

SERVICE PROCEDURE

**14508
APRIL 2014**

SUBJECT: SAFETY RECALL

Air disc brake caliper mounting bolts on certain DuraStar[®], ProStar[®], TranStar[®], and WorkStar[®] models built 5 November 2012 thru 17 February 2014 with air disc brake feature codes 04WEY, 04WEZ, or 04WZK.

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, which 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 5 November 2012 thru 17 February 2014 with air disc brake feature codes 04WEY, 04WEZ, or 04WZK.

SPECIAL TOOLS

Part Number	Part Description	Quantity
04-617-02	Air Disc Caliper Wrench	1

PARTS INFORMATION for Vehicles with Codes 04WEY and 04WEZ

Part Number	Part Description	Quantity
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

PARTS INFORMATION for Vehicles with Codes 04WZK

NOTE: There are only 5 vehicles with this brake code:

VINS: EH016165, EH016166, EH799141, EH799142 and FH123936.

Part Number	Part Description	Quantity
2511813C91	Bolt, M20 X 1.5-6G Thread	As Needed
30179R1	Washer; 21.8 MM X 37 MM X 4 MM PHC	As Needed

SERVICE PROCEDURE

WARNING! PARK VEHICLE ON HARD FLAT SURFACE, TURN THE ENGINE OFF, SET THE PARKING BRAKE AND INSTALL WHEEL CHOCKS TO PREVENT THE VEHICLE FROM MOVING IN BOTH DIRECTIONS. FAILURE TO COMPLY 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 COMPLY MAY RESULT IN PERSONAL INJURY AND / OR DEATH.

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

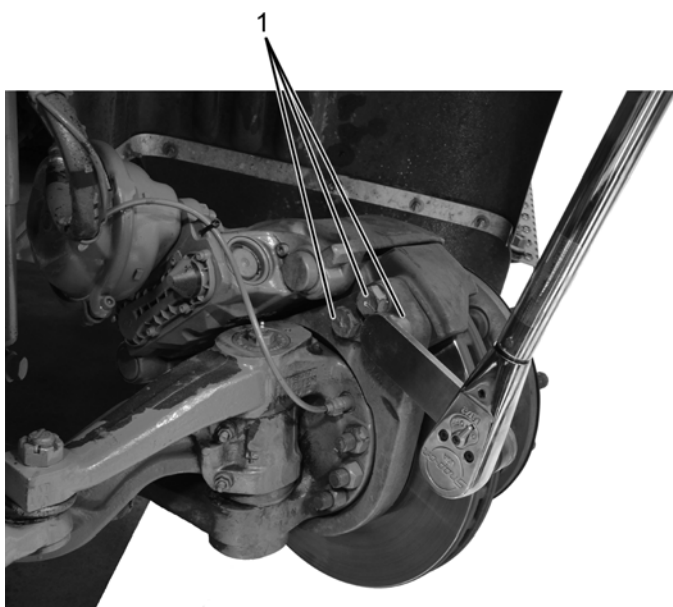
1. Bring vehicle into shop and park on flat surface.
2. Shift transmission to Park or Neutral, set parking brakes, and install wheel chocks.
3. Raise each axle equipped with air disc brakes with suitable lifting device and support with jack stands.
4. Unlatch and open hood.
5. Remove tire and wheel assemblies from all axles equipped with air disc brakes. Refer to Service Manual Section, Wheels, Rims, and Tires, S17001Y.



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Figure 1. Torque Wrench 90 Degrees in Relation to Air Disc Caliper Wrench.

1. Torque wrench
2. Air Disc Caliper Wrench 04-617-02



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Figure 2. Steering Axle Upper Caliper Mounting Bolts.

1. Upper caliper mounting bolt (3)

CAUTION: All caliper mounting bolt torquing procedures must use the torque wrench and Air Disc Caliper Wrench 04-617-02 at a 90-degree orientation. Failure to comply may result in an inaccurate final torque.

NOTE: Torque wrench and Air Disc Caliper Wrench 04-617-02 shall be at a 90-degree orientation for all disc brake caliper bolt tightening procedures.

