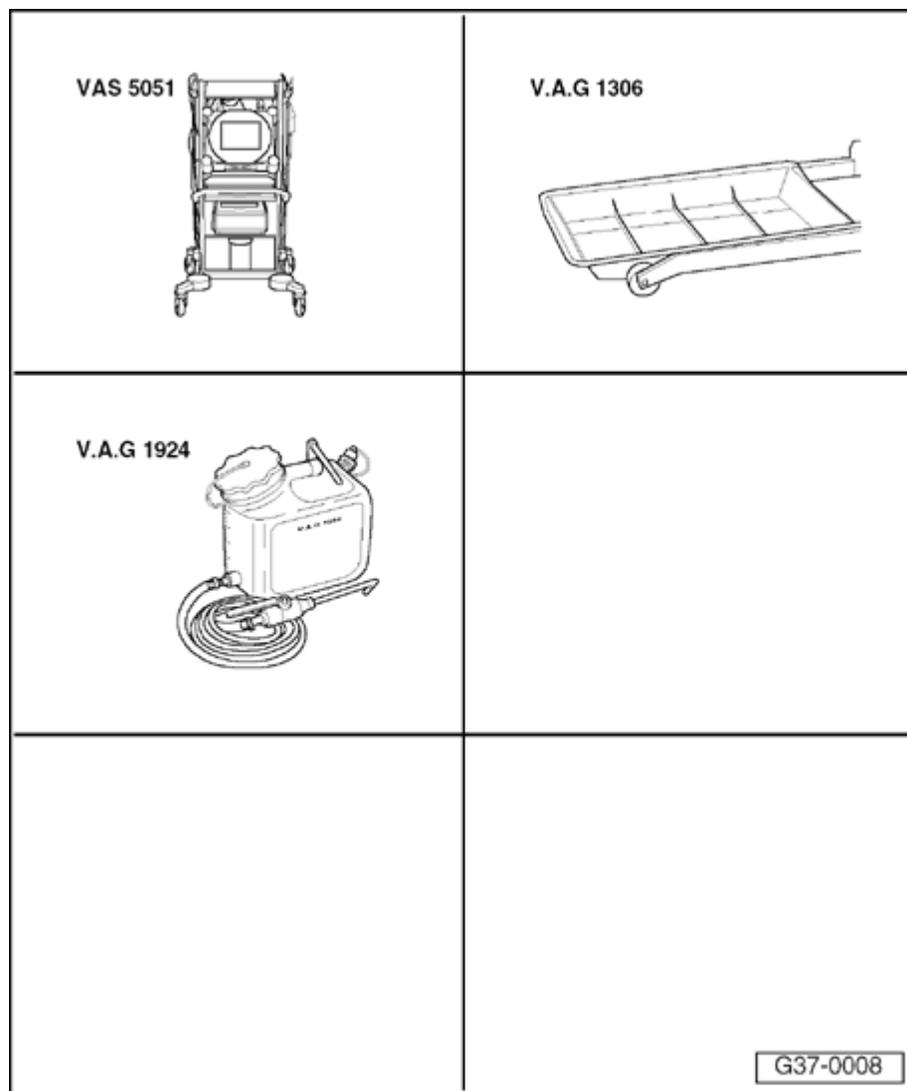


37-133



Automatic Transmission Fluid (ATF), checking and changing

ATF level, checking

Special Tools and Equipment

- ◆ VAS5051 tester with VAS5051/1 diagnostic cable (or VAG1551 scan tool with VAG1551/3 cable)
- ◆ VAG1306 drip tray
- ◆ VAG1924 ATF filler tool
- ◆ Protective glasses

Test requirements:

- Transmission must not be in emergency running mode.
- Vehicle on level ground.
- Selector lever in "P", let engine run at idle.
- A/C system and heating switched off.
- ATF temperature must not be higher than 30 ° C at start of test, allow transmission to cool down if necessary.

