

ASSEMBLY INSTRUCTIONS

COMFORT AIR® Rear Air Suspension for Hino Towing Applications

SUBJECT: Air Pressure Retention Valve
Kit No. 34013-472

LIT NO: 59310-077

DATE: August 2022

REVISION: A

INTRODUCTION

This publication is intended to assist in the installation, on an as-needed basis, of Hendrickson Truck Commercial Vehicle Systems' aftermarket Air Pressure Retention Valve Kit No. 34013-472 (see Figure 1) on Hendrickson COMFORT AIR® rear air suspensions originally equipped on Hino trucks with roll-off decks used in automobile towing applications. The air pressure retention valve is designed to work with single and dual height control valve COMFORT AIR configurations in such towing applications.

The air pressure retention valve allows approximately 10 psi of air pressure to be retained in the rear suspension air springs to help further prevent any potential internal damage to the air spring rubber bellows after the vehicle's air pressure dump valve feature is activated.

See Hendrickson publication number 17730-245 COMFORT AIR Tech Procedure for Hino Vehicles for complete safety and service instructions available online at: www.hendrickson-intl.com.

FIGURE 1



Single Air Pressure Retention Valve Kit No. 34013-472 Contents

1	Air Pressure Retention Valve
1	Height Control Valve Plug

INSTALLATION

CAUTION

A TECHNICIAN USING A SERVICE PROCEDURE OR TOOL WHICH HAS NOT BEEN RECOMMENDED BY HENDRICKSON MUST FIRST SATISFY HIMSELF THAT NEITHER HIS SAFETY NOR THE VEHICLE'S SAFETY WILL BE JEOPARDIZED BY THE METHOD OR TOOL SELECTED. INDIVIDUALS DEVIATING IN ANY MANNER FROM THE INSTRUCTIONS PROVIDED WILL ASSUME ALL RISKS OF CONSEQUENTIAL PERSONAL INJURY OR DAMAGE TO EQUIPMENT INVOLVED.

You will need (double the respective quantities for COMFORT AIR suspensions equipped with dual height control valves):

- One (1) service Kit No. 34013-472
- Four (4) ¼"-20 1.25" bolts and ¼"-20 nylon locknuts, and eight (8) ¼" flat washers (Note, such fasteners are not included in Kit No. 34013-472.)

WARNING

PLACE THE VEHICLE ON A LEVEL FLOOR AND CHOCK THE WHEELS TO PREVENT THE VEHICLE FROM MOVING OR ROLLING. DO NOT WORK AROUND OR UNDER A RAISED VEHICLE SUPPORTED BY ONLY A FLOOR JACK. ALWAYS SUPPORT A RAISED VEHICLE WITH RIGID SAFETY STANDS. FAILURE TO DO SO CAN CAUSE SERIOUS PERSONAL INJURY OR DAMAGE TO EQUIPMENT.

1. Chock the wheels and support the frame with safety stands.

WARNING

PRIOR TO AND DURING DEFLATION AND INFLATION OF THE AIR SUSPENSION SYSTEM, ENSURE THAT ALL PERSONNEL AND EQUIPMENT ARE CLEAR FROM UNDER THE VEHICLE AND AROUND THE SERVICE AREA, FAILURE TO DO SO CAN CAUSE SERIOUS PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE.

2. Disconnect the height control valve linkage and lower the height control valve arm to exhaust the air in the air springs and deflate the rear suspension.

SERVICE HINT

The center of the rear cross member is a suitable location to install the air retention valve, see Figure 2.

3. Locate an installation area for the air pressure retention valve, preferably on the cross member (or alternatively on a vehicle frame rail) that will allow both air spring supply lines to be divided into equal lengths, see Figures 2 and 3.
4. Disconnect the air line(s) from the air spring(s) and the height control valve.

