

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

Action Electric Drum Pumps

Description

Action electric drum pumps are electrically driven and selfpriming. They are designed to transfer nonflammable liquids that are compatible with pump materials. The motor is isolated from liquid by a mechanical seal made of Teflon. Model CPVC ELEC has an outer column of CPVC and an inner shaft made of Hastelloy C. Model C20 ELEC has an outer column of polypropylene and an inner shaft of Carpenter 20. They both have an intermittent-duty motor. The pumps are also available with air motors, Models CPVC AIR and C20 AIR respectively.

Specifications

Models C20 ELEC and CPVC ELEC

Motor	Universal type AC-DC, Intermittent-Duty (2M145)
Motor Bearings	Ball, Prelubricated & shielded
Volts	115VAC, 60 Hz, single phase
Cord	8 Foot, 16 Ga., 3-cond. SJT, with molded 3-prong plug for 115V
Amps	6.3A
Horsepower	1/2 HP
RPM	10,000
Seals	Teflon
Discharge Hose	5 ft., 1 in. I.D.

Model	GMP† Total Head (in Feet)					Max. Head*	Max. Viscosity
	0 ft.	5 ft.	10 ft.	15 ft.	20 ft.		
C20 ELEC	17	13	9	5	1	20.7 ft.	1,000 CPS
CPVC ELEC	17	13	9	5	1	20.7 ft.	1,000 CPS

(†) Based on water at 72° F.

(*) Calculate equivalent PSI by dividing total head by 2.31.

General Safety Information

1. Know the pump application, limitations, and potential hazards.



WARNING Do not use to pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc. Do not use in explosive atmospheres. Pump should only be used with liquids compatible with pump component materials. Failure to follow this warning can result in personal injury and/or property damage.

2. Make certain that the power source (electric motor) conforms to the requirements of the equipment.
3. Provide adequate protection and guarding around moving parts.
4. Disconnect power before servicing.
5. Release all pressure within the system before servicing any component.
6. Drain all liquids from the system before servicing.
7. Secure the discharge line before starting the pump. An unsecured discharge line will whip, possible causing personal injury and/or property damage.
8. Check hoses for weak or worn condition before each use, making certain that all connections are secure.
9. Periodically inspect pump and system components. Perform routine maintenance as required. (see Maintenance section).
10. Provide a means of pressure relief for pumps whose discharge line can be shut off or obstructed.

Action Electric Drum Pumps

General Safety Information (Continued)

11. Personal Safety

- Wear safety glasses at all times when working with pump.
- Wear a face shield, proper apparel when pumping hazardous chemicals.

- When wiring an electrically-driven pump, follow all electrical and safety codes, as well as the most recent United States National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).

⚠ WARNING *Risk of electrical shock! Never connect the Green (or Green and Yellow) wire to a live terminal!*

To reduce the risk of electrical shock, the motor must be securely and adequately grounded! This can be accomplished by either: 1) inserting plug (portable) directly into a properly installed and grounded 3-prong grounding type receptacle (as shown in Figure 2A for 110-120V, or Figure 2B for 220-240V); 2) Permanently wiring the unit with a grounded, metal raceway system; 3) Using a separate ground wire connect to the bare metal of the motor frame; 4) Other suitable means. The green (or green and yellow) conductor in the cord is the grounding wire. The motor must be securely and adequately grounded for your protection against shock hazards! Where a 2-prong wall receptacle is encountered, it must be replaced a properly grounded 3-prong receptacle installed in accordance with the National Electrical Code and local codes and ordinances. To ensure a proper ground, the grounding means must be tested by a qualified electrician. Use only 3-wire extension cords that have a 3-prong, grounding-type plugs, and 3-pole receptacles that accept the equipment plug.

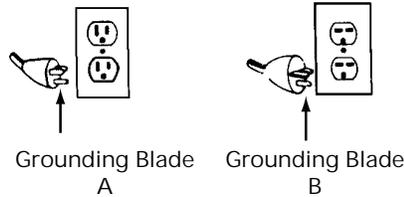


Figure 2 - Grounding methods

- All wiring should be performed by a qualified electrician.
- Protect electrical cord from sharp objects, hot surfaces, oil, and chemicals. Avoid kinking the cord. Replace or repair damaged or worn cords immediately.
- Keep fingers and foreign objects away from ventilation and other openings. Do not insert any objects into the motor.
- Use wire of adequate size to minimize voltage drop at the motor.
- Disconnect power before servicing a motor or its load. If the power disconnect is out-of-sight, lock it in the open position and tag it to prevent unexpected application of power.
- Do not touch an operating motor. Modern motors are designed to operate at high temperatures.

