

SERVICE PROCEDURE

**G-12524
OCTOBER 2012**

SUBJECT: SAFETY RECALL
Piston spring brakes on certain DuraStar®, ProStar®, TranStar®, and WorkStar® models built 29 November, 2010 thru 2 April, 2012 with feature code 04EVP.

DEFECT DESCRIPTION

The piston in the spring brake chamber may in certain cases, cause internal air leakage in the chamber. An internal leak past the spring piston could result in the parking brake not fully releasing in some cases which could result in partial to full brake application. An unexpected application of the parking brake 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 29 November, 2010 thru 2 April, 2012 with feature code 04EVP piston spring brakes.

PARTS INFORMATION

Part Number	Part Description	Quantity
ZAJMJS3024ET951	Chamber; combination with welded yoke.	2

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 vehicle on a flat surface.
2. Shift transmission to park or neutral and set spring brakes.
3. Install wheel chocks.
4. Release spring brakes using dash mounted air control valve.

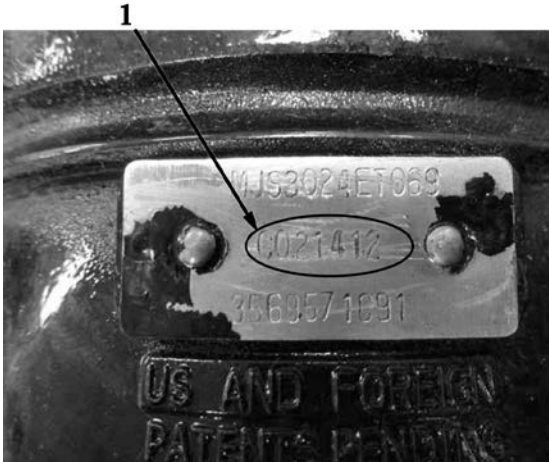


Figure 1. Spring Brake Label

1. Spring brake build date code

5. Inspect the build date code on both spring brake chambers (Figure 1). If the date codes on the spring brake chambers are 11/03/2010 through 04/01/2012, proceed with Step 6 for each chamber to be replaced. If the date codes on the spring brake chambers fall outside these dates, no further action is required. Proceed to Step 26.

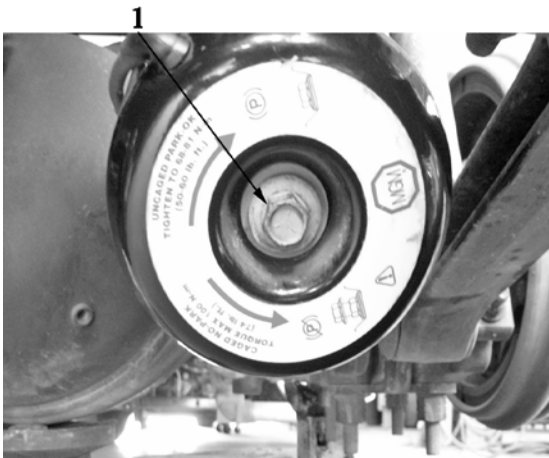


Figure 2. Spring Brake Chamber

1. Integral release bolt

6. Locate integral release bolt on back of spring brake chamber (Figure 2).



Figure 3. Caging Spring Brake Chamber

WARNING: Do not exceed fully caged length and do not exceed 74 lb-ft (100 N·m) torque on the integral release bolt at any time or damage may occur which could prevent any further correct manual release of the spring brake.

7. Cage spring brake chamber by turning integral release bolt counter-clockwise until the power spring is fully caged or compressed (Figure 3).



Figure 4. Integral Release Bolt Measurement

8. Parking brake spring is fully caged when the release bolt is up approximately 1 11/16 in / 33 mm from the run position (Figure 4).
9. Set spring brakes and drain truck air tanks.

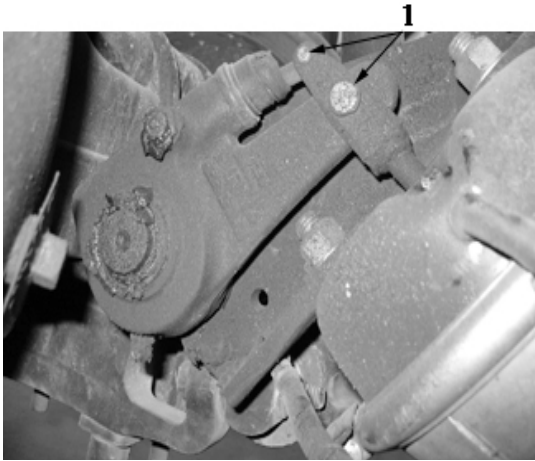


Figure 5. Slack Adjuster

1. Slack adjuster clevis pins (2)

10. Remove cotter pins from clevis pins. Remove clevis pins from yoke. Discard cotter pins and retain clevis pins for reuse.
11. Adjust slack adjuster nut until slack adjuster is free from spring brake chamber welded yoke.

