

P.O.D. Skimmer

Model TR-610 and TR-611
Quick Start Guide V1.0



Unpacking and Preparation

1. Remove pump from shipping box and use the included spanner wrenches to remove the bottom of the pump by turning the wrench counter-clockwise when looking at the pumps' bottom.



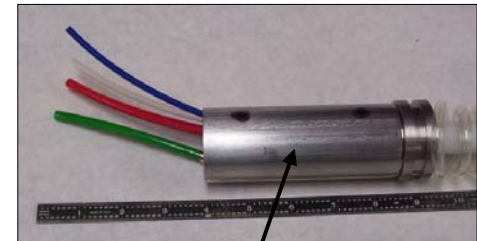
2. Disassemble the pump as shown and remove the foam packing from both sides of the pumps float. Save the packing and shipping material if there is ever a need to return the pump for service.



3. Reassemble the pump then unpack the P.O.D skimmer. Remove the washers and acorn nut from the threaded rods located at the bottom of the skimmer and thread them into the pump as shown. Insert the threaded rods into the head 1/4 inch.

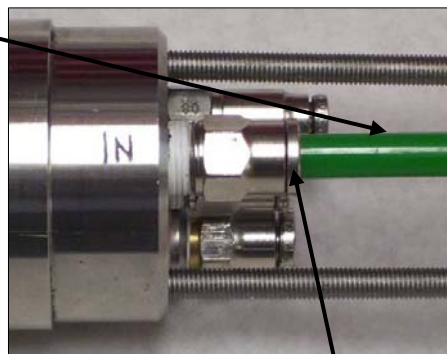


4. Place the rod skimmer on a flat surface and simultaneously pull all four tubes approximately four inches past the end of the connector tube (Note: the green tube is 4 inches long). When inserting the tubes into their fittings, do not twist the tubes over each other.



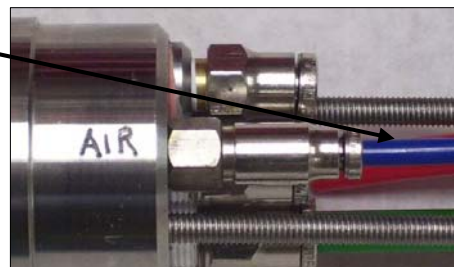
Connector tube

5. Place the pump on the flat surface with the head positioned toward the end of the rod skimmer and insert the green $\frac{1}{4}$ in O.D. Nylon tube into the push-to-connect fitting labeled "IN". **Note:** All tubes can be removed by pushing on the release ring and pulling on the tube.

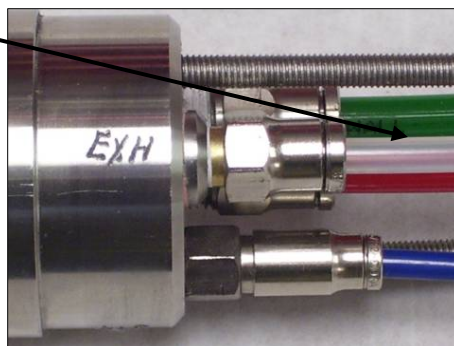


Release ring

6. Insert the blue $\frac{5}{32}$ in O.D. Nylon tube (compressed gas supply) into the push-to-connect fitting labeled "AIR".



7. Insert the clear $\frac{3}{16}$ in O.D. Nylon tube (pump exhaust) into the push-to-connect fitting labeled "EXH".



1. Referring to the illustration on page 6, the length of the air supply, product discharge tubing and support cable is referred to as the L POD. Additional air supply and product discharge tubing will need to be added to this length to reach site-specific compressed gas supplies and product storage.
2. When measuring the L POD make sure the density float (item 3) is in contact with the skimmer support tubes (item 4) and that the coiled hose is retracted.
3. Product thickness = D.W.-D.P. When the product thickness is less than 3 feet, then L POD = D.W. When the product thickness is greater than 3 feet, then the L POD must be calculated to compensate for the groundwater rebound when the weight of the product has been removed by the P.O.D. Skimmer. Failure to account for this rebound will result in the P.O.D. Skimmer extracting water from the well.
4. $L\text{ POD adjusted} = D.W. - (\text{product thickness} \times \text{the specific gravity of the product})$.

For example: If D.W.=40 ft. and there is 10 ft of gasoline with a specific gravity (s.g.) of .7, then LPOD would be 40 ft. – (10x7) or 33 ft.
5. After setting the POD Skimmer in the well, allow 10 minutes of stabilization time before applying compressed gas to the pump.

