
Manual # 99904091

SiteStar® Lube Skid

Revised: May 10, 2021



IOWA MOLD TOOLING CO., INC.

PO Box 189

Garner, IA 50438

Tel: 641-923-3711 FAX: 641-923-2424

Website: <http://www.imt.com>

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Revisions

DATE	LOCATION	DESCRIPTION
20061108	99904027, 99904028, 99904049	ECN 10310 - BOM UPDATES TO ASSEMBLY DRAWINGS
20070214	70733533	ADDED 70733533 TO REPLACE 70731387.
20070315	99904197, 99904198, 99904206	ECN 10388 - NEW ASSEMBLY DRAWINGS.
20070716	99904197- 198,99904206	ECN 10520 - MOVED IN-LINE LUBRICATOR BRACKET
20080229	99904027	ECN 10656 - NEW RELIEF VALVE IN PUMP ASSEMBLY
	99904197, 99904198, 99904206	ECN 10679 - MOVED TIE-DOWN RING.
20080606	51721589, 51721591, 99904198, 99904206	ECN 10719 - NEW DIAPHRAGM PUMPS.
20081021	99904486	ECN 10831 - ADDED REMOTE METER DRAWING.
20090722	99904700	ADDED FINAL FILTER INSTALLATION DRAWING.
20091103	51721589, 51721591	ECN 11114 - UPDATED AIR REGULATOR
20101203	99904486	ECN 11320 - UPDATE TO WASHER ON METER INSTALLATION
20120502	51721591	ECN 11596 - UPDATE PUMP ASSEMBLY.
20120914		ADDED NOZZLE REPLACEMENT PARTS.
20130703	99904700 70734059 70732174	PER ENGINEERING MARKUP; ADDED ELEMENT FILTER 73540001 ADDED GREASE PUMP 70734059 ADDED HOSE REEL 70732174
20190502	99904486	CN816
20210510	99904027	CN1209

CHAPTER 1

Lube Skid Specifications & Safety

In This Chapter

Specifications 3

Lube Skid Safety 4

Specifications

	
Lube skid lifted into Dominator® mechanics body with IMT telescopic crane.	SiteStar lube skid for mobile lubrication needs in Dominator mechanics body or flatbed applications.

SiteStar Lube Skid Specifications	
Weight	
Four tanks, empty, without grease	1600 lb
Four tanks, empty, with grease	1710 lb
Four tanks, full, without grease	3240 lb
Four tanks, full, with grease	3360 lb
Height	54"
Width	48"
Length	7'-4"
Capacity	220 gal
Type	Removable from load bed
Tie Down	D-ring tie downs in the front and rear for fastening to load bed tie downs

Product Tanks

Designed for oil, salvage, anti-freeze, and water, the 55-gallon product tanks are constructed of polyethylene material that provides for cleaner product storage and lighter weight tanks (up to 80% lighter per tank). The tanks are filled from a top-fill location, and are secured in place using a tank retaining bar.

Pumping Systems

- Oil, Anti-Freeze, Salvage — Air diaphragm pumps
- Grease — Air piston pump

Available Configurations

- 2 oil, 1 anti-freeze, and 1 oil salvage
- 2 oil, 1 anti-freeze, 1 oil salvage, and 1-120 lb grease
- 3 oil and 1 anti-freeze
- 3 oil, 1 anti-freeze, and 1-120 lb grease
- 3 oil and 1 oil salvage
- 3 oil, 1 oil salvage, and 1-120 lb grease
- 4 oil
- 4 oil and 1-120 lb grease

Hose Reel Location

The hose reels are located on a fixed shelf on the skid that allows them to be accessed from the rear of the load bed area.

Skid Structure

The skid is constructed of structural tubing with 1/8" deckplate. The skid has an integral hose reel shelf at the rear. The skid has an incorporated tank containment cage.

Air Operating System

The skid has a pneumatic quick coupler for providing air to the pumping system from a remote air compressor. The pumps are activated from separate control valves for each system.

Lifting

The skid can be removed from the load bed area either with a crane or with a fork truck. There are three lift points on the skid for lifting with a crane and there are fork pockets in the skid for a fork truck.

Product Pump Locations

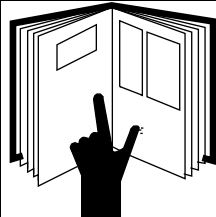
The product air diaphragm pumps are located on the floor of the skid and the grease system air piston pump is located on the grease drum.

Optional Accessories

The skid has an option for final oil product filtration between the product pumps and the dispensing hose reels.

Lube Skid Safety

WARNINGS



EQUIPMENT MISUSE HAZARDS

- Equipment misuse can cause the equipment to rupture or malfunction and can result in serious injury. Follow the safety precautions listed below to prevent accidents!
- This equipment is for professional use only.
- Read all instruction manuals, tags, and decals prior to operating the unit.
- Use the equipment for its intended purpose only, and make no modifications or alternations.
- Check equipment daily and repair or replace worn or damaged parts immediately.
- Do not exceed the maximum working pressure of any component.
- Do not use hoses to pull equipment.
- Route hoses away from traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not lift pressurized equipment.
- Comply with all applicable local, state, and national fire, electrical, and safety regulations.
- Do not put fuel in any system not specifically designed for fuel. Fuel may damage the pump or other components.



INJECTION HAZARDS

Fluid from the dispensing valve, leaks, or ruptured components can inject fluid into your body and cause extremely serious injury, including the need for amputation. Fluid splashed into the eyes or on the skin can also cause serious injury.

- Fluid injected into the skin may look like just a cut, but it is a serious injury. *Get immediate medical attention.*
- Do not point the dispensing valve at anyone or at any part of the body.
- Do not put your hand or fingers over the end of the dispensing valve.
- Do not stop or deflect leaks with your hand, body, glove or rag.
- Use only extensions and nozzles designed for use with your dispensing valve.
- Tighten all fluid connections before you operate the equipment.
- Check the hoses, tubes, and couplings daily. Replace worn or damaged parts immediately. Do not repair high pressure couplings; you must replace the entire hose.

CHAPTER 2

Lube Skid Operation & Maintenance

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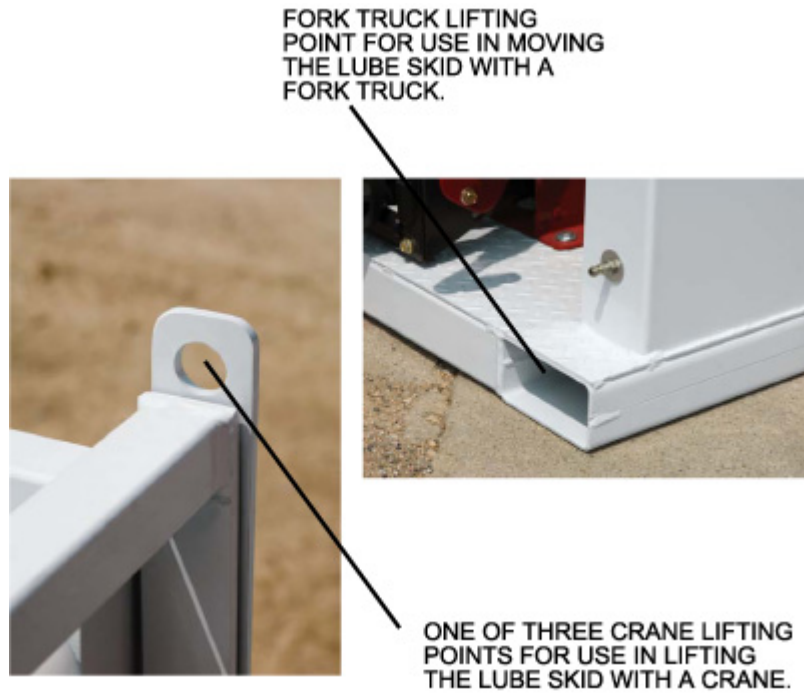
Lube Skid Operation

Power: The SiteStar lube skid has air pumps for the oil, antifreeze, grease and salvage systems. These pumps are powered using a remote air compressor (not included) which connects to a central pneumatic control valve located at the bottom of the hose reel shelf. The pumps are activated from separate control valves for each system. See the **System Operation** section for information on running the pumps.



AIR SOURCE COUPLING

Moving the Skid: The SiteStar lube skid can be carried in the back of a mechanics truck, flatbed, or other carrier vehicle with a load area at least 50" wide, or can be used as a stand-alone system. The lube skid can be moved using a crane secured to the three integrated lift points on the top of the skid, or using a fork truck in the fork truck pockets located at the bottom of the skid. When moving the lube skid with a crane, use the lifting sling kit (IMT # 93720520) provided with the skid which includes a nylon sling (IMT # 72661624) and three 4.5-ton shackles (IMT # 72661622).



Skid Installation: Once the lube skid is in the cargo bed, tie down the unit to the bed using the D-rings at the front and rear of the base of the skid.



Oil / Anti-Freeze System Operation: All fluid systems are pumped using hoses. To use the hoses, unwind them by pulling on the nozzle until the hose is extended to the desired length. Rewind the hoses by sharply tugging on the end of the hose assembly. The hoses are spring-retractable and will rewind.

