

CERTAIN 1992 - 2003 MODEL YEAR VEHICLE LINES - SPEED CONTROL SYSTEM MODIFICATION

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OVERVIEW

This Safety Recall involves an inspection of the Speed Control Deactivation Switch (SCDS) harness connector for the presence of brake fluid contamination. If no brake fluid is present, install the universal fused jumper harness. If brake fluid is present, replace the SCDS and inspect the speed control servo harness connector for heat damage. See Flow Chart#2 on page 3.

In addition, for 1999 through 2003 Windstar vehicles, the repair includes an inspection of the Anti-lock Brake System (ABS) connectors. See Flow Chart #2 on page 3.

If a related damage condition is found that you believe to be caused by a leaking SCDS, call the Special Service Support Center (1-800-325-5621) to request approval **prior** to the repair of any related damage. Requests for approval after completion of the repair will not be granted.

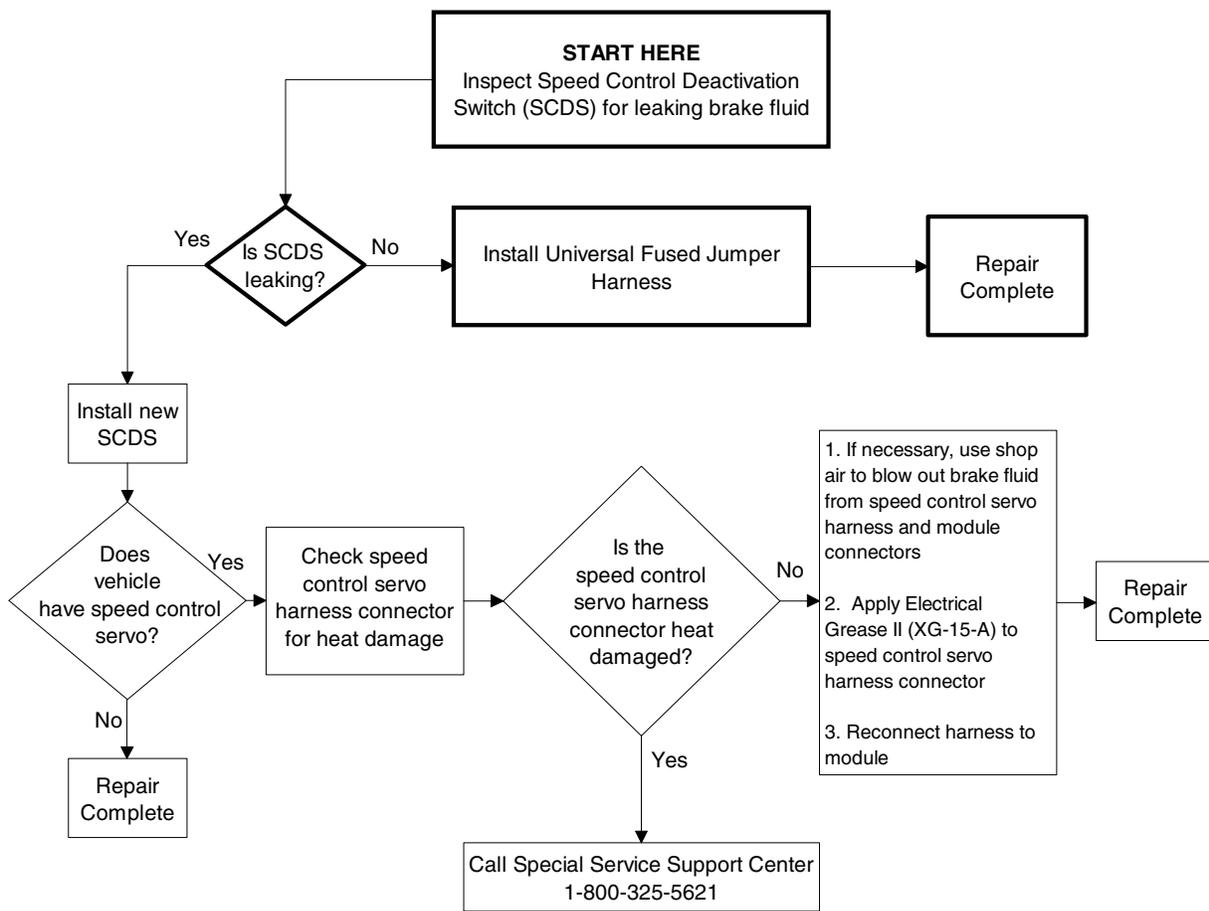


REPAIR FLOW CHARTS

Flow Chart #1 shows the repair procedure for all affected vehicles except 1999 through 2003 Windstar vehicles.

