

NOTE: BEFORE ATTEMPTING THIS RECALL, REVIEW VIP OR VEHICLE HISTORY TAB TO VERIFY THAT THE RECALL APPLIES TO THIS VEHICLE AND HAS NOT BEEN COMPLETED.

DaimlerChrysler

January 1999

Dealer Service Instructions for:

Safety Recall No. 790 Fuel Rail O-Rings and Reinforcements

Models

1993-1997 (LH) Dodge Intrepid; Chrysler Concorde, New Yorker and LHS; and Eagle Vision
1997 (PR) Plymouth Prowler

NOTE: This recall applies only to the above vehicles equipped with a 3.5L engine ("F" in the 8th VIN Position)

IMPORTANT: Some of the involved vehicles may be in dealer used vehicle inventory. Dealers should complete this recall service on these vehicles before retail delivery. Dealers should also perform this recall on vehicles in for service as determined by using the DIAL VIP System.

Subject

The fuel rail O-rings on about 710,000 of the above vehicles may leak fuel. In addition, the outlet (passenger) side fuel rail may crack and leak fuel. Fuel leakage in the presence of an ignition source could result in an engine compartment fire.

Repair

The fuel rail O-rings must be replaced and the outlet (passenger) side fuel rail must be reinforced. Those vehicles that exhibit fuel leakage on the outlet fuel rail, as determined by the leak test in Section "A" of the service procedure, must have the outlet rail replaced.

Alternate Transportation

If leak testing determines that outlet rail replacement is required and the vehicle must be held overnight, dealers should attempt to minimize customer inconvenience by placing the owner in a loaner vehicle.

Parts Information

A. Fuel Rail O-Ring and Reinforcement Package (Required for ALL vehicles):

<u>Part Number</u>	<u>Description</u>
CAXJ7901	Fuel Rail O-Rings and Reinforcement Package

Each package contains:

<u>Qty</u>	<u>Description</u>	<u>Qty</u>	<u>Description</u>
2	EGR Tube Gaskets	1	Intake Plenum Gasket
2	Fuel Rail Gaskets	3	Crossover/Inlet Tube O-Rings
1	Outlet Tube O-Ring	2	Crossover Plugs w/ O-Rings
1	Pressure Regulator O-Ring Kit	2	Outlet Rail Reinforcements
1	Epoxy Package	4	Tie Straps
1	Sandpaper	2	Alcohol Wipes

Each dealer, to whom vehicles in the recall were invoiced (or the current dealer at the same street address), will receive enough Fuel Rail O-Ring and Reinforcement Packages to service about 10% of those vehicles.

B. Outlet Rail Package (Vehicles With a Leaking Outlet Rail Only):

<u>Part Number</u>	<u>Description</u>
CADJ7902	Outlet Rail Package

Each package contains:

<u>Quantity</u>	<u>Description</u>
1	Reinforced Outlet Rail
3	Upper Injector O-Rings
3	Lower Injector O-Rings

Each dealer will receive **one** (1) Outlet Rail Package to use as required. Additional outlet rail packages may be ordered as necessary. **Very few vehicles are expected to require outlet rail replacement.**

Service Procedure

A. Leak Test and Remove the Fuel Rail:

1. Remove the air inlet hose between the air cleaner and inlet plenum.
2. Disconnect the PCV makeup air hose and idle air control (IAC) supply hose (part of the air inlet plenum) then disconnect the air inlet plenum from the throttle bodies and set it

- aside. Do not remove the inlet plenum from behind the manifold.
3. Remove the engine cover from the top of the intake manifold plenum.
 4. Hold the throttle lever in the wide-open position and remove the throttle cable and speed control cable from the lever ([Figure 1](#)).
 5. Remove the throttle cable and speed control cable from their mounting bracket by compressing the locking tabs ([Figure 1](#)).
 6. Disconnect the IAC and intake air temperature sensor electrical connectors ([Figure 2](#)).
 7. Disconnect the vacuum hose from the manifold tuning valve (MTV) ([Figure 2](#)).
 8. Disconnect the MAP sensor electrical connector ([Figure 3](#)).
 9. Disconnect the Throttle Position Sensor (TPS) electrical connector ([Figure 4](#)).
 10. Disconnect the purge hose from both of the throttle bodies ([Figure 4](#)).
 11. Disconnect the PCV hose, brake booster hose and other vacuum hoses from the intake plenum.
 12. Disconnect the EGR tubes from the intake plenum ([Figure 5](#)). Discard the gaskets.
 13. Remove the intake plenum support bracket bolt on each side of the plenum ([Figure 6](#)).
 14. Remove the intake plenum mounting bolts then lift the plenum up and off the engine. Discard the gasket.
 15. Cover the intake manifold openings to prevent foreign material from entering the engine. Then, using shop air, clean any loose dirt and debris from around the fuel injectors.
 16. Tag the injector electrical connectors to identify their location then disconnect the injector electrical connectors.
 17. Using the DRB III, pressurize the fuel system.
 18. **Inspect the outlet fuel rail** (passenger side rail that contains the fuel pressure regulator) **for fuel leakage** and/or cracks on the outside of the rail near the cylinder #3 and #5 injector pods ([Figure 7](#)).
 - **If there is no fuel leaking through a crack in the rail, the outlet rail must be reinforced. Complete Section "A", then proceed to Section "B" – Reinforce the Fuel Outlet Rail.**
 - **If fuel IS leaking through a crack in the rail, the outlet rail must be replaced. Complete Section "A", then proceed to Section "C" – Replace the Fuel Outlet Rail.** (Outlet rail replacement is not required if fuel leaks at the O-ring locations.) *Very few vehicles are expected to require fuel rail replacement.*
 19. With the ignition key in the OFF position, disconnect the battery.

Note: To enhance customer satisfaction, remember to record all radio settings before disconnecting the battery and to reset all electronic memory (clock, radio settings, etc.) when you have completed the service procedure.

20. Remove the fuel tank filler cap to release the fuel tank pressure.

WARNING: The fuel system is under constant fuel pressure even with the engine off. Fuel pressure must be released before servicing the fuel rail.

21. Remove the protective cap from the pressure test port on the fuel rail ([Figure 8](#)).

WARNING: Do not allow fuel to spill onto the engine intake or exhaust manifolds. Place shop towels under and around the pressure port to absorb fuel when pressure is released from the rail.

22. Obtain the hose from the fuel pressure gauge tool set #C-4799-A. Position one end of the hose into an approved gasoline container, then attach the hose to the fuel rail test port to release the fuel pressure.
23. Remove the hose from the fuel rail and reinstall the test port cap.

24. Disconnect the fuel pressure regulator vacuum hose.
25. Disconnect the coolant temperature sensor electrical connector.
26. Remove the six (6) fuel rail mounting bolts ([Figure 9](#)).
27. Remove the inlet and outlet rail retainer screws ([Figure 9](#)).
28. Slide the inlet rail retainer toward the front of the inlet rail and lift retainer off rail ([Figure 9](#)).
29. Slide the outlet rail retainer toward the rear of the outlet rail and lift retainer off rail ([Figure 9](#)).
30. Remove the fuel tube support bracket bolt ([Figure 9](#)).

NOTE: Do not remove the bracket bolt from the intake manifold (shared with heater hose nipple) as coolant leaks may occur.

31. Tag and remove the inlet tube clip from the inlet rail then pull rearward to disconnect the inlet tube from the inlet rail ([Figure 9](#)).

NOTE: Do NOT disconnect the inlet tube from the fuel supply hose quick connect.

CAUTION: Inlet and outlet tube clips are not interchangeable.

32. Remove and discard the inlet tube O-ring.
33. Tag and remove the outlet tube clip from the outlet rail then pull rearward to disconnect the outlet tube from the outlet rail ([Figure 9](#)).

NOTE: Do NOT disconnect the outlet tube from the fuel return hose quick connect.

