

[DodgeRam.org](#) > [Main](#) > [Tech Index](#) > [TSB's](#) > 18-48-98 for the V8

TSB 18-48-98

Ignition System Cross Fire/Secondary Ignition Wire Induction
Note: this page is for the V8 repair. The [V6 repair](#) is on another page.

Visit [Geno's Garage](#)
for Truck accessories.



Date: December 30, 1998

Models: 1994-1999 BR/BE Ram

Note: applies to vehicles with 3.9L, 5.2L and 5.9L engines (gas)

1994 - 1999 (AN) Dakota
1994 - 1999 (BR/BE) Ram Truck
1998 - 1999 (DN) Durango
1995 - 1999 (XJ) Cherokee
1994 - 1999 (ZJ) Grand Cherokee

Symptoms: some vehicles may exhibit one or more of these symptoms:

- spark knock complaints with vehicle under load
- various single cylinder misfire (1, 3, 7,) ad especially 5 and/or 8
- surge in 4th gear with the Electronically Modulated Converter Clutch (EMCC) engaged (around 45MPH).
- Perceived torque converter EMCC engagement/ disengagement around 45 MPH.

Diagnosis:

Using the Mopar Diagnostic System (MDS/MDS2) or the Diagnostic Scan Tool (DRB III), verify that all engine/transmission systems are functioning as designed. If other DTC's are present, repair as necessary before proceeding with this bulletin. If no other DTC's are present and **the above symptoms have been reported by the customer**, perform the repair procedure.

NOTE: This rerouting procedure should be performed before any other misfire, surge, or spark knock repairs are attempted.

Parts:

3	56028186	Clip, single wire
2	06503441	Clip, wire to hose (5.2L, 5.9L)
1	04364375	Convolute, 10 ft roll

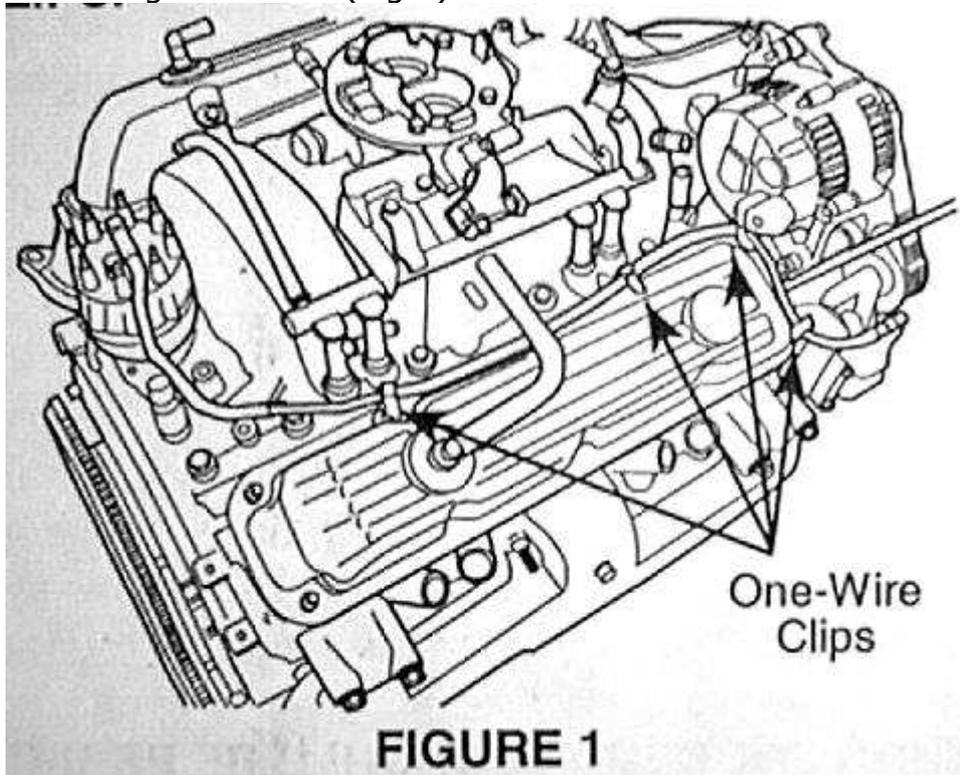
Repair: The repair procedure involves rerouting the coil wires and/or the plug wires to minimize induction effects.

