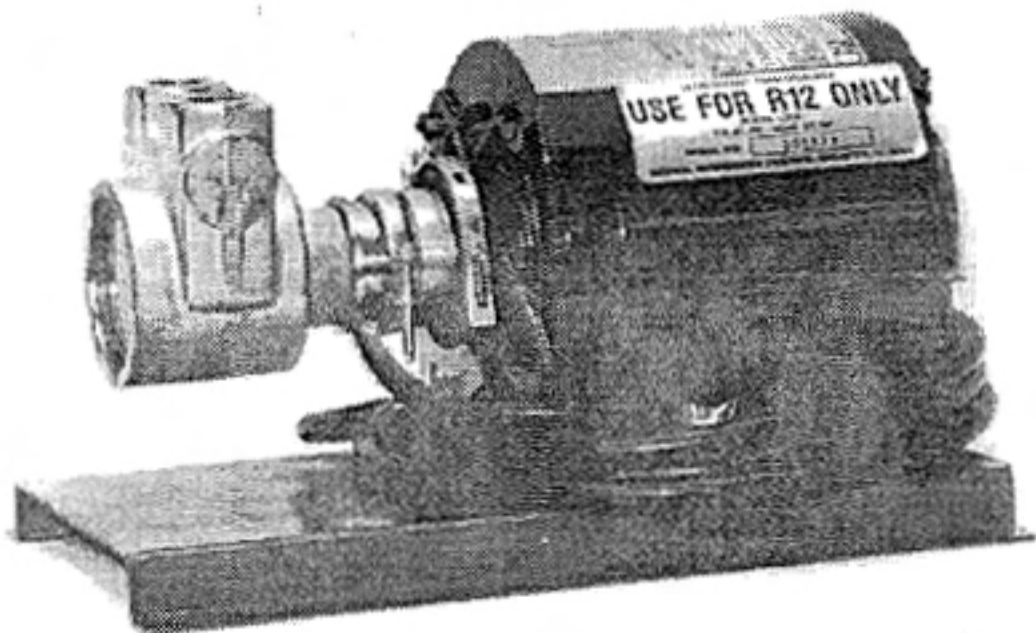




NATIONAL REFRIGERATION PRODUCTS

Operating Instructions



MODEL LP12
Refrigerant Transfer Pump

985 WHEELER WAY • LANGHORNE, PA 19047

Phone (215) 638-8909 Fax (215) 638-9270



NATIONAL REFRIGERATION PRODUCTS

1950 Street Road • Bensalem, PA 19020 • (215) 639-5885 • Fax (215) 639-5765

May 21, 1992

OPERATING INSTRUCTIONS

MODEL LP12

CAUTION...PUMP MUST BE FILLED WITH WATER BEFORE OPERATING.

INTRODUCTION

This pump has been designed and manufactured for ease of installation. The LP12 is a vane pump rated at 200 psi working pressure. The LP12 is designed to recover 100 pounds or more of liquid R12. The pump is not designed to pump refrigerant from small cylinders.

GENERAL INSTALLATION

LOCATION

Pumps of all types are sensitive to restrictions in the inlet lines. Our pumps are capable of withstanding these restrictions better than most, however the best performance is obtained by locating the pump as close to the fluid source as possible and minimizing the number of elbows and valves. In addition, a piping guide should be used to determine the proper size inlet pipe for the flow rate and viscosity of the fluid. At a minimum, the pipe must be at least 1/2" inside diameter (ID).

Pumps of this type will work in any position, however, avoid mounting the pump vertically with the pump up. In the event of a seal leak, fluid may enter the motor causing possible shock hazard and equipment damage.

This series of pumps are self-priming to a degree. As the pump wears, the self-priming ability decreases, so the best possible location for the pump is to be below the refrigerant level of the unit to be pumped.

INLET PLUMBING

Piping must be at least 1/2 inch ID. Pump performance is heavily dependent on all inlet pipe threads being sealed. Use pipe thread sealant. Inlet hoses must be rated so as not to collapse under 28 inches Hg of vacuum pressure at the anticipated temperature. Keep elbows and valves to a minimum as they are restrictive and can cause constriction and/or cavitation, which may damage the pump.

INLET ACCESSORIES

An inlet filter (20 microns or smaller), or a 304 filter drier is recommended. Abrasive particles will damage the bearings, vanes, and seals. A shut-off valve is also recommended to facilitate on-line maintenance.

DISCHARGE PLUMBING

Piping must be rated to exceed the maximum discharge pressure of the pump, and must be at least 1/2 inch ID. Piping size should be large enough as not to create excessive restrictions, since this will make the pump work harder than necessary. All threads should be sealed with a pipe sealant to prevent leakage.

ELECTRICAL CHARACTERISTICS

The electric motor for the LP12 pump is rated at 1/3HP, 115 volts, 1 phase, and 60 Hz.

