

SERVICE PROCEDURE

G-05523-R1
February 2006

**SUBJECT: SAFETY RECALL (U.S., EXPORT)
ENGINE GROUND CABLE on certain 7000 and 8000
Series Models built 3/1/2003 thru 7/28/2005 with
Caterpillar® Engines**

REVISION DESCRIPTION

- Modified step 7.
- Added step 12.
- Added **FINAL INSPECTION**.

DEFECT DESCRIPTION

The engine electrical ground cable that connects the engine block with the starter may be routed in a way that could cause chafing against the starter's positive battery cables. If chafing occurs between the positive and negative cables, an electrical short may result and possibly cause a **vehicle fire**, which may result in **property damage, personal injury or death**.

MODELS INVOLVED

This Safety Recall involves 7000 and 8000 Series models built between 3/1/2003 and 7/28/2005 with Caterpillar engines.

PARTS INFORMATION

The parts required for this recall are:

Part Number	Part Description	Quantity
3527275C91	HARNESS, ELECTRICAL ENGINE BLOCK GROUND 2 GAUGE	1 <i>As Required by INSPECTION PROCEDURE</i>

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.

ISIS VERIFICATION

1. Please verify if vehicle is also eligible for Safety Recall **G-04510**. Not all vehicles involved in this recall are eligible for SR G-04510.
2. If vehicle **IS NOT** eligible for Safety Recall G-04510, then skip to **CABLE INSPECTION PROCEDURE**.
3. If vehicle **IS** eligible for Safety Recall G-04510 **AND** Safety Recall G-04510 is "**Complete**," then skip to **CABLE INSPECTION PROCEDURE**
4. If vehicle **IS** eligible for Safety Recall G-04510 **AND** Safety Recall G-04510 is "**Incomplete**," please first complete Safety Recall G-04510, then continue to complete this recall.

CABLE INSPECTION PROCEDURE

5. Inspect the engine block to starter electrical ground (black) cable.
6. If engine block ground cable *does not* chafe or touch the positive battery cables, then no cable replacement is necessary.
7. If engine cable is chafing or rubbing against the positive starter cables as per Figure 1, skip to step 8, otherwise skip to **FINAL INSPECTION**.



Figure 1 – Chafing Ground Cable

CABLE REPLACEMENT PROCEDURE



WARNING:

BATTERIES EXPEL EXPLOSIVE GASES. KEEP SPARKS, FLAMES, BURNING CIGARETTES, AND OTHER IGNITION SOURCES AWAY AT ALL TIMES. ALWAYS WEAR SAFETY GLASSES AND A FACE SHIELD WHEN WORKING NEAR BATTERIES TO PREVENT PERSONAL INJURY.

8. Disconnect negative battery cable from batteries.
9. Remove engine block ground cable.
10. Inspect positive cable for chafing damage. If any chafing of cable is evident, replace damaged positive battery cable and conduit.
11. Replace engine block ground cable with new, shorter cable.

NOTE: 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 2.

