BAIT TANK AND GENERAL PURPOSE PUMPS SERVICE PARTS

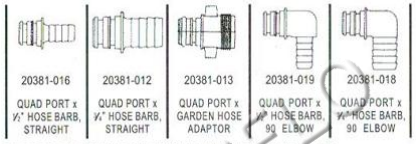
KEV # DESCRIPTION

0 Service Kit*
1 Upper Housing with Clips
2 Check Valve Assembly
3 Diaphragm Assembly (Includes screws)
4 Lower Housing Assembly
5 Motors
6 Poris-75HB(2)
Ports-Garden Hose (2)
7 Pump Head Assembly
8 Side Clips (pair)

Service Kit includes #2,#3,#8 and drive cam assembly

ACCESSORIES

OUICK CONNECT PORT SYSTEM



THE ABOVE PART NUMBERS ARE PACKAGED WITH 2 FITTINGS PER POLY BAG

STRAINERS

Inlet	outlet	Screen
3/4 Barb	3/4 Barb	40 Mesh
3/4 Barb	3/4 Barb	40 Mesh
3/4 Barb	3/4 Barb	40 Mesh
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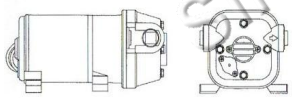


FEATURES

*Self-Priming
*Soft, Noise Absorbing Mounts
*Corrosion Resistant Materials
*with Thermall Overload Protection

SPECIFICATIONS

Motor: Permanent Magnet, Ball Bearings on both Front and Rear Endbells. CE Models are fully suppressed.

Pump: Four chamber positive displacement diaphragm design; Self-priming up to 6 ft.suction lift;Pump able to run dry without damage;Removable port to hose connectors.

CE

TECHNICAL DATA

TYPE	VOLTS (V)	AMP (A)	FLOW RATE (L/min)	Max Pressure (PSI)
FL-30	12	2.2	10	17
FL-31	24	1.5	10	17
FL-35	12	3.9	12.5	35
FL-34	24	2	12.5	35
FL-33	115	0.5	12.5	35
FL-32	220	0.4	12.5	35
FL-40	12	6	17	40
FL-44	24	2.5	17	40
FL-41	115	0.5	17	40
FL-43	220	0.4	17	40

* CE fully suppressed models are identified by a prefix "R"and a CE mark on the label(i.e.R4105-501)
Self Declaration Of Conformance(SDOC)is available upon request.

OPERATION of Singflo FL series

Your "Quad II"bait tank pump is designed to self-prime up to 6 feet suction lift and fill your tank in 8-12 minutes.This allows 5 to 6 water changes per hour. If pump fills tank in less than 8 minutes divert excess water by installing a T or Y valve. Reduce turbulence by adding additional inlet at water line or drill out multiple stand pipe hose so water does not spurt out of holes. Your lively bait need calm fresh water.

This pump is quiet running. It is recommended you utilize a "lighted" on-off switch so that the pump is turned off when not in use.

The "Quad II"is able to run dry (no liquid)for exfended periods with no damage to the pump. However, this could cause needless battery drain.

For general purpose or diesel transfer, plug in your choice of ports and lock in with slide clips. Attach hoses and wiring.

For portable use we recommend the pump be attached to a base (ie.3/4''x8''x10''board or plywood),add a toggle switch,a length of two conduictor cable with alligator clips for battery connection.

Singflo TROUBLESHOOTING

WARNING:BEFORE SERVICING PUMP ,CLOSE SEA COCK, TURN OFF POWER AND DRAIN WATER FROM HOSES!!

Failure to Prime-Motor operates but no pump discharge

* Restricted intake or discharge line
* Air leak in intake line
* Debris in pump
* Punctured pump diaphragm (pump leaks)
* Crack in pump housing

Motor falls to turn on

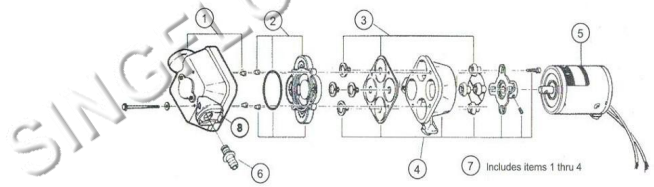
* Blown fuse
* Pump circult has no power
* Loose wiring connection
* Defective motor

Low Flow and Pressure

* Air leak at pump intake
* Accummulation of debris inside pump and plumbing
*Wom pump bearing (excessive nosie)
*Punctured pump diaphragm (punop leaks)
* Defective motor

Pulsating Flow

*Restrocted pump delivery. Check discharge lines fittings and valves for clogging or under sizing



Quite often when a pump is worn or defective the one failed component has overburdened others. To avoid frequent aggravating repair, offers service kit assemblies making repairs as quick and easy as possible.

