

Fig. 74 This is the test connector for the ABS system. Use the Ford Super Star II tester or an equivalent scan tool to access the ABS system

module to the mounting bracket and remove the ABS module.

### To install:

- 5. Align the ABS module with the bracket so that the lever is facing the drivers side of the vehicle. If all 3 mounting holes in the ABS module do not line up with the holes in the mounting bracket, the ABS module is incorrectly aligned with the bracket. Install the 3 attaching screws and tighten to 40-60 inch lbs. (4.5-6.8
- 6. Attach the 55-pin connector by installing the bottom part of the connector into the slots in the ABS module and pushing the top portion of the connector into the ABS module. Then, pull the locking lever completely down to ensure proper installation.
  - 7. Connect the negative battery cable.

### 1995-00 Vehicles

The control module is located on the HCU. To facilitate the removal of the module, the HCU must be removed. If the proper tools for bleeding the ABS system are not available. you will need to have a professional technician perform this repair.

### \*\*\* WARNING

Electronic modules are sensitive to static electrical charges. If exposed to these charges, damage may result.

- 1. Disconnect the negative battery cable.
- 2. Remove the HCU as describe din this section.
- 3. Remove the module retaining screws and remove the anti-lock brake control module.
- 4." The installation is the reverse of the

# Hydraulic Control Unit

### **REMOVAL & INSTALLATION**

### 1992-94

## See Figure 76

- 1. Disconnect the negative battery cable and remove the air cleaner and air outlet tube.
  - 2. Detach the 19-pin connector from the HCU

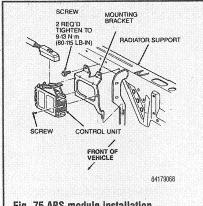


Fig. 75 ABS module installation

to the wire harness and detach the 4-pin connector from the HCU to the pump motor relay.

- 3. Remove the 2 lines from the inlet ports and the 4 lines from the outlet ports of the HCU. Plug each port to prevent brake fluid from spilling onto the paint and wiring.
- 4. Remove the 3 nuts retaining the HCU assembly to the mounting bracket and remove the assembly from the vehicle.

### ➡The nut on the front of the HCU also retains the relay-mounting bracket.

- 5. Position the HCU assembly into the mounting bracket. Install the 3 retaining nuts and tighten to 12-18 ft. lbs. (16-24 Nm). Make sure the ABS pump motor relay bracket is retained by the front bracket nut.
- 6. Connect 4 lines to the outlet ports on the side of the HCU and 2 lines to the inlet ports on the rear of the HCU and tighten the fittings to 10-18 ft. lbs. (14-24 Nm).
- 7. Attach the 19-pin connector to the harness and the 4-pin connector to the pump motor relay.
- 8. Install the air cleaner and air outlet tube.
- 9. Connect the battery cables, properly bleed the brake system and check for fluid leaks.

## 1995-00

- 1. Disconnect the negative battery cable.
- 2. Detach the anti-lock brake control module electrical connectors.

## \*\* CAUTION

Brake fluid contains polyglycol ethers and polyglycols. Avoid contact with the eyes and wash your hands thoroughly after handling brake fluid. If you do get brake fluid in your eyes, flush your eyes with clean, running water for 15 minutes. If eye irritation persists, or if you have taken brake fluid internally, IMMEDIATELY seek medical assistance.

- 3. Disconnect and plug the hydraulic brake lines.
- 4. Remove the HCU retaining bolts and remove the HCU.
  - 5. If necessary, remove the HCU bracket.

### To install:

- If removed, install the HCU bracket. 6.
- Position the HCU.
- 8. Install and tighten the retaining bolts.
- 9. Connect the hydraulic brake lines.
- 10. Connect the anti-lock brake control module electrical connectors.
  - 11. Connect the negative battery cable.
  - 12. Bleed the 4-wheel ABS.

## **Speed Sensors**

## REMOVAL & INSTALLATION

### Front

## See Figures 77, 78, 79, 80 and 81

- 1. Disconnect the negative battery cable.
- 2. From inside engine compartment, detach sensor assembly 2-pin connector from the wiring harness.
- 3. Remove the steel routing clip attaching the sensor wire to the tube bundle on the left sensor or remove the plastic routing clip attaching the sensor wire to the frame on the right sensor.
- 4. Remove the rubber coated spring steel clip holding the sensor wire to the frame.
- 5. Remove the sensor wire from the steel routing clip on the frame and from the dust shield.
- 6. Remove the sensor attaching bolt from the front spindle and slide the sensor out of the mounting hole.

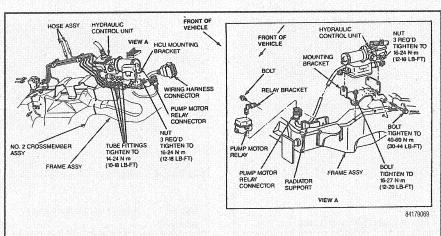


Fig. 76 Hydraulic Control Unit installation