CAUTION: Inlet and outlet tube clips are not interchangeable.

34. Remove and discard the outlet tube O-ring.
35. Remove the crossover tube clips from the inlet and outlet rails ([Figure 9](#)).
36. Remove the crossover tube from the inlet and outlet rails ([Figure 9](#)). Discard the crossover tube O-rings.
37. Remove the inlet and outlet fuel rails from the engine ([Figure 9](#)).
38. Thread a 5/16" slide hammer or Miller Special Tool #C-3752 into the inlet rail crossover plug and then remove the crossover plug ([Figure 9](#)). Discard the plug and O-ring.

NOTE: The crossover plug is not threaded. Threads must be cut into the plastic plug with the tool.

39. Thread the slide hammer or Miller Tool into the outlet rail crossover plug and then remove the crossover plug ([Figure 9](#)). Discard the plug and O-ring.
40. Remove the fuel pressure regulator from the outlet rail ([Figure 9](#)).
41. Remove and discard the pressure regulator O-rings.
- 42.

- **If the outlet rail did NOT leak in Step 18, the outlet rail must be reinforced.** Proceed to the service procedure in [Section "B"](#) to reinforce the outlet rail.
- **If the outlet rail leaked fuel in Step 18, the outlet rail must be replaced.** Proceed to the service procedure in [Section "C"](#) to replace the outlet rail.

B. Reinforce the Fuel Outlet Rail:

1. Using the supplied sandpaper, rough up the outer surface of the outlet rail next to the #3 and #5 injector pods as shown in [Figure 10](#)
2. Clean each of the roughed up areas using the supplied alcohol wipes. **Use one alcohol wipe for each area.**

3. Prepare the epoxy as follows:

CAUTION: Read warning on back of epoxy package.

- a. Break the center of the epoxy package by rolling the side of the package with the largest amount of material toward the center and applying pressure to the rolled up section.
- b. Mix thoroughly in the package until the color is uniform (approximately 60-90 seconds). Do not use excessive pressure or puncture the package during mixing.
- c. Cut the corner of the package and apply immediately.

NOTE: Material set time is approximately 6-8 minutes.

4. Apply the epoxy to the back (concave) side of one of the supplied reinforcements. IMMEDIATELY install the reinforcement on the outlet rail in one of the roughed up areas next to the #3 or #5 injector pod. Position the reinforcement so that the large notch is up and it fits around the injector pod. ([Figure 11](#)).
5. Temporarily secure the reinforcement to the outlet rail with two (2) of the supplied tie straps ([Figure 11](#)).
6. Apply epoxy to the back (concave) side of the other supplied reinforcement. IMMEDIATELY install the reinforcement on the outlet rail in the other roughed up area next to the #3 or #5 injector pod ([Figure 11](#)). Position the reinforcement so that the large notch is up and it fits around the injector pod.
7. Temporarily secure the reinforcement to the outlet rail with two (2) of the supplied tie straps ([Figure 11](#)).
8. Continue with [Section "D" – Assemble and Install Fuel Rail](#).

C. Replace the Fuel Outlet Rail:

NOTE: Only those vehicles that exhibit fuel leakage on the outlet side of the fuel rail, as determined by the leak test in Section "A", require fuel outlet rail replacement. *Very few vehicles are expected to require fuel outlet rail replacement.*

1. Using a flat thin screwdriver, carefully pry the three fuel injectors out of the old outlet rail.
2. Remove the upper and lower O-rings from the injectors.
3. Lightly lubricate the supplied injector O-rings with clean engine oil.
4. Install the new upper and lower O-rings onto the injectors.
5. Install the injectors into the new outlet rail. Make sure to index the injectors so that the notch on the injector is aligned with the tab in the fuel rail.
6. Continue with [Section "D" – Assemble and Install Fuel Rail](#).

D. Assemble and Install Fuel Rail:

1. Clean the fuel rail, intake manifold, intake plenum and EGR tube gasket surfaces.

CAUTION: DO NOT use metal scrapers, grinding discs or abrasives to clean aluminum components as damage to sealing surfaces may occur.

2. Lightly lubricate the supplied fuel pressure regulator O-rings with clean engine oil.

NOTE: The pressure regulator O-rings are sealed together in one of the O-ring kit bags.

3. Install the large diameter O-ring into the fuel rail pressure regulator pocket. Use a socket or similar tool to ensure that the O-ring is properly seated.
4. Install the small diameter pressure regulator O-ring into the outlet rail pocket. Use a

socket or similar tool to ensure that the O-ring is properly seated.

5. Install the original fuel pressure regulator into the outlet rail and "seat" it into the O-rings.
6. Lightly lubricate the O-rings on the provided crossover plugs with clean engine oil ([Figure 9](#)).

NOTE: The crossover plug O-rings should already be installed on the crossover plugs.

7. Install one of the supplied crossover plugs into the inlet rail ([Figure 9](#)).
8. Install the other crossover plug into the outlet rail ([Figure 9](#)).
9. Lightly lubricate the supplied outlet tube O-ring with clean engine oil and install it onto the outlet tube ([Figure 9](#)).

IMPORTANT: The outlet tube O-ring is the small O-ring that is sealed in one of the O-ring kit bags with 3 larger O-rings. Use the O-ring template in the kit to insure that the proper O-ring is installed in this location.

10. Install the outlet tube into the outlet rail and then install the outlet tube clip onto the outlet rail ([Figure 9](#)).
11. Using one of the supplied gaskets, install the outlet fuel rail onto the engine.
12. Lightly lubricate the supplied inlet tube O-ring with clean engine oil and install it onto the inlet tube ([Figure 9](#)).
13. Install the inlet tube into the inlet rail and then install the inlet tube clip onto the inlet rail ([Figure 9](#)).
14. Using the other supplied gasket, install the inlet fuel rail onto the engine.
15. Lightly lubricate the remaining two supplied crossover tube O-rings with clean engine oil ([Figure 9](#)).
16. Install one of the O-rings onto each end of the crossover tube ([Figure 9](#)).
17. Install the crossover tube into the inlet and outlet rails ([Figure 9](#)). Secure the tube by installing the crossover tube clips.
18. Install the inlet rail retainer and then slide the retainer toward the rear of the inlet rail ([Figure 9](#)).
19. Remove the four (4) tie straps from the outlet rail reinforcements (if applicable).
20. Install the outlet rail retainer and then slide the retainer toward the front of the outlet rail ([Figure 9](#)).
21. Install the inlet and outlet rail retainer screws ([Figure 9](#)). Tighten the screws to 15 in-lbs (1.7 N•m).
22. Install the six (6) fuel rail mounting bolts ([Figure 9](#)). Tighten the fuel rail mounting bolts to 100 in-lbs (11 N•m).
23. Install the fuel tube support bracket bolt ([Figure 9](#)).
24. Connect the negative battery cable.
25. **Using the DRB III, pressurize the fuel system and check for leaks.**
26. Connect the fuel pressure regulator vacuum hose.
27. Connect the injector electrical connectors.
28. Connect the coolant temperature sensor electrical connector.
29. Uncover the intake manifold openings and, using the supplied gasket, install the intake plenum. Tighten the mounting bolts to 250 in-lbs (28 N•m) in the sequence shown in [Figure 12](#).
30. Install the air intake plenum support bracket bolt on each side of the manifold ([Figure 6](#)). Tighten the bolts to 250 in-lbs (28 N•m).
31. Connect the EGR tube to the intake plenum ([Figure 5](#)) as follows:
 - a. Loosely install the EGR tube using the supplied gaskets.
 - b. Tighten the EGR tube screws to 200 in-lbs (22 N•m).
 - c. Ensure that the insulation on the EGR tube aligns with and contacts the insulation

- on the vacuum harness at the rear of the engine.
32. Connect the PCV hose, brake booster hose and other vacuum hoses to the intake plenum.
 33. Connect the purge hoses to both throttle bodies (Figure 4).
 34. Connect the TPS electrical connector (Figure 4).
 35. Connect the MAP sensor electrical connector (Figure 3).
 36. Connect the vacuum hose to the MTV (Figure 2).
 37. Connect the IAC and intake air temperature sensor electrical connectors (Figure 2).
 38. Install the throttle cable and speed control cable into the mounting bracket (Figure 1).
 39. Hold the throttle lever in the wide-open position and install the throttle cable and speed control cable into the lever (Figure 1).
 40. Install the engine cover to the top of the intake manifold plenum.
 41. Install the air inlet plenum behind the manifold and connect the PCV makeup air hose and IAC supply hose (part of the air inlet plenum).
 42. Install the air inlet tube between the air cleaner and the inlet plenum.

