

#06-07-30-007A: Malfunction Indicator Lamp (MIL) On, Diagnostic Trouble Code (DTC) P0894, Harsh 1-2 Shift with 4L60-E, 4L65-E, 4L70-E Auto Transmission (Test/Replace TCC Enable Solenoid/Harness, Auto Trans Wiring) - (Feb 20, 2007)

Subject: Malfunction Indicator Lamp (MIL) On, Diagnostic Trouble Code (DTC) P0894, Harsh 1-2 Shift with 4L60-E, 4L65-E, 4L70-E Automatic Transmission (Test and Replace Torque Converter Clutch (TCC) Enable Solenoid / Harness, Auto Trans Wiring)



Models: 2006 Cadillac Escalade Models
2006 Chevrolet Light Duty Trucks
2006 Chevrolet Express Vans
2006 GMC Light Duty Trucks
2006 GMC Savana Vans
2006 Pontiac GTO
2006 HUMMER H2, H3
2006 Saab 9-7X
with 4L60-E / 4L65-E / 4L70-E (RPOs M30, M32, M70) Automatic Transmission

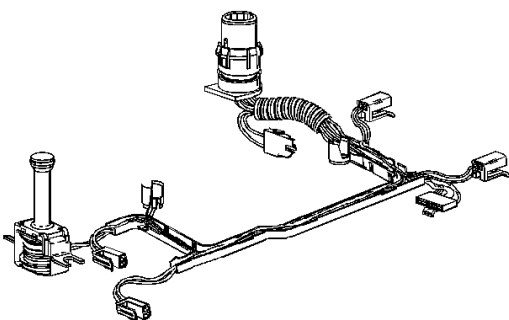
This bulletin is being revised to add part number for vehicles with Input Speed Sensor (ISS). Please discard Corporate Bulletin Number 06-07-30-007 (Section 07 -- Transmission/Transaxle).

Condition

Some customers may comment on a harsh 1-2 shift with the MIL illuminated.

Diagnosis with a scan tool may reveal a DTC P0894.

Cause

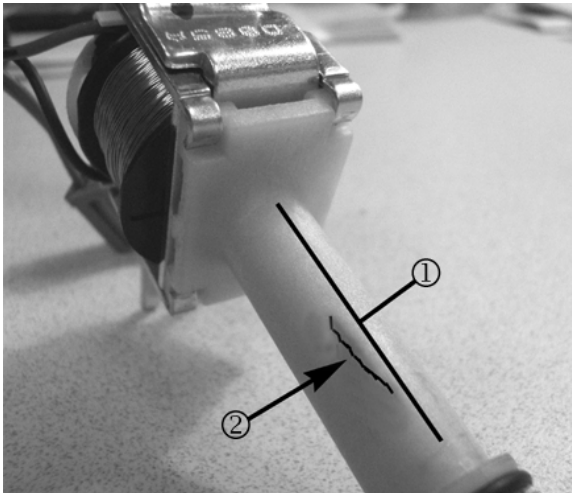


This condition may be caused by a leaking TCC enable solenoid. The TCC enable solenoid is part of the automatic transmission wiring harness.

Correction

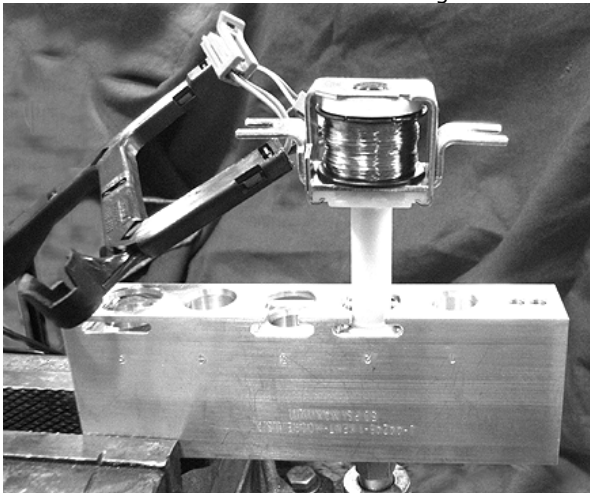
Follow the diagnosis and repair procedure below for a DTC P0894.

1. With a scan tool, verify the presence of DTC P0894.
2. Remove the TCC Enable solenoid / automatic transmission wiring harness. Refer to Torque Converter Clutch Pulse Width Modulation (TCC PWM) Solenoid, TCC Solenoid, and Wiring Harness in the appropriate SI Document.



Tip

- Typically if the TCC enable solenoid is found to have a crack / fracture (2), it will be located parallel to the mold seam (1) as shown above.
 - Engineering investigation shows that TCC enable solenoids that are brown in color may exhibit the cracking / fracture condition.
 - Engineering investigation shows that TCC enable solenoids that are off-white in color do not exhibit the cracking / fracture condition.
3. Air check the TCC enable solenoid using J 44246 solenoid testing kit.



4. Install the TCC enable solenoid into bore #2 of J 44246 as shown above.
5. While air is being applied to the solenoid through J 44246, coat the outside of the solenoid body with transmission fluid to help expose a possible vertical crack in the molded part of the solenoid body. This crack may be very small and not visible without the use of ATF. Complete instructions for the Shift Solenoid Leak Test can be found in SI Document ID # 856531.
 - If NO visual leaks are found in the TCC enable solenoid, refer to DTC P0894 in the appropriate SI Document.
 - If visual leaks are found in the TCC enable solenoid, continue with the next step.
6. Replace the TCC enable solenoid. Refer to Torque Converter Clutch Pulse Width Modulation (TCC PWM) Solenoid, TCC Solenoid, and Wiring Harness in the appropriate SI Document.
7. Road test the vehicle.

Parts Information

| Part Number | Description |
|--------------------|--|
| 24234280 (NON-ISS) | Harness, Automatic Transmission Wiring (TCC Enable Solenoid) |
| 24234121 (W/ISS) | Harness, Automatic Transmission Wiring (TCC Enable Solenoid) |

Warranty Information (excluding Saab U.S. Models)

For vehicles repaired under warranty, use:

| Labor Operation | Description | Labor Time |
|------------------------|---|------------------------------------|
| K6554 | Wiring Harness And/Or Solenoid - Harness Assembly - Replace | Use Published Labor Operation Time |

Warranty Information (Saab U.S. Models)

For vehicles repaired under warranty, use:

| Labor Operation | Description | Failed Object | Fault/Reason | Location Code | Warranty Type | Repair/Action Code | Labor Time |
|------------------------|---|----------------------|---------------------|----------------------|----------------------|---------------------------|------------------------------------|
| 4454201 | Wiring Harness And/Or Solenoid - Harness Assembly - Replace | 44542 | 50 | 0 | 01 | 01 | Use Published Labor Operation Time |

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