

SERVICE PROCEDURE

**G-12515
July 2012**

**SUBJECT: SAFETY RECALL
ALTERNATOR WIRING on certain LoneStar[®], PayStar[®],
ProStar[®], TranStar[®], and WorkStar[®] models built 01 June
2009 thru 04 April 2012 with a MaxxF[®] 11 or
MaxxF[®] 13 engine feature code 12UXJ or 12UXH and
with alternator feature code 08GGN, 08GGR, 08GHG, or
08GHH.**

NOTE: This service procedure supersedes the service procedure for safety recall 11516. If the vehicle has had recall 11516 completed, it must be redone using the parts and service instructions below.

DEFECT DESCRIPTION

The positive alternator cable may rub on the high-pressure power steering hose, possibly compromising its insulation and causing an electrical short. An electrical short may cause a vehicle fire possibly resulting in property damage, personal injury, or death.

MODELS INVOLVED

This Safety Recall involves certain LoneStar[®], PayStar[®], ProStar[®], TranStar[®], and WorkStar[®] models built 01 June 2009 thru 04 April 2012 with a MaxxF[®] 11 or MaxxF[®] 13 engine feature code 12UXJ or 12UXH and with alternator feature code 08GGN, 08GGR, 08GHG, or 08GHH.

PARTS INFORMATION

WorkStar®

Part Number	Part Description	Quantity
8900227R91	Kit, 12515 WorkStar® Bosch alternator wiring	1

Table 1

Kit 8900227R91 contains the following parts:

Part Number	Part Description	Quantity
306132C1	Cable tie strap	5
2041341C1	Saddle	1
25222R1	Saddle bolt	1
120380	Saddle lock washer	1
25519R1	Saddle nut	1
2040046C2	Extension twist bracket	1
3666881C1	Dual swivel saddle	1
1682054C1	Protective molding	1

Table 2

LoneStar®, PayStar®, ProStar®, and TranStar®

Part Number	Part Description	Quantity
8900229R91	Kit, SR12515 Bosch alternator routing	1

Table 3

Kit 8900229R91 contains the following parts:

Part Number	Part Description	Quantity
306132C1	Cable tie strap	5
3666881C1	Dual swivel saddle	1
3545771C1	Saddle	1
25483R1	Saddle bolt	1
120380	Saddle lock washer	1
25519R1	Saddle nut	1
922860R1	Extension (stand-off)	1

Table 4

SERVICE PROCEDURE

WARNING! Park vehicle on hard flat surface, turn the engine off, set the parking brake, and block the wheels to prevent the vehicle from moving in both directions. Failure to do so may result in property damage, personal injury, and/or death.

WARNING! If the vehicle must be raised, do not work under the vehicle supported only by jacks. Jacks can slip or fall over, potentially resulting in property damage, personal injury, and/or death.

WARNING! Always wear safe eye protection when performing vehicle maintenance. Failure to do so may result in serious eye injury.

WARNING! Keep flames or sparks away from vehicle and do not smoke while servicing the vehicle's batteries. Batteries expel explosive gases. Failure to do so may result in property damage, personal injury, and/or death.

WARNING! Remove the ground cable from the negative terminal of the battery box before disconnecting any electrical components. Always connect the ground cable last. Failure to do so may result in property damage, personal injury, and/or death.

For LoneStar[®], PayStar[®], TranStar[®], and ProStar[®], go to page 4. For WorkStar[®], go to page 14.

For LoneStar[®], PayStar[®], TranStar[®], and ProStar[®]

1. Park the vehicle on a flat surface, shift the transmission to park or neutral, set the parking brake, and block the wheels to prevent the vehicle from moving in both directions.
2. Open battery compartment and remove electrical connections at the batteries. Always remove negative battery cable first.
3. Inspect fuel case area, close to power steering pump, to see if extension stand-off bracket, saddle, and cable strap have already been installed (Figure 1). If extension stand-off is present, remove fuel case bolt that secures it and cut cable strap that secures the alternator harness. The extension stand-off bracket and saddle will be re-used but will need to be reassembled (Figure 3).

If no extension stand-off bracket is currently installed on the fuel case, proceed to step 4.

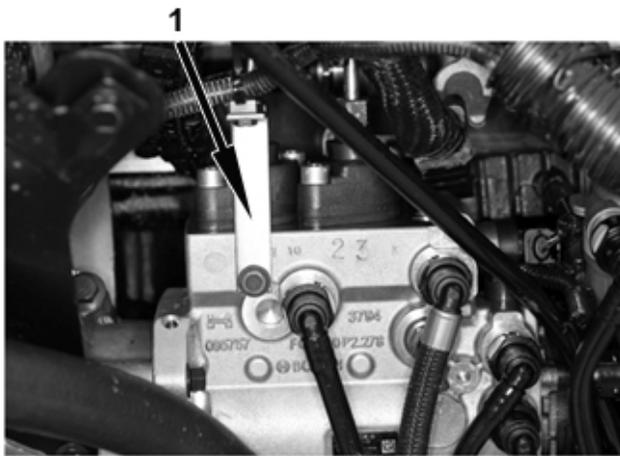


Figure 1

1. Extension stand-off bracket, saddle, and cable strap may already be mounted to the fuel case

4. Assemble hardware as shown in Figure 2 to match Figure 3. Attach saddle (3545771C1) to extension (922860R1) and secure with saddle bolt (25483R1) using saddle lock washer (120380) and saddle nut 25519R1.



Figure 2
1. Fuel case bolt and washer NOT needed

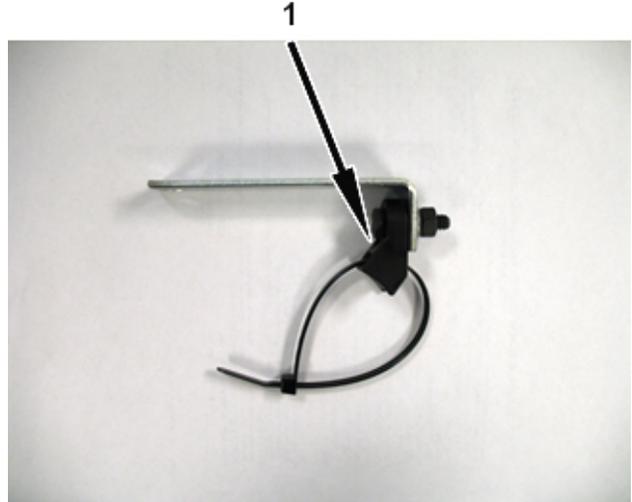


Figure 3
1. Alternator cables need to be strapped to curved surface of saddle strap.