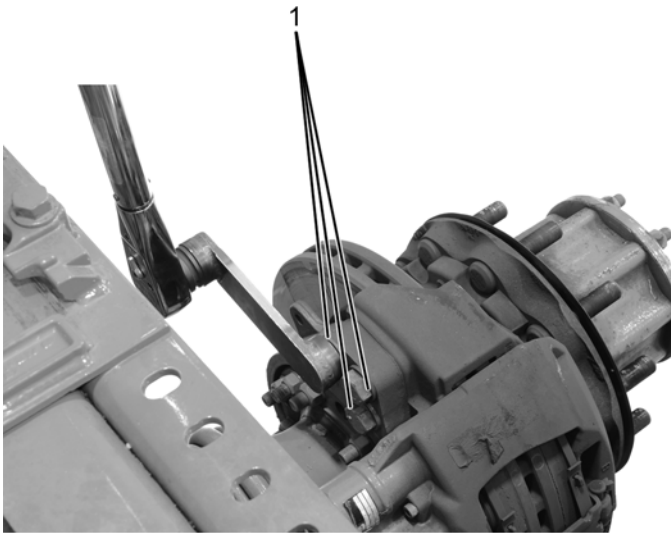
- If air disc caliper wrench is greater than 90 degrees in relation to torque wrench, the torque wrench applies more torque than specified.
 - If air disc caliper wrench is less than 90 degrees in relation to torque wrench, the torque wrench applies less torque than specified.
6. Starting with left front steering axle and help from an assistant to turn steering wheel, turn steering wheel fully to the left. Using a suitable torque wrench (Figure 1, Item 1) and air disc caliper wrench (Figure 1, Item 2), tighten three upper disc brake caliper mounting bolts (Figure 2, Item 1) to 350 lb-ft (475 N•m).



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Figure 3. Steering Axle Lower Caliper Mounting Bolts.

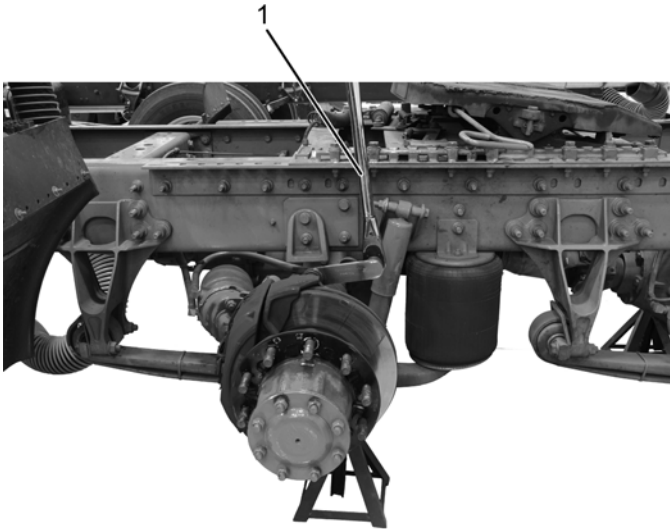
1. Lower caliper mounting bolt (3)
7. Turn steering wheel fully to the right and tighten three left front bottom steering axle disc brake caliper mounting bolts (Figure 3, Item 1) to 350 lb-ft (475 N•m).
8. Repeat Steps 6 and 7 for right side of steering axle.



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

1. Upper disc brake caliper mounting bolt (3)



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Figure 5. Intermediate Axle Upper Bolts Torque Wrench Orientation.

1. Torque wrench and air disc caliper wrench

NOTE: Assistant is no longer needed.

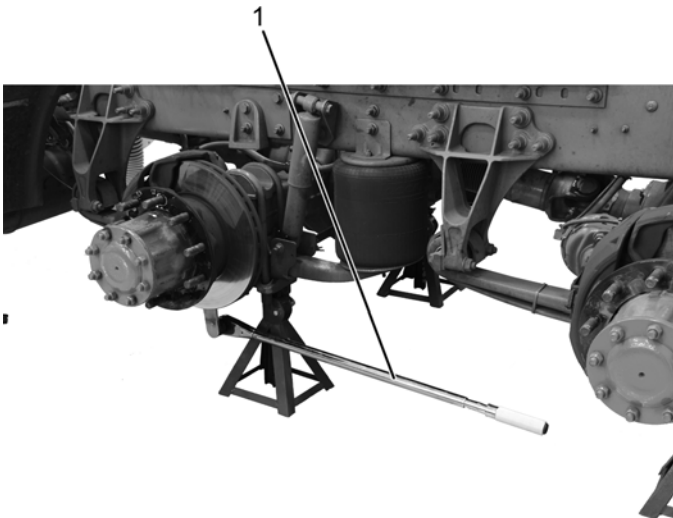
9. For vehicles equipped with only steer axle air disc brakes, go to Step 15. For vehicles equipped with rear axle air disc brakes, continue to Step 10.
10. Move to left-side intermediate drive axle; tighten three upper disc brake caliper mounting bolts (Figure 4, Item 1) to 350 lb-ft (475 N•m). Refer to Figure 5 for torque wrench and air disc caliper wrench orientation.



