



R 99V-128

INTERNATIONAL[®] VEHICLE RECALL

G-89505
July, 1999

**SUBJECT: VEHICLE RECALL (U.S., EXPORT)
9000 Conventional and Cabover Series**

DEFECT DESCRIPTION

The front disc wheel hub flange could experience fatigue cracking under normal operating conditions. This defect could result in wheel separation that could cause a vehicular accident without warning that could result in personal injury and / or property damage, or death.

MODELS INVOLVED

9000 Conventional and Cabover Series that have FF-982 or FF-987 Non-Driving Front Axles in vehicles built from 2/1/96 through 5/31/98.

OWNER NOTIFICATION

Owners will be notified of this campaign on their vehicles by Navistar. 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 since 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.

SERVICE PROCEDURE FOR REPLACING THE FRONT AXLE HUBS

This issue relates to the new unitized hub and bearing assembly with no serviceable parts (bearings that are lubricated for life) referred to as a truck hub unit. All removed wheel hub units must be returned along with warranty claim number and VIN identification number. Follow the instructions in the hub and stud assembly kit. Use the shipping labels and fill out the warranty claims and VIN number information. All vehicles in this recall must have both wheel hubs replaced. No recall cards should be returned to Navistar with the number one box checked.

WARNING: To prevent serious eye injury, always wear safe eye protection when you perform vehicle maintenance or service.

WARNING: Block the wheels to prevent the vehicle from moving. Support the vehicle with safety stands. Do not work under a vehicle supported only

by jacks. Jacks can slip or fall over resulting in serious personal injury or death.

Note: The procedure below begins with the wheels already off and starts with steps to remove the wheel hub. If instructions are needed at any point in this repair procedure refer to the CTS 5000 Master Service Manual. Follow all standard safety precautions and procedures recommended by the CTS 5000 Master Service Manual.

REMOVING THE WHEEL HUB UNIT FROM THE STEERING KNUCKLE PROCEDURE

CAUTION: When the threaded protective cap is removed or tightened, use a size 3-1/2-inch socket to avoid damaging the unit.

1. Remove the threaded protective cap from the hub by turning it in a counter-clockwise direction.
2. Bend back the outer "D" lock washer tab away from the flat edge of the outer wheel bearing nut. Refer to Figure 1.

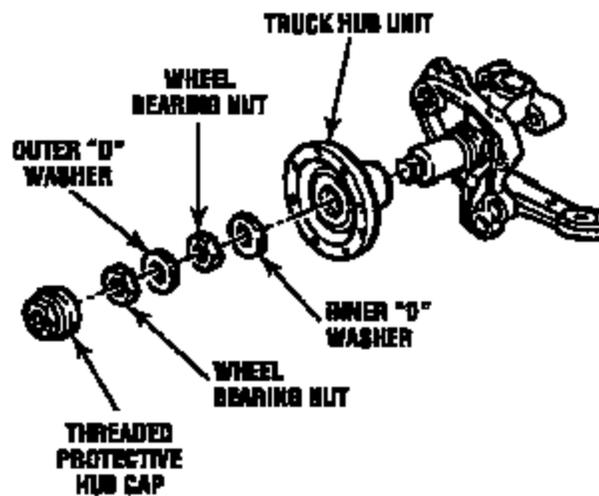


Figure 1

3. Remove the outer wheel bearing nut and the outer washer from the axle spindle.
4. Use a torque multiplier or 24-inch breaker bar to remove inner wheel bearing nut and inner washer from the spindle.
5. Discard removed hub cap, both washers and nuts.

CAUTION: When removing the wheel hub unit from knuckle spindle, take care not to misalign or wedge wheel hub unit into the spindle threads to prevent the wheel hub unit from becoming jammed or wedged onto the spindle.

6. Remove wheel hub unit carefully. Draw hub assembly straight away from spindle.

NOTE: If the wheel hub unit is difficult to remove from the spindle continue with the following procedures.

Procedure For Using A 17.5 Ton Cross Block Puller Tool To Remove The Wheel Hub Unit From The Spindle.

