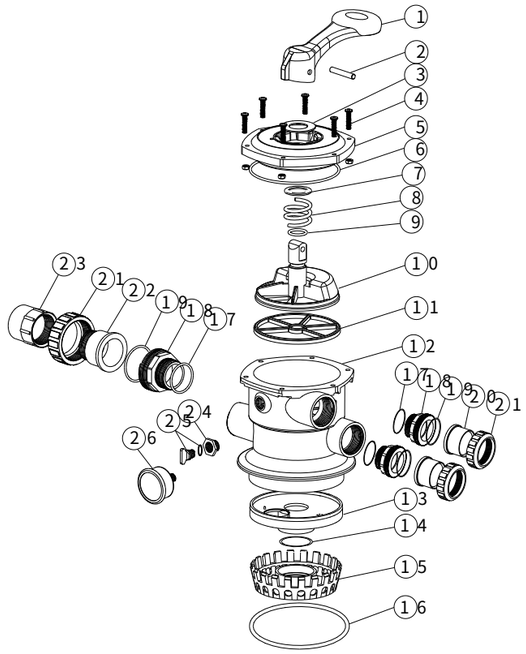
EM-MV40B VALVE REPLACEMENT PARTS

Item	Part No	Description	Qty
1	01013003	Handle(Big)	1
2	03018008	Pin for Handle	1
3	01181001	Washer for Handle	1
4	89280107	M6×30 Screw with Nut for Standard Lid	6
5	01013004	1.5"Top Mount Valve Standard Lid (Black)	1
6	02011002	O-Ring for 1.5" Valve Lid	1
7	01181002	Washer for Spring	1
8	03014001	Spring for 1.5" Top Mount Valve	1
9	02011022	O-Ring for 1.5" Valve Rotor	2
10	01021001	1.5" Valve Rotor	1
11	02311002	Spider Gasket	1
12	01013007	1.5"Top Mount Valve Bottom Body Clamp (Black)	1
13	01013011	1.5" Diffuser	1
14	02011001	O-Ring for Diffuser	1
15	01013012	1.5"Top Mount Valve OverDrain Diffuser	1
16	02011134	O-Ring	1
17	02020013	O-Ring for 1.5"Connector	3
18	01013015	1.5"Connector (Black)	3
19	02011003	O-Ring for 1.5"Union	3
20	01171153	1.5"Union (ABS)	2
21	01013017	1.5"Union Nut (Black)	3
22	01041002	1.5"Union With Sight Glass (Short)	1
23	01172026	1.5"Union With Sight Glass Holder	1
24	01111048	Connector for pressure gauge/stopper	1
	02011139	Connector for pressure gauge/stopper	1
25	89021703	Drain Plug with O-ring	1
26	06021013	Plastic Pressure Gauge With O-Ring (60psi)	1



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

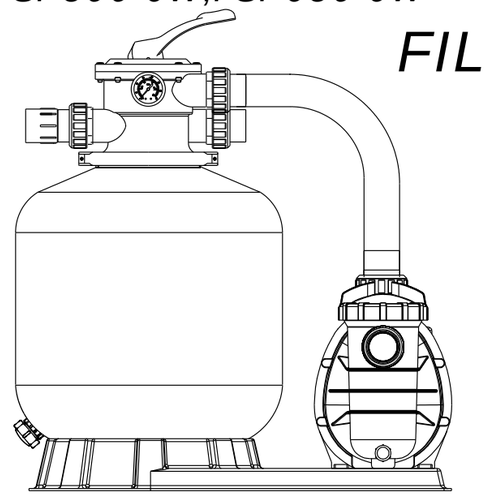
⚠ THIS FILTER OPERATES UNDER HIGH PRESSURE. WHEN ANY PART OF THE CIRCULATING SYSTEM (e.g., CLAMP, PUMP, FILTER, VALVES, ETC.) IS SERVICED, AIR CAN ENTER THE SYSTEM AND BECOME PRESSURIZED . PRESSURIZED AIR CAN CAUSE THE LID OR VALVE TO BE BLOWN OFF WHICH CAN RESULT IN SEVERE INJURY, DEATH, OR PROPERTY 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.

