

Service Bulletin

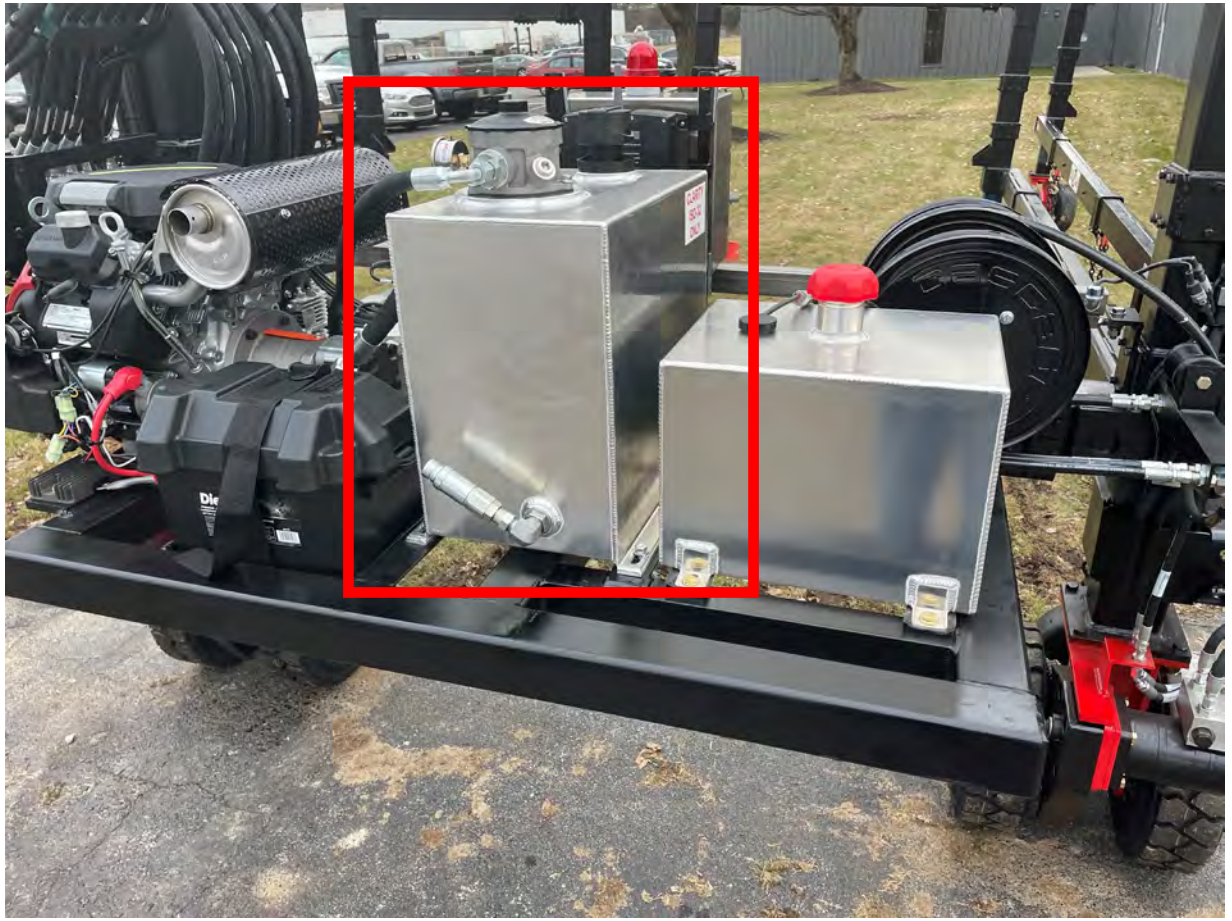
Aluminum Reservoir Installation

Model: RG Produced Units

Revision: C

Date: 2/2/23

Hydraulic Fluid Aluminum Reservoir Installation



Required Tools

- Large channel lock pliers
- 1 1/4" Combination wrench
- 7/8” Combination wrench
- 11/16" Combination wrench
- 9/16" Combination wrench
- 12" Crescent wrench
- Needle nose pliers
- Philips screwdriver
- 9/16" Allen socket
- 11/16" Deep socket, 3/8" drive
- 1/2" Deep socket, 3/8” drive
- 9/16" 3/8" drive socket
- In-lb torque wrench
- Ft-lb torque wrench

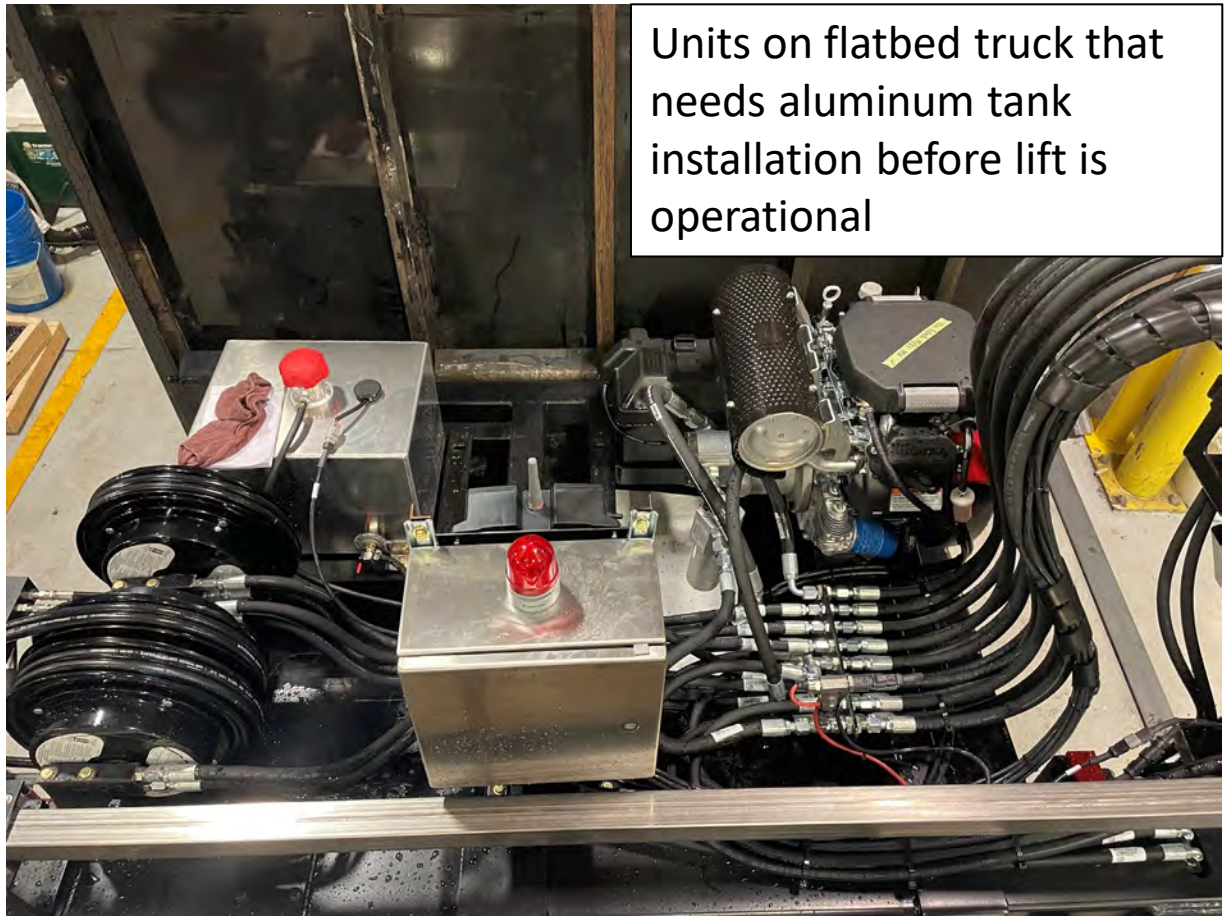




Podzilla units requiring aluminum tank installation will fall into two categories: Lifts needing the plastic tank removed, parts swapped from plastic tank to aluminum tank, then installed. The other will be lifts with the plastic already removed and the unit still on the flatbed truck.

Unit that requires plastic tank removal & aluminum tank installation





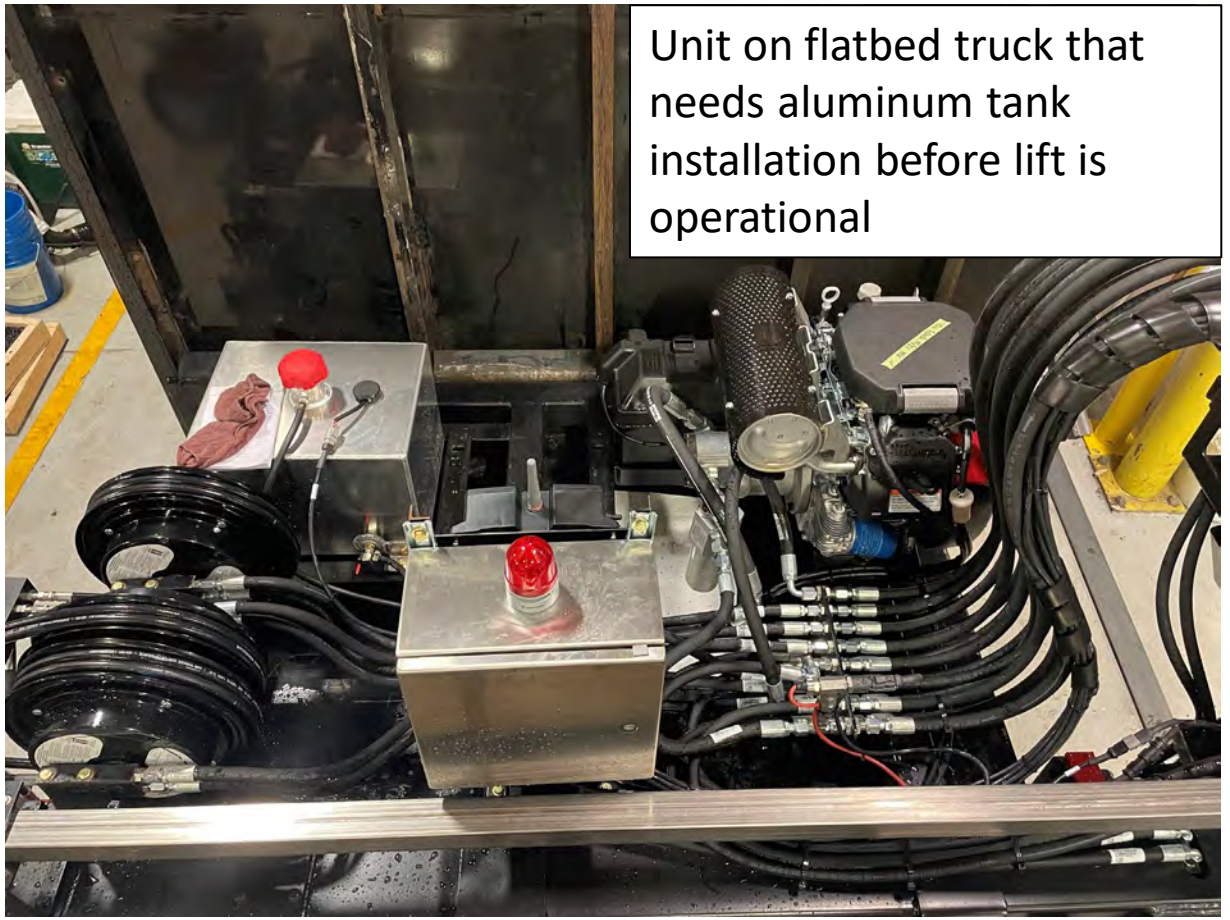
Units on flatbed truck that needs aluminum tank installation before lift is operational

Podzilla units requiring plastic tank removal and aluminum tank accessory installment, please follow the next few slides.

