

Introduction.

This document provides the instructions necessary to replace the AirStar compressor storage tank using AirStar Storage Tank Replacement Kit, PN 85234. Make sure to read the entire document before proceeding with the installation.

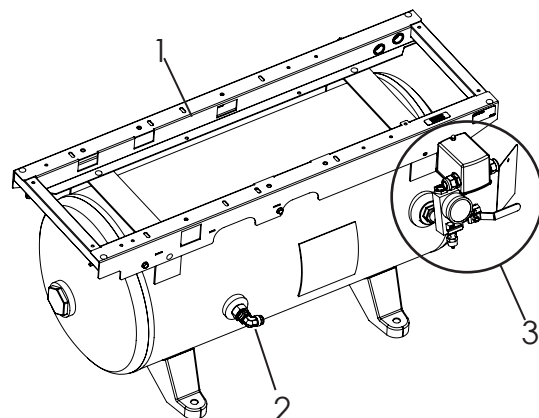
Important Information

Service Personnel	All personnel servicing the AirStar <u>must</u> read and understand the Operator's Manual before operating or performing any service of the unit. Only a trained technician from a qualified Air Techniques dealer should perform any service.
Power Removal	Never work on equipment connected to live power. A professional electrician is recommended to safely remove mains power to the unit prior to performing any replacement procedures.
Tank Pressure	Prior to performing the replacement procedures, make sure to depressurize the storage tank to be replaced.
Hardware	Keep all hardware while removing components from the tank, as it will be reused on the replacement tank. Make sure to note (tag if necessary) the routing of all pneumatic hoses and wires as the rerouting will need to be recreated on the new tank. Take pictures for reference if necessary.

Tools required but not supplied

- ☐ Torque wrench
- ☐ Channel locks
- ☐ 3/8 - inch socket
- ☐ 1/4 - inch socket
- ☐ Adjustable wrench tool
- ☐ 3/8 - inch box end wrench

Major components supplied (Kit, PN 85234)



- 1. Tank with chassis
- 2. Check valve
- 3. Tank outlet assembly

Step 1: Remove the Cooler/Dryer Assembly

1. Drain Dryer Bowl by slowly twisting the bottom gray fitting to depressurize.
2. Disconnect 12mm flamex hose from check valve.
3. Disconnect 10mm flamex hose from the cooler's bottom elbow.
4. Disconnect braided hose from the cooler's top elbow.
5. Access the Electrical Box internal wiring by removing side screw 1 and 2 securing the door. Carefully swing the door down and perform the following.
 - a. Remove the ground nut and disconnect the cooler ground wire.
 - b. Disconnect the two cooler power wires from the contactor.
 - c. Remove Strain Relief Gland Nut from inside the Electrical Box and remove the cooler wire harness from the Electrical Box. A #2 screw driver with a cylindrical shank may be used to open up the strain relief gland and to push the connectors through.

