



# VEHICLE RECALL

**G-04509**  
**September 2004**

**SUBJECT: SAFETY RECALL (U.S., EXPORT)**  
**POWER STEERING PUMP MOUNTING STUDS on**  
**certain 1652SC, 3800, 4700SFC, RE and CE bus**  
**models built 2/04/2003 thru 2/27/2004 with T444E**  
**engines.**

## **DEFECT DESCRIPTION**

The studs used to secure the power steering pump to the engine block can fail, possibly resulting in engine oil leakage, complete loss of power steering without warning, and an increase in stopping distances. The power steering pump is designed to provide power assist to both the steering system and the hydraulic braking system. A disengaged pump may reduce the fluid flow to less than the minimum required flow rate to provide full power assist to the brake system with low engine speed. **This defect may cause an increase in both stopping distance and steering wheel efforts during steering and braking maneuvers at slow engine speeds, therefore increasing the possibility of an accident, which could result in property damage, personal injury, or death.**

## **MODELS INVOLVED**

This Safety Recall involves certain 1652SC, 3800, 4700SFC, RE and CE bus models built 2/04/2003 thru 2/27/2004 with T444E engines.

## **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.

## **PARTS INFORMATION**

The part that may be required for this recall is:

<b>Part Number</b>	<b>Part Description</b>	<b>Quantity</b>
<b>1822295C1</b>	STUD, SPECIAL	2 per vehicle

***Destroy and discard all removed parts locally.***

## **SERVICE PROCEDURE**



### **WARNING:**

***TO PREVENT SERIOUS EYE INJURY, ALWAYS WEAR SAFE EYE PROTECTION WHEN YOU PERFORM VEHICLE MAINTENANCE OR SERVICE.***



### **WARNING:**

***TO PREVENT UNEXPECTED MOVEMENT OF THE VEHICLE AND POSSIBLE SERIOUS PERSONAL INJURY OR DEATH, BLOCK THE WHEELS TO PREVENT THE VEHICLE FROM MOVING IN BOTH DIRECTIONS.***

## ***MOUNTING STUD INSPECTION PROCEDURE***

1. Open and secure hood.
2. Using a dental mirror, inspect the end of the studs for any manufacturer's marks.



**Figure 1**

3. If the mounting studs contain either of the following marks on the ends of the stud, **THEY MUST BE REPLACED**. Skip to step 5 for replacement procedure.



