

- **AUXILIARY POWERTRAIN CONTROL SYSTEM (APCS)—ENGINE IDLE SPEED DOES NOT ADJUST—7.3L DI TURBO**
- **ENGINE IDLE SPEED DOES NOT ADJUST—7.3L DI TURBO—SHORTED OR OPEN CIRCUIT TO AUXILIARY POWERTRAIN CONTROL SYSTEM (APCS)**

**Article No.
95-15-13**

FORD: 1995 ECONOLINE, F SUPER DUTY, F-250, F-350

ISSUE

There may be no idle speed adjustment from the Auxiliary Power Control Module (APCM) on some vehicles. This may be due to a short or open in KEY PWR, GND, BUS(-) or BUS(+) circuit to the APCM or operator controlled switches.

ACTION

Run KOEO On Demand and KOER Switch Self Test with NGS. If any codes are present, go to the appropriate pinpoint test in the 1995 7.3L DI Turbo Diesel Diagnostic Manual. If no codes are present, check for an open or short in one (1) or more of the four (4) circuits going to the APCM. If circuits are satisfactory, replace the APCM. Refer to the following Service Procedure for details.

SERVICE PROCEDURE

NOTE

FOR NON-SPEED CONTROL VEHICLES (1995 ONLY), THE POWERTRAIN CONTROL MODULE (PCM) MAY BE INCORRECT: FOR MANUAL VEHICLES, PROCESS CATCH-WORD MUST BE SOD4 OR LATER; FOR F-250/F-350/E-350 AUTOMATIC VEHICLES, PROCESSOR CATCH-WORD MUST BE TEE5 OR LATER; FOR F-SUPER DUTY, PROCESSOR MUST BE PRY4 OR LATER. THE CATCH-WORD TAG MAY BE LOCATED ON THE VEHICLE A-PILLAR OR ON THE PCM ITSELF.

APCM codes CErr and CrSd, indicate that Circuits 914 and 915 are at fault. APCM codes EErr and AErr indicate that APCM is at fault.

To run the Auxiliary Powertrain Control System (APCS) the vehicle cannot be moving, parking brake must be set, and foot must be off the brake pedal, clutch pedal, and accelerator pedal with automatic transmission in park or manual transmission in neutral.

NOTE

THE STOPLAMP CIRCUIT IS NECESSARY TO OPERATE APCS WITH HAZARD FLASHERS.

1. If APCS does not work when hazard flashers are on:
 - a. Depress service brake pedal. If Econoline or F-Series Cargo/High-mount Stoplamp does not come on, replace bulb or repair open in either fuse, F-Series Circuit 569 (DG) or Econoline Circuit 511 (LG) or ground (Figure 1).
 - b. For Econoline Cutaway only:
 - Disconnect brakelamp resistor located on the left B-pillar.
 - Using a Digital Volt-Ohm Meter (DVOM), measure voltage between Circuit 511 (LG) and Circuit 57 (BK) on the resistor connector (Figure 1).
 - Depress service brake pedal.
 - If voltage is not present, repair open in Circuit 511 (LG) or 57 (BK).
 - If voltage is present, replace 270 ohm resistor F5UZ-13A427-AB.
2. If APCS does not work at all:
 - a. Run KOEO On Demand and KOER Switch Self Test following the steps in the Scan Tool Section of the 1995 7.3L DI Turbo Diesel Diagnostic Manual. If any codes are present, go to the appropriate pinpoint test.

NOTE

WHEN RUNNING KOER SWITCH TEST, AFTER YOU PRESS THE TRIGGER TO START THE TEST, WAIT 5 SECONDS BEFORE RUNNING THROUGH THE DRIVER-OPERATED CONTROLS. THE TEST MAY ALSO TAKE UP TO 5 MINUTES TO COMPLETE.