Completion Reporting and Reimbursement

Claims for vehicles that have been serviced, must be submitted on the DIAL System. Claims submitted will be used by DaimlerChrysler to record recall service completions and provide dealer payments.

Use one of the following labor operation numbers and time allowances:

Description	Labor Op. No.	Time
Replace fuel rail o-rings and reinforce outlet rail	14790182	1.3 hours
Replace fuel rail o-rings and replace outlet rail	14790183	1.2 hours

Add the cost of the recall parts package plus applicable dealer allowance to your claim.

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section for complete recall claim processing instructions

Parts Return

Not required.

Dealer Notification & Vehicle List

All dealers will receive a copy of this dealer recall notification letter by first class mail. Two additional copies will be sent through the CMMS and the "TIL" will be updated to include this recall in the near future. **Each dealer to whom involved vehicles were invoiced** (or the current dealer at the same street address) **will receive a list of their involved vehicles.** The vehicle list is arranged in Vehicle Identification Number (VIN) sequence. Owners known to DaimlerChrysler are also listed. The lists are for dealer reference in arranging for service of involved vehicles.

DIAL System Functions 53 and VIP

All involved vehicles will be entered to DIAL System Functions 53 and VIP at the time of recall implementation for dealer inquiry as needed.

Function 53 provides involved dealers with an updated VIN list of their incomplete vehicles. The customer name, address and phone number is listed if known. Completed vehicles are removed from Function 53 within several days of repair claim submission. To use this system, type "53" at the "ENTER FUNCTION" prompt, then type "ORD790".

Owner Notification and Service Scheduling

All involved vehicle owners known to DaimlerChrysler are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A copy of the owner notification letter is attached.

Enclosed with each owner notification is an Owner Notification Form. The involved vehicle and recall are identified on the form for owner or dealer reference as needed.

Vehicle Not Available

If a vehicle is not available for service, let us know by filling out the pre-addressed Vehicle Disposition Form portion of the Owner Notification Form or describe the reason on a postcard and mail to:

DaimlerChrysler Corporation
CIMS 482-00-85
800 Chrysler Drive East
Auburn Hills, Michigan 48326-2757

Additional Information

If you have any questions or need assistance in completing this action, please contact your Zone Service Office.

Customer Services Field Operations
DaimlerChrysler Corporation

DaimlerChrysler

SAFETY RECALL TO REPLACE YOUR VEHICLE'S FUEL RAIL O-RINGS AND REINFORCE THE FUEL OUTLET RAIL

Dear DaimlerChrysler Vehicle Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor

Vehicle Safety Act.

DaimlerChrysler Corporation has determined that two defects which relate to motor vehicle safety exist in some **1993 through 1997 Chrysler Concorde, New Yorker and LHS; Dodge Intrepid and Eagle Vision; and 1997 Plymouth Prowler vehicles equipped with a 3.5L engine.**

The problems are... The fuel rail O-rings on your vehicle (identified on the enclosed form) may leak fuel. In addition, the outlet side fuel rail may crack and leak fuel. Fuel leakage in the presence of an ignition source could result in an engine compartment fire.

What DaimlerChrysler and your dealer will do... DaimlerChrysler will repair your vehicle free of charge (parts and labor). To do this, your dealer will replace the fuel rail O-rings and reinforce or replace the fuel outlet rail. The work will take about 1½ hours to complete. However, additional time may be necessary depending on how dealer appointments are scheduled and processed.

What you must do to ensure your safety...

- Simply **contact your dealer** right away to schedule a service appointment. Ask the dealer to hold the parts for your vehicle or to order them before your appointment.

- **Bring the enclosed Owner Notification Form with you to your dealer.** It explains the required service to the dealer.

If you need help... If you have trouble getting your vehicle repaired, please **call the DaimlerChrysler Customer Center, toll free, at 1-800-992-1997.** A representative will assist you in getting your vehicle repaired. If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, DC 20590, or call the Toll Free Auto Safety Hotline at 1-800-424-9393. Washington, DC area residents may call 1-202-366-0123.

We're sorry for any inconvenience, but we are sincerely concerned about your safety. Thanks for your attention to this important matter.

