



Field Service Bulletin

Pony Tank 87 PSI Regulator & Filter Upgrade Kit

Part Number 24409010

ENP-616

January 23, 2018

1. Introduction

Agility Fuel Solutions Pony Tanks made prior to 2017 supply 125 psi to the vehicle engine, and is too high for Cummins Near Zero engines. The Near Zero 12L and possibly other natural gas engines require lower fuel pressure to operate properly.

The Agility 24409010 Pony Tank retrofit kit includes a new pressure regulator and a high pressure filter to improve existing and older Pony Tanks. The fuel pressure output is 85 psi and is compatible with all Cummins 6.7L, 9L and 12L natural gas engines, including the Near Zero 12L.

These instructions can be used for the entire 24400000 and 24401000 family of Agility Pony Tank systems.

Warning Messages Used in this Bulletin

WARNING

Personal injury or death may occur if procedures are not followed.

CAUTION

Damage to equipment, fuel system or vehicle is possible if instructions are not followed.

2. Affected Units

This upgrade applies to 24400000 and 24401000 series of Agility Pony Tank systems.

3. Corrective Action

Not applicable.

4. Required Parts and Tools

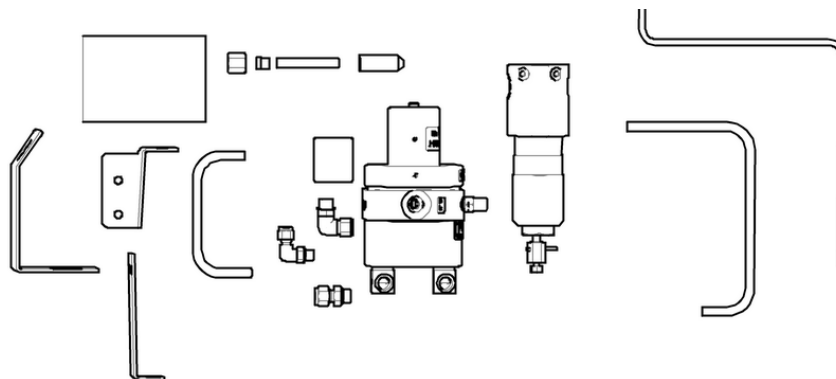


Figure 1. Pony Tank 87 psi regulator and filter upgrade kit, part number 24409010.

- In addition to the information in this bulletin, the Pony Tank manual, ENP-005, Rev. F and later, provides additional reference material.
- Common CNG fuel system hand tools for leak detection and repair.
- Pony Tank Retrofit Kit part number 24409010 consists of:

Qty.	Part Number	Description
1	10200062	Connector, 3/8-in. tube x 9/16-18 male
1	10200176	Elbow, 1/4-in. tube x 7/16-20 male
3	10200180	Elbow, 1/4-in. tube x 7/16-20 male
1	10306975	Regulator, 87 psi outlet
1	10602021	Decal, "CNG Vent Line"
1	10602253	Decal, "WARNING, CNG Vent Hazard"
1	10602239	Decal, "Drain Filter"
1	20100466	Subassembly, filter
1	24409100	Bracket, regulator
1	24409101	Bracket, filter
1	24409104	Bracket, 3-way valve
1	24409400	Tube, formed, valve to filter
1	24409401	Tube, formed, filter to regulator
1	24409402	Tube, formed, regulator to low pressure gauge
1	30000410	Subassembly, regulator vent

2. Procedure



- A. The Pony Tank should be depressurized before starting work.**
- B. This procedure requires drilling new holes for mounting brackets. DO NOT allow the drill bit to contact the cylinder.**

1. Depressurize the Pony Tank.
 - a. Place the Pony Tank in a well ventilated area with no overhead spaces where gas can be trapped.
 - b. Close the cylinder valve to isolate pressure within the cylinder.
 - c. Make sure the hose is securely tied to the frame to prevent movement and point it away to a safe place when releasing gas.
 - d. Turn the 3-way valve to the vent position to relieve pressure.

