

3:1 RATIO, OUTPUT - 5 GPM
MIN. AIR PRESSURE - 40 PSI
MAX. AIR PRESSURE - 200 PSI
MAX. OUTPUT PRESSURE - 600 PSI

OWNERS MANUAL

IT IS THE RESPONSIBILITY OF THE OWNER AND/OR OPERATOR TO PROPERLY USE AND MAINTAIN THIS EQUIPMENT CAREFULLY READ AND UNDERSTAND THE INSTRUCTIONS AND WARNINGS IN THIS MANUAL BEFORE OPERATING THIS EQUIPMENT.

If the operator is not fluent in English, the instructions and warnings shall be read and discussed in the operator's native language, making sure the operator comprehends the contents.

This equipment complies with OSHA Standards where applicable



WARNING

DO NOT exceed the stated maximum working pressure of the pump or of the lowest rated component in your system.

DO NOT alter or modify any part of this equipment.

DO NOT operate this equipment with combustible gas.

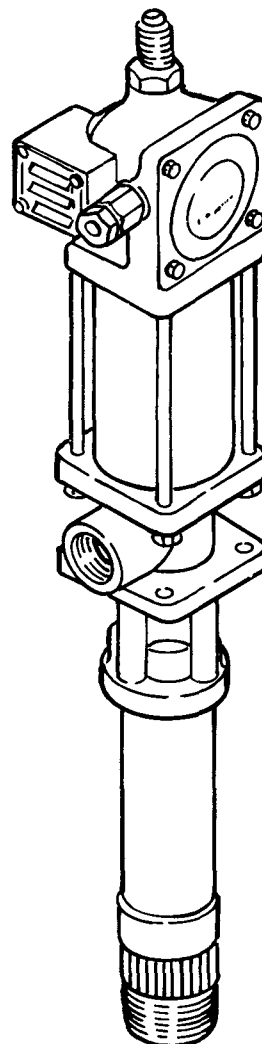
DO NOT attempt to repair or disassemble the equipment while the system is pressurized.

TIGHTEN all fluid connections securely before using this equipment.

ALWAYS read and follow the fluid manufacturer's recommendations regarding fluid compatibility, and the use of protective clothing and equipment.

CHECK all equipment regularly and repair or replace worn or damaged parts immediately.

IMPORTANT: Failure to heed these warnings including mis-use, overpressurizing, modifying parts, using incompatible chemicals and fluids, or using worn or damaged parts, may result in equipment damage and/or serious personal injury, fire, explosion, or property damage.



CONTENTS

PAGE

Safety Warnings	1, 2
Operation	2
Maintenance	2
Installation	3
Disassembly Procedure	4
Parts Breakdown & Dimensions	4, 5
Service Parts	6
Troubleshooting Chart	6
Accessories	7
Warranty	8

This manual contains **IMPORTANT WARNINGS** and **INSTRUCTIONS** READ AND RETAIN FOR REFERENCE



WARNING

Pressure Relief Procedure

TO reduce the risk of serious bodily injury, including splashing in the eyes or on the skin, always follow this procedure whenever you shut off the pump, when checking or servicing any part of the system, and when installing, cleaning or changing any part of the system.

1. **Disconnect the air to the pump.**
2. **Point the dispensing valve away from yourself and others.**
3. **Open the dispensing valve until pressure is relieved.**

If you suspect that the dispensing valve or hose is completely clogged, or that pressure has not been fully relieved after following the steps above, VERY SLOWLY loosen the hose end coupling and relieve pressure gradually, then loosen completely. Now clear the valve or hose.

INSPECTION INSTRUCTIONS

If overpressurizing of the equipment is believed to have occurred, contact the factory authorized warranty and service center nearest you for inspection of the pump.

Specialized equipment and knowledge is required for repair of this pump. Contact the factory authorized warranty and service center nearest you for repairs or adjustments other than maintenance specified in this manual.

Annual inspection is recommended by the factory authorized warranty and service center nearest you.

A list of factory authorized warranty and service centers is available upon request.

DAMAGED PUMPS

Any pump that appears to be damaged in any way, is badly worn or operates abnormally, shall be removed from use until repairs are made. Contact the factory authorized warranty and service center nearest you for repairs.

OPERATION

Flushing

Flush the supply lines and hoses with compatible solvent and blow dry with air before connecting them to the system. This is to purge any contaminants such as dirt, moisture or metal shavings that could damage the pump or system components.