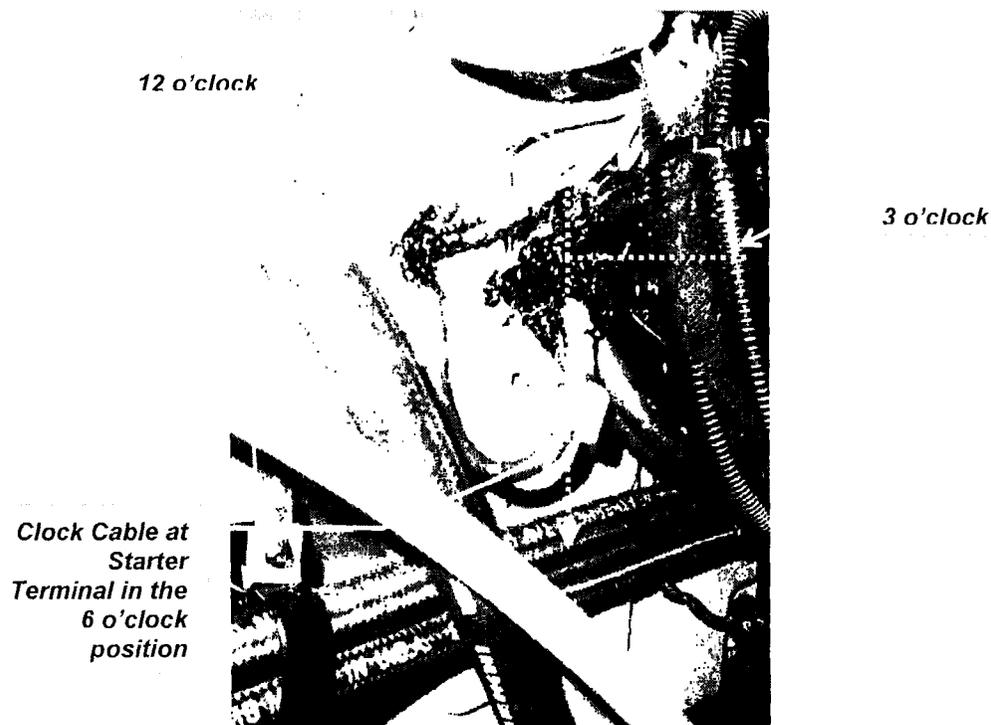
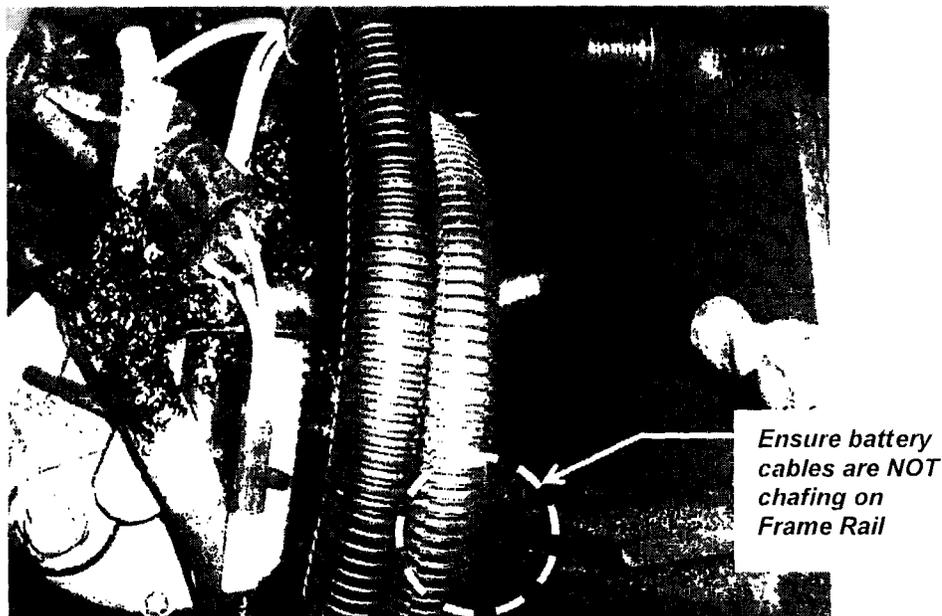


Figure 2 – Properly Clocked Short Engine Ground Cable

12. Perform **FINAL INSPECTION**.

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 3 – Battery Cables to frame rail rub
(Cummins engine shown, however condition may also exist on CAT engines)**