WARNING: Use a brass or leather mallet for removal and disassembly procedures. Do not hit steel parts with a steel hammer. Pieces can break off and cause serious personal injury.

1. Using a brass hammer, drive out two studs from opposite sides of the wheel hub unit to provide access for two Grade 8 bolts used with the cross block puller.
2. Assemble the cross block puller with two 8" x 7/8" Grade 8 bolts onto the face of the wheel hub unit assembly. Refer to Figure 2.
3. Install the inner wheel bearing nut just until it is flush with the end of the spindle. Once the hub is loose and is sliding off, remove the nut.

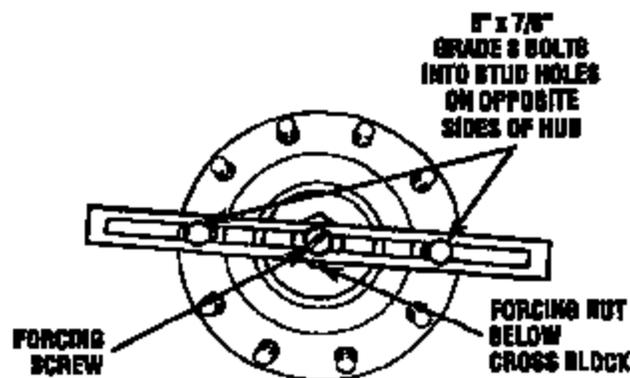


Figure 2

CAUTION: You must follow these notes:

- Always use the shortest legs possible for an application to reduce the chance of tool or equipment damage.
 - Apply force gradually. The part should "give" a little at a time. Do not try to speed the operation by using an impact wrench on the forcing screw.
 - If maximum force has been applied, and the part has not moved, use a tool with a larger capacity. Do not hit the part with a hammer in an attempt to jar it loose. Hitting the part with the hammer could result in damage to components.
4. Tighten the forcing nut and washer against the cross block to apply force to the tool and separate the wheel hub unit from the knuckle spindle. Refer to Figure 3.

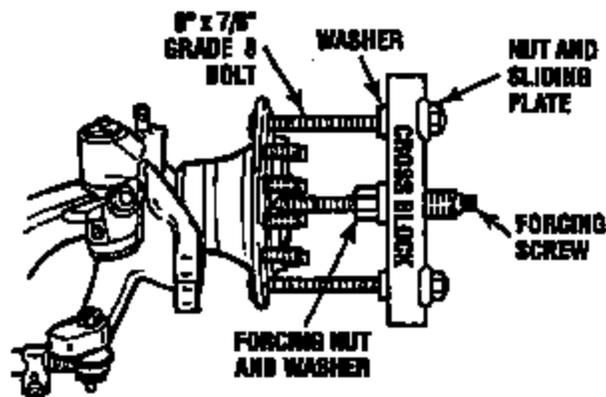


Figure 3

- Repeat this procedure to remove the wheel hub unit on the opposite side of axle.

INSTALLING THE REPLACEMENT WHEEL HUB UNITS ONTO THE AXLE SPINDLE

Two different kits are provided for different wheel hub unit replacement.

NOTE: Two kits are required to completely service one axle.

| GAWR EASY STEER PLUS | LONG WHEEL STUD KIT # | SHORT WHEEL STUD KIT # |
|-----------------------------|------------------------------|-------------------------------|
| 13,200 lb | P/N KIT1447 | P/N KIT1448 |

*Long Wheel Studs are only on aluminum wheels

*Long Wheel Studs measure approximately 2.9" from the outboard face of the flange to the end of the stud

*Short Wheel Studs are only on steel wheels

*Short Wheel Studs measure approximately 2.5" from the outboard face of the flange to the end of the stud

- Check the knuckle spindle for scratches, nicks or marks. Minor surface damage may be repaired using a crocus or emery cloth. Refer to Figure 4.