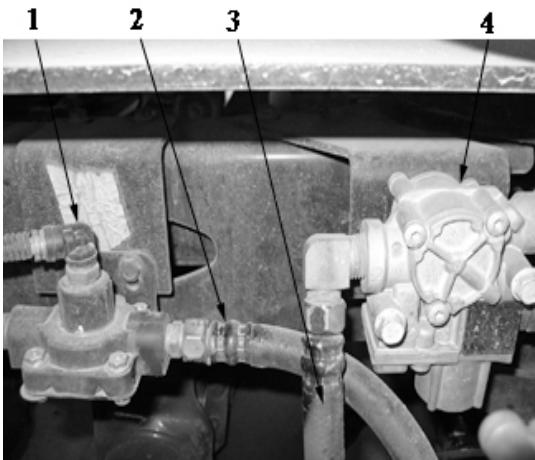


Figure 6. Brake System Valves

1. Quick release valve
2. Spring brake hose
3. Service brake hose
4. ABS modulator valve

WARNING: Verify that no air pressure remains in the service brake chamber before you proceed. Sudden release of compressed air can cause serious personal injury and damage to components.

IMPORTANT: Be sure to mark air line from air-inlet port marked “Spring” for reinstallation reference.

12. Disconnect spring brake chamber hose from quick release valve (Figure 6, Items 1 and 2).
13. Disconnect spring brake chamber hose from ABS modulator valve (Figure 6, Items 3 and 4).
14. Remove two spring brake chamber mounting hex nuts from spring brake assembly and remove spring brake chamber assembly from chassis. Discard hex nuts.

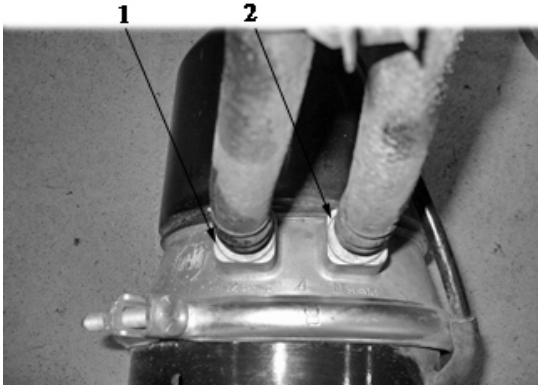


Figure 7. Spring Brake Chamber

1. Spring brake air inlet port
2. Service brake air inlet port

15. Remove spring brake chamber hose and service brake hose from spring brake chamber (Figure 7).
16. Apply thread sealant to brake hose threads before installation.
install spring brake chamber hose and service brake hose onto new spring brake chamber assembly.

NOTE: When installing any MGM Magnum Performance Plus model chamber, it is mandatory to position chamber so the breather tube is away from the road surface. Failure to comply will void the brake warranty on these models.

NOTE: Do not use an impact wrench to tighten retaining nuts to MGM brake chamber.

17. Install spring brake chamber assembly onto chassis while properly aligning the position of chamber air-inlet ports for alignment with brake system air valves. Install two washers and new hex nuts onto spring brake chamber assembly. Torque nuts to 133-155 lb-ft (180-210 N·m).
18. Adjust slack adjuster until aligned with spring brake chamber welded yoke holes.

19. Install clevis pins from step 10 and new cotter pins onto spring brake chamber yoke.
20. Adjust the brake shoe to drum clearance by referring to the slack adjuster manufacturer's procedures.
21. Install spring brake chamber hose onto quick release valve.
22. Install spring brake chamber hose onto ABS modulator valve.
23. Verify adequate vehicle air system pressure and release spring brake.
24. Un-cage spring brake chamber by turning integral release bolt clockwise until release bolt is seated to chamber housing.
25. With the aid of an assistant, apply service brake and hold. Using soapy water, spray service brake and spring brake chamber hose connections. Inspect for air leaks at air line fittings. If bubbles appear, repair as needed.
26. Set spring brakes.
27. Uninstall wheel chocks.

END OF SERVICE PROCEDURE

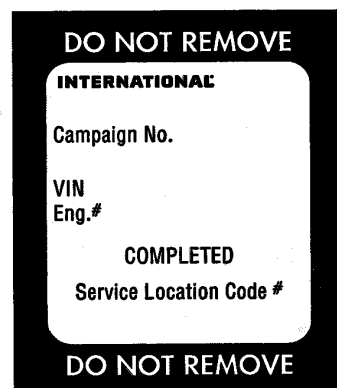
LABOR INFORMATION

Operation Number	Description	Time
A40-12524-1	Inspection only	0.3
A40-12524-2	Inspect and replace one chamber	0.8
A40-12524-3	Inspect and replace two chambers	1.2

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

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 12524.

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