

DODGE 45/545RFE REPEAT TRANSMISSION FAILURE-FLARED SHIFTS

COMPLAINT: Dodge vehicles equipped with the 45/545RFE transmission may exhibit a repeat transmission failure, repeated OD Clutch failure or a complaint of flared shifts, which leads to transmission failure before or after overhaul. Note: This may or may not be accompanied by a Line Pressure Sensor Transducer Fault codes.

CAUSE:

1. The cause may be, a faulty Line Pressure Transducer, as shown in Figure 1, causing incorrect readings of what actual Line pressure is back to the PCM/TCM. Refer to Figure 2 for typical scan tool PID's showing normal pressure readings and normal duty cycle percentages related to them. Also note that normal pressure at idle on some vehicles is as low as 40 psi. at idle and that a malfunctioning transducer telling the PCM/TCM that the Actual Pressure Matches the Desired pressure, when in actuality it is much lower, can cause continual failure of this transmission. Refer to Figure 3 which shows how to verify that the pressure on the scan tool is the same as Line Pressure, with the adapter from Miller Tools.
2. Another cause may bore wear in the valve body where the Solenoid Switch Valve plugs are located causing a leak in the OD Clutch circuit (Figure 4).

CORRECTION: 1. To correct this condition, replace the Line Pressure Transducer.
2. Repair or replace the valve body.

SERVICE INFORMATION:

LINE PRESSURE TRANSDUCER (Dodge Part number).....4799758

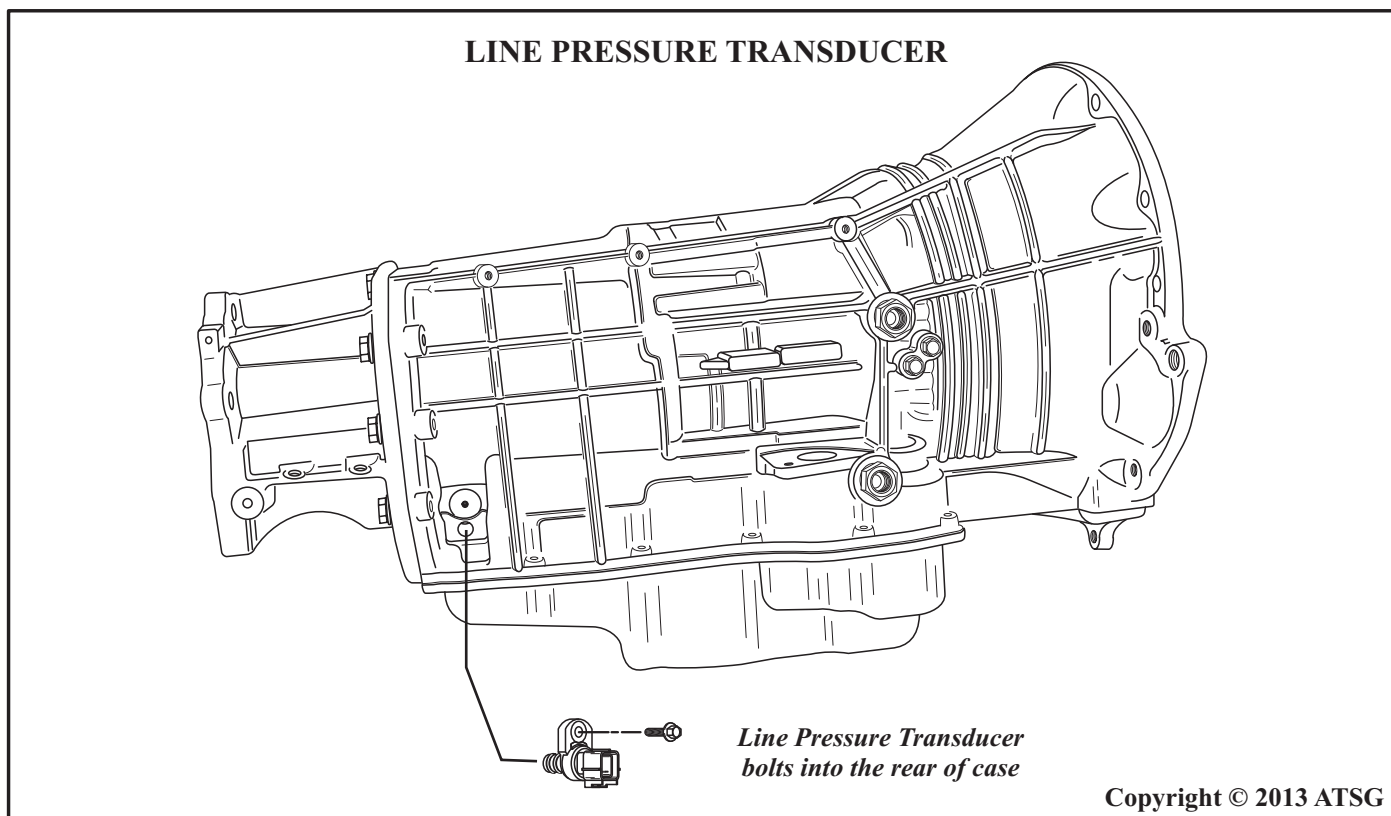
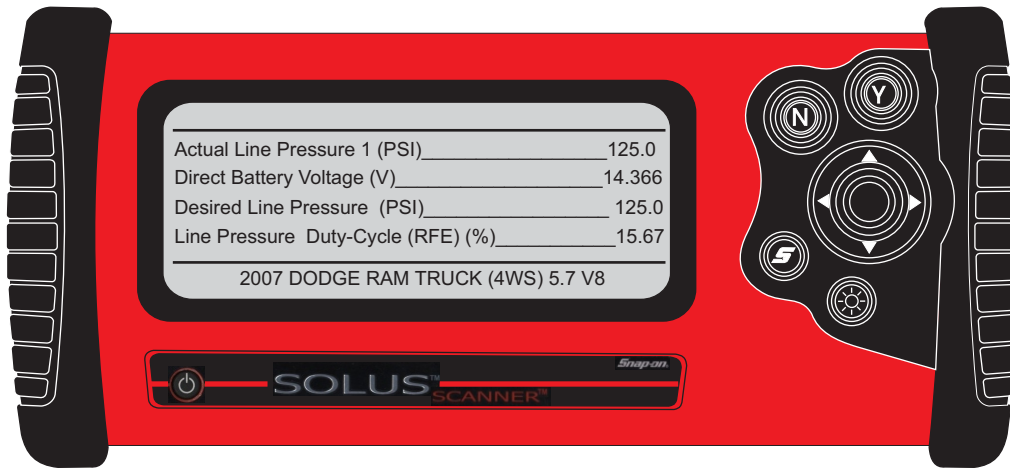