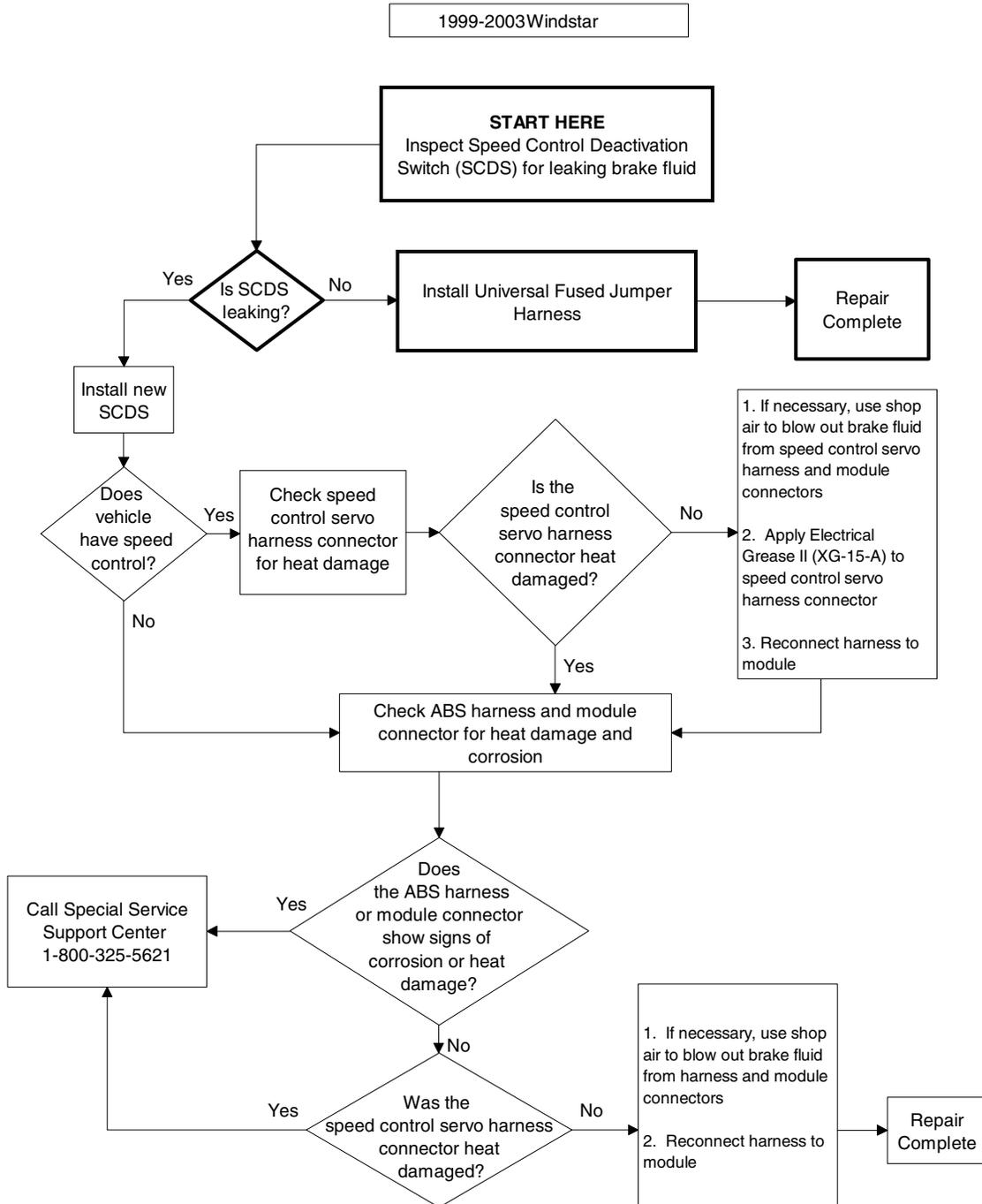
Flow Chart #1

- 1992-2003 E-Series
- 2000-2003 Excursion
- 1995-2002 Explorer
- 1993-1997, 1999-2003 F-Series Over 8500 GVW
- 1994 F53 Motorhome
- 1997, 2002 Mountaineer
- 1995-1997, 2001-2003 Ranger
- 1995-1998 Windstar



Flow Chart #2 shows the repair procedure for 1999 through 2003 Windstar vehicles.

Flow Chart #2



SPEED CONTROL DEACTIVATION SWITCH (SCDS) IDENTIFICATION AND LOCATION

SCDS Identification

The Speed Control Deactivation Switch (SCDS) involved in Safety Recall 09S09 and the revised SCDS are illustrated below (See Figure 1).

