Eman water technology			
Key No.	Part No.	Description	Qty
1*	89280103	2.0" Union (Black/ White Colour)	2
2	89023601	Connecting Fitting	1
3 4	89021308	Pump body for SB,SR Screw for Impeller with O-Ring	1
5	02011108	O-Ring for Diffuser	1
6	01111015	Diffuser	1
7	01311001	Impeller SR10 (110V/60HZ)/ (220V/60HZ)	1
7	01311002	Impeller SR20 (110V/60HZ)/ (220V/60HZ) Impeller SR20 (220V/50HZ)/ (380V/50HZ)	1
7	01311004	Impeller SR10 (220V/50HZ) and (380V/50HZ)/ SR15 (110V/60HZ) and (220V/60HZ)	1
7	01311005	Impeller SR15 (220V/50HZ) and (380V/50HZ)/ SR30 (110V/60HZ) and (220V/60HZ)	1
7	01311006	Impeller \$R30 (220V/50HZ) and (380V/50HZ)	1
8	04015046	3/4" Mechanical Seal O-Ring for Flange	1
10	01021013	Pump Flange for SB,SR	1
11	03011080	M6×15 Hexagonal Bolt	16
12	02011099	Motor Slinger for SR10/ SR15	1
12	02011101 89021301	Motor Slinger for SR20/ SR30 Motor SB10 or SR10 (220V/50HZ)	1
13	89021302	Motor \$B15 or \$R15 (220V/50HZ)	1
13	89021303A	Motor SB20 or SR20 (220V/50HZ)	1
13	89021304 89021401	Motor SB30 or SR30 (220V/50HZ) Motor SB10 or SR10 (220V/60HZ)	1
13	89021402	Motor SB15 or SR15 (220V/60HZ)	1
13	89021403	Motor \$B20 or \$R20 (220V/60HZ)	1
13	89021404	Motor \$830 or \$830 (220V/60HZ)	1
13	89021601 89021602	Motor SB10 or SR10 (380V/50HZ) Motor SB15 or SR15 (380V/50HZ)	1
13	89021603	Motor SB20 or SR20 (380V/50HZ)	1
13	89021604	Motor SB30 or SR30 (380V/50HZ)	1
13	89021501 89021502	Motor SB10 or SR10 (110V/60HZ) Motor SB15 or SR15 (110V/60HZ)	1
13	89021502	Motor SB15 or SR15 (110V/60HZ) Motor SB20 or SR20 (110V/60HZ)	1
13	89021504	Motor \$B30 or \$R30 (110V/60HZ)	1
14	89021310	M8*20 Bolt for motor with washer	4
15	01111032	Base with Nut & Washer for SB/SR10 / SB/SR15 Base with Nut & Washer for SB/SR20 / SB/SR30	1
16	01021021	Opening Key	1
17	04016014	Capacitor for SB/SR10,SB15	1
17	04016015 04016016	Capacitor for SB/SR20 & SC/EPH200 & SPH200 Pump Capacitor for SB/SR30 EPH300,EPH400 & SPH300 Pump	1
17	04016022	Capacitor for SR/SB10-15 & SC100-150 Pump 110V	1
17	04016023	Capacitor for SR/SB20-30 & SC200 Pump 110V	1
18	89021505	Cable Box	1
20	89021312 01031007	Cable Box for SR Pump 220V/50HZ / 220V/60HZ / 380V/50HZ. Cooling fan for SC SB/SR10 / SB/SR15	1
20	01031007	Cooling fan for EPH SB/SR20 / SB/SR30	1
21	01031001	Fan Cover for EPH SB/SR20 / SB/SR30	1
	01021000	Fan Cover for SB/SR10 / SB/SR15 Pump	1
21	01031002 01031008	Fan Cover for SB/SR20 / SB/SR30 Pump	1



followed, including the following:

1. READ AND FOLLOW ALL INSTRUCTIONS.

2. WARNING — To reduce risk of injury, do not permit children to use this product unless they are

closely supervised at all times.

