



# Technical Service Information

## FORD MOTOR COMPANY AX4N 1999 - UP MOMENTARY NEUTRAL ON ACCELERATION SHIFT SELECTOR IN OD POSITION ONLY

**COMPLAINT:** Some 1999 and later Ford Motor Company vehicles equipped with the AX4N Transaxle may exhibit a condition that has been described as a neutral during the 1-2 upshift, or as a neutral during acceleration in first gear. This complaint does not occur if the shift selector is moved to the D position.

**CAUSE:** The cause may be that a faulty Vehicle Speed Sensor is causing this complaint. See Figure 1. It is a new design Vehicle Speed Sensor that is a Permanent Magnet Sensor that reads off the park gear. See figure 2. **Reason:** when the neutral feeling occurs it is a fault in the signal that is sent to the PCM, telling it that the vehicle speed has just increased from approximately 15 mph to approximately 35 to 40 mph. When this happens the trans is still in first gear, the PCM turns on Shift Solenoid 3 momentarily and then turns it back off again. At the time that Shift Solenoid 3 is on it allows the Forward Clutch Control Valve to move to a downshifted position, at which time the Forward Clutch exhausts causing the trans to slip into a neutral condition. Figure 3 shows Shift Solenoid 3 off, and the Forward Clutch applied. Figure 4 shows Shift Solenoid 3 on, and the Forward Clutch off.