Then flush the pump. The pump was tested in lightweight oil, which was left in to protect the pump from corrosion. Flush out the pump before connecting it to the system if the oil could contaminate the fluid you are pumping.



WARNING

When flushing the pump with solvents, to reduce the risk of injury from splashing or static sparking, always hold a metal part of the dispensing valve firmly to the side of a grounded metal pail, and use the lowest possible fluid pressure when flushing.



WARNING

This pump can develop 600 PSI maximum working pressure, at 200 PSI maximum incoming air pressure. Be sure that all equipment and accessories are rated to withstand the maximum working pressure of this pump. DO NOT exceed the maximum working pressure of any component or accessory used in the system.

In a circulating system, the pump runs continuously and slows down or speeds up as supply demands, until the air supply is shut off.

In a direct supply system, with adequate air pressure supplied to the motor, the pump starts when the gun or dispensing valve is opened and stalls against pressure when it is closed.

If the pump accelerates quickly or is running too fast, stop it immediately. Check the fluid supply and refill it if necessary. Prime the pump to remove all air from the system, or flush the pump and relieve pressure.

MAINTENANCE



WARNING

Always follow the Pressure Relief Procedure Warning whenever you stop spraying and before checking or repairing any part of the system, to reduce the risk of serious bodily injury.

If you are pumping fluid which dries, hardens or sets up, flush the system with a compatible solvent as often as necessary to prevent a buildup of dried fluid in the pump or hoses.

Corrosion Protection for Carbon Steel Pumps



CAUTION

Water, or even moist air, can cause your pump to corrode. To help prevent corrosion, NEVER leave the pump filled with water or air. After normal flushing, flush the pump again with mineral spirits or oil-based solvent, relieve pressure, and leave the mineral spirits in the pump. Be sure to follow all steps of the Pressure Relief Procedure Warning.

INSTALLATION

The typical installation and pump mountings, shown are only a guide for selecting and installing system components. Contact your Lincoln Representative for assistance in designing a system to suit your particular needs.

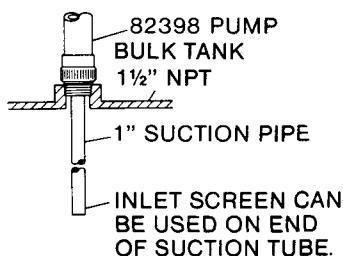
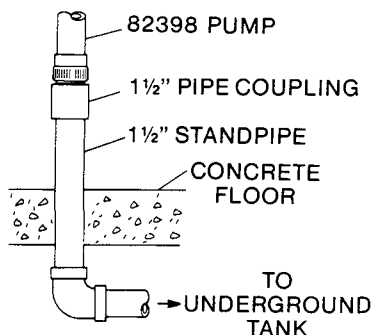
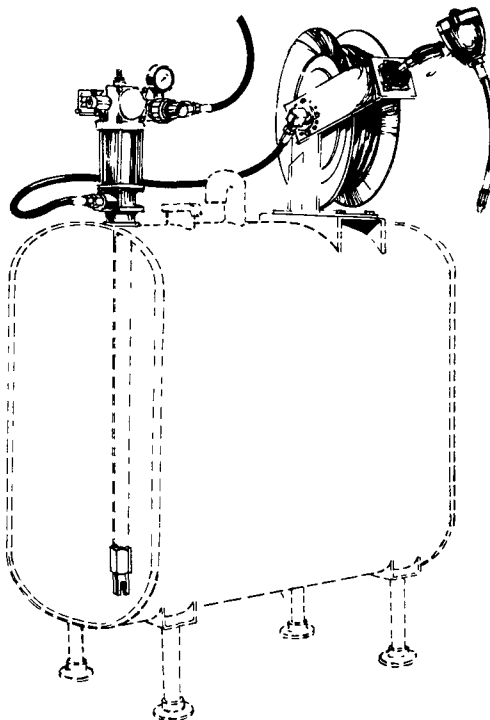
Mount the pump to suit the type of installation planned. Refer to the pump dimensional drawing for mounting layout.

An air line filter/regulator/lubricator is recommended for use with your Lincoln pump to remove harmful dirt and moisture from your compressed air supply, and to provide automatic air motor lubrication.