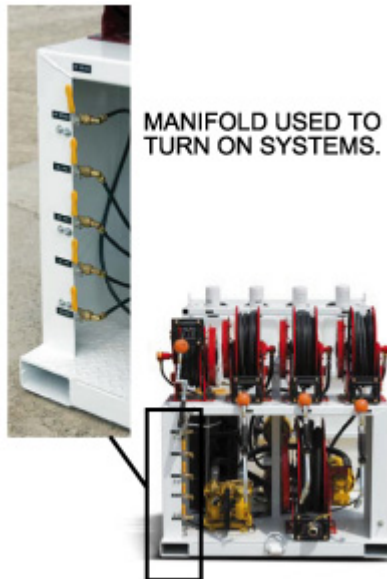
To activate a system, turn on the system using the manifold valves on the left side of the hoses. Turn the valve counterclockwise to open it. All valves are off when in the up position. If multiple systems are operated at the same time, the air flow will be divided between the systems, and system performance may suffer.

For maximum fluid delivery, set the regulator on the air diaphragm pumps (oil, anti-freeze, or salvage pumps) to 45 to 55 psi. The airflow to each pump should be a minimum of 40 psi, and a maximum of 125 psi. Higher airflow may result in pump wear and/or damage. Do not exceed pressures beyond 125 psi into the pump.

Salvage System Operation: The salvage system can be used to pull fluid from an external tank to the lube skid tank, or to pull fluid from the lube skid tank into an external tank. Change the direction of flow by moving the diverter valve (Item #1 on the Salvage Pump Assembly drawing 99904019). When set to *IN*, flow will move into the lube skid tank.

WARNING

When systems are no longer needed, turn off pumps by returning the manifold valve handles to the closed (upright) position. This will stop airflow.



Filling Tanks: Fill the tanks using the 5" fill cap located on the top of the tank. Cap tightly prior to using fluid or moving the cargo vehicle. Prior to filling or emptying the tanks, move the tank lock bar which is located over the fill caps. Replace the bar after filling or emptying the tanks.

Chemical Safety

Many chemicals are available for cleaning and lubricating your equipment. Prior to opening or using any chemical for cleaning, lubrication, or other procedure, **READ THE LABEL**.

Labels on chemical containers list important information on health, safety, and the product itself. This information can save you from serious injury or even DEATH. Some of this information may be the scientific or common name of the chemical, which is useful when describing poisoning conditions to a poison control center or doctor. The label also describes chemical properties such as flammability, combustibility, explosiveness, or corrosiveness. This information can save your life.

The label also provides advisories in how the product is to be used, such as, "Use only in a well-ventilated area", "Keep away from heat", or "Avoid contact with skin". Always follow these and other warnings and instructions, and refer to the container for first aid instructions.

These warnings and advisories may also be posted in the area where chemicals are stored or used.

Chemicals and their containers have specific handling, storage, and disposal requirements. If these requirements aren't noted on the container, acquire the information from the chemical distributor or responsible governmental agency.

Lube Skid Maintenance

Grease Zerks: Grease zerks are located in the hose reels. Grease the zerks weekly using a hand grease gun or a pneumatic pressure grease gun and NLGI#2 consistency grease.

Nozzles: Relieve the pressure before checking or repairing the dispensing valve. Be sure other valves, controls, and the pump are operating properly. To relieve pressure:

- 1 Disconnect the air supply to the pump.
- 2 Trigger the valve into a waste container to relieve pressure.
- 3 Open any bleed-type master air valves and fluid drain valves in the system.
- 4 Leave the drain valve open until you are ready to pressurize the system.

WARNING

Avoid Injury! If you suspect the dispensing valve, extension, or nozzle is clogged or that pressure has not been fully relieved after following the pressure relief steps, very slowly loosen a fitting on the fluid line to gradually relieve the pressure. Then loosen it completely and clear the clog.

WARNING


Pressurized Equipment Hazard!
The equipment stays pressurized until the pressure is manually relieved. To reduce the risk of serious injury from pressurized fluid, accidental spray, or splashing fluid, follow the pressure relief procedure when you are instructed to relieve pressure, check, clean or service system equipment, or install or clean fluid nozzles.

Nozzle Troubleshooting

PROBLEM	CAUSE	SOLUTION
Slow or no fluid.	Clogged filter. Low pump pressure. Shutoff valve not fully open. Foreign material is jammed in the metering element (if metered nozzle).	Relieve pressure. Clean or replace filter.
Oil leaks from swivel.	Loose swivel.	Torque swivel to 15-20 ft-lb (20-27 N-m).
	O-ring is worn or damaged.	Replace o-ring and torque swivel to 15-20 ft-lb (20-27 N-m).
Oil drips from nozzle. (Note: Some fluid weeping is possible in applications of fluid thermal expansion.)	Nozzle is damaged or obstructed.	Inspect the nozzle for damage or obstructions. Replace if damaged.
Valve leaks.	O-rings or valve seat are worn or damaged.	Replace the o-rings and/or valve seat.

If the *solution* does not resolve your problem, contact your authorized IMT distributor or IMT technical support.

Valve Handle Repair

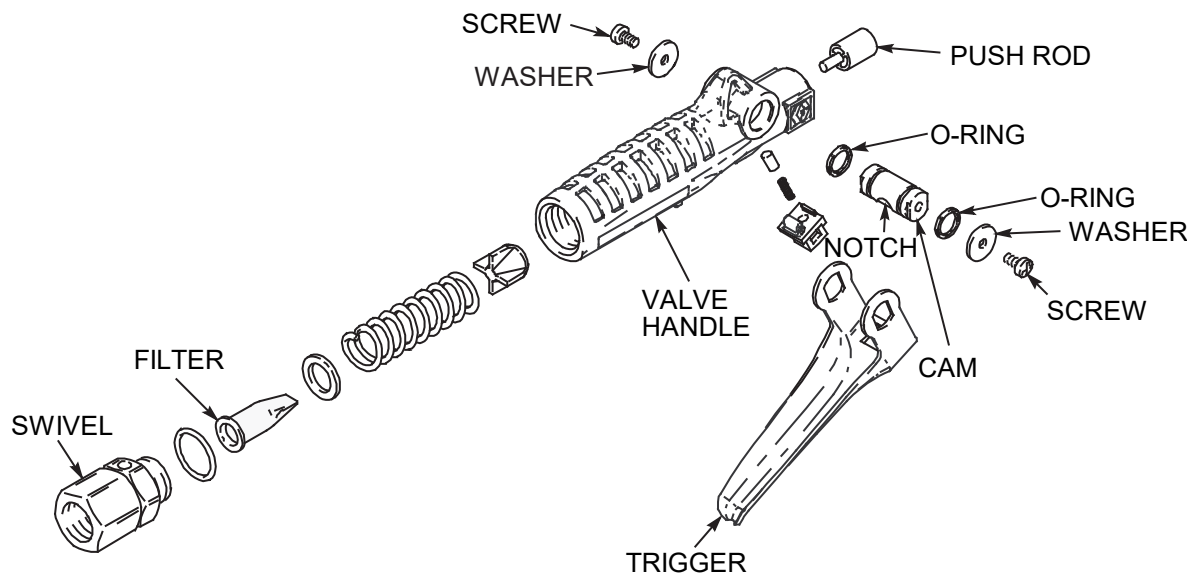
 WARNING
<p>Avoid Serious Injury!</p> <p>Follow the pressure relief procedure prior to working with valve handles.</p>

- 1 Relieve pressure.
- 2 If replacing o-rings, cam or push rod, remove the swivel and internal pieces. You must remove the cam to get the push rod out of the outlet end of the valve handle.
- 3 Remove screws, washer and trigger. Push the cam out of the valve handle. Replace o-rings or cam.
- 4 Replace any worn or broken parts.
- 5 Reassemble internal pieces. Insert the push rod through the outlet end of the valve handle before installing the cam.
- 6 Lubricate the cam. Slide it into the valve handle, making sure the notch is oriented as shown. Make sure the large end of the push rod is resting in the notch of the cam.
- 7 Replace screws and washers. Torque screws to 15 to 25 in-lb (1.7 to 2.8 N-m).
- 8 Replace swivel. Torque to 15 to 20 ft-lb (20 to 27 N-m).

Valve Handle Filter Replacement

- 1 Relieve the pressure.
- 2 Unscrew hose fitting from swivel.

- 3 Remove and replace filter, which is inside the valve handle. Make sure the filter is oriented as shown.
- 4 Thread the hose fitting into the swivel and tighten. Torque swivel to 15 to 20 ft-lb (20 to 27 N-m).



