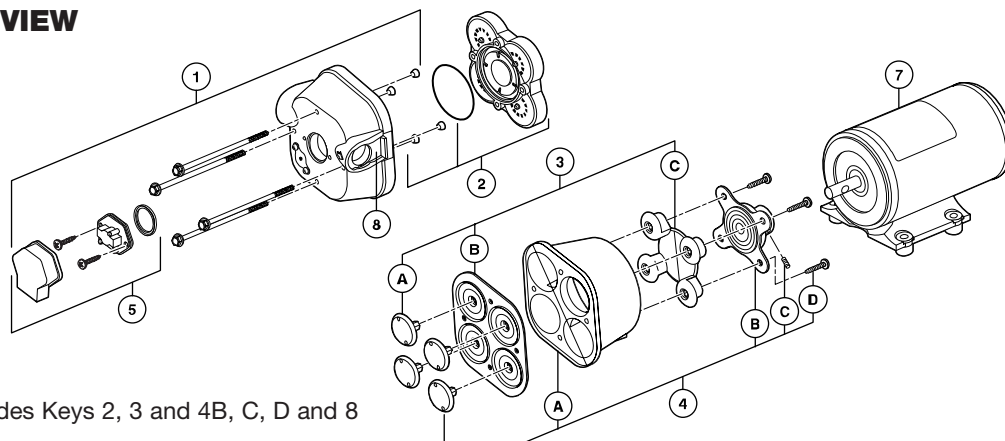




WARNING: DISCONNECT POWER TO PUMP AND OPEN VALVE TO RELIEVE WATER PRESSURE PRIOR TO SERVICING PUMP

EXPLODED VIEW



* Service kit includes Keys 2, 3 and 4B, C, D and 8

| KEY | DESCRIPTION | QTY | 31595-SERIES | 31600-SERIES | 31620-SERIES | 31630-SERIES |
|-----|--------------------------|--------------|--------------|--------------|--------------|--------------|
| 1 | Upper Housing | XXXXX-0092 | 1 | 18910-4040 | 18910-4040 | 18910-4040 |
| | | XXXXX-0094 | 1 | 18910-4040 | 18910-4040 | 18910-4040 |
| | | XXXXX-0292 | 1 | 18910-4025 | 18910-4025 | 18910-4025 |
| | | XXXXX-0294 | 1 | 18910-4025 | 18910-4025 | 18910-4025 |
| | | XXXXX-0294 | 1 | 18910-4025 | 18910-4025 | 18910-4025 |
| 2 | Valve Kit | | 1 | 18911-7030 | 18911-7030 | 18911-7030 |
| 3 | Diaphragm Kit | | 1 | 18912-3040 | 18912-3040 | 18912-3040 |
| 4 | Lower Housing Kit | | 1 | 18915-9000 | 18915-9002 | 18915-9002 |
| 5 | Pressure Switch | XXXXX-0092 | 1 | 18916-0040 | 18916-0040 | 18916-0040 |
| | | XXXXX-0094 | 1 | 18916-0040 | 18916-0040 | 18916-0040 |
| | | XXXXX-0292 | 1 | 18916-0025 | 18916-0025 | 18916-0025 |
| | | XXXXX-0294 | 1 | 18916-0025 | 18916-0025 | 18916-0025 |
| | | XXXXX-0294 | 1 | 18916-0025 | 18916-0025 | 18916-0025 |
| *6 | Service Kit | | 1 | 18920-9042 | 18920-9043 | 18920-9043 |
| 7 | Motor Kit – 12V EMC COMP | | 1 | 18919-0134 | 18919-0131 | 18919-0133 |
| | | 24V EMC COMP | 1 | 18919-1055 | 18919-1052 | N/A |
| 8 | Slide Clips | | 1 | 30648-1000 | 30648-1000 | 30648-1000 |
| 9 | Pumphead Assy. | XXXXX-0092 | 1 | 18914-6240 | 18914-6340 | 18914-6340 |
| | | XXXXX-0094 | 1 | 18914-6240 | 18914-6340 | 18914-6340 |
| | | XXXXX-0292 | 1 | 18914-6225 | 18914-6325 | 18914-6325 |
| | | XXXXX-0294 | 1 | 18914-6225 | 18914-6325 | 18914-6325 |
| | | XXXXX-0294 | 1 | 18914-6225 | 18914-6325 | 18914-6325 |

DISASSEMBLE

Pressure Switch (5)

1. Disconnect power to pump and open a faucet or valve to relieve system pressure.
2. Remove Rubber Boot, then remove the two visible Pressure Switch Screws located on each side of the Pressure Switch (5).

Upper Housing (1)

3. Slide Port Clip (8) back and unplug from Tank Plumbing.
4. Loosen but DO NOT remove the four Pump Head Screws and carefully remove Upper Housing Assembly (1).
5. Remove Check Valve (2) and inspect for debris.

Check Valve Assembly (2) Follow Steps 1, 3 & 4

6. Inspect Check Valve (2) and O-Ring

Lower Housing (4) Follow Step 1, 3 & 4

7. Remove Rubber Plugs on housing (4-A) to access Allen Screw.
8. Rotate Lower Housing (4), so access notch is aligned with Cam Bearing Set Screw (4-C), loosen set screw with a 1/8" Allen Wrench and slide pump head off motor shaft.

Diaphragm (3-B)

9. Loosen four cam piston screws with Phillips head screw driver and pull apart cam (4-B) from Inner Pistons (3-A). (Both pistons (3-A & C) should be replaced when a new Diaphragm (3-B) is installed.)

Motor (7) Follow steps 1, 3, 4, 7, & 8

REASSEMBLE

Diaphragm (3-B)

1. Insert Outer Pistons (3-C) into Lower Housing (4-A) by bending pistons at center fold.
2. Placing the Diaphragm (3-B) (flatter side of Diaphragm facing the motor) on the Lower housing (4-A). Press each Inner Piston (3-A) through the Diaphragm and Lower Housing (4A) into Outer Piston (3-C). Hex stem of Inner Pistons (3-A) must be aligned into hex holes in Outer Pistons (3-C). Tighten cam piston screws partially, center piston in diaphragm, and tighten screws securely (18 in. lbs. torque). Also, the Outer Pistons (3-C) must be aligned with alignment slots on Cam Assembly (4-B) making sure screw holes align in cam assembly, otherwise diaphragm will leak.

Cam Bearing (4-B)

3. Place Cam Bearing (4-B) over Inner Pistons (3-C) and tighten down with four Phillips Head Screws. (18 in. lbs. torque)

Lower Housing (4) to Motor (7)

- Coat motor shaft with grease prior to installing Cam Bearing (4-B).
4. When installing the Lower Housing (4), rotate access notch to align with Cam Bearing Set Screw (4-C).
5. Attach Cam Bearing (4-B) to motor shaft indentation with Cam Bearing Set Screw (4-C). (35 in. lbs. torque)
6. Reinsert new Notch Plugs.

Check Valve (2)

7. Place Ferrules (Rubber Cones) in the Upper Housing (1) coned side first.
8. Properly seat O-Ring in Check Valve (2) and insert Check Valve (2) into the Upper Housing (1).

Upper Housing (1)

9. Place Upper Housing (1) on top of the Lower Housing (4-A) and tighten Hex Bolts (30 in. lbs. torque) through the Upper Housing (1) to the Motor.