

# Rapid Sprayer Pump Repair Kit

Rapid Sprayer Pump Repair Kit (80-0-226) contains the following parts:



- ❖ 2 Diaphragms
- ❖ 4 Seats
- ❖ 4 balls
- ❖ 8 O-Rings

For pricing information or to place an order, call the  
Order Desk (800) 688-5652

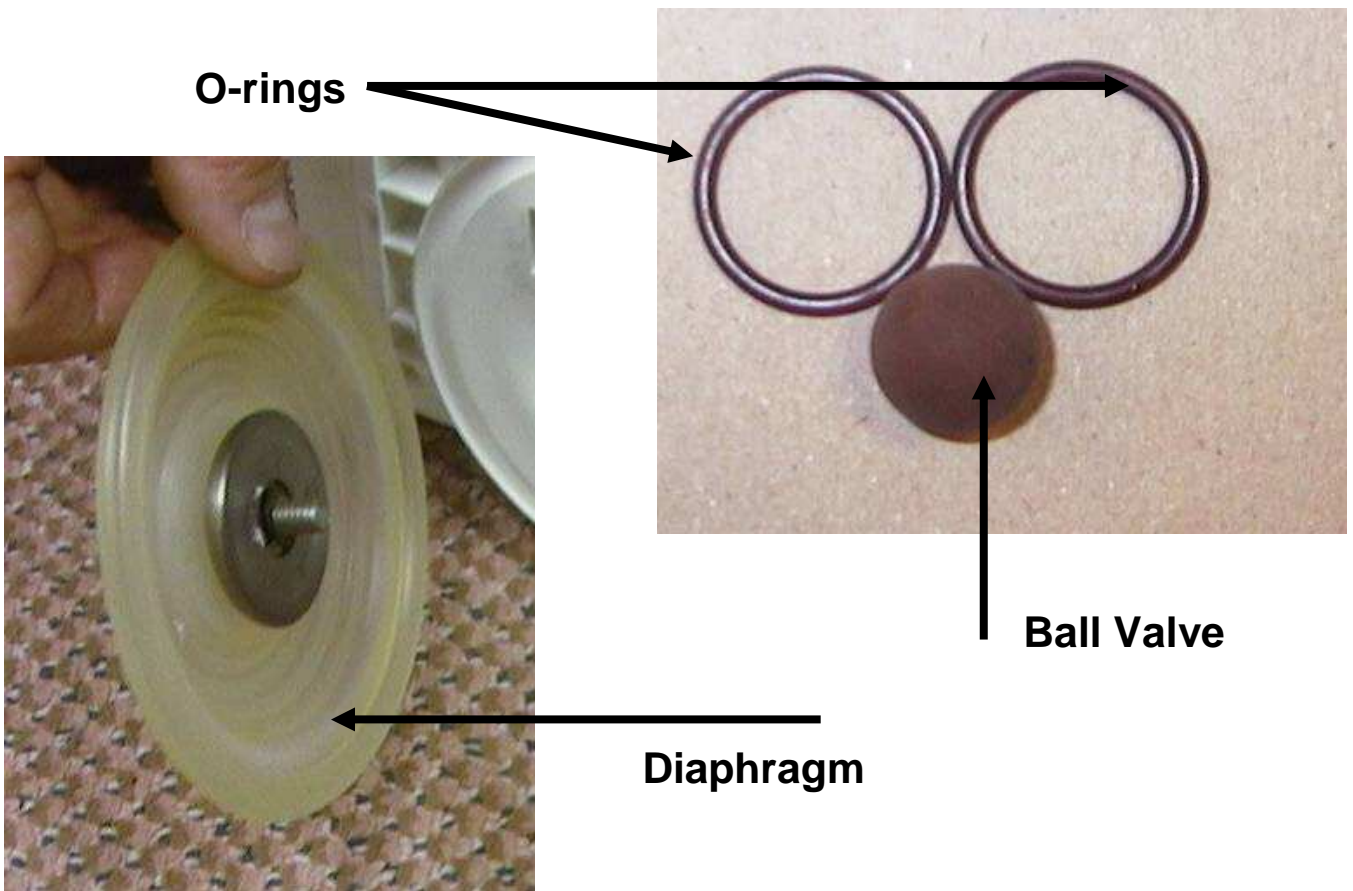
# Pump Maintenance

## Caution:

Before any repair or maintenance is attempted, the compressed air line to the pump should be disconnected and all air pressure allowed to bleed from the pump. Drain the pump and remove hoses.

