

SERVICE PROCEDURE

13504
APRIL 2013

SUBJECT: SAFETY RECALL
Axle bearing retainer nut snap ring on certain ProStar[®] models built 24 January 2012 through 02 January 2013 with feature codes 29AEB and 29AEC PreSet Plus[®] hubs.

DEFECT DESCRIPTION

This Safety Recall provides the procedure to inspect certain ProStar[®] units with ConMet PreSet Plus[®] axle hubs that may have missing or improperly installed axle bearing retainer nut lock snap ring. All six positions will be inspected. Axle bearing retainer nut snap ring may be missing or installed incorrectly. In some instances, retainer nut may loosen. In rare instances, separation of wheel hub from axle could occur contributing to vehicle crash resulting in property damage, personal injury, or death.

MODELS INVOLVED

This Safety Recall involves certain ProStar[®] models built 24 January 2012 through 02 January 2013 with feature codes 29AEB and 29AEC PreSet Plus[®] hubs.

PARTS INFORMATION

Part Number	Part Description	Quantity
3566160C1	Gasket, Axle Shaft Flange	4
3531210C1	Gasket, Hub Cap	2
3740165C1	Snap Ring Retainer R Drive	As Required
3740164C1	Snap Ring Retainer FF Front	As Required
EmGard 2979 50w	Wheel Bearing, Front, Lubricant Synthetic Oil	As Required
EmGard 2837 75w90	Wheel Bearing, Rear, Lubricant Synthetic Oil	As Required

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 PERSONAL INJURY AND / OR DEATH.

WARNING! ALLOW COMPONENTS IN ENGINE COMPARTMENT TO COOL BEFORE SERVICING ENGINE OR VEHICLE. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY AND / OR DEATH.

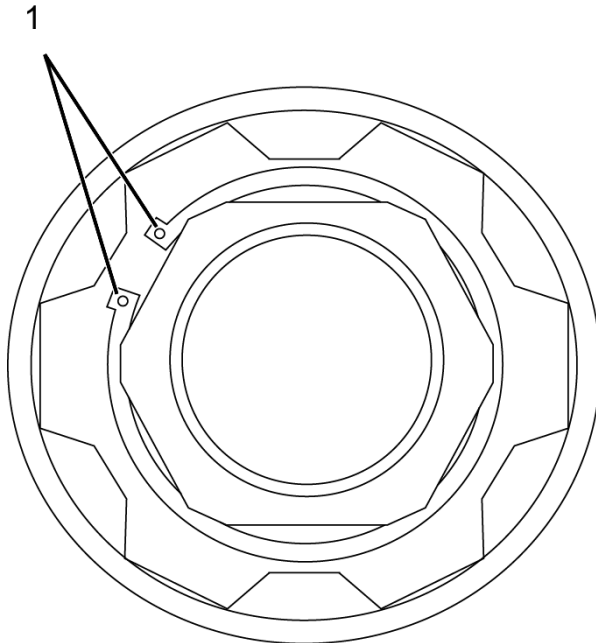
WARNING! KEEP FLAMES OR SPARKS AWAY FROM VEHICLE AND DO NOT SMOKE WHILE SERVICING THE VEHICLE'S BATTERIES. BATTERIES EXPEL EXPLOSIVE GASES. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, AND / OR DEATH.

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.

1. Bring vehicle into shop and park on flat surface.
2. Shift transmission to park or neutral and set parking brakes.
3. Install wheel chocks.

FRONT AXLE INSPECTION AND REPAIR

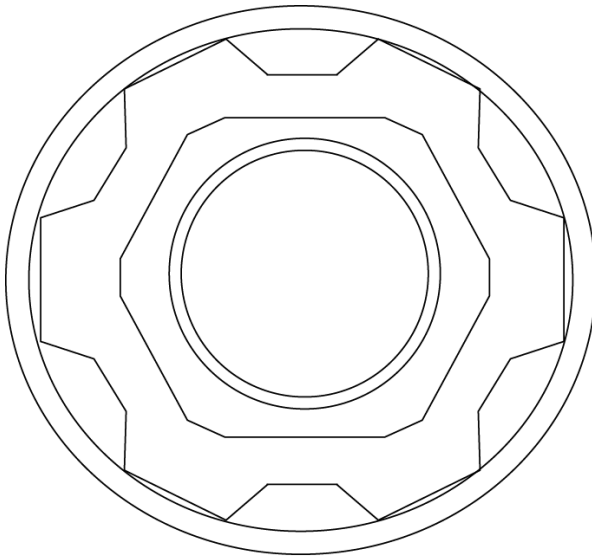
1. Place drain pan under spindle before removing hub cap.
2. Remove two front hub caps on steering axle.