*Ensure battery
cables are NOT
chafing on
Frame Ground*

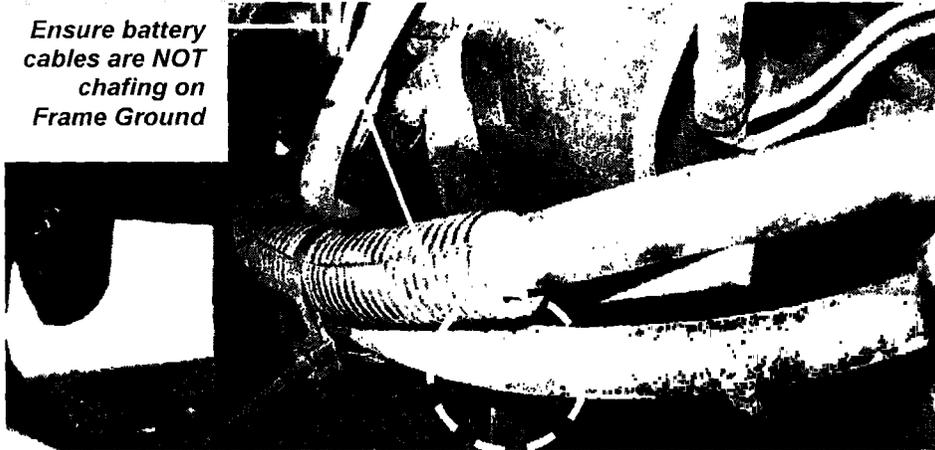


Figure 3a – Battery Cables to FRAME GROUND rub

*Ensure battery
cables are NOT
chafing on
Engine Ground*

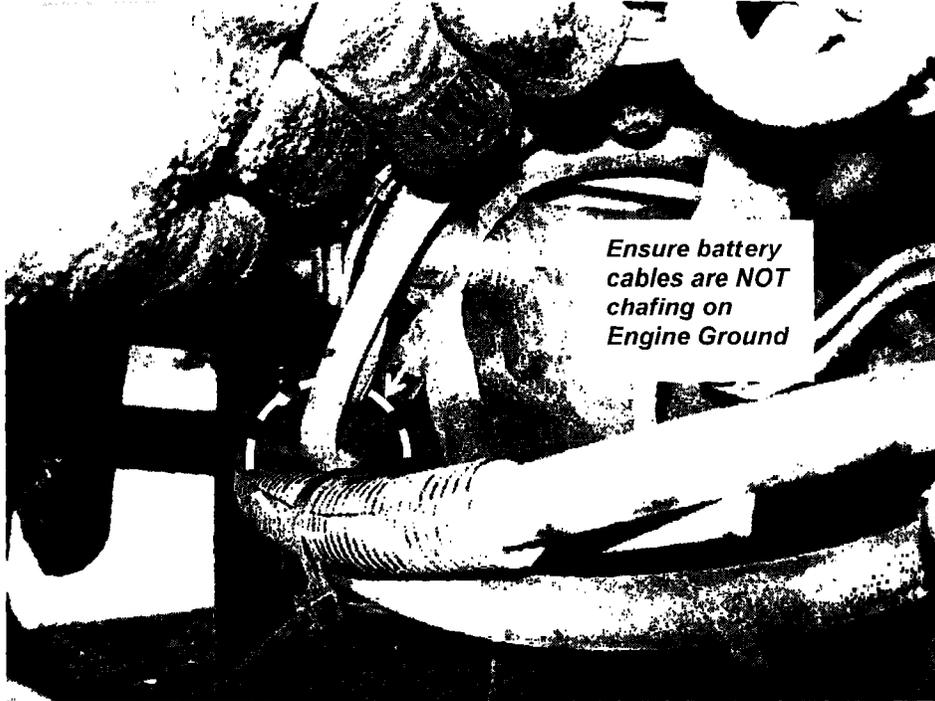


Figure 3b- Battery Cables to ENGINE BLOCK GROUND rub



Figure 3c – Battery cables to starter case, starter terminal studs or other starter components and wiring.

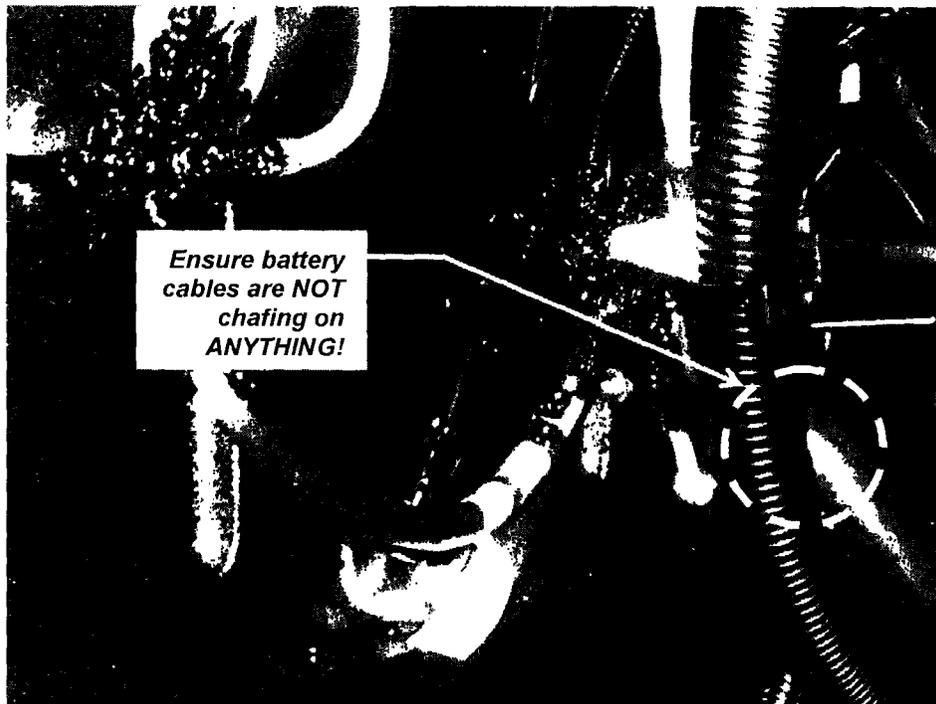


Figure 3d – Battery POSITIVE cables to Battery GROUND cables (Cummins engine shown, however condition may also exist on CAT engines)