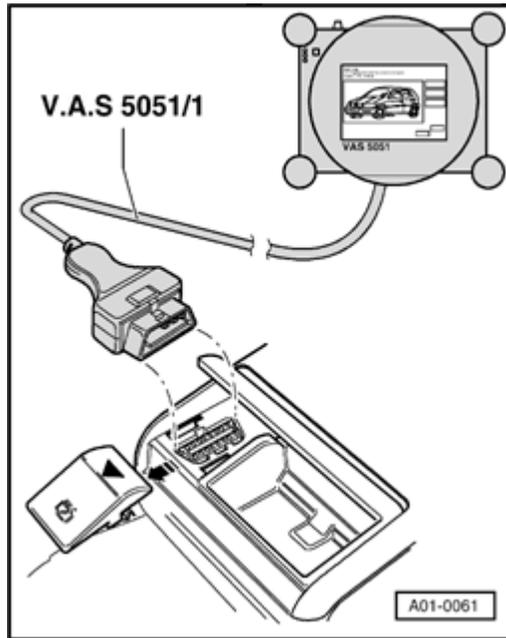
Notes:

- ◆ *ATF level changes with ATF temperature.*
- ◆ *Performing ATF level check when ATF temperature is too low causes overfilling.*
- ◆ *Performing ATF level check when ATF temperature is too high causes insufficient filling.*
- ◆ *Excess filling and insufficient filling both affect*

the function of the transmission.

- ◆ *An extra ATF check must be performed for vehicles with auxiliary ATF cooler ⇒ [page 37-138](#)*
- ◆ *The ATF temperature is read out by the VAS5051 tester or VAG1551 Scan Tool (ST).*

Checking ATF temperature



- Connect VAS5051 tester to vehicle with VAS5051/1 diagnostic wire. Alternately, VAG1551 Scan Tool (ST) can also be attached using VAG1551/3 adapter.

⇒ [Repair Manual, 5 Spd. Automatic Transmission 01V On Board Diagnostic \(OBD\), Repair Group 01, Performing On Board Diagnostic \(OBD\)](#)

- Start engine.

Rapid data transfer **HELP**
Select function XX



When indicated on display:

- Press buttons -0- and -8- to select "Read measuring value block" and press -Q- button to confirm input.

Read measuring value block **Q**
Enter display group number XXX



When indicated on display:

- Press buttons -0-, -0- and -4- to select display group "004" and press -Q- button to confirm input.

Read measuring value block 4 →



When indicated on display:

1 2 3 4

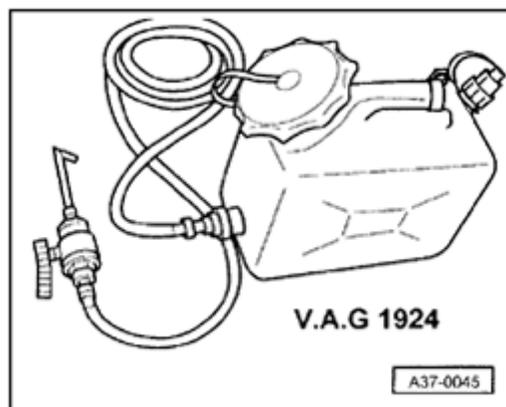
- Read ATF temperature in display field 1.

Checking and correcting ATF level

Notes:

- ◆ ATF level is checked at the ATF check plug.
- ◆ ATF level is correct if a little bit of fluid still escapes at the ATF check plug between 35 ° and 45 ° C ¹⁾ (dependant on the fluid level when warming up).

1) For warm countries 50 ° C

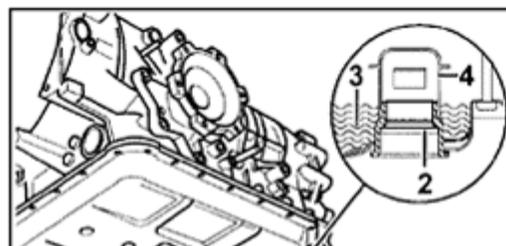


A

- Secure container of VAG1924 ATF filler tool as high up on vehicle as possible.
- Raise vehicle.
- Place VAG1306 drip tray under transmission.

WARNING!

Wear protective glasses.



A

- Once an ATF temperature of 35 ° C is reached, remove ATF check plug -2- and drain excess ATF if necessary.

- If ATF exits from the ATF filler plug hole before the ATF reaches 40 °C, the ATF level is OK.

Note:

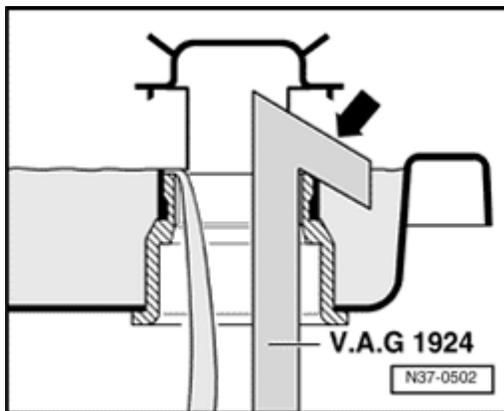
ATF check plug must be closed again by 45° C

1) at the latest ⇒ [page 37-137](#) .