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- b. If no codes are present (key on, engine off), disconnect APCM and measure voltage on Pin 2 of the APCM connector. If voltage is not present, replace fuse or repair open in Circuit 296 (W/PUR), F-Series, or Circuit 16 (R/LG), Econoline (Figure 2).
- c. Measure resistance on Circuit 57 (BK) between APCM connector Pin 1 to ground. If resistance is greater than 5.0 ohms, repair open in ground circuit (Figure 2).
- d. With key off, measure resistance on Circuit 915 (PK/LB) between APCM connector Pin 3 to Data Link Connector Pin 10. If resistance is greater than 5.0 ohms, repair open in BUS(-) circuit.
- e. With key off, measure resistance on Circuit 914 (T/O) between APCM connector Pin 4 to Data Link Connector Pin 2. If resistance is greater than 5.0 ohms, repair open in BUS(+) circuit.
- f. If all circuits are satisfactory, replace APCM.

PART NUMBER	PART NAME
F5UZ-12B641-AC	Auxiliary Powertrain Control Module (APCM) - Econoline
F5TZ-12B641-AD	Auxiliary Powertrain Control Module (APCM) - F-Series
F5UZ-13A427-AB	Resistor (270 Ohm)

OTHER APPLICABLE ARTICLES: NONE
WARRANTY STATUS: Eligible Under The Provisions Of Bumper To Bumper Warranty Coverage

OPERATION	DESCRIPTION	TIME
951513A	Replace Resistor	0.5 Hr.
951513B	Replace Auxiliary Powertrain Control Module (APCM)	0.4 Hr.