5. Remove dipstick bracket securing bolt (Figure 4).



Figure 4
1. Dipstick bracket securing bolt

6. Remove alternator harness positive cable securing nut (Figure 5).

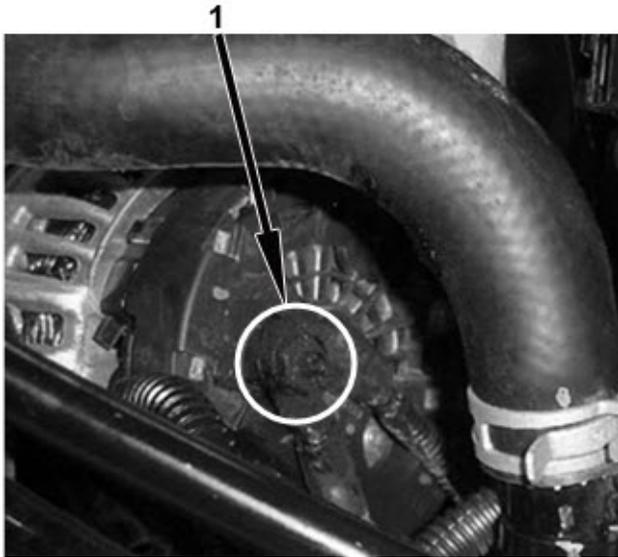


Figure 5

1. Alternator harness positive cable securing nut

7. Remove alternator-mounting bolt that secures ground cable to alternator harness (Figure 6). Reinstall bolt and tighten to specification, as ground harness will be relocated in a later step.



Figure 6

1. Alternator mounting bolt

8. Remove alternator harness ends from alternator so that you are able to readjust and reroute cables (Figure 7).

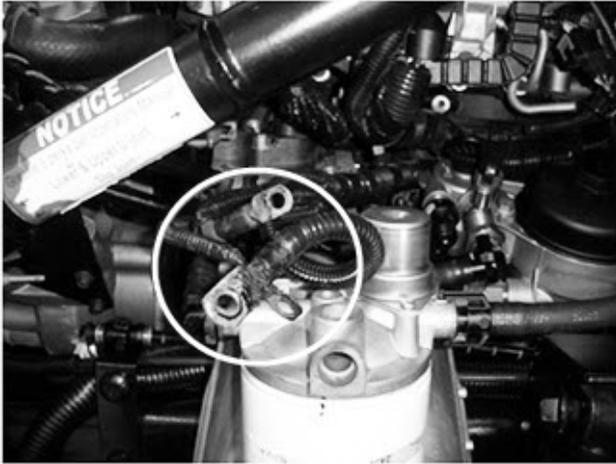


Figure 7

9. Attach extension stand-off (922860R1) to dipstick bracket by using same securing bolt that was originally in place (Figure 8). Make sure that extension stand-off is placed at same angle as shown (Figure 9).

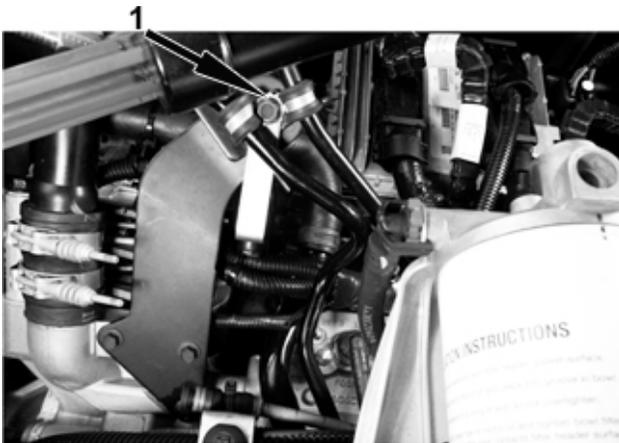


Figure 8

1. Dipstick bracket attachment bolt

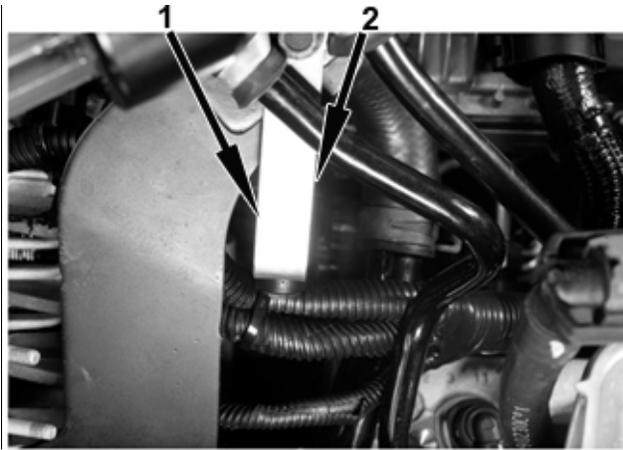


Figure 9

1. Extension bracket faces in toward engine compartment.
2. Notice the angle and location of the extension bracket.

10. Reroute alternator harness to outside of power steering hose and above power steering high-pressure line. Use cable tie strap (306132C1) to attach alternator harness to saddle (3545771C1). Do not tighten cable strap at this time. It will be tightened in a later step (Figure 10).



Figure 10

11. Locate and remove existing cable tie strap or straps that secure alternator harness, ECM to sensor harness, and chassis-to-ECM harness onto Bosch strain-relief ECM bracket (Figure 11).

