

Air Compressor Bundle

7400-7700 SPFH – 4WD

RC0157

7400-7700 SPFH – 2WD

RC0158

7400-7700 SPFH – No Tank

RC0159



Installation Instructions Parts Listing Service Information

7400, 7500, 7700 Self Propelled Forage Harvester (North America)

Please retain this document for future reference.

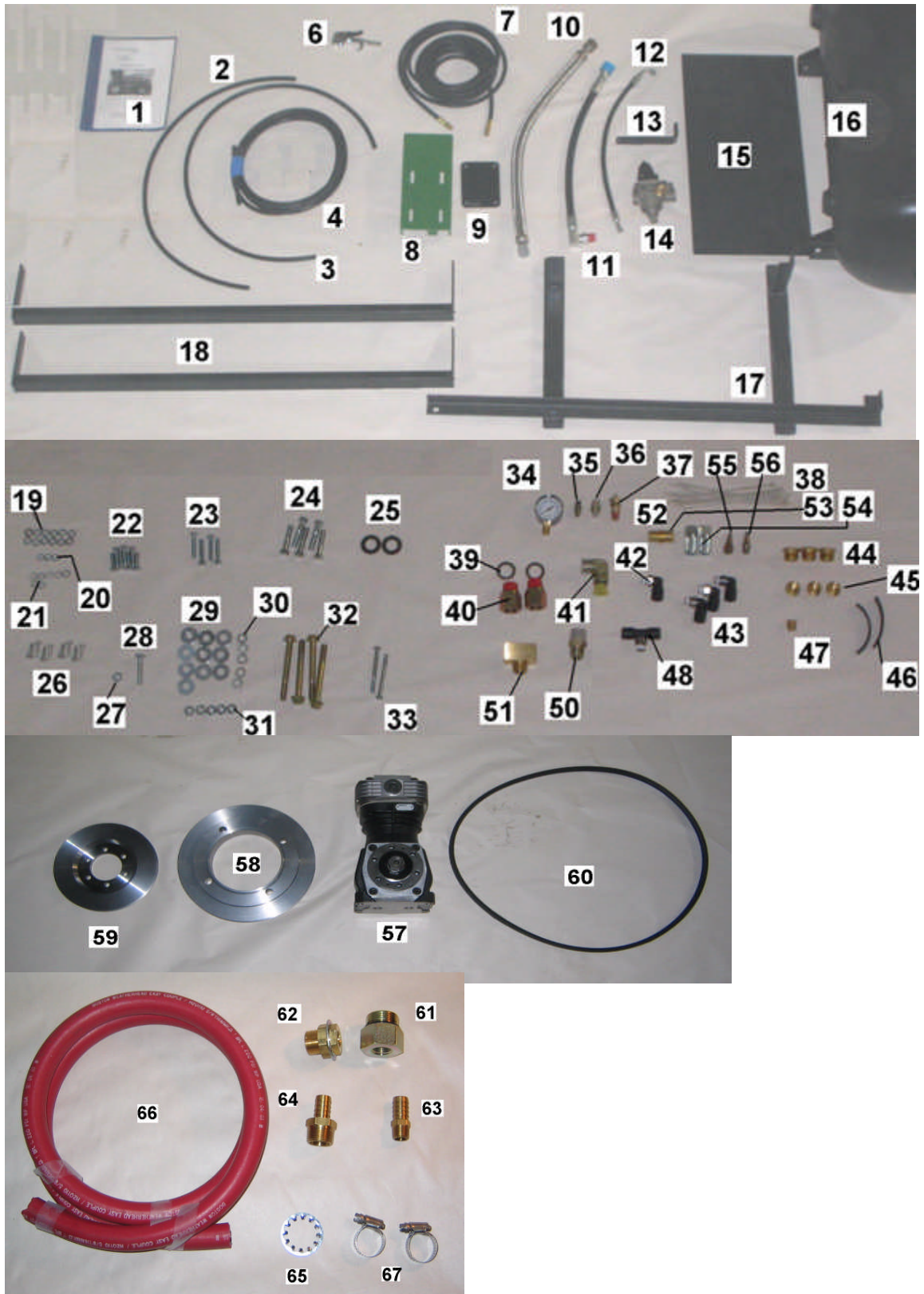


RCI Engineering LLC
RC0261 (11April2006)
www.RCIengineering.com

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1. Contents of Bundle (depending on configuration)



1.1 Parts Listing

Note: For service parts, see your local John Deere dealer. Your local John Deere dealer can order the parts from RCI at www.RCIengineering.com.

Key	RCI Part Number	Part Name	Qty.
1	RC0261	Installation Instructions	1
2	RC0267	1/4" H201 PTC Hose, 40in.	40
3	RC0233	1/4" H201 PTC Hose, 48 in.	48
4	RC0266	1/4" H201 PTC Hose, 180in.	180
6	RC0241	Blow Gun, high flow	1
7	RC0240	1/4" x 25' 1/4" MPT hose	1
8	RC0221	Compressor Mounting Bracket	1
9	RC0222	Compressor Bolt Plate	1
10	RC0229	Hose, 3/4" MPT x JIC braided	1
11	RC0260	Oil return Line, -10 ORFS to 1/2 MPT	1
12	RC0259	Oil Pressure Line, JIC to -4 ORFS	1
13	RC0223	Mounting plate for Unloader Valve	1
14	RC0218	Unloader Valve	1
15	RC0268	Rubber Wrap	1
16	RC0215	Air Tank	1
17	RC0224	Tank Mounting Frame - 4WD	1
18	RC0274	2WD Air Tank Frame	2
19	RC0265	M8 Flat Washer	12
20	RC0243	M8 X 1.25 Fin Hex Nut	3
21	RC0244	M8 Lock washer	7
22	RC0253	M8 x 30	7
23	RC0242	M8 X 1.25 X 45 8.8	4
25	RC0254	3/4" Flat Washer	2
26	RC0252	1/4" - 14 Self Tapping Screws	8
27	RC0264	M10 Nut	1
28	RC0246	M10 X 1.5 X 80 8.8	1
29	RC0250	7/16 Washer	10
29	RC0248	7/16 x 2" Bolt	5
30	RC0251	7/16 Lock Washer	5
31	RC0249	7/16 Nut	5
32	RC0247	M12 x 110 Flange Head Engine Bolts	4
33	RC0245	M8 x 1.25 x 80 8.8	2
34	RC0217	Pressure Gauge	1
35	RC0272	Fitting, 1/8" MPT to -4JIC	1
36	RC0256	M10 - 4 ORFS Adapter	1
37	RC0216	Safety Valve	1
38	RC0123	Tie Band	12
39	RC0227	Ring - M26 adapter	2
40	RC0228	M26X1.5 to 3/4" FPT	2
41	RC0257	M22 - 10 ORFS Adapter, 90 deg	1
42	RC0235	PTC Fitting, 1/4" NPT, 90 deg	1
43	RC0238	PTC, 3/8" NPT elbow	3
44	RC0231	Adapter 3/4" FPT X 3/8" MPT	3

45	RC0234	3/4" NPT CS Hex Plug	3
46	RC0255	Edge Trim, 4"	2
47	RC0232	Bushing, 3/8" to 1/4" FPT	1
48	RC0236	PTC T-Fitting, 3/8" NPT	1
50	RC0271	Fitting, 3/4" MPT to JIC	1
51	RC0230	T-fitting, Male Run, forged, 3/4" MPT	1
53	RC0263	1/4" FPT female coupler	1
54	RC0237	Quick Coupler, Industrial, 3/8" NPT	2
55	RC0239	1/4" FPT male coupler	1
56	RC0262	1/4" MPT male coupler	1
57	RC0220	Compressor	1
58	RC0225	Pulley, Engine	1
59	RC0126	Pulley, Compressor	1
60	RC0226	Drive Belt, A-50	1
61	RC0275	Straight Thread adapter	1
62	RC0276	Bulkhead Connector	1
63	RC0277	Barb Fitting - 3/8 NPT	1
64	RC0278	Barb Fitting - 3/4 NPT	1
65	RC0279	Lock Washer	1
66	RC0280	Hose	5
67	RC0281	Hose clamp	2

2. Service Information

Purpose of Air Compressor Bundle:

This Air Compressor Bundle is intended for use in cleaning the SPFH and for occasional use to operate tools and inflate tires.

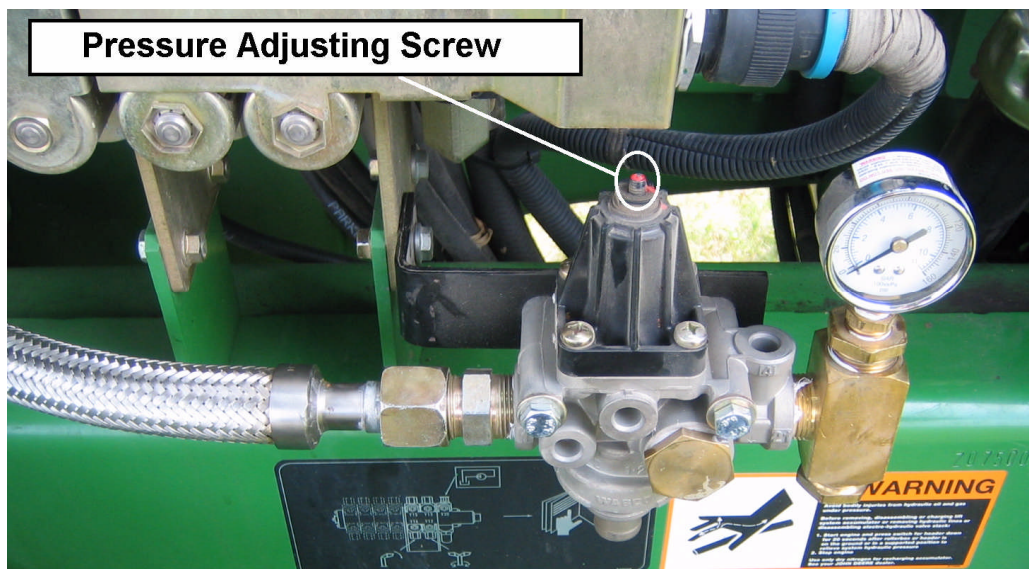
Please retain this document for future reference.

Notice:

1/ Follow all SPFH safety precautions as printed in the 7000 Series SPFH Operators Manual.

2/ Never service the machine with the engine running.

3/ If using the bundle to power air tools or inflate tires, adjust the regulated pressure by turning the set screw on the unloader valve shown below. Always adjust this device with the engine off and tank pressure at 0 psi. Use the air hose and air gun to drain the system pressure if needed. (Turn CW to increase pressure, CCW to reduce pressure.)



Service Intervals

100 Engine Hours

- 1/ Drain any water from air tank that may accumulate.
 - a/ First reduce system pressure to 0 psi
 - b/ Remove one of bottom plugs on tank to allow water to drain.

400 Engine Hours

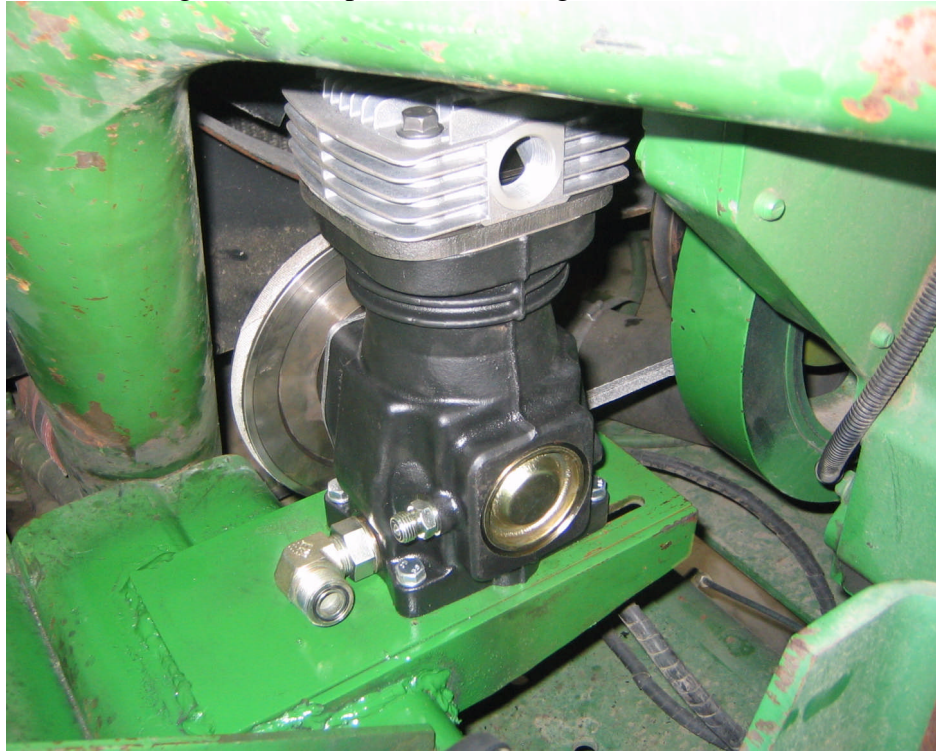
- 1/ Inspect drive belt tension. Adjust as needed. Do not over tighten.

3. Installation of Air Compressor

3.1 Install Air Compressor Mounting Bracket and Engine Pulley

- 3.1.1 This bracket will be installed on the RH rear of the machine, near the fan belt. The end result is shown below in Figure 1.

Figure 1. Compressor Mounting Bracket Installed



Note: First the bracket will be spot-welded in position. Then other components will be added to verify the alignment of the bracket before final welding.

- 3.1.2 Install RC0221 Air Compressor Mounting Bracket. Use a long, straight edge such as a carpenter square to offset the rear edge of the compressor mounting bracket flush with the rear face of the engine crankshaft pulley used to drive the fan. Reference Figure 2.
- 3.1.3 Use a smaller square to verify the RC0221 Mounting Bracket is perpendicular to the SPFH main frame. **Remove vehicle electrical ground** to prepare for welding and then spot-weld the frame in position. Be sure to properly clean all surfaces and take care to not damage other machine components during this operation.

Note: Spot-weld the bracket into position at the top of the frame as shown in Figure 3, page 6. Do not add any additional weld to the bracket to the frame at this time. An alignment check must be done to ensure proper belt alignment.

