



# Technical Service Information

## 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 "Fusible Link" or a blown fuse that would prevent battery voltage from reaching the PCM Relay. The PCM Power Relay supplies 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 and 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 Gauge/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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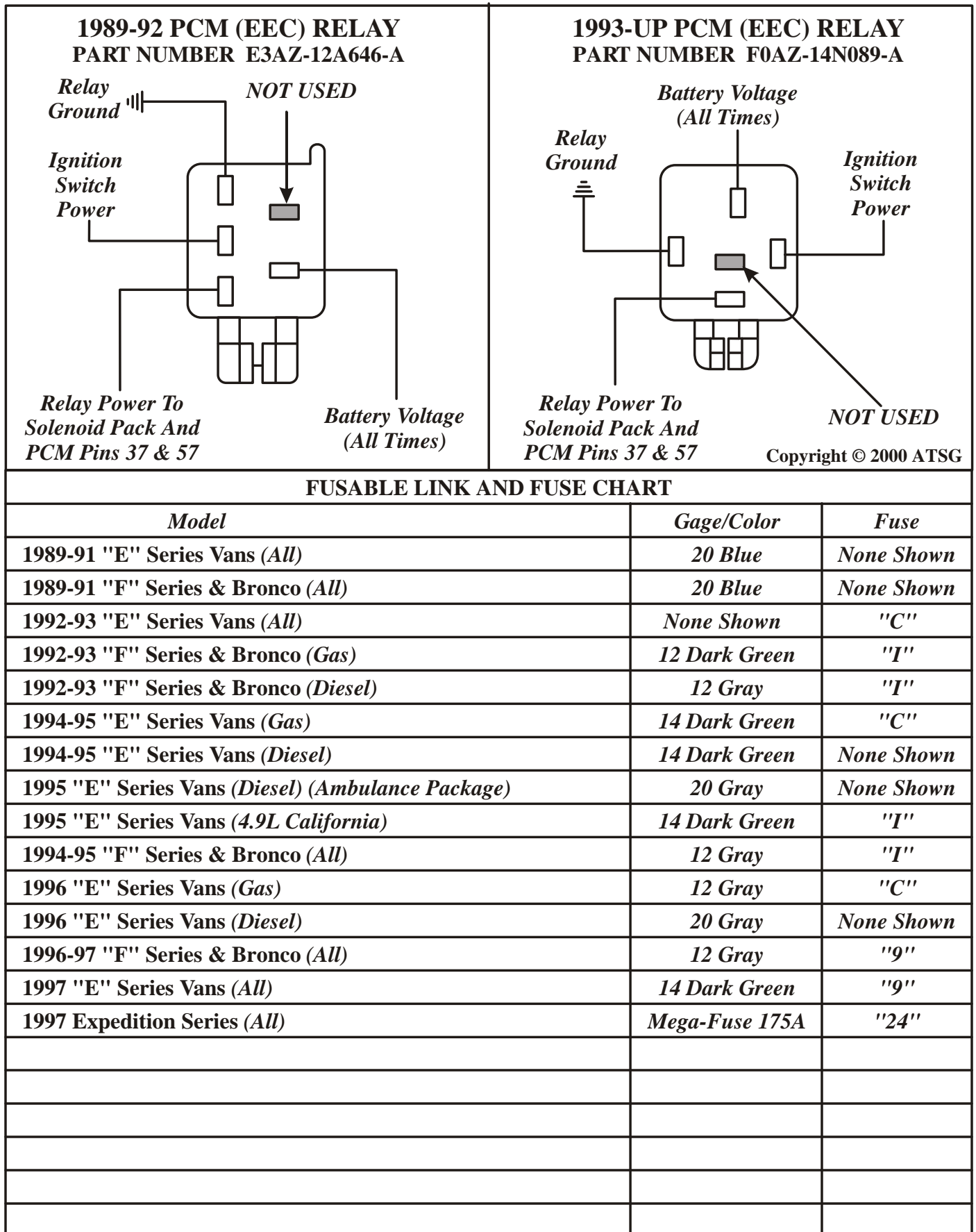
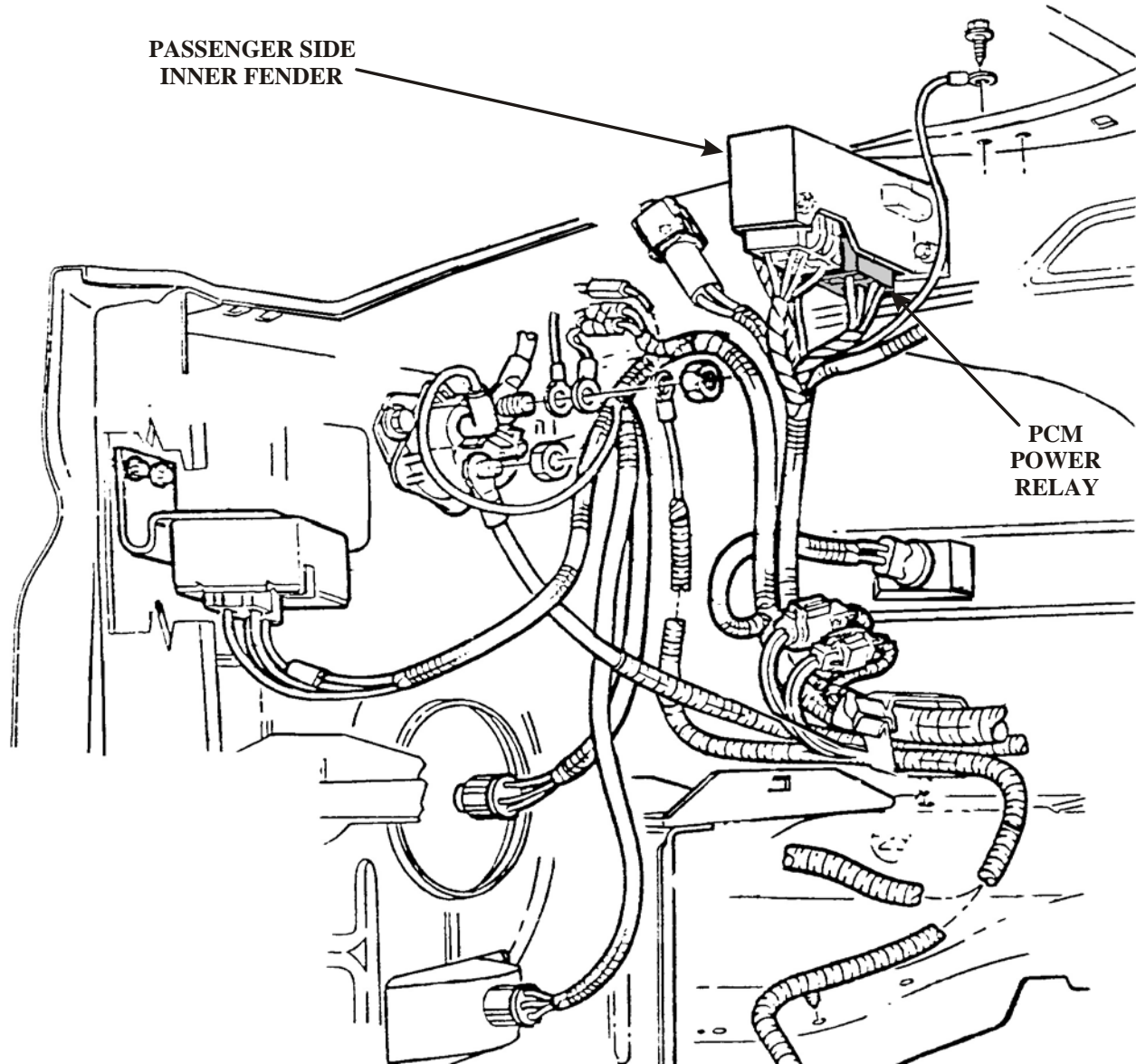


