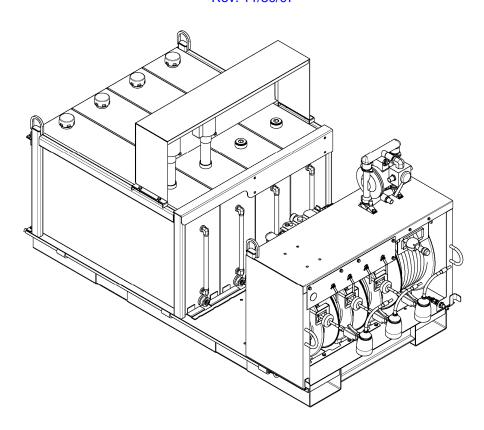


# LUBE SKID OWNERS MANUAL

Manual No. 601000999 Rev. 11/30/07



Serial No.

Mailing Address: P.O. Box 580697 Tulsa, OK 74158-0697 Physical Address: 4707 N. Mingo Rd. Tulsa, OK 74117-5904

Phone (918) 836-0463 Fax (918) 834-5979 http://www.autocrane.com



### **Auto Crane Warranty Registration**

Fax Transmission

To:	Warranty Depar	rtment	Fax:	(918) 834-5979	
From:			Date:		
Re:	Product Registr	ation	Pages:		
End Use	er Information:	(Required for Warranty Activa	ation)		
Name:			Phone:		
Address:					
City:		State:		Zip:	
Contact:		E-mail Add	ress:		
<u>Distribut</u>	tor Information:	(Required for Warranty Activa	ation)		
Name:					
Address:					
City:		State:		Zip:	
Contact:		E-mail Add	ress:		
<u>Product</u>	Information:	(Required for Warranty Activa	ation)		
Model No	o.:		Serial No.:		
Date Pro	duct Delivered:	Da	te Processed:*		
VIN#				* For Auto Crane use	only

### ONE REGISTRATION FORM PER UNIT (CRANE OR BODY)

Registration form must be mailed or faxed within 15 days of customer installation.

Mail to:

Warranty Department Auto Crane Company P.O. Box 581510 Tulsa, OK 74158-0697

Warranty Registration Rev. 072403

### LUBE SKID OWNER'S MANUAL REVISION RECORD

Revision Date	Section(s) Or Page(s)	Description of Change

#### Notes:

- 1. The information contained in this manual is in effect at the time of this printing. It does not cover all instructions, configurations, accessories, etc. If you require additional information, please contact **Auto Crane Company** at **(918) 836-0463**.
- 2. **Auto Crane Company** reserves the right to update this material without notice or obligation.

### **WARNINGS**

**WARNING!** Read the instruction manual and decals prior to operating the unit. Use the equipment for its intended purposes only.

**WARNING!** It is the responsibility of the end user to follow all applicable local, state, and national fire, electrical, and safety regulations.

**WARNING!** Keep all hoses away from traffic areas, sharp edges, moving parts, and hot surfaces.

#### WARNING! NEVER.....

- Weld, modify, or use unauthorized components on any Auto Crane unit! This will void any warranty or liability. Also failure of the lube skid may result.
- Exceed the maximum working pressure of any component.
- Put fuel into the system. Fuel may damage the pump or other components.
- ♦ Move or lift pressurized equipment.
- Pull on hoses to move equipment.
- Point the dispensing valve at anyone or any part of the body.
- Put you hand or fingers over the end of the dispensing valve.
- ♦ Stop or deflect leaks with your hand, body, glove, or rag.
- Use extensions or nozzles not designed for use with your dispensing valve.
- Repair high pressure couplings; you must replace the entire hose.

**WARNING!** Replace any damaged or worn parts immediately.

**WARNING!** Use only fluids and solvents with are compatible with the equipment. If you are not sure, call you AutoCrane distributor.

**WARNING!** Wear hearing protection when operating this equipment.

**WARNING! GET MEDICAL ATTENTION IMMEDIATELY,** If at any point fluid is injected into the skin. The injury may look just like a cut.

**WARNING!** ALWAYS follow the pressure relief procedure mentioned in this manual before cleaning, checking, or servicing the equipment.

**WARNING!** ALWAYS ground the equipment and operate in a well ventilated area. Improper grounding, poor ventilation, open flames or sparks can cause a hazardous condition and result in a fire or explosion and serious injury.

**WARNING!** ALWAYS know the specifics hazards of the fluid you are using and follow all local, state, and national guidelines when dispensing and disposing of that hazardous fluid.