**CORRECTION:** Replace the Vehicle Speed Sensor with Ford Part Number YF1Z-7H103-AA

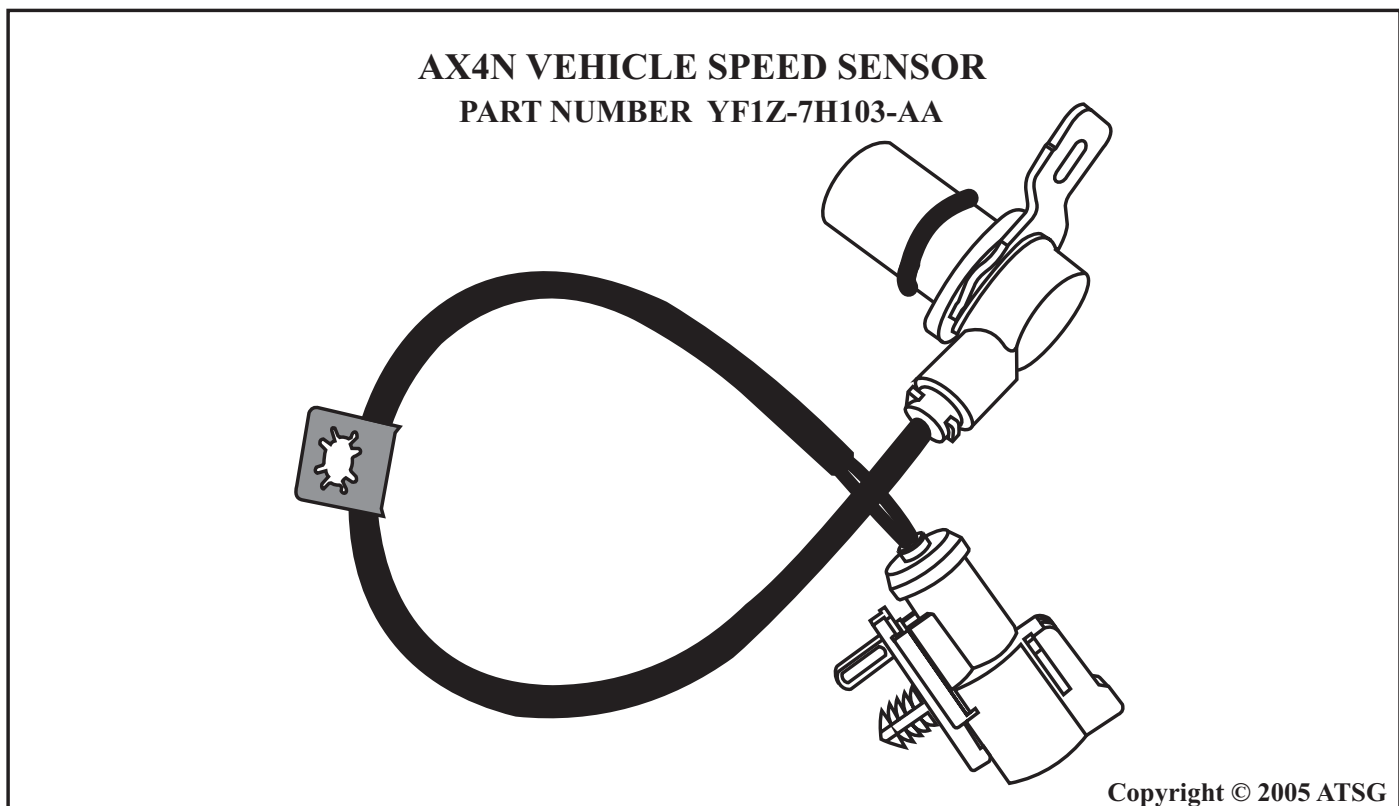
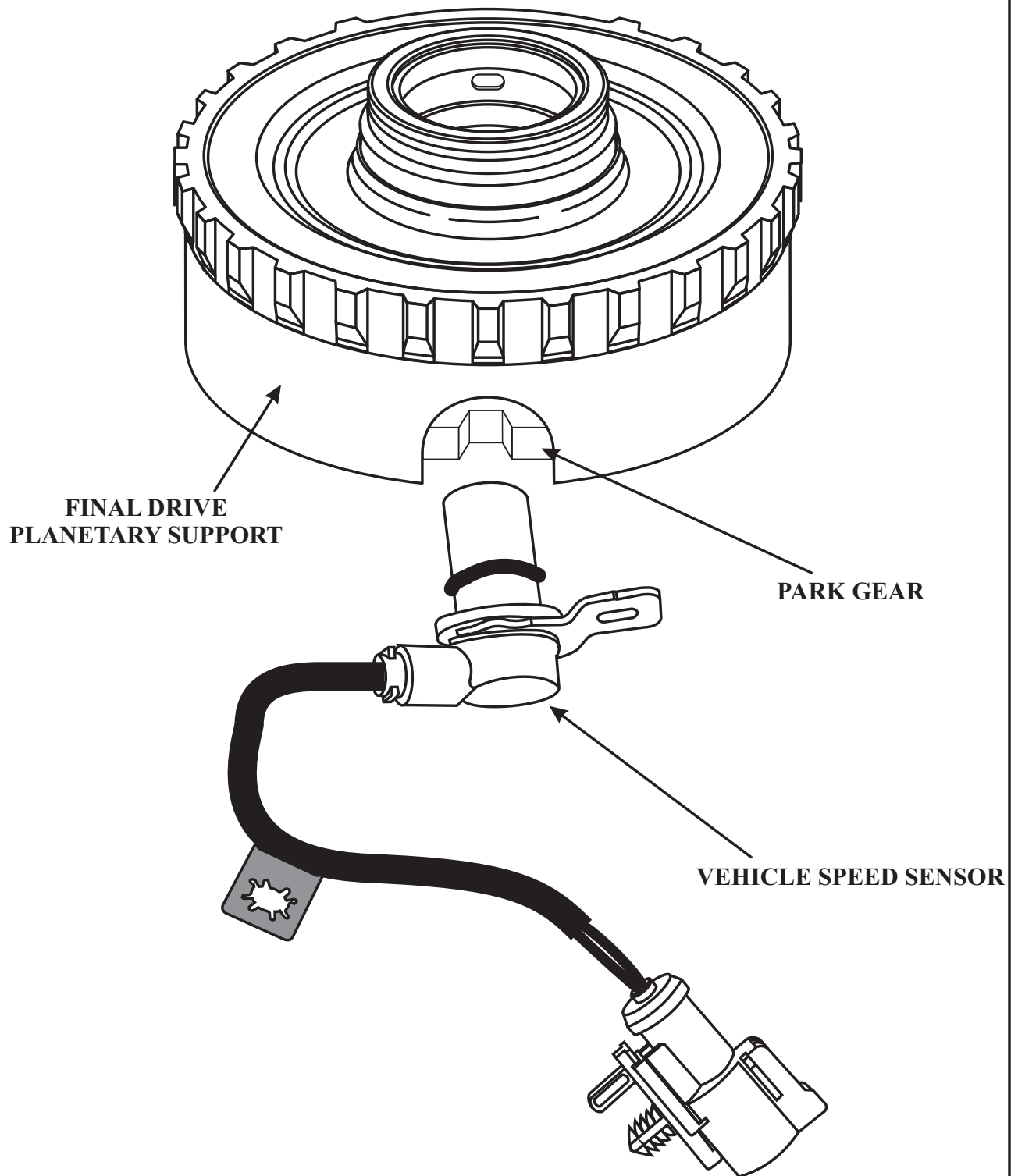