*Customer Services Field Operations
DaimlerChrysler Corporation
790*

*Buckle up
for Safety* 

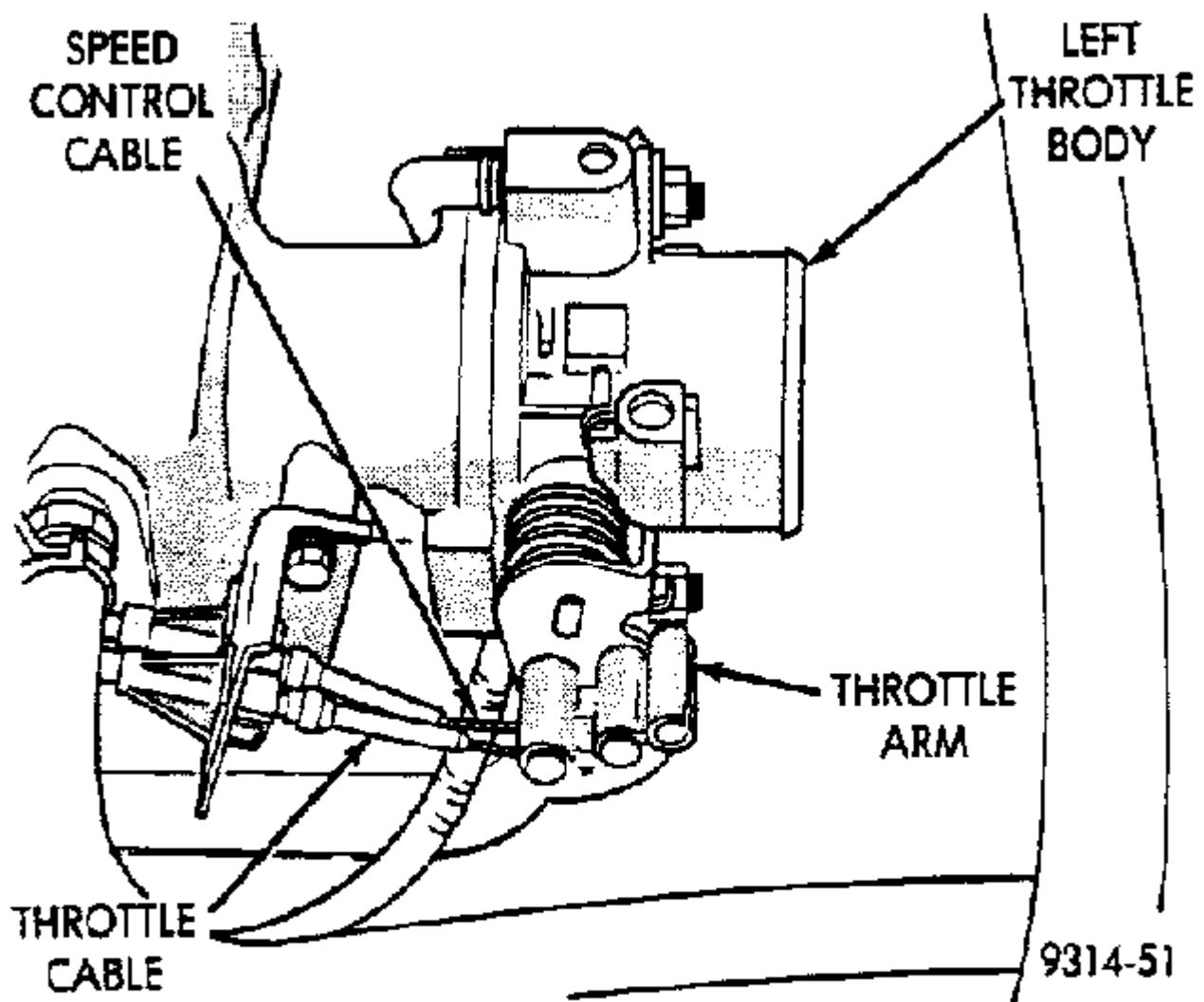


Figure 1

