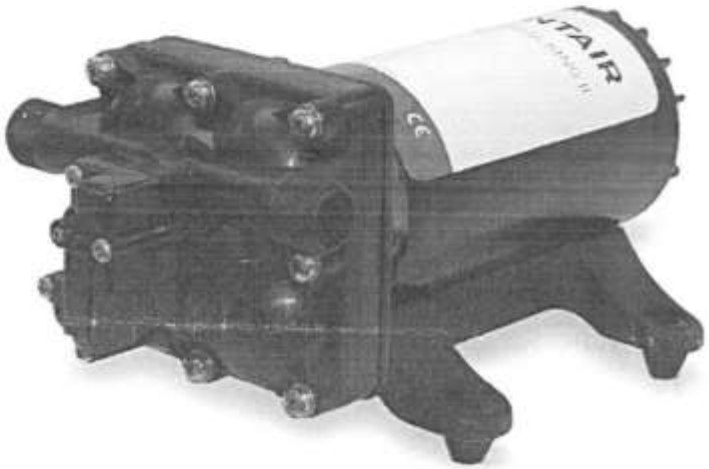
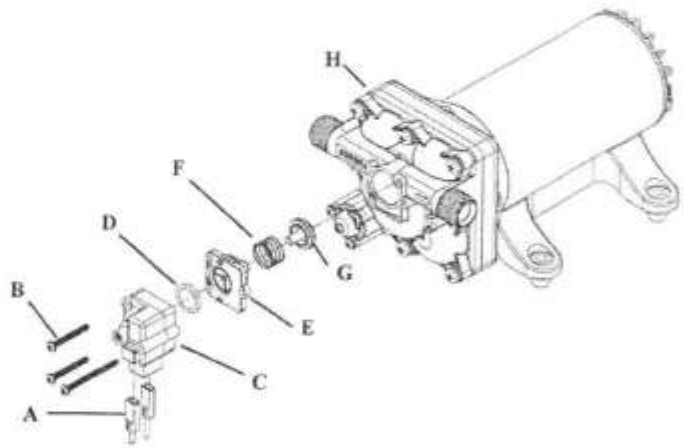
PENTAIR

SHURFLO® MODEL 4048
REPLACEMENT KIT INSTRUCTIONS

MODEL 4048

NOTE
Before starting work, make certain that power to pump is off. Release liquid pressure on the outlet line of pump before performing maintenance. You may find it easier to remove the pump and work on a bench. SHURFLO always recommends professional service.





CHECK VALVE REPLACEMENT KIT

DISASSEMBLY

1. Disconnect the lead wires (A) from the pressure switch (C). Note which wire goes to each terminal contact on the switch.

2. Remove the 3 pressure switch screws (B).

3. Remove the switch assembly (C) from the pump.

4. Remove the rubber diaphragm (D).

5. The retainer (E) has been pressed into the pump housing. To remove the retainer, twist and pull to lift the retainer out of the pump housing (H).

6. Remove the spring (F) and the check valve (G) from the pump housing (H). Discard the old rubber diaphragm, retainer, spring and check valve.

ASSEMBLY

1. Place the new check valve assembly (G) into the pump housing (H) as shown with the stem facing up. Place the new spring (F) over the stem of the check valve assembly (G). Place the new retainer (E) over the spring (F). Press aligned parts down and place the rubber diaphragm (D) over the retainer (E).

2. Place the switch assembly (C) into position.

3. Install the 3 switch screws (B) securely. Do not over-tighten (10-16 in-lbs).

4. Connect the lead wires (A) to the switch terminal contacts.

VALVE ASSEMBLY REPLACEMENT KIT

DISASSEMBLY

1. Disconnect the lead wires (A) from the pressure switch (B). Note which wire goes to each lead on the switch.

2. Remove the 4 outside housing screws (C). Note: Do not remove the pressure switch screws (B).

3. Remove the 4 inside housing screws (D). Note: If you work carefully, the lower housing (G) will not separate from the motor assembly.

4. Remove the upper housing (E).

5. Remove the old valve assembly (F).

ASSEMBLY

1. Place the new valve assembly (F) on the diaphragm (G). Align grooves in the diaphragm with grooves in the valve assembly.

2. Place the upper housing (E) on top of the valve assembly (F) and drive assembly (G). Diaphragm should fit inside the housing with no pinching.

3. Tighten the 4 inner housing screws (D). Tighten to 25-32 in-lbs.

4. Tighten the 4 outer housing screws (C). Tighten to 25-32 in-lbs.

5. Attach the lead wires (A) onto the switch (B).

UPPER HOUSING ASSEMBLY REPLACEMENT KIT

DISASSEMBLY

1. Disconnect the lead wires (A) from the pressure switch (B). Note which wire goes to each lead on the switch.

2. Remove the 4 outside housing screws (C). Note: Do not remove the pressure switch screws (B).

3. Remove the 4 inside housing screws (D). Note: If you work carefully, the lower housing (G) will not separate from the motor assembly.

