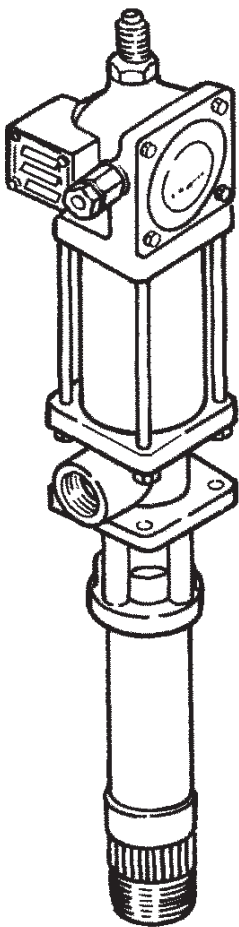


# Stub pump

Model 84933, 84934, series "D"



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Section	A6
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**⚠ DANGER**

Read manual prior to installation or use of this product. Keep manual nearby for future reference. Failure to follow instructions and safety precautions may result in death or serious injury.

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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.

This equipment complies with OSHA standards where applicable.

#### Specifications

5:1 ratio, output	6 gal./min. (22 l/min.)
Min. Air pressure	40 psi (2,75 bar)
Max. Air pressure	200 psi (13,8 bar)
Max. output pressure	1,000 psi (68,9 bar)

#### 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.

#### Notice

Failure to heed these warnings including misuse, over pressurizing, 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.

#### WARNING

Systems which will be dispensing fluids under pressure may need to be protected by using a thermal relief kit, which will safely limit the pressures caused by thermal expansion. Please contact your local Lincoln distributor and refer to service page section K5, page 31 for more details. Failure to include thermal relief protection may cause damage not covered under Lincoln's warranty policy.

## Pressure relief procedure

#### WARNING

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 over pressurizing 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 anyway, 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

The pump was tested in lightweight oil, which was left in to protect the pump from corrosion. 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

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

### ⚠ WARNING

Do not clean this system without proper grounding.

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

**Do not** exceed the maximum working pressure of any component or accessory used in the system.

This pump can develop 1,000 psi (68,9 bar) maximum working pressure, at 200 psi maximum incoming air pressure.

Verify all equipment and accessories are rated to withstand the maximum working pressure of this pump.

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

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.

### ⚠ 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.

## Corrosion protection for carbon steel pumps

**!** **Notice** Water and 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.

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.

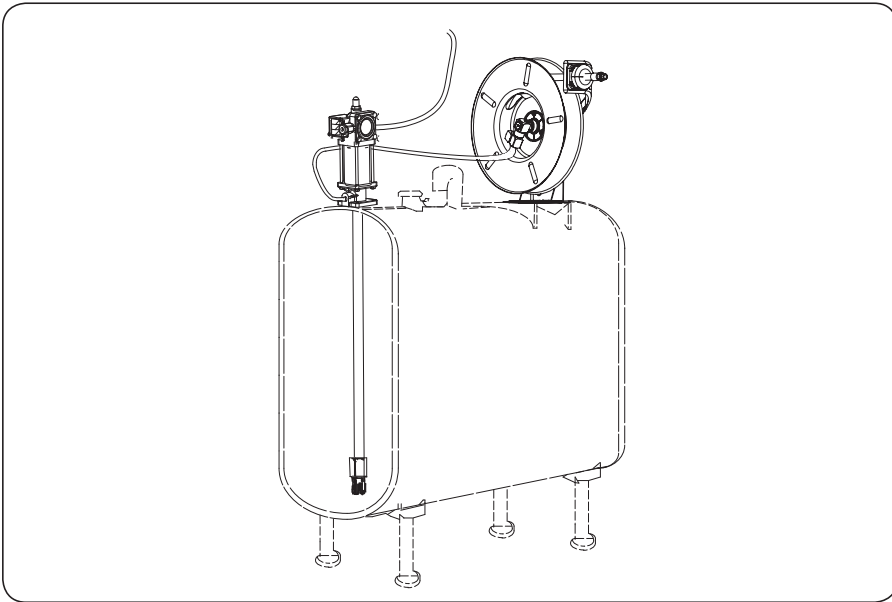
Contact your Lincoln representative for assistance in designing a system to suit your particular needs.

