Proper protection, such as gloves, eyewear, and aprons, are recommended when handling a pump.

eOne - Small Capacity Pump Rebuild Instructions

In this document we cover the steps on how to rebuild the **eOne Basic, eOne MA, eOne MF, and eOne Plus** small capacity pump listed in charts below. It can be performed with the pump still mounted on the wall. It's best to perform the rebuild in a clean area, so make sure to cover the chemical bucket so you don't lose any parts.

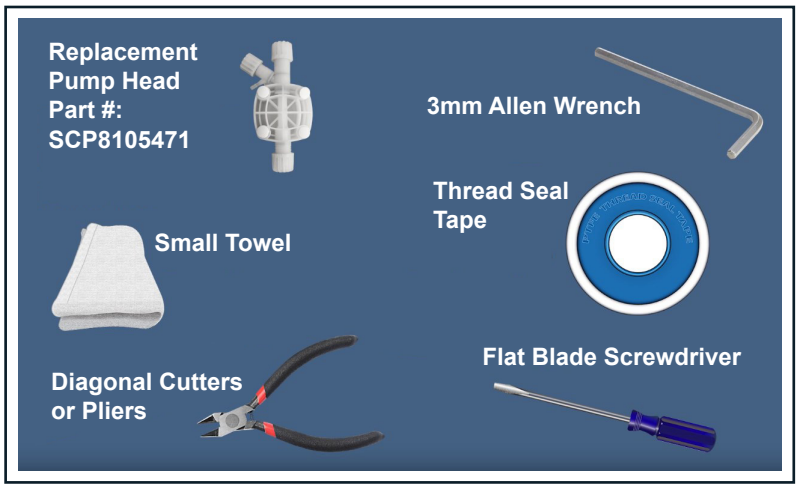
eOne Basic Versions Covered

Version	Flow Rate	
0210	0.53 GPH	2 LPH
0507	1.32 GPH	5 LPH

NOTE: This document uses the eOne MF pump in the steps as an example. Your pump may look different.

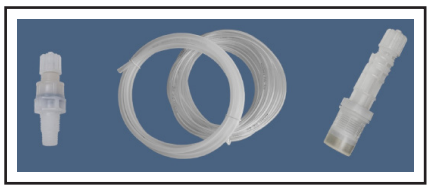
eOne MA, eOne MF, eOne Plus Versions Covered

Version	Flow Rate	
0110	0.26 GPH	1 LPH
0216	0.53 GPH	2 LPH
0420	1.06 GPH	4 LPH
0607	1.59 GPH	6 LPH
0710	1.85 GPH	7 LPH
1012	2.64 GPH	10 LPH
1505	3.96 GPH	15 LPH



To start you will need:

- A 3mm Allen Wrench
- Diagonal pliers or cutters
- Thread seal tape
- Small towel
- Flat blade screwdriver
- Replacement Pump Head **Part #: SCP8105471**
- Tubing Kit **Part #: SCO0030022**



Tubing Kit

Part #: SCO0030022

(Includes Injection Valve, Tubing, and Foot Filter)

MAINTENANCE TIP: The simplest way to perform maintenance on the **eOne** pump, is to run fresh water through the unit between uses. This helps prevent build-up inside the Foot Filter, Pump Head, Injection Valve, and Tubing, allowing for these components to last longer.

Proper protection, such as gloves, eyewear, and aprons, are recommended when handling a pump.

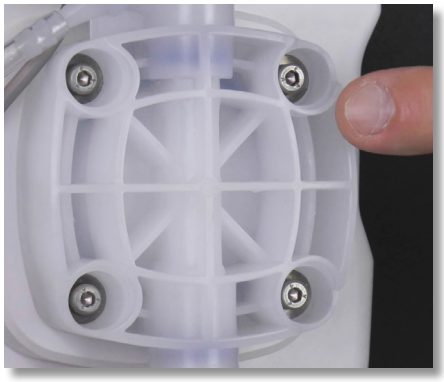
eOne - Small Capacity Pump Rebuild Instructions

PUMP HEAD

Step 1: Before rebuilding the **eOne** pump, disconnect the unit from the power supply and turn off the water.