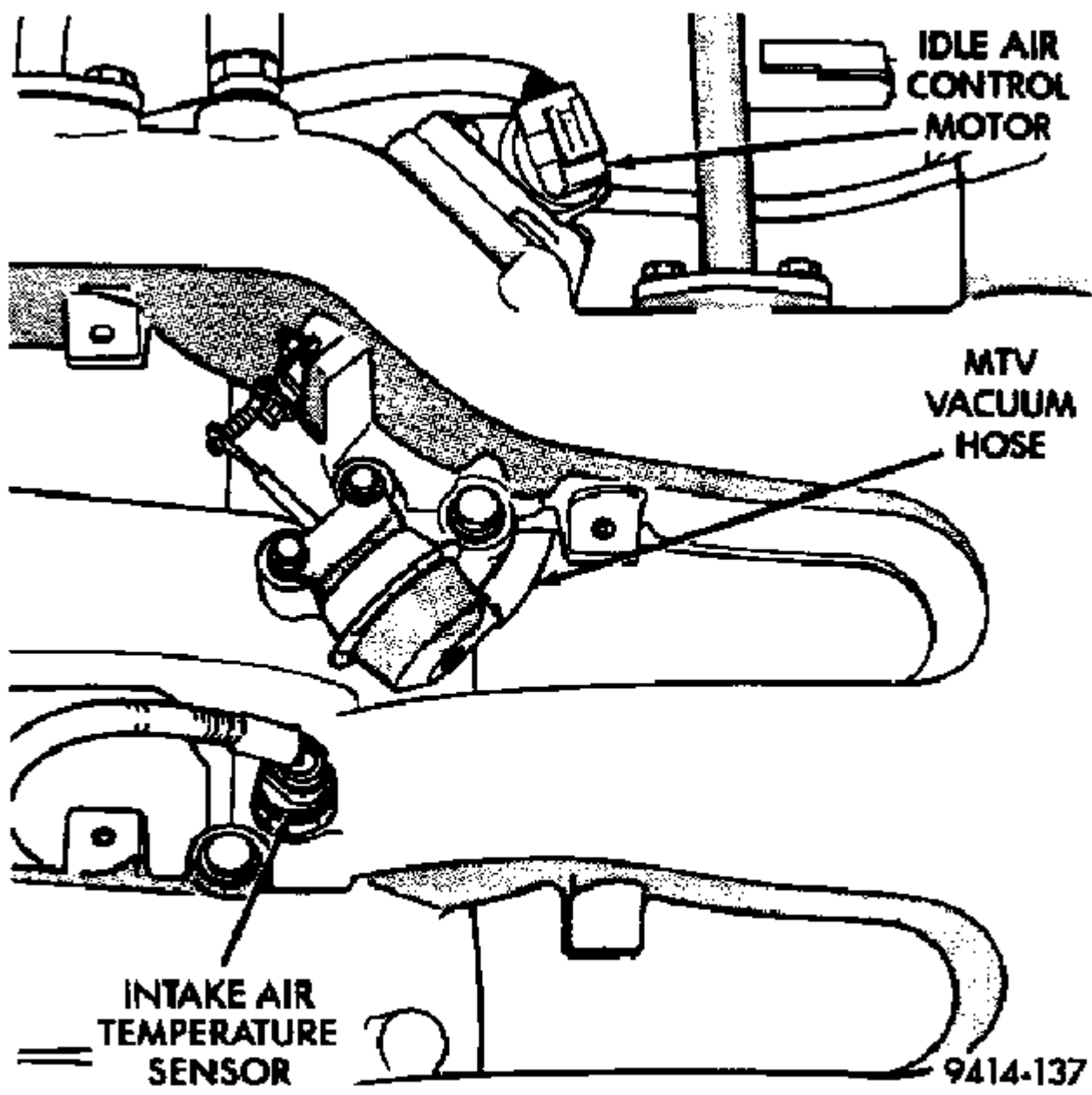


Figure 2

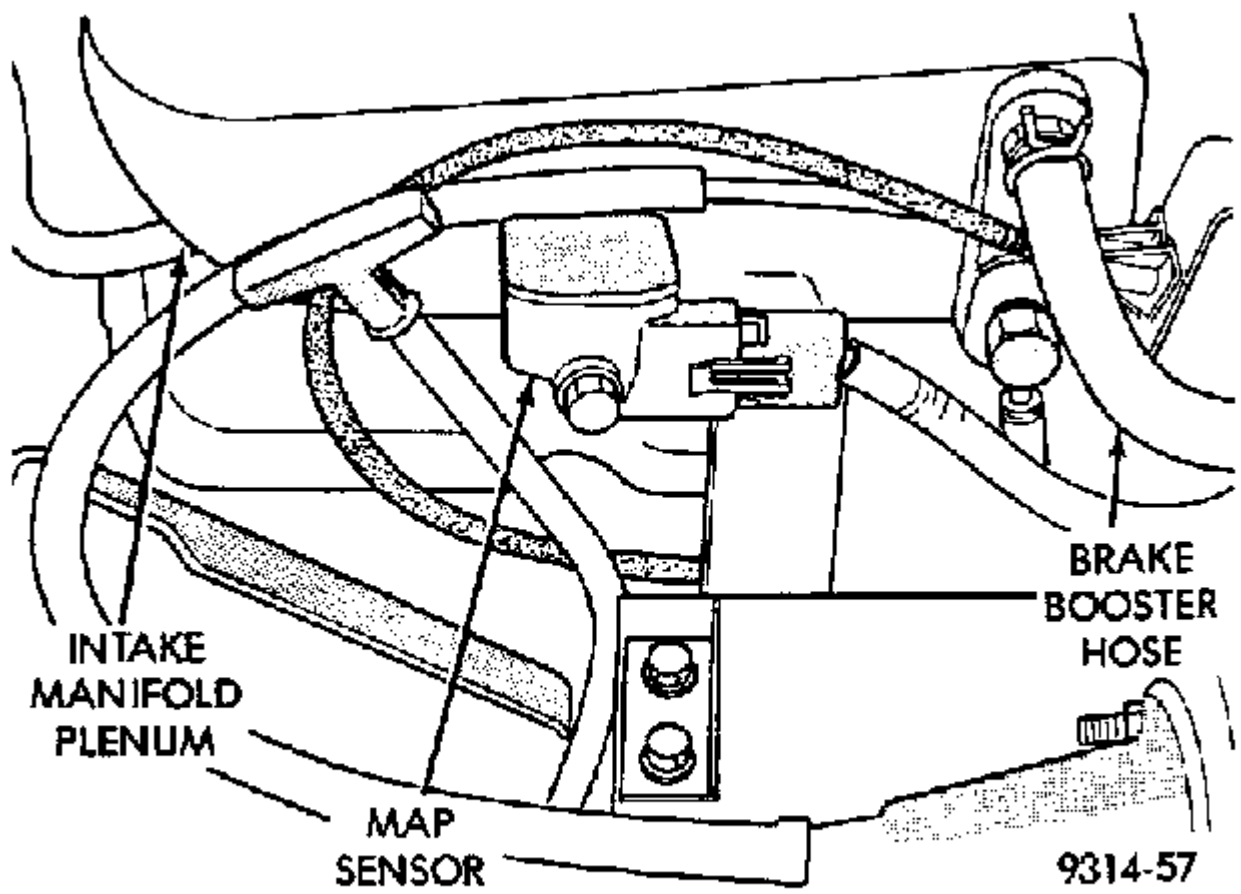


Figure 3

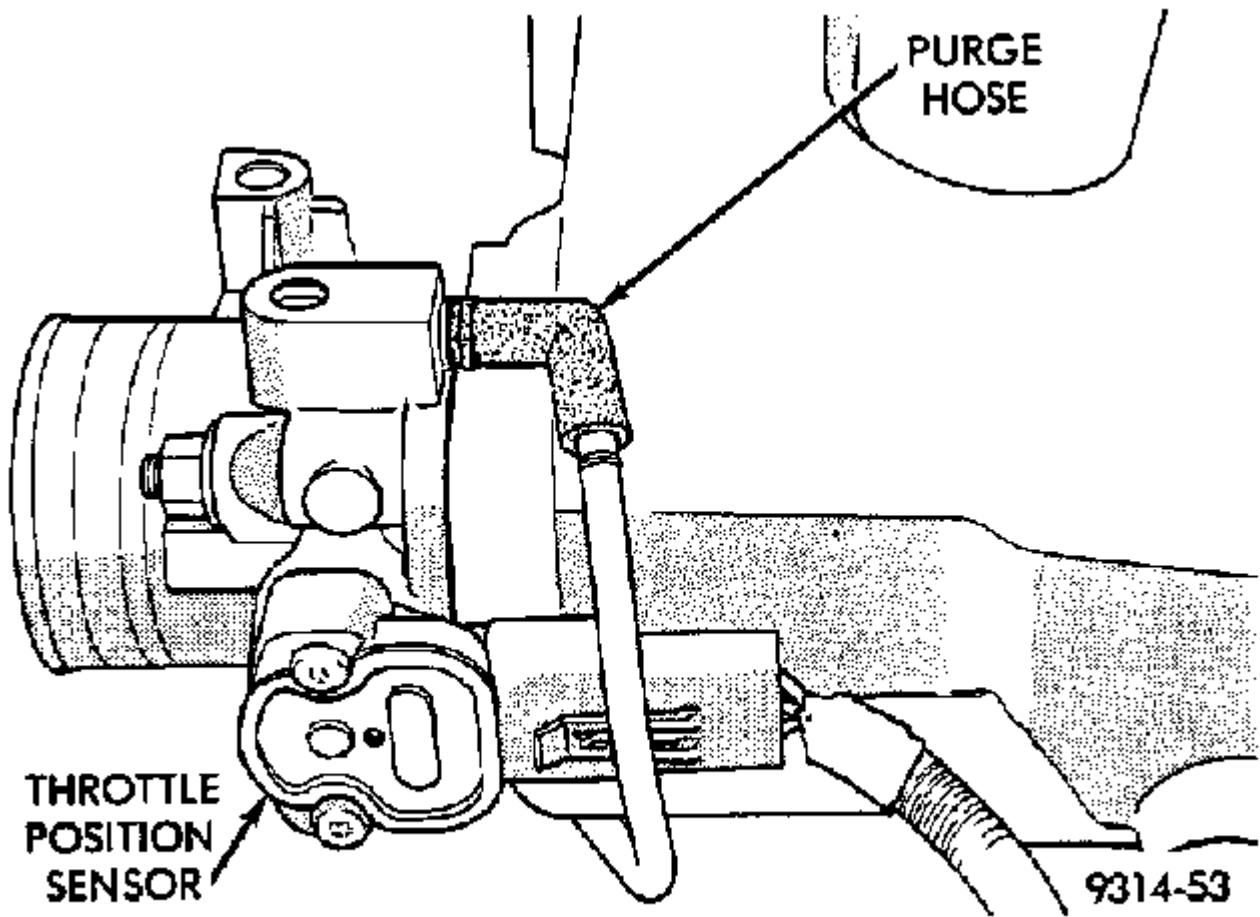


Figure 4

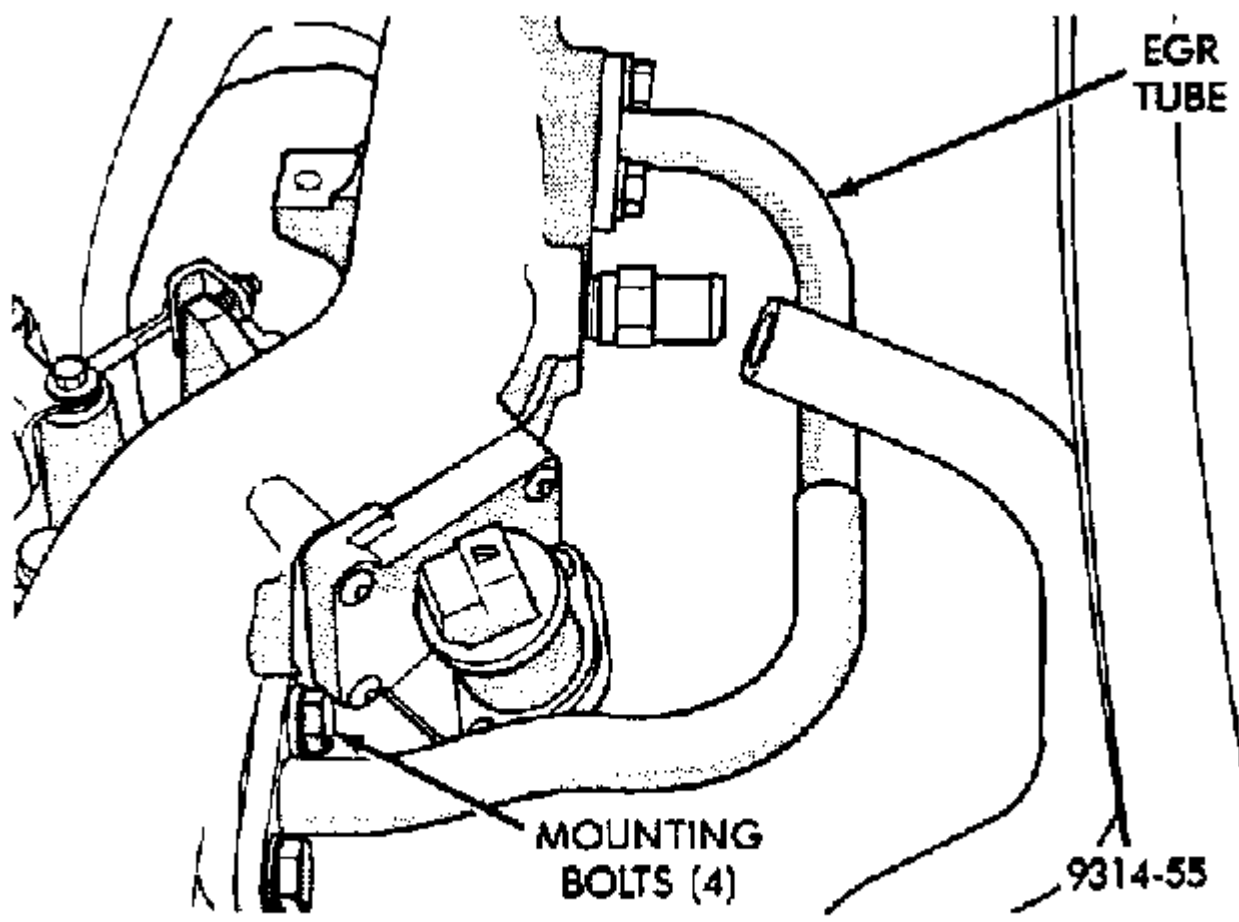