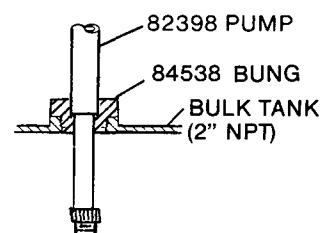
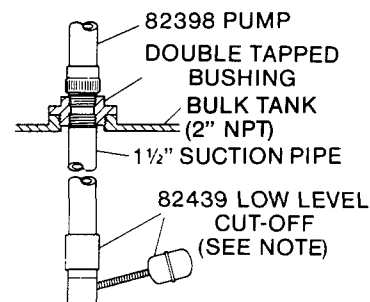
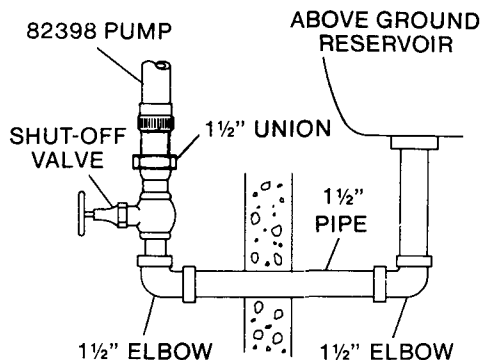
Be sure all air and fluid hoses are properly sized for your system.

TIGHTEN all fluid connections securely before using this equipment.