Figure 1

SCAN TOOL PID'S FOR LINE PRESSURE INFORMATION



Idle in Drive stopped

Actual Line Pressure 1 (PSI)_____ 40.0
 Direct Battery Voltage (V)_____ 14.366
 Desired Line Pressure (PSI)_____ 40.0
 Line Pressure Duty-Cycle (RFE) (%)_____ 29.1

Stall in Drive stopped

Actual Line Pressure 1 (PSI)_____ 160.1
 Direct Battery Voltage (V)_____ 14.366
 Desired Line Pressure (PSI)_____ 160.1
 Line Pressure Duty-Cycle (RFE) (%)_____ 5.1

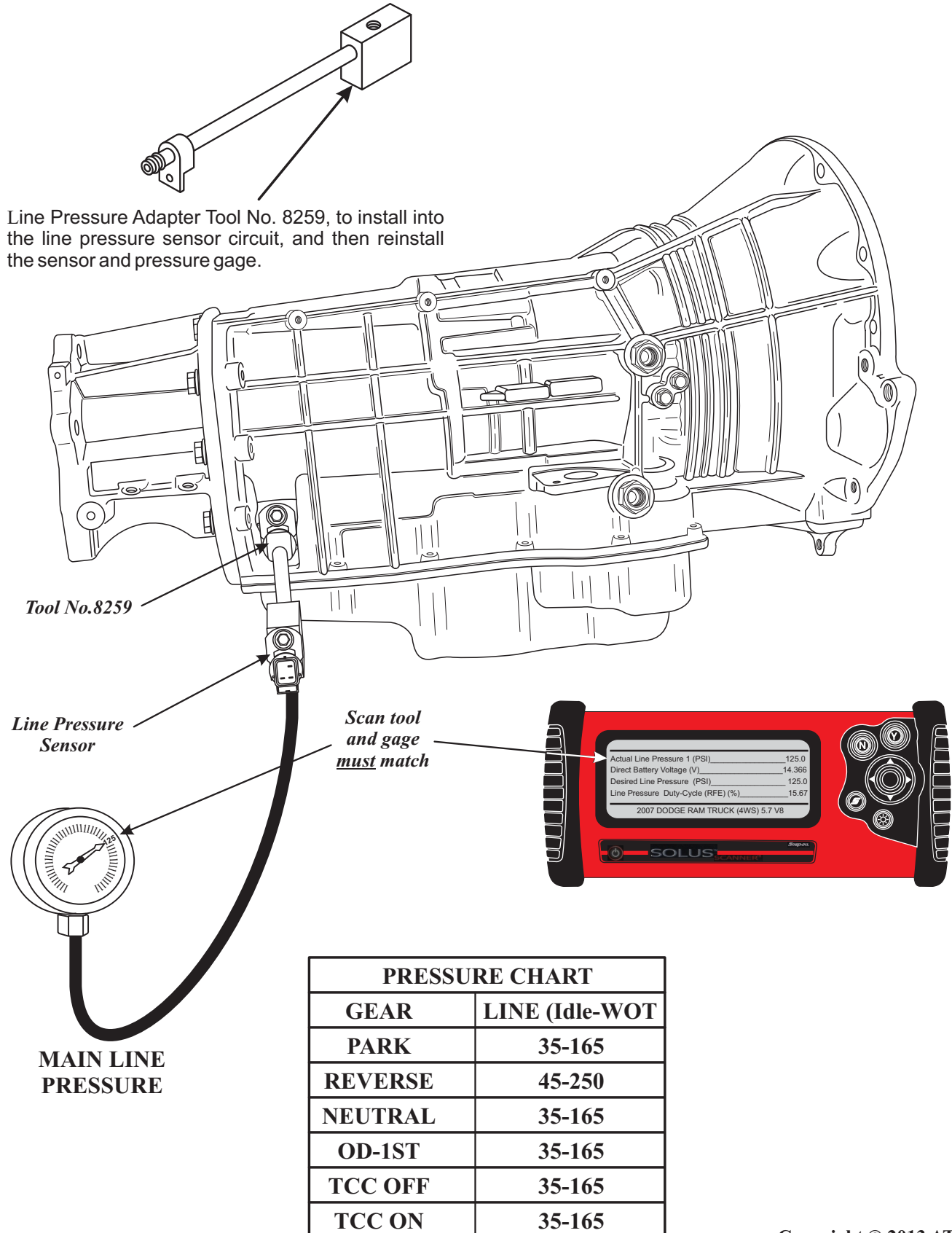
Medium acceleration

Actual Line Pressure 1 (PSI)_____ 118.0
 Direct Battery Voltage (V)_____ 14.366
 Desired Line Pressure (PSI)_____ 118.0
 Line Pressure Duty-Cycle (RFE) (%)_____ 19.67

Cruising in 5th with TCC On

Actual Line Pressure 1 (PSI)_____ 77.0
 Direct Battery Voltage (V)_____ 14.366
 Desired Line Pressure (PSI)_____ 77.0
 Line Pressure Duty-Cycle (RFE) (%)_____ 22.67

