



CHRYSLER RWD TRANSMISSIONS IMPROVED LINE RISE & THROTTLE RESPONSE

COMPLAINT: It is commonly known that line rise of RWD Chrysler transmissions, i.e. 904, 727, 500/618, all **“PRE”** 1996 RE units is sluggish and in many cases insufficient. This causes technicians to find themselves having to adjust the throttle rod/cable in an attempt to located a happy medium of shift feel and shift timing. Many times the vehicle is delivered with out really achieving the desired shift characteristics.

CAUSE: Decrease pressure supplied to the pressure regulator valve throttle plug, which is used to prevent line pressure from exceeding approximately 100 to 120 psi at wide open throttle (See Figure 1).

CORRECTION: Drill a .040" exhaust hole through the exterior casting into the decrease pressure circuit by following the “example” steps below and illustrated in Figure 2. A controlled venting of this oil will allow a more rapid line rise response to throttle opening, improving the shift characteristics of the transmission. It also will allow a more desirable top end line pressure reading as well as a slight increase in the converter clutch apply pressure.

Step 1. Measure the overall length of the plug (.480") as seen with the example in Figure 2.

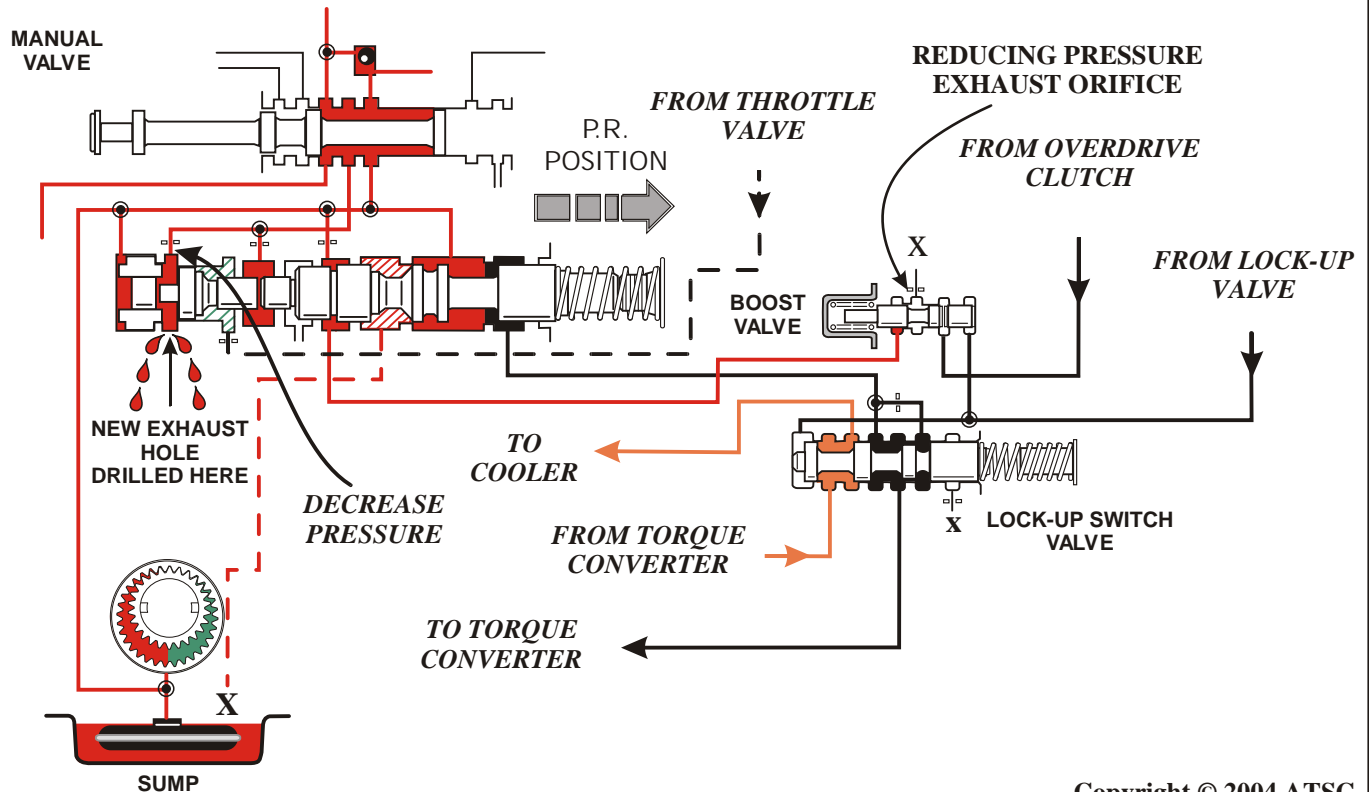
Step 2. Measure the length of the plug minus one shoulder (.430") as seen with the example in Figure 2.

