

# **VEHICLE RECALL**

G-04517-R1 December 2004

**SUBJECT:** SAFETY RECALL (U.S., EXPORT)

TIE ROD ARMS on certain 9200*i*, 9400*i*, and 9900*i* 

models built 11/1/2002 thru 6/16/2003

## **REVISION DESCRIPTION**

#### **MODELS INVOLVED**

- Due to an error in campaign address files, more vehicles were recalled than was required.
- A revised list of suspect vehicle identification numbers (VIN) has been added to this section.

#### SERVICE PROCEDURE

- · Re-worded warning regarding clamp tack welds.
- Added INSPECTION PROCEDURE.

#### LABOR INFORMATION

Added new labor operation for VIN inspection only.

## **DEFECT DESCRIPTION**

The lower tie rod arms on certain axles were not induction hardened as required by International specification. Without the induction hardening process being performed, the tie rod arm may fatigue during the expected life of the vehicle. A fatigue failure of the tie rod arm may result in a loss of vehicle steering control. This may result in a vehicle crash without warning that can result in property damage, personal injury or death.

## **MODELS INVOLVED**

This Safety Recall involves certain 9200*i*, 9400*i*, and 9900*i* models built between 11/1/2002 and 6/16/2003 with 14K Lb. front axles (feature code 0002ARV) and wheel-bases greater than 191" (485cm).

The following vehicles are involved in this recall. All vehicles on this list *MUST HAVE THE SERVICE PROCEDURE PERFORMED*.

1	1	
3C055525	4C083191	
3C059719	4C083891	
3C063237	4C084892	
3C072399	4C085311	
3C072677	4C085502	
3C072678	4C085583	
3C072973	4C085911	
3C073396	4C085912	
3C073397	4C085913	
3C073807	4C086060	
3C074165	4C086105	
3C074166	4C086206	
3C074167	4C086207	
3C074168	4C086208	
3C074169	4C086209	
3C074214	4C086210	
3C074215	4C086211	
3C074337	4C086212	
3C074343	4C086224	
3C074569	4C086225	
3C074570	4C086451	
3C074571	4C086767	
3C077059	4C087726	
3C078110	4C087727	
3C078111	4C087728	
4C073228	4C087729	
4C080091	4C087915	
4C080532	4C089262	
4C080551	4C089877	
4C080564	4N050428	
4C080599	4N074170	
4C080667	4N075955	
4C080669	4N079797	
4C080858	4N080697	
4C081007	4N085859	
4C081068	4N086867	
4C081244	4N087045	
4C081245	4N087046	
4C081246	4N087047	
4C081247		

## **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.

# **PARTS INFORMATION**

The part required for this recall is:

Part Number	Part Description	Quantity
8900141R91	Recall Service Kit for G-04517	1

The above recall service kit (*ArvinMeritor p/n KITMFS14*) contains the following parts:

Part Number	Part Description	Quantity
3133R7350	Left Hand Tie Rod Arm	1
3133\$7351	Right Hand Tie Rod Arm	1
1227X1610	Tie Rod Arm Nut	2
K2414	Cotter Pin for Tie Rod End	2
K2618	Cotter Pin for Tie Rod Arm End	2
TP-0488	Service Part Instructions	1

## 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.



#### **WARNING:**

SUPPORT THE TIE ROD ASSEMBLY DURING MAINTENANCE AND SERVICE TO PREVENT SERIOUS PERSONAL INJURY AND DAMAGE TO COMPONENTS. IF THE CROSS TUBE CLAMPS ARE TACK-WELDED, DO NOT REMOVE THE TACK-WELD DURING THE TIE ROD ASSEMBLY REMOVAL. REMOVAL OF THE TACK WELD REDUCES CLAMP FORCE.

REPLACE THE CROSS TUBE IF THE WELD IS BROKEN. A BROKEN WELD CAN RESULT IN LOSS OF STEERING CONTROL, SERIOUS PERSONAL INJURY AND DAMAGE TO COMPONENTS.



## **CAUTION:**

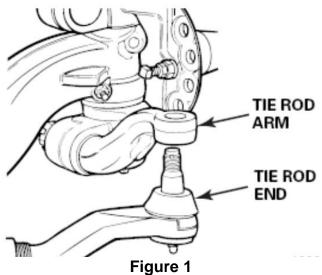
DO NOT HEAT THE ARM TO REMOVE THE TIE ROD ASSEMBLY. HEATING THE TIE ROD ARM WILL SOFTEN PARTS. DAMAGE TO COMPONENTS WILL RESULT.

