

SERVICE PROCEDURE

G-04510-R1
February 2006

SUBJECT: **SAFETY RECALL (U.S., EXPORT)**
BATTERY CABLES on certain HPV models built
11/20/2000 thru 5/20/2004 with Cummins,
Caterpillar or International DT/HT530 engines.

REVISION DESCRIPTION

SERVICE PROCEDURE

- Added step 5.
- Added **CATERPILLAR® ENGINE WARNING**.
- Added **FINAL INSPECTION**.

LABOR INFORMATION

- Added new labor operations A40-04510-3 and A40-04510-4.

DEFECT DESCRIPTION

The positive battery cable between the batteries and the starter may rub against an electrical ground cable between the starter and frame rail possibly causing an electrical short and/or fire. This may result in **property damage, personal injury or death**.

MODELS INVOLVED

This Safety Recall involves the following models and build date ranges. Please refer to this table to determine if a vehicle is included in the suspect population:

<i>Model</i>	<i>Build Start Date</i>	<i>Build End Date</i>
4300 4X2	2000-11-20	2001-12-20
4400 4X2	2000-11-21	2001-12-21
4400 6X4	2001-05-18	2001-11-27
7300 4X2	2001-10-02	2004-05-12
7300 4X4	2002-01-03	2004-05-19
7400 4X2	2001-08-15	2004-05-20
7400 4X4	2001-09-27	2004-05-20
7400 6X4	2001-07-23	2004-05-20
7400 6X6	2001-12-14	2004-05-20
7500 4X2	2002-01-15	2004-05-19
7500 4X4	2002-01-29	2004-05-14
7500 6X4	2001-07-19	2004-05-19

Model	Build Start Date	Build End Date
7500 6X6	2002-02-04	2004-05-05
7600 4X2	2002-06-20	2004-05-19
7600 6X4	2002-04-24	2004-05-20
7700 6X4	2003-12-16	2004-04-28
8500 4X2	2003-03-10	2004-02-16
8500 6X4	2001-10-10	2002-12-06
8600 4X2	2002-05-16	2004-05-20
8600 6X4	2002-04-23	2004-05-20

The suspect vehicle population includes the models above that have a Cummins, Caterpillar, or International DT/HT530 engine.

OWNER NOTIFICATION

International Truck and Engine Corporation has notified 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 parts that may be required for this recall are:

Part Number	Part Description	Quantity
3554554C1	GUIDE,BRK HOSE & CABLE*SWIVEL	1
306132C1	STRAP,CABLE LOCK	2
3516934C1	STRAP,CABLE LOCK 1/2" X 20"	1
AS PER LINESET TICKET	BATTERY TO STARTER CABLE, POSITIVE	AS REQ'D PER INSPECTION
AS PER LINESET TICKET	STARTER TO FRAME CABLE, GROUND	AS REQ'D PER INSPECTION
AS PER LINESET TICKET	CONDUIT	AS REQ'D PER INSPECTION

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.