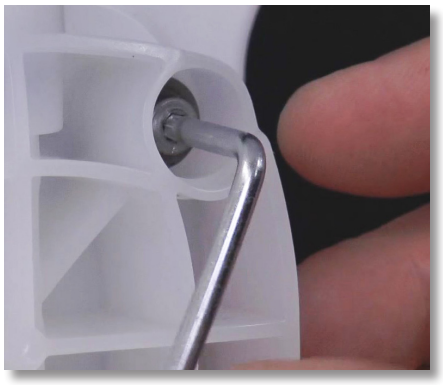
Step 2: In order to remove the Pump Head, use your finger or a flat blade screwdriver and take off the four white caps at the corners of the Pump Head.

Discard the white caps.



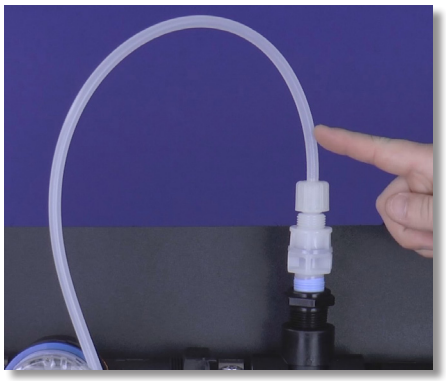
Step 3: Locate the Pump Head screws.

eOne - Small Capacity Pump Rebuild Instructions

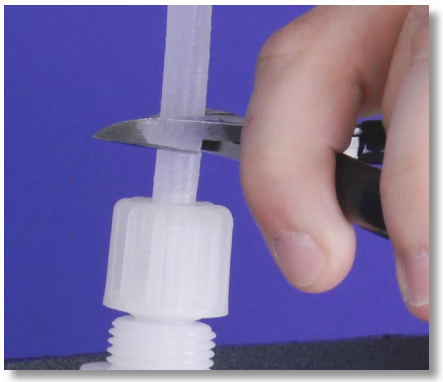


Please pay careful attention through the removal of the used pump head and connected tubing.

Step 4: Using the Allen wrench, loosen each screw, but do not entirely remove them. Only loosen until the Pump Head can be removed by hand from the pump itself. Do not remove the Pump Head yet.



Step 5: Locate the used rigid Discharge tubing connected to the old Injection Valve.

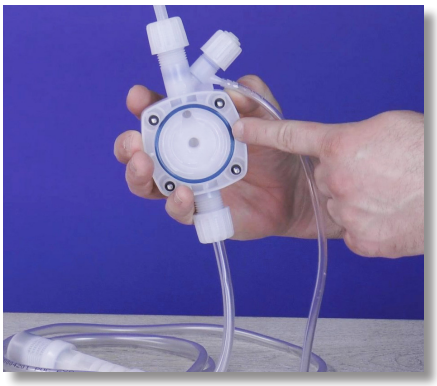


Step 6: Use the diagonal pliers or cutters to cut the tube as close to the old Injection Valve as possible.

Keep the tube upright to ensure no remaining chemical spills out.

eOne - Small Capacity Pump Rebuild Instructions

Step 7: Set the diagonal pliers down and use the same hand to remove the Pump Head along with the connected tubing and Foot Filter. They should all come off as one piece.



Step 8: Once removed, check the backside of the pump head to see if the blue o-ring is in the groove.

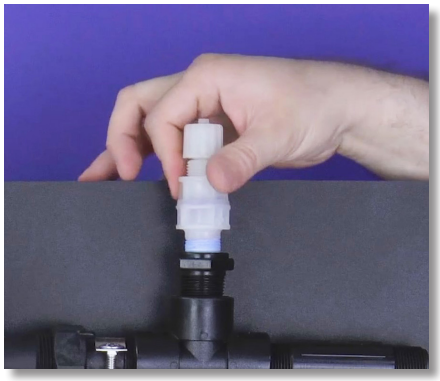
NOTE: If the blue o-ring is attached to the Pump Head, discard the Pump Head along with the blue o-ring, connected tubing, and Foot Filter. Skip to Step 11.

