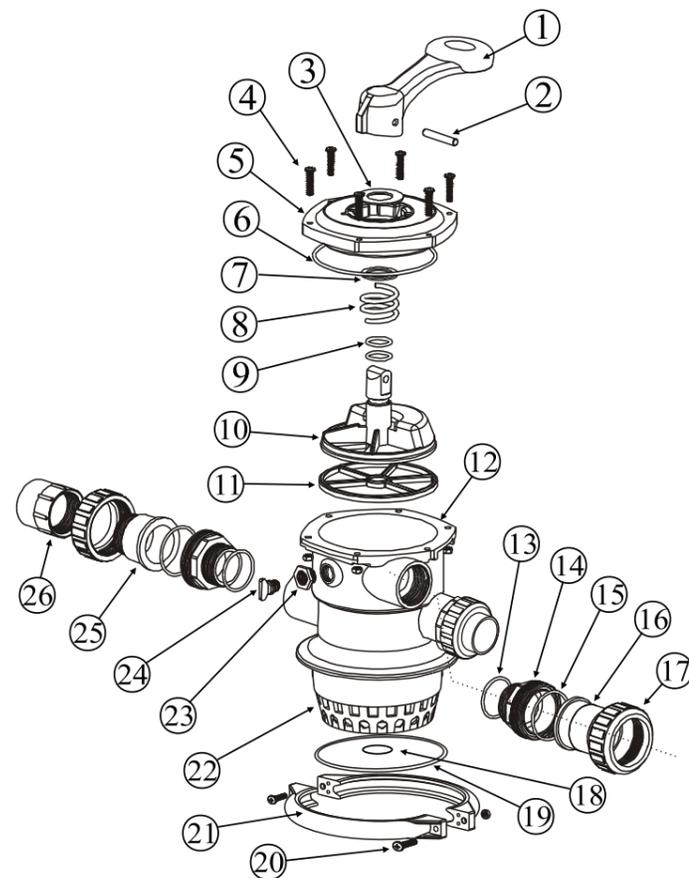


- ❖ Clean and inspect Ring; re-install on trap cover.
- ❖ Replace trap cover on trap; turn clockwise to tighten cover.

**NOTICE:** Tighten trap cover by hand only .Pump should prime now. Priming time will depend on vertical length of suction lift and horizontal length of suction piping.

**EM-MV40B VALVE REPLACEMENT PARTS**

Item	Description	Part No
1	Handle	MPV-01-019
2	Pin,handle	MPV-01W-1
3	Washer	MPV-01-006
4	Bolt with nut, lid	MPV-01W-02-1 MPV-01W-02-2
5	Lid assy	MPV-01-004-1
6	O'ring,lid	MPV-01W-03
7	Washer	MPV-01-007
8	Spring	MPV-01W-04
9	O' ring,rotor	MPV-01W-05
10	Rotor	MPV-01-005
11	Gasket,spider	MPV-01-015
12	Body-diffuser assy	MPV-01-001
13	O'ring,bulkhead	MPV-01W-06
14	Bulkhead fitting	MPV-03-004
15	O' ring,bulkhead	MPV-01W-7
16	Adaptor,bulkhead	MPV-01-010
17	Nut,bulkhead	MPV-01-009
18	O' ring,standpipe	MPV-01W-8
19	O' ring,filter	MPV-01W-9B
20	Bolt with nut, clamp	MPV-01W-10-1 MPV-01W-10-2
21	Flange clamp	FT-01-003
22	Overdrain,diffuser	MPV-01-012
23	Nut,plug	MPV-01-014
24	Plug with oring	CP-01W-05 CP-01-013
25	Sight glass	MPV-01-017
26	Tricky set	MPV-01-018



Valve Position	Function
FILTER	Normal Filtration and Vacuuming
BACKWASH	Cleaning Filter by reversing the flow
RINSE	Used after backwash to flush dirt from valve
WASTE	By-passes filter, used for vacuuming to waste or lowering water level
RECIRCULATE	By-passes filter for circulating water to pool
CLOSED	Shuts off all flow to filter or pool

