



Mercedes W211 E55 AMG Transmission Drain and Refill

722.649 Transmission
April 2014 [AMG_W211]

*Photo credits to G-AMG from Benzworld.com

Tools Needed:

1. Torque wrench (for 8Nm and 20Nm)
2. 5mm hex socket (for ATF drain plug on ATF drain pan) [not necessarily needed if you just drop the pan]
3. T30 Torx socket
4. Long funnel that has an end that will fit in the ATF fill tube
5. Large flat pan to collect ATF fluid (enough to hold at least 6 quarts to prevent spillage)
6. Jack stands (consider rubber jack pads as well to reduce damage to unibody rubber pads)
7. 10mm socket (to remove rear-most underbody splash shield)
8. Neoprene gloves (to keep your hands clean)

Required Materials Needed (W211 E55 AMG specific):

1. 4 liter jug Fuchs Titan 4134 ATF. PN: 001989680313 (MB spec 216.14, backwards compatible with original 216.12 spec) [\$45 from rmeuropean.com; per Fuchs website, supposedly this Fuchs 4134 is rebranded to MB oil, so save money and buy this fluid vs buying costly "genuine" MB ATF fluid]
2. MB ATF dipstick tool (or equivalent): Mercedes PN: 140589152100 (\$42 shipped on eBay, if you look around; otherwise get from RMEuropean.com)
3. ATF drain plug washer: PN: 1402710060 (\$2.11) [Rmeuropean.com]
4. ATF genuine drain pan rubber gasket: PN: 1402710080 (\$8.42) [Rmeuropean.com]
5. ATF genuine filler cap lock tab: PN: 1409910055 (\$1.66) [Rmeuropean.com]
6. ATF genuine transmission filter: PN: 1402770095 (\$12.30) [Rmeuropean.com]

Buy over \$65 in parts from RMEuropean.com and get free ground shipping. You can get a Febi ATF dipstick from RMEuropean for \$37, if you want save over the genuine MB part.

*Instructions applicable to other 722.6xx transmissions, but be careful of ATF fill amounts (you may need more less than the 4 quarts). Best to start low as you can easily add more. Overfilling will need a suction transfer device (or drop the ATF pan again) to lower the levels.



LET DRAIN INTO A GRADUATED CONTAINER, IT MUST BE AT LEAST 7 QUARTS.

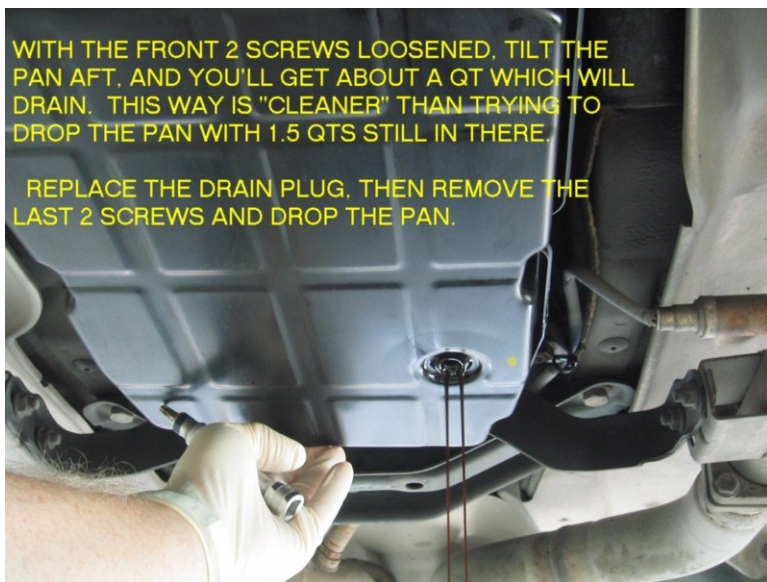
SOME ADVOCATE LETTING IT DRAIN OVERNIGHT I HAVE TRIED BOTH WAYS, AND FOUND LITTLE DIFFERENCE. (MAYBE 1/2 QUART).



T30 TORX BIT

REMOVE THE FRONT 4 BOLTS/SPACERS.

LOOSEN, BUT DON'T REMOVE THE FORWARD TWO BOLTS.



WITH THE FRONT 2 SCREWS LOOSENED, TILT THE PAN AFT, AND YOU'LL GET ABOUT A QT WHICH WILL DRAIN. THIS WAY IS "CLEANER" THAN TRYING TO DROP THE PAN WITH 1.5 QTS STILL IN THERE.

REPLACE THE DRAIN PLUG, THEN REMOVE THE LAST 2 SCREWS AND DROP THE PAN.

