



Instrument cluster

General information

The following components are integrated in the instrument cluster:

- Instrument Cluster Control Module J285

- Engine oil temperature display

- Tachometer

- Engine coolant temperature display

- Multi-function indicator (MFA)

- Fuel gauge

- Speedometer

- Indicator lamps ⇒ [90-1, Instrument cluster warning and indicator lamps, overview](#)

All warning and indicator lamps are equipped with light-emitting diodes (LEDs) which cannot be serviced or replaced separately. In the event of malfunctions, the complete instrument cluster must be replaced ⇒ [90-1, Instrument cluster, adaptation/replacing](#) .

Before troubleshooting or servicing, technicians must be familiar with the functions and operation specifics of the applicable instrument cluster and MFI functions. Always read the owners manual and review specific system functions.

Instrument cluster component functions can be checked using On Board Diagnostic (OBD) program function "Output Diagnostic Test Mode (DTM)" ⇒ [90-1, Instrument Cluster, checking with Output Diagnostic Test Mode \(DTM\)](#)

Note:

- *The Anti-theft Immobilizer Control Module J362 is integrated with the Comfort System Central Control*

Module J393 .

Note:

- *Additional information:*

⇒ *Owners Manual*

⇒ *Self Study Program - Course Number 891503 "The 2006 Passat Introduction"*

⇒ *Self Study Program - Course Number 871503 "The 2006 Passat Electrical Systems Design and Function"*

⇒ *Electrical Wiring Diagrams, Troubleshooting and Component Locations binder*

CAN-Bus wire repairs ⇒ [97-8, Repairing CAN-Bus wires](#)

On Board Diagnostic (OBD), function

The instrument cluster is controlled by an internal microprocessor with On Board Diagnostic (OBD) capability. If malfunctions occur in monitored sensors and components, Diagnostic Trouble Codes (DTCs) are stored in memory.

Troubleshoot instrument cluster malfunctions by performing OBD program using Vehicle Diagnostic, Testing and Information System VAS 5051/5052 in operating mode "Guided Fault Finding" .

Instrument cluster, adaptation/replacing

- Connect Vehicle Diagnostic, Testing and Information System VAS 5051/5052 ⇒ [97-1, VAS 5051 / 5052](#) .

- In Vehicle Diagnostic, Testing and Information System VAS 5051/5052 , select operating mode "Guided Fault Finding" .

- Using the "Go To" button, select "Functions/Component selection" and the following menu options in sequence:

- Body
- Electrical Equipment
- 01 - On Board Diagnostic (OBD) capable systems

- Instrument cluster
- Instrument cluster functions
- Instrument cluster, adaptation/replacing

Instrument cluster, removing and installing

Note:

- *Prior to replacing instrument cluster, perform work sequence "Instrument cluster, adaptation/replacing" in order to read out the data stored in the control module ⇒ [90-1, Instrument cluster, adaptation/replacing](#) .*

Removing:

Caution!

- **Switch off all electrical consumers.**
- **Switch ignition off and remove ignition key.**

Warning!

Observe safety precautions for working on airbags

⇒ [Repair Manual, Body Interior, Repair Group 69,](#)

.

- Remove drivers airbag

⇒ [Repair Manual, Body Interior, Repair Group 69, Airbag; Drivers airbag unit, removing and installing](#)

- Remove steering wheel

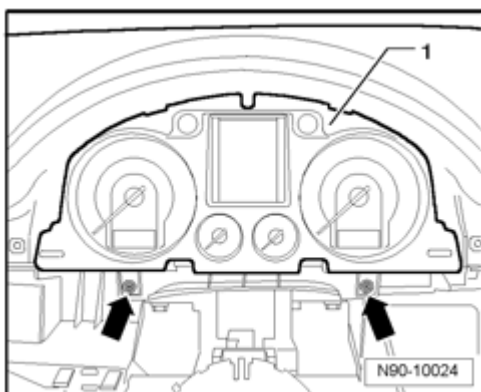
⇒ [Repair Manual, Suspension, Wheels, Steering, Repair Group 48, Steering column, assembly overview; Steering wheel, removing and installing](#)