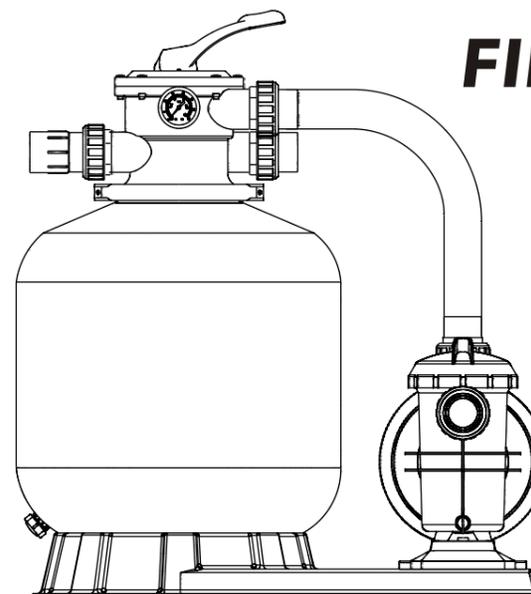
**WARNING**

- ⚠ THIS FILTER OPERATES UNDER HIGH PRESSURE. WHEN ANY PART OF THE CIRCULATING SYSTEM (e.g., CLAMP, PUMP, FILTER, VALVES, ETC.) IS SERVICED, AIR CAN ENTER THE SYSTEM AND BECOME PRESSURIZED . PRESSURIZED AIR CAN CAUSE THE LID OR VALVE TO BE BLOWN OFF WHICH CAN RESULT IN SEVERE INJURY, DEATH, OR PROPERTY DAMAGE
- ⚠ TURN PUMP OFF BEFORE CHANGING VALVE POSITION.
- ⚠ TO PREVENT DAMAGE TO THE PUMP AND FOR PROPER OPERATION OF THE SYSTEM, CLEAN PUMP STRAINER AND SKIMMER BASKETS REGULARLY.
- ⚠ DO NOT UNSCREW SCREWS OF FLANGE CLAMP WHILE PUMP IS RUNNING.

**FSF500-6W,FSF650-6W**

**FILTER & PUMP COMBO**

Installation & Operating  
Instruction



**INSTALLATION**

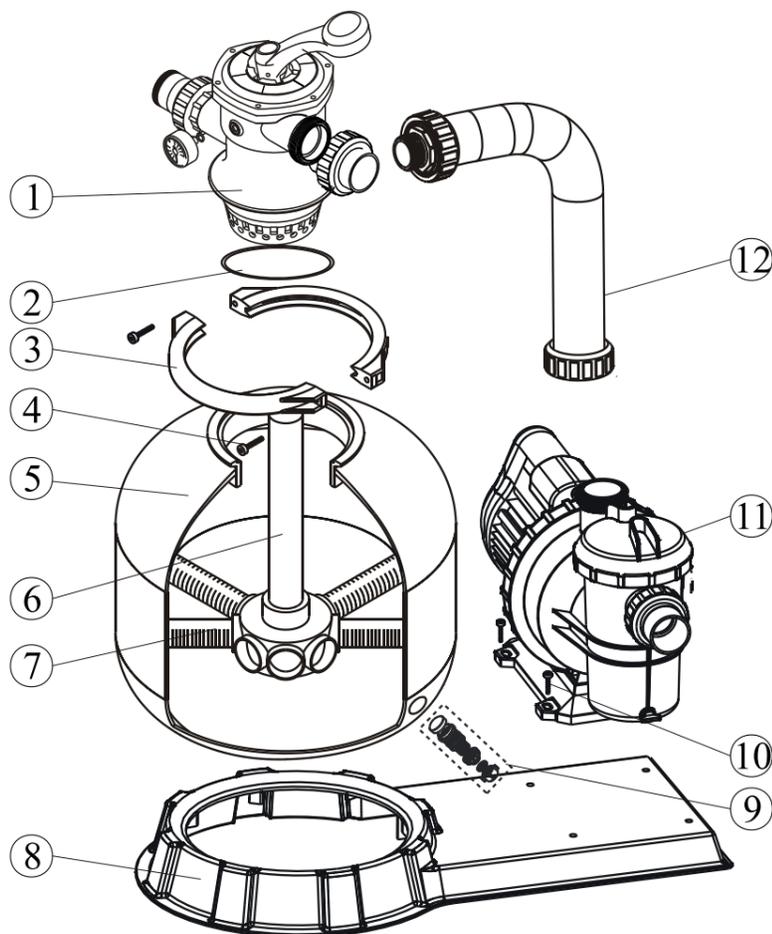
- \* Install filtration system including pump,filter tank and multiport valve.
- \* The filter system should be installed as close as possible to the swimming pool and preferably at a level of 0.50 metres below the surface of the water in the swimming pool. Make sure there is drainage available at the place where the filter is to be installed.
- \* PUMP
  - 1.Only qualified,licensed personnel should install pump and wiring.
  - 2.Electrical Contractors Please Note:All 220 volt 50Hz pump must be wired to the main power supply trough an approved and correctly rated contractor.
  - 3.Allow for gate valve in suction piping.
  - 4.Pump suction and discharge connections have moulded in thread stops,do not try to screw pipe in beyond these stops.
- \* FILTER TANK and MULTIPOINT VALVE
  - 1.Loading the sand media.Filter sand media is loaded through the top opening of the filter.
    - a.Loosen the plastic clamps from tank neck.
    - b.Cap internal pipe with plastic cap to prevent sand from entering it.
    - c.We recommend filling tank approximately 1/2 way with water to provide a cushion effect when the filter sand is poured in. This helps protect the under-drain laterals from excessive shock.
    - d.Carefully pour in correct amount and grade of filter sand.Be sure center pipe remains centered in opening. Sand surface should be leveled and should come to about the middle of the filter tank.Remove plastic cap from internal pipe.
  - 2.Assemble filter control valve to filter tank.
    - a.Insert filter control valve(with O'ring in place)into the tank neck,taking care that the center pipe slips into the hole in the bottom of the valve.
    - b.Place two plastic clamps around valve flange and tank neck and tighten just enough so that the valve may Be rotated on tank for final positioning.
    - c.Carefully screw pressure gauge(with O'ring in place)into tapped hole in valve body.Do not over-tighten.
    - d.Connect pump to control valve opening marked PUMP with hose.After connections are made,tighten clamps with screwdrive,tapping around clamp with screwdrive handle to help seat valve flange clamp.
  - 3.Make return to pool pipe connection to control valve opening marked RETURN and complete other necessary plumbing connections,suction lines to pump,waste,etc.
  - 4.To prevent water leakage,be sure all pipe connections are tight.

