# VALID LEVELING SYSTEM

## Installation Guide

**PART# VTL01K013-IM**

**Valid Manufacturing Ltd.**

*Advanced Technologies… Simple Solutions*

# VALID LEVELING SYSTEM
# INSTALLATION INSTRUCTIONS



Revision 8 20th August 2008

# VALID LEVELING SYSTEM

This document outlines the procedure of installing the pneumatic components of a Valid Leveling System on a Prevost H3 coach and must be read in conjunction with the attached drawings **VTL01K013** and **D140299P1REV_B_MOD**.

## Procedure

1. Install fittings on valve #'s 9 & 11 (K910026) and valve #6 (D0045A1W2) as shown in Figures 1 & 2.

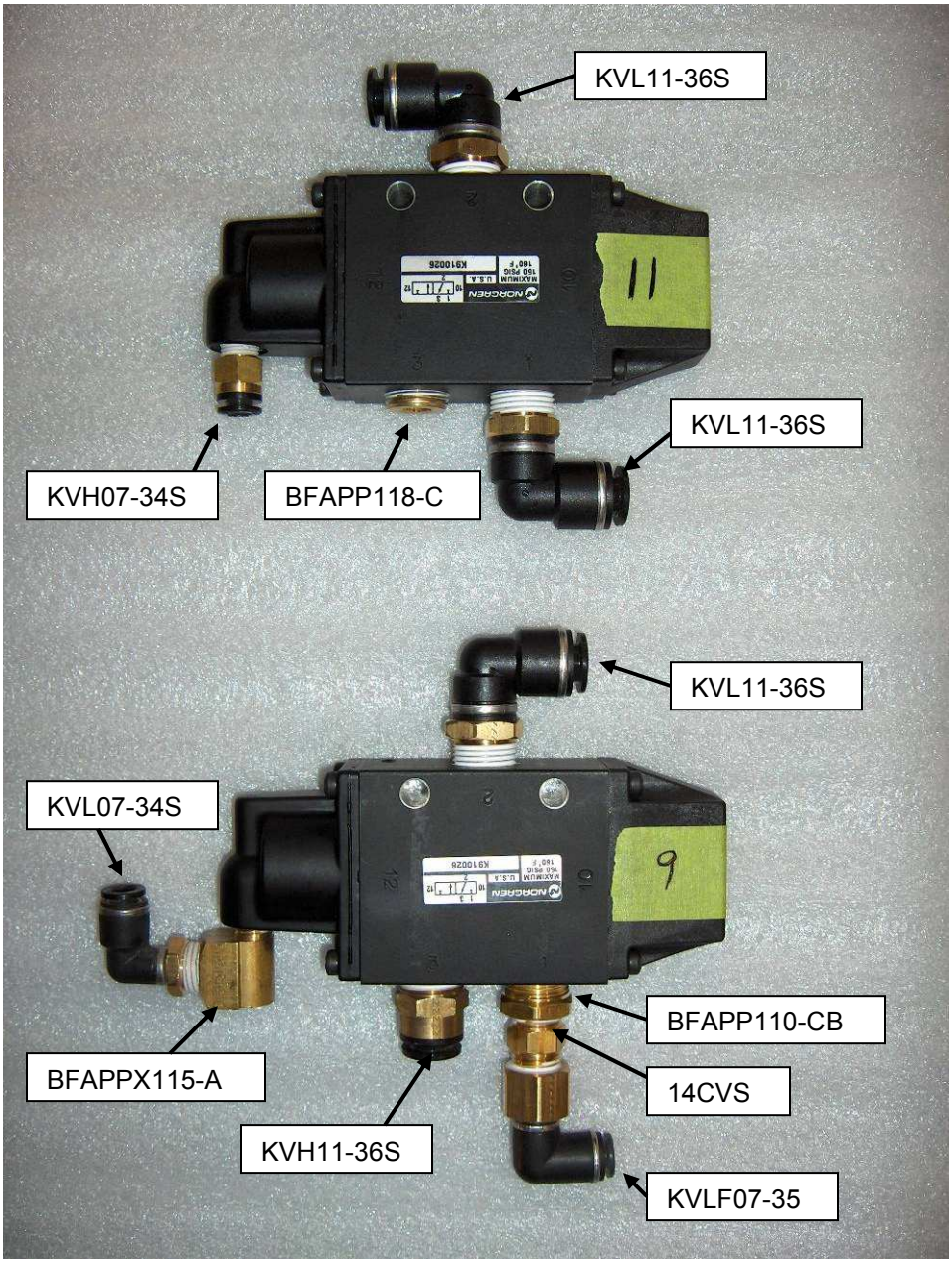



Figure 1 – Fittings for valves #9 & 11

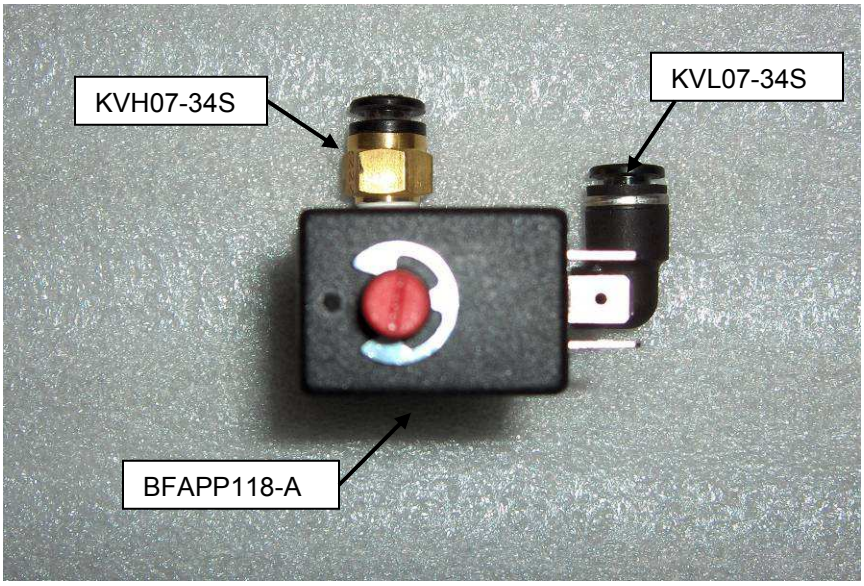



Figure 2 – Fittings for valve #6

***** IMPORTANT *****
The manual override for valve #6 should be in the zero (0) position otherwise the valve will never turn off.

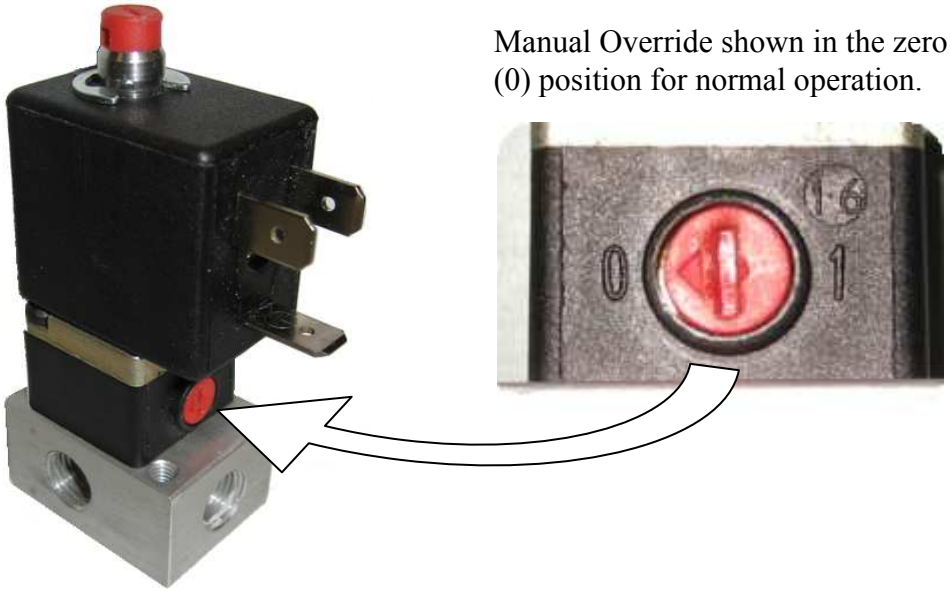



Figure 2a – Manual Override on valve #6

2. Disconnect the windshield washer fluid hoses and remove the tank unit from the coach to provide access to the pneumatic panel.

