



Technical Service Information

THM 440-T4 2ND GEAR STARTS

MODELS AFFECTED: 1985-1987 DE VILLES AND FLEETWOODS
1986-1987 ELDORADOS AND SEVILLES

Some vehicles equipped with a THM 440-T4 Transaxle may experience loss of downshift to first gear or second gear starts on take-off. This condition could occur all the time or intermittently.

The following procedure should be followed to diagnose a second gear start condition:

- 1 Pressure test as described in the appropriate Service Information Manual. Ensure minimum line pressure is to specification. A high minimum line pressure could result in "governor circuit flooding" and cause unwanted governor pressure. Refer to the 440-T4 Diagnosis and On-car Service in the Service Information Manual for high or low line pressure diagnosis.
- 2 Remove and flush governor assembly with clean solvent, then inspect for binding weights and/or mis-positioned springs. Replace governor assembly if necessary.
- 3 Reinstall governor cover without the governor installed. Start the engine and move selector lever to the drive position. Stop the engine and reinstall governor assembly. This procedure will help flush the governor passages of possible debris.
- 4 Road test and verify transaxle operation.

If the condition of second gear starts still exists:

- 5 Install a 0-100 PSI pressure gauge at the governor pressure tap and monitor governor pressure while the condition is occurring (refer to Figure 1).
- 6 If governor pressure is 3.0 PSI (21 kPa) or below at 0 mph (0 kmh), go to Step 9.
- 7 If governor pressure exceeds 3.0 PSI (21 kPa) at 0 mph (0 kmh), install a known good governor assembly and verify transaxle operation. If second gear starts are still experienced, continue to Step 8.

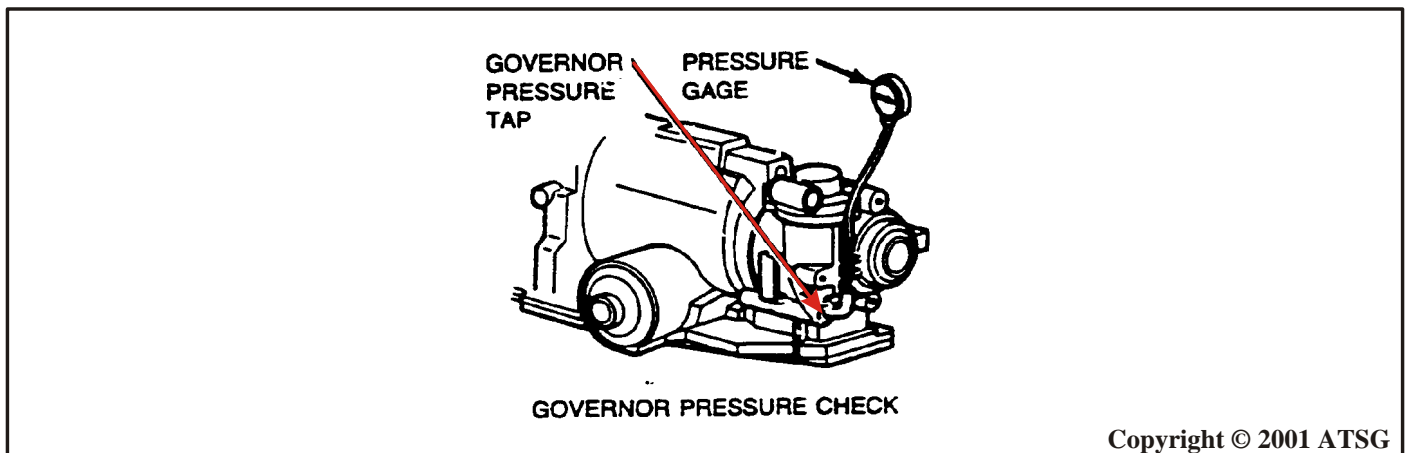


Figure 1

- 8 Remove bottom pan, inspect accumulator cover and governor retainer for damage of gasket and/or sealing surfaces. Inspect governor orifice for damage or missing orifice plug refer to Figure 2). Inspect and remove any foreign material that may be lodged in this area.

