

# **Technical Service Information**

### THM 440-T4 SLIPPING AND/OR NO TCC APPLY

**COMPLAINT:** Some vehicles equipped with the THM 4T60-E transaxle built on or before January 26, 1993 (Julian Date 026) may exhibit no converter clutch apply, or a converter clutch apply shudder condition. Either one of these conditions will usually store diagnostic code 039 in the PCM memory. Vehicles built after the above Julian Date have a new design Pulse Width Modulated (PWM) Solenoid with added screens. Refer to Figure 1 for Julian Date identification. 'Excessive heat on torque converter may be visible when this condition exists.

**CAUSE:** 

The cause may be due to sediment trapped in the PWM solenoid, and may enter the solenoid from either the control and/or feed passages and lodge in the flow path around the metering ball causing an undesired leak (See Figure 2).

CAREFUL DIAGNOSIS IS HIGHLY RECOMMENDED. DO NOT ASSUME THAT THE CONDITION IS CAUSED BY THE ABOVE CONCERN.

Following is a list of other items that may affect converter clutch engagement.

Engine performance related Improper operation of the PCM

Poor connection between PCM and transaxle case connector

Converter clutch apply valve stuck Converter clutch regulator valve stuck Turbine shaft sealing ring damage Drive sprocket support bushing worn Oil pump drive shaft seal damaged

Number 1 checkball missing or off location

PWM solenoid "0" ring leaking PWM solenoid inoperative

**CORRECTION:** Replace the Pulse Width Modulated (PWM) Solenoid with OEM part number 8683535. This is the new design solenoid, in which screens were added to the solenoid control and feed passages (See Figure 3). The PWM spacer plate filter has also been eliminated on the later models that use the new design PWM solenoid (See Figure 4). The new design PWM solenoid with screens added should be installed on all rebuilds to prevent contamination. It is not necessary to remove spacer plate filter when installing the upgraded PWM solenoid.

#### **SERVICE INFORMATION:**

(New Design With Added Screens)



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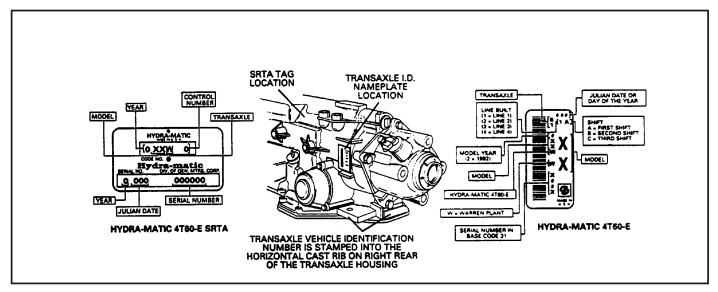


Figure 1

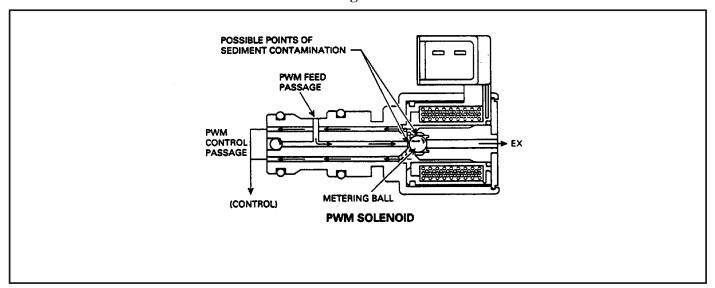


Figure 2



## **Technical Service Information**

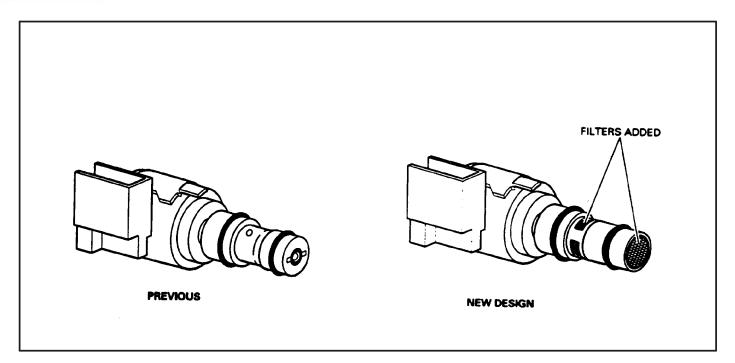


Figure 3

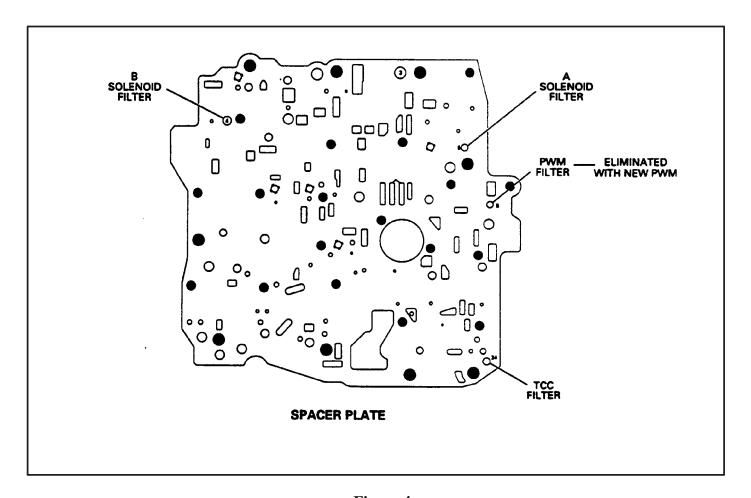


Figure 4

AUTOMATIC TRANSMISSION SERVICE GROUP