

PUMP TUBE REPLACEMENT

Classic Series Single Head Adjustable & Fixed Output Pumps



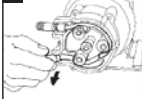
1 NOTICE: Before installing or servicing the pump, read the pump manual for all safety information and complete instructions. The pump is designed for installation and service by properly trained personnel.

Pump Manufactured Before April 29, 2011

I PREPARATION

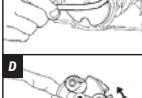
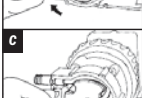
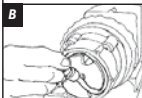
- Follow all safety precautions prior to tube replacement.
- Prior to service, pump water or a compatible buffer solution through the pump and suction and discharge lines to remove chemical and avoid contact.
- Turn pump off.
- Disconnect the suction and discharge connections from pump head.
- Plug power cord into constantly energized, properly grounded receptacle for tube replacement.

A



II REMOVE OLD TUBE

- Remove and set aside cover and screws.
- Set feed rate dial on setting L.
- Turn pump on and let it run until one of three roller assembly slots lines up with the tube fitting on the suction side. **Figure A**
- Turn pump off.
- Lift tube fitting out of housing slot and pull it toward center of roller assembly. **Figure B**
- Turn pump on and allow roller assembly to jog while guiding tube, with tension, up and out of housing. **Figure C**
- Turn pump off. Remove and discard pump tube.
- Remove roller assembly, shaft, and housing.
- Use non-citrus all-purpose cleaner to clean chemical residue from pump head housing, roller assembly and cover.
- Check housing for cracks. Replace if cracked.
- Ensure rollers turn freely. **Figure D** Replace roller assembly if the rollers are seized or worn or if there is a reduction or lack of output from the pump.
- Reinstall clean tube housing.
- Install shaft into feed rate control, apply AquaShield™ to the shaft tip.
- Install roller assembly.



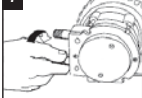
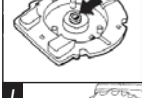
III INSTALL NEW TUBE

IMPORTANT! DO NOT lubricate pump tube or roller assembly.

- Manually rotate the roller assembly counterclockwise to align one of three roller assembly slots with the suction side housing slot.
- Place tube fitting into suction side slot of the housing and the roller assembly slot. **Figure E**
- With pump setting on L, hold tube fitting and jog roller assembly by turning pump on.

IMPORTANT! Avoid rotating wrist, which can result in a twisted tube that will not center. **DO NOT** force tube and be careful of your fingers.

- Guide tube with slight tension toward the center to prevent pinching between housing and roller assembly. If the tube is pinched during installation, discard. **Figure F**
- When tube reaches the discharge tube housing slot, turn pump off.
- Turn dial ring to setting 10, hold tube fitting firmly, do not pull, and turn pump on. **NOTE:** A used tube will have stretched approximately 3/4" and the new tube will appear to be stiff and short. Follow directions to allow rollers to stretch tube into place.
- Allow rollers to stretch tube into place while guiding tube into slot. **Figure G**
- Turn pump off.
- Apply a small amount of AquaShield™ to cover bushing **ONLY** and replace cover and two screws. **Figure H** Leave the front screw between the tube fittings loose for centering the tube in the next step.



IV CENTER NEW TUBE

- To center pump tube on rollers, set feed rate dial to setting 10. Turn pump on.
- Turn the tube fitting on the suction side not more than 1/8 of a turn in the direction tube must move. **Figure I**
- DO NOT** let go of fitting until tube rides approximately in center of rollers.
- Turn pump off, let go of fitting, and finger tighten cover screws.
- Inspect the suction and discharge lines, point of injection and check valve duckbill for blockages. Clean and/or replace as needed.
- Reconnect the suction and discharge lines. **NOTE:** Cover screws are self-tapping and must be backed in to locate original thread before securing. If a screw boss is stripped, use alternate bosses and position opposite from each other. Never secure the cover plate with more than 2 screws.

TUBE CHANGE FOR FIXED OUTPUT PUMP



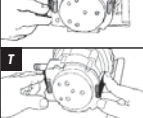
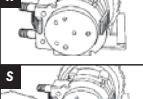
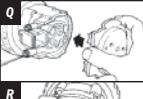
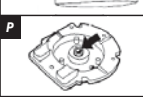
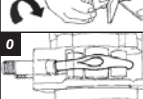
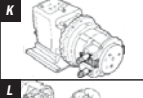
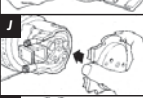
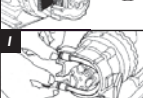
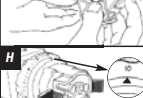
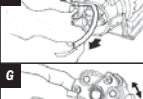
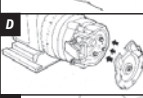
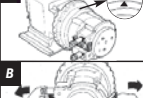
To install a new tube in a fixed output pump, follow the instructions and utilize the on/off switch to jog the roller assembly in the absence of the feed rate control.

Pump with QuickPro™ Pump Head Manufactured After April 29, 2011

I PREPARATION

- Follow all safety precautions prior to tube replacement.
- Prior to service, pump water or a compatible buffer solution through the pump and suction and discharge lines to remove chemical and avoid contact.