### **READ THIS PAGE**

# LUBE SKID TABLE OF CONTENTS

INTRODUCTION	1-1.0
GENERAL SPECIFICATIONS	1-2.0
SAFETY TIPS AND PRECAUTIONS	2-1.0
LUBE SKID TRANSPORTATION	2-2.0
OPERATION OF LUBE SKID	2-4.0
SAFETY DECAL SECTION	3-1.0
DECAL LAYOUT	3-2.0
MAINTENANCE	3-5.0
GENERAL DIMENSIONS	4-1.0
GENERAL ASSEMBLY	5-1.0
TANK ASSEMBLY	5-6.0
3:1 OIL PUMP ASSEMBLY	5-7.0
DIAPHRAGM PUMP ASSEMBLY	5-10.0
OIL HOSE REEL ASSEMBLY	5-12.0
FILTER, LUBRICATOR, REGULATOR ASSEMBLY	5-13.0
GREASE OPTION	6-1.0
GREASE PUMP KIT	6-3.0
GREASE PUMP ASSEMBLY	6-4.0
GREASE HOSE REEL ASSEMBLY	6-9.0
5:1 OIL PUMP OPTION	6-10.0
5:1 OIL PUMP ASSEMBLY	6-11.0
FILTER OPTION	6-14.0
WARRANTY	I AST PAGE

### LUBE SKID INTRODUCTION

Auto Crane products are designed to provide many years of safe, trouble-free, dependable service when properly used and maintained.

To assist you in obtaining the best service from your lube skid and to avoid untimely failure, this manual provides the following operating and service instructions. It is specifically recommended that all operating and service personnel consider this manual as mandatory material for reading and study before operating or servicing Auto Crane products. It is highly recommended that owners, equipment managers, and supervisors also read this manual.

Auto Crane has incorporated several safety features in the lube skid for your protection.

For your convenience the overall dimensions of the lube skid are included on the General Dimension Drawing.

Remember, the lube skid adds weight to the vehicle. Adding weight may change the driving and riding characteristics of the vehicle unless the appropriate overload spring(s) are installed on the truck. The payload of the vehicle is reduced by the weight of the lube skid. The operator should exercise care when loading the vehicle. Distributing the payload on the vehicle evenly will greatly improve the driving and riding characteristics of the vehicle.

Auto Crane Company issues a limited warranty certificate with each unit sold. See last page for warranty.

It has always been Auto Crane Company policy to handle all warranty claims we receive as promptly as possible. If a warranty claim involves discrepant material or workmanship, Auto Crane will take immediate corrective action. It is understandable that Auto Crane Company cannot assume responsibility of liability when it is obvious that our products have been abused, misused, overloaded or otherwise damaged by inexperienced persons trying to operate the equipment without reading the manual.

Auto Crane will not assume responsibility or liability for any modifications or changes made to unit, or installation of component parts without authorization.

Auto Crane maintains a strong distributor network and a knowledgeable Customer Service Department. In most cases, an equipment problem is solved via phone conversation with our customer service department. The customer service department also has the ability to bring a local distributor, a regional sales manager, or a factory serviceman into the solution of an equipment problem.

If, through no fault of Auto Crane Company, it is necessary to send an experienced factory serviceman on a field service call the rates stated in the Auto Crane Distributor's Flat Rate Manual will apply.

Auto Crane Company's extensive Research and Development Program allow our customers to use the best equipment on the market. Our Engineering Staff and our knowledgeable sales people are always available to our customers in solving lube skid application problems. When in doubt, call the Auto Crane factory.

Note: This manual should remain with the lube skid at all times.

#### **DISTRIBUTOR ASSISTANCE**:

Should you require any assistance not given in this manual, we recommend that you consult your nearest Auto Crane Distributor. Our distributors sell authorized parts and have service departments that can solve almost any needed repair. This manual does not cover all maintenance, operating, or repair instructions pertinent to all possible situations. If you require additional information, please contact the Auto Crane Company at the following telephone number: (918) 836-0463. The information contained in the manual is in effect at the time of this printing. Auto Crane Company reserves the right to update this material without notice or obligation.

### LUBE SKID GENERAL SPECIFICATIONS

#### **DIMENSIONS**

**Width:** 48 in (1.22 m)

**Height:** 51-5/8 in (1.31 m)

**Length:** 88 in (2.24 m)

Weight: \*

2(O), 1(A), 1(S) 1385 lbs 3(O), 1(A) 1342 lbs 3(O), 1(S) 1381 lbs 4(O) 1338 lbs Grease Option 68 lbs (Drum not included in weight) Filter Option 33 lbs (Includes 1-filter add 11 lbs per extra filter)

\*Weights are shown with tanks empty

O - Oil

A – Antifreeze S – Salvage

#### **CAPACITY**

**Total Capacity:** 

Individual Tanks 60 Gallons Total 240 Gallons

**Usable Capacity:** 

Individual Tanks 55 Gallons Total 220 Gallons

Tanks are made of aluminum with sight tube, breather cap, 2" NPT bung connection (top), and strainer (bottom)

#### **PUMPING SYSTEMS**

Oil 3:1 Air Piston Pump
Optional 5:1 Air Piston Pump
Grease 50:1 Air Piston Pump
Salvage 1:1 Diaphragm Pump
Anti-Freeze 1:1 Diaphragm Pump

#### **DISPENSING RATES**

Oil: 3 gpm Anti-freeze 3 gpm Salvage 3 gpm

All oil and Anti-freeze pumps have metering control valves.