FSP350-6W,FSP400-6W,FSP450-6W
FSP500-6W,FSP650-6W



FILTER & PUMP COMBO
Installation & Operating Instruction

CE

NEW!

INSTALLATION

* Install filtration system including pump,filter tank and multiport valve.
* The filter system should be installed as close as possibie 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 60Hz 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 MULTIPORT 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.

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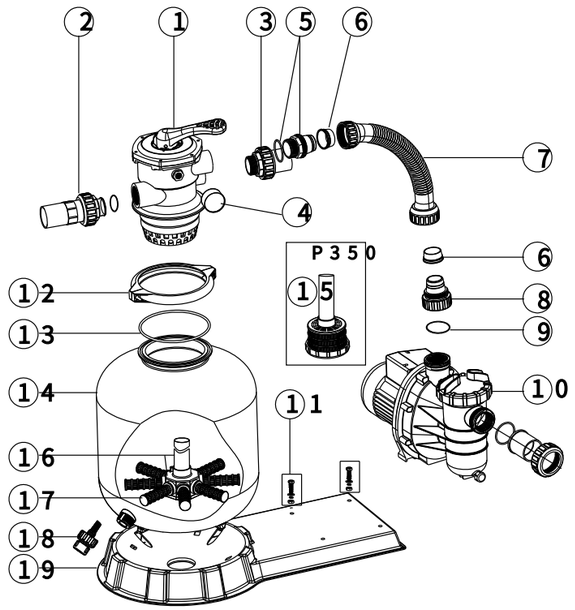
INSTALL/START-UP OF FILTRATION

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 tun 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).

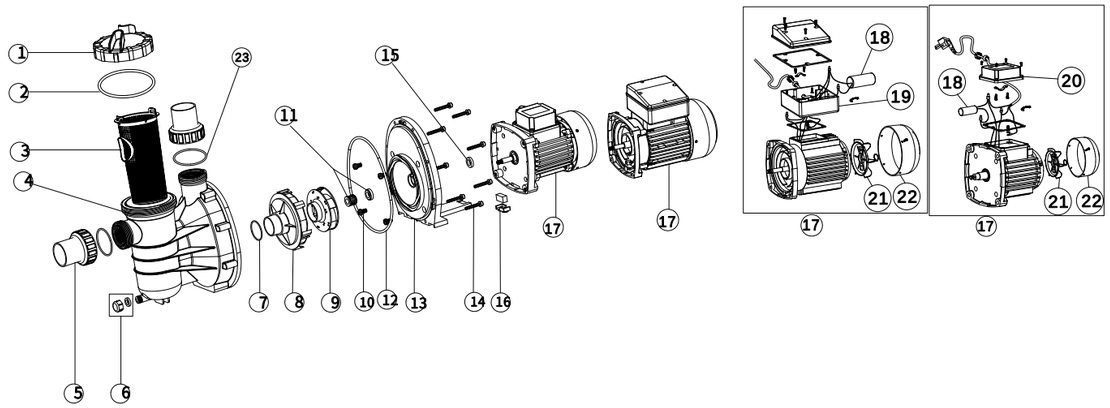
NOTE: During initial clean-up of the pool water it may be necessary to backwash frequently due to the unusually heavy initial dirt load in the water.