Figure 2. Alignment of Air Compressor Mounting Bracket

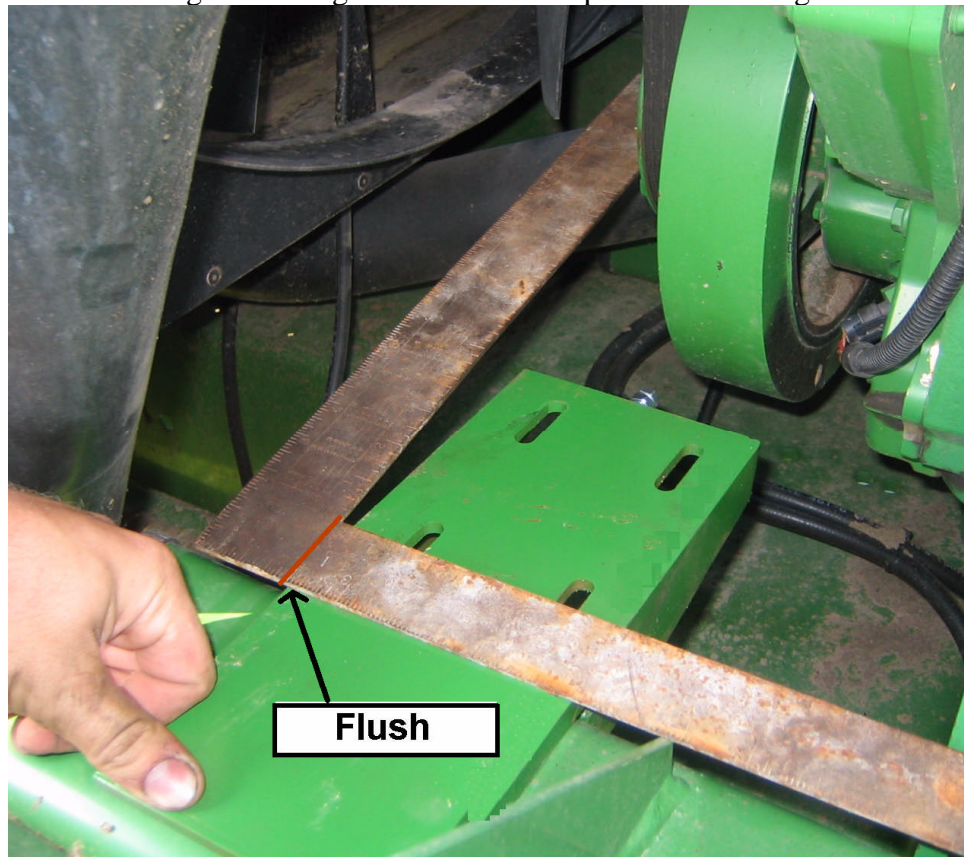
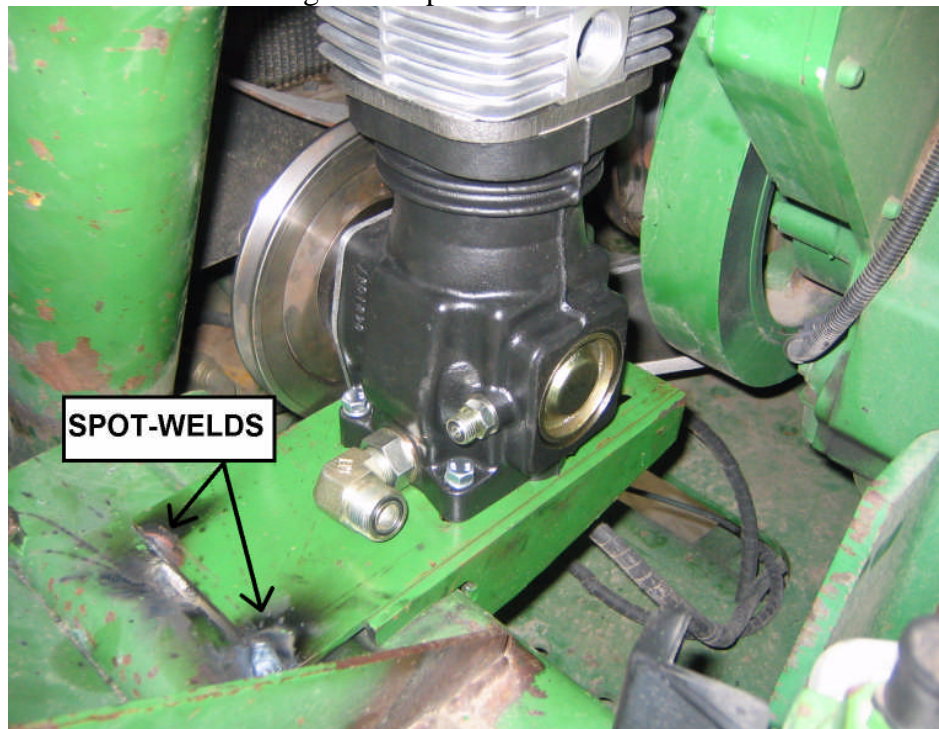


Figure 3. Spot-weld Placement



3.1.4 Install RC0225 Pulley on the engine crankshaft, following the steps below.

3.1.4.1 Remove the fan belt.

3.1.4.2 Remove the four bolts that hold the crankshaft pulley in place as shown in Figure 4.

3.1.4.3 Install RC0225 Pulley on the end of the existing fan belt pulley using 4, RC0247 12 mm Flange Head Bolts, as shown in Figure 5. Tighten bolts to same specification for removed bolts as indicated in the Engine Repair Manual.

Figure 4. Preparation for Installation of Engine Pulley

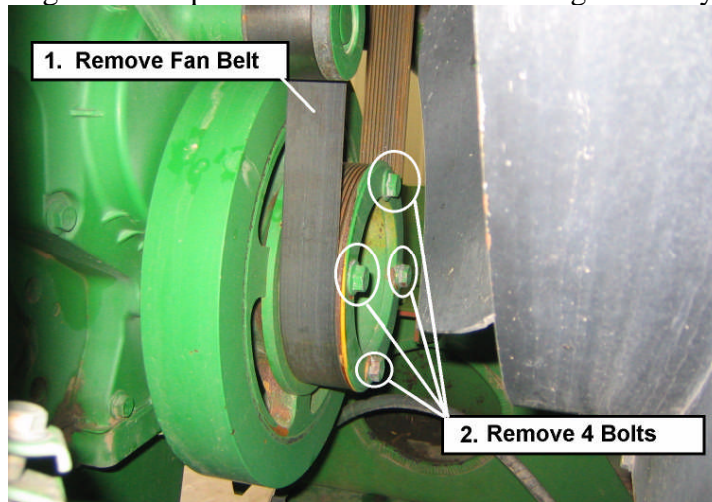


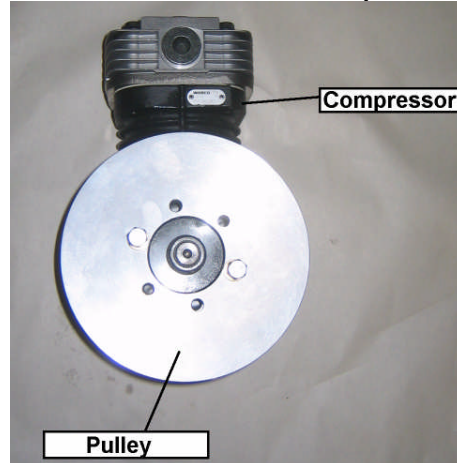
Figure 5. Installation of Engine Pulley



3.1.4.4 Install the engine fan belt.

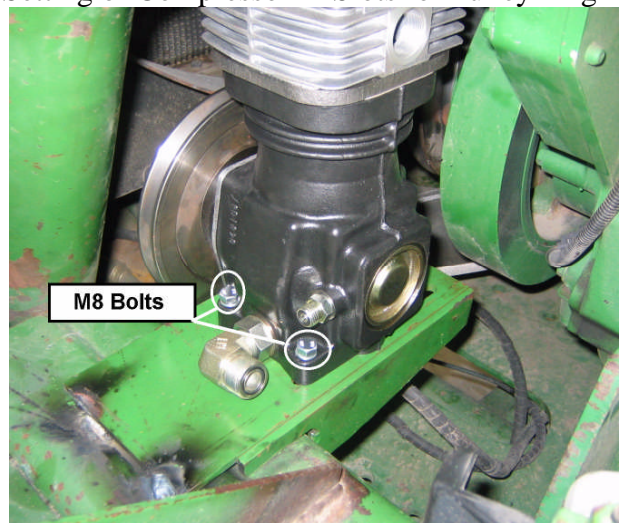
- 3.1.5 Install RC0126 Pulley on the Air Compressor Shaft using six (6) RC0253 M8x30 mm bolts and six (6) RC0265 M8 Flat Washers as shown in Figure 6. Install Shim (included with compressor), between the pulley and the hub on the compressor.

Figure 6. Installation of Air Compressor Pulley



- 3.1.6 Install four (4) RC0242 M8x45mm Bolts with four (4) RC0244 M8 Lock Washers into the base of the RC0220 Air Compressor as shown in Figure 7 for alignment purposes. Set the compressor onto the RC0221 Mounting Bracket that is spot-welded to the frame.

Figure 7. Setting of Compressor In Slots for Pulley Alignment Check

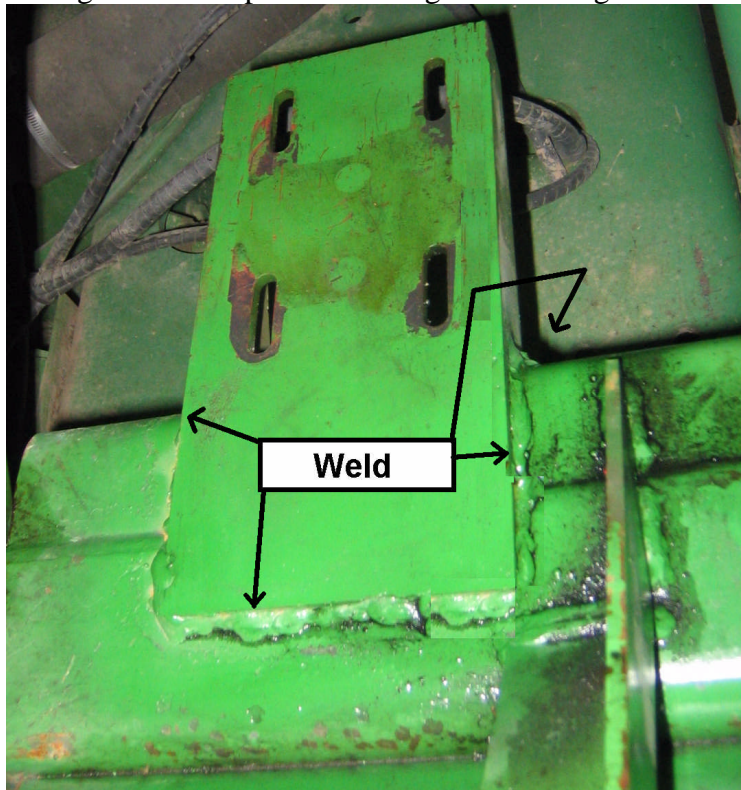


- 3.1.7 Verify alignment of Compressor Pulley to the Crankshaft Pulley by use of a straight edge. Make adjustments to the position of the RC0221 Compressor Mounting Bracket as necessary.
- 3.1.8 Remove the Air Compressor from the Mounting Bracket.

- 3.1.9 Note: Prepare surfaces properly before welding. Take precautions to avoid damage to other machine components during welding.

Weld around perimeter of Mounting Bracket as shown in Figure 8. This weld will need to extend along the inside of the main frame to the bottom of the Mounting Bracket, but only on the outside surfaces.

Figure 8. Completed Welding of Mounting Bracket

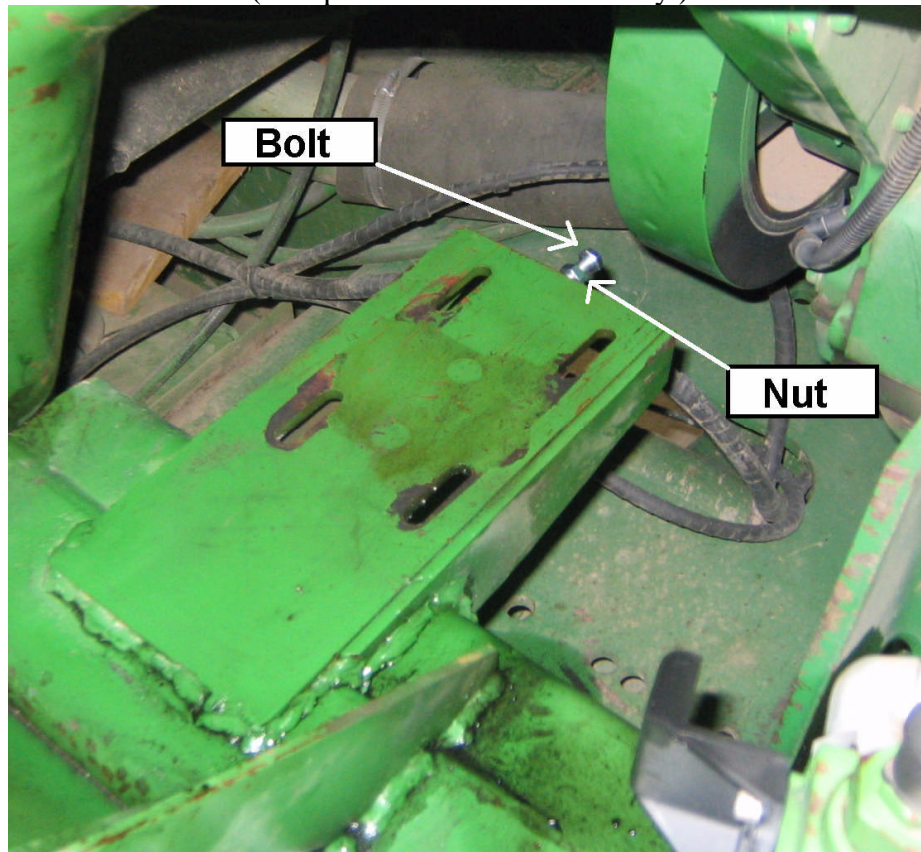


- 3.1.10 Allow time to cool. Clean welded surfaces and paint as necessary.