Dial Total: 16 quarts
Graduation: ¼ quarts
Extension: 10" Hose

### PNEUMATIC SYSTEM REQUIREMENTS

**Pressure:** 100psi (minimum)

**Volumetric Flow:** 

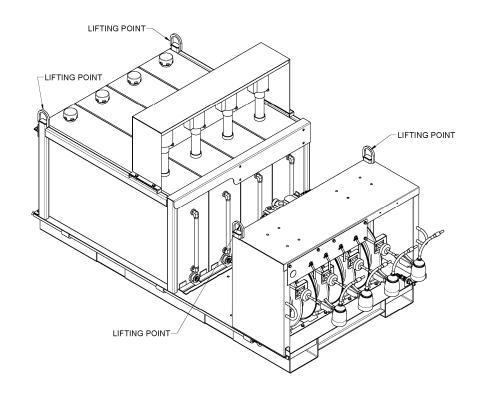
Oil pumps: 30scfm (minimum)
Diaphragm: 60scfm (minimum)

### --- IMPORTANT ---SAFETY TIPS AND PRECAUTIONS

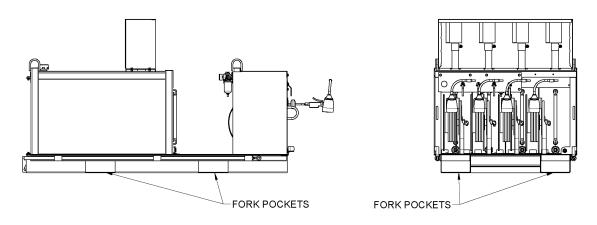
- No unqualified or unauthorized person shall be allowed to operate the lube skid.
- WARNING: Never weld, modify, or use unauthorized components / parts on any Auto Crane unit. This will void any warranty or liability. Also, failure of the lube skid may result.
- Make certain the lube skid is tied down per factory specifications before transportation.
   Contact your local distributor or the Auto Crane factory if any questions arise.
- 4. Visual inspections and tests should be conducted at the beginning of each shift each day to insure that the lube skid and all its operating systems are in good condition and working order before it is used.
- 5. Inspect hydraulic hoses frequently for signs of deterioration, and replace them as required.
- 6. If a hydraulic break occurs, leave the area of the break and do not attempt to stop the break by hand as the hydraulic oil may be hot and under high pressure which can cause serious injury. Shut the system down as soon as possible.
- 7. Do no point the dispense valve at anyone or at any part of the body.
- 8. Do not "blow back" fluid; this is not an air spray system.
- 9. Always have the dispensing nozzle on the dispense valve when dispensing.
- 10. Tighten all fluid connections before operating the equipment.
- 11. Follow the pressure relief procedure before cleaning, checking, or servicing equipment.
- Check the pick-up points at least every thirty days for distortions or cracks and replace it as required.
- 13. Oil pumps as required.
- 14. Stop all operations when cleaning, adjusting or lubricating the machine.
- 15. Keep dirt and grit out of moving parts by keeping lube skid clean. Make sure machine is free of

- excess oil, grease, mud and rubbish, thus reducing accidents and fire hazards.
- 16. Keep clear of all moving parts when starting or operating the pumps.
- 17. Disconnect unit from air supply before servicing equipment.
- Ground the equipment and the object being lubricated.
- 19. If there is any static sparking or you feel an electric shock while using equipment, **stop dispensing immediately.** Do no use the equipment until you identify the problem.
- 20. Provide fresh air ventilation to avoid the buildup of flammable fumes from solvents or the fluid being dispensed.
- 21. Keep dispensing area free of debris, including solvent, rags, and gasoline.
- 22. Do not smoke in dispensing area.
- 23. Know the specific hazards of the fluid you are using.
- 24. Dispose hazardous fluid according to all local, state and national guidelines.
- 25. Always wear protective eyewear, gloves, clothing and respirator as recommended by the fluid and solvent manufacturer.
- 26. Keep all hoses away from traffic areas, sharp edges, moving parts, and hot surfaces.
- 27. Never exceed the maximum working pressure of any component.
- 28. Never move or lift pressurized equipment.
- 29. Never pull on hoses to move equipment.
- 30. Use equipment only for its intended purpose.
- 31. Comply with all applicable local, state and national fire, electrical, and safety regulations.