Figure 1

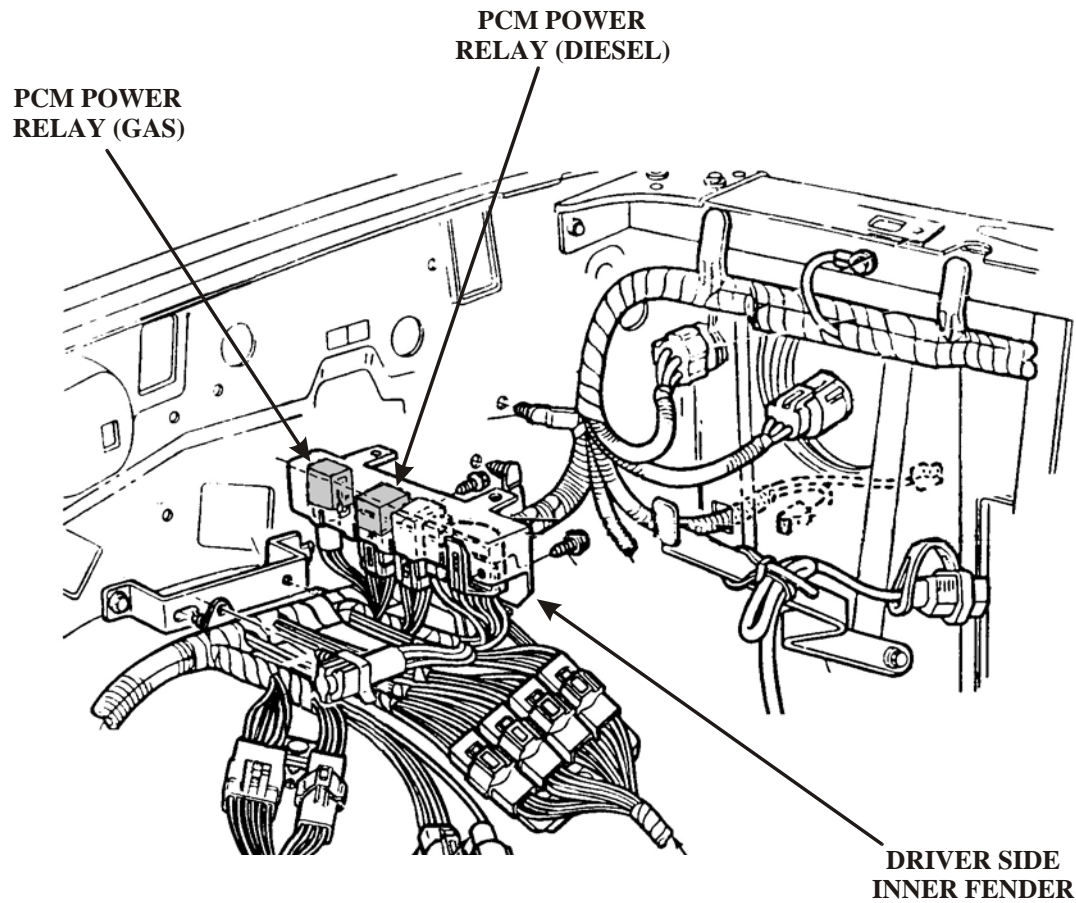
## 1989-1991 "E" SERIES VANS



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Figure 2