Note that the revised SCDS has a different electrical connector. An adapter jumper harness (which is included in the parts kit) is required when replacing the old SCDS with the revised SCDS.

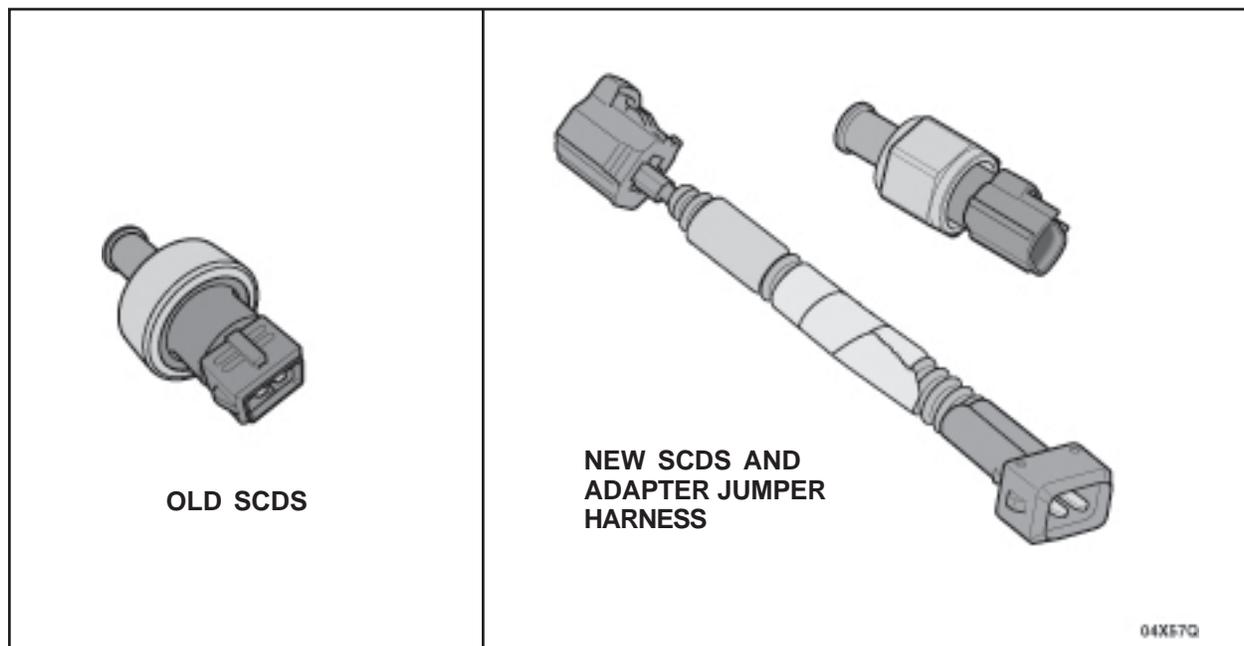


FIGURE 1

SCDS Location

In most vehicles involved in this recall, the SCDS is located on the master cylinder. In 1992-1993 E-Series vehicles, the SCDS is usually located on the junction block or brake proportioning valve on the left frame rail under the driver's seat. In 1993 F-Series vehicles, the SCDS is usually located on the junction block or brake proportioning valve on the left frame rail below the master cylinder. To verify, just follow the metal brake lines from the master cylinder until the switch is found. On F-53 Motorhome vehicles, if the SCDS is not located on the master cylinder, it may be located in a brake line junction block approximately 457 mm (18 in) below the master cylinder. It may be necessary to reposition wiring harnesses and/or remove add-on equipment in order to locate the switch.



SCDS INSPECTION PROCEDURE

NOTE: For E-Series vehicles, there is a possibility that the vehicle was manufactured without a SCDS. If unable to locate a SCDS after checking on all the brake lines, no further action is required, release the vehicle.

NOTE: On 1992-1993 E-Series and 1993 F-Series vehicles, it may be necessary to lift the vehicle to gain access to the SCDS. On Windstar vehicles, the air cleaner housing must be separated in the middle to gain access to the SCDS.