# LUBE SKID TRANSPORTATION OF UNIT



### Lifting point locations for crane attachment



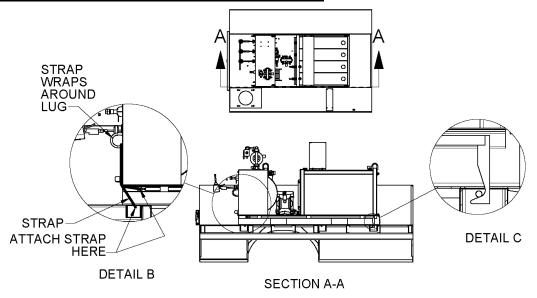
Lifting point locations for fork truck

### LUBE SKID TRANSPORTATION OF UNIT

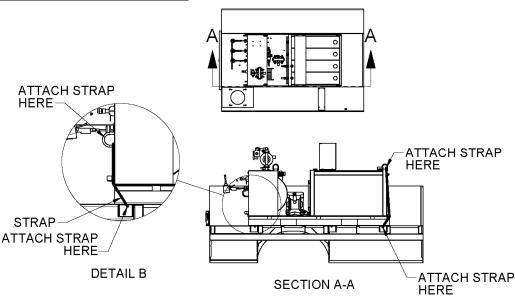
#### **Vehicle Attachment:**

The Lube Skid was designed for easy installation in an AutoCrane 84CA body. The tie-down system allows you to tie down the lube skid without having to get behind the lube skid for attachment. However, if you do not have a AutoCrane 84CA body, the lifting points can be used to tie the back of the unit to the vehicle. Reference figures below shows the tie-down locations.

#### **AutoCrane Titan 84CA Body Tie-Down Procedure:**



#### Other Body Tie-Down Procedure:



### --- IMPORTANT --OPERATION OF UNIT

#### **IMPORTANT!**

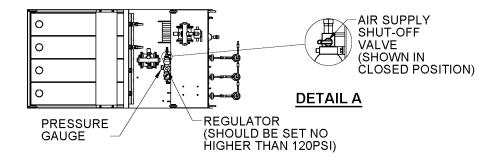
Make sure this manual has been thoroughly read by all operating personnel and supervisors.

Always observe safe and practical operation to avoid possible accidents. Refer to Safety Tips and Precautions.

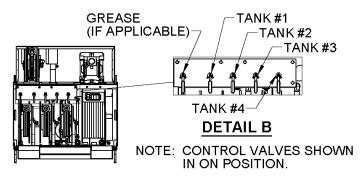
#### **Operation of Unit**

- 1. Connect air supply line to quick disconnect on lube skid (located at bottom right front corner of skid).

  Note: Check Lubricator for oil and drain the filter periodically.
- 2. Turn on main air supply line to lube skid located on the Filter, Lubricator, Regulator assembly.



- 3. Verify regulator is set no higher than 120 psi. The separate regulator for the grease function (if applicable) should be set no higher than 80 psi.
- 4. Open the corresponding air supply line for the tank that contains the fluid being dispensed.



- 5. Depress trigger (if applicable) to the corresponding hose reel.
- 6. When using the salvage system, the valve located directly above the salvage hose reel allows you to pump fluid into the tank or to reverse it and pump fluid out of the tank.

### **LUBE SKID** SAFETY DECAL SECTION

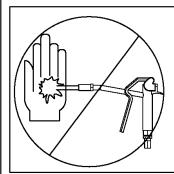
PART NO.: 601000302 USED ON: Lube Skid

DECAL: SKIN INJECTION HAZARD QUANTITY: 1

FUNCTION: To inform operator about the PLACEMENT: Center of top shelf

dangers of high pressure fluid

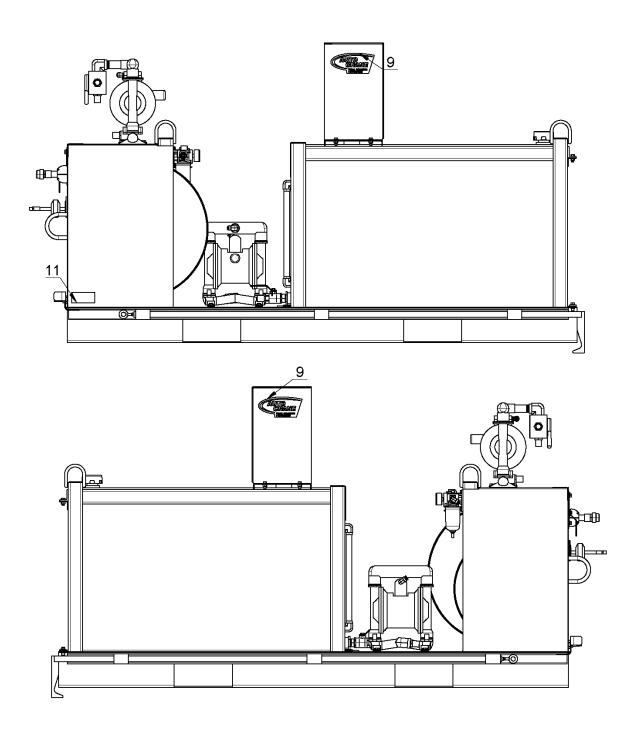
penetrating the skin.