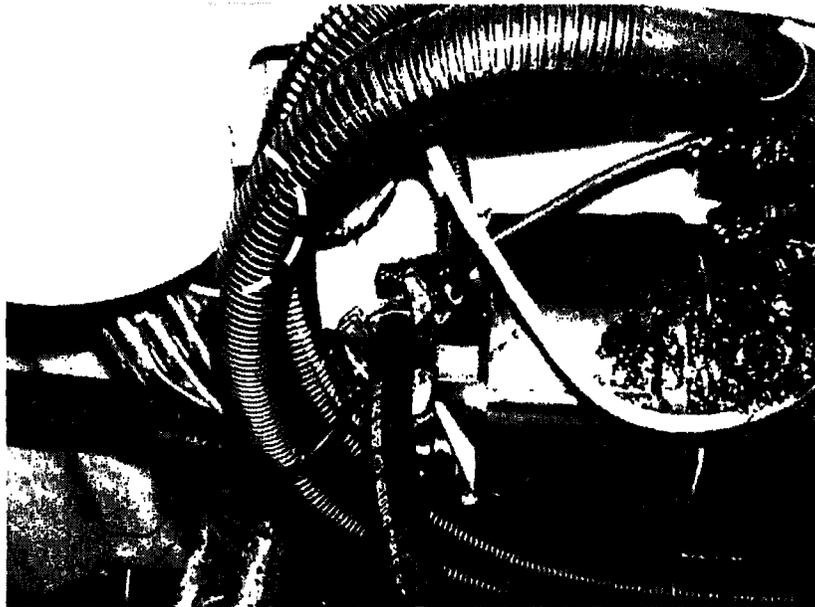


Figure 3e – Battery POSITIVE cables Rubbing on Fuel Filter housing

END OF SERVICE PROCEDURE

LABOR INFORMATION

<u>Operation No.</u>	<u>Description</u>	<u>Time</u>
A40-05523-1	<i>INSPECTION ONLY – NO CABLE REPLACEMENT</i>	0.5 hr
A40-05523-2	<i>ADD ON FOR ENGINE BLOCK GROUND CABLE REPLACEMENT</i>	0.3 hr
A40-05523-3	<i>ADD ON FOR POSITIVE BATTERY CABLE REPLACEMENT</i>	0.4 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.

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 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.

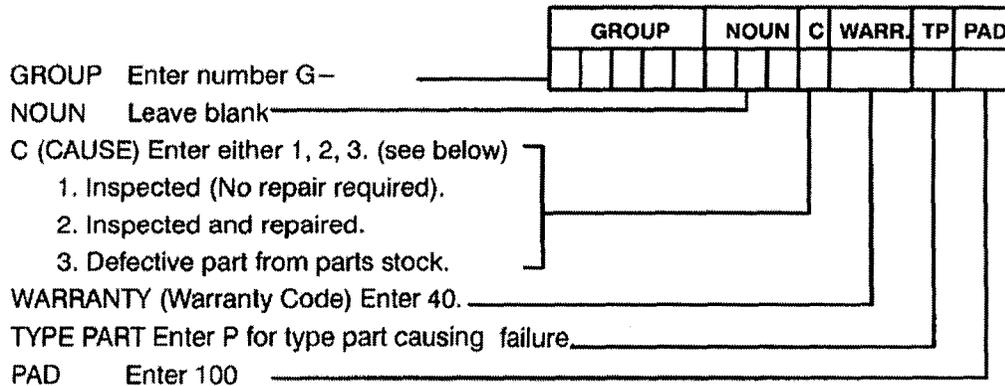
To avoid having to replace an owner vehicle or refund the purchase price, every effort must be made to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible.

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.

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:



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.

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

SERVICE PROCEDURE

G-05523-R2
March 2006

SUBJECT: SAFETY RECALL (U.S., EXPORT)
ENGINE GROUND CABLE on certain 7000 and 8000
Series Models built 3/21/2002 thru 7/28/2005 with
Caterpillar® Engines

REVISION DESCRIPTION

- BUILD DATE RANGE OF SUSPECT VEHICLES WAS INCORRECT ON PREVIOUS VERSIONS OF RECALL. CORRECT DATE RANGE: **3/21/2002 THRU 7/28/2005.**
- Vehicles marked in ISIS were marked properly, only letter incorrect.

DEFECT DESCRIPTION

The engine electrical ground cable that connects the engine block with the starter may be routed in a way that could cause chafing against the starter's positive battery cables. If chafing occurs between the positive and negative cables, an electrical short may result and possibly cause a **vehicle fire**, which may result in **property damage, personal injury or death.**

MODELS INVOLVED

This Safety Recall involves 7000 and 8000 Series models built between 3/21/2002 and 7/28/2005 with Caterpillar engines.

PARTS INFORMATION

The parts required for this recall are:

Part Number	Part Description	Quantity
3527275C91	HARNESS, ELECTRICAL ENGINE BLOCK GROUND 2 GAUGE	1 <i>As Required by INSPECTION PROCEDURE</i>

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.