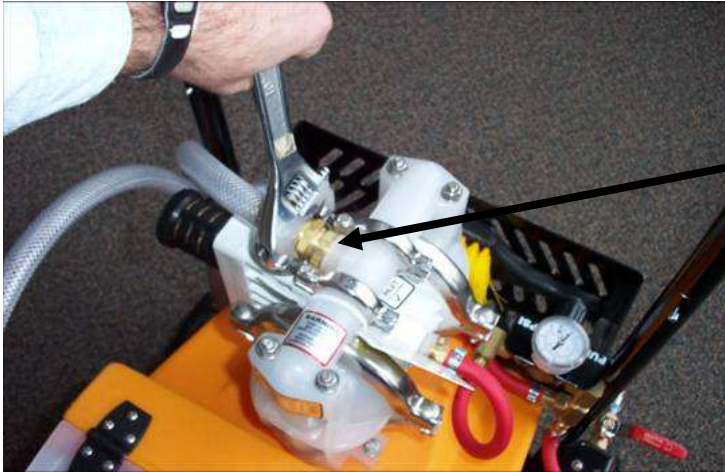
Maintenance schedules for the Wilden pump are dependent upon how frequently the pump is used. However, regular inspections and maintenance will help to prevent unscheduled pump downtime.

Periodic part replacement is recommended i.e. ball valves, o-rings, diaphragms and gaskets (see below). All of these parts will wear, due to the abrasive aggregates contained in the coating.



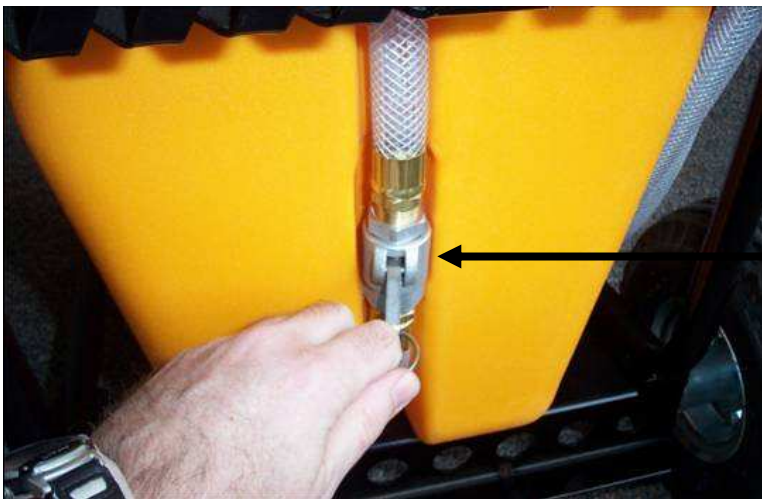
# Pump Disassembly

To remove the pump from the hopper:



Detach the discharge hose on the top of the pump (this is a regular garden hose fitting)