NOTE: IF WIRES MUST CROSS DURING THE REROUTE PROCEDURE, THEY MUST CROSS AT A RIGHT ANGLE.

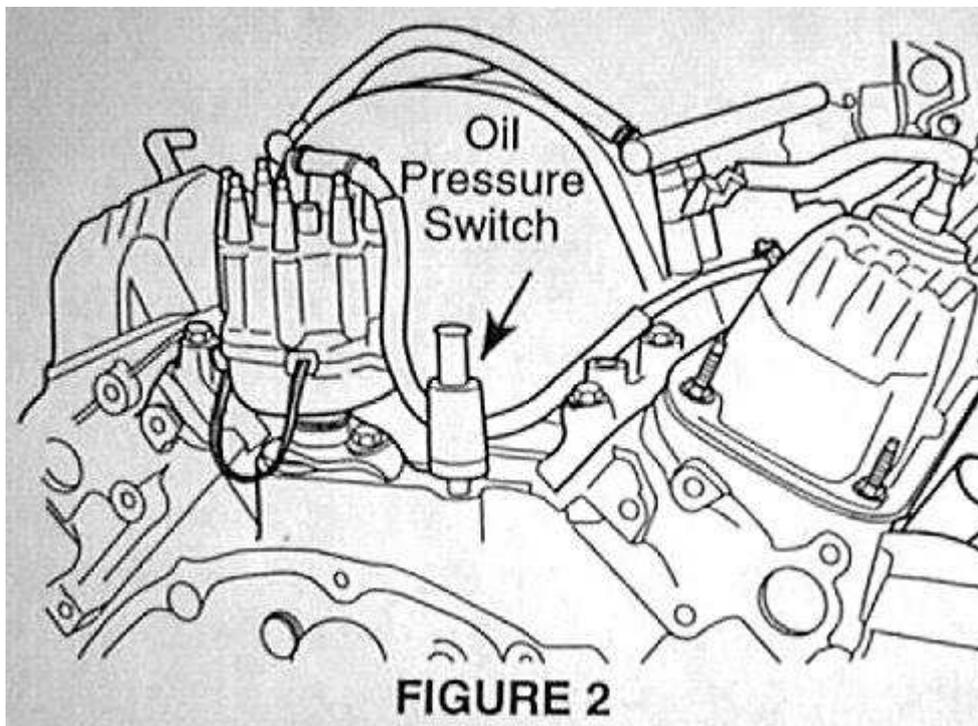
5.2L and 5.9L ENGINE PROCEDURE

A - Coil Wire Routing (Fig 1 & Fig 2).

1. Remove coil wire from distributor cap tower terminal.
2. Remove coil wire from the rear five-wire clip, the center three-wire clip, and the front one-wire clip along the lower side of the right valve cover.
3. Install 3 one wire clips along the top and front of the valve cover. Use the valve cover retaining bolt studs (Fig 1).