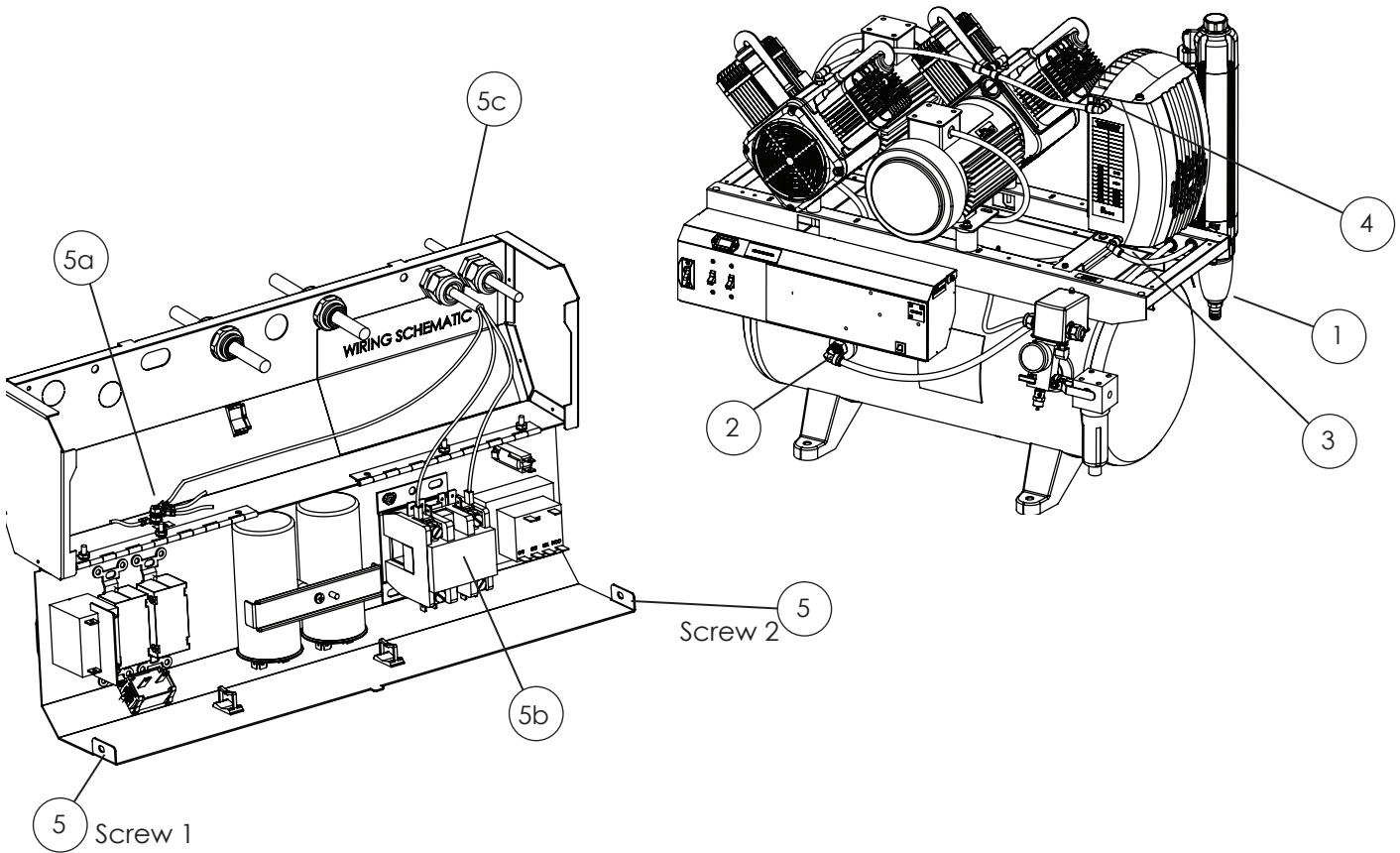


Figure 1. Cooler/Dryer Flamex Hose, Power and Wire Harness Connection Locations

6. Remove the two hex screws holding the cooler mounting bracket to the chassis.
Some force will be required for the self-tapping screws to create the threads on blind holes.
7. Remove Cooler/Dryer with mounting bracket and Flamex hoses attached.