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

1. Lower caliper mounting bolt (3)

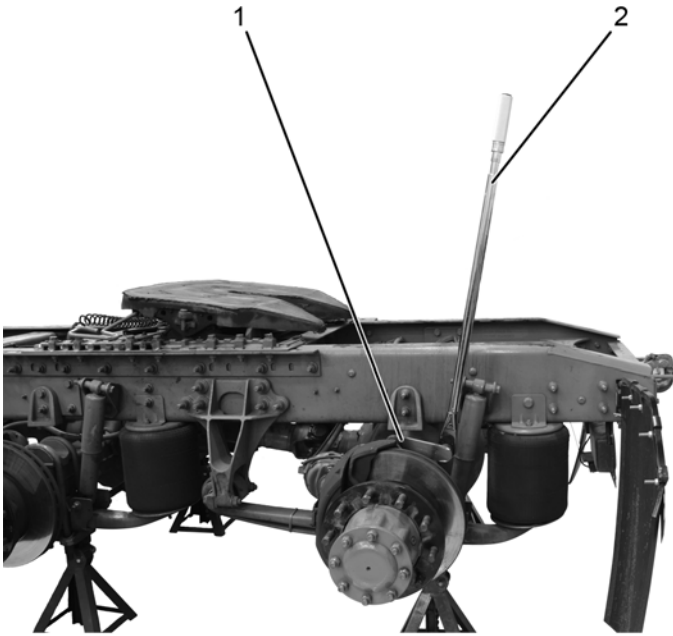


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Figure 7. Intermediate Axle Lower Bolts Torque Wrench Orientation.

1. Torque wrench and air disc caliper wrench

11. Tighten three lower left-side intermediate drive axle disc brake caliper mounting bolts (Figure 6, Item 1) to 350 lb-ft (475 N•m). Refer to Figure 7 for torque wrench and air disc caliper wrench orientation.



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Figure 8. Rear Axle Upper Bolts Torque Wrench Orientation.

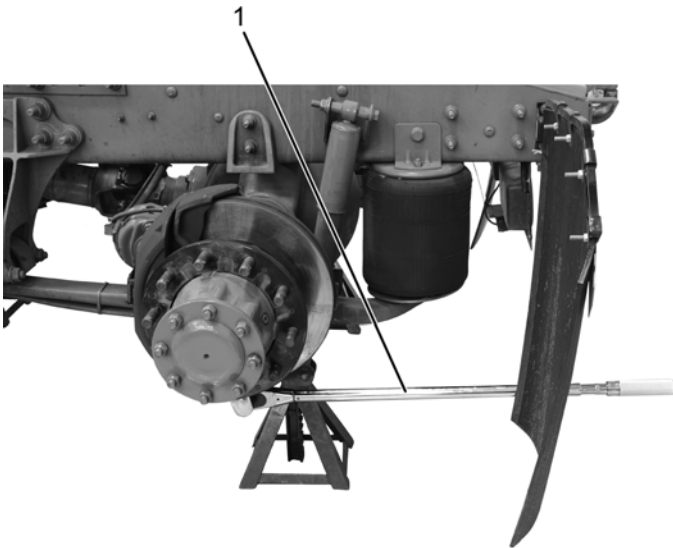
1. Caliper mounting bolt (3) (two not shown)
 2. Torque wrench and air disc caliper wrench
12. Move to left side rear drive axle; tighten upper disc brake caliper mounting bolts (Figure 8, Item 1) to 350 lb-ft (475 N•m). Position torque wrench and air disc caliper wrench in proper orientation (Figure 8, Item 2).