3. Identify and label valves #10 & 12 as shown in Figure 3, verify to drawings **VTL01K013** and **D140299P1REV_B_MOD**.

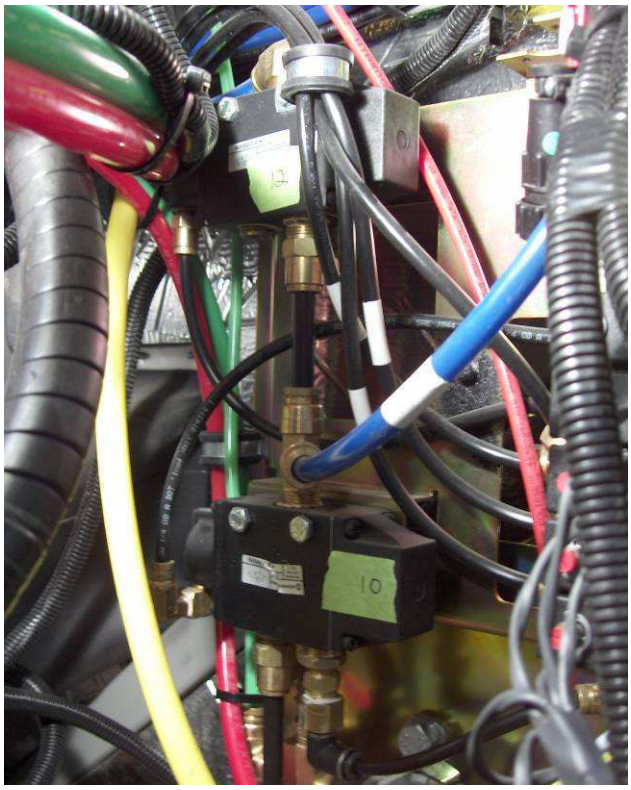



Figure 3
Valves #10 & 12
Identification

4. Remove fitting from port #1 on valve #10 and install check valve as shown in Figure-4. **WARNING – This will drain all air pressure from the coach auxiliary air tank, make sure proper jack stands are in place.**

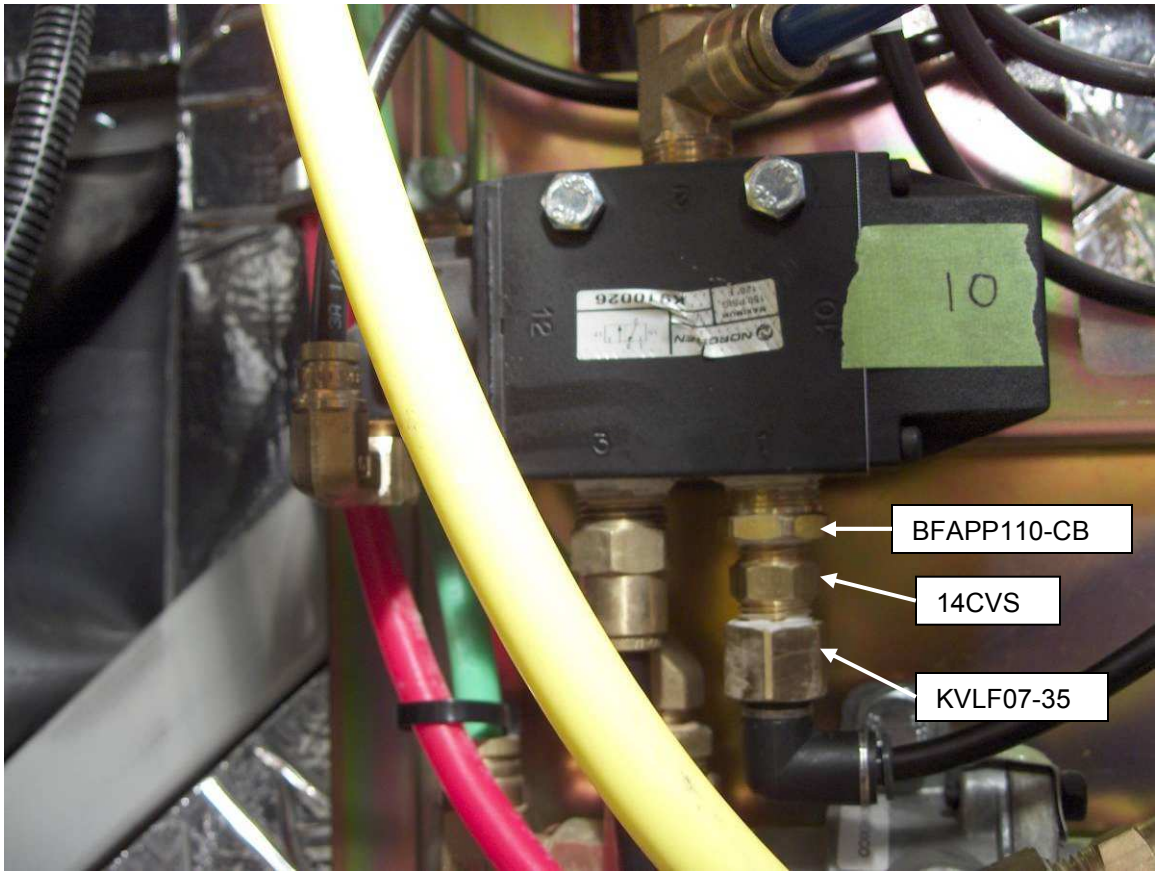



Figure 4 – Valve #10 Mods

5. Mount valve #6 to H390P-003-01 using (2) SHC4M16, layout and drill (2) 5/32” holes in panel, and mount assembly using (2) 70010RBB8G screws as shown in Figure 5.