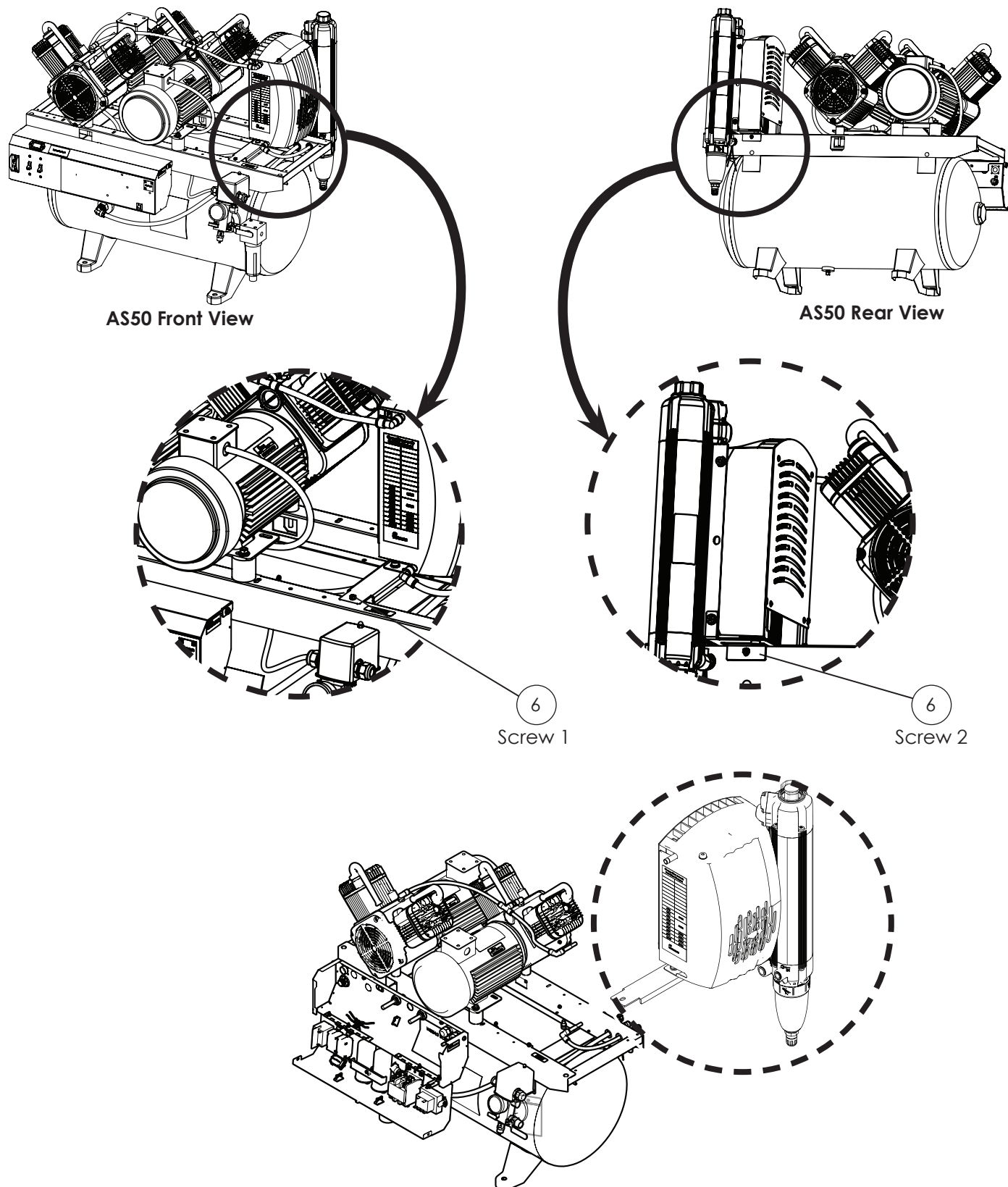


Figure 2. Cooler/Dryer Securing Screws Location

Step 2: Remove the Electrical Box

1. Remove wire harnesses from each motor as follows.
 - a. Remove the motor(s)'s top plate of each junction box.
 - b. Disconnect the three lugs and unscrew the ground wire.
 - c. Remove Strain Relief Nut from inside the junction box and separate the wire harness from the motor.
2. Remove the cover from the Pressure Switch by releasing the top captive nut. Remove the wire harness from Pressure Switch.
3. Remove the two hex screws inside the Electrical Box. Remove the Electrical Box from the chassis.