3.2 Install RC0220 Air Compressor.

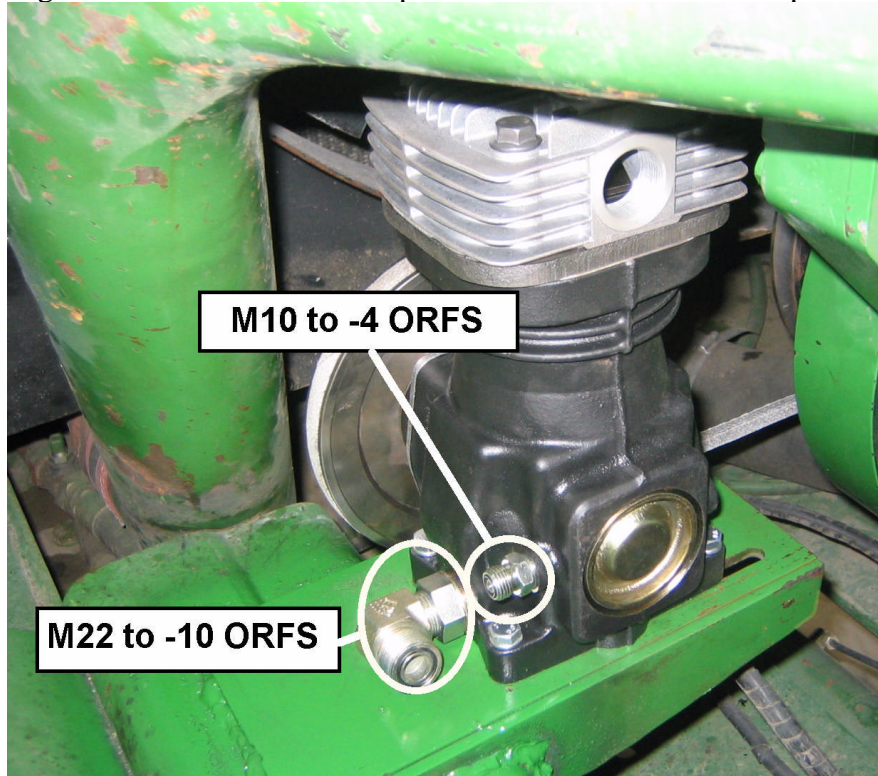
- 3.2.4 Using the same hardware used for alignment, four (4) RC0242 M8x45mm Bolts with four (4) RC0244 M8 Lock Washers, install the air compressor on the Mounting Bracket.
- 3.2.5 Install RC0222 Bolt Plate on the bottom side of the Mounting Bracket. This plate must be aligned with the welded stop facing down and towards the engine, aligned with the bolt stop on the end of the Mounting Bracket. This stop is used for tensioning the belt. Thread each of the four M8 bolts into the holes of the RC222 Bolt Plate. Do not tighten completely, but draw the Bolt Plate up to the Mounting Bracket so that it is properly aligned to avoid twisting during tensioning.
- 3.2.6 Install RC0226 Drive Belt on the Pulleys.
- 3.2.7 Install one (1) RC0246 M10x80 mm bolt with one (1) RC0264 M10 Hex Nut in the bolt stop on the end of the Mounting Bracket to be used as the tensioning bolt as shown in Figure 9.

Figure 9. Tensioning Bolt Installation
(Compressor removed for clarity.)



- 3.2.8 Adjust M10 Bolt to properly tension the belt.
- 3.2.9 Tighten four (4) M8 bolts at the base of the Air Compressor to secure the compressor in position.
- 3.2.10 Install RC0256 M10 to -4 ORFS Adapter in M10 Port of Air Compressor as shown in Figure 10.
- 3.2.11 Install RC0257 M22 to -10 ORFS 90deg Adapter in M22 Port of Air Compressor as shown in Figure 10.

Figure 10. Installation of Adapters for Oil Lines of Air Compressor



- 3.2.12 Remove 1/8" NPT Plug from engine block. Install RC0272 Adapter (1/8" MPT to -2 JIC) in port as shown in Figure 11.

Figure 11. Adapter in Engine Block



3.2.13 Install RC0259 Hose from RC0272 Adapter to RC0256 Adapter (M10 to -4 ORFS) on Air Compressor.

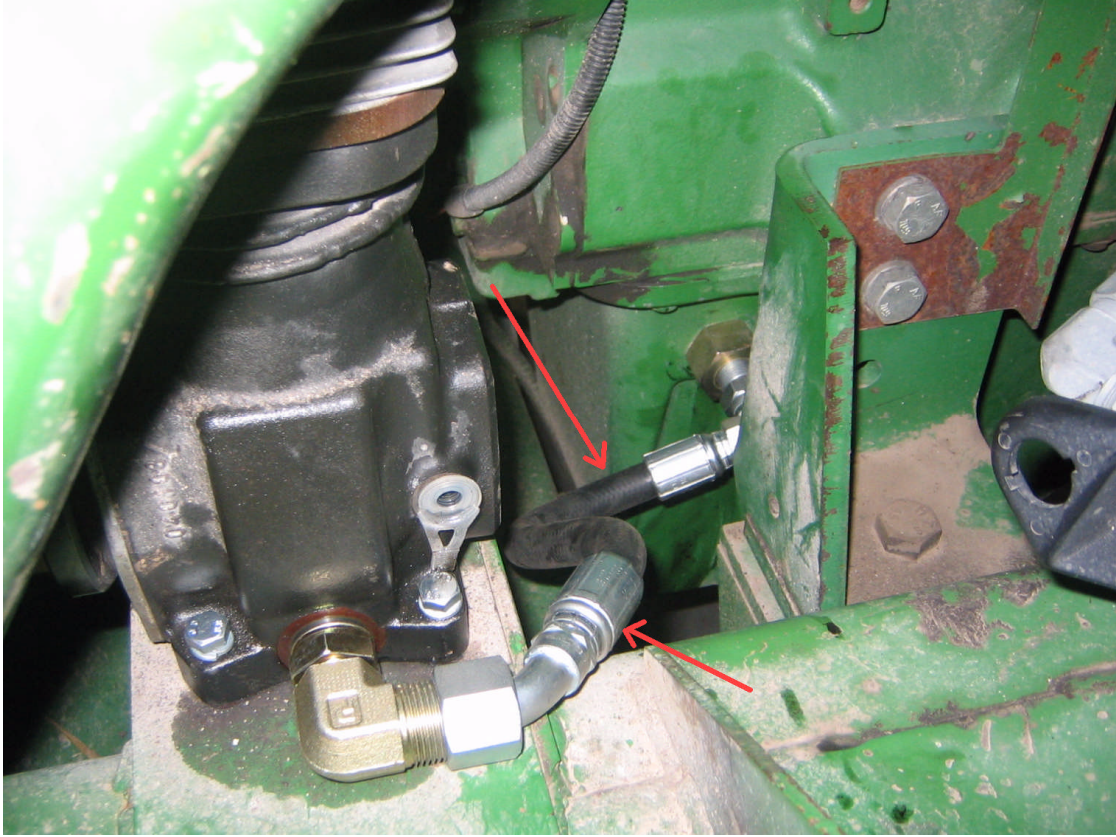
3.2.14 Remove Large Plug from engine oil pan (Engine Oil Fill Location on engine for 9000 Series Tractors). Install RC0275 Straight Thread Adapter (1/2" FPT to 1-5/16" Str) in this port as shown in Figure 12.

Figure 12. Adapter in Oil Pan, Installed.



3.2.15 Install RC0260 Hose from RC0275 Adapter on engine block to RC0257 Adapter on Air Compressor (-10 ORFS). Route the hose as low as possible to assist in oil return to the engine. There should be no loop or raised section in the oil line as

shown below. Oil must be able to drain to the oil pan without pooling in the oil line.



3.2.16 Install one (1) RC0228 Adapter (M26 male to $\frac{3}{4}$ " FPT) and one (1) RC0227 Ring (M26) on side port of air compressor as shown in Figure 13.

3.2.17 Install RC0229 Steel Braided Air Hose in the new adapter as shown in Figure 13.

3.2.18 Install one (1) RC0228 Adapter (M26 male to $\frac{3}{4}$ " FPT) and one (1) RC0227 Ring (M26) on top port of air compressor as shown in Figure 13.

3.2.19 Install RC0278 Barb Fitting in top adapter as shown in Figure 13.

Figure 13. Adapter and Barb Fitting Installation



3.2.20 Inspect hose orientation so that there is no contact between the air hose and the oil lines as shown in Figure 14. Also verify the lower hose does not have any low spots in it's path allowing oil to collect (all oil must return direct to oil pan).

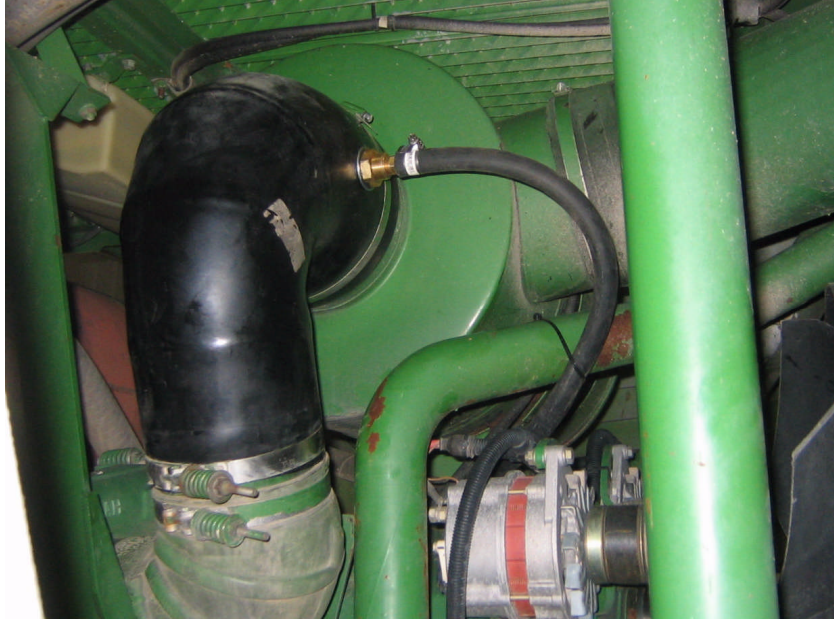
Figure 14. Proper Hose Routing



3.3 Install Air Intake Hose

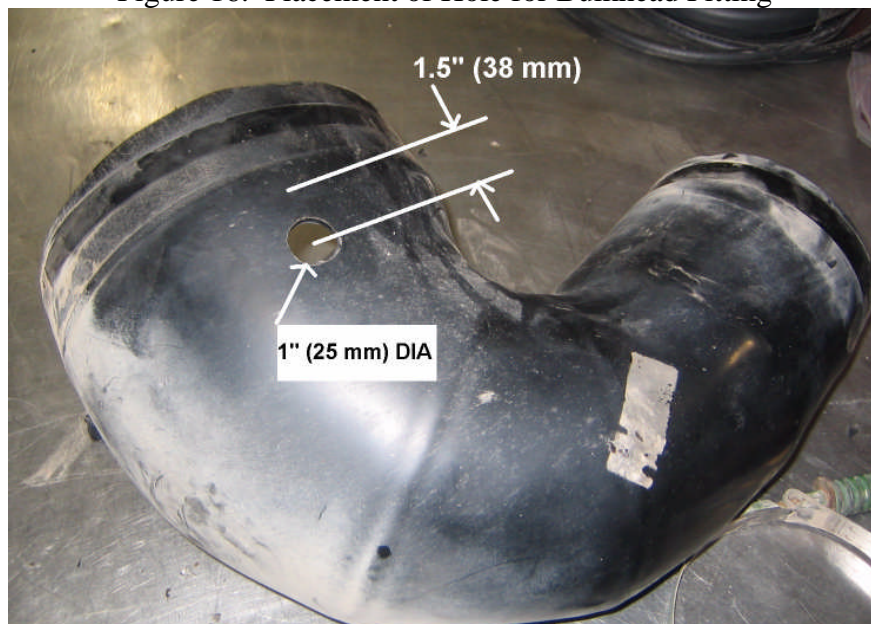
- 3.3.1 The RC0280 Air Intake Hose will be installed to the elbow between the engine air filter and turbocharger as shown in Figure 15. To start, remove the elbow.

Figure 15. Installation of Air Intake Hose



- 3.3.2 Drill a 1" (25mm) diameter hole on the rear side of the elbow, 1.5" (38mm) from the outermost position of the air filter housing on the inside of the elbow (when installed), as shown in Figure 16. Use a 1/2" (12mm) pilot bit to start the hole to prevent tearing of the plastic elbow.

Figure 16. Placement of Hole for Bulkhead Fitting



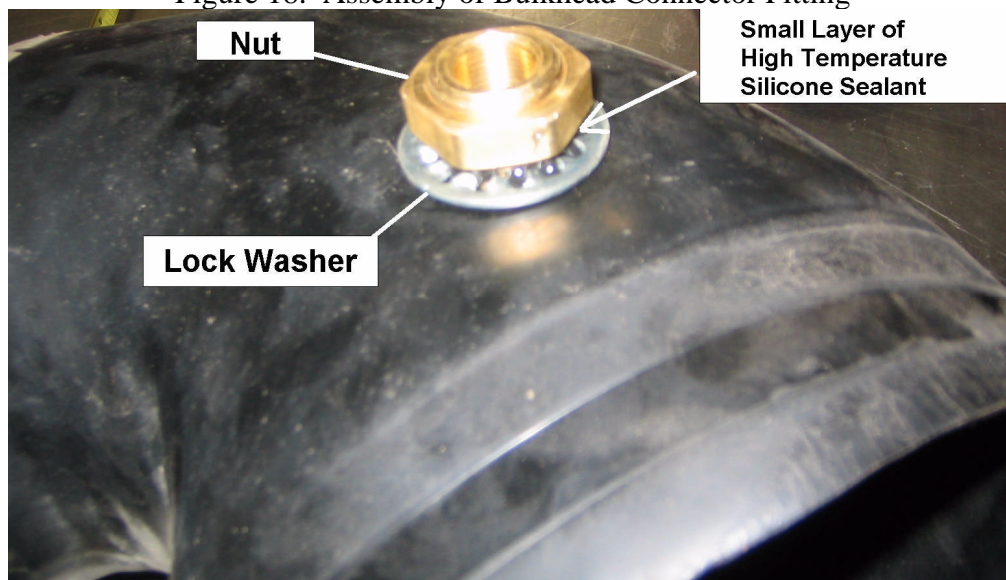
- 3.3.3 Install the RC0276 Bulkhead Connector Fitting in the hole from the inside out. Use the lock washer that is on the fitting on the inside of the elbow. The nut will be located on the outside of the elbow when finished. See Figure 17.

Figure 17. Installation of Bulkhead Connector Fitting



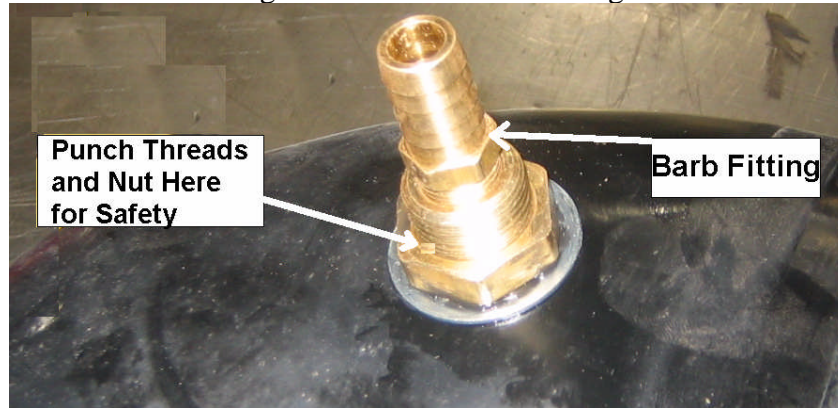
- 3.3.4 On the outside of the elbow, apply a thin layer of high temperature silicone sealant. Then install RC0279 Lock Washer onto the fitting along with the nut and tighten to a snug fit. Do not over tighten or this will cause damage to the lock rings. See Figure 18 for assembly picture.

