

6L80/6L90

Slips in Reverse, 3rd, 5th P0776 Possibly Set

6L80 (RPO MYC) and 6L90 (RPO MYD) transmissions equipped in the GM C/K full size trucks and SUV's, Cadillac D body (STS-V) and the Cadillac/Chevrolet Y body (XLR, Corvette) may experience any or all of the following complaints.

- Slips in Reverse
- Slips in 3rd
- Slips in 5th
- Delayed Reverse Engagement
- Intermittent Hard Shifts into 3rd and/or 5th
- Problems change severity with transmission temp change
- P0776 DTC may set

P0776 will set if:

The TCM detects an incorrect oncoming clutch gear ratio, or flare, when the 3-5-R clutch is commanded "to apply" for 2.25 seconds and the transmission input shaft speed is greater than 60 to 100 RPM from the anticipated input shaft speed.

- No DTC's P0716 or P0717 are active or have failed this key on.
- No DTC's P0722 or P0723 are active or have failed this key on.
- No DTC P1825 is active or has failed this key on.
- Ignition voltage is between 8.6–18.0 volts.
- Transmission Fluid Temperature (TFT) is equal to or greater than 0°C (32°F).
- TCM High Side Driver (HSD) one is enabled.
- Average driven wheel speed is 80 RPM or more.
- Side to side average wheel speed between driven and non-driven wheel is 150 RPM or less for six seconds.
- The transmission input shaft speed is greater than 60 RPM.
- PC solenoid 2 is commanded on.
- 3rd (1.532:1) or 5th (0.852:1) gear ratio has been achieved.

If a P0776 sets the TEHCM (TCM) will:

- Commands maximum line pressure.
- Inhibits TCC.
- Freezes transmission adaptive functions.

6L80/6L90

Slips in Reverse, 3rd, 5th P0776 Possibly Set (continued)

Cracks have been found in the 1-2-3-4/3-5 reverse housing that can cause any combination of the complaints listed above. The cracks effect the 3-5-reverse area of the clutch drum and they can change severity with temperature and input torque changes.

Always inspect the drum for cracks both visually and with a soapy water/air test. In addition, the suspect drums can now be identified by looking for a DOT MATRIX stamping on the housing that indicates that you have the updated housing. If you do not find the stamping, you must inspect the housing for cracks as that housing was manufactured prior to the supplier change.

NOTE: When replacing the 1-2-3-4/3-5-reverse housing make sure that the bearing that supports the housing is installed in the new replacement housing. Some early replacement housings from GM did not contain the bearing. The current housing includes the bearing so this should no longer be an issue. If the bearing is not present shift feel problems will occur.