Unscrew the pump air line as shown. This has a swivel fitting on this end only

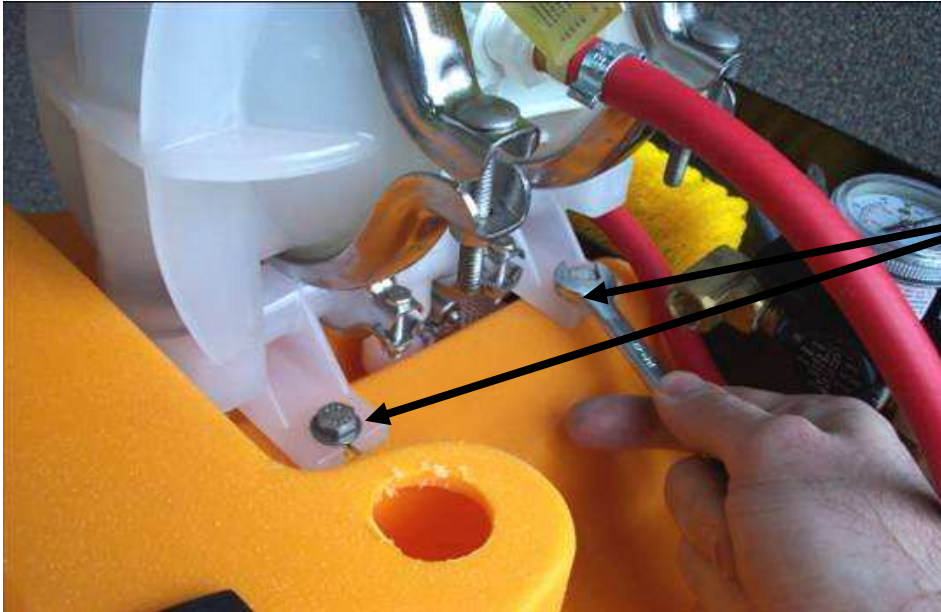


Detach the cam lock coupler on the back of the hopper

## Pump Disassembly – Cont'd

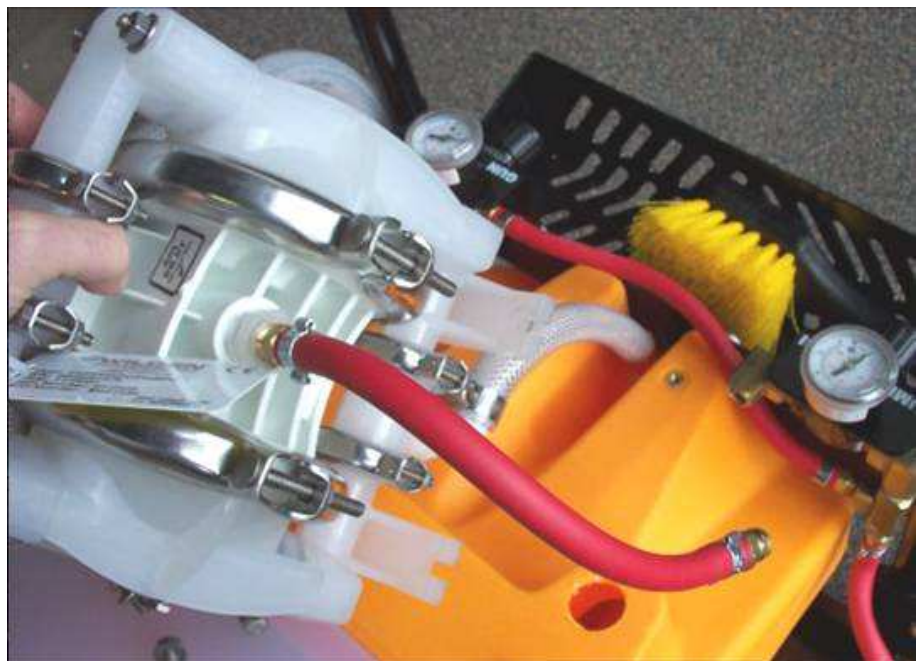
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To remove the pump from the hopper – Cont'd:



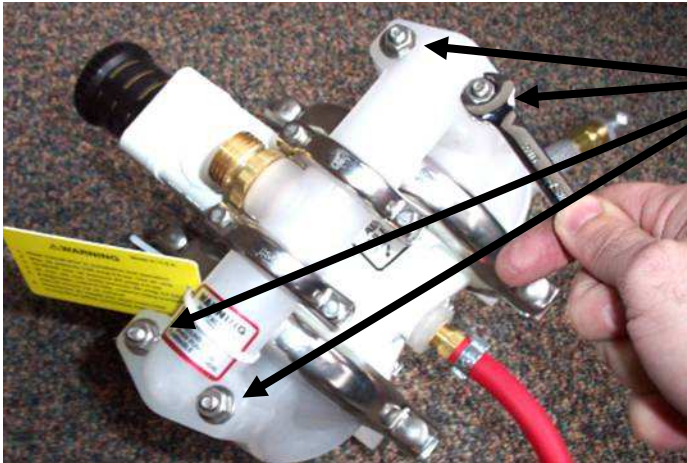
Unbolt the pump from the hopper using a 7/16" wrench (4 bolts)

Remove the pump from the hopper.