ISIS VERIFICATION

1. Please verify if vehicle is also eligible for Safety Recall **G-04510**. Not all vehicles involved in this recall are eligible for SR G-04510.
2. If vehicle **IS NOT** eligible for Safety Recall G-04510, then skip to **CABLE INSPECTION PROCEDURE**.
3. If vehicle **IS** eligible for Safety Recall G-04510 **AND** Safety Recall G-04510 is "**Complete**," then skip to **CABLE INSPECTION PROCEDURE**
4. If vehicle **IS** eligible for Safety Recall G-04510 **AND** Safety Recall G-04510 is "**Incomplete**," please first complete Safety Recall G-04510, then continue to complete this recall.

CABLE INSPECTION PROCEDURE

5. Inspect the engine block to starter electrical ground (black) cable.
6. If engine block ground cable *does not* chafe or touch the positive battery cables, then no cable replacement is necessary.
7. If engine cable is chafing or rubbing against the positive starter cables as per Figure 1, skip to step 8, otherwise skip to **FINAL INSPECTION**.



Figure 1 – Chafing Ground Cable

CABLE REPLACEMENT PROCEDURE



WARNING:

BATTERIES EXPEL EXPLOSIVE GASES. KEEP SPARKS, FLAMES, BURNING CIGARETTES, AND OTHER IGNITION SOURCES AWAY AT ALL TIMES. ALWAYS WEAR SAFETY GLASSES AND A FACE SHIELD WHEN WORKING NEAR BATTERIES TO PREVENT PERSONAL INJURY.

8. Disconnect negative battery cable from batteries.
9. Remove engine block ground cable.
10. Inspect positive cable for chafing damage. If any chafing of cable is evident, replace damaged positive battery cable and conduit.
11. Replace engine block ground cable with new, shorter cable.

NOTE: 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 2.

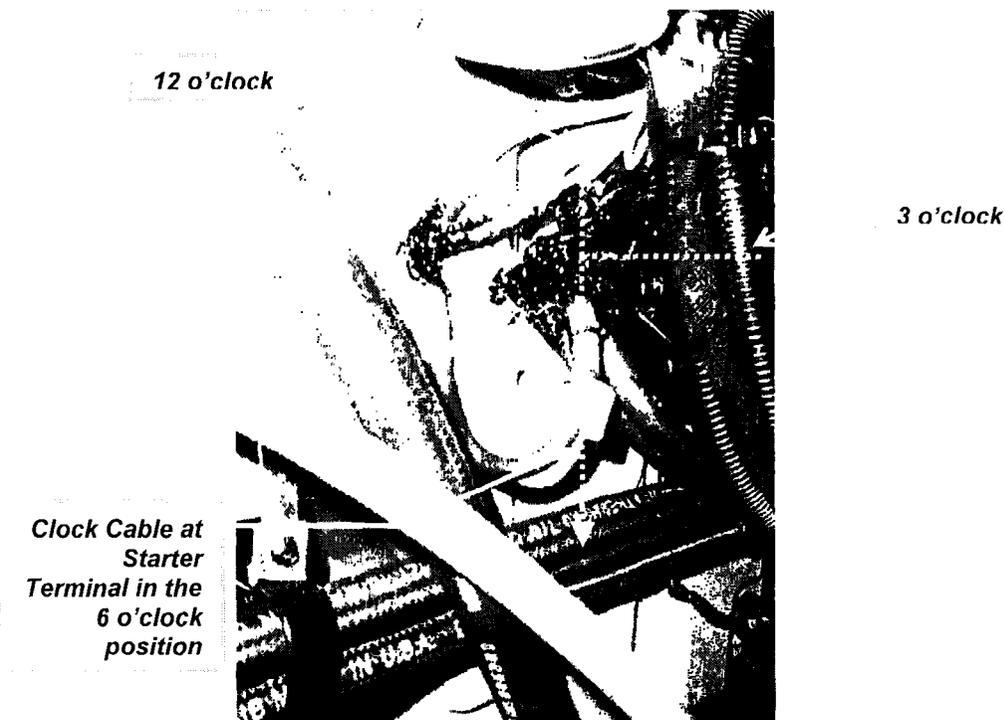
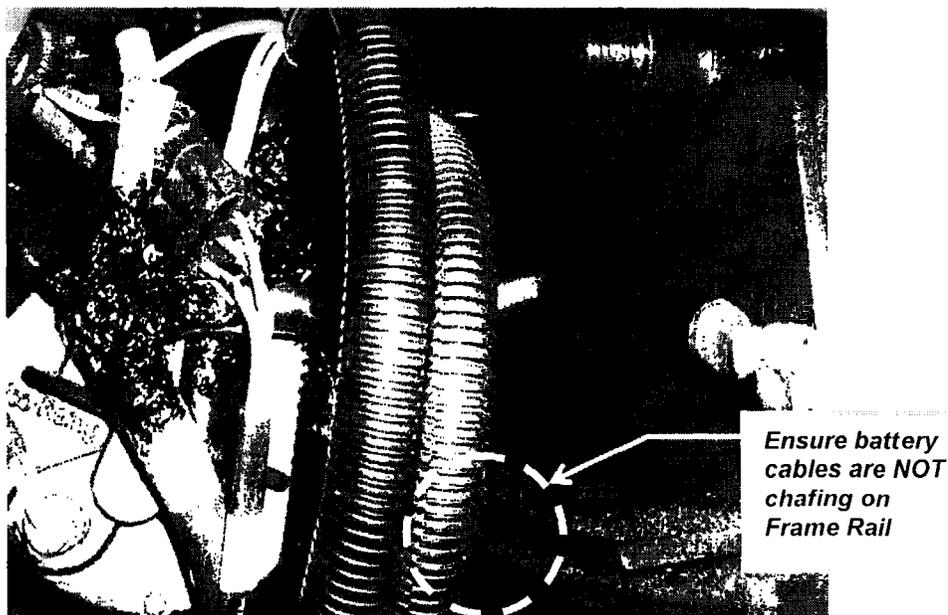