Note: if you want to skip the drain plug steps (not recommended) or if you stripped your drain plug and can't get it off, you can go directly to this step to drain the ATF. Be forewarned that it can get messy if you don't have a large and wide catch pan.



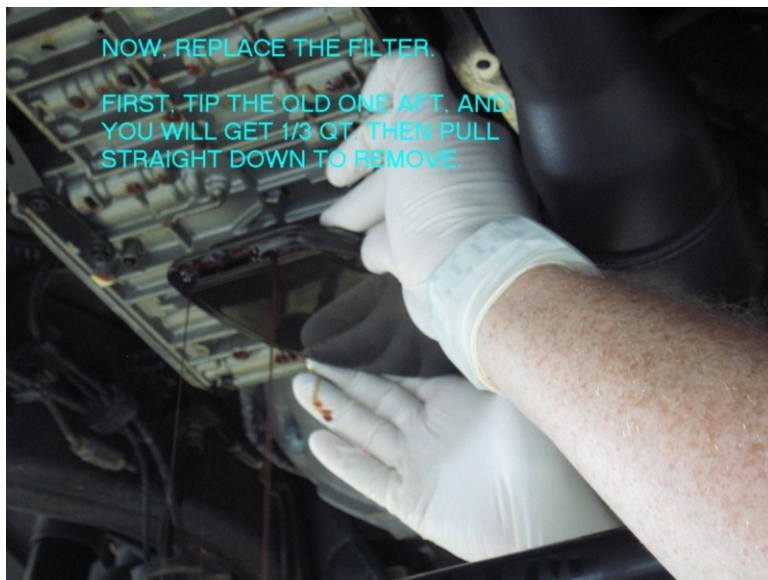
CHECK THE MAGNET FOR METAL SHAVINGS.

REMOVE THE OLD GASKET,
AND USE A LINT-FREE!! PAPER
TOWEL TO COMPLETELY CLEAN
THE PAN. NOT A TRACE!! OF FOREIGN
BODY MAY BE LEFT.

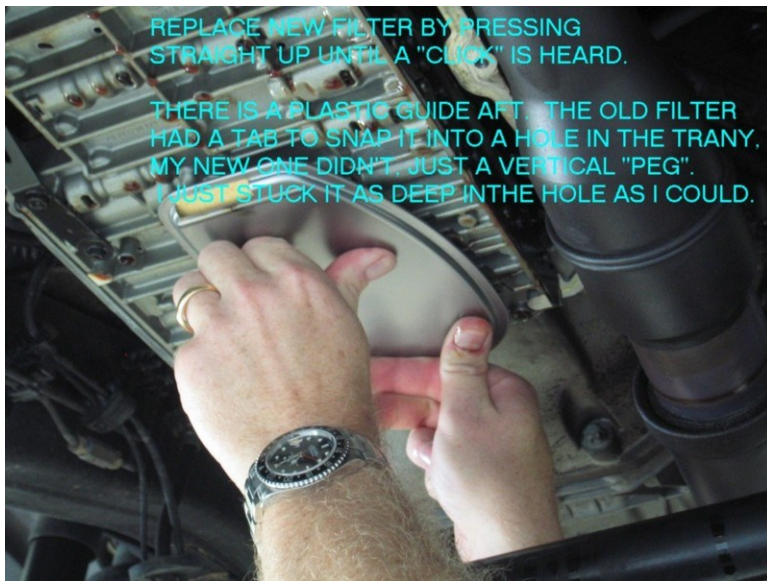
Note: On my 2006 E55, I had a round magnet instead of the square magnet. I just lifted it off and cleaned it up before placing it back on the pan.



INSTALL NEW GASKET. AND
REPLACE MAGNET.



NOW, REPLACE THE FILTER.
FIRST, TIP THE OLD ONE AFT, AND
YOU WILL GET 1/3 QT. THEN PULL
STRAIGHT DOWN TO REMOVE.



Note: Follow the vertical peg on the new filter, there's a spot on the valve body where it will click in. The filter will be at a slight angle when it's properly clicked in.



Note: This is for the (6) pan bolts. Make sure your sprag spacers are aligned properly with the pan before tightening down

