1996 - 2000 Corvette: Service Bulletin: Harsh 1-2 Upshift, SES, MIL, or CEL Illuminated, DTC P1870 Set

Subject: Harsh 1-2 Upshift, SES, MIL, or CEL Illuminated, DTC P1870 Set (Replace Valve Body)
Source: Chevrolet Dealer Technical Service Bulletin
Number: 01-07-30-023B

Models:
1996 Buick Roadmaster
1996 Cadillac Fleetwood
1999-2000 Cadillac Escalade
1996-2000 Chevrolet Camaro, Corvette
1996-2000 Pontiac Firebird
1996-2000 Chevrolet and GMC Light Duty Truck Models
1996-2000 Oldsmobile Bravada

with 4L60-E Automatic Transmission (RPO M30)
Built Prior to January 15, 2000 (Julian Date 0015)

This bulletin is being revised to update VIN Breakpoint Date information and revise the Parts Information table. Please discard Corporate Bulletin Number 01-07-30-023A (Section 07 -- Transmission/Transaxle).

Condition

Some customers may comment on a harsh 1-2 upshift and the Check Engine Light or Service Engine Soon indicator is illuminated.

Diagnosis

Typically, these vehicles will have been driven more than 32,000 km (20,000 mi) before this condition occurs.

The scan tool may show a DTC P1870 set as a history code.

A harsh 1-2 shift or DTC P1870, caused by wear in the control valve body, may be difficult to duplicate when the transmission temperature is below 93°C (200°F).

Cause

The condition may be due to wear in the control valve body. This wear occurs in the bore that contains the TCC isolator and regulator valves, and results in poor, or no, TCC apply.

Important

- **DTC P1870 is a type B code. The conditions for setting the P1870 DTC must occur on TWO CONSECUTIVE TRIPS (ignition cycles, with a drive cycle) before setting a P1870 history code.**

- **When the conditions for setting DTC P1870 are met (first trip), the PCM commands maximum line pressure and harsh 1-2 shifts are the result.**
- **This may result in a harsh 1-2 shift with no history code if the conditions for setting the DTC required for the second trip are not met, on two consecutive trips (Ignition cycles, with a drive cycle).**
- **When the conditions for setting the DTC are met, on the second consecutive trip, a DTC P1870 is stored as a history code.**
- **When the P1870 code is stored, the PCM will turn on the Service Engine Soon (SES), Check Engine Light (CEL), or Malfunction Indicator Lamp (MIL).**

Correction

Install a control valve body with the revised TCC regulator and isolator valves. Refer to the Parts Information table below. These valves are used in all transmissions produced after January 15, 2000 (Julian Date 0015), and all of the service parts currently available through GMSPO contain revised TCC regulator and isolator valves.

Important

If all of the following conditions are true, it is not necessary to rebuild the transmission or to replace additional transmission components beyond the control valve body.

- **Transmission operation is normal before the transmission reaches operating temperature, or before DTC P1870 is set (no slips, flares, or missing gears).**
- **The torque converter is not blue or overheated.**
- **The transmission fluid is not burned or has no burned odor.**
- **The transmission fluid pan contains no abnormal debris (clutch material, bronze, brass, or metal fragments).**

Parts Information

Note: Information for other platforms other than Corvette and F-Body platform have been removed from the table below. - Corvette Action Center

Model Year	Vehicle Platform	Engine (RPO)	Transmission (RPO)	Transmission Broadcast Code	P/N
1996	F Car Y Car	5.7L (LT1)	4L60-E (M30)	FFD, YDD	24217857

1997	F Car Y Car	5.7L (LS1)	4L60-E (M30)	FFD, YDD	24217870
1998-2000	F Car Y Car	5.7L (LS1)	4L60-E (M30)	FFD, YDD	24221158

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.