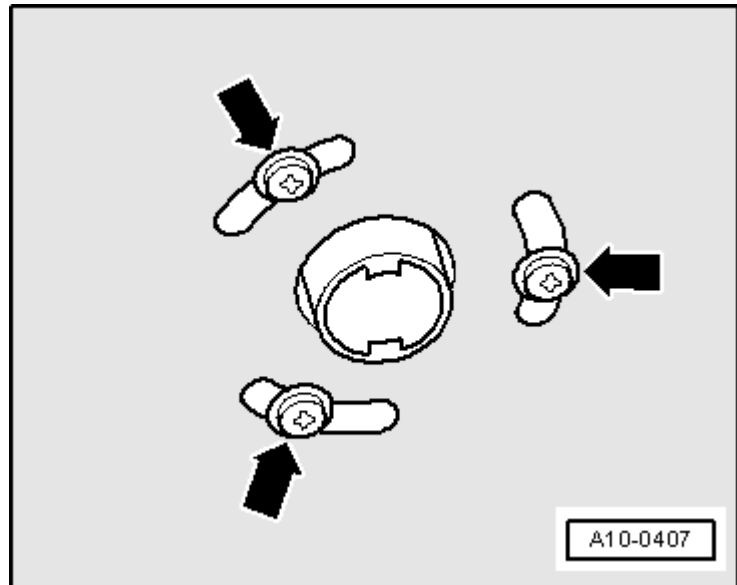


Checking multi-function switch -F125- with 10-pin connector

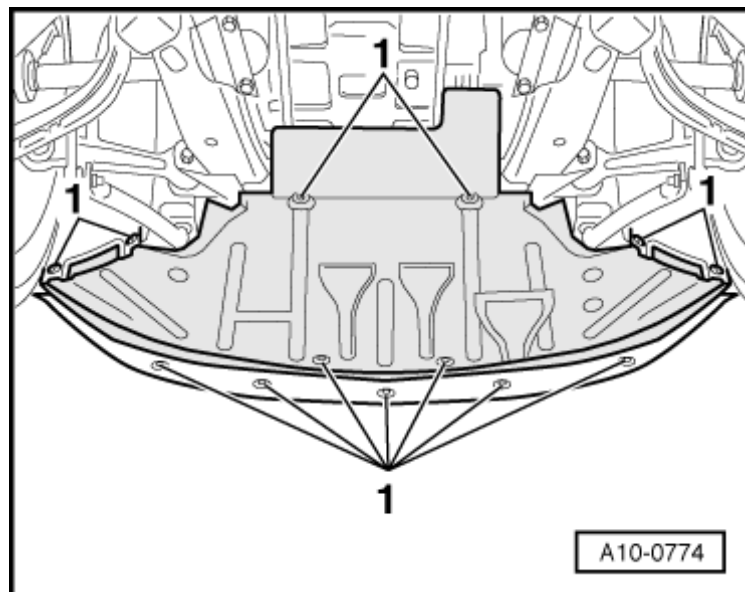


Note

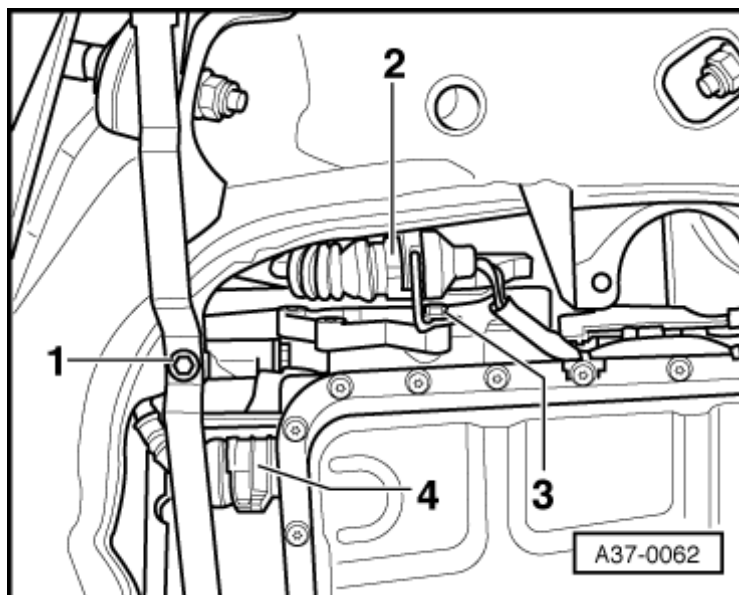
- ◆ Read "measured value block 004" for multi-function switch before performing electrical check.
- ◆ Make sure that selector lever cable is properly adjusted →Automatic gearbox 01L, four-wheel drive; Rep. Gr.37.
- On vehicles fitted with auxiliary heater, remove screws -arrows- securing exhaust pipe of auxiliary/ additional heater to noise insulation.



