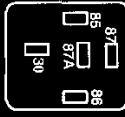


**C1051**  
**12A581**

Fuel pump relay



F03147

\* Diesel

Pin	Circuit	Circuit function
30	37 (YE)	Voltage supplied at all times (overload protected)
85	926 (LB/OG)	Fuel pump relay, control
86	361 (RD)	Voltage supplied at all times (overload protected)
	*16 (RD/LG)	
87	238 (DG/YE)	Fuel pump relay, switched power, output
87A	—	not used

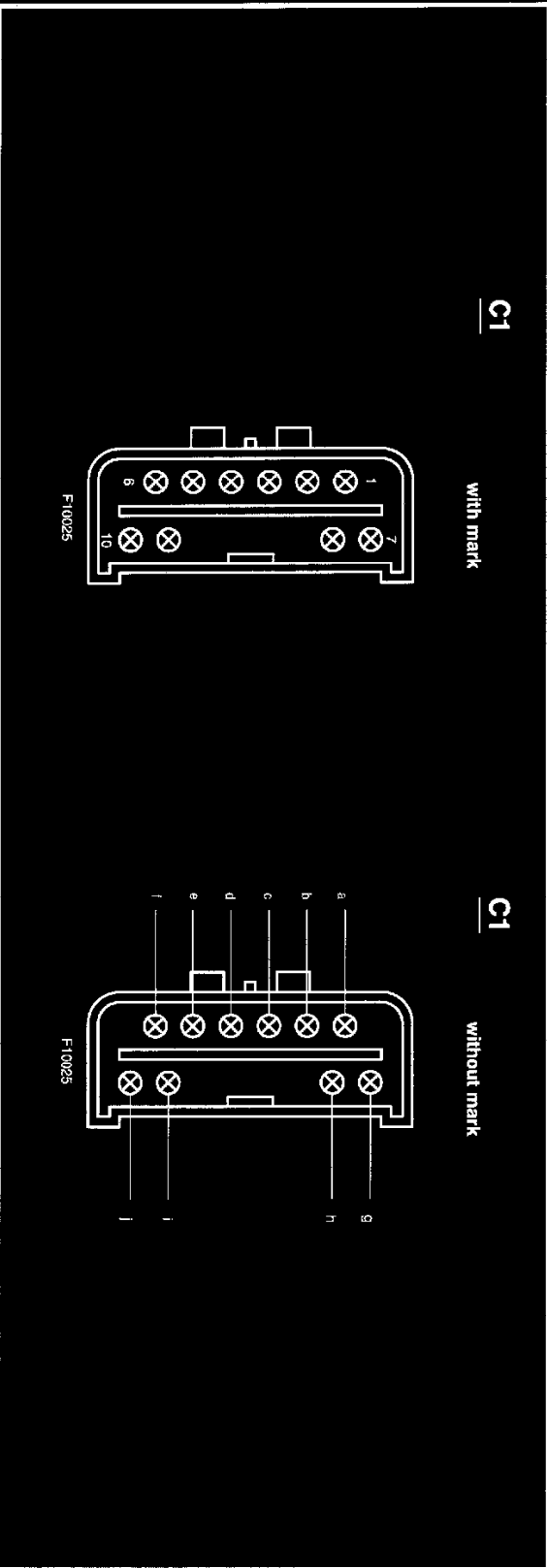
# Fuel Pump Relay: Testing and Inspection

## Introduction

Component testing procedures are provided to determine whether a component is good or bad.

Testing information for each component includes a schematic, a view of the terminal locations and step-by-step test procedures. Terminal locations are identified by numbers or letters that may be on the component or next to it.

## Terminals

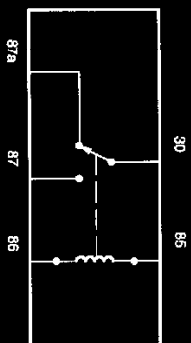


The component connector **MUST BE REMOVED** before testing. To test a single circuit within the component, select that circuit under the column "Circuit to test". If you wish to test the complete component, perform all tests.

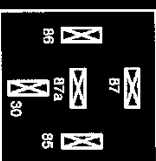
Connect the tester to the terminals shown in the second column and operate the component as shown in the third column.

## Relay – Mini ISO

### Schematic



### Terminals



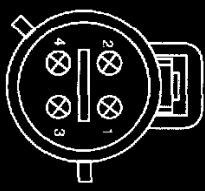
### Component testing procedure (no voltage applied)

Circuit to test	Connect ohmmeter to terminals	A good relay will indicate
Coil	85 and 86	50–100Ω
	30 and 87a	Closed circuit
Contact	30 and 87	Open circuit
	86 and 30	Open circuit
Coil – Contact	86 and 87a	Open circuit
	86 and 87	Open circuit

Component testing procedure (voltage applied)  
 Disconnect the ohmmeter, connect pins 30 and 85 to 12V DC power and pin 86 to ground. Measure voltage between pin 87 and pin 86. If the voltage is 12V, continue with the test. If not, replace the relay. Disconnect power from pin 85 and measure voltage between pin 87a and pin 86. If the voltage is 12V, the relay is okay. If not, replace the relay.