1. Disconnect the harness connector from the SCDS (See Figure 2).

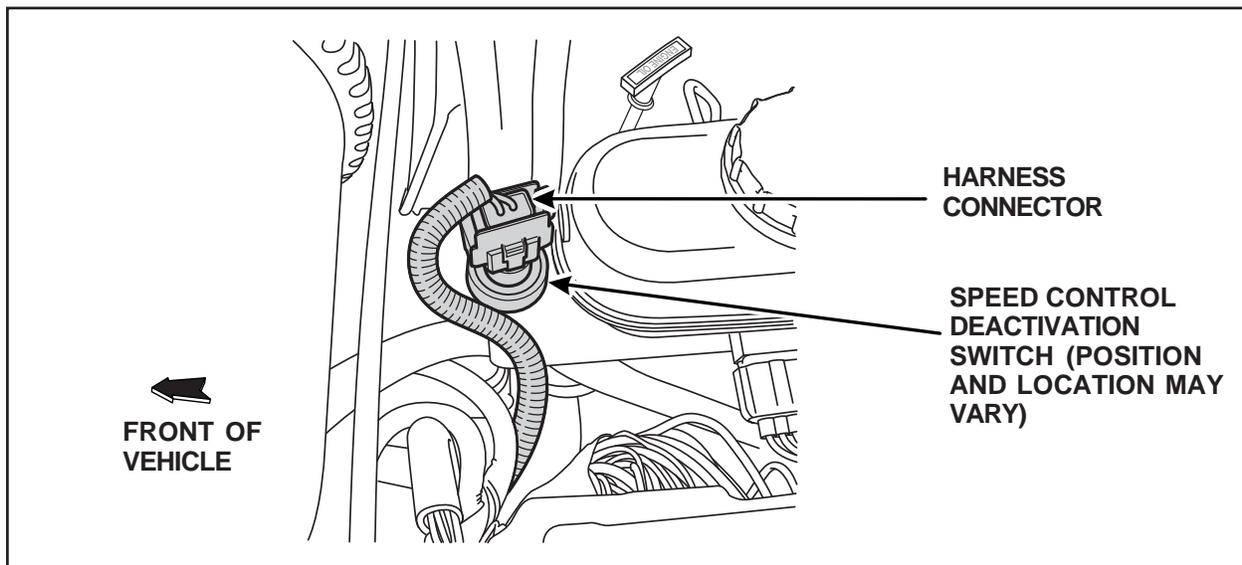


FIGURE 2

2. Inspect the harness connector for the presence of brake fluid.
 - If there is **no** evidence of brake fluid on the connector, install Universal Fused Jumper Harness (UFJH). See page 6.
 - If there is **is** evidence of brake fluid on the connector, replace SCDS. See page 7.



UNIVERSAL FUSED JUMPER HARNESS (UFJH) INSTALLATION

1. Connect the Universal Fused Jumper Harness (UFJH) to the SCDS and the vehicle harness.
2. Secure the UFJH to the existing harness with tie straps, making sure the fuse holders are positioned vertically with the fuse holder cap facing upward. Wrap the tie straps underneath, then over the top of the existing harness and verify proper fuse holder orientation (See Figure 3).
3. No further action is required, release the vehicle.