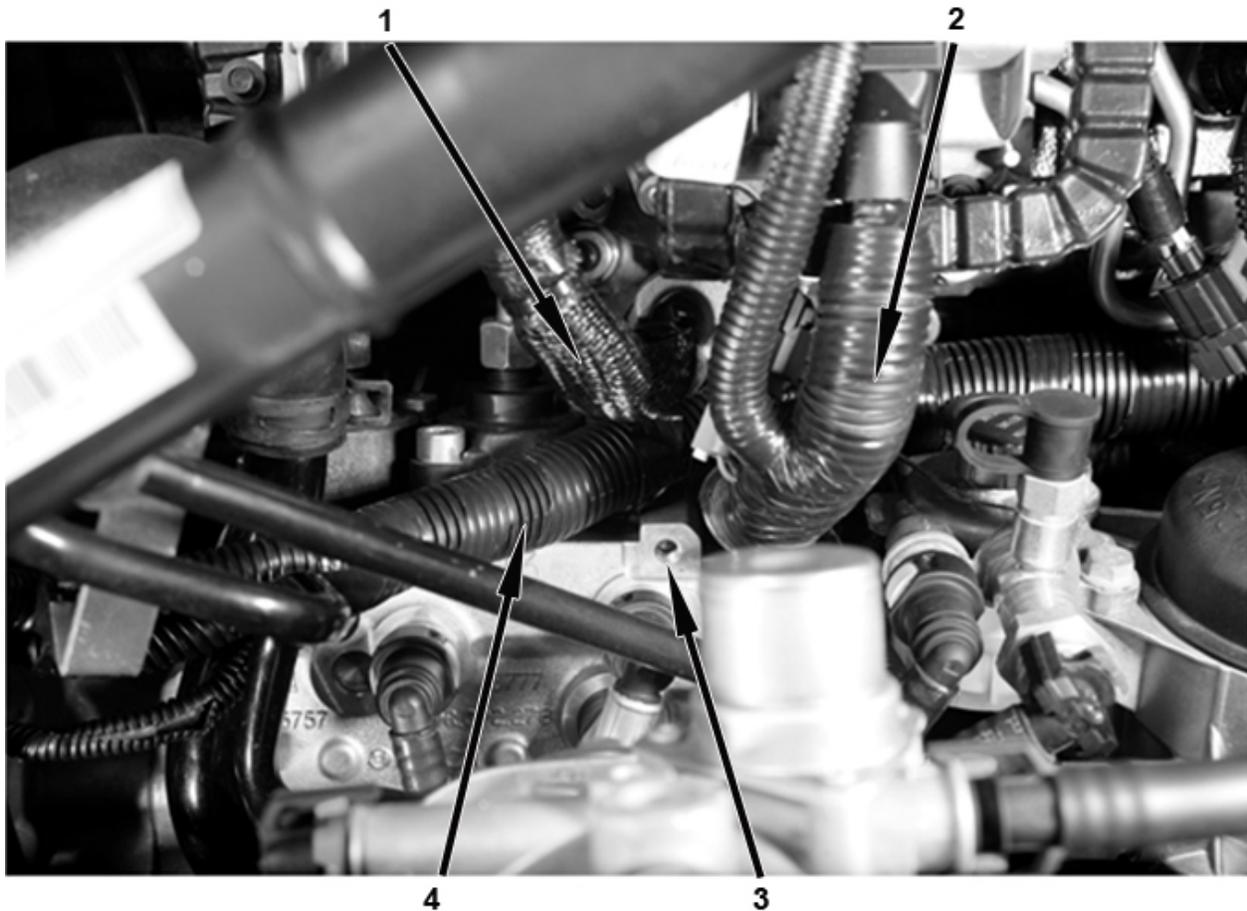


Figure 11

1. ECM-to-sensor harness
2. Chassis-to-ECM harness
3. Pump screw boss
4. Alternator harness

12. Insert a new cable tie strap (306132C1) through Bosch strain-relief ECM bracket, around alternator harness and ECM-to-sensor harness, and tighten cable tie strap enough to lift harnesses off pump screw boss (Figure 11 and Figure 12).

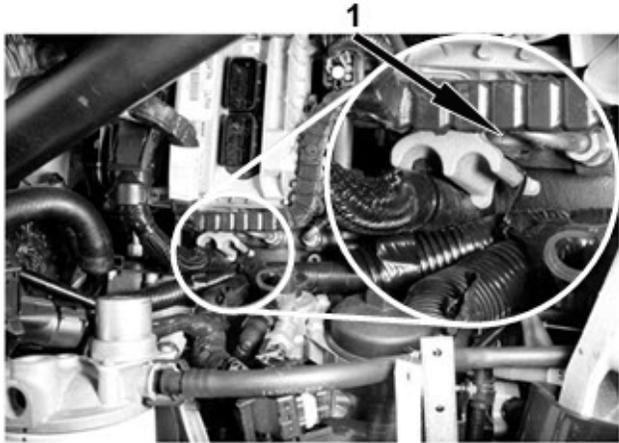


Figure 12

1. Strain relief location

13. Insert a second cable tie strap (306132C1) through Bosch strain-relief ECM bracket and around chassis-to-ECM harness and tighten cable tie strap enough to lift harnesses off pump boss (Figure 13).

