

## CHRYSLER 42RE, 44RE, 46RE, 47RE

# NEW DESIGN GOVERNOR PRESSURE SENSOR AND TRANSMISSION CONTROL RELAY ADDED

**CHANGE:** *Change No. 1* - Beginning at the start of production for 1996 models, all Chrysler 42RE, 44RE, 46RE and 47RE transmissions were built with a new design Governor Pressure Sensor that now incorporates the Transmission Fluid Temperature (TFT) sensor inside the Governor Pressure Sensor assembly. The previous design has the TFT pop-riveted to the solenoid assembly. Refer to Figure 1.

*Change No. 2* - Beginning at the start of production for 1996 models, all Chrysler vehicles equipped with a 42RE, 44RE, 46RE or 47RE transmission were built with a Powertrain Control Module (PCM), instead of the previous Transmission Control Module (TCM). Chrysler has installed a new "Transmission Control Relay" on these models that now controls the voltage to pin number one at the transmission, via a ground signal from the PCM. Refer to Figure 2 for locations and wire colors on the various models, and Figure 3 for a complete wiring schematic including the Transmission Control Relay.

**REASON:** *Change No. 1* - Increased Transmission Fluid Temperature Sensor accuracy for improved reliability and durability.

*Change No. 2* - Increased reliability and durability by relieving the added solenoids amperage from the circuit and improves "Limp Mode" control when fault codes are stored in the PCM.

#### PARTS AFFECTED:

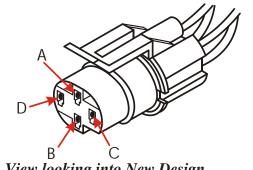
- (1) GOVERNOR PRESSURE SENSOR Now incorporates the Transmission Fluid Temperature Sensor which requires four terminals on the sensor instead of the previous three, as shown in Figure 1.
- (2) INTERNAL WIRING HARNESS Eliminates the previous TFT from the solenoid assembly and requires a new connector with four wires to accommodate the new design Governor Pressure Sensor. Refer to Figure 1.
- (3) TRANSMISSION CONTROL MODULE Eliminated, and transmission functions are now handled by the Powertrain Control Module (PCM).
- (4) TRANSMISSION CONTROL RELAY Added to control the voltage to pin number one at the transmission and controlled with a ground signal from the PCM. Refer to Figure 2 for the locations and wire colors on the various models, and Figure 3 for a complete wire schematic.

#### **INTERCHANGEABILITY:**

None of the parts listed above will interchange with any previous model vehicles.



### NEW DESIGN GOVERNOR PRESSURE SENSOR WITH "TFT" INCORPORATED INSIDE THE SENSOR

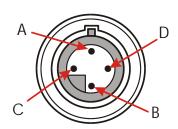


View looking into New Design Governor Pressure Sensor Connector

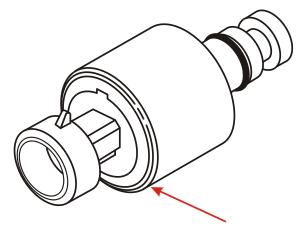
Pin Number	All Models
А	RED
В	WHITE
С	BLACK
D	GREEN

#### PIN FUNCTION

- 5-Voltsupply tosensor fromPCM Governor PressureSensor Signalto PCM
- Transmission Fluid Temperature Signalto PCM
- Governor PressureSensor Ground

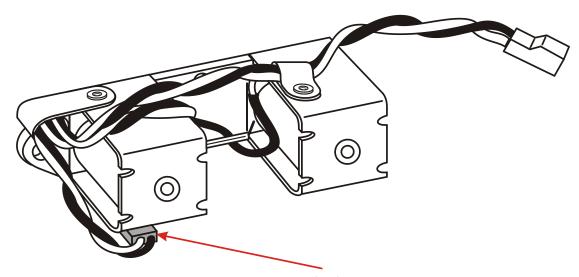


View looking into the Governor Pressure Sensor



Governor Pressure Sensor

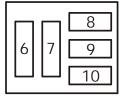
### PREVIOUS DESIGN "TFT" SENSOR LOCATION



Transmission Fluid Temperature Sensor



Pin Number	Model "BR" Ram Pick-up	Model "ZJ" Grand Cherokee
6	RED/WHT	LT GREEN
7	RED	LT BLUE
8	PINK	BRN/ORG
10	LTG/BLK	RED/ORG

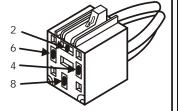


TRANSMISSION CONTROL RELAY CONNECTOR PIN I.D. FOR "BR" AND "ZJ" MODELS

#### PIN FUNCTION

- 6 Fused Battery Voltage
- 7 Transmission Control RelayOutput (12Vto Transmission)
- 8 Transmission Relay Control (Grnd Signalfrom PCM)
- 10 Fused Ignition Switch (12V to Relay from Ign. Switch)