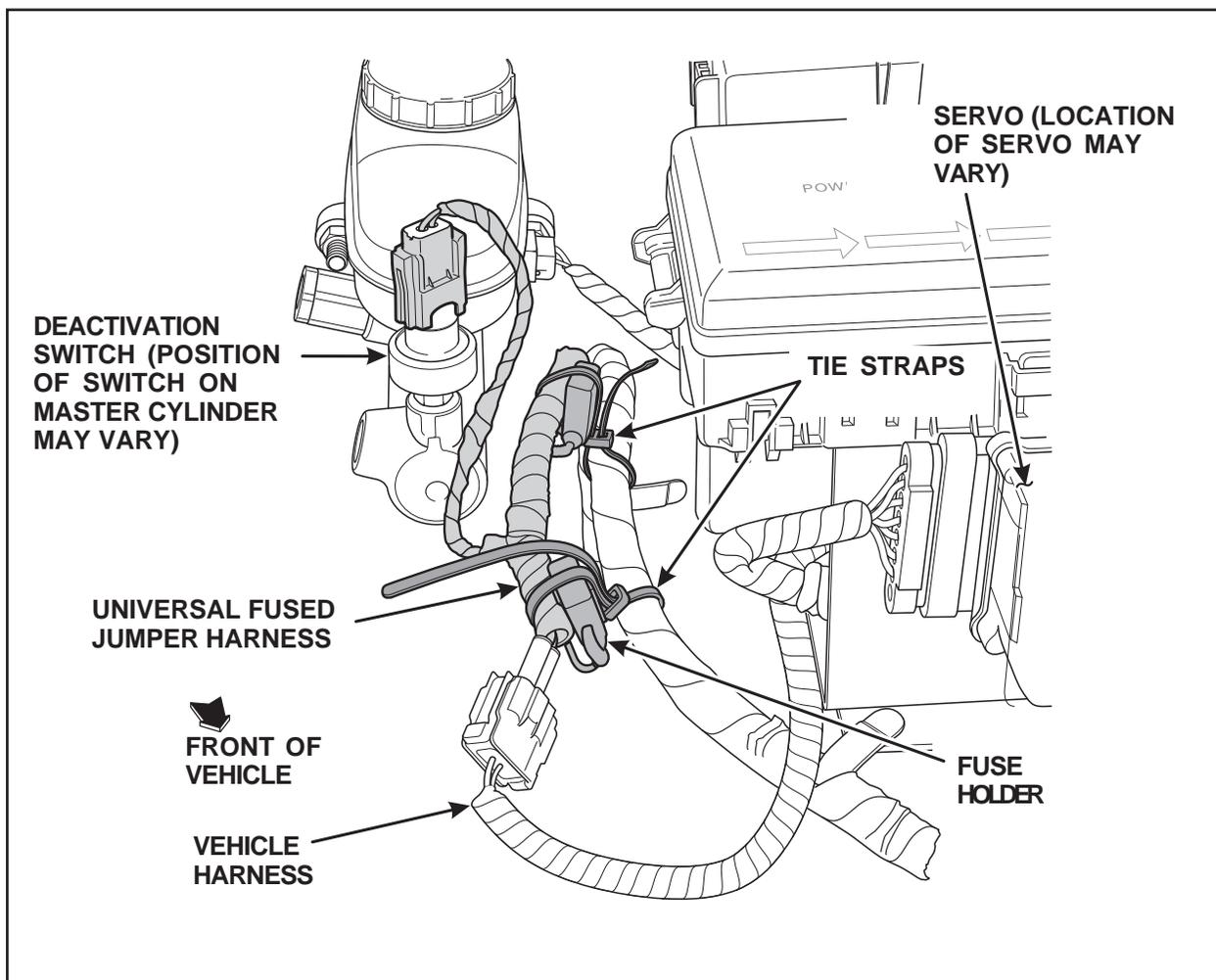


FIGURE 3



SPEED CONTROL DEACTIVATION SWITCH (SCDS) REPLACEMENT

NOTE: The brake pedal must not be depressed during the removal and replacement of the SCDS.

1. Check the brake fluid level at the master cylinder and, if necessary, fill to maximum fluid level.

NOTICE: DO NOT apply fluid to the electrical connector or damage to the connector may occur.

2. Add a few drops of Motorcraft High Performance DOT 3 Motor Vehicle Brake Fluid, PM-1-C (US), CPM-1-C (Canada), to the fluid port at the threaded end of the **new** SCDS (See Figure 4).

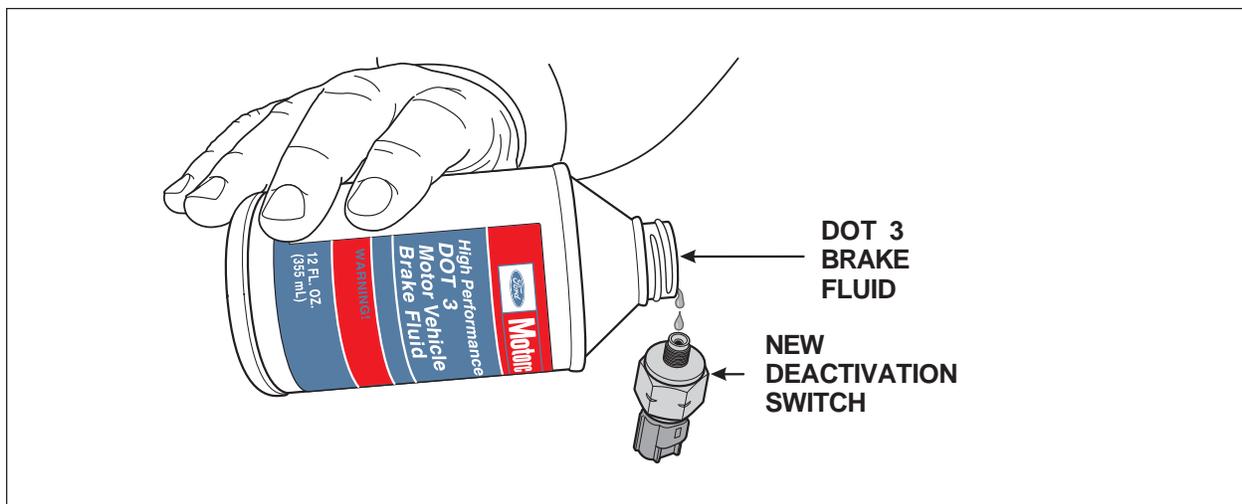


FIGURE 4

NOTICE: Do not allow any foreign material to enter the master cylinder port once the SCDS is removed.