Transmission housing/ pan bolts torque

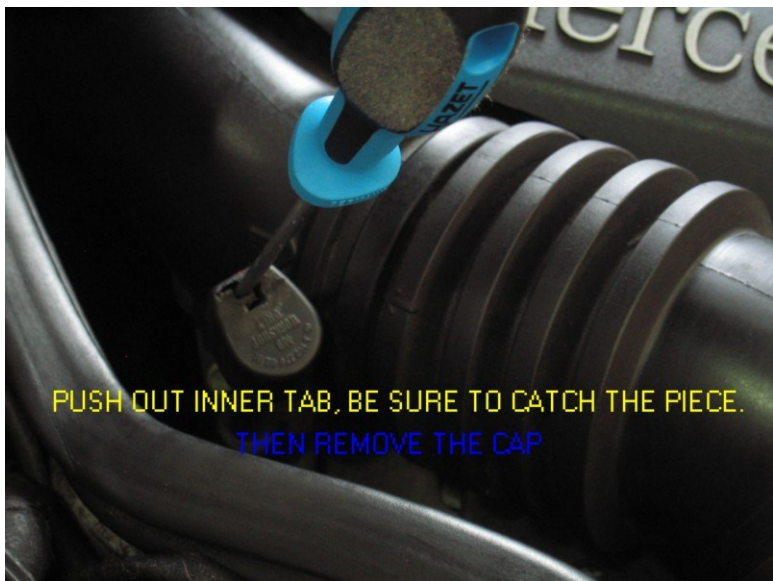
8 Nm = 5.9 ft-lbs = 72 in-lbs

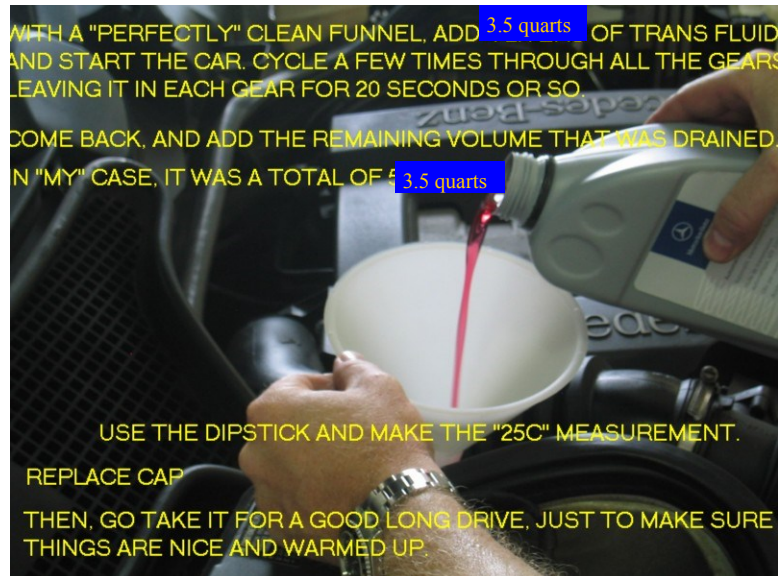
I had to use a 1/4" torque wrench for this. Do not over torque or under torque or you'll get a leak



Note: Drain plug torque

20Nm = 15 ft-lbs = 177 in-lbs





WITH A "PERFECTLY" CLEAN FUNNEL, ADD 3.5 quarts OF TRANS FLUID AND START THE CAR. CYCLE A FEW TIMES THROUGH ALL THE GEARS LEAVING IT IN EACH GEAR FOR 20 SECONDS OR SO. COME BACK, AND ADD THE REMAINING VOLUME THAT WAS DRAINED. IN "MY" CASE, IT WAS A TOTAL OF 5 3.5 quarts

USE THE DIPSTICK AND MAKE THE "25C" MEASUREMENT.

REPLACE CAP

THEN, GO TAKE IT FOR A GOOD LONG DRIVE, JUST TO MAKE SURE THINGS ARE NICE AND WARMED UP.

NOTE: Our W211 E55 AMG requires about 3.5 quarts (about 3.4 liters) for a drain and refill. The ATF comes supplied in LITERS, so keep that in mind when you pour it in.

Start by filling with 3.5 quarts, drive around for 20 minutes, then carefully top it off when measuring on a level surface (if necessary).

Initially, the "cold measurement" is not the most accurate after the drain and refill as not all of the fluid is back in the transmission lines just yet. Use the "hot measurement" after you drive around for 20 minute for the most accurate amounts.

In "my car", the total drain and refill was 3.5 quarts.