BATTERY CABLE INSPECTION PROCEDURE

1. Inspect positive (red) battery cables, conduit and ground cable (black) in areas indicated below:

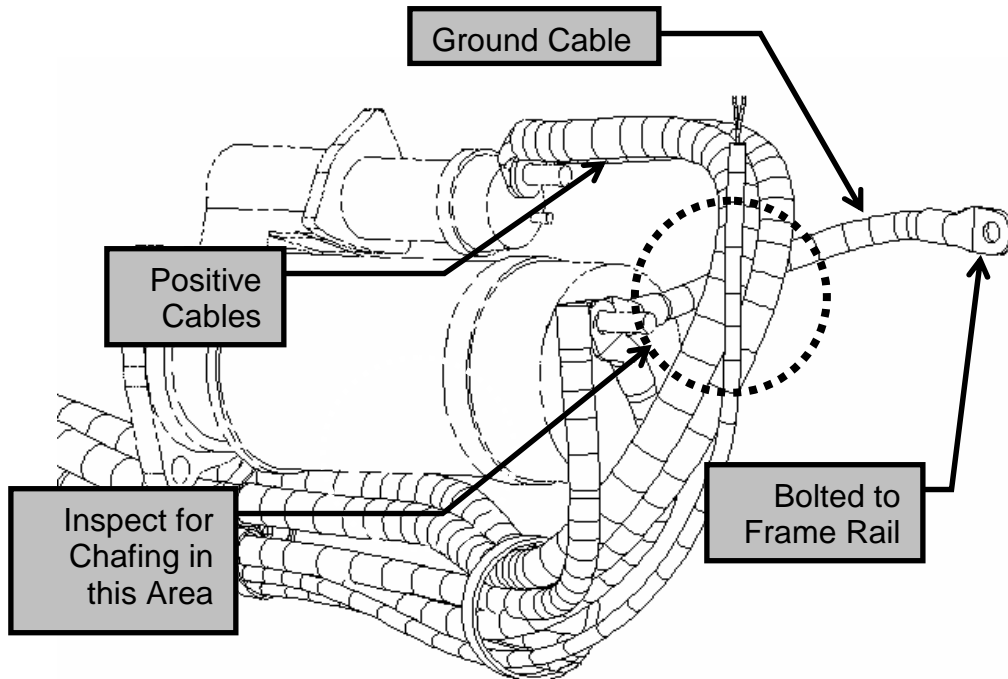


Figure 1 – Engine Removed for Clarity

2. If ANY indication of chafing or rubbing is evident, replace any affected cables and continue to step 4.
3. If there is NO indication of chafing or rubbing, continue onto step 4.