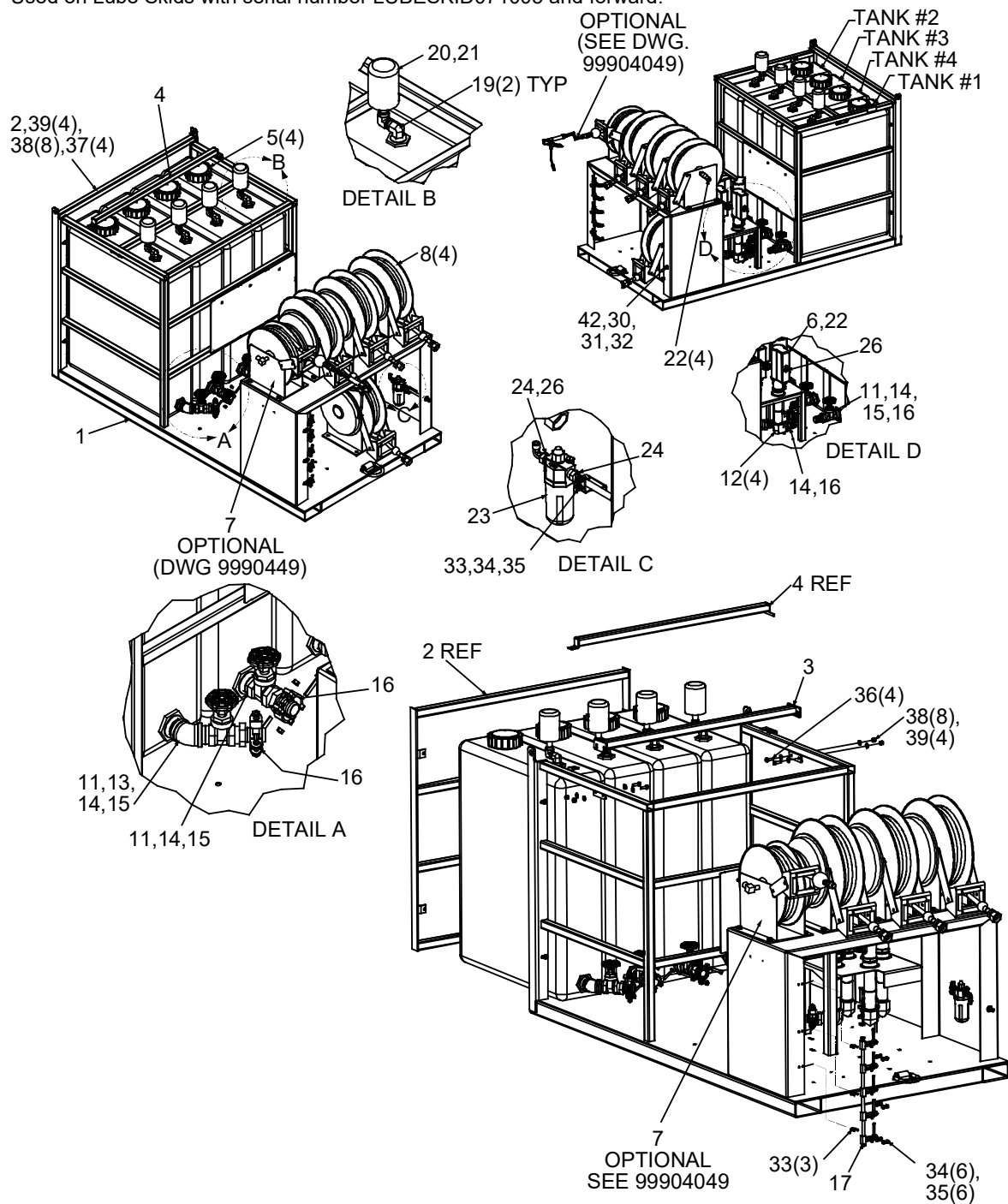
CHAPTER 3

Lube Skid Assemblies & Spare Parts

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Used on Lube Skids with serial number LUBESKID071005 and forward.



NOTES:

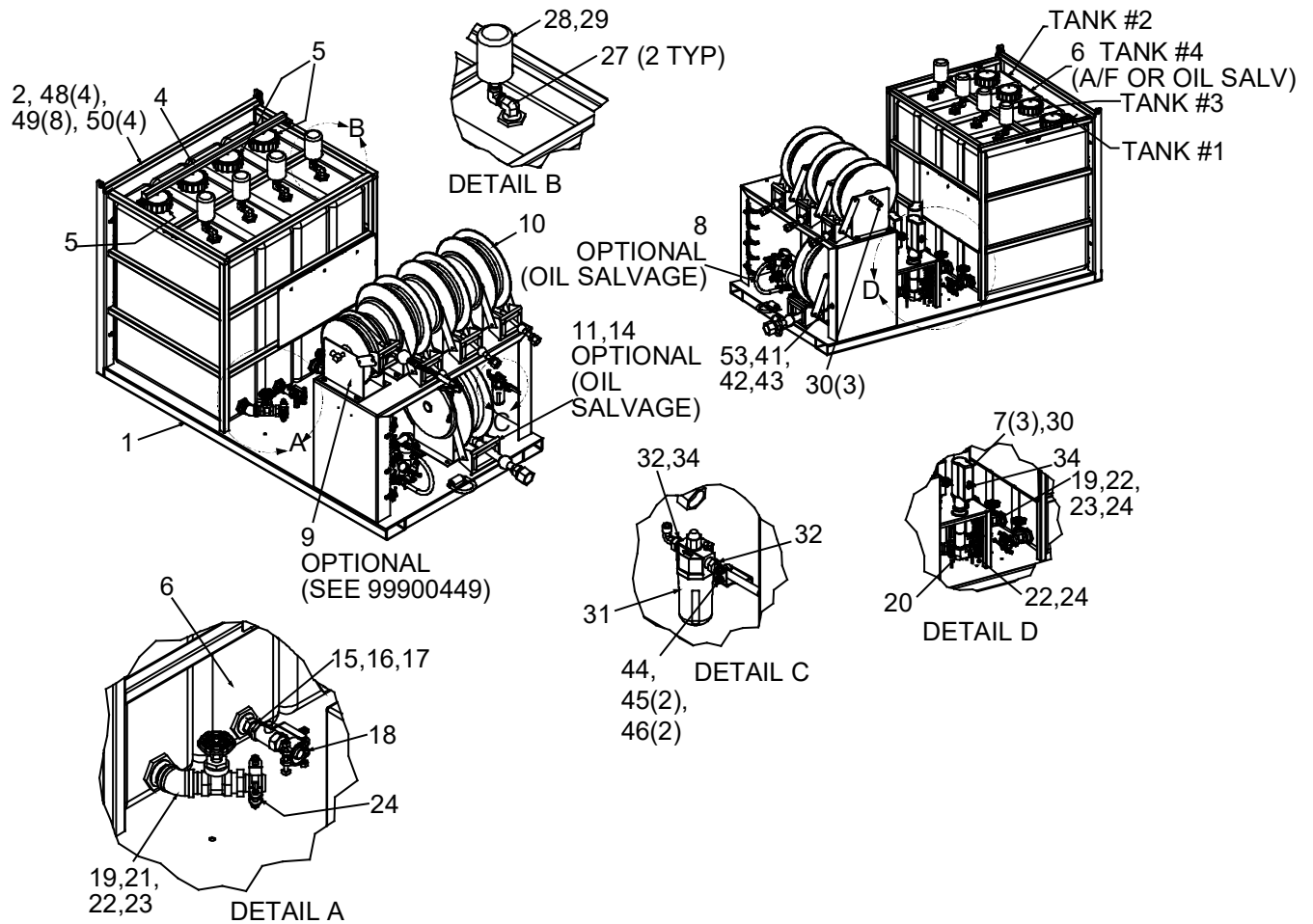
HOSE-PUMP-TANK-REEL CONNECTIONS		
<i>HOSE ITEM #</i>	<i>PUMP ITEM #</i>	<i>REEL OR TANK ITEM #</i>
27	1	REEL #1
18	1	TANK #1 (CUT TO LENGTH)
27	2	REEL #2
18	2	TANK #2 (CUT TO LENGTH)
28	3	REEL #3
18	3	TANK #3 (CUT TO LENGTH)
28	4	REEL #4
18	4	TANK #4 (CUT TO LENGTH)

99904197 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	52720885	WELDMENT-LUBE SKID W/AIR PISTON PUMPS	1
2.	52720070	WELDMENT-GATE LUBE SKID	1
3.	52720071	BAR-WLDMT TOP CONTAINMENT	1
4.	52720084	BAR WLDMT-TANK LOCK LUBE SKID	1
5.	70034488	TANK-POLY 55 GAL W-BOTTOM BUNG 1.50	4
6.	70733533	PUMP-OIL ARO 5:1 AIR	4
7.	70733061	REEL-GREASE .38X50ft HP	REF
8.	70732362	REEL-OIL .50 X 50	4
9.	93720899	INSTALLATION KIT-4 PISTON PUMPS (INCL 11-32,42)	1
10.	93720387	HARDWARE KIT (INCL 33-41)	1
11.	72053251	NIPPLE-PIPE BLK 1.50X CLOSE	5
12.	72053288	ELBOW-STREET BLK 1.50 X 90 DEG	4
13.	72053348	ELBOW-BLK 1.50 X 45DEG	1
14.	72531552	NIPPLE-BARB STL 1.50MPT 1.50	8
15.	73054022	VALVE-GATE 1.50 BRASS	4
16.	72066517	CLAMP-HOSE 1.50 2-BOLT	8
17.	51720374	MANIFOLD-AIR PUMPS LUBE SKID 2006	1
18.	89394074	HOSE-HYD 1.50 100R4 881-24 PAR	11'
19.	72053556	ELBOW-STREET STL .75 X 90 DEG	8
20.	72533514	ADPTR-BREATHING FILTER OIL TANK	4
21.	73054974	FILTER-BREATHING OIL RESERVOIR	4
22.	72053497	ADPTR-MPT/M JIC .50 8	8
23.	73052107	MD-LUBE-LUBRICATOR .50in IN-LINE	1
24.	72531830	REDUCER BUSH-STL .50- .25	2
25.	72533698	PUSH LOC- FTG .38 DOT X .25 MPT	A/R
26.	72533700	PUSH LOC- FTG ELBOW .38 DOT X .25 MPT	A/R
27.	51394417	HOSE-FJ .50 X 35.00 (8-8) 100R2	2
28.	51395584	HOSE-FJ .50 X 37.00 (8-8) 100R2	2
29.	70396004	TUBE-PUSHLOC .38 AIR	29.5'
30.	72532047	NIPPLE-DISC .25 MPT (AIR)	1
31.	72053469	COUPLING-STL .25	1
32.	72063005	WASHER .50 FLAT	1
33.	72066912	BOLT-U .25-20X 1.12 ILX .62 IW	5
34.	72062104	NUT .25-20 HEX NYLOCK	10