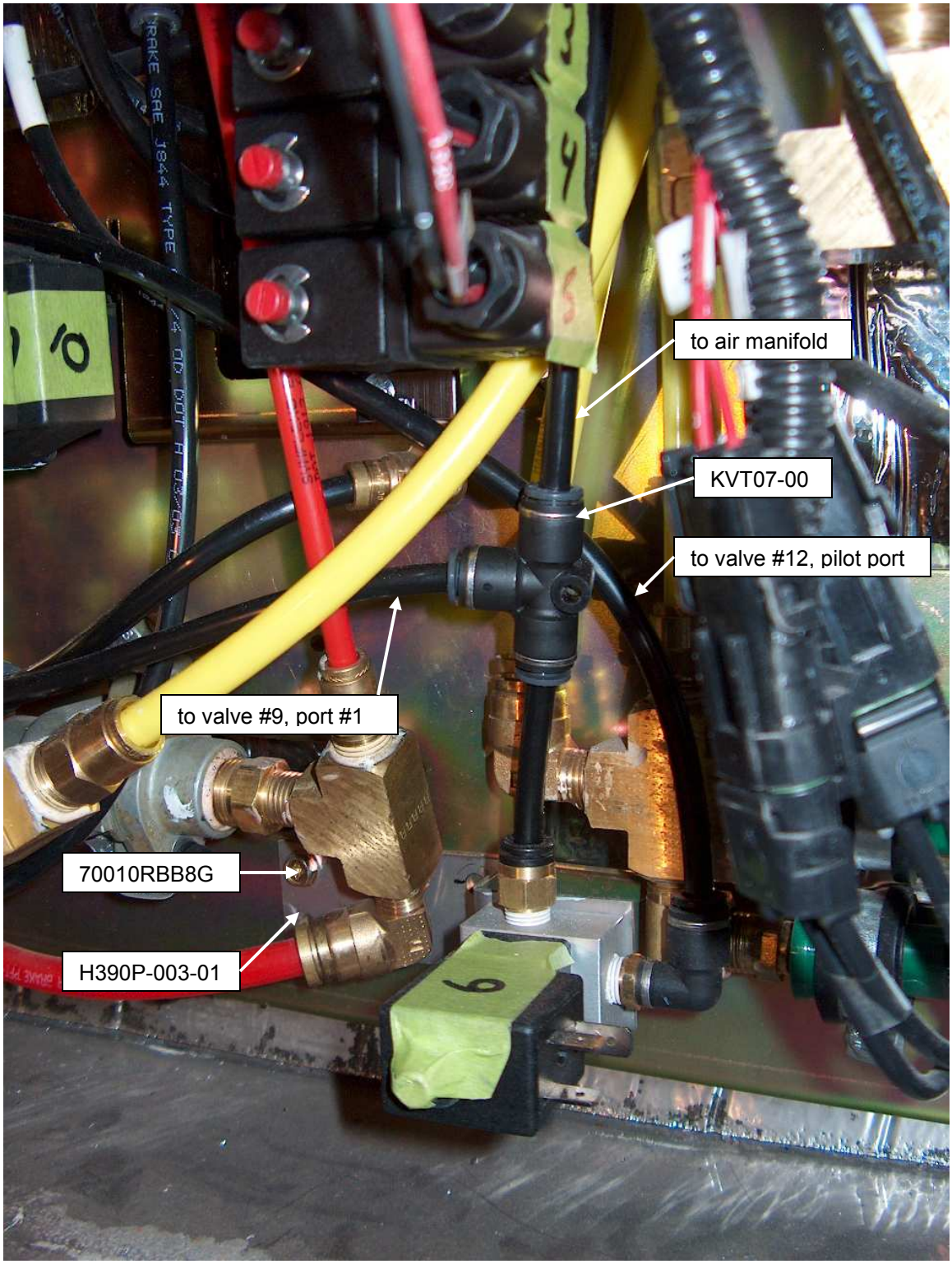



Figure 5 – Valve #6 Mounting

6. Remove mounting bolts from valve #12, install valve #11 using (2) HHC6M80 as shown in Figure 6.

7. Remove mounting bolts from valve #10, install valve #9 using (2) HHC6M80 and (2) HNILN6M as shown in Figure 6.

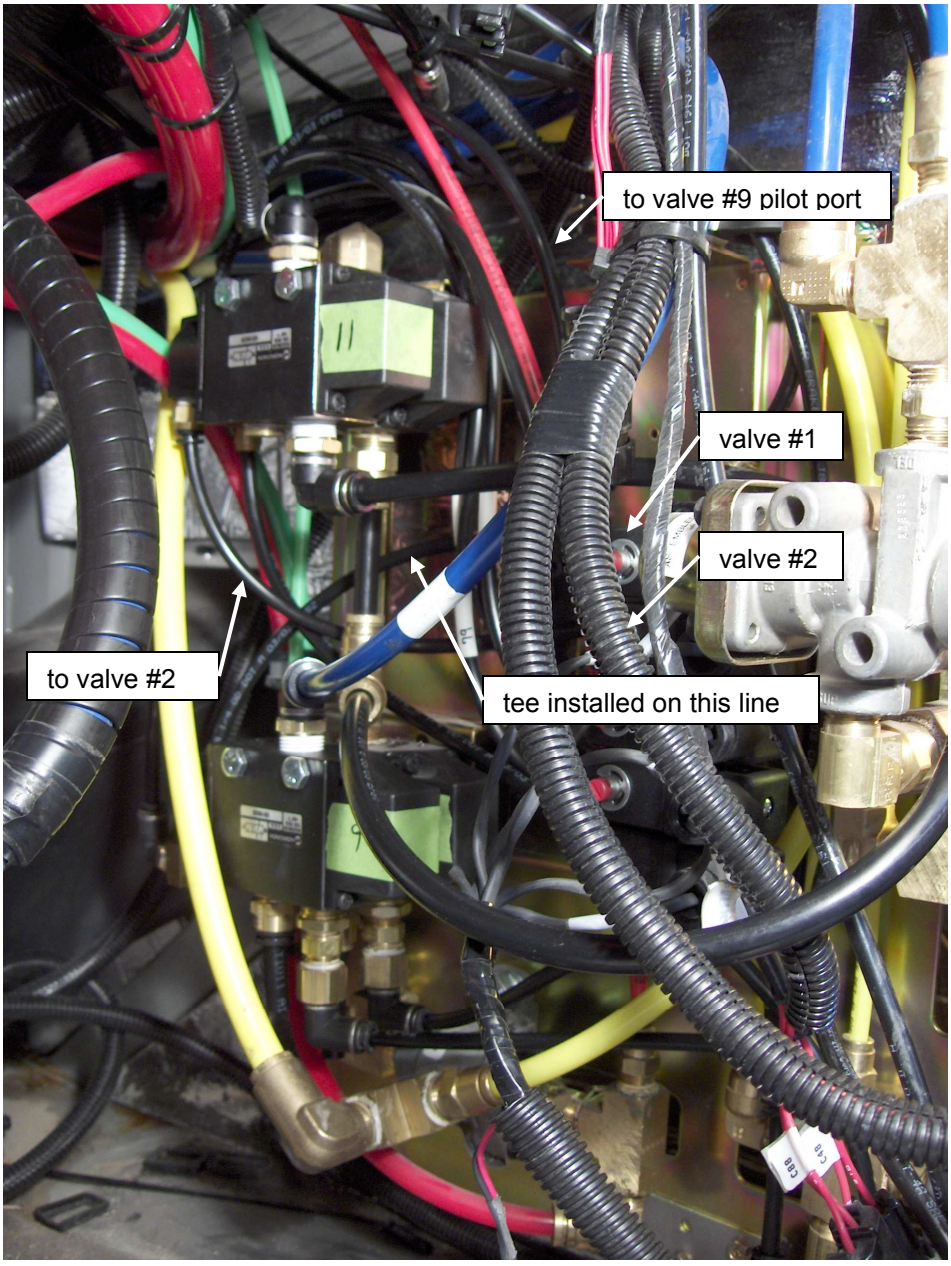



Figure 6 – Valve #9 & 11 Mounting

8. Install air line from air manifold (above panel) to KVT07-00 (tee); install one line to valve #6 and one to port #1 on valve #9; install one line from valve #6 to the pilot port on valve #12, as shown in Figure 5.

9. Install KVT07-00 (tee) on air line that runs from valve #1 to the pilot port on valve #10. Install air line from tee to the pilot port on valve #9, with the air line running up and over valves #11 & 12, as shown in Figure 6.

10. Install air line from valve #2 to pilot port on valve #11, as shown in Figure 6.

11. Remove blue air line from port #2 on valve #10 and install it on port #2 on valve #9, install air line from port #2 on valve #10 to port #1 on valve #11 as shown in Figure 7.

