

**Quad Reference**

**Disassemble**

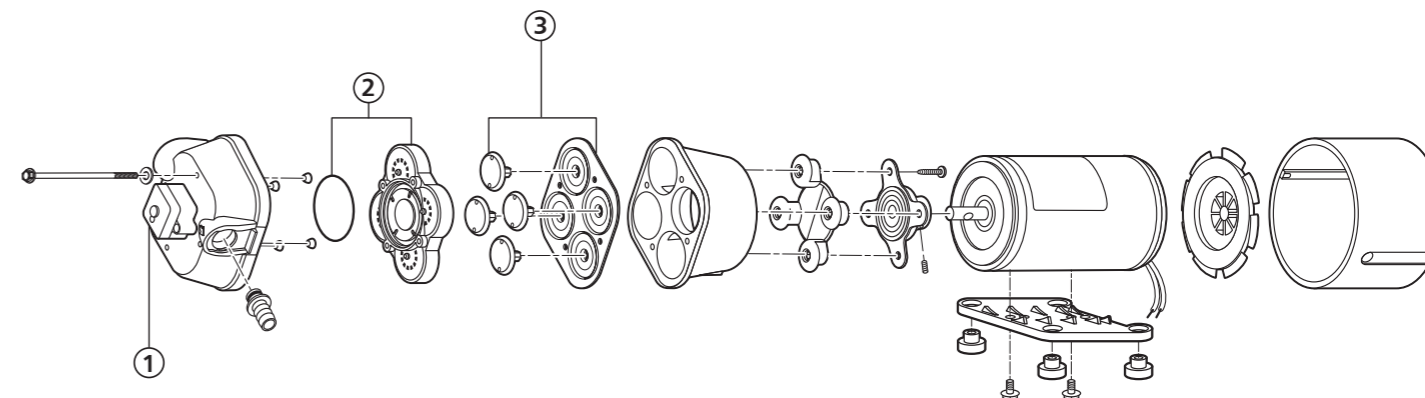
1. Remove power from the pump. Open discharge valve to relieve system pressure.
2. Push port clips back and disconnect plumbing from pump.
3. Loosen the four pump head screws, do not remove screws.
4. Rotate pump head until cam / bearing set screw is visible through drain notch.
5. Loosen cam / bearing set screw and slide pump off motor shaft.
6. Separate upper housing, lower housing and check valve assembly as required.  
(Please ensure that ferrules are in place and not lost.)

**Reassembly**

1. Install new outer in lower housing with piston tops pointing away from motor.
2. Install new diaphragm in lower housing with the molded o-ring seals facing away from motor.
3. Insert each inner piston through the diaphragm into outer piston.
4. Turn each piston until fully seated.
5. Secure cam / bearing assembly to outer pistons using 18 inch pounds (2.0 Nm) of torque.
6. Lube the motor shaft with a small amount of light grease; slide lower housing on motor shaft. Align set screw with motor shaft indentation.
7. Set screw **MUST** be positioned over shaft indentation and secured tightly.
8. Check that ferrules are installed in upper housing and o-ring is properly seated.
9. Install check valve assembly in upper housing and fit upper and lower housings together.
10. Align pump head with motor and tighten four screws evenly using 25 inch pounds (2.8Nm) of torque.

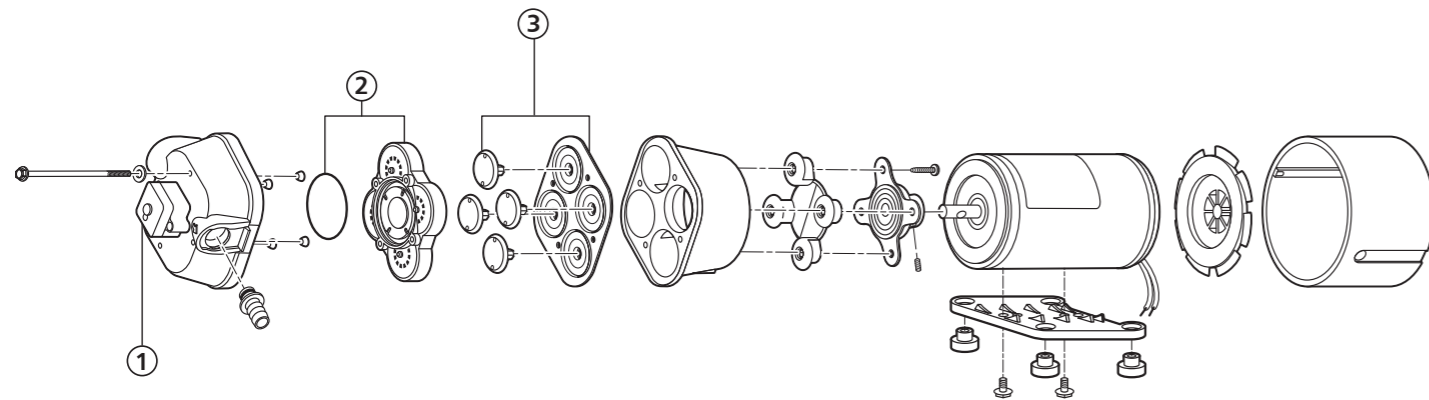
**Switch Replacement**

1. Remove power from pump. Relieve system pressure. Disconnect inlet and outlet hoses.
2. Remove pressure switch cover and disconnect power leads from switch.
3. Remove switch and switch diaphragm from pump by remove two switch mounting screws.
4. Replace switch diaphragm and switch **NOTE:** Check the old diaphragm for material mark located in the center of the new diaphragms. V is for VITON, and E is for EPDM. Select the correct material for the installation.
5. Do not over tighten switch mounting screws.