Figure 5

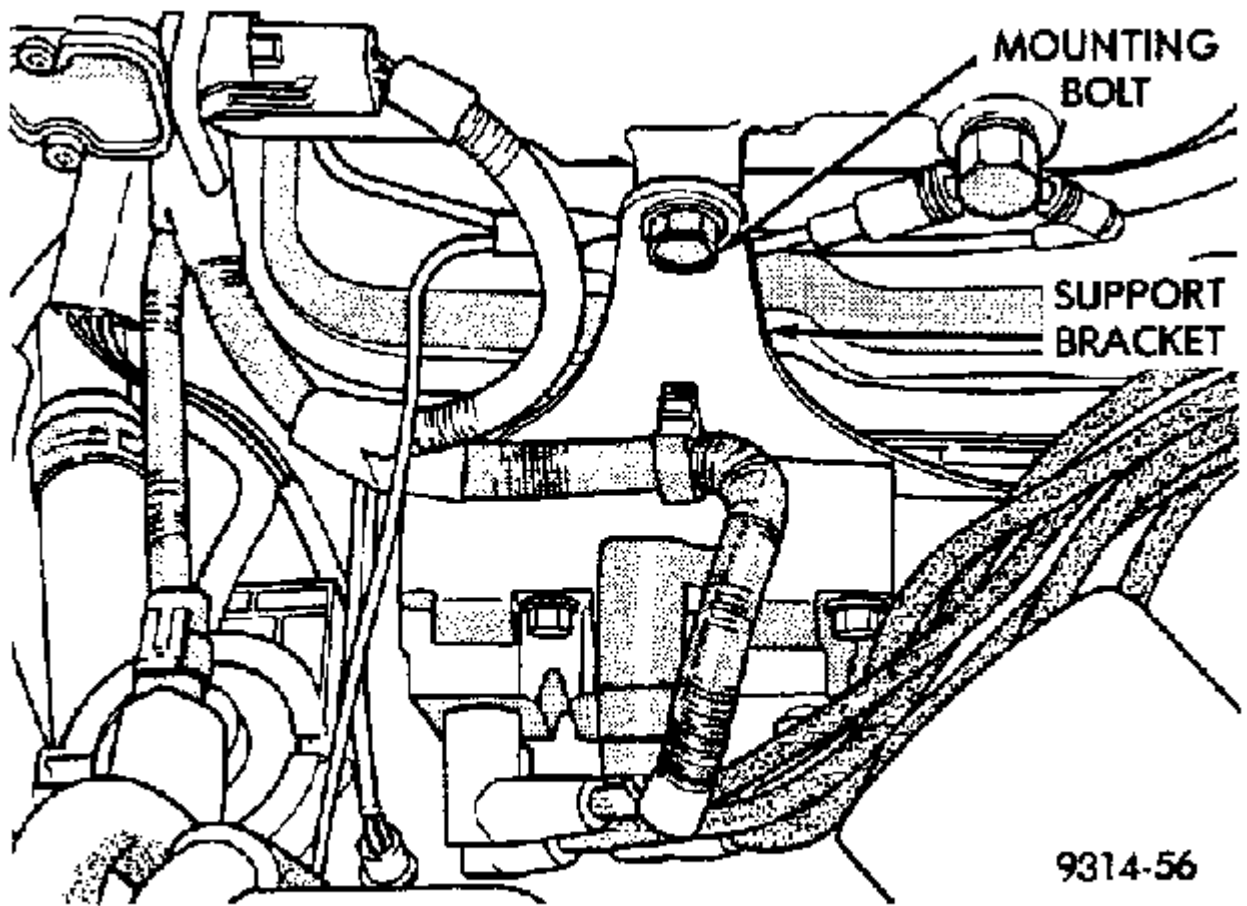


Figure 6

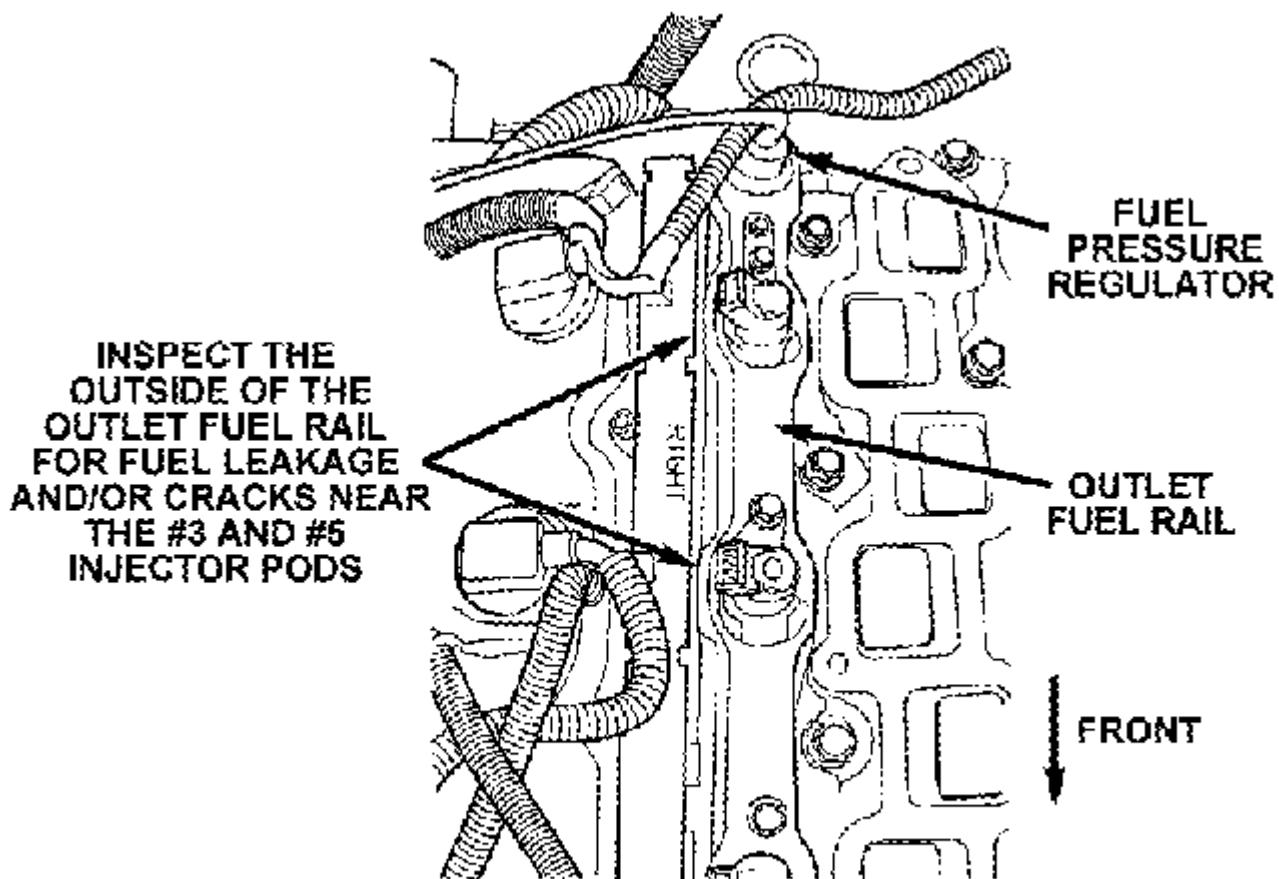
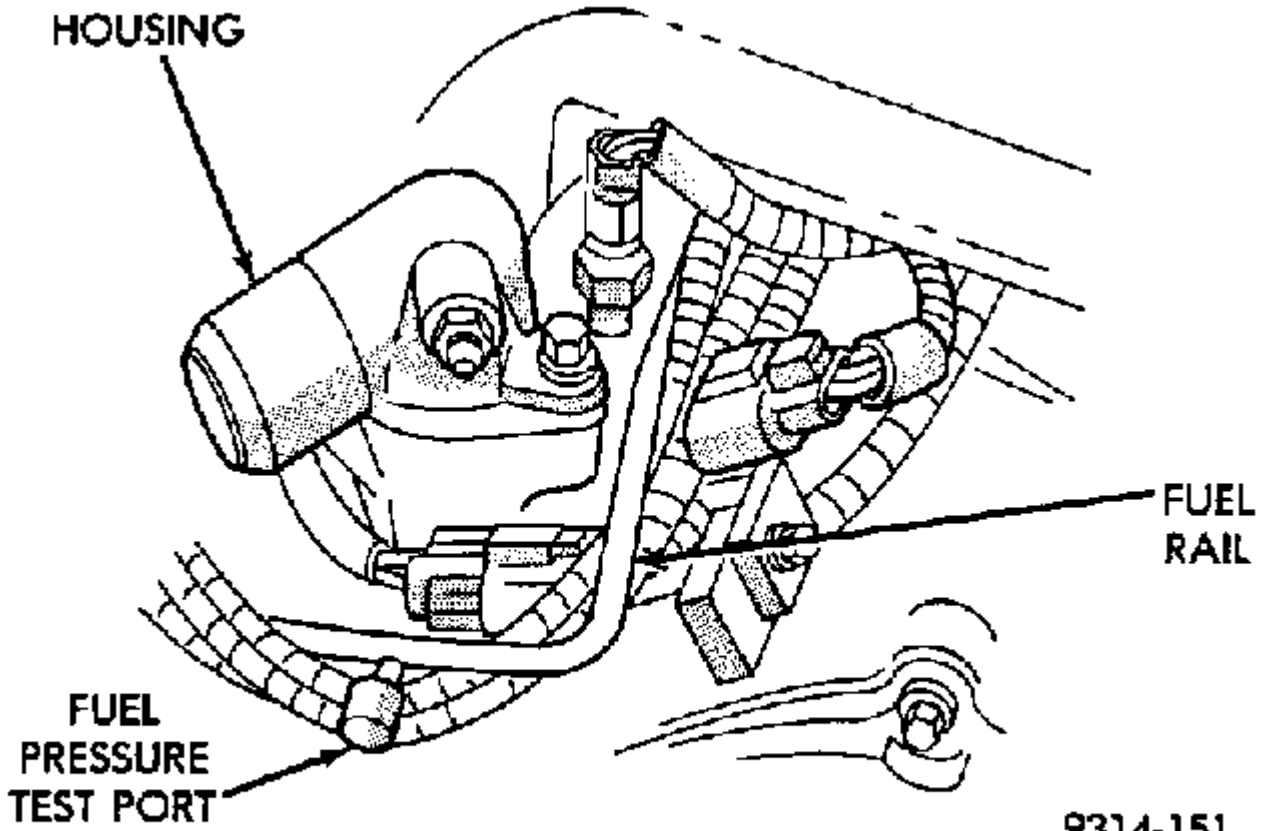


