

VEHICLE RECALL

G-02508 October 2002

SUBJECT: VEHICLE RECALL (U.S., EXPORT)
Inspecting and Replacing the Fuel Injector Control
Module on 3200 and 4200 Models Built From 09/21/01
through 06/26/02 With VT 365 Engines

DEFECT DESCRIPTION

The fuel injector control module also known as the injector driver module (IDM) on these VT 365 engines could be missing a vibration damping shell, which could allow electronic components to vibrate and break loose from the component board inside the module.

RISK TO MOTOR VEHICLE SAFETY

This defect could result in a rough running engine, loss of engine power, a no start condition, or immediate engine shut down without warning. If immediate engine shut down occurs, the result could be a vehicular accident, possibly resulting in property damage, personal injury or death.

DESCRIPTION OF VEHICLES INVOLVED

3200 and 4200 models built from 09/21/01 through 06/26/02 with the VT 365 engine.

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

DESCRIPTION: All vehicles in this recall must have the injector driver module (IDM) replaced. The IDM is mounted on top of the engine and is bolted to the engine control module (ECM). The IDM and ECM will be removed from the engine as an assembly so the IDM can be replaced. The ECM will not be replaced.

REMOVING THE IDM / ECM ASSEMBLY

Before performing the service, please read and understand the following instructions completely.

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

- 1. <u>WARNING:</u> 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.
- 2. Shut off the engine, apply the parking brake and put the transmission in neutral.
- 3. <u>WARNING:</u> To avoid serious personal injury or possible death, disconnect the main negative battery terminal before removing or installing any electrical components.
- 4. Remove the four mounting bolts (shown in Figure 1) that secure the IDM / ECM assembly to the support bracket and remove the IDM / ECM assembly without removing the support bracket.

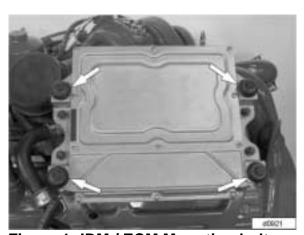


Figure 1: IDM / ECM Mounting bolts

5. Lift the IDM / ECM assembly and remove the four ECM harness connectors (item 3) from the ports shown in Figure 2, items 1 and 2. Pull the connectors straight out being careful not to bend the pins.

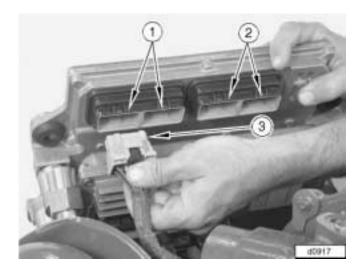


Figure 2: ECM Harness Connectors

Item: 1. ECM engine harness connector ports

2. ECM chassis harness connector ports

3. Harness connector, one of four

6. Remove all three IDM harness connectors from the ports shown in Figure 3, item 1.

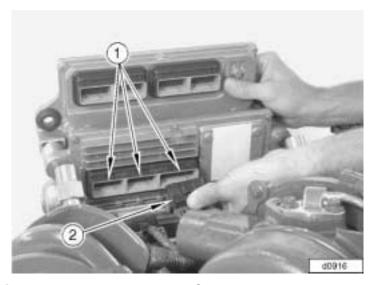


Figure 3: IDM Harness Connectors

Item: 1. IDM harness connector ports

2. IDM harness connector plug, one of three

7. Separate the ECM (item 1) from the IDM (item 2) as shown in Figure 4, by removing the four bolts and spacers. All nuts, washers, bolts, spacers, and pilots must be saved for the reassembly steps. DO NOT remove the grommets and bushings from the ECM. Keep both the IDM and the ECM handy for step 9.