Unit that requires plastic tank removal & aluminum tank installation



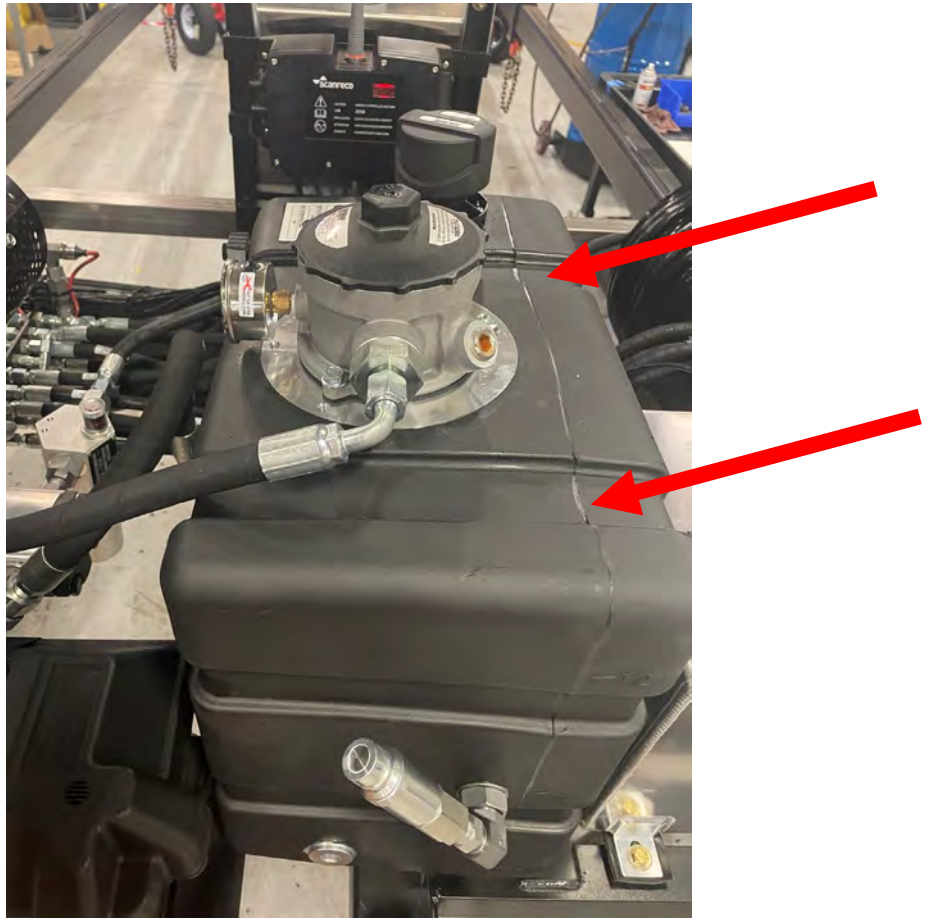
Podzilla units requiring aluminum tank installation on lifts still mounted on the flatbed truck, please jump to slide 53



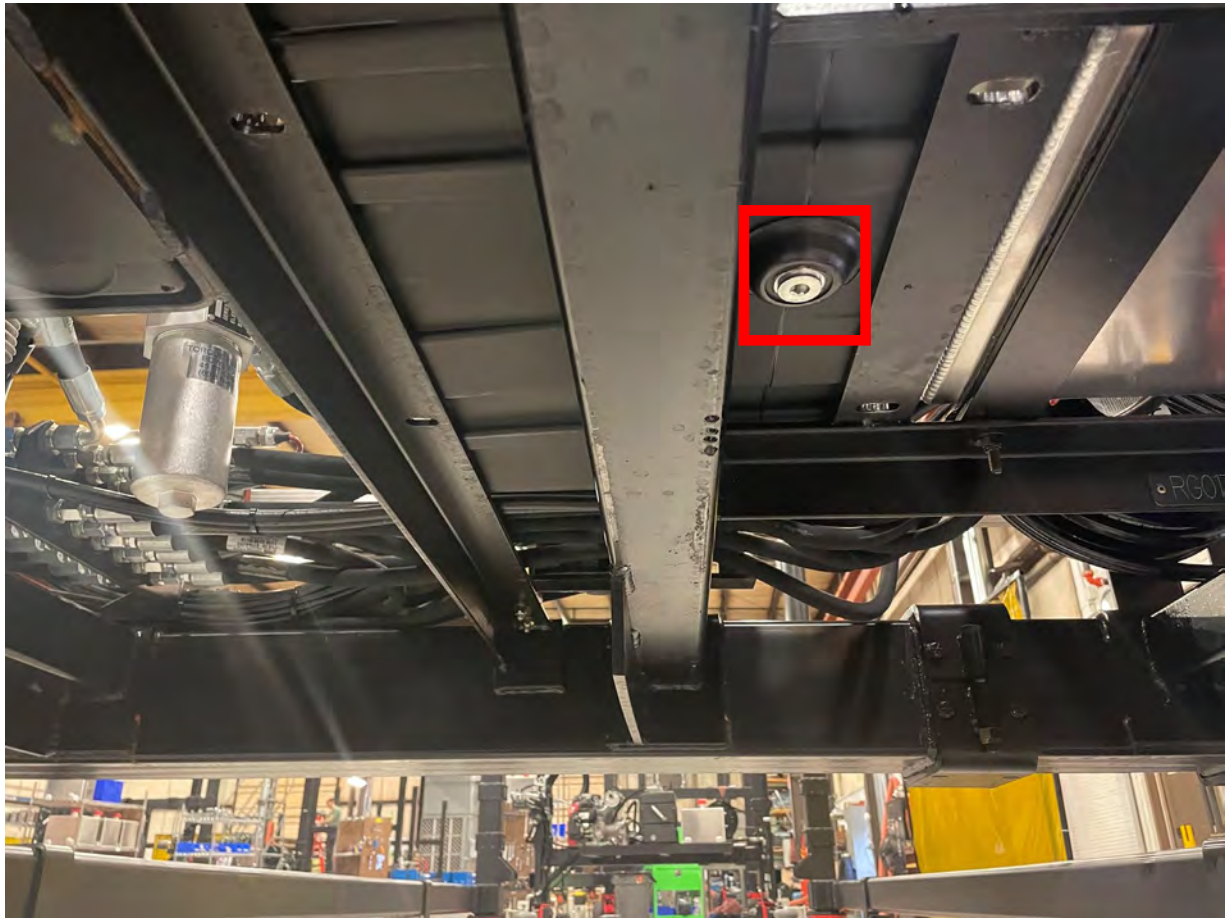
Step one is to remove negative battery cable from the negative battery terminal post. Once removed, tuck the cable away so it cannot inadvertently contact the negative terminal post.



The next step in removing the plastic tank is to uninstall the rubberized metal straps that are holding the tank in place.



Now remove the drain plug from the bottom of the tank and drain all the hydraulic oil. This will require three very clean 5-gallon buckets to catch and hold the oil for later use.



Three clean 5-gallon buckets with the reservoir oil. Once oil is drained, place these buckets out of the way and ensure no contaminants enter the oil. This oil is what will be used to refill the aluminum tank.



Now remove the oil return line from the top mounted return filter housing fitting. Cap the line with the supplied plastic plug once the hose is removed from the filter housing fitting.

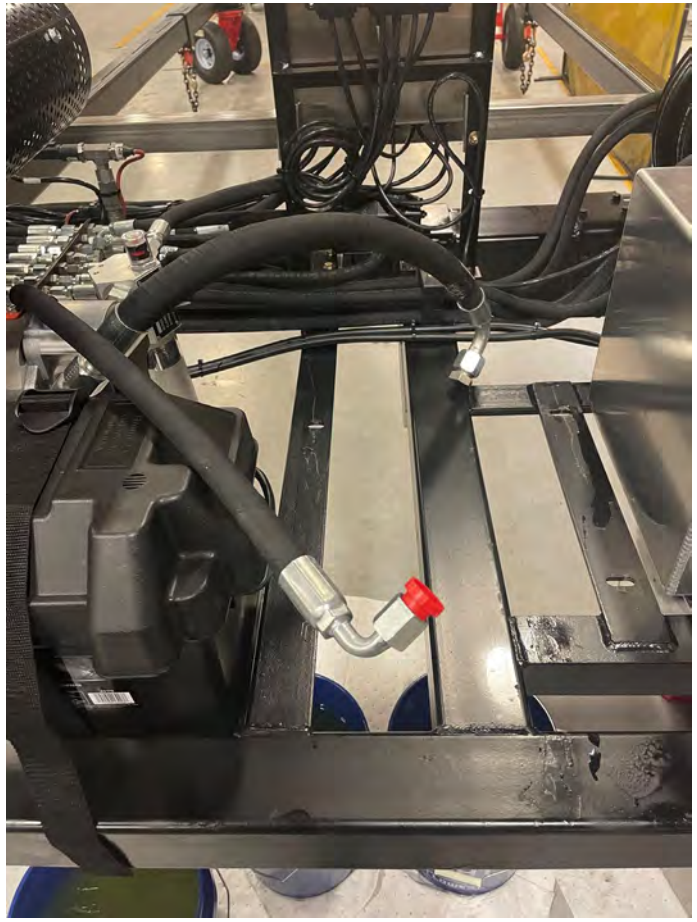




Remove the suction line hose from the bottom suction strainer assembly and male JIC fitting. Cap the suction line hose with the supplied plug once removed from the suction strainer.



Lift and Remove the plastic tank.



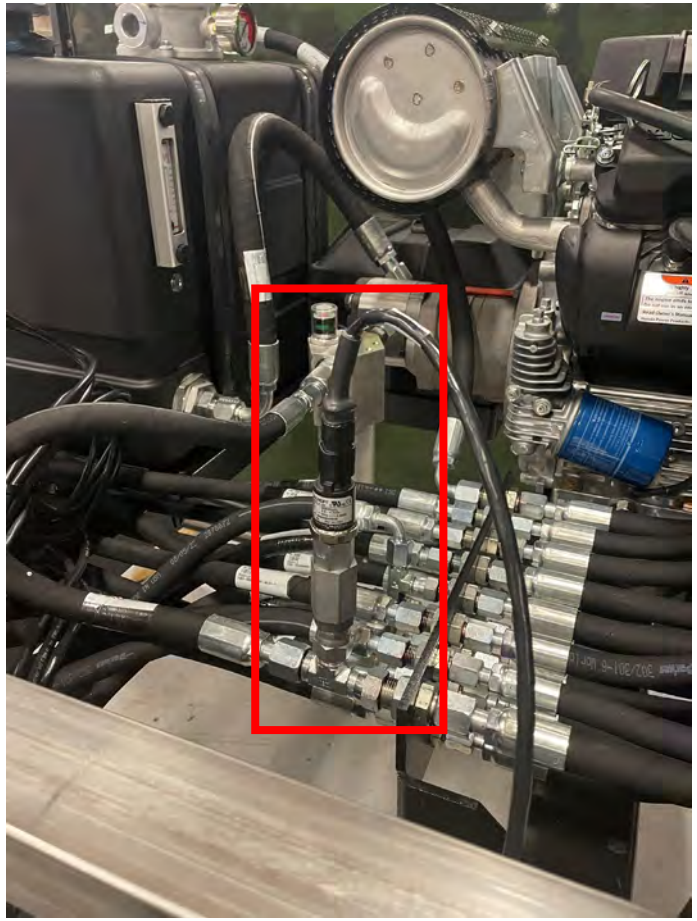
All the tank accessories will now need removed from the plastic Schroeder tank and set aside for installation on the new aluminum reservoir.



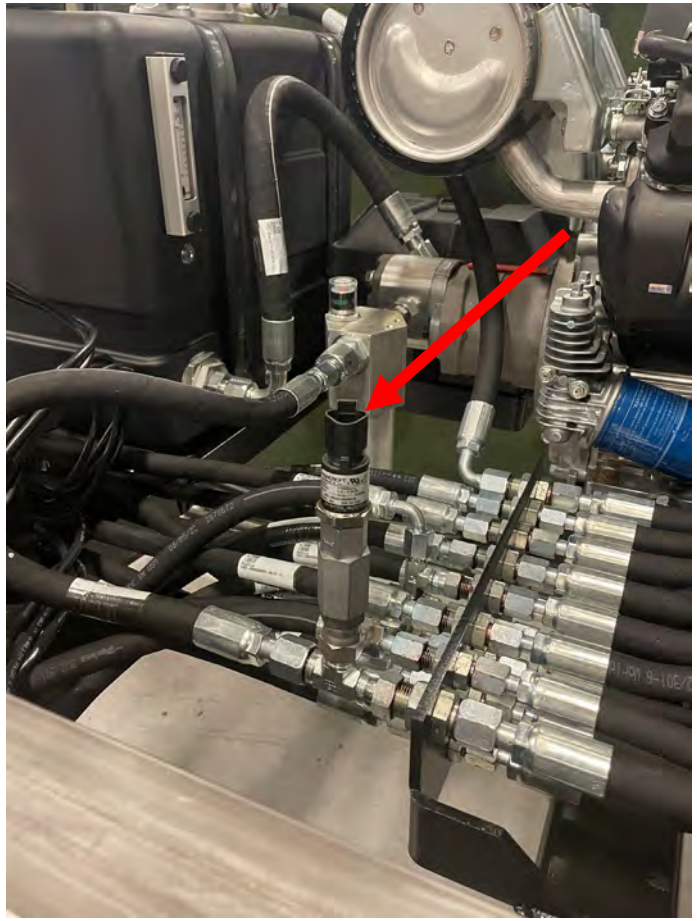
Some older lifts may still have the Hydraulic temp sensor located in the plastic reservoir. Please double check if you lift falls into this category. If so, please relocate the temp sensor as described in the next few slides.