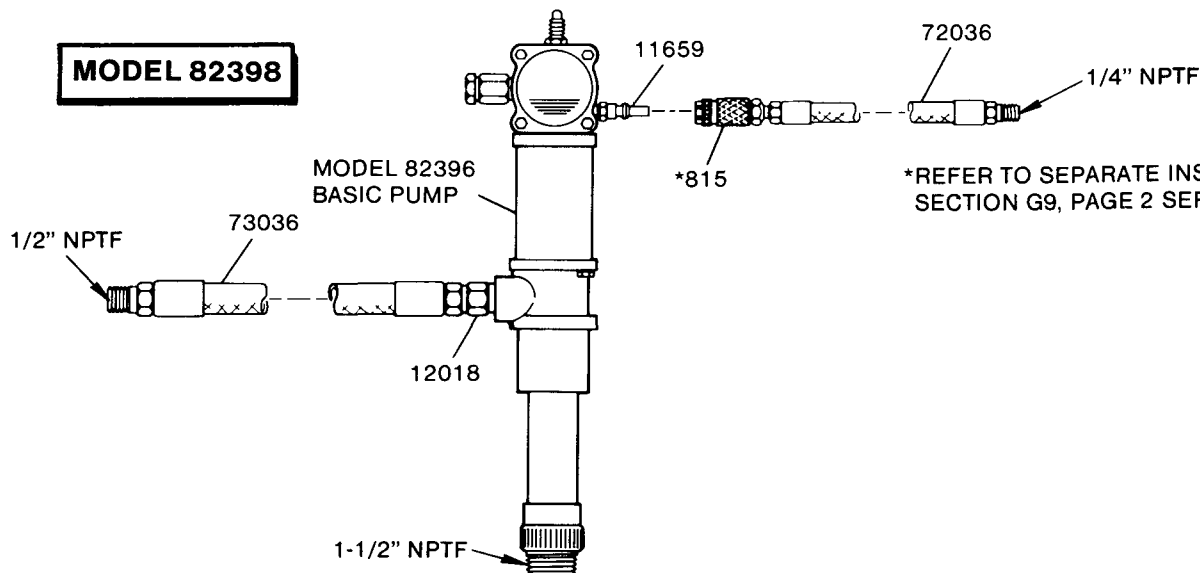
TYPICAL PUMP MOUNTINGS

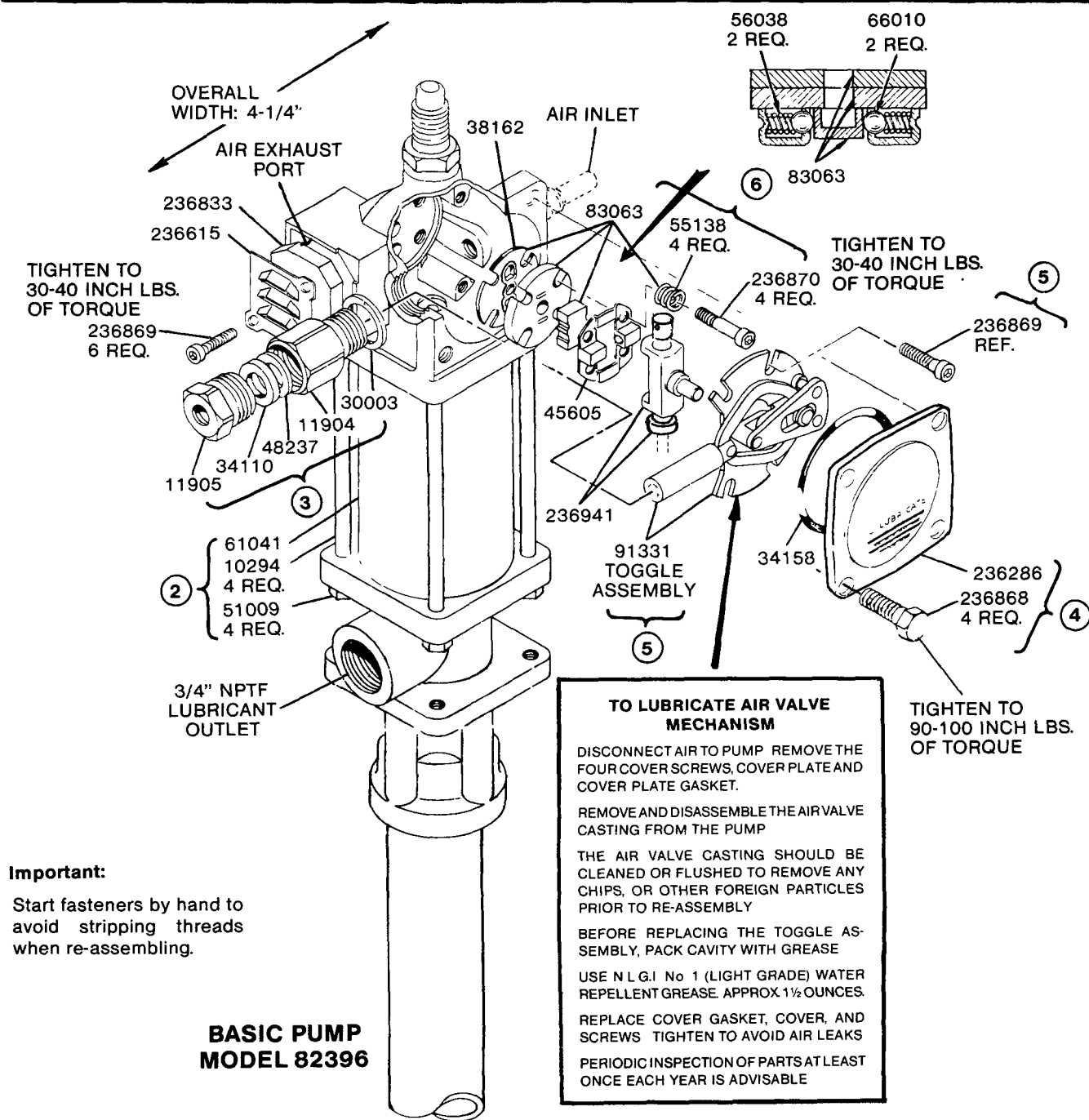


Note: When pumping from bulk tanks use 82439 Low Level Cut-Off to maintain prime and prevent air from being pumped through meters when tank is empty. Refer to Service Page K1-1.