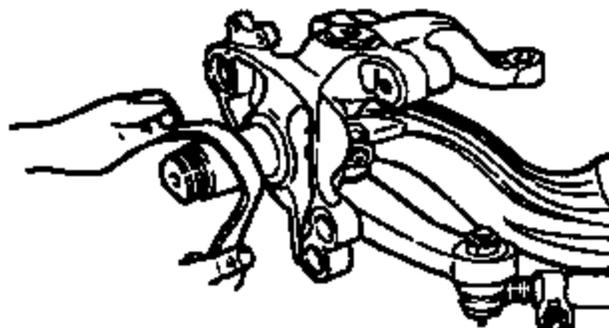


Figure 4

2. Clean knuckle spindle with a clean dry rag. **DO NOT** apply any solvent.
3. Lubricate the inside bore of the replacement hub and the entire axle spindle with NLGI #1 or #2 grease.

CAUTION: Take care to align unit carefully. Install the new hub unit straight onto spindle. Do not allow the hub unit to misalign and wedge onto spindle threads. Bearing damage could occur. If the wheel hub unit does not slide on easily, do not force it on the spindle. The wheel hub unit can become jammed on the spindle if care is not taken to align it properly with the spindle. If the wheel hub unit becomes jammed on the spindle, carefully remove the wheel hub unit from the spindle so as not to disassemble or loosen the inner bearings from the wheel hub unit and repeat procedures.

Disassembly of the wheel hub unit could contaminate the lubricant and will void the manufacturer's warranty. Disassembled hub units cannot be used and require replacement.

Check the bore of the wheel hub unit for any obstructions and check the spindle for any nicks or burrs.

4. Carefully align the new wheel hub unit bore with the spindle and then slide the hub straight onto the spindle.

WARNING: The inner wheel bearing nut and outer wheel bearing nut torque values are unique to the wheel hub unit. Failure to follow the specified torque may result in possible component damage, wheel separation and serious personal injury and / or property damage, or death.

NOTE: The inner wheel bearing nut and the outer wheel bearing nut are identical but torque values are different.

5. Install new thick inner washer and the new wheel bearing nut onto the spindle threads. Tighten the inner wheel bearing nut onto spindle 500 to 700 lb-ft (678-949 N·m) while rotating the hub in both directions. Refer to Figure 5.

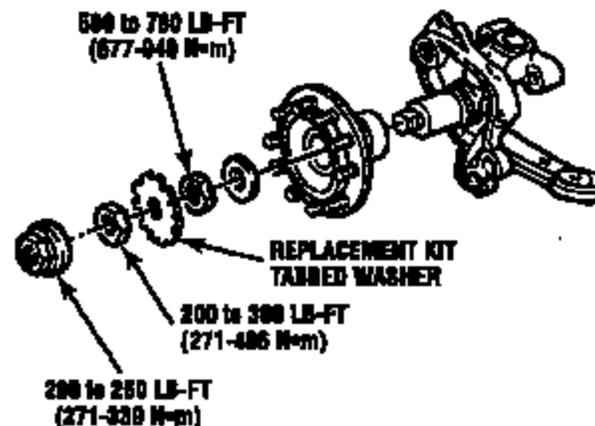


Figure 5

6. For ABS equipped axles, check that the original ABS sensor has not moved from the sensor holder. Check the sensor wiring to the chassis wiring. Refer to the CTS 5000 Master Service Manual for sensor adjustments.
7. Install the new tabbed washer onto the spindle threads.
8. Install the new outer wheel bearing nut onto the spindle threads. Tighten the outer wheel bearing nut from 200 to 300 lb-ft (271-406 N•m) torque.
9. Bend tabs of the new outer replacement tabbed washer over the flats of the outer wheel bearing nut and the inner wheel bearing nut. Bend washer tabs onto at least one flat edge to each nut. Use care to ensure that tool used to bend tabs does not slip past tabs and damage the spindle hub threads.
10. Apply the spindle warning label provided in the kit to the spindle end before installing the hub cap. Refer to Figure 6.