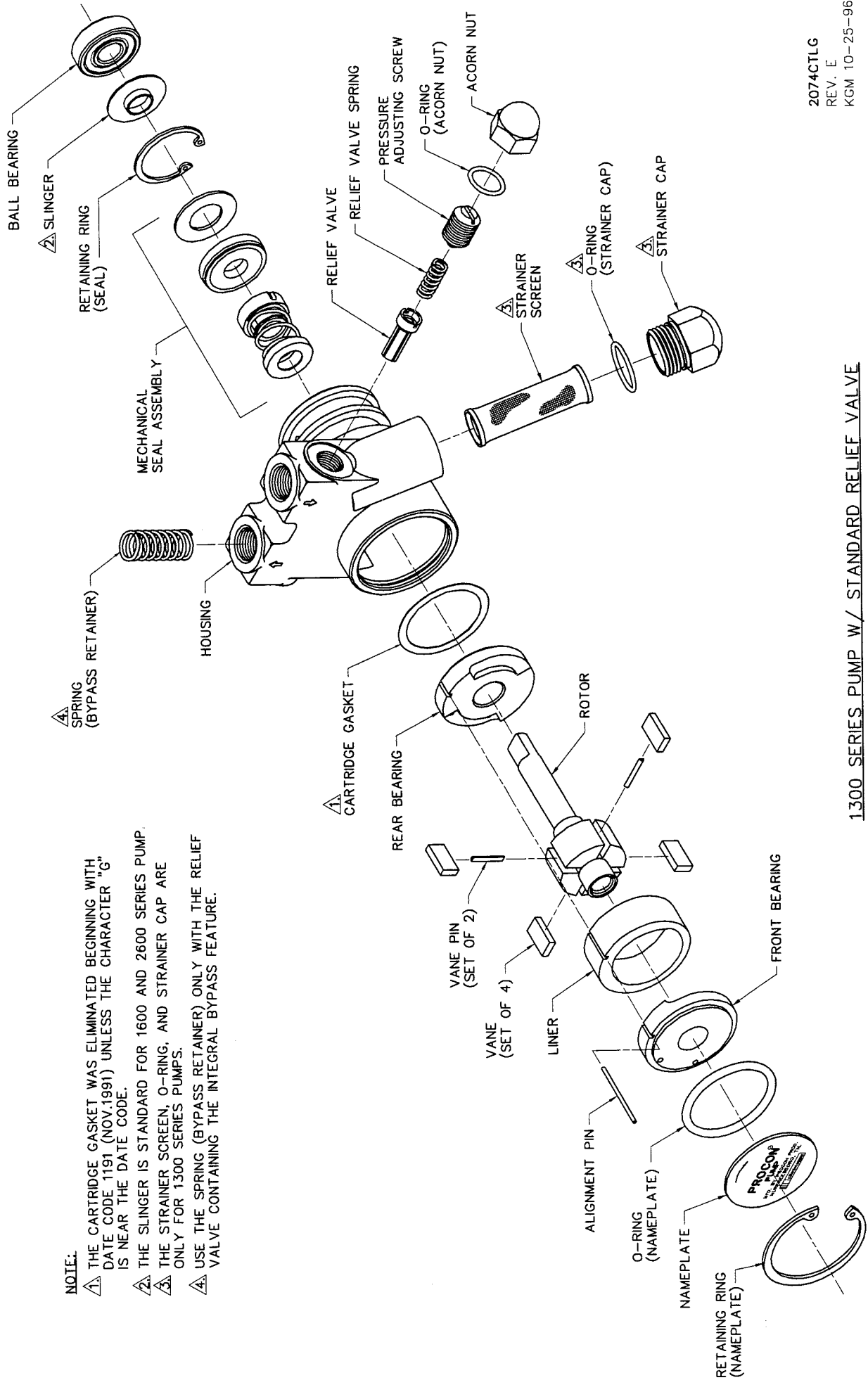
IMPORTANT SAFETY LIST

To prevent serious injuries, please observe the following basic safety precautions when installing, operating, or servicing your liquid refrigerant pump manufactured by National Refrigeration Products.

1. Do not overfill the drums.
2. Do not mix different refrigerants in a recovery cylinder. Mixtures can not be separated.
3. Do not run the pump until you have read the installation and instruction manual.
4. Protect your eyes. Wear safety goggles at all times.
5. Do not wear watches, rings, jewelry, neck-ties, or loose-fitting clothes. They may get caught in moving parts. Keep hair away from moving parts.
6. Loose objects can become flying projectiles. remove all loose items, such as wrenches, rags, allen wrenches, etc., from the pump before starting.
7. Protect your eyes, skin, and clothing. Be prepared for leaks when starting that may spray out the fluid being pumped.
8. Check connections, valves, and electrical connections before starting the unit.

WARRANTY

NRP Recovery Equipment is warranted to be free of manufacturing defects. NRP will repair or give credit for repair at NRP's choice if any NRP recovery units or accessories have manufacturing defects. Any warranty claim must be submitted in writing within one year of purchase with copy of invoice. In no event shall NRP be liable for the cost of labor charges, lost profits, injury to good will or any other special or consequential damages for defective goods, late delivery, or non-delivery. There are no warranties which extend beyond the description on the face hereof, and NRP makes no warranty of merchant ability or fitness for specific purpose. Warranty does not cover damage by improper operation or abuse.



- NOTE:**
- ⚠ THE CARTRIDGE GASKET WAS ELIMINATED BEGINNING WITH DATE CODE 1191 (NOV.1991) UNLESS THE CHARACTER "G" IS NEAR THE DATE CODE.
 - ⚠ THE SLINGER IS STANDARD FOR 1600 AND 2600 SERIES PUMP.
 - ⚠ THE STRAINER SCREEN, O-RING, AND STRAINER CAP ARE ONLY FOR 1300 SERIES PUMPS.
 - ⚠ USE THE SPRING (BYPASS RETAINER) ONLY WITH THE RELIEF VALVE CONTAINING THE INTEGRAL BYPASS FEATURE.

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1300 SERIES PUMP W/ STANDARD RELIEF VALVE