

ATTENTION

YOUR WARRANTY DEPENDS ON YOUR ADHERENCE TO THESE GUIDELINES

AX4N Ford Automatic Transmission

PRODUCT BULLETIN

Water Damaged PCM

Some 1999-2003 Windstar and 2004-2007 Freestar / Monterey vehicles built prior to 6/22/2006 may exhibit engine / transmission driveability issues due to water entering the powertrain control module (PCM) or transaxle vent. Symptoms may include various diagnostic trouble codes (DTCs), harsh or delayed transmission shifts / engagements, no reverse engagement, engine overheat, engine lean condition causing a misfire (possibly leading to melted electrodes on the spark plugs), and rough idle. The water leakage may be due to the PCM connector cover not seating completely and water leaking down from the cowl panel grille (cowl top vent panel) area.

APPLICABLE VEHICLES

1999-2003	Ford Windstar (AX4N)	May affect T161519, T161521, T161522, T161524, or T161324.
2004-2007	Ford Freestar (AX4N)	May affect T161326, T161327, T161328, or T161329.
2004-2007	Mercury Monterey (AX4N)	May affect T161326 or T161329.

FAILURE CAUSE

The water leakage is likely due to the PCM connector cover not seating properly and/or water leaking down from the cowl top vent panel area.

PARTS INFORMATION

PART NUMBER	PART NAME
N806322-S	Pushpin Screw/Rivet (4 per repair)
TA-32	Clear Silicone Rubber
TA-26	Threadlock 262
164-R4901	PVC Soft Foam Adhesive Stripes - Rotunda Part (2 per repair)

REPAIR ACTION

Prior to performing any transmission repairs, inspect vehicle for evidence of water damage at PCM, PCM connector, and transaxle vent. Inspect transmission fluid for presence of water.

If presence of water is detected in the PCM or transmission fluid, follow the repair instructions per the service procedure as listed in the following pages. This procedure lists steps for servicing the water leak path in the cowl panel grille area, and also for servicing the PCM.

REPAIR PROCEDURE

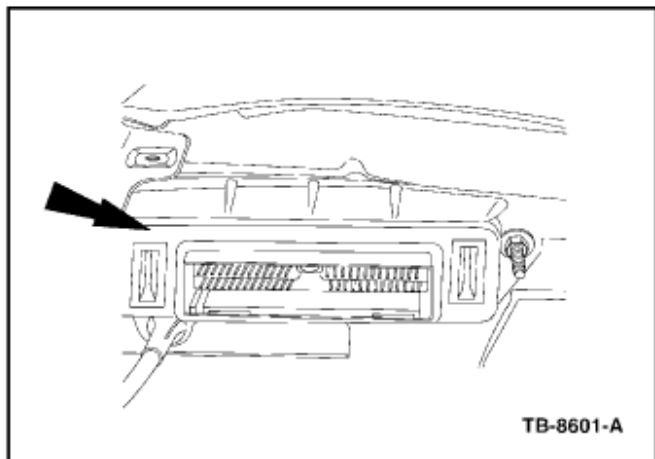


Figure 1

Disconnect the PCM connector. Remove the PCM cover from the studs in the bulkhead.

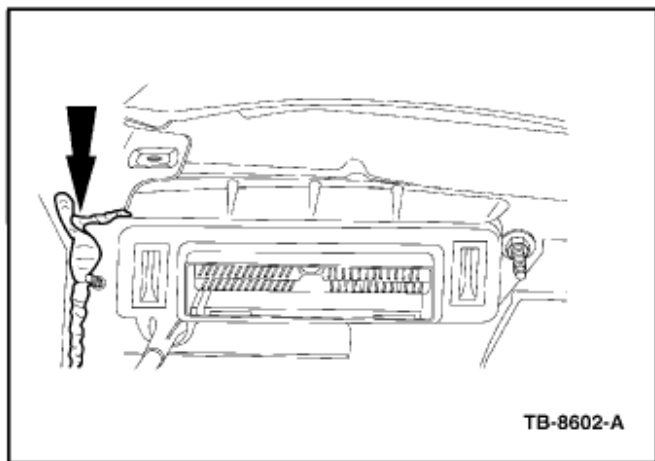


Figure 2

Inspect the body sealant on the bulkhead to ensure it is not protruding out causing the cover not to seal properly in that area. (Figure 2) If sealant is interfering with the PCM cover, remove excess with a sharp tool. Reinstall the PCM cover ensuring the cover seals and is flush with the bulkhead.