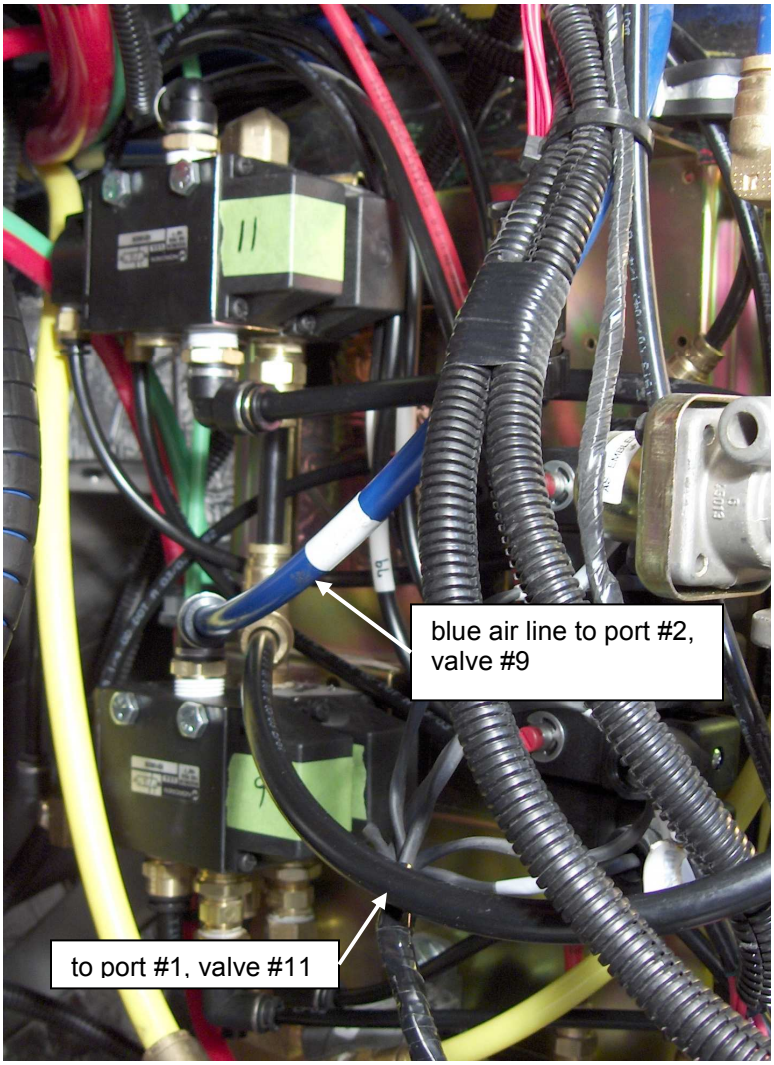



Figure 7 – Misc. Plumbing

12. Flip down front bumper of coach, remove access panel, then remove access panel on roof of compartment to identify air line access hole as shown in Figure 8.

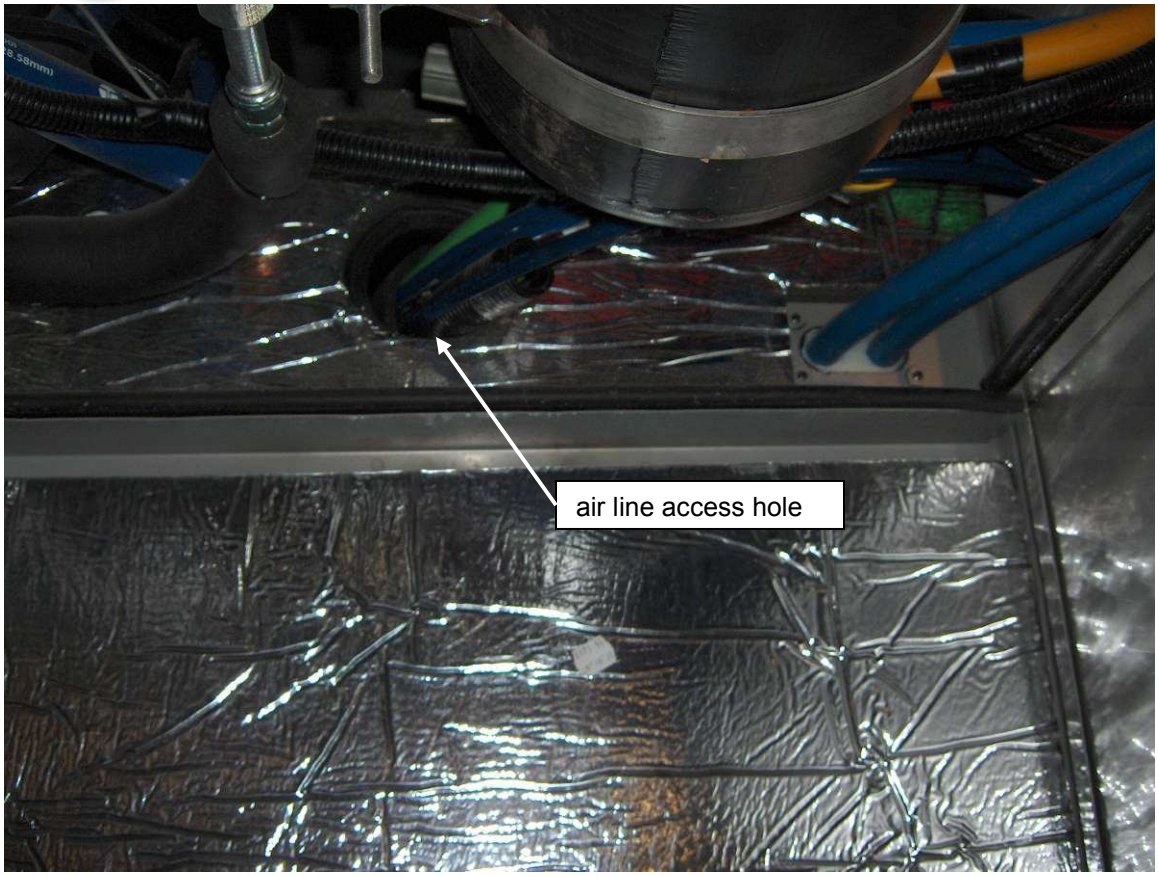



Figure 8 – Air Line Access Hole

13. Locate air line access hole underneath front suspension area of coach, remove zip ties as shown in Figure 9. **WARNING – MAKE SURE JACK STANDS ARE IN PLACE BEFORE ACCESSING THIS AREA.**

14. Feed a 10’ piece of blue 3/8” air line from the front of the coach through the air line access hole so that approx. 5’ of air line is in the front suspension area.

15. Remove the air line that connects port #3 on valve #15 and port #3 on valve #14, install plug in port #3 on valve #15 as shown in Figure 10.

16. Install blue 3/8” air line (installed in step 14) to port #3 on valve #14, connect other end to port #2 on valve #11 as shown in Figures 10 & 11.

