## Checking multi-function switch -F125- with 8pin connector

## Note

- Read measured value block 004 for multi-function switch before performing electrical check.
- Make sure that selector lever cable is properly adjusted
$\rightarrow$ 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 8-pin connector of multi-function switch - F 125 -.


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- | - Ignition switched off <br> - Switch to resistance measuring range <br> - Selector lever in "P", "N", "D" | Less than $1 \Omega$ | - Check connector at multifunction switch for contact corrosion, moisture or loose fitting <br> - Check selector lever cable adjustment $\rightarrow$ Automatic gearbox 01L, four-wheel drive; Rep. Gr. 37 |
|  |  | - Selector lever in " $R$ ", "4", "3", "2" | $\infty \Omega$ |  |
| $1+3$ |  | $\text { - } \begin{aligned} & \text { Selector lever in " } \mathrm{R} \text { ", } \\ & \text { " } \mathrm{N} \text { ", " } 4 \text { " } \end{aligned}$ | Less than $1 \Omega$ |  |



- Selector lever in "P", $\quad \infty \Omega$ "D", "3", "2"

Renew multi-function switch $\rightarrow$ Automatic gearbox 01L, four -wheel drive; Rep. Gr. 37

## Test step No. 2

| Contacts on -F125- | Items tested | Test conditions and additional steps | Specification | Fault rectification if readout does not match specification |
| :---: | :---: | :---: | :---: | :---: |
| $6+7$ | P/N signal from multi-function switch -F125- | - Ignition switched off <br> - Switch to resistance measuring range <br> - Selector lever in " $R$ ", "D", "4", "3", "2" <br> - Selector lever in "P", " N " | ( $\sim^{\infty} \Omega$ | - Check connector at multifunction switch for contact corrosion, moisture or loose fitting <br> - Check selector lever cable adjustment $\rightarrow$ Automatic gearbox 01L, four-wheel drive; Rep. Gr. 37 <br> - Renew multi-function switch $\rightarrow$ Automatic gearbox 01L, four -wheel drive; Rep. Gr. 37 |

## Test step No. 3

| Contacts on -F125- | Items tested | Test conditions and additional steps | Specification | Fault rectification if readout does not match specification |
| :---: | :---: | :---: | :---: | :---: |
| $1+8$ | Reversing light signal from multifunction switch -F125- | - Ignition switched off <br> - Switch to resistance measuring range <br> - Selector lever in "P", <br> "N", "D", "4", "3", "2" <br> - Selector lever in "R" | $\infty \Omega$ <br> Less than $1 \Omega$ | - Check connector at multifunction switch for contact corrosion, moisture or loose fitting |


|  |  | Check selector lever cable <br> adjustment $\rightarrow$ Automatic <br> gearbox 01L, four-wheel <br> drive; Rep. Gr.37 |
| :--- | :--- | :--- | :--- |
| -Renew multi-function switch <br> $\rightarrow$ Automatic gearbox 01L, four <br> -wheel drive; Rep. Gr.37 |  |  |

## Checking voltage supply of multi-function switch

- Connect multimeter for voltage measurement between contacts -1 - and -6of the 8 -pin connector.
- Switch on ignition.
- Specification: approx. battery voltage.

If readout does not match specification:

- Repair wiring $\rightarrow$ Current flow diagrams, Electrical fault finding and Fitting locations.

Checking wiring between 8-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-
$\rightarrow$ Chapter.
- Connect multimeter for resistance measurement between contacts on the 8pin connector and the sockets on adapter V.A.G 1598/20- (test box), as shown in the following table.


| Connector <br> Contact | Adapter -1598/20- <br> (test box) <br> Socket | Specification |
| :---: | :---: | :---: |
| 1 | 54 and 55 | Less than $1.5 \Omega$ |


| 2 | 36 | Less than $1.5 \Omega$ |
| :---: | :---: | :---: |
| 3 | 8 | Less than $1.5 \Omega$ |
| 4 | 37 | Less than $1.5 \Omega$ |
| 5 | 9 | Less than $1.5 \Omega$ |
| 6 | 6,34 and 28 if <br> necessary | Less than $1.5 \Omega$ |
| 7 | $\rightarrow$ Anchor, Test step No. 2 |  |
| 8 | $\rightarrow$ Anchor, Test step No. 3 |  |

## 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 $\rightarrow$ Automatic gearbox 01L, four-wheel drive; Rep. Gr.37.

