



# Technical Service Information

## GM 6L80/90

### MULTIPLE SOLENOID PERFORMANCE CODES

**COMPLAINT:** Vehicles equipped with the 6L80/90 family of transmissions may exhibit intermittent solenoid performance trouble codes including, P0776 Clutch Pressure Control Solenoid 2, 3-5-R Clutch Stuck Off, P0796 Clutch Pressure Control Solenoid 3, 1-R/4-5-6 Clutch Stuck Off, P2714 Clutch Pressure Control Solenoid 4, 2-6 Clutch Stuck Off, P2723 Clutch Pressure Control Solenoid 5, 1-2-3-4 Clutch Stuck Off.

**CAUSE:** The cause may be, that the bore plug at the end of the Clutch Regulating Valve is leaking at the retainer, as shown in Figure 1, causing a slow reaction of the regulating valve and a loss of solenoid signal pressure, which in turn can cause a Solenoid Stuck Off code or a Solenoid Performance code. Refer to Figure 2 for a view of each solenoid and its regulating valve line-up.

**CORRECTION:** To correct this condition, replace the end plugs with the O-ringed end plug kit as shown in Service information or remove the bore plug and with a tubing cutter, knurl the plug to stop the leak, then re-install the plug. See Figure 3 for a valve body exploded view.

### SERVICE INFORMATION:

O-RINGED END PLUG KIT (Sonnax part number).....104740-23K

*Special Thanks  
to Dean at  
Quality Trans. OH*

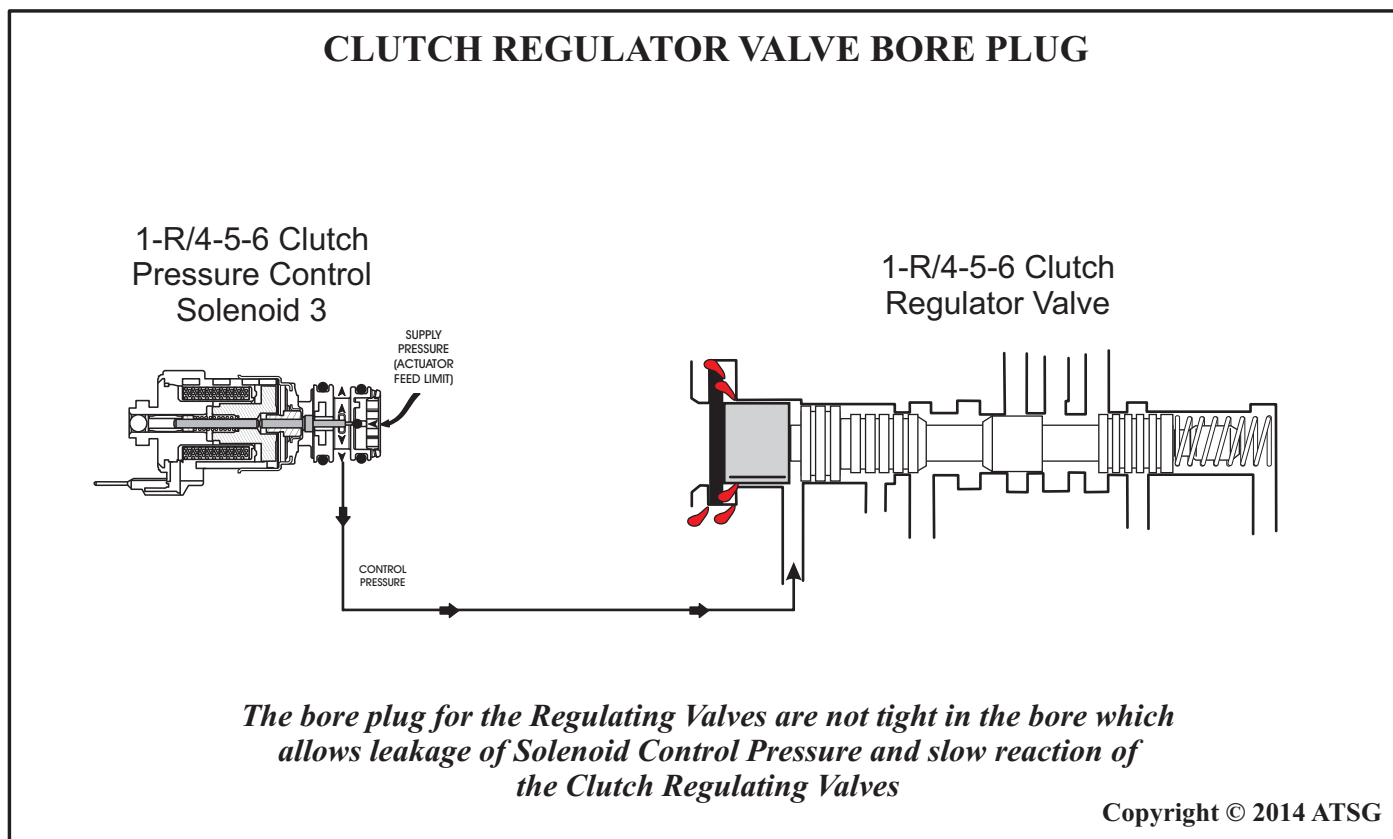
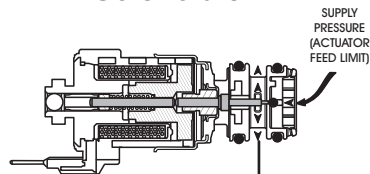