3. Remove the old SCDS.

NOTE: Call the Special Service Support Center for assistance if brake fluid does not flow from the SCDS fitting when the SCDS is removed.

NOTE: If the **new** SCDS is not installed immediately after the original switch is removed, the master cylinder brake fluid could drop below the minimum level and air could enter the brake system. If this should occur, air must be bled from the brake system at all 4 wheels. **In this situation, the labor to bleed the brake system will not be covered under this program.**

4. With the brake fluid reservoir cap removed, observe for brake fluid dripping/draining from the SCDS fitting. As soon as brake fluid begins to bleed from the fitting, install the **new** SCDS and tighten to 18 Nm (13 lb-ft).



5. Check the brake fluid level at the master cylinder, fill to maximum fluid level and install the brake fluid reservoir cap.
6. Before installing the adapter jumper harness, fill the vehicle harness end of the jumper (male pin connector end) with **Motorcraft Electrical Grease II (XG-15-A)** (See Figure 5).

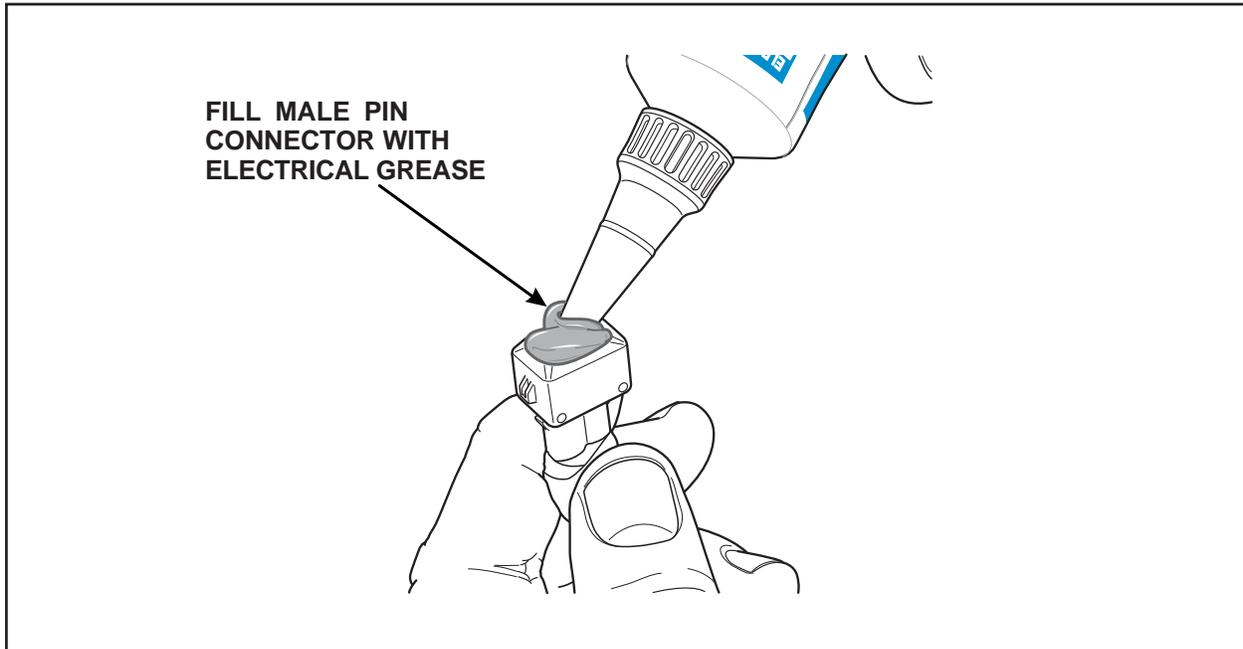


FIGURE 5

7. Install the adapter jumper harness by connecting it to both the SCDS and the vehicle harness. Using the provided tie strap, secure the adapter jumper harness to a nearby component such as the speed control cable or another wire harness.
 - If the vehicle has a speed control servo, proceed with speed control servo inspection. See page 9.
 - If the vehicle is a 1999-2003 Windstar that does not have speed control, proceed with ABS inspection. See page 11.
 - If none of the above apply, no further action is required, release the vehicle.