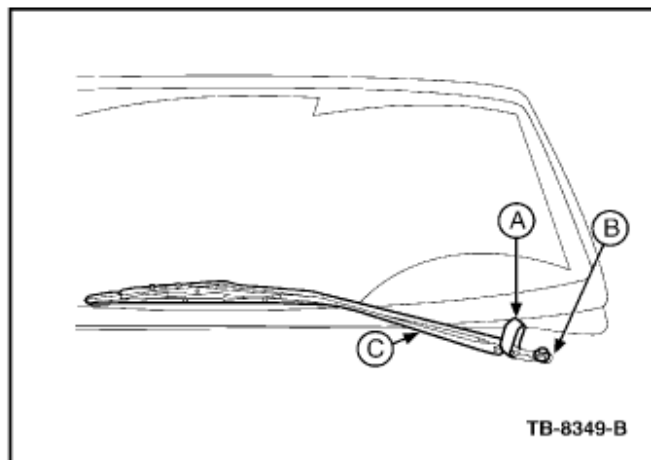


Figure 3

1. Remove the wiper pivot arm. (Figure 3)
 - Release pivot arm nut cover.
 - Remove the pivot arm nut.
 - Remove the pivot arm.

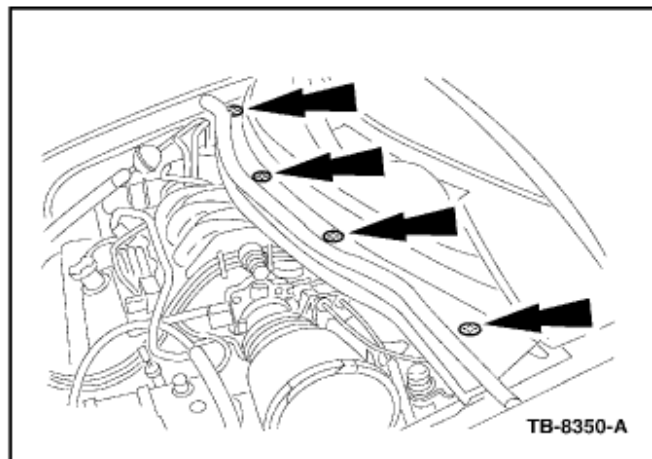


Figure 4

2. Remove the screws. (Figure 4)
3. Release the clips.
4. Remove the windshield wiper hose.
5. Remove the upper cowl panel grille.

REPAIR PROCEDURE (continued)

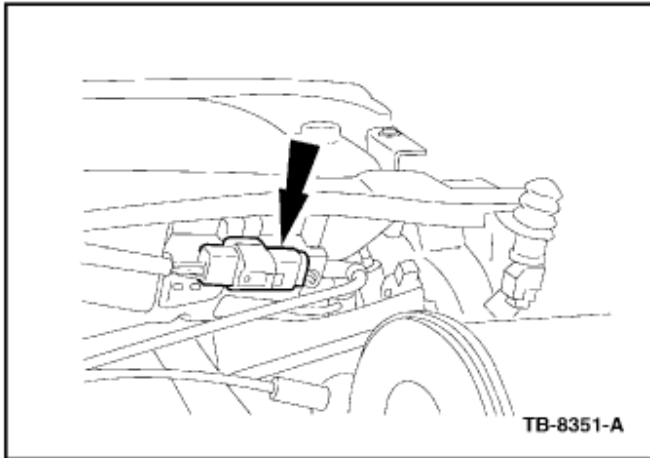


Figure 5

6. Disconnect the electrical connector. (Figure 5)

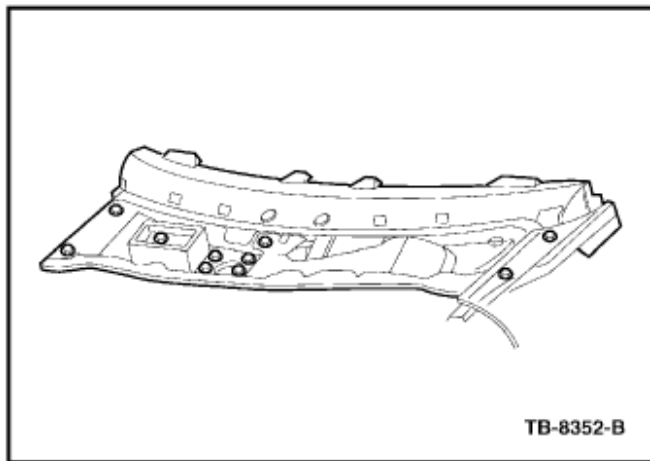


Figure 6

7. Remove the lower cowl panel assembly. (Figure 6)

- Remove the ten (10) bolts.
- Remove the lower cowl panel assembly.

