



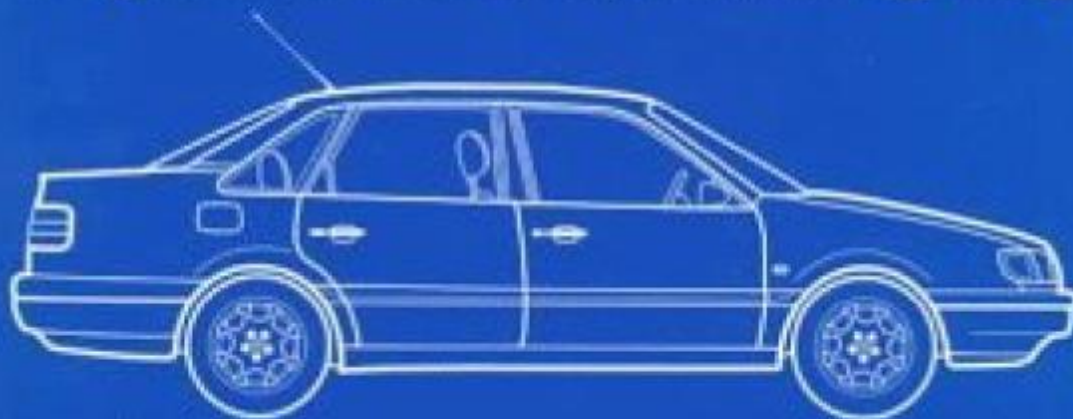
Volkswagen Passat

Official Factory Repair Manual

1996

Gasoline, Turbo Diesel, TDI

4-cylinder and VR6, including wagon

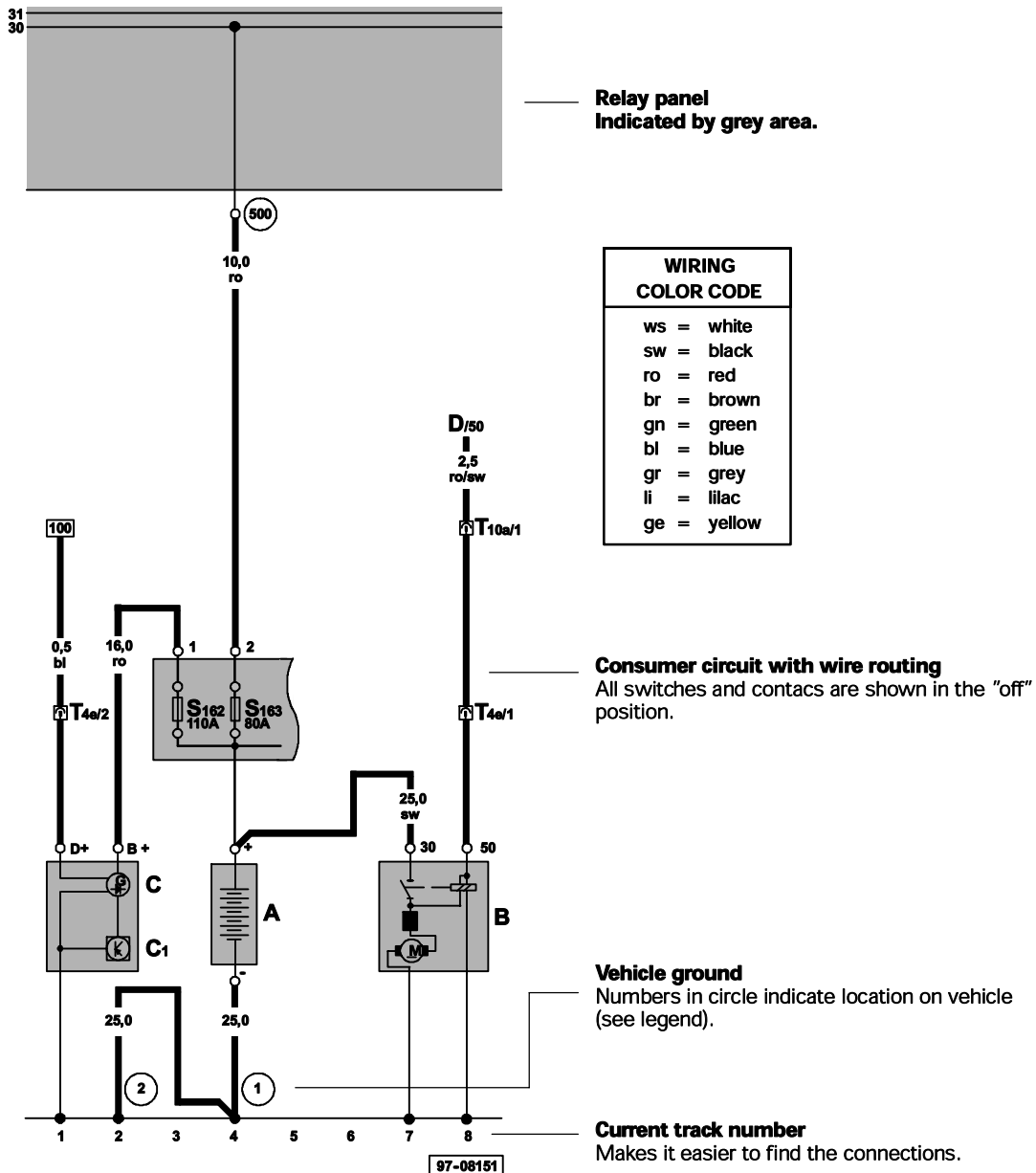


Richard Bentley

PASSAT '95-'97



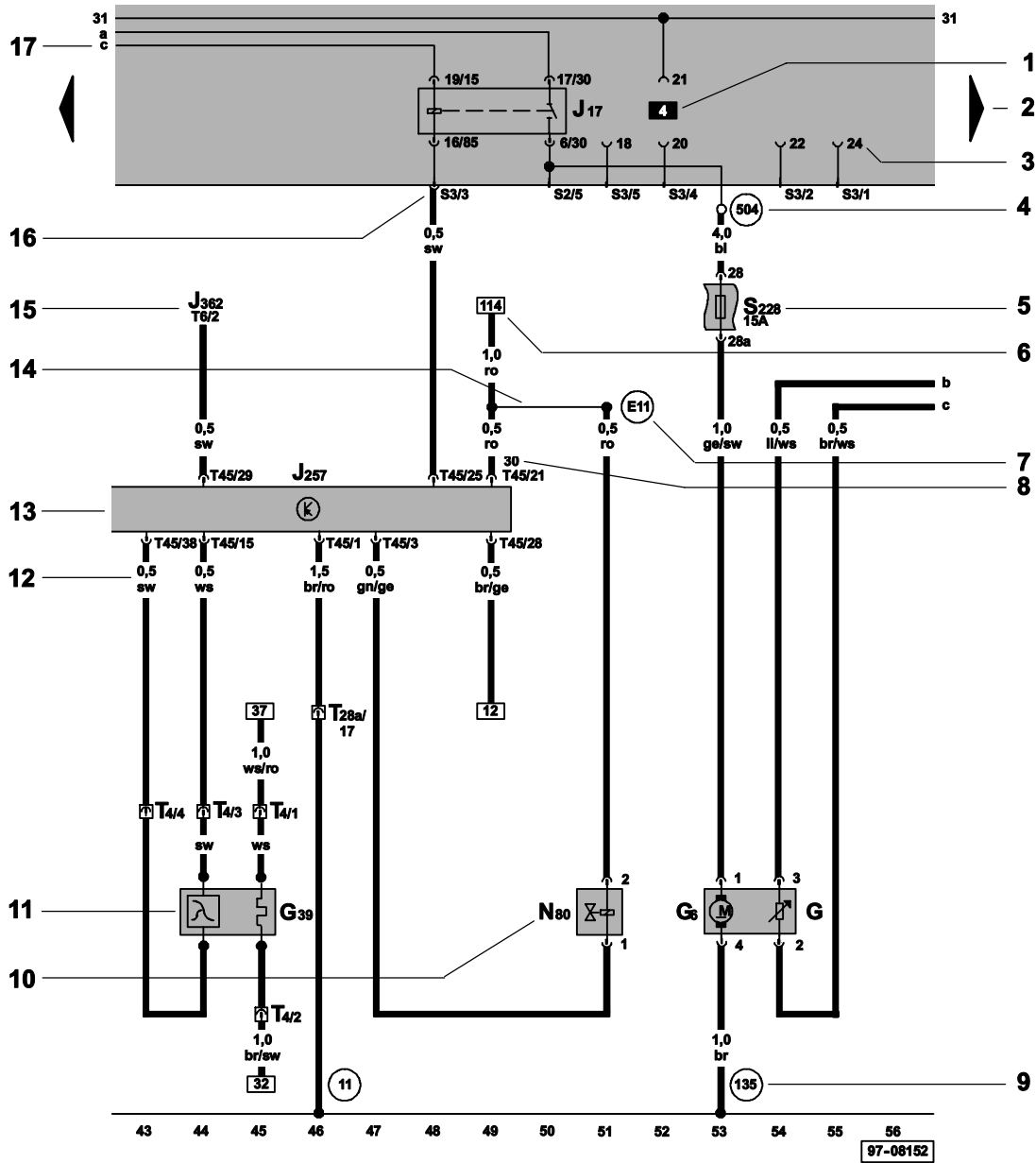
Wiring diagram layout



- A - Battery
- B - Starter
- C - Generator (GEN)
- C1 - Voltage Regulator (VR)
- D - Ignition/Starter Switch
- S162 - Fuse -1- (30) in fuse bracket / battery
- S163 - Fuse -2- (30) in fuse bracket / battery
- T4e - 4-Pin Connector, on transmission
- T10a - 10-Pin Connector, on protective housing for control module, in engine compartment, left
- ① - Ground strap, battery to body
- ② - Ground strap, transmission to body
- ⑤00 - Screw connection -1- (30), on relay panel

Legend
In all wiring diagrams the same component designation (code) is used for a particular component; for example, always A for battery.

How to read wiring diagrams


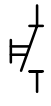




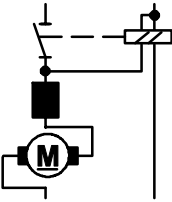


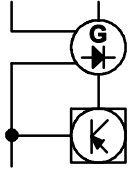
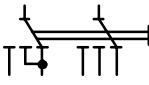

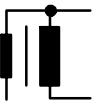
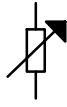
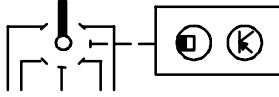




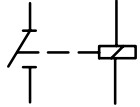


How to read wiring diagrams

- 1 - Relay location number**
Indicates location on relay panel.
- 2 - Arrow**
Indicates wiring circuit is continued on the previous and/or next page.
- 3 - Connection designation - relay control module on relay panel**
