



VEHICLE RECALL

G-02515
December 2002

SUBJECT: VEHICLE RECALL (U.S., EXPORT)
Under-Torqued Brake Spider or Anchor Plate
Mounting Bolts On The Right Side of Certain 9100i,
9200i, 9400i and 9900i Models Built Between 7/22/02
and 8/16/02

DEFECT DESCRIPTION

The bolts securing the brake spider to the front axle wheel end and the rear axle(s) wheel end were under torqued during the vehicle assembly line operation **on the right side of the vehicle ONLY**. The low torque may not provide the necessary clamp load to adequately secure the brake spider to the axle wheel end.

RISK TO MOTOR VEHICLE SAFETY

If the clamp load of the fasteners is not sufficient, the brake spider will move when the brakes are applied in either the forward or reverse direction. Such movement may cause individual brake components to fail or eventually fatigue the brake spider mounting bolts. If all the bolts fail due to fatigue, the result would be complete loss of braking at that wheel end. Any reduced braking power can result in extended stopping distance, which could result in a loss of vehicle control, which in turn could cause an accident, possibly resulting in property damage, personal injury or death.

DESCRIPTION OF VEHICLES INVOLVED

Certain 9100i, 9200i, 9400i and 9900i models built between 7/22/02 and 8/16/02 are involved in this recall. Only the brake spider fasteners on the right side of the vehicle are to be campaigned. **Exceptions: The front axles on vehicles with front axle codes 02ARK or 02ARL are NOT involved because they came to the assembly line with the brake spiders already installed. Only the right rear wheel end(s) on these vehicles will need repair.** Verify vehicles involved using ISIS or use the attached VIN list (contains ALL VIN's in this recall).

OWNER NOTIFICATION

International Truck and Engine Corporation will notify 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.

SERVICE PROCEDURE

NOTE: ONLY AFFECTS RIGHT SIDE OF VEHICLE

BEFORE PERFORMING THE SERVICE PROCEDURE, PLEASE READ AND UNDERSTAND THE FOLLOWING INSTRUCTIONS COMPLETELY.

INTRODUCTION: Before starting the procedure, check the front axle code or reference the VIN list at the end of this letter to determine if the front axle needs serviced for this recall. If the front axle code is 02ARK or 02ARL the front axle is not involved and the VIN list will say "None Required". These two axles are the only exceptions. All other axles must have the right side brake spider mounting fasteners re-torqued. Reference the PART INFORMATION section of this letter to determine the parts required.

WARNING: To prevent serious eye injury, always wear appropriate eye protection when performing vehicle maintenance or service.

NOTE: STEPS (1 – 4) APPLY TO ALL VEHICLES.

1. **WARNING: Block the wheels to prevent the vehicle from moving. If a vehicle moves unexpectedly or suddenly, the result could be serious personal injury or death.**
2. Open the hood assembly.
3. **WARNING: Raise the vehicle as necessary. Do not work under a vehicle supported only by jacks. Jacks can slip or fall over, potentially resulting in serious personal injury or death.**
4. Continue to the front axle service procedure if necessary then perform the rear axle service procedure on all vehicles.

FRONT AXLE SERVICE PROCEDURE (IF NECESSARY, RIGHT SIDE ONLY)

1. Back off front axle brake shoe adjustment to allow for wheel assembly removal.
2. Place a container under the hub cap to catch oil and remove hub cap.
3. Remove outer wheel bearing adjusting nut.
4. Remove wheel, rim, hub and bearings as an assembly.
5. Remove front wheel oil seal.
6. Install new front wheel oil seal.
7. Remove one brake spider fastener to determine if there is any indication of brake spider chocking (wear marks on the bolts or brake spider caused by movement of the brake spider on the axle); if so, all brake spider mounting fasteners must be replaced (Reference Figure 1). Reference the PART INFORMATION section of this letter for replacement fasteners.