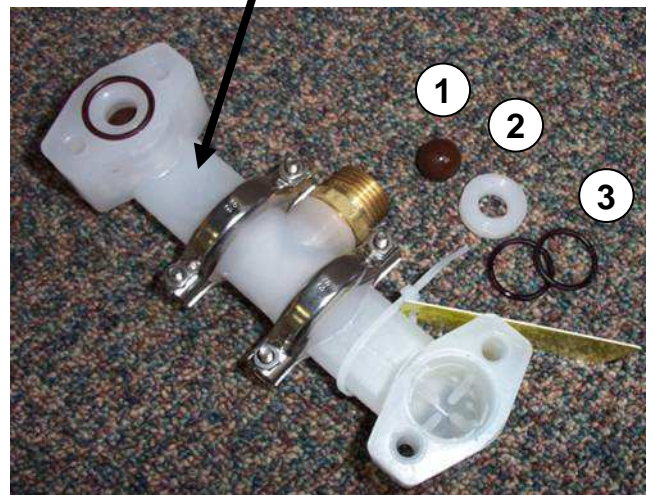
# Pump Disassembly – Cont'd

To change ball valves and diaphragms:



Remove the long ¼" bolts and nuts using a 7/16" wrench as shown.

Discharge Manifold

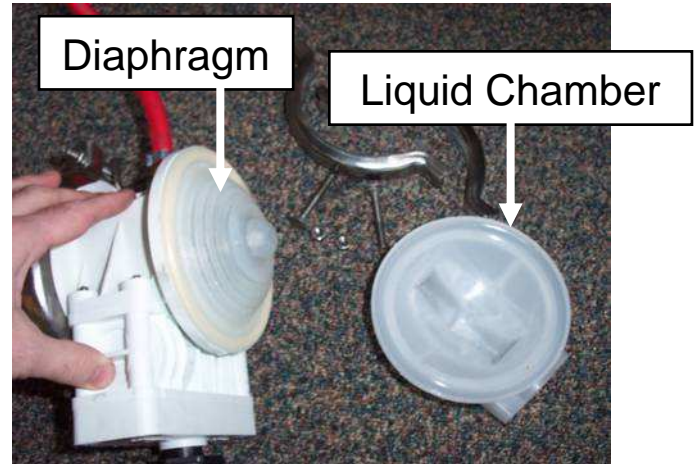


The ball (1), seat (2) and O-rings (3) are shown removed from one side of the discharge manifold (right) and the liquid chamber (below)



Liquid Chamber

## Pump Disassembly – Cont'd



Use a 7/16" wrench to remove the clamp bands securing the liquid chambers to the center section. Lift the chamber away from the center section to expose the diaphragm and outer piston. The diaphragm should be cleaned with warm water to remove built up coating. If the diaphragm shows signs of splitting or abrasive wear it should be replaced.



Use a 7/8" wrench and socket to remove the diaphragm from the shaft and piston. Use a vise (**with protective jaws to prevent any damage to the shaft**) to remove the diaphragm from the other side.