Figure 18. Assembly of Bulkhead Connector Fitting



- 3.3.5 Using a small punch or chisel, punch the threads of the fitting at the nut as a safety precaution to prevent loosening of the fitting over time. Install RC0277 Barb Fitting (3/8" NPT) in the end of the Bulkhead Connector Fitting. Use thread tape to seal the threads of the Barb Fitting. See Figure 19.

Figure 19. Install Barb Fitting



- 3.3.6 Install Elbow on Engine.
- 3.3.7 Install RC0280 Air Intake Hose from inlet of compressor to Bulkhead Connector Fitting on Elbow using two RC0281 hose clamps. Route hose as shown in Figure 20 and 21. Secure using tie straps as indicated. **Note: Do not over tighten tie bands as this will restrict air flow through the intake hose.**

Figure 20. Right Side of Engine, Hose Installation

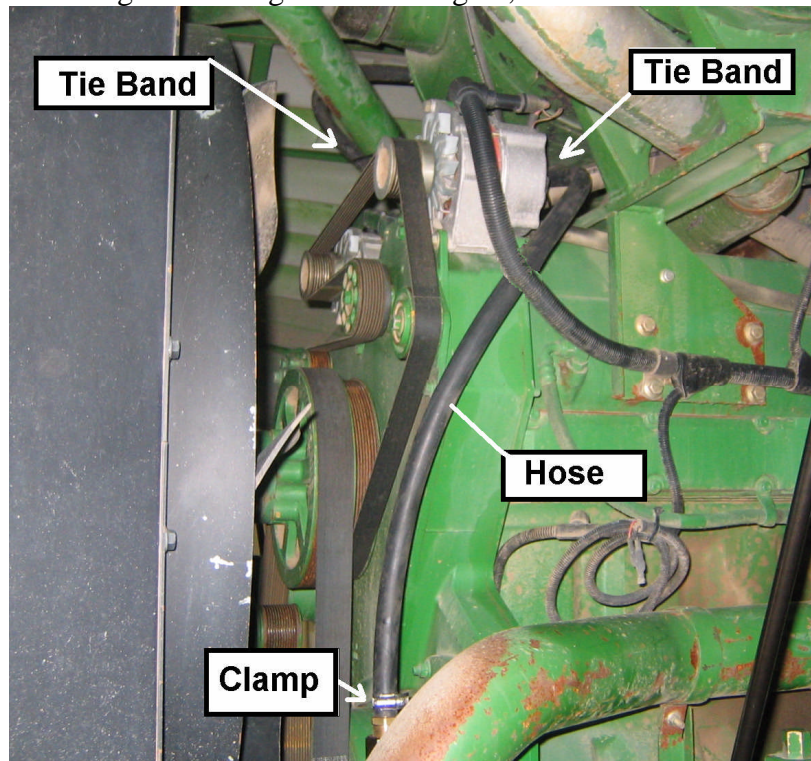
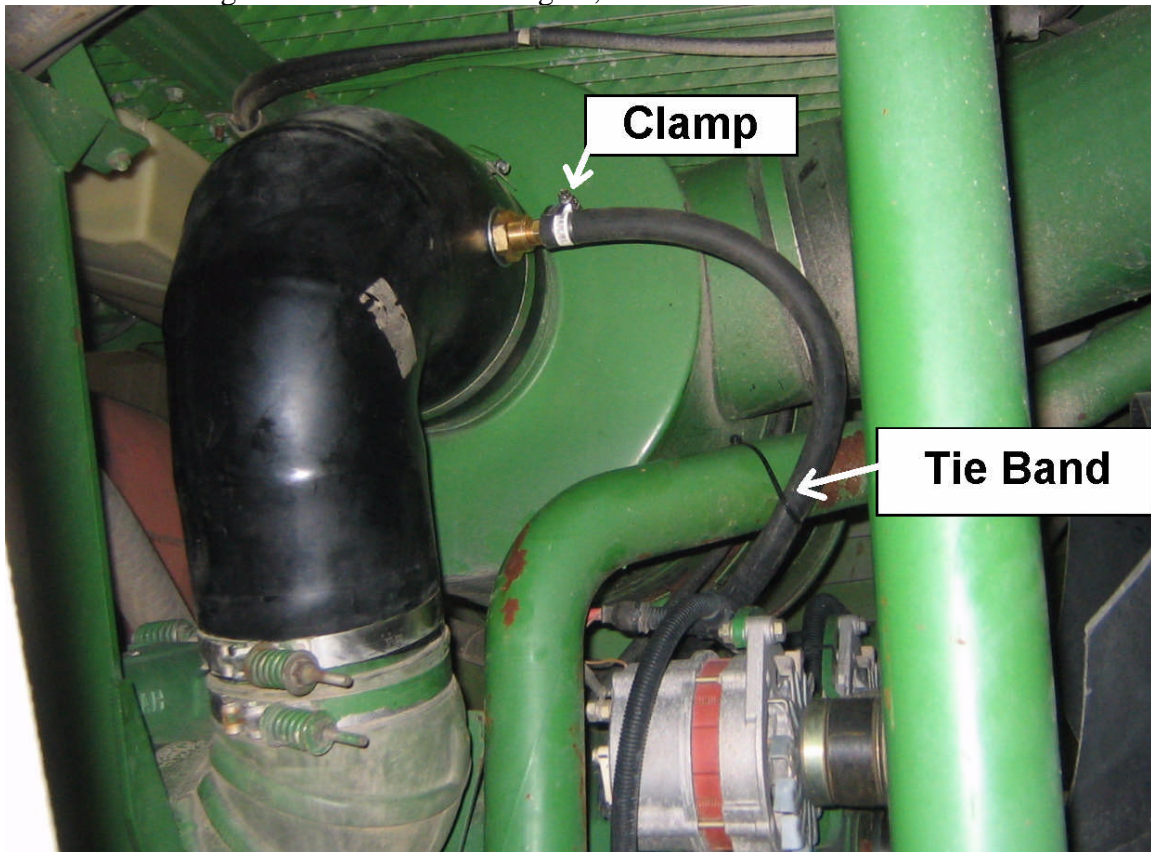


Figure 21. Left Side of Engine, Air Intake Hose Installation



4 Installation of Unloader Valve

Note: Use Pipe Thread Sealant Tape for all Pipe Thread Connections

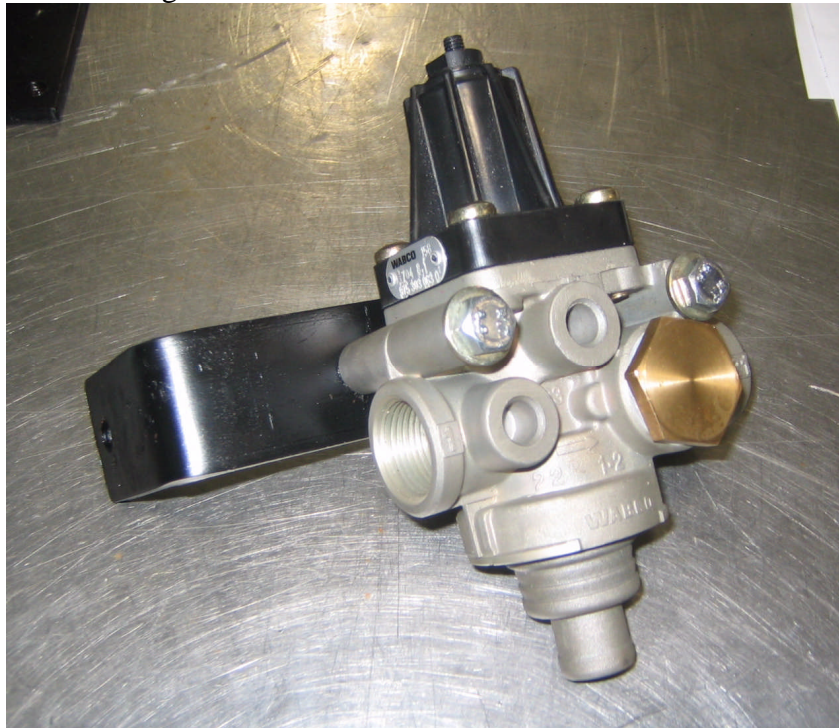
4.1 Assembly of Unloader Valve

4.3.1 Attach RC0218 Unloader Valve to the RC0223 Valve Bracket using the following:

- | | |
|----------|------------------------|
| Two (2) | RC0243 M8 x 80 Bolts |
| Four (4) | RC0265 M8 Flat Washers |
| Two (2) | RC0244 M8 Lock Washers |
| Two (2) | RC0243 M8 Nut |

The assembly is shown in Figure 22. The spacer welded to the bracket will fit between the Unloader Valve and the Bracket and is designed to stabilize the Unloader Valve on the Bracket.

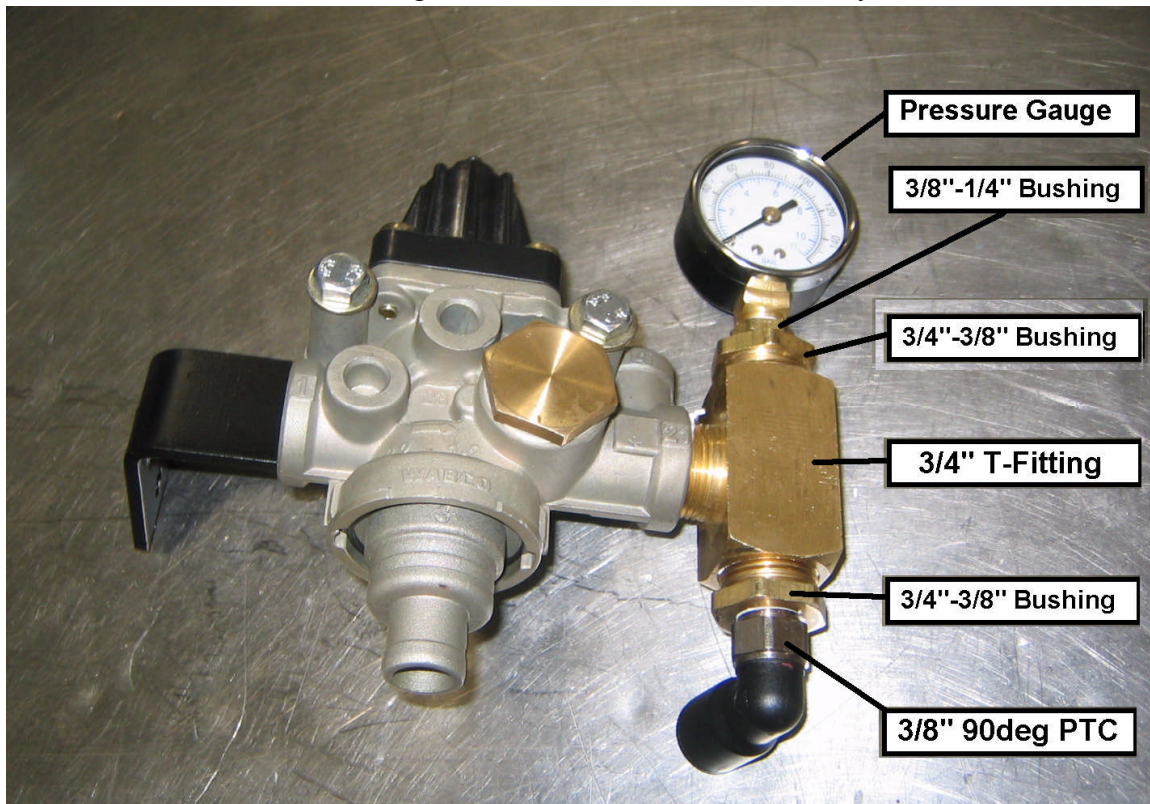
Figure 22. Unloader Valve on Valve Bracket



4.3.2 Install the following components on the Unloader Valve as shown in Figure 23.

- a/ RC0230 T-Fitting (3/4" MPT)
- b/ RC0231 Bushing (3/4" MPT to 3/8" FPT) (Qty 2)
- c/ RC0232 Bushing (3/8" MPT to 1/4" FPT)
- d/ RC0217 Pressure Gauge
- e/ RC0238 90 Deg Push-to-Connect Fitting (3/8" MPT)

Figure 23. Unloader Valve Assembly



4.2 Installation of Unloader Valve Assembly

4.2.1 Remove M8 Bolt from support of Hydraulic Valve Bank on RH Frame Rail as shown in Figure 24.

4.2.2 Install Unloader Valve Assembly using the following hardware:

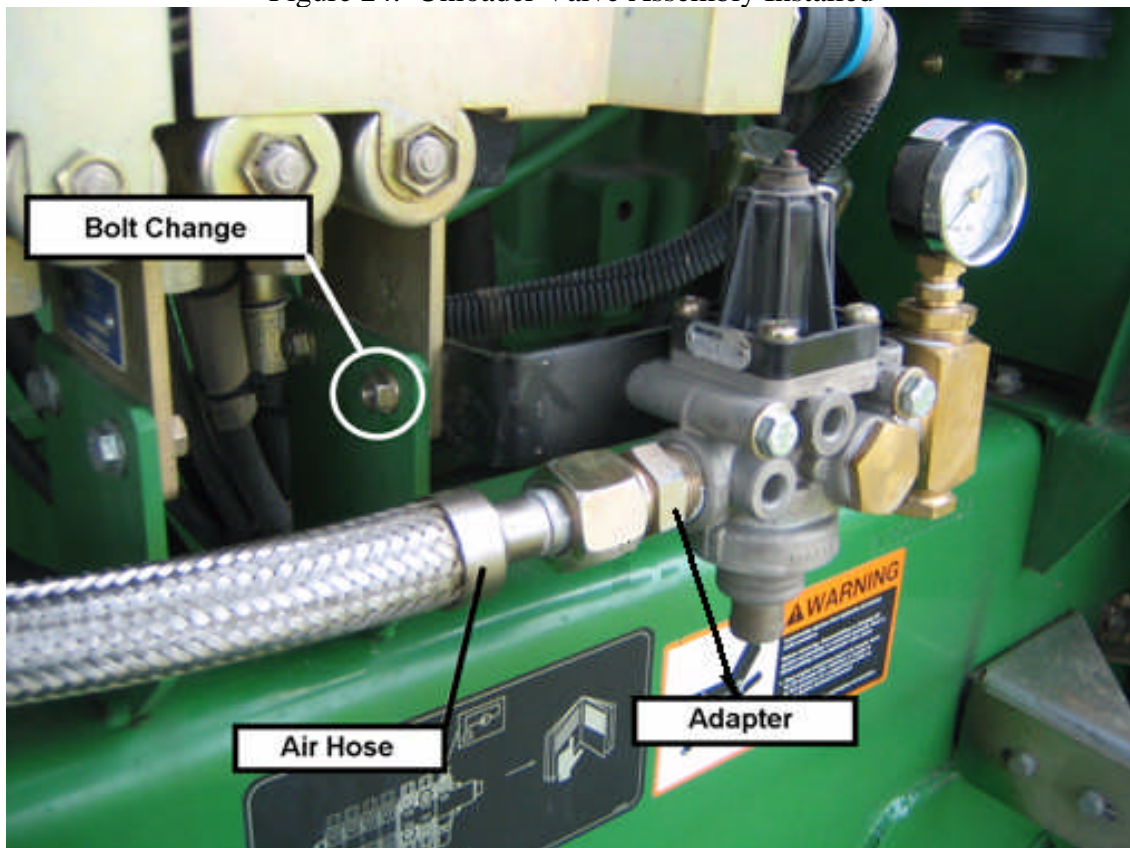
- One (1) RC0253 M8 x 30 Bolt
- One (1) RC0265 M8 Flat Washer (on head end of bolt)

Reuse the existing flange nut for the connection.