**Figure 2a**

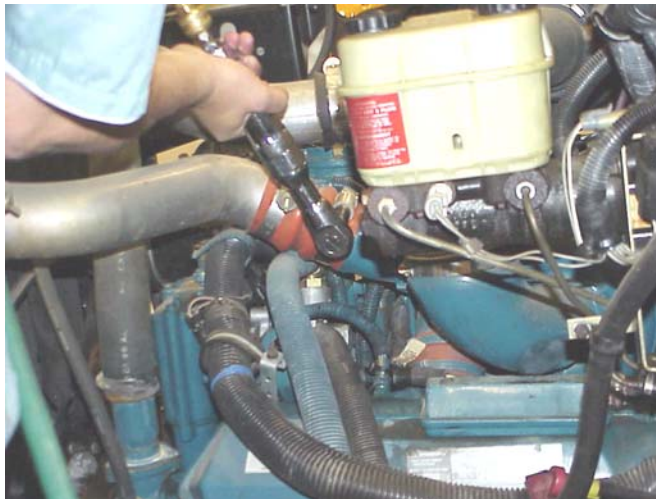


**Figure 2b**

4. If the studs **do not** have marks on the ends, they **do not** require replacement.

#### ***STUD REPLACEMENT PROCEDURE***

5. Remove charge air cooler outlet hose and pipe.



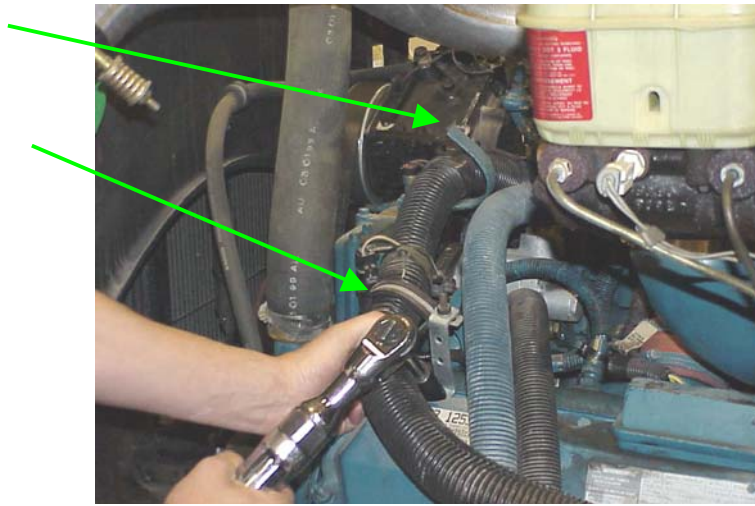
**Figure 3**

6. Cover engine air inlet to prevent debris from entering engine intake during service procedure.



**Figure 4**

7. Remove engine harness clipping necessary to reposition harness and secure out of the way.



**Figure 5**



**Figure 6**

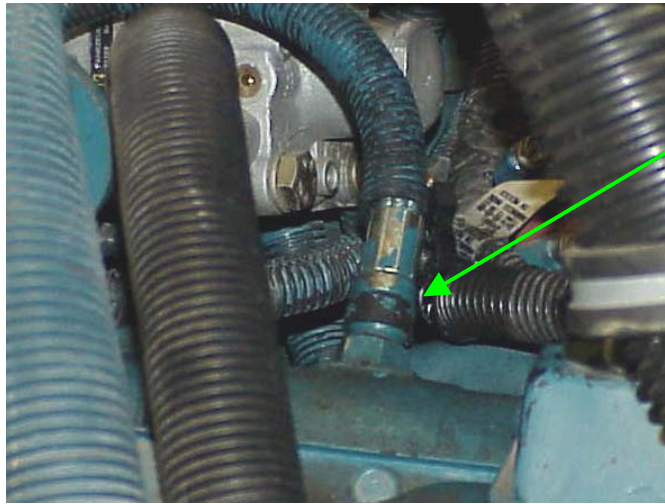
8. Remove engine lift eye.