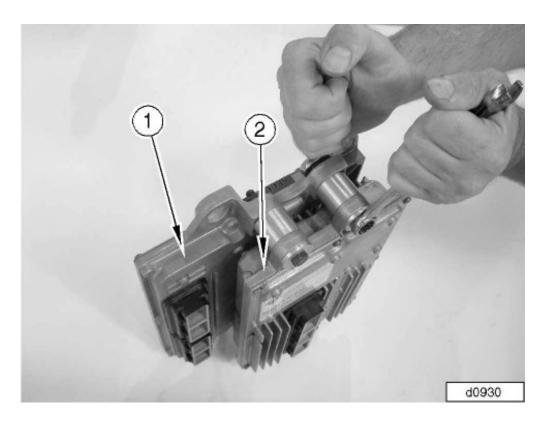


Figure 4: Separating the ECM and the IDM

Item: 1. ECM

2. IDM

- 8. **DO NOT SKIP THIS STEP.** International requires the tracking numbers for the IDM / ECM assembly and for the old and new IDM's. The time to complete the INFORMATION SHEET is part of the 1.5-hour labor operation. Using the enclosed "INFORMATION SHEET", fill in the required serial numbers for items 6 through 10. The "INFORMATION SHEET" is the next page of this letter and is also supplied with each new recall kit.
 - Item 6 requires the IDM serial number from the old IDM label.
 - **Item 7** requires the ECM serial number from the bottom of the ECM, as shown in Figure 5.
 - Item 8 requires the IDM/ECM assembly serial number from the old IDM / ECM assembly label, as shown in Figure 5. Determine the part number from the old IDM / ECM assembly label and enter the serial number from the old IDM / ECM label in the spaces provided behind the correct part number on the INFORMATION SHEET.
 - Item 9 requires the IDM serial number from the new label on the new IDM.
 - Item 10 requires the IDM / ECM assembly serial number from the new IDM / ECM assembly label that came in the recall kit.



Figure 5: Shows the Bottom of the ECM, the IDM / ECM Assembly and ECM Labels are Circled

INFORMATION SHEET MUST BE COMPLETED AND RETURNED, TO ADDRESS PROVIDED IN LATEST CAMPAIGN LETTER, WITH IDM.

PARTS INCLUDED IN KIT 8900086R91	
1. New Combo Label for the IDM / ECM Asse	embly
2. New clear Mylar cover	
3 Information Sheet	
4. IDM PV2.3 Module (1837127C4)	
To Transfer Warranty to the new IDM, please fill ou	t the tracking information below:
DEALER INFORMATION	
1. Date:	
2. Dealer Name:	
3. Dealer Address:	
VEHICLE INFORMATION Fill in the Vehicle information as it is found on the V	ehicle and Engine labels.
4. Vehicle VIN:	
5. Engine Serial Number:	
EXISTING MODULE INFORMATION Fill in Serial Number information as it is found on th	e labels.
OLD IDM Serial Number: (From old IDM Label)	1837127C3- <u> </u> <u> </u>
7. ECM Serial Number: (From ECM Label)	1839053C2- <u> </u> <u> </u>
8. OLD IDM/ECM Assembly Serial Number:	1839841C92- <u> </u> <u> </u> <u> </u>
(From IDM / ECM Assembly Label)	1839993C92- _ _ _ _
NEW MODULE INFORMATION	
9. NEW IDM Serial Number: (From new IDM Label)	1837127C4- <u> </u> <u> </u>
10. NEW IDM / ECM Assembly Serial Number (From new IDM / ECM Assembly Label)	1839993C93- _ _ _ _

INSTALLING THE IDM / ECM ASSEMBLY

1. Check both modules (IDM and ECM) for damage to the rubber seals (1) or to the pins in any of the connector cavities (2) as shown in Figure 6. If there is seal or pin damage, replace the control module. Do not attempt to straighten bent pins.

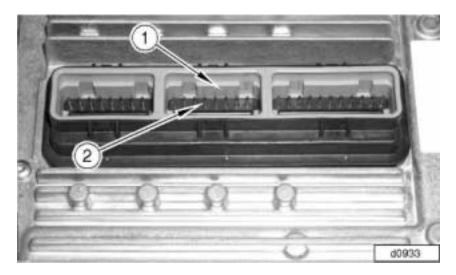


Figure 6: Inspecting the Rubber Seals and the Connecting Pins

2. **NOTE:** When assembling the IDM and the ECM, orient items 1 through 4 as shown in Figure 7. Continue to step 3 for assembly.

