



Technical Service Information

FORD/MAZDA CD4E PERSISTENT GEAR RATIO ERRORS 2001 & UP

COMPLAINT: After overhaul, 2001 and up vehicles equipped with the CD4E transaxle may exhibit a complaint of gear ratio error codes P0731, P0732, P0733 or P0734, and the transmission tries to shift to third but then downshifts back to second or first gear. After clearing these codes, they immediately return during the road test. The Speedometer also will read in Park if the engine is revved up, and or it is noticed that the Speedometer is about 15-20 MPH slow.

CAUSE: The cause may be that during installation of the transmission, the Turbine Speed Sensor harness connector was connected to the Output/Vehicle Speed Sensor, and the Output/Vehicle speed sensor harness connector was connected to the Turbine Speed Sensor, as the connectors are identical and the harnesses are long enough to cross-connect. The previous design VSS was on the opposite side of the trans which made it impossible to cross-connect. The new design OSS/VSS arrived in 2001 and up models.

CORRECTION: Refer to Figure 1 for a sample wiring schematic showing the wire colors for these two sensors. Figure 2 shows the location of the previous design and new design Vehicle Speed Sensor locations. Refer to Figure 3 for a close up of the TSS and VSS and their connectors. Verify that the correct harness is connected to the correct sensor.

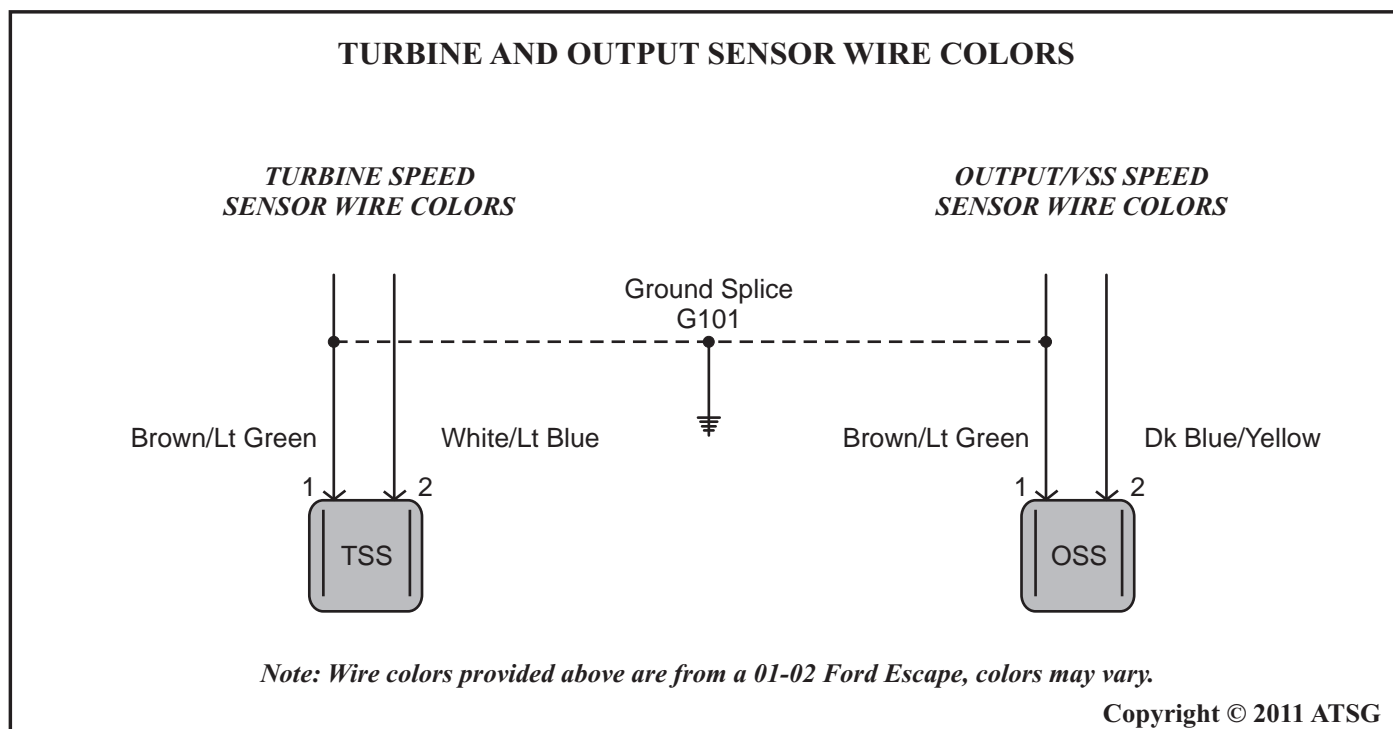
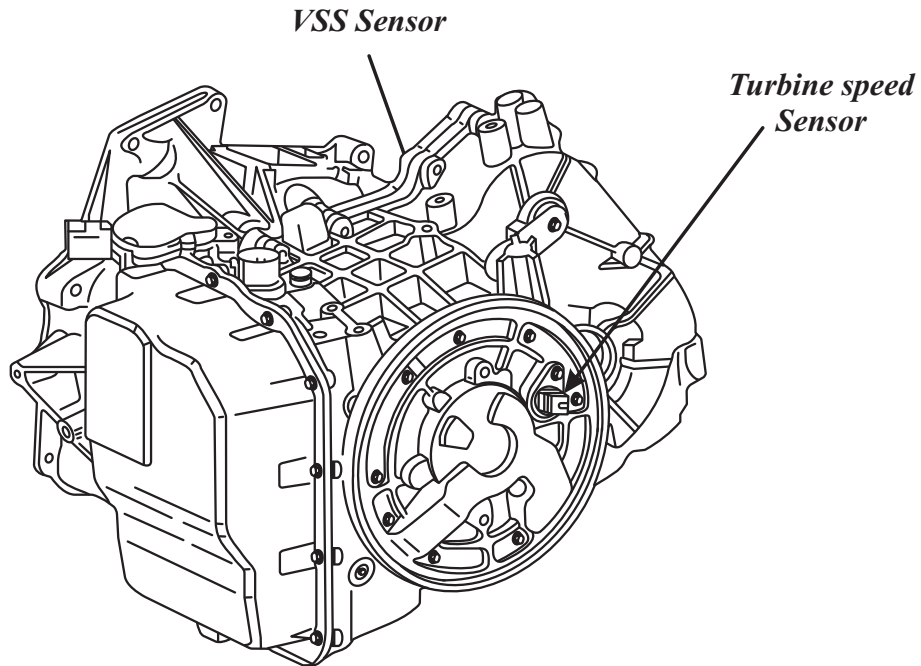
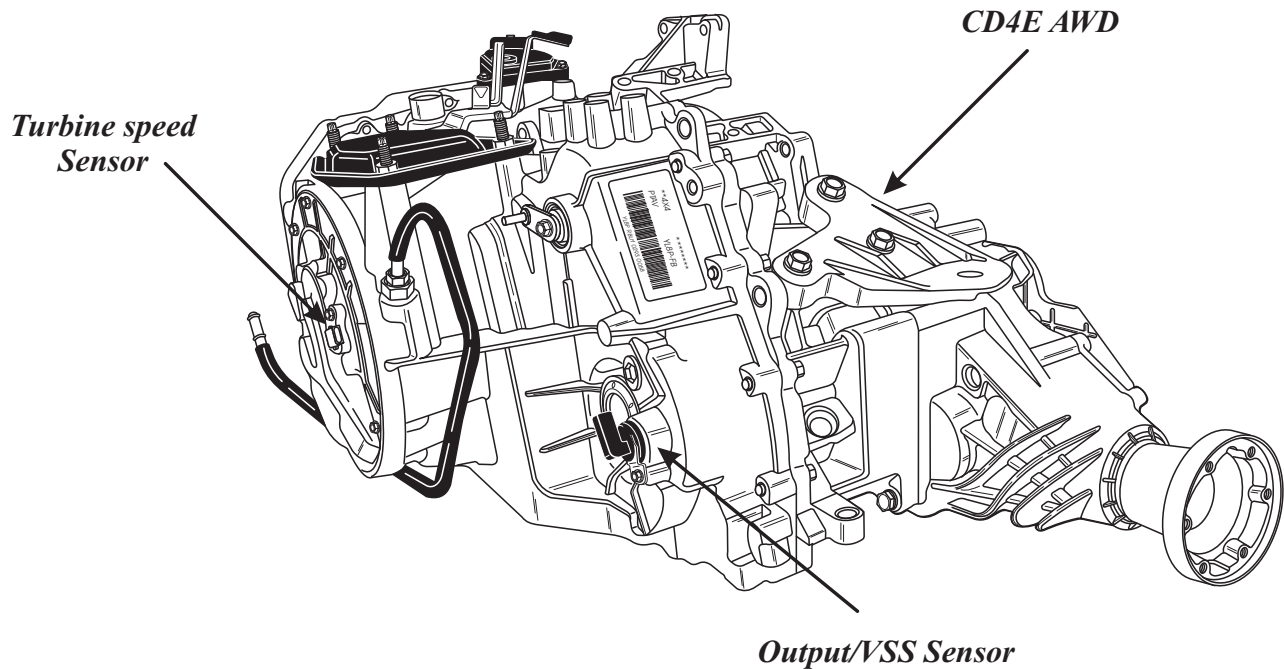