8. Obtain two (2) PVC soft foam adhesive stripes (164-R4901) from the Rotunda Squeak And Rattle Kit (164-R4900).

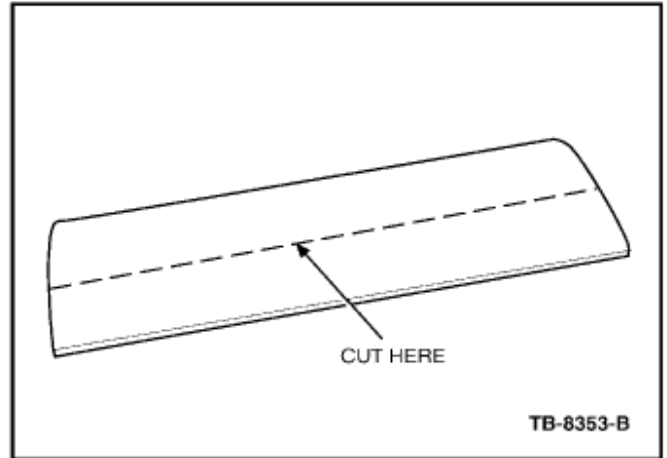


Figure 7

9. Cut both of the PVC soft foam adhesive stripes in half, lengthwise, so you have four (4) pieces 7/8" x 6" (22 mm x 152 mm). (Figure 7)

10. Clean the metal body surface under the lower cowl panel, in the area above the transaxle and the area above the PCM.

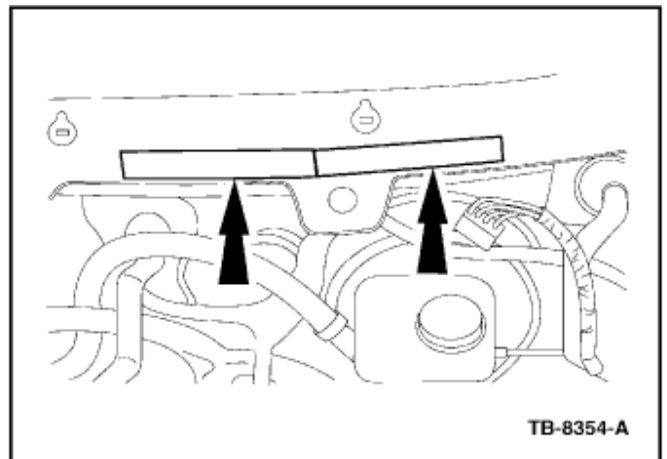


Figure 8

11. Place two (2) of the cut pieces of the PVC soft foam adhesive stripes on the metal body surface over the transaxle area. The two ends need to touch, do not allow any gap between the two ends. (Figure 8)

REPAIR PROCEDURE (continued)

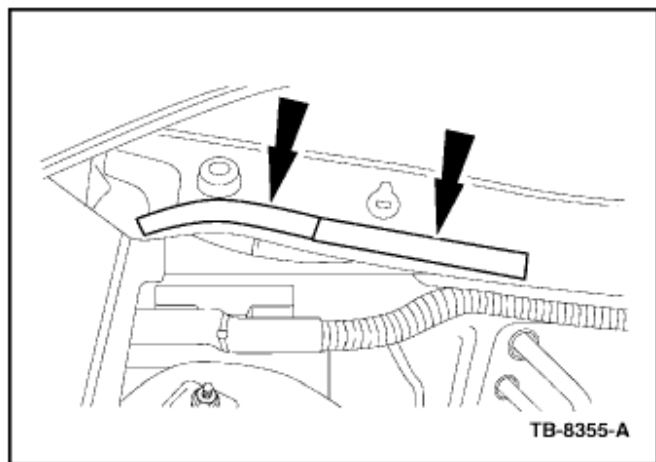


Figure 9

12. Place the other two cut pieces of the PVC soft foam adhesive stripes on the metal body surface over the PCM area. The two ends need to touch, do not allow any gap between the two ends. (Figure 9)

