Switch	Black/Red and Black	
G04	Alternator Exciter Wire	A16, D4	-	
G05	Seat Belt/Brake Warning System	G2; D7; A25; Fuse 18; Seat Belt Indicator Light; E-brake Indicator Light (A/T 1990+)	Black	
G06	Oil Pressure Warning System	D1; A4	-	
G07	-	A9; M1	-	
G08	Interior Lighting	A1; Instrument Cluster Wiring Harness; A/T Shift Console Light; Power Convertible Top Switch Light	Gray/Blue	
G09	Lights	A26; E1	-	
G10	Headlight Washer Relay (Europe only)	A19; D5; C9	Green/Red	
<b>H HVAC Wiring Harness</b>				<b>Brown Plug</b>
<b>Pin</b>	<b>Description</b>	<b>Goes To</b>	<b>Wire Color</b>	
H01	Radiator Cooling Fan	A/C Relay; Fuse 1; C7; Cooling Fan Thermo Switch; Cooling Fan	Red/Black	
H02	HVAC System	HVAC Fan Switch Speed 1; HVAC Blower Fan; A/C Relay; H6	Red/Black and Black/Yellow	
H03	HVAC System	A/C Relay; Battery via Fuse 23	Red	
H04	HVAC System	A/C Relay; A/C Thermostat; A/C Compressor Clutch; Idle Stabilizer Valve	Green	
H05	HVAC System	HVAC Fan Switch Speed 4; A/C Relay (internal)	Black	
H06	HVAC System	HVAC Fan Switch Speed 1; HVAC Blower Fan; A/C Relay; H2	Red/Black and Black/Yellow	
<b>K Seat Belt/Coolant level Warning Wiring Harness</b>				<b>White</b>
<b>Pin</b>	<b>Description</b>	<b>Goes To</b>	<b>Wire Color</b>	
K01	Seat Belt Warning System	Seat Belt Relay Terminal G; Seat Belt Switch	Gray/Red	
K02	Seat Belt Warning System	Seat Belt Relay Terminal 2 (internal)	-	
K03	-	Relay Panel Power	-	
K04	Seat Belt Warning System	Seat Belt Relay Terminal 86; Door Contact Switch (left); Seat Belt Switch	Gray & Black/Green	
K05	Ignition Switch Key-In Power	Ignition Switch Terminal SU; Seat Belt Warning Relay Terminal 85; Power Convertible Top Switch; Relay 5 (internal)	Brown/Red	

<b>L Horn Wiring Harness</b>				<b>Black Plug</b>
<b>Pin</b>	<b>Description</b>	<b>Goes To</b>	<b>Wire Color</b>	
L01	Horns	A25; Horns Relay Terminal 86	Black	
L02	Horns	B25; Horns Relay Terminal 87	Brown/Black	
L03	Horns	Horns Relay Terminal 30; Dash Wiring Harness	Brown	
L04	Horns	Horns Relay Terminal 85; Horn Button	Brown/Blue	
<b>M Steering Column Switch or Headlight/Dimmer Switch Wiring Harness</b>				<b>Black Plug</b>
<b>Pin</b>	<b>Description</b>	<b>Goes To</b>	<b>Wire Color</b>	
M01	-	A9; G7	-	
M02	Headlights	A21	-	
<b>N Individual Circuit, Fuel Injection</b>				<b>Red Plug</b>
<b>Pin</b>	<b>Description</b>	<b>Goes To</b>	<b>Wire Color</b>	
N	Fuel System Power ~ CIS	Fuel Pump Relay Terminal 87 and Fuse 5 (internal); Fuel Injection Power Supply Relay Terminal 86	Red/Black	
N	Fuel System Power ~ Digifant	Fuel Pump Relay Terminal 87 and Fuse 5 (internal); Fuel Injectors	Red	
<b>P Individual Circuits, Battery Power</b>				<b>-</b>
<b>Pin</b>	<b>Description</b>	<b>Goes To</b>	<b>Wire Color</b>	
P	Battery	Main Fusebox Battery Power	Red	
P	Automatic Transmission (1990+)	Starter Interlock Relay Terminal 30	Red	
P	Power Seat Height Adjust Fuse	Main Fusebox Battery Power	Red	
P	Power Windows	Fuse 37 (Relay Position 17); Power Window Control Unit	Red	
P	Ignition Switch Power	Ignition Switch Terminal 30	Red	
P	Fuel System Power ~ CIS	Fuel Injection Power Supply Relay Terminal 30	Red	
P	Headlight Washer Relay (Europe only)	Main Fusebox Battery Power	Red	
<b>R ECU Power Supply Wiring Harness</b>				<b>Green Plug</b>
<b>Pin</b>	<b>Description</b>	<b>Goes To</b>	<b>Wire Color</b>	
R01	Airbag System	Digifant Relay Terminal 86; Airbag Control Unit; D2	Black	
R02	Digifant ECU, Injectors	Digifant Control Unit Terminal 14; Digifant Relay Terminal 87	Black/Yellow	

**Please consult wiring diagrams for your particular car for precise wire routing and colors.**

# How To Read Current Flow Wiring Diagrams



**1 - Circuits**

**15:** Originates at ignition switch. Supplies power when ignition switch is in ON or START position.

**X:** Load-reduction relay circuit. Originates at ignition switch. Supplies power only when ignition switch is in ON position. Circuit is interrupted when starter is actuated.

