

**AC BARREL PUMP MOTOR
USER'S MANUAL**

**MODEL NUMBER
DEF-1000-A**

J. PROBLEMS AND SOLUTIONS

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
No flow rate or slow flow rate	Unopened to the electric or air source	Open the power and air source
	Motor failure, not rotating	Motor Check
	Outlet closed	Open the outlet valve
	Pump lift is too big	Shorten the transportation distance and height
	Liquid viscosity is too big	Check the liquid type with supplier
	Liquids are draining out	Stop the pump
	The inlet block off	Clean the inlet
Vibration, Big noise	Liquids are draining out	Stop the pump
	Motor overload	Check the liquids viscosity and pump lift
	Sliding bearing damage	Change the sliding bearing and seal ring
	Coupling wear	Change the coupling
Pump tube leakage	Seal ring wear	Change the seal ring
	Circuit failure	Check the circuit
	Long time working of the motor, overheating protection, electric brush damage	Restart the motor after cooling down Change the electric brush



**AC BARREL PUMP MOTOR
USER'S MANUAL**



WARNING: Carefully read and understand all INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

MODEL NUMBER: DEF-1000-A



11212A McCormick Road
Hunt Valley, MD 21031

Phone: (410) 252-9300
www.americanlube.com

11251 North Patt Street
Anaheim, CA 92801

AC BARREL PUMP MOTOR USER'S MANUAL

MODEL NUMBER
DEF-1000-A

A. SAFETY

All safety instructions must be observed and followed.

Before Using

1. There are high speed rotating components. Failure to follow the safety instructions may lead to serious injury. All safety instructions must be observed and strictly followed.
2. Before installing and starting the barrel pump, the related engineer must have the considerable qualification and is familiar with this manual.
3. The installation and maintenance must be done strictly according to the current machinery and electrical standard.
4. The spare parts life time will be limited by wear and corrosion. The failure can be affected by the operating environment. The user has the responsibility to operate in accordance with the regulations. Routine maintenance and spare parts exchange should be performed regularly. Stop the pump when the pump is under irregularity and obviously dangerous status.
5. The pump should automatically install the detection alarm system when it is installed at the location where it may cause failure or personal injury.

Using

1. Wear protective clothing and goggles, in accordance with the safe production routine when operate with corrosive and hazardous substance.
2. It is prohibited to use plastic or aluminum alloy pump pipes and the non-explosion proof motor when transferring flammable liquids.
3. To carry flammable liquids, the earth wire must be installed, electrostatic protection device and conductive hose must be used when transferring flammable liquids.
4. Make sure the pump head is inserted into the liquid completely before using. Also all the connectors should be tightly connected. There should be no leakage and dangerous fall out situation.
5. The suitable flexible pipe must be used during the transfer of high temperature liquids.
6. Pay attention to the pumped liquids temperature, do not allow the viscosity and density to exceed the stated upper limit.
7. Install the filters in the pump tube bottom when transporting liquids with impurities or solids. To avoid a blockage, please check and clean it regularly.
8. Make sure the motor is under close status before it is powered on. Never leave the pump unattended and never operate the motors without pumps.
9. Do not touch the tube bottom after switching on the electric or air source. The impeller rotating under high speed may lead to equipment damage and personal injury.

Make sure the pump tube working under vertical position. Never upend or lay flat after using. Pay attention to the residual liquids may lead to injury or cause environmental damage.

B. MACHINE DESCRIPTION

MOTOR: AC series motor with the overheating protection components, Quick coupling adapter, Automatic positioning coupling and Adjustable speed switch.



ATTENTION!

- Never operate the motors without pump.
- Never leave the pump unattended.
- Never dry run the pump.
- The pump should not be immersed deeper into the liquid than the outlet connection.

C. TECHNICAL DATA

C1. Electrical Data

PUMP MODEL	ELECTRICAL POWER			Load Speed (RMP)	Rated Speed (RMP)
	Current	Voltage(V)	Power (W)		
DEF-1000-A	AC	120	450	3000~11000	20000

D. OPERATING CONDITIONS

D1. Environmental Conditions

Electro-Motor operating environment: -25~40°C

D2. Power Supply

Make sure that the supply voltage corresponds to the voltage indicated on the rating plate.



ATTENTION!

Power from lines with values outside the indicated limits can damage the electrical components.

AC BARREL PUMP MOTOR USER'S MANUAL

MODEL NUMBER
DEF-1000-A

E. MOVING AND TRANSPORT

The pump tube and motor adopt the carton box packing. There is enough protection packing material inside. However, never knock on, heavy load by the non-normal external force. Please transport and stacking as per packing indication. Keep dry and anti-corrosion of the stacking place.

F. INSTALLATION

Check if the packaging was damaged before opening. Make sure there are no missing spare parts.

Safety Check

Make sure that the supply voltage corresponds to the voltage indicated on the rating plate.

7.1 Motor Installation

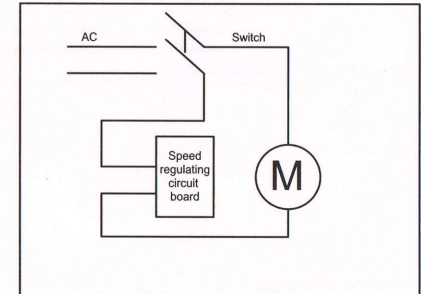
1. Pump tube check: Make sure there is no looseness in the joint parts. The coupling and shaft should be able to rotate flexibly.
2. Motor Check: Make sure the power cable is complete, and switch in good condition. Do a dry run for several minutes to check if the motor is workable. Do not put hands to the motor output shaft.
3. Put the motor coupling directed at the pump tube. Make sure the pump tube head is inserted into the motor head completely.
4. The motor and pump tube position could be adjusted by 360°. Adjust the pump tube to the suitable position and lock the nut to finish the installation. It is recommended that the pump exports away from the motor power cable.

7.2 Start

Make sure there is no leakage in the joint parts. The tube outlet must be well fixed to prevent leakage due to pressure.

F7. Electrical Connections

- Terminal strip box should include:
 - ON/OFF switch;
 - Speed regulating knob switch
- Speed regulating circuit board
- 5M Power cable



ATTENTION!

IT IS THE INSTALLER'S RESPONSIBILITY TO PREFORM THE ELECTRICAL CONNECTIONS WITH RESPECT FOR THE APPLICABLE REGULATIONS.

G. DAILY USE

Long term, continuous running of the motor may cause overheating, at which time the overheating protection system automatically will cut the power. The motor can be restarted by pressing the on/off button after it has cooled down.



ATTENTION!

The suggested duty cycle is 2 hours. Do not exceed one hour when the environment temperature more than 30°C. Please change the electric brush every 250-300 hours.

H. NOISE LEVEL

Under normal working conditions the noise emission from all models does not exceed the value of 80 db at a distance of 1 meter from the electric pump.

I. DISPOSING OF CONTAMINATED MATERIALS

In the event of maintenance or demolition of the machine, do not disperse contaminated parts into the environment. Refer to local regulations for their proper disposal.