

# IC Corporation

## AUTHORIZED FIELD CHANGE

AFC # 03401

November 2003

Subject File: Caliper Slide Pin Bolts

All IC Corporation & Affiliate Companies Dealers

### **SUBJECT:**

Some hydraulic buses were built with the caliper slide pin bolt improperly torqued. If the bolt becomes loose, damage to parts of the brake system at the wheel end may occur requiring major repair or replacement.

### **APPLIES TO:**

IC hydraulic buses manufactured at our Tulsa facility between October 22, 2002 and May 27, 2003. The vehicle identified on the enclosed card fits this description and our records show you as the owner of this vehicle.

### **ACTIONS YOU SHOULD TAKE:**

We told the customer to advise the operators of the subject vehicles of this defect. If the operator detects any of the following brake operating abnormalities, the vehicle should be placed out of service until the repair is made.

- Dragging or noisy brakes.
- Illumination of the brake warning light.

All vehicles involved in this AFC must have the caliper slide pin bolts inspected for proper torque.

### **INSPECTION AND REPAIR PROCEDURE:**

We told the customer that your dealer will make this correction for you at no cost. Contact your dealer to make the arrangements to repair your unit. We also told the customer if you desire to make this inspection and/or inspection and repair yourself, you may purchase the bolts from the dealer.



#### **WARNING:**

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



#### **WARNING:**

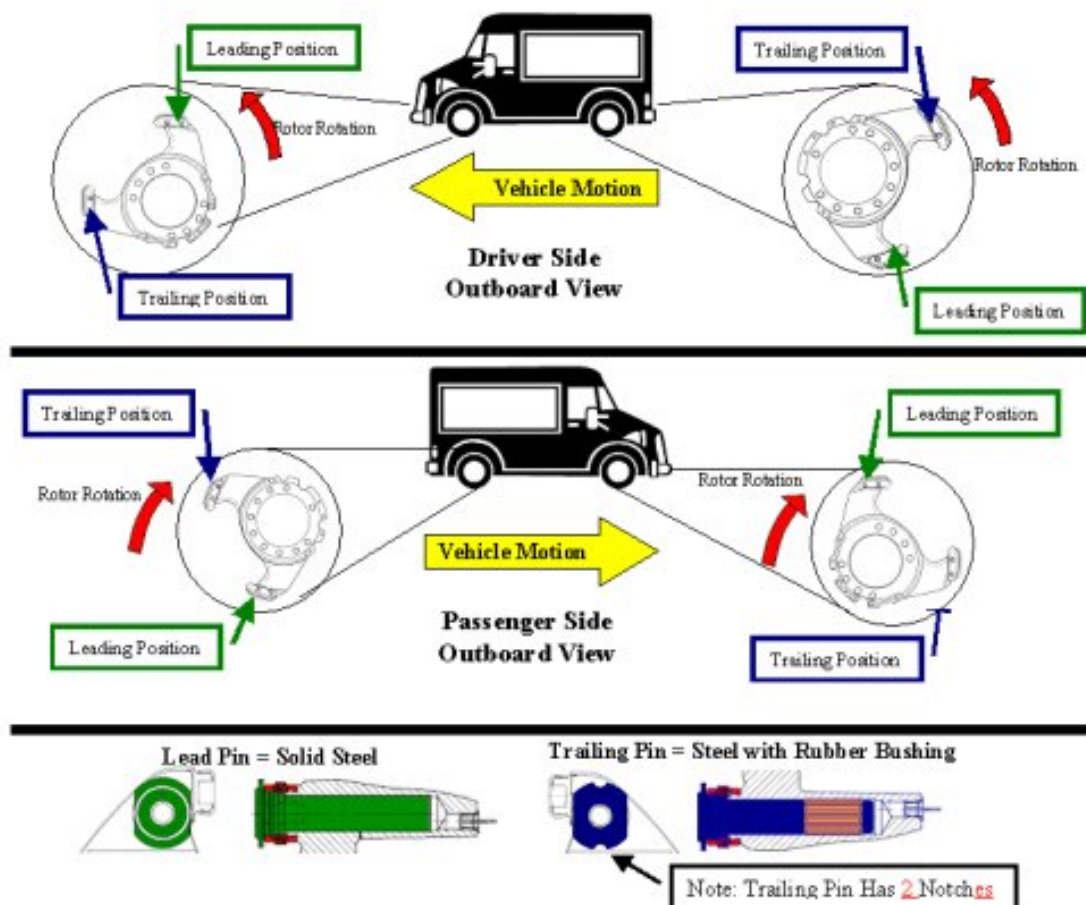
Block the wheels to prevent the vehicle from moving. If a vehicle moves unexpectedly or suddenly, the result could be serious personal injury or death.



