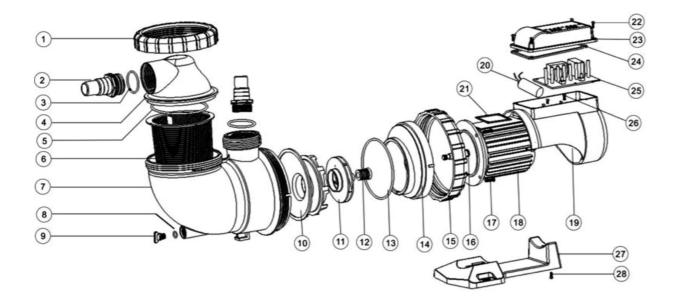
# AMU012TP/AMU012P/AMU016TP/AMU016P/AMU020TP/AMU020P PUMP PARTS FOR AQUA-MINI



Key No.	Part No.	Description	Qty		
1	01021067	Nut for Lid			
2*	89280105	1.5" Union (Black/ White Colour)	2		
2	01013015	1.5"Connector (black)	1		
2	01013051	32mm & 38mm Adaptor	2		
3	02011104	O-Ring for 1.5" Union	2		
3	02020013	O-ring for 1.5" Connector	2		
4	01041045	Transparent Lid	1		
5	02020049	O-Ring for Lid	1		
6	01111104	Basket	1		
7	01021070	AMU Pump Body	1		
8	02020014	O-Ring for Drain Plug	1		
9	01111017	Drain Plug with O'Ring	1		
10	01111103	Diffuser	1		
11	01311044	Impeller(AMU020TP/AMU020P)(220V/50HZ)	1		
11	01311045	Impeller(AMU012/16TP/AMU012/16P)(220V/50HZ/60HZ)	1		
11	01311046	Impeller(AMU016/20TP/AMU016/20P)(220V/50HZ/60HZ)	1		
11	01311051	Impeller(AMU012TP/AMU012P)(220V/60HZ)	1		
12	04015002	1/2" Mechanical Seal	1		
13	02020011	O-Ring for Flange	1		
14	01021069	Flange	1		
15	01021068	Nut for Body	1		
16	02011156	Motor Slinger	1		
17	03011067	Screw for Flange	4		
18	04021202	Motor (AMU012TP/AMU012P/ AMU016TP/ AMU016P) (220V/50HZ) (220V/60HZ)	1		
18	04021203	Motor (AMU020TP/AMU020P) (220V/50HZ)(220V/60HZ)	1		
19	01321019	Fan Cover	1		
20	04016036	Capacitor for AMU012TP/AMU012P&AMU016TP/AMU016P(220V/50Hz,220V/60Hz)	1		
20	04016030	Capacitor for SS/SD/SQ/ST020 AMU020P/TP(50/60Hz)	1		
21	02020048	Cover Slinger	1		
22	03011007	M4x12Screw	4		
23	01321018	Cable Box	1		
24	02020012	Slinger for Cable Box	1		
25	04015041	PCB (for AMU012TP AMU016TP AMU020TP)	1		
26	03011100	Screw	4		
27	01111102	Base	1		
28	03011006	Screw for Base	1		

Notes: 2. 89280105B is 1.5" Union in Black Colour 2. 89280105W 1.5" Union in White Colour





# AQUA-MINI Series Centrifugal Pump Installation & Operating Instructions

Keep this manual for future reference.

# **⚠ WARNINGS:**

- \* EMAUX pumps must be wired to the main supply through an approved and licensed electrician.
- \* If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard;
- \* This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety; children should be supervised to ensure that they do not play with the appliance;
- \* The maximum total head is 1 metre;
- \* Pollution of the liquid could occur due to leakage of lubricants;
- \* The pump must not be used when people are in the water;
- \* The pump must be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA.

# NOTICE:

Pump suction and discharge connections have moulded in thread stops, DO NOT try to tighten beyond these Stops.

# **INSTALLATION**

CAUTION: THE PUMP SHOULD BE INSTALLED ACCORDING TO YOUR LOCAL ELECTRICAL INSTALLATION ORDINANCES AND REGULATIONS.

ONLY QUALIFIED, LICENSED PERSONNEL SHOULD INSTALL PUMP.

- 1) Locate pump as close to pool as possible, preferably in a dry, well ventilated area away from direct sunlight. Pump Mount must:
- Be on solid, level, rigid and vibration free surface.
- Allow pump suction inlet height to be as close to water level as possible.
- Allow use of short, direct suction pipe (To reduce friction loss.)
- Allow for gate valves in suction and discharge piping.
- Have adequate floor drainage to prevent flooding.
- Be protected from excess moisture.
- Allow adequate access for servicing pump and piping.
- 2) Fixed the pump by screws onto the platform.
- 3) Connect the suction and discharge pipe to the outlet and inlet of the swimming pool.

