



# Technical Service Information

## FORD AX4S/AXOD-E HARSH SHIFTS, CLICKING NOISE, TIE-UP ON SHIFTS 1993-UP AFTER REBUILD

**COMPLAINT:** After rebuild, harsh shifts (High Line) and/or a “Clicking” or cycling noise may be heard from the side cover area, that is usually accompanied by an ON/OFF bind-up sensation that coincides with the “Clicking” noise. These symptoms may be accompanied with Diagnostic Trouble Code (DTC) 652 (MLUS Shorted or Open Circuit), DTC 624 (EPC Circuit Failure), and/or one Shift Solenoid DTC 62 1, 622, or 624.

**CAUSE:** The cause may *be*, solenoid wire connectors installed on the wrong solenoids.

**CORRECTION:** Connect *the internal wiring harness connectors to their proper solenoids, using the wire colors, as shown in Figure 1 and 2. Proper connection of solenoids can also be verified externally through the case connector using the Ohms chart in Figure 2. NOTE:* The internal wire harness normally is secured by wire-ties which would prevent improper connection of solenoids, however, not all wire harnesses have the wire ties necessary to prevent this problem and the chart must be used.

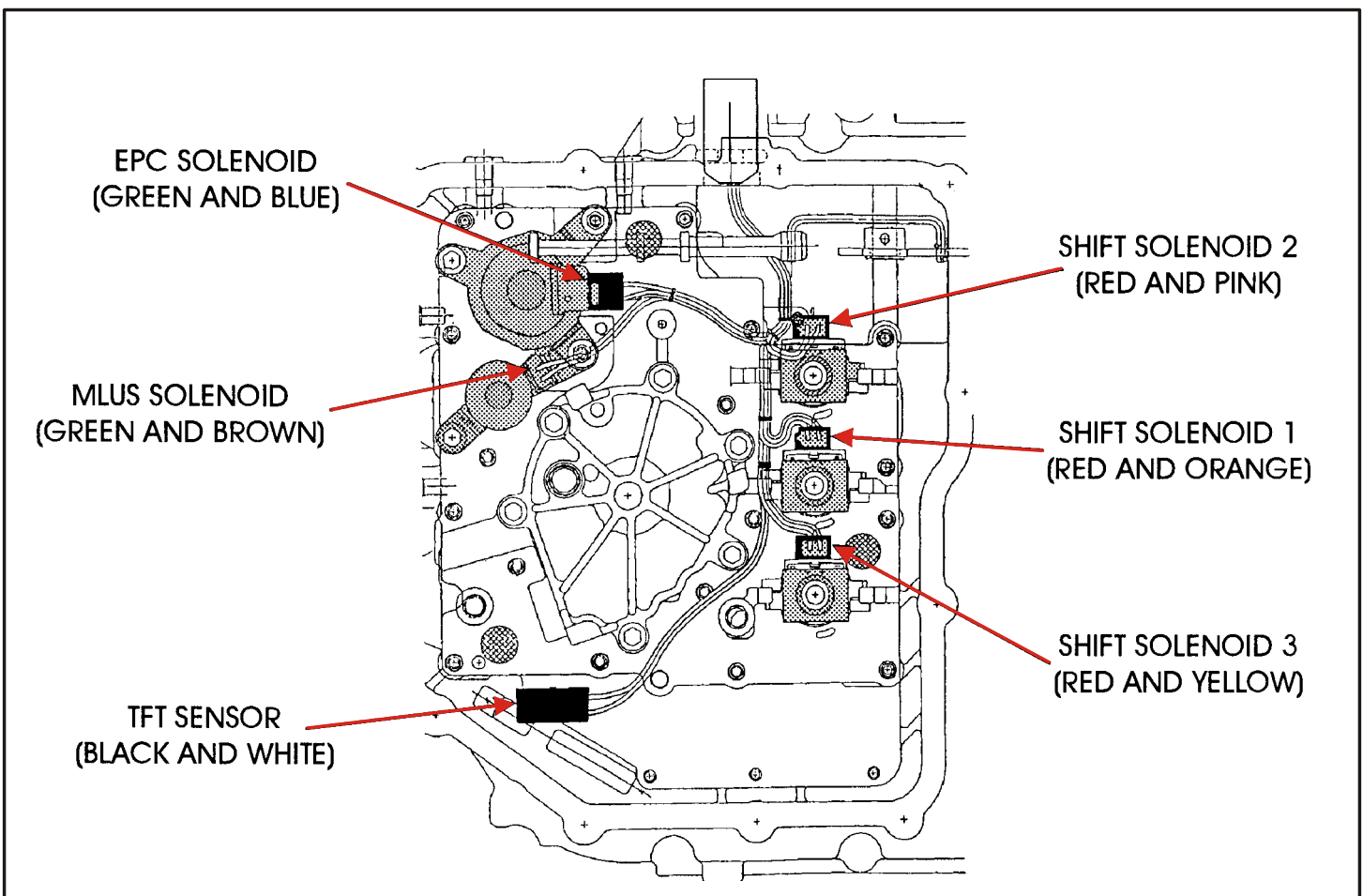