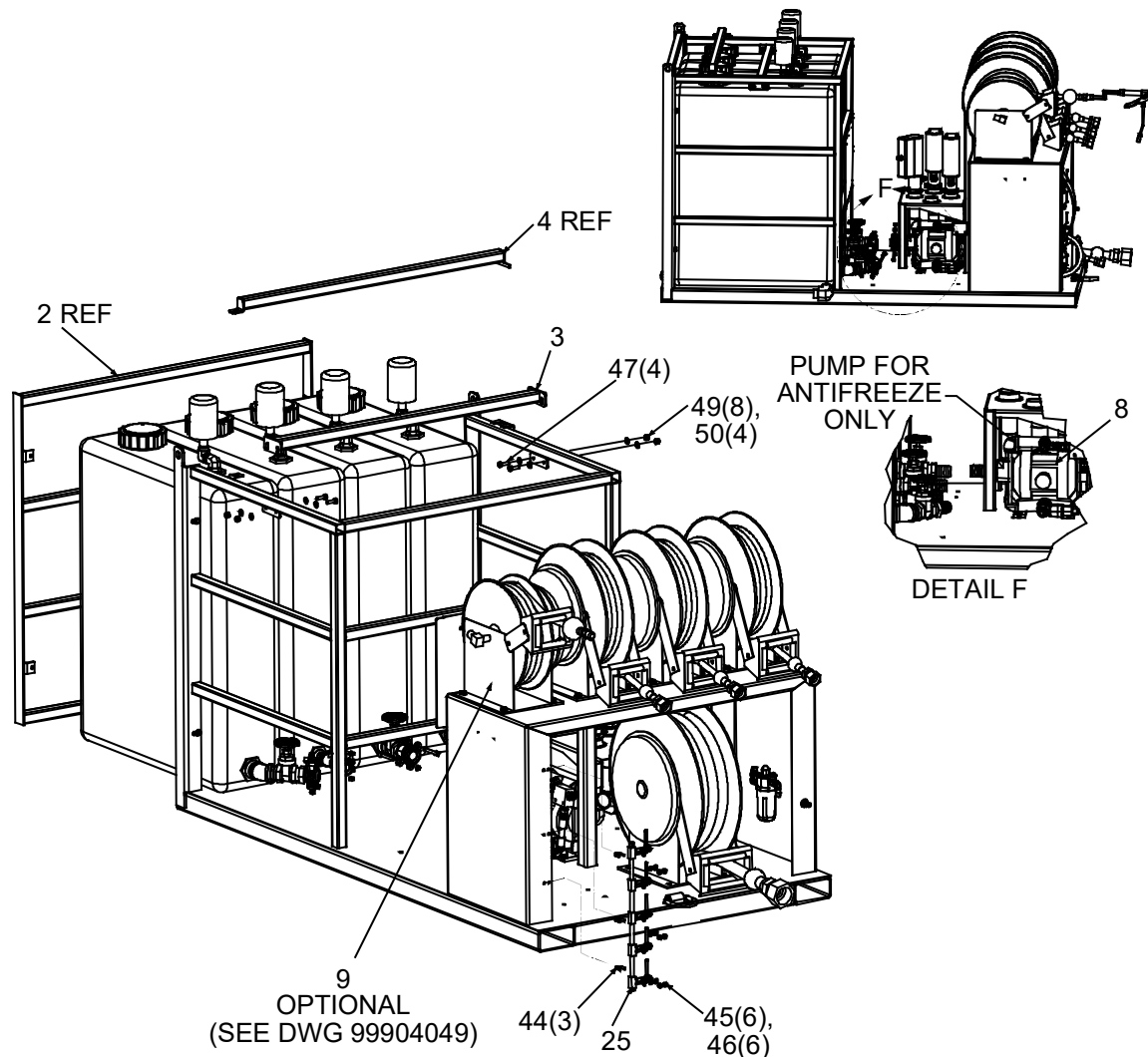
99904197 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
35.	72063001	WASHER .25 FLAT	10
36.	72060047	CAP SCR .38-16X 1.25 HH GR5 Z	24
37.	72060048	CAP SCR .38-16X 1.50 HH GR5 Z	4
38.	72063003	WASHER .38 FLAT	56
39.	72062103	NUT .38-16 HEX NYLOCK	28
40.	70034060	TIES-PLASTIC .18W 8.00L BLACK	5
41.	77045927	RETAINER-ZIP TIE ELEC HARNESS (BODIES)	5
42.	72053012	NIPPLE-PIPE BLK .25 X 6.00	1
REV. B 20080229			

Lube Skid Assembly - 3 Pumps (99904198) (Eff. 2-07)

Used on Lube Skids with serial number LUBESKID071005 and forward.



99904198-2 DRAWING

**NOTES:**

- 1 USE ITEM #38, HYDRAULIC HOSE, TO CONNECT PUMP #1 TO REEL #1, AND PUMP #3 TO REEL #3.
- 2 USE ITEM #26, HYDRAULIC HOSE, TO CONNECT PUMP #1 TO TANK #1, PUMP #2 TO TANK #2, AND PUMP #3 TO TANK #3. (CUT TO LENGTH.)
- 3 USE ITEM #39, HYDRAULIC HOSE, TO CONNECT PUMP #2 TO REEL #2.
- 4 PUMP #4 IS OPTIONAL - OIL OR SALVAGE.

ANTIFREEZE DIAPHRAGM PUMP

- 5 USE ITEM #39, HYDRAULIC HOSE, TO CONNECT PUMP #4 TO REEL #4.
- 6 USE ITEM #36, HYDRAULIC HOSE, TO CONNECT PUMP #4 TO TANK #4. (CUT TO LENGTH.)