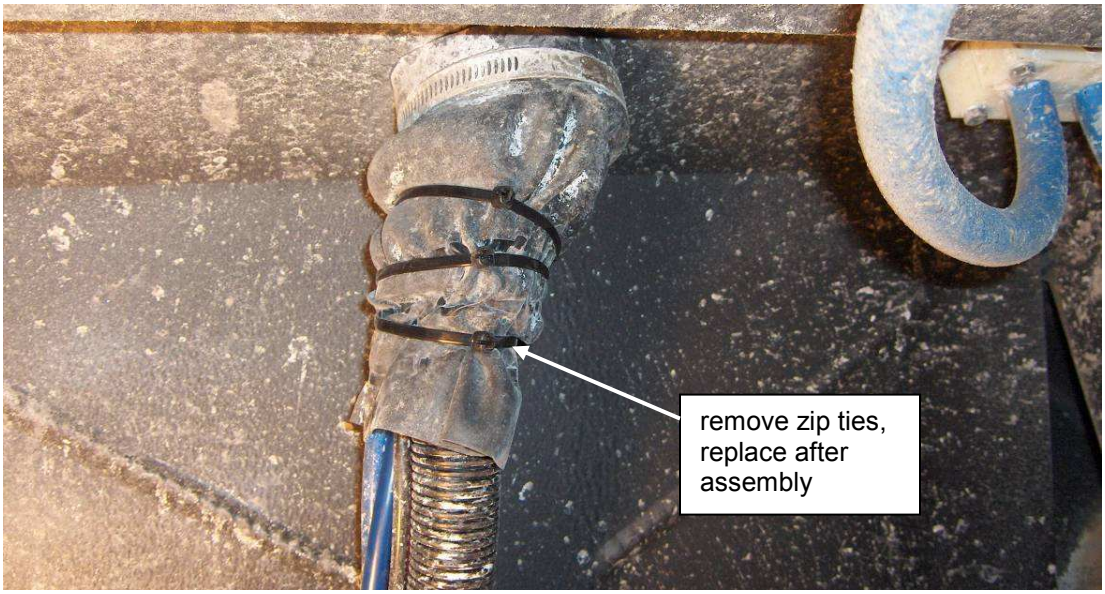



Figure 9 – Air Line Access Hole

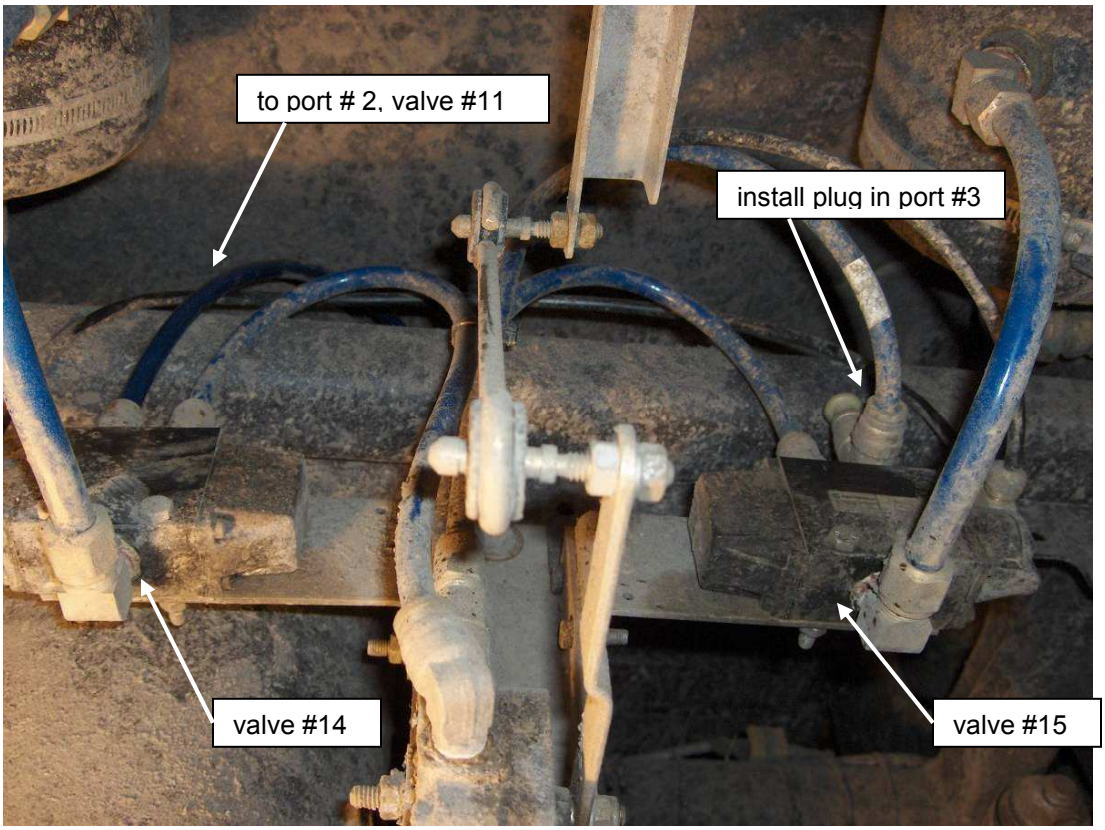



Figure 10 – Valve #14 & 15 (Looking toward front of coach)

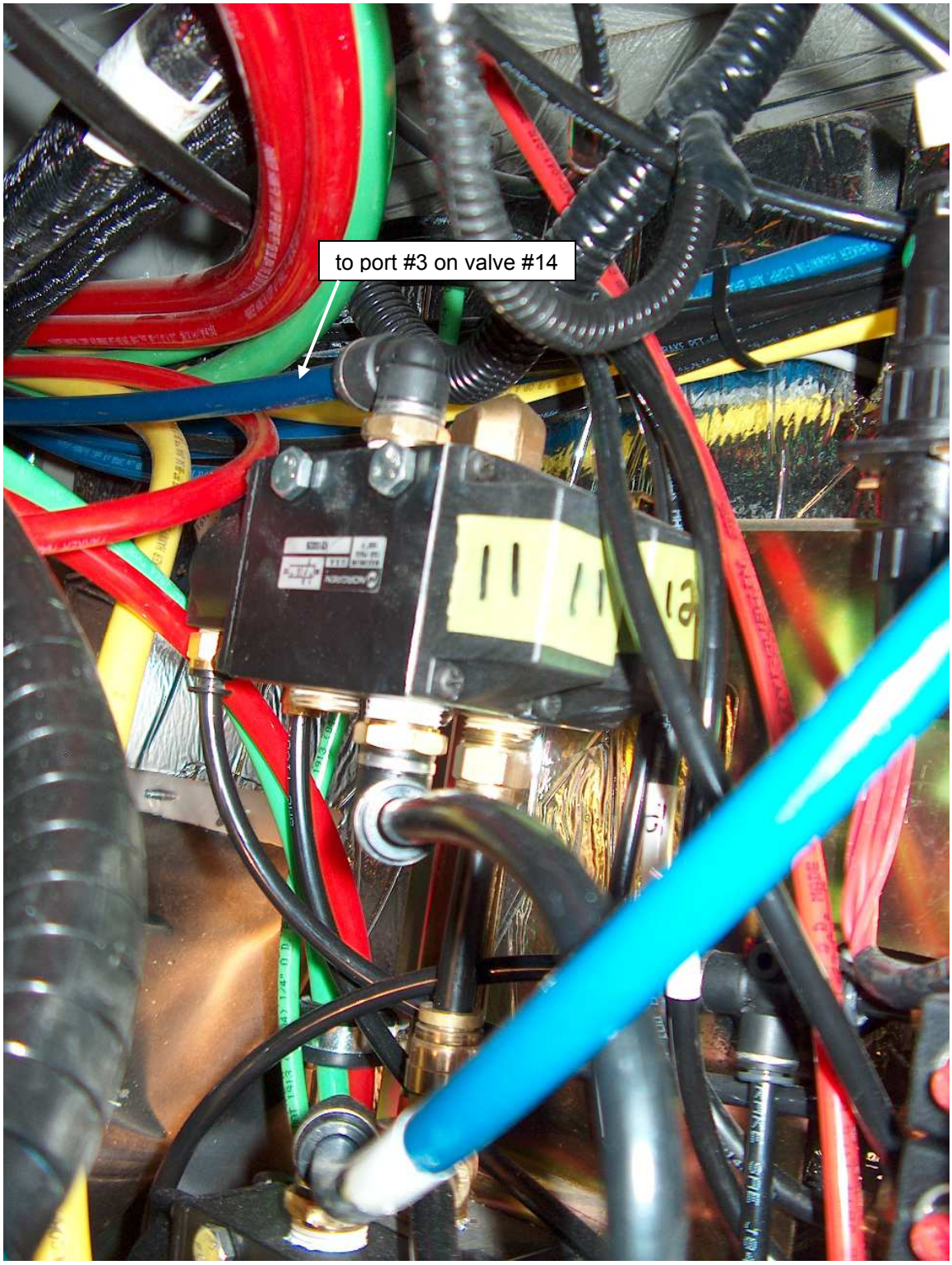



Figure 11 – Valve #11

17. Replace zip ties on air line access hole, double check all air line routing to valves #14 & 15.

18. Double check all air line routing to drawings **VTL01K013** and **D140299P1REV_B_MOD**.

19. Install all access panels and windshield washer fluid tank unit.

# SENSOR MOUNTING

The front level sensor mount (H390P-004-01) should be welded in place or attached with rivets in the front service compartment located beneath the driver as shown in Figure 1.