SADDLE CLAMP INSTALLATION

4. Install saddle clamp and strap-locks as indicated below:

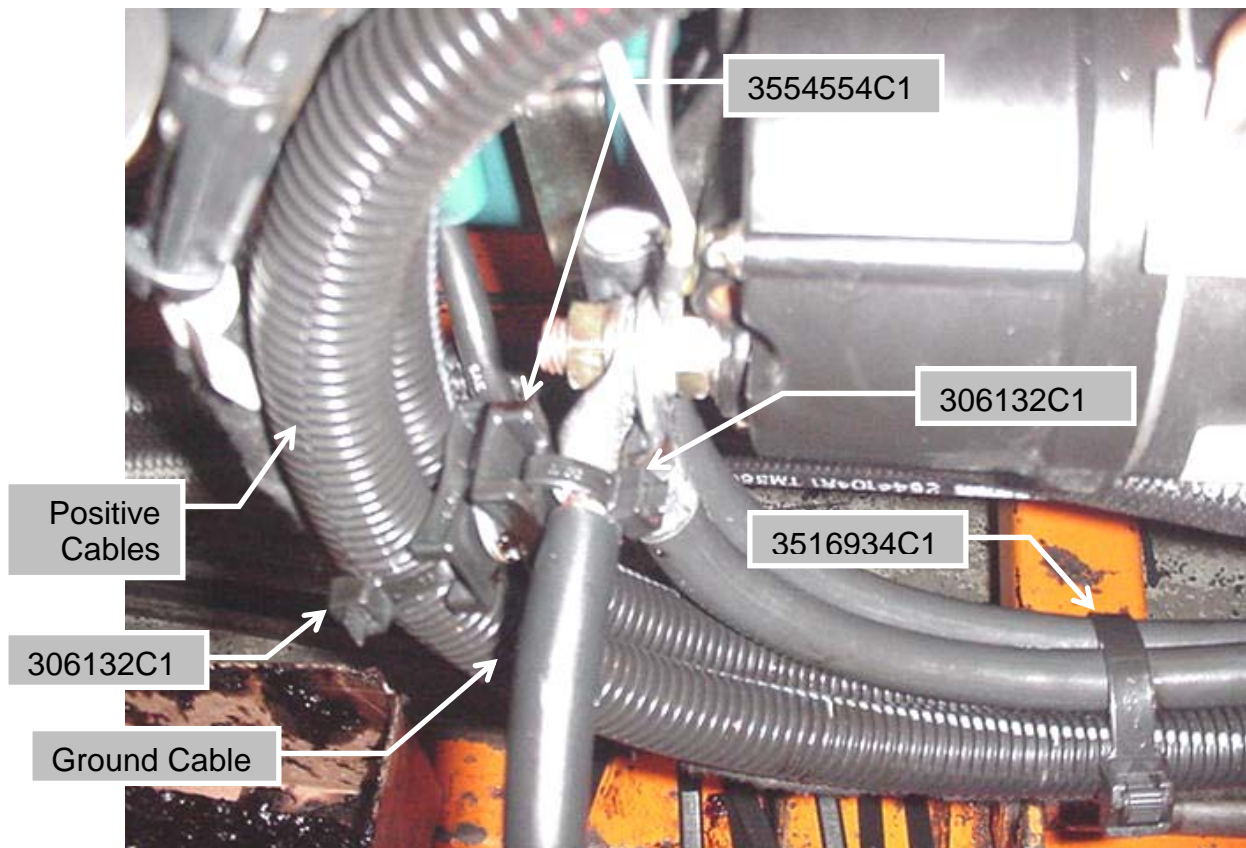


Figure 2

5. Note warning below for performing this service procedure on vehicles with Caterpillar engines. Continue on to perform the FINAL INSPECTION.

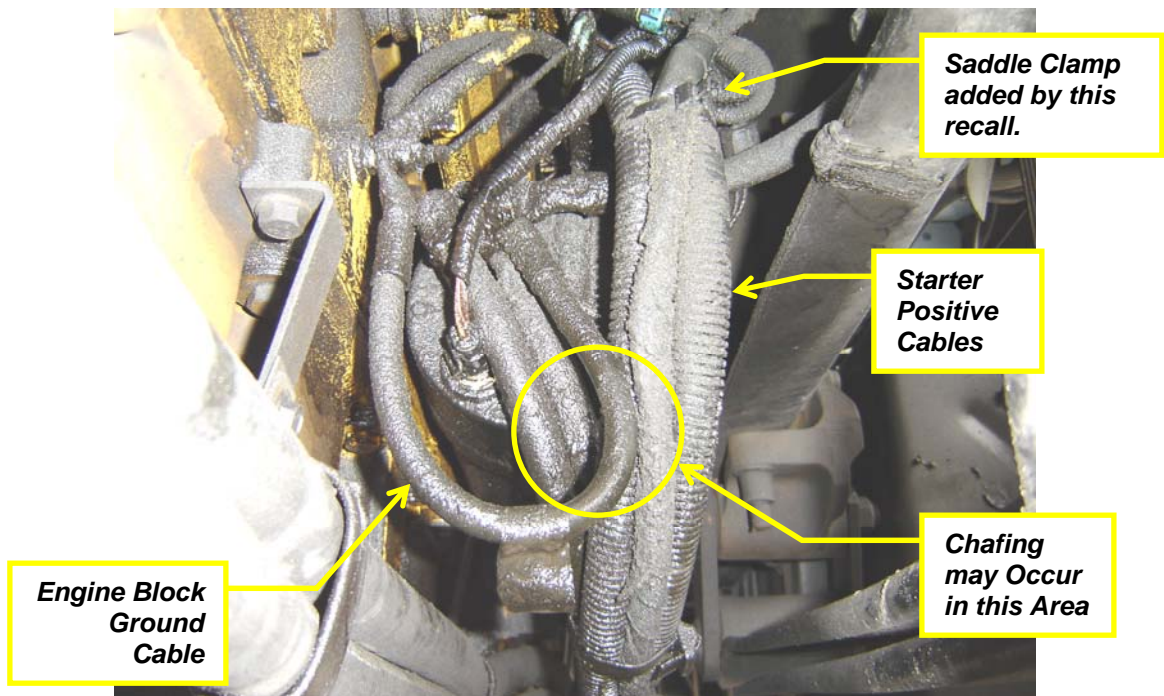
Caterpillar Engine Warning

- After performing this recall on vehicles with Caterpillar engines, please inspect the routing of the ENGINE BLOCK ground cable.