**C1253** (BK)  
**12A581**

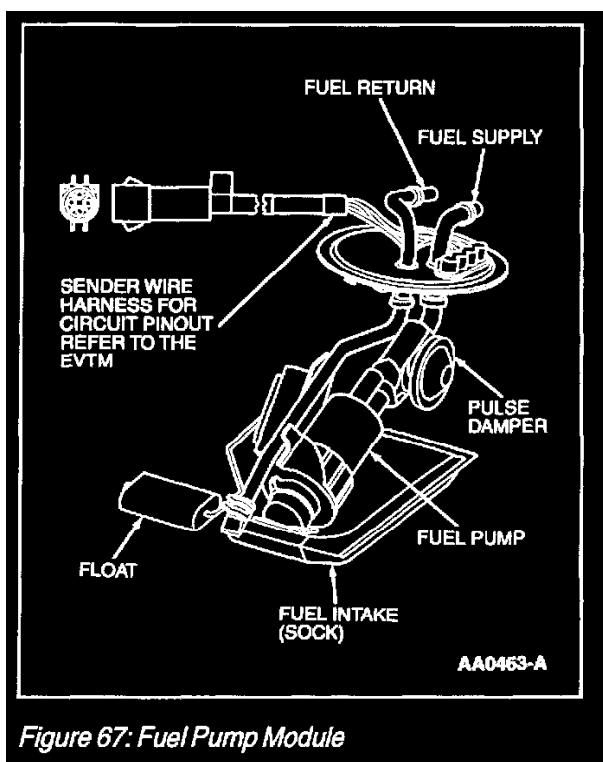
Fuel pump



Pin	Circuit	Circuit function
1	-	not used
2	787 (PK/BK)	Fuel pump, Power
3	57 (BK)	Ground
4	-	not used

## Fuel Pump: Description and Operation

### FUEL PUMP AND RESERVOIR



*Figure 67: Fuel Pump Module*

### Fuel Pump Module

The fuel pump module (Figure 67) is mounted inside the fuel tank in a reservoir. The pump has a discharge check valve that maintains system pressure after the ignition key has been turned off to minimize starting concerns. The reservoir prevents fuel flow interruptions during extreme vehicle maneuvers with low tank fill levels.

## Fuel Pump: Service and Repair

### REMOVAL

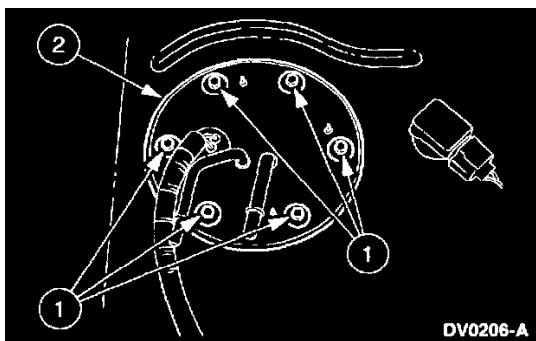
#### WARNING:

^ **DO NOT SMOKE OR CARRY LIGHTED TOBACCO OR OPEN FLAME OF ANY TYPE WHEN WORKING ON OR NEAR ANY FUEL RELATED COMPONENT. HIGHLY FLAMMABLE MIXTURES ARE ALWAYS PRESENT AND MAY BE IGNITED, RESULTING IN POSSIBLE PERSONAL INJURY.**

^ **FUEL IN THE FUEL SYSTEM REMAINS UNDER HIGH PRESSURE EVEN WHEN THE ENGINE IS NOT RUNNING. BEFORE REPAIRING OR DISCONNECTING ANY OF THE FUEL LINES OR FUEL SYSTEM COMPONENTS, THE FUEL SYSTEM PRESSURE MUST BE RELIEVED TO PREVENT ACCIDENTAL SPRAYING OF FUEL, CAUSING PERSONAL INJURY OR A FIRE HAZARD.**

1. Disconnect the battery ground cable.
2. Remove the fuel tank.
  - ^ To remove the midship fuel tank; refer to Midship Fuel Tank.
  - ^ To remove the aft-of-axle fuel tank; refer to Aft-of-Axle Fuel Tank.

3. Place the fuel tank on a suitable work surface.



4. Remove the fuel pump and sender.
  - 1 Remove the screws.
  - 2 Remove the fuel pump and sender.

### INSTALLATION

1. Follow the removal procedure in reverse order.