3300 SERIES PUMPS

Operational and Installation Guidelines

Please read these Operational and Installation Guidelines before installing the 3300 Series Pumps. If additional help is needed, please consult the Factory.

CAUTIONS

- Water pipe connections and fixtures directly connected to a potable water supply shall be sized, installed and maintained in accordance with Federal, State, and local codes.
- Do not operate the pump above the pressure limitations specified on the data label.
- Never operate the pump in a harsh environment or hazardous atmosphere, since motor brush and switch may cause electrical arcing.
- **Do not pump gasoline or other flammable liquids. Do not use with petroleum products.**
- **Do not assume fluid compatibility. If the fluid is improperly matched to the pumps' elastomers, a leak may occur**
- As long as there is inlet water pressure, the pump will not stop forward flow of water even if the motor is turned off. Be sure the system has positive means of shutting off water supply.
- Always consider electrical shock hazard when working with and handling electrical equipment. If uncertain, consult an Electrician. Electrical wiring should only be done by a qualified Electrician per Local and State Electrical Codes.

MOUNTING

- The pump should be mounted in a dry place and away from any source of heat. If an enclosure is used, special instructions for cooling the motor may be necessary. Consult the Factory.
- Do not subject the pump to extreme high or low (freezing) temperatures while in operation. (Operating ambient temperature range is 32ºF to 115ºF).
- The pump may be mounted horizontally with the outlet port on the right when viewed from the pump end or with the pump above the mount; or vertically with the pump above or below the motor.

PLUMBING

- The pump is equipped with either a pressure sensing demand switch, a bypass relief valve, or both which controls the maximum safe operating pressure.
- We recommend use of flexible tubing with proper pressure rating.
- Pump will prime only if all pressure is relieved from outlet port.
- It is recommended that debris-free liquid be pumped or an in-line sediment filter (50 mesh) be installed at the inlet side to keep foreign debris out of the system.
- The pump should always be mounted prior to any components which could introduce particles to the liquid; thus, preventing them from entering the pump chambers and possibly causing clogging.
- Avoid any sharp bends which may crimp tubing and restrict flow. Use 90º elbow fittings if necessary. REMCO provides pumps with different kinds of fittings. Please consult Factory for your needs.

ELECTRICAL

- The 3300 Series Pumps are designed for intermittent duty, but may run continuously if the motor temperature does not exceed the recommended limit. Some 3300 Series Pumps are equipped with thermally protected motors and in case motor temperature exceeds thermal cut-out rating, pump will shut down and will not restart until motor cools down to specified temperature. Please consult the appropriate Data Sheet for continuous running parameters, noting the effect of rapid On/Off Cycling (See section below).
- If a power supply is used with the system and the supply is not furnished by REMCO, it will need to be reviewed for correct application and approval by REMCO.

Installation Procedure

The basic demand pump is controlled by a built-in pressure sensing demand switch. When a faucet or valve is opened down stream of the pump, line pressure drops, thus starting the pump automatically. Conversely, when the valve shuts, the line pressure increases turning the pump off automatically. The pressure switch actuates in response to the pump outlet pressure at a predetermined and preset pressure. The pump label indicates the pre-set OFF pressures. Typically, the OFF pressure is accurately set at the FACTORY and the ON pressure is within an allowable range below that value. In response to the characteristics of the system in which the pump is installed, such as the flexibility and length of the tubing, and the faucet or valves and the duration that they are open, these pressure settings may vary. Therefore, change in pressure settings is expected with use and over time. If the pump does not have an integral pressure sensing demand switch (i.e. pump is operated with an external control), pump will be equipped with a bypass relief valve (bypass is factory preset).

Read the OPERATIONAL AND INSTALLATION GUIDELINES on the other side carefully before starting to install the pump. Consult the Factory if there is any question.

Determine the optimum location for your pump before proceeding.

- Turn off the fluid supply.
- Cut the flexible tubing in sufficient length to avoid any stress on the tubing or hose where it connects to the pump or the fitting on any accessory or hose.
- Insert tubing or hose into pump ports. If compression fittings with threaded nuts are used, insert tubing until it bottoms out in the port and hand tighten the compression nut until the connection is tight. Then use a wrench to tighten the nut 1/2 turn clockwise or follow the wrench tightening instructions provided by the fitting manufacturer.
- The 3300 Series pump is now ready for operation. Open the inlet valve if any to allow fluid to flow to the pump.
- If the power source is a transformer, plug the appropriate REMCO supplied or approved transformer into the receptacle and connect the pump to the transformer. If the power source is not a transformer, connect the pump to the appropriate power source. Open the discharge or dispensing valve. Allow water to circulate, purging any entrapped air.
- The pump will now start building pressure. Operating pressure will vary with flow rate, flow valve, feed-water pressure and line voltage. Check for fitting leaks.
- If compression fittings with threaded nuts are used, observe any leaks after pump has run for approximately 15 minutes. Further tighten compression nuts approximately 1/8 to 1/4 of a turn on all fittings in the system. Wait 15 minutes and repeat the leak check.