SPEED CONTROL SERVO INSPECTION

1. Disconnect the speed control servo and inspect the vehicle harness connector for heat damage (See Figure 6).
 - If no heat damage is found at the speed control servo connector (even if there is presence of brake fluid in the connector), proceed to step 2 for further instructions.
 - If heat damage is found, proceed as follows:
 - 1999-2003 Windstar, complete ABS inspection on page 11 before calling the Special Service Support Center for further instructions.
 - All other vehicles, call the Special Service Support Center for further instructions.

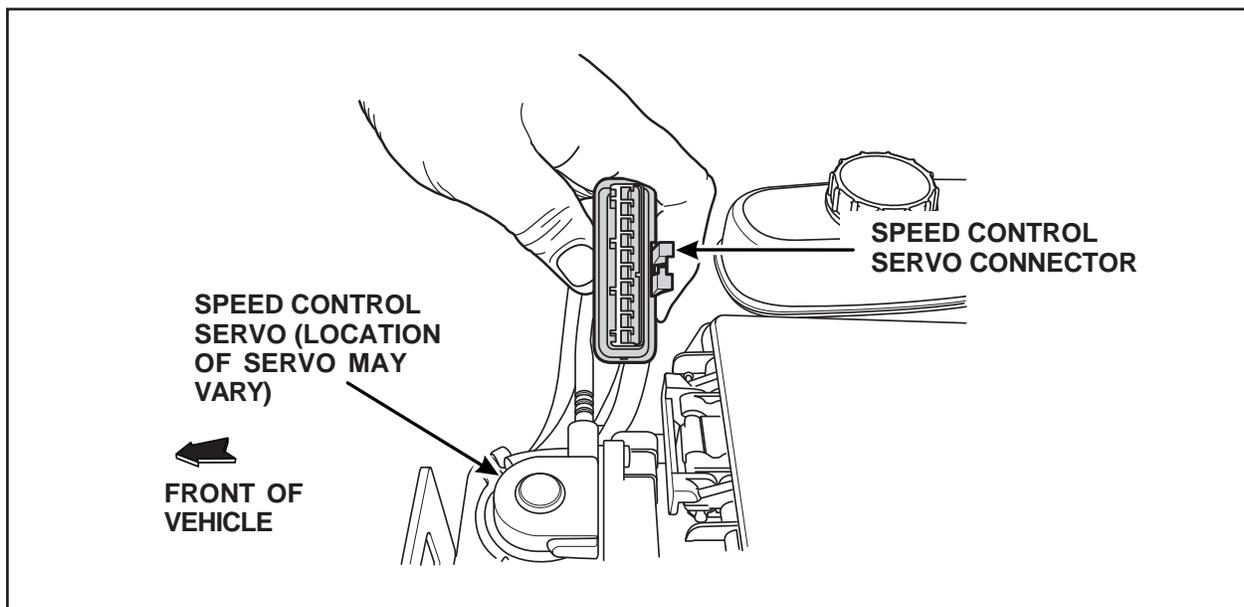


FIGURE 6



2. With the speed control servo disconnected, use shop air to blow out any trace of brake fluid from the speed control servo harness electrical connector and the servo module. **Do not use any type of solvent to clean the connectors.**
3. Apply a 5 mm (3/16 in) high bead of **Motorcraft Electrical Grease II (XG-15-A)** across the entire width and length of the servo vehicle harness connector (See Figure 7).

NOTICE: Be sure to apply an adequate amount of grease to the vehicle harness connector only. **DO NOT** apply the grease directly to the connector of the servo module.