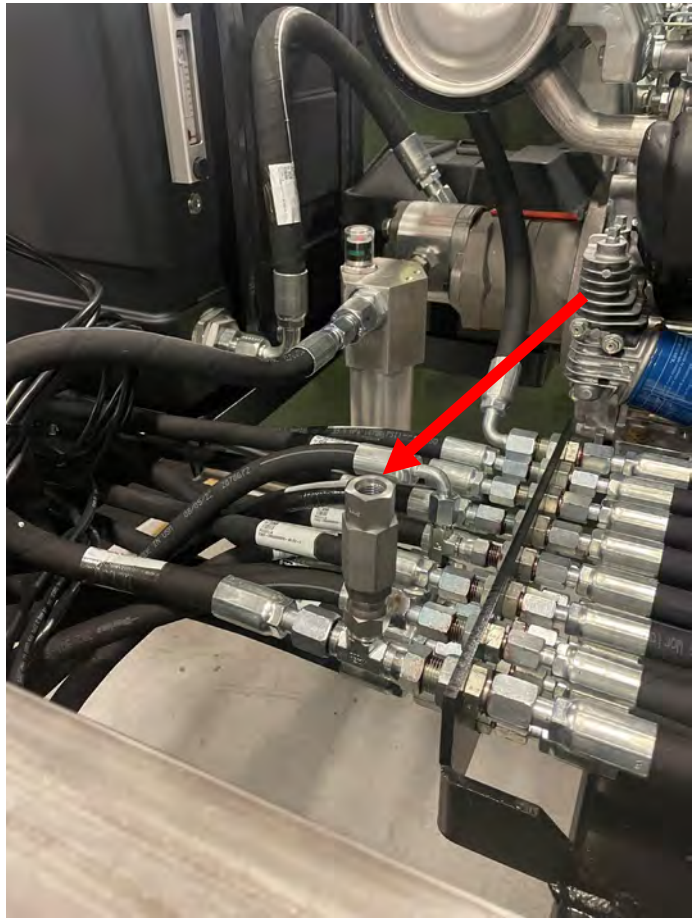
Locate the system main pressure sensor (located at the bulkhead fitting array bracket)



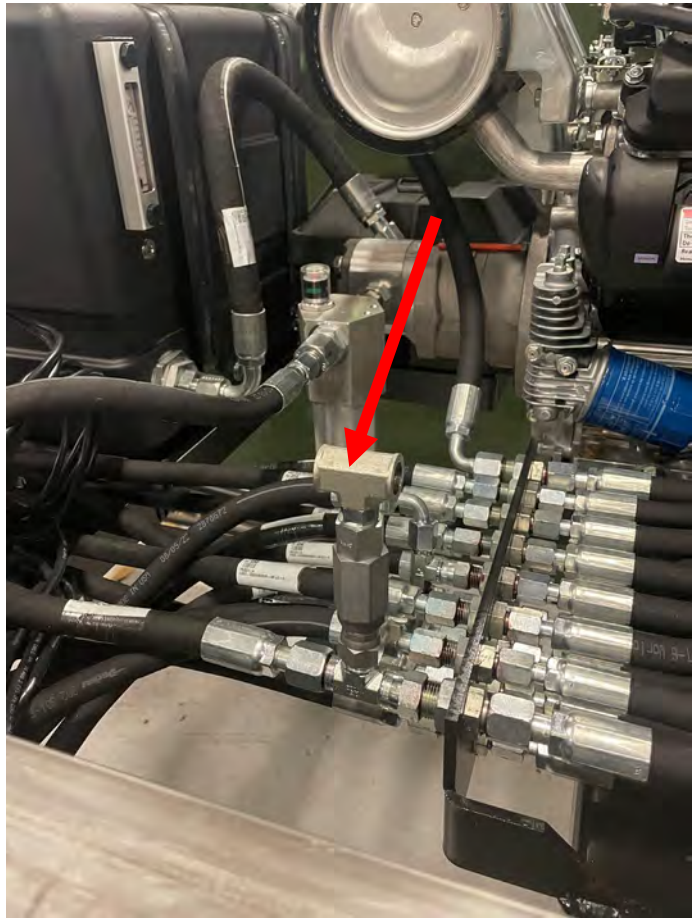
Unplug the main pressure sensor cable



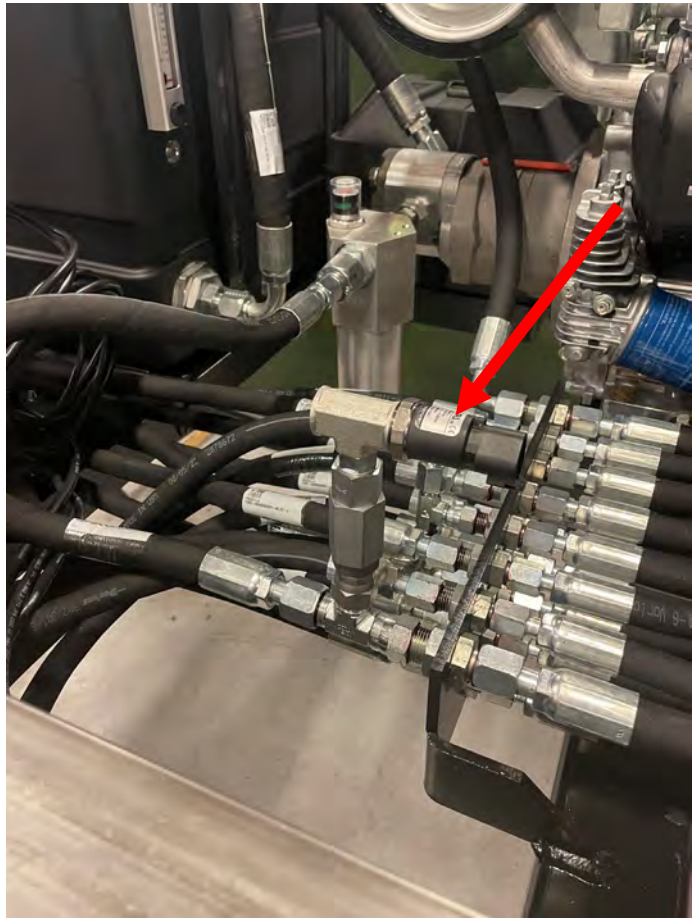
Remove the main pressure sensor



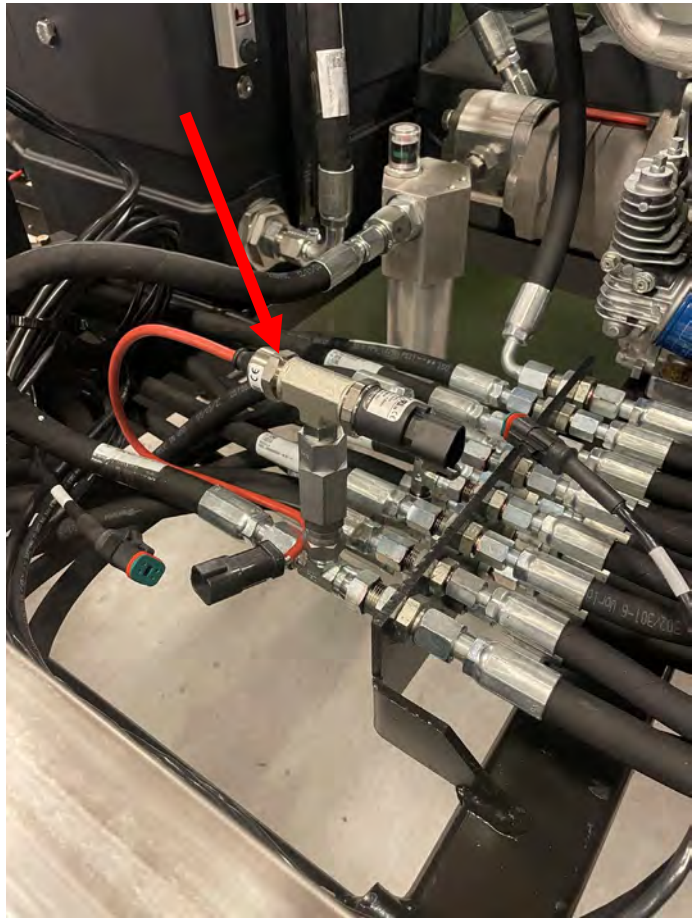
Install the supplied tee fitting (p/n: 6 G5G5JAO-S)



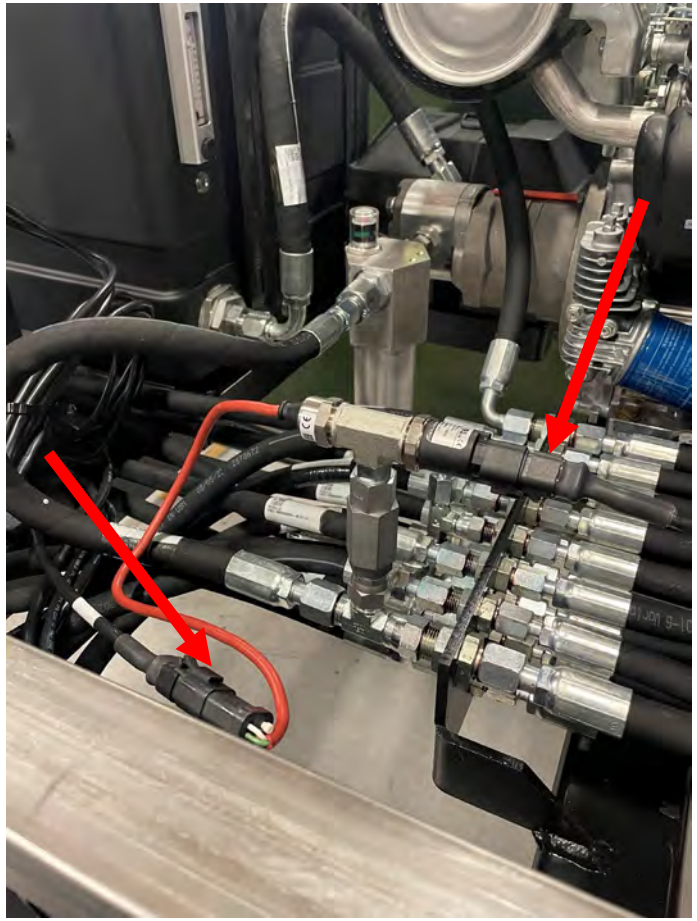
Reinstall the main pressure sensor



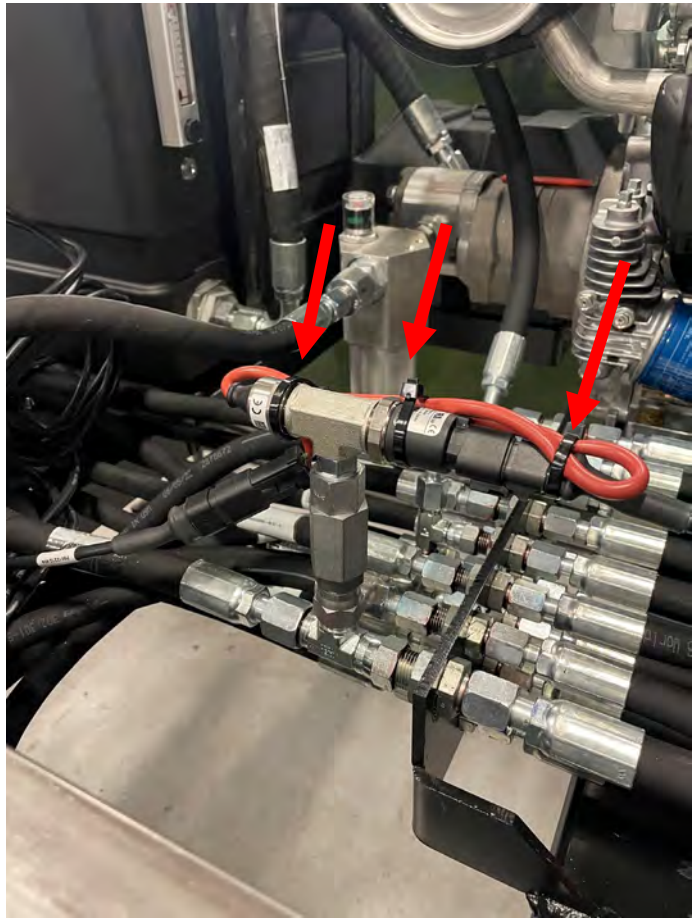
Install the hydraulic temp sensor (p/n: 20073658) on the opposite side of the tee fitting.



Reconnect the main pressure sensor cable and the hydraulic temp sensor cable.



Using zip ties, take excess cable and tie back as shown in picture below



We can now resume removing the rest of the tank accessories from plastic Schroeder tank to be set aside for installation on the new aluminum reservoir.



First, we'll remove the oil sight gauge and the suction strainer fittings.



Remove suction strainer assembly from the tank by rotation the assembly counterclockwise via the largest hex nut portion of the fitting stack. This will come out as one complete assembly.



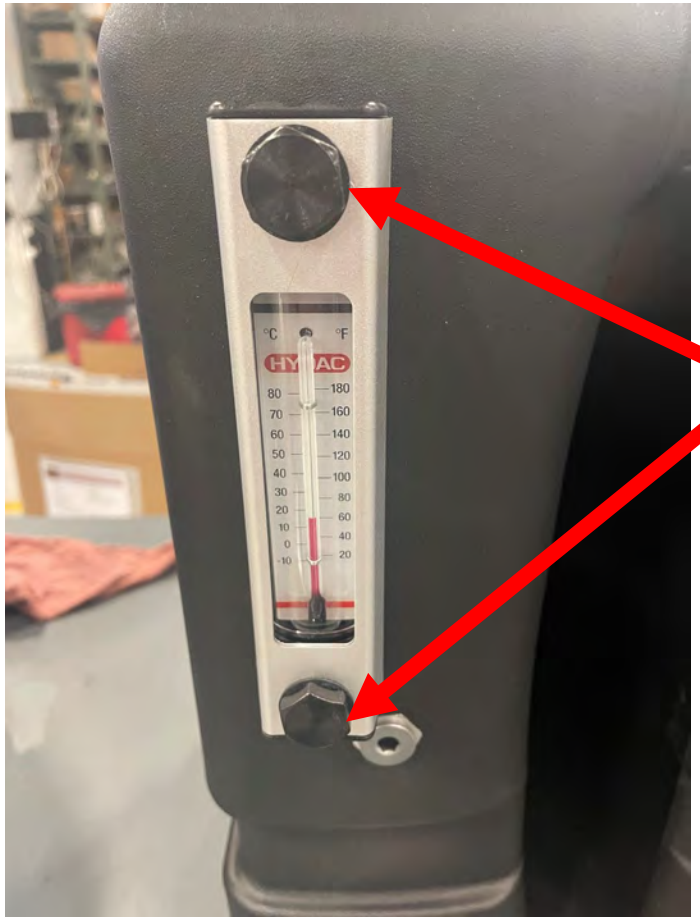




Next, remove the sight glass assembly.



