

### FORD E4OD

#### **EEC POWER RELAY LOCATIONS** AND DIAGNOSIS

**COMPLAINT:** 

The vehicle may exhibit 4th gear starts and after checking line pressure, it is found to be at maximum. Your scan tool may not initiate any "Self Tests", nor can you retrieve any service codes, or the battery(s) may run down after setting overnight.

**CAUSE:** 

The above complaints may be caused by a faulty PCM Power Relay, formally called an EEC Power Relay for gas applications, or a TECA Relay for diesel applications, which is either stuck off or stuck on.

Stuck Off = 4th gear starts, high line pressure and no ability to run "Self Tests".

Stuck On = Battery may run down after setting overnight.

Keep in mind that we may also have a faulty "Fusable Link" or a blown fuse that would prevent battery voltage from reaching the PCM Relay. The PCM Power Relay supplys battery voltage to the PCM at pins 37 and 57 on vehicles equipped with the EEC-IV system, and to PCM pins 71 and 97 on vehicles equipped with the EEC-V system.

The PCM Power Relay also supplies battery voltage directly to the Solenoid Pack at pins 1 and 12 on some models and directly to pin 1 only, on other models.

**CORRECTION:** Diagnose the relay circuits by using the illustrations in Figure 1 and replace the relay as necessary. Use the illustrations in Figures 2 through 5 to locate the PCM Power Relay.

> The wiring schematic shown in Figure 6 is the 1989-94 PCM Power Relay system that supplies battery voltage directly to pin 1 only of the solenoid pack, and supplies battery voltage *indirectly* to pin 12 of the solenoid pack, via pin 35 from the PCM.

> The wiring schematic shown in Figure 7 is the 1995-Up PCM Power Relay system that supplies battery voltage *directly* to pins 1 1nd 12 of the solenoid pack.

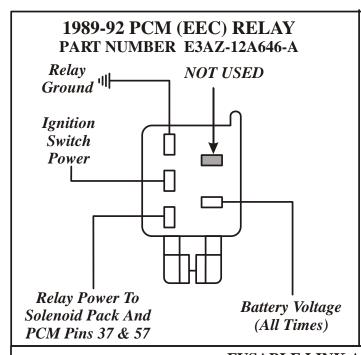
> *Note:* If the PCM Power Relay has no voltage to the direct battery feed terminal, check the condition of the "Fusible Link" and the appropriate fuse in the fuse block, if used. Refer to Figure 1 for Gage/Color chart and the fuse used in fuse block.

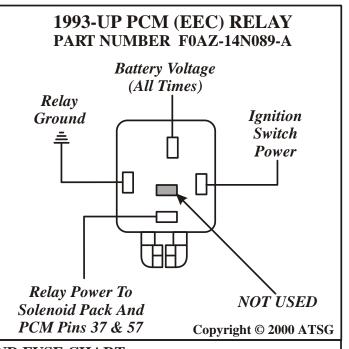
#### **SERVICE INFORMATION:**

1989-1992 PCM (EEC) Power Relay	E3AZ-12A646-A
1993-Up PCM (EEC) Power Relay	F0AZ-14N089-A

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#### FUSABLE LINK AND FUSE CHART Model Gage/Color Fuse 1989-91 "E" Series Vans (All) 20 Blue None Shown 1989-91 "F" Series & Bronco (All) 20 Blue None Shown "C" 1992-93 "E" Series Vans (All) None Shown ''*I*'' 12 Dark Green 1992-93 "F" Series & Bronco (*Gas*) ''**I**'' 1992-93 "F" Series & Bronco (*Diesel*) 12 Grav "C" 1994-95 "E" Series Vans (Gas) 14 Dark Green 1994-95 "E" Series Vans (*Diesel*) 14 Dark Green None Shown 1995 "E" Series Vans (Diesel) (Ambulance Package) None Shown 20 Gray *''*7'' 1995 "E" Series Vans (4.9L California) 14 Dark Green 1994-95 "F" Series & Bronco (All) ''*I*'' 12 Gray "C" 1996 "E" Series Vans (*Gas*) 12 Gray None Shown 1996 "E" Series Vans (Diesel) 20 Gray ''Q'' 1996-97 "F" Series & Bronco (All) 12 Gray *''9''* 1997 "E" Series Vans (All) 14 Dark Green **''24''** 1997 Expedition Series (All) Mega-Fuse 175A