OIL PRESSURE TESTS



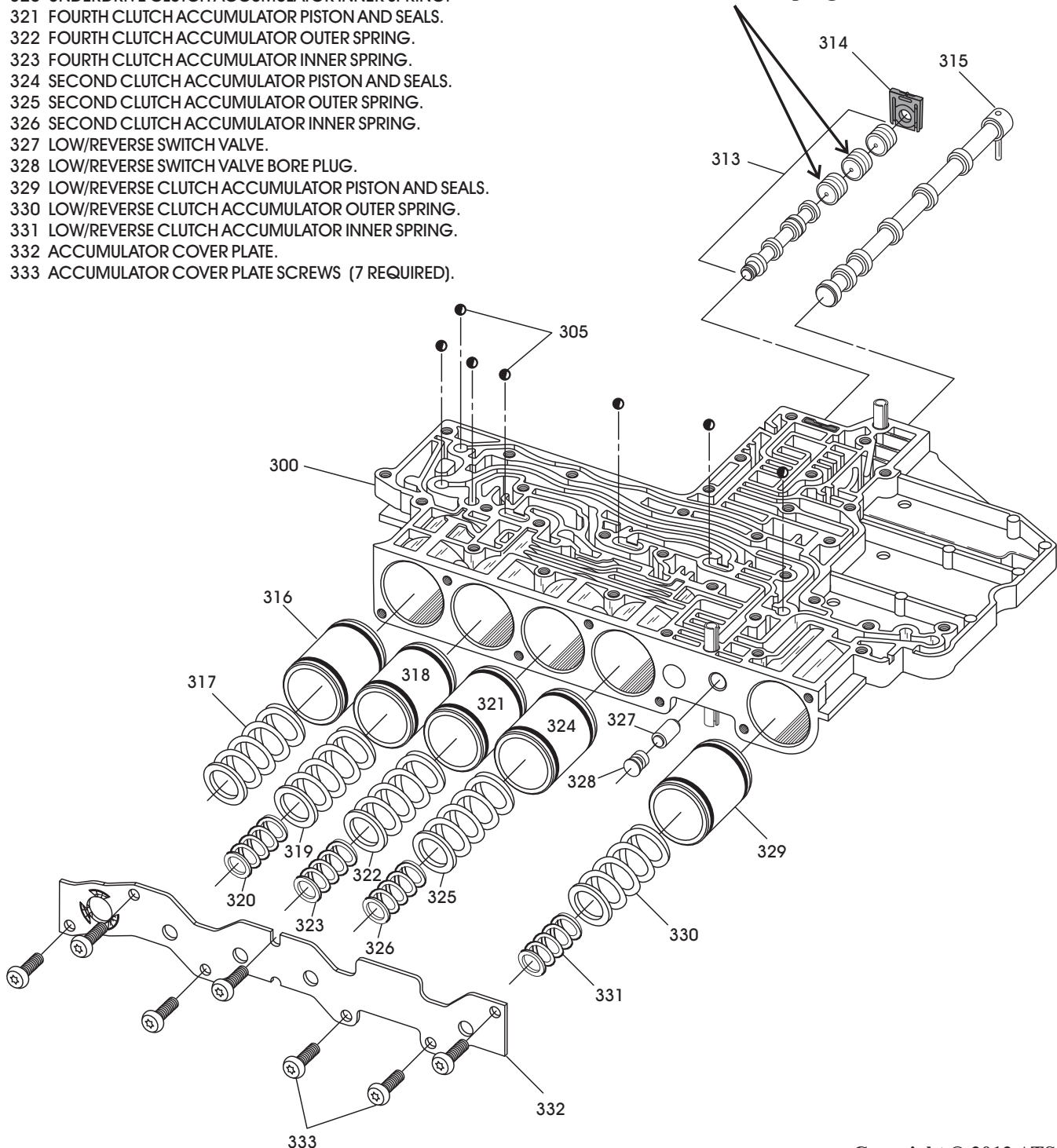
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Figure 3

MAIN VALVE BODY EXPLODED VIEW

- 300 VALVE BODY ASSEMBLY.
- 305 1/4" VITON CHECK BALLS (7 REQUIRED).
- 313 SOLENOID SWITCH VALVE AND THREE PLUGS.
- 314 SOLENOID SWITCH VALVE LINE-UP PLASTIC RETAINING CLIP.
- 315 MANUAL VALVE.
- 316 OVERDRIVE CLUTCH ACCUMULATOR PISTON AND SEALS.
- 317 OVERDRIVE CLUTCH ACCUMULATOR SPRING (SINGLE).
- 318 UNDERDRIVE CLUTCH ACCUMULATOR PISTON AND SEALS.
- 319 UNDERDRIVE CLUTCH ACCUMULATOR OUTER SPRING.
- 320 UNDERDRIVE CLUTCH ACCUMULATOR INNER SPRING.
- 321 FOURTH CLUTCH ACCUMULATOR PISTON AND SEALS.
- 322 FOURTH CLUTCH ACCUMULATOR OUTER SPRING.
- 323 FOURTH CLUTCH ACCUMULATOR INNER SPRING.
- 324 SECOND CLUTCH ACCUMULATOR PISTON AND SEALS.
- 325 SECOND CLUTCH ACCUMULATOR OUTER SPRING.
- 326 SECOND CLUTCH ACCUMULATOR INNER SPRING.
- 327 LOW/REVERSE SWITCH VALVE.
- 328 LOW/REVERSE SWITCH VALVE BORE PLUG.
- 329 LOW/REVERSE CLUTCH ACCUMULATOR PISTON AND SEALS.
- 330 LOW/REVERSE CLUTCH ACCUMULATOR OUTER SPRING.
- 331 LOW/REVERSE CLUTCH ACCUMULATOR INNER SPRING.
- 332 ACCUMULATOR COVER PLATE.
- 333 ACCUMULATOR COVER PLATE SCREWS (7 REQUIRED).

Check for bore wear in the valve body where these two inner plugs are located



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Figure 4