- Remove drivers side trim

⇒ [Repair Manual, Body Interior, Repair Group 68, storage compartments, covers and panels](#)

- Remove instrument panel/instrument cluster trim

⇒ [Repair Manual, Body Interior, Repair Group 68, Storage compartments, covers and trim; Instrument panel trim, removing and installing](#)



- Remove screws - **arrows** - at instrument cluster - **1** - .

Note:

- *The electrical connection on the rear of the instrument cluster is fixed to the instrument panel frame and is disconnected automatically upon removal of instrument cluster.*

- Pull instrument cluster - **1** - straight out of instrument panel opening.

Installing:

Install in reverse order of removal.

- After installing, test the functions of the instrument cluster.

Instrument Cluster, checking with Output Diagnostic Test Mode (DTM)

The following components and functions can be checked using Instrument Cluster Control Module J285 On Board

Diagnostic (OBD) program function "Output Diagnostic Test Mode (DTM)" :

- Speedometer G21
- Tachometer G5
- Fuel Gauge G1
- Engine Coolant Temperature (ECT) Gauge G3
- Warning Buzzer H3 (audible buzzer in instrument cluster, activation)
- Flasher acoustic (activation of flasher relay)
- Segment test (During segment test, all segments of display unit are activated. For this, the display will be activated in sequence in the colors white, red, green and blue.)
- Glow Plug Indicator Light K29
- Anti-Theft Engine Disable Indicator Light K115
- Safety Belt Warning Light K19
- Brake and Parking Brake Warning Lamp K7
- Brake Pad Wear Indicator Lamp K32
- Low Windshield Washer Fluid Level Indicator Lamp K106
- Low Fuel Level Warning Lamp K105
- Oil Pressure Warning Lamp K3
- Oil Level Indicator Lamp K38

- Oil Pressure Warning Buzzer H11

Note:

- *Above system/component checks depend on equipment level and market version.*

- Connect Vehicle Diagnostic, Testing and Information System VAS 5051/5052 ⇒ [97-1, VAS 5051 / 5052](#) .

- In Vehicle Diagnostic, Testing and Information System VAS 5051/5052 , select operating mode "Guided Fault Finding" .

- Using the "Go To" button, select "Functions/Component selection" and the following menu options in sequence:

- Body
- Electrical Equipment
- 01 - On Board Diagnostic (OBD) capable systems
- Instrument cluster
- Instrument cluster functions
- Output Diagnostic Test Mode (DTM) of instrument cluster

Instrument cluster, rear view**Note:**

- *Do not disassemble instrument cluster. In the event of malfunctions, replace complete instrument cluster.*

Instrument cluster, rear view (information for connector identification) ⇒ *Electrical Wiring Diagrams, Troubleshooting and Component Locations binder*