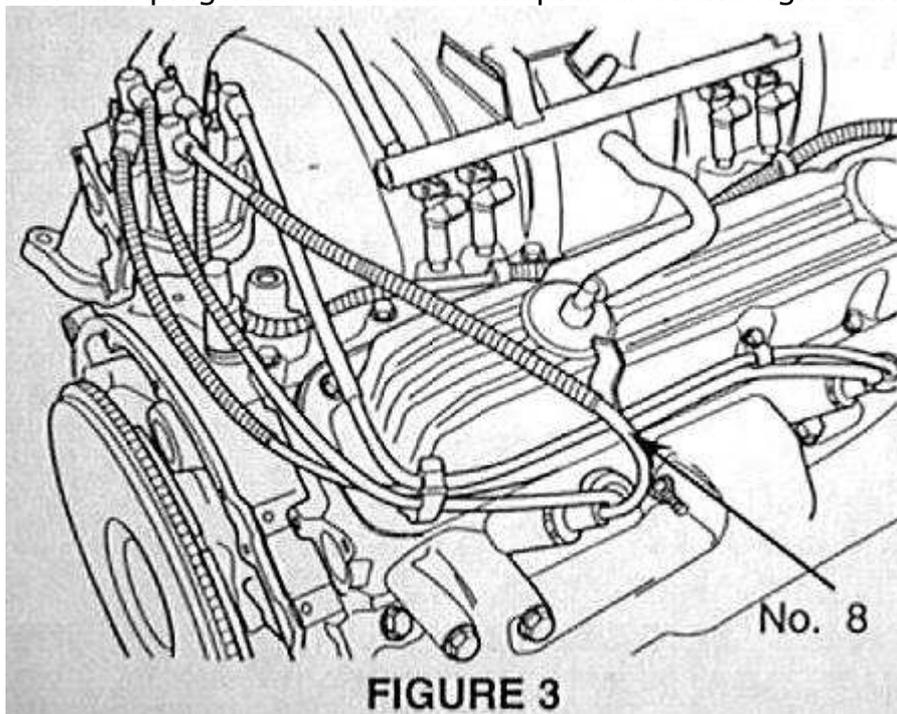
4. Route the coil wire starting from the ignition coil and working toward the distributor. Any excess wire should end up at the distributor end.
5. Install the coil wire into the one wire clips. This may be easier to perform while the coil wire is loose from the valve cover and before the one-wire clips are attached to the valve cover studs.
6. Cut the ignition wire convolute into three lengths 8", 4", and 3.25" (203 mm, 101.5 mm, 82.5 mm).
7. Slit and install the three sections of convolute onto the coil wire between the clips. Install the 3.25" section at the front of the right valve cover. Install the 8" and the 4" sections along the top side of the right valve cover. This may be easier to perform while the coil wire is loose from the valve cover and before the one-wire clips are attached to the valve cover studs.
8. Route the distributor end of the coil wire down and behind the intake manifold in front of the oil pressure switch.
 - **NOTE: The coil wire must be a minimum of 1" away from any other ignition wires. This may require the coil wire to be routed under the vacuum and/or wire harnesses in the right rear corner of the intake manifold.**



9. Route the distributor end of the coil wire up the side of the distributor cap and onto the coil tower terminal.
10. Use the original piece of coil wire convolute to protect the wire against chafing by components at the rear of the engine.

B - Number 8 Cylinder Plug Wire Routing (Fig 3).

1. Remove the #8 plug wire from the distributor tower terminal.
2. Remove the #8 plug wire from the five-wire clip at the lower rear of the valve cover.
3. Route the #8 plug wire over the rear quarter of the right valve cover (Fig 3).



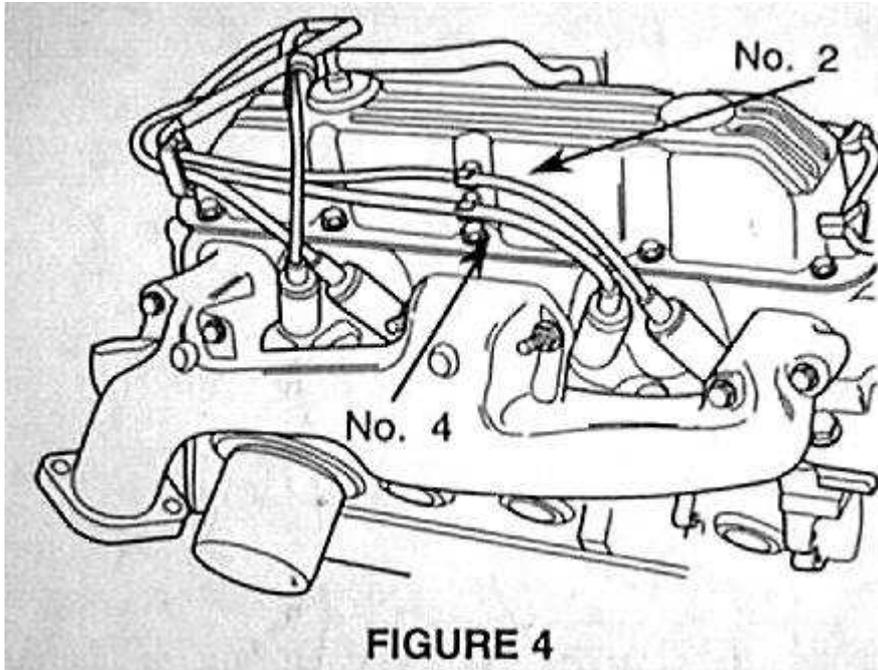
4. Reposition the original piece of plug wire convolute to prevent the wire from chafing at the right valve cover and with other engine components.
5. Secure the #8 plug wire and convolute in place with the hose to wire clip. The small end of the clip supports the convolute. The large end of the clip attaches

to the heater hose.

