01M 4 Speed Automatic Fluid change Procedure

Here is the step by step on how to change the ATF fluid in the TDI 4 speed 01M Automatic transmission. For the parts lists I included cropped picture links to the ETKA pages relative to the 01M transmission.

NOTE:
-This is not the differential fluid which is independent of the ATF and is a different type of fluid. Please refer to the Bentley manual for the simple instructions on changing and checking this fluid.

-This job relies on ABSOLUTE cleanliness. Some of the pictures do not reflect the cleaning that took place when reinstalling the parts due to reuse of certain picture frames. Above all make sure that no dirt is allowed to get into the transmission housing. The housing and valve controls contain extremely close tolerance electronically controlled servo valves similar to those found inside the TDI injection pump.

Parts needed:
http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/1ATa.jpg

(1) 01M 325 429 "Oil Strainer" Fig 1
(1) 01M 325 443 "gasket" Fig 2
(1) 096 321 370 "gasket" Fig 16
Fluid needed per the Bentley Manual:
"VW ATF is obtainable as a spare part.

-Container size 1.0 ltr. (1.0567 qt) - Part No. G 052 162 A2"

Note: I found that 4.5 liters were needed when replacing the filter as outlined in the following procedure.

Fluid and filter change Procedure:

First remove the plastic side liner that covers the driver side of the transmission. There are two washer retainers that can easily be removed turning them off with a flat screwdriver.
Front flat washer

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT1.JPG
Next remove the guard on the transmission pan. This requires removing 4 bolts, (2)
on the engine side, (2) on the outer most drivers side of the transmission.

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT3.JPG
Using an Allen socket remove the allen cap on the transmission pan, not fluid will
drain out once loosened so be ready to catch about 2 liters of fluid.

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT5a.jpg
With the initial amount of fluid drained from the transmission, you will need to remove the plastic baffle. This is a red 2 inch long insert that retains a majority of
This insert is also what is used to determine whether or not you have the correct amount of fluid in the ATF pan when refilling. This will be discussed later in the procedure. For now insert your allen and remove it being careful not to strip it out since its only plastic. Use caution because the fluid may still be hot and once the
baffle is removed fluid will rush out the hole.

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT7.JPG
Now with the fluid drained reinstall the plastic insert and the allen cap loosely, the
reason is you will need to remove it later to determine proper fill level.

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT8.JPG

With the fluid drained now your going to remove the four bolts that hold the pan to
the bottom of the transmission.

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT9c.JPG
Now lower the pan to the floor and if you have to drain off the rest of the residual
fluid in the pan.

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT9g.JPG

Looking up at the transmission valve housing you will see the filter with its steel base suspended from the housing. The filter is simply a press fit into the valve housing requiring a simple twist removal. Be careful NOT to pry downward so that you do not
crack off the possibly brittle plastic.

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT9h.JPG
This a comparison shot with the new filter and seal along side the old filter and
installed seal.

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20Change%20Procedure/AT9k.JPG
Gently press the new filter up and into the valve body, notice that the filter may sag a bit, this is normal since the only thing holding it in is the small seal and insert into
the valve body.

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT9m.JPG

Take the fluid pan and remove the old seal. I suggest cleaning out the pan and wiping it down. I noticed that on this transmission the magnet was cracked, I did not replace it but on the next change a new one will be ordered. Now reinstall the new
seal.

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT9n.JPG
Reinstall the pan back on the transmission with the four bolts. Torque for the four
bolts are 12 Nm (9 ft lb)

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT9p.jpg

Next step is to remove the red security cap. IF your careful you can remove it
without damaging it.

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT9q.JPG

Cap removed:

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT9r.JPG
Cap opened:

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT9s.JPG

Insert pry tool:

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT9t.JPG
Pry tool up:

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT9u.JPG

While holding the tool open the cap:

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT9v.JPG

For the filler plug you need to pry up some small tabs as well. Using the same tool
pry them up, twist and remove the plug.

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure/AT9w.JPG
Taking a 2 foot length of 3/4" heater hose slide it onto the fill port. Insert a funnel to make the filling process easier and reduce the chance of spilling. I suggest measuring the amount drained and refill that exact amount, this will cut the time to
check the proper fill amount.

http://pics.tdiclub.com/members/drivbiwire/Auto%20Fluid%20change%20procedure\AT9y3.JPG
The next step requires the use of the VAG-Com and removal of the allen nut on the transmission pan. First off look at the picture taken out of the Bentley CD. This give you an idea of what it is that we are going to be checking.
This is a condensed version of what is in the Bentley Manual:

**FLUID LEVEL CHECKING PROCEDURE**

Now start the car and go into the transmissions data blocks under transmission with your VAG-Com and go to block 005, this will display fluid temp.

- ATF temperature not above approx. **30°C (86°F)**
- Vehicle level
- Selector lever in "P"
- If ATF is below 30°C (86°F) bring the ATF up to test temperature.
  Test temperature: 35°C to 45°C (95°F to 113°F)
- Remove ATF level plug from oil pan.

**CHECKING PHYSICAL QUANTITY**

*If ATF drips out of hole:*
ATF need not be topped up.
- Install new seal on plug and tighten to 15 Nm (11 ft lb).
ATF check is completed.

*If ATF does not drip out*
- Remove plug from filler line.
- Fill with ATF until ATF runs out of level hole
- Install new seal on plug and tighten to 15 Nm (11 ft lb).
ATF check is completed.

**CAUTION!**
*Too little or too much ATF will adversely affect transmission function.*