**QUAD 4000 SERIES**

PART NO.	PRESSURE SWITCH	CHECK VALVE	DIAPHRAGM
R4100143	NA	20407030	20403040
R4100343	NA	20407030	20403040
R4100500	NA	20407030	20403040
R4100502	NA	20407020	20403040
R4100507	NA	20407060	20403040
R4100522	NA	20407030	20403040
R4100523	NA	20407020	20403040
R4100524	NA	20407020	20403040
R4100525	NA	20407030	20403040
R4105524	NA	20407030	20403040
R4120242	NA	20407030	20403040
R4120243	NA	20407030	20403040
R4120252	NA	20407020	20403040
R4120253	NA	20407020	20403040
R4300142	02095103	20407030	20403040
R4300143	02095103	20407030	20403040
R4300242	02095109	20407030	20403040
R4300342	02095103	20407030	20403040
R4300343	02095103	20407030	20403040
R4300500	02095103	20407020	20403040
R4300501	02095103	20407020	20403040
R4300503	02095109	20407020	20403040
R4300504	02095103	20407020	20403040
R4300506	02095103	20407010	20403050
R4300519	02095103	20407030	20403040
R4300520	02095103	20407010	20403050
R4300521	02095104	20407030	20403040
R4300522	02095104	20407030	20403040
R4300533	02095103	20407030	20403040
R4300533	02095103	20407030	20403040
R4300534	02095103	20407020	20403040
R4300535	02095103	20407020	20403040
R4300536	02095104	20407020	20403040
R4300537	02095103	20407010	20403050



**QUAD 4000 SERIES**

PART NO.	PRESSURE SWITCH	CHECK VALVE	DIAPHRAGM
R4300538	02095104	20407030	20403040
R4300539	02095104	20407030	20403040
R4300540	02095104	20407060	20403040
R4320242	02095104	20407030	20403040
R4320243	02095104	20407030	20403040
R4320252	02095104	20407020	20403040
R4320253	02095104	20407020	20403040
R4320501	02095103	20407030	20403040
R4400343	02095104	20407030	20403040
R4400501	02095104	20407030	20403040
R4400503	02095105	20407020	20403040
R4400504	02095105	20407020	20403040
R4400505	02095104	20407030	20403040

**Pentaflex Reference** (See page 16 for exploded view)

**Disassemble Pump Housing**

1. Disconnect power to the pump motor. Relieve system pressure. Disconnect inlet and outlet hoses.
2. Remove the pressure switch cover and remove the two wire leads from the switch space connectors.
3. Remove the six screws from the upper housing.
4. Remove the upper housing from the check valve and diaphragm / lower housing assemblies.

**Check Valve Assembly (To replace check valve only follow steps 1 through 6)**

5. The check valve chamber and o-ring are located on the diaphragm / lower housing assembly.
6. Remove the check valve chamber subassembly from the diaphragm / lower housing subassembly (pull the valve chamber from the diaphragm).

**Diaphragm / Cam / Lower Housing Assembly**

7. Remove the diaphragm / lower housing assembly from the motor from end bell adaptor.

**Reassemble Pressure Switch Assembly**

1. Install the switch diaphragm into upper housing NOTE: Check the old diaphragm for material mark located in the center of the new diaphragms. V is for VITON, and E is for EPDM. Select the correct material for the installation.
2. Install the switch body over the diaphragm, align the screw holes and install the two mounting screws.
3. Reinstall the two wires onto the spade connectors, install the switch cover and screw.

**Check Valve Assembly**

4. Install the o-ring into the o-ring groove located on the discharge side of the check assembly.
5. Install the check valve chamber assembly into the diaphragm, thus aligning the check valve chamber with the diaphragm seal walls (push in to secure the diaphragm).

**Upper Housing Assembly**

6. With the check valve chamber subassembly installed on the diaphragm, place the upper housing assembly onto the pre-assembled lower housing subassembly.
7. Lube the motor shaft with a small amount of light grease; align the cam with the motor "D" shaft and motor list, then slide the cam onto the motor shaft.
8. Check the discharge location (see arrow on front of port) for correct port orientation (discharge right is the standard position).
9. Install the six pump head screws through the upper housing, 3 screws will engage to lower housing. The other 3 screws will go through the lower housing into the front end bell assembly aligning the 3 pins on the front bell with the 3 holes on the lower housing and tighten securely.