



G56 Transmission and Transfer Case Fluid Change

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Like everything else on the truck, the transmission and transfer case fluid must be changed. The owner's manual recommends a 60,000 mile service interval on both. It's a fairly simple process and hopefully this article will help you with it. I prefer to drive the truck around a little bit before I change the fluid. This will cause anything that has settled on the bottom since you last drove to be re-suspended in the fluid, allowing it to drain out with the fluid. The only problem with this is that the transmission fluid will be warm when you work with it.

As always, I suggest wearing the proper protective equipment when performing maintenance. The big one here is eye protection to prevent transmission fluid in your eyes.

Start by gathering all the materials. You will need:

- 14mm hex key for the transmission fill and drain plugs
- 10mm hex key for the transfer case fill and drain plugs
- 6 quarts + 1 quart (over fill) of ATF+4 for the transmission
 - UPDATE: I no longer use ATF+4 in the transmission; instead I use MobilTrans SHC DC. See the transmission fluid analysis article for further details about why I decided to change.**
- 3 quarts of ATF+4 for the transfer case
- A fluid pump to get the fluid into the transmission and transfer case
- A catch bucket that can hold 10 quarts of fluid
- Torque wrench to tighten the plugs
- Anti-seize compound for the plug threads



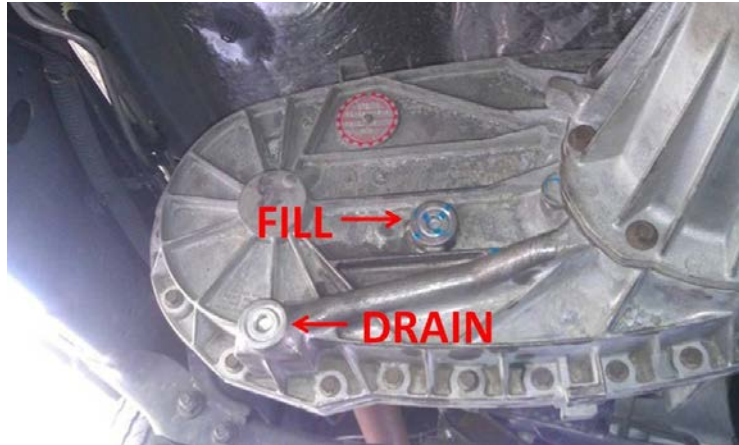
Step 1

Both the fill and the drain plugs are located on the passenger side of the transmission. Climb under the truck and loosen the fill plug on the transmission with a 14mm hex key. **ALWAYS LOOSEN THE FILL PLUG FIRST!** If you fail to loosen the fill plug first, you'll drain your transmission only to find that you can't get the fill plug out and now you have no way to re-fill it. If the transmission is still full (no leaks) you will have some fluid come out of the fill plug when you remove it. This is normal and is a good sign. After the fill plug is loose, loosen the drain plug with the same 14mm hex key. Place a bucket under the drain plug and fully remove the drain plug to drain the fluid, and then remove the fill plug. The drain plug has a magnet built into it to collect metal shavings from the transmission. It will have shavings on it; just clean them off with a rag. If you notice any large chunks of metal, you've got something major wrong with the transmission and should get it fixed ASAP.



Step 2

Repeat the above process for the transfer case. First loosen the fill plug with a 10mm hex key, then the drain plug with the same 10mm hex key. Move the bucket under the drain plug and fully remove it to drain the fluid, and then remove the fill plug. The transfer case drain plug does not have a magnet built into it.



The fluid that came out of my truck was a dark purplish color, even though it's hard to see in the pictures. It didn't smell burnt and both the transmission and transfer case were full up to the fill plugs.



Step 3

Clean the transmission drain plug and apply some anti-seize to the threads. Wipe the drain plug hole with a rag and reinstall the drain plug. Torque to 42 ft lbs. Repeat this process for the transfer case drain plug, and torque it to 15-25 ft lbs (I went to 20 ft lbs).

Step 4

Clean your fill plug and apply some anti-seize to the threads. Place it in a clean spot so it's ready to install when you need it. Set up your fluid pump and start pumping fluid back into the transmission. "Full" is when the fluid starts to run out of the fill plug hole. Mine took just a hair over 6 quarts to start running out of the hole. It is recommended to over-fill the transmission by 1 quart to help with lubrication. To accomplish this, tightly wrap a rag around the hose of your pump and hold it in the fill plug to seal it off. Then pump the 7th quart into the transmission. When the 7th quart is in the transmission, quickly remove the pump line and re-install the fill plug. Torque to 42 ft lbs. I lost about a ½ cup of fluid doing this. No pictures of the filling process, it was too messy to get the camera out.



Repeat this process for the transfer case. Clean the fill plug, put anti-seize on the threads, and place it in a clean spot. Pump fluid in the transfer case until it starts running out of the hole and then quickly install the fill plug. Torque to 15-25 ft lbs (I went to 20 ft lbs). My transfer case held just a hair under 3 quarts.

Step 5

After a few days of driving, climb back under the truck and re-torque the drain and fill plugs to ensure they aren't going to come loose. 42 ft lbs for both plugs on the transmission, and 15-25 (20) ft lbs for the transfer case.