

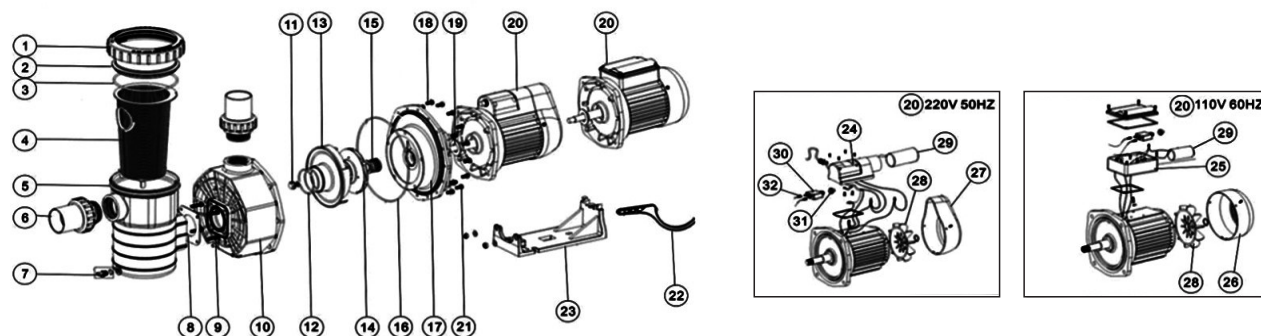
SUCTION PORT FROM POOL
OR VACUUM FILTER

DISCHARGE PORT TO
FILTER OR POOL

PUMP MAY BE BOLTED TO LEVER
FOUNDATION OR MOUNTING BRACKET

SCREWS OF PUMP BODY

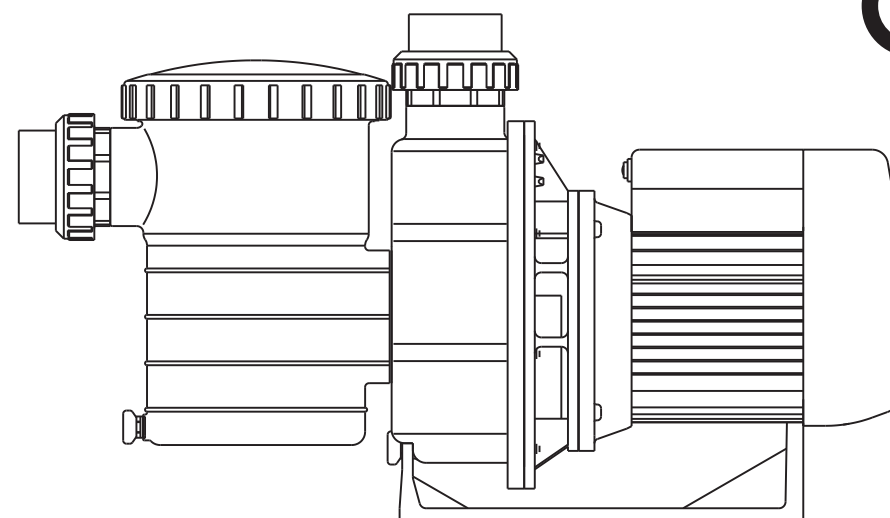
PUMP PARTS FOR SB



Key No.	Part No.	Description	Qty	Key No.	Part No.	Description	Qty
1	01021008	Nut for Lid	1	20	89021404	Motor SB/ SR30 (220V/60HZ)	1
2	01041022	Transparent Lid	1	20	89021601	Motor SB/ SR10 (380V/50HZ)	1
3	02010248	O-Ring for Lid	1	20	89021602	Motor SB/ SR15 (380V/50HZ)	1
4	01111030	Basket	1	20	89021603	Motor SB/ SR20 (380V/50HZ)	1
5	89021305	Pre-Filter Body	1	20	89021604	Motor SB/ SR30 (380V/50HZ)	1
6*	89280103	2.0" Union (Black/ White Colour)	2	20	89021501	Motor SB/ SR10 (110V/60HZ)	1
7	89021307	Drain Plug with O-ring	1	20	89021502	Motor SB/ SR15 (110V/60HZ)	1
8	02011115	Square Gasket	1	20	89021503	Motor SB/ SR20 (110V/60HZ)	1
9	03011083	M6 x 30 Screw for Pump Body	4	20	89021504	Motor SB/ SR30 (110V/60HZ)	1
10	89021308	Pump body for SB,SR	1	21	89021310	M8*20 Bolt for motor with washer	4
11	89021309	Screw for Impeller with O-Ring	1	22	01021021	Opening key	1
12	02011108	O-Ring for Diffuser	1	23	01111032	Base with Nut & Washer for SB10/ SB15	1
13	01111015	Diffuser	1	23	01111031	Base with Nut & Washer for SB20/ SB30	1
14	01311001	Impeller SB10 (110V/60HZ) and (220V/60HZ)	1	24	89021312	Cable Box for SB/ SR Pump 220V/50HZ; 220V/60HZ; 380V/50HZ.	1
14	01311002	Impeller SB20 (110V/60HZ) and (220V/60HZ)	1	25	89021505	Cable Box for SB/ SR Pump 110V/60HZ	1
14	01311003	Impeller SB/ SR20 (220V/50HZ) and (380V/50HZ)	1	26	01031001	Fan Cover for EPH SB/SR20 SB/SR30	1
14	01311004	Impeller SB/ SR10 (220V/50HZ) and (380V/50HZ)/ Sb15 (110V/60HZ) and (220V/60HZ)	1	26	01031002	Fan Cover for SB/SR10,SB/SR15 Pump	1