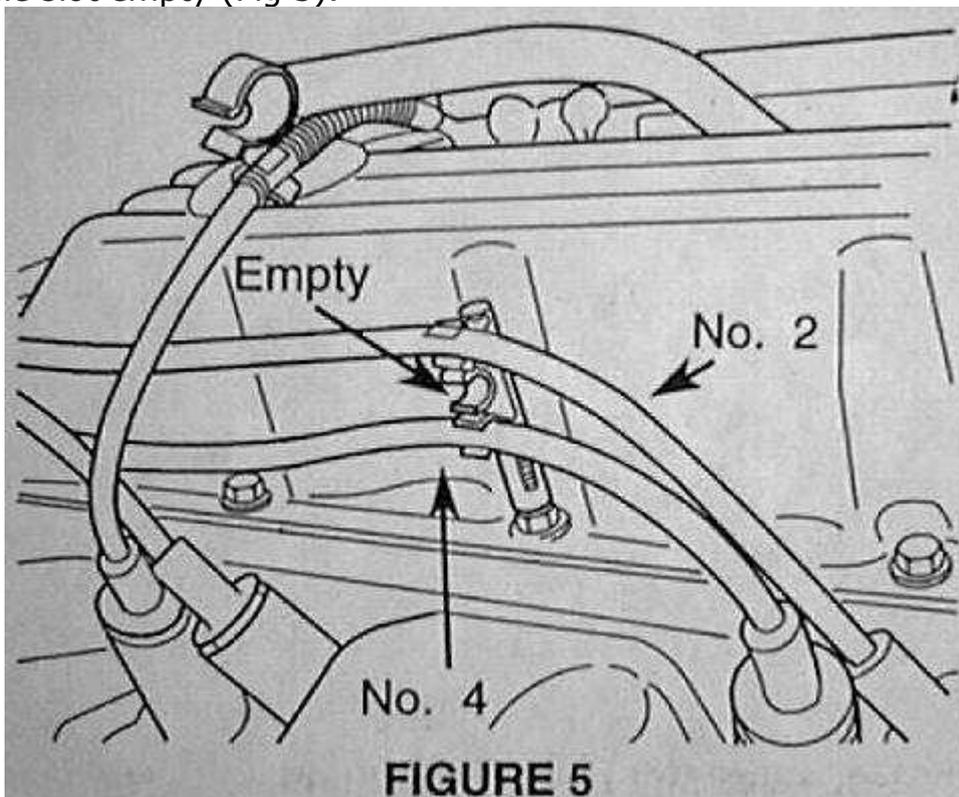
- **NOTE: Make sure the #8 plug wire is secure and away from the #4 plug wire. Make certain it will not fall to contact the cylinder head or exhaust components.**

6. Install the #8 plug wire into its distributor cap terminal.

C - Number 4 Plug Wire Rerouting (Fig 4 & Fig 5).

