DTC P0897 the TCM detects a calculated transmission oil life of 10 percent or less

Circuit Description

Transmission fluid life is determined by monitoring transmission fluid temperature over a period of time. The transmission control module (TCM) calculates transmission fluid life based on a set of temperature ranges stored in TCM memory. As the vehicle is driven, a counter increments. The rate at which the counter increments depends on the temperature range in which the transmission is currently operating. The higher the temperature range, the faster the counter increments. As the counts increment, the TCM will begin to decrease the fluid life percentage from 100, high fluid life, to 0, low fluid life. If the TCM detects a calculated transmission oil life of 10 percent or less, then DTC P0897 sets. DTC P0897 is a type C DTC.

Conditions for Running the DTC

- No Transmission Fluid Overtemperature DTC P0218.
- No TFT DTCs P0711, P0712, or P0713.

Conditions for Setting the DTC

The calculated transmission oil life remaining is less than 10 percent.

Action Taken When the DTC Sets

- The TCM does not request the Engine Control Module (ECM) to illuminate the malfunction indicator lamp (MIL).
- CHANGE TRANSMISSION FLUID displays on the driver information center (DIC).
- The TCM records the operating conditions when the Conditions for Setting the DTC are met. The TCM stores this information as a Failure Record.
- The PCM stores DTC P0897 in TCM history.

Conditions for Clearing the DIC/DTC

- The TCM clears the DIC when the condition no longer exits.
- A scan tool can clear the DTC.

- The TCM clears the DTC from TCM history if the vehicle completes 40 warm-up cycles without a non emission related diagnostic fault occurring.
- The TCM cancels the DTC default actions when the fault no longer exists and the DTC passes.

Diagnostic Aids

Inspect the transmission cooling system for possible blockage and restrictions.

Test Description

The number below refers to the step number on the diagnostic table.

This step changes the AT fluid and filter. It is important to reset the oil life monitor after the fluid and filter are replaced.

DTC P0897

Step	Action	Value(s)	Yes	No
1	Did you perform the Diagnostic System Check – Vehicle?	\$~	Go to Step 2	Go to Diagnostic System Check - Vehicle in Vehicle DTC Information
2	 Install a scan tool. Turn ON the ignition, with the engine OFF. Record the DTC Failure Records. Clear the DTC. Replace the transmission fluid and filter. Refer to Automatic Transmission Fluid/Filter Replacement Use the scan tool in order to reset the transmission oil life. Is the action complete? 		Go to Step 3	

Step	Action	Value(s)	Yes	No
3	Perform the following procedure in order to verify the repair: 1. Select DTC. 2. Select Clear Info. 3. Ensure that the transmission oil life monitor displays 99 percent or greater. 4. Select Specific DTC. 5. Enter DTC P0897. Has the test run and passed?		Go to Step 4	Go to Step 2
4	With the scan tool, observe the stored information, capture info and DTC info. Does the scan tool display any DTCs that you have not diagnosed?	5	Go to Diagnostic Trouble Code (DTC) List - Vehicle in Vehicle DTC Information	System OK