Figure 1



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Figure 2  
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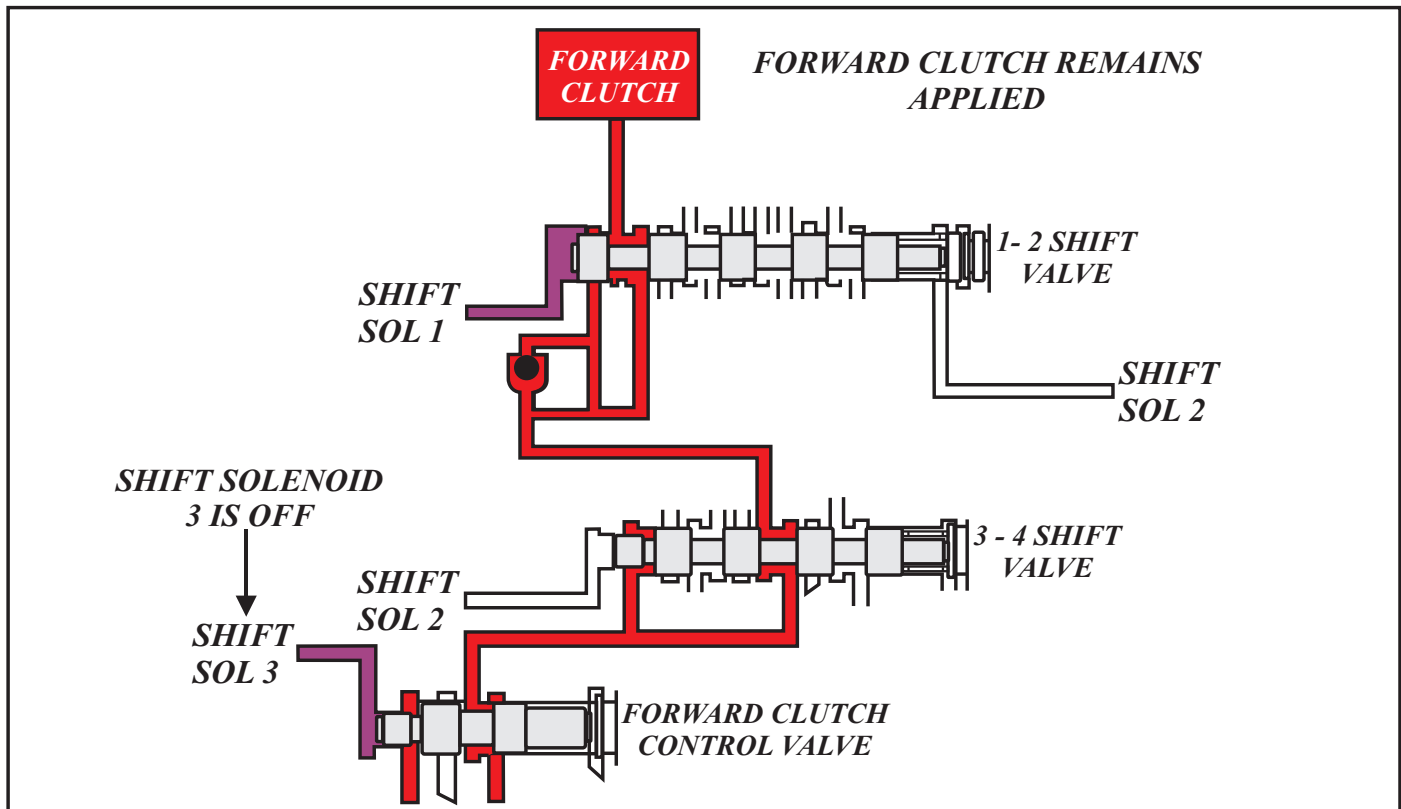
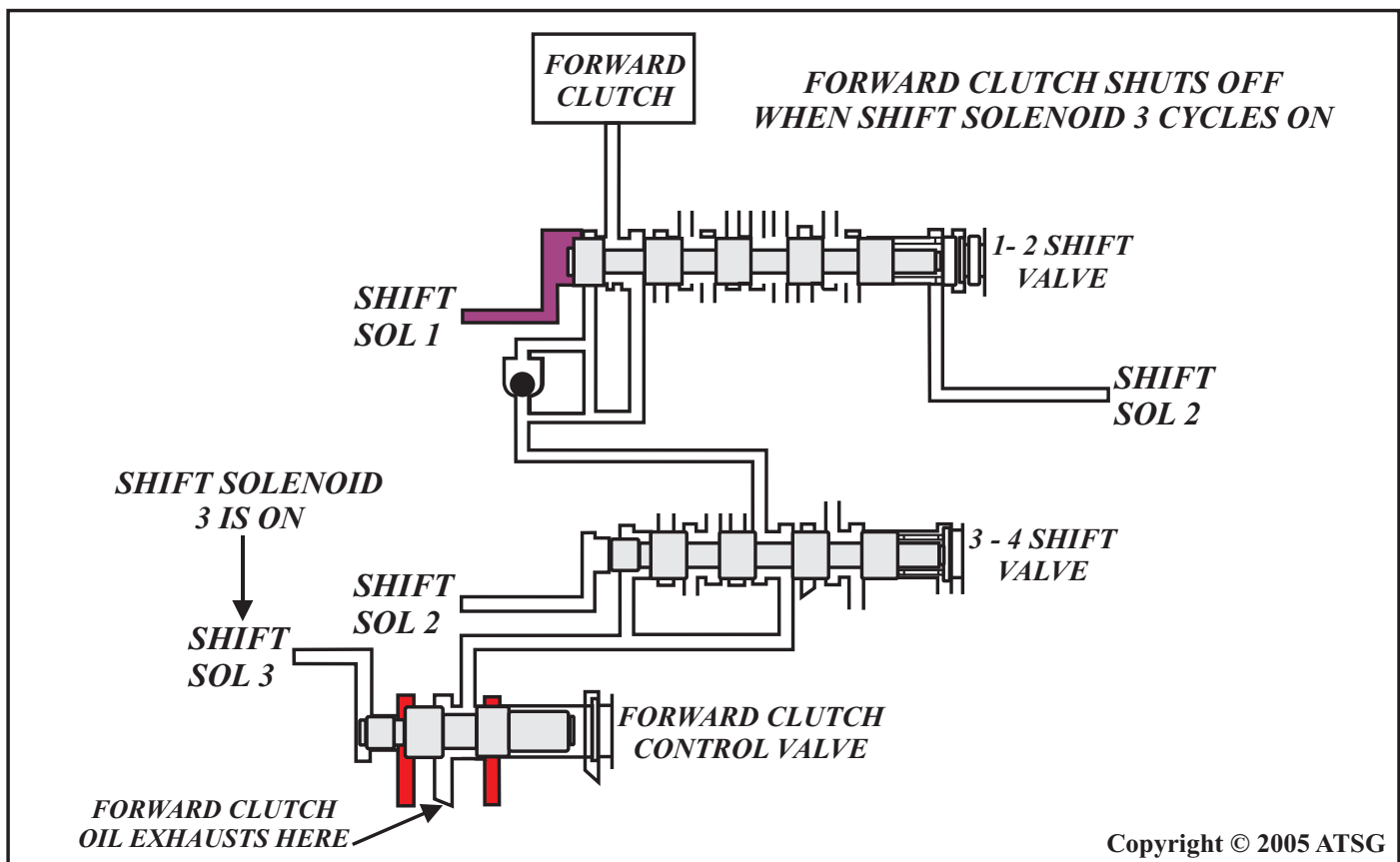


Figure 3



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