OIL SALVAGE DIAPHRAGM PUMP

1 USE ITEM #35, HYDRAULIC HOSE, TO CONNECT SALVAGE PUMP TO SALVAGE REEL.

2 USE ITEM #37, HYDRAULIC HOSE, TO CONNECT SALVAGE PUMP TO TANK. (CUT TO LENGTH.)

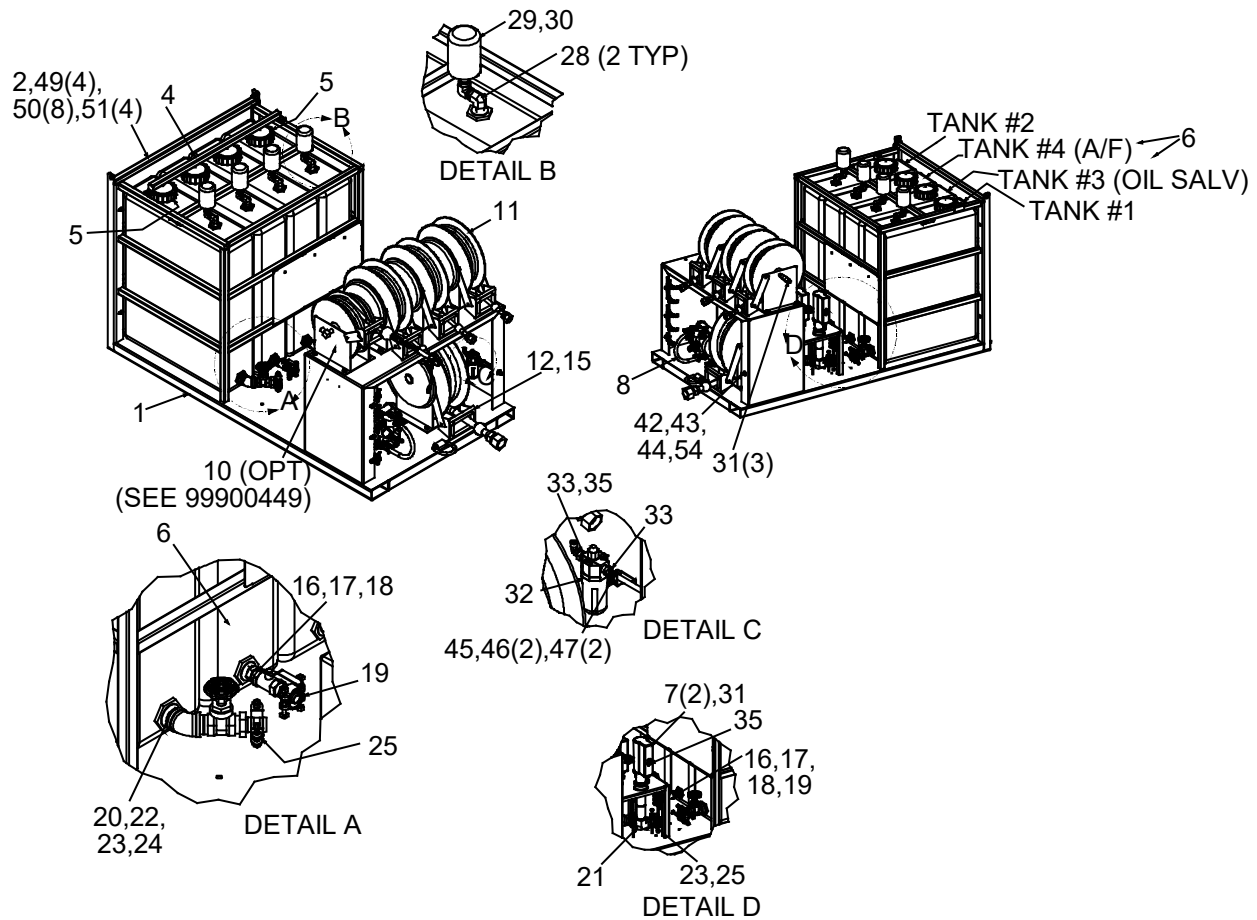
99904198 PARTS LIST

ITEM	PART #	DESCRIPTION	QUANTITY
1.	52720885	WLDMT-LUBE SKID W/AIR PISTON PUMPS	1
2.	52720070	WLDMT-GATE LUBE SKID	1
3.	52720071	BAR-WLDMT TOP CONTAINMENT	1
4.	52720084	BAR WLDMT-TANK LOCK LUBE SKID	1
5.	70034488	TANK-POLY 55 GAL W-BOTTOM BUNG 1.50	3
6.	70034483	TANK-POLY 55 GAL W-BOTTOM BUNG 1.00	1
7.	REF	PUMP-OIL 5:1 AIR	3
8.	REF	PUMP ASM-SALVAGE	1 REF
8.	REF	PUMP ASM OIL/ANTIFREEZE	1 REF
9.	70733061	REEL-GREASE .38X50ft HP	REF
10.	70732362	REEL-OIL .50 X 50	A/R
11.	70732174	REEL-FUEL	1
12.	93720901	INSTALLATION KIT-3 PISTON PUMPS (INCL 14-43)	1
13.	93720387	HARDWARE KIT (INCL 44-52)	1
14.	72053680	ADPTR-MPT/M JIC 1.00 16	1
15.	72053804	ADPTR-MPT/HEX/MPT 1.00 1.00	1
16.	73054378	VALVE-BALL 1.00	1
17.	72531549	NIPPLE-BARB STL 1.00MPT 1.00	1
18.	72066515	CLAMP-HOSE 1.00 2-BOLT	1
19.	72053251	NIPPLE-PIPE BLK 1.50X CLOSE	4
20.	72053288	ELBOW-STREET BLK 1.50 X 90 DEG	3
21.	72053348	ELBOW-BLK 1.50 X 45DEG	1
22.	72531552	NIPPLE-BARB STL 1.50MPT 1.50	6
23.	73054022	VALVE-GATE 1.50 BRASS	3
24.	72066517	CLAMP-HOSE 1.50 2-BOLT	6
25.	51720374	MANIFOLD-AIR PUMPS	1
26.	89394074	HOSE-HYD 1.50 100R4 881-24 PAR	8'
27.	72053556	ELBOW-STREET STL .75 X 90 DEG	8
28.	72533514	ADPTR-BREATHING FILTER OIL TANK	4
29.	73054974	FILTER-BREATHING OIL RESERVOIR	4
30.	72053497	ADPTR-MPT/M JIC .50 8	6
31.	73052107	MD-LUBE-LUBRICATOR .50in IN-LINE	1
32.	72531830	REDUCER BUSH-STL .50- .25	2
33.	72533698	PUSH LOC- FTG .38 DOT X .25 MPT	A/R
34.	72533700	PUSH LOC- FTG ELBOW .38 DOT X .25 MPT	A/R
35.	51396869	HOSE-FJ 1.00 X 48.00 (16-16) 100R4	1
36.	51396895	HOSE-J 1.00 X 23.00 (16) 100R4	1
37.	51396945	HOSE-J 1.00 X 53.00 (16) 100R4	1
38.	51394417	HOSE-FJ .50 X 35.00 (8-8) 100R2	2
39.	51395584	HOSE-FJ .50 X 37.00 (8-8) 100R2	2
40.	70396004	TUBE-PUSHLOC .38 AIR (UR)	29.5'
41.	72532047	NIPPLE-DISC .25 MPT (AIR)	1

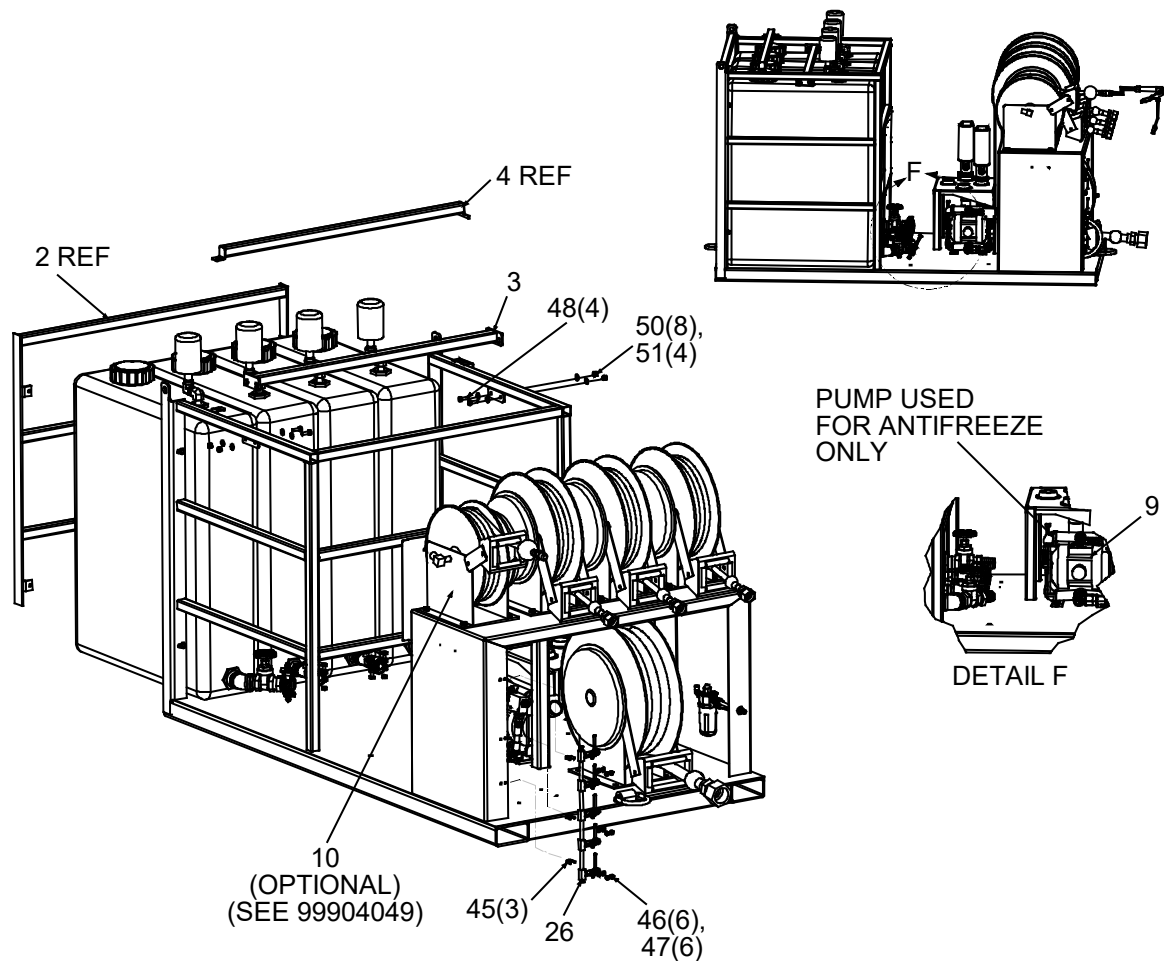
99904198 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
42.	72053469	COUPLING-STL .25	1
43.	72063005	WASHER .50 FLAT	1
44.	72066912	BOLT-U .25-20X 1.12 ILX .62 IW	5
45.	72062104	NUT .25-20 HEX NYLOCK	10
46.	72063001	WASHER .25 FLAT	10
47.	72060047	CAP SCR .38-16X 1.25 HH GR5 Z	24
48.	72060048	CAP SCR .38-16X 1.50 HH GR5 Z	4
49.	72063003	WASHER .38 FLAT	56
50.	72062103	NUT .38-16 HEX NYLOCK	28
51.	70034060	TIES-PLASTIC .18W 8.00L BLACK	5
52.	77045927	RETAINER-ZIP TIE ELEC HARNESS (BODIES)	5
53.	72053012	NIPPLE-PIPE BLK .25 X 6.0	1
REV C 20080606			

Lube Skid Assembly - 2 Pumps (99904206) (Eff 2-07)

Used on Lube Skids with serial number LUBESKID071005 and forward.