Figure 1

PREVIOUS DESIGN TSS AND VSS LOCATIONS



NEW DESIGN TSS AND VSS LOCATIONS



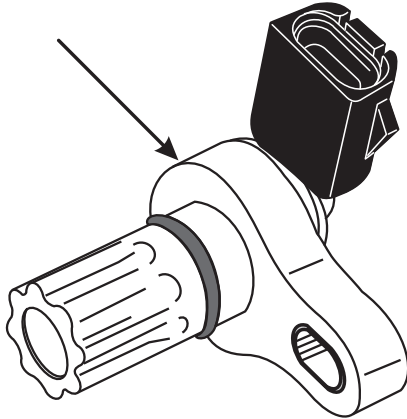
Copyright © 2011 ATSG

Figure 2

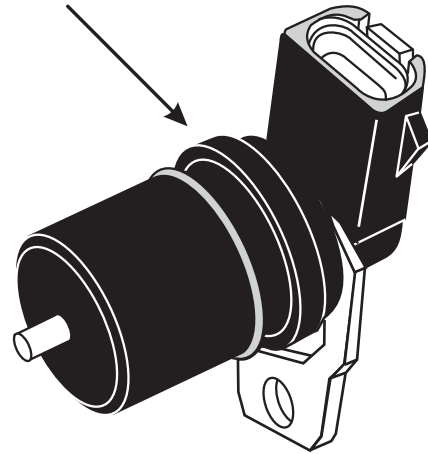
FORD/MAZDA CD4E PERSISTENT GEAR RATIO ERRORS 2001 & UP

SENSOR I.D.

Turbine Sensor



Output/VSS Sensor



Copyright © 2011 ATSG

Figure 3