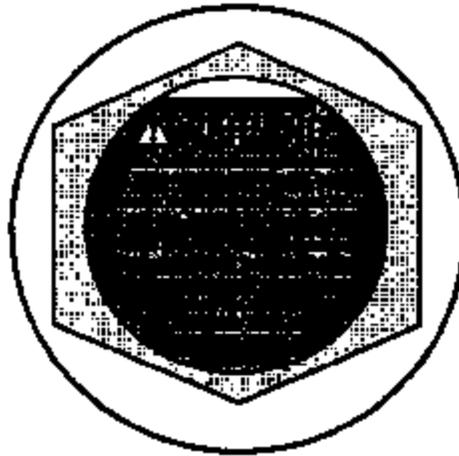


Figure 6

11. Apply a light coating of NLGI #1 or #2 grease to the axle spindle nuts to protect against corrosion.
12. Install the new hub cap from the kit into the hub threads. Tighten from 200 to 250 lb-ft (271-339 N•m).
13. Install the brake drum and the tire-wheel assembly. Refer to the International Service Manual CTS-5017K for instructions and torque specifications and tightening sequence.
14. All replaced wheel hub units must be returned along with warranty claim and VIN numbers, according to the instructions packaged with the replacement kits. Shipping details and labels are also included.

For additional information on other techniques to service, or for complete maintenance procedures on the Easy Steer Plus Axle Series, call 800-535-5560 or 888-725-9355.

PARTS INFORMATION

FOLLOW THE INSTRUCTIONS INCLUDED WITH THE HUB KITS AND RETURN ALL HUBS.

| Part Number | Part Description | Quantity |
|--------------------|---|-----------------|
| KIT1447 | 13,200 lb GAWR Long Wheel Stud Kit | 2 Kits |
| | 1 Kit Contains: | |
| | Hub & Stud Assembly | 1 |
| | Hub cap | 1 |
| | Inner Washer | 1 |
| | Wheel Nuts | 2 |
| | Tabbed Washer | 1 |
| | Technical Bulletin | 1 |
| | Hub Return Address Label | 1 |
| | Hub Return Instruction | 1 |
| | Spindle End Warning Label | 1 |
| KIT1448 | 13,200 lb. GAWR Short Wheel Stud Kit | 2 Kits |
| | 1 Kit Contains: | |
| | Hub & Stud Assembly | 1 |
| | Hub cap | 1 |
| | Inner Washer | 1 |
| | Wheel Nuts | 2 |
| | Tabbed Washer | 1 |
| | Technical Bulletin | 1 |
| | Hub Return Address Label | 1 |
| | Hub Return Instruction | 1 |
| | Spindle End Warning Label | 1 |

LABOR INFORMATION

| Operation No. | Description | Time |
|----------------------|-------------------------------|-------------|
| A40-99505-1 | Replace both front wheel hubs | 1.7 Hrs. |

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with Campaign G-99505 will require a CTS-1075 Campaign Identification Label.

Attach the CTS-1075 label on a clean surface next to the vehicle identification number (VIN) plate.



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, transfer location or customer must be notified 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.

In order 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 vehicle as soon as possible.

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 Recall Number 99505

NOUN Leave Blank.