Step 9: If the blue o-ring is not there, still discard the Pump Head and connected items, but check to see if the blue o-ring is stuck to the **eOne** pump.

eOne - Small Capacity Pump Rebuild Instructions

Step 10: If so, remove and discard the blue o-ring now. This can be done with your finger or flat blade screwdriver.

Step 11: Using the small towel, wipe clean the diaphragm and any other chemical stricken parts on the pump.



Step 12: Unscrew, disconnect, and discard the old Injection Valve from the installation saddle or tee.

eOne - Small Capacity Pump Rebuild Instructions

Step 13: Locate the Pump Head bag, along with the four (4) new small white caps.

Step 14: Take the four (4) new small white caps out of its bag, and set the white caps aside.

Step 15: Take the new Pump Head out of its bag, and turn it over so you are looking at the backside of the pump head.

Check to see if the large, blue o-ring sits in the groove.

If not, look to see if it fell out in the pump head bag or call Dilution Solutions for assistance at 1-800-451-6628.

eOne - Small Capacity Pump Rebuild Instructions

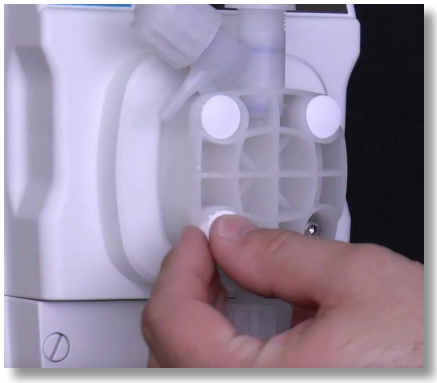
Step 16: Insert the large, blue o-ring into the groove on the backside of the Pump Head.

Step 17: To install the new Pump Head, align it so that the Y-shape points upward on the **eOne** pump.

Step 18: Use the Allen wrench to carefully hand-tighten the four (4) Pump Head screws in a crisscross pattern until evenly snug.

Do not overtighten. This keeps the Pump Head aligned and on straight.

eOne - Small Capacity Pump Rebuild Instructions

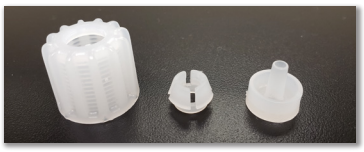


Step 19: To finish up, take the four (4) new, small white caps you set aside earlier, and put one (1) over each screw.

DISCHARGE VALVE

Step 20: To continue the rebuild, locate the Discharge Valve at the top of the Pump Head.

Step 21: Remove the Discharge Valve tube nut, collar, and nozzle. Set all three aside.



eOne - Small Capacity Pump Rebuild Instructions

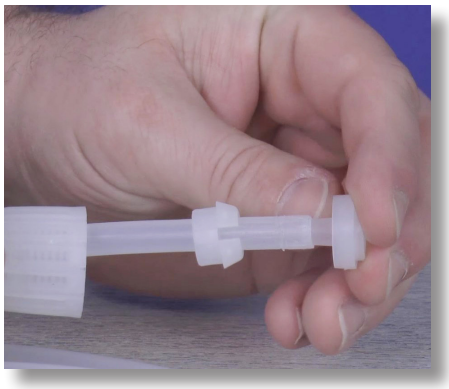
Step 22: Make sure not to lose the blue o-ring underneath the tube nozzle and sitting on the Discharge Valve.

Step 23: Open the Tubing Kit and take out the rigid polyethylene Discharge tubing. Set the Tubing Kit aside.