# 

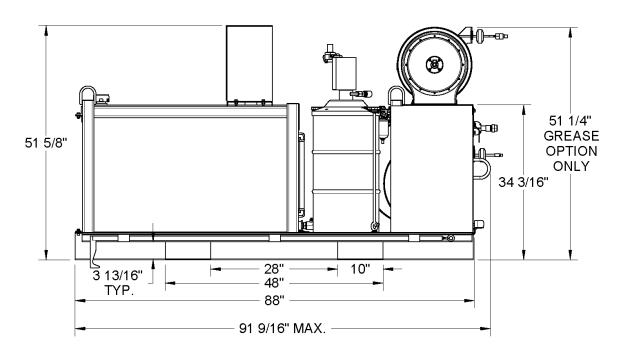
SKIN INJECTION HAZARD FLUID FROM VALVE, LEAKS, OR RUPTURED HOSES CAN INJECT FLUID INTO BODY AND CAUSE EXTREMELY SERIOUS INJURY. FLUID SPLASHED IN EYES OR SKIN CAN ALSO CAUSE SERIOUS INJURY.

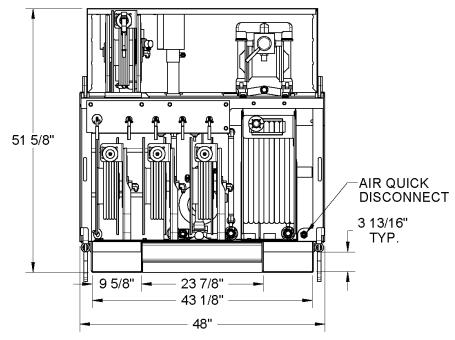
### LUBE SKID DECAL LAYOUT P/N: 601000300