99904206-2 DRAWING

**NOTES:**

- 1 USE HOSE #39 TO CONNECT PUMP #1 TO REEL #1.
- 2 USE HOSE #27 TO CONNECT PUMP #1 TO TANK #1. (CUT TO LENGTH)
- 3 USE HOSE #40 TO CONNECT PUMP #2 TO REEL #2.
- 4 USE HOSE #27 TO CONNECT PUMP #2 TO TANK #2. (CUT TO LENGTH.)

OIL SALVAGE DIAPHRAGM PUMP #3

- 1 USE HOSE #36 TO CONNECT SALVAGE PUMP TO SALVAGE REEL.
- 2 USE HOSE #38 TO CONNECT SALVAGE PUMP TO TANK. (CUT TO LENGTH.)

ANTIFREEZE DIAPHRAGM PUMP #4

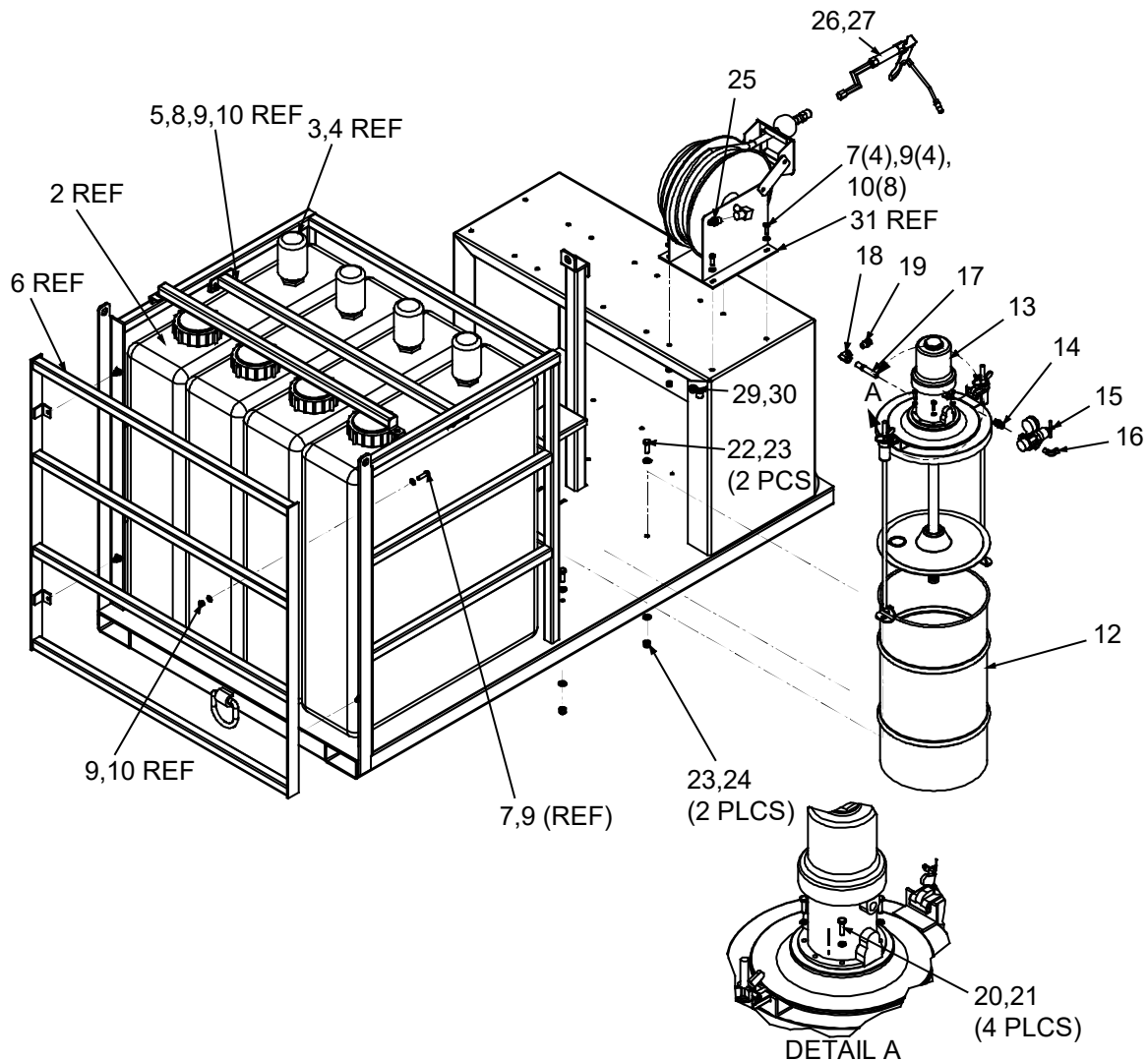
- 1 USE HOSE #40 TO CONNECT PUMP #4 TO REEL #4.
- 2 USE HOSE #37 TO CONNECT PUMP #4 TO TANK #4. (CUT TO LENGTH.)

99904206 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	52720885	WLDMT-LUBE SKID W/AIR PISTON PUMPS	1
2.	52720070	WLDMT-GATE LUBE SKID	1
3.	52720071	BAR-WLDMT TOP CONTAINMENT	1
4.	52720084	BAR WLDMT-TANK LOCK LUBE SKID	1
5.	70034488	TANK-POLY 55 GAL W-BOTTOM BUNG 1.50	2
6.	70034483	TANK-POLY 55 GAL W-BOTTOM BUNG 1.00	2
7.	REF	PUMP-OIL ARO 5:1 AIR	2
8.	REF	PUMP ASM-SALVAGE LUBE SKID 2006	1
9.	REF	PUMP ASM OIL/ANTIFREEZE LUBE SKID 2006	1
10.	70733061	REEL-18inH GREASE .38X50ft HP	REF
11.	70732362	REEL-.50 X 50 (OIL	A/R
12.	70732174	REEL-FUEL N817-23-24-10-1/2B-SR	1
13.	93720907	INSTALLATION KIT-2 PISTON PUMPS (INCL 15-44)	1
14.	93720387	HARDWARE KIT (INCL 45-53)	1
15.	72053680	ADPTR-MPT/M JIC 1.00 16	1
16.	72053804	ADPTR-MPT/HEX/MPT 1.00 1.00	2
17.	73054378	VALVE-BALL 1.00	2
18.	72531549	NIPPLE-BARB STL 1.00MPT 1.00	2
19.	72066515	CLAMP-HOSE 1.00 2-BOLT	2
20.	72053251	NIPPLE-PIPE BLK 1.50X CLOSE	3
21.	72053288	ELBOW-STREET BLK 1.50 X 90 DEG	2
22.	72053348	ELBOW-BLK 1.50 X 45DEG	1
23.	72531552	NIPPLE-BARB STL 1.50MPT 1.50	4
24.	73054022	VALVE-GATE 1.50 BRASS	2
25.	72066517	CLAMP-HOSE 1.50 2-BOLT	4
26.	51720374	MANIFOLD-AIR PUMPS	1
27.	89394074	HOSE-HYD 1.50 100R4 881-24 PAR	5'
28.	72053556	ELBOW-STREET STL .75 X 90 DEG	8
29.	72533514	ADPTR-BREATHER FILTER OIL TANK	4
30.	73054974	FILTER-BREATHER OIL RESERVOIR	4
31.	72053497	ADPTR-MPT/M JIC .50 8	5
32.	73052107	MD-LUBE-LUBRICATOR .50in IN-LINE	1
33.	72531830	REDUCER BUSH-STL .50- .25	2
34.	72533698	PUSH LOC- FTG .38 DOT X .25 MPT	4
35.	72533700	PUSH LOC- FTG ELBOW .38 DOT X .25 MPT	3
36.	51396869	HOSE-FJ 1.00 X 48.00 (16-16) 100R4	1
37.	51396895	HOSE-J 1.00 X 23.00 (16) 100R4	1
38.	51396945	HOSE-J 1.00 X 53.00 (16) 100R4	1
39.	51394417	HOSE-FJ .50 X 35.00 (8-8) 100R2	1
40.	51395584	HOSE-FJ .50 X 37.00 (8-8) 100R2	2
41.	70396004	TUBE-PUSHLOC .38 AIR (UR)	29.5'
42.	72532047	NIPPLE-DISC .25 MPT (AIR)	1
43.	72053469	COUPLING-STL .25	1
44.	72063005	WASHER .50 FLAT	1

99904206 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
45.	72066912	BOLT-U .25-20X 1.12 ILX .62 IW	5
46.	72062104	NUT .25-20 HEX NYLOCK	10
47.	72063001	WASHER .25 FLAT	10
48.	72060047	CAP SCR .38-16X 1.25 HH GR5 Z	24
49.	72060048	CAP SCR .38-16X 1.50 HH GR5 Z	4
50.	72063003	WASHER .38 FLAT	56
51.	72062103	NUT .38-16 HEX NYLOCK	28
52.	70034060	TIES-PLASTIC .18W 8.00L BLACK	5
53.	77045927	RETAINER-ZIP TIE ELEC HARNESS (BODIES)	5
54.	72053012	NIPPLE-PIPE BLK .25 X 6.0	1
REV C 20080606			