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Figure 1. Snap Ring Retainer Properly Installed.

1. Snap ring retainer
3. Inspect snap ring retainers (Figure 1, Item 1). Make sure snap ring retainers are in place and fully locked into grooves of lock nut.
 - a. If snap ring retainers (Figure 1, Item 1) are properly installed, no further repairs are necessary. Proceed to Step 5.



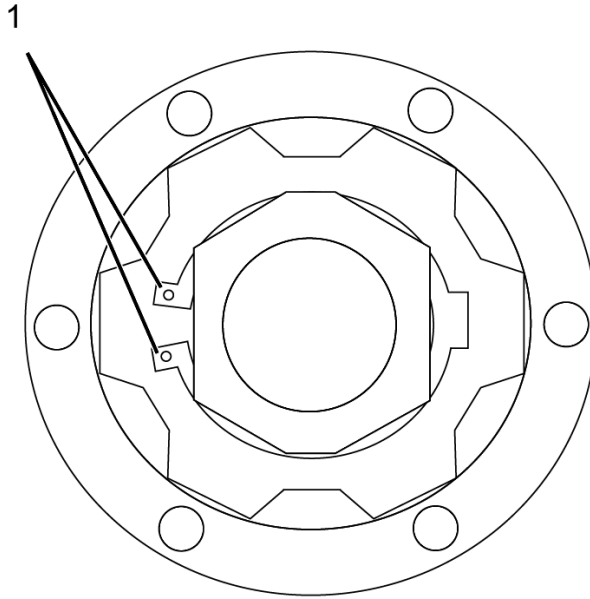
0000048055

Figure 2. Snap Ring Retainer Missing.

- b. If snap ring retainer is missing or improperly installed (Figure 2), check bearing nut torque. Torque to 300 lb-ft (407 N·m).
4. Install new snap ring retainer (Figure1, Item 1), locking properly into grooves of nut.
5. Install front hub caps with new gaskets.
6. Using star pattern, torque hub cap bolts to 12 to 18 lb-ft (16-24 N·m).
7. Fill front hubs to proper level with wheel bearing front lubricant, EmGard 2979 50w synthetic oil.

REAR AXLE INSPECTION AND REPAIR

1. Place drain pan under spindle before removing axle.
2. Remove four rear axle shafts.

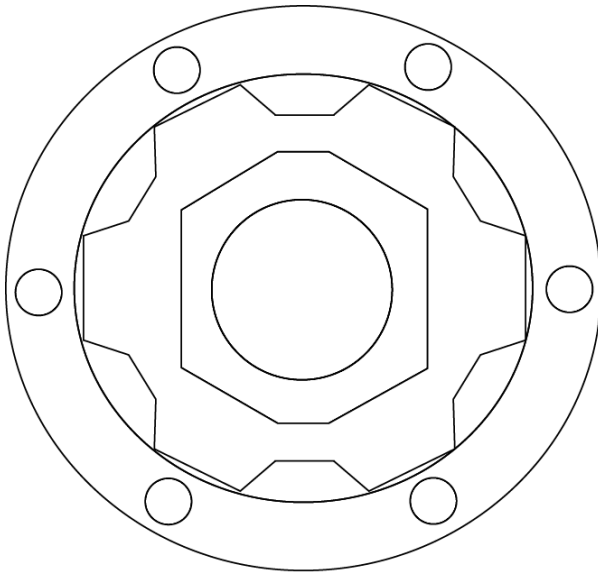


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Figure 3. Snap Ring Retainer Properly Installed.

1. Snap ring retainer

3. Inspect snap ring retainer (Figure 3, Item 1) on each axle. Make sure snap ring retainers are in place and fully locked into grooves of lock nut.
 - a. If snap ring retainer (Figure 3, Item 1) is properly installed, no further repairs are necessary. Proceed to Step 5.



