

# ***SERVICE PROCEDURE***

**G-12522  
OCTOBER 2012**

**SUBJECT: SAFETY RECALL**

**Air disc brake caliper mounting bolts on certain DuraStar®, ProStar®, TranStar®, and WorkStar® models built 3 August 2011 thru 23 May 2012 with air disc brake feature codes 04JBZ, 04JCA, 04JCC, 04JCE, or 04JCN.**

**DEFECT DESCRIPTION**

The mounting bolts that fasten the air disc brake caliper to the caliper anchor plate may have not been tightened to their specified torque. If the caliper mounting bolts and caliper were to separate from the vehicle, it may result in an unexpected pull condition or increased stopping distance during braking. An unexpected pull condition or increased stopping distance during braking may contribute to a vehicle crash which may result in property damage, personal injury, or death.

**MODELS INVOLVED**

This Safety Recall involves certain DuraStar®, ProStar®, TranStar®, and WorkStar® models built 3 August, 2011 through 23 May, 2012 with feature codes 04JBZ, 04JCA, 04JCC, 04JCE, or 04JCN (air disc Brakes).

**PARTS INFORMATION**

<b>Part Number</b>	<b>Part Description</b>	<b>Quantity</b>
30091R1	Bolt, Hex Head; M20 X 60 PHC CLS10	As Needed
30179R1	Washer; 21.8 MM X 37 MM X 4 MM PHC	As Needed

**SPECIAL TOOLS**

<b>Part Number</b>	<b>Part Description</b>	<b>Quantity</b>
04-617-01	Air Disc Caliper Wrench	1

## **SERVICE PROCEDURE**

**WARNING!** PARK VEHICLE ON HARD FLAT SURFACE, TURN THE ENGINE OFF, SET THE PARKING BRAKE AND BLOCK THE WHEELS TO PREVENT THE VEHICLE FROM MOVING IN BOTH DIRECTIONS. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY AND/OR DEATH.

**WARNING!** IF THE VEHICLE MUST BE RAISED, DO NOT WORK UNDER THE VEHICLE SUPPORTED ONLY BY JACKS. JACKS CAN SLIP OR FALL OVER, POTENTIALLY RESULTING IN PROPERTY DAMAGE, PERSONAL INJURY AND/OR DEATH.

**WARNING!** ALWAYS WEAR SAFE EYE PROTECTION WHEN PERFORMING VEHICLE MAINTENANCE. FAILURE TO DO SO MAY RESULT IN SERIOUS EYE INJURY.

**WARNING!** ALLOW COMPONENTS IN ENGINE COMPARTMENT TO COOL BEFORE SERVICING ENGINE OR VEHICLE. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY AND/OR DEATH.

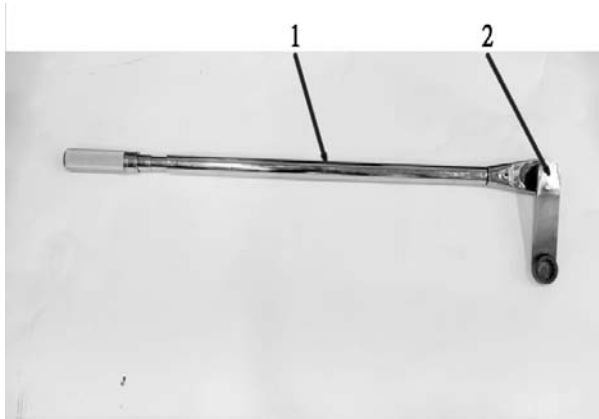
**WARNING!** KEEP FLAMES OR SPARKS AWAY FROM VEHICLE AND DO NOT SMOKE WHILE SERVICING THE VEHICLE'S BATTERIES. BATTERIES EXPEL EXPLOSIVE GASES. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, AND/OR DEATH.

**WARNING!** REMOVE THE GROUND CABLE FROM THE NEGATIVE TERMINAL OF THE BATTERY BOX BEFORE DISCONNECTING ANY ELECTRICAL COMPONENTS. ALWAYS CONNECT THE GROUND CABLE LAST. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY, AND/OR DEATH.

1. Park the vehicle on a flat surface.
2. Shift transmission to park or neutral and set parking brakes.
3. Install wheel chocks.
4. Raise each axle with suitable lifting device and support with jack stands.
5. Unlatch hood straps and open hood.