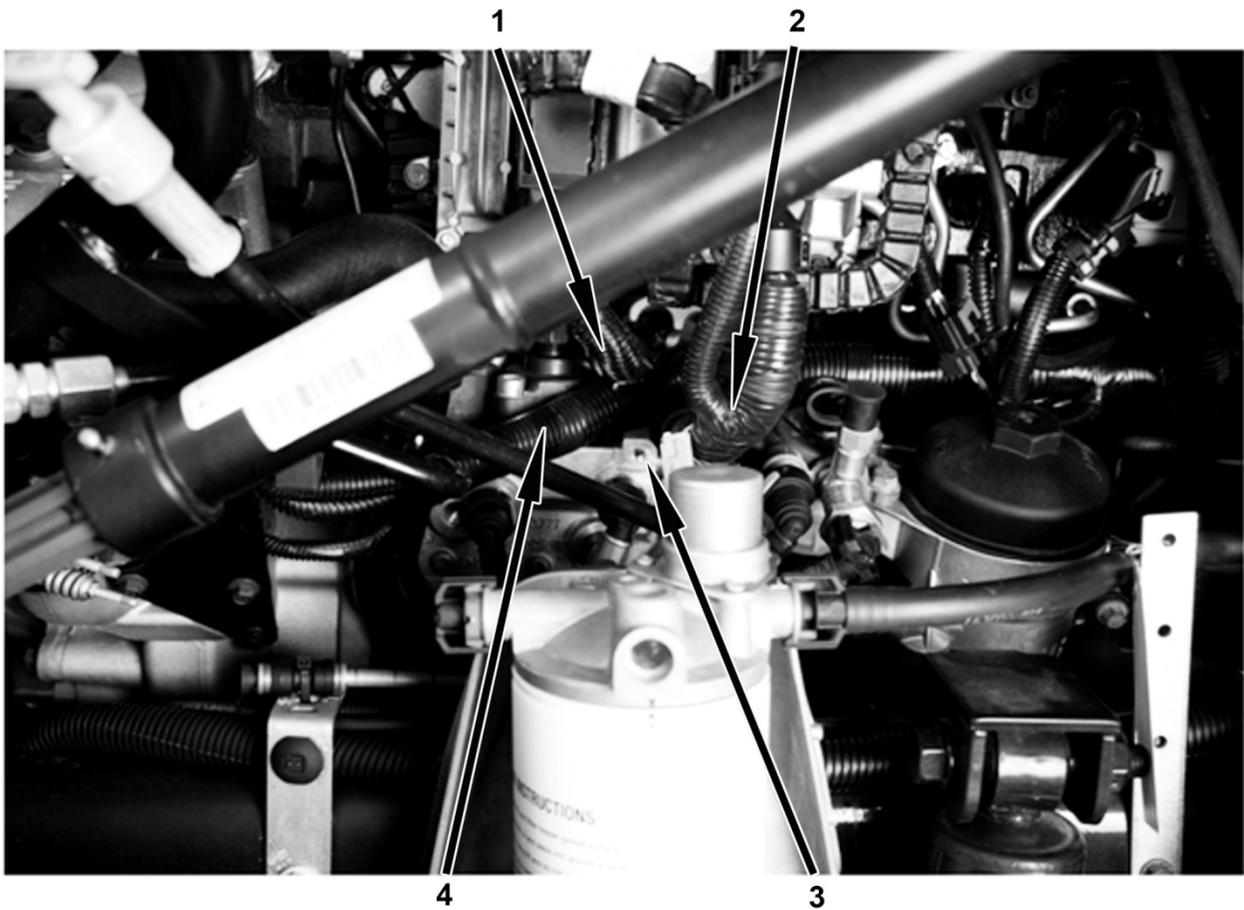


Figure 13

1. ECM-to-Sensor harness
2. Chassis-to-ECM harness
3. Pump screw boss
4. Alternator harness

14. Verify proper clearance, adjust if necessary to obtain proper clearance, and then cut off the extra cable strap ends.

15. Remove lower-front alternator-mounting bolt. If there is a bracket clamp present, leave it in place. Install bolt through ground terminal of alternator harness, then through bracket clamp, and re-install bolt (Figure 14). Tighten to specification.

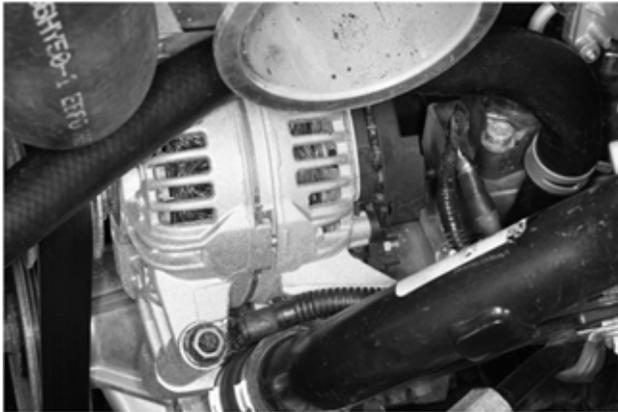


Figure 14

16. Reinstall power cables of alternator harness to positive terminal of alternator. Tighten nut to specification. Install nut (Figure 15).

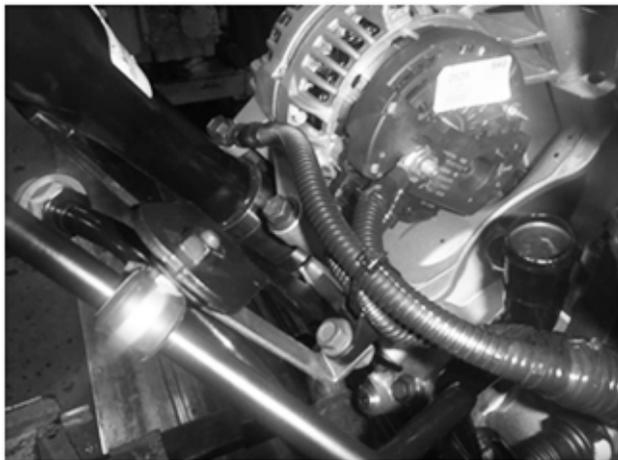


Figure 15

17. Use two cable tie straps (306132C1) to place dual-saddle swivel guide (3614752C1) between oil dipstick tube and alternator harness bundle (Figure 16). Do not fully tighten cable tie straps around oil dipstick tube or alternator harness bundle at this time. They will be tightened in next step.

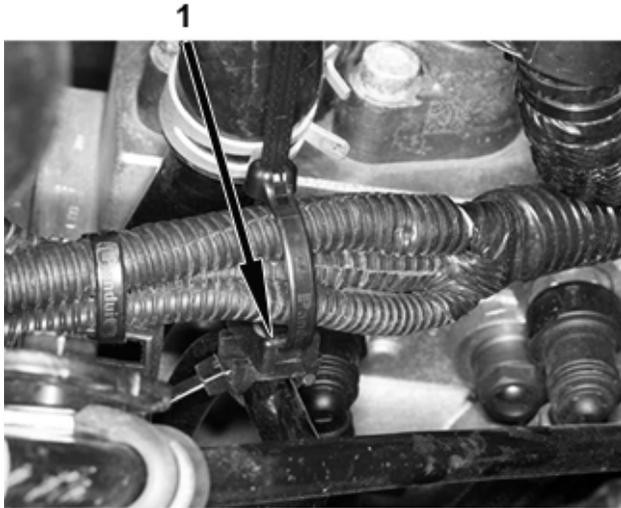


Figure 16

1. Dual-saddle swivel guide

NOTE: As you perform the next step, verify there are no rub points prior to tightening any tie strap.