Using an adjustable wrench, loosen the top and bottom black hex nuts on the slight glass assembly.



Black sight glass retention hex nuts



Now, turn the tank and remove the auxiliary quick disconnect suction port fitting and SAE-12 plug.





Finally, remove the breather/fill cap assembly and return line filter housing assembly from top of the plastic tank.



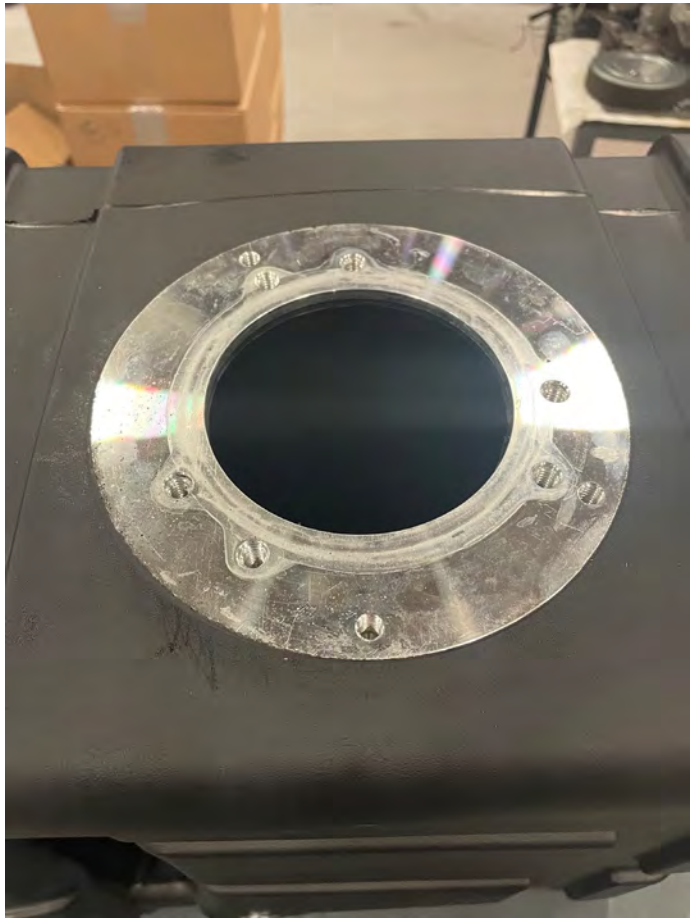
Remove the breather cap followed by the Qty:6 M5x0.8 Phillips head screws from the threaded breather/fill cap housing.





Remove the Qty: three 5/16-18 screws holding the return line filter assembly to the tank. Lift the entire assembly out.





Breather/fill cap assembly and return line filter housing removed.



The obsolete plastic reservoir now has all accessories removed and can be appropriately discarded.



The below listed items are all components that should be removed from the plastic reservoir and re-installed on the new aluminum reservoir.



Breather/Filler Cap & Threaded Housing

Suction Strainer Assembly

Aux. Suction Port Assembly

Return Line Filter Housing Assembly

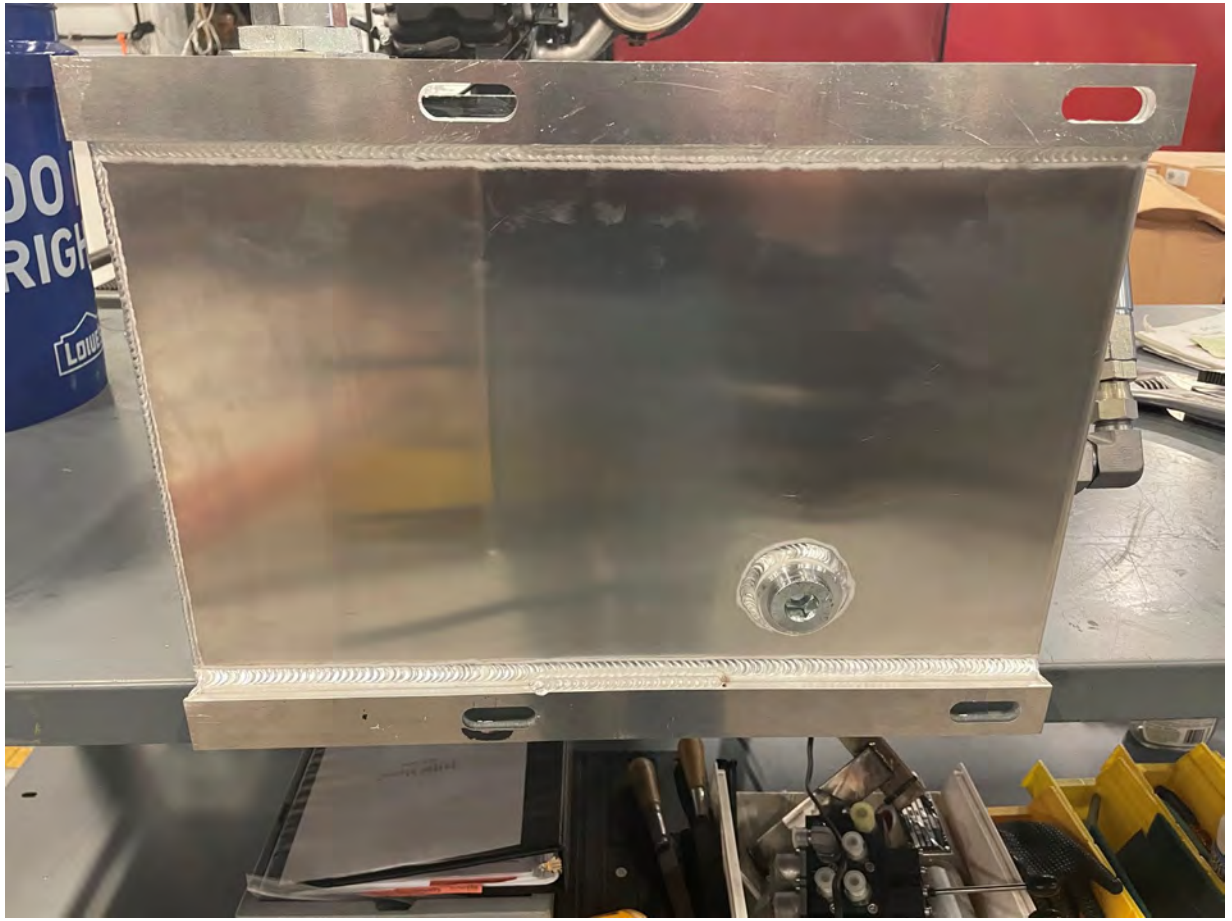
Sight Glass Assembly

SAE-12 Plug

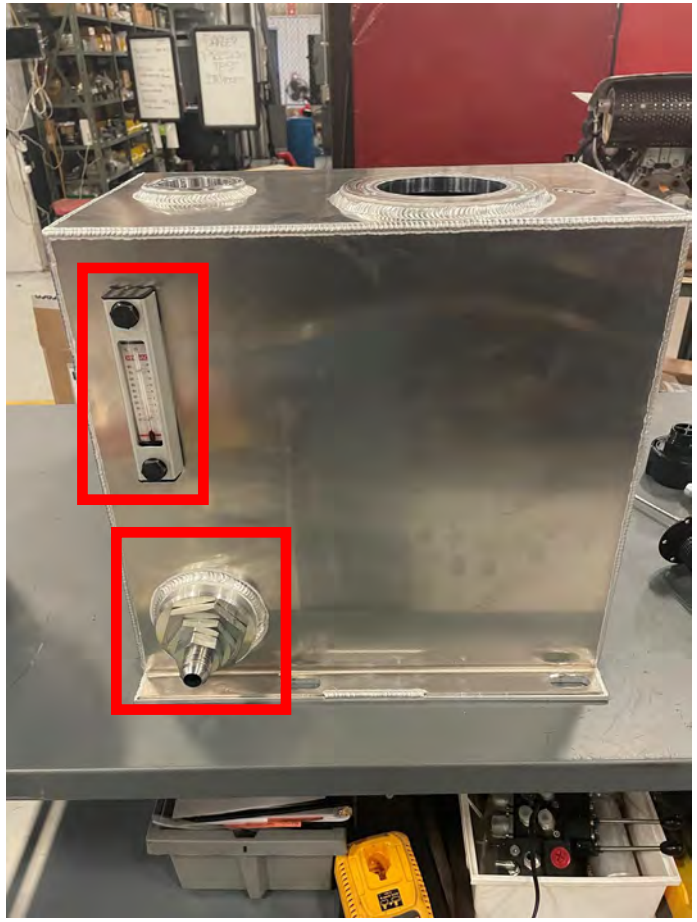
The plug in the bottom side of the plastic reservoir will not be used in the aluminum reservoir



The new aluminum reservoirs require a SAE 12 plug installed in the bottom side drain port. Please ensure this is installed prior to any work on the aluminum tank.

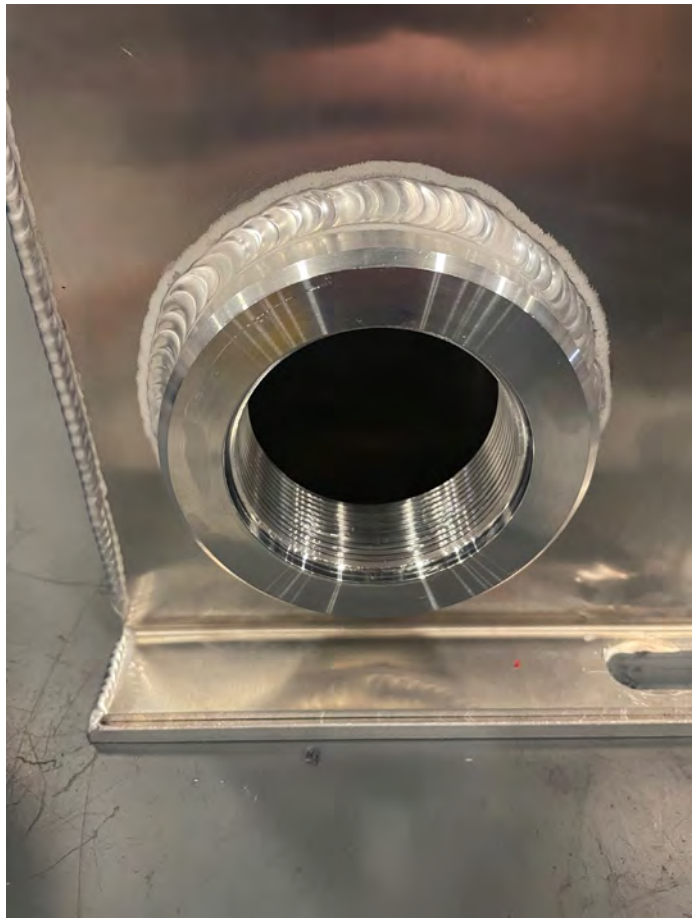


The first tank accessories to re-install on the aluminum reservoir is the sight glass assembly and the suction strainer assembly.



Thread the suction strainer assembly into the SAE-32 half coupling on the aluminum tank. Using the largest hex portion of the assembly housing, tighten until it stops and cannot tightened any further.



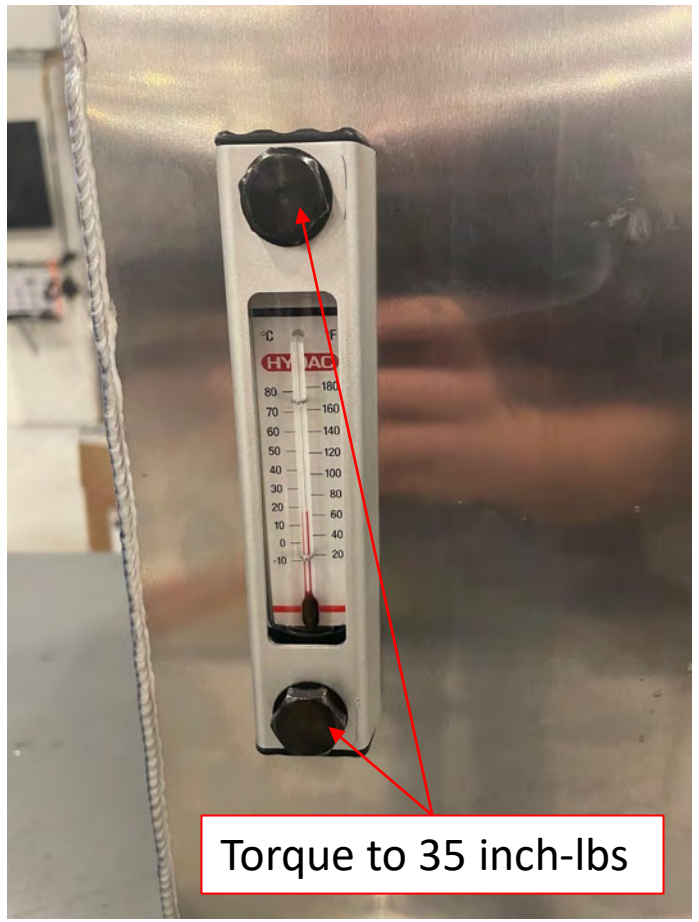




Now install the sight glass assembly into the M12 x 1.75mm tapped holes. Use the large black hex nuts above and below the sight gauge to tighten to below listed specifications and install.







Sight glass and suction strainer assembly installed.



Next, re-install the auxiliary suction port Q.D. connector into the right-hand side of aluminum tank.



