

RWAL CODE 9

1989-91 (AD) RAM PICK-UP, CAB & CHASSIS/RAMCHARGER (RWD,4WD) POWER RAM CAB & CHASSIS (4WD), (AN) DAKOTA SPORT, CAB & CHASSIS

If both the red brake warning light and the amber anti-lock warning light are illuminated on the above mentioned vehicles and a code 9 is present during diagnosis of the Rear Wheel Anti-Lock Brake System (RWAL), a possible cause can be a spread terminal(s) on the 2-way connection at the RWAL speed sensor.

To diagnose this condition, perform the following checks:

1. Disconnect the 14 pin connector at the RWAL control module. Make sure the ignition is off. Modules are located (see Figs. 1 - 3):

AB - Van (without air conditioning), on the heater duct.

AB - Van (with air conditioning), behind the glove box.

AN - Trucks, on the right kick panel.

AD - Trucks, behind the glove box.

2. Measure the resistance between pin 13 (white/violet speed sensor ground) and pin 14 (red/violet speed sensor signal) on the RWAL control module connection. The resistance should be less than 2400 ohms. If resistance is greater than 2400 ohms, disconnect the 2-way connector at the speed sensor located on the rear axle (see Fig. 4).

3. Measure the speed sensor resistance. If the resistance is less than 2400 ohms, the female terminal must be inspected for spreading.

| PARTS REQ. FOR REPAIR | QTY. | NAME | CHRY. PART# |
|------------------------|------|--|-------------|
| AB-Vehicles | 1 | Wiring Assembly Jumper | 4487098 |
| | 1 | Tie Strap (If equipped with 8 1/4 rear axle) | 6015756 |
| AN-Vehicles | 1 | Wiring Assembly Jumper | 4482801 |
| AD-Vehicles | 1 | Wiring Assembly Jumper | 4487030 |
| PARTS REQ. FOR GAUGING | | | |
| | 1 | 10 Pin Terminal Strip | 4419498 |

4. Take the 10 pin terminal strip gauge (PN 4419498) and insert any of the pins into the female terminal on the 2-way wiring harness connector. The terminals should mate snugly. If the gauge pin is loose, do not attempt to close down the female terminals. Perform the following repair procedure:

REPAIR PROCEDURE:

1. Disconnect the speed sensor to main harness jumper harness and unsnap it from the brake line clips.

2. Install the new jumper harness onto the brake line clips.

3. Connect the new jumper harness onto the RWAL speed sensor.

4. Connect the new jumper harness to the main wiring harness. On AB vehicles equipped with 8 1/4 rear axles, the jumper wiring harness may be 8" - 10" too long. The extra length of harness should be tied back to the vehicle brake line with a tie strap (PN 6015756).

5. Verify proper resistance (under 2400 ohms) at the 14 pin connector at the RWAL control module.

6. Connect the 14 pin RWAL control module connector.

7. Test drive over 40 m.p.h. Make sure RWAL system operates correctly, no warning lights are illuminated, and no RWAL codes are present.

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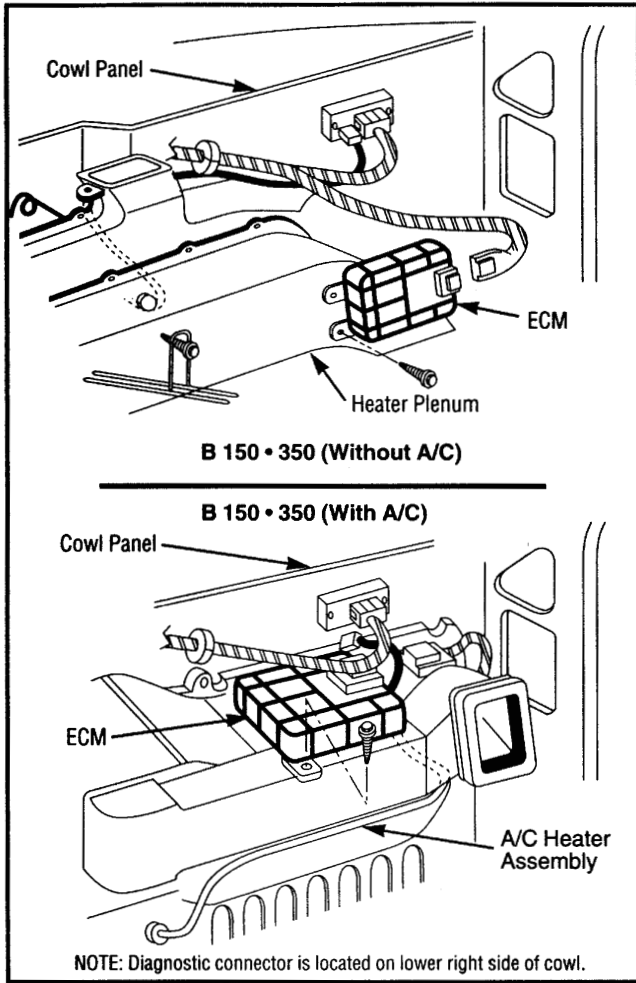