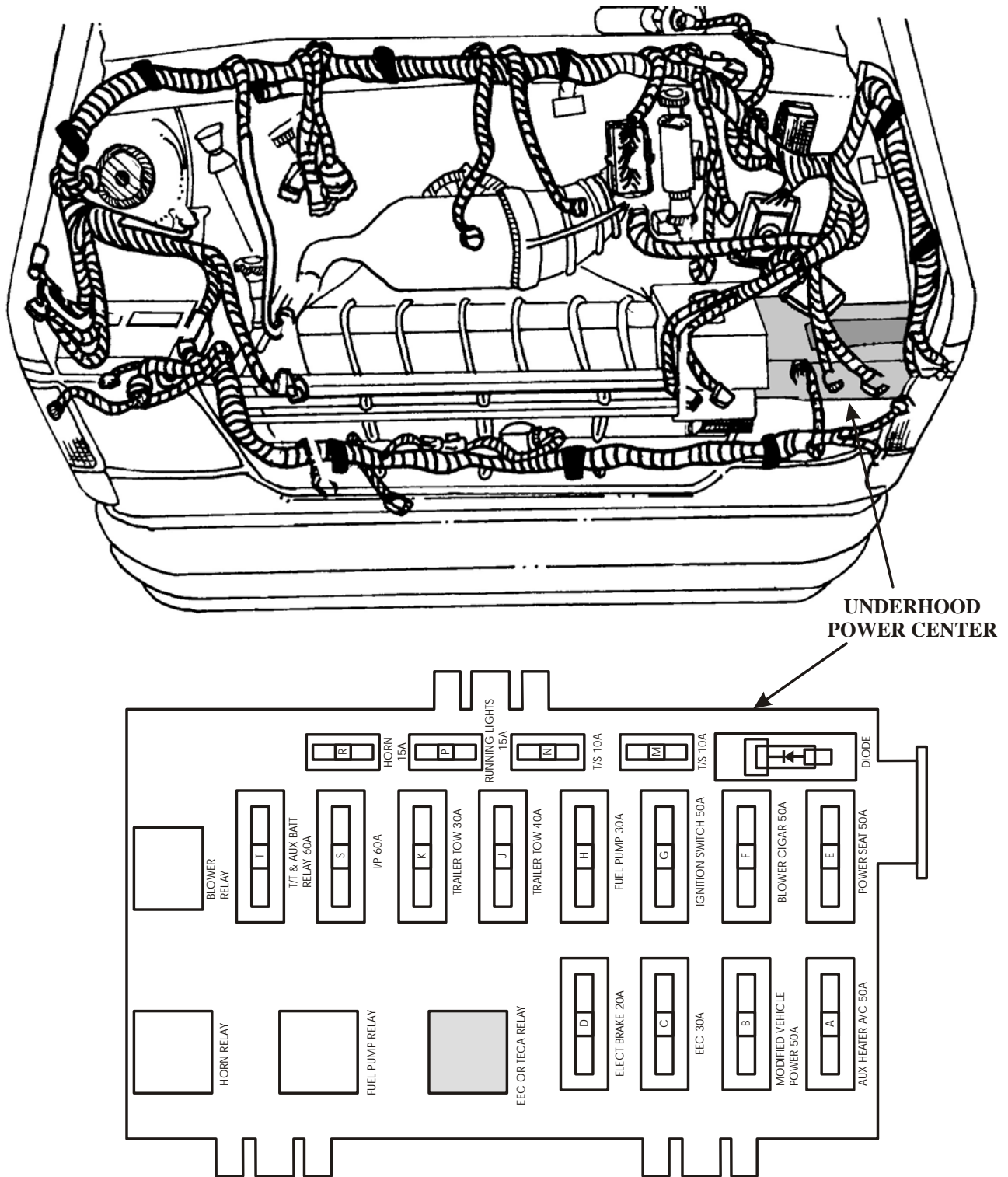
## 1989-1991 "F" SERIES & BRONCO



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Figure 3

## 1992 AND LATER "E" SERIES