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

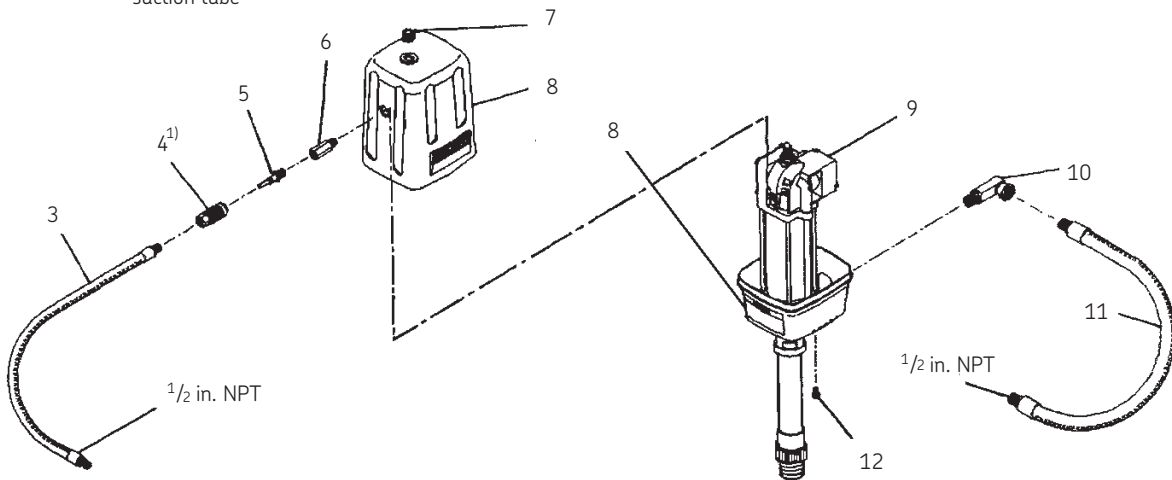
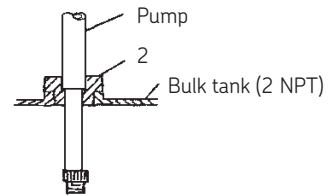
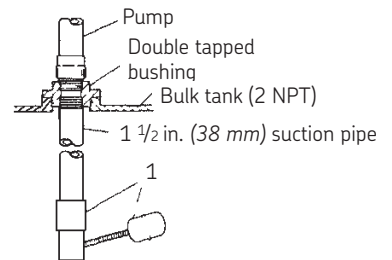
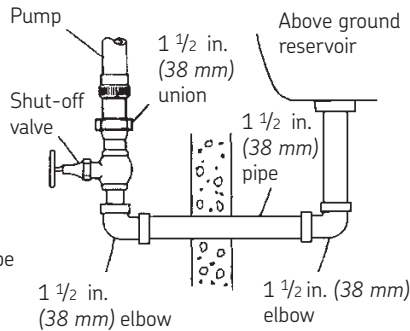
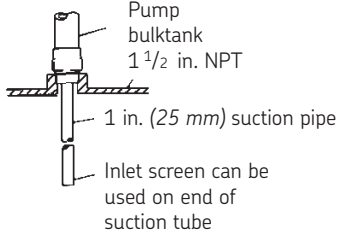
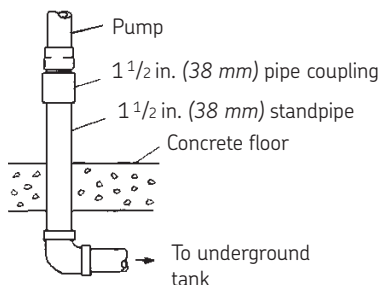
An air line filter/regulator/lubricator is recommended for use with your Lincoln pump to remove harmful dirt and moisture from the compressed air supply, and to provide automatic air motor lubrication.