18. Pull harness bundle and dual-saddle swivel guide up and tight on oil dip stick tube to eliminate rub points and tighten cable tie straps between dual-saddle swivel guide to oil dip stick tube and alternator harness bundle. Cut off extra cable tie strap ends.

19. Tighten cable tie strap at extension bracket saddle and cut off extra cable strap ends.

20. Reconnect electrical connections to batteries. Always connect ground cable last. Close battery compartment.

21. Remove wheel blocks.

For WorkStar®

1. Park the vehicle on a flat surface, shift the transmission to park or neutral, set the parking brake, and block the wheels to prevent the vehicle from moving in both directions.
2. Open battery compartment, disconnect frame and starter negative battery cable, and clean power harness connector.
3. Remove driver's side fender.
4. Inspect fuel case area (close to power steering pump) to see if extension stand-off bracket, saddle, and cable strap have already been installed (Figure 17). If extension stand-off is present, remove fuel case bolt that secures it, cut cable strap that is securing alternator harness, and discard extension stand-off as it will not be used (Figure 17).

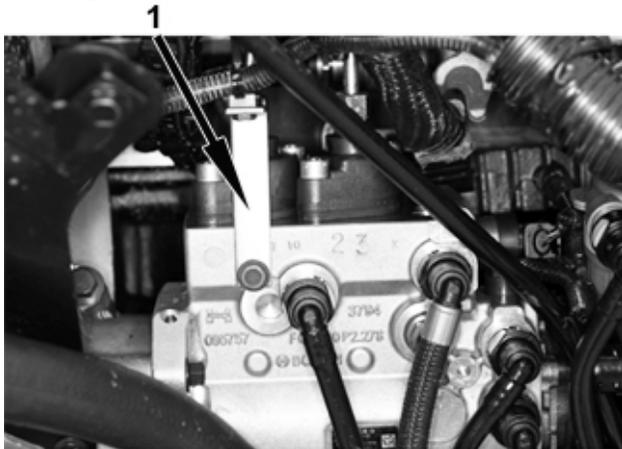


Figure 17

1. Extension stand-off bracket, saddle, and cable strap

5. Remove alternator harness positive cable securing nut (Figure 18).

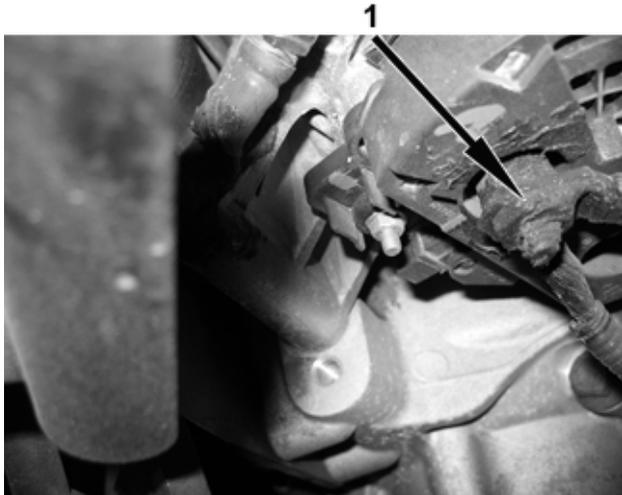


Figure 18

1. Alternator harness positive securing nut

6. Remove alternator-mounting bolt that secures ground cable of alternator harness (Figure 19).



Figure 19

1. Alternator mounting bolt (view from above with air cleaner removed)

7. Use parts listed on page 1 for use on WorkStar[®]. Attach saddle (2041341C1) to extension twist bracket (2040046C2) and secure with saddle bolt (25222R1) using saddle lock washer (120380) and saddle nut 25519R1 (Figure 20).

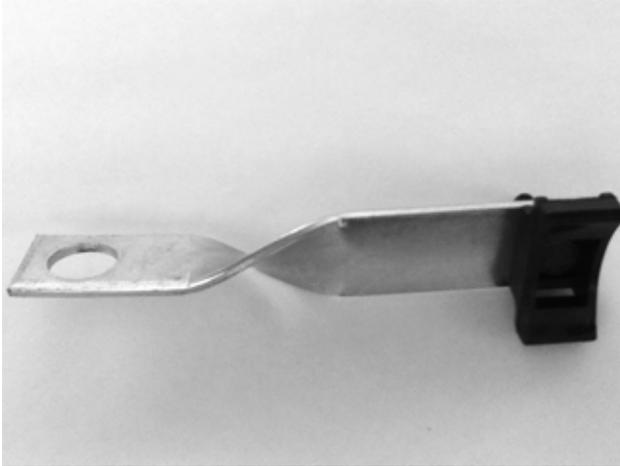


Figure 20

8. Install extension on bolt removed in step 6 but do not install alternator ground harness. Reinstall bolt with saddle facing inward towards engine. Do not tighten bolt at this time. The ground harness will be relocated in a later step (Figure 21).

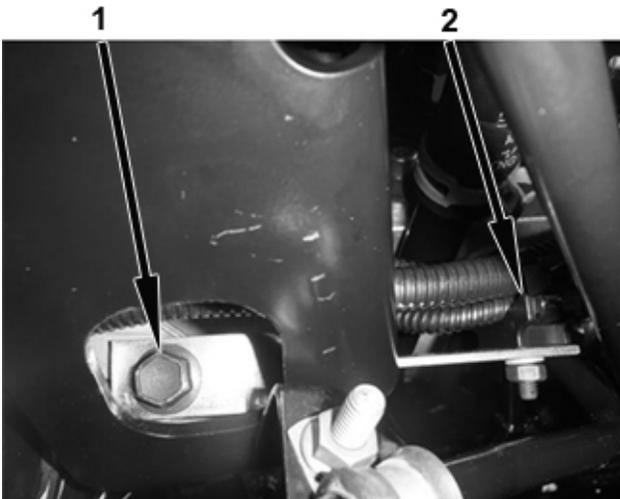


Figure 21

1. Rear ground terminal – do not tighten bolt
2. Saddle facing inward toward the engine

9. Locate and remove existing cable tie strap or straps that secure alternator harness, ECM to sensor harness, and chassis-to-ECM harness onto Bosch strain-relief ECM bracket (Figure 22).