**Figure 1**

The rear level sensor mount (VTL01P010S) should be welded in place or attached with rivets on the frame member behind the driver side rear fender as shown in Figure 2.

**Figure 2**

# REAR HARNESS INSTALLATION

This document shows the installation of the rear harness for a Valid leveling system on a Prevost H3-45 VIP shell.

1. Cut a 2” hole in the white plastic conduit at the rear of the driver side of the coach (remove rear fender for access) approx. 8” from the firewall, as shown in Figure 1.

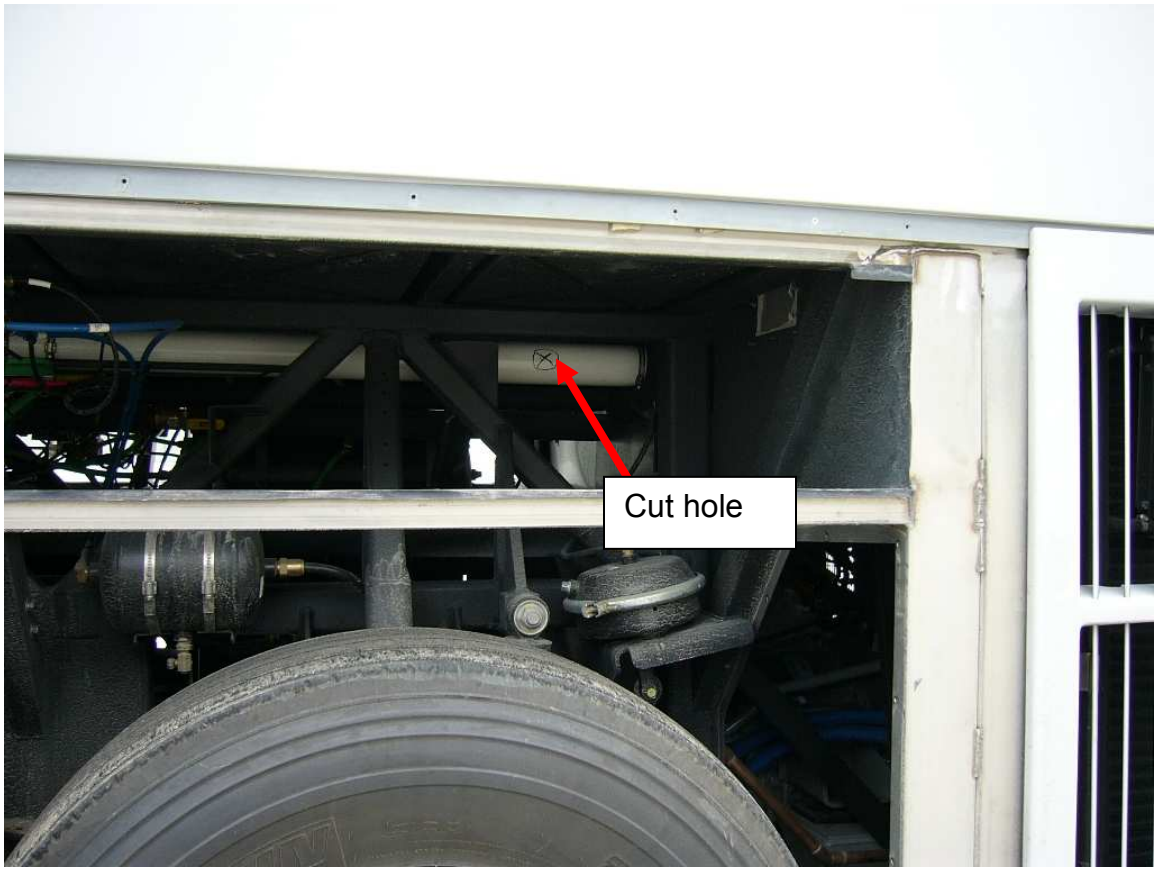



**Figure 1**

2. Install harnesses VTL04A010-45 & VTL04A012-45 inside the conduit so that the sensor connectors are left toward the rear of the coach as shown in Figure 2. Leave approx. 24” of each harness coiled up outside the conduit.

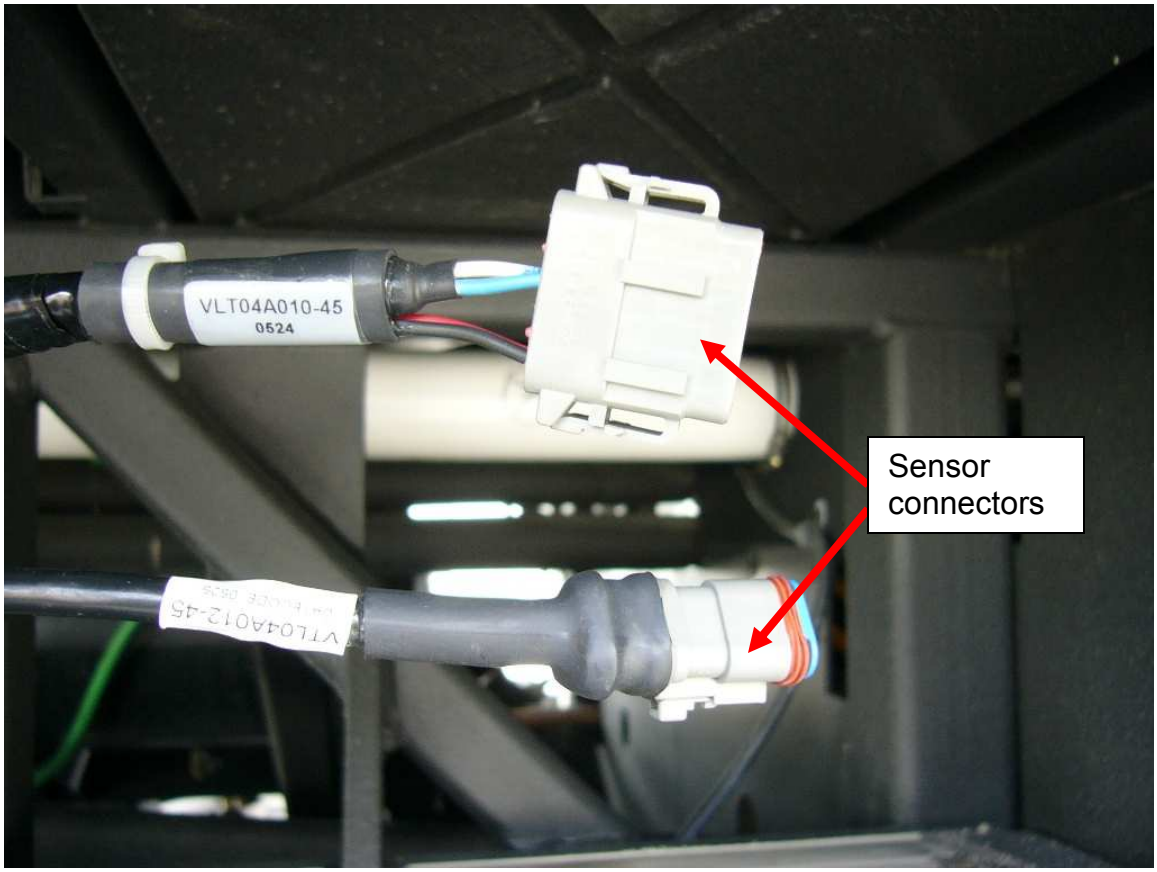



**Figure 2**

3. At the front end of the white conduit, route the harnesses around the heater box and down into the front service bay area (under the driver) as shown in Figures 3 thru 5. Leave any extra harness length coiled up in the service bay.