Use correct air and fluid hoses for your system.

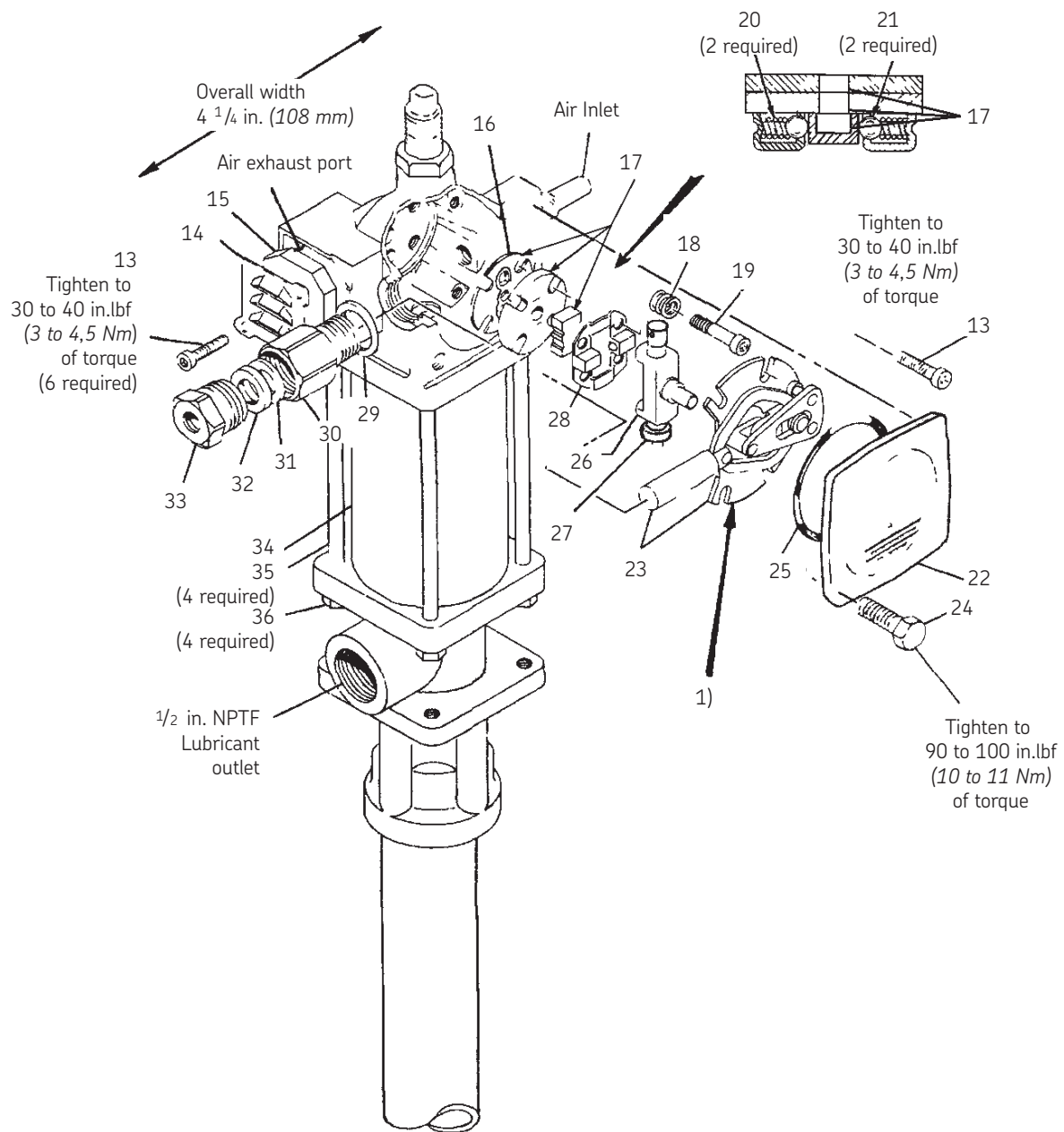
**Tighten** all fluid connections securely before using this equipment.