**Figure 7**

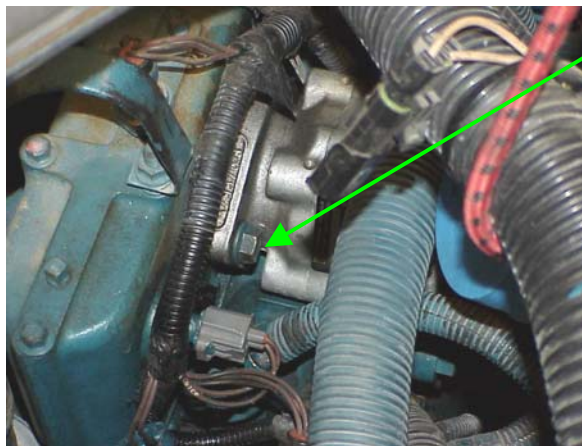


9. Disconnect high pressure oil pump line at the left cylinder head.

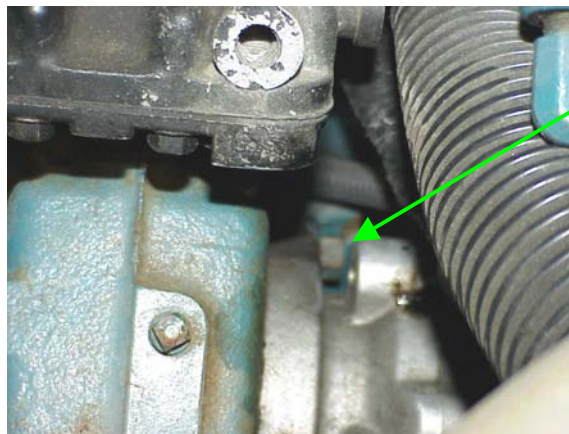


**Figure 8**

10. Remove both power steering pump mounting nuts.

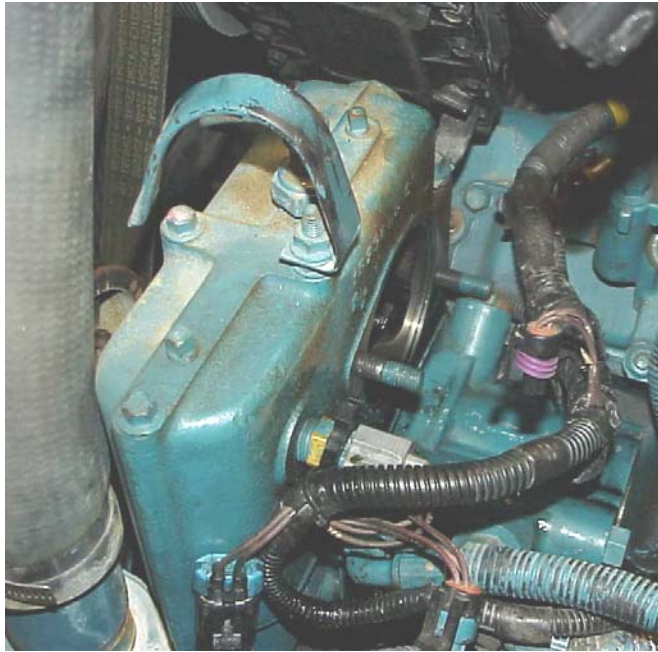


**Figure 9**



**Figure 10**

11. Remove power steering pump and gasket and secure out of the way – **DO NOT OPEN POWER STEERING SYSTEM.**



**Figure 11**

12. Remove the power steering mounting studs with stud remover.
13. Clean power steering pump, gasket, and gear tower mating surfaces with a clean dry shop cloth. Ensure no debris or dirt falls into the gear tower.
14. Apply Loctite™ 277 or equivalent thread locking compound to one (1) side only of each new mounting stud.
15. Install new studs into gear tower housing. The Loctite™ end of the stud should be in the gear tower housing.
16. Ensure studs bottom out in gear tower housing – finger tight.
17. Install power steering pump. Reuse gasket and/or o-ring. Torque nuts to **45 LbF-Ft (61 Nm)**.
18. Re-install all components in reverse order of removal:
  - a. High-pressure oil pump line
  - b. Engine lift eye
  - c. Engine harness routing and clipping
  - d. Charge air cooler piping

## **END OF SERVICE PROCEDURE**

## LABOR INFORMATION

<u>Operation No.</u>	<u>Description</u>	<u>Time</u>
A40-04509-1	<i>Inspect &amp; Replace Power Steering Pump MTG Studs</i>	1.0 Hr
A40-04509-2	<i>Inspect ONLY – Replacement NOT Required</i>	0.3 Hr

## 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.

<b>DO NOT REMOVE</b>
<b>INTERNATIONAL</b>
Campaign No.
VIN
Eng.#
<b>COMPLETED</b>
Service Location Code #
<b>DO NOT REMOVE</b>

## 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 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 an owner vehicle or refund the purchase price, every effort must be made to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible.

## **POSSIBLE CUSTOMER REIMBURSEMENT**

There may be an occasion when a customer was charged for repairs related to this recall prior to the recall being released. The customer letter contains a statement for the customer to contact the Dealer if they believe they are entitled to reimbursement costs. The Dealer should follow the Customer Reimbursement guidelines in Warranty Policy Letter 03-001G. The Warranty Procedures and Administrative Policies manual (CTS1100) is in the process of being updated to include the information in Policy Letter 03-001G.

## **WARRANTY CLAIMS**

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 number G—						
NOUN Leave blank						
C (CAUSE) Enter either 1, 2, 3. (see below)						
1. Inspected (No repair required).						
2. Inspected and repaired.						
3. Defective part from parts stock.						
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 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 the Regional Service Manager at your regional office.

## **INTERNATIONAL TRUCK AND ENGINE CORPORATION**