



Technical Service Information

VT20/25-E DELAYED FORWARD ENGAGEMENT

COMPLAINT: Before and after repairs, a slight delayed engagement into drive occurs when cold and becomes worse as fluid temperature increases.

CAUSE: Pressed into the Input Shaft Assembly is an Input Fluid Passage Seal (Figure 1) that loses its sealing capabilities and often times goes overlooked during repairs.

CORRECTION: Replace the Input Fluid Passage Seal. At the time of printing, this seal is included in a Precision kit.

Additional causes for delayed forward engagement can be due to compromised sealing rings on the input shaft, a mechanically failed Neutral Idle/TCC On-Off Solenoid (Figure 2) and/or a problem with the Forward and Reverse Clutch valve in the valve body (Figure 3). In these cases, TCC and Reverse engagement problems may also accompany the delayed in Forward complaint.

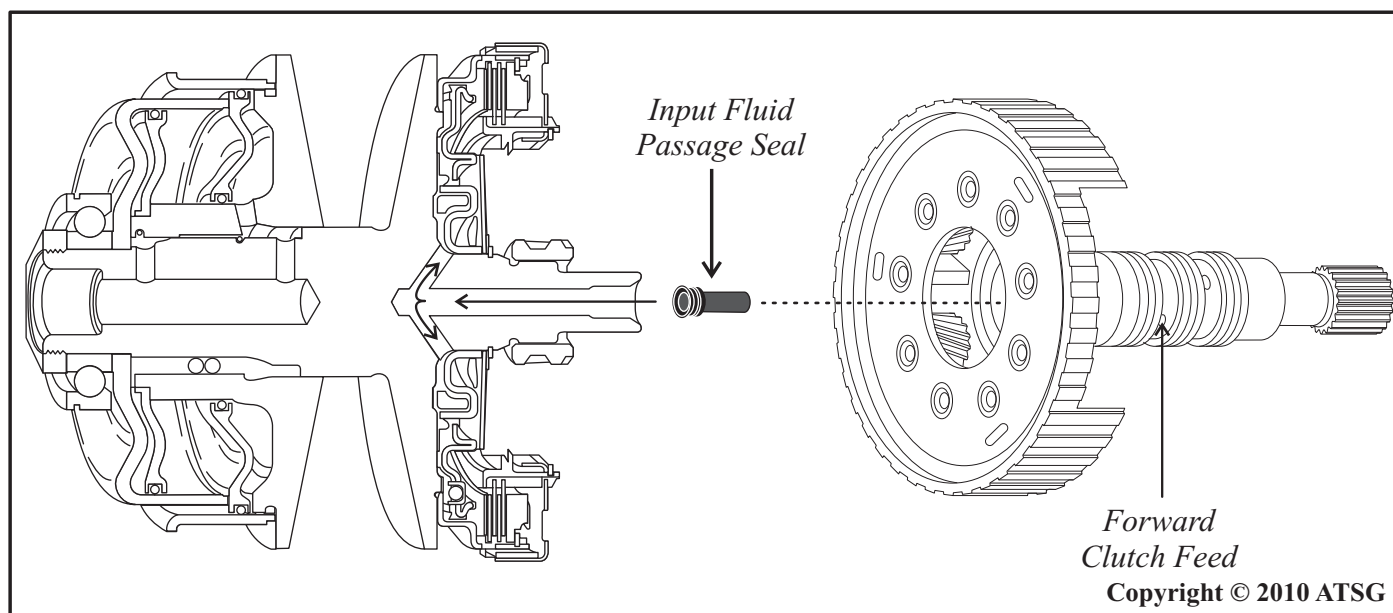
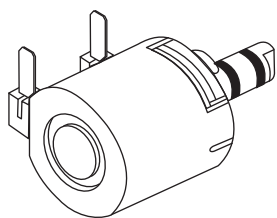


Figure 1



The Neutral Idle/TCC Clutch Control Solenoid Valve. A normally low, 3 port linear pressure control solenoid that controls the fluid pressure used to apply the forward and reverse clutches as well as the torque converter clutch.

The Solenoid should measure between 3.5 and 4.1 ohms at 68° F.

Copyright © 2010 ATSG

Figure 2



Figure 3