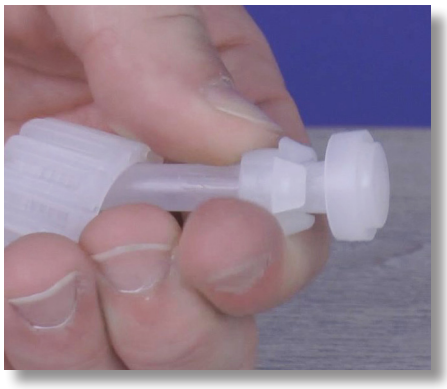
Step 24: Slide one end of the rigid polyethylene Discharge tubing through the outside opening of the tube nut.

eOne - Small Capacity Pump Rebuild Instructions

Step 25: Slide the collar onto the tube, and make sure the collar's crown is pointing away from the tube nut.



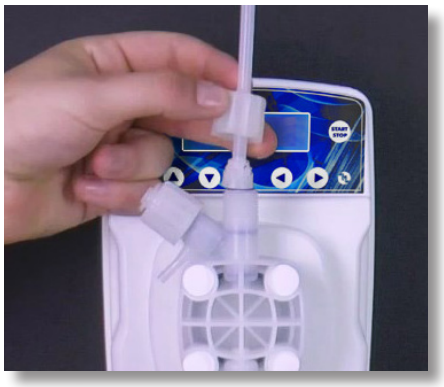
Step 26: Grab the nozzle and insert the pointed end into the opening of the same tube.



Step 27: Push the collar and nozzle together as close as possible.

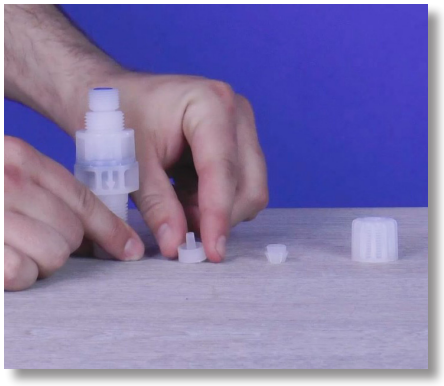
eOne - Small Capacity Pump Rebuild Instructions

Step 28: Pull the tube nut toward the nozzle to compress the collar and nozzle tight together, forming a ferrule connection.



Step 29: Attach the tube, and tube connections onto the Discharge Valve by hand tightening the tube nut. Do not cross thread nor overtighten.

NOTE: If the tube nut is not securing, re-check the ferrule connection. Pull the tube nut toward the nozzle, once more, to compress the collar and nozzle together. Retighten the tube nut until secure.



INJECTION VALVE

Step 30: To rebuild this section, take the new Injection Valve out of the Tubing Kit, and remove the tube nut, collar, and nozzle.

Set them aside, but make sure not to lose them.

eOne - Small Capacity Pump Rebuild Instructions

Step 31: Take the thread seal tape and wrap it around the threads of the Injection Valve for the necessary size – 3/8" or ½".

NOTE:
Blue or Pink Seal Tape: wrap 3 - 4 times around.
White Seal Tape: wrap 5 - 6 times around.

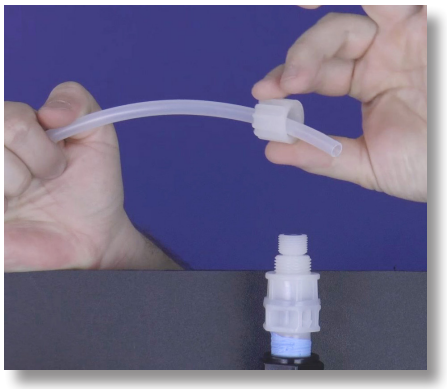
Step 32: Install and hand tighten the Injection Valve into the installation saddle or tee in the supply line. Do not overtighten.

NOTE: The arrow on the Injection Valve should be pointing toward the supply line.

Step 33: Grab the rigid polyethylene Discharge tube connected to the Discharge Valve. Using diagonal pliers or cutters, cut the tube so that it runs comfortably from the discharge valve to the Injection Valve.

