



Technical Service Information

THM 4T65-E SOFT 1-2 SHIFT OR DELAY TO REVERSE (MAY STORE DTC 1811)

COMPLAINT: Some General Motors vehicles equipped with the THM 4T65-E transaxle, may exhibit a soft 1-2 upshift and/or a delay when the selector lever is placed into reverse. These conditions may also set Diagnostic Trouble Code 1811, which is "Maximum Adapt" and "Long Shift".

CAUSE: The cause may be, a defective Pressure Control Solenoid (PCS), and/or a worn line boost valve and sleeve assembly in the valve body, creating less than desired line pressure rise.

CORRECTION: Replace the Pressure Control Solenoid with the *updated* PCS, available from OEM under part number 10478146. Before installing the new PCS, turn the adjusting screw on the end of the solenoid in *exactly 1/8 turn*, as shown in Figure 1.
Inspect and replace as necessary, the boost valve and sleeve assembly located in the valve body, in the location shown in Figure 2. This valve train is available from Sonnax®, under part number 84754-30K, and is not yet available from OEM except in a complete valve body assembly.

SERVICE INFORMATION:

Pressure Control Solenoid (New Design From OEM) 10478146
Boost Valve and Sleeve Kit (Sonnax® Part No.) 847554-30K

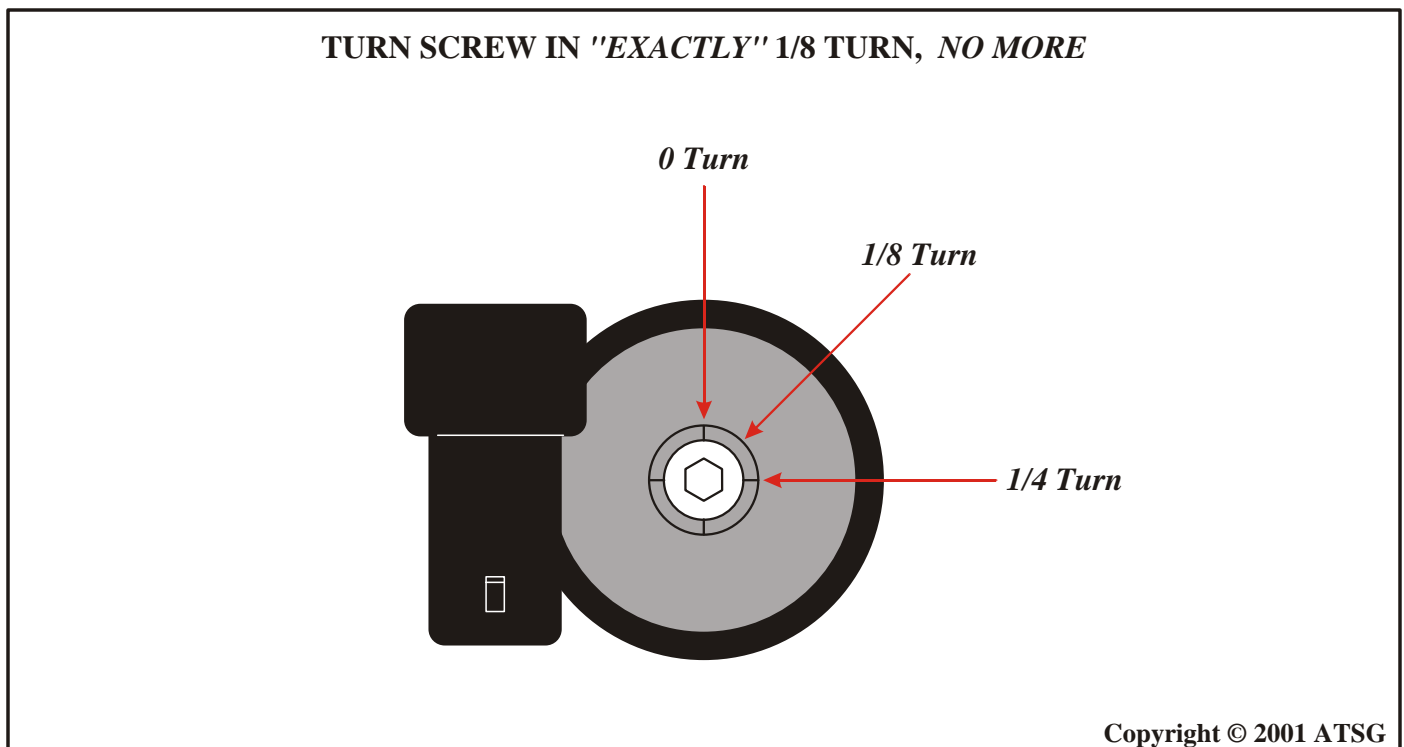
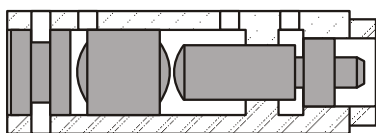
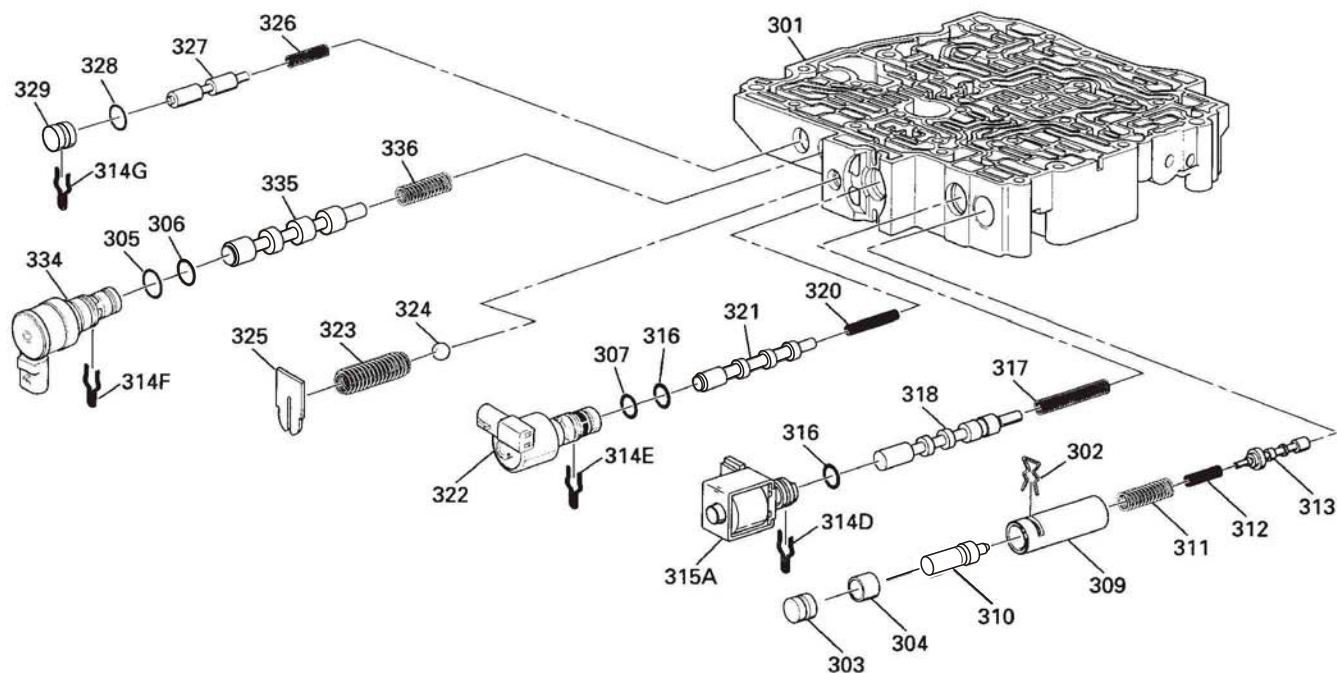
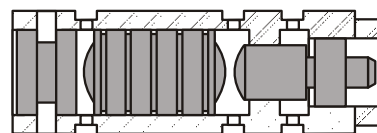