2. Remove covers, bottom handle bracket and regulator bracket. See Figure 2.

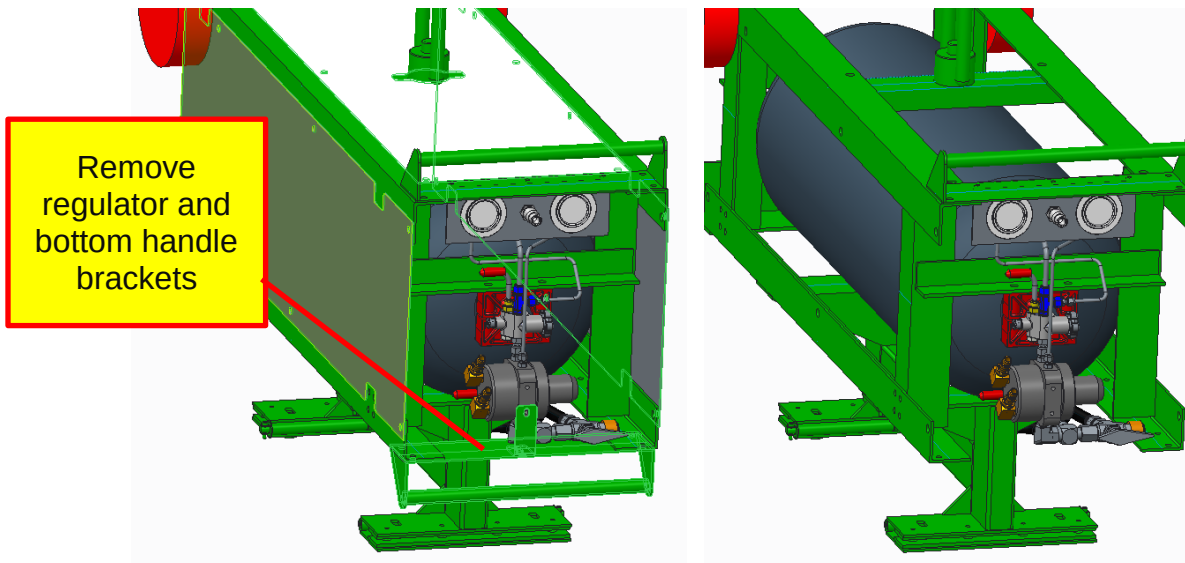


Figure 2. Remove covers and regulator bracket.

3. Next, remove the regulator, low pressure hose and **regulator** PRD vent as shown in Figure 3. Clean and save all parts and fasteners for re-use.

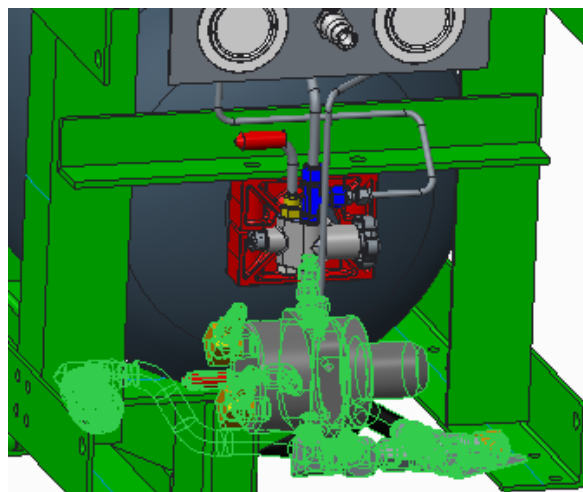


Figure 3. Remove the old regulator and related parts. Clean and save the fittings and fasteners for re-use.

4. Remove the tube from the regulator to the low pressure gauge and replace it with the new tube regulator to low pressure gauge tube as shown in Figure 4.