Figure 2 – Properly Clocked Short Engine Ground Cable

12. Perform **FINAL INSPECTION**.

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 3 – Battery Cables to frame rail rub
(Cummins engine shown, however condition may also exist on CAT engines)**

Ensure battery cables are NOT chafing on Frame Ground

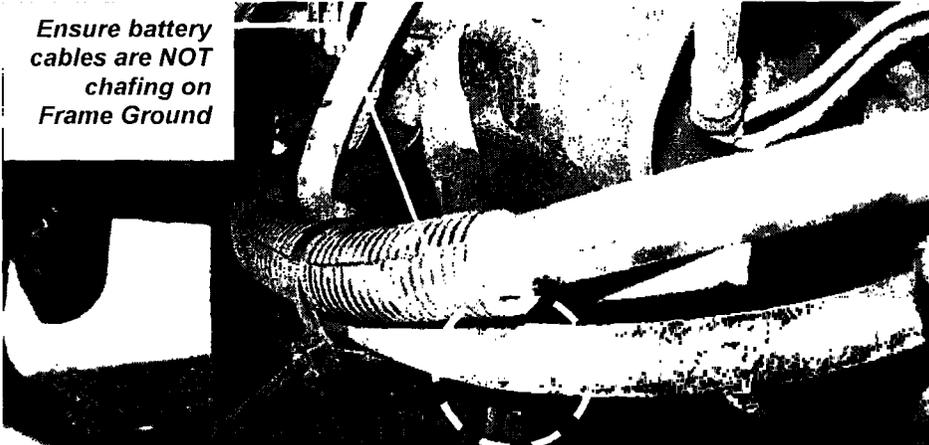