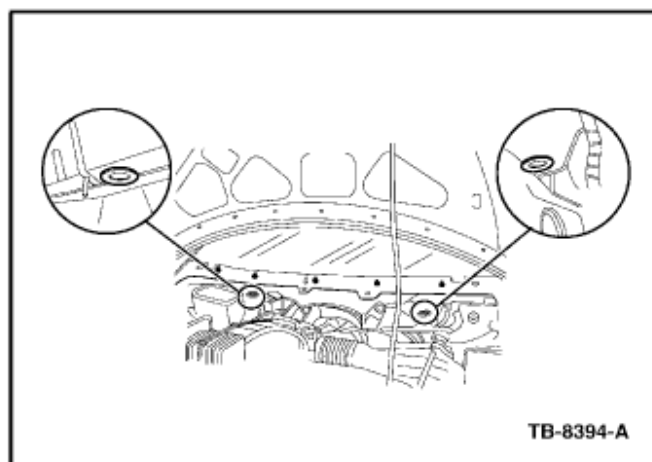


Figure 11

14. Remove and discard the two rubber plugs on the bottom of the cowl sheet metal. (Figure 11)

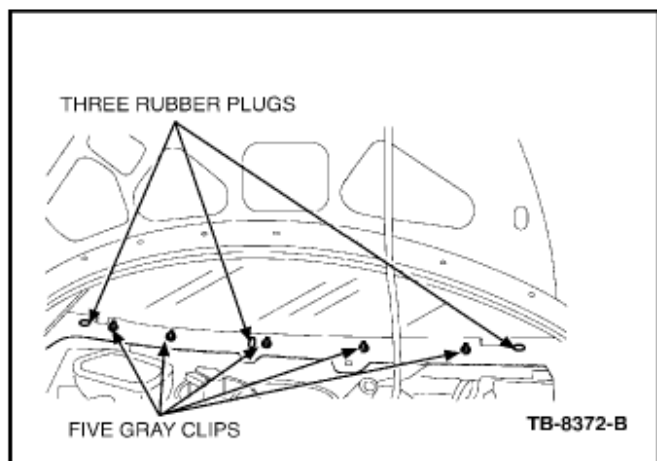


Figure 10

13. Check that the three (3) rubber plugs and five (5) gray plastic clips are fully seated. Add Clear Silicone Rubber around the three (3) rubber plugs and the five (5) gray plastic clips. (Figure 10)

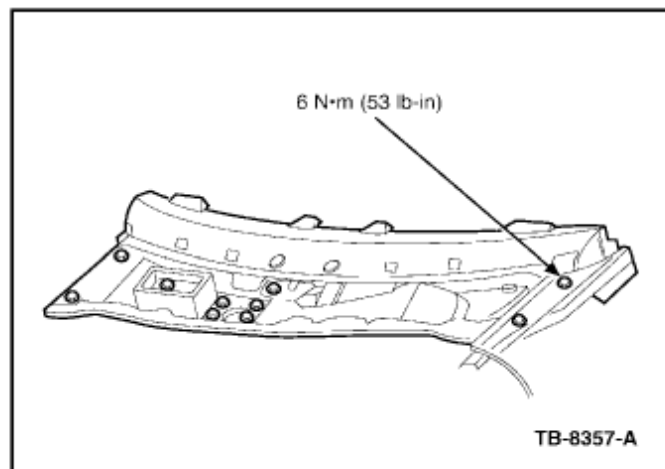


Figure 12

15. Install the lower cowl panel and 10 retaining bolts. (Figure 12)

REPAIR PROCEDURE (continued)