99904028 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	52720069	WELDMENT	1
2.	52720071	BAR-WLDMT TOP CONTAINMENT	1
3.	52720070	GATE WELDMENT	1
4.	70034483	TANK-POLY 55 GAL W-BOTTOM BUNG 1.00	4
5.	70732362	REEL- .50 X 50 (OIL	3
6.	70732174	REEL-FUEL	1
7.	93720387	KIT-HRDWR (INCL 16-22)	1
8.	93720388	INST KIT-OIL/ANTIFREEZE (INCL 9-15,28-43)	1
9.	72053680	ADPTR-MPT/M JIC 1.00 16	2
10.	72053804	ADPTR-MPT/HEX/MPT 1.00 1.00	3
11.	70145281	ELBOW-MPT/75/F JIC 1.00 16 SWEEP	1
12.	72053497	ADPTR-MPT/M JIC .50 8	3
13.	70396004	TUBE-PUSHLOC .38 AIR (UR)	29.5'
14.	73054378	VALVE-BALL 1.00	4
15.	51720374	MANIFOLD-AIR PUMPS	1
16.	72066912	BOLT-U .25-20X 1.12 ILX .62 IW	3
17.	72062104	NUT .25-20 HEX NYLOCK	6
18.	72063001	WASHER .25 FLAT	6
19.	72060047	CAP SCR .38-16X 1.25 HH GR5 Z	24
20.	72060048	CAP SCR .38-16X 1.50 HH GR5 Z	4
21.	72063003	WASHER .38 FLAT	56
22.	72062103	NUT .38-16 HEX NYLOCK	28
23.	51720379	PUMP ASM-SALVAGE	1
24.	51720381	PUMP ASM OIL/ANTIFREEZE (NOTE: PUMP 70731387 REPLACED BY 70733533 EFFECTIVE 2-1-07, SERIAL NUMBER LUBESKID071005.)	3
25.	52720084	BAR WLDMT-TANK LOCK	1
26.	70733061	REEL- 18in GREASE .38X50ft HP	REF
27.			
28.	72532047	NIPPLE-DISC .25 MPT (AIR)	1
29.	72063005	WASHER .50 FLAT	1
30.	72053469	COUPLING-STL .25	1
31.	72533700	PUSH LOC- FTG ELBOW .38 DOT X .25 MPT	1
32.	72533514	ADPTR-BREATHER FILTER OIL TANK	4
33.	73054974	FILTER-BREATHER OIL RESERVOIR	4
34.	72531549	NIPPLE-BARB STL 1.00MPT 1.00	2
35.	72531195	NIPPLE-BARB 45 DEG 1.00 1.00	1
36.	72066515	CLAMP-HOSE 1.00 2-BOLT	4
37.	51396869	HOSE-FJ 1.00 X 48.00 (16) 100R4	1
38.	51396896	HOSE-J 1.00 X 39.00 (16) 100R4	1
39.	51396897	HOSE-F 1.00 X 34.00 (16) 100R4	1
40.	51396895	HOSE-J 1.00 X 23.00 (16) 100R4	1
41.	51396945	HOSE-J 1.00 X 53.00 (16) 100R4	1
42.	51710586	HOSE-FF .50 X 31.50 (8-8) 100R2	1
43.	51396685	HOSE-FF .50 X 38.00 (8-8) 100R17	2
REV. A 20061108			

Grease System Assembly (51720433, Dwg 99904049)



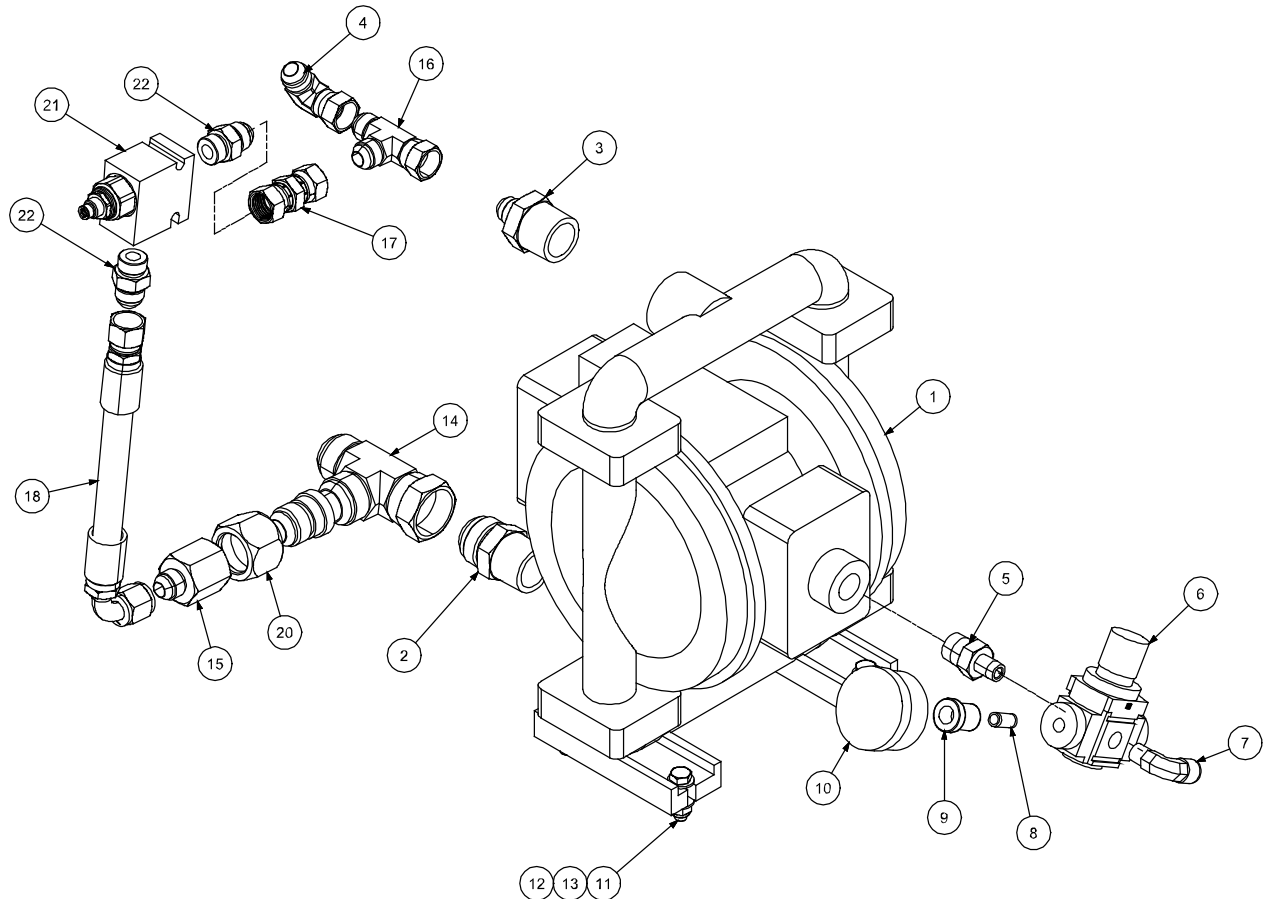
99904049 PARTS LIST

ITEM	PART #	DESCRIPTION	QUANTITY
1.	51720433	GREASE SYSTEM-120LB (INCL 12-30)	1
2.	70034483	TANK-POLY 55 GAL W-BOTTOM BUNG 1.00	4 REF
3.	72533514	ADPTR-BREATHER FILTER OIL TANK	4 REF
4.	73054974	FILTER-BREATHER OIL RESERVOIR	4 REF
5.	52720071	BAR-WLDMT TOP CONTAINMENT	1 REF
6.	52720070	GATE WELDMENT	1 REF
7.	72060047	CAP SCR .38-16X 1.25 HH GR5 Z	A/R

99904049 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
8.	72060048	CAP SCR .38-16X 1.00 HH GR5 Z	A/R
9.	72062103	NUT .38-16 HEX NYLOC ZINC	A/R
10.	72063003	WASHER .38 W FLAT ANSI B27.2Z	A/R
11.			
12.	70143874	DRUM-EMPTY 120 GREASE	1
13.	90073283	GREASE-AIR 120LB PUMP NO REEL	1
14.	72053723	ADPTR-MPT/HEX/MPT .38 .38	1
15.	70048017	REGULATOR-AIR 3/8in NPT	1
16.	72533701	PUSH LOC- FTG ELBOW .38 DOT X .38 MPT	1
17.	70073790	NIPPLE-GRA20 160-790	1
18.	72531100	ELBOW-STL .38 X 90 DEG	1
19.	72053670	ADPTR-MPT/M JIC .38 8	1
20.	72060004	CAP SCR .25-20X 1.00 HH GR5 Z	4
21.	72063049	WASHER .25 LOCK	4
22.	72060093	CAP SCR .50-13X 1.50 HH GR5 Z	2
23.	72063005	WASHER .50 FLAT	4
24.	72062080	NUT .50-13 HEX NYLOCK	2
25.	72053497	ADPTR-MPT/M JIC .50 8	1
26.	70732888	SWIVEL- .38NPT	1
27.	73054873	VALVE-GREASE .38NPT	1
28.	51394012	HOSE-FF .50 X 50.00 (8-8) 100R2	1
29.	72066580	CLAMP	1
30.	72061151	SCR-SELF TAP .25X1.003PT HWH SEAL	1
31.	70733061	REEL- 18in GREASE .38X50ft HP	1 REF
REV. A 20061108			

Oil / Antifreeze Pump Assembly (51721589)