1) For warm countries 50° C

- Add ATF if no ATF has escaped from the ATF check plug hole by 40 °C.

- Insert VAG1924 ATF filler tool into an opening - 4- in the protective cap, but do not knock cap upward.



A

- Fill with ATF using VAG1924 ATF filler tool until ATF exits from the check hole.



- Always replace seal (arrow) for ATF check plug.
- Tighten ATF check plug to 80 Nm.
- → Press button on VAG1551.
- Press buttons -0- and -6- to select "End output" and press -Q- button to confirm input.

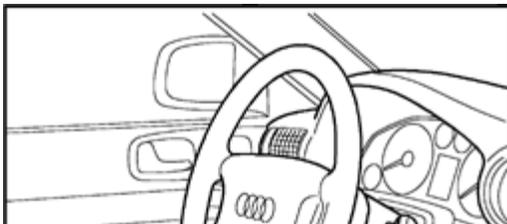
ATF level, checking (vehicles with auxiliary ATF cooler)

This test must be performed after auxiliary ATF cooler has been emptied or when it has been replaced. Installation position of the auxiliary ATF cooler ⇒ [page 37-157](#) , item A.

Test requirements:

- Transmission must not be in emergency running mode.
- ATF is filled up ⇒ [37-140](#)
- Selector lever in "P", let engine run at idle.
- A/C system and heating switched off.
- ◆ *The ATF temperature is read out by the VAS5051 tester or VAG1551 Scan Tool (ST).*

Checking ATF temperature



A

- Connect VAS5051 tester to vehicle with VAS5051/1 diagnostic wire. Alternately, VAG1551 Scan Tool (ST) can also be attached using VAG1551/3 adapter.

⇒ [Repair Manual, 5 Spd. Automatic Transmission 01V On Board](#)

[Diagnostic \(OBD\), Repair Group 01, Performing On Board Diagnostic \(OBD\)](#)

Rapid data transfer HELP
Select function XX

- Start engine.

⬅ When indicated on display:

- Press buttons -0- and -8- to select "Read measuring value block" and press -Q- button to confirm input.

Read measuring value block Q
Enter display group number XXX

⬅ When indicated on display:

- Press buttons -0-, -0- and -4- to select display group "004" and press -Q- button to confirm input.

Read measuring value block 4 →
1 2 3 4

⬅ When indicated on display:

- Read ATF temperature in display field 1.

- Let engine run until ATF temperature has reached at least 85 ° C, a road test may be necessary to reach this temperature.

Note:

The thermostat at the opening for the auxiliary ATF cooler does not open until 80 ° C so that the cooler can fill up with ATF.

The content of the auxiliary ATF cooler is 140 ml. of ATF.

- Switch off engine and let ATF cool down again until temperature has fallen below 35 ° C.

- Check ATF level ⇒ [page 37-133](#) .

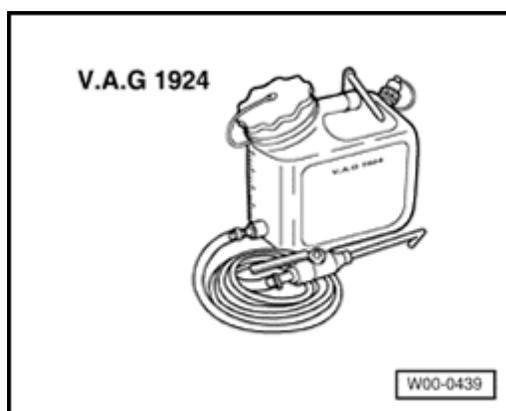
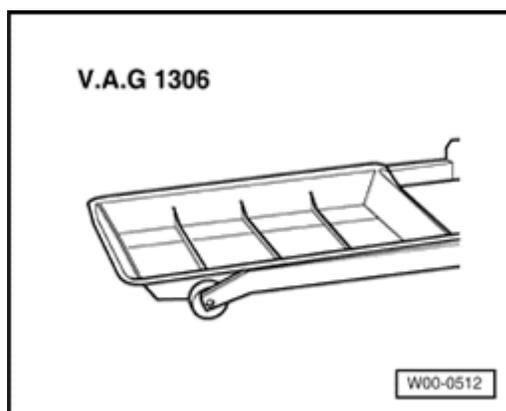
37-140

ATF, changing or topping off after repair work

- Engine switched off.