Thread the Q.D. connector assembly into the SAE-12 port leaving the connector at a 30–45-degree angle up and tighten lock nut until it stops and cannot be tightened any further.



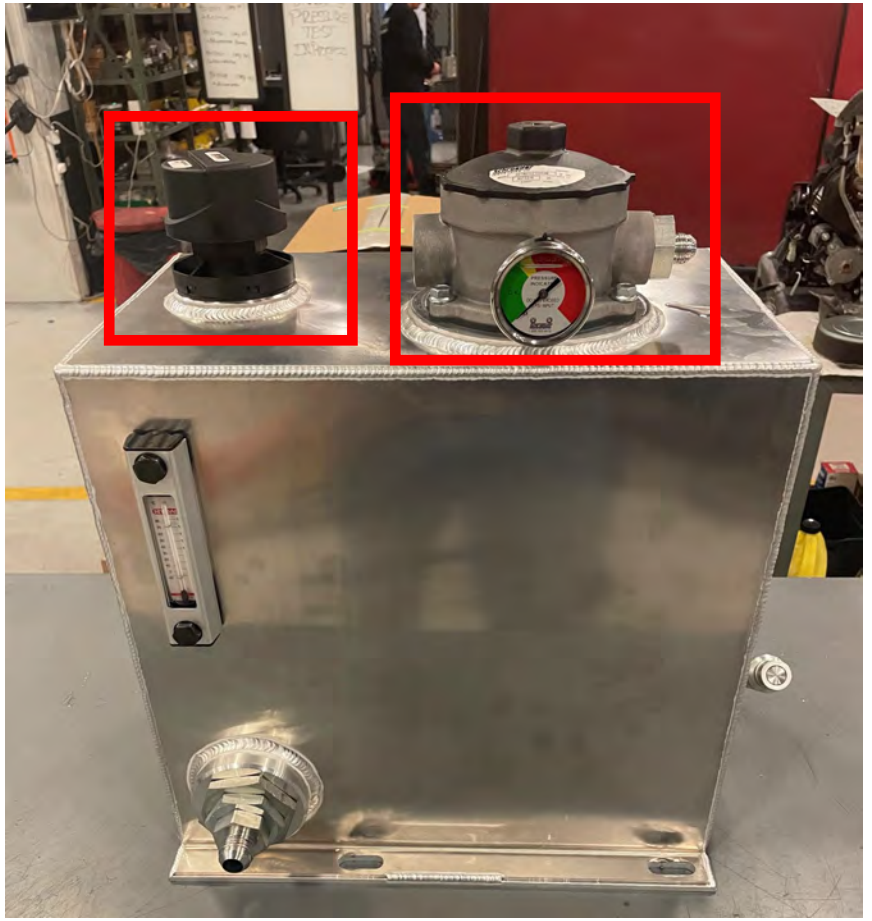




Auxiliary suction port QD connector installed



Lastly, the return line filter housing and breather/fill cap assemblies need to be re-installed to the top of the aluminum tank.



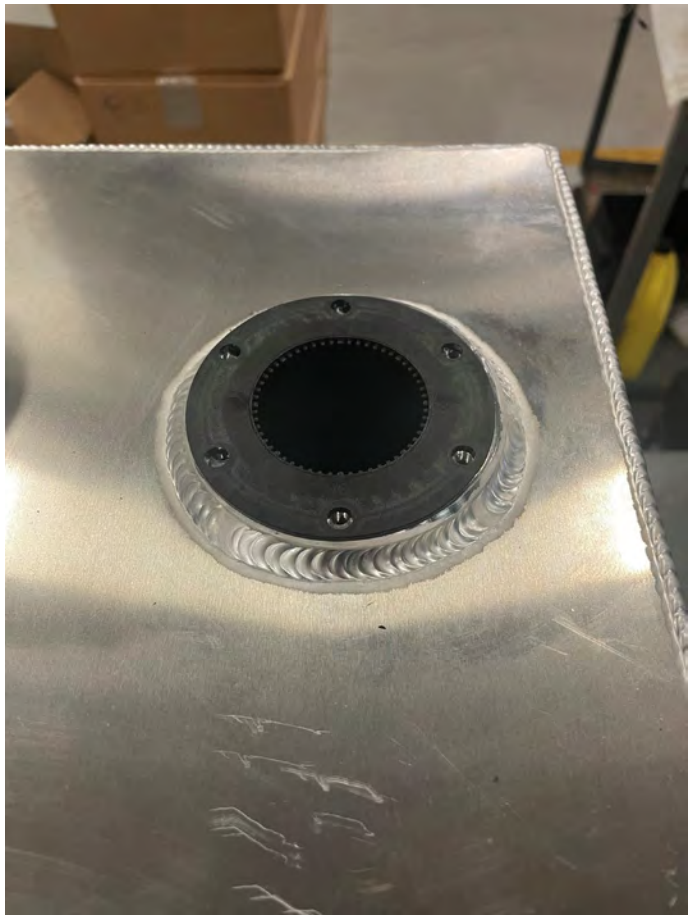
The breather/fill cap and return line filter housing will mount to the open ports/flanges on the top of the aluminum tank. Smaller (left) flange opening is for the breather/fill cap, and the larger (right) flange opening is for the return line filter housing.



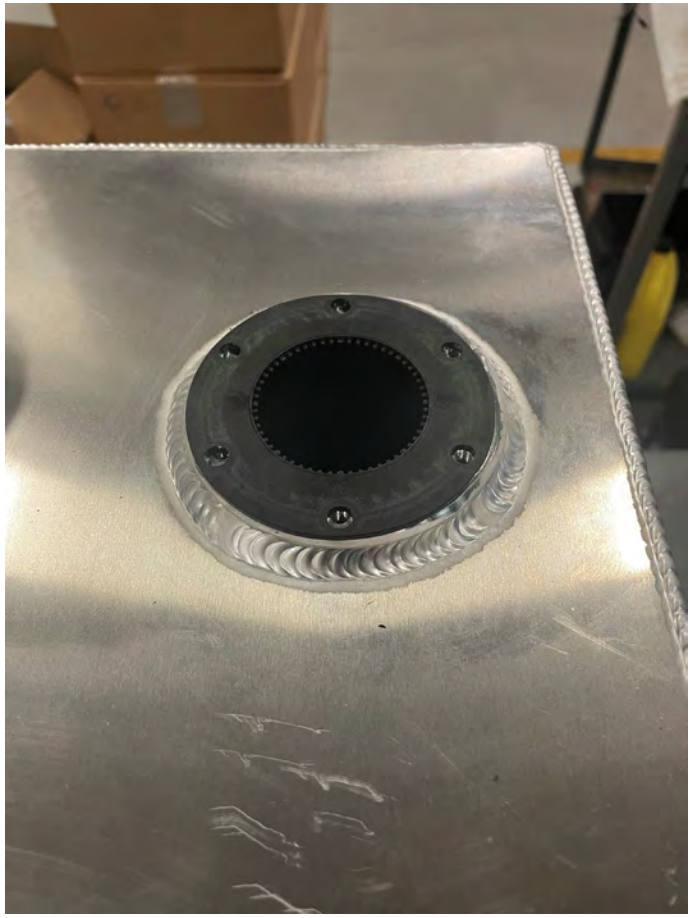
The breather/fill cap housing will be installed with the 6 Phillips head screws into the smaller flange port tapped M5x0.8 holes. Place the strainer gasket into the opening before placing the cap housing in place and threading the M5 screws into the holes.







With the cap housing in place on top of the strainer gasket, line up the screw holes and tighten all 6 Phillips M5x0.8 screws as per the torque specification below. Install the breather cap hand tight into the threaded cap housing.







Now place the return line filter housing into the large flanged port opening.







Orient the housing so that the pressure gauge faces the side of the tank with the sight gauge, and the open male JIC hydraulic fitting is facing the side of the tank with the Auxiliary suction line QD port.





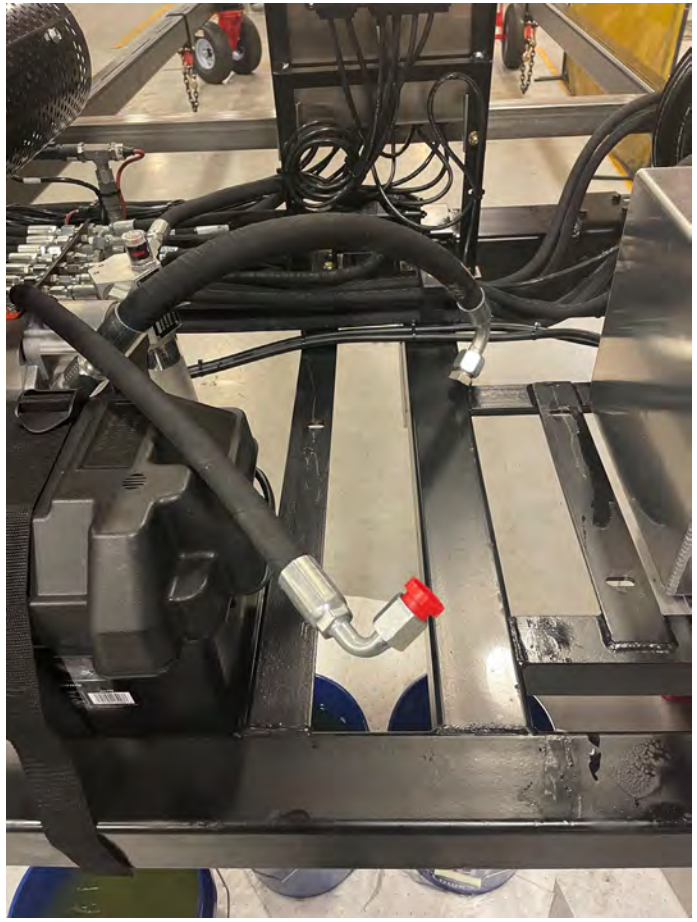
Once positioned correctly, mount the housing to the tank using the supplied 5/16-18 hex head screws and tighten to the torque specification listed below.



All reservoir accessories installed.



Finally, we'll install the new aluminum reservoir (with all the accessories mounted) on the Podzilla power rack frame. Your lift will either be already on the ground, or your lift was shipped from RG on a flatbed truck requiring a tank to be installed before the lift is operational

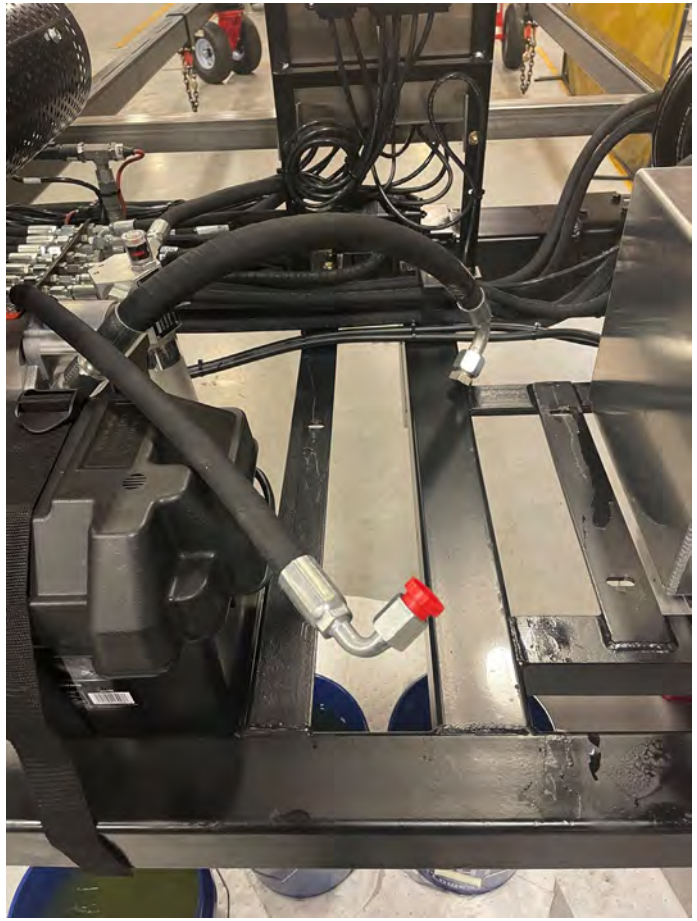




For units still on the flatbed truck, please follow the next few slides on the installation instructions while the lift is still on the truck bed.