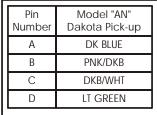
Pin Number	Model "AB" Ram Van, Wagons and Jeeps	
2	LIGHT BLUE	
4	LT GREEN/BLACK	
6	VIOLET/LT BLUE	
8	RED/WHT	

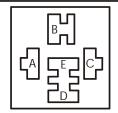


TRANSMISSION CONTROL RELAY CONNECTOR PIN I.D. FOR "AB" MODELS

#### PIN FUNCTION

- 2 Transmission Control RelayOutput (12Vto Transmission)
- 4 Fused Ignition Switch (12V to Relay from Ign. Switch)
- 6 Transmission Relay Control (Grnd Signalfrom PCM)
- 8 Fused Battery Voltage

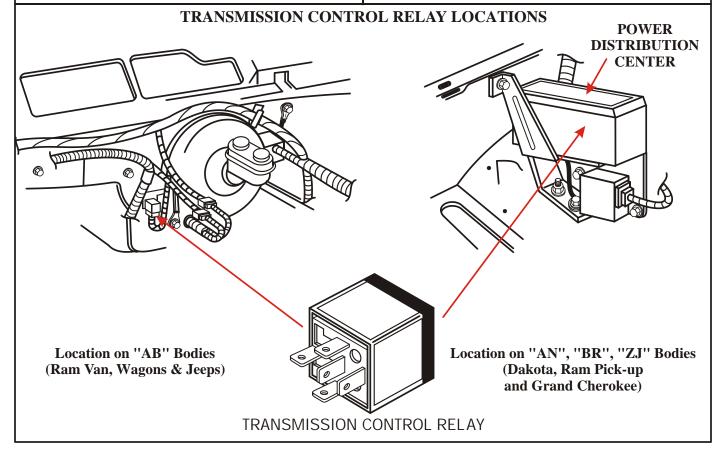




TRANSMISSION CONTROL RELAY CONNECTOR PIN I.D. FOR "AN" MODELS

#### PIN FUNCTION

- A Fused Ignition Switch (12V to Relay from Ign. Switch)
- B Fused Battery Voltage
- C Transmission Relay Control (Grnd Signal from PCM)
- D Transmission Control RelayOutput (12Vto Transmission)





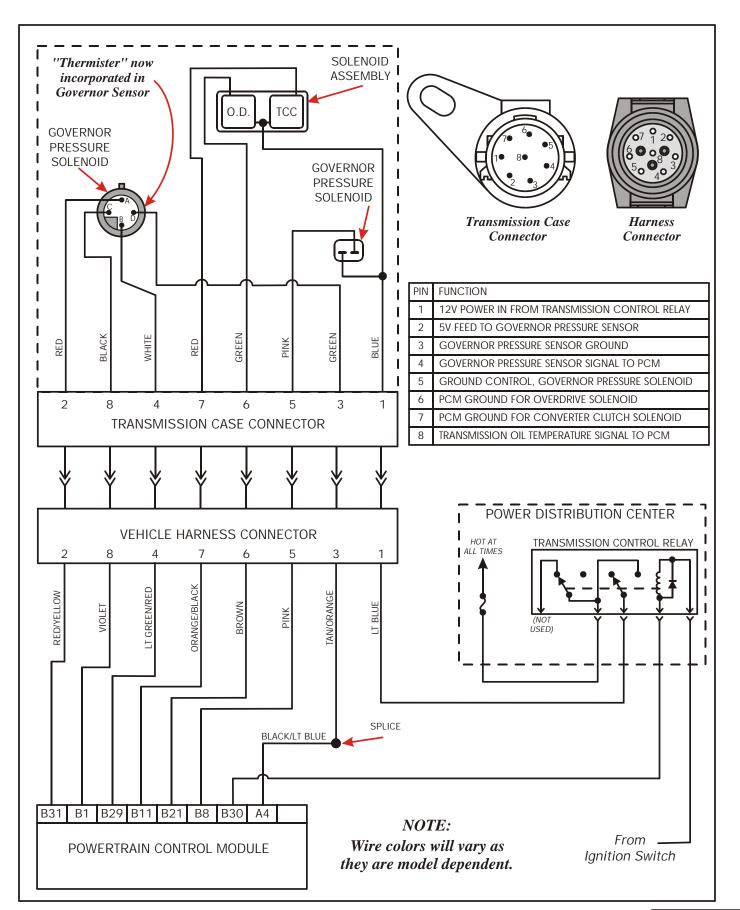


Figure 3
AUTOMATIC TRANSMISSION SERVICE GROUP