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Figure 9. Intermediate and Rear Axle Lower Caliper Mounting Bolts.

1. Lower caliper mounting bolt (3)



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Figure 10. Rear Axle Lower Bolts Torque Wrench Orientation.

1. Torque wrench and air disc caliper wrench

13. Tighten three lower left-side rear drive axle disc brake caliper mounting bolts (Figure 9, Item 1) to 350 lb-ft (475 N•m). Refer to Figure 10 for torque wrench and air disc caliper wrench orientation.

14. Perform Steps 10 - 13 for opposite side of rear axles.

VEHICLE RECALL 14508

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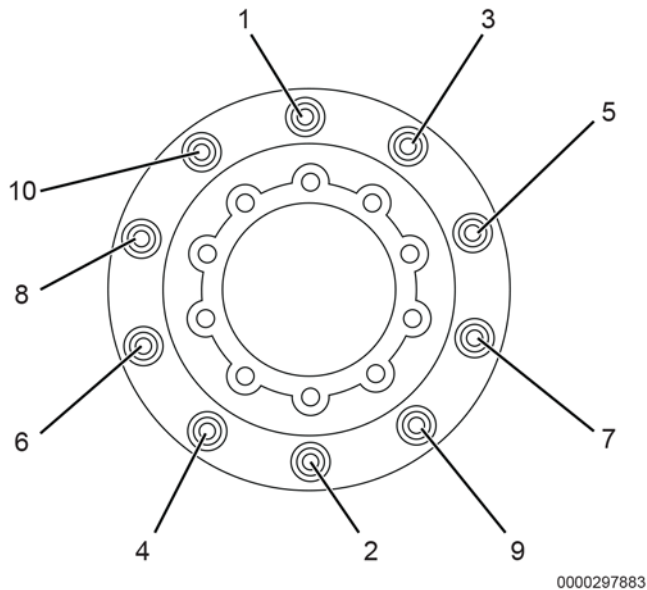


Figure 11. Wheel Torque Sequence.

15. Install tires, wheel assemblies, and wheel nuts. Refer to Service Manual Section, Wheels, Rims, and Tires, S17001Y . Draw up nuts alternately following crisscross pattern sequence (Figure 11). 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. Close and latch hood.
17. Remove jack stands and lower vehicle.
18. Tighten wheel nuts to 450 - 500 lb-ft (610 - 678 N•m) using torque sequence (Figure 11).
19. Remove wheel chocks.
20. Road test vehicle for 10 minutes.
21. Final tighten wheel nuts to 450 - 500 lb-ft (610 - 678 N•m) using torque sequence (Figure 11).

END OF SERVICE PROCEDURE

LABOR INFORMATION

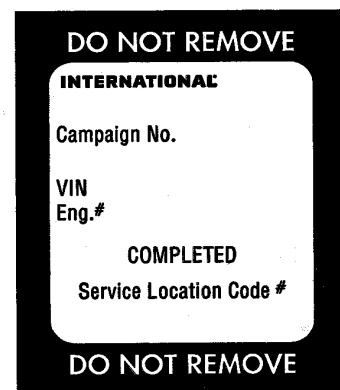
NOTE: Only one labor operation may be used based upon repair performed.

Operation Number	Description	Time
A40-14508-1	Tighten Caliper Bolts; Steer Axle Only	0.8 hr
A40-14508-2	Tighten Caliper Bolts; Steer Axle and Single Drive Axle	1.8 hrs
A40-14508-3	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.



A black rectangular label with white text. At the top, it says "DO NOT REMOVE". Below that, in a white rounded rectangle, it says "INTERNATIONAL". Underneath, there are fields for "Campaign No.", "VIN", and "Eng.#". Below these fields, it says "COMPLETED" and "Service Location Code #". At the bottom, it says "DO NOT REMOVE".

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 14508.

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 submissions, items acquired locally must be submitted in the "Other Charges" tab. The cost of any bulk items (such as a bag of cable tie straps, roll of wire, a barrel of oil, or a tube of silicone) should be prorated for the cost of the individual pieces / amount used during each repair.

GROUP	NOUN	C	WARR.	TP	PAD

GROUP — Enter number

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

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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.

VEHICLE RECALL 14508