When applying compressed gas to the pump, allow no more than $\frac{1}{2}$ psi per ft. of depth to the skimmer. Any additional pressure will waste compressed gas, especially when used with CO₂ or a solar compressor.
6. Use soapy water to check for gas leaks at fittings and CO₂ regulator.

Installation

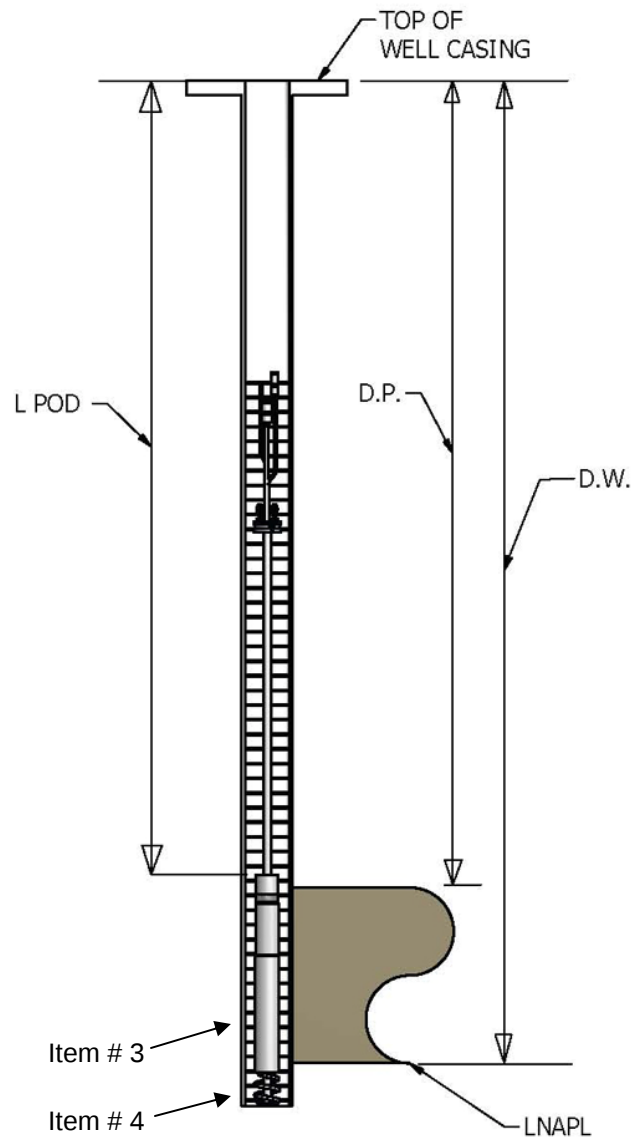
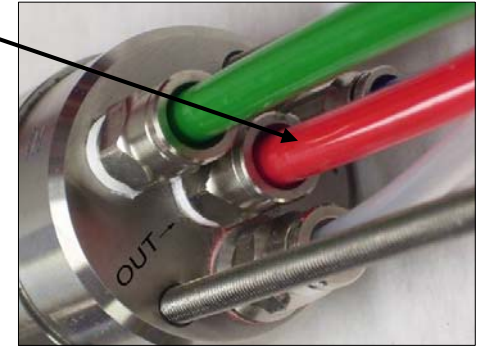
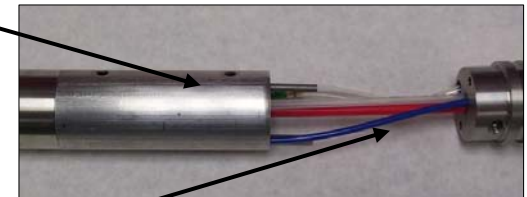


Fig.1

8. Insert the red ¼ in O.D. tube (product discharge) into the push-to-connect fitting in the center of the pumps head labeled "OUT".



9. Slide the connector tube onto the pumps' head as shown.

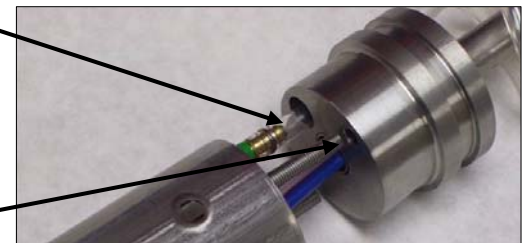


9a. Inspect the tubes to make sure they are not excessively twisted around each other before continuing with the skimmer assembly. If necessary, disconnect and re-route tubing.