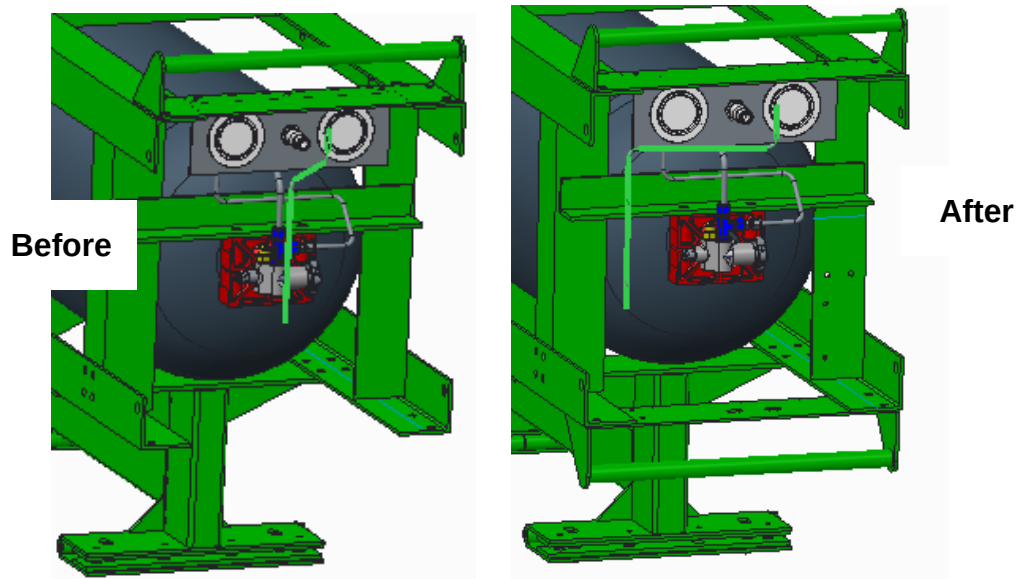


Figure 4. Remove and replace the tube from the regulator outlet to the low pressure gauge.

5. See Figure 5. Drill the support to the right of the cylinder valve for the filter mounting bracket. Refer to drawing 24409103 in Appendix A.
6. Do not damage the cylinder with the drill bit.

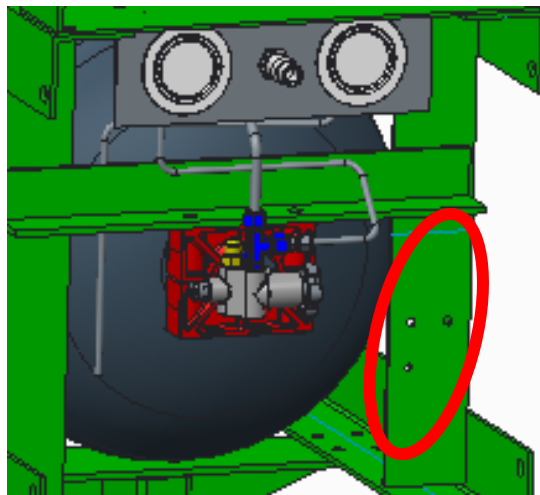


Figure 5. Drill holes for the filter bracket as shown.

7. Modify handle bottom bracket 24400008 to match the holes as the bottom handle bracket 24409008. The new 3-way valve bracket will mount here. Refer to drawing 24409102, Appendix B for details.

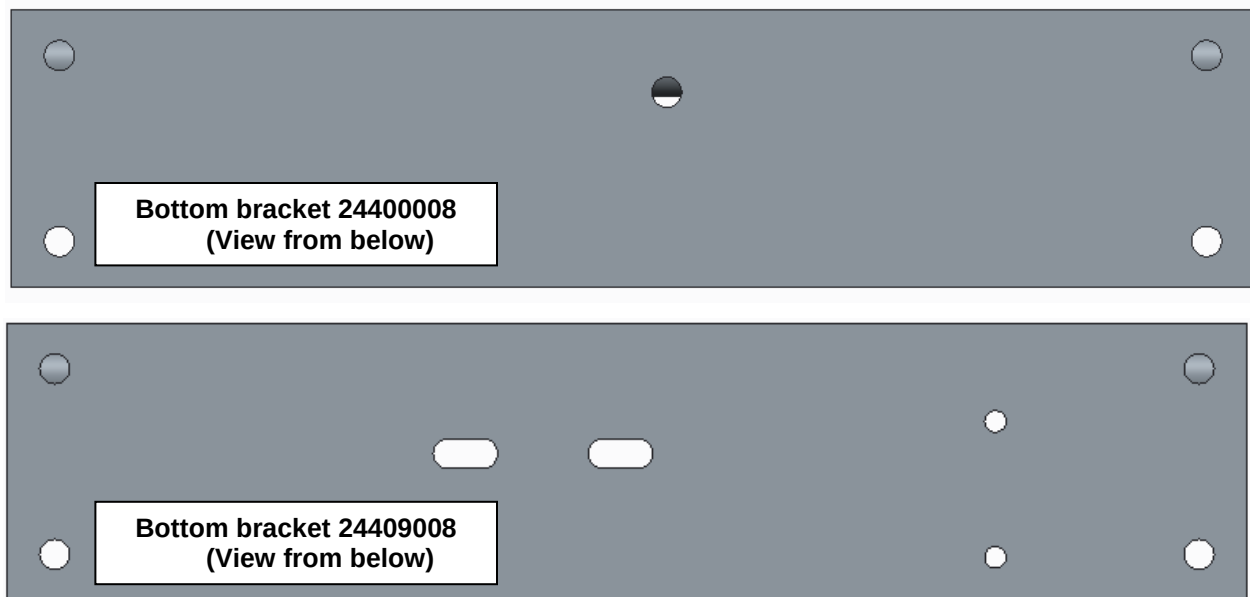
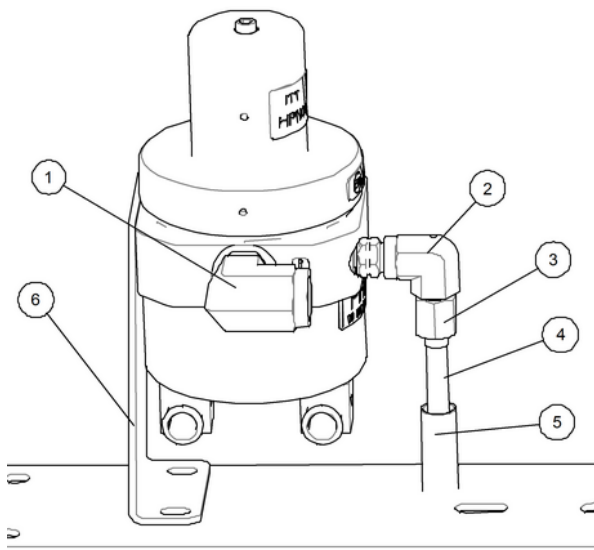