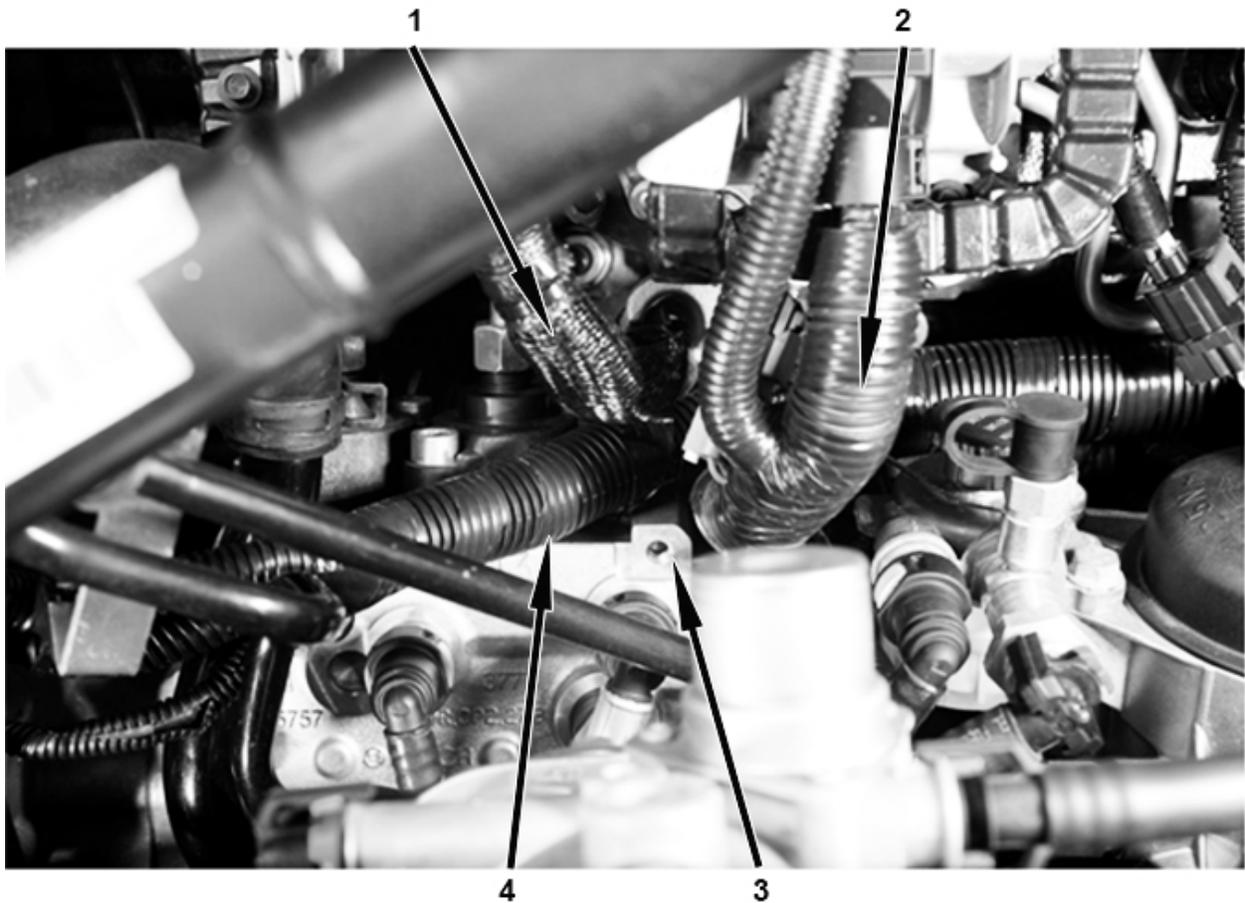


Figure 22

1. ECM-to-Sensor harness
2. Chassis-to-ECM harness
3. Pump screw boss
4. Alternator harness

10. Insert a new cable tie strap (306132C1) through Bosch strain-relief ECM bracket, around alternator harness, and ECM-to-sensor harness and tighten cable tie strap enough to lift harnesses off pump screw boss (Figure 22 and Figure 23).

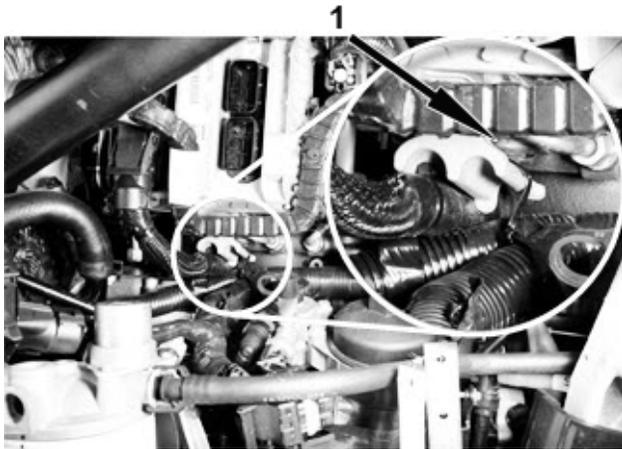


Figure 23

1. Strain relief location

11. Insert a second cable tie strap (306132C1) through Bosch strain-relief ECM bracket and around chassis-to-ECM harness and tighten cable tie strap enough to lift harnesses off pump boss (Figure 24).