### **NOTES**

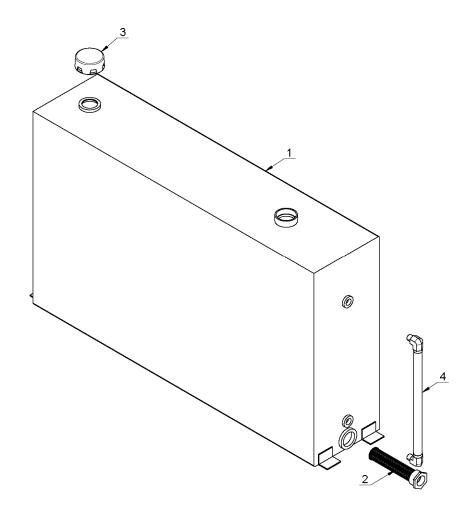
### LUBE SKID GENERAL DIMENSIONS





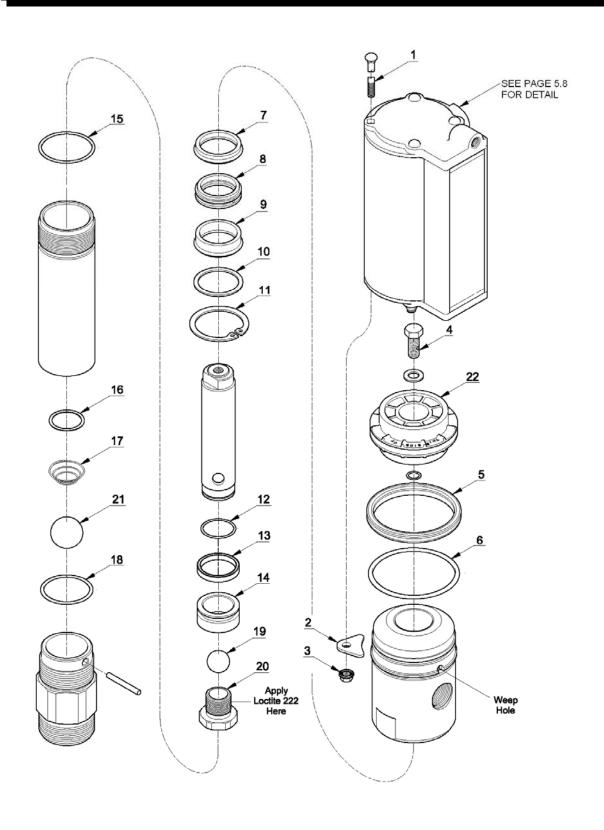
### **NOTES**

# LUBE SKID TANK ASSEMBLY P/N: 601000010

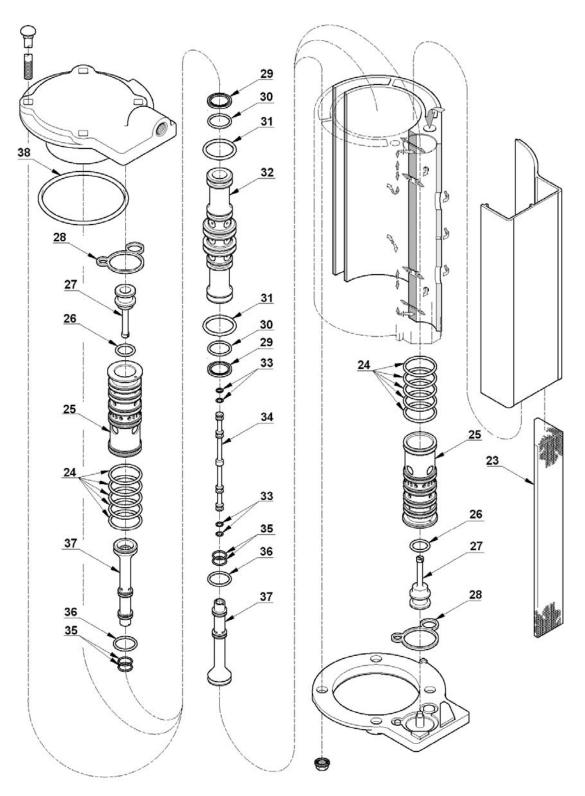


ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	601000011	TANK, ALUMINUM 60 GAL
2	1	601000012	STRAINER, 40 MICRON
3	1	601000013	CAP, FILLER BREATHER
4	1	601000014	SIGHT GLASS - 1/2" NPT

## LUBE SKID 3:1 OIL PUMP ASSEMBLY P/N: 601000230



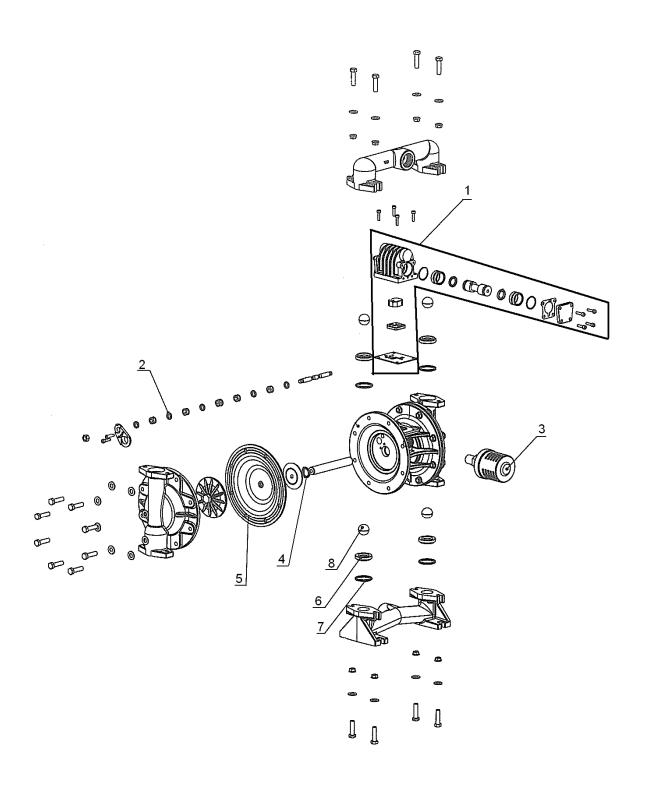
## LUBE SKID 3:1 OIL PUMP ASSEMBLY P/N: 601000230



## LUBE SKID 3:1 OIL PUMP ASSEMBLY P/N: 601000230

ITEM NO.	QTY.	PART NO.	DESCRIPTION
		601000231	KIT, REPAIR, AIR MOTOR KEEPER
1	4		BOLT, CARRIAGE, 1/4"-20 X 7-1/2"LG
2	4		KEEPER
3	4		NUT, SERRATED FLANGE 1/4"-20
		601000232	KIT, MAJOR REPAIR
4	1		SCREW, 3/8"-24UNC X 3/4"
5	1		O-RING, 2-5/8"ID X 3"OD
6	1		O-RING, 2-3/4"ID X 3"OD
7	1		SEAL, 1-5/8"ID X 1-7/8"OD
8	1		BEARING (BRASS)
9	1		SEAL, 1-5/8"ID X 2"OD
10	1		WASHER
11	1		RING, RETAINING
12	1		O-RING, 1-3/8"ID X 1-1/2"OD
13	1		PACKING, BLOCK-V
14	1		PISTON (BRASS)
15	1		O-RING, 2-1/4"ID X 2-7/16"OD
16	1		WASHER
17	1		SPRING, TAPERED
18	1		O-RING, 2-1/8"ID X 2-5/16"OD
19	1	601000233	BALL, 7/8" DIA
20	1	601000234	SEAT, VALVE
21	1	601000235	BALL, 1-1/4"DIA
22	1	601000236	PISTON, AIR
23	1	601000238	MUFFLER
		601000237	KIT, VALVE REPLACEMENT
24	10		O-RING, 1"ID X 1-1/8"OD
25	2		ADAPTER, EXHAUST
26	2		O-RING, 1/2"ID X 11/16"OD
27	2		PISTON, PILOT
28	2		GASKET
29	2		SEAL, CAP (TEFLON)
30	2		O-RING, 11/16"ID X 7/8"OD
31	2		O-RING, 7/8"ID X 1-1/8"OD
32	1		SPOOL, DIRECTIONAL
33	4		O-RING, 1/8"ID X 1/4"OD
34	1		SHAFT
35	4		O-RING, 3/8"ID X 1/2"OD
36	2		O-RING, 11/16"ID X 13/16"OD
37	2		ADAPTER, PILOT
38	1		O-RING, 3"ID X 3-3/16"OD