Figure 6. Modify bracket 24400008 to match the other bracket as shown.

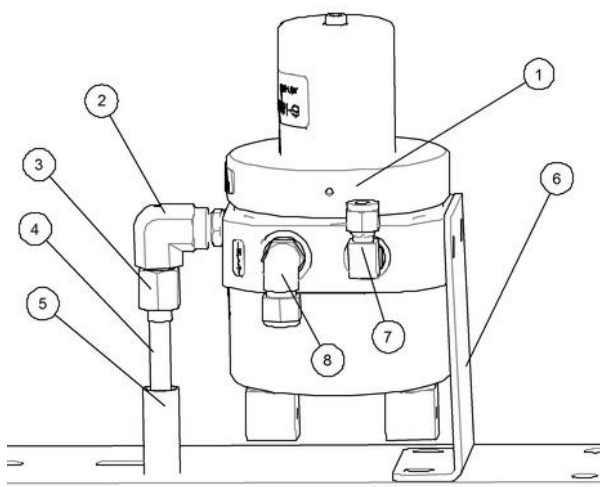
8. Refer to Figure 7. Install fittings into the new 85 psi regulator as shown. Re-use elbow 10240288, JIC elbow 20100403, regulator vent tube 30000409 and vent cap 10712383 from the old regulator.



1. 10240288, elbow, 9/16-18 male SAE, 1/2-in. female NPT
2. 20100403, elbow, 1/4-in. female NPT, -6 male JIC
3. 10240390, tube nut, -6
4. 30000409, regulator vent tube
5. 10712383, vent tube cap
6. 24409100, regulator bracket

Figure 7. New regulator and fittings, view 1.

9. Refer to Figure 8. Add elbows 10200176 and 10200180.

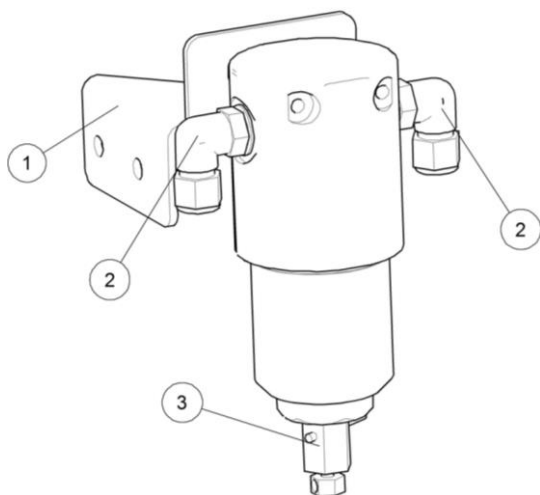


7. 10200176, elbow, 1/4-in. tube to 7/16-20 male

8. 10200180, positionable elbow, 3/8-in. x 9/16-18

Figure 8. New regulator and fittings, view 2.

