

ESSENTIAL SERVICE

TRANSMISSION FLUID CHECK

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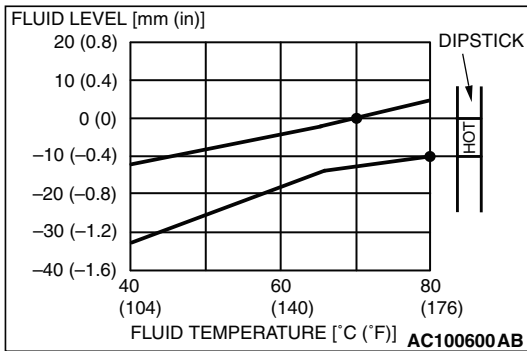
Required Special Tool:

- MB991958: Scan Tool (MUT-III Sub Assembly)
 - MB991824: V.C.I.
 - MB991827: MUT-III USB Cable
 - MB991911: MUT-III Main Harness B

1. Drive the vehicle until the transmission fluid temperature rises to the normal temperature [70 – 80°C (158 – 176°F)].

NOTE: The transmission fluid temperature is measured with scan tool MB991958.

NOTE: If it takes some amount of time until the transmission fluid reaches its normal operating temperature [70 – 80 °C (158 – 176 °F)], check the transmission fluid level by referring to the left diagram.



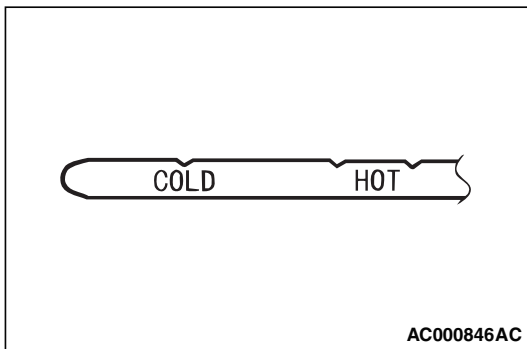
2. Park the vehicle on a level surface.
3. Move the selector lever through all positions to fill the torque converter and the hydraulic circuits with fluid, and then move the selector lever to the "N" position.
4. After wiping off any dirt around the dipstick, remove the dipstick and check the condition of the transmission fluid.

NOTE: If the transmission fluid smells as if it is burnt, it means that the transmission fluid has been contaminated by fine particles from the bushings and friction materials. A transmission overhaul and cooler line flushing may be necessary.

5. Check that the transmission fluid level is at the "HOT" mark on the dipstick. If the transmission fluid level is less than this, add DIAMOND ATF SP III transmission fluid until the level reaches the "HOT" mark.

NOTE: If the transmission fluid level is too low, the oil pump will draw in air along with the transmission fluid, which will cause bubbles to form. If the transmission fluid level is too high, rotating components inside the transmission will churn the fluid and air into a foamy liquid. Both conditions (level too low or too high) will cause the hydraulic pressure to drop, which will result in late shifting and slipping of the clutches and brakes.

In either case, air bubbles can interfere with normal valve, clutch, and brake operation. Also, foaming can cause transmission fluid to escape from the transmission vents where it may be mistaken for a leak.



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- Securely insert the dipstick.

NOTE: The transmission fluid should always be replaced under the following conditions:

- *When troubleshooting the transmission*
- *When overhauling the transmission*
- *When the transmission fluid is noticeably dirty or burnt (driving under severe conditions)*

TRANSMISSION FLUID CHANGE

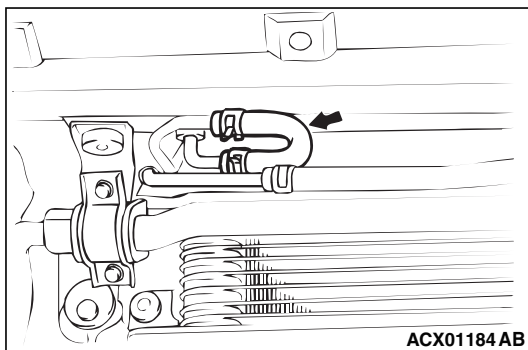
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Required Special Tool:

- MB991958: Scan Tool (MUT-III Sub Assembly)
 - MB991824: V.C.I.
 - MB991827: MUT-III USB Cable
 - MB991911: MUT-III Main Harness B

If you have an transmission fluid changer, use it to replace the transmission fluid. If you do not have an transmission fluid changer, replace the transmission fluid by the following procedure.

1. Disconnect the hose shown in the illustration which connects the transmission and the oil cooler (inside the radiator). Place a container under the hose to collect the discharge.



CAUTION

The engine should be stopped within one minute after it is started. If all the transmission fluid has drained out before then, the engine should be stopped at that point.

