



Technical Service Information

FORD 5R110W-TORQSHIFT TRANSMISSION DELAYED FORWARD AND, OR REVERSE ENGAGEMENT LOW MAINLINE PRESSURE

COMPLAINT: Before or after overhaul, Ford Motor Company vehicles that are equipped with the 5R110W-Torqshift transmissions may exhibit a delayed forward and reverse engagement condition. Upon performing a line pressure test, it may be observed that the line pressure readings are below specification. (See Figure 2)

CAUSE: If the line pressure readings are found to be below specifications, the cause may be, that in the pump cover assembly, there may be either a sticking pressure regulator valve, or that the pressure regulator valve, or the pressure regulator valve bore may be worn. (See Figure 3) A faulty pressure control “A” Solenoid may also cause a low line pressure condition as well (See Figure 1)

CORRECTION: If the pressure regulator valve, or the pump cover is found to be damaged, repair bore, and install new pressure regulator valve assembly with Sonnax kit. See service information. Replace pressure control solenoid “A”. **Note:** ATSG recommends replacing the PCA solenoid during overhaul. See service information.

SERVICE INFORMATION:

SONNAX PRESSURE REGULATOR VALVE KIT.....36940-03K
SONNAX REAMER KIT.....F-36940-TL3
FORD PRESSURE CONTROL SOLENOID “A”4C3Z-7G383-AA

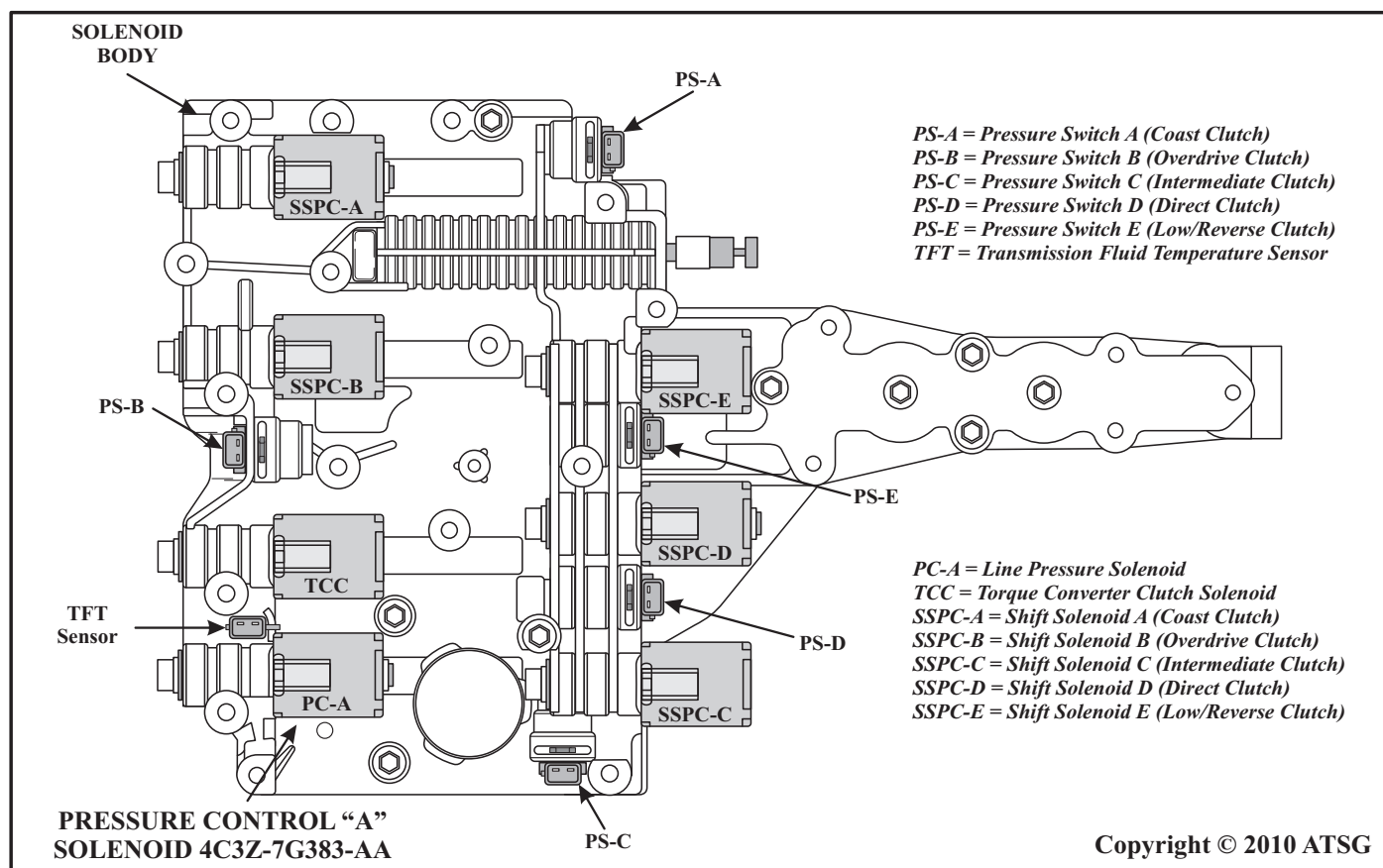
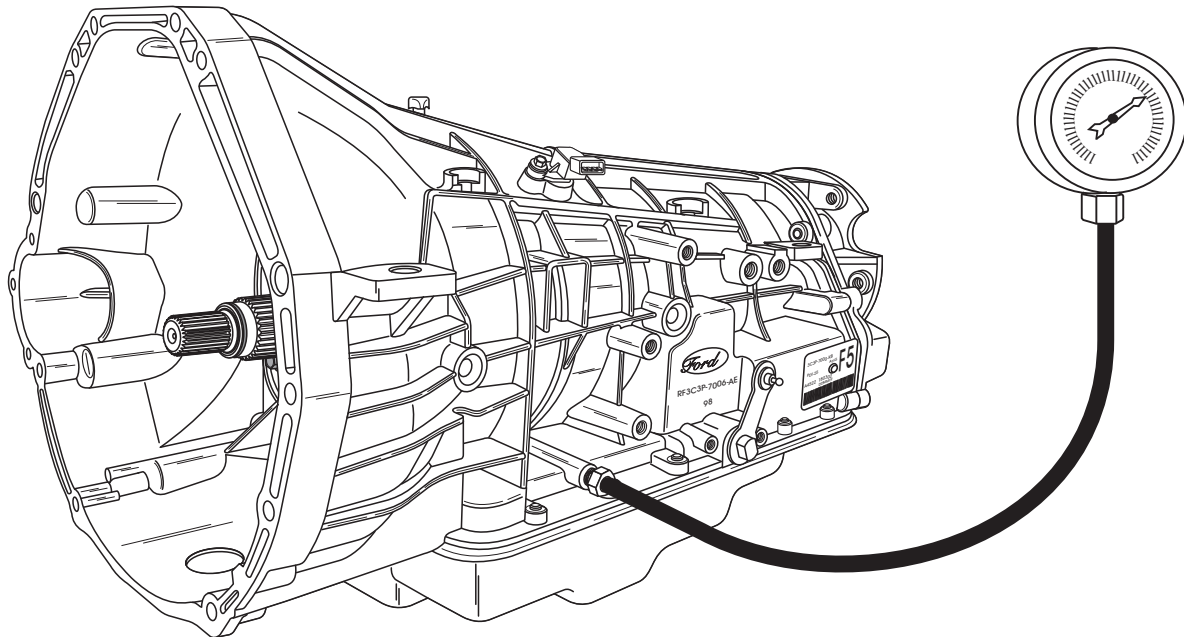