Front Spider
Mounting Bolts
7 Per Wheel End
No Washers

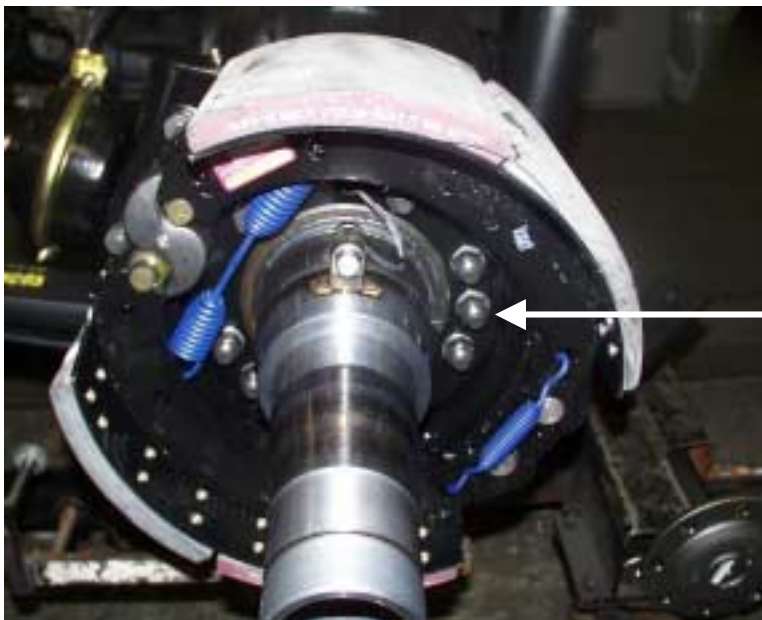
Figure 1 – Front Spider Mounting

8. Torque all 7 front brake spider bolts to 175 – 190 Lbf-Ft (240 – 260 NM).
9. Re-install wheel assembly.
10. Adjust outer wheel bearing adjusting nut; prime wheel cavity with lube; and check end play with dial indicator.

11. Install wheel hub cap and gasket.
12. Top off lube in hub cap.
13. Clean front wheel assembly (wheel and tire) as needed.
14. Adjust front brake slack adjuster.
15. Lower front axle assembly and close the hood assembly.

REAR AXLE (Right Side Only, but all rear axles need this service.)

1. Remove rear wheel assembly (rim and tire).
2. Install cage bolt into park brake air chamber.
3. Loosen rear brake shoe adjustment.
4. Remove rear brake drum (or hub).
5. Remove one brake spider fastener to determine if there is any indication of brake spider chucking (wear marks on the bolts or brake spider caused by movement of the brake spider on the axle); if so, all brake spider mounting fasteners must be replaced (Reference Figure 2). Reference the PART INFORMATION section of this letter for replacement fasteners.



Rear Spider
Mounting Bolts
9 or 10 Per Wheel
End
With Washers

Figure 2 – Rear Spider Mounting

6. Torque ALL (9 or 10) rear brake spider bolts to 175 – 190 Lbf-Ft (240 – 260 NM).
7. Install rear brake drum (or hub).
8. Adjust outer wheel bearing adjusting nut and check end play with dial indicator.

9. Re-install rear wheel assembly (rim and tire).
10. Adjust rear brake slack adjuster.
11. Remove cage bolt from park brake air chamber.
12. Lower rear axle assembly.
13. Remove wheel chocks.
14. Repeat steps 1 through 13 if the vehicle has a tandem rear axle.

PART INFORMATION

PART ISSUES: PLEASE READ

All vehicles in this recall need to have the service procedure completed. There is no inspection only option. At the end of this letter you will find a VIN list that contains all the vehicles in this recall and the front wheel seal part number if needed. Please read ORDERING PARTS section below. TABLES 1 and 2 provide the hardware that may be needed, depending on what is found during the service procedure. We expect most VIN's will just need the torque procedure and not require new hardware.