Figure 1

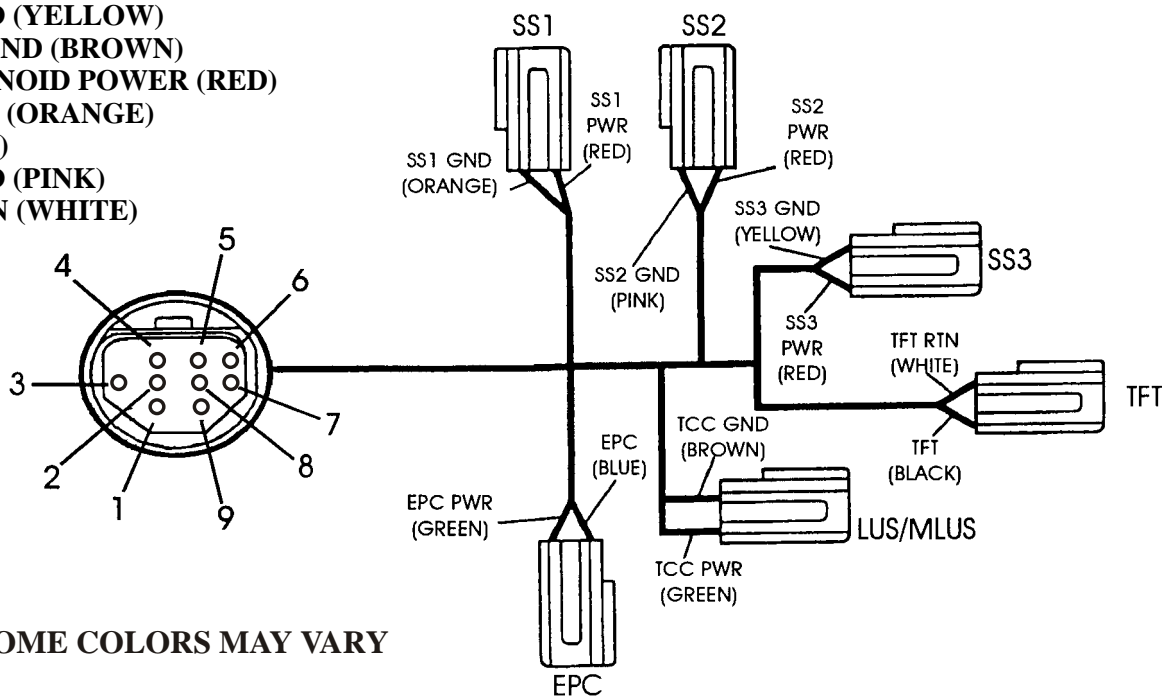
## SHIFT SOLENOID RESISTANCE CHART AND TFT SENSOR RESISTANCE CHART FOR BOTH AX4S AND AX4N

**SSI = SHIFT SOLENOID NUMBER ONE**  
**SS2 = SHIFT SOLENOID NUMBER TWO**  
**SS3 = SHIFT SOLENOID NUMBER THREE**  
**MLUS = MODULATED LOCK-UP SOLENOID**  
**EPC = ELECTRONIC PRESSURE CONTROL SOLENOID**  
**TSS = TURBINE SHAFT SPEED SENSOR**  
**TFT = TRANSMISSION FLUID TEMPERATURE**

SOLENOID	SOLENOID RESISTANCE (OHMS)	°C	°F	TFT SENSOR (OHMS)
SS1	15 - 25	0-20	32-58	100k - 37k
SS2	15 - 25	21-40	59-104	37k - 16k
SS3	15 - 25	41-70	105-158	16k - 5k
MLUS	.98 - 1.6	71-90	159-194	5k - 2.7k
EPC	3.23 - 5.50	91-110	195-230	2.7k - 1.5k
TSS	100 - 200	111-130	231-266	1.5k - 0.8k
		131-150	267-302	0.8k - 0.5k

1. EPC GROUND (BLUE)
2. EPC AND LUS/MLUS POWER (GREEN)
3. SS3 GROUND (YELLOW)
4. MLUS GROUND (BROWN)
5. SHIFT SOLENOID POWER (RED)
6. SSI GROUND (ORANGE)
7. TFT (BLACK)
8. SS2 GROUND (PINK)
9. TFT RETURN (WHITE)

### 93-96 AX4S AND ALL AX4N



NOTE: SOME COLORS MAY VARY

Figure 2