

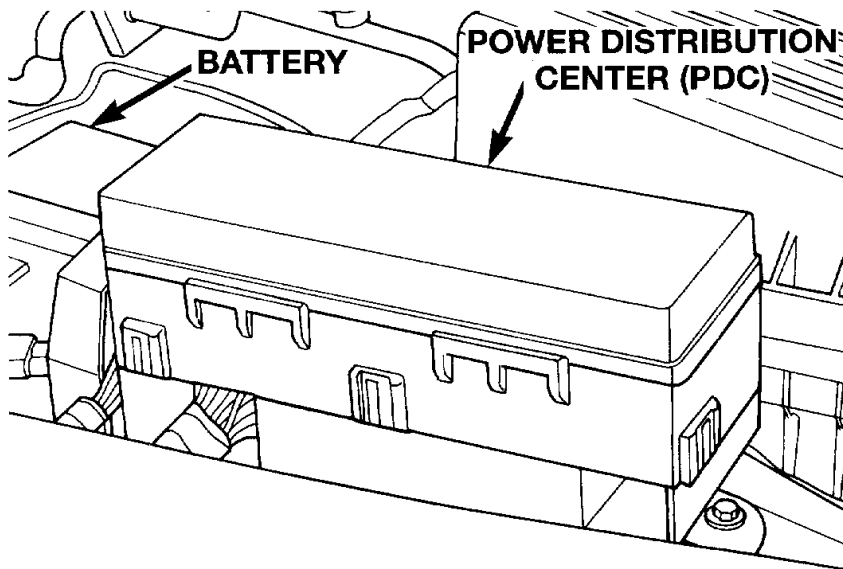
# **Component Procedures: Compressor Clutch Relay**

## **Table of Contents**

1. A/C Compressor Clutch Relay Description (Article 2049750)
2. A/C Compressor Clutch Relay-PCM Output (Article 2049751)
3. A/C Compressor Clutch Relay (Article 2044912)
4. Connectors (itype\_33)
5. Procedures (itype\_376)
6. Component Tests and General Diagnostics (itype\_383)

## Component Procedures: Compressor Clutch Relay

### A/C Compressor Clutch Relay Description (Article 2049750)



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### A/C Compressor Clutch Relay-PCM Output (Article 2049751)

AIR CONDITIONING  
(A/C) CLUTCH RELAY-  
PCM  
OUTPUT

The A/C relay is located in the Power Distribution Center (PDC). The PDC is located in the engine compartment. Refer to label on PDC cover for relay location.

The  
powertrain control module  
(PCM) activates the A/C  
compressor

through the A/C clutch relay. The PCM regulates A/C compressor operation by switching the ground circuit for the A/C clutch relay on and off.

When the PCM receives a request for A/C from A/C  
evaporator

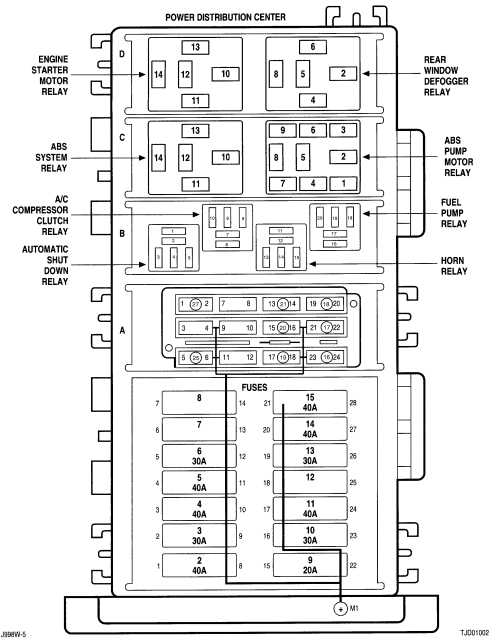
switch, it will adjust idle air control (IAC) motor position. This is done to increase idle speed. The PCM will then activate the A/C clutch through the A/C clutch relay. The PCM adjusts idle air control (IAC) stepper motor position to compensate for increased engine load from the A/C compressor.