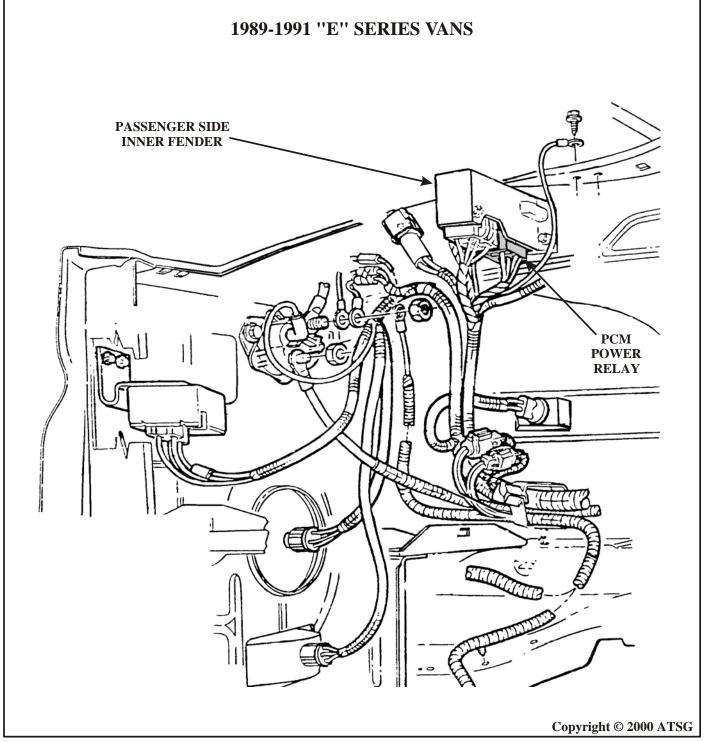


Figure 2



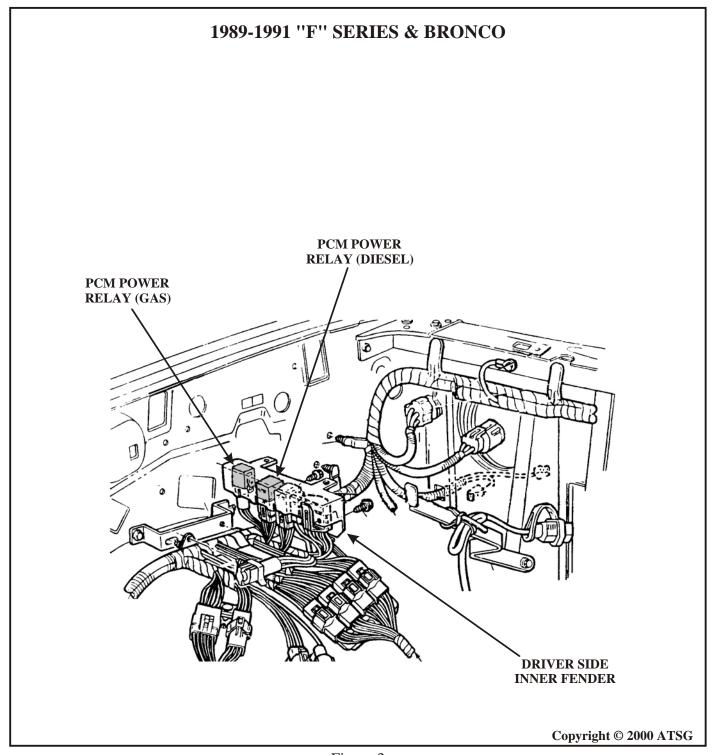


Figure 3



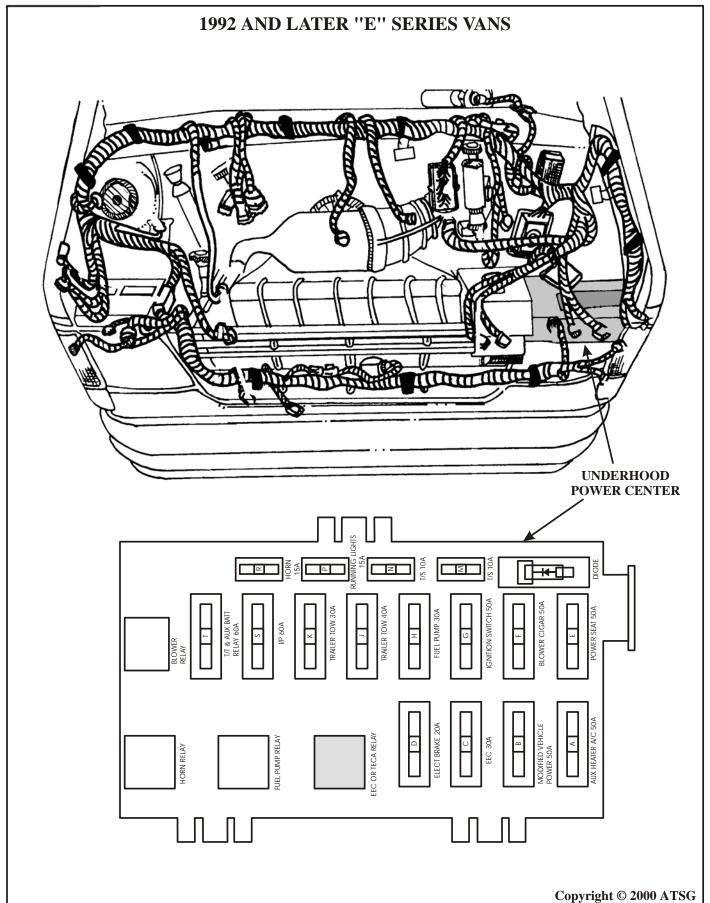


Figure 4
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# 1992 AND LATER "F" SERIES & BRONCO **UNDERHOOD POWER CENTER UNDERHOOD POWER CENTER** PCM POWER RELAY TRAILER MARKER LAMPS RELAY HORN RELAY IDM RELAY NOT USED