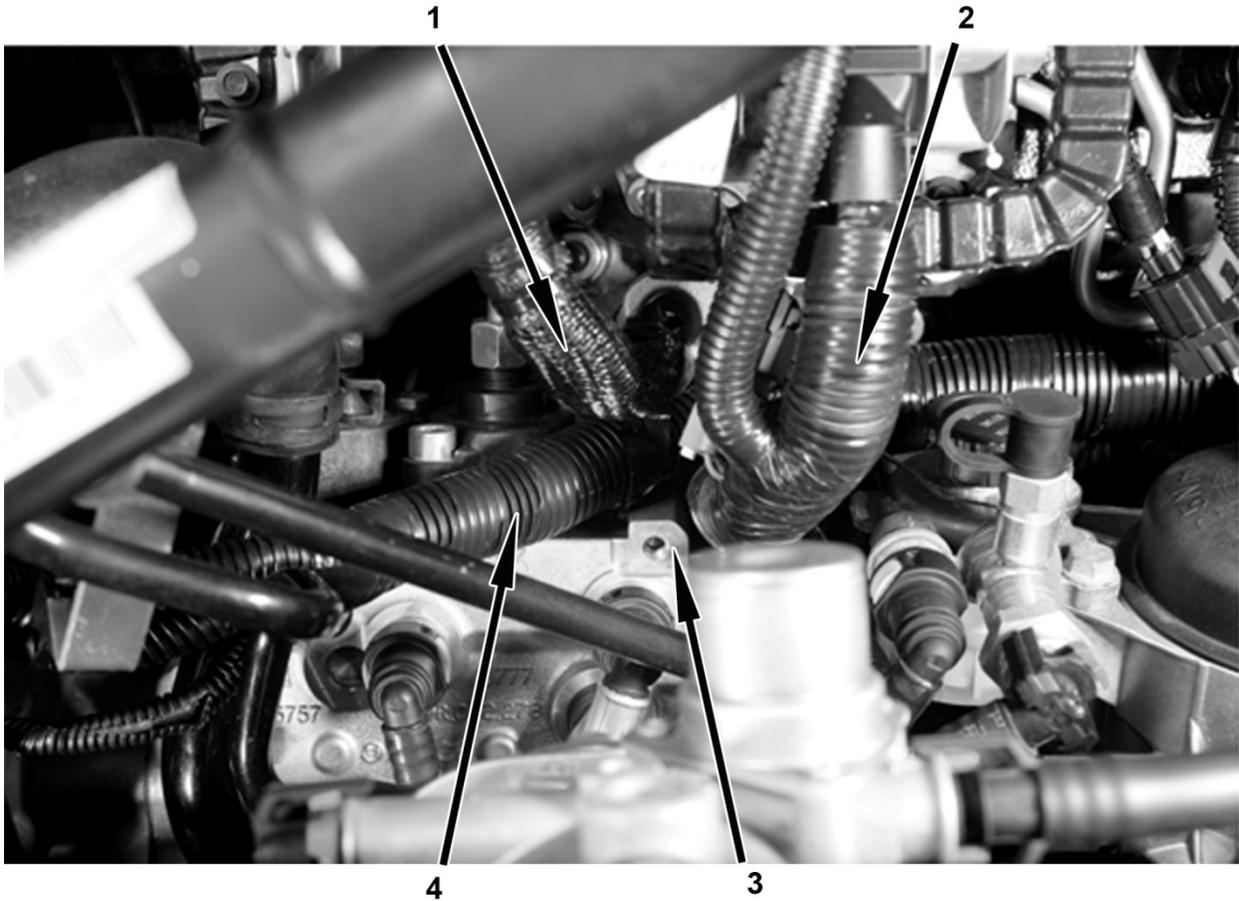


Figure 24

1. ECM-to-Sensor harness
2. Chassis-to-ECM harness
3. Pump screw boss
4. Alternator harness

12. Verify proper clearance, adjust if necessary to obtain proper clearance, and then cut off extra cable strap ends.

13. Remove lower front alternator-mounting bolt, install bolt through ground terminal of alternator harness, re-install bolt, and tighten bolt to specification. Connect the positive cables in the 6 o'clock position and tighten nut to specification (Figure 25).

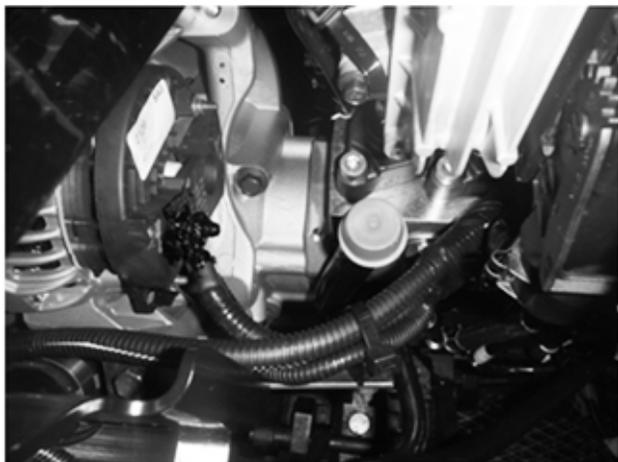


Figure 25

14. Install a cable tie strap (306132C1) to saddle on twisted bracket and around alternator harness bundle but do not fully tighten at this time. The cable tie strap will be tightened in a later step (Figure 25).
15. Adjust clamp of power steering hose such that it is located away from harness routing (Figure 26).



Figure 26

1. Power steering hose clamp

16. Install a dual-saddle swivel guide (3666881C1) between power steering hose tube and alternator harness bundle. Using a cable tie strap (306132C1) attach alternator harness bundle to one side of dual-saddle swivel guide. Using another cable tie strap, attach other side of dual-saddle swivel guide to power steering hose (Figure 27). The straps will be tightened in step 18.

