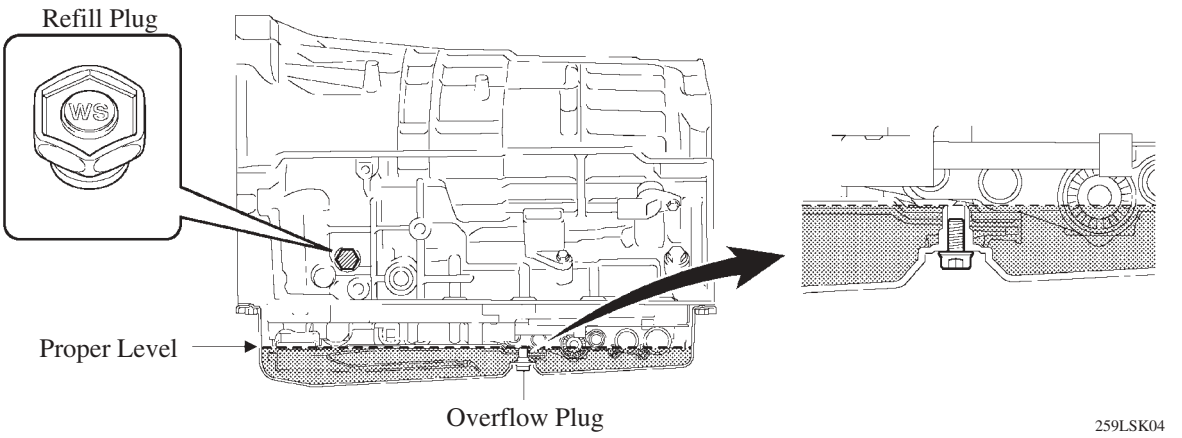
7. ATF Filling Procedures

The ATF filling procedure has been changed in order to improve the accuracy of the ATF level when being repaired or replaced. As a result, the oil filler tube and the oil level gauge used in the conventional automatic transmission have been discontinued, achieving a maintenance-free ATF level.

- This mechanism consists of a refill plug, overflow plug, ATF temperature sensor, and shift indicator light "D".



Service Tip

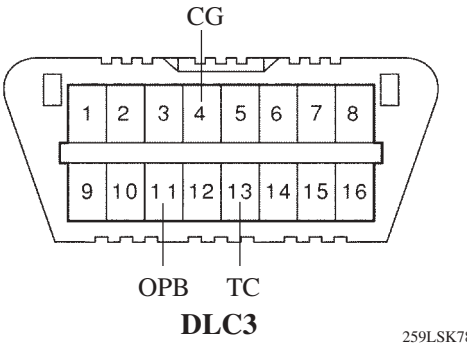
ATF Filling procedures using SST (09843-18040)

When a large amount of ATF needs to be filled (i. e. after removal and installation of oil pan or torque converter), perform the procedure from step 1. When the small amount of ATF is required (i. e. removal and installation of oil cooler tube, repair of oil leak), perform the procedure from step 7.

1) Raise the vehicle keeping it level.
2) Remove the refill plug and overflow plug.
3) Fill ATF from the refill plug until it overflows from the overflow plug.
   - The fluid to fill should be ATF WS.
4) Install the overflow plug.
5) Fill the specified amount of ATF determined by the procedure and install the refill plug.
   - Example

Procedure	Amount Liters (US qts, Imp. qts)
Removal and installation of an oil pan (including oil drainage)	1.7 (1.80, 1.50)
Removal and installation of a transmission valve body	4.3 (4.54, 3.78)
Replacement of a torque converter	5.4 (5.70, 4.75)

6) Lower the vehicle down.
7) Use the SST (09843-18040) to short the following terminals of the DLC3 connector :
   - Models without air suspension: Terminals TC and CG
   - Models with air suspension: Terminals TC, OPB, and CG



(Continued)

8) Start the engine and allow it to idle.
   - A/C switch must be turned off.
   - On models with the smart key system, make sure to insert the smart key in the engine switch to start the engine.
9) Move the shift lever from the P position to the S mode position and slowly select each gear S1 – S6. Then move the shift lever back to the P position.
10) Move the shift lever to the D position, and quickly move then back and forth between N and D (once per less than 1.5 seconds) for at least six seconds. This will activate the oil temperature detection mode.
    Standard: The shift position indicator light "D" remains illuminated for 2 seconds and it goes off.
11) Return the shift lever to the P position and disconnect the TC terminal.
    - For models with air suspension, do not disconnect the SST from terminals OPB and CG of DLC3 until the procedure is finished.
12) Idle the engine to raise the oil temperature.
13) Immediately after the shift position indicator light "D" turns on, lift the vehicle up.
    - The shift position indicator light "D" will indicate the ATF temperature according to the following table. (Insert table here)

ATF Temp.	Less than optimized temperature	Optimized temperature	More than optimized temperature
Shift Position Indicator Light "D"	Turn OFF	Turn ON	Blinking

14) Remove the overflow plug and adjust oil quantity.
    - If the ATF overflows, go to step 17, and if the ATF does not overflow, go to step 15.
15) Remove the refill plug.
16) Fill ATF to the refill plug until it flows out from the overflow plug.
17) When the ATF flow slows to a trickle, install the overflow plug through the new gasket.
18) Install the refill plug (only if the refill plug has been removed).
19) Lower the vehicle down.
20) Turn the ignition switch OFF to stop the engine.
    - Disconnect the terminals OPB and CG of the DLC3 when working on a vehicle equipped with air suspension.

For details about the ATF Filling procedures, see the LEXUS LS430 Repair Manual Supplement (Pub. No. RM1049E).