

FORD AXODE/AX4S/AX4N TROUBLE CODES 628, P0741, OR P1744 STORED

COMPLAINT: Before and/or after rebuild, during the road test, the Malfunction Indicator Lamp (MIL) begins to flash and the system faults to Failure Mode Effects Management (FMEM) which creates maximum line pressure. When code retrieval has been completed DTC 628 (TCC Slippage), P0741 (TCC Stuck Off) or P1744 (TCC Performance) may be stored. After diagnosis of the complete TCC system, no faults are found. When the codes are cleared, they return on the next road test.

CAUSE: The cause may be, installation of the incorrect drive and/or driven sprockets, as shown in Figure 1, or by installing an exchange unit that has the incorrect sprocket tooth count. It is the sprocket tooth count that determines the target gear ratio that the PCM is looking for. Because the PCM is comparing the engine RPM signal to the Turbine Speed Signal (TSS), the PCM assumes that the converter clutch is slipping and stores the above trouble codes due to an incorrect sprocket tooth count.

CORRECTION: Use the charts found in Figures 2 and 3, to ensure that the sprocket tooth count matches the vehicle application. It is a good practice to tag exchange units with the tooth count recorded to ensure that the correct transaxle for that vehicle is installed.

Special Note: To assist in diagnosing this problem, raise the front wheels off the ground and see if these codes reset, with no load on the vehicle. If they do reset, the chances are that it is a gear ratio problem and NOT converter clutch slippage.

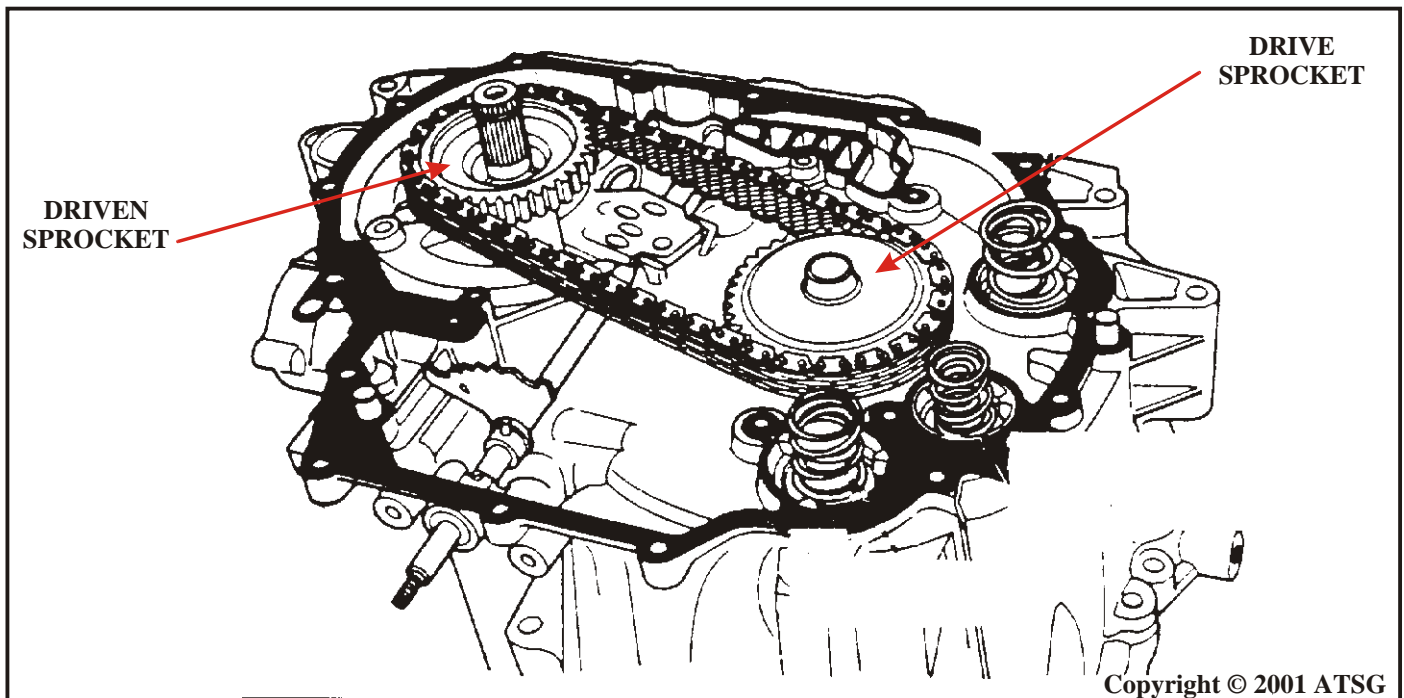


Figure 1



AXODE/AX4S TRANSAXLE SPROCKET TO VEHICLE APPLICATION CHART		
YEAR / ENGINE / MODEL	DRIVE SPROCKET	DRIVEN SPROCKET
<i>1991-95, 3.0L SHOC Taurus/Sable</i>	<i>37 Teeth</i>	<i>36 Teeth</i>
<i>1996-01, 3.0L SOHC Taurus/Sable</i>	<i>35 Teeth</i>	<i>38 Teeth</i>
<i>1996-00, 3.0L DOHC Taurus/Sable</i>	<i>35 Teeth</i>	<i>38 Teeth</i>
<i>1993-95, 3.2L Taurus SHO</i>	<i>35 Teeth</i>	<i>38 Teeth</i>
<i>1996, 3.4L Taurus SHO</i>	<i>35 Teeth</i>	<i>38 Teeth</i>
<i>1991-95, 3.8L Taurus/Sable Police Only</i>	<i>37 Teeth</i>	<i>36 Teeth</i>
<i>1991-99, 3.8L Taurus/Sable</i>	<i>38 Teeth</i>	<i>35 Teeth</i>
<i>1995-99, 3.0L Windstar</i>	<i>34 Teeth</i>	<i>39 Teeth</i>
<i>1995, 3.8L Windstar</i>	<i>37 Teeth</i>	<i>36 Teeth</i>
<i>1996-99, 3.8L Windstar</i>	<i>38 Teeth</i>	<i>39 Teeth</i>
<i>1991-94, 3.8L Lincoln Continental</i>	<i>37 Teeth</i>	<i>36 Teeth</i>

Figure 2

AX4N TRANSAXLE SPROCKET TO VEHICLE APPLICATION CHART		
YEAR / ENGINE / MODEL	DRIVE SPROCKET	DRIVEN SPROCKET
<i>1995, 3.0L & 3.8L Taurus/Sable</i>	<i>37 Teeth</i>	<i>36 Teeth</i>
<i>1996-97, 3.0L DOHC Taurus/Sable</i>	<i>35 Teeth</i>	<i>38 Teeth</i>
<i>1996-97, 3.0L SOHC Taurus/Sable</i>	<i>35 Teeth</i>	<i>38 Teeth</i>
<i>1996-99, 3.4L Taurus SHO</i>	<i>35 Teeth</i>	<i>38 Teeth</i>
<i>1998-99, 3.0L DOHC Taurus/Sable</i>	<i>35 Teeth</i>	<i>38 Teeth</i>
<i>1998-99, 3.0L SOHC Taurus/Sable</i>	<i>35 Teeth</i>	<i>38 Teeth</i>
<i>1995-00, 3.8L Lincoln Continental</i>	<i>35 Teeth</i>	<i>38 Teeth</i>
<i>1995-98, 4.6L Lincoln Continental</i>	<i>38 Teeth</i>	<i>36 Teeth</i>

Figure 3