Shows the individual terminals in a multi-point connector.
For example: contact 24 on terminal **4** on relay panel.
- 4 - Diagram of threaded pin on relay panel**
White circle shows a detachable connection.
- 5 - Fuse designation**
For example: S228 = Fuse number 28, 15 amps, in fuse holder
- 6 - Reference of wire continuation (current track number)**
Number in frame indicates current track where wire is continued.
- 7 - Wire connection designation in wiring harness**
Location of wire connections are indicated in the legend.
- 8 - Terminal designation**
Designation which appears on actual component and/or terminal number of a multi-point connector.
- 9 - Ground connection designation in wire harness**
Locations of ground connections are indicated in legend.
- 10 - Component designation**
Use legend at bottom of page to identify the component code.
- 11 - Component symbols (see page IV - VI)**
- 12 - Wire cross-section size (in mm²) and wire colors**
Abbreviations are explaining in color chart beside the wiring diagram.
- 13 - Component symbol with open drawing side**
Indicated component is continued on another wiring diagram. The number of corresponding wiring diagram can taken from list of contents.
- 14 - Internal connections (thin lines)**
These connections are **not** wires. Internal connections are current carrying and are listed to allow tracing of current flow inside components and wiring harness.
- 15 - Reference of continuation of wire to component**
For example: Control module for anti-theft immobilizer J362 on 6-Pin Connector, terminal 2
- 16 - Relay panel connectors**
Shows wiring of multi-point or single connectors on relay panel
For example: S3/3 - Multi-point connector S3, terminal 3
- 17 - Reference of internal connection continuation**
Letters indicate where connection continues on the previous and/or next page.






















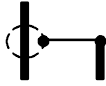


Symbols used in wiring diagrams

	Fuse		Switch (manually operated)
	Thermo-fuse (Circuit Breaker)		Switch (thermally operated)
	Battery		Push button switch (manually operated)
	Starter		Switch (mechanically operated)
	Switch (pressure operated)		Generator (GEN)
	Multiple switch (manually operated)		Resistance
	Ignition Coil		Variable resistor (Rheostat)
	Distributor (electronic)		Resistor temperature dependent
	Spark plug connector and plug		Heater element temperature dependent
	Glow plug Heater element		Relay

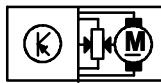
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Symbols used in wiring diagrams

	Diode		Solenoid valve
	Zener diode		Magnetic clutch
	Diode light sensitiv		Wire connector
	Light bulb		Pin connector
	Light bulb (dual filament)		Multi-point connector at component
	LED		Internal connections in component
	Interior light		Wire connection detachable
	Instrument (Gauge)		Wire connection fixed
	Electronic control module		Wire connection in wiring harness
	Rear window defogger heat element		Resistance wire
	Cigarette lighter		Shield wire