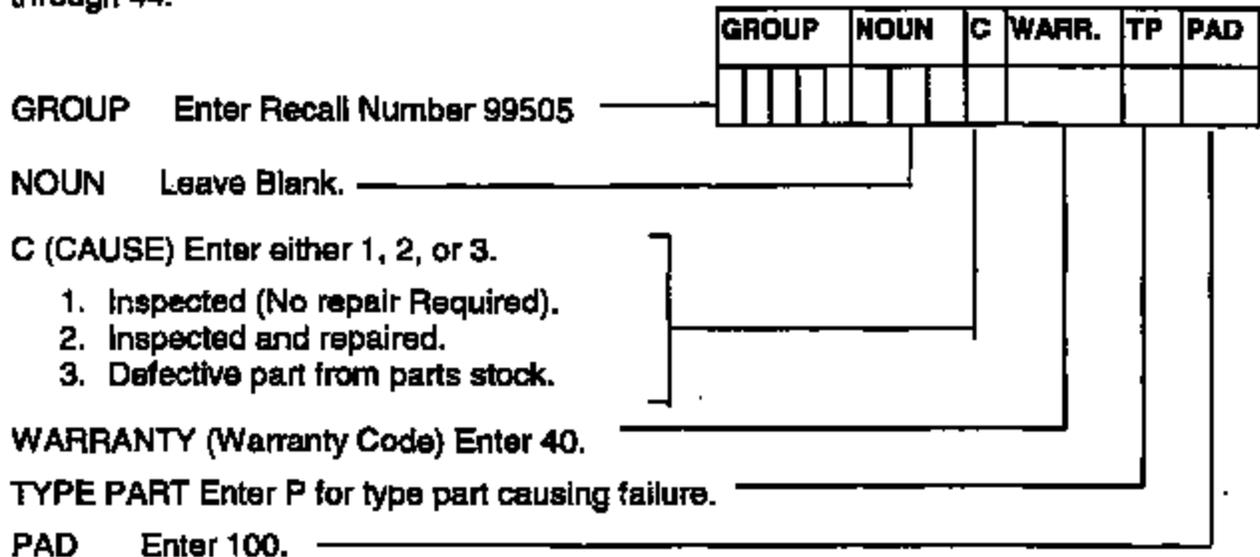
C (CAUSE) Enter either 1, 2, or 3.

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, 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 Safety Recall G-99505.

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.

Distribution: All Dealers

Reproduction: Not Required

NAVISTAR INTERNATIONAL TRANSPORTATION CORP.

Navistar International
Transportation Corp.

455 North Cityfront Plaza Drive
Chicago Illinois 60611
Telephone 312 836-2000

NAVISTAR.

SAFETY RECALL 99505

August, 1999

Dear International Customer:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Navistar International Transportation Corp. has determined that a defect related to motor vehicle safety exists in the front wheel hubs on certain 9000 Conventionals and Cabover Models that have FF982 and FF987 Non-Driving Front Axles rated at 13,200lbs. Vehicles built from 2/1/96 through 5/31/98 are included in this Safety Recall. The vehicle identified on the enclosed card fits this description and our records show that you own this vehicle.

REASON FOR THIS RECALL

WARNING - YOUR FRONT WHEELS COULD FALL OFF WITHOUT WARNING DURING NORMAL DRIVING CONDITIONS. IF A FRONT WHEEL COMPLETELY SEPARATES FROM YOUR VEHICLE, THE RESULT COULD BE A COMPLETE LOSS OF STEERING CONTROL CAUSING AN ACCIDENT RESULTING IN VEHICLE DAMAGE AND / OR PERSONAL INJURY, OR DEATH.

ACTION YOU SHOULD TAKE

Navistar estimates that its dealers will have instructions to correct this defect by August 2, 1999. After that date, you are requested to contact your International dealer for an appointment to bring your vehicle, along with the enclosed card, to your dealer to remedy the defect at no cost to you. **The remedy is to replace the wheel hub assemblies.** The repair will be made without charge to you and will require approximately one hour of repair time.

IMPORTANT - PLEASE NOTE

If the vehicle will not or cannot be corrected, please mark on the enclosed card under "CHECK ONE", the box which best describes why the vehicle will not be repaired and return the postage-prepaid card to us. In the event you no longer own the vehicle described on the card, please fill in the new customer name and address, if known, and return it to us. This information will allow us to update our records so that you will not be contacted again regarding this recall.

(OVER PLEASE)

IF YOU NEED ASSISTANCE

If you take your vehicle to your International dealer on a mutually agreed upon service date, and he does not remedy this condition without charge on that date or within five days, you can obtain assistance by following the procedure described in the Owner Assistance Guide section in your Owner's Manual or by calling toll free 1-800-448-7825.

You may also wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, D.C. 20590, or call the toll-free Auto Safety Hot-Line at 1-800-424-9393 (Washington, D.C. area residents may call 366-0123) if your International dealer fails to repair or is unable to remedy this condition without charge or within a reasonable time.

We request your prompt attention to correction of this defect and apologize for any inconvenience it may cause you.

NAVISTAR INTERNATIONAL TRANSPORTATION CORP.