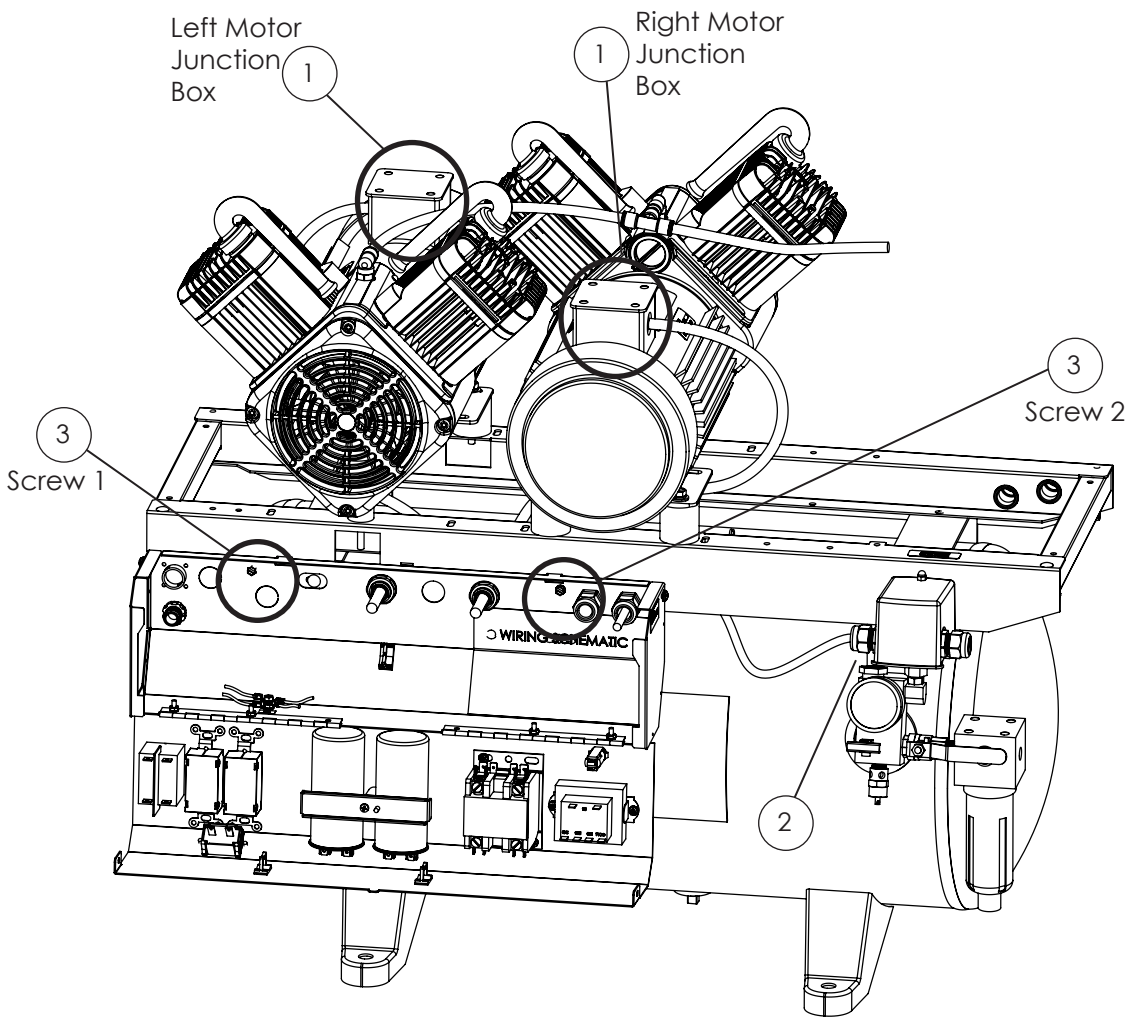


Figure 3. Electrical Box Removal from Chassis

Step 3: Remove Left and Right Motors

1. Disconnect pneumatic braided hose assemblies from the left and right motors.
2. Remove the nut securing the left motor to the front chassis rail. The nut is accessed through a cutout in the face of the chassis rail.
3. Remove the two (2) nuts and washers securing the left motor to the two (2) shock mounts installed on the chassis rail. Lift and remove the left motor from the shock mounts.
4. Remove the nut securing the right motor to the rear chassis rail. The nut is accessed through a cutout in the face of the chassis rail.
5. Remove the two (2) nuts and washers securing the right motor to the two (2) shock mounts installed on the chassis rail. Lift and remove the motor from the shock mounts.
6. Remove the shock mounts from the chassis rails and transfer the mounts to the replacement tank chassis rails.