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Symbols used in wiring diagrams



Control motor,
headlight range adjustment



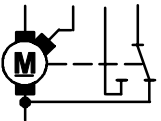
Speaker



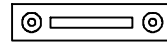
Motor



Antenna with electronic
antenna amplifier



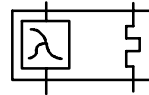
Wiper motor
2-speed



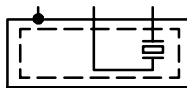
Radio



Crankshaft position sensor
(CKP)



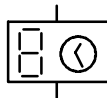
Heated oxygen sensor



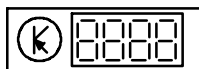
Knock sensor (KS)



Analog clock



Digital clock



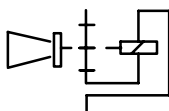
Multi-function
indicator



Airbag spiral spring



Speed sensor



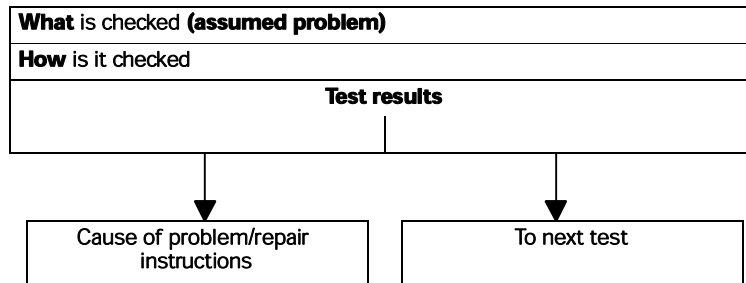
Horn

97-08154

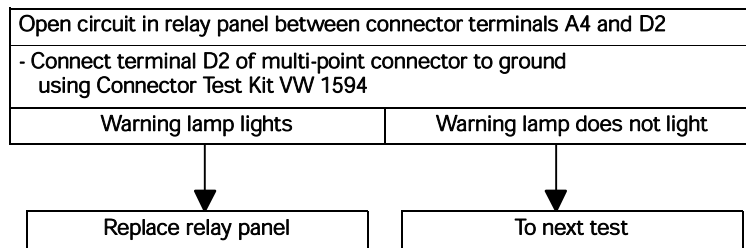
Explanation of troubleshooting procedures

Starting with the reported problem, troubleshooting procedures show step-by-step **what** is checked and **how** it is checked in order to find the problem in the quickest and most reliable way. If several causes (of a problem) are possible in one system, a test procedure is used for diagnosis.

Structure of a Test step:



Example of a troubleshooting procedure:



Passat (2.8L-Engine - Motronic Multiport Fuel Injection (MFI)/128kW), code AAA, from August 1995

Diagram Title	Num/Page
- Passat (2.8L-Engine - Motronic Multiport Fuel Injection (MFI)/128kW), code AAA, from August 1995	31/01
- Battery, ignition/starter switch	34/02
- Fresh air blower	34/03
- Coolant fan, two speeds	03/01
- Generator (GEN), starter, fuel pump (FP), fuel level sensor	31/02
- Ignition system, motronic engine control module (ECM), heated oxygen sensor (HO2S)	31/03
- Motronic engine control module (ECM), knock sensors, engine coolant temperature (ECT) sensor	31/04
- Motronic engine control module (ECM) injectors, mass air flow (MAF) sensor	31/05
- Motronic engine control module (ECM), throttle valve control module	31/06
- Motronic engine control module (ECM), secondary air injection (AIR) system	31/07
- Instrument cluster, engine coolant level/temperature (ECL/ECT) warning light, visual and acoustical oil pressure control, odometer display, fuel gauge	31/09
- Instrument cluster, tachometer	34/05
- Instrument cluster, digital clock	34/06
- Instrument cluster, outside air temperature sensor, parking brake warning light switch and brake fluid level warning light switch	34/07
- Interior light, luggage compartment light, radio/parking light warning buzzer, seat belt warning system relay, door contact switch	34/08
- Data Link Connector (DLC) wire connector, radio connection, cigarette lighter, ashtray light	34/09
- Headlights, font side markers, headlight dimmer flasher switch	34/10
- Turn signal and emergency flasher system, parking light switch	34/11
- Tail lights, brake lights, turn signal lights	34/12
- Light switch, right front turn signal light	34/13
- Fog lights, license plate lights, back-up lights	34/14
- Rear window defogger heat element, dual horns	34/15
- Windshield wiper/washer system	34/16
- Rear window wiper/washer system, ABS warning light, airbag malfunction indicator lamp (MIL), brake and parking brake warning light	34/17