2. Start the engine and let the transmission fluid drain out. (Running conditions: "N" range with engine idling)

Discharge volume: Approximately 4.0 dm³ (4.2 quarts)

3. Remove the drain plug from the bottom of the transmission case to drain the transmission fluid.

Discharge volume: Approximately 2.0 dm³ (2.1 quarts)

4. Install the drain plug with a new gasket, and tighten it to the specified torque.

Tightening torque: 39 ± 5 N·m (29 ± 3 ft·lb)

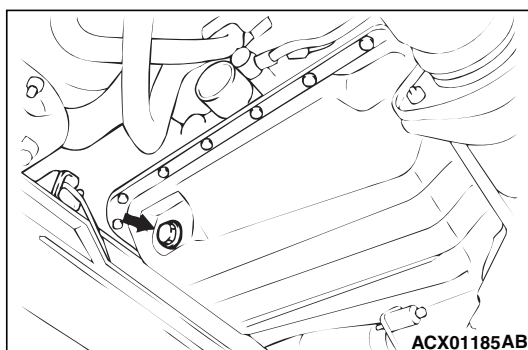
CAUTION

Stop pouring if the full volume of transmission fluid can not be added.

5. Add new transmission fluid (DIAMOND ATF SP III) through the oil filter tube.

Adding volume: Approximately 6.0 dm³ (6.3 quarts)

6. Repeat the procedure in Step 2. (to pump out the rest of the contaminated transmission fluid)

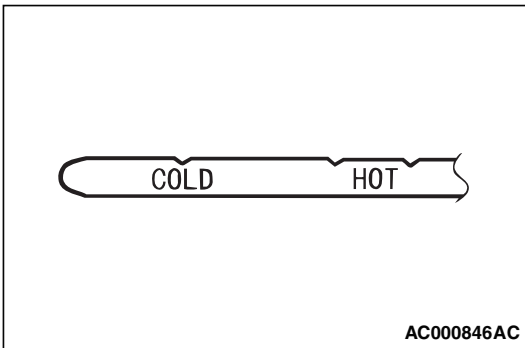
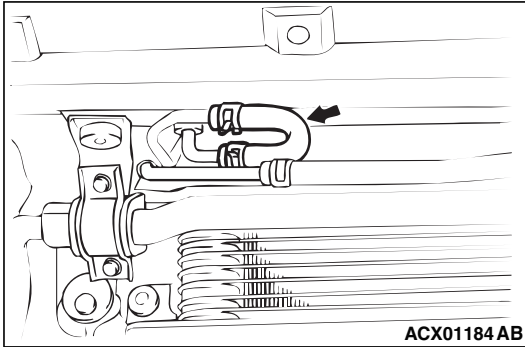


7. Add new transmission fluid (DIAMOND ATF SP III) through the oil filler tube.

Adding volume: Approximately 4.0 dm³ (4.2 quarts)

NOTE: Check for contamination or a burnt odor. If the transmission fluid is still contaminated or burnt, repeat Steps 6 and 7 before proceeding to Step 8.

8. Reconnect the hose which was disconnected in step 1 above, and firmly replace the dipstick.
9. Start the engine and run it at idle for one to two minutes.
10. Move the selector lever through all positions, and then move it to the "N" position.

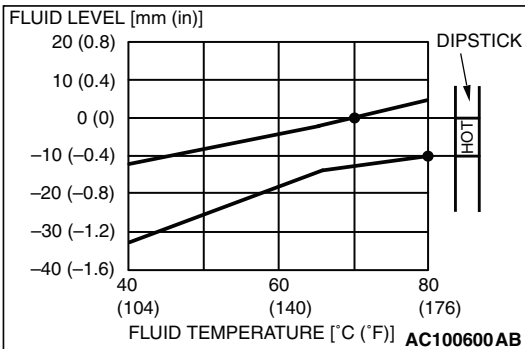


11. Check that the transmission fluid level is at the "COLD" mark on the dipstick. If the level is less than this, add transmission fluid.
12. Drive the vehicle until the transmission fluid temperature rises to the normal operating temperature [70 – 80°C (158 – 176°F)], and then check the transmission fluid level again. The transmission fluid level must be at the "HOT" mark.

NOTE: The transmission fluid temperature is measured with scan tool MB991958.

NOTE: The "COLD" level is for reference only; the "HOT" level should be regarded as the standard level.

NOTE: If it takes some amount of time until the transmission fluid reaches its normal operating temperature [70 – 80 °C (158 – 176 °F)], check the transmission fluid level by referring to the left diagram.



13. When the transmission fluid is less than the specified level, add transmission fluid.

When the transmission fluid is greater than the specified level, drain the excess fluid through the drain plug to adjust the transmission fluid to the specified level.

14. Firmly insert the dipstick into the oil filler tube.