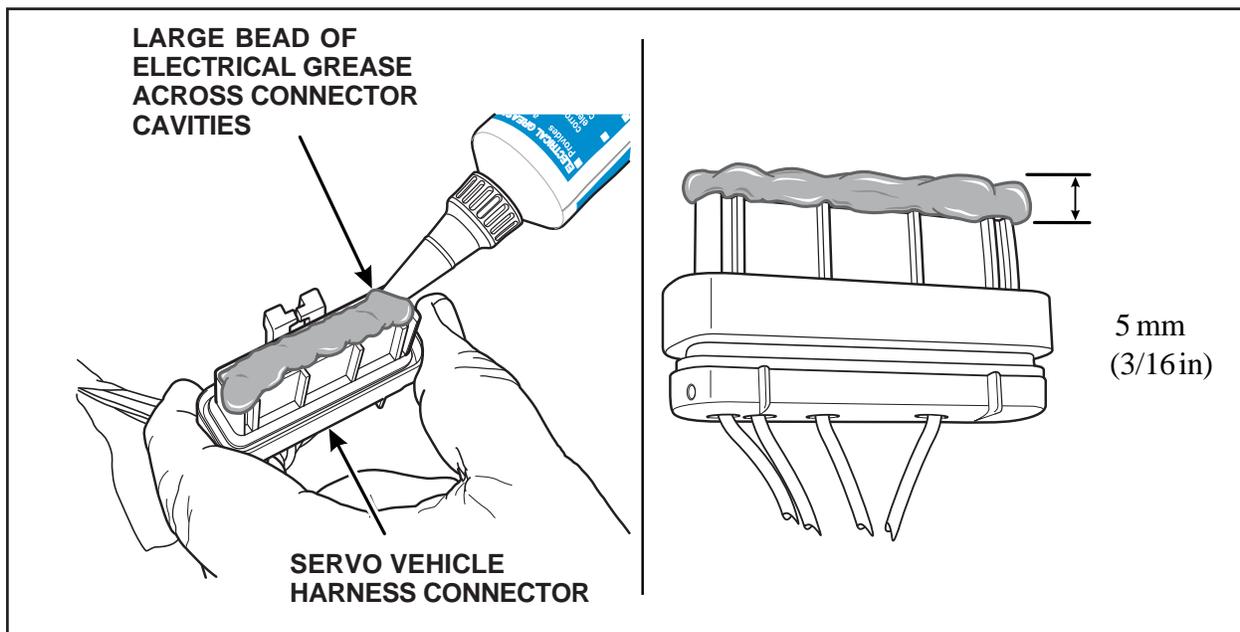


FIGURE 7

4. Reconnect the harness to the servo module.
5. If the vehicle is a 1999-2003 Windstar, proceed to ABS inspection on page 11. Otherwise no further action is required, release the vehicle.



ANTI-LOCK BRAKE SYSTEM (ABS) INSPECTION

NOTE: This inspection applies to 1999 through 2003 Windstar vehicles only.

1. Lift vehicle and remove ABS cover.
2. Disconnect ABS module. Inspect the ABS harness and module connectors for the presence of brake fluid.
3. If brake fluid is present, use shop air to blow out any trace of brake fluid from the harness connector and module.
4. Inspect the ABS harness and module connectors for corrosion and/or heat damage (See Figure 8).

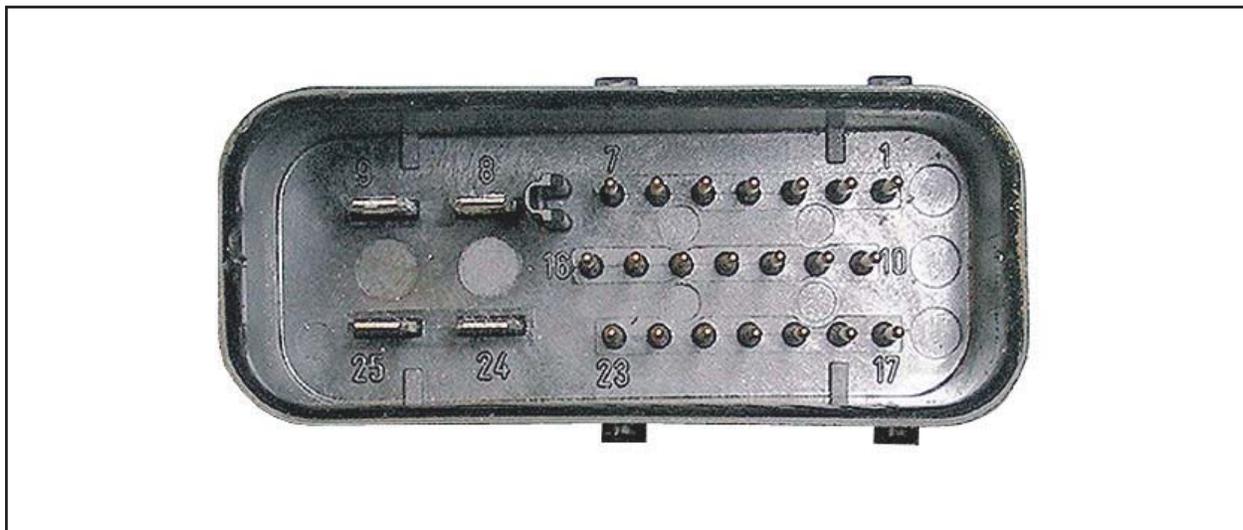


FIGURE 8

5. If evidence of corrosion and/or heat damage is found in either the ABS harness or module connector, call the Special Service Support Center for further instructions.
6. If there is no evidence of corrosion and/or heat damage, reconnect the ABS harness to the ABS module.
7. **Is the speed control servo heat damaged?**
 - If the speed control servo **is** heat damaged, call the Special Service Support Center for further instructions.
 - If the speed control servo **is not** heat damaged, no further action is required, release the vehicle.