NOTE: The Discharge tubing needs to come straight out of the Pump Head and go straight into the Injection Valve. If the tubing is too snug, the tubing connection will come loose and produce a leak.

eOne - Small Capacity Pump Rebuild Instructions

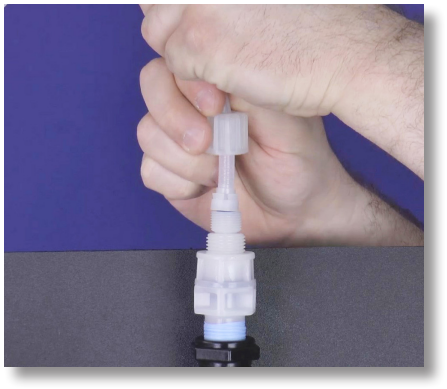


Step 34: Re-attach the tube connections onto the loose end of the connected Discharge tubing. Be mindful of their orientation for the tubing connections.

NOTE: If you forgot the connections orientation, please refer to steps 24 - 29 of this manual.

Step 35: Push the collar and nozzle together as close as possible.

Pull the tube nut toward the nozzle to compress the collar and nozzle tight together forming a ferrule connection.



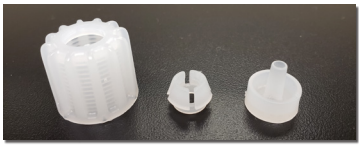
Step 36: Attach the tube, and tube connections onto the Injection Valve by hand tightening the tube nut. Do not cross thread nor overtighten.

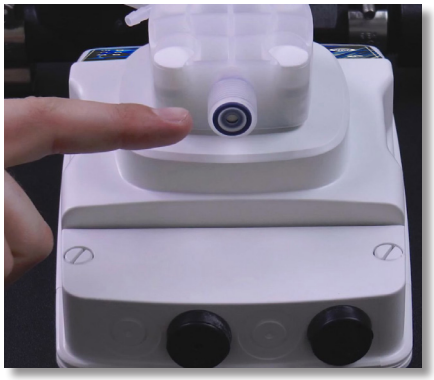
NOTE: If the tube nut is not securing, re-check the ferrule connection. Pull the tube nut toward the nozzle, once more, to compress the collar and nozzle together. Retighten the tube nut until secure.

eOne - Small Capacity Pump Rebuild Instructions

SUCTION VALVE

Step 37: Rebuild the Suction Valve by locating the Suction Valve at the bottom of the Pump Head, and remove the tube nut, collar, and nozzle.
Set the connections aside, and make sure not to lose them.

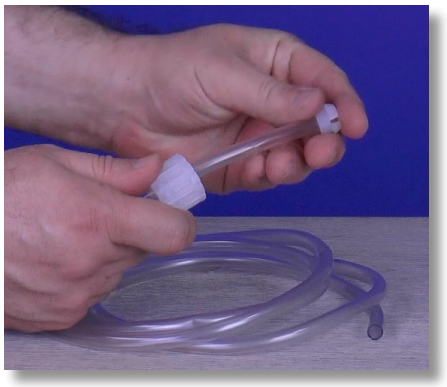




Step 38: Make sure you don't lose the blue o-ring directly at the bottom of the Suction Valve.

Step 39: Remove the clear, flexible PVC tubing from the Tubing Kit.

eOne - Small Capacity Pump Rebuild Instructions



Step 40: Attach the tubing connections onto one end of the PVC tube, be mindful of their orientation.

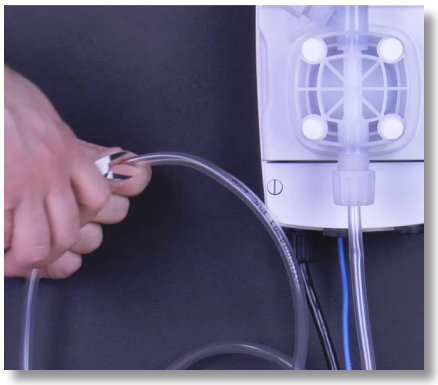
NOTE: If you forgot the connections orientation, please refer to steps 24 - 29 of this manual.