10. Install two elbows and the bleed valve into the high pressure filter assembly 20100466 as shown in Figure 9. Affix the “Drain Filter” decal 10602437 to the filter housing so it is visible to the operator. You may wish to attach the decal **after** the filter is installed to make sure it is in the correct location.



1. 24409101, filter bracket

2. 10200180, elbow (2 each)

3. 10300172, bleed valve

Figure 9. Components installed into the high pressure filter assembly.

11. Attach the modified handle bottom bracket 24400008 to the Pony Tank frame and install the regulator bracket 24409100 and filter bracket 24409101 as shown.

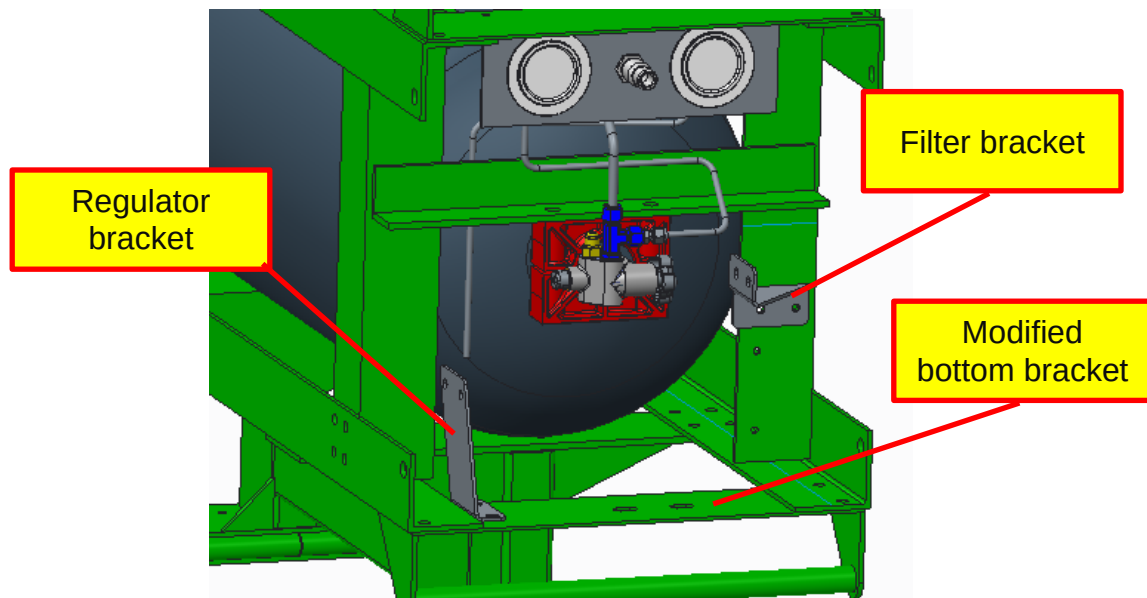


Figure 10. Install various mounting brackets to the Pony Tank frame.

12. Mount the regulator with parts on the regulator mounting bracket and install the low pressure gauge tube 24409402 to the regulator outlet.