FIGURE 2

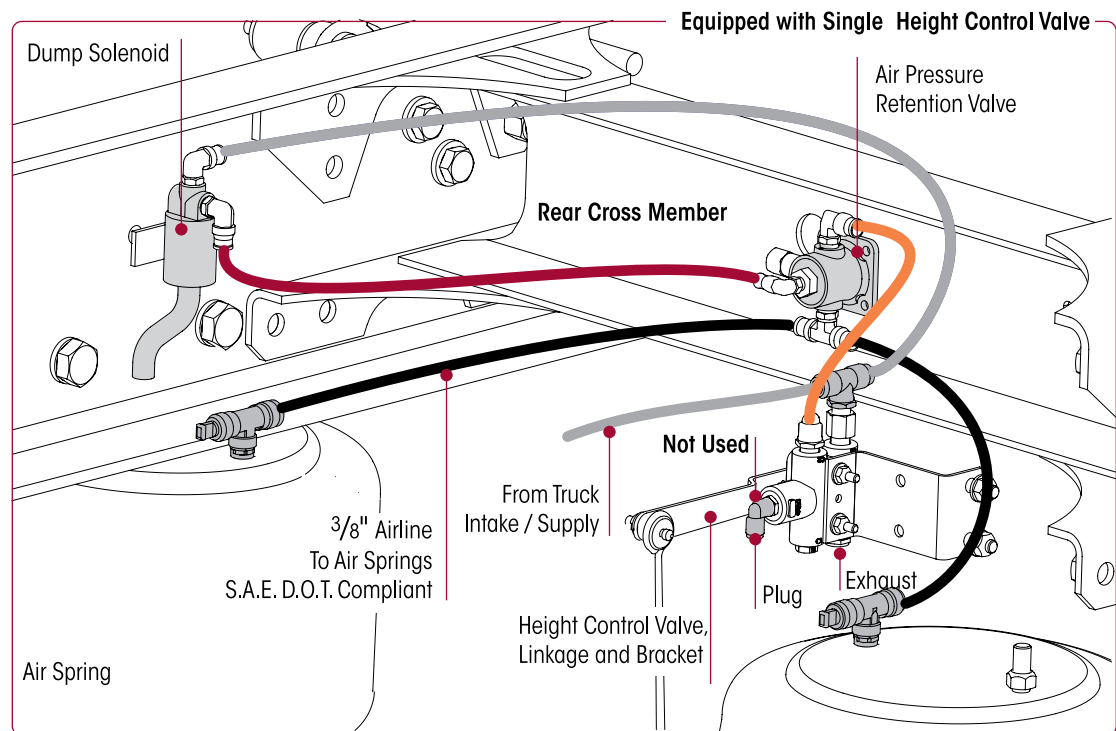
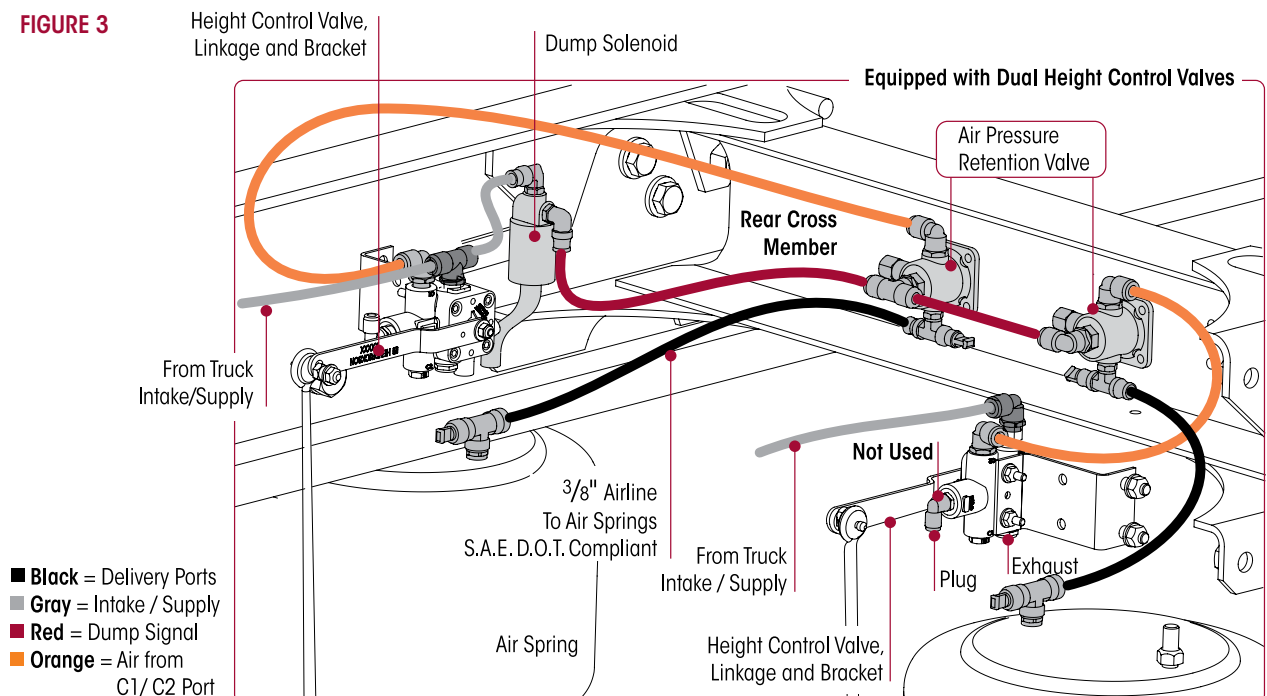


FIGURE 3





SERVICE HINT

If available, use existing appropriately sized holes in the vehicle cross member that is near the install location.

5. Use the air pressure retention valve hole locations to mark the hole pattern on the vehicle cross member (or frame rail).
6. Drill in the marked hole locations to accommodate the $\frac{1}{4}$ " bolts.
7. Install the air pressure retention valve onto the vehicle cross member (or frame rail) with the orientation of the air pressure retention valve facing down to help prevent contamination, see Figures 2 and 3.
8. Install the four (4) $\frac{1}{4}$ " air pressure retention valve fasteners through the valve body to the cross member (frame rail). Snug the fasteners. **DO NOT** tighten at this time.
9. Remove the air line from C1 or C2 port on the height control valve and plug the port, see Figure 4.
10. Use the remaining air line from the C1 or C2 port and run the line into the $\frac{3}{8}$ " inlet fitting on the air pressure retention valve, see Figure 5.