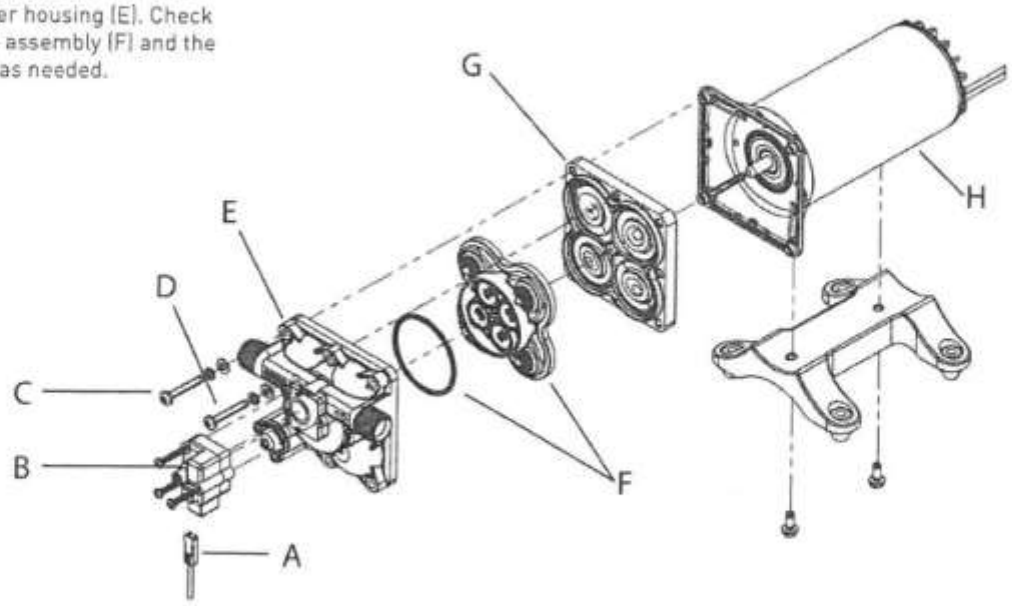
4. Remove the upper housing (E). Check and clean the valve assembly (F) and the drive assembly (G) as needed.

ASSEMBLY

1. Place the valve assembly (F) on the diaphragm (G) (Align grooves in the diaphragm with grooves in the valve assembly).

2. Place the upper housing (E) on top of the valve assembly (F) and drive assembly (G). Diaphragm should fit inside the housing with no pinching.

3. Tighten the 4 inner housing screws (D). Tighten to 25-32 in-lbs.



PRESSURE SWITCH REPLACEMENT KIT

DISASSEMBLY

1. Disconnect the motor and pigtail lead wires (A) from the pressure switch (C). Note which wire goes to each terminal on the switch.

2. Remove the 3 pressure switch screws (B).

3. Remove the switch assembly (C) from the pump.

4. Remove the rubber diaphragm (D).

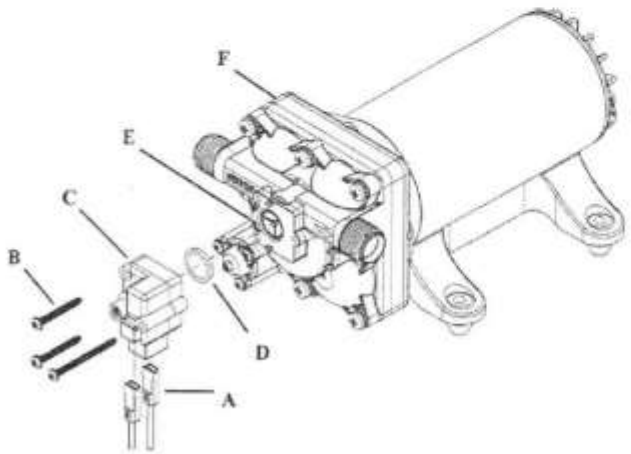
ASSEMBLY

1. Install the new switch assembly (C) with the new diaphragm (D) making sure the diaphragm is properly seated.

2. Secure the switch (C) to the pump body and firmly tighten the 3 mounting screws (B). Do not over-tighten (10-16 in-lbs).

3. Connect the lead wires (A) to the switch terminal contacts.

4. The pump is now ready for connection to electrical power.



PUMP HEAD REPLACEMENT KIT

DISASSEMBLY

1. Disconnect the lead wires (A) from the pressure switch (B). Note which wire goes to each lead on the switch.

2. Remove the 4 outside housing screws (C).

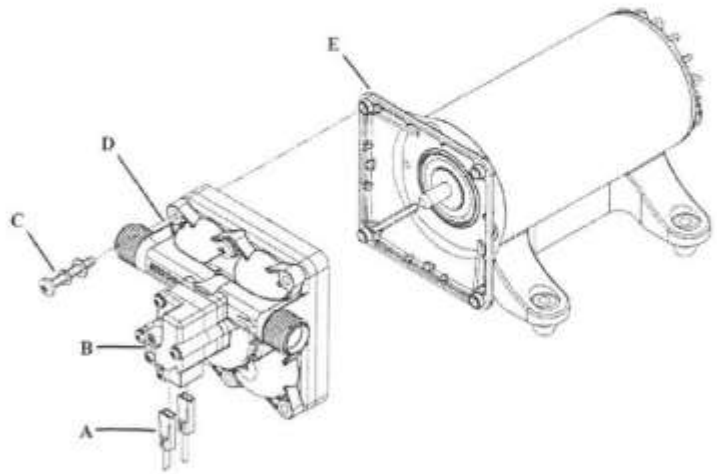
3. Remove the entire pump head (D) from the motor (E).