⚠ WARNING *Do not handle a pump or pump motor with wet hands or when standing on a wet or damp surface, or in water.*

Installation

⚠ WARNING *In order to safely use these products familiarize yourself with these pumps and also with the liquid (chemical, etc.) that is going to be pumped through the units. Liquids must be compatible with pump component materials. Even though this pump is suitable for many liquids, it is not suitable for all liquids!*

- Place the pump into the liquid to be pumped.
- Attach the pump to the drum with the bung adapter supplied.

⚠ WARNING *Do not pump liquids containing metal chips or shavings. Never operate the pump dry. These will damage the pump.*

- Secure the discharge line of the pump to keep it from lashing about.
- Plug the pump power cord into a properly installed receptacle.
- Make certain hose clamp is securely tightened to discharge port before starting check hose prior to every use!

Note: Both models as supplied from factory, are wired for 115V operation.

⚠ WARNING *An incorrect connection may cause an electrical short, produce an electrical shock or burn out the pump motor, resulting in property damage and injury.*

- Unplug the pump when the pumping operation is complete.

Note: The pump will drain down when it is unplugged.

- This unit is not waterproof and is not intended to be used in showers, saunas, or other potentially wet locations. The motor is designed to be used in a clean, dry location with access to an adequate supply of cooling air. Ambient temperature around the motor should not exceed 104° F (40° C). For outdoor installations motor must be protected by a cover that does not block airflow to and around the motor. This unit is not weatherproof nor is it able to be submersed in water, or any other liquid.

Models C20 ELEC and CPVC ELEC

Maintenance

⚠ WARNING *Disconnect power before servicing.*

⚠ CAUTION *Do not stand the pump on its shaft.*

1. After each use, flush the pump with water or a suitable nonflammable solvent.
2. Store the pump in a clean, dry area; the preferred method of storage is hanging.
3. Motor bearing never needs to be lubricated, replace when necessary.
4. Pump should be checked daily, weekly, monthly, etc., for proper operation. If anything has changed since unit was new, unit should be removed and repaired or replaced. Replace any worn or damaged part immediately.
5. Only qualified electricians or servicemen should attempt to repair this unit.

⚠ WARNING *Improper repair and/or assembly can cause an electrical shock hazard.*

Troubleshooting Chart

Symptom	Possible Cause(s)	Corrective Action
Pump does not prime	<ol style="list-style-type: none"> 1. Clogged impeller or augers 2. Clogged discharge port 3. Broken shaft coupling 4. Worn or damaged shaft seal 	<ol style="list-style-type: none"> 1. Clean impeller and augers 2. Clean discharge port and hose 3. Replace shaft coupling 4. Replace shaft seal
Insufficient flow	<ol style="list-style-type: none"> 1. Possible causes for "Pump does not prime" (above) 2. Clogged impeller or augers 3. Clogged discharge hose 4. Pinched discharge hose 5. Pumped liquid is too viscous 	<ol style="list-style-type: none"> 1. Check and repair as is necessary 2. Clean impeller or augers 3. Clean discharge hose 4. Replace discharge hose 5. Use only for liquids with viscosity within range of pump.