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.  
<sup>1)</sup> Refer to separate instructions: section G9, page 2 series.



Note: Start fasteners by hand to avoid stripping thread when reassembling.

<sup>1)</sup> Disconnect air to pump. Remove the four cover screws, cover plate and cover plate gasket. Remove and disassemble the air valve casting from the pump. The air valve casting should be cleaned or flushed to remove any chips or other foreign particles prior to reassembly. Before replacing the toggle assembly, pack cavity with grease. Use NLGI No. 1 (light grade) water repellent grease approximately 1 1/2 ounces. Replace cover gasket and screws. Tighten to avoid air leaks. Periodic inspections of parts at least once each year is advisable.

## Disassembly procedure

- 1 Remove valve cap (45), trip rod pin (44).
- 2 Unscrew four nuts (36) from tie rods (35) and lift air valve casting (47) off of air cylinder (34).
- 3 Remove packing nut (30) and packing cap (33) from air valve casting.
- 4 Remove four screws (24) and cover (22).
- 5 Remove four screws (13) toggle plate and trip assembly (26) and trip sleeve (27).

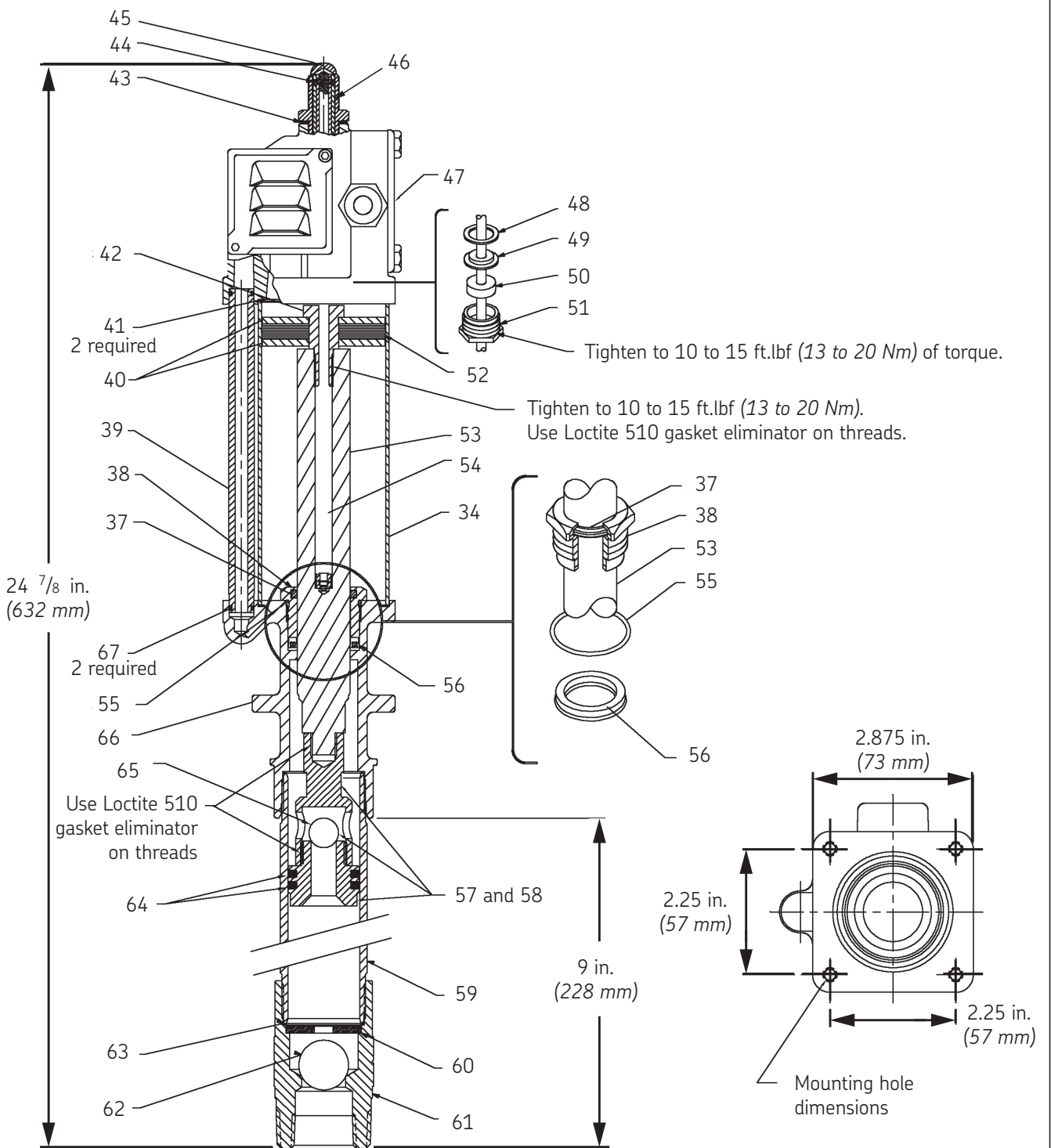
- 6 Remove four valve seat screws (19) four springs (18), valve guide plate (28), valve slide (17), seat kit and valve gasket (16).
- 7 Unscrew packing nut (51) from air valve casting and remove all packing parts.
- 8 Unscrew pump tube (59) from outlet casting (66).
- 9 Remove air cylinder (34) and air passage tube (39) from outlet casting.
- 10 Loosen both piston bolts (42) (one at end of piston rod (53) and loosen.
- 11 Remove air piston, pump piston, piston rod and trip rod from outlet casting.