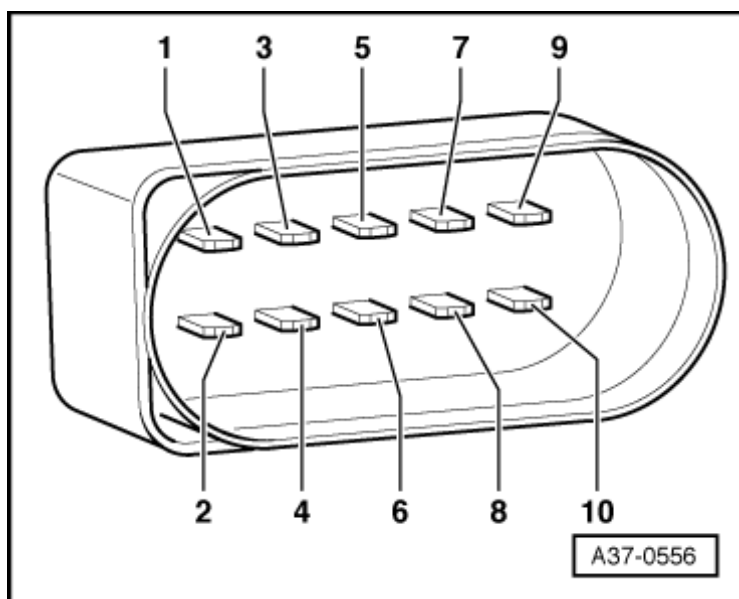
- Release fasteners -arrows- and detach noise insulation.



- Unplug connector -2- of multi-function switch -F125- at front left of gearbox.



Contact assignment at 10-pin connector of multi-function switch -F125-



Test step No. 1

| Contacts on -F125- | Items tested | Test conditions and additional steps | Specification | Fault rectification if readout does not match specification |
|--------------------|------------------------------|---|---------------|---|
| 1 + 2 | Multi-function switch -F125- | <ul style="list-style-type: none"> • Ignition switched off • Switch to resistance measuring range | Less than 1 Ω | <ul style="list-style-type: none"> - Check connector at multi-function switch for contact corrosion, moisture or loose fitting - Check selector lever cable adjustment →Automatic gearbox 01L, four-wheel drive; Rep. Gr.37 |
| | | <ul style="list-style-type: none"> - Selector lever in "P", "N", "D" | | |
| 1 + 3 | | <ul style="list-style-type: none"> - Selector lever in "R", "N", "S" or "4" | Less than 1 Ω | |

| | | | |
|-------|---|----------------------|---|
| 1 + 4 | – Selector lever in “P”, “D”, “3”, “2” | $\infty \Omega$ | – Renew multi-function switch →Automatic gearbox 01L, four-wheel drive; Rep. Gr.37 |
| | – Selector lever in “N”, “D”, “S” or “4”, “2” | Less than 1 Ω | |
| | – Selector lever in “P”, “R”, “3” | $\infty \Omega$ | |
| 1 + 5 | – Selector lever in “D”, “S” or “4”, “3” | Less than 1 Ω | |
| | – Selector lever in “P”, “R”, “N”, “2” | $\infty \Omega$ | |

Test step No. 2

| Contacts on -F125- | Items tested | Test conditions and additional steps | Specification | Fault rectification if readout does not match specification |
|--------------------|--|---|----------------------|---|
| 9 + 10 | P/N signal from multi-function switch -F125- | <ul style="list-style-type: none"> Ignition switched off Switch to resistance measuring range | $\infty \Omega$ | <ul style="list-style-type: none"> Check connector at multi-function switch for contact corrosion, moisture or loose fitting Check selector lever cable adjustment →Automatic gearbox 01L, four-wheel drive; Rep. Gr.37 Renew multi-function switch →Automatic gearbox 01L, four-wheel drive; Rep. Gr.37 |
| | | – Selector lever in “R”, “D”, “S” or “4”, “3”, “2” | | |
| | | – Selector lever in “P”, “N” | Less than 1 Ω | |

Test step No. 3

| Contacts on -F125- | Items tested | Test conditions and additional steps | Specification | Fault rectification if readout does not match specification |
|--------------------|---|---|----------------------|---|
| 7 + 8 | Reversing light signal from multi-function switch - F125- | <ul style="list-style-type: none"> Ignition switched off Switch to resistance measuring range | $\infty \Omega$ | – Check connector at multi-function switch for contact corrosion, moisture or loose fitting |
| | | – Selector lever in “P”, “N”, “D”, “S” or “4”, “3”, “2” | | |
| | | – Selector lever in “R” | Less than 1 Ω | – |

| | | | | |
|--|--|--|--|---|
| | | | | <p>Check selector lever cable adjustment → Automatic gearbox 01L, four-wheel drive; Rep. Gr.37</p> <p>– Renew multi-function switch → Automatic gearbox 01L, four-wheel drive; Rep. Gr.37</p> |
|--|--|--|--|---|

