INSTRUCTION AND REPAIR MANUAL

MODEL 330

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ATTENTION: SAFETY WARNINGS:

Read and understand all warnings before installation or servicing pump.

OPERATIONAL LIMITS:

Maximum Operating Pressure:	175 psi at Temperatures to 150°F (65.5°C)
Maximum Operating Temperature:	200°F (93°C)

ELECTRICAL SAFETY:

Warning: Electrical Shock Hazard

All electrical connections are to be made by a qualified electrician in accordance with all codes and ordinances. Failure to follow these instructions could result in serious personal injury, death or property damage.

Warning: Electrical Overload Hazard

Insure all motors have properly sized overload protection. Failure to follow these instructions could result in serious personal injury, death or property damage.

Warning: Sudden Start-Up Hazard

Disconnect and lockout power source before servicing. Failure to follow these instructions could result in serious personal injury, death or property damage.

HIGH TEMPERATURE SAFETY:

Warning: Hot Surface Hazard

If pumping hot water, insure guards or proper insulation is installed to protect against skin contact to hot piping or pump components. Failure to follow these instructions could result in serious personal injury, death or property damage.

Warning: Spraying Water Hazard

When servicing pump replace all gaskets and seals. Do not re-use old gaskets or seals. Failure to follow these instructions could result in serious personal injury, death or property damage.

HIGH PRESSURE SAFETY:

Warning: High Pressure Hazard

The pump is rated at a maximum of 175 psi at 150°F. Do not exceed this pressure. Install properly sized pressure relief valves in system. Failure to follow these instructions could result in serious personal injury, death or property damage.

Warning: Expansion Hazard

Water expands when heated. Install properly sized thermal expansion tanks and relief valves. Failure to follow these instructions could result in serious personal injury, death or property damage.

SERVICE

Your Aurora pump requires no maintenance other than periodic inspection, and occasional cleaning and lubrication of bearings. The intent of inspection is to prevent breakdown, thus obtaining optimum service life. The liquid end of the pump is lubricated by the fluid being pumped and therefore does not require periodic lubrication. The motor, however may require lubrication, in which case, the motor manufacturer's recommendation should be followed.

REPAIRS

Before starting any work, insure the electrial power is locked out, the system pressure has been lowered to 0 psi and temperature of the unit is at a safe level.

Warning: Sudden Start-Up Hazard

Disconnect and lockout power source before servicing. Failure to follow these instructions could result in serious personal injury, death or property damage.

Warning: Spraying Water Hazard

When servicing pump replace all gaskets and seals. Do not re-use old gaskets or seals. Failure to follow these instructions could result in serious personal injury, death or property damage.

Inspect removed parts at disassembly to determine if they can be reused. Cracked castings should never be reused. Scored or worn pump shafts should be replaced. Gaskets should be replaced at reassembly simply as a matter of economy. They are much less expensive to replace routinely than to replace individually as the need arises. While motors and motor controls are often returned to the manufacturer for repairs it is usually more practical and economical to repair the pump at the job site or the pump repair shop.

Cleaning of most parts can be accomplished with the use of clean rags.

⚠ Warning: Use of Solvents

We do not recommend the use of solvents or petroleum cleaners for cleaning the parts because of the fire danger. Failure to follow these instructions could result in serious personal injury, death or property damage.

DISASSEMBLY OF THE PUMP. READ AND UNDERSTAND ALL SAFETY WARNINGS AT THE BEGINNING OF THE MANUAL BEFORE BEGINNING INSTALLATION OR ANY REPAIR WORK. Disassemble only what is needed to make repairs or accomplish inspection.

PROCEDURE FOR REMOVING AND INSTALLING PUMP MOTOR.

CAUTION

DO NOT OPERATE THIS UNIT DRY

TO REMOVE MOTOR

1. Support motor on both sides. Remove four hex head cap screws (24) that hold motor to volute (9).

2. Carefully and slowly pull motor (25) until seal flange (19) and impeller (17) are completely out of the volute (9). Avoid resting entire unit on seal flange or impeller.

3. Remove Allen head lock screw (15) and washer (16) from center of impeller (17). Pull impeller from shaft. Do no lose square key (23).

4. Remove seal spring member (18) from shaft. Avoid cutting rubber parts or scratching carbon face.

5. Remove two hex head cap screws (21) from seal flange (19). Hold seal flange so that it doesn't drop on motor shaft while removing screws. Remove seal flange.

6. Remove ceramic seal face member (18) from center of seal flange (19) and o-ring (20) from groove. Check for nicks and cuts. Replace as necessary.

7. Finally, remove water slinger (22) if replacing with new one or servicing motor.

TO INSTALL MOTOR

1. Slip water slinger (22) on motor shaft past shoulder.

2. Press ceramic seal face member (18) into center cavity of seal flange (19) with the smooth ceramic facing out. Clean and grease o-ring (20) and place in seal flange groove.