4.2.3 Install RC0271 Adapter (JIC to 3/4" NPT) at inlet to Unloader Valve Assembly as shown in Figure 24.

4.2.4 Install end of RC0229 Air Hose to end of RC0271 Adapter as shown in Figure 24.
Use proper hose routing to prevent hose contact with any other components as this hose may be heated when the compressor is used.

Figure 24. Unloader Valve Assembly Installed



5 Installation of Air Tank – 4WD SPFH

5.1 Install Air Tank Bracket

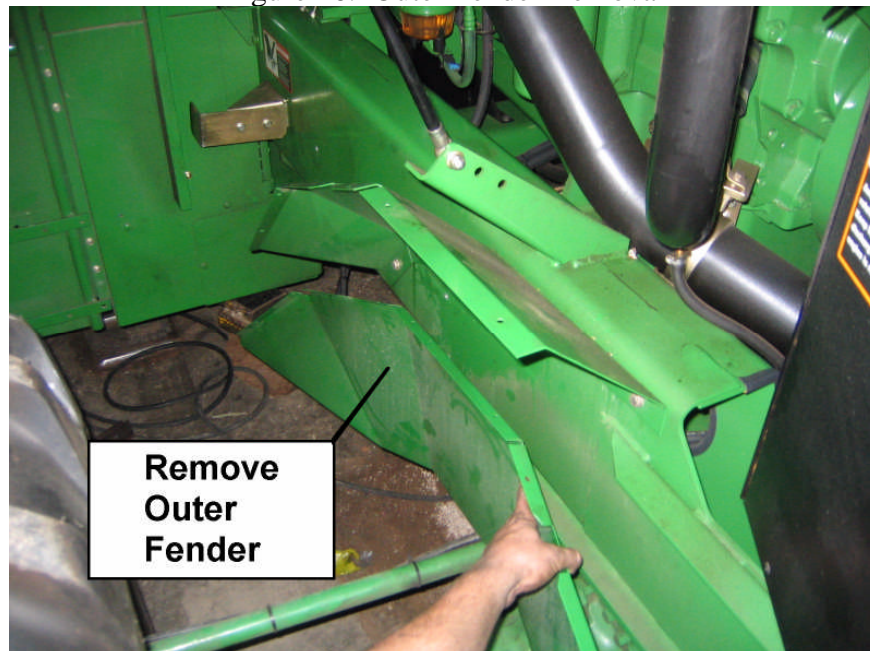
Note: Air Tank will be installed below LH frame rail, in front of the rear axle as shown in Figure 25.

Figure 25. Completed Air Tank Installation



5.1.1 Remove the LH Outer Fender for access to the main frame as shown in Fig. 26.

Figure 26. Outer Fender Removal



- 5.1.2 Remove clamp on rear hydrostatic hoses as shown in Figure 27. Remove the clamp from the cross member of the frame. It will not be needed when the air tank is installed. Temporarily, pull hoses out of the way of the tank installation.

Figure 27. Removal of Clamp on Rear Hydrostatic Hoses



- 5.1.3 Install the RC0224 Tank Mounting Frame under the LH frame rail and above the rear axle carrier. The long angle iron piece will span from the rear axle carrier to the frame cross-member by the hydraulic oil tank.

For proper orientation and installation, first take the end with the small angle iron spacer welded to it and install it from the bottom, to rest on top of the frame cross member. Slide the frame towards the front of the machine. Then install the plain end (with a hole on the end of the angle iron) on top of the rear axle. The short uprights welded to the rectangular tubing should be pointed up, and will hook around the LH frame rail. See Figures 28 and 29 for clarification.

Figure 28. View from above LH frame rail, looking down towards rear axle carrier along engine.

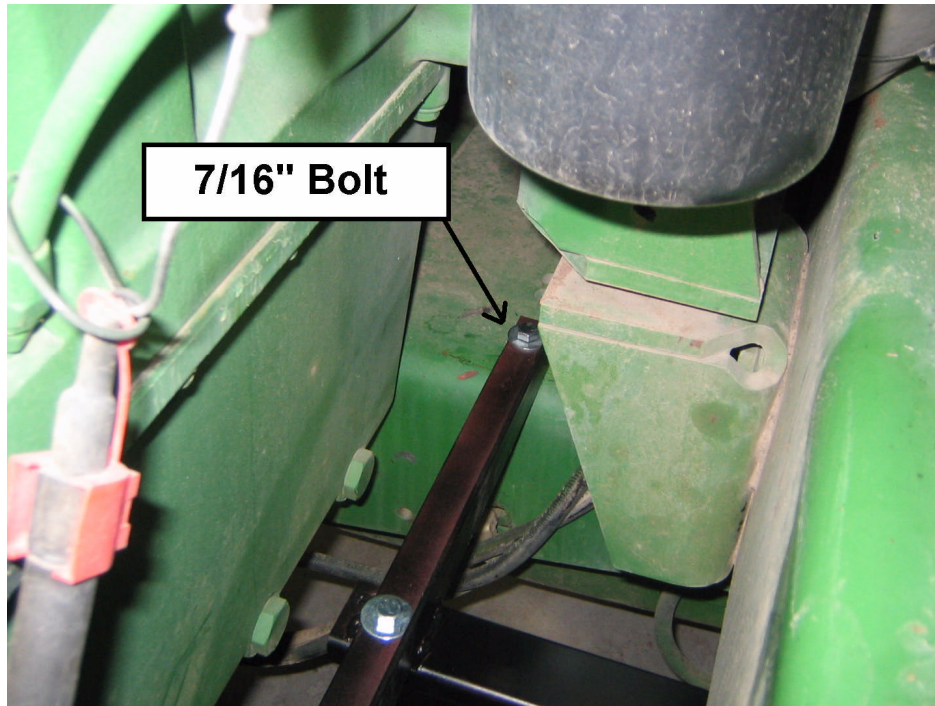
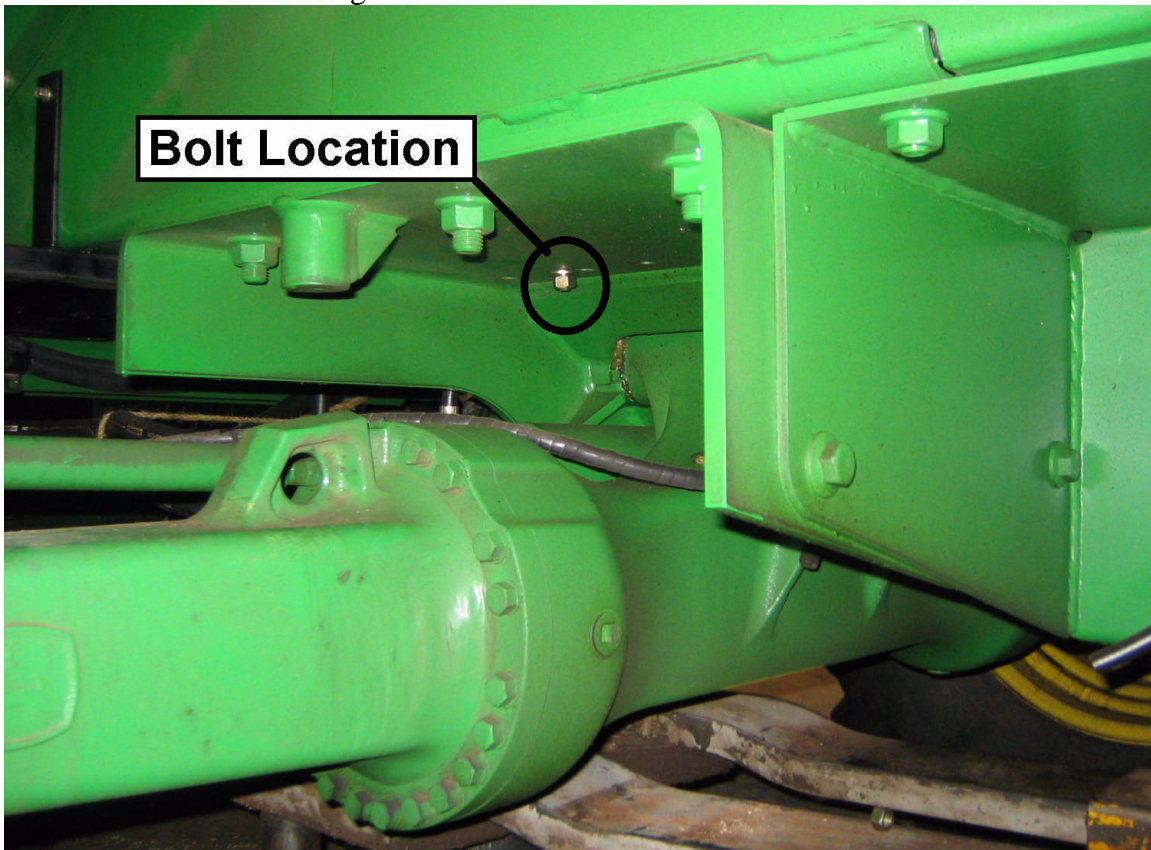


Figure 29. View from LH side of machine.



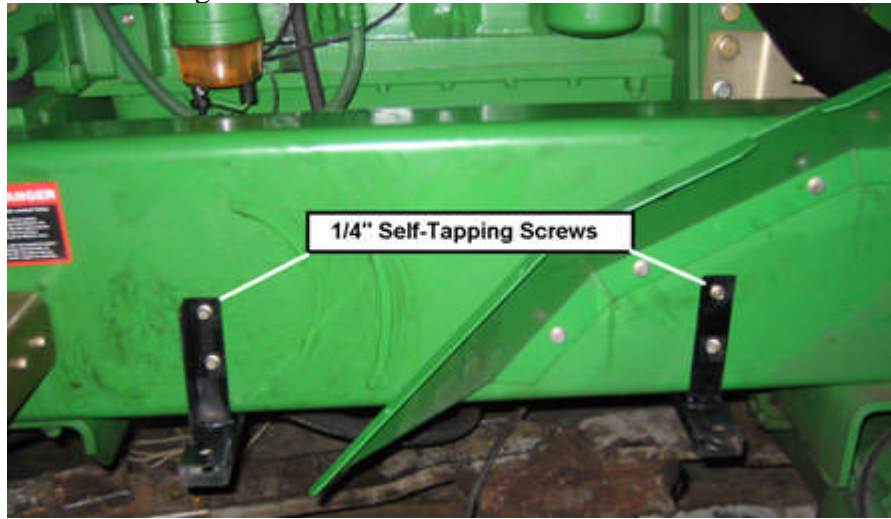
- 5.1.4 Install one (1) RC0248 Bolt (7/16" x 2") with one (1) RC0250 Washer (7/16") from the top down, through the hole in the end of the angle iron into the second existing hole of the rear axle carrier, as shown in Figure 28.
- 5.1.5 Install one (1) RC0250 Washer (7/16") and one (1) RC0249 Nut on the bottom side of the axle carrier as shown in Figure 30. **Do not tighten this bolt at this time.**

Figure 30. Bottom Side of Axle Carrier



- 5.1.6 With the help of an assistant or hydraulic/pneumatic lift, raise the air tank frame up to the LH frame rail. The rectangular tubing should be in solid contact with the bottom of the frame rail. Mark the holes in the two uprights of the tank frame. Lower the frame. Drill the marks with a 13/64" diameter drill bit.
- 5.1.7 Install four (4) RC0252 Screws (1/4" Self-Tapping Screws) in the new holes with the frame lifted back into position. The end result will appear as shown in Figure 31.

Figure 31. Tank Frame Connection to Main Frame.



- 5.1.8 Tighten the 7/16" Bolt at the rear axle carrier.

Note: The angle iron section does not bolt to the axle cross member at the front.

- 5.1.9 Install outer fender to finish this tank frame installation.

5.2 Install Air Tank

- 5.2.1 With the help of an assistant or hydraulic lift, lift the air tank to the air tank frame. Orient the tank with the legs pointing up so that the 1/4" NPT Fitting hole on the side of the tank is facing the center of the machine. This will also place the 1/4" NPT Fitting hole that is next to the tank legs on one end of the tank towards the rear of the machine.
- 5.2.2 Install one (1) RC0248 Bolt (7/16" x 2") with two (2) RC0250 Washers (7/16"), one (1) RC0251 Lock Washer and one (1) RC0249 Nut through each of the four (4) holes in the rectangular tubing through the legs of the RC0215 Air Tank. The result is shown in Figure 32.

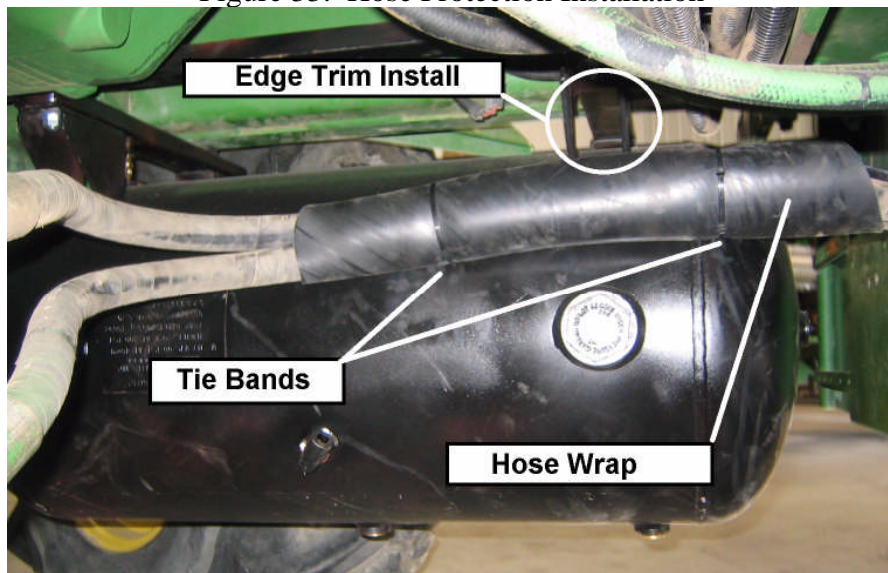
Figure 32. Completed Air Tank Mounting



- 5.2.3 Install two (2) RC0255 Edge Trim sections on the edge of the front, inside air tank legs. This will be used to protect the rear hydrostatic hoses from damage on the tank. See Figure 33 for location information.
- 5.2.4 Install RC0268 Rubber Wrap lengthwise on the hydrostatic hoses as shown in Figure 33. Start with the wrap between the hoses and wrap at least one time completely around the hoses. Use RC0123 Tie Bands as necessary to secure the wrap on the hoses. The hoses can now rest on the air tank as shown. Make sure the hoses do not interfere with any other vehicle components such as electrical harnesses or sharp edges.