## INSTALL/START-UP OF FILTRATION

1. Be sure correct amount of filter media sand is in tank and that all connections have been made and are secure.
2. Depress control valve handle and rotate to BACKWASH position. (To prevent damage to control valve seal, always depress handle before turning.)
3. Prime and start pump. Never run pump dry! Running pump dry may damage seals, causing leakage and flooding! Fill pump with water before starting motor. (be sure all suction and return lines are open), allowing the filter tank to fill with water. Once water is flowing out of the waste line, run the pump for at least 1 minute. The initial back-washing of the filter is recommended to remove any impurities or fine sand particles in the sand media.
4. Turn pump off and set valve to RINSE position. Start pump and operate until water in sight glass is clear, about 1/2 to 1 minute. Turn pump off and set valve to FILTER position and restart pump. The filter is now operating in the normal filter mode, filtering dirt particles from the pool water.
5. Adjust pool suction and return valves to achieve desired flow. Check system and filter for water leaks and tighten connections, bolts, nuts, as required.
6. Note the initial pressure gauge reading when the filter is clean. (It will vary from pool to pool depending upon the pump and general piping system.) As the filter removes dirt and impurities from the pool water, the accumulation in the filter will cause the pressure to rise and flow to diminish. When the pressure gauge reading is 1.5 bar, higher than the initial "clean" pressure you noted, it is time to backwash the filter (see BACKWASH under filter and control valve functions).

NOTE: During initial clean-up of the pool water it may be necessary to backwash frequently due to the unusually heavy initial dirt load in the water.

