

G-03501
February 2003

SUBJECT: NON-COMPLIANCE RECALL (U.S., EXPORT)
Installing the Hydraulic Brake Monitor Module on
3200, 4200, 4300, and 4400 Models Built with Brake
Code 4GAS from 7/16/02 through 1/14/03

NON-COMPLIANCE DESCRIPTION

These vehicles are noncompliant with Federal Motor Vehicle Safety Standard (FMVSS) 105 section 5.3.1 if they were built without the hydraulic brake monitor module. Without this brake monitor module, the brake warning light will not come on to warn the operator if there is a loss of hydraulic pressure in the brake system, a loss of power steering flow or if the emergency brake booster motor is not functioning.

VEHICLES INVOLVED

These vehicles were built with brake code 04GAS from 7/16/02 through 1/14/03 and include the following models: 3200, 4200, 4300, and 4400.

OWNER NOTIFICATION

International Truck and Engine Corporation will notify owners of these vehicles about this campaign. A copy of the owner letter is attached. During the recall process, a listing of owner names and addresses will be furnished to the involved dealers to enable dealers to follow up with owners and have the vehicles corrected. You must limit the use of this listing to this campaign, because the list may contain information obtained from state motor vehicle registration records and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

SERVICE PROCEDURE

INTRODUCTION: All vehicles in this recall must have the hydraulic brake monitor module installed if it was not installed at the assembly plant. Some vehicles built at the end of the build date range may have had the module installed at the assembly plant.

BEFORE PERFORMING THE SERVICE, PLEASE READ AND UNDERSTAND THE FOLLOWING INSTRUCTIONS COMPLETELY.

WARNING: To prevent serious eye injury, always wear safe eye protection when you perform vehicle maintenance or service.

1. Shut off the engine, apply the parking brake and put the transmission in neutral.
2. Turn the ignition to the on position and watch the dash indicator lights go through an illumination test sequence. This will take about 10 seconds. If the hydraulic brake warning light does not come on and stay illuminated after this initial test cycle, then continue to step 3 and perform the recall. If the hydraulic brake warning light illuminates during the light test cycle and stays on after the test cycle then stop at this step because the module is already installed (some of the vehicles that were built at the end of the build date range may have had the module installed at the assembly plant).
3. **WARNING:** Block the wheels to prevent the vehicle from moving. If a vehicle moves unexpectedly or suddenly, the result could be serious personal injury or death.
4. Open the hood assembly.
5. Disconnect the battery ground cable and the ECM ground.
6. Remove the fuse panel cover located inside the cab on the right side of the dash in front of the passenger seat.
7. Remove the steering column cover for access to the instrument panel.
8. Remove the instrument cover then the instrument panel (4 screws).
9. Remove the Electronic System Control Module (ESC) cover (left kick panel).
10. Remove the dash trim panel from the center section. Remove the storage bin or the switch panel or the blank from the upper right double din location of the dash center section to allow for wire access and routing.

11. Disconnect the pass through connector at the cowl. Connect the A90N gray wire to cavity 20 on the pass through connector and connect the A90M gray wire to cavity 19 on the pass through connector (Reference Figure 2).
12. Disconnect the 1600 connector from the ESC module and connect the A90P gray wire to cavity 9 in the 1600 connector (reference Figure 1 below).