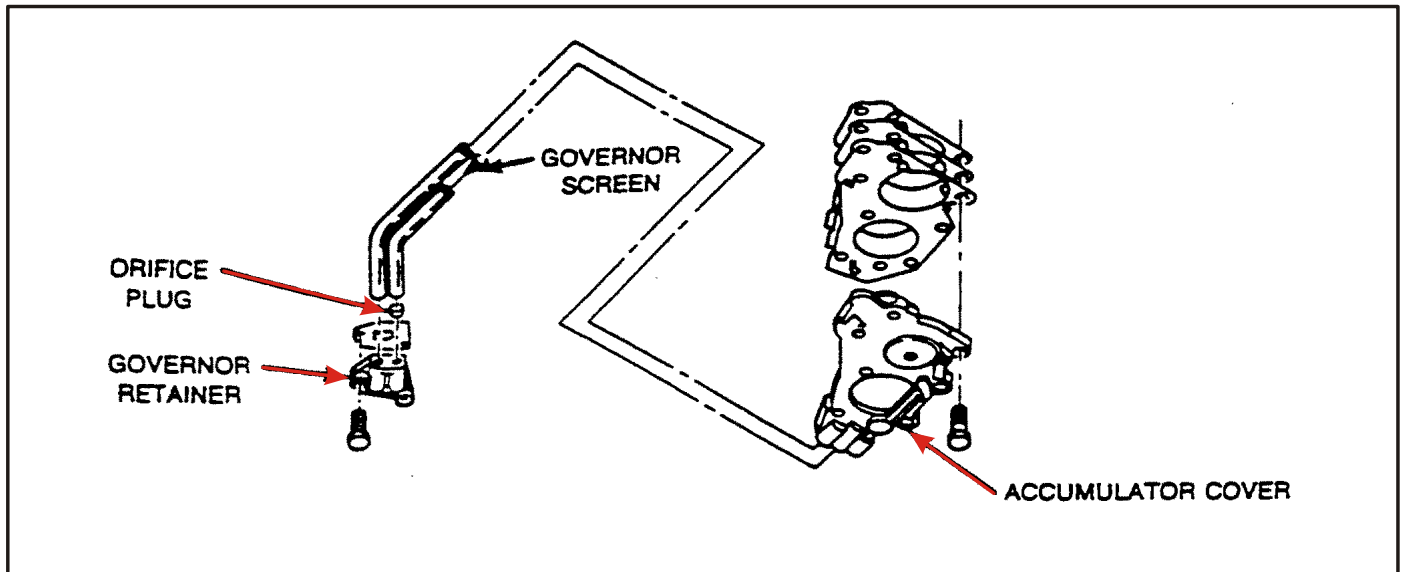


Figure 2

- 9 Governor pressure below 3.0 PSI (21 kpa) at 0 mph (0 kmh) indicates the 1-2 shift valve is in the up shifted position. Remove the control valve assembly. Refer to the appropriate Service information Manual. Inspect for the following conditions:

Sticking 1-2 shift valve (331)

Sticking 1-2 throttle valve (332)

Binding 1-2 throttle valve spring, due to a mis-positioned 1-2 throttle valve bushing retainer (390).

Ensure the throttle valve bushing retainer (390) is installed flush with the mating surface of the control body casting (363).

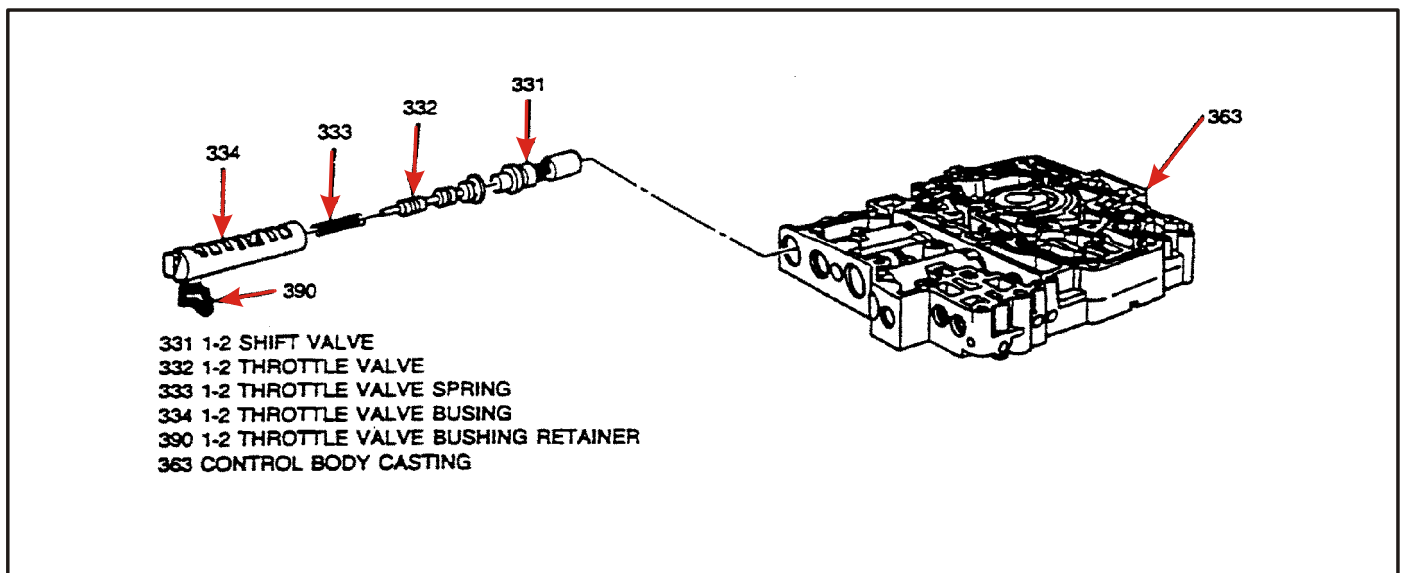


Figure 3