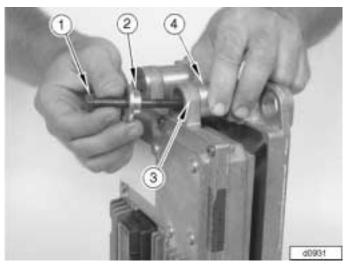


Figure 7: Orientation of the IDM / ECM Spacers and Bolts

Items: 1. M8 X 70 bolt

- 2. Pilot
- 3. IDM
- 4. Spacer

- 3. Assemble the ECM and the IDM: Reference Figures 7 and 8.
 - a. Orient the ECM and IDM as shown in Figure 8.
 - b. Install and finger tighten all four bolts and hardware as shown in Figures 7 and 8, with all four nuts on top.
 - c. Using a wrench, gently snug all four nuts.
 - d. Holding the bolt heads with a wrench, torque the nuts to 19 22 Lbf-Ft (25-29 NM).

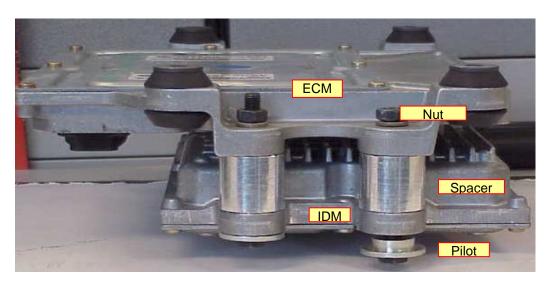


Figure 8: Assembly of the ECM to the IDM

- 4. Before removing the old IDM / ECM Assembly Serial number label, make sure the serial numbers were recorded, on the "INFORMATION SHEET", as instructed in step 9 of the Removal Procedure. Using a box cutter or a scraper, remove the old IDM / ECM assembly label.
- 5. Make sure the area where the old IDM / ECM Assembly Label was attached is clean and dry. The new label will not properly adhere if the area is dirty or greasy. Install the new IDM / ECM Assembly Label (from recall kit, as shown in Figure 9), on the ECM and in the same location and orientation as the old label. Apply the Mylar (transparent label) over the New IDM / ECM assembly Label.



Figure 9: Sample of a New Assembly Label from a Recall Kit

- Fill out the remainder of the "INFORMATION SHEET". Put the completed
 "INFORMATION SHEET" and the old IDM in the recall kit box and return the box as
 instructed in the "PARTS INFORMATION" section of this letter.
- 7. Carefully install the three IDM harness connectors (keyed for port matching), making sure not to damage the pins.
- 8. Install the four ECM harness connectors, making sure not to damage the pins.
- Install the IDM / ECM assembly onto the support bracket. Tighten the mounting bolts to 18 Lbf-Ft (24 NM).
- 10. Reconnect the main negative battery terminal.
- 11. Program the modules using the NETS system.

PART INFORMATION

RETURNING PARTS: ALL IDM'S MUST BE RETURNED WITH THE COMPLETED INFORMATION SHEET.

Return the parts per the instructions on the R-5185 PARTS DISPOSITION AUTHORIZATION form and attach the return authorization form to the part.

LABOR INFORMATION

There is no inspection option. All vehicles must have the IDM replaced and all claims must be submitted with the labor operation below for 1.5 Hours.

Operation No.	Description	Time
A40-02508-1	Replace injector driver module (IDM)	1.5 Hrs.

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with this campaign <u>MUST BE</u> 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.



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: ALL CLAIMS MUST BE CAUSE NUMBER 2 BELOW, which is for "inspected and repaired". There is no inspection only option for this Safety Recall. All vehicles must have the IDM replaced, no exceptions.

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 ——						
NOUN: Leave Blank.—————						
C: (CAUSE) Enter number 2.]					
Inspected and repaired. -			_			
WARRANTY: (Warranty Code) Enter 40						
TYPE PART: Enter P for type part causing fail	lure.					
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