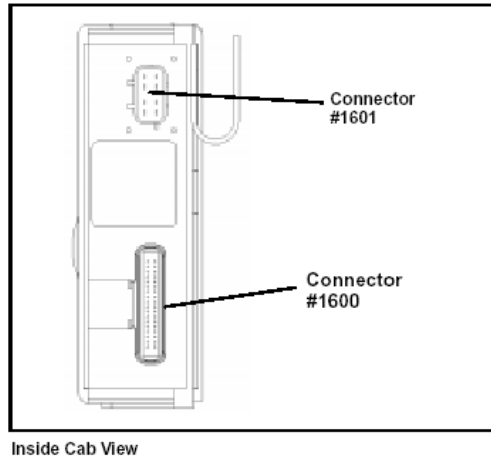


Figure 1: ESC Module

13. Remove one of the nuts from a ground stud in the cab next to the pass through connector, install the ring terminal of the 90-GA white wire over the ground stud and tighten the nut (Reference Figure 2).
14. Plug the connector of the A13FF pink wire into the F11 fuse position, install the new 5 Amp fuse into the F11 fuse position, plug the A13FG pink wire connector into cavity E of the brake monitor module plug attached to the gray & white wire harness installed above, push this plug into the brake monitor module and lay the pink harness over the main harness (Reference Figure 2).
15. Connect the pass through connector at the cowl.
16. Connect the ESC module connector.
17. Connect the instrument panel wiring.
18. Connect the battery ground cable and the ECM ground.
19. Test the brake warning light operation. The brake warning light should come on and stay on after the key is left in the on position for more than 10 seconds.
20. Secure the module and both overlay harnesses to the main harness.
21. Install the ESC module cover (kick panel).

22. Secure the instrument panel and cover.
23. Install the steering column cover.
24. Install the dash panel center section components and install the center section trim panel.
25. Install the fuse panel cover.
26. Close the hood assembly and remove the wheel chocks.