IMPORTANT:

TO PREVENT CHAFING OF THE POSITIVE CABLES AGAINST THE ENGINE BLOCK GROUND CABLE (SEE FIGURE 3), PLEASE ENSURE ENGINE BLOCK GROUND CABLE IS CLOCKED IN THE DOWNWARD (6 O'CLOCK) POSITION, SEE FIGURE 4.



**Figure 3 --
Chafing may occur between Engine Block Ground and Newly Located Positive cables.**

NOTE: *If NO rubbing or chafing is present between CAT ENGINE GROUND cable and battery cables, NO re-clocking is necessary.*

- *If rubbing or chafing of the ENGINE GROUND cable against the Battery Cables is present, rotate and tighten the new ground cable on the starter terminal so it is straight down (6 o'clock position) and not contacting the starter positive cables, see figure 4.*

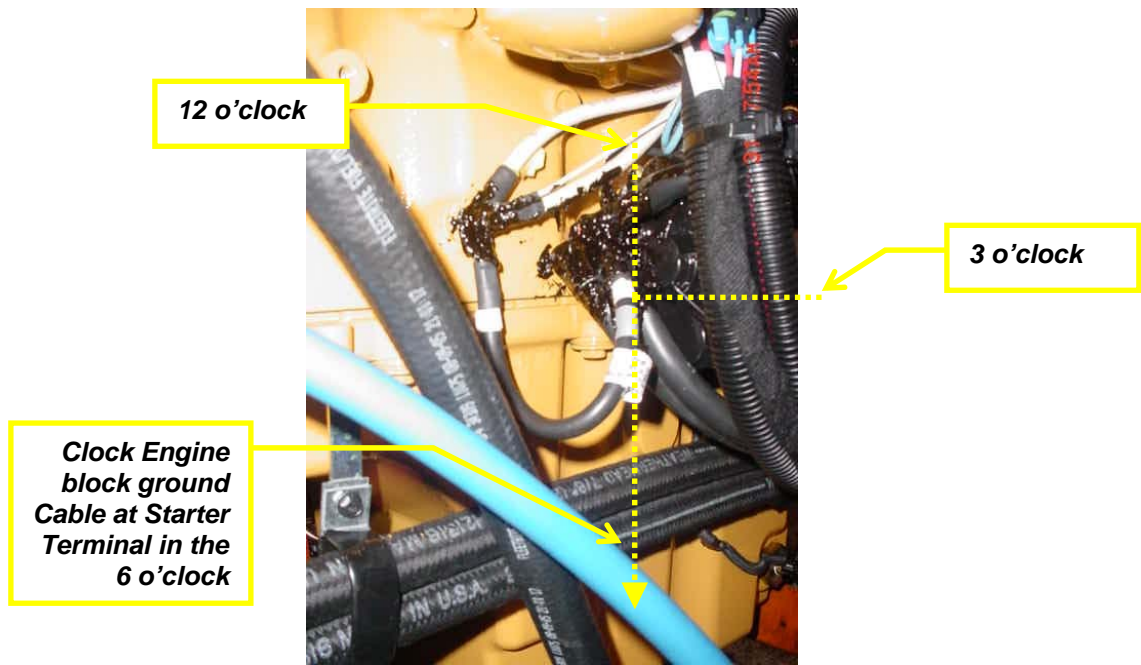


Figure 4 – Correct CAT (non-C15) engine block ground cable routing.