10. Pull all tubes out approximately one inch then inspect the connector tube location as shown.

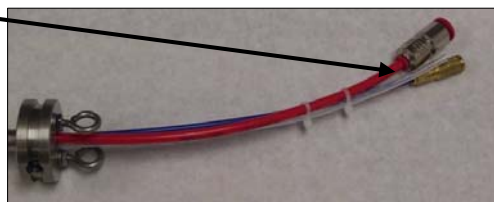


11. Inspect the tubes to make sure they are not being kinked or bent as the skimmer and pump are drawn to each other.

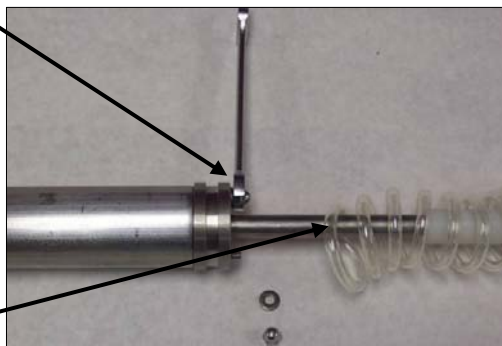


11a. Align the threaded rod with the thru-hole located in the bottom of the skimmer.

12. Pull each tube separately to remove any slack before attaching the washers and nuts.



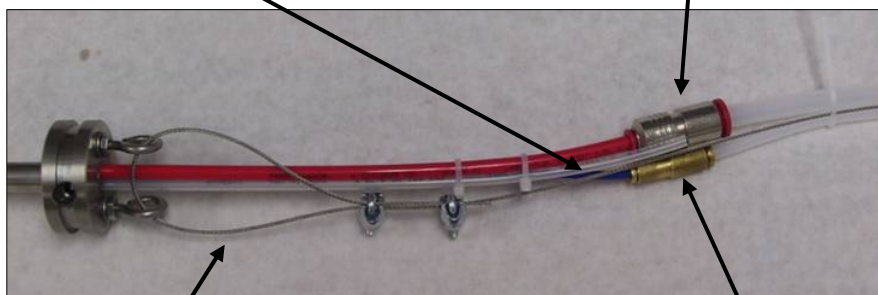
13. Finish the pump/skimmer connection by placing the washer and acorn nut onto both threaded rods. Tighten both nuts with 3/8 in open end wrench.



13a. If necessary, adjust the diameter of the coiled hose by twisting the tube where it enters the thru-hole.

14. Exhaust tube 3/16 in O.D. clear Nylon. Do not block or bend.

14a. Product discharge reducing union 1/4 in O.D. to 3/8 in O.D.



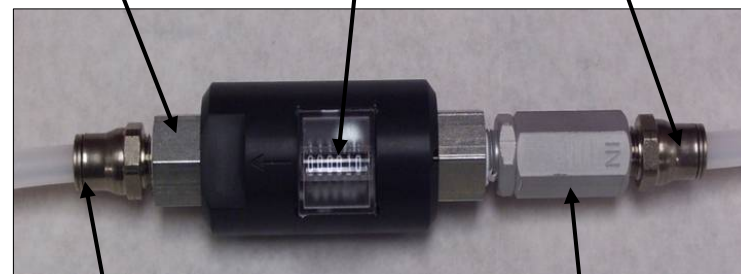
14b. Attach restraining cable through both eyelets. Leave enough slack to pull evenly.

14c. Compressed gas supply reducing union 5/32 in O.D. to 1/4 in O.D.

P.O.D. Pulse / Cycle Counter

Pn # 603495, Included with P.O.D. Skimmer

Pulse counter fluid chamber can be accessed for cleaning. Pulse counter cannot be reset. 3/8 in O.D. push-to-connect product inlet fitting.



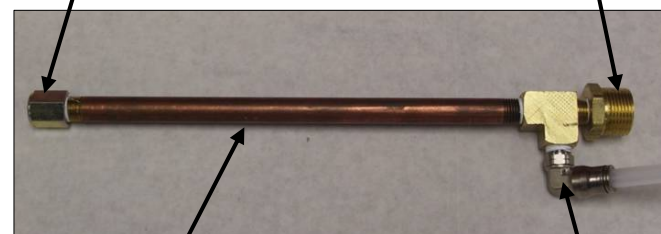
3/8 in O.D. push-to-connect product discharge fitting.

Inline product filter to protect pulse counter from debris. Filter can be disassembled to access and clean bronze filter element.

P.O.D. Drum Connector

Pn # TR-618, Sold Separately

Breather: Porous, bronze 3/4 in male pipe thread for threading into drum or tank.



10 in long 1/4 in pipe riser

3/8 in O.D. push-to-connect 90 degree swivel elbow