Checking voltage supply of multi-function switch

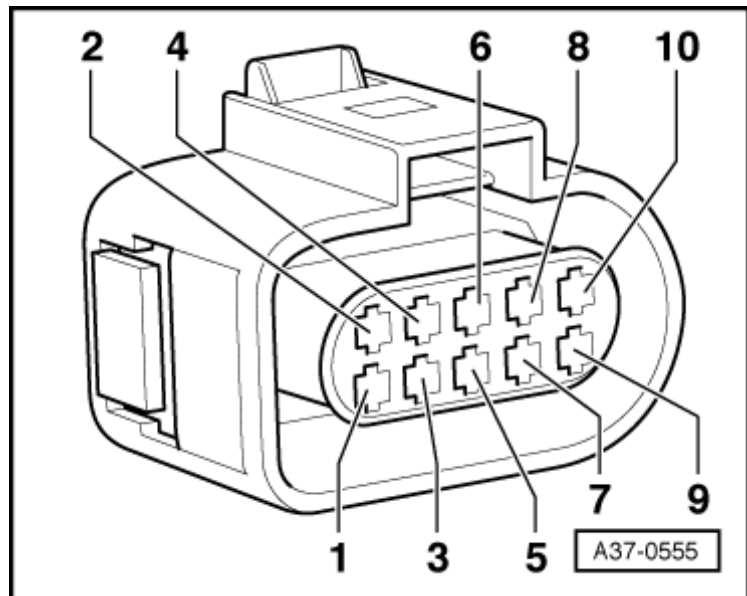
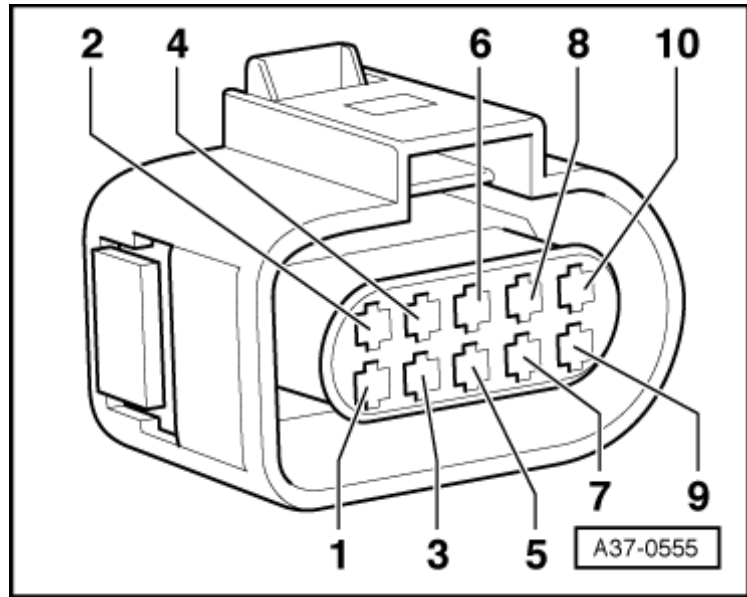
- Connect multimeter for voltage measurement between contacts -1- and -10- and between contacts -7- and -10- of the 10-pin connector.
- Switch on ignition.
- Specification: approx. battery voltage each time.

If a readout does not match specification:

- Repair wiring → [Current flow diagrams](#), [Electrical fault finding and Fitting locations](#).

Checking wiring between 10-pin connector for multi-function switch and gearbox control unit

- Connect adapter -V.A.G 1598/20- (test box) to automatic gearbox control unit -J217- → [Chapter](#).
- Connect multimeter for resistance measurement between contacts on the 10-pin connector and the sockets on adapter -V.A.G 1598/20- (test box), as shown in the following table.



| Connector Contact | Adapter -1598/20- (test box) Socket | Specification |
|-------------------|-------------------------------------|---------------|
|-------------------|-------------------------------------|---------------|

| | | |
|----|---------------------------|------------------------|
| 1 | 54 and 55 | Less than 1.5 Ω |
| 2 | 36 | Less than 1.5 Ω |
| 3 | 8 | Less than 1.5 Ω |
| 4 | 37 | Less than 1.5 Ω |
| 5 | 9 | Less than 1.5 Ω |
| 6 | Contact vacant | |
| 7 | → Anchor, Test step No. 2 | |
| 8 | | |
| 9 | → Anchor, Test step No. 3 | |
| 10 | | |

**Note**

- ◆ *If readout does not match specification, rectify open circuit in wiring according to current flow diagram and check connector for contact corrosion, moisture and leaks.*
- ◆ *If readout obtained in this wiring check matches specification, the multi-function switch -F125- must be renewed → Automatic gearbox 01L, four-wheel drive; Rep. Gr.37.*