

**G-05501-R1**  
**April 2005**

**SUBJECT: SAFETY RECALL (CANADA, EXPORT)**  
**FRONT DRIVE SHAFT on 4800 4x4's with FABCO**  
**TC-200 TRANSFER CASES built 6/30/1999 thru**  
**5/8/2002**

*This Recall is the final remedy and supercedes Safety Recall G-03516*

### **REVISION DESCRIPTION**

***THIS IS AN ISIS ONLY NOTIFICATION. There will be NO paper mailing for this revision.***

#### ***PARTS INFORMATION***

- Part number 2587207C1 was incorrectly included in the recall service kit **8900110R91. – DO NOT USE 2587207C1 TO PERFORM THIS RECALL.**
- Added new recall service kit **8900145R91** with correct nuts. ***THIS KIT WILL NOT BE AVAILABLE FOR ORDER UNTIL AFTER 4/4/2005.***
  - ***Please locally source eight (8) Grade 10.9 M12 nuts with a locking feature until kit is available.***

### **DEFECT DESCRIPTION**

An excessive front driveshaft angle may cause accelerated wear and failure of the driveshaft and related components. The front driveshaft can possibly become separated from the vehicle without warning and get into the path of other vehicles on the highway, possibly resulting in property damage, personal injury, or death.

### **MODELS INVOLVED**

This Safety Recall involves 4800 4x4 models with a Fabco TC-200 transfer case (*feature code 13TJZ ONLY*) built 6/30/1999 through 5/8/2002.

## **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.

## **PARTS INFORMATION**

The part required for this recall is:

<b>Part Number</b>	<b>Part Description</b>	<b>Quantity</b>
<b>8900110R91</b>	Recall Service Kit	1
<b>8900145R91</b>	Recall Service Kit – Nuts	1

**8900110R91** contains the following parts:

<b>Part Number</b>	<b>Part Description</b>	<b>Quantity</b>
<b>1697666C1</b>	Bolt, M12 x 45mm	8
<b>1694397C1</b>	Seal, T-Case, Fwd Output	1
<b>1663097C1</b>	Nut, Lock, T-Case, Fwd Output	1
<b>ETN0119427</b>	Seal, Frt Axle Pinion	1
<b>ETN0210133</b>	Nut, Lock, Frt Axle Pinion	1
<b>8000846R91</b>	Flange, T-150 (Front Axle)	1
<b>8000847R91</b>	Flange, T-150 (T-Case)	1
<b>8000848R91</b>	Propshaft, Double Cardan	1

**8900145R91** contains the following parts:

<b>Part Number</b>	<b>Part Description</b>	<b>Quantity</b>
<b>905263R1</b>	NUT,HEX LOCK, M12 PREVAILING TORQUE HEX NUT	8

***Discard all REMOVED parts locally EXCEPT YOKE WASHERS. Undamaged YOKE WASHERS are REUSED in the Service Procedure.***

**SERVICE PROCEDURE begins on next page.**

## **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.***

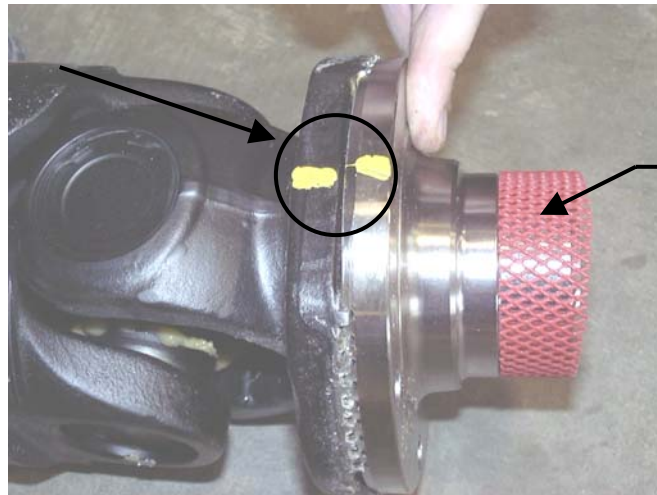
## **FRONT DRIVESHAFT INSPECTION**

**DO NOT** perform the **FRONT DRIVESHAFT REPLACEMENT** if a vehicle was modified in ANY way from factory original. Examples of modification can be as follows:

- Transfer Case re-positioned by Truck Equipment Manufacturer (TEM) due to specialized truck body installation.
- Center bearing installed. The suspect vehicles were originally built with one (1) front drive shaft. If there are two (2) FRONT drive shafts, **DO NOT** perform the **FRONT DRIVESHAFT REPLACEMENT**.

## **FRONT DRIVESHAFT REPLACEMENT**

1. Dry fit and lay out the new shaft and flanges to determine which side belongs on the axle side and which belongs on the transfer case side. Mark flange and shaft for ease in installation and proper alignment.



Front Axle Flange has  
**SMALL** Diameter  
Splines

Transfer Case Flange  
has **LARGE** Diameter  
Splines

**Figure 1 – Front Axle Side – Small Spline**

2. Remove original FRONT driveshaft.
3. Remove front axle yoke and shaft seal. Save the washers, they will be re-used during flange installation.



**Figure 2**

4. Remove transfer case yoke and shaft seal. You will need to engage the transfer case to prevent the front output shaft from rotating.



**Figure 3**

5. Install new front axle input shaft seal.



**Figure 4**

6. Install new front axle flange, washer and nut. Torque nut to **420-450 LbF-Ft (570-610 Nm)**.

7. Install new transfer case output shaft seal.



**Figure 5**

8. Install new transfer case flange, washer and nut. Torque nut to **460-500 LbF-Ft (625-678 Nm)**.

**NOTE:** *You will need to use a thin wall socket to properly tighten the nut.*



**Figure 6**

9. Disengage the transfer case so the output shaft is free to rotate.
10. Install new driveshaft starting with the front axle. **INSTALL SHAFT WITH SLIP JOINT TOWARDS THE REAR OF THE VEHICLE.** Align



mark on flange with mark on shaft. Install and torque bolts to **88-92 LbF-Ft (120-125 Nm)**.

11. Rotate transfer case output shaft until the mark on transfer case flange aligns with mark on shaft. Install and torque bolts to **88-92 LbF-Ft (120-125 Nm)**.