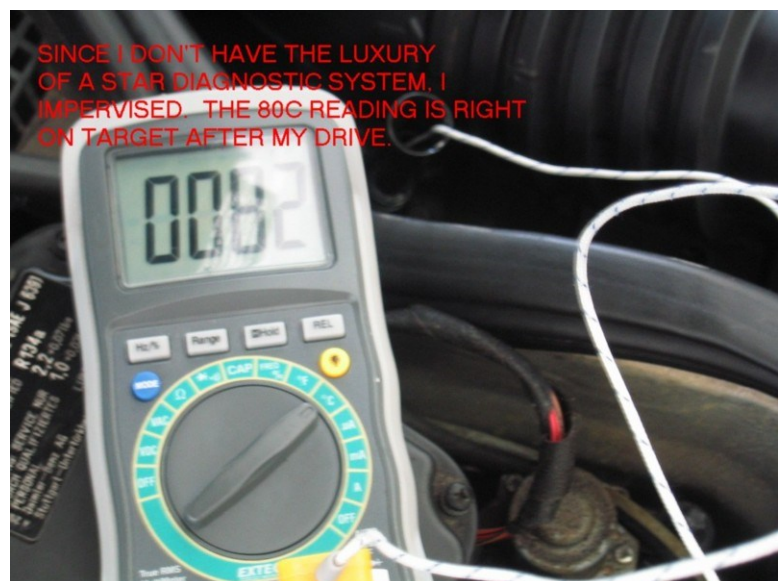
INSERT DIPSTICK WHILE THE ENGINE IS RUNNING. TO OBTAIN THE "25C" READING. YOU WILL FEEL THE RUBBER TIP HIT THE PAN.

I THEN TOOK A HEALTHY DRIVE, TO MAKE SURE EVERYTHING WAS UP TO "NORMAL" OPERATING TEMPS. I REPLACED THE CAP BEFORE THE DRIVE.

Note: To measure your ATF level, your engine MUST be running and the gear shifter is in Park.

If car is cold, use the 25 Celcius marking set. If the car has been driving for 20 minutes, then use the 80 Celcius marking set.

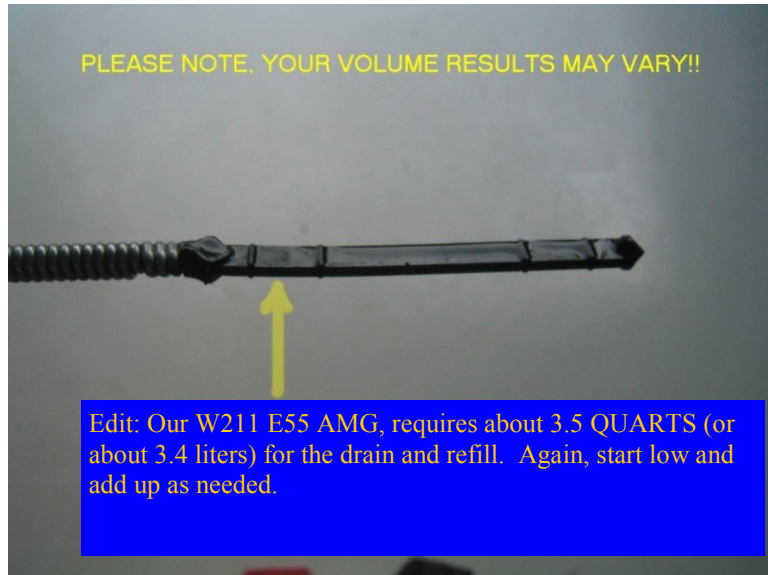
Again, the 80C marking sets are the most accurate. Use those markings on a fully warmed up car.



SINCE I DON'T HAVE THE LUXURY OF A STAR DIAGNOSTIC SYSTEM, I IMPROVISED. THE 80C READING IS RIGHT ON TARGET AFTER MY DRIVE.

Note: While it's nice to have a thermometer, if you drive around for 20 minutes, your transmission will be at 80 degrees Celcius, so this step is not necessary, unless you are OCD.

Just make sure you drive your car around and not just let it idle. Driving your car allows the ATF to get back into all of the transmission lines for an accurate level.



Note: If you overfilled, you can use a multi-use transfer pump to suction out the ATF. Only do this when the car has sat for 6 hours with the hood open, or you'll melt the hose. However, if you are careful during refill, you won't need it.

Harbor Freight Tools (66418)
\$8 online or in store



LAST STEP—RESET TRANSMISSION ADAPTATIONS

1. From a car that is totally off, insert key into ignition. Push gas pedal to floor and hold it.
2. While holding the gas pedal floored down, turn the key to position 2 (all warning lights come on), but do NOT start the car, and count for 5 seconds.
3. Turn key back to position 1 (accessory only), you can now let go of the gas pedal.
4. Wait a full 2 minutes of doing nothing inside the car—do not exit the car or mess with radios/windows/etc.—wait the full 2 minutes.
5. After 2 minutes has elapsed, you can now start the car and drive off with smooth and crisp shifting as your car resets its shift adaptations on new ATF fluid.

CONGRATS! You just saved yourself about \$400 doing this service yourself.

Recommended ATF service Interval
Factory: 40k miles

My experience (suggested intervals):

ATF Drain and refill only (by drain plug): every 20k miles

Full pan drop, ATF drain and refill, gasket and new ATF filter service: every 40k miles.