MODEL 82398





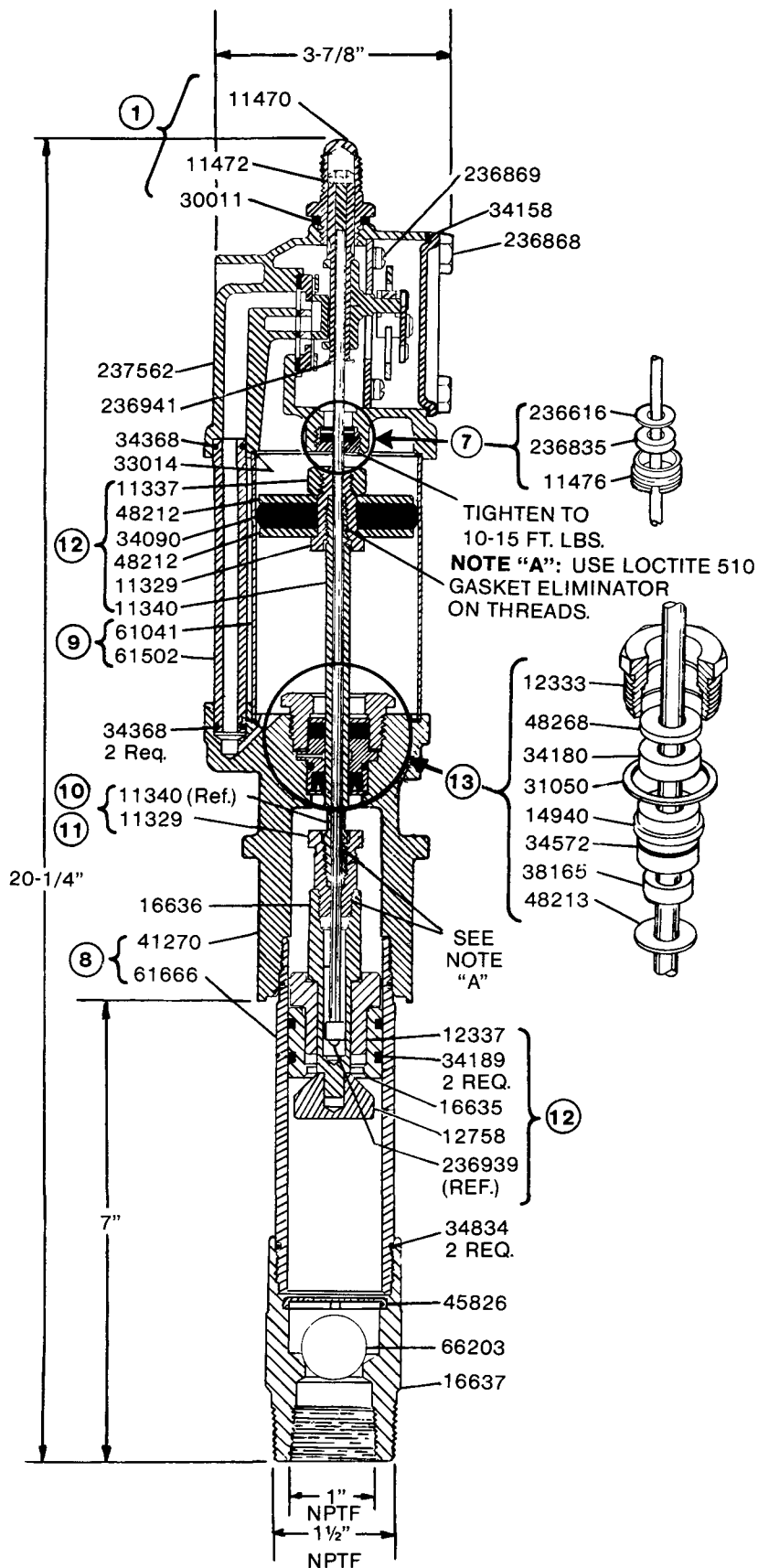
Important:

Start fasteners by hand to avoid stripping threads when re-assembling.

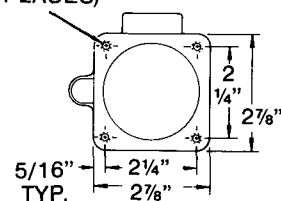
DISASSEMBLY PROCEDURE

1. Remove 11470 Valve Cap, 11472 Trip Rod Pin.
2. Unscrew four 51009 Nuts from 10294 Tie Rods and lift 237562 Air Valve Casting off of 61041 Air Cylinder.
3. Remove 11904 Packing Nut and 11905 Packing Cap from air valve casting.
4. Remove four 236868 Screws and 236286 Cover.
5. Remove four 236869 Screws, 91331 Toggle Plate and 236941 Trip Shoe Assembly.
6. Remove four 236870, 55138 Springs, 45605 Valve Guide Plate and 83063 Valve Slide, Seat and Gasket.
7. Unscrew 11476 Trip Rod Packing Nut from air valve casting and remove all packing parts.
8. Unscrew 61666 Pump Tube from 41270 Outlet Casting.
9. Remove 61041 Air Cylinder and 61502 Air Passage Tube from outlet casting.
10. Extend 11340 Piston Rod out bottom of outlet casting, exposing 11329 Piston Bolt.
11. Place wrenches on both 11329 Piston Bolts (one at each end of 11340 Piston Rod) and loosen.
12. Remove air piston, pump piston, piston rod and trip rod from outlet casting. Thread rod through gland packing.
13. Unscrew 12333 Gland Packing Nut from outlet casting and remove all gland parts.
14. To reassemble reverse procedure.

