Fuel Pump Relay and Relay Activation, Checking

The fuel pump and some of the injection system components are powered via the fuel pump relay.

The FP relay will only be activated if the engine is turning over. That means, the relay is only grounded via the engine control module when the engine control module is receiving engine speed impulses.

Test Conditions

Battery voltage OK

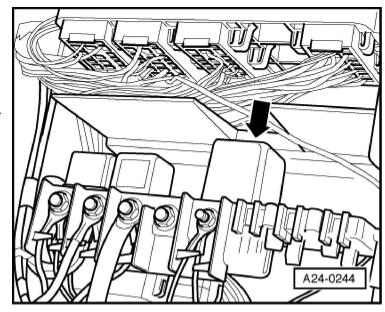
Fuel Pump Relay, Functional Test



Note

The fuel pump relay is located in the electronics box in the front passenger footwell (central electrics unit, relay position 4).

- Connect vehicle diagnostic, testing and information system -VAS5051- or scan tool -VAG1551- and select engine electronics control module by entering address word "01". Refer to Chapter. The ignition must be switched on.
- Start output Diagnostic Test Mode (DTM).
 Refer to Chapter.



Fuel pump relay should activate and fuel pump should run.

If relay does not activate:

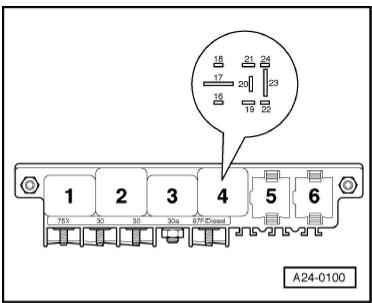
 Check activation of fuel pump relay. Refer to Anchor.

If fuel pump does not run:

 Check activation of fuel pump and other components. Refer to Anchor.

Fuel Pump Relay, Testing Activation

- Switch ignition off.
- Connect test box -VAG1598/31- to wiring harness for engine control unit. Do not connect to engine control module. Refer to Chapter.
- Connect sockets 65 and 2 of test box to each other using test leads from connector test kit -



VAG1594-.

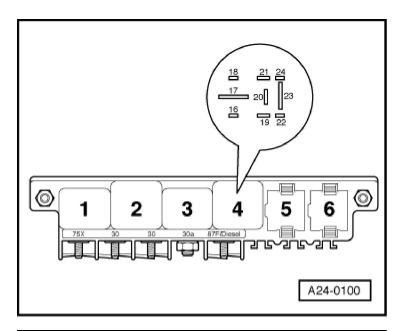
Specification: Fuel pump relay (relay position 4) should be activated.

If the relay is now activated but not during the output Diagnostic Test Mode (DTM):

 Replace the engine control module. Refer to Chapter.

If the relay does not activate:

 Disconnect fuel pump relay from relay panel (relay position 4).



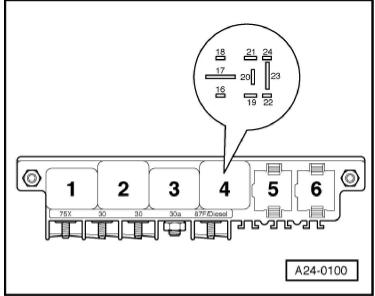
 Connect hand-held multimeter (voltage measurement range) between GND and terminal 19 on relay panel.

Specification: approximately battery voltage

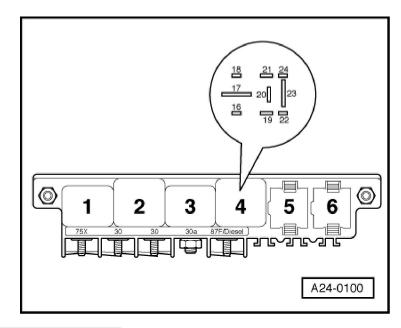
If specification is not obtained:

 Check wiring. Refer to Wiring diagrams, Troubleshooting & Component locations.

If specification is obtained:



 Test for open circuit and short to B+ or GND in the following wiring connection:



Micro central electrics in passenger footwell (right), relay position 4 terminal	Test Box -VAG1598/31- Socket
16	65

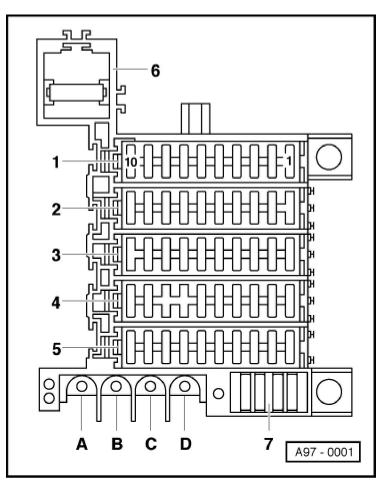
Repair any open/short circuit as necessary.

If no malfunction is detected in the wire:

- Replace the Fuel Pump (FP) Relay -J17-.
- Display readiness code. Refer to Chapter. Readiness code must be regenerated if DTC memory was erased. Refer to Chapter.

Fuel Pump and Components, Checking Activation

- Remove fuse cover on A-pillar in footwell on right side.
- Remove fuses 1, 2, and 3 (in blue fuse carrier, 4th row from the top).
- Start output Diagnostic Test Mode (DTM).
 Refer to Chapter.
- Connect handheld multimeter (voltage measurement range) between GND and either left or right contact of following fuses (only one fuse terminal voltage supply):



Fuse No.	Specification for Left or Right Contact
1	approximately battery voltage
2	approximately battery voltage
3	approximately battery voltage

If the specifications are not obtained:

Check wiring. Refer to Wiring diagrams, Troubleshooting & Component locations.

If no malfunction is detected in wire:

- Replace Fuel Pump (FP) Relay -J17-.
- Display readiness code. Refer to Chapter. Readiness code must be regenerated if DTC memory was erased. Refer to Chapter.