Figure 1



OEM Boost Valve And Sleeve Assembly



Sonnax® Boost Valve And Sleeve Assembly

- 301 CONTROL VALVE BODY
- 302 LINE BOOST VALVE AND BUSHING RETAINER
- 303 LINE BOOST VALVE BORE PLUG
- 304 LINE BOOST VALVE
- 305 TCC PWM SOLENOID "O" RING SEAL
- 306 TCC PWM SOLENOID "O" RING SEAL
- 307 PRESSURE CONTROL SOLENOID "O" RING SEAL
- 309 REVERSE BOOST VALVE BUSHING
- 310 REVERSE BOOST VALVE
- 311 PRESSURE REGULATOR VALVE OUTER SPRING
- 312 PRESSURE REGULATOR VALVE INNER SPRING
- 313 PRESSURE REGULATOR VALVE
- 314D 1-2, 3-4 SHIFT SOLENOID RETAINER
- 314E PRESSURE CONTROL SOLENOID RETAINER
- 314F TCC PWM SOLENOID RETAINER
- 314G TCC REGULATOR APPLY VALVE BORE PLUG RETAINER
- 315A 1-2, 3-4 SHIFT SOLENOID ASSEMBLY
- 316A 1-2, 3-4 SHIFT SOLENOID "O" RING SEAL

- 317 1-2 SHIFT VALVE SPRING
- 318 1-2 SHIFT VALVE
- 320 TORQUE SIGNAL REGULATOR VALVE SPRING
- 321 TORQUE SIGNAL REGULATOR VALVE
- 322 PRESSURE CONTROL SOLENOID ASSEMBLY
- 323 LINE PRESSURE RELIEF VALVE SPRING
- 324 LINE PRESSURE RELIEF VALVE
- 325 LINE PRESSURE RELIEF VALVE SPRING RETAINER
- 326 TCC REGULATOR APPLY VALVE SPRING
- 327 TCC REGULATOR APPLY VALVE
- 328 TCC REGULATOR APPLY VALVE BORE PLUG "O" RING SEAL
- 329 TCC REGULATOR APPLY VALVE BORE PLUG
- 334 TCC PWM SOLENOID ASSEMBLY
- 335 TCC CONTROL VALVE
- 336 TCC CONTROL VALVE SPRING