- 12 Unscrew gland packing nut (38) from outlet casting and remove gland seal parts.
- 13 To reassemble reverse procedure.



### Notice

If complete disassembly is required, replace all gaskets, o-rings and packings (order repair kit.)



## Parts list

Item	Description	Part no.	Qty.	Item	Description	Part no.	Qty.
1	Low level cut-off	82439 <sup>4)</sup>	1	37	O-ring	245428	1
2	Bung bushing	84538 <sup>4)</sup>	1	38	Gland nut	245426	1
3	Air hose	72024		39	Air passage tube	62383	1
4	Coupler	815	1	40	Air piston washer	48212	1
5	Nipple	11659	1	41	Gasket	33014 <sup>1)</sup>	2
6	Outlet Adapter	11348	1	42	Piston bolt	245424	1
7	Knurled lock nut	11478	1	43	Valve cap gasket	30011 <sup>1)</sup>	1
8	Pump cover assembly	85935	1	44	Trip rod pin	11472 <sup>1)</sup>	1
9	Bare pump assembly	84933	1	45	Valve cap	11470	1
10	Adapter	241584	1	46	Trip rod collar	11471	1
11	Lubricant hose	73024	1	47	Air valve casting	236612	1
12	Hex bolt	50060	4	48	Gasket	33039 <sup>1)</sup>	1
13	Screw	236869	6	49	Gasket (brass)	236616 <sup>1)</sup>	1
14	Muffler cover	236615		50	Packing (buna-n)	236835 <sup>1)</sup>	1
15	Muffler	236833	1	51	Packing nut	245425	1
16	Valve gasket	38162 <sup>2)</sup>	1	52	Air piston packing	34090	1
17	Slide and seat kit	83063	1	53	Piston rod	241510	1
18	Spring	55138 <sup>2)</sup>	4	54	Trip rod	91528	1
19	Valve seat screw	236870	4	55	O-ring	245429	1
20	Spring	56038 <sup>1)</sup>	2	56	U-cup	245427 <sup>1)</sup>	1
21	Steel ball	69102	2	57	Connector	230003 <sup>1),3)</sup>	1
22	Cover	236286	1	58	Piston	230002 <sup>1),3)</sup>	1
23	Toggle plate assembly	91331	1	59	Pump tube	241511	1
24	Screw	236868 <sup>1)</sup>	4	60	Ball stop	241518	1
25	O-ring (neoprene)	34158 <sup>1)</sup>	1	61	Foot valve body	241517	1
26	Trip shoe assembly	11475	1	62	Steel ball	66203	1
27	Trip sleeve	11947	1	63	Pump tube gasket	241516 <sup>1)</sup>	2
28	Valve guide plate	45605	1	64	Packing (buna-n)	261077 <sup>1)</sup>	2
29	Packing nut gasket	30003 <sup>1)</sup>	1	65	Ball check	230004 <sup>1),3)</sup>	1
30	Packing nut	11904	1	66	Outlet casting	245401	1
31	Packing washer	48237	1	67	O-ring (buna-n)	34368 <sup>1)</sup>	2
32	Packing (buna-n)	34110 <sup>1)</sup>	1				
33	Packing cap	11905	1				
34	Air cylinder	61447	1				
35	Tie rod	241512	4				
36	Nut	51009	4				

<sup>1)</sup> Included in 230015 repair kit.

<sup>2)</sup> Included in 83063 valve seat assembly.

<sup>3)</sup> Included in 230001 piston replacement kit.

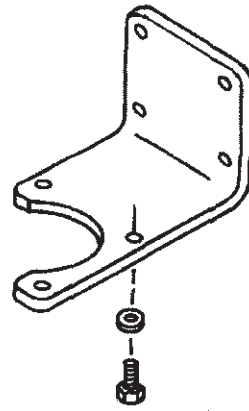
<sup>4)</sup> Not included with pump must be ordered separately.



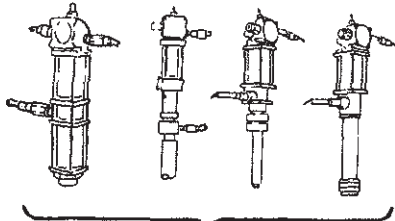
Accessories (must be purchased separately)



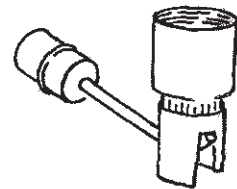
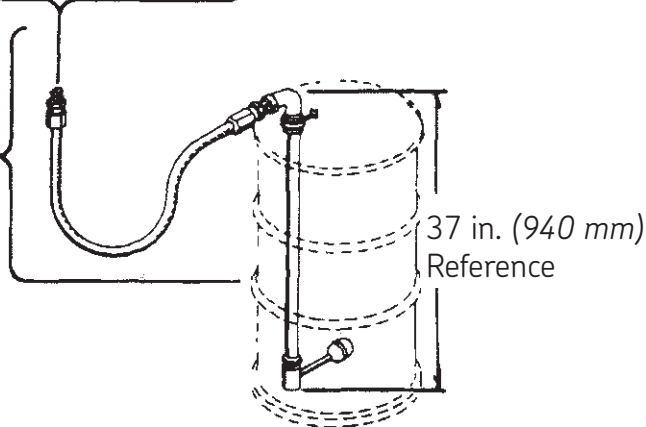
84538<sup>1)</sup>  
Bung bushing (2 in. NPT)  
(for 84933 only)