Figure 1:
B 150-350 Electronic Control Module (ECM) Locations

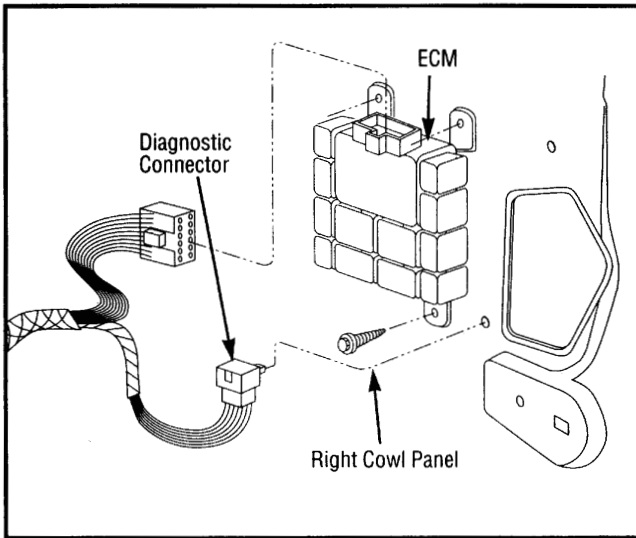


Figure 2:
(AN) Dakota Electronic Control Module (ECM) Locations

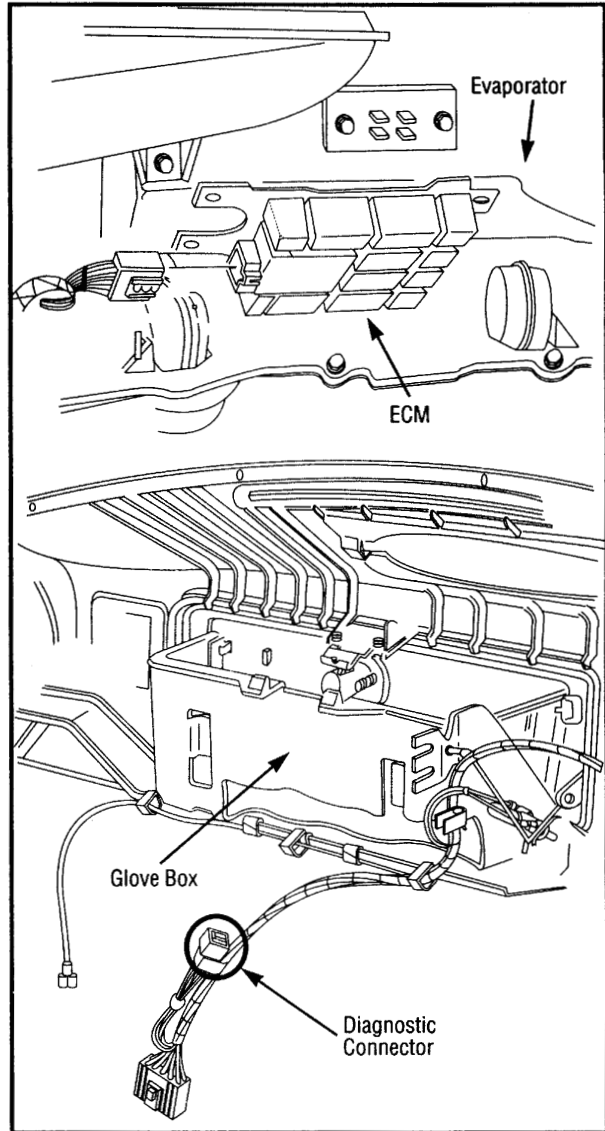


Figure 3:
D/W 150 • 350 & Ramcharger Electronic Control Module (ECM) Locations

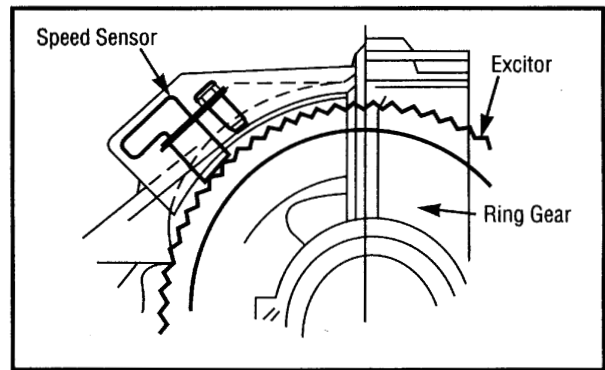


Figure 4:
Rear Anti-Lock Brake System Speed Sensor