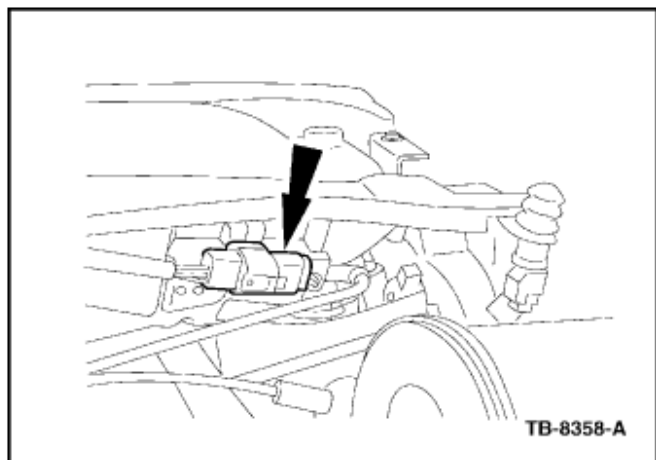


Figure 13

16. Connect the electrical connector. (Figure 13)

17. Install the upper cowl panel grille.

18. Install the windshield wiper hose.

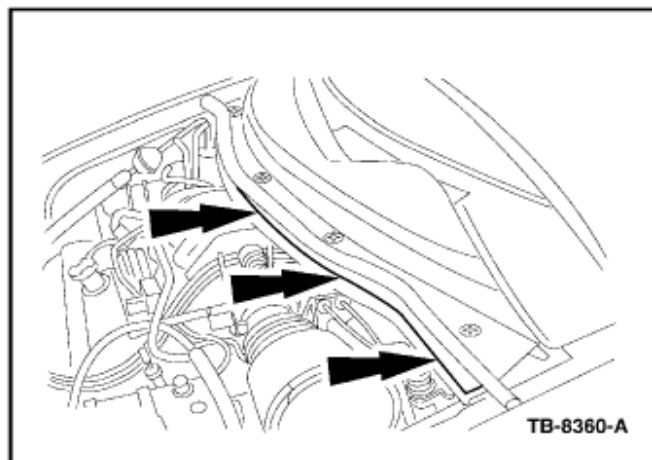


Figure 15

20. Add Clear Silicone Rubber to the front seam between the upper and lower cowl in the area above the transaxle. (Figure 15)

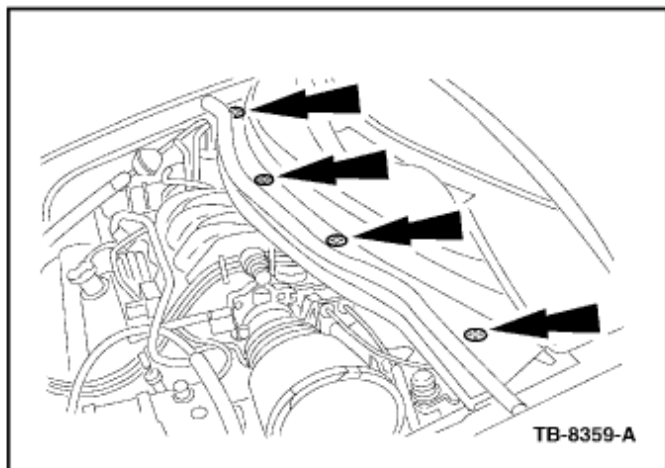


Figure 14

19. Install four (4) new pushpin screw/rivets to secure the upper cowl to the lower cowl. Add Clear Silicone Rubber to the four (4) pushpin screw/rivets to make a watertight seal around them. (Figure 14)

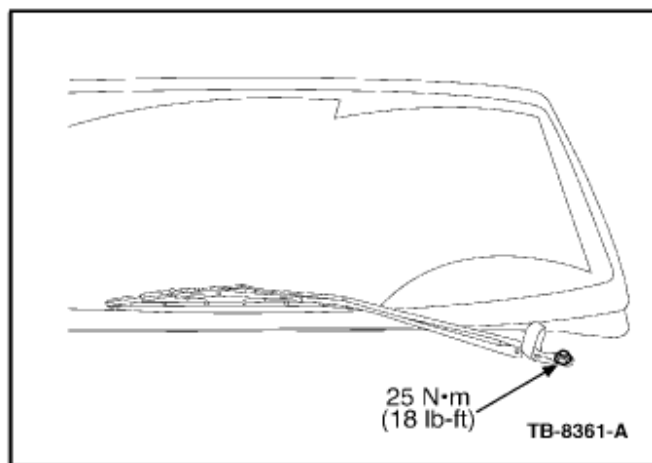


Figure 16

21. Install wiper pivot arms. (Figure 16)

NOTE: APPLY THREADLOCK TO THE PIVOT ARM NUT.

22. Check the wiper pivot arm adjustment.