**If the vehicle must be raised, do not work under a vehicle supported only by jacks. Jacks can slip or fall over potentially resulting in serious personal injury or death.**

This repair procedure involves inspecting the bus by measuring the tightness of the subject bolts with a torque wrench. There are two bolts per wheel end, four-wheel ends in total. If a bolt is not properly torqued, it must be replaced with a new bolt.

1. Chock the wheels or raise onto jack stands as necessary.
2. Using a torque wrench, tighten the bolt and measure the torque.
  - a. If the torque reaches **110 Lb-Ft (150 Nm)** without **any** movement of the bolt, then the bolt is properly torqued and no further action is required. Move on to another bolt.
  - b. If the bolt moves **before** reaching the specified torque, it must be removed and replaced with a new patch bolt. See Step 3.
3. Replace the loose bolt with a new patch bolt part number 3584626C1 and torque to **93-107 Lb-Ft (126-145 Nm)**.
  - a. If the bolt that is located on the top portion of the caliper cannot be replaced because of interference with the rear spring, both bolts must be loosened to allow the rotor to move for clearance.
  - b. In this case, **both bolts** must be replaced. See Step 4.
4. If both bolts had to be replaced on any wheel end, the following procedure must be followed when installing the new bolts:
  - a. Install new upper (top) mounting bolt FINGER tight securing the caliper to the anchor plate.
  - b. Then install new lower mounting bolt FINGER tight.
  - c. FIRST, tighten the **leading** caliper mounting bolt to **93-107 Lb-Ft (126-145 Nm)**.
  - d. NEXT, tighten the **trailing** caliper mounting bolt to **93-107 Lb-Ft (126-145 Nm)**.
  - e. See the following diagram for defining leading and trailing caliper mounting bolts.
5. Once all of the pin bolts have been inspected and/or replaced, lower the vehicle and remove the wheel chocks as necessary.



### **LABOR:**

*Each vehicle will require labor operation A40-03401-1.*

If any bolts are replaced, add the appropriate labor operation to the warranty claim that corresponds to the number of bolts replaced and under what conditions they were replaced.

<b>Labor Operation Number</b>	<b>Description</b>	<b>Time (Hours)</b>	<b>Conditions</b>
A40-03401-1	Torque Inspection, ALL	0.6	Required all units
A40-03401-2	Add if replaced 1 Bolt	0.05	Bolt without spring interference
A40-03401-3	Add if replaced 2 Bolts	0.1	
A40-03401-4	Add if replaced 3 Bolts	0.15	
A40-03401-5	Add if replaced 4 Bolts	0.2	
A40-03401-6	Add if replaced 5 Bolts	0.25	
A40-03401-7	Add if replaced 6 Bolts	0.3	
A40-03401-8	Add if replaced 1 Bolt w/rear spring interference	0.2	Bolts with rear spring interference (Includes replacement of both bolts on one caliper)
A40-03401-9	Add if replaced 2 Bolts w/rear spring interference	0.4	

## PARTS:

### PART NUMBER

3584626C1

### PART DESCRIPTION

Bolt M12x1.25x40 w/Patch

### QUANTITY

As Req'd



Dealers should purchase the parts directly from the Parts Depot.

## ADMINISTRATIVE/DEALER RESPONSIBILITIES (U.S. & POSSESSIONS)

Proceed immediately to make the necessary corrections to the units in your inventory. All inventory vehicles subject to this AFC 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/or “**Authorized Field Campaign**” cards for those vehicles, the transfer location or the customer must be notified from your dealer location.

## AFC CLAIMS – Repairs Performed By Authorized Dealers

Refer to the Dealer’s Policy Manual for procedures to conduct an AFC. It is important that the AFC Coding be completed properly to assist in processing the recall 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
0 3 4 0 1		2	40	P	100

GROUP Enter AFC Number \_\_\_\_\_

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 the necessary correction to the units in your inventory. All inventory vehicles subject to this AFC 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/or “**Authorized Field Campaign**” 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 AFC 03401.

**LESSOR RESPONSIBILITY:**

Any vehicle lessor receiving this AFC notice must forward a copy of this notice to the lessee within ten days.

IC Corporation asks 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.