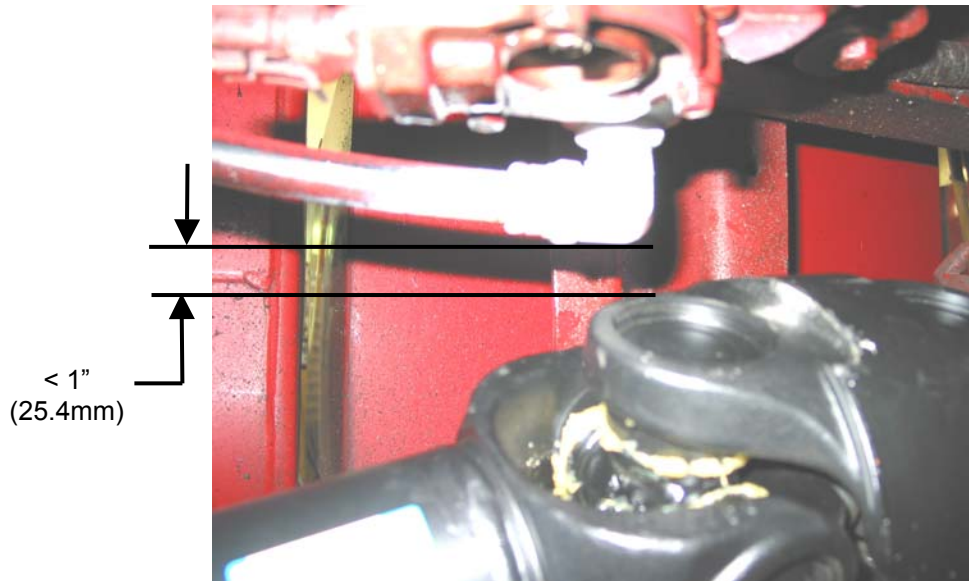
**Figure 7**

12. Check and fill, if necessary, front axle and transfer case oil level.



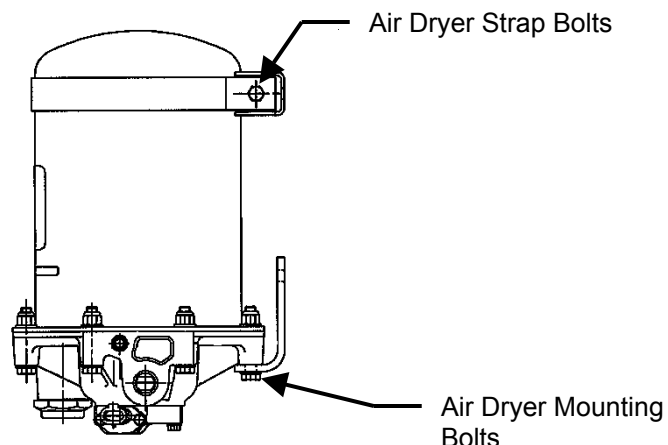
## AIR DRYER ROTATIION

13. Some vehicles built with feature code 804EMZ, air dryer relocation, will require the air dryer to be rotated and re-mounted.
14. If the vehicle's air dryer has an output elbow in close proximity (less than 1" [25.4mm]) to the drive shaft (see Figure 8), a rotation is required. Continue to step 16.



**Figure 8**

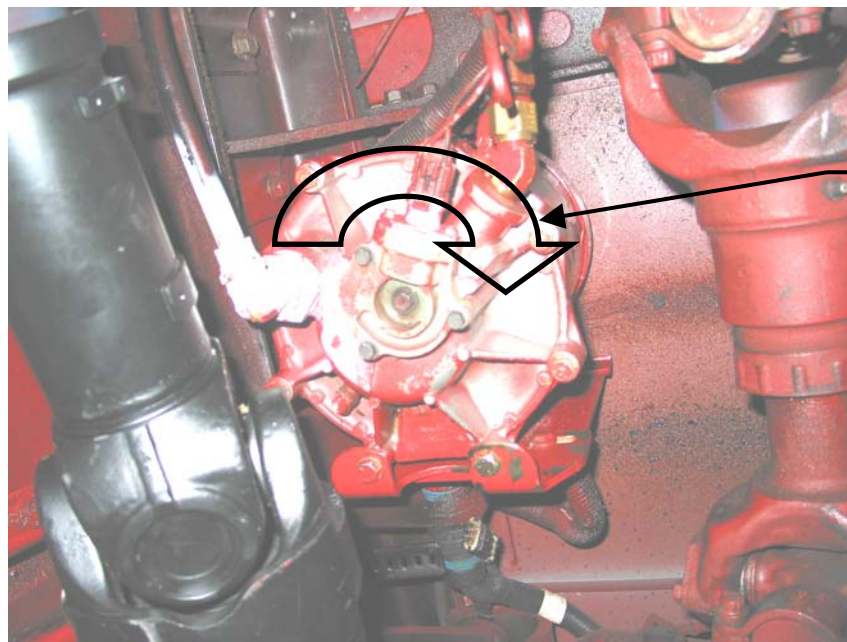
15. If the air dryer elbow is not located in close proximity (greater than 1" [25.4mm]) to the driveshaft, then the dryer relocation is not required.
16. Remove the air dryer mounting bolts. Loosen upper air dryer strap bolts.