Note: If complete disassembly is required, replace all gaskets, o-rings & packings. (Order 83071 Repair Kit.)



1/4-20 TH'D.
MOUNTING HOLE
(4 PLACES)



**MOUNTING HOLE
DIMENSIONS**

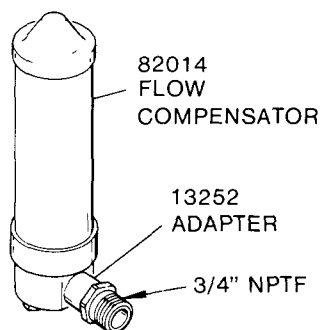
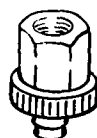
SERVICE PARTS

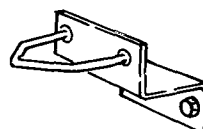
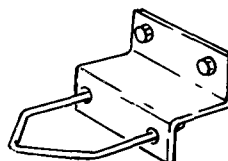
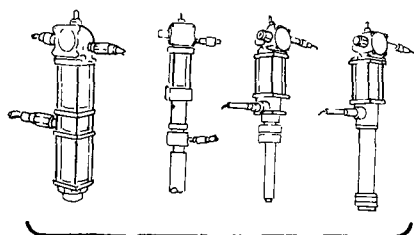
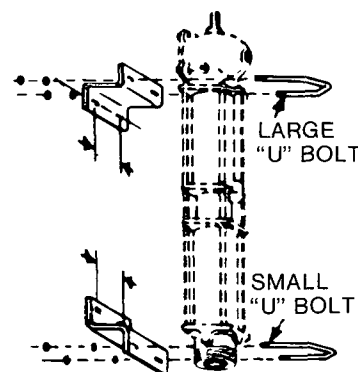
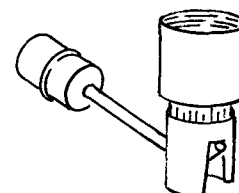
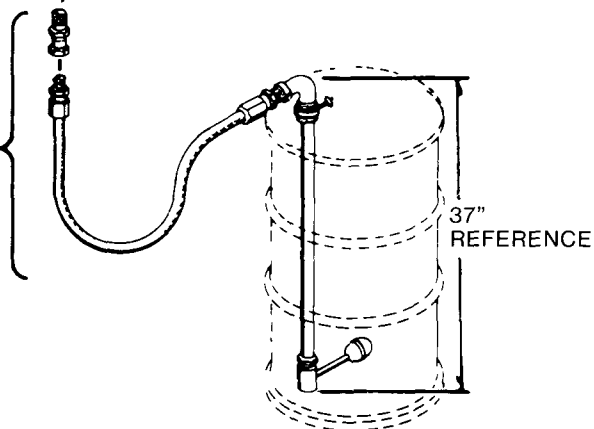
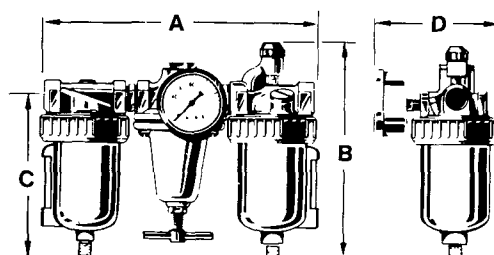
Part	Description	Part	Description	Part	Description
815	Air coupler	*31050	Gland gasket	*56038	Spring
10294	Tie rod	*33014	Gasket (Brass)	61041	Air cylinder
11329	Piston bolt	34090	Air piston packing	61502	Air passage tube
11337	Air piston nut	*34110	Packing (buna-N)	61666	Pump tube
*11340	Piston rod	*34158	O-ring (neoprene)	*66010	Steel ball
11470	Valve cap	*34180	Packing (buna-N)	66203	Steel ball
*11472	Trip rod pin	*34189	Packing (buna-N)	72036	Air hose
11476	Packing nut	*34368	O-ring (buna-N)	73036	Lubricant hose
11659	Air nipple	*34572	O-ring (urethane)	83063	Valve slide & seat
11904	Packing nut	*34834	O-ring (buna-N)	91331	Toggle plate
11905	Packing cap	38162	Valve Gasket	236286	Cover
12018	Adapter	*38165	Packing (urethane)	236615	Muffler cover
12333	Packing nut	41270	Outlet casting	*236616	Gasket (Brass)
12337	Spring stop	45605	Valve guide plate	236833	Muffler
*12758	Piston seat	45826	Guide washer	*236835	Packing (buna-N)
14940	Packing spacer	48212	Air piston washer	236868	Screw
*16635	Piston	48213	Packing washer	236869	Screw
16636	Connecting rod	48237	Packing washer	236870	Valve seat screw
16637	Foot valve body	48268	Packing washer	236939	Trip rod
*30003	Packing nut gasket	51009	Nut	236941	Trip shoe assembly
*30011	Valve cap gasket	55138	Spring	237562	Air valve casting