# Pump Reassembly

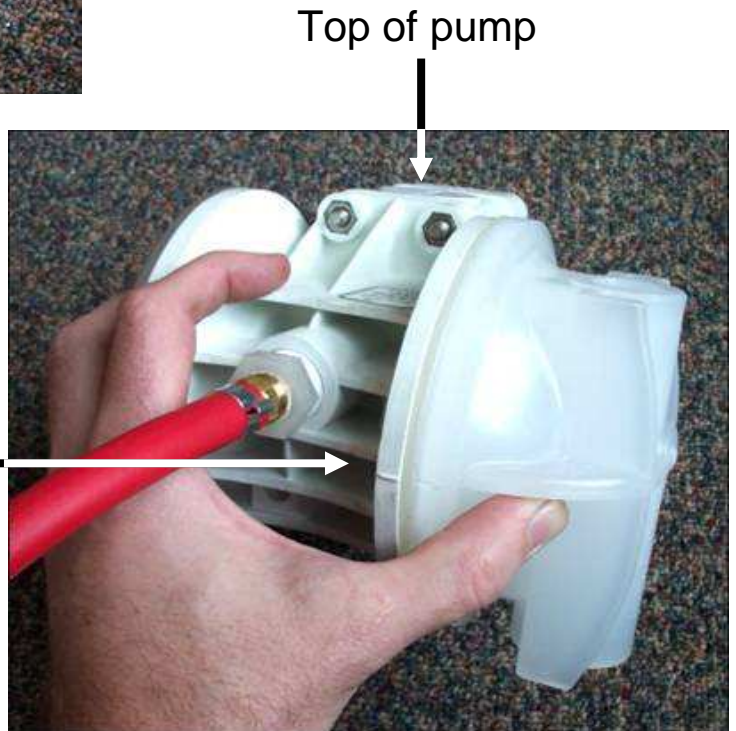
## Installing New Diaphragms



Make sure that the inner piston (shown left) is positioned with the rounded edge toward the inside of the diaphragm. Do not exceed 90 in-lbs (10.7 N-m) when securing to shaft.

Position the liquid chamber with the center section as shown. Line up the the two molded in lines shown by the arrow

Do not exceed 65 in-lbs (7.3 N-m) torque when tightening clamp bands



### Note:

For a full breakdown on engineering, operation and maintenance specifications see the Wilden web site at [www.wildenpump.com](http://www.wildenpump.com)

# Pump Reassembly – Cont'd

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## Installing New Ball Valves



Instructions show the ball valve installation on the liquid chamber. The same applies to the discharge manifold. Insert one o-ring

Insert one o-ring...

Then a ball...

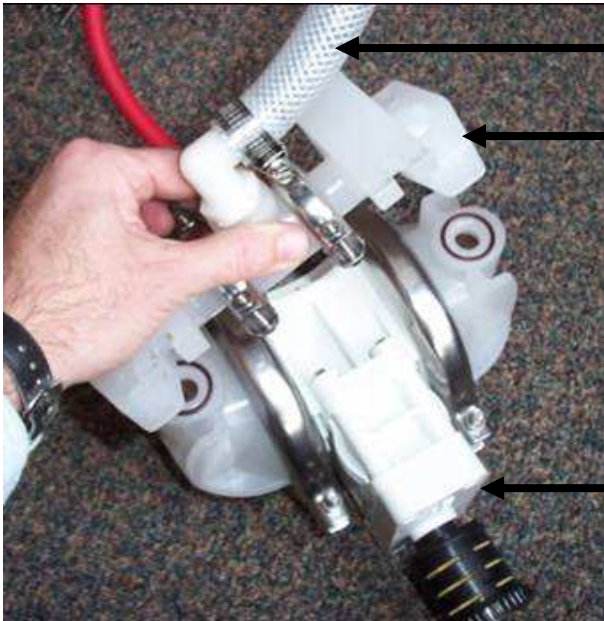


Then a valve seat and a second o-ring...



# Pump Reassembly – Cont'd

## Installing New Ball Valves

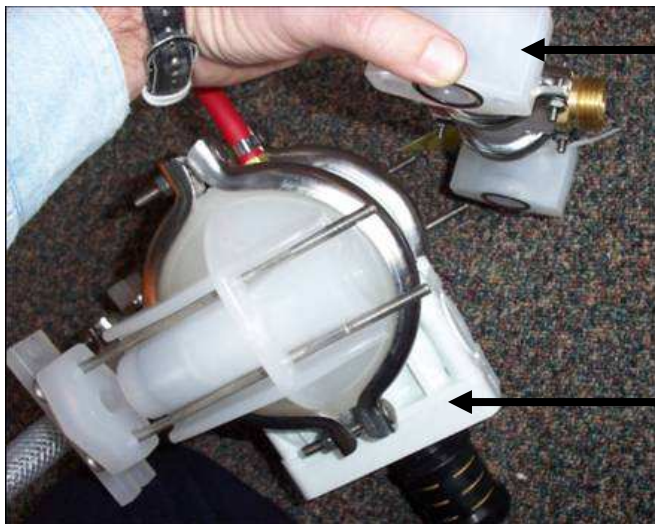


Draw tube

Inlet Manifold

Note the relative positions of the draw tube and inlet manifold to the air exhaust chamber.

Air exhaust chamber



Discharge Manifold

Note the relative positions of the discharge manifold to the air exhaust chamber.

Air exhaust chamber

When tightening the long vertical bolts, do not exceed 80 in-lbs (9 N-m) of torque.