Note: It is critical to start the wrap between the hoses and wrap completely so the hoses are not in contact with each other or other components as damage may result due to hydrostatic pump vibrations in the hose.

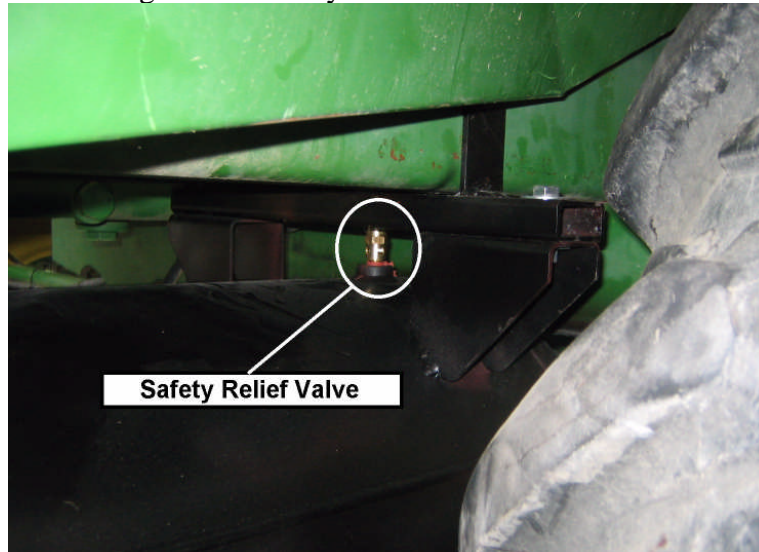
Figure 33. Hose Protection Installation



5.3 Install Fittings in Air Tank

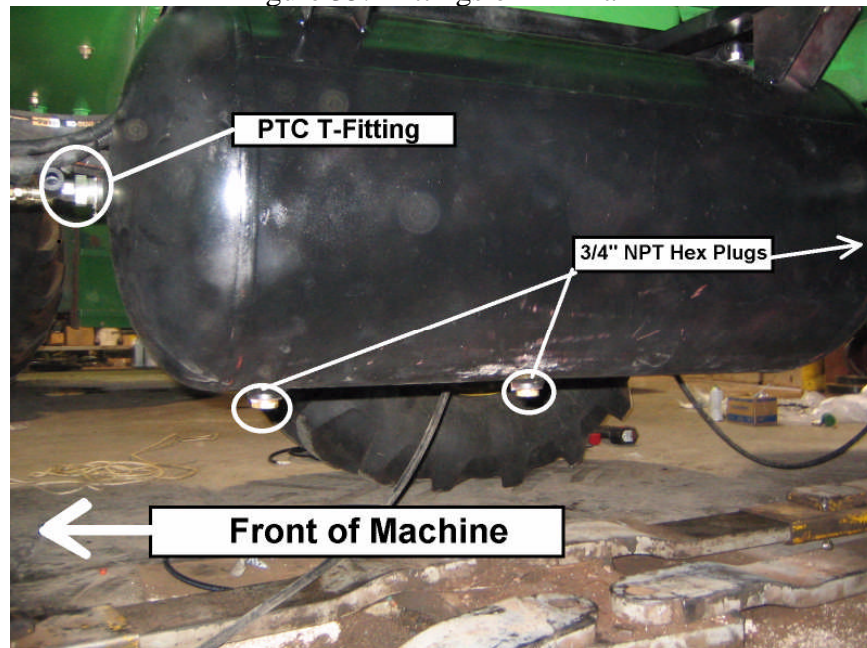
- 5.3.1 Install RC0216 Safety Relief Valve in 1/4" FPT Fitting Hole on air tank next to the rear leg, below the main frame as shown in Figure 34.

Figure 34. Safety Relief Valve Installation



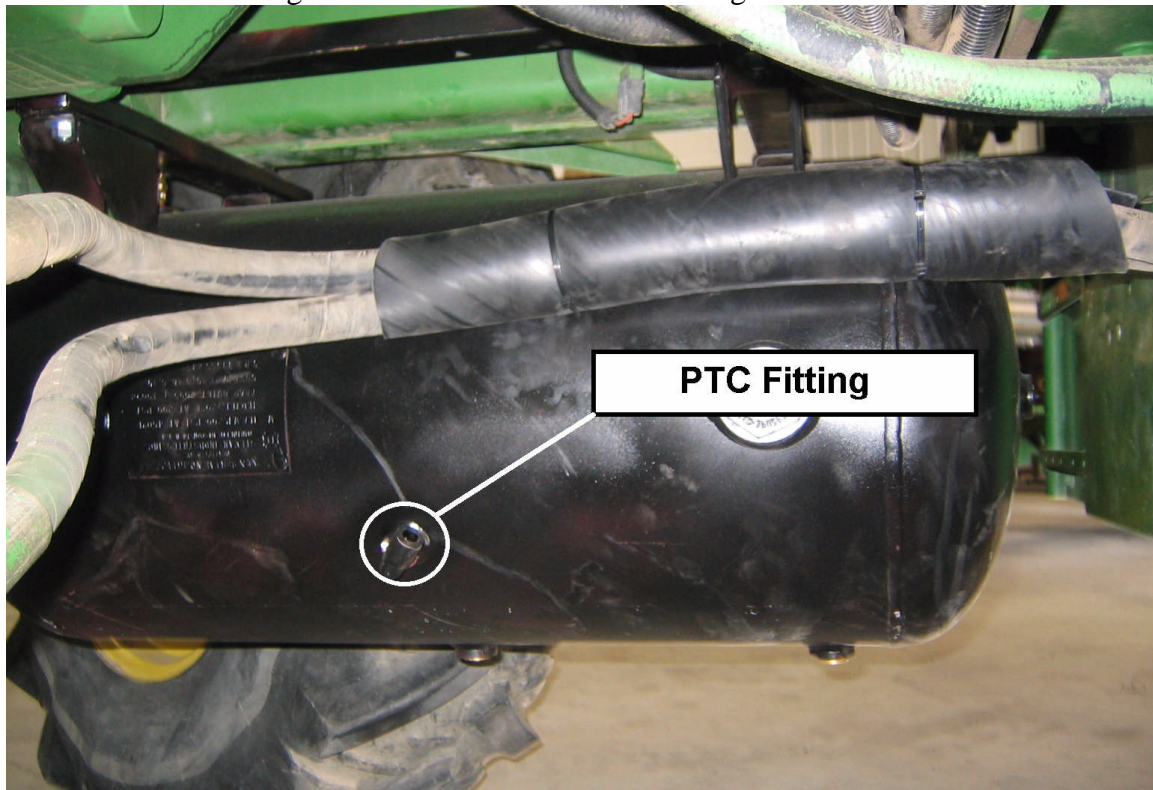
- 5.3.2 Install three (3) RC0234 Hex Head Plugs (3/4" NPT) in the bottom and rear port of the tank (end near the rear axle). See Figure 35.
- 5.3.3 Install one (1) RC0258 Bushing (1/2" NPT to 1/4" NPT) and one (1) RC0236 T-Fitting PTC (1/4" PTC) at the front end of the tank as shown in Figure 35.

Figure 35. Fittings on Air Tank



- 5.3.4 Install one (1) RC0235 PTC Fitting (1/4" MPT, 90 deg) in side port of air tank as shown in Figure 36. This fitting swivels for proper hose alignment.

Figure 36. Installation of PTC Fitting in Air Tank



6 Installation of Air Tank – 2WD SPFH

6.1 Install Air Tank Bracket

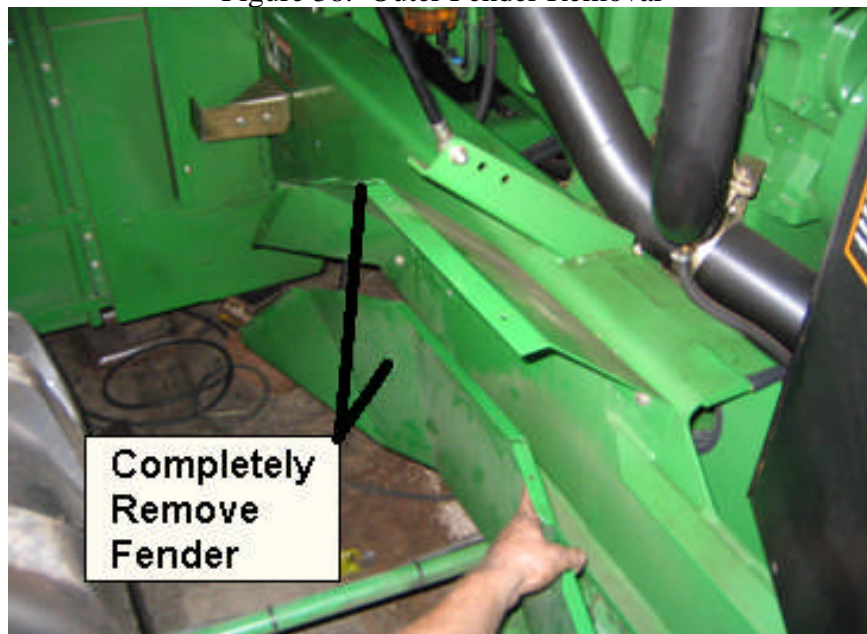
Note: Air Tank will be installed in front of the rear axle, as shown in Figure 37.

Figure 37. Completed Air Tank Installation, LH Side



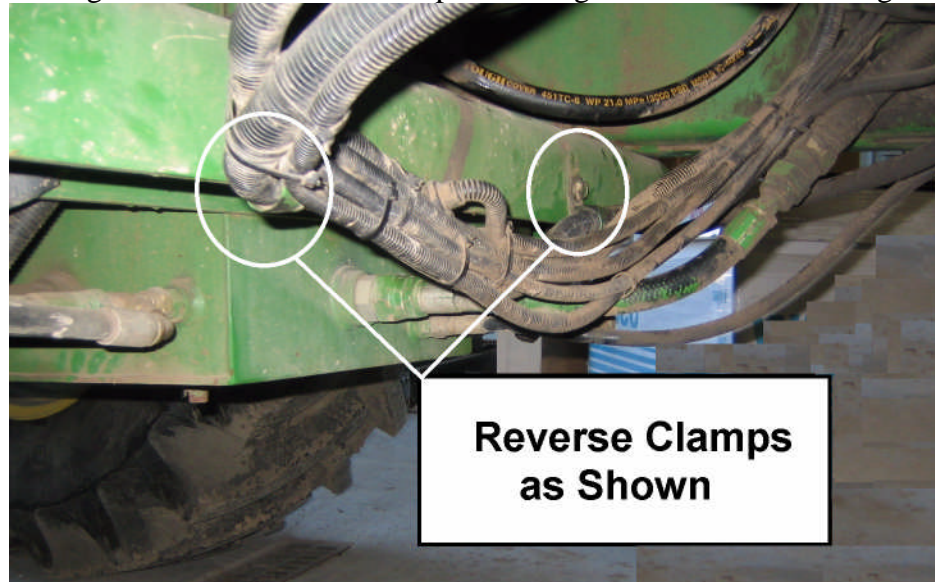
- 6.1.1 Remove the LH Fender completely for access to the main frame as shown in Figure 38.

Figure 38. Outer Fender Removal



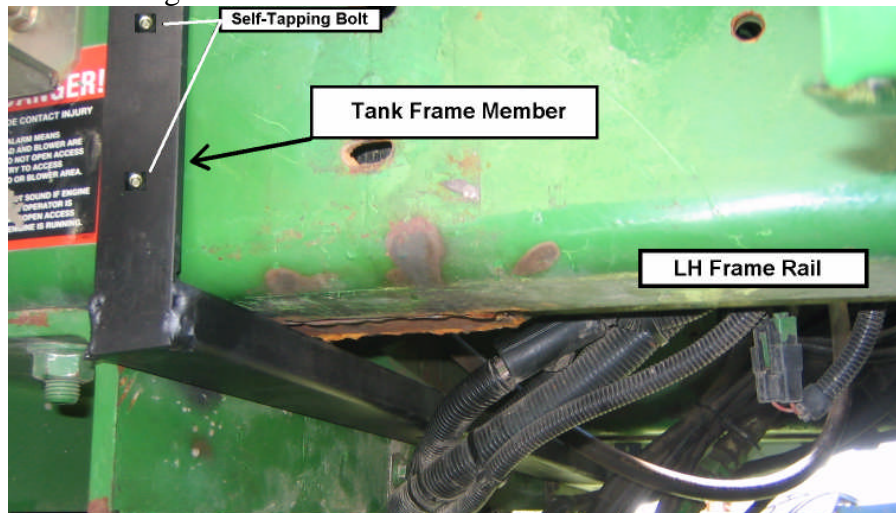
- 6.1.2 Remove clamps on wiring harness across the main frame cross member and reverse the direction of the clamps to lower the harness. Reinstall as shown in Figure 39.

Figure 39. Removal of Clamp on Wiring Harness and Reversing



- 6.1.3 Install one (1) RC0274 Tank Mounting Frame Member directly behind the main frame cross member. This section will fit across the width of the frame as shown in Figure 40. Be sure to align the frame so the holes in the rectangular tubing are closest to the LH frame rail of the SPFH.