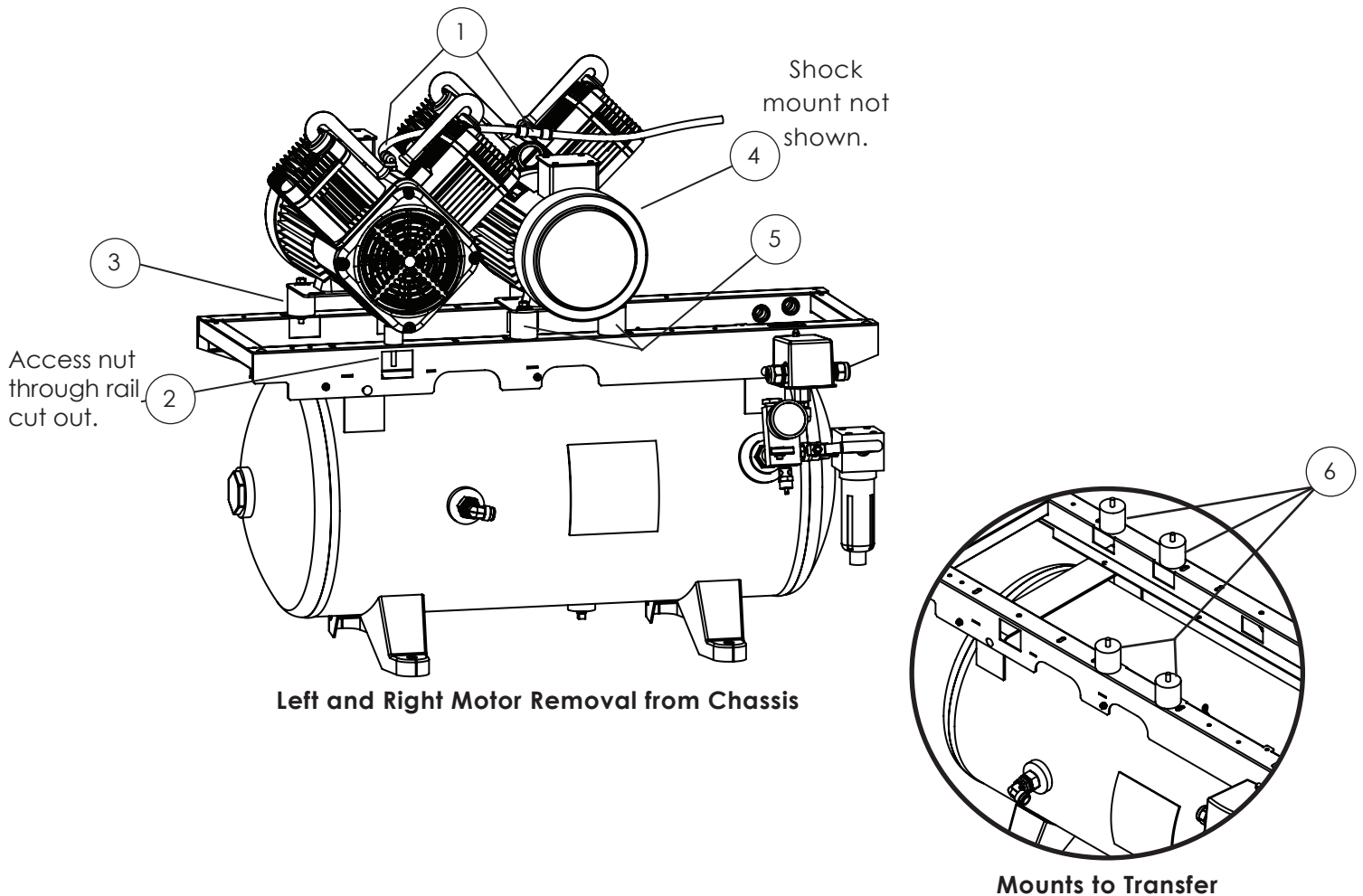


Figure 4. Motor and Mounts Removal from Chassis

Step 4: Outlet Filter and Leveling Feet Replacement (See Figure 5)

1. Remove bowl and the filter element and place to the side for later installation.
2. Remove Outlet Filter Body and nipple; place to the side for later installation.
3. Replace damaged tank with new one supplied. Orient for installation and install leveling feet on new tank as necessary.

Note: Use pipe sealant or Teflon tape as necessary.

4. Install new nipple supplied in kit envelope into Outlet Filter body. Clean female threads before installing the new nipple.
5. Install the Outlet Filter Body with new nipple onto the new tank.
6. Install bowl and filter element to the Outlet Filter Body.