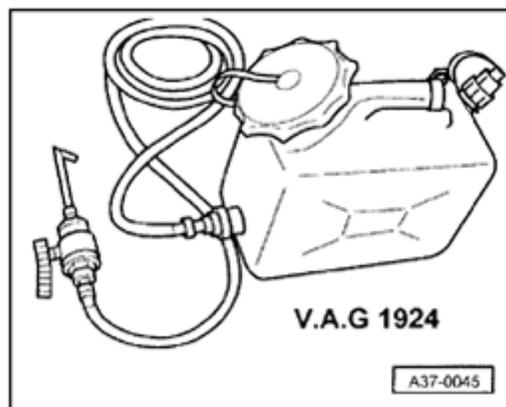
Special tools and equipment

- ◆ VAG1306 drip tray



- ◆ VAG1924 ATF filler tool

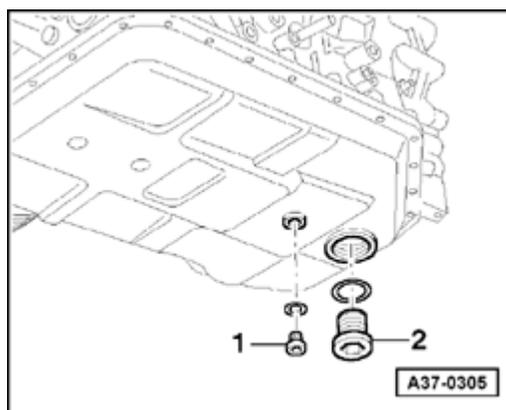
37-141



- A**
- Secure container of VAG1924 ATF filler tool as high up on vehicle as possible.
 - Raise vehicle.

Notes:

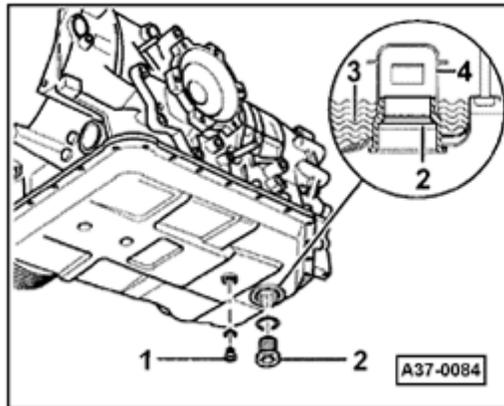
- ◆ *Observe disposal regulations.*
 - ◆ *Engine must not be started without ATF and vehicle must not be towed!*
- Place VAG1306 drip tray under transmission.



- A**
- Remove ATF drain plug -1- and drain ATF.

Note:

Drain plug and oil seal must both be replaced.

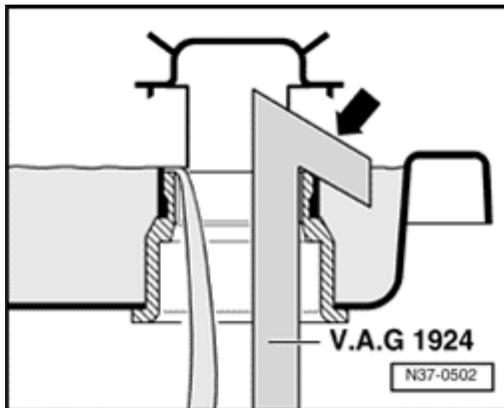


- Tighten ATF drain plug to 40 Nm.

- Remove ATF check plug -2-.

A

- Insert VAG1924 ATF filler tool into an opening -4- in the protective cap, but do not knock cap upward.



A

- Fill with ATF using VAG1924 ATF filler tool until ATF exits from the check hole.

- Shift selector lever into position "P".

- Start engine.

- Keeping the brake pedal depressed, shift into all selector lever positions at idle speed. Each position must remain selected for at least 10 seconds.

- Shift selector lever into position "P".

- Check ATF level and top off ⇒ [Page 37-133](#) onward.

Note:

Observe all notes and test requirements for "Checking ATF level".