## REPLACEMENT PARTS OF FILTER



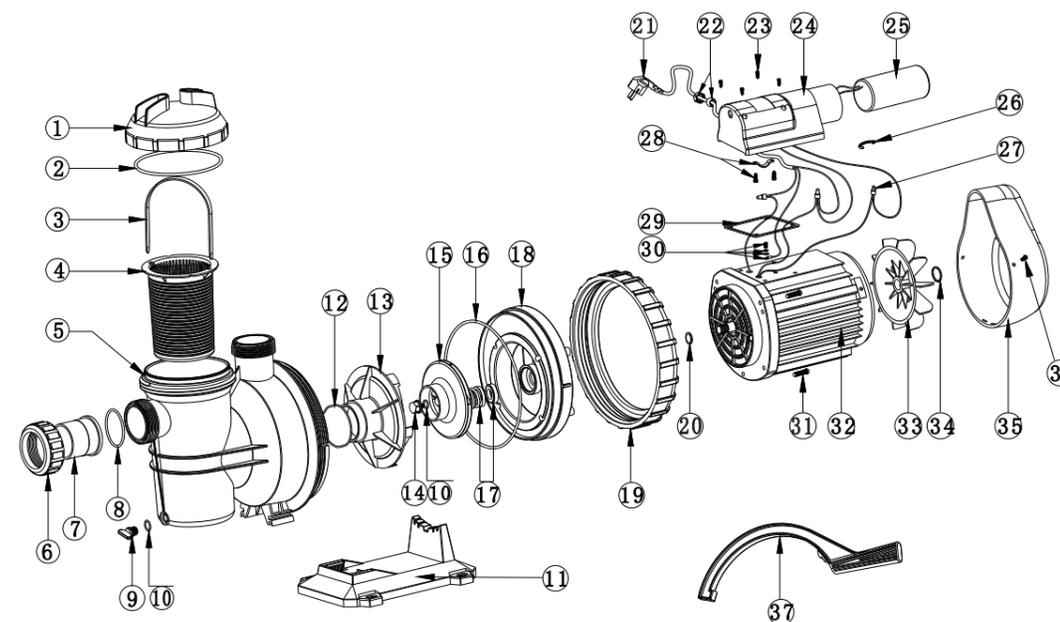
### FSF500-6W

Item	Part No.	Description
1	MPV-01A	Valve
2	010104	O'ring
3	010107	Flange clamp
4	020108	Screw
	020107	Nut
5	0101055	V500 Filter tank
6	0101014	Lateral assembly With center pipe
7	010118	Lateral
8	0105062	Under drain
9	010106	Filter base
10	010507	Hexagon screw
	010508	Washer
	010509	Spring washer
	010510	Hexagon nut
11	SC100	Pump
12	0105134	Hose

### FSF650-6W

Item	Part No.	Description
1	MPV-01A	Valve
2	010104	O'ring
3	010107	Flange clamp
4	020108	Screw
	020107	Nut
5	0101056	V650 Filter tank
6	0101015	Lateral assembly With center pipe
7	010118	Lateral
8	0105062	Under drain
9	010106	Filter base
10	010507	Hexagon screw
	010508	Washer
	010509	Spring washer
	010510	Hexagon nut
11	SC150	Pump
12	0105135	Hose

## SC PUMP REPLACEMENT PARTS



Key NO.	Description	Part No	Key NO.	Description	Part No
1	Lid	030301	21	Cable	030132
2	O'ring	030302		Waterproof plug wire	030225
3	Handle	030303	22	Nut for irdome	030133
4	Basket	030304		Waterproof plug for cable	030134
5	Pump body	030305	23	Screw for irdome	030135
6	Nut	030306	24	Irdome	030136
7	Union	030307		0.5HP Capacitance	030228
	Union	030308	25	0.75HP Capacitance	030229
8	O'ring	030309		1.0HP-1.5HP Capacitance	030137
9	Plug with o'ring	030112		2.0HP Capacitance	030138
10	O'ring	030113	26	Belt	030140
11	Base	030310	27	Terminals insulation joints	030141
12	Seal o'ring for diffuser	030311	28	Cable placement piece	030142
13	Diffuser	030312		Screw for cable placement piece	030143
14	Screw for impeller	030123	29	Waterproof Washer for the cover of irdome	030147
	Screw	0301231		Earth copper screw	030148
15	Impeller	030313	30	Washer	030149
	0.5HP Impeller	0303131		Washer	030150
	0.75HP Impeller	0303132		Earth cable	030151
	1.0HP Impeller	0303133	31	Screw for flange	030237
	1.5HP Impeller	0303134		0.5HP Motor	030318
	2.0HP Impeller	0303135		0.75HP Motor	030319
	Copper nut	0301245	32	1.0HP Motor	030320
16	O'ring	030314		1.5HP Motor	030321
				2.0HP Motor	030322
17	Shaft seal	030125	33	Small fan	030156
	Flange	030315	34	Elastic protective ring (Type B)	030158
18	Stainless loop	0303151	35	Cover for motor	030160
	Copper nut	0303152	36	Screw for cover	030162
19	Ring lock nut	030316	37	Opening key	030323
20	Waterproof washer	030317			

## PRIMING PUMP

- ❖ Release all air from filter and piping system.
- ❖ In a flooded suction system (water source higher than pump), pump will prime itself when suction and discharge valves are opened.
- ❖ If pump is not in a flooded suction system, unscrew and remove trap cover; fill trap and pump with water.