ORDERING PARTS: Not all VIN's need the front axle serviced for this recall, but if they do, the front seal part number is provided in the attached VIN list at the end of this letter. Only one seal is needed since only the right side is involved. For all VIN's that need a front seal you must also order one hub gasket part number 3531210C1. Reference TABLES 1 and 2 if hardware is needed.

RETURNING PARTS: DO NOT RETURN ANY PARTS.

TABLE 1: Front Spider Hardware (No washers used on front)

FRONT Spider Hardware Parts	Description	Quantity Required Per Spider
9411658	Nut, Hex Lock 5/8 NF	7
25334R1	Bolt, Hex Head 5/8 –18 UNF x 1 3/4	7

TABLE 2: Rear Spider Hardware

REAR Spider Hardware Parts	Description	Quantity Required
9411658	Nut, Hex Lock 5/8 NF	Please read * NOTES below
25334R1	Bolt, Hex Head 5/8" –18 UNF x 1 3/4"	
25051R1	Bolt, Hex Head 5/8" –18 UNF x 2"	
406267C1	Washer, Special 5/8	

*** NOTES:** 9 of each piece are required for non-cast spiders or vehicles built with code 4092 and not with code 4774.
 10 of each piece are required for cast spiders or vehicles with code 4091 or vehicles with codes 4092 and 4774.
 Some vehicles may have 2-inch long bolts (PN: 25051R1) instead of the 1 and 3/4 inch bolts. The two-inch length may not be necessary, verify the length that is needed by inspecting each bolt application.

LABOR INFORMATION

Operation Number	Description	Time
A40-02515-1	Re-torque Brake Spider Mounting Rt. Side Front & Rear Axle (4x2)	1.6 Hrs.
A40-02515-2	Re-torque Brake Spider Mounting Rt. Side Front, Intermediate & Rear Axle (6x4)	2.0 Hrs.
A40-02515-3	Re-torque Brake Spider Mounting Rt. Side Rear Axle only (4x2). (Vehicle has Front Axle Code 02ARK or 02ARL)	0.8 Hrs.
A40-02515-4	Re-torque Brake Spider Mounting Rt. Side Rear & Intermediate Axles only (6x4). (Vehicle has Front Axle Code 02ARK or 02ARL)	1.2 Hrs.

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 all units in your inventory that are marked for this recall. **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 the 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 a vehicle or refund the purchase price less a reasonable allowance for depreciation, every effort must be made to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible.

WARRANTY CLAIMS

NOTE: All the vehicles in the recall must have the service procedure completed. There is not inspection only option. All claims must have CAUSE of 2 below.

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 The Recall Number	NOUN: Leave Blank.	C: (CAUSE) Enter number 2. 2. Inspected and repaired.	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 all involved units in your 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 the 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 your Regional Service Manager.