DEALER CODING

BASIC PART NO.	CONDITION CODE
12B641	X1
OASIS CODES: 614000, 617400, 618400, 619400	

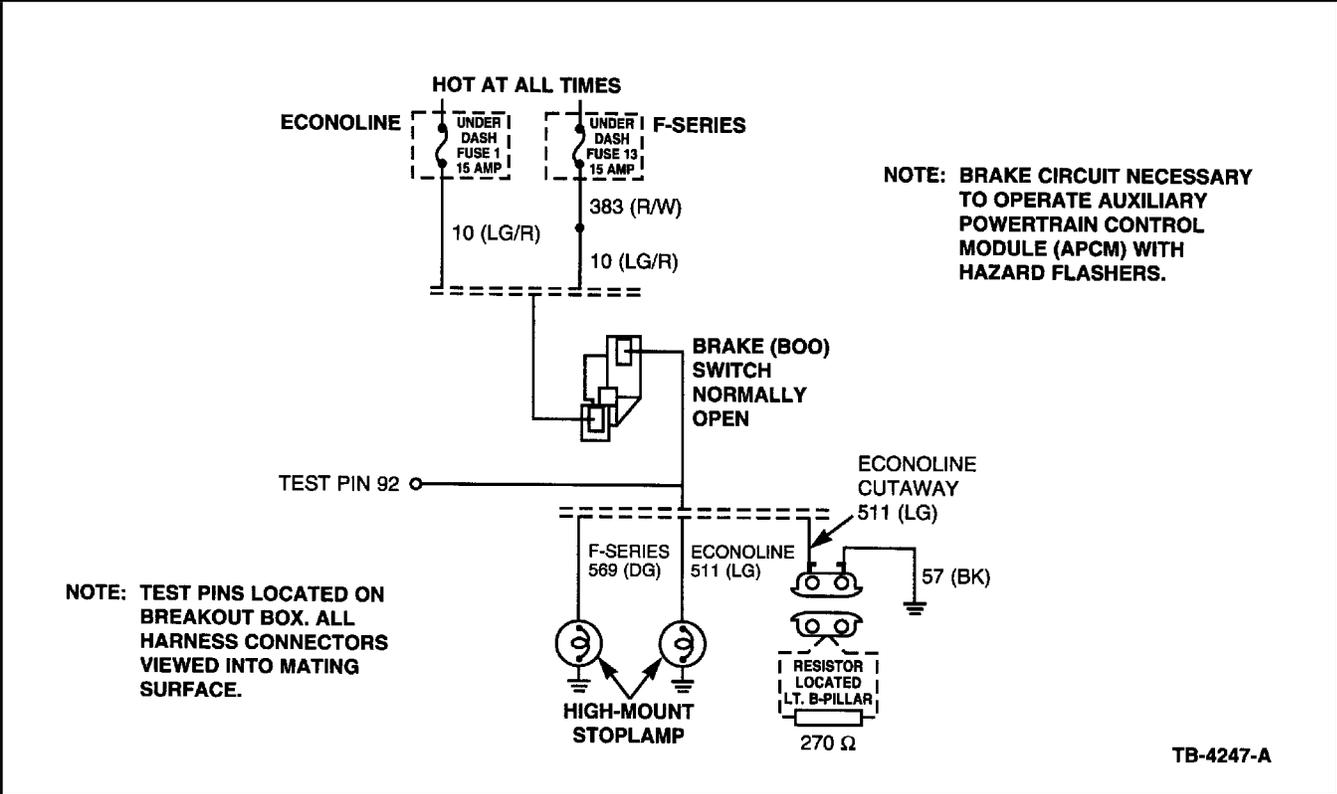


Figure 1 - Article 95-15-13

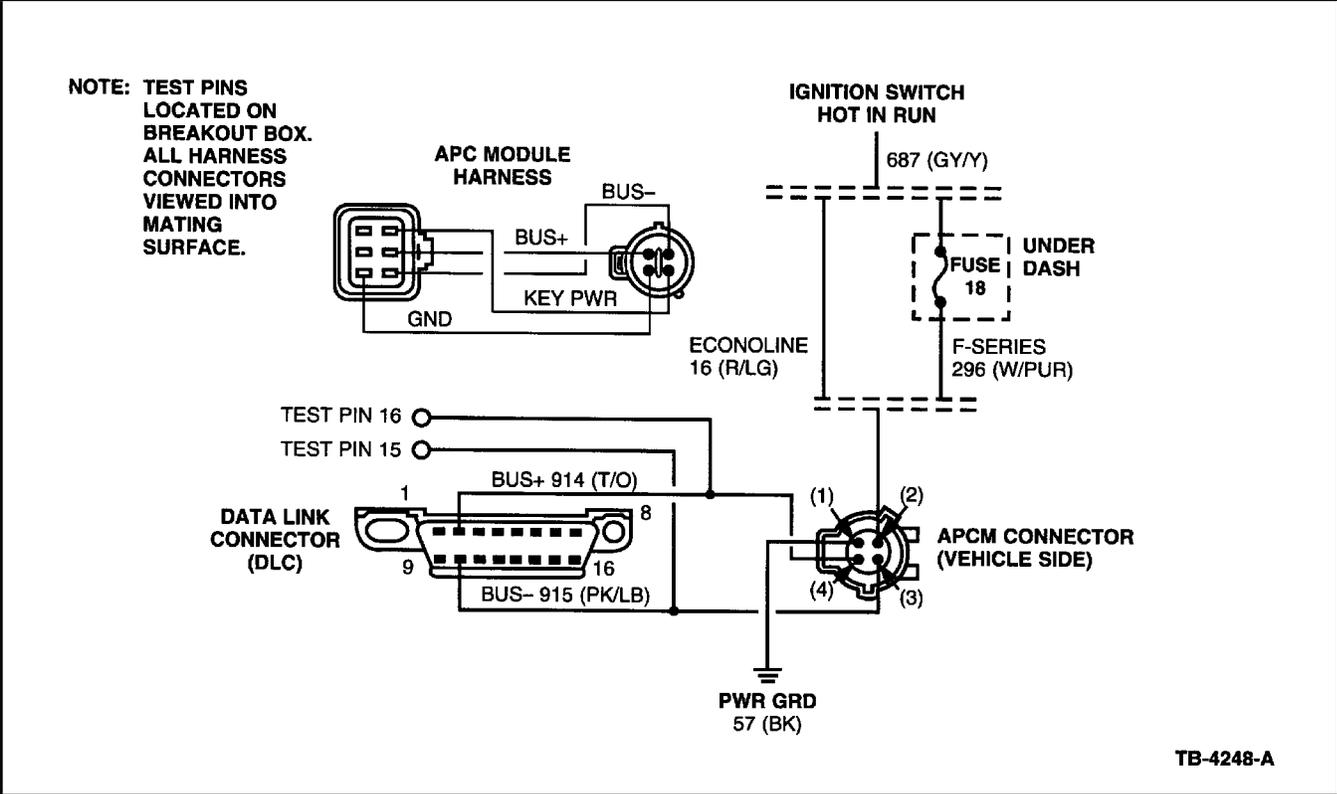


Figure 2 - Article 95-15-13