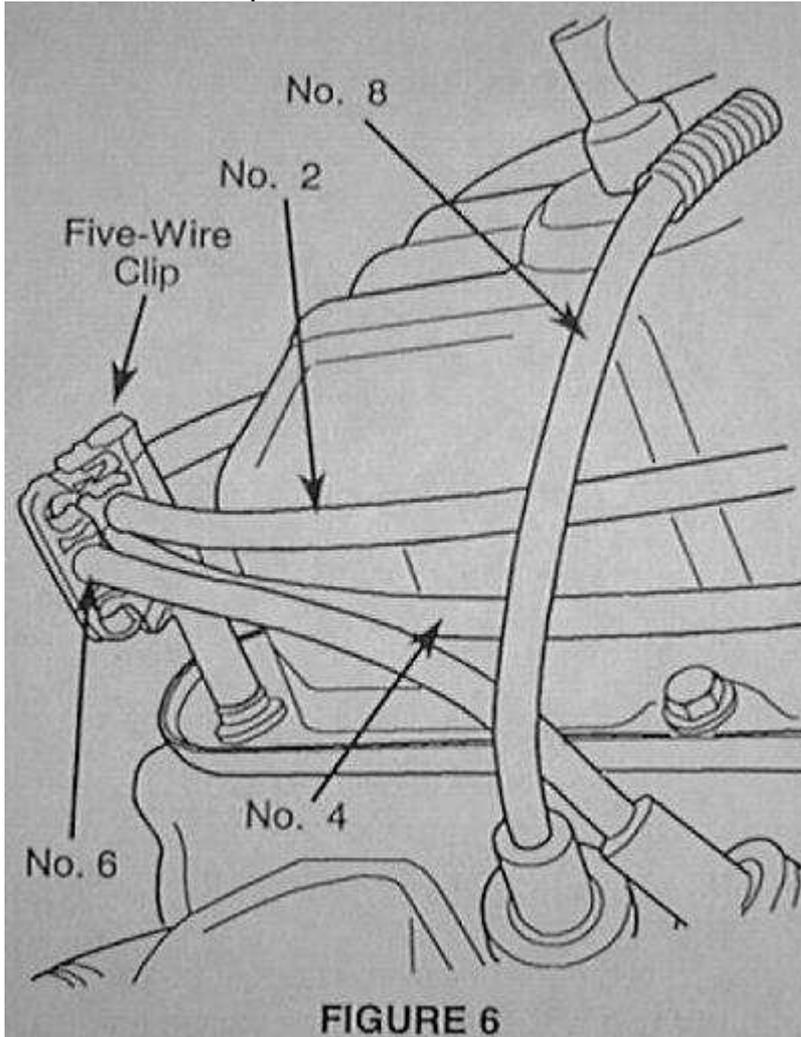


1. Remove the #4 cylinder plug wire from the distributor cap terminal.
2. At the center of the lower side of the right valve cover is three-wire clip. Keep the #2 and #4 plug wires from crossing each other at this clip. Position the #2 plug wire in the top wire slot and the #4 wire in the bottom wire slot. Leave the middle slot empty (Fig 5).

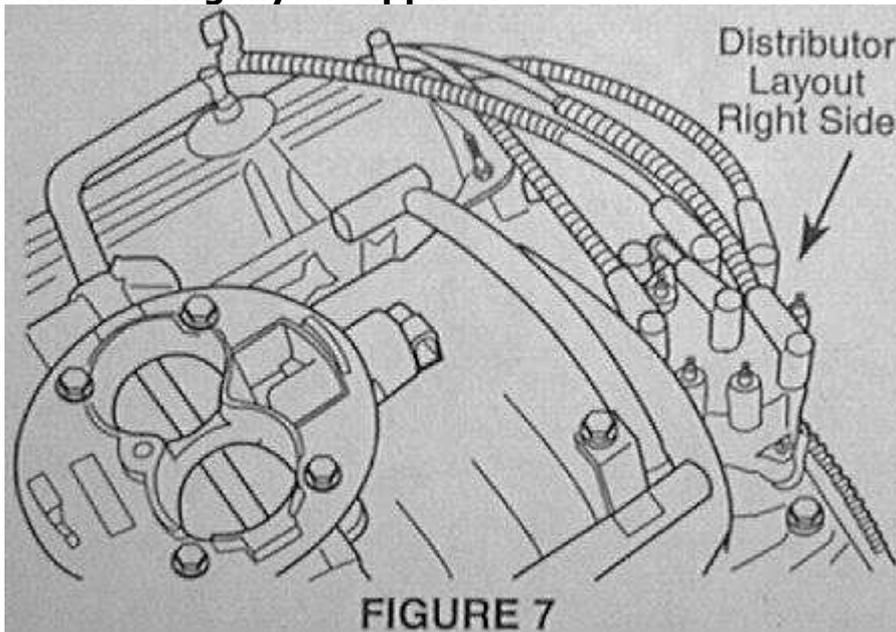


- Keep the plug wires from crossing and chafing each other at the five-wire clip found at the right rear lower side of the valve cover. Position the #4

plug wire in a slot that will space it farthest away from the #8 plug wire (Fig 6). Remove any slack in the #4 plug wire between the three-wire and the five-wire clips.



