

- **ELECTRICAL—VEHICLE SPEED SIGNAL (VSS) INPUT NOTICED WHEN TESTING WITH NEW GENERATION STAR TESTER (NGS) WHEN VEHICLE IS STOPPED—SUPER DUTY F-53 MOTORHOME CHASSIS VEHICLES BUILT 1/2/1998 THROUGH 7/31/2000**
- **TRANSMISSION—4R100—TRANSMISSION STARTS OUT IN 2ND GEAR—ERRATIC 1-2 UPSHIFT OR ERRATIC 2-1 DOWNSHIFT FROM TRANSMISSION—SUPER DUTY F-53 MOTORHOME CHASSIS VEHICLES BUILT 1/2/1998 THROUGH 7/31/2000**

**Article No.
02-11-3**

FORD: 1999-2000 SUPER DUTY F-53 STRIPPED CHAS.

Article **01-6-4** is being republished in its entirety to update the model year coverage.

ISSUE

Some vehicles may exhibit an erratic transmission 1-2 upshift or 2-1 downshift or may start out in 2nd gear. This may be caused by a vehicle speed signal from the Anti-lock Brake System (ABS) module that is contaminated with engine electrical noise from the engine wiring harness on the ground circuit. A vehicle speed input to the Powertrain Control Module (PCM) may be noticed when using a New Generation Star (NGS) tester to monitor the Vehicle Speed Sensor (VSS), even when the vehicle is not moving.

ACTION

Add a separate ground harness to improve PCM grounding. Refer to the following Service Procedure for details.

SERVICE PROCEDURE

1. Disconnect battery negative.
2. Remove the ground screw from under the dash (to the left of the brake pedal assembly. This screw has two (2) ground eyelets attached).
3. Drill a 6mm (1/4") hole near the original ground screw location and clean to bare metal around the hole.

NOTE

BE SURE THE NUT CAN BE INSTALLED BEHIND THE HOLE.

4. Bolt the original ground eyelets to the sheet metal using this new hole (Bolt: N805503-S301 and Nut: N620480-S301).
5. Remove the PCM connector.
6. Remove the black plastic shield from the back of the PCM connector.
7. Remove the red locking plate from the front of the connector.
8. Using the sharpened paper clip tool (or small screwdriver), open the locking tabs and remove the pins as shown (Figure 1).

NOTE

TO INSURE THE CORRECT PINS WERE REMOVED, THE RESISTANCE SHOULD BE "0" OHMS BETWEEN ALL SEVEN (7) PINS.

9. Insert the seven (7) pins from the new Jumper Harness (1C3Z-13N850-AA) into the connector. Reinstall the red locking plate.
10. Install the eyelet from the new Jumper Harness (1C3Z-13N850-AA) into the ORIGINAL hole (weldnut).

NOTE

DO NOT CONNECT THE NEW JUMPER HARNESS WITH THE OTHER GROUND EYELETS. THESE GROUNDS MUST BE SEPARATE.

11. Reinstall the black plastic PCM connector shield and tape/tie back the removed PCM ground pins.

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12. Reinstall the PCM connector and reattach the battery negative.

And Emissions Warranty Coverage

PART NUMBER	PART NAME
1C3Z-13N850-AA	Ground Jumper Harness
N805503-S301	Bolt
N620480-S301	Nut

OPERATION	DESCRIPTION	TIME
021103A	Add Separate Powertrain Control Module (PCM) Ground Harness	0.9 Hr.

DEALER CODING

OTHER APPLICABLE ARTICLES: NONE
SUPERSEDES: 01-6-4
WARRANTY STATUS: Eligible Under The Provisions Of Bumper To Bumper Warranty Coverage

BASIC PART NO.	CONDITION CODE
12A581	X1
OASIS CODES: 203000, 203200, 204000, 501000, 502000, 504000, 610000, 610500, 610600, 611500, 614000, 614500	

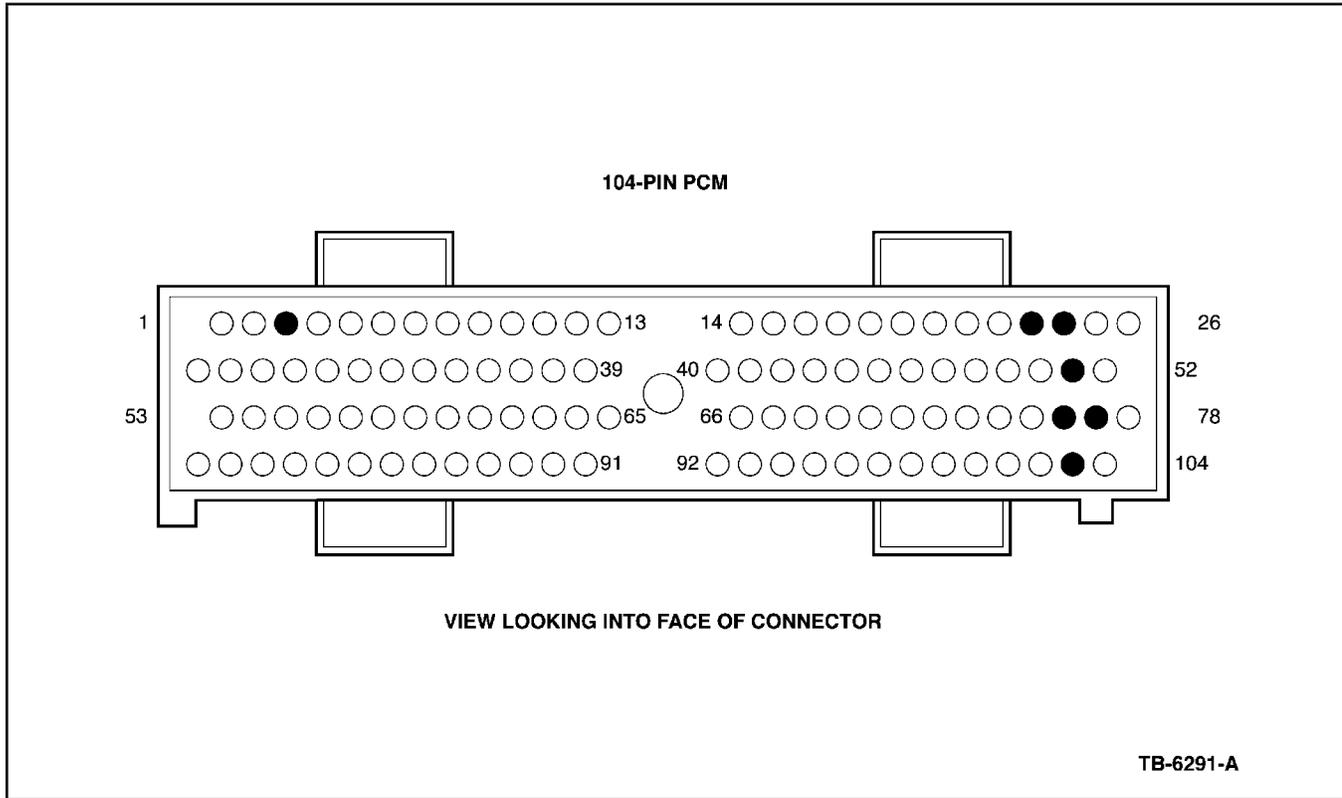


Figure 1 - Article 02-11-3