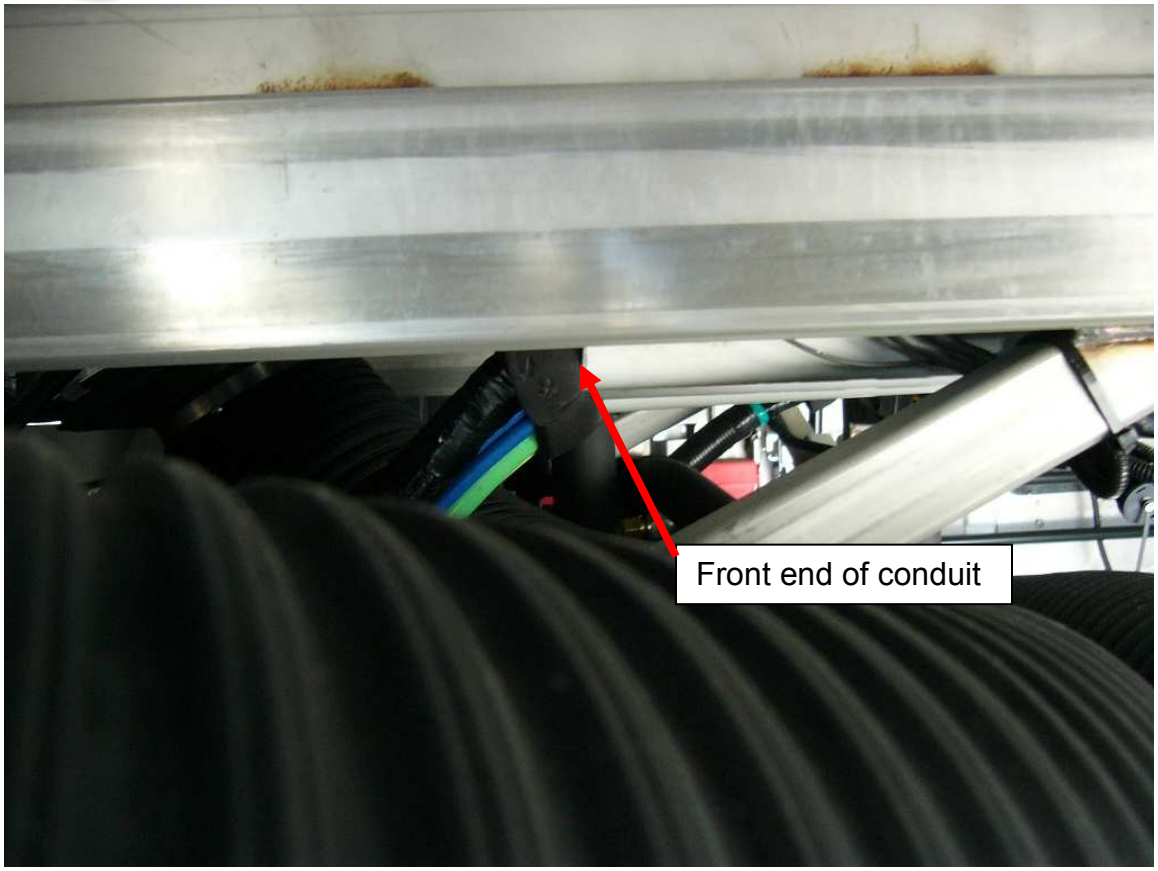



**Figure 3**

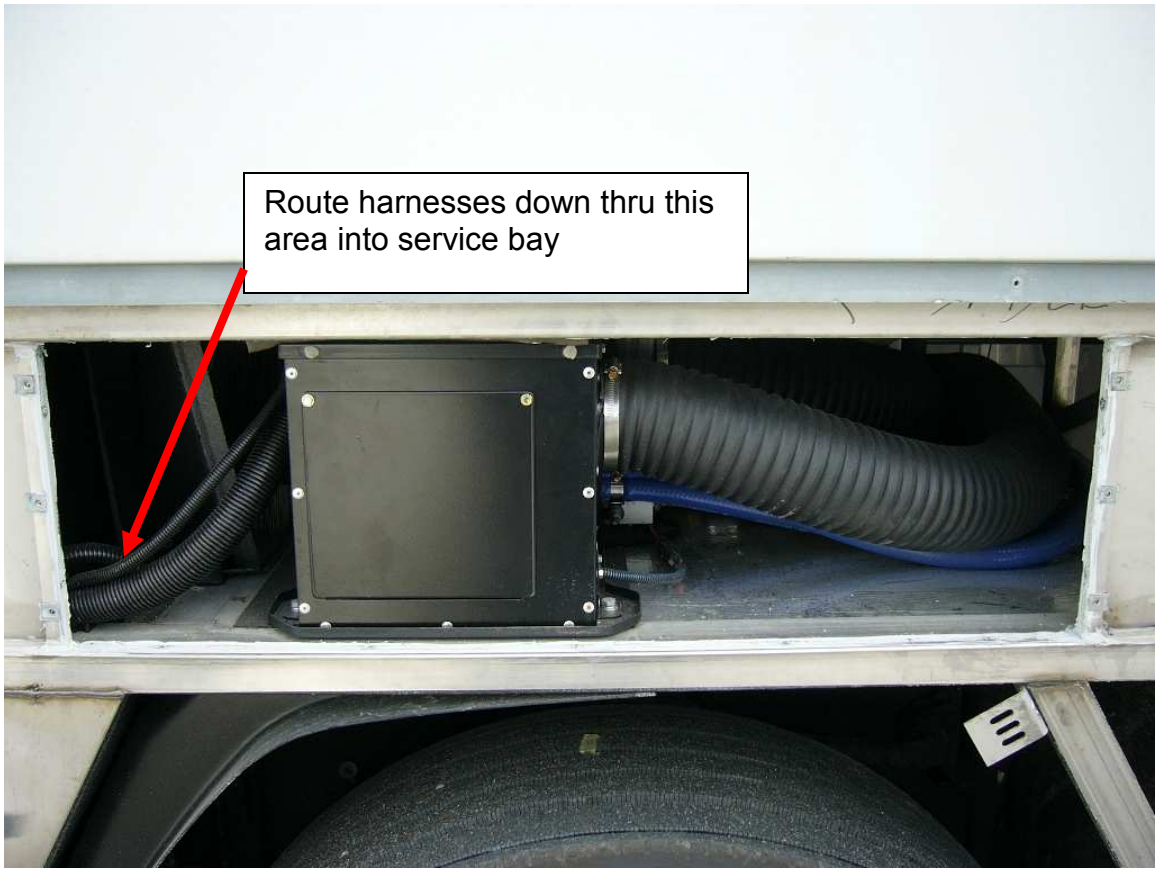
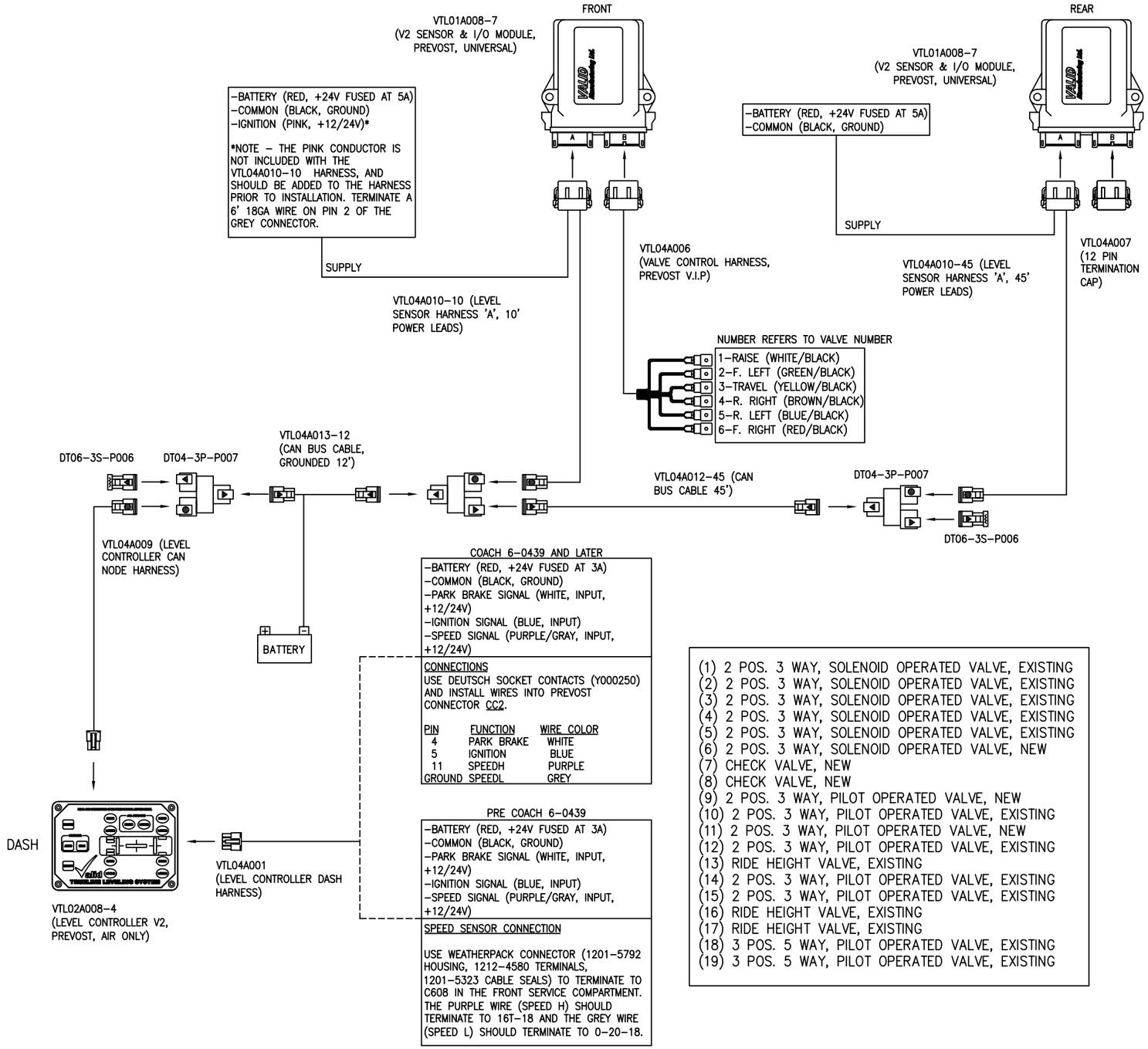