Step 41: Push the collar and nozzle together as close as possible. Pull the tube nut toward the nozzle to compress the collar and nozzle tight together, forming a ferrule connection.

Step 42: Attach the tube, and tube connections onto the suction valve by hand tightening the tube nut. Do not cross thread nor overtighten.

NOTE: If the tube nut is not securing, re-check the ferrule connection. Pull the tube nut toward the nozzle, once more, to compress the collar and nozzle together. Retighten the tube nut until secure.

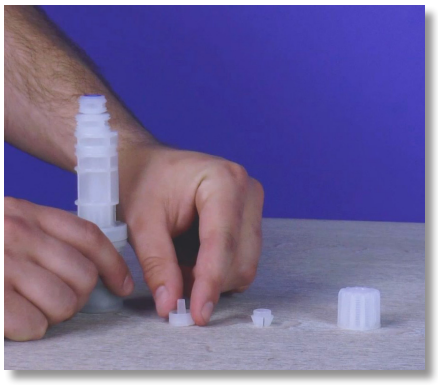
eOne - Small Capacity Pump Rebuild Instructions



FOOT FILTER

Step 43: To rebuild the Foot Filter, cut the PVC Suction tubing attached to the Suction Valve, so that the Foot Filter will comfortably sit in the chemical bucket in a vertical position.

NOTE: The Foot Filter will need to be 2” from the bottom of the bucket or stock tank.

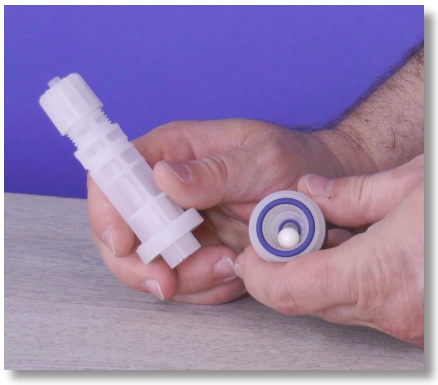


Step 44: Grab the Foot Filter from the Tubing Kit and remove its tube nut, collar, and nozzle. Set everything else aside.

Step 45: Shake the Foot Filter back and forth. You should hear a ceramic ball moving freely inside.

NOTE: If you hear the ceramic ball moving, skip to Step 53.

eOne - Small Capacity Pump Rebuild Instructions



Step 46: If you don't hear the ball moving, separate the Foot Filter into three (3) pieces by popping the filter basket from the filter body.

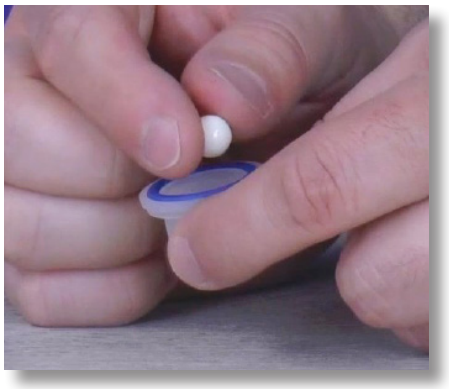
The filter seat may stick to the filter body. Make sure it rests in the filter basket instead, to avoid losing the ceramic ball.

If there is no ceramic ball, call Dilution Solutions at 1-800-451-6628 for assistance.

Step 47: Pull the filter seat out of the filter basket and set the filter basket aside.

Step 48: Pour the ceramic ball out of the filter seat and into your hand and use the small towel to wipe the ceramic ball clean. Do not misplace it.

eOne - Small Capacity Pump Rebuild Instructions



Step 49: Put the ceramic ball back into the filter seat.