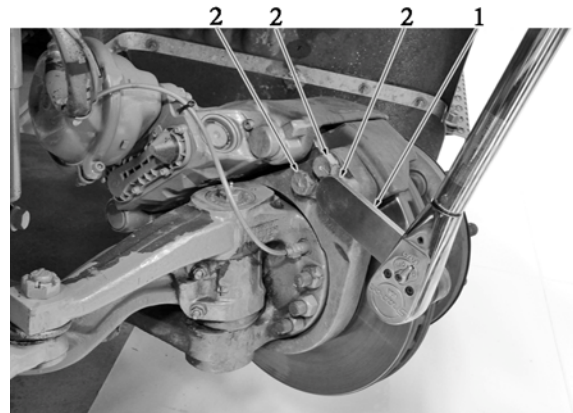
6. Remove tire and wheel assemblies from all axles.

**CAUTION: All caliper mounting bolt torquing procedures must use the torque wrench and air disc caliper wrench 04-617-01 at a 90-degree orientation. Failure to do so will result in an inaccurate final torque.**



**Figure 1. Torque Wrench 90-Degrees to Air Disc Caliper Wrench**

1. Torque Wrench
2. Air disc caliper wrench 04-617-01

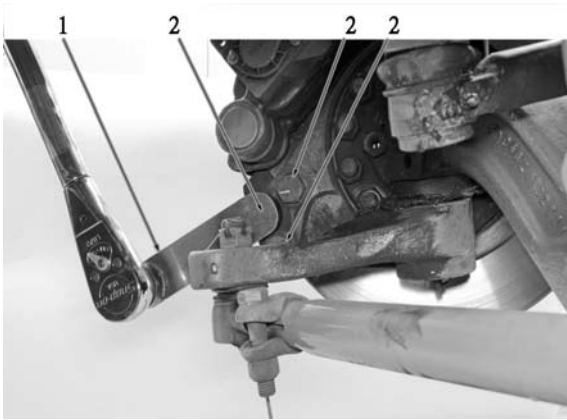


**Figure 2. Steering Axle Upper Caliper Mounting Bolts**

1. Torque wrench and air disc caliper wrench 04-617-01
2. Upper caliper mounting bolts (3)

**NOTE: Torque wrench and air disc caliper wrench 04-617-01 shall be 90-degrees orientation for all disc brake caliper bolt torquing procedures. If the air disc caliper wrench 04-617-01 is greater than 90-degrees in relation to torque wrench, the torque wrench applies more torque than specified. If the air disc caliper wrench 04-617-01 is less than 90-degrees in relation to torque wrench, the torque wrench applies less torque than specified.**

7. Starting with left front steering axle and help from an assistant to turn steering wheel, turn steering wheel fully to the left. Using a suitable torque wrench and air disc caliper wrench 04-617-01 (Figure 1), torque upper disc brake caliper mounting bolts to 350 lb-ft (475 N·m) (Figure 2).



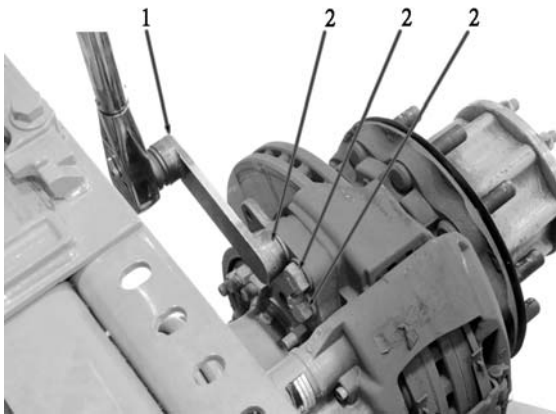
**Figure 3. Steering Axle Lower Caliper Mounting Bolts**

1. Torque wrench and air disc caliper wrench 04-617-01
2. Lower caliper mounting bolts (3)

8. Turn steering wheel fully to the right and torque left front bottom steering axle disc brake caliper mounting bolts to 350 lb-ft (475 N·m) (Figure 3).

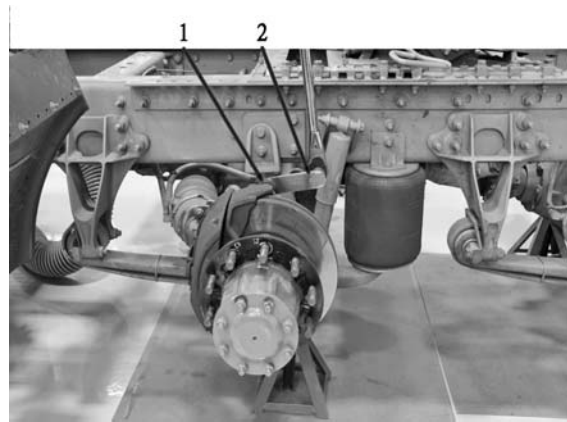
9. Repeat procedure 7 and 8 for right side of steering axle.