#### **FUNCTIONS**

CODE	MODEL NO	HORSE POWER	TIMER	PRE-FILTER	
88028419	88028419 AMU012TP		√	√	
88027519	AMU012T	0.12hp	√		
88027819	AMU012P	0.12hp		√	
88028119	AMU012	0.12hp			
88028420	88028420 AMU016TP		√	√	
88027520	AMU016T	0.16hp	√		
88027820	AMU016P	0.16hp		√	
88028120	AMU016	0.16hp			
88028401	AMU020TP	0.20hp	√	√	
88027501	AMU020T	0.20hp	√		
88027801	AMU020P	0.20hp		√	
88028101	AMU020	0.20hp			





Hazardous suction.
Can trap hair or
body part, causing
severe injury or
death. Do not block
suction.

# **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 basket lid; fill basket and pump with water.
- Clean and inspect O-Ring; re-install the basket lid.
- \* Turn clockwise to tighten the lid.

NOTICE: Tighten basket lid by hand only.

Pump should prime now. Priming time will depend on vertical length of suction lift and horizontal length of suction piping.

#### 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 of 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 in lint strainer
- 5) Dirty filter
- 6) Impeller clogged

#### HIGH PUMP PRESSURE

- 1) Discharge valve or inlet fittings not fully opened
- 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 via connections or valve stem
- 2) Basket and lint strainer needs cleaning
- 3) Low water level in pool

#### **TROUBLE SHOOTING**

**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.

# **ROUTINE MAINTENANCE**

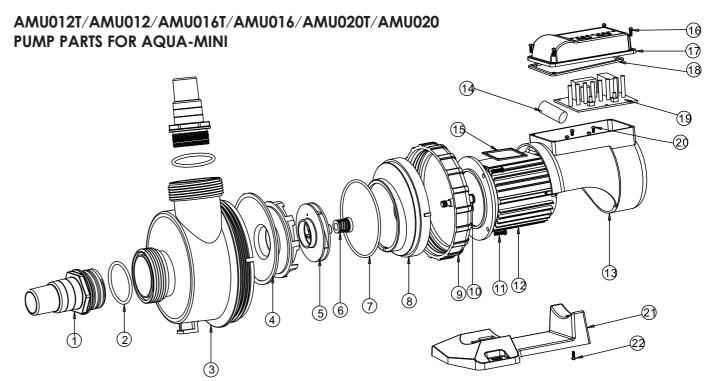
The only routine maintenance needed is inspection/cleaning of the basket (pre-filter basket). Debris or trash that collects in basket will choke off water flow through the pump. Follow instructions below to clean the basket:

- 1) Stop pump, close gate valve in suction and discharge, and release all pressure from system before proceeding.
- 2) Unscrew basket lid (pre-filter lid) by turning counterclockwise.
- 3) Remove basket and clean. Flush basket with water, make sure that the holes are clean. Replace the basket and fill the pump body with water. If basket is replaced backwards cover will not fit on pump body.
- 4) Clean and inspect lid.
- 5) Clean the O-ring and its groove on the trap pump body (pre-filter) and replace lid. The lid should be tightened by hand 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 name, model number and part number.
- 2) Description of part.



Key No.	Part No.	Product Description	Qty	Key No.	Part No.	Product Description	Qty
1	89280105	1.5"union (optional )	2	10	02011156	Motor Slinger	1
	01013051	32-38 Union (optional )	2	11	03011067	Screw for flange	4
2	02011104	O-Ring for 1.5" Union	2		04020099	Motor(AMU012T/AMU012)(220V/50Hz)(220V/60Hz)	1
	02020013	O-Ring for 32-38 Union	2	12	04020100	Motor(AMU016T/AMU016)(220V/50Hz)(220V/60Hz)	1
3	01020018	Body	1		04020101	Motor(AMU020T/AMU020)(220V/50Hz)(220V/60Hz)	1
4	01111103	Diffuser	1	13	01321019	Fan Cover	1
5	01311045	Impeller(AMU012T/AMU012)(220V/50Hz)	1	14	04016036	Capacitor for AMU012T/AMU012 AMU016T/AMU016 (220V/50Hz)	1
	01311046	Impeller(AMU016T/AMU016)(220V/50Hz)	1	14	04016030	Capacitor for AMU020T/AMU020(220V/60Hz)	1
	01311044	Impeller(AMU020T/AMU020)(220V/50Hz)	1	15	02020048	Cover Slinger	1
	01311051	Impeller(AMU012T/AMU012)(220V/60Hz)	1	16	03011007	Screw for cable Box	4
	01311045	Impeller(AMU016T/AMU016)(220V/60Hz)	1	17	01321018	Cable Box	1
	01311046	Impeller(AMU020T/AMU020)(220V/60Hz)	1	18	02020012	Slinger for cable Box	1
6	04015002	1/2"Mechanical seal	1	19	04015041	PCB (for AMU012T AMU016T AMU020T)	1
7	02020011	O-Ring for flange	1	20	03011100	Screw	4
8	01021069	Flange	1	21	01111102	Base	1
9	01021068	Nut for body	1	22	03011006	Screw for base	1