14	01311005	Impeller SB/ SR15 (220V/50HZ) and (380V/50HZ)/ Sb30 (110V/60HZ) and (220V/60HZ)	1	27	01031008	Fan Cover for SB/SR20,SB/SR30 Pump	1
14	01311006	Impeller SB30 (220V/50HZ) and (380V/50HZ)	1	27	01031009	Fan Cover for SB/SR10,SB/SR15 Pump	1
15	04015046	3/4" Mechanical seal	1	28	01031007	Cooling fan for SC SB/SR10,SB/SR15	1
16	02011093	O-Ring for Flange	1	28	01031006	Cooling fan for EPH SB/SR20,SB/SR30	1
17	01021013	Pump Flange for SB/ SR	1	29	04016014	Capacitor for SB/ SR10/ SB/ SR15 (220V/50HZ) (220V/60HZ)	1
18	03011080	M6x15 Hexagonal Bolt	16	29	04016015	Capacitor for SB/ SR20 (220V/50HZ) (220V/60HZ)	1
19	02011096	Motor Slinger	1	29	04016016	Capacitor for SB/ SR30 (220V/50HZ) (220V/60HZ)	1
20	89021301	Motor SB/ SR10 (220V/50HZ)	1	29	04016022	Capacitor for SB/ SR10/ SB15 (110V/60HZ)	1
20	89021302	Motor SB/ SR15 (220V/50HZ)	1	29	04016023	Capacitor for SB/ SR20/ SB30 (110V/60HZ)	1
20	89021303A	Motor SB/ SR20 (220V/50HZ)	1	30	04015042	Overload Switch PE77-6A/250VAC for SB/ SR10	1
20	89021304	Motor SB/ SR30 (220V/50HZ)	1	30	04015015	Overload Switch PE77-8A/250VAC for SB/ SR15	1
20	89021401	Motor SB/ SR10 (220V/60HZ)	1	30	04015012	Overload Switch PE77-10A/250VAC for SB/ SR20	1
20	89021402	Motor SB/ SR15 (220V/60HZ)	1	30	04016037	Overload Switch PE77-13A/250VAC for SB/ SR30	1
20	89021403	Motor SB/ SR20 (220V/60HZ)	1	31	02021039	Cover for Overload Switch	1
				32	04014018	Insulation Fitting for Overload Switch	1

Note:6* 89280103B is 2.0 Union in Black Colour
6* 89280103W is 2.0 Union in White Colour

SB Series Centrifugal Pump Installation & Operating Instructions



INSTALLATION

Only qualified, licensed personnel should install pump and wiring.

IMPORTANT ELECTRICAL

Electrical Contractors Please Note: EMAUX pumps must be wired to the main power supply through an approved and correctly rated contactor.

