

# 6T70/6T75

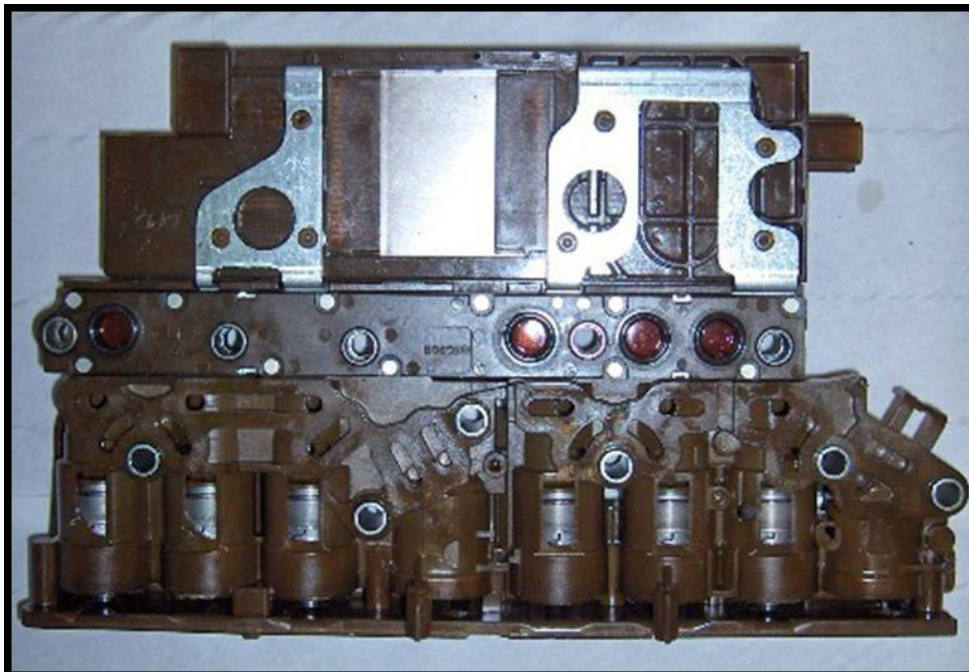
## DTC's P0752, P0872, P0877, P0989

GM L body (RPO MH2, MH4, MH6, MY9) (Terrain, Equinox, Vue) R/V body (Traverse, Enclave, Acadia) Z body (Malibu, G6, Aura) applications equipped with a 6T70 or 6T75 trans-axle may experience DTC's that relate to the fluid pressure switches located in the TEHCM (TCM).

***The DTC's can include any or all of the following, P0752, P0872, P0877 or P0989.***

***P0752 will set if:***

- The transmission has achieved 1st locked, 1st free-wheel, or 2nd, the 4-5-6/R1 pressure switch is pressurized, 3rd gear is commanded, and gear box slip is 400RPM or greater for 2.0seconds, 5 times.
- The ignition voltage is 8.6volts or greater.
- The engine speed is 400RPM or greater for 5.0seconds.
- The high side driver is enabled.
- The throttle position signal is valid.
- The output shaft speed is greater than 0RPM, or the throttle position is greater than 0.5%.
- The TFT is -7°C (19°F) or greater.
- DTC P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, P0308, P0401, P042E, P0716, P0717, P0722, P0723, or P182E are not set.



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## DTC's P0752, P0872, P0877, P0989 (continued)

### ***P0872 will set if:***

DTC P0711, P0712, P0713, P0716, P0717, P0722, P0723, P0742, P0751, P0756, P0757, P0973, P0974, P0976, P0977, P1915, or P182E are not set.

The TCM detects that the TFP switch #3 signal voltage remains LOW after the 2-6 clutch transitions from a HIGH pressure state to a LOW pressure state. The TCM counts each incident. The DTC sets when 18 counts are accumulated.

- The high side driver is enabled.
- The engine speed is 400 RPM or greater for 5 seconds.
- The engine speed is 550 RPM or greater.
- Ignition voltage is 8.6 volts or greater.
- The transmission fluid temperature (TFT) is  $-7^{\circ}$  to  $+120^{\circ}\text{C}$  ( $19^{\circ}$ – $248^{\circ}\text{F}$ ).

### ***P0877 will set if:***

The TCM detects that the TFP switch #4 signal voltage remains LOW after the 1-2-3-4 clutch transitions from a HIGH pressure state to a LOW pressure state. The TCM counts each incident. The DTC sets when 12 counts are accumulated.

- DTC P0711, P0712, P0713, P0716, P0717, P0722, P0723, P0742, P0751, P0756, P0757, P0973, P0974, P0976, P0977, P182E or P1915 are not set.
- The engine speed is 400 RPM or greater for 5 seconds.
- The ignition voltage is 9.0 volts or greater.
- The transmission fluid temperature (TFT) is  $-7^{\circ}$  to  $+110^{\circ}\text{C}$  ( $19^{\circ}$ – $230^{\circ}\text{F}$ ).
- The High Side Driver is ON.
- The engine speed is 550 RPM or greater.

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## DTC's P0752, P0872, P0877, P0989 (continued)

### ***P0989 will set if:***

- The TCM detects that the TFP switch #5 signal voltage remains LOW after the low and reverse clutch or the 4-5-6 clutch transitions from a HIGH pressure state to a LOW pressure state. The TCM counts each incident. The DTC sets when 18 counts are accumulated.
- The engine speed is 400 RPM or greater for 5 seconds.
- The engine speed is 550 RPM or greater.
- The ignition voltage is 8.6 volts or greater.
- The transmission fluid temperature (TFT) is  $-7^{\circ}$  to  $+120^{\circ}\text{C}$  ( $19^{\circ}$ – $248^{\circ}\text{F}$ ).
- The high side driver (HSD) is enabled.

### ***If a P0752 sets the TCM will:***

- Freeze shift adapts.
- Command max pressure.
- Inhibit tap shifts and manual shifting.
- Limit the transaxle to reverse, 1st and 3rd gears.

### ***If a P0872, P0877 or P0989 sets the TCM will:***

- Freeze shift adapts.

To repair any or all of these concerns, remove the TEHCM from the vehicle and inspect the suspect pressure switch for debris. Inspect the pressure switch for a delamination problem. Units with 50,000 miles or more, have displayed issues with the pressure switch membranes coming apart leading to the DTC's. If the pressure switch is delaminating you will need to replace the TEHCM (TCM with valve body).