Step 3. The difference between the two readings is .050". By dividing that number in half (.025") and adding it to the figure acquired in step 2 (.430"), the depth from the edge of the bore to the decrease circuit can be marked for drilling on the top side of casting, approximately .455", also shown in Figure 2.

Note: For 1996 and later vehicles drilling this hole may cause an erroneous code P1763 **“Transmission Governor Pressure Sensor Volts Too High.”** This can be overcome by re-flashing the PCM according to Chrysler bulletin 21-04-00 which re-calibrates the JTEC Powertrain Control Module with new software (calibration change 96Cal18, 97Cal18, 98Cal12, and 99Cal14).

Another option would be to carefully solder a 150 ohm 1/4 watt resistor into the governor sensor signal circuit which will desensitize the P1763 code setting concern. Radio Shack part # 271-1312

PARTIAL HYDRAULIC SCHEMATIC OF PRESSURE REGULATOR VALVE "DRIVE" POSITION 1st thru 3rd GEAR

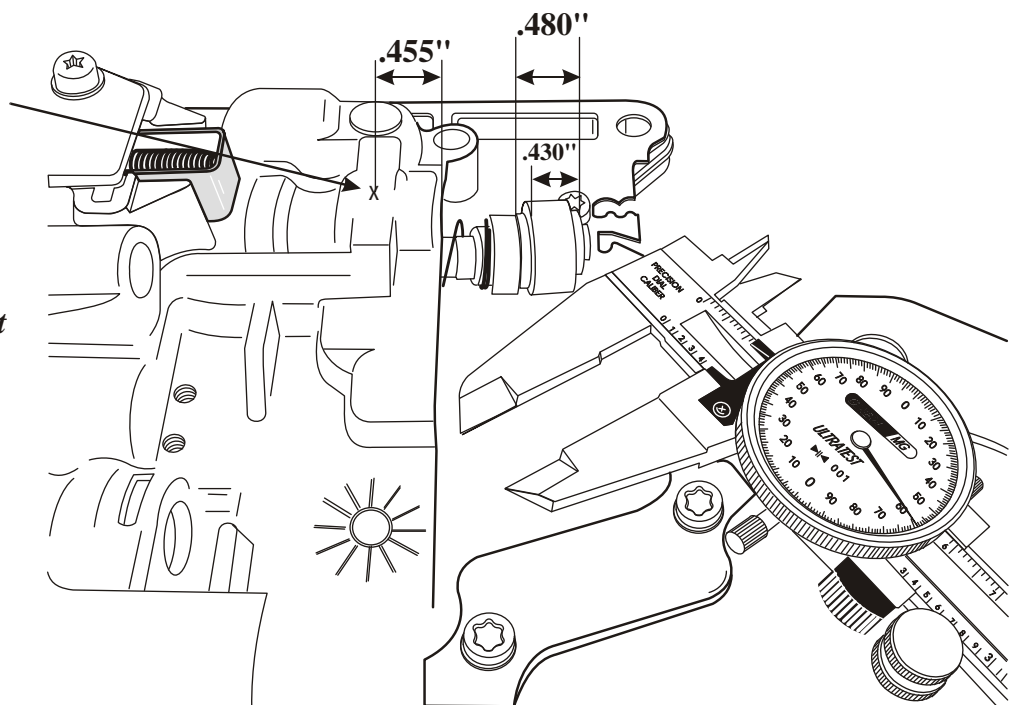


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Figure 1

From the example used in the text:

Measure approximately .455" in from the edge of the valve body over the pressure regulator valve throttle plug bore and drill a .040" exhaust hole through the valve body casting.



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Figure 2