INTERNATIONAL TRUCK AND ENGINE CORPORATION

VIN LAST 8 ASCENDING	WHEEL SEAL ONE REQUIRED		VIN	SEAL		VIN	SEAL
3C038563	3528090C1		3C039191	394894C91		3C045652	3528090C1
3C039147	394894C91		3C039192	394894C91		3C045653	3528090C1
3C039148	394894C91		3C039193	394894C91		3C045654	3528090C1
3C039149	394894C91		3C039194	394894C91		3C045655	3528090C1
3C039150	394894C91		3C039195	394894C91		3C045662	3528090C1
3C039151	394894C91		3C039196	394894C91		3C046228	3528090C1
3C039152	394894C91		3C039217	394894C91		3C047031	None Req'd
3C039153	394894C91		3C039218	394894C91		3C047032	None Req'd
3C039154	394894C91		3C039219	394894C91		3C047033	None Req'd
3C039155	394894C91		3C039220	394894C91		3C048090	None Req'd
3C039156	394894C91		3C039221	394894C91		3C049222	3528090C1
3C039157	394894C91		3C039222	394894C91		3C049560	None Req'd
3C039158	394894C91		3C039223	394894C91		3C049561	None Req'd
3C039159	394894C91		3C039224	394894C91		3C049564	None Req'd
3C039160	394894C91		3C039225	394894C91		3C049565	None Req'd
3C039161	394894C91		3C039226	394894C91		3C049566	None Req'd
3C039162	394894C91		3C039228	394894C91		3C049567	None Req'd
3C039163	394894C91		3C039229	394894C91		3C049569	None Req'd
3C039164	394894C91		3C039230	394894C91		3C049883	None Req'd
3C039165	394894C91		3C039231	394894C91		3C049890	None Req'd
3C039166	394894C91		3C039232	394894C91		3C049891	None Req'd
3C039167	394894C91		3C039233	394894C91		3C049892	None Req'd
3C039168	394894C91		3C039234	394894C91		3C049898	None Req'd
3C039169	394894C91		3C039235	394894C91		3C049899	None Req'd
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3C039172	394894C91		3C045153	3528090C1		3C050285	None Req'd
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3C039174	394894C91		3C045226	3528090C1		3C050889	3528090C1
3C039175	394894C91		3C045227	3528090C1		3C050890	3528090C1
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VIN	SEAL		VIN	SEAL		VIN	SEAL
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3C051815	None Req'd		3C053023	None Req'd		3C054482	None Req'd
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3C051820	None Req'd		3C053031	None Req'd		3C054505	3528090C1
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3C052176	3528090C1		3C053562	3528090C1		3C054584	3528090C1
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3C052605	3528090C1		3C054116	1612877C91		3C055158	3528090C1
3C052606	3528090C1		3C054256	3528090C1		3C055167	None Req'd
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3C052773	None Req'd		3C054352	None Req'd		3C055269	3528090C1
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VIN	SEAL		VIN	SEAL
3C055272	3528090C1		3C056898	3528090C1
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3C055526	3528090C1		3C056902	3528090C1
3C055572	None Req'd		3C056903	3528090C1
3C055576	3528090C1		3C056959	3528090C1
3C055579	3528090C1		3C056969	3528090C1
3C055598	3528090C1		3C056970	3528090C1
3C055615	3528090C1		3C056972	3528090C1
3C055701	None Req'd		3C056973	3528090C1
3C055704	3528090C1		3C056974	3528090C1
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3C055725	3528090C1		3C057038	3528090C1
3C055772	None Req'd		3C057039	3528090C1
3C055773	None Req'd		3C057040	3528090C1
3C055774	None Req'd		3C057051	3528090C1
3C055786	None Req'd		3C057052	3528090C1
3C055850	3528090C1		3C057156	3528090C1
3C055851	3528090C1		3C057157	3528090C1
3C056057	None Req'd		3C057203	3528090C1
3C056058	None Req'd		3C057330	3528090C1
3C056059	None Req'd		3C057333	3528090C1
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3C056061	None Req'd		3C057435	None Req'd
3C056084	None Req'd		3C057438	None Req'd
3C056086	None Req'd		3C057487	3528090C1
3C056087	None Req'd		3C057510	None Req'd
3C056089	None Req'd		3C057689	None Req'd
3C056090	None Req'd		3C057690	3528090C1
3C056092	None Req'd		3C057944	None Req'd
3C056183	3528090C1		3C058064	None Req'd
3C056221	None Req'd		3C058065	None Req'd
3C056288	3528090C1		3C058190	3528090C1
3C056289	3528090C1		3C058897	3528090C1
3C056290	3528090C1		3C059131	None Req'd
3C056396	None Req'd		3C059296	3528090C1
3C056519	None Req'd		3C059541	None Req'd
3C056520	None Req'd		3C059566	None Req'd
3C056521	None Req'd		3C059567	None Req'd
3C056522	None Req'd		3C059568	None Req'd
3C056856	3528090C1		3C059992	3528090C1
3C056888	3528090C1		3C059993	3528090C1
3C056889	3528090C1		3C059994	3528090C1
3C056892	3528090C1		3C059996	3528090C1
3C056893	3528090C1		3C060260	3528090C1
3C056897	3528090C1			