Figure 7

THERMOSTAT
HOUSING



FUEL
RAIL

FUEL
PRESSURE
TEST PORT

9314-151

Figure 8

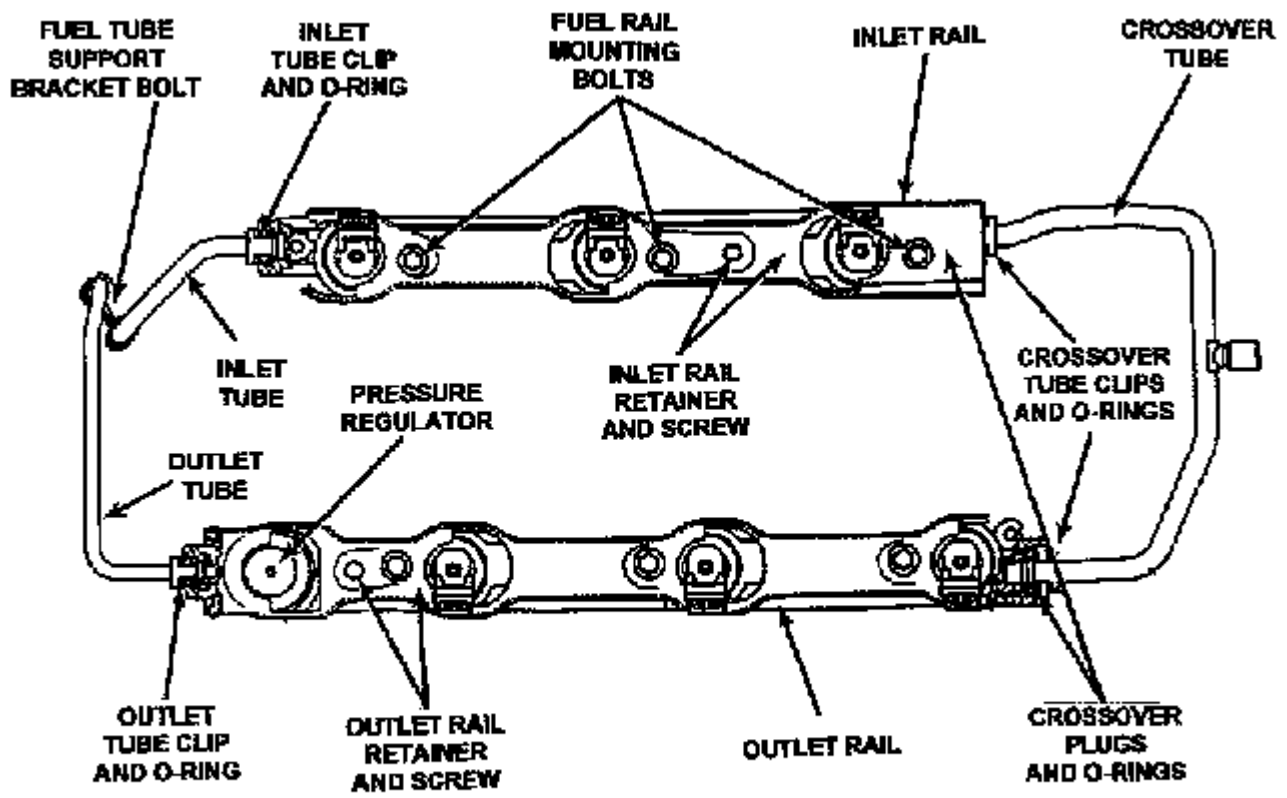
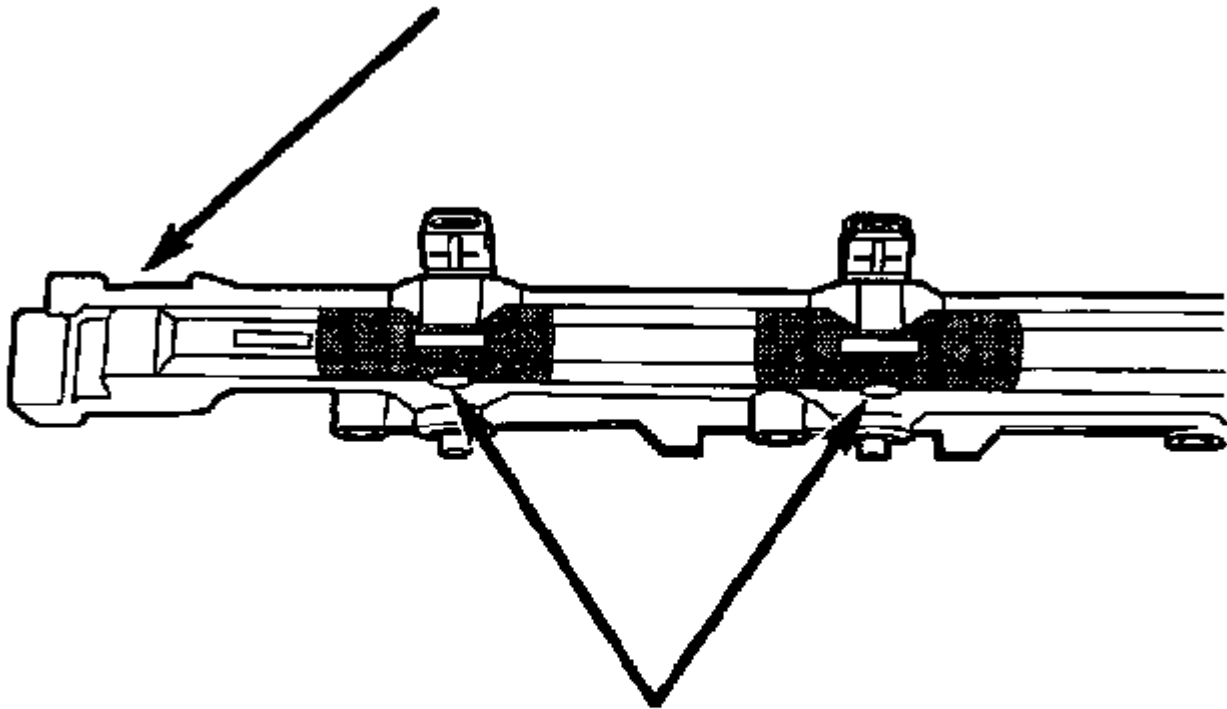