Figure 3a – Battery Cables to FRAME GROUND rub

Ensure battery cables are NOT chafing on Engine Ground

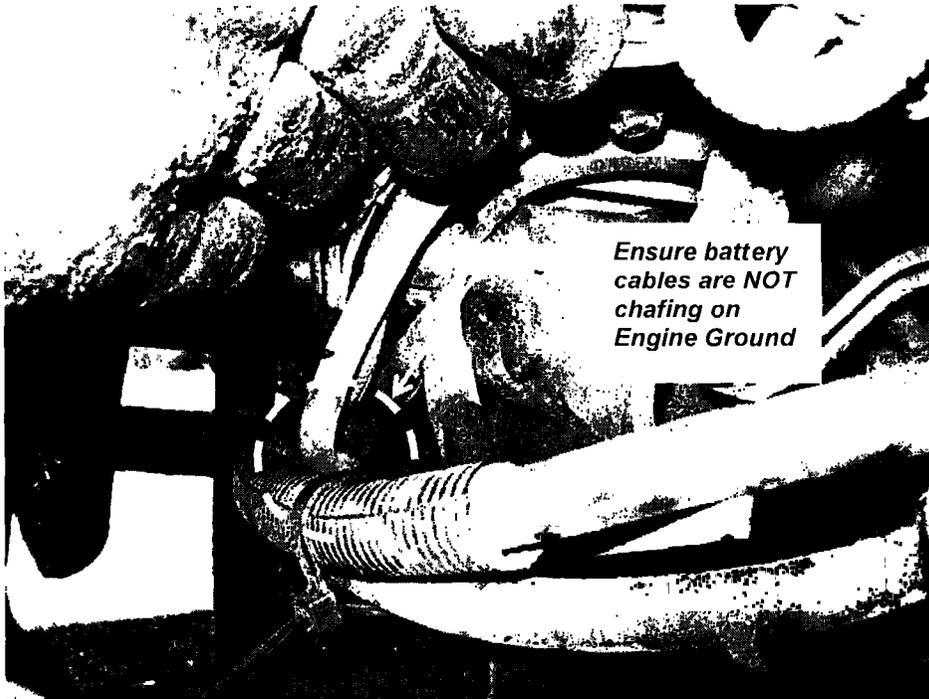


Figure 3b- Battery Cables to ENGINE BLOCK GROUND rub

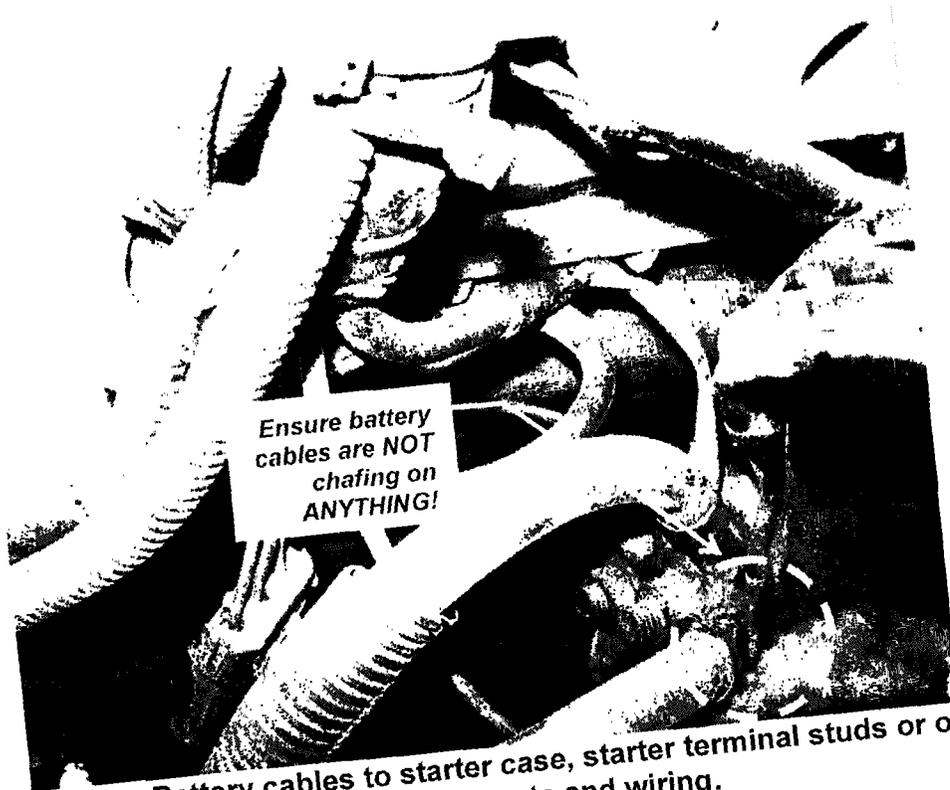


Figure 3c – Battery cables to starter case, starter terminal studs or other starter components and wiring.