FINAL INSPECTION

- Regardless of whether or not the saddle clamp was installed, please perform this final inspection on ***all*** vehicles to ensure the electrical cables are properly routed.
- Please inspect the starter electrical cable routing for rubbing or chafing in the following areas:
 - Battery Cables to frame rail.
 - Battery Cables to FRAME ground cable.
 - Battery Cables to ENGINE BLOCK ground cable .
 - Battery Cables to starter case, starter terminal studs or other starter components and wiring.
 - Battery Positive Cable to BATTERY ground cable.
 - Battery Positive Cable to FUEL FILTER housing.
- It may be necessary to loosen and/or remove a battery cable to re-orient it.
- It may also be necessary to loosen/replace routing/clipping points (p-clamps, extension clips, etc...) to facilitate a no-rub condition.
- See figures below for a representation of rub conditions that require remedied.

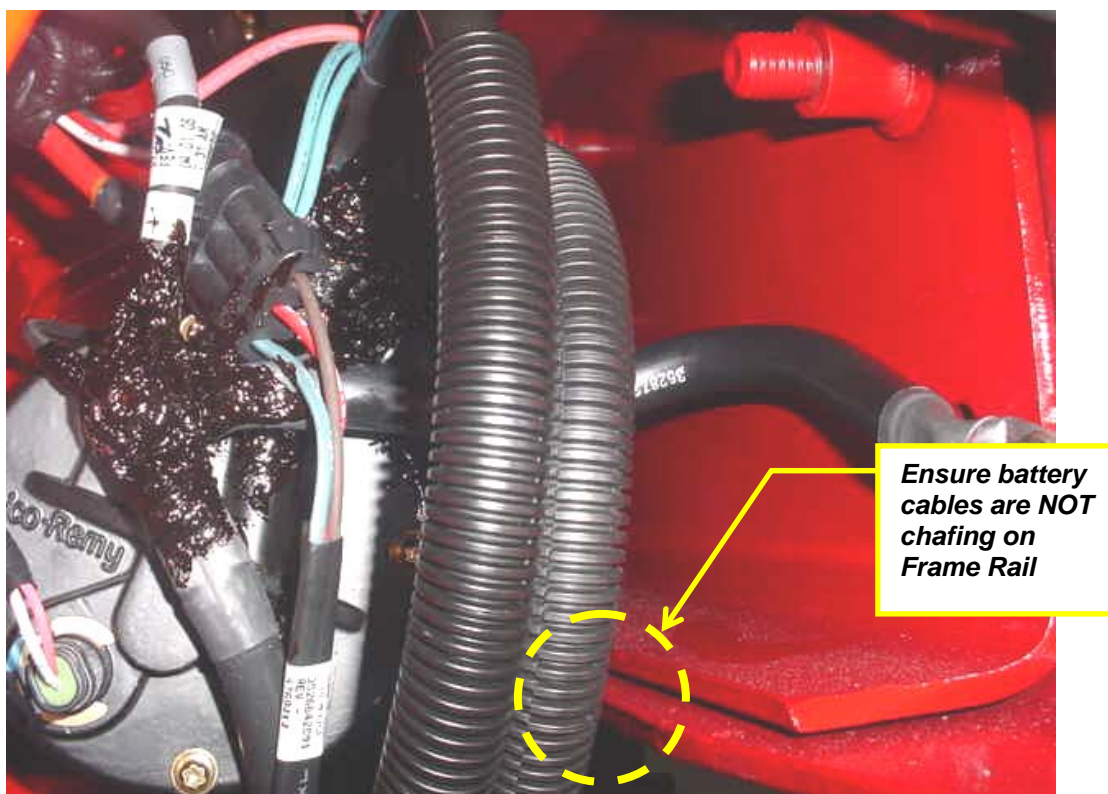


Figure 5 – Battery Cables to frame rail rub

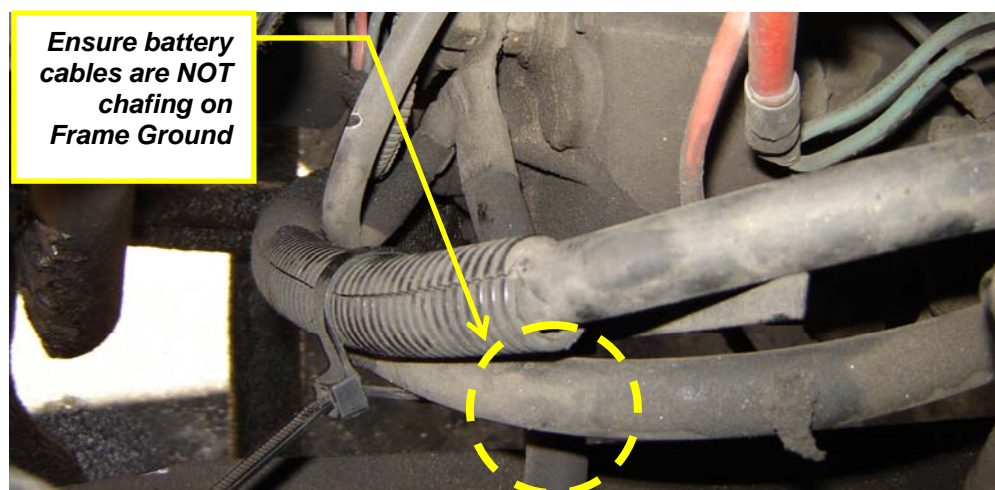


Figure 5a – Battery Cables to FRAME GROUND rub

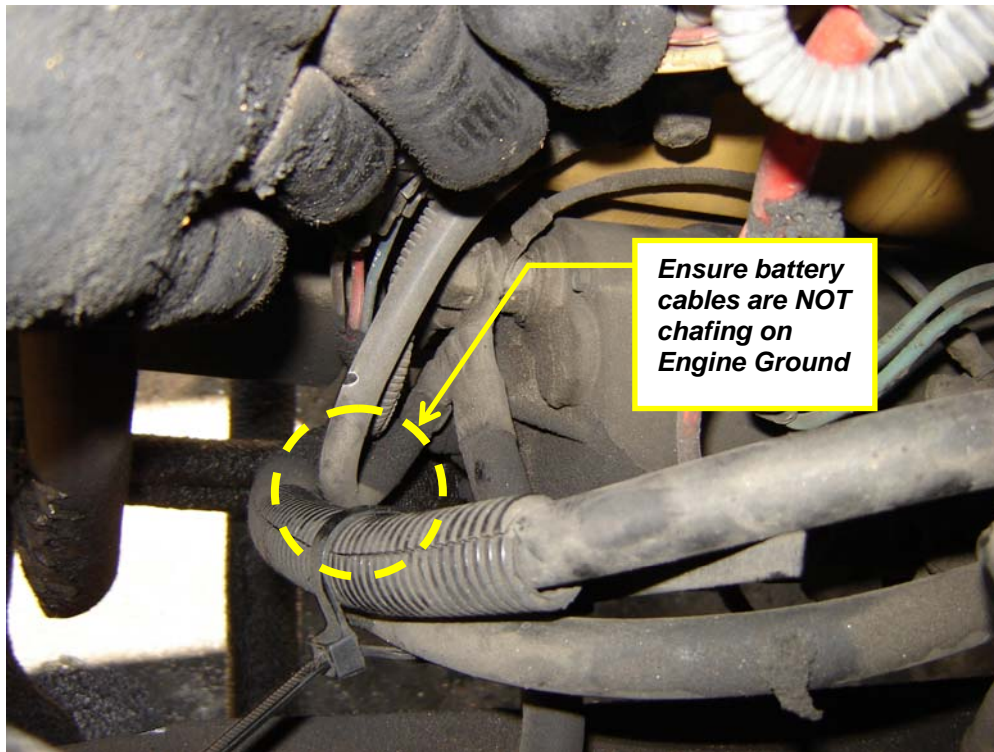


Figure 5b- Battery Cables to ENGINE BLOCK GROUND rub

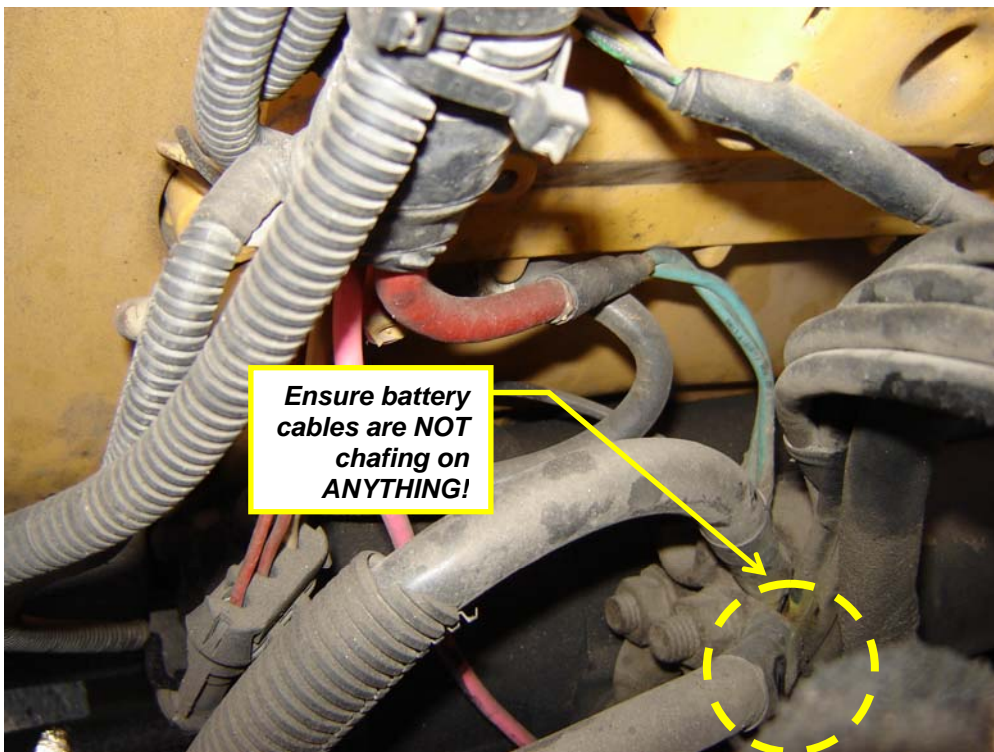


Figure 5c – Battery cables to starter case, starter terminal studs or other starter components and wiring.