VANS

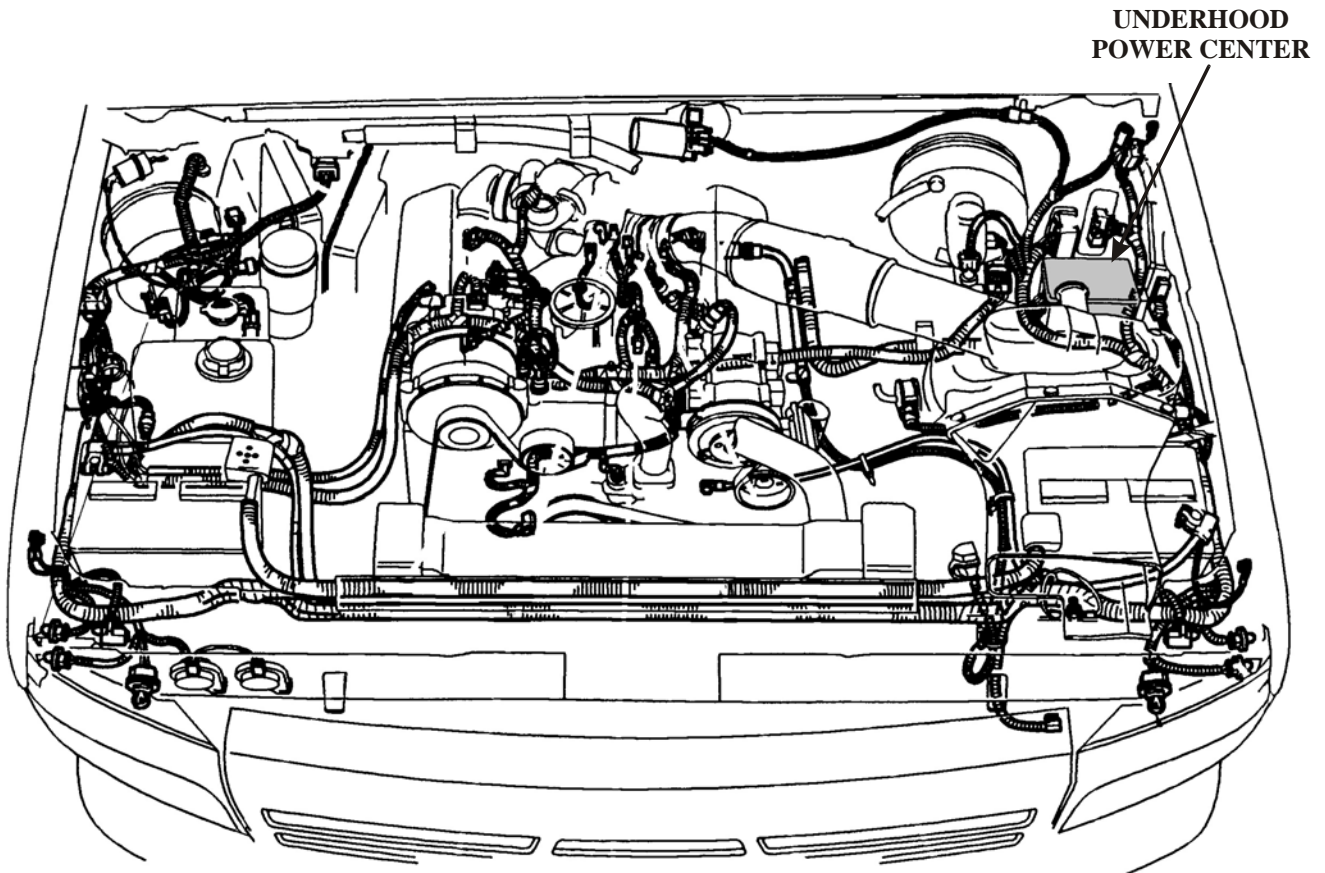


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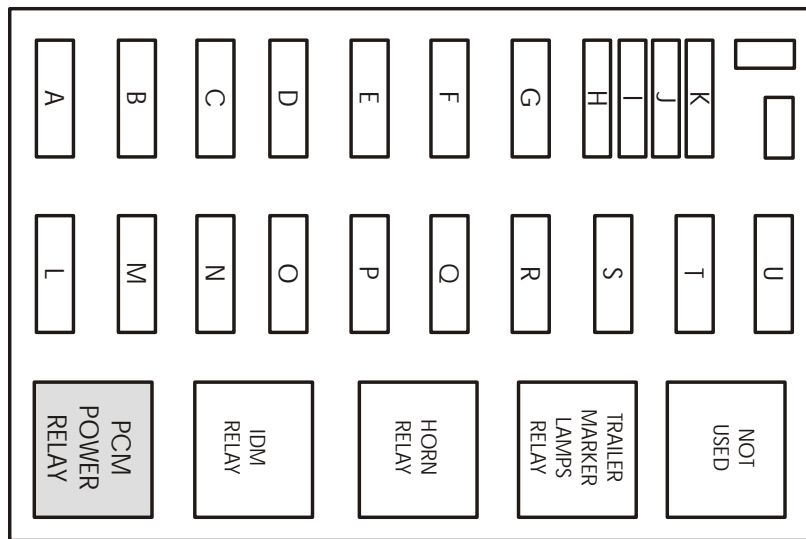
Figure 4