**30:** Battery positive (+) voltage. Supplies power whenever battery is connected (i.e. not dependent on ignition switch position).

**31:** Ground; battery negative (-).

**2 - Connection designation ~ relay control module on relay panel**

Shows the individual terminals in a multi-point connector.

**3 - Relay position number**

**4 - Reference of internal connection continuation**

Letters indicate where connection continues on the previous and/or following diagram

**5 - Connections at rear of panel**

Designations of each pin connection. For example, C13 is referring to connector C, pin number 13. See page 3.

**6 - Wire size and wire color(s)**

Color abbreviations are listed in a key on each diagram.

**7 - Terminal designation on component**

**8 - Component**

In this example, from left to right, the components are: Horns, horn button, fan motor, window heating element.

**9 - Ground connection locations**

Locations are defined in the diagram index.

**10 - Current track number**

**11 - Wire connection designation in wire harness**

Locations are defined in the diagram index.

**12 - Connector in wire or wire harness**

T1 = 1-point terminal connector; T2 = 2-point terminal connector; etc. Locations are defined in the diagram index.

**13 - Current track continuation**

Number in box indicates the current track number where wire is continued.

**14 - Internal connection inside relay panel**

D7 connects internally to G2, G5 and A25.

**15 - Terminal number on relay**

85 = Ground side of switching relay

86 = Power-in side of switching relay

87 = Relay switch contact

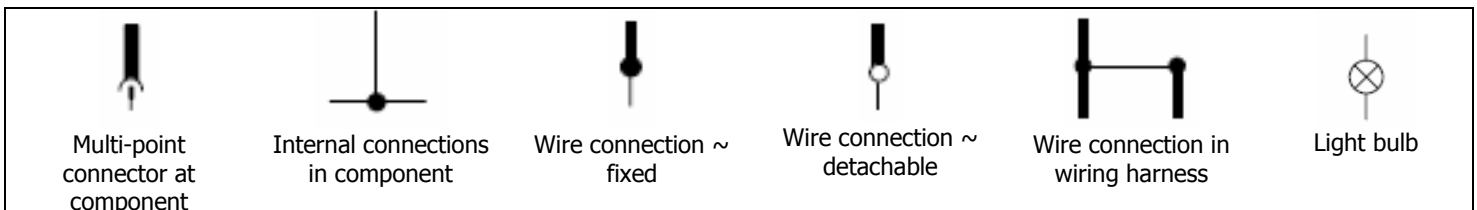
87a = Normally closed switch contact

87b = Normally open switch contact

**16 - Fuse**

Indicates fuse position number and amperage.

**How the horn circuit works:** Pressing the horn button closes the contacts sending an electrical signal to relay 6, which triggers terminal 30 to contact terminal 87, completing the path to ground, which closes the circuit sending power to the horns making them honk.



## Ground Locations

### **1980-1986**

Main ground cables/straps:

- Battery to the left frame rail; frame rail to the transmission
- Valve cover to the ignition coil bracket
- Fender to hood
- A/C compressor to battery (or engine block)
- Ignition Control Unit to battery

Ground locations:

- Fuse/relay panel
- Steering column
- Cold-start valve (CIS only)
- Trunk, rear left and right
- Dash wiring harness

### **1987-1989**

Main ground cables/straps:

- Battery to the left frame rail; frame rail to the transmission
- Valve cover to the ignition coil bracket
- Fender to hood
- A/C compressor to engine block (or alternator)
- Ignition Control Unit to battery

Ground locations:

- Fuse/relay panel
- Steering column
- Cold-start valve (CIS only)
- Trunk, rear left and right
- Dash wiring harness
- Engine bay, front left and right ('88+)

### **1990-1993**

Main ground cables/straps:

- Battery to the left frame rail; frame rail to the transmission
- Valve cover to the ignition coil bracket
- Fender to hood
- Digifant ECU to firewall
- A/C compressor to engine block (or alternator)

Ground locations:

- Fuse/relay panel
- Instrument cluster wiring harness
- Steering column
- Trunk, rear left and right
- Engine bay, front left and right
- Horns ('91+)

## Wire Size Conversions

Metric Size	American Wire Gauge (AWG) Size	General wire size guidelines
0.35	22	<p style="text-align: center;">16 gauge: 10 amps max                      14 gauge: 15 amps                      12 gauge: 20 amps                      10 gauge: 30 amps                      8 gauge: 40 amps</p> <p>If your runs are going to be longer than about 30 feet of total wire length, bump up to the next size wire to reduce voltage drop on a 12V system.</p>
0.5	20	
0.75	18	
1.0	16	
1.5	14	
2.5	12	
4.0	10	
6.0	8	
16.0	4	
25.0	2	