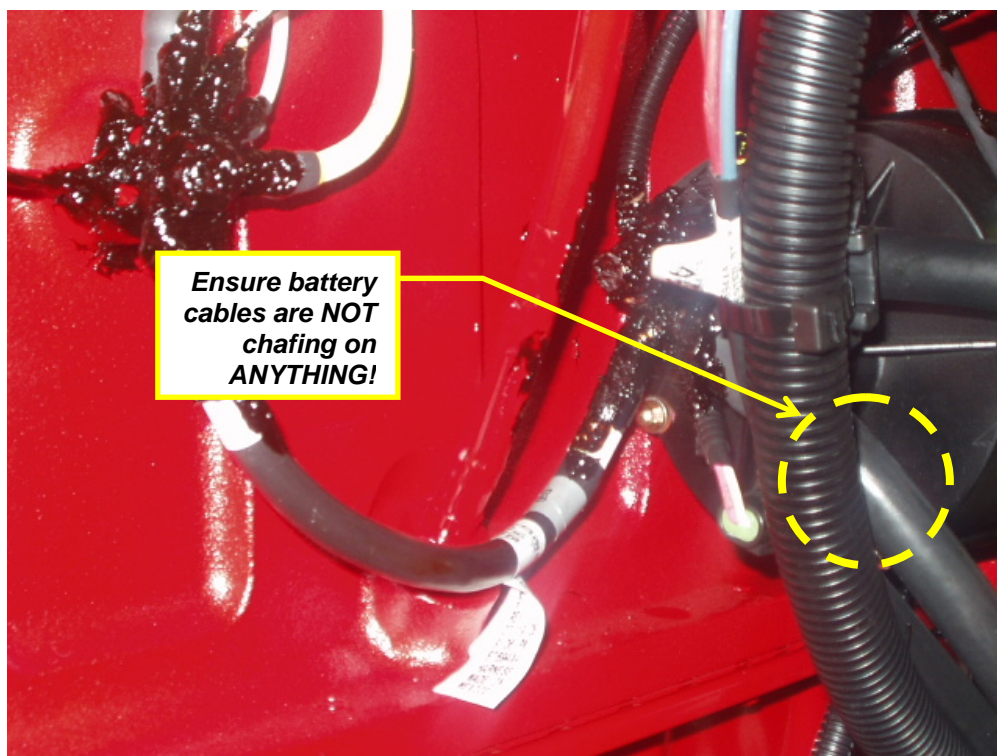


Figure 5d – Battery POSITIVE cables to Battery GROUND cables

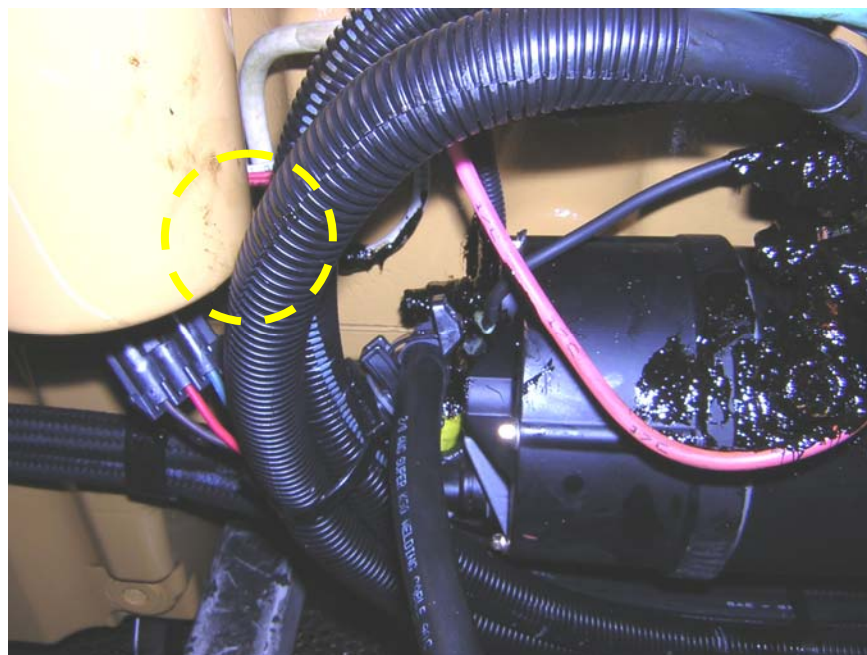


Figure 5e – Battery POSITIVE cables Rubbing on Fuel Filter housing (CAT engine shown, however condition may also exist on Cummins ISM)

END OF SERVICE PROCEDURE

LABOR INFORMATION

<u>Operation No.</u>	<u>Description</u>	<u>Time</u>
A40-04510-1	<i>Install Saddle Clamp and Strap Locks Only</i>	0.4 Hr
A40-04510-2	<i>Install Saddle Clamp, Strap Locks, and Battery Cables</i>	1.0 Hr
A40-04510-3	<i>Inspection only, no corrections necessary.</i>	0.3 Hr
A40-04510-4	<i>ADD ON ONLY – Caterpillar Engine Block GROUND CABLE Re-Clock</i>	0.2 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.

A black and white image of a rectangular label form. The form has a black border with the text "DO NOT REMOVE" at the top and bottom. Inside the border, the word "INTERNATIONAL" is printed in bold. Below it, there are fields for "Campaign No.", "VIN", and "Eng.#". Further down, the word "COMPLETED" is printed in bold, followed by a field for "Service Location Code #".

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)	WARRANTY (Warranty Code) Enter 40.	TYPE PART Enter P for type part causing failure.	PAD Enter 100
		1. Inspected (No repair required).			
		2. Inspected and repaired.			
		3. Defective part from parts stock.			

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