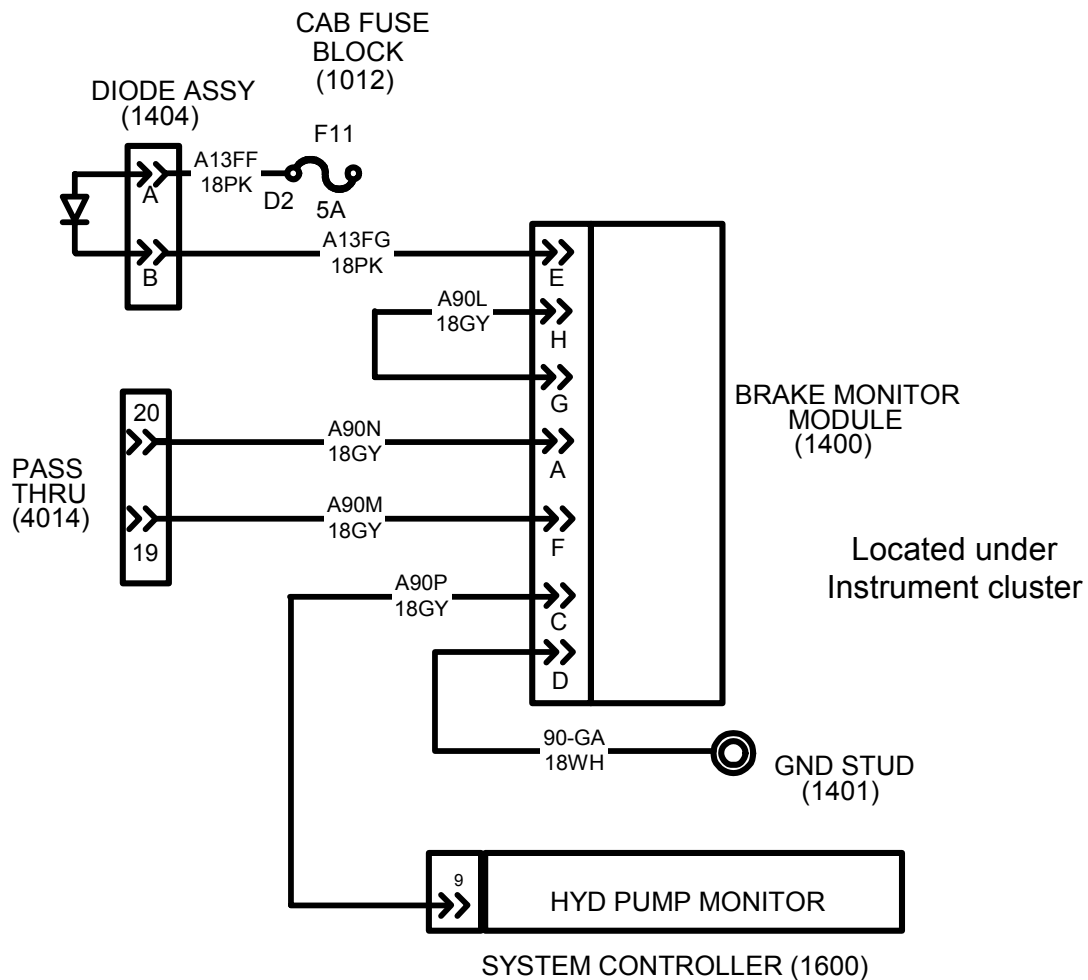


Figure 2: Installation Schematic For The Hydraulic Brake Monitor Module

PART INFORMATION

One of each of the following parts will be needed for each vehicle in this recall.

DESCRIPTION	PART NUMBER	QUANTITY Per VIN
Hydraulic Brake Monitor Module: black plastic box	1658510C3	1
Harness: gray and white wires with plug for brake monitor module and terminated wire ends	3567209C91	1
Harness: pink wires with a diode and terminated wire ends	3581303C91	1
Fuse, 5 Amp mini fuse	MIN5	1

RETURNING PARTS: **There are no parts to be returned.**

LABOR INFORMATION

All vehicles in this recall are expected to need the hydraulic brake monitor module installed, but there could be a few built at the end of the build date range that had the module installed at the assembly plant. If a dealer finds a vehicle that had the module installed at the assembly plant, the claim should be for inspection only (for 0.3 hrs).

<u>Operation No.</u>	<u>Description</u>	<u>Time</u>
A40-03501-1	Install the Hydraulic Brake Monitor Module	1.0 Hrs.

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with this campaign **MUST BE** marked with a CTS-1075 campaign Identification Label.

Complete the label and attach on a clean surface next to the vehicle identification number (VIN) plate.

DO NOT REMOVE
INTERNATIONAL
Campaign No.
VIN Eng.#
COMPLETED
Service Location Code #
DO NOT REMOVE

ADMINISTRATIVE/DEALER RESPONSIBILITIES (U.S. & POSSESSIONS)

Proceed immediately to make necessary correction to units in inventory. **All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery.** If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or the customer must be notified **IMMEDIATELY** from your dealer location.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately **repaired** within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within **60 days** after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to **replacement** with an identical or reasonable equivalent vehicle at no charge, or to a **refund** of the purchase price less a reasonable allowance for depreciation.

However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

To avoid having to replace a vehicle or refund the purchase price less a reasonable allowance for depreciation, every effort must be made to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible.

WARRANTY CLAIMS

Special Note: Most claims should use cause number 2 below. A few may use cause number 1 if they had the monitor module installed at the assembly plant.

Refer to Dealer Warranty Manual for procedures to conduct Recall Campaigns.

It is important that the Recall Coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Manual, Section 7-1. Special attention should be given to Items 39 through 44:

GROUP	NOUN	C	WARR.	TP	PAD

GROUP: Enter The Recall Number here _____

NOUN: Leave Blank. _____

C: (CAUSE) Enter number 1 or 2.

- 1. Inspected (No Repair Required).
- 2. Inspected and repaired.

WARRANTY: (Warranty Code) Enter 40. _____

TYPE PART: Enter P for type part causing failure. _____

PAD: Enter 100. _____

ADMINISTRATIVE/DISTRIBUTOR RESPONSIBILITY (EXPORT)

Proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or the customer must be notified from your distributor location.

Export locations are to submit warranty claims in the usual manner making reference to this recall number.

We ask for your full cooperation and follow-up to this important subject matter. If you have any questions or need further assistance, please contact your Regional Service Manager.

INTERNATIONAL TRUCK AND ENGINE CORPORATION