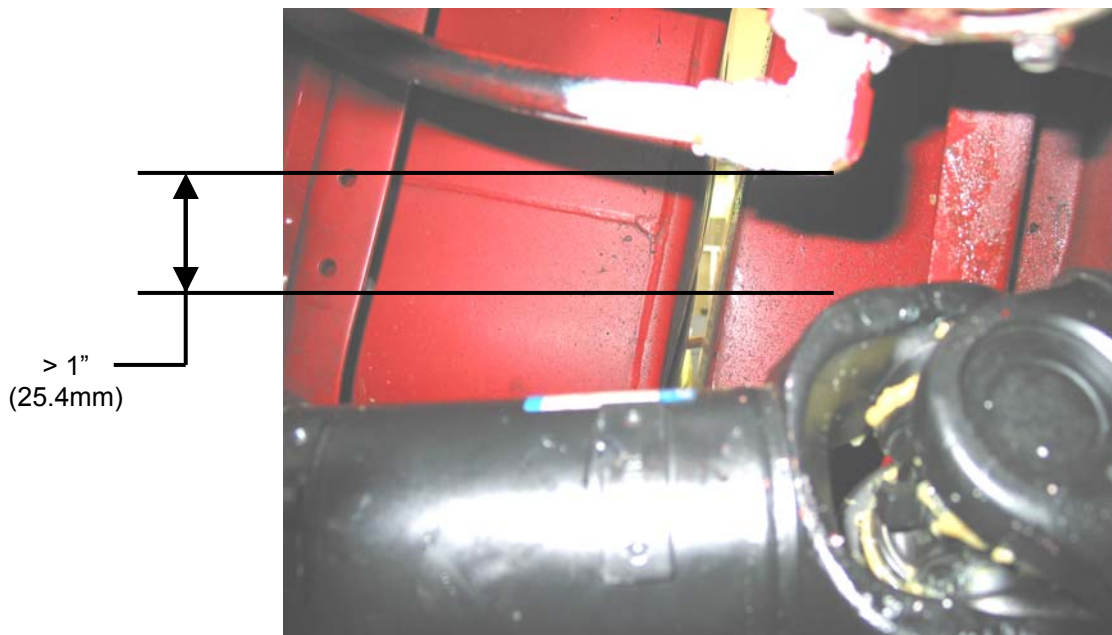
**Figure 9**

17. Rotate air dryer and re-install mounting bolts; tighten strap bolts.

**NOTE: Please only rotate one (1) mounting bolt position.**



**Figure 9 – Rotated Air Dryer**



**Figure 10 – Rotated Air Dryer**

**END OF SERVICE PROCEDURE**


## **LABOR INFORMATION**

<b><u>Operation No.</u></b>	<b><u>Description</u></b>	<b><u>Time</u></b>
A40-05501-1	<i>Inspect ONLY</i>	0.3 Hr
A40-05501-2	<i>Inspect and R &amp; R Front Drive Shaft</i>	1.5 Hr
A40-05501-3	<i>Add on for Rotate Air Dryer</i>	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.



A rectangular label with a black border. At the top and bottom, it says "DO NOT REMOVE" in white capital letters. In the center, there is a white rectangular area with black text. The text includes "INTERNATIONAL" in bold, "Campaign No." followed by a line, "VIN" followed by a line, "Eng.#" followed by a line, "COMPLETED" in bold, and "Service Location Code #" followed by a line.

## **ADMINISTRATIVE/DEALER RESPONSIBILITIES** (CANADA & 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.

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.

## **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 number G—	NOUN Leave blank	C (CAUSE) Enter either 1, 2, 3. (see below)	WARRANTY (Warranty Code) Enter 40.	TYPE PART Enter P for type part causing failure.	PAD Enter 100
		1. Inspected (No repair required).			
		2. Inspected and repaired.			
		3. Defective part from parts stock.			

### **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**