Model 84940<sup>1)</sup>  
Wall mount bracket kit

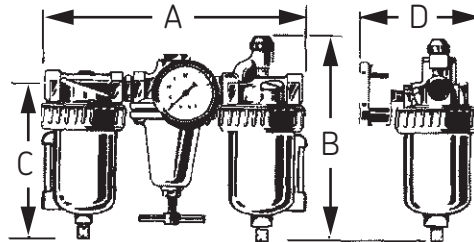


84945<sup>1)</sup>  
Suction  
Kit



Model 84946<sup>1)</sup> (1 in. NPT)  
Model 82439 (1 1/2 in. NPT)  
(Low level cut-off)

Filter-regulator and gauge-lubricator



Dimensions

Model	Pipe size	A	B	C	D	Weight
83387-4	1/4 in. (6 mm)	8 3/4 in. (222 mm)	7 5/8 in. (193 mm)	5 3/8 in. (136 mm)	4 1/8 in. (105 mm)	5.5 lbs. (2.5 kg)
83387-6	3/8 in. (9 mm)	8 3/4 in. (222 mm)	7 5/8 in. (193 mm)	5 3/8 in. (136 mm)	4 1/8 in. (105 mm)	5.5 lbs. (2.5 kg)
83387-8	1/2 in. (12 mm)	10 3/4 in. (273 mm)	8 1/8 in. (206 mm)	5 3/4 in. (146 mm)	4 3/4 in. (120 mm)	5.5 lbs. (2.5 kg)

## Troubleshooting

Problem	Solution
Air motor does not operate	Check air supply to pump Replace trip shoe assembly (25), trip sleeve (27) and toggle plate (23)
Air seepage from air exhaust while pump is not operating.	Replace valve slide, valve seat (17), valve gasket (16), trip rod packing (50) and gasket (49) and gasket (48)
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 piston (58), ball check (65) and piston packing (52). Check inside diameter of pump tube (59), if scored replace pump tube
Excessive amount of air in lubricant or excessive amount of lubricant coming from air exhaust. Note: some lubricant exhausts with air normally	Replace u-cup (56)

## Following machinery directive 2006/42/EC, Annex II Part 1 A

The manufacturer Lincoln Industrial, One Lincoln Way, St. Louis, MO 63120-1578 USA hereby declares that the machine

Designation: High-pressure air operated chassis pump

Type: Lubrigun

Part number: 282396, 82050, 82050-575, 82054, 82716, 83513, 84667, 84668, 84933

Year of construction: see type identification plate

complies with all basic requirements of the following directives at the time when first being launched in the market.

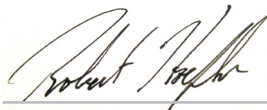
Machinery directive 2006/42/EC  
EMC 2009/19/EC and 2004/108/EC  
RoHS II 2011/65/EC

Applied standards DIN EN ISO  
12100:2011-3, DIN EN 61000-2:2003-5,  
DIN 40050-9:1993-5  
DIN EN 809-1:2011, DIN EN 60204-1:2011-1, DIN EN 55011:2011-4

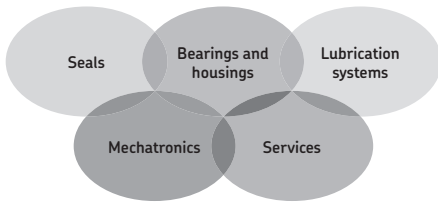
In the case of modifications or alterations of the above mentioned machine not authorized by the manufacturer validity of this EC declaration of conformity will cease. The person empowered to assemble the technical documentation on behalf of the manufacturer is the head of standardization; see manufacturer's address.

EC Declaration of Conformity  
EU-Repräsentant  
SKF Lubrication Systems Germany GmbH  
Heinrich-Hertz-Str. 2-8  
DE - 69190 Walldorf

Manufacturer  
Lincoln Industrial, One Lincoln Way  
St. Louis, MO 63120-1578 USA



Bob Hoefler,  
Bob Hoefler, Director Product Development /  
Product Engineering  
January 15, 2015



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