NOTE: Further adjustments should not be necessary although it may take several days of operation before all the air has been purged and the system is stabilized.

- **Rapid On/Off Cycling must be limited to no more than 6 times per minute, even if the pump is operating in the Continuous Duty zone. Cycling could cause the motor to heat beyond the recommended maximum temperature, and reduce the operational life of the pump and pressure-sensing switch.**

Troubleshooting Guidelines

IF PUMP WILL NOT START CHECK:

- Correct voltage (±10%) and electrical connections
- Fuse or breaker
- Pressure switch operation and correct voltage at switch
- Rectifier or motor for open or grounded circuit

IF PUMP WILL NOT PRIME (NO DISCHARGE WITH MOTOR RUNNING) CHECK:

- Debris in strainer
- Restriction (kinks) in inlet/outlet tubes
- Debris in inlet/outlet
- Air leaking in from inlet

IF PUMP WILL NOT SHUT OFF (OUTPUT LINE CLOSED AND NO LEADS) CHECK:

- Air trapped in outlet line or pump head
- Correct voltage to pump
- Debris in pump inlet/outlet valves
- Loose drive assembly or pump head screws
- Pressure switch operations/adjustments
- Leaks

IF PUMP LEAKS FROM PUMP HEAD OR SWITCH CHECK:

- Loose screws at switch or pump head
- Switch diaphragm ruptured or pinched
- Punctured diaphragm if fluid is present

Servicing and Maintenance

- Flush pump with clean water and neutralizer after each use
- Store in a warm dry place out of the elements
- Contact the factory for all other service/maintenance questions

Replacement Parts (Accessories and other configurations available)

Pressure Switch Assembly

PART NUMBER	GPM	DESCRIPTION
3300-PSW	1.2-2.2GPM	PRESSURE SWITCH, 45-75 PSI
3300-PSW-100	1.2-2.2GPM	PRESSURE SWITCH, 80-150 PSI

Valve Housing Assembly

PART NUMBER	GPM	DESCRIPTION
VHA7863-7F77	1.2-2.2GPM	DEMAND OR BYPASS, VITON VALVES

Upper Housing Assembly

PART NUMBER	GPM	DESCRIPTION
UHA7880-7F77	1.2-2.2GPM	3/8" THREADED W/PRESSURE SWITCH, 45-75 PSI
UHA7880-8F77	1.2-2.2GPM	3/8" THREADED W/BYPASS, 45-75 PSI
UHA7803-7F77	1.2-2.2GPM	3/4" QUICK ATTACH W/PRESSURE SWITCH, 45-75 PSI
UHA7803-8F77	1.2-2.2GPM	3/4" QUICK ATTACH W/BYPASS, 45-75 PSI

Complete Pumphead Assembly

PART NUMBER	GPM	DESCRIPTION
7880-7F777	1.2GPM	3/8" THREADED W/PRESSURE SWITCH, 45-75 PSI
7880-8F77	1.2GPM	3/8" THREADED W/BYPASS, 45-75 PSI
7883-7F77	2.2GPM	3/8" THREADED W/PRESSURE SWITCH, 45-75 PSI
7883-8F77	2.2GPM	3/8" THREADED W/BYPASS, 45-75 PSI
7803-7F77	2.2GPM	3/4" QUICK ATTACH W/PRESSURE SWITCH, 45-75 PSI
7803-8F77	2.2GPM	3/4" QUICK ATTACH W/BYPASS, 45-75 PSI

Screws Not Included

Limited Warranty

Remco warrants its products to be free from material and workmanship defects (under normal use and service) for a period of one (1) year from the date of manufacture, or one (1) year use with proof of purchase, not to exceed two (2) years in any event. The limited warranty will not apply to pumps that were improperly installed, misapplied, or incompatible with fluids or components not manufactured by REMCO. REMCO will not warrant any pump which is damaged or modified outside the REMCO factory. All pumps/products must be flushed of any chemicals before shipping. All warranty considerations are governed by Remco's written Return Policy. Returns are to be shipped postage prepaid to our service center in Osakis, MN. REMCO shall not be liable for freight damage incurred during shipping. Package returns carefully and include the RMA number on the packaging. REMCO INDUSTRIES, 10425 Wildlife Loop SE, Osakis, MN 56360.

Upon receiving a pump, it will be tested per REMCO's test criteria. REMCO's obligation under this warranty policy is limited to the repair or replacement of the unit. Pumps found not defective (under the terms of this limited warranty) are subject to charges to be paid by the returnee for the testing and packaging of "tested good" units. No credit or labor allowances will be given to the returnee for pumps returned as defective. Warranty replacements will be shipped on a freight allowance basis. REMCO reserves the right to choose the method of transportation. This limited warranty is in lieu of all other warranties, expressed or implied, and no other person is authorized to give any other warranty or assume obligation or liability on REMCO's behalf. REMCO shall not be liable for any labor, damage, or other expenses, nor shall REMCO be liable for any indirect, incidental, or consequential damages of any kind incurred by the reason of the use or sale of any defective product or part. This limited warranty covers pumps distributed within the United States of America. Other world market areas should consult with the distributor for any deviation from this document.