Figure 1

## SOLENOID AND CLUTCH REGULATOR VALVES

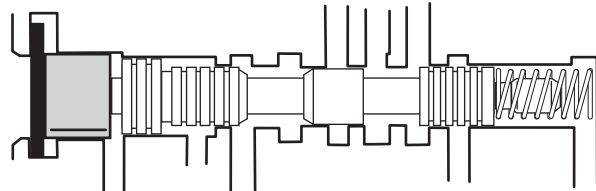
1-R/4-5-6 Clutch  
Pressure Control  
Solenoid 3



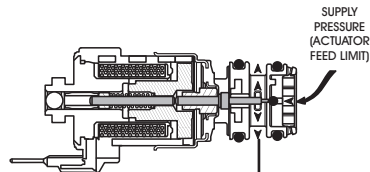
To 1-R/4-5-6 Clutch  
Boost Valve

CONTROL  
PRESSURE

1-R/4-5-6 Clutch  
Regulator Valve



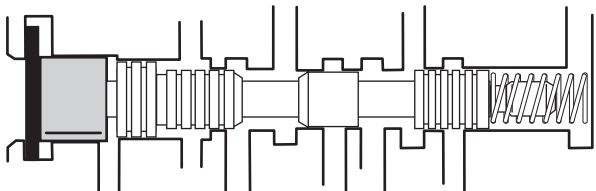
3-5-R Clutch  
Pressure Control  
Solenoid 2



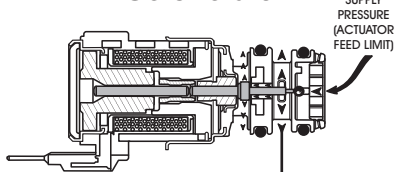
To 3-5-R Clutch  
Boost Valve

CONTROL  
PRESSURE

3-5-R Clutch  
Regulator Valve



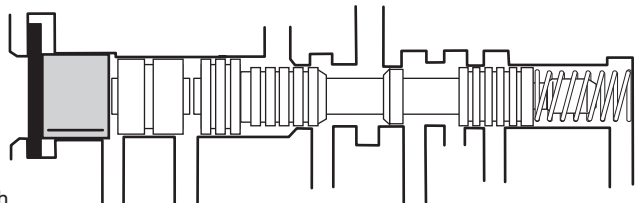
1-2-3-4 Clutch  
Pressure Control  
Solenoid 5