Figure 1

LINE PRESSURE TESTS



LINE PRESSURE CHART		
Range	Idle Speed	Stall Speed
P/N	50 psi	—
R	100 psi	320 psi
(D)	70 psi	320 psi
3	80 psi	260 psi
2	80 psi	215 psi
1	80 psi	270 psi

All Pressures Listed Are Approximate

PRECAUTIONS:

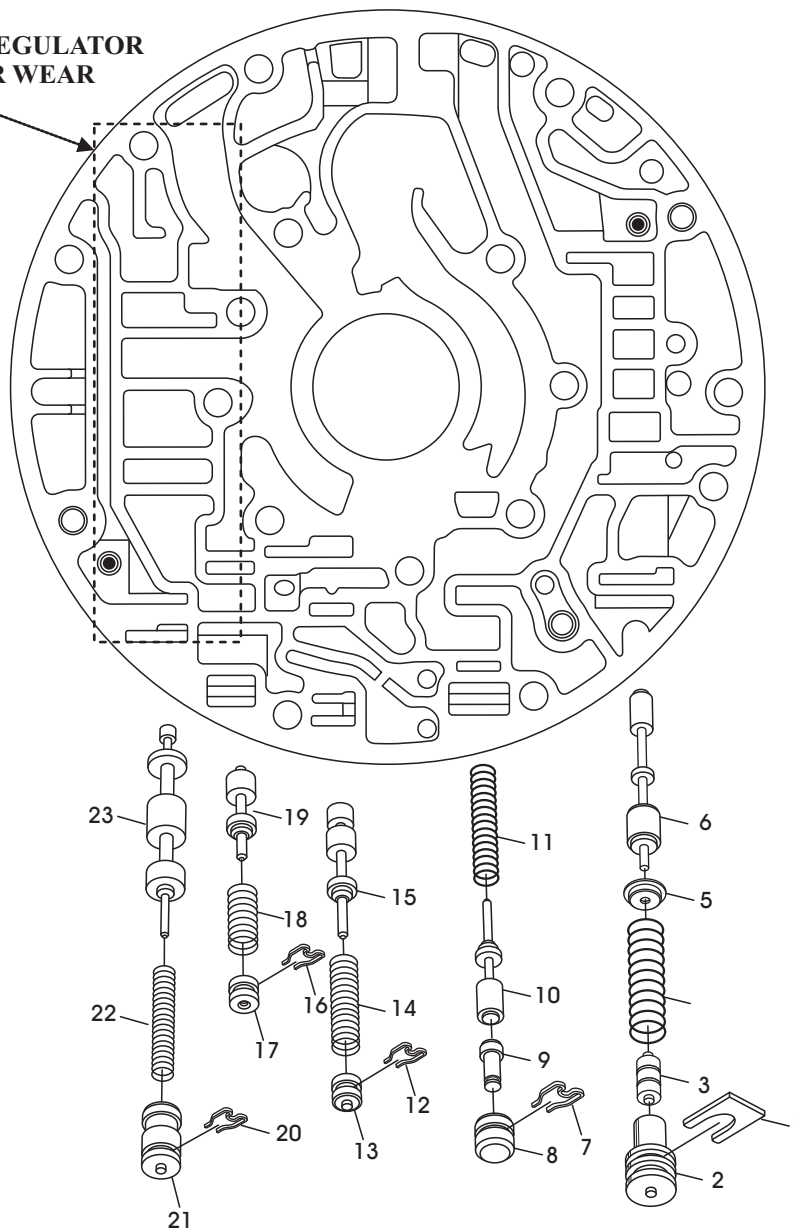
- (1) **Perform the line pressure test in all ranges prior to performing the stall speed test. If line pressure is low at idle, "do not" carry out the stall speed test or additional transmission damage will occur. Do not maintain wide open throttle (WOT) in any range for more than 5 seconds or transmission damage may occur.**
- (2) **Apply the parking brake and block wheels during the line pressure test. Vehicle movement during the test may cause personal injury or damage to the vehicle and equipment.**

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Figure 2

OIL PUMP COVER ASSEMBLY EXPLODED VIEW

CHECK PRESSURE REGULATOR
VALVE BORE FOR WEAR



- 1 CONVERTER CLUTCH CONTROL VALVE BORE RETAINER.
- 2 CONVERTER CLUTCH CONTROL VALVE SLEEVE.
- 3 CONVERTER CLUTCH CONTROL VALVE PLUG.
- 4 CONVERTER CLUTCH CONTROL VALVE SPRING.
- 5 CONVERTER CLUTCH CONTROL VALVE SPRING SEAT.
- 6 CONVERTER CLUTCH CONTROL VALVE.
- 7 COOLER BYPASS VALVE BORE PLUG RETAINER (ORANGE I.D.).
- 8 COOLER BYPASS VALVE BORE PLUG.
- 9 THERMOSTATIC VALVE ASSEMBLY.
- 10 COOLER BYPASS VALVE.
- 11 COOLER BYPASS VALVE SPRING.
- 12 CONVERTER PRESSURE LIMIT VALVE BORE PLUG RETAINER.

- 13 CONVERTER PRESSURE LIMIT VALVE BORE PLUG.
- 14 CONVERTER PRESSURE LIMIT VALVE SPRING.
- 15 CONVERTER PRESSURE LIMIT VALVE.
- 16 CONVERTER ANTI-DRAIN BACK VALVE BORE PLUG RETAINER.
- 17 CONVERTER ANTI-DRAIN BACK VALVE BORE PLUG.
- 18 CONVERTER ANTI-DRAIN BACK VALVE SPRING.
- 19 CONVERTER ANTI-DRAIN BACK VALVE.
- 20 MAIN REGULATOR VALVE BORE PLUG RETAINER.
- 21 MAIN REGULATOR VALVE BORE PLUG.
- 22 MAIN REGULATOR VALVE SPRING.
- 23 MAIN REGULATOR VALVE.

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Figure 3