**NOTE: Assistant is no longer needed at this point.**



**Figure 4. Intermediate and Rear Axle Upper Caliper Mounting Bolts**

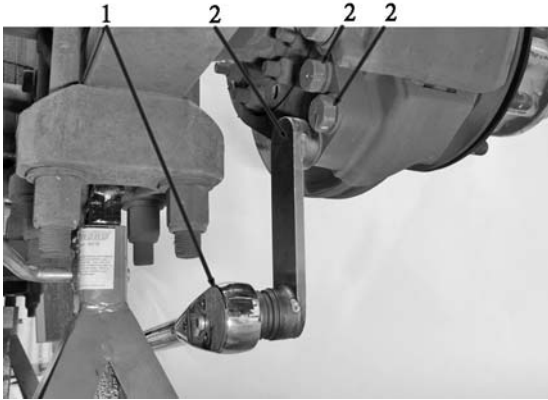
1. Torque wrench and air disc caliper wrench 04-617-01
2. Caliper mounting bolts (3)



**Figure 5. Intermediate Axle Upper Bolts Torque Wrench Orientation**

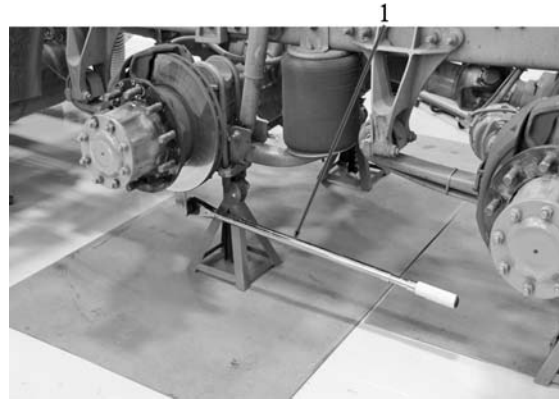
1. Caliper mounting bolt
2. Torque wrench and air disc caliper wrench 04-617-01

10. Move to left side intermediate drive axle; torque upper disc brake caliper mounting bolts to 350 lb-ft (475 N·m) (Figures 4 and 5).



**Figure 6. Intermediate and Rear Axle Lower Caliper Mounting Bolts**

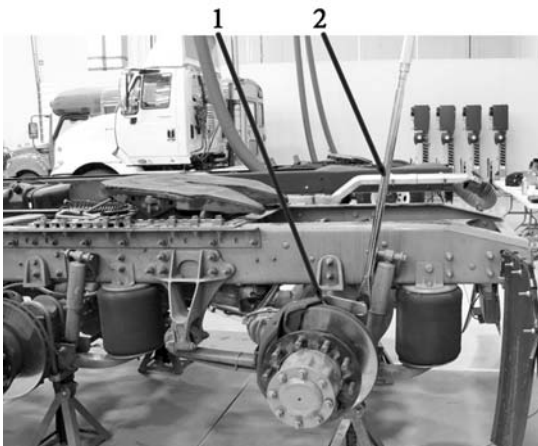
1. Torque wrench and air disc caliper wrench 04-617-01
2. Caliper mounting bolts (3)



**Figure 7. Intermediate Axle Lower Bolts Torque Wrench Orientation**

1. Torque wrench and air disc caliper wrench 04-617-01

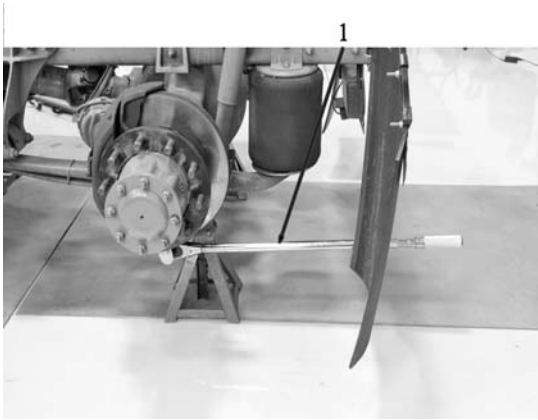
11. Torque lower left side intermediate drive axle disc brake caliper mounting bolts to 350 lb-ft (475 N·m) (Figures 6 and 7).