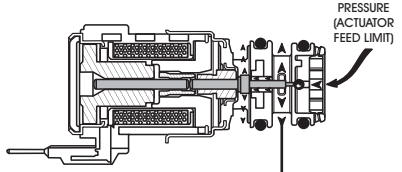
To 1-2-3-4 Clutch  
Boost Valve

CONTROL  
PRESSURE

1-2-3-4 Clutch  
Regulator Valve

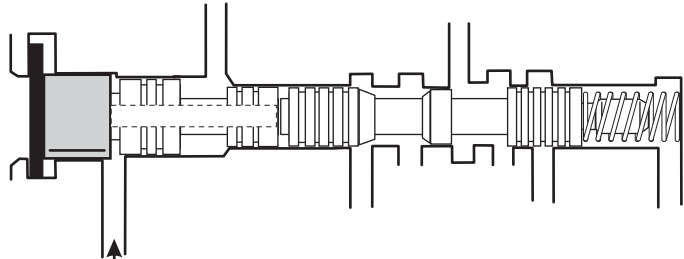


2-6 Clutch  
Pressure Control  
Solenoid 4



CONTROL  
PRESSURE

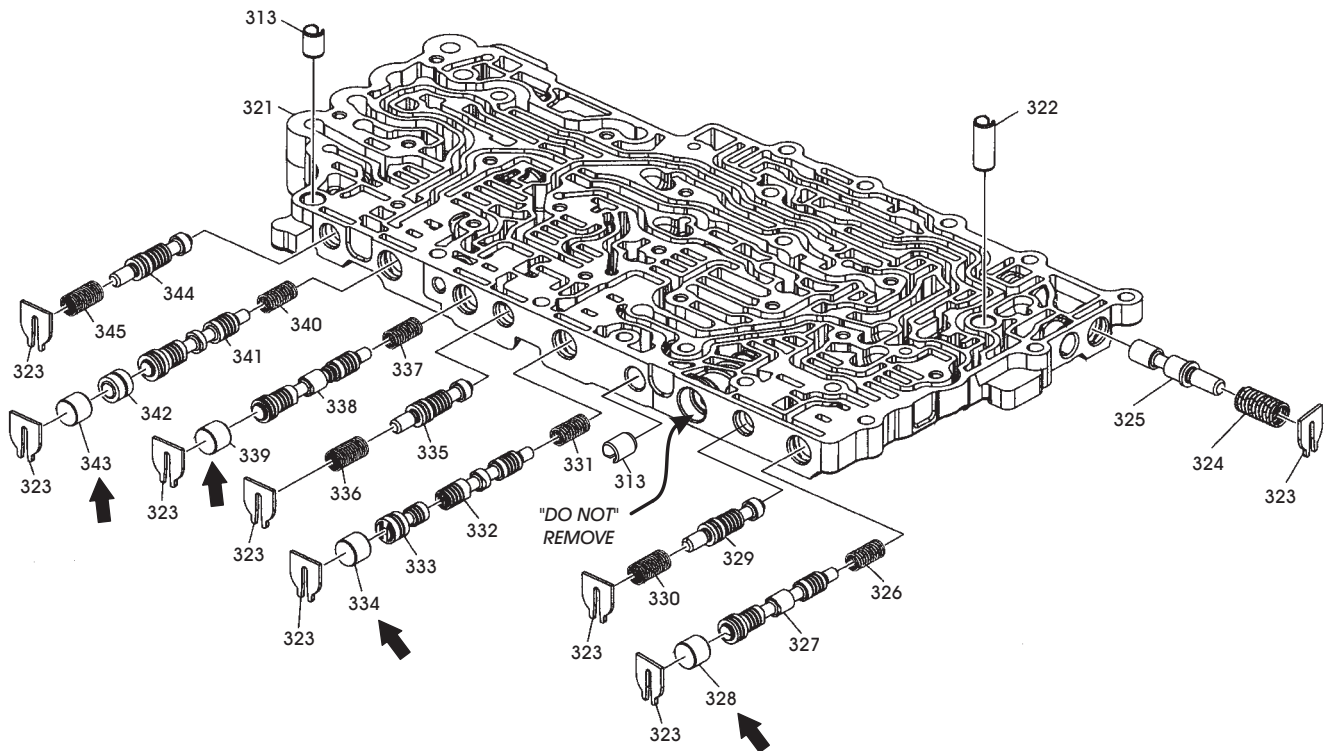
2-6 Clutch  
Regulator Valve



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Figure 2

## 6L80 UPPER VALVE BODY ASSEMBLY EXPLODED VIEW



- 313 VALVE BODY LOCATING DOWEL.
- 321 UPPER VALVE BODY CASTING.
- 322 VALVE BODY LOCATING DOWEL (LONG).
- 323 VALVE LINE-UP RETAINER (8 REQUIRED).
- 324 ACTUATOR FEED LIMIT VALVE SPRING.
- 325 ACTUATOR FEED LIMIT VALVE.
- 326 1ST/REV AND 4-5-6 CLUTCH REGULATOR VALVE SPRING.
- 327 1ST/REV AND 4-5-6 CLUTCH REGULATOR VALVE.
- 328 1ST/REV AND 4-5-6 CLUTCH REGULATOR VALVE BORE PLUG.
- 329 1ST/REV AND 4-5-6 CLUTCH BOOST VALVE.
- 330 1ST/REV AND 4-5-6 CLUTCH BOOST VALVE SPRING.
- 331 2-6 CLUTCH REGULATOR VALVE SPRING.
- 332 2-6 CLUTCH REGULATOR VALVE.
- 333 2-6 CLUTCH REGULATOR VALVE GAIN VALVE.
- 334 2-6 CLUTCH REGULATOR VALVE BORE PLUG.

- 335 3-5/REVERSE CLUTCH BOOST VALVE.
- 336 3-5/REVERSE CLUTCH BOOST VALVE SPRING.
- 337 3-5/REVERSE CLUTCH REGULATOR VALVE SPRING.
- 338 3-5/REVERSE CLUTCH REGULATOR VALVE.
- 339 3-5/REVERSE CLUTCH REGULATOR VALVE BORE PLUG.
- 340 1-2-3-4 CLUTCH REGULATOR VALVE SPRING.
- 341 1-2-3-4 CLUTCH REGULATOR VALVE.
- 342 1-2-3-4 CLUTCH SHUTTLE VALVE.
- 343 1-2-3-4 CLUTCH REGULATOR VALVE BORE PLUG.
- 344 1-2-3-4 CLUTCH BOOST VALVE.
- 345 1-2-3-4 CLUTCH BOOST VALVE SPRING.

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Figure 3