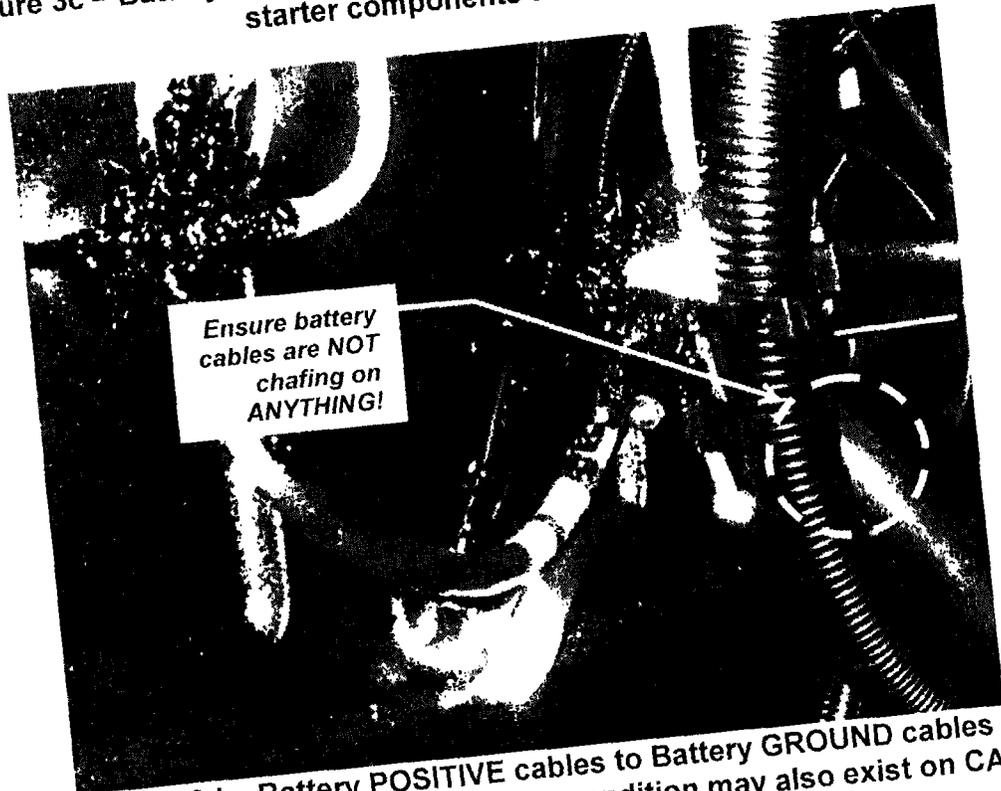


Figure 3d – Battery POSITIVE cables to Battery GROUND cables (Cummins engine shown, however condition may also exist on CAT engines)

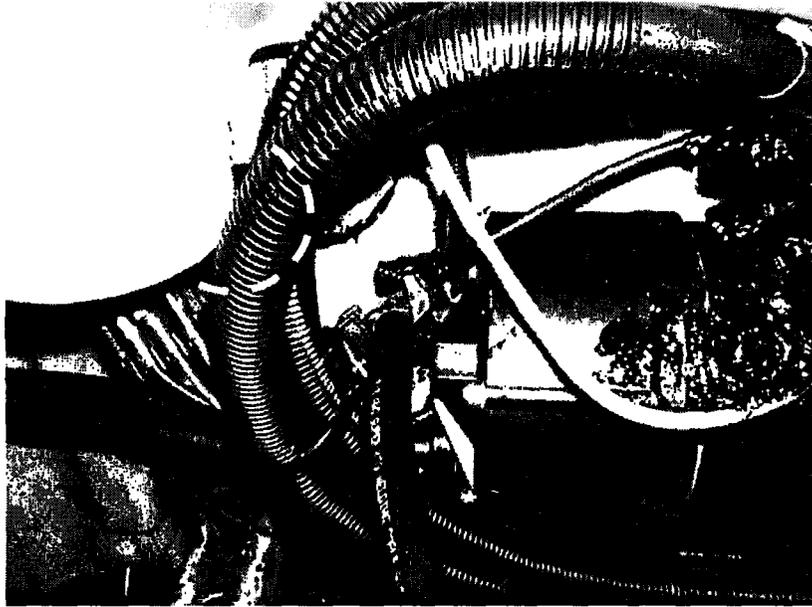


Figure 3e – Battery POSITIVE cables Rubbing on Fuel Filter housing

END OF SERVICE PROCEDURE

LABOR INFORMATION

<u>Operation No.</u>	<u>Description</u>	<u>Time</u>
A40-05523-1	<i>INSPECTION ONLY – NO CABLE REPLACEMENT</i>	0.5 hr
A40-05523-2	<i>ADD ON FOR ENGINE BLOCK GROUND CABLE REPLACEMENT</i>	0.3 hr
A40-05523-3	<i>ADD ON FOR POSITIVE BATTERY CABLE REPLACEMENT</i>	0.4 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.

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 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.

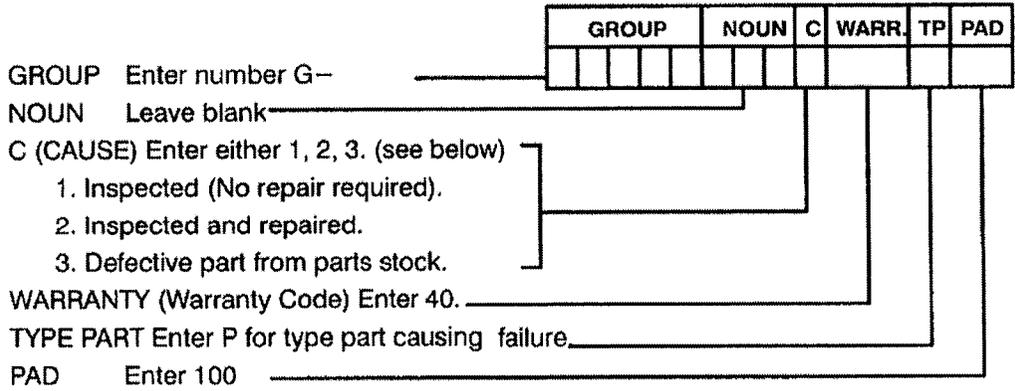
To avoid having to replace an owner vehicle or refund the purchase price, every effort must be made to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible.

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.

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:



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.

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