*Included in 83071 Repair Kit.

TROUBLESHOOTING

Problem	Solution
1. Airmotor does not operate.	Check air supply to pump. Replace 236941 Trip Shoe Assembly and 91331 Toggle Plate.
2. Air seepage from air exhaust while pump is not operating.	Replace 83063 Valve Slide, Seat & Gasket, 236835 Trip Rod Packing and 236616 Gasket.
3. Loss of pressure, volume or continuous operation of pump when not in normal use.	Clean piston seat and ball foot valve. If Worn or Damaged: Replace 16635 Piston, 12758 Piston Seat and 34189 Piston Packings. Check inside diameter of 61666 Pump Tube, if scored replace pump tube.
4. Excessive amount of air in lubricant or excessive amount of lubricant coming from air exhaust. Note: Some lubricant exhausts with air normally.	Replace 34180 Gland Packing, 31050 Gland Gasket, 34572 O-ring and 38165 U-cap Packing.

ACCESSORIES (Must be purchased separately).

**84600 FLOW
COMPENSATOR KIT**

**84765*
FOOT VALVE (1 1/2" NPT)**

**84538*
BUNG BUSHING (2" NPT)**

**MODEL 84148
WALL MOUNT BRACKET KIT**

**84165
SUCTION
KIT**

**MODEL 82439
LOW LEVEL CUTOFF**
FILTER—REGULATOR & GAUGE—LUBRICATOR


Model	Pipe Size	A	B	C	D	Weight (lbs.)
83387-4	1/4"	8 3/4"	7 5/8"	5 3/8"	4 1/8"	5.5
83387-6	3/8"	8 3/4"	7 5/8"	5 3/8"	4 1/8"	5.5
83387-8	1/2"	10 3/4"	8 1/8"	5 3/4"	4 3/4"	8.5

***NEW
MODELS**

LINCOLN LUBRICATING EQUIPMENT LIMITED WARRANTY

Lincoln, A Pentair Company, warrants that lubrication equipment, materials dispensing equipment and other related equipment manufactured by it will be free from defects in material and workmanship during the one (1) year following the date of purchase. If equipment proves to be defective during this warranty period, it will be repaired or replaced without charge, provided that factory examination indicates the equipment to be defective. To obtain repair or replacement, it must be shipped, transportation charges prepaid, with proof of date of purchase to a Lincoln authorized Warranty and Service Center, within the one (1) year following the date of purchase

This warranty is extended to the original retail purchaser only. This warranty does not apply to equipment damaged from accident, overload, abuse, misuse, negligence, faulty installation or abrasive or corrosive materials, or to equipment repaired or altered by anyone not authorized by Lincoln to repair or alter the equipment. This warranty applies only to equipment installed and operated according to the recommendations of Lincoln or its authorized field personnel. No other express warranty applies to lubrication equipment, materials dispensing equipment, and other related equipment manufactured by Lincoln.

ANY IMPLIED WARRANTIES applicable to lubrication equipment, materials dispensing equipment, and other related equipment manufactured by Lincoln INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WILL LAST ONLY FOR ONE (1) YEAR FROM THE DATE OF PURCHASE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

In no event shall Lincoln be liable for incidental or consequential damages. The liability of Lincoln on any claim for loss or damage arising out of the sale, resale, or use of lubrication equipment, materials dispensing equipment, and other related equipment shall in no event exceed the purchase price. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

RETAIN THIS INFORMATION FOR FUTURE REFERENCE

When ordering replacement parts, list: Part Number, Description, Model Number, and Series Letter.

LINCOLN provides a Distributor Network that stocks equipment and replacement parts.