FIGURE 4

Height Control Valve and Bracket

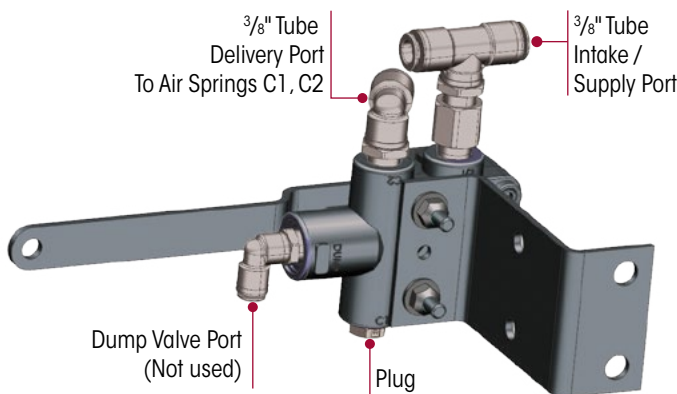
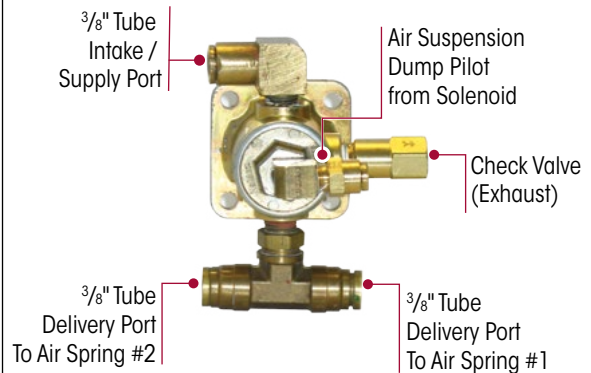


FIGURE 5

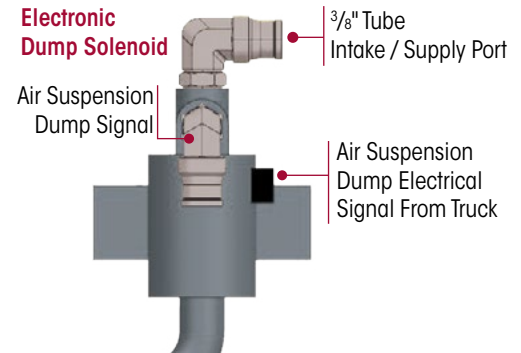
Air Pressure Retention Valve



11. Install the air lines from the air pressure retention valve $\frac{3}{8}$ " T-fitting(s) to the air spring(s), see Figures 2 and 3.
12. Remove the $\frac{1}{4}$ " air line from the dump port on the height control valve.
13. Route the $\frac{1}{4}$ " air line from the electronic dump solenoid (see Figure 6) along the cross member and install it into the $\frac{1}{4}$ " pilot fitting on the air retention valve.
14. Tighten the $\frac{1}{4}$ " air pressure retention valve fasteners to ensure the valve is properly secured to the cross member (frame rail).

FIGURE 6

Electronic Dump Solenoid



WARNING

PRIOR TO AND DURING DEFLATION AND INFLATION OF THE AIR SUSPENSION SYSTEM, ENSURE THAT ALL PERSONNEL AND EQUIPMENT ARE CLEAR FROM UNDER THE VEHICLE AND AROUND THE SERVICE AREA, FAILURE TO DO SO CAN CAUSE SERIOUS PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE.

WARNING

INFLATE THE SUSPENSION SLOWLY AND MAKE SURE THE RUBBER BLADDER OF THE AIR SPRING INFLATES UNIFORMLY AND IS NOT BINDING. FAILURE TO DO SO CAN CAUSE DAMAGE TO THE AIR SPRING AND/OR MOUNTING BRACKETS AND VOID WARRANTY.

15. Inflate the air springs.
16. Test the air pressure retention valve by activating the air pressure dump switch valve in the cab.



17. Confirm that the air springs retain adequate residual pressure to prevent the air spring rubber bellows from becoming pinched or otherwise exposed to any excess internal wear.
18. Check the connections for any leaks using soapy water.
19. Remove the safety stands and wheel chocks.



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**Additional Hendrickson
Product Information**
www.hendrickson-intl.com

Actual product performance may vary depending upon vehicle configuration, operation, service and other factors.

All applications must comply with applicable Hendrickson specifications and must be approved by the respective vehicle manufacturer with the vehicle in its original, as-built configuration. Contact Hendrickson for additional details regarding specifications, applications, capacities, and operation, service and maintenance instructions.

Call Hendrickson at 1.866.755.5968 (toll-free) or 1.630.910.2800 for additional information.



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