**Figure 4**

**Figure 5**




| REV | DATE | BY | DESCRIPTION |
|---|---|---|---|
| 2 | 19JUN06 | DN | CLAIRIFY VTL04A006 CONNS |
| 1 | 26MAY06 | DN | ADDED NEW KEPAD CONN INFO |

## TOLERANCES

(UNLESS OTHERWISE NOTED)

ALL DIMENSIONS ARE IN INCHES
FRACTIONAL DIMENSIONS ±1/32"
TWO DECIMAL DIMENSIONS ± 0.010"
THREE DECIMAL DIMENSIONS ± 0.003"
ANGLES ± 0.5°

## NOTICE



| DATE | DRAWN BY | CHECKED | SCALE: |
|---|---|---|---|
| 25FEB05 | JWF | | NONE |

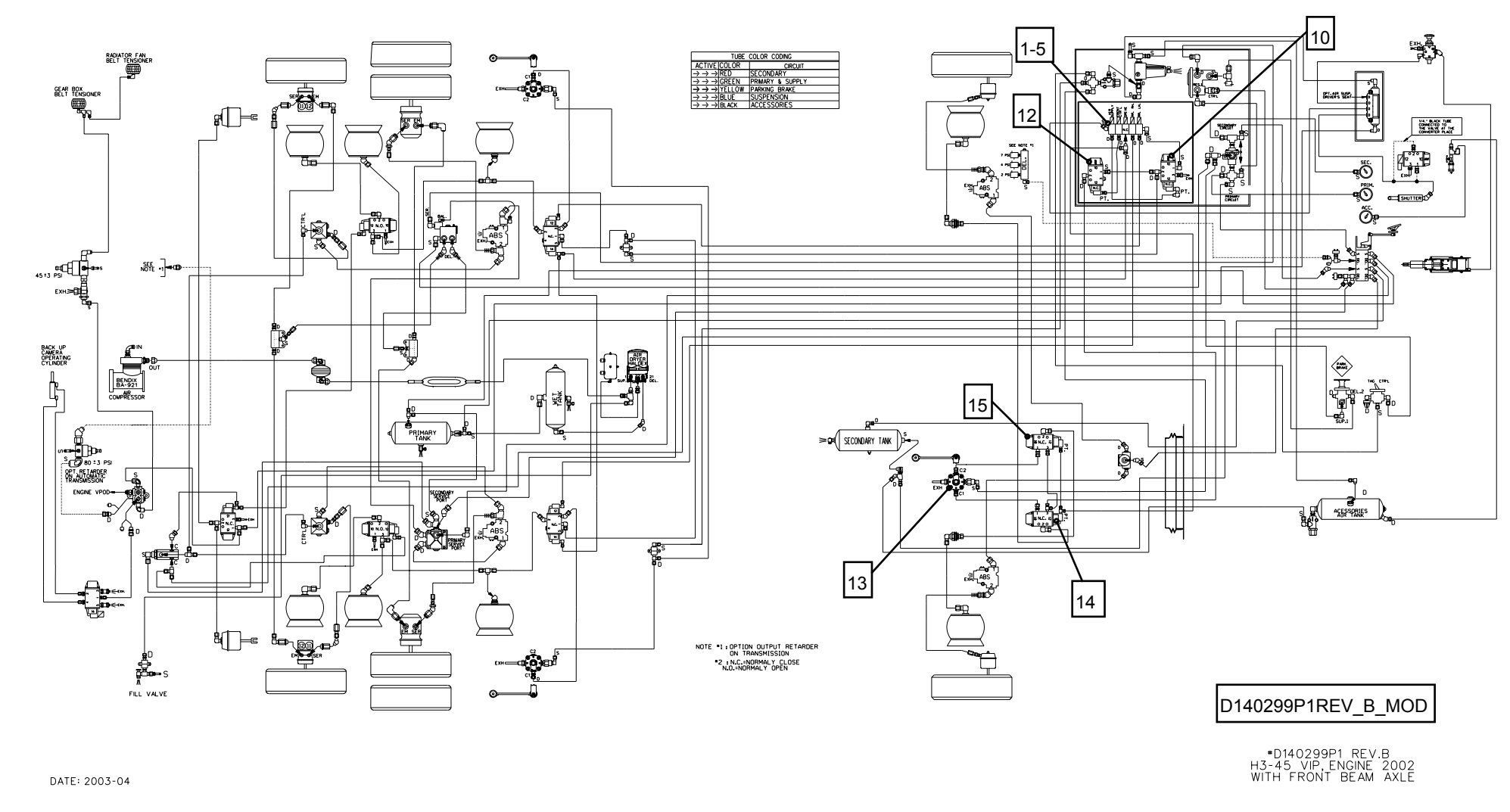
VALID Manufacturing Ltd.
5320-B 48th Ave. S.E. Phone 250 832-6477
Salmon Arm, B.C. Fax 250 832-7746
Canada
V1E 1X2
sales@validmanufacturing.com

# TRUELINE LEVELING SYSTEM CONTROL AND AIR SCHEMATIC

AIR LEVELING ONLY, PREVOST

DRAWING NUMBER VTL01K013

REV 2




*D140299P1 REV.B
H3-45 VIP, ENGINE 2002
WITH FRONT BEAM AXLE

DATE: 2003-04