ASSEMBLY

1. Align the "D" groove of the motor shaft with the "D" groove on the eccentric (wobbler) inside the pump head (D). Check to be sure the switch terminals face down towards the motor mounting plate. Push until the pump head (D) seats on the motor (E).

2. Tighten the 4 outer screws (C). Tighten to 25-32 in-lbs.

3. Attach the lead wires (A) onto the switch (B)..



DRIVE ASSEMBLY REPLACEMENT KIT

DISASSEMBLY

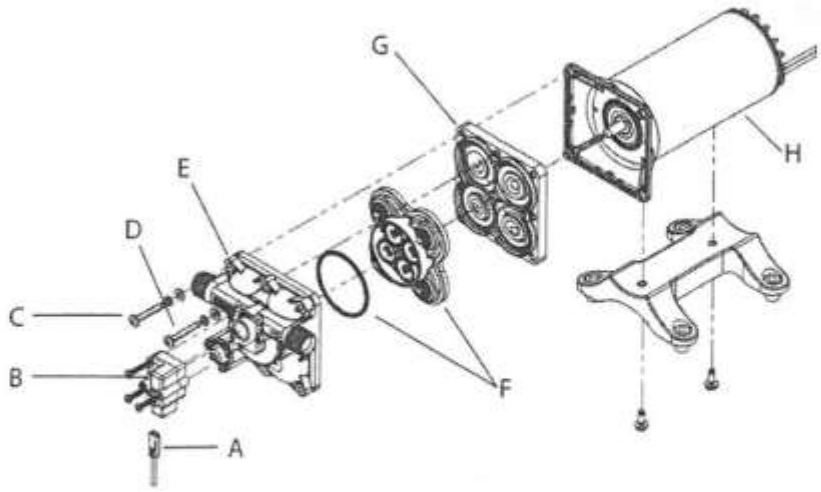
1. Disconnect the lead wires (A) from the pressure switch (B). Note which wire goes to each lead on the switch.

2. Remove the 4 inner housing screws (D).

3. Remove the 4 outer housing screws (C). These screws hold the pump to the motor.

4. Remove the upper housing (E) and valve assembly (F).

5. Remove the old diaphragm/drive assembly (G) from the motor (H).



ASSEMBLY

1. Place the valve assembly (F) on top of the new diaphragm assembly (G). Align grooves in the diaphragm with grooves in the valve assembly.

2. Place the upper housing (E) on top of the valve assembly (F) and drive assembly (G). Diaphragm should fit inside the housing with no pinching.

3. Align the "D" groove of the motor shaft with the "D" groove on the eccentric

(wobbler) inside the drive assembly (G). Check to be sure the switch terminals face down towards the motor mounting plate. Push the pump head until it seats on the motor face.

4. Tighten the 4 inner housing screws (D). Tighten to 25-32 in-lbs.

5. Tighten the 4 outer housing screws (C). Tighten to 25-32 in-lbs.

6. Attach the lead wires (A) to the switch terminal contacts.

BY-PASS & PRESSURE SWITCH ADJUSTMENT

The by-pass is a spring loaded diaphragm that opens up allowing water from the discharge side back to the inlet side. The by-pass is set to begin opening at about 40 psi and creating full by-pass at about 65 psi. The pressure switch on the pump is set to shut off at 55 psi. If the switch or by-pass are adjusted too much, the by-pass and switch shut-off can overlap and THE PUMP WILL NOT SHUT OFF. Screwing the switch screw in clockwise will raise the shut-off pressure. Unscrewing the switch screw counterclockwise will lower the pump shutoff pressure. Screwing the by-pass screw in will raise the pressure at which the by-pass starts and raise the full by-pass pressure. Unscrewing the by-pass screw counterclockwise will lower the pressure at which by-pass starts and lower the full by-pass pressure. **WARNING: If full by-pass is reached before the shut-off setting, the pump will not shut off.** Full by-pass pressure setting should be at least 5 psi higher than pump shut off pressure.

SETTING PROCEDURE

1. Turn off power.

2. Disconnect power wire to switch.

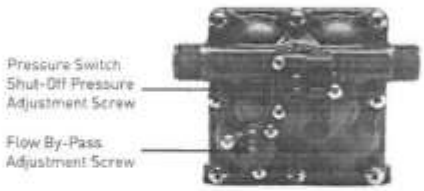
3. Connect power directly to the red pump motor lead. Pump will start.

4. Close all valves and adjust by-pass screw until it reaches desired full by-pass (factory setting = 65 psi) Open and close valve and adjust as needed.

5. Open valve and turn off power.

6. Reconnect power wire to switch.

7. Open and close valve alternately while adjusting switch screw to reach desired shutoff pressure (55).



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