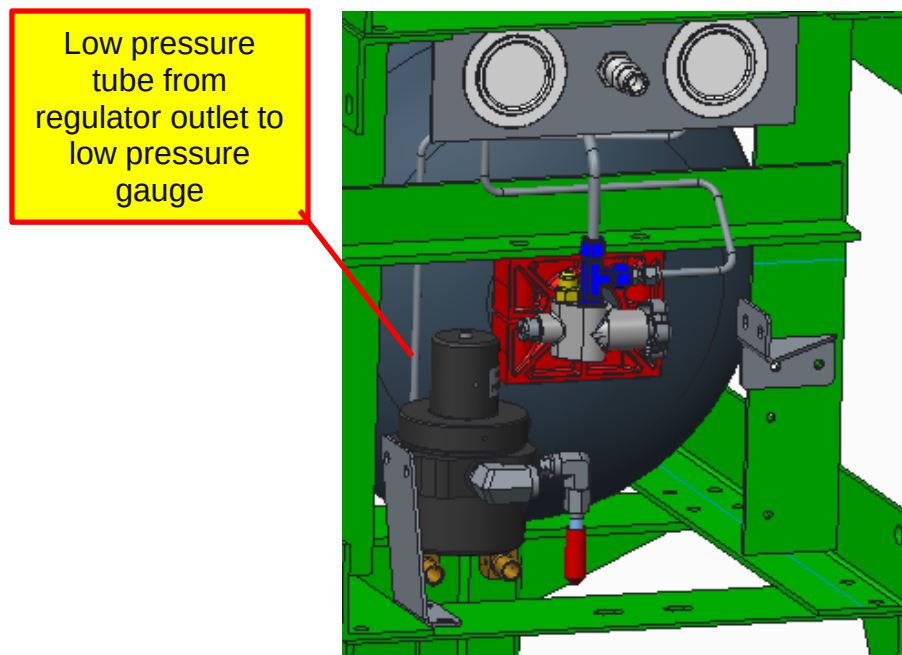


Figure 11. Mount the regulator and attach the low pressure gauge tube.

13. Mount the high pressure filter to the filter mounting bracket. If not done so already, affix the “Drain Filter” decal so it is visible to the operator.

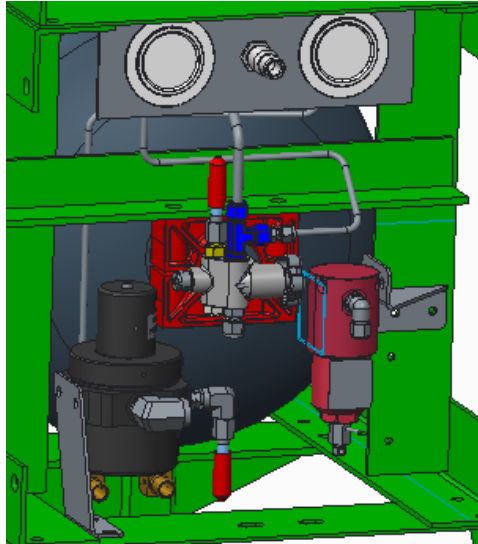


Figure 12. Mount the filter and attach the decal in a visible location.

14. Next, install the U-shaped valve to filter tube 24409400 and the roughly J-shaped filter to regulator tube 24409401 as shown in Figure 13.

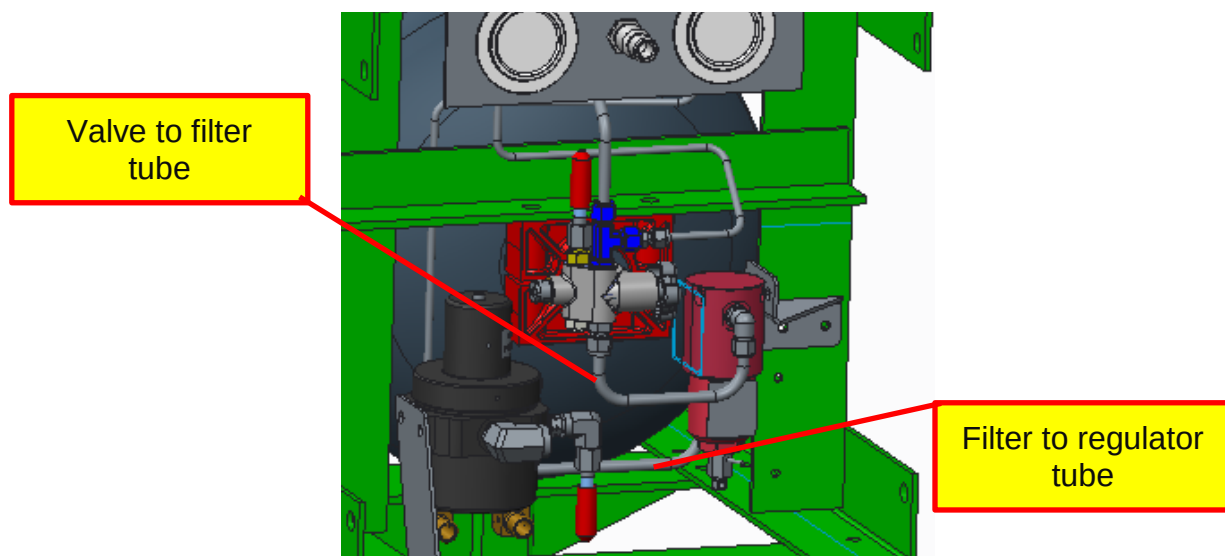


Figure 13. Install the high pressure lines as shown.