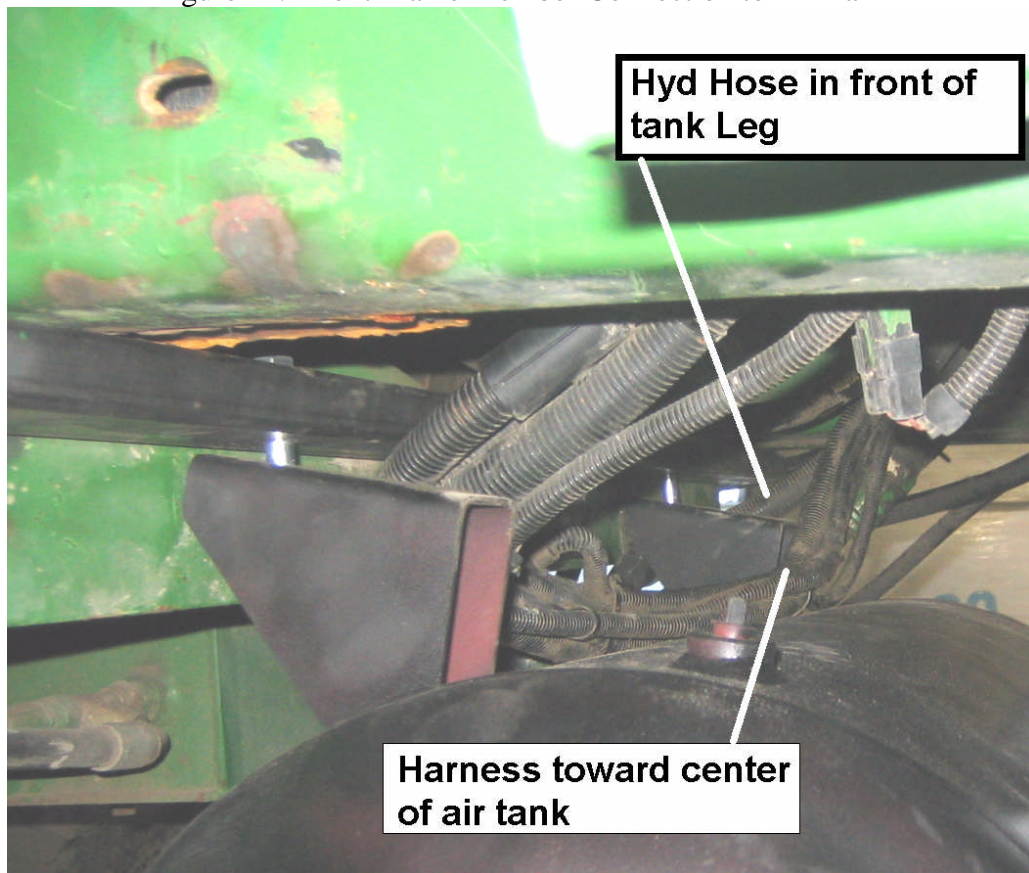
Figure 40. First Tank Frame Member Installation



- 6.1.4 The rectangular tubing should be in solid contact with the bottom of the main frame rail. Mark the holes in the two uprights of the tank frame. Drill the holes with a 13/64" diameter drill bit.

- 6.1.5 Install four (4) RC0252 Screws (1/4" Self-Tapping Screws) (two per side) in the new holes with the frame in position. The end result will appear as shown in Figure 40.
- 6.1.6 Install two (2) RC0248 Bolt (7/16" x 2") with two (2) RC0250 Washer (7/16") from the top down, through each hole in the rectangular tubing.
- 6.1.7 Using an assistant or hydraulic/pneumatic lift, raise the air tank up to the front tank frame. Keep the side 1/4" NPT Port towards the rear of the machine. The top 1/4" NPT Port near the tank leg should be on the LH side of the machine. Route the harness towards the center of the tank, behind the front tank leg. Route the hydraulic hoses towards the front of the machine, ahead of the air tank leg. The tank leg will then separate the hoses from the wire harnesses. Install two (2) RC0250 Washer (7/16"), RC0251 Lock Washer and two (2) RC0249 Nut (7/16") to hold the tank to the frame. Do not completely tighten the bolts at this time. The tank will need to pivot to place the other end of the frame in mounting position. See Figure 41.

Figure 41. Front Frame Member Connection to Air Tank



- 6.1.8 Bolt the other RC0274 Tank Mounting Frame Member on the rear tank legs with the same hardware used on the front tank legs. Tighten the frame in place.

The tank will then be lifted into position for the frame to be mounted. See Figure 42.

Figure 42. Rear Tank Frame Member for Assembly



6.1.9 With the help of an assistant or hydraulic/pneumatic lift system, raise the tank into position. The rear rectangular tubing will rest against the bottom of the main frame.

6.1.10 Drill two (2) holes similar to front frame member, per side, to retain the rear frame member. Hole diameter is $13/64$ ". See Figure 43.

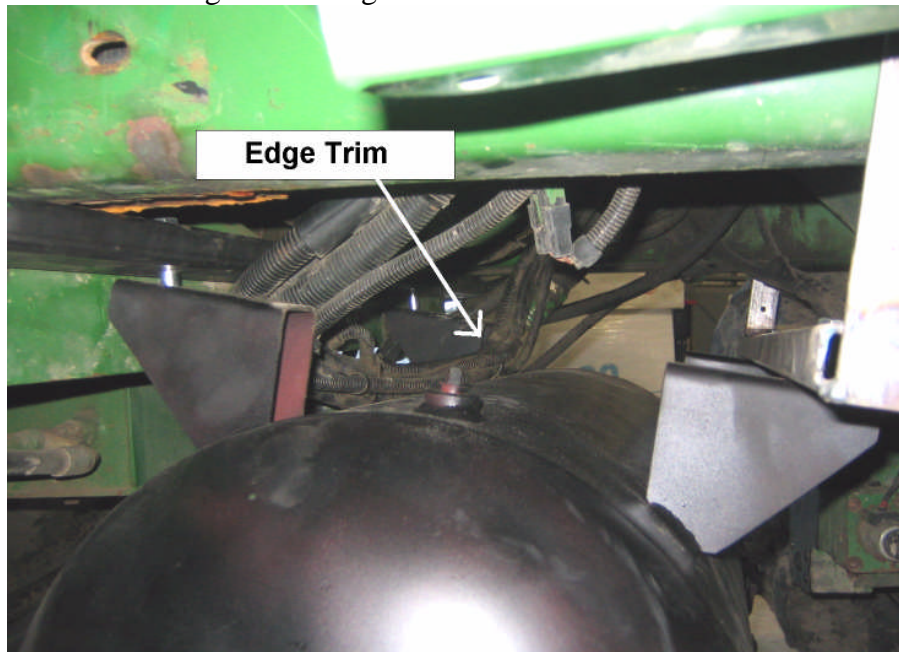
Figure 43. Drill Rear Tank Mount Holes



6.1.11 Install four (4) RC0252 Screws ($1/4$ " Self-Tapping Screws) (two per side) in the new holes with the frame in position.

- 6.1.12 Tighten all air tank hardware to draw the tank into position.
- 6.1.13 Install outer fender to finish this tank frame installation.
- 6.1.14 Install two (2) RC0255 Edge Trim sections on the edge of the front RH side air tank legs. This will be used to protect the electrical harnesses from damage on the tank. See Figure 44 for location information.

Figure 44. Edge Trim Installation Location



- 6.1.18 Install LH Fender.

6.2 Install Fittings in Air Tank

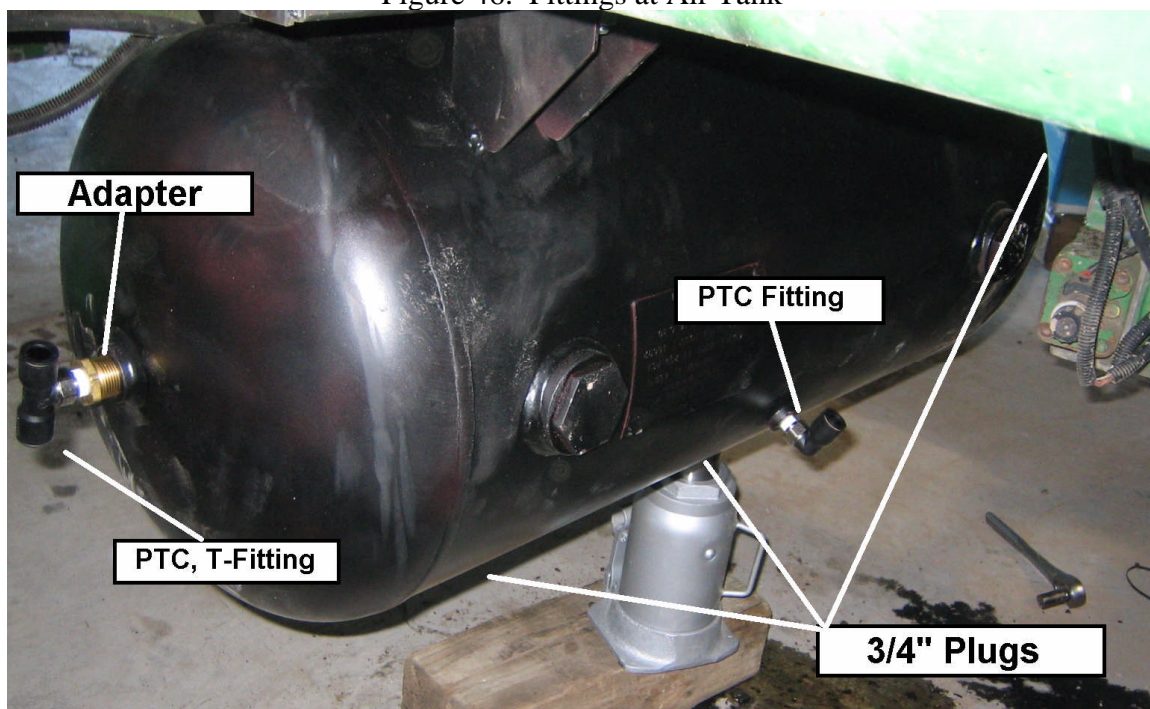
- 6.2.1 Install RC0216 Safety Relief Valve in 1/4" FPT Fitting Hole on air tank next to the rear leg, below the main frame as shown in Figure 45.

Figure 45. Safety Relief Valve Installation



- 6.2.2 Install three (3) RC0234 Hex Head Plugs (3/4" NPT) in the bottom and RH port of the tank (end near the RH frame rail) See Figure 46.
- 6.2.3 Install one (1) RC0258 Bushing (1/2" NPT to 1/4" NPT) and one (1) RC0236 T-Fitting PTC (1/4" PTC) at the LH side of the tank as shown in Figure 39.

Figure 46. Fittings at Air Tank

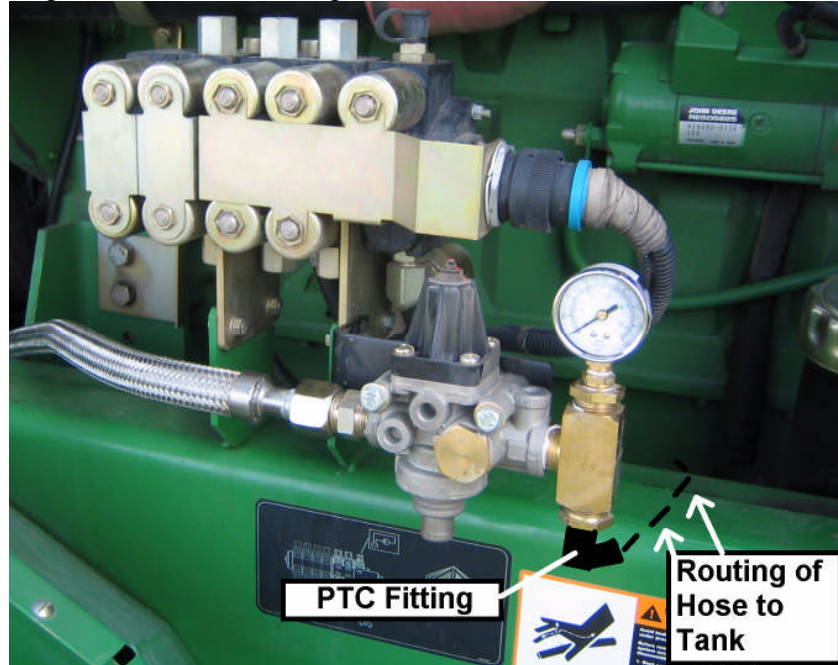


7 Installation of Air Lines

7.1 Install Air Line from Unloader Valve to Tank

- 7.1.1 Install RC0233 Air Hose (1/2" O.D. air hose, 48" Length) into the Push-To-Connect (PTC) Fitting on the Unloader Valve. Once the hose is installed in the fitting, it cannot be removed. See Figure 47.

Figure 47. Hose Leading from PTC on Unloader Valve to Tank

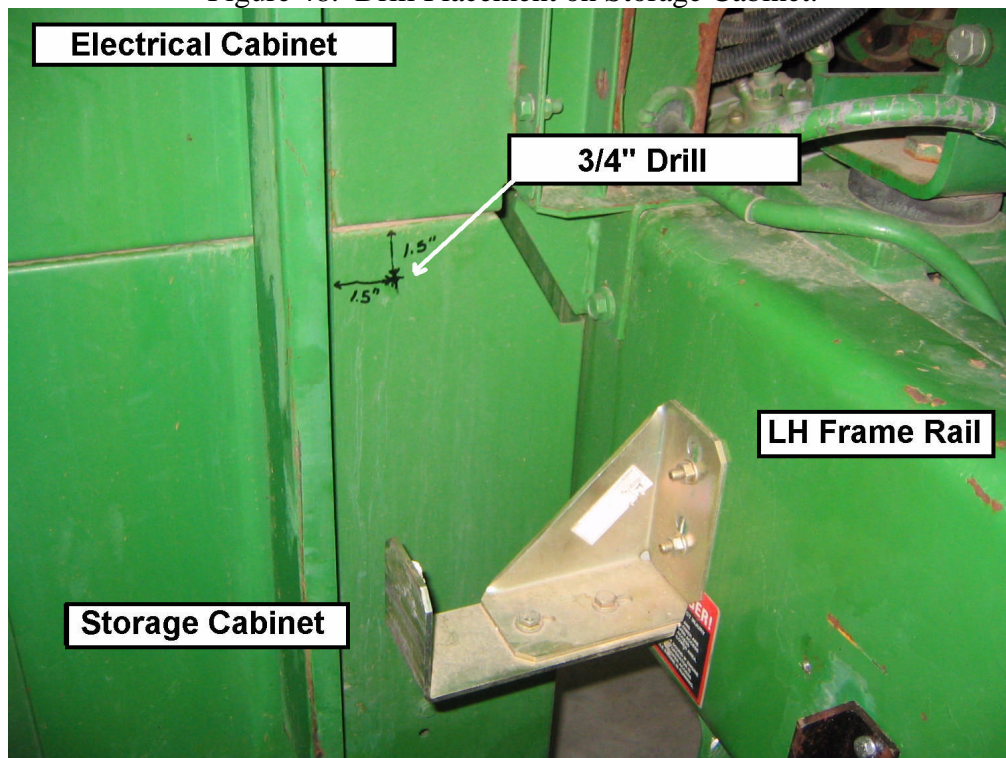


- 7.1.2 Install the other end of the RC0233 Air Hose in the PTC Elbow Fitting on the side of the air tank. This is the fitting shown in Figure 46. Cut off any extra hose length before inserting the hose in the fitting. Once the hose is installed, it cannot be removed.