Figure 9

**FUEL PRESSURE
REGULATOR POD**



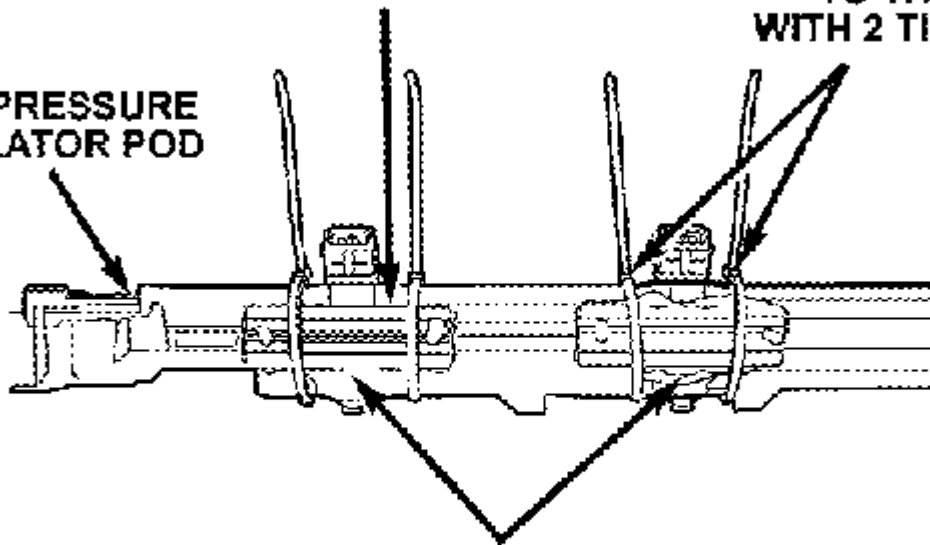
**ROUGH UP THE OUTER SURFACE
OF THE RAIL NEXT TO THE #3 AND #5
INJECTOR PODS. MAKE SURE THAT
THE ROUGHED UP AREA IS SLIGHTLY
LARGER THAN THE REINFORCEMENTS**

Figure 10

**MAKE SURE LARGE
NOTCH IN REINFORCEMENT
MATES WITH INJECTOR
POD CONTOUR**

**TEMPORARILY
SECURE EACH
REINFORCEMENT
TO THE RAIL
WITH 2 TIE STRAPS**

**FUEL PRESSURE
REGULATOR POD**



**INSTALL THE REINFORCEMENTS
NEXT TO THE
#3 AND #5 INJECTOR PODS**

Figure 11

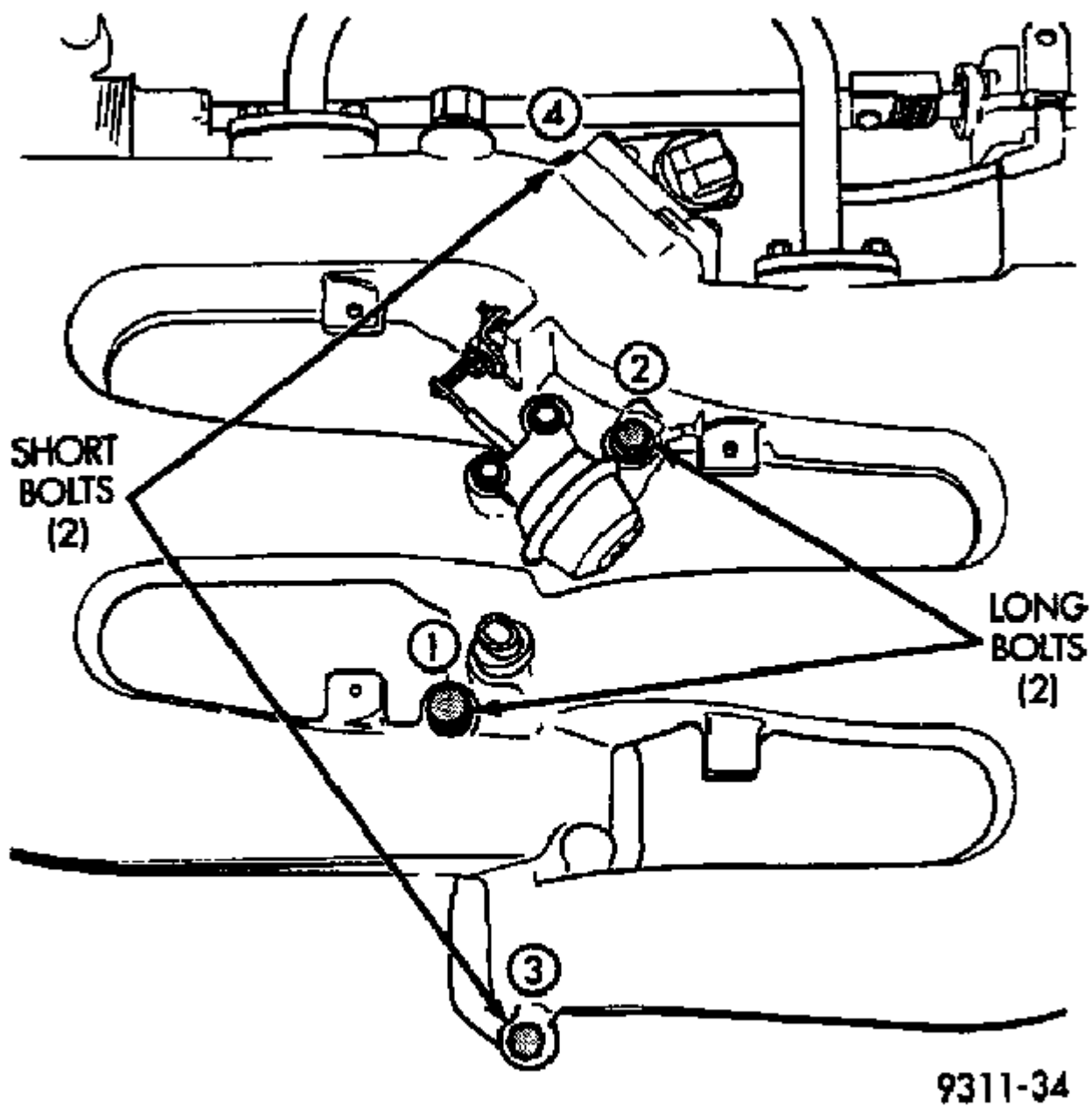


Figure 12