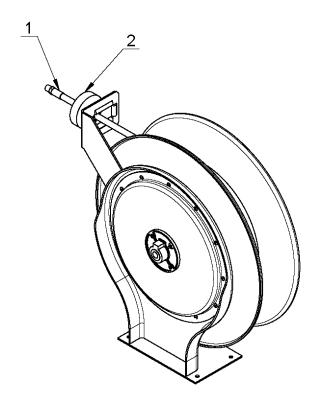
# LUBE SKID DIAPHRAGM PUMP ASSEMBLY P/N: 601000240



# LUBE SKID DIAPHRAGM PUMP ASSEMBLY P/N: 601000240

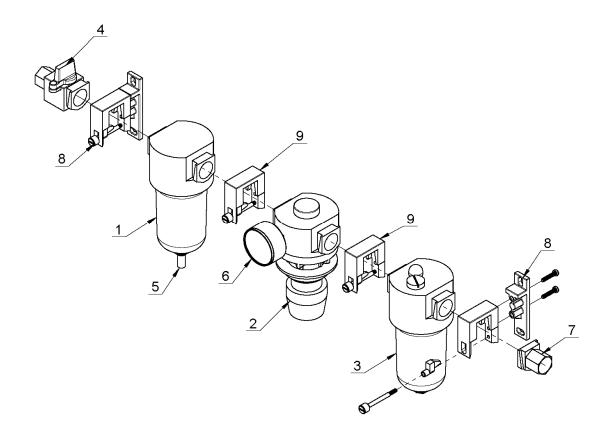
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	601000241	AIR VALVE ASSEMBLY
2	6	601000242	O-RING, PILOT SHAFT
3	1	601000243	MUFFLER
4	2	601000244	O-RING, MAIN SHAFT
5	2	601000245	DIAPHRAGM
6	4	601000246	SEAT, VALVE
7	4	601000247	O-RING, VALVE SEAT
8	4	601000248	VALVE BALL

## LUBE SKID OIL HOSE REEL ASSEMBLY P/N: 601000340



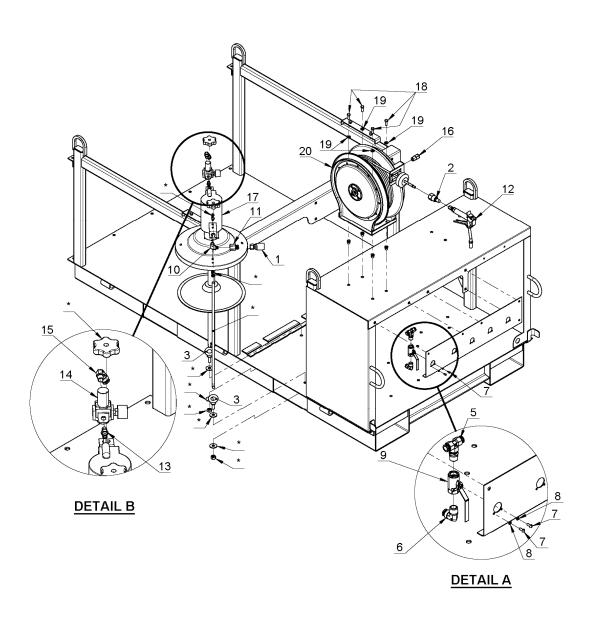
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	601000345	HOSE, 1/2 X 50FT
2	1	601000346	BUMPER ASSEMBLY