**1992 AND LATER "F" SERIES & BRONCO**



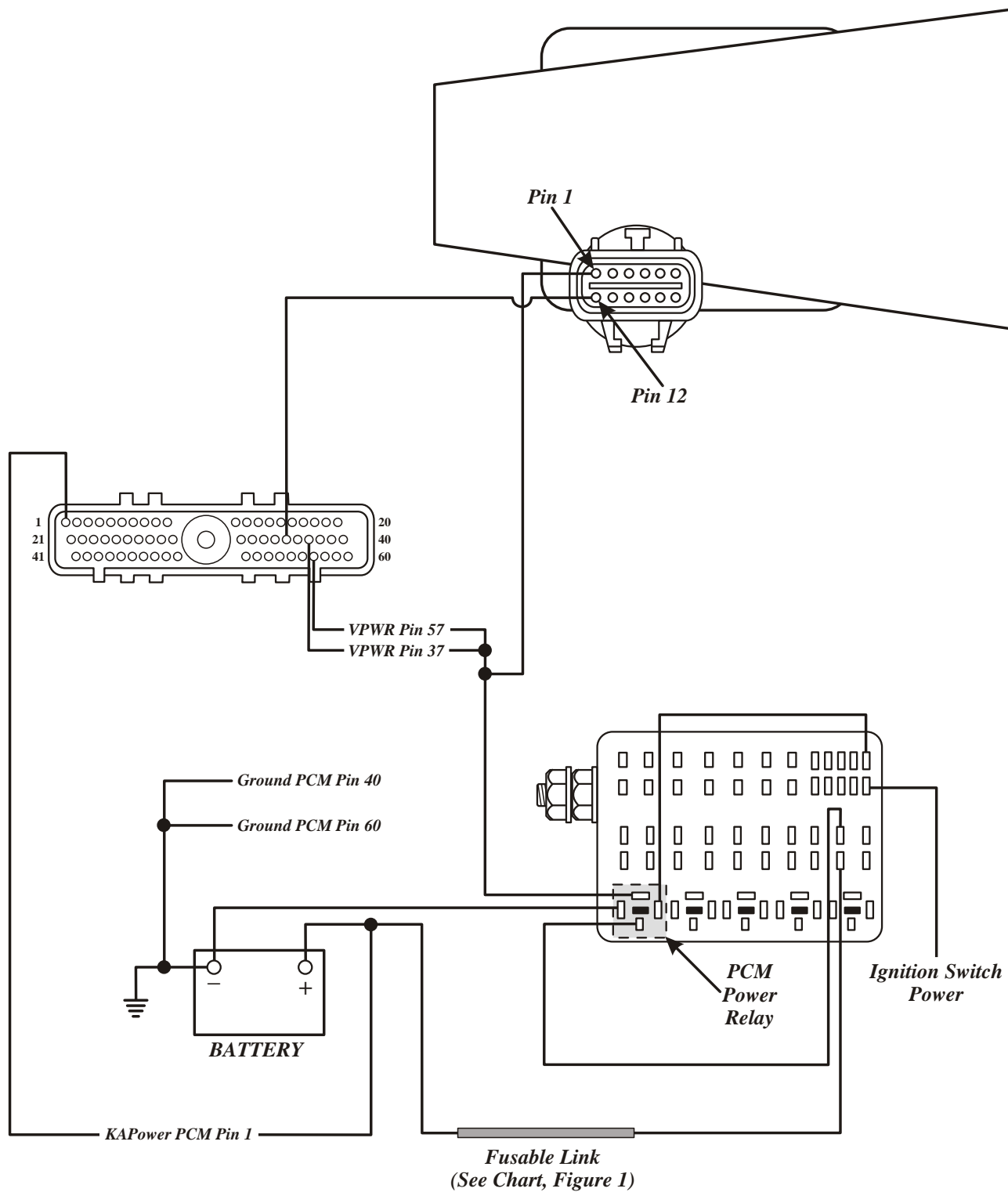
**UNDERHOOD POWER CENTER**



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Figure 5

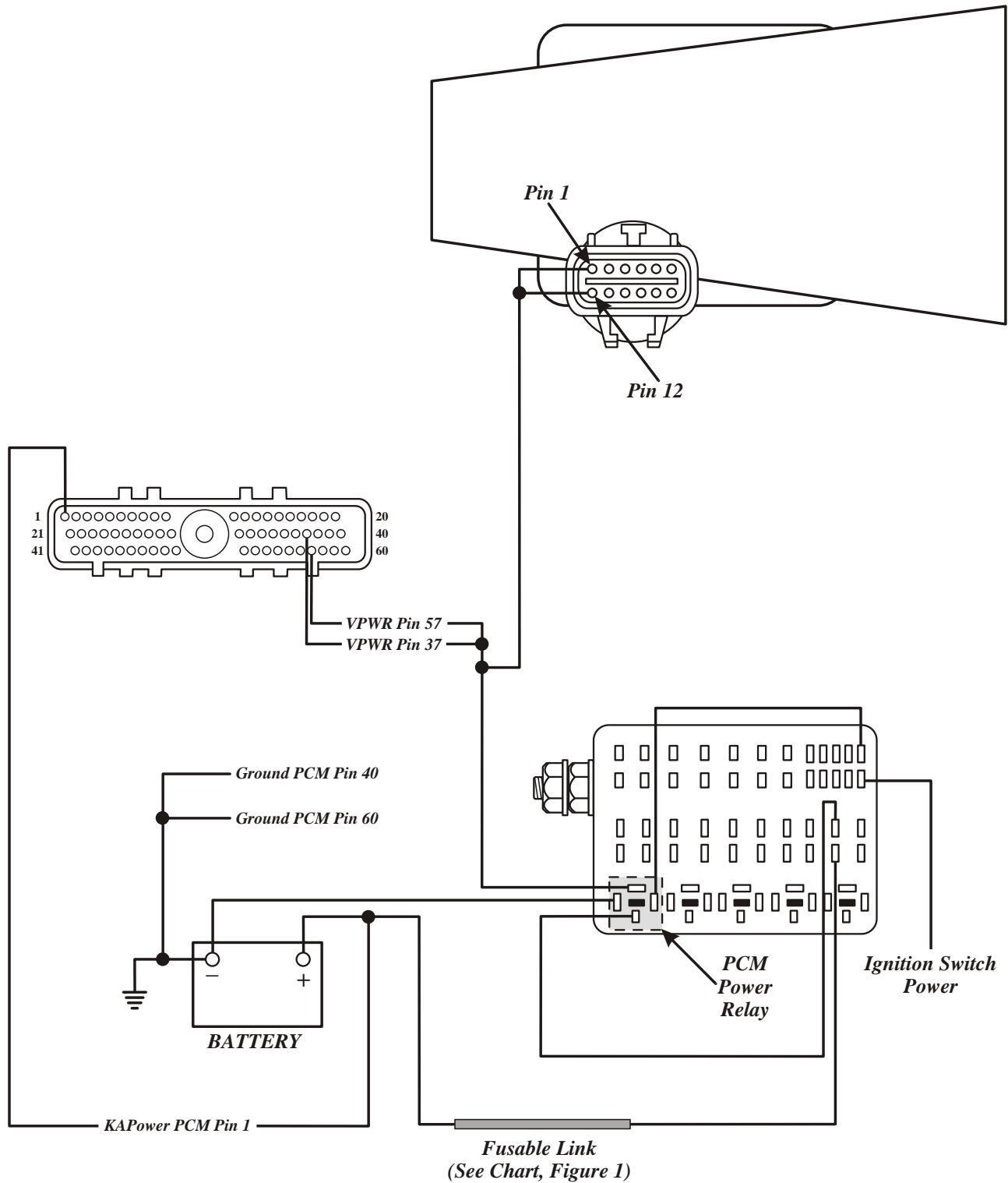
## 1989-94 PCM (EEC) POWER RELAY WIRE SCHEMATIC WITH POWER SUPPLY TO PIN 1 "ONLY" OF SOLENOID BODY



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Figure 6

## 1995-UP PCM (EEC) POWER RELAY WIRE SCHEMATIC WITH POWER SUPPLY TO PINS 1 AND 12 OF SOLENOID BODY



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Figure 7