Figure 5

00-19 Page 6 of 8

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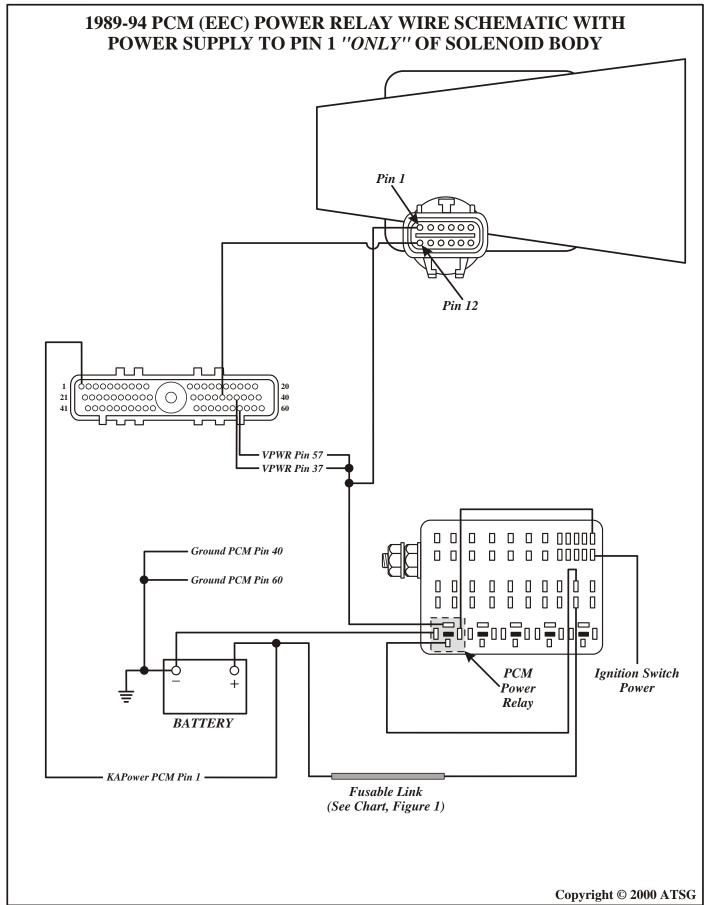


Figure 6



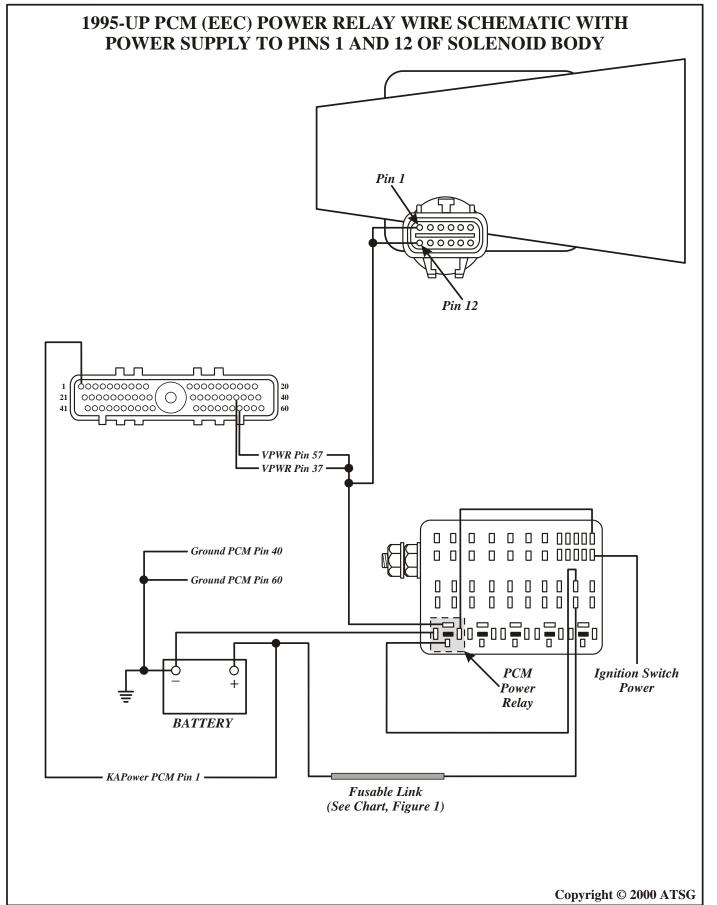


Figure 7
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