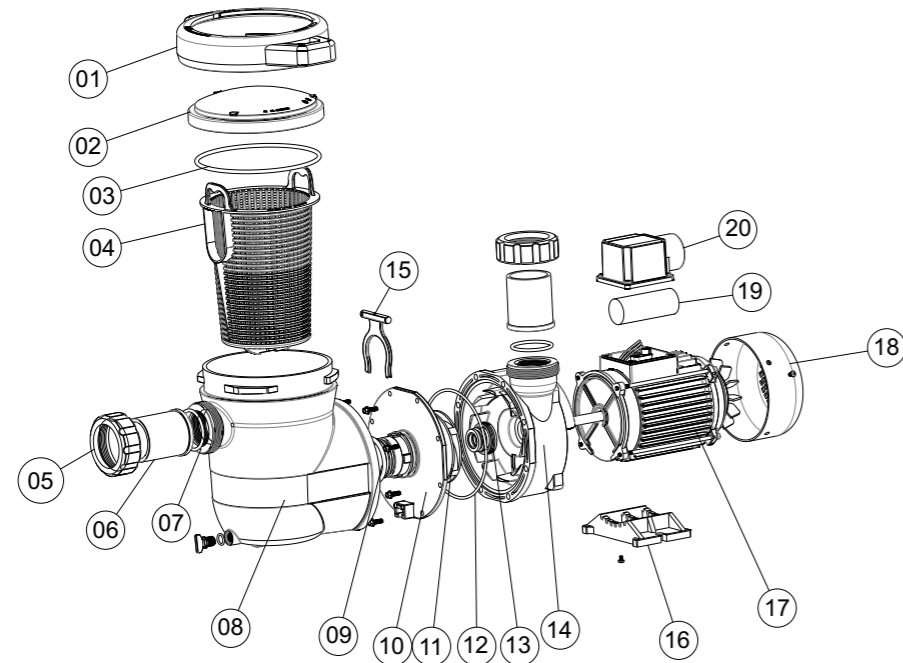
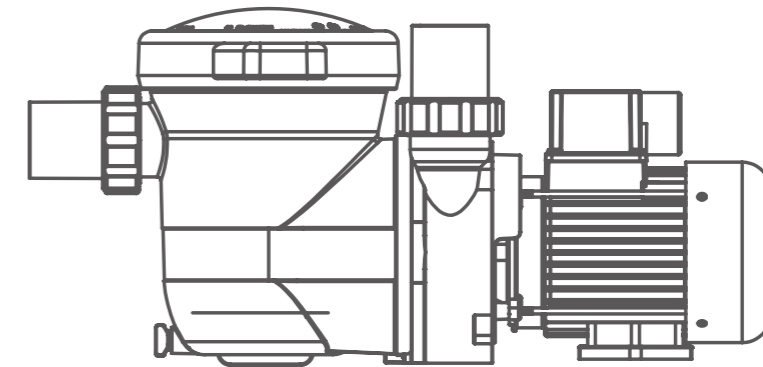


### PUMP PARTS FOR AS



Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	420407395	Nut For Lid	1	13	113006600	Mechanical Seal	1
2	420387395	Transparent Lid	1	14	420047395	Lower part of Pump Body	1
3	111010048	O-Ring for Lid	1	15	420327395	Arm in arm	1
4	420237395	Basket with Handle	1	16	01111029	base	1
5	420307395	1.5" UNION NUT	2	17	42059057754	EM316-MotorYYWB3-0.5-AS	1
6	420220904	1.5"Union	2		42059057756	EM316-MotorYYWB3-0.75-AS	1
7	111002362	O-Ring for 1.5" Union	2		42059057757	EM316-MotorYYWB3-1.0-AS	1
8	420247395	Pump Pre-Filter	1		42059057758	EM316-MotorYYWB3-1.5-AS	1
9	111010049	O-Ring	1	18	420170879	Fan Cover	1
10	420037395	Pump Body Cover	1	19	106241444	Capacitor 8uf	1
11	420366599	Impeller AS0.5HP	1		106241421	Capacitor 14uf	1
	420367744	Impeller AS0.75HP	1		106241424	Capacitor 20uf	1
	420367745	Impeller AS1.0HP	1		106241604	Capacitor 30uf	1
	420367746	Impeller AS1.5HP	1	20	420270893	Cap Cover	1
12	111010050	Waterproof washer	1	20	02010241	Gasket	1

## All-Star Series 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 best 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 single 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.