15. Attach the low pressure hose to the 3-way outlet port and install the new valve bracket 24409104 as shown below.

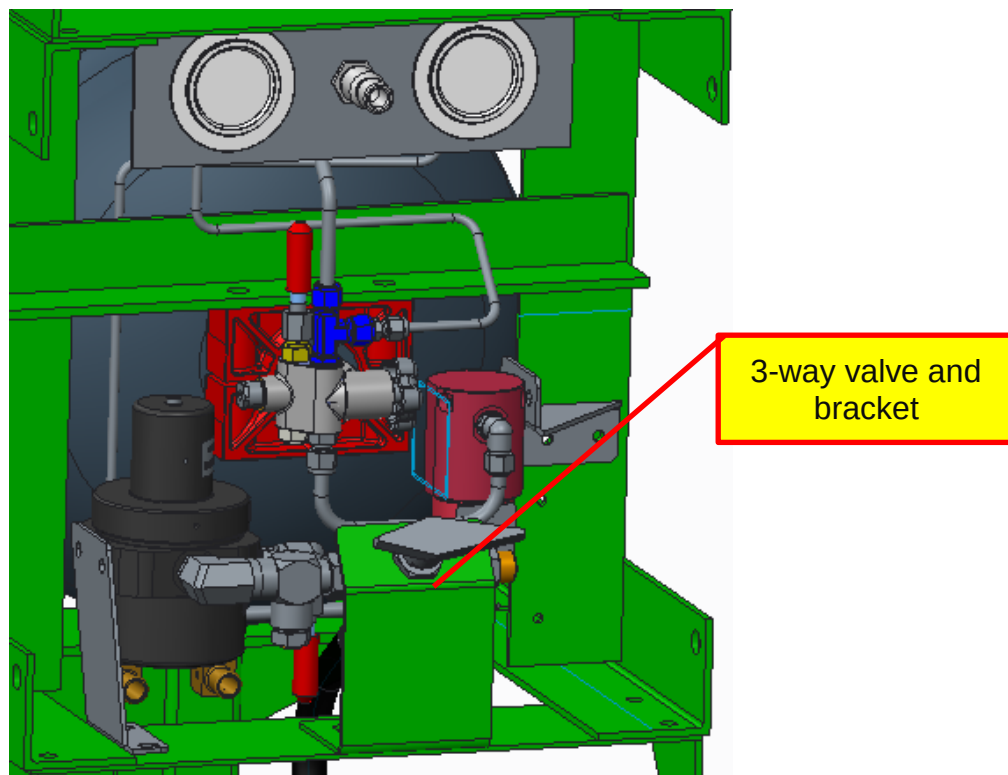


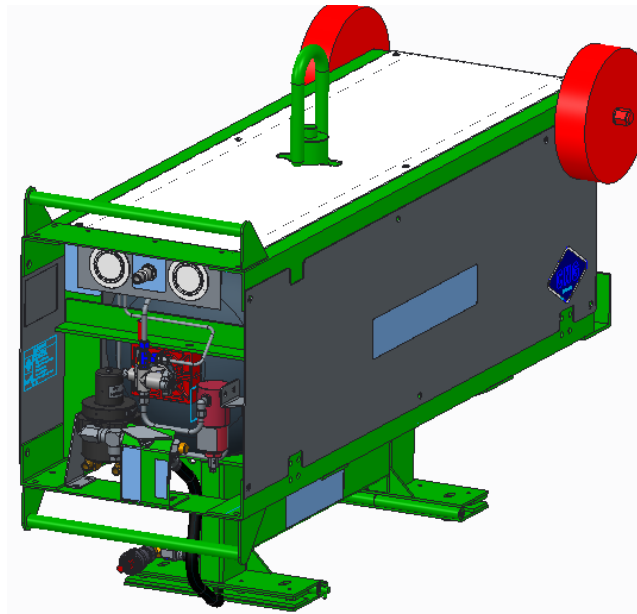
Figure 14. Attach the low pressure hose and install the new 3-way valve bracket

16. Pressure and leak test the assembly.
17. Repair any leaks.
18. Reassemble covers onto the system and replace any missing decals. Reference 24409000 system drawing or the Pony Tank Operation Manual, ENP-005, Rev F and later, for other decal part numbers and their locations.

Maintenance Notes

Task	Frequency
Leak test with methane detector	Every month
Drain high pressure filter	After every 1 to 2 months*
Replace filter element	After every 6 to 12 months*
Component inspection	Every month
Cylinders	Inspect cylinders every 3 years or as required by cylinder manufacturer

*Suggestions only. Intervals vary depending on actual use and must be determined by the user.