REPLACEMENT PARTS OF FILTER

Item	Part No.	Description	Qty
1	88280105	1.5"Top Mount Valve	1
2	89280101	1.5" union with sight glass O-Ring	1
3	89280102	1.5" Union Set With Ch-Ring	1
4	06021001	Plastic pressure Gauge With Ch-Ring (35psi)	1
	01111048	Connector for pressure gauge	1
5	89030204	Hose adapter with Ch-Ring	1
6	02011026	Sleeve for Hose	2
7	89031501	FSP350-6W Plastic union with Nut	1
	89031601	FSP400-6W Plastic union with Nut	1
	89031701	FSP450-6W Plastic union with Nut	1
	89031801	FSP500-6W Plastic union with Nut	1
	89031901	FSP650-6W Plastic union with Nut	1
8	01013049	Hose adapter with nut	1
9	02011104	O-Ring for pump	1
10	08030044	SS020	1
	08030045	SS033	1
	08030023	SS050	1
	08030024	SS075	1
	08030049	SS100	
	08030050	SS120	1
11	89032001	Pump Assembly Screw	2
12	89010119	M6*80 Screw With Nut	2
	01271010	Clamp Lock	2
13	02011134	O-Ring for Filter Neck	1
14	01331005	P350 Filter Tank	1
	01331006	P400 Filter Tank	1
	01331007	P450 Filter Tank	1
	01331008	P500 Filter Tank	1
	01331010	P650 Filter Tank	1
15	89011602	P350 Laterals Assembly with Center Pipe	1
16	89011603	P400 Laterals Assembly with Center Pipe	1
	89011604	P450 Laterals Assembly with Center Pipe	1
	89011605	P500 Laterals Assembly with Center Pipe	1
	89011606	P650 Laterals Assembly with Center Pipe	1
17	01172007	P400-P450 Lateral (L=515mm)	8
	01172008	P500-P650 Lateral (L=626mm)	8
18	89011601	Water Rain Set	1
19	01111056	FSP350-4W Combo Base	1
	01111053	FSP400-6W - FSP650-6W Combo base	1



SS PUMP REPLACEMENT PARTS



Key NO.	Part NO.	Product Description	QTY	Key NO.	Part NO.	Product Description	QTY
1	01201031	Transparent Lid	1	15	02011153	Motor Slinger for SS050-S120	1
2	02011074	O-Ring for lid	1	16	89022404	Motor support	1
3	01112051	Basket	1	17	89022201	Motor SS020 (220V/60HZ)	1
4	01021064	SSP Pump Pre-filter	1		89022202	Motor SS033 (220V/60HZ)	1
5	89280105	1.5" union	2		89022203	Motor SS050 (220V/60HZ)	1
6	89022402	Drain Plug With O'ring	1		89022204	Motor SS075 (220V/60HZ)	1
7	02011004	O-Ring for diffuser	1		89022205	Motor SS100 (220V/60HZ)	1
8	01111014	Diffuser	1		89022206	Motor SS120 (220V/60HZ)	1
9	01311023	Impeller SS020 (220V/60HZ)	1	18	04016009	Capacitor for SS050 Pump	1
	01311024	Impeller SS033 (220V/60HZ)	1		04016010	Capacitor for SS075 Pump	1
	01311015	Impeller SS050 (220V/60HZ)	1		04016012	Capacitor for SS100 Pump	1
	01311016	Impeller SS075 (220V/60HZ)	1		04016030	Capacitor for SS020 Pump	1
	01311017	Impeller SS100 (220V/60HZ)	1		04016031	Capacitor for SS033 Pump	1
	01311018	Impeller SS120 (220V/60HZ)	1	19	89022112	Cable Box for SS050-S120 Pump	1
10	89022403	M8*16 Screw with washer	4	20	89022111	Cable Box for SS020-S033 Pump	1
11	04015033	1/2 Mechanical seal	1	21	01031027	Cooling fan for SS050-S120 Pump	1
12	02011090	O-Ring for Flange	1		01031026	Cooling fan for SS020-S033 Pump	1
13	01021065	SSP Pump Flange	1	22	01031011	Fan Cover for SS020-S033 Pump	1
14	03011035	M6*30 Screw	8		01031010	Fan Cover for SS050-S120 Pump	1
15	02011156	Motor Slinger for SS020,SS033	1	23	02011104	O-Ring	2

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.
- 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.