TO DISASSEMBLE

Upper Housing

1 Loosen but do not remove four pump head screws and carefully remove upper housing assembly(1).

2 Inspect check valve (2) for debris

3 Reassemble new upper housing (1)

Check Valve Assembly

Follow step 1

3 Replace check valve (2)

4 Reassemble upper housing (1)

Lower Housing, Diaphragm, Motor

Follow step 1

3 Rotate lover housing (4) so mounting notch opening on lower housing exposes set screw which holds bearing housing to shaft.

4 Loosen this set screw by inserting wrench 1/8'' Allen wrench into mounting notch opening. Then slide lower housing (4) off motor shaft.

Diaphragm Conld

5 Loosen four cam piston screws with Phillips head screw driver and pull apart cam from inner pistons,(Pistons should always be replaced when a new diaphragm is installed.)

Motor Cont'd

5 Replace Motor (5).

TO REASSEMBLE

Motor

1.Reassemble lower housing assembly (4) to motor(Follow steps 4 to 10)

Diaphragm

2.Lower housing is assembled with:
Flat side of diaphragm and outer pistons facing motor
Hex stem of inner pistons must be aligned into hex holes in outer pistons(4).
Ourter pistons must be aligned with alignment slots on cam assembly making sure screw holes align in cam assebly, otherwise diaphragm will leak.

3.Tighten cam piston screws partially,center piston in diaphragm, then tighten screws securely (18 in lbs,torque)

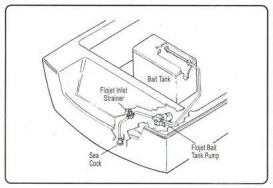
Lower Housing

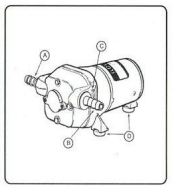
4.Reassemble lower housing assembly (4) to motor

5.Retighten set screw securely. Set screw head must be positioned facing motor cover ing seam (indentation).(Positioning of this screw is critical to avoid misalignment and subsequent diaphragm damage.)

Upper Housing, Check Valve

6.Reassemble upper housing (1)
7.Properly seat O-Ring in check valve assembly (2) and check if ferules and screen are in place on upper housing (1).
8.Install check valve 92) into upper housing (1) and pushin.
9.Assemble on to lower housing (4),align 4 screws on to motor by rotation lower housing (4) if necessayr to align feet
10.Tighten screws evenly to 30 in.lbs.torque.





INSTALLATION

STEP 1

Remove shipping plugs from Quad pump ports, Some water from factory testing may spill out.

STEP 2

Install inlet A and discharge B port connectors. Firmly push slide clips C forward to lock port connectors in place.

STPE 3

Slide rebber mounts fully into 4 mounting tracks.

STEP 4

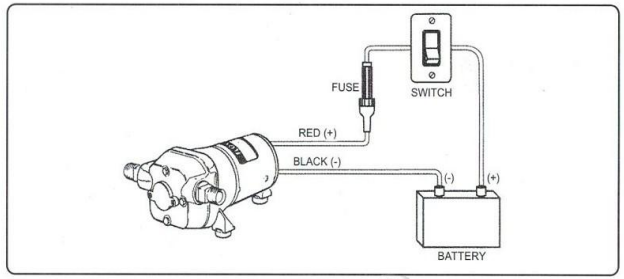
Mount pump vertically with pump head down or horizontally in an accessible location. If mounting vertically motor up attach motor maunts first, then pump head mounts,while supporting weight of pump.

STEP 5

Use 3/4" I.D. flexible hose (preferably braided of reinfoced). Use hose clamps on the slip-on barb hose connectors.

STEP 6

Install a 3/4'' in line strainer #01610-000 in accessible location between sea cock and pump inlet. This strainer or equivalentis required for pump warranty to be valid.



WIRING

WIRING

STEP 1

Use 14 gauge stranded wire to 20'.12 gauge to 50' from power source

STEP 2

Use a 10-15 amp rated 9lighted) on-off switch on the (+)positive (red) motor lead.

STEP 3

Install 10 amp fuse protection in the positive switched lead for the -501 and -504 models, use a 15amp fuse for the -502 and a 5 amp fuse for the -503 models.