
FORD 8F35

NEUTRAL AT A STOP

COMPLAINT: A 2019 Ford Transit Connect equipped with the 8F35 transmission has a complaint of a neutral condition when downshifting from second gear to first gear until the vehicle is at a stop. In addition, the transmission will bind-up on the 1-2 shift followed by a harsh bump when the bind-up released.

The diagnostic trouble codes that set were P0751 "Shift Solenoid A Performance/Stuck Off", P2700 "Friction Element "A" Apply Time Range/Performance" and P2701 "Friction Element "D" Apply Time Range/Performance".

CAUSE: When the transmission was disassembled for inspection, the Selectable One-Way Clutch (SOWC) was found to be severely damaged (see figures 1 and 2).

The SOWC is clutch "D" and must hold in both directions for reverse and hold one way and freewheel the other in first gear. Due to the damage to the SOWC, it wouldn't freewheel correctly as it shifted into second gear. It would cause a bind up on the shift and then suddenly release.

CORRECTION: Replace the Selectable One-Way Clutch. As a precautionary measure both planetaries and sun gears were replaced due to their high failure rate. The valve body was also replaced due to metal contamination.

Thanks goes out to Frank from Roy's Transmission Service for the excellent photos and for sharing his experience with ATSG.

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Figure 1



Figure 2