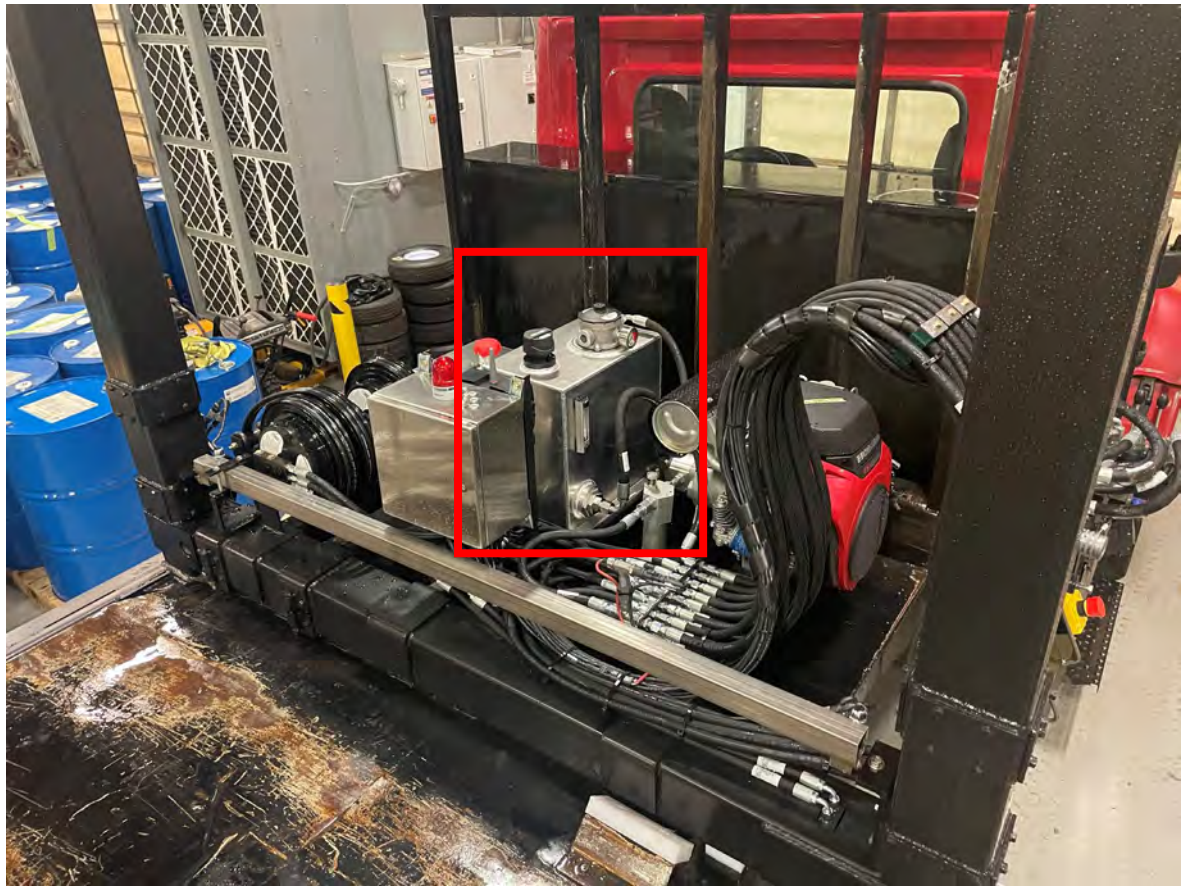
For units already off the flatbed truck on the ground, please jump to slide 57

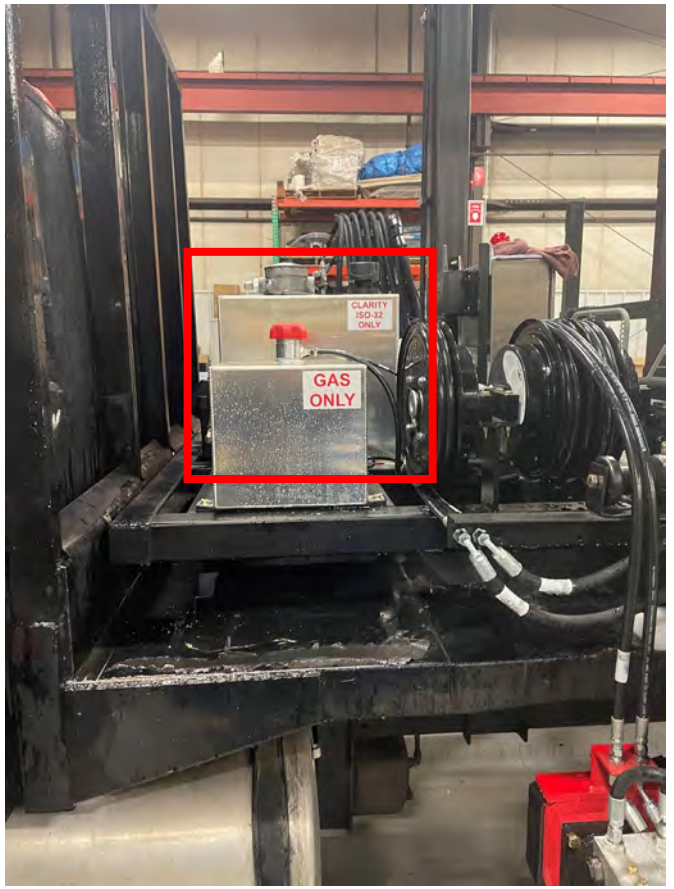


For units still on the flatbed truck, first make sure the tank area is clear and all hoses are pulled back out of the way. We also suggest putting a spill matt on the truck bed itself underneath the power rack.



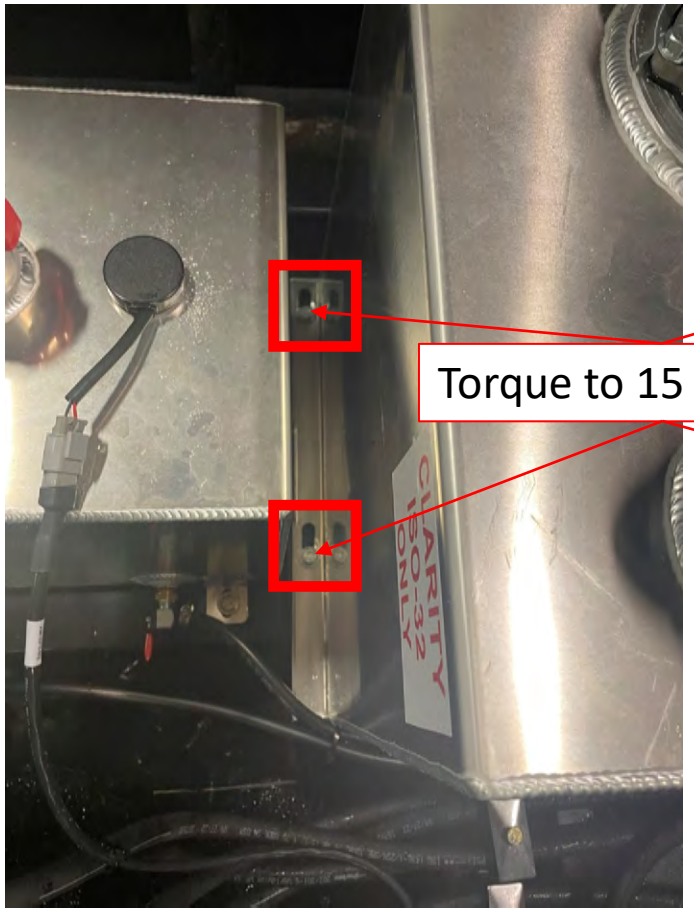
Next, place the new aluminum reservoir (with all the accessories mounted to it) on the Podzilla power rack frame. Orient the tank so the Aux. suction port Q.D. connector is facing towards the truck cab.

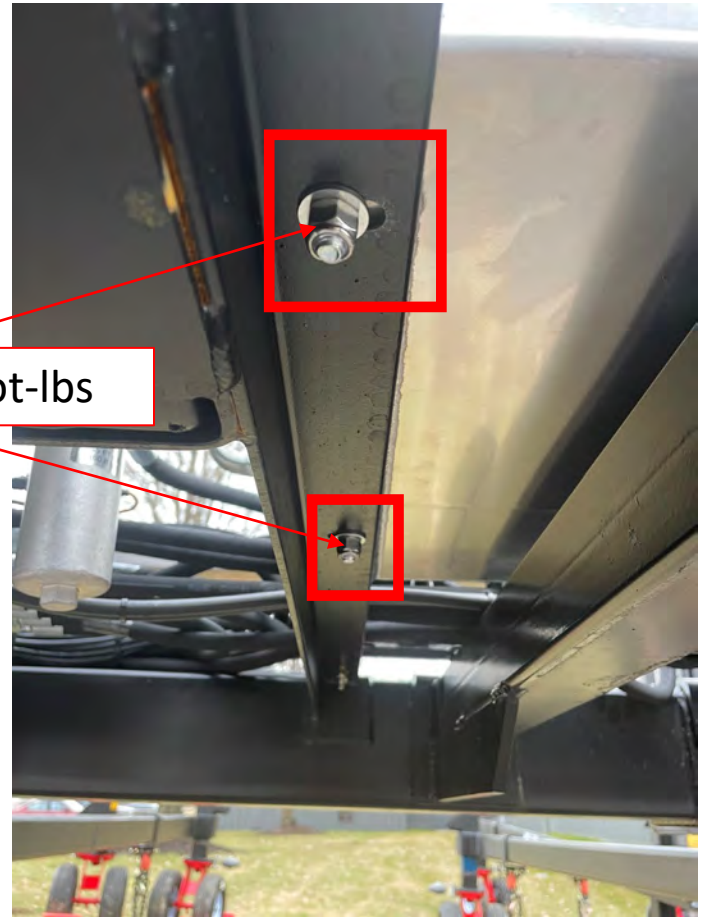




Align the lefthand slots on the aluminum tank mounting tab with the frame mounting holes in the power rack. Drop in the supplied 3/8-16 x 1.25” hex head bolts and put the 3/8” nylon locking nuts on the bottom side of the bolts. Flat washers will be used at both the head of the bolt and the nylon locking nut. Tighten as specified below.

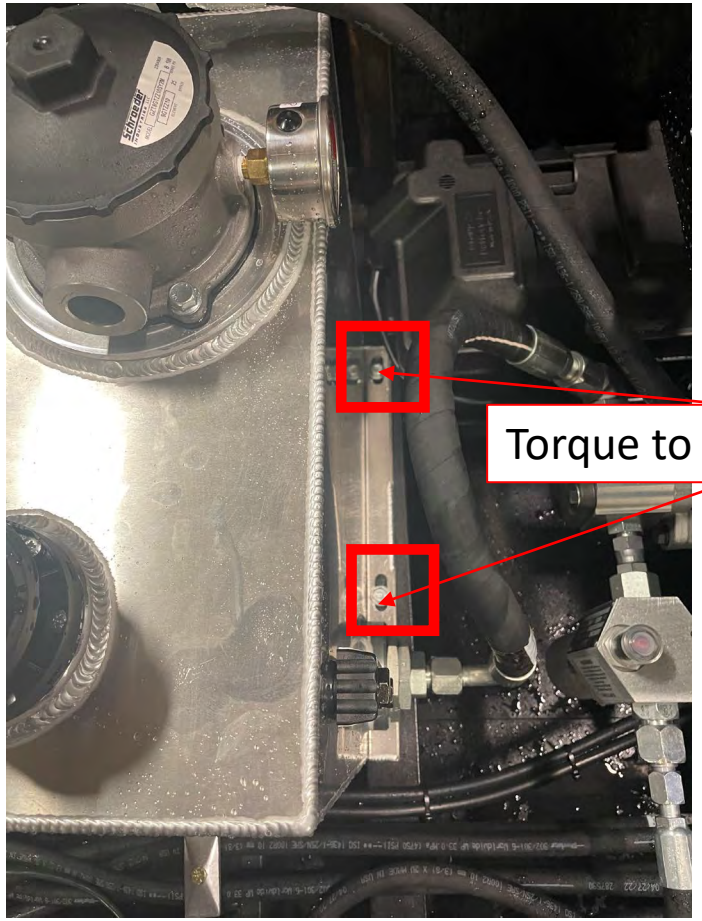


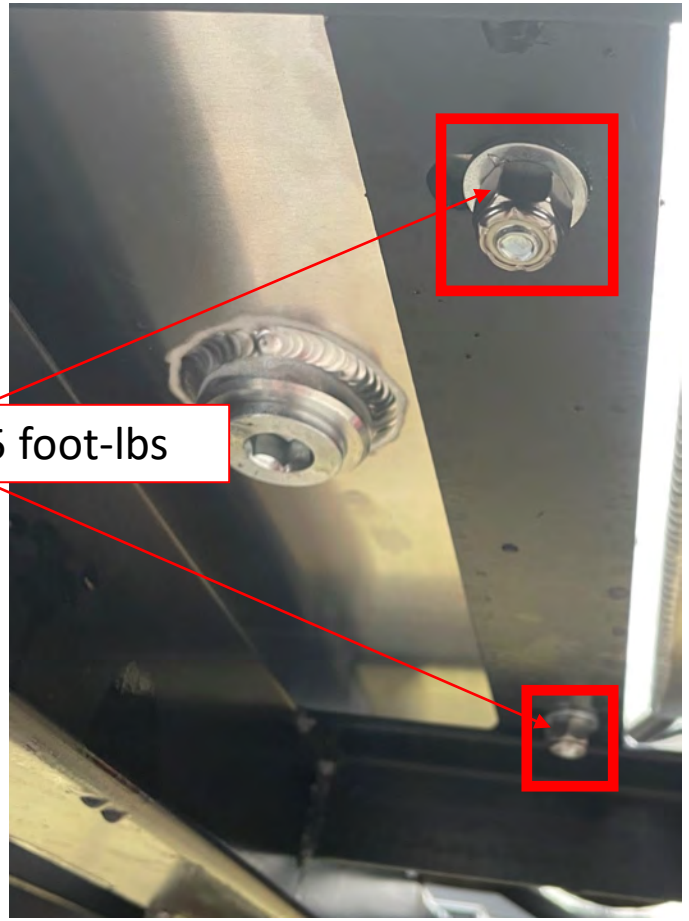




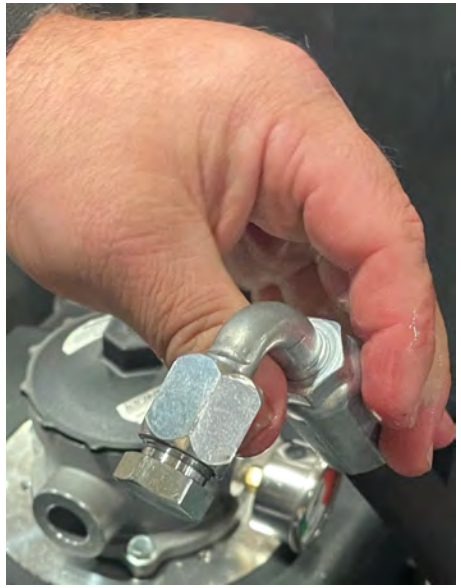
Align the righthand slots on the aluminum tank mounting tab with the frame mounting holes in the power rack. Drop in the supplied 3/8-16 x 1.25” hex head bolts and put the 3/8” nylon locking nuts on the bottom side of the bolts. Flat washers will be used at both the head of the bolt and the nylon locking nut. Tighten as specified below.