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Figure 4. Snap Ring Retainer Missing.

- b. If snap ring retainer is missing or improperly installed (Figure 4), check bearing nut torque. Torque to 500 lb-ft (678 N·m) for drive axles.
4. Install new snap ring retainer (Figure 3, Item 1), locking properly into grooves of nut.
5. Reinstall rear axles with new gaskets.
6. Using correct stud tightening sequence, torque axle drive bolts to 70 to 90 lb-ft (95-122 N·m).
7. Check and top off differentials with EmGard 2837 75w90 synthetic oil, as needed.
8. Using suitable lifting device, tilt axle one direction (lift until opposite tire is suspended in air), and wait for 30 seconds, then lower axle.
9. Using suitable lifting device, tilt axle again from opposite side (lift until opposite tire is suspended in air) and wait for 30 seconds, to make sure wheel ends are full of oil, then lower axle.
10. Check and top off differentials with EmGard 2837 75w90 synthetic oil, as needed.
11. Torque oil fill plugs to 20 to 25 lb-ft (27-34 N·m).
12. Remove wheel chocks.

13. Release parking brakes.

END OF SERVICE PROCEDURE

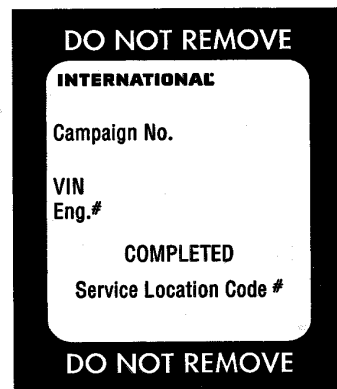
LABOR INFORMATION

Operation Number	Description	Time
A40-13504-1	Inspection Only (All Axles)	1.5 hrs
A40-13504-2	Replace Snap Ring Retainer (Each Axle)	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.



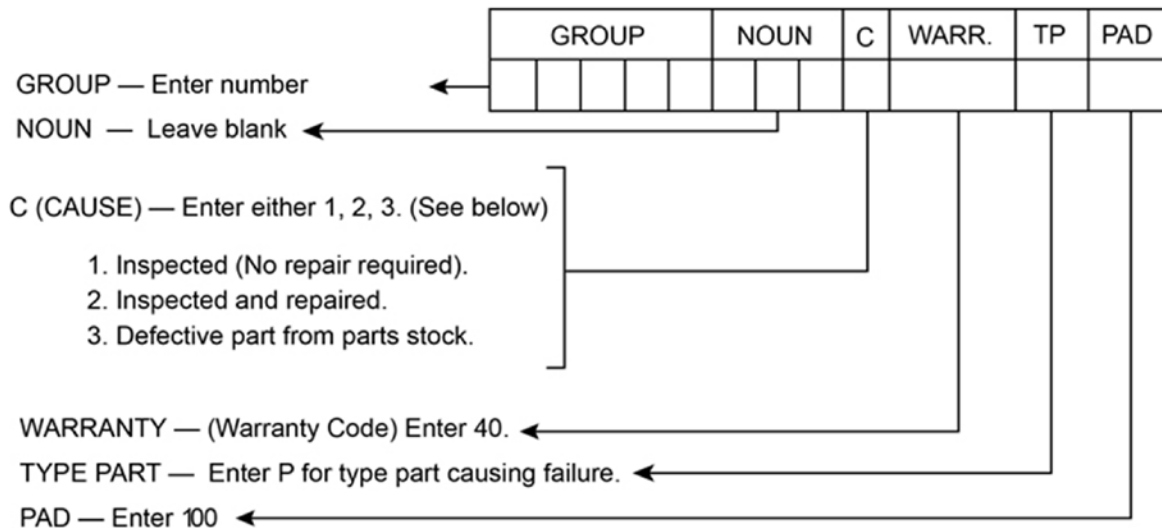
ADMINISTRATIVE / DEALER RESPONSIBILITIES

WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Safety Recall 13504.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Policy Manual, Section 7.1.8.

As with all claim submissions, items acquired locally must be submitted in the "Other Charges" tab. The cost of any bulk items (such as a bag of cable tie straps, roll of wire, a barrel of oil, or a tube of silicone) should be prorated for the cost of the individual pieces / amount used during each repair.



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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.

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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.