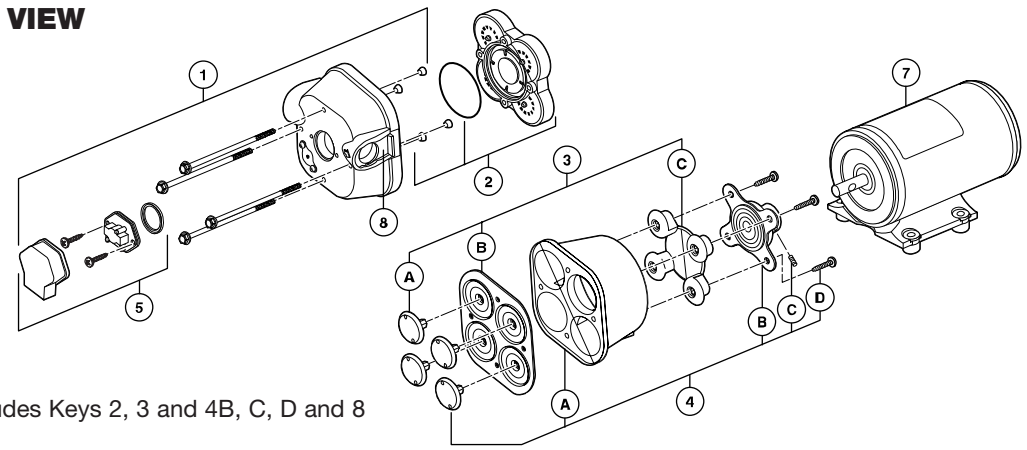
WARNING: DISCONNECT POWER TO PUMP AND OPEN VALVE TO RELIEVE WATER PRESSURE PRIOR TO SERVICING PUMP

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	18910-4040
		XXXXX-0094	1	18910-4040	18910-4040	18910-4040	18910-4040
		XXXXX-0292	1	18910-4025	18910-4025	18910-4025	18910-4025
		XXXXX-0294	1	18910-4025	18910-4025	18910-4025	18910-4025
2	Valve Kit		1	18911-7030	18911-7030	18911-7030	18911-7030
3	Diaphragm Kit		1	18912-3040	18912-3040	18912-3040	18912-3040
4	Lower Housing Kit		1	18915-9000	18915-9002	18915-9002	18915-9002
5	Pressure Switch	XXXXX-0092	1	18916-0040	18916-0040	18916-0040	18916-0040
		XXXXX-0094	1	18916-0040	18916-0040	18916-0040	18916-0040
		XXXXX-0292	1	18916-0025	18916-0025	18916-0025	18916-0025
		XXXXX-0294	1	18916-0025	18916-0025	18916-0025	18916-0025
*6	Service Kit		1	18920-9042	18920-9043	18920-9043	18920-9043
7	Motor Kit – 12V EMC COMP		1	18919-0134	18919-0131	18919-0132	18919-0133
	24V EMC COMP		1	18919-1055	18919-1052	18919-1053	N/A
8	Slide Clips		1	30648-1000	30648-1000	30648-1000	30648-1000
9	Pumphead Assy.	XXXXX-0092	1	18914-6240	18914-6340	18914-6340	18914-6340
		XXXXX-0094	1	18914-6240	18914-6340	18914-6340	18914-6340
		XXXXX-0292	1	18914-6225	18914-6325	18914-6325	18914-6325
		XXXXX-0294	1	18914-6225	18914-6325	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.