#### LUBE SKID FLR ASSEMBLY P/N: 750205000



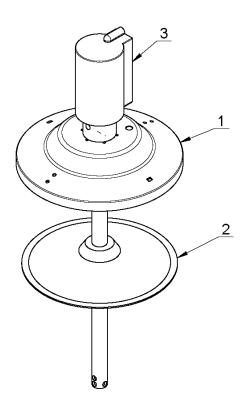
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	750205001	FILTER
2	1	750205002	REGULATOR
3	1	750205003	LUBRICATOR
4	1	750205004	SHUT OFF VALVE
5	1	750205005	AUTO DRAIN
6	1	750205006	GAGE, AIR (0-160 PSI)
7	1	750205007	1/2 NPT END
8	2	750205008	SLEEVE W/MTG BRACKET
9	2	750205009	SLEEVE

## LUBE SKID GREASE OPTION P/N: 601000020



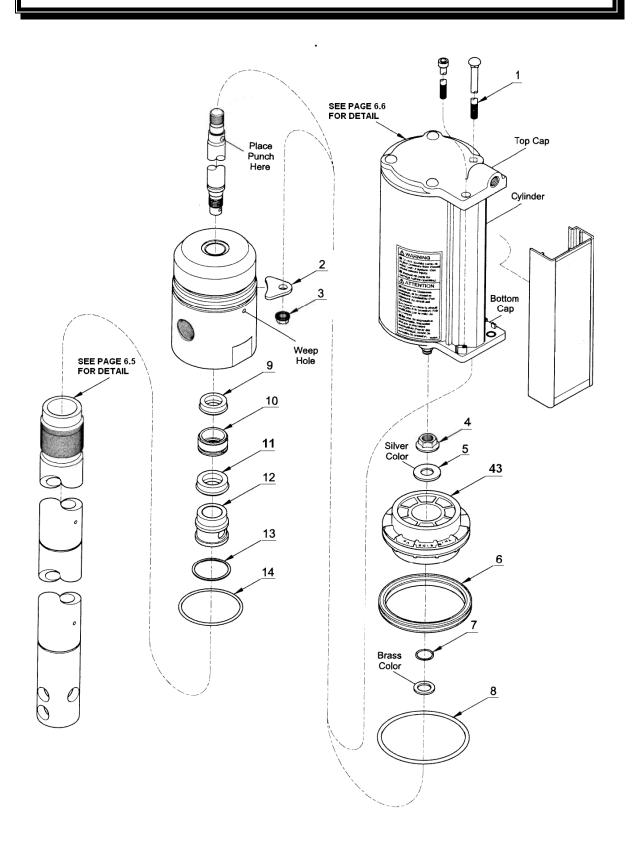
<sup>\*</sup> INCLUDED IN TIE DOWN KIT - 601000270

#### LUBE SKID GREASE PUMP KIT P/N: 601000250



ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	601000251	GREASE PUMP
2	1	601000252	FOLLOWER PLATE
3	2	601000253	COVER, DRUM

# LUBE SKID GREASE PUMP ASSEMBLY P/N: 601000251



### **NOTES**

### **NOTES**



P.O. Box 580697 \* Tulsa, OK 74158-0697 4707 N. Mingo Rd. \* Phone (918) 836-0463

## LIMITED WARRANTY 2 YEAR PARTS AND LABOR

Auto Crane will warranty to the consumer for a period of (2) years parts and labor from the date of purchase. Each new Auto Crane unit they sell will be free under normal use and service from defects in material and workmanship. Date of purchase will be honored as the date indicated on the Bill of Sale, which must accompany the Warranty Registration and be on file with Auto Crane. Absent a valid Warranty Registration and appropriate documentation, the original date of manufacture, as indicated by the serial number on the product, will be used to determine the effective date of the 2 year warranty.

The obligation of Auto Crane under this warranty is limited to the replacement or repair of parts that appear to the manufacturer after review and/or inspection to be defective and paid flat rate labor for replacing defective parts. This warranty does not obligate Auto Crane to bear the travel time charges in connection with the replacement or repair of defective parts. Responsibility for customer's claims arising from misapplication, abuse, misuse or alteration of equipment or parts lies with the distributor or user and no warranty obligation is assumed in these circumstances by Auto Crane.

Auto Crane will in no event be liable for any consequential damages or contingent liabilities arising out of the failure of any Auto Crane Product or parts to operate properly.

Auto Crane makes no warranty in respect to component accessories, it being subject to the warranties of their respective manufacturers.

If field service, at the request of the distributor, is rendered and fault is found not to be with Auto Crane's product, the distributor shall pay the time and expense of the field representative.

Claims for service labor or other expenses that have incurred by the buyer without approval or authorization or Auto Crane will not be accepted.

When applying for warranty, claims may be handled by contacting your nearest authorized Auto Crane Distributor. All claims are to be filed in writing on an Auto Crane Warranty Claim Form.

AUTO CRANE COMPANY IS UNDER NO OBLIGATION TO EXTEND THIS WARRANTY TO ANY CUSTOMER FOR WHICH AN AUTO CRANE DELIVERY REPORT FORM HAS NOT BEEN COMPLETED AND ON FILE WITH AUTO CRANE COMPANY