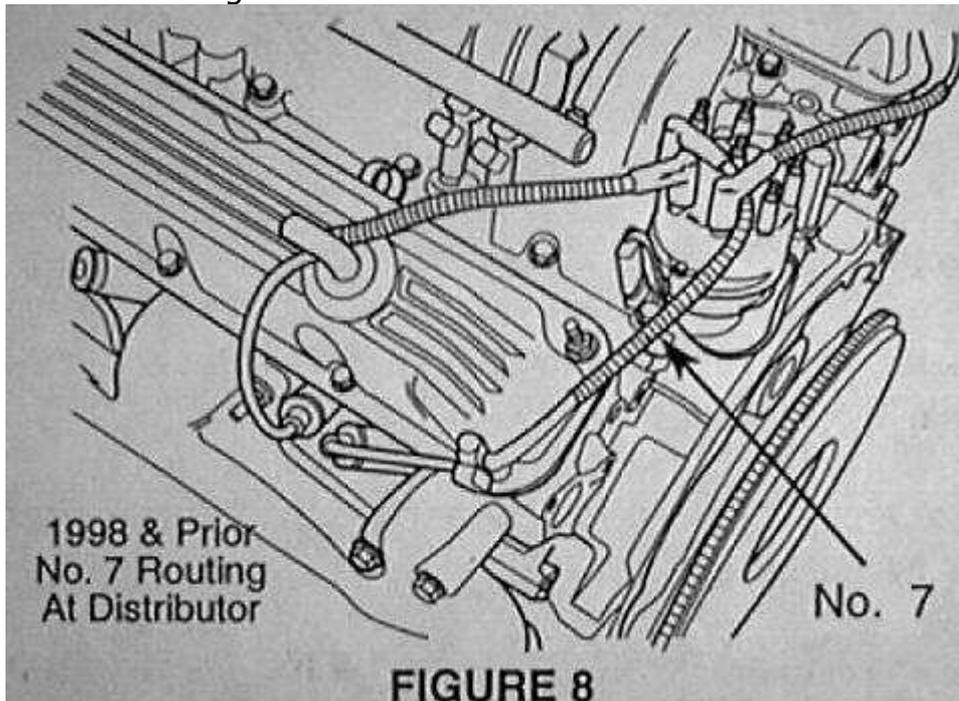
-
- **NOTE: Earlier model five-wire clips look slightly different but the same wiring layout applies.**



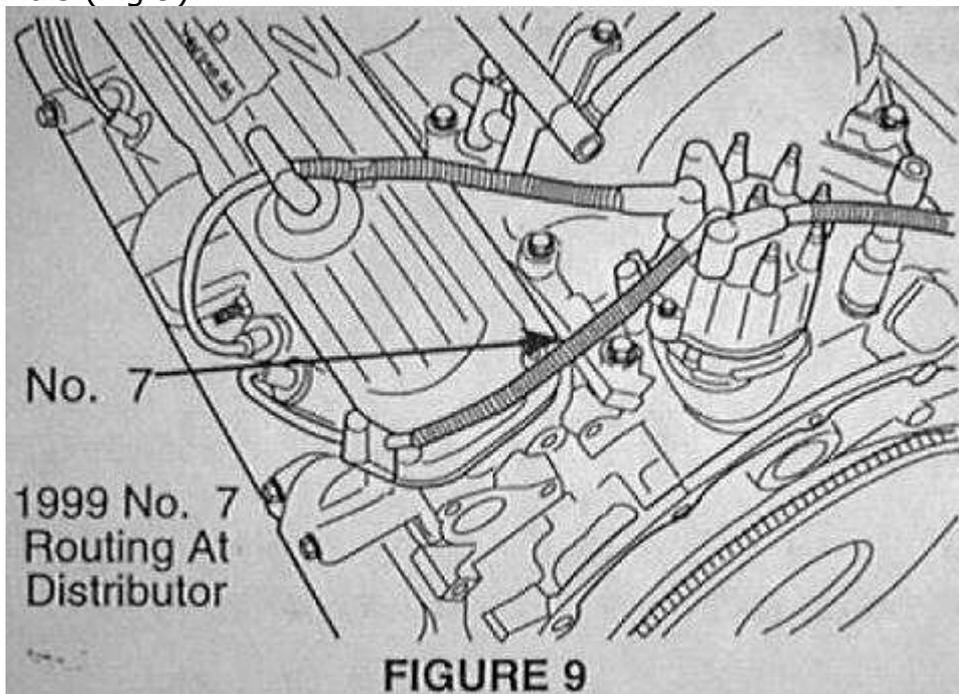
-
- 3. Route the #4 plug wire behind the transmission dipstick tube and heater hoses.
 - **NOTE: Make sure that the #4 plug wire is at least one inch away from the #8 wire.**
- 4. Install the #4 Plug wire to its distributor cap terminal (Fig 7).