Instrument cluster, multi-pin connector assignments**Note:**

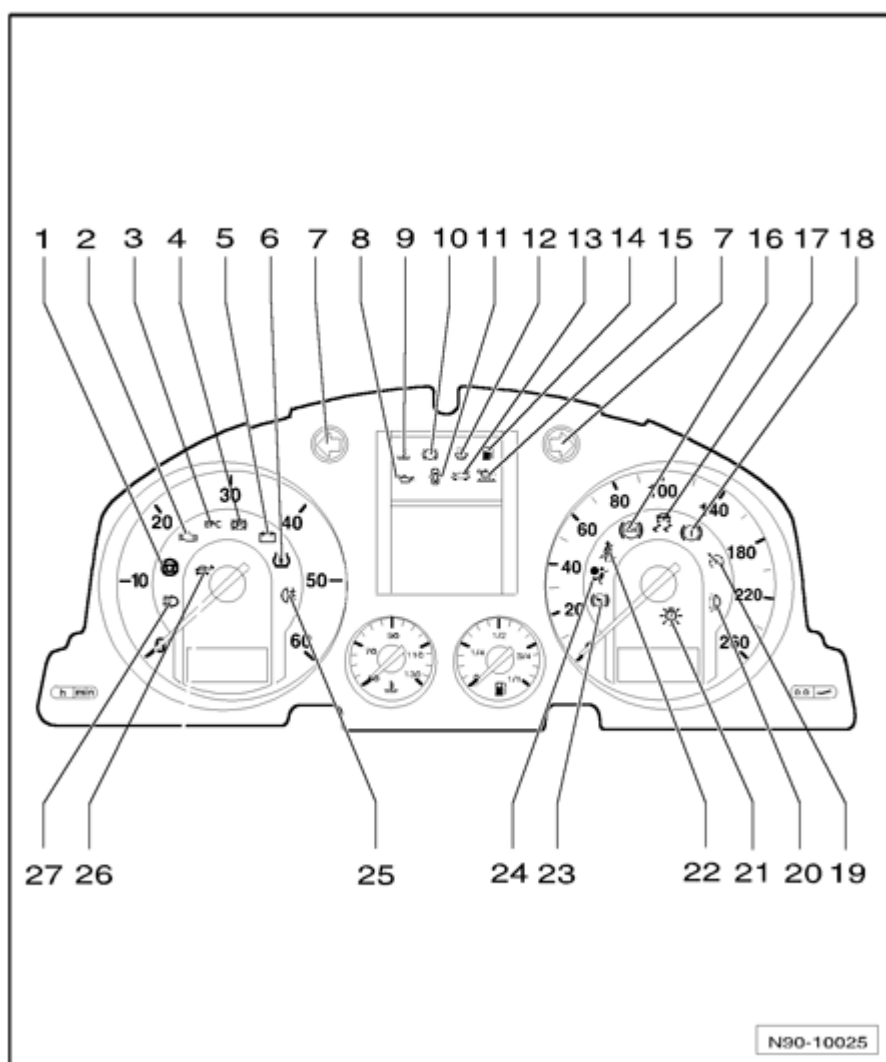
- *Multi-pin connector assignments depend on engine, vehicle equipment level and market version.*

Instrument cluster, multi-pin connector assignments ⇒
Electrical Wiring Diagrams, Troubleshooting and Component Locations binder

Instrument cluster warning and indicator lamps, overview

Note :

- *Applicability and layout of instrument cluster warning and indicator lamps depend on engine, vehicle equipment and market version.*
- *Different instrument clusters are used, depending on vehicle equipment. Some lamps illustrated here may not apply to US/CDN models.*



- **Electro-mechanical power steering**
- **Malfunction Indicator Lamp (MIL)**
- **EPC - Electronic Power Control**
 - Warning lamp only present in vehicles with gasoline engine
- **Electronic parking brake**
- **Generator (GEN)**
- **Tire pressure monitoring (TPM)**
- **Turn signal indicator (turn signal/emergency flasher system)**
- **Engine oil pressure**
- **Engine coolant temperature / level**
- **Brake pad wear indicator**
- **Indicator lamp "doors open"**
- **Washer fluid level**
- **Indicator lamp "front hood open"**
- **Low fuel level**
- **Engine oil pressure**
- **Anti-lock braking system (ABS)**
- **Electronic Stabilization Program (ESP)**
- **Parking brake / brake system**
- **Cruise Control System (CCS)**
- **Fog lamps**
- **Bulb failure**
- **Safety belts**
- **Indicator lamp "foot brake"**

engaged"

- Warning lamp only present in vehicles with automatic transmission

- **Airbag / safety belt tensioner**
- **Rear fog lamp**
- **Indicator lamp "fuel tank cap open"**
- **High beam**