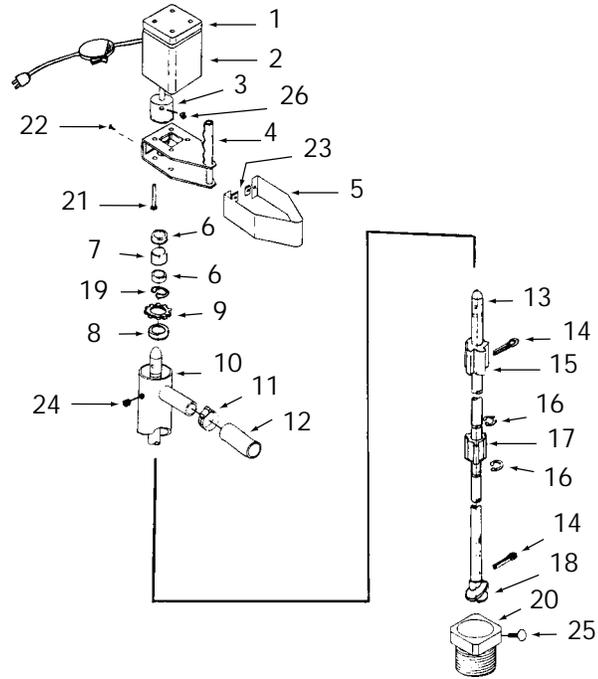


Figure 3— Replacement Parts Illustration

Replacement Parts List for Model C20 ELEC

Reference Number	Description	Part Number	Quantity
1	Motor Guard	66101	1
2	1/2 HP Motor w/8 ft. Power Cord and Switch	66999	1
3	Pump Coupling	66896	1
4	Handle/Pump Mount Assembly	66285	1
5	Cover Plate	66407	1
6	Bearing	66108	2
7	Spacer	66189	1
8	Seal	87413	1
9	Star Washer	66555	1
10	Outer Column	87717	1
11	Hose Clamp	1P416	1
12	5 Foot Hose	87119	1
13	Inner Shaft	87120	1
14	Cotter Pin	87921	2
15	Impeller	87722	1
16	C-Ring Retainer	87123	6
17	Spacer	87825	3
18	Auger	87829	1
19	C- Ring Retainer	66130	1
20	Bung Adapter	87000	1
21	8-32 x 1-3/4 Pan Head Machine Screw	66011	4
22	Pan Head Machine Screw	66004	2
23	10-12 Speed Nut	66003	2
24	1/4"-20 x 1/4" Socket Set	77017	2
25	1/4"-20 x 3/4" Thumb Screw	1650-19	1
26	Coupling Set Screw	66016	2

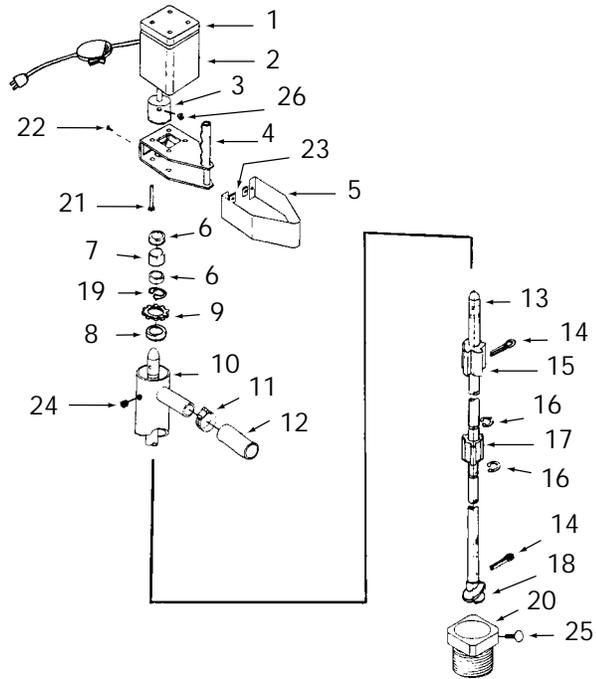


Figure 4 — Replacement Parts Illustration

Replacement Parts List for Model CPVC ELEC

Reference Number	Description	Part Number	Quantity
1	Motor Guard	66101	1
2	1/2 HP Motor w/8 ft. Power Cord and Switch	66999	1
3	Pump Coupling	66896	1
4	Handle/Pump Mount Assembly	66285	1
5	Cover Plate	66407	1
6	Bearing	66108	2
7	Spacer	66189	1
8	Seal	77413	1
9	Star Washer,SS	66555	1
10	Outer Column	77717	1
11	Hose Clamp	1P416	1
12	5 Foot Hose	77119	1
13	Inner Shaft	77120	1
14	Cotter Pin	77921	2
15	Impeller	77722	1
16	C-Ring Retainer	77123	6
17	Spacer	77825	3
18	Auger	77829	1
19	C- Ring Retainer	66130	1
20	Bung Adapter	77000	1
21	8-32 x 1-3/4 Pan Head Machine Screw	66011	4
22	Pan Head Machine Screw 440 x 1/2"	66004	2
23	10-12 Speed Nut	66003	2
24	1/4"-20 x 1/4" Socket Set	77017	2
25	1/4"-20 x 3/4" Thumb Screw	1650-19	1
26	Coupling Set Screw	66016	2

Action Electric Drum Pump

90-Day Limited Warranty