D - Number 7 Plug Wire Rerouting (Fig 8 & Fig 9)

1. Verify that the #7 plug wire crosses over the distributor cap and leaves the distributor cap between the #3 and the #6 tower terminals (Fig 8). This is the original wire routing on 1998 and earlier models.



2. For 1999 models, the #7 plug wire was shortened. Reroute the #7 wire so that it crosses the distributor cap and leaves the cap between the #6 and #5 tower terminals (Fig 9).



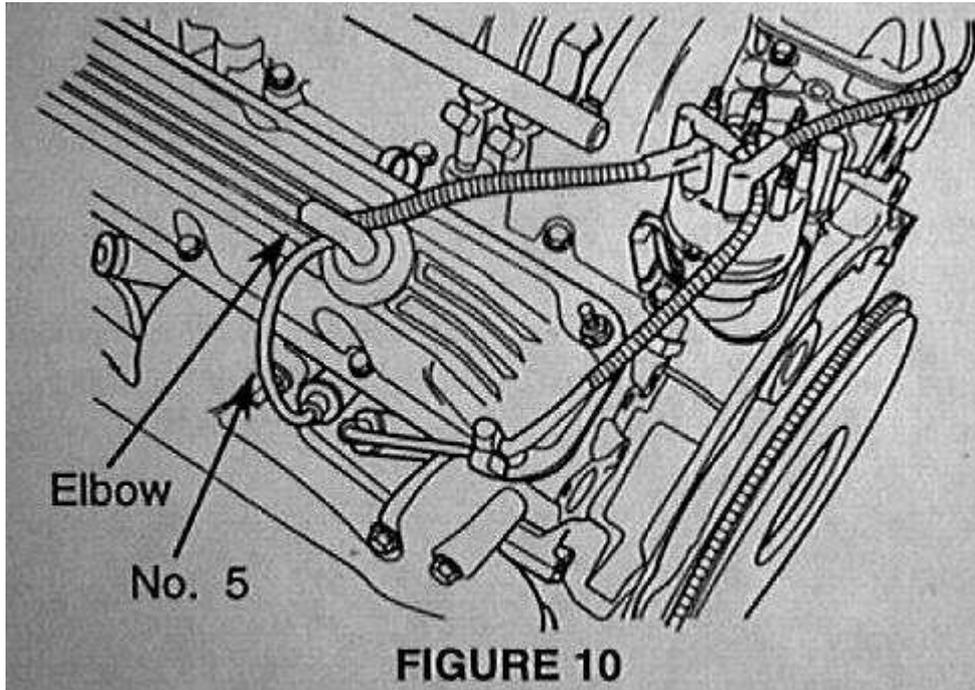
- **NOTE: Make sure the #7 plug wire is at least one inch away from the #5 wire.**

E - Number 5 Plug Wire Rerouting (Fig 10)

1. Remove the #5 plug wire from the distributor cap terminal.
2. Remove the #5 plug wire from the five-wire clip found at the lower rear of the left valve cover.
3. Route the #5 plug wire over the left valve cover and in front of the breather

tube elbow.

4. Position the original convolute from the #5 wire to prevent chafing against the valve cover and any engine components. Secure the small end of the hose to wire clip over the convolute. Secure the large end of the hose to wire clip to the breather hose.



-
- **NOTE: Make sure the #5 plug wire is secure and away from the #7 plug wire. Make certain it will not fall down and contact the cylinder head and/or exhaust components.**

notes:

Policy: Reimbursable within the terms of the warranty.

Labor charge: V6 0.2 Hrs.

V8 0.4 Hrs.

Thanks to Bob Bergevin for supplying the TSB information

[Top of Page](#)

[DodgeRam.info Home](#)