#### INSPECTION PROCEDURE

- Please verify that the VIN of the vehicle is listed above.
- If a vehicle is **not** listed then **DO NOT** perform the service procedure.
- If a vehicle is listed, then continue on to perform the service procedure.

#### TIE ROD ARM DIS-ASSEMBLY

1. Remove the cotter pins and nuts that fasten each tie rod end to the tie rod arms.



2. Disconnect the cross tube assembly from the tie rod arms. If available, use a tie rod end puller to separate the tie rod end from the tie rod arm.

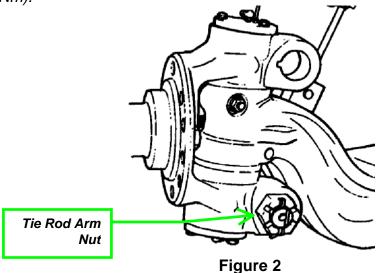
NOTE: If a tie rod end puller is not available, use a leather or plastic mallet to tap on the side of the tie rod arm to loosen the end from the arm.

- 3. Remove the cotter pin and nut that fastens the tie rod arms in the knuckle.
- 4. Remove the tie rod arms from the knuckle. If necessary, use a leather or plastic mallet to tap on the end of the rod. Remove the key.

#### TIE ROD ARM ASSEMBLY

- 5. Clean and dry the tie rod arm taper and the steering knuckle taper hole.
- 6. Press the key into the slot in the new tie rod arm. Install the new tie rod arm into the knuckle.

7. Install the nut onto the tie rod arm. Torque to *550-1025 LbF-Ft* (746-1389 Nm).

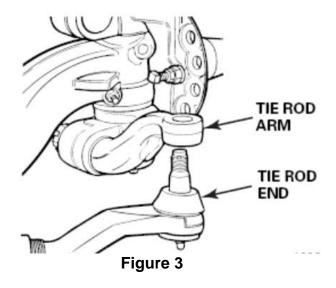


8. Install new cotter pins. If necessary, tighten the nut slightly, increasing the final torque value until the holes are aligned.

NOTE: DO NOT LOOSEN THE NUT TO INSTALL THE COTTER PIN.

- 9. Clean and dry the tie rod taper and tie rod arm taper hole.
- 10. Install the tie rod ends into the tie rod arms.

NOTE: The threaded portion of the tie rod end must be installed into the cross tube beyond the end of the slot. The clamp tab must be firmly seated against the cross tube.



11. Torque tie rod nuts to 160-320 LbF-Ft (217-434 Nm).

12. Install new cotter pins. If necessary, tighten the nuts until the holes are aligned.

NOTE: DO NOT LOOSEN THE NUTS TO INSTALL THE COTTER PINS.

#### WHEEL ALIGNMENT

- 13. Check and if necessary, adjust the toe-in. Refer to *MASTER SERVICE MANUAL* for proper procedure.
- 14. If toe-in adjustment is made, torque tie rod clamp bolt/nut to *60-80 LbF-Ft* (81-108 Nm).

# **END OF SERVICE PROCEDURE**

# **LABOR INFORMATION**

Operation No.	<u>Description</u>	<u>Time</u>
A40-04517-1	Install New Tie Rod Arms (2 each per vehicle)	2.0 Hr
A40-04517-2	VIN Inspection ONLY	0.3 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 (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.

# POSSIBLE CUSTOMER REIMBURSEMENT

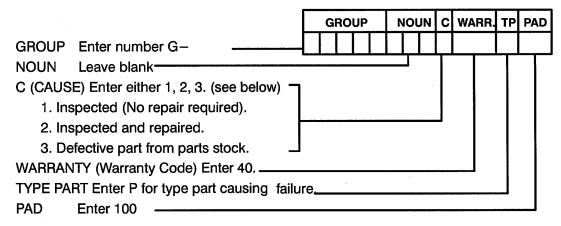
There may be an occasion when a customer was charged for repairs related to this recall prior to the recall being released. The customer letter contains a statement for the customer to contact the Dealer if they believe they are entitled to reimbursement costs. The Dealer should follow the Customer Reimbursement 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.

# **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:



# 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