3. WARNING – (For cord & plug connected units) risk of electric shock. Connect only to a

grounding type receptacle protected by a ground-fault circuit-interrupter(GFCI). Contact a qualified electrician if you cannot verify that the receptacle is protected by a GFCI.

4. WARNING – (For cord & plug connected units). To reduce the risk of electric shock, replace

damaged cord immediately.

5. WARNING – (For cord & plug connected units). To reduce the risk of electric shock do not use

an extension cord to connect unit to electric supply; Provide a properly located outlet. 6. WARNING – (For hot tub and spa pumps). Do not install within an outer enclosure or beneath

the skirt of the hot tub or spa, unless so marked. 7. SAVE THESE INSTRUCTIONS

water technoloay

INSTALLATION LOCATION

Locate pump as close to pool/spa as possible, preferably in a dry, well ventilated area

away from direct sunlight. it should be on a hard, level surface. Give consideration to:

- 1. Drainage away from pump
- 2. Ventilation of pump motor
- 3. Access for future servicing and winterizing
- 4. Protection from the elements

Pumps without strainer bodies are designed for flooded suction (all suction fittings and

suction piping below water level) and will not self-prime. Consequently, the pump must be

installed at an elevation that is below water level when pool or spa is filled.

GENERAL PLUMBING

FOR SOLVENT WELD CONNECTION

Rigid or flexible PVC pipe can be used. Pipe ends should be clean and free of any flash caused by the cutting operation. Be sure that the proper solvent is used on type of pipe specified.

Caution: We recommend that consider climatic conditions when applying adhesives, make the adhesive action of certain glues less effective. Check the manufacturer's instructions.

PUMP PLUMBING

Suction pipe should be as large or large than discharge pipe avoid using a suction pipe smaller than pump connection.

Keep the piping as straight and short as possible, and of suitable size. Avoid connecting an elbow directly into the pump inlet (use a length of straight pipe to allow a proper entry for the water).arrange horizontal runs to slope upward to the pump to prevent high spots that could form air pockets. Support the piping independently so that it places no strain on the pump. Keep as much of the suction line as possible below the water level to reduce priming time.

ELECTRICAL DATA

Refer to information on motor nameplate for electrical service data. All motors should have fused disconnect switch or circuit breaker. Be sure wire size is sufficient for pump hp and distance from power source. Wiring should be done in accordance with applicable codes by a competent electrician,

PUMP START UP

Do not operate pump until it has been primed as water acts to cool and lubricate the seal. For pumps without strainer bodies and located above water, close suction line valve and fill pump with water in order to prime. If no flow is observed in five minutes, stop the motor and re-prime. If the pump fails to operate, check for air leaks. Refer to trouble shooting section.



PUMP MAINTENANCE

1. Motors are self-lubricating no lubrication required. 2.Shaft seals may become worn and must be replaced if leakage is observed.

SERVICE & REPAIR PARTS

Refer all service to your local 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. 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 sing phase Motor

- 6. Disconnected or defective wiring
- 7. Low voltage

NOISY PUMP AND MOTOR

- 1. Worn motor bearings
- 2. Suction line partly plugged

MOTOR OVERHEATS

- 1. Low voltage
- 2. Inadequate ventilation

AIR BUBBLES AT INLET FITTINGS

- 1. Leakage of air into suction line at connections or valve stem
- 2. Low water level in drain of bath

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.

LOW PUMP CAPACITY

- 1. Suction or discharge line partly pluaaed
- 2. Suction or discharge line too small
- 3. Pump running at reduced speed
- 4. Impeller clogged

HIGH PUMP PRESSURE

Return lines too small

PUMP DOES NOT REACH FULL SPEED

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

PUMP DELIVERS NO WATER

- 1. Pump is not primed
- 2. Leakage or air into suction system
- 3. Impeller clogged

LEAKAGE OF WATER AT SHAFT

Shaft seal requires replacement