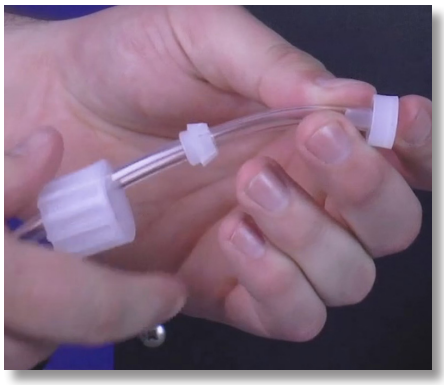
Step 50: Place the filter seat back into the filter basket.

Step 51: Insert the filter basket into the filter body and forcefully pop them together. This may take a couple of tries, please be sure not to misplace the ceramic ball.

NOTE: Pull on the two sections to make sure they are securely connected.

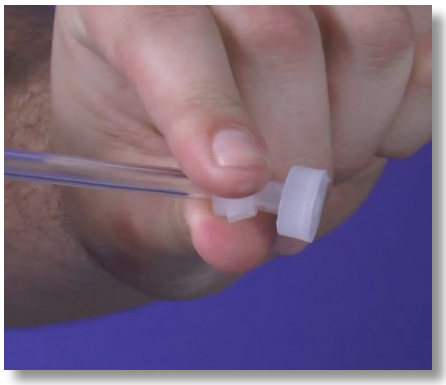
eOne - Small Capacity Pump Rebuild Instructions

Step 52: Shake the Foot Filter back and forth once more, verifying the ceramic ball is moving freely. Set the Foot Filter aside.



Step 53: Grab the PVC Suction tubing hanging down from the Suction Valve, and attach the tube connections onto the loose end of the PVC Suction tubing. Be mindful of the orientation for the tubing connections.

NOTE: If you forgot the connections orientation, please refer to steps 24 - 29 of this manual.



Step 54: Push the collar and nozzle together as close as possible.

eOne - Small Capacity Pump Rebuild Instructions

Step 55: Pull the tube nut toward the nozzle to compress the collar and nozzle tight together, forming a ferrule connection.

Step 56: Grab the Foot Filter and re-attach the tube and tube connections onto the Foot Filter by hand tightening the tube nut. Do not cross thread nor overtighten.

NOTE: If the tube nut is not securing, re-check the ferrule connection. Pull the tube nut toward the nozzle, once more, to compress the collar and nozzle together. Retighten the tube nut until secure.

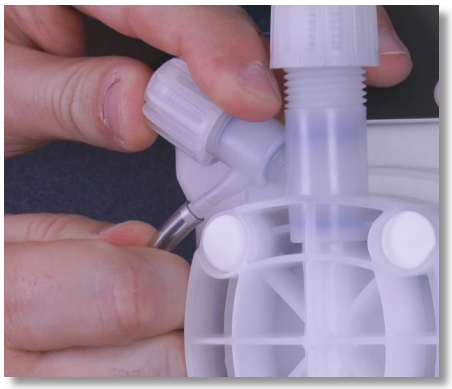
Step 57: Place the Foot Filter into the bucket or stock tank. This ensures the Foot Filter draws chemistry once you begin operation.

NOTE: Keep the foot filter 2” off the bottom.

eOne - Small Capacity Pump Rebuild Instructions

AIR BLEED BARB

Step 58: Take the smaller remaining PVC tubing out of the Tubing Kit.



Step 59: Locate the manual air bleed barb on the upper left section of the Pump Head and slide one end of the PVC tubing over the barb.

Step 60: Using the diagonal pliers, cut the tube so that it is long enough for the chemical bleed off to go into the bucket or stock tank while priming the **eOne** pump.

eOne - Small Capacity Pump Rebuild Instructions

Step 61: The **eOne** pump should now be ready to connect to the power supply.

Go through the priming process, and begin your next use or treatment.

We hope this document has been helpful rebuilding your **eOne** small capacity pump.

For more information, please call us at **1-800-451-6628**
or visit us online at **www.dilutionsolutions.com**.