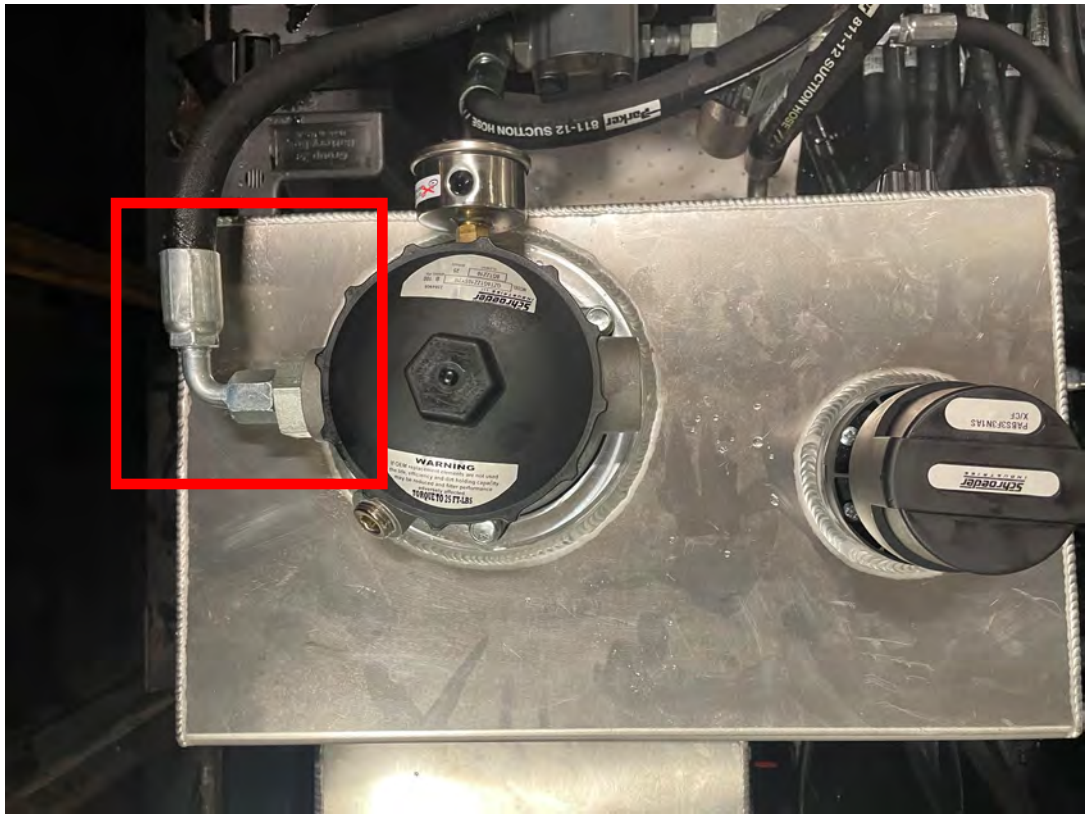




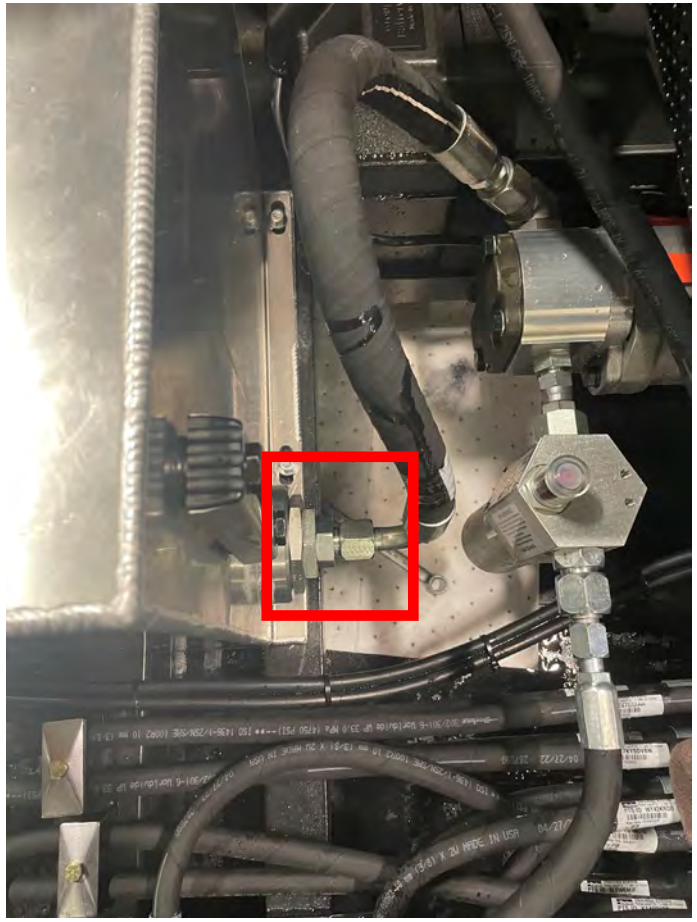


Remove the plug on the return line and connect it to the male fitting on the filter housing and tighten securely. (no leaks under normal system pressure)





Connect the gear pump suction line to the suction strainer fittings on the aluminum tank and tighten securely. (no leaks under normal system pressure)



Remove fill port cap and add hydraulic oil from 5-gallon buckets back into the tank.





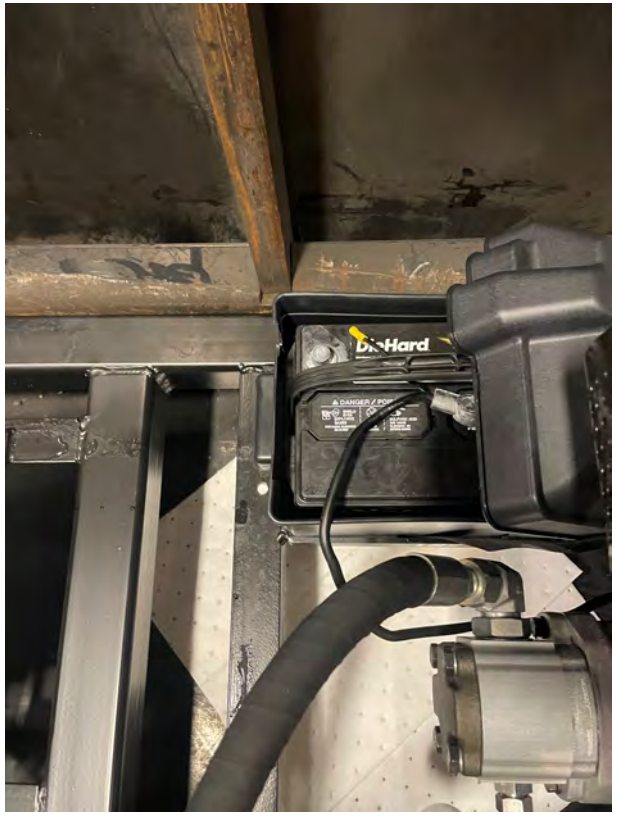
The sight gauge on the aluminum tank should register somewhere just above the red “HYDAC” logo. But be sure not to over fill the tank.

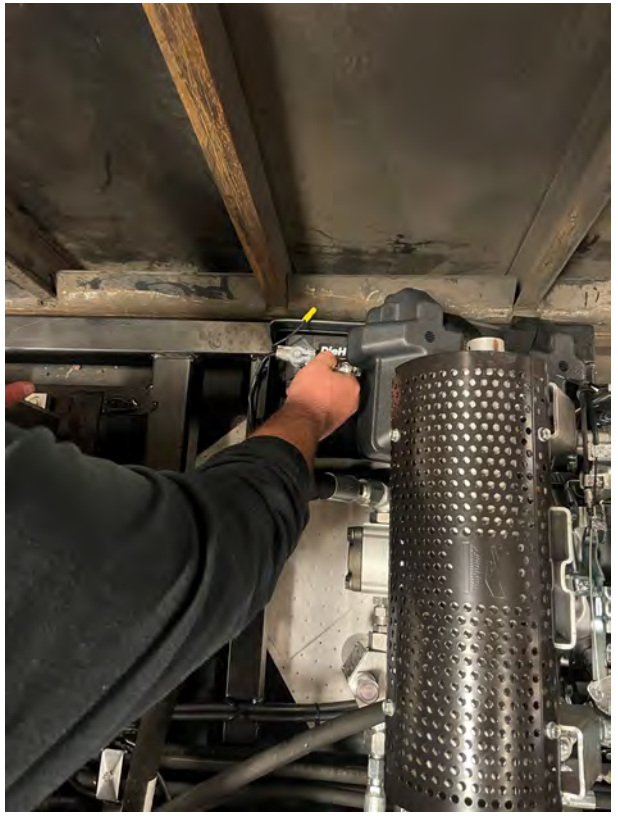


Replace the fill port breather cap and securely hand tighten the cap.



The last step in making the Podzilla operational is reconnecting the negative battery cable to the negative battery terminal post and putting the battery box lid back on.



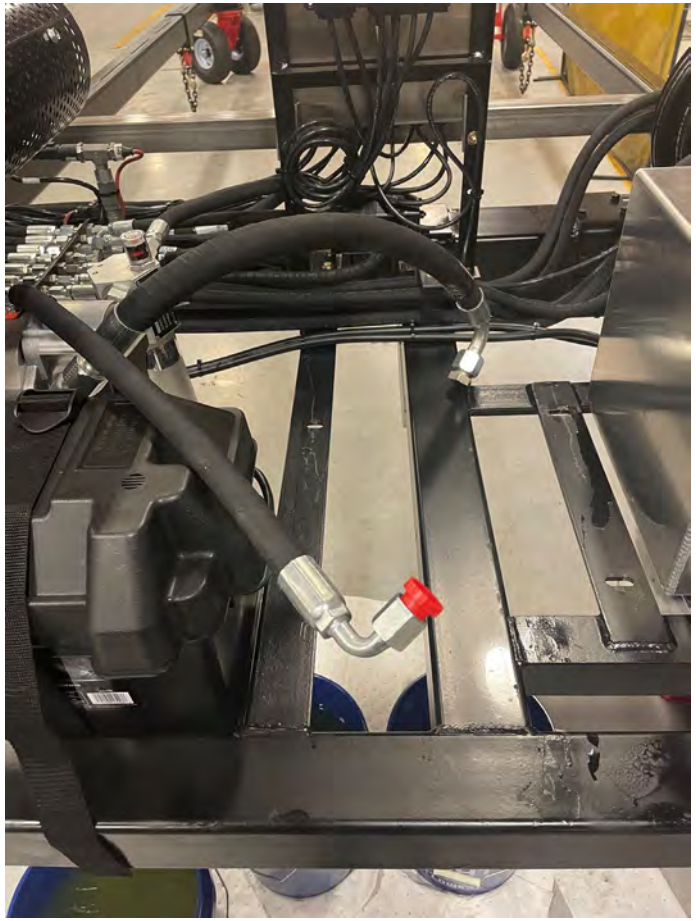




All steps complete, Podzilla is ready for the normal unloading operation off the flatbed truck.



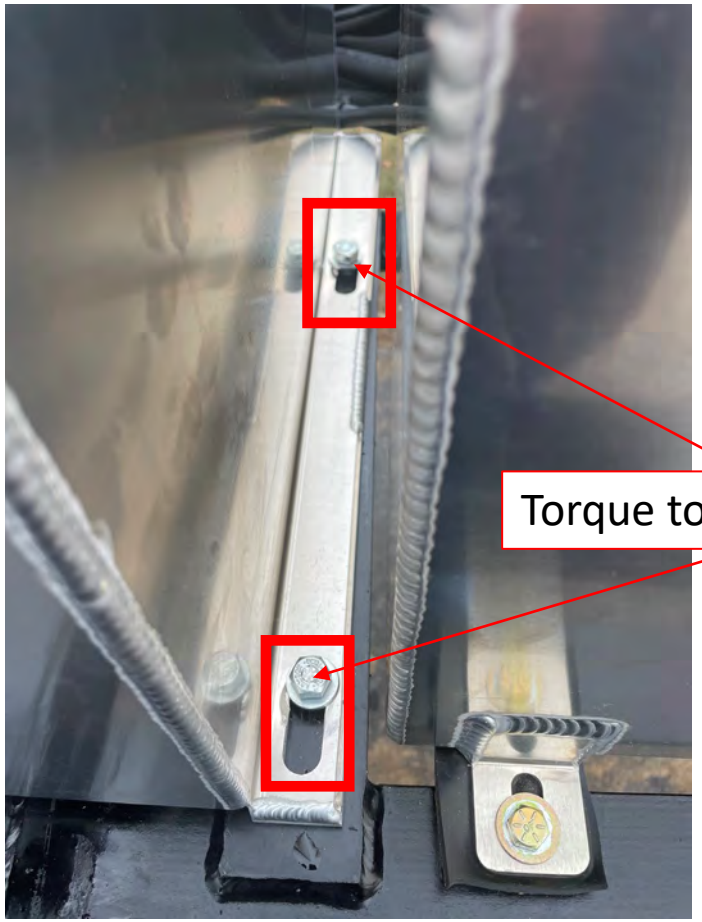
Installation of the new aluminum reservoir (with all the accessories mounted to it) for lifts on the ground and off the truck flatbed. Place the new aluminum tank on the Podzilla power rack frame. The new tank will align with the current holes in the power rack frame used for mounting the plastic tank strap bolts. Orient the tank so the Aux. suction port Q.D. connector is facing outwards and away from the container.