By switching the ground path for the relay on and off, the PCM is able to cycle the A/C  
compressor clutch

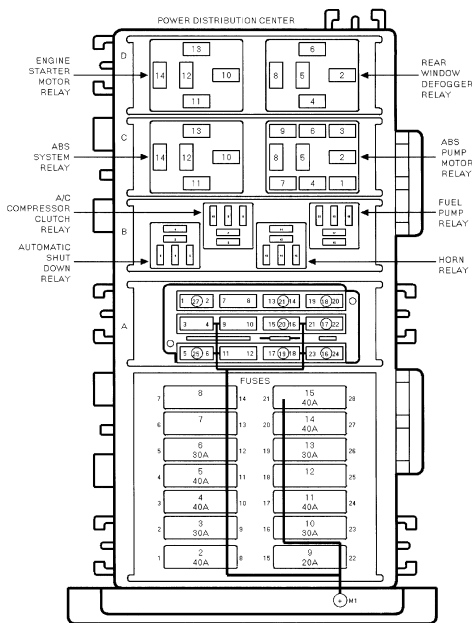
. This is based on changes in engine operating conditions. The PCM Will also de-energize the relay if coolant temperature exceeds

125° C (257° F)

### A/C Compressor Clutch Relay (Article 2044912)



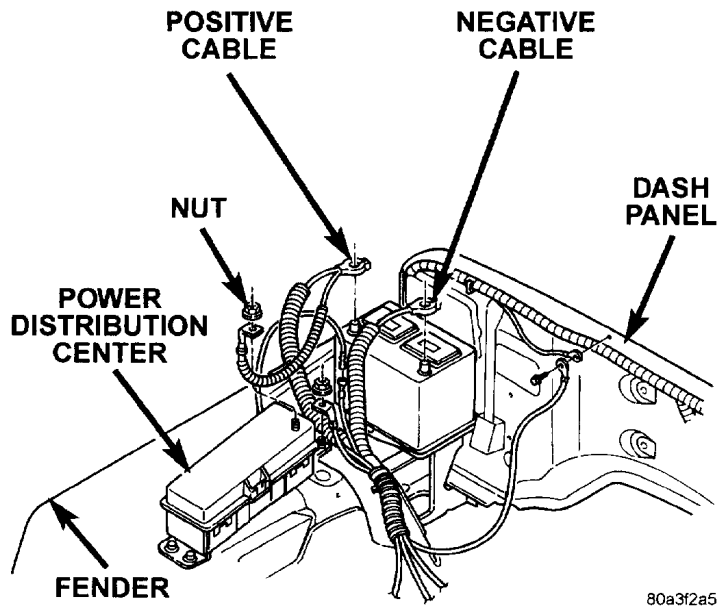
### Connectors (itype\_33)



### A/C COMPRESSOR CLUTCH RELAY

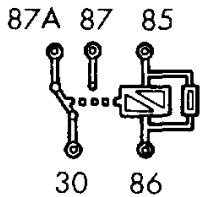
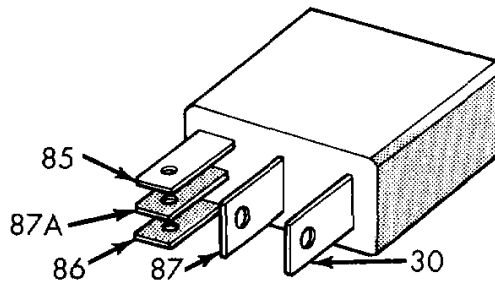
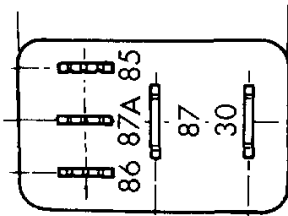
CAV	CIRCUIT	FUNCTION
B6	A17 20RD/GY	FUSED B(+)
B7	C3 20DB/BK	A/C COMPRESSOR CLUTCH RELAY OUTPUT
B8	F20 20VT/WT	FUSED IGNITION SWITCH OUTPUT (RUN)
B9	-	-
B10	C13 18DB/OR	A/C COMPRESSOR CLUTCH RELAY CONTROL

### Procedures (itype\_376)



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**Component Tests and General Diagnostics (itype\_383)**



TERMINAL LEGEND	
NUMBER	IDENTIFICATION
30	COMMON FEED
85	COIL GROUND
86	COIL BATTERY
87	NORMALLY OPEN
87A	NORMALLY CLOSED

9514-16