Pump Mount Must:

- ❖ Be solid Level Rigid Vibration Free.
- ❖ Allow use of short, direct suction pipe. (To reduce friction losses & don't install the pump at more than 3M geometrical height from water level)
- ❖ Allow for gate valves in suction and discharge piping.
- ❖ Have adequate floor drainage to prevent flooding.
- ❖ Be protected from excess moisture.
- ❖ All adequate access for servicing pump and piping.

NOTICE:

Pump suction and discharge connections have moulded in thread stops, **DO NOT** try to screw pipe in beyond these stops.

OPERATION



▲ **NEVER** run pump dry! Running pump dry may damage seals, causing leakage and flooding! Fill pump with water before starting motor.

▲ Before removing lid:
STOP PUMP before proceeding.
CLOSE GATE VALVES in suction and discharge pipes.
RELEASE ALL PRESSURE from pump and piping system.
NEVER tighten or loosen screws while pump is operation.

▲ Do not block pump suction! To do so with body may cause severe or fatal injury. Children using pool must **ALWAYS** have close adult supervision!

Priming Pump:

- ❖ Release all air from filter and piping system: see filter owner manual.
- ❖ 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.

ROUTINE MAINTENANCE

The only routine maintenance needed is inspection/cleaning of trap basket. Debris or trash that collects in basket, will choke off water flow through the pump. Follow instructions below to clean trap:

- 1) Stop pump, close gate valve in suction and discharge, and release all pressure from system before proceeding.
- 2) Unscrew trap lid (turn counterclockwise).
- 3) Remove strainer basket and clean. Be sure all holes in basket are clear, flush basket with water and replace in trap with large opening at pipe connection port (between ribs provided). If basket is replaced backwards cover will not fit on trap body.
- 4) Clean and inspect lid Ring; reinstall on trap cover.
- 5) Clean Ring groove on trap body and Replace lid. To help keep lid from sticking, tighten hand tight only.
- 6) Prime pump (see priming instructions above)

SERVICE & REPAIR PARTS

Refer all service to your local agent or dealer as his knowledge of your equipment makes him the vest qualified source of information. Order all repair parts through your dealer. Give the following information when ordering repair parts:

- 1) Unit nameplate data or serial number on label.
- 2) Description of part.

TROUBLE SHOOTING

MOTOR DOES NOT START

- 1) Disconnect switch or circuit breaker in off position
- 2) Fuses blown or thermal overload open
- 3) Locked motor shaft
- 4) Motor windings burned out
- 5) Defective starting switch inside singl phase motor
- 6) Disconnected or defective wiring
- 7) Low voltage

PUMP DOES NOT REACH FULL SPEED

- 1) Low voltage
- 2) Pump connected for wrong voltage

MOTOR OVERHEATS (protector trips)

- 1) Low voltage
- 2) Motor windings connected for wrong voltage on dual voltage model
- 3) Inadequate ventilation

PUMP DELIVERS NO WATER

- 1) Pump is not primed
- 2) Closed valve in suction or discharge line
- 3) Leakage or air into suction system
- 4) Impeller clogged

LEAKAGE OF WATER AT SHAFT

- 1) Shaft seal requires replacement

LOW PUMP CAPACITY

- 1) Valve in suction or discharge line partly closed
- 2) Suction or discharge line partly plugged
- 3) Suction or discharge line too small
- 4) Plugged basket in skimmer or hair and lint strainer
- 5) Dirty filter
- 6) Impeller clogged

HIGH PUMP PRESSURE

- 1) Discharge valve or inlet fittings closed too much
- 2) Return lines too small
- 3) Dirty filters

NOISY PUMP AND MOTOR

- 1) Plugged basket in skimmer or hair in lint strainer
- 2) Worn motor bearings
- 3) Valve in suction line partly closed
- 4) Suction line partly plugged
- 5) Vacuum hose plugged or too small
- 6) Pump not supported properly

AIR BUBBLES AT INLET FITTINGS

- 1) Leakage of air into suction line at connections or valve stem
- 2) Cover gasket of hair and lint strainer needs cleaning
- 3) Low water level in pool

NOTE: If the recommendations in the trouble shooting portion of this manual do not solve your particular problem(s), please contact your local dealer for service.