7.2 Install Air Line from Air Tank to Storage Cabinet

- 7.2.1 Drill a $\frac{3}{4}$ " Diameter Hole as shown in Figure 48. This position is 1.5" below the top of the storage cabinet and 1.5" away from the Body Section as shown. Use caution to not contact any wiring harnesses or other components below the electrical cabinet while drilling.

Figure 48. Drill Placement on Storage Cabinet.



- 7.2.2 Install one (1) RC0238 PTC Elbow Fitting and one (1) RC0254 Flat Washer ($\frac{3}{4}$ ") in the new hole as shown in Figure 42. Install one (1) RC0237 Quick Coupler on the inside of the cabinet as shown in Figure 50.

Figure 49. Installation of PTC Fitting

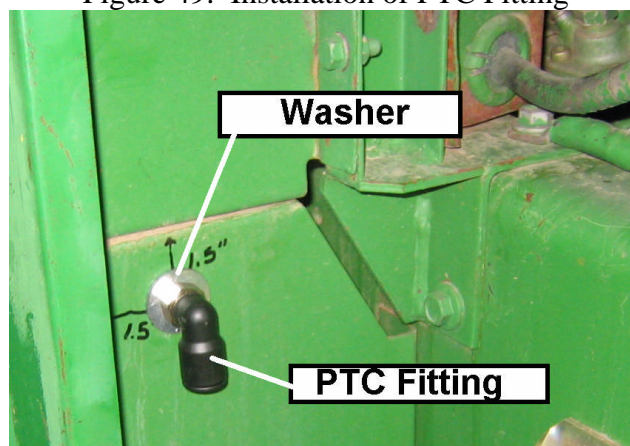
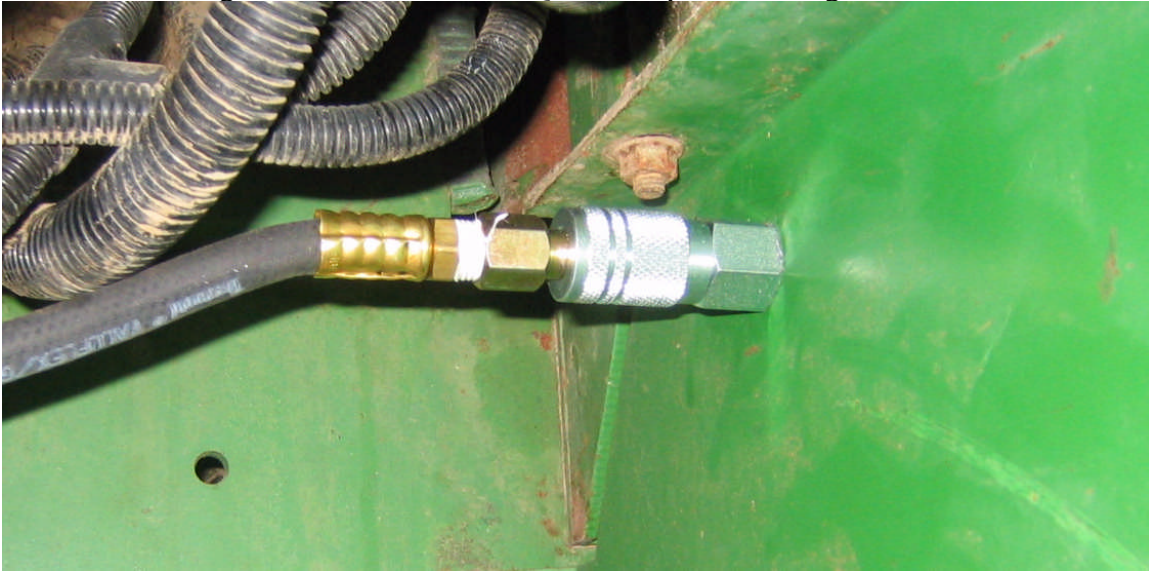


Figure 50. Installation of Quick Coupler in Storage Cabinet



- 7.2.3 Install RC0267 Hose (40") from the PTC Fitting installed on the storage cabinet to the T-Fitting on the Air Tank indicated in Figure 51. Cut the hose to length as required before assembly in the PTC Fitting.

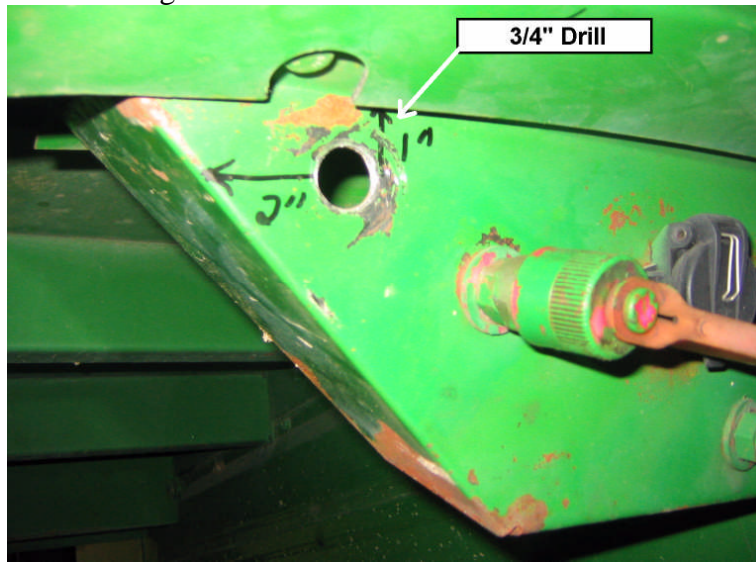
Figure 51. Installation of Air Line to Storage Cabinet



7.3 Install Air Line from Air Tank to Front Outlet

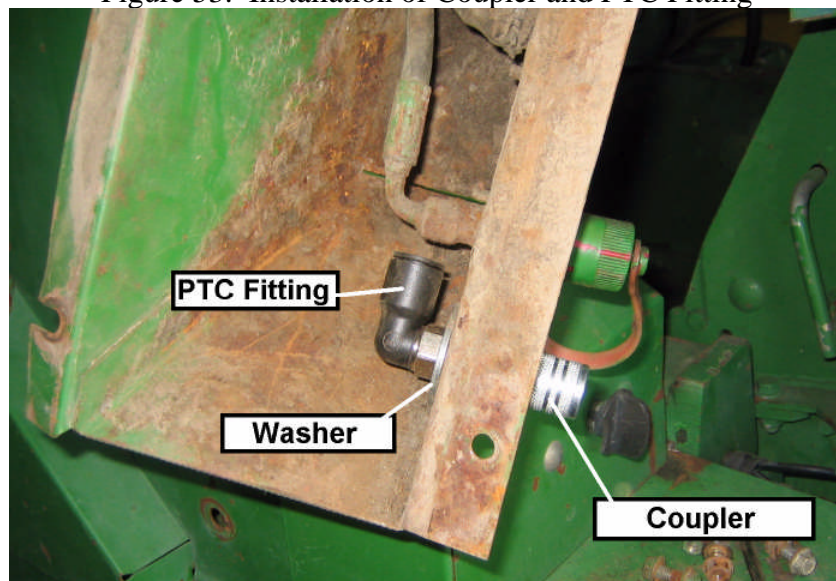
- 7.3.1 Remove the panel that supports the hydraulic outlets on the Front RH Fender.
- 7.3.2 Drill a $\frac{3}{4}$ " Diameter Hole as shown in Figure 52. This position is 1" below the top of the panel and 2" from the outside of the panel as shown. Use caution to not contact any wiring harnesses or other components in the panel.

Figure 52. Front Panel Outlet Location



- 7.3.3 Install one (1) RC0238 PTC Elbow Fitting and one (1) RC0254 Flat Washer ($\frac{3}{4}$ ") in the new hole as shown in Figure 53. Install one (1) RC0237 Quick Coupler on the outside of the panel as shown in Figure 53.

Figure 53. Installation of Coupler and PTC Fitting



- 7.3.4 Install RC0266 Hose (180", PTC Hose, ½" O.D.) to the PTC Fitting of the front panel. Route along other hoses through the machine to connect to the T-Fitting on the air tank. Use RC0123 Tie Bands as necessary to secure the line. See Figures 54 and 55. Cut hose to appropriate length before installing into T-Fitting.

Figure 54. Air Hose Routing

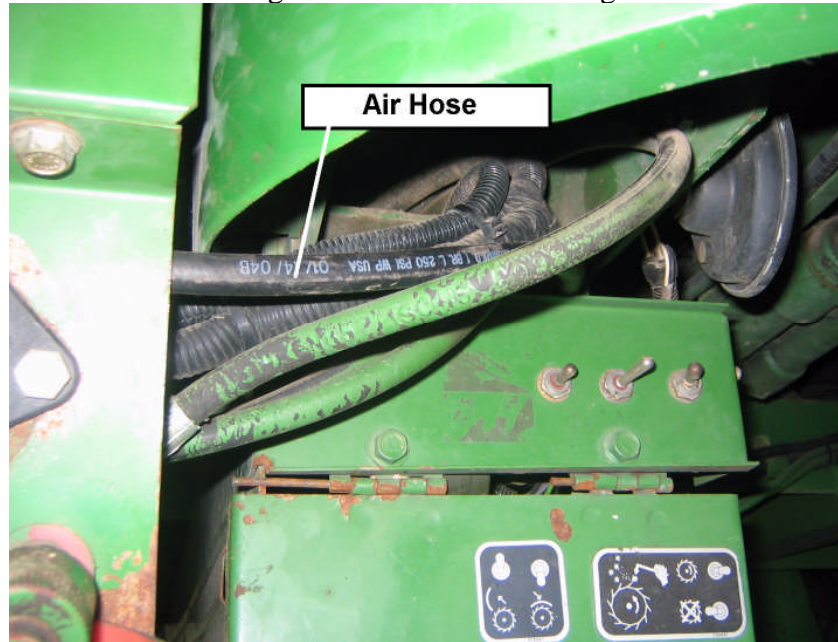
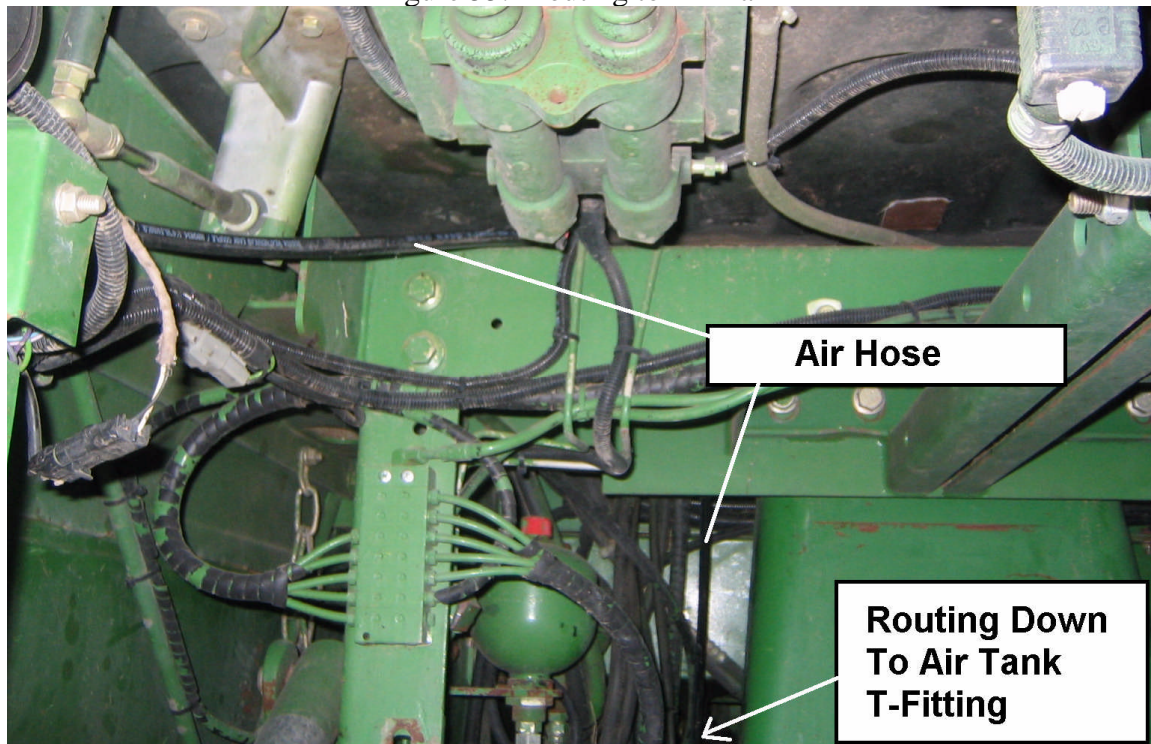


Figure 55. Routing to Air Tank

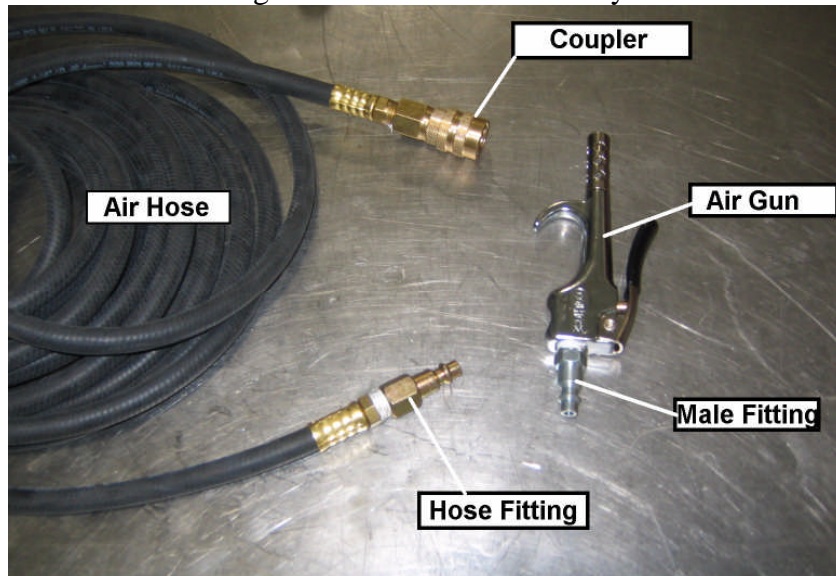


8 Installation of Air Gun and Service Hose

8.3 Install Fittings on Air Hose

- 8.3.1 Install RC0239 Male Coupler and RC0263 Female Coupler on RC0240 Air Hose as shown in Figure 56.

Figure 56. Air Hose Assembly



- 8.3.2 Install RC0262 Male Fitting on RC0241 Air Gun as shown in Figure 56.
- 8.3.3 Place hose and Air Gun in Storage Cabinet when not in use. The Hose Fitting can remain connected to the Coupler in the cabinet when not in use. See Figure 57.

Figure 57. Hose and Air Gun Storage