A



II REMOVE THE PUMP TUBE

- Turn the pump off and unplug the power cord. On the adjustable model, ensure that the feed rate control is set to 10. **Figure A**
- Depressurize and disconnect the suction and discharge lines.
- Open the back and front of the latches on both sides of the head. Carefully fold latches back to prevent contact with the cover. **Figure B**
For CE pump only: Remove the safety screw on cover.
- Remove the tube housing cover and flip to use as a tool in the next step. **Figure C**
- Align the center of the inverted cover with the center of the roller assembly so that the three holes on the face of the cover align with the three knurled lugs on the roller assembly. Position the cover feet near the tube fittings. **Figure D** **NOTE:** The roller assembly needs to be collapsed to remove the tube.
- On the adjustable pump, hold the feed rate control securely. On the fixed output pump hold the pump securely. Use the tube housing cover as a wrench and quickly (snap) rotate the cover counter-clockwise to collapse the roller assembly. The tube will no longer be pressed against the tube housing wall. **Figure E** **NOTE:** Counter-clockwise is viewed from facing the head of the pump.
- Remove and discard the pump tube. **Figure F**
- Remove the roller assembly, and the tube housing. On the adjustable pump also remove the shaft. Set them aside to reinstall later.
- Use a non-citrus all-purpose cleaner to clean chemical residue from the tube housing, roller assembly and cover.
- Check the housing for cracks and replace it if it is cracked.
- Ensure the rollers turn freely. Replace the roller assembly if the rollers are seized or worn or if there is a reduction or lack of output from the pump. **Figure G**
- Reinstall the clean tube housing. On an adjustable pump, also install the shaft into the feed rate control.
- Apply AquaShield™ to the shaft tip.
- Install the roller assembly.

III INSTALL THE PUMP TUBE AND EXPAND THE ROLLER ASSEMBLY

IMPORTANT! DO NOT lubricate pump tube or roller assembly.

- Ensure the power to the pump is off and the power cord is unplugged. On the adjustable model, ensure that the feed rate control is set to 10. **Figure H**
- Place the new tube in the pump head; use your fingers to center it over the rollers. **Figure I**
- Place the tube housing cover on the tube housing, affix the front latches to the cover lip and then press the latches back to secure. **Figure J**
- With the cover latched, plug the pump in and turn the power on. Allow the pump to run the roller assembly in its collapsed position for approximately one minute to relax the tube. **Figure K**
- Turn the pump off and unplug the power cord.
- Remove the tube housing cover and flip to use as a tool in the next step. **Figure L**
- Align the center of the inverted cover with the center of the roller assembly so that the three holes on the face of the cover align with the three knurled lugs on the roller assembly. Position the cover feet near the bottom. **Figure M** **NOTE:** The roller assembly needs to be expanded so the tube is pressed against the tube housing wall.
- Expand roller assembly.

Adjustable Model

- Hold the feed rate control securely, use the cover as a wrench and quickly (snap) rotate the roller assembly clockwise to expand the roller assembly. The tube will be pressed against the tube housing wall. **Figure N & O** Proceed to step 9. **NOTE:** Clockwise is viewed from facing the head of the pump.

Fixed Output Model (manufactured before 04/29/11)

WARNING Only the Stenner fan brake tool should be used for this step.

- Insert the fan brake tool into the vent in the rear of the motor housing. Refer to the figures below. **NOTE:** The fixed output pump doesn't have a clutch so the fan brake keeps the shaft from rotating when expanding the roller assembly.
- Holding the pump securely, use the cover as a wrench and quickly (snap) rotate the roller assembly clockwise to expand the roller assembly. The tube will be pressed against the tube housing wall. **Figure N & O** **NOTE:** Clockwise is viewed from facing the head of the pump.
- Remove the fan brake tool. Proceed to step 9.



Fixed Output Model (motor vent with key slot, manufactured after 04/29/11)

- Slide one latch out to remove it from the tube housing. Insert the latch end into the key slot in the vent in the rear of the motor housing. While pressing the latch into the rear of the motor, gently rotate the cover clockwise until it stops. Refer to the figures below.
- Holding the pump securely, use the cover as a wrench and quickly (snap) rotate the roller assembly clockwise to expand the roller assembly. The tube will be pressed against the tube housing wall. **Figure N & O** **NOTE:** Clockwise is viewed from facing the head of the pump.
- Remove the latch from the vent and re-attach it to the tube housing. Proceed to step 9.



- Apply a small amount of AquaShield™ to the cover bushing **ONLY**. **DO NOT** lubricate the pump tube. **Figure P**
- Place the tube housing cover (feet first) on the tube housing, affix the front of the latches to the cover lip and then press the latches back to secure. **Figure Q**

IV CENTER NEW TUBE

- Ensure the pump is off. Lift the latch located between the tube fittings, leaving the end of the latch engaged with the lip on the tube housing cover. Leave the latch on the opposite side engaged. **Figure R**
- Plug the pump in and turn it on. Turn the tube fitting on the suction side not more than 1/8 of a turn in the direction tube must move. **Figure S**
- DO NOT** let go of fitting until tube rides approximately in center of rollers.
- Turn the pump off, let go of the fitting, and secure the latch between the fittings. **Figure T**
For CE pump only: Reinstall the safety screw on the cover.
- Inspect the suction and discharge lines, point of injection, and check valve duckbill for blockages. Clean and/or replace as required.
- Reconnect the suction and discharge lines.
- Turn the pump on and verify operation.