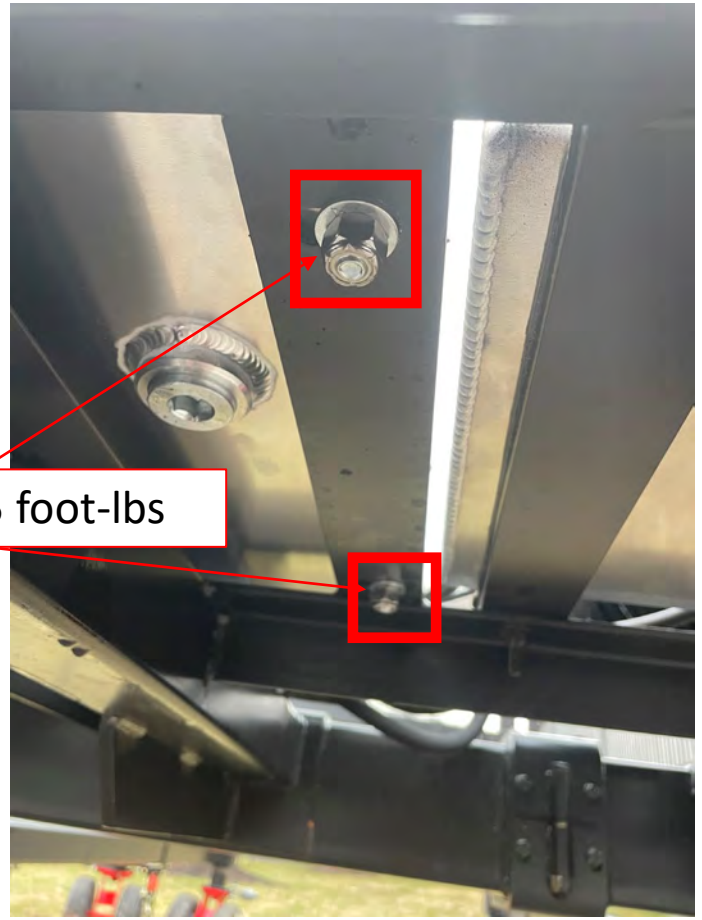




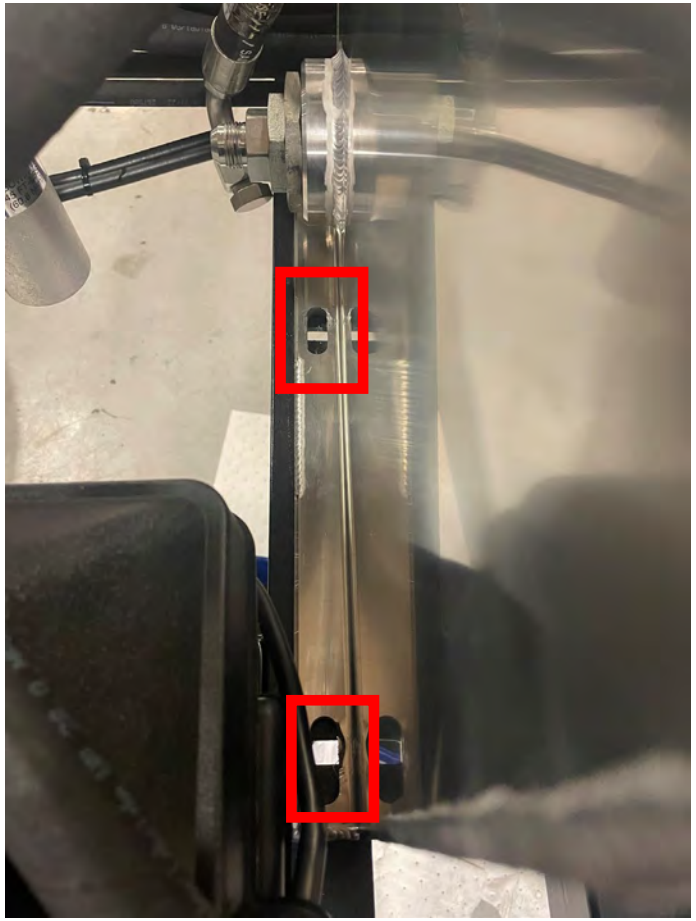
Align the righthand slots on the aluminum tank mounting tab with the frame mounting holes in the power rack. Drop in the supplied 3/8-16 x 1.25” hex head bolts and put the 3/8” nylon locking nuts on the bottom side of the bolts. Flat washers will be used at both the head of the bolt and the nylon locking nut. Tighten as specified below.

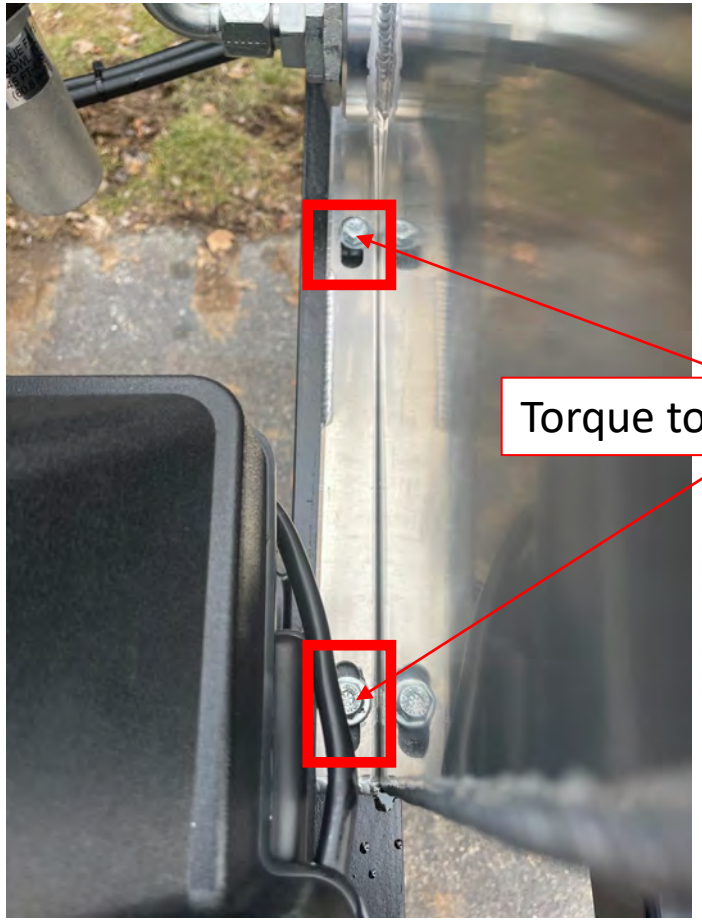


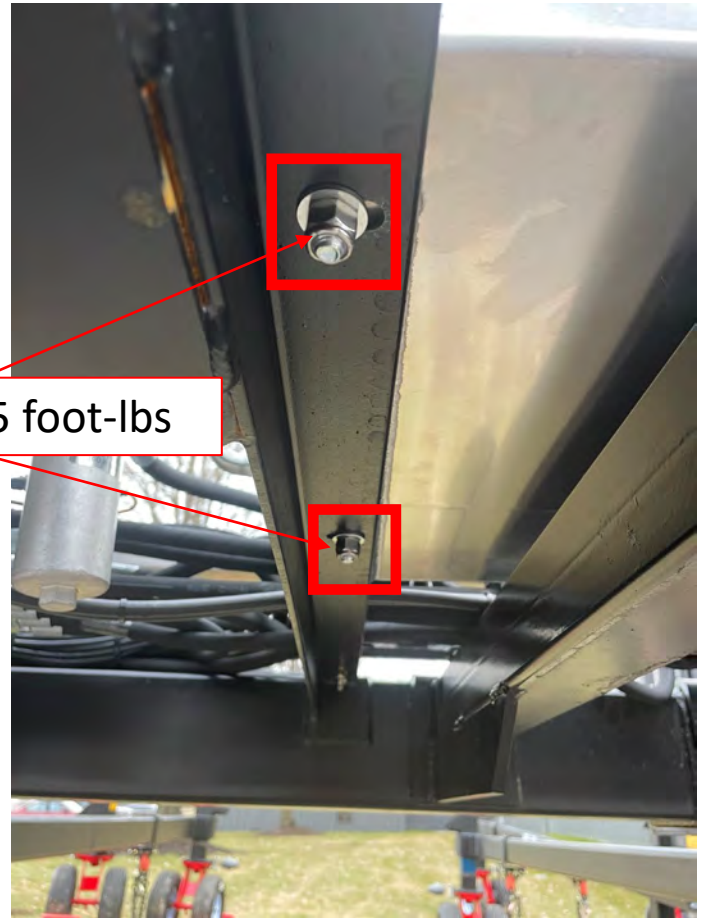




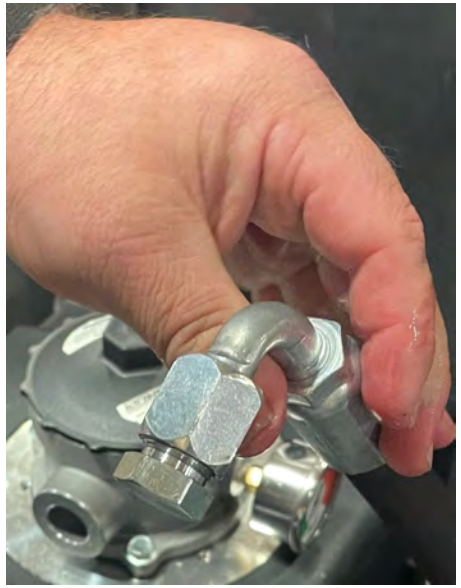
Align the lefthand slots on the aluminum tank mounting tab with the frame mounting holes in the power rack. Drop in the supplied 3/8-16 x 1.25” hex head bolts and put the 3/8” nylon locking nuts on the bottom side of the bolts. Flat washers will be used at both the head of the bolt and the nylon locking nut. Tighten as specified below.

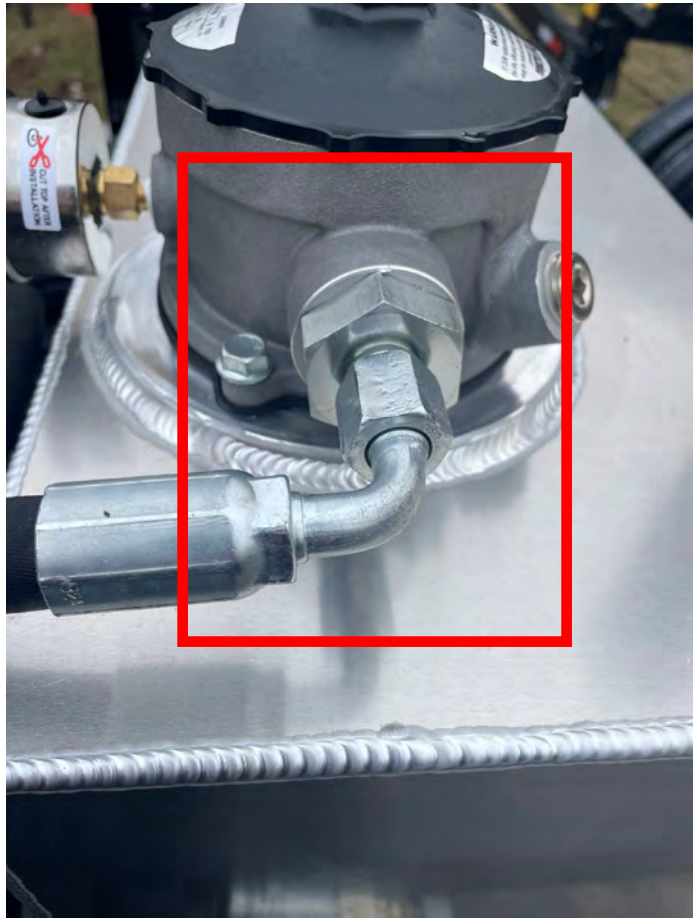






Remove the plug on the return line and connect it to the male JIC fitting on the filter housing and tighten securely. (no leaks under normal system pressure)





Connect the gear pump suction line to the suction strainer fittings on the aluminum tank and tighten securely. (no leaks under normal system pressure)



Both lines reconnected to the aluminum reservoir.



Take the oil from the 5-gallon buckets saved from draining the plastic reservoir and add this fluid back into aluminum tank via the top mounted fill port.





The sight gauge on the aluminum tank should register somewhere just above the red “HYDAC” logo. But be sure not to over fill the tank.



Replace the fill port breather cap and securely hand tighten the cap.



The last step in making the Podzilla operational is reconnecting the negative battery cable to the negative battery terminal post.





Re-install lid to battery box and secure tightly with strap.



All steps complete, Podzilla is ready for normal operation

