Diagnostic Information on Diagnostic Trouble Code (DTC) P0894 and P1870 #02-07-30-001D - (Dec 2, 2005)

Diagnostic Information on Diagnostic Trouble Code (DTC) P0894 and P1870

2000-2006 GM Passenger Cars and Light Duty Trucks

2003-2006 HUMMER H2

2006 HUMMER H3

2005-2006 Saab 9-7X

with 4L60-E or 4L65-E Automatic Transmission

This bulletin is being revised to add the 2006 model year vehicles and HUMMER H3. Please discard Corporate Bulletin Number 02-07-30-001C (Section 07 -- Transmission/Transaxle).

Diagnostic trouble codes (DTC) P0894 and P1870, Transmission Component Slipping, may have different root causes. The following diagnostic tips are provided to assist in accurately repairing the condition.

- Corporate Bulletin Number 01-07-30-023B or newer is intended for 1996-1999 vehicles with more than 32,000 km (20,000 mi). This bulletin addresses wear in the valve body TCC isolator/regulator bore, which can cause DTC P1870. This wear condition is not the cause of DTC P0894 or P1870 on any 2000 model year vehicle built after January 15, 2000, or any 2001 or newer vehicles as the valve body used on these vehicles has been revised to prevent the wear condition.
- Corporate Bulletin Number 99-07-30-005 or newer should be used to help with diagnosis of these DTCs. This bulletin will help to determine if the DTC is caused by the TCC system or by a slipping internal transmission component such as a clutch or band.

- Slip speeds greater than about 400 RPM at steady state driving are usually caused by a slipping clutch or band.
- Slip speeds ranging from approximately 100 to 400 RPM at steady state driving are usually caused by the TCC not applying but may also be caused by a slipping clutch or band.
- A plugged or restricted TCC apply fluid orifice (238, located in the pump) may cause DTC P0894 or P1870, especially in low mileage vehicles with less than 8,000 km (5,000 mi).
- A converter clutch valve (224, located in the pump), which does not have full travel of 13 mm (0.5 in) or is stuck in the off position may cause DTC P0894 or P1870. Inspect the valve for chips, debris, nicks or burrs. Also, inspect the springs (225 and 226) to make sure they are not limiting valve travel. A spring that is not fully wound may catch in the bore, limit valve travel and cause DTC P0894 or P1870.
- A cracked or leaking TCC solenoid (part of harness 66) may cause DTC P0894 or P1870. Use solenoid test kit J 44246 to test the operation of this solenoid.
- A cracked or leaking TCC PWM solenoid (396) may also cause DTC P0894 or P1870.

When attempting to diagnose a DTC P0894 or P1870, it is important to also refer to the appropriate Service Information (SI) document for further possible causes of this condition.
