

Service Instructions for Flojet Quad diaphragm and Jabsco 31XXX models

Warning disconnect power supply to the pump and open a valve or tap to relieve the system pressure before starting work.



PRESSURE SWITCH (if fitted) **DIS-ASSEMBLE**

-
1. Remove rubber boot or screwed on cover
 2. Disconnect wires from the spade terminals
 3. Remove the rubber gasket to expose the two screws located each side of the pressure switch
 4. Gently separate the switch and switch diaphragm from the pump head and inspect for debris.

UPPER HOUSING AND CHECK VALVE ASSEMBLY

-
5. Loosen but **do not remove** the 4 pump head screws/bolts
 6. Carefully remove the upper housing assembly
 7. Remove check valve and check valve 'O' ring and inspect for debris.

LOWER HOUSING

-
8. Rotate lower housing and remove rubber plugs to open drain notches
 9. Turn the lower housing so that a drain notch is aligned with the Cam Bearing Set Screw, loosen set screw with 1/8" allen key.
 10. Slide lower housing off the motor shaft

DIAPHRAGM



Using a Philips head screw driver, loosen the 4 cam piston screws and pull cam apart from the outer piston. (Both pistons should be replaced when a new diaphragm is fitted). Pull Inner Pistons (7) free from Outer Piston and remove the Diaphragm. Slightly bend outer piston (4) along pre-moulded crease to aid removal.



INNER PISTONS
Hexagonal stem 7

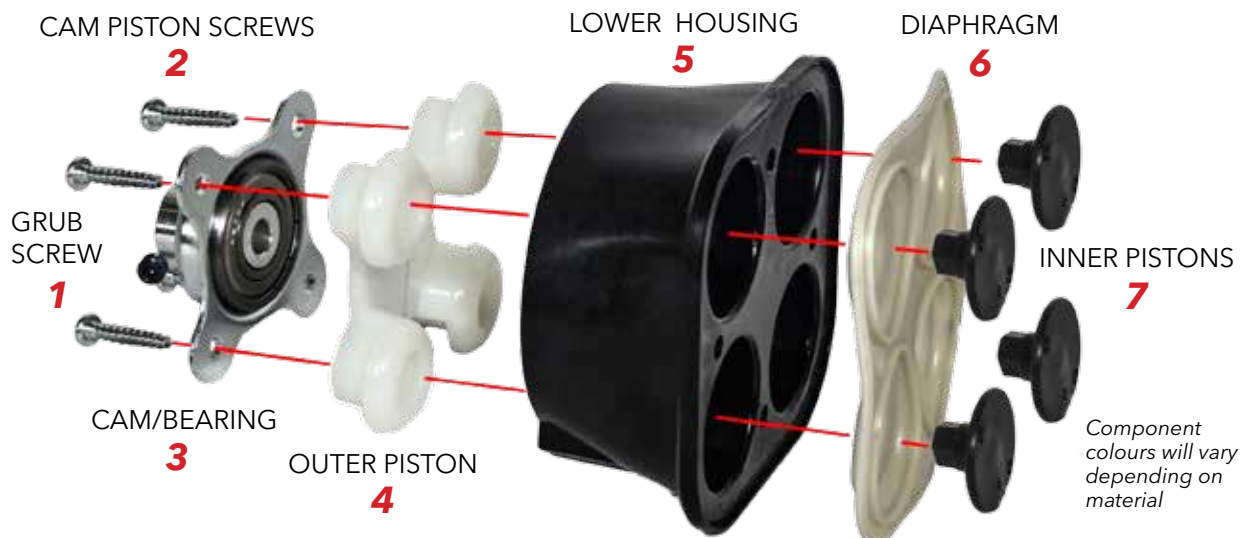


OUTER PISTON 4
Pre-moulded crease

RE-ASSEMBLE

Refer to photographs on page 1

DIAPHRAGM & LOWER HOUSING ASSEMBLY



1. Install single piece outer piston (4) into lower housing (5) with piston tops pointing away from motor (see picture). Slightly bend outer piston (4) along pre-moulded crease to aid assembly.
2. Place diaphragm (6) in lower housing (5) with the moulded o-ring seals facing away from the motor.
3. Insert each hex stem of inner piston (7) through the diaphragm into the outer piston. Turn each piston unit fully seated.
4. Align cam/bearing (3) with outer piston (4). Secure with cam/piston screws using 18 in.lbs torque.
5. Install the lower housing assembly onto the motor shaft. Coat motor shaft with grease prior to installing.
6. Turn the lower housing so that a drain notch is aligned with the Cam Bearing Grub Screw, the screw must align with motor shaft indentation, tighten set screw (1) with 1/8" allen key (35 in.lbs torque).
7. Reinsert drain notch covers and rotate housing to align with motor.

UPPER HOUSING & CHECK VALVE ASSEMBLY

1. If necessary replace ferrules (rubber cones) in the Upper Housing, coned side first
2. Seat 'O' ring in check valve
3. Insert check valve into the Upper Housing and push in
4. Place the upper housing on top of the lower housing and tighten screws/bolts through the upper housing to the motor (30 in. lbs torque)

Ferrules



PRESSURE SWITCH ASSEMBLY

1. Place pressure switch and diaphragm against front of pump and insert screws, take care not to cross thread or strip the threads in the housing.
2. Reconnect wires and replace cover.

Note: The pre-mounted screw on the face of the switch housing is the pressure adjustment screw. This is a factory pre-set switch, **DO NOT ADJUST**. Adjustment other than the one made by the factory voids the warranty.