Transmission Dipstick
(Check fluid without a dipstick.)
(Change fluid without a dipstick.)

Submitted by Harry Pinchot (pcril@earthlink.net)  September 2004

Eurovans and Rialtas with the VR6 engine and automatic transmission (O1P) do not have a dipstick or normal filler tube for the transmission. The O1P automatic transmission is equipped with a short filler tube, which is capped with a red plastic cover. VW considers this transmission unserviceable (sealed, closed) by anyone other than a dealer and requires the use of only VW automatic transmission fluid, P/N G052 162 A2.

Here is how to install a transmission dipstick so you can routinely check the fluid level, observe the fluid color and odor, and add fluid without special equipment or having to remove the belly pan.

APPROX. MODIFICATION TIME: 1 hour

PART LIST
* All prices are pre tax.

<table>
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<tbody>
<tr>
<td>Individual Parts:</td>
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<tr>
<td>Transmission dipstick, P/N 098321 431 F</td>
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<tr>
<td>Transmission filter kit</td>
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<td>VW automatic transmission fluid</td>
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<td>VW P/N G 052 162 A2</td>
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<td>Filler tube P/N 098 321 405 C</td>
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<td>APPROX. TOTAL COST OF PARTS</td>
<td>~ $100</td>
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INSTRUCTIONS

Note: I followed the procedures listed in the Bentley manual for checking the automatic transmission fluid (ATF) level, including measuring the fluid temperature before opening the overflow tube.

Note: Having the fluid at the correct temp and running the gear selector through the gears are imperative in order to get the level correct. When the transmission is cool it appears to be over filled, just as it does in any other automatic transmission.
Note: The filler tube (P/N 098 321 405 C) has a mounting bracket at the lower end and upper end. The upper bracket will NOT fit around the 6-cylinder starter and must be removed from the tube. The lower bracket is more than sufficient to secure the tube.

- Remove the existing fill tube by prying upwards with two small screwdrivers. It is snapped in place and removes easily.
- Remove the “O” ring from the tube and placed it on the dipstick tube between the two ridges at the lower end of the tube. A new "O" ring should be used if possible. These ridges are intended to position the “O” ring in the correct location.
- Insert the dipstick tube into the case and secure it with the lower bracket.
- (If you are going to change the fluid and filter, now is a good time.)
- Check the fluid level with the dipstick. The fluid level when warm (not hot) sets right between the two holes in the dipstick where it would normally.

If you wish to CHECK your fluid WITHOUT installing a dipstick, the red cover (seal) can be easily removed without damaging it. If you do not wish to replace it after servicing the transmission, the cover under the red cap has its own securing clips. The red cover can be removed by inserting a very small screwdriver or nail into the bottom of vertical slot on the cover. This will release the clip that holds the cover closed. The cap can then be reused.

If you wish to CHANGE fluid WITHOUT installing a dipstick, try the following procedure:

- Purchase four liters of VW ATF P/N G 052 162 A2. Purchase a filter and filter gasket plus a pan gasket. All can be purchased for less cost and faster delivery from Europarts www.europarts-sd.com, 858-451-0020
- Park the vehicle on level ground and warm the engine to operating temperature.
- Remove the belly pan.
- Remove the red plastic seal from the filler located at the front of the transmission. Now remove the filler cap.
- Remove the bolts holding the transmission oil pan leaving two bolts loose (on opposite corners).
- Position a drain pan under the oil pan and remove one of the remaining oil pan bolts while supporting the pan with your other hand.
- Gently lower the free corner and allow the "HOT" fluid to drain into the pan. Now remove the last bolt.
• Keep the drain pan under the transmission and remove the filter and its gasket. When you remove the filter additional fluid will drain into the pan.

• Install the new filter and its gasket (round seal) to the valve body.

• Clean the oil pan, remove and replace the oil pan gasket. It is a fancy "O" ring that simply fits over the pan lip.

• Remove the Alan plug (hex head bolt) at the left rear corner of the oil pan. When you do this you will notice the bolt is actually a plug threaded into a tube that is welded to the oil pan. Note, some tubes are not welded in place and are removable with the long end of the same Alan wrench used to remove the plug.

• Install the oil pan and gasket. Be sure that you have replaced the filter and gasket first. Do not install the Alan head plug you just removed from the pan's left rear corner.

• Leave the drain pan under the transmission and pour three liters of ATF (NO MORE) into the filler tube at the front of the transmission. A small amount may drain from the opening created when you removed the Alan head plug (bolt). Stop pouring when this happens (VW ATF is expensive).

• Temporarily replace the plug, start the engine, and run the gear selector through all gears.

• After the transmission oil pan is hot to the touch (check by placing the palm of your hand against the oil pan), remove the plug and add additional fluid through the filler until it begins to run out the hole at the left rear of the oil pan.

• Run the selector through all gears again and top off again.

• Replace the Alan head plug and install the filler cover.

• Check for leaks and clean off any spilled fluid and test drive.

• Recheck for leaks and replace the belly pan.

• Have a beer and enjoy the feeling of accomplishment that a true DIY experiences.

Updated
Wednesday, September 29, 2004