3. Warranty Information

Standard warranty terms apply.

Standard repair time (SRT) is 3 hours per Pony Tank system.

If you have any questions, contact Agility Fuel Solutions Customer Care: +1 949 267 7745, toll free: +1 855 500 2445 or support@agilityfs.com.

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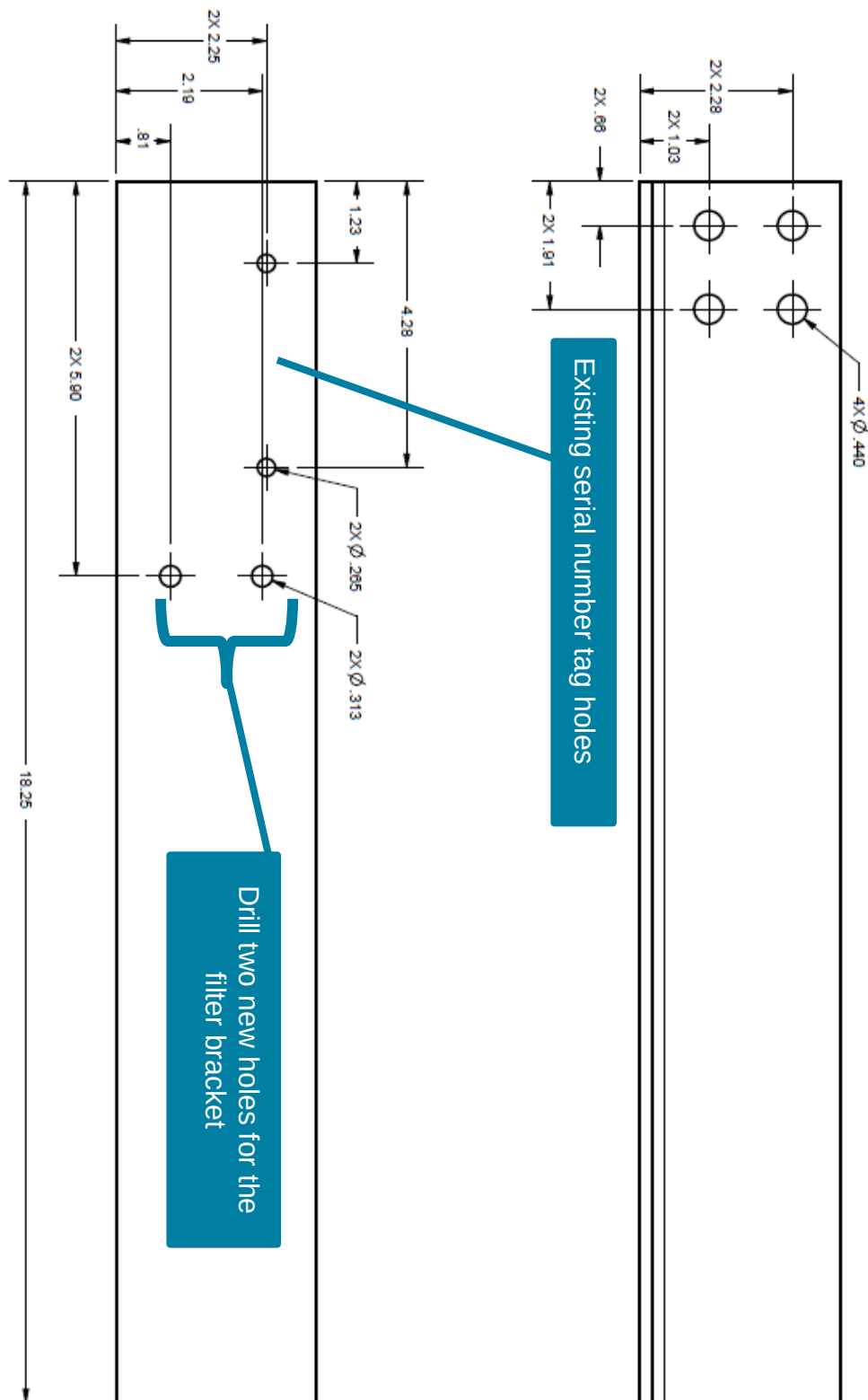
Agility Fuel Solutions

3335 Susan Street Suite 100

Costa Mesa, CA 92626 USA

www.agilityfuelsolutions.com

Appendix A, 24409103



Appendix B, 24409102