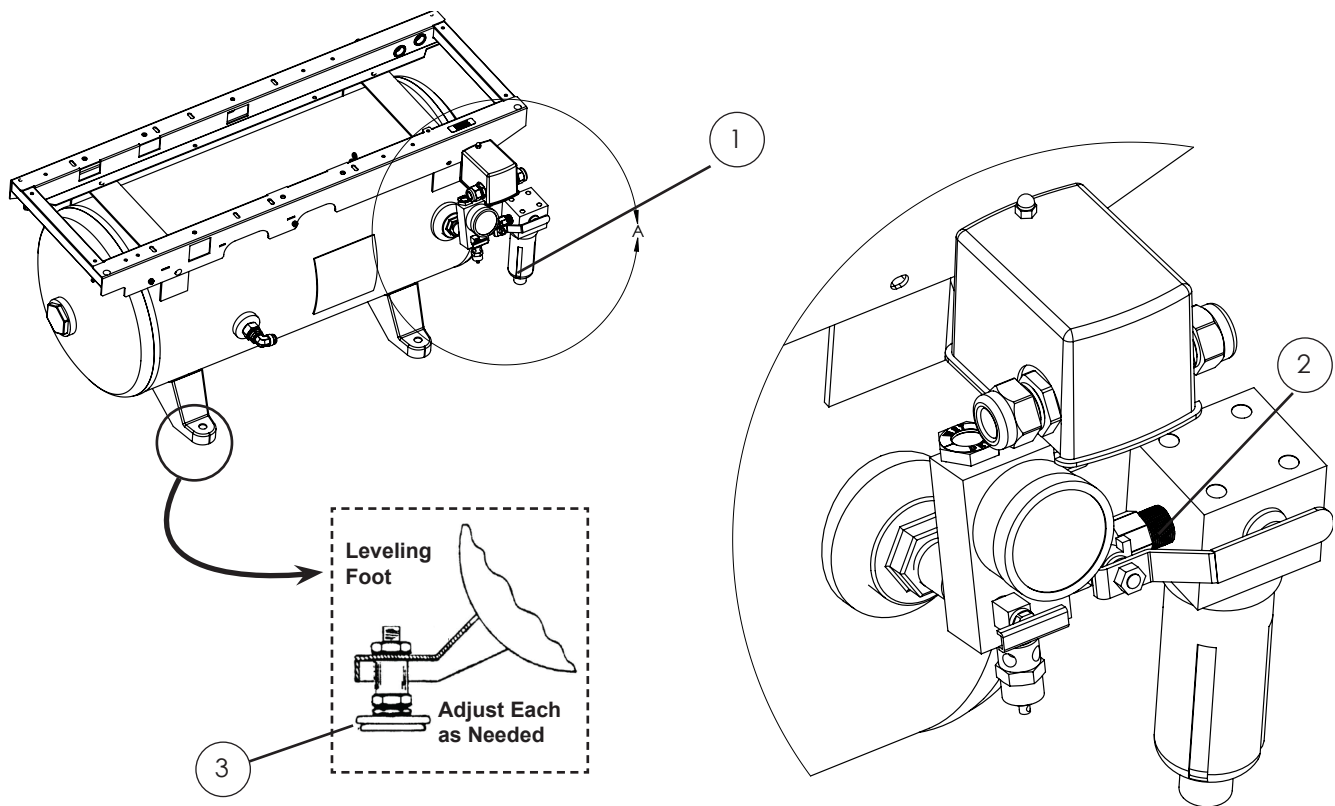


Figure 5. Outlet Filter Replacement

Step 5: Install Left and Right Motors (See Figure 4)

1. Make sure that the shock mounts are securely mounted to the replacement tank chassis rails.
2. Lower the right motor onto the shock mounts. Using the two (2) nuts and washers, secure the right motor to the two (2) shock mounts installed on the chassis rail.
3. Install the nut securing the right motor to the rear chassis rail. The nut is accessed through a cutout in the face of the chassis rail.
4. Lower the left motor onto the shock mounts. Using the two (2) nuts and washers, secure the left motor to the two (2) shock mounts installed on the chassis rail.
5. Install the nut securing the left motor to the front chassis rail. The nut is accessed through a cutout in the face of the chassis rail.
6. Connect pneumatic braided hose assemblies to the left and right motors.

Step 6: Install the Electrical Box (See Figure 3)

1. Align screw holes of the Electrical Box with the screw holes of the chassis and secure with the two hex screws. Take care to route and place wire harnesses appropriately before fully securing.
2. Install the wire harness to the Pressure Switch. Replace the cover by tightening the top captive nut.
3. Install wire harnesses to each motor as follows.
 - a. If necessary, remove the motor(s)'s top plate of each junction box.
 - b. Install the Strain Relief Nut from inside the Electrical Box.
 - c. Connect the three lugs by matching colors and secure the ground wire.

Step 7: Install the Cooler/Dryer Assembly (See Figures 1 and 2)

1. Align the screw holes of the cooler mounting bracket with the screw holes of the chassis and secure with the two hex screws. Be sure to route wire harness and hoses appropriately while mounting the assembly.
2. Connect 12mm flamex hose to check valve.
3. Connect 10mm flamex hose to the cooler's bottom elbow.
4. Connect braided hose to the cooler's top elbow.
5. Push the connectors of the cooler wire harness through the Strain Relief Gland and Gland Nut inside the Electrical Box. Use a #2 screw driver with a cylindrical shank to open up the Strain Relief Gland if necessary.
6. Connect the Electrical Box internal wiring by performing the following
 - a. Connect the cooler power wires.
 - b. Install ground wire and tightening the nut to 35 in-Lb.
7. Secure the wire harness with associated Strain Relief nut.
8. Swing the Electrical Box door up, align the side screw holes and install side screw 1 and 2 securing the door.

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