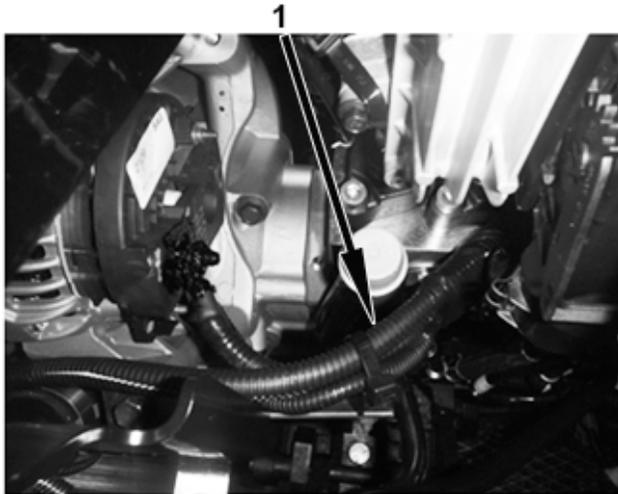


Figure 27

1. Installation of dual-swivel saddle

17. Cut a piece of protective molding (1682054C1) approximately 3 5/8 in. (93 mm) and press protective molding on to bracket tab (Figure 28).

NOTE: Figure 28 is for reference only as cable tie strap is not to be tightened at this time.



Figure 28

1. Protective molding

NOTE: As you perform the next step, verify there are no rub points prior to tightening any tie strap.

18. Pull harness bundle and dual-saddle swivel guide up and tight on power steering tube to eliminate rub points. Tighten cable tie straps between dual-saddle swivel guide to power steering tube and alternator harness bundle. Then, cut off extra cable tie strap ends.

19. Position extension away from any rub points (other bracket or steering hose) and tighten rear alternator-mounting bolt to specification. Tighten cable tie strap and cut off extra cable tie strap end (Figure 29).

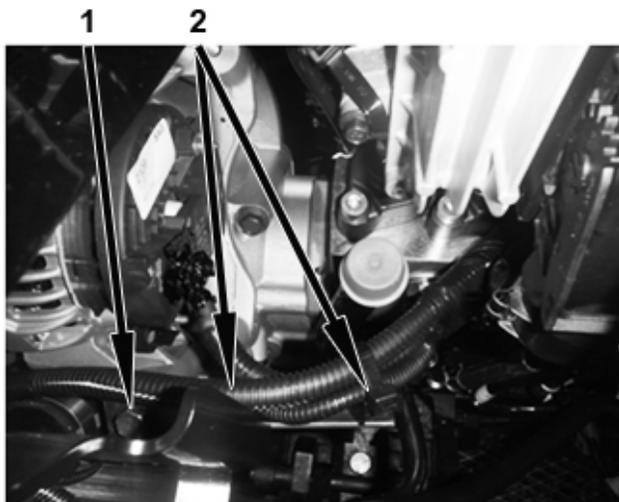


Figure 29

1. Rear alternator mounting bolt
2. Possible rub points

20. Reinstall driver's side fender.

21. Reconnect electrical connections to batteries. Always connect ground cable last. Close the battery compartment.

22. Remove wheel blocks.

LABOR INFORMATION

Operation No.	Description	Time
A40-12515-1	PayStar [®] , TranStar [®] , and ProStar [®] - Install Extension Bracket & Saddle; Route Harness	0.5
A40-12515-2	WorkStar [®] - Install Alternator Bracket & Saddle; Route Harness	0.9

Table 5

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.



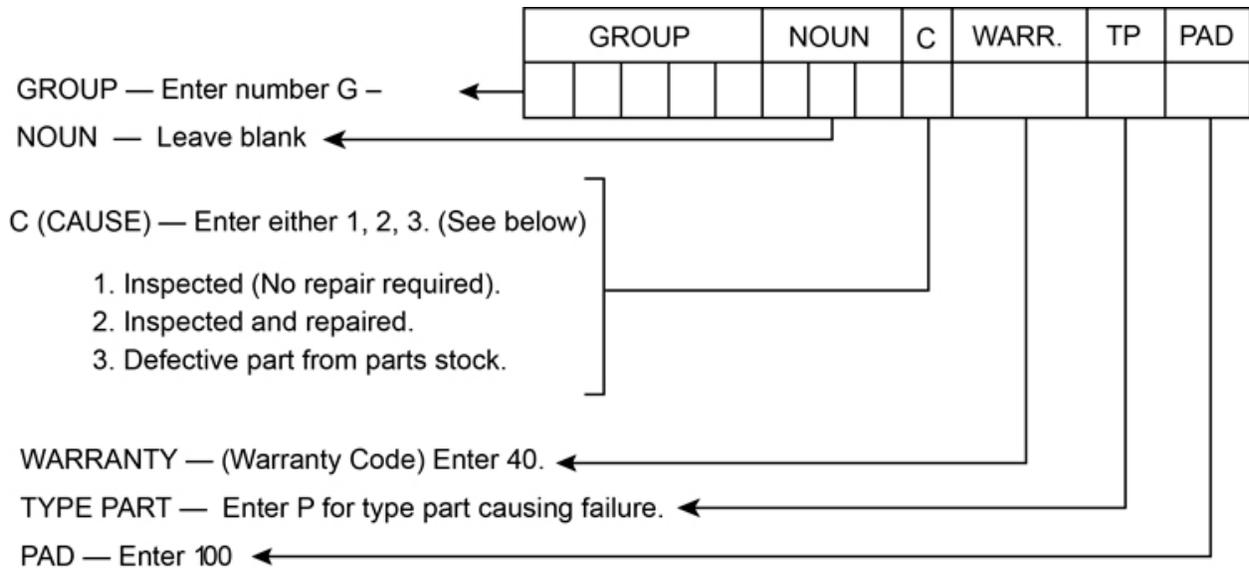
The image shows a rectangular label template with a black border. At the top, it says "DO NOT REMOVE". Below that, in a white box, it says "INTERNATIONAL". Underneath, there are fields for "Campaign No.", "VIN", and "Eng.#". Below these fields, it says "COMPLETED" and "Service Location Code #". At the bottom, it says "DO NOT REMOVE".

ADMINISTRATIVE/DEALER RESPONSIBILITIES

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:



UNITED STATES AND POSSESSIONS

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.

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.

Dealers should 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 make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited 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.

CANADA

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.

Dealers should 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 make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited 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.

EXPORT

Export Distributors should 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 distributor location.

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

Export Distributors are expected to provide full cooperation and follow-up with respect to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

NAVISTAR, INC