**Figure 8. Rear Axle Upper Bolts Torque Wrench Orientation**

1. Caliper mounting bolt
2. Torque wrench and air disc caliper wrench 04-617-01

12. Move to left side rear drive axle; torque upper disc brake caliper mounting bolts to 350 lb-ft (475 N·m) (Figures 4 and 8).

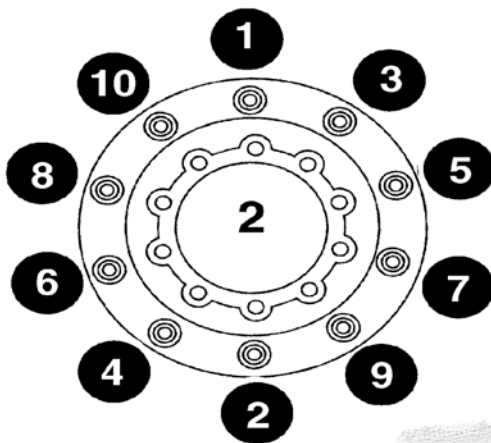


**Figure 9. Rear Axle Lower Bolts Torque Wrench Orientation**

1. Torque wrench and air disc caliper wrench 04-617-01

13. Torque lower left side rear drive axle disc brake caliper mounting bolts to 350 lb-ft (475 N·m) (Figures 6 and 9).

14. Repeat procedures 10 through 13 for opposite side of rear axles.



**Figure 10. Wheel Torque Sequence**

15. Install tires, wheel assemblies, and wheel nuts. Draw up nuts alternately following crisscross pattern sequence (Figure 10). Do not fully tighten nuts at this time. This procedure will allow uniform seating of nuts and ensure even, face-to-face contact of wheel and hub.

16. Remove jack stands and lower vehicle.

17. Torque wheel nuts to 450 to 500 lb-ft (610 - 678 N·m) using torque sequence (Figure 10).

18. Close and latch hood.

19. Remove wheel chocks.

20. Road test vehicle for 10 minutes.

21. Re-torque wheel nuts to 450 to 500 lb-ft (610 - 678 N·m) using torque sequence (Figure 10).

## END OF SERVICE PROCEDURE

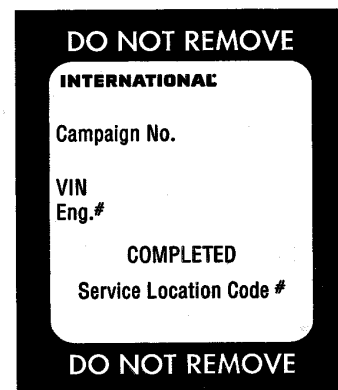
### LABOR INFORMATION

Operation Number	Description	Time
A40-12522-1	Tighten caliper bolts; steer axle and single drive axle	1.8 hrs
A40-12522-2	Tighten caliper bolts; steer axle and tandem drive axles	2.7 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.



The image shows a rectangular label template with a black border. At the top, it says "DO NOT REMOVE" in white. Below that, the word "INTERNATIONAL" is printed in bold. The label contains several fields for information: "Campaign No.", "VIN", "Eng.#", "COMPLETED", and "Service Location Code #". At the bottom, it says "DO NOT REMOVE" in white.

### ADMINISTRATIVE/DEALER RESPONSIBILITIES

#### WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Safety Recall 12522.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Policy Manual, Section 7.1.8.

As with all claim submission, items acquired locally must be submitted in the "Other Charges" tab. The cost of any bulk items (bag of cable tie straps, roll of wire, barrel of oil, tube of silicone, etc.) should be prorated for the cost of the individual pieces/amount used during each repair.

	GROUP	NOUN	C	WARR.	TP	PAD
GROUP Enter number G—						
NOUN Leave blank						
C (CAUSE) Enter either 1, 2, 3. (see below)						
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						

## UNITED STATES AND POSSESSIONS

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.

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.

Dealers should 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 make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited 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.

## **CANADA**

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.

Dealers should 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 make every effort to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible. However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

Dealers involved in the recall process will be furnished a listing of owner names and addresses to enable them to follow up with owners and have the vehicles corrected. Use of this listing must be limited 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.

## **EXPORT**

Export Distributors should 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 distributor location.

Export Distributors are to submit warranty claims in the usual manner making reference to this recall number.

Export Distributors are expected to provide full cooperation and follow-up with respect to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

## **NAVISTAR, INC**