CAUTION

NOTE: MAKE SURE THAT CERAMIC FACE IS FREE FROM OIL OR GREASE.

3. Install seal flange on motor register and secure in place with two cap screws (21).

4. Press seal spring member (18) on motor shaft with carbon face towards ceramic seal member. Avoid cutting rubber parts on shaft.

5. Line up keyways and push impeller (17) on motor shaft up to shoulder. Insert square key (23) in place.

6. Secure impeller with washer (16), impeller gasket (16.5) and Allen head lock screw (15).

7. Position and carefully install assembled motor unit to the volute (9) and secure motor using cap screws (24).

CAUTION

MOTOR MUST BE WIRED AS INDICATED ON MOTOR JUNCTION BOX COVER AND NAME PLATE.

Remove motor shaft and cap. Momentarily, start and stop motor-while impeller is still turning, check end shaft rotation. Rotation must be in the direction indicated by the arrow on the outside of the volute (9). Fill strainer pot with water, install baseket, and secure cover. Pump is ready for operation. Press in motor shaft end cap.

STARTING PUMP AFTER REASSEMBLY. Do not start pump until all air and vapor has been bled and there is liquid in the pump to provide the necessary lubrication. It is possible that the mechanical seal may drip during first few minutes of operation.

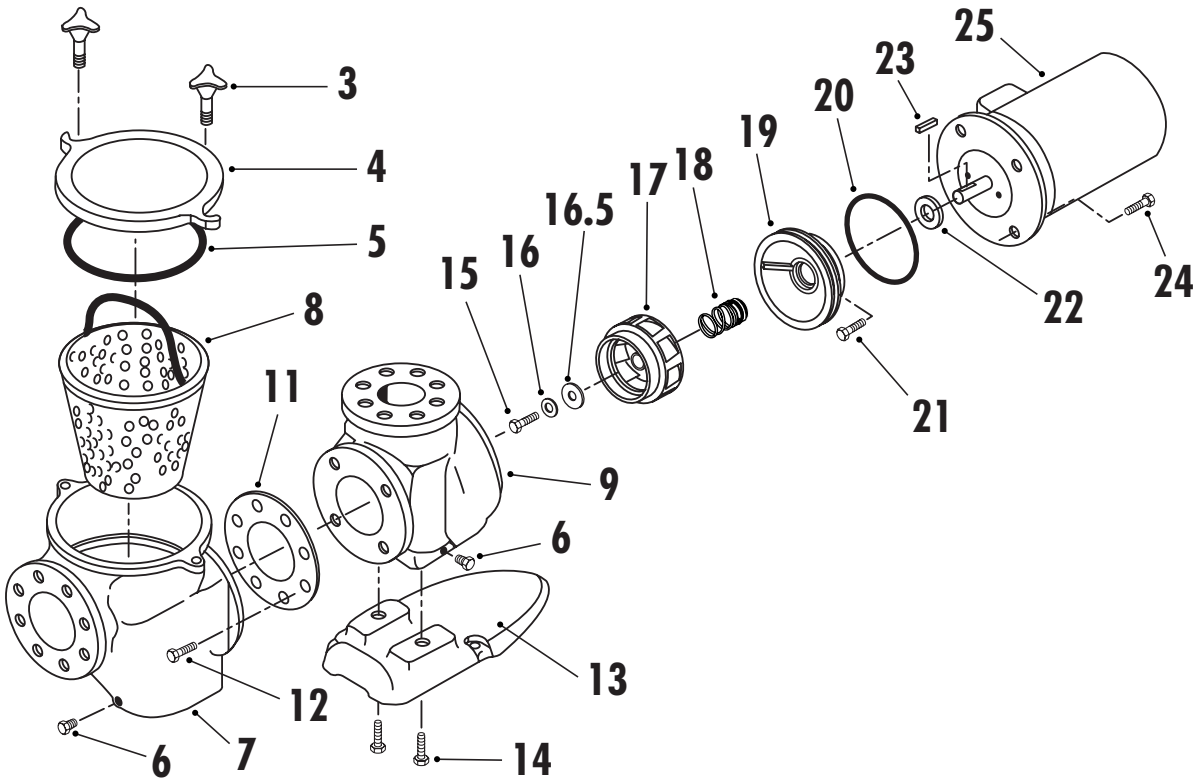

Figure 1. Pump Exploded View

A LIST OF PARTS
MODEL 330 Gold Vane Pump
(See Figure 1)

3.	Hand Nut		
4.	Cover	16.	Impeller Washer
5.	O-ring	16.5	Impeller Gasket
6.	Pipe Plug	17.	Impeller
7.	Strainer Pot	18.	Mechanical Seal
8.	Basket	19.	Flange
9.	Volute	20.	O-ring
11.	Gasket	21.	Capscrew
12.	Screw	22.	Water Slinger
13.	Foot	23.	Impeller Key
14.	Screw	24.	Capscrew
15.	Lock Screw	25.	Motor

AP-SECT.6 - ITEM 330

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NOTE:
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