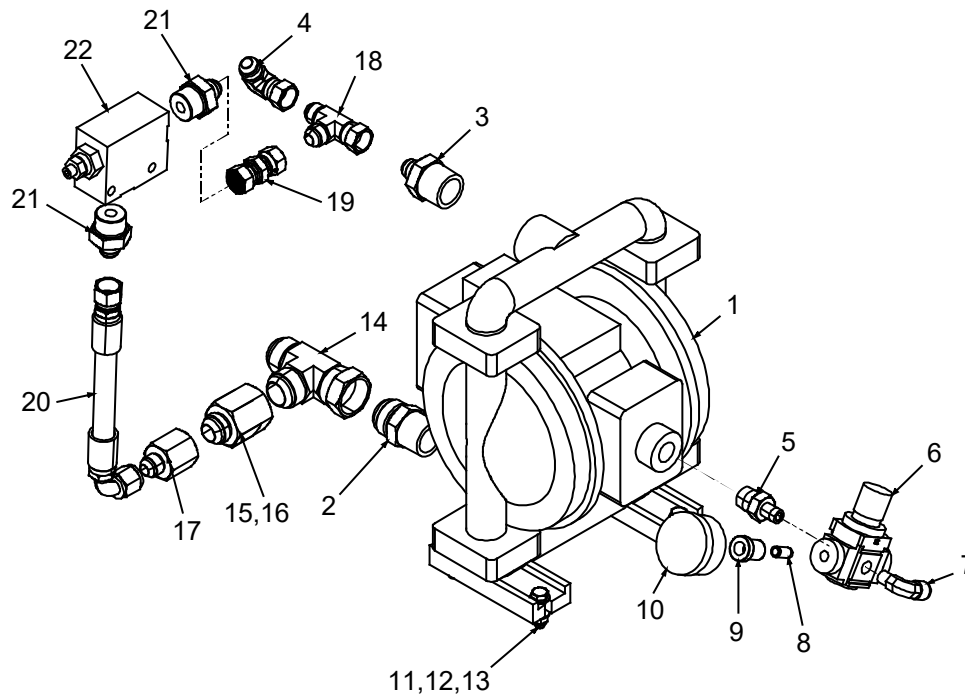
Effective: 04/2021



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1.	70734343	PUMP-DIAPHRAGM 1.00in METALLIC	1
2.	72053680	ADPTR-MPT/M JIC 1.00 16	1
3.	72534558	ADPTR-MPT/M JIC 1.00 8	1
4.	72532658	ELBOW-M JIC/90/F JIC SW 8 8	1
5.	72053724	ADPTR-MPT/HEX/MPT .50 .25	1
6.	70048239	REGULATOR-AIR ADJ 0-60PSI .25NPT	1
7.	72533700	PUSH LOC- FTG ELBOW .38 DOT X .25 MPT	1
8.	72053000	NIPPLE-PIPE BLK .12X CLOSE	1
9.	72053431	COUPLING-RED BLK .25 - .12	1
10.	70048015	GAUGE-PRESS AIR 300 CNTR MNT	1
11.	72060026	CAP SCR .31-18X 1.25 HH GR5 Z	4
12.	72062109	NUT .31-18 HEX NYLOCK	4

ITEM NO.	PART NO.	DESCRIPTION	QTY.
13.	72063002	WASHER .31 FLAT	8
14.	72533000	TEE-SWVL NUT RUN JIC 16	1
15.	72532972	ADPTR-M JIC/F JIC 8 12	1
16.	72532657	TEE-SWVL NUT RUN JIC 8	1
17.	72534371	UNION-F JIC/SWIVEL/F JIC -8 -8	1
18.	51397448	HOSE-FJ .50 X 9.00 (8-8) 100R2	1
19.	72533028	ADPTR-M JIC/F JIC 12 16	1
20.	72533029	NUT-JIC STL 16 (1.31 THD)	1
21.	73540667	VALVE-RELIEF ANTIFREEZE 150 PSI	1
22.	72532358	ADPTR-MSTR/MJIC #8 #8	2
REV. C 20210510			

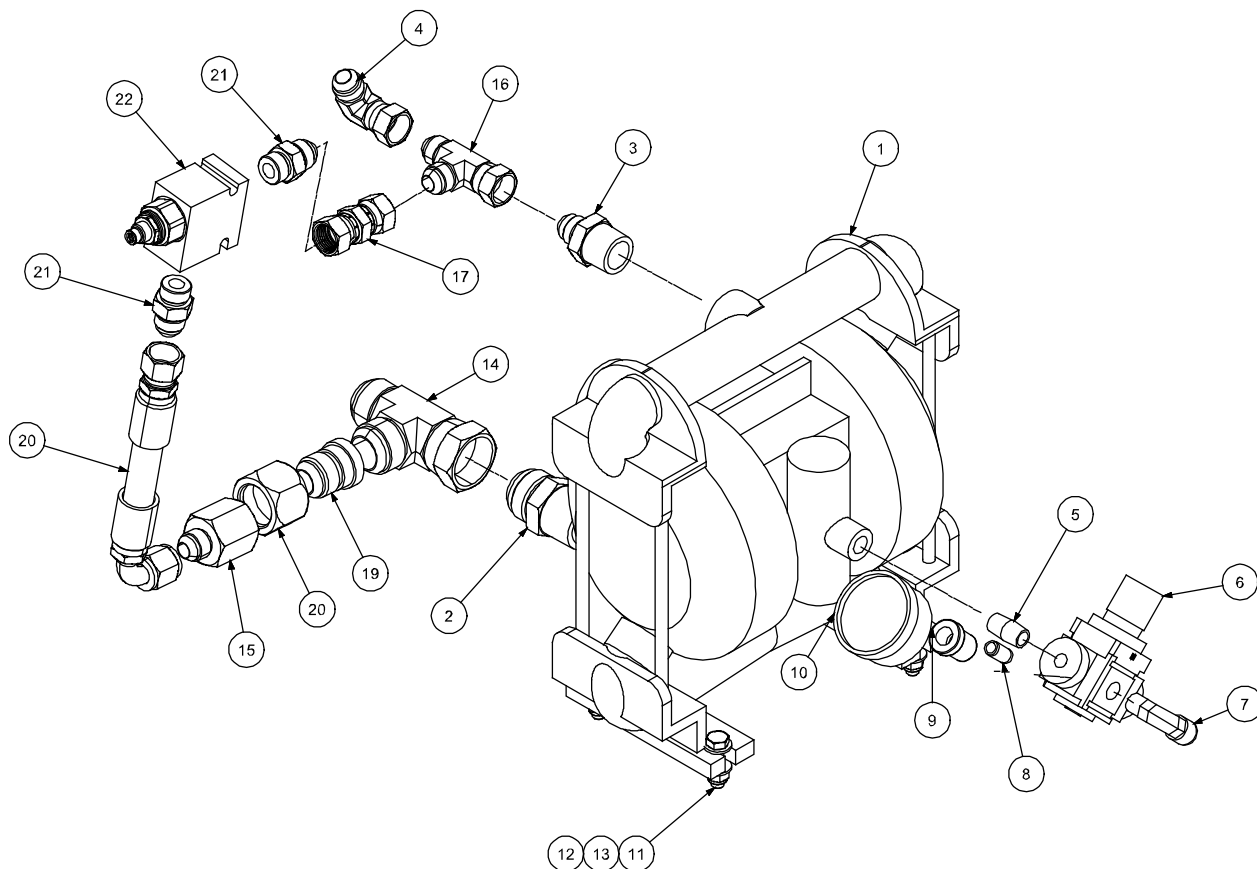
Oil / Antifreeze Pump Assembly (51721589) (Eff. 6-08)



51721589 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	70734343	PUMP-DIAPHRAGM 1.00in METALLIC	1
2.	72053680	ADPTR-MPT/M JIC 1.00 16	1
3.	72534558	ADPTR-MPT/M JIC 1.00 8	1
4.	72532658	ELBOW-M JIC/90/F JIC SW 8 8	1
5.	72053724	ADPTR-MPT/HEX/MPT .50 .25	1
6.	70048239	REGULATOR-AIR ADJ 0-60 PSI .25NPT	1
7.	72533700	PUSH LOC- FTG ELBOW .38 DOT X .25 MPT	1
8.	72053000	NIPPLE-PIPE BLK .12X CLOSE	1
9.	72053431	COUPLING-RED BLK .25 - .12	1
10.	70048015	GAUGE-PRESS AIR 300 CNTR MNT	1
11.	72060026	CAP SCR .31-18X 1.25 HH GR5 Z	4
12.	72062109	NUT .31-18 HEX NYLOCK	4
13.	72063002	WASHER .31 FLAT	8
14.	72533000	TEE-SWVL NUT RUN JIC 16	1
15.	72533028	ADPTR-M JIC/F JIC 12 16	1
16.	72533029	NUT-JIC 37DEG FLR PAR29 06B-16	1
17.	72532972	ADPTR-M JIC/F JIC 8 12	1
18.	72532657	TEE-SWVL NUT RUN JIC 8	1
19.	72534371	UNION-F JIC/SWIVEL/F JIC -8 -8	1

51721589 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
20.	51397448	HOSE-FJ .50 X 9.00 (8-8) 100R2	1
21.	72532360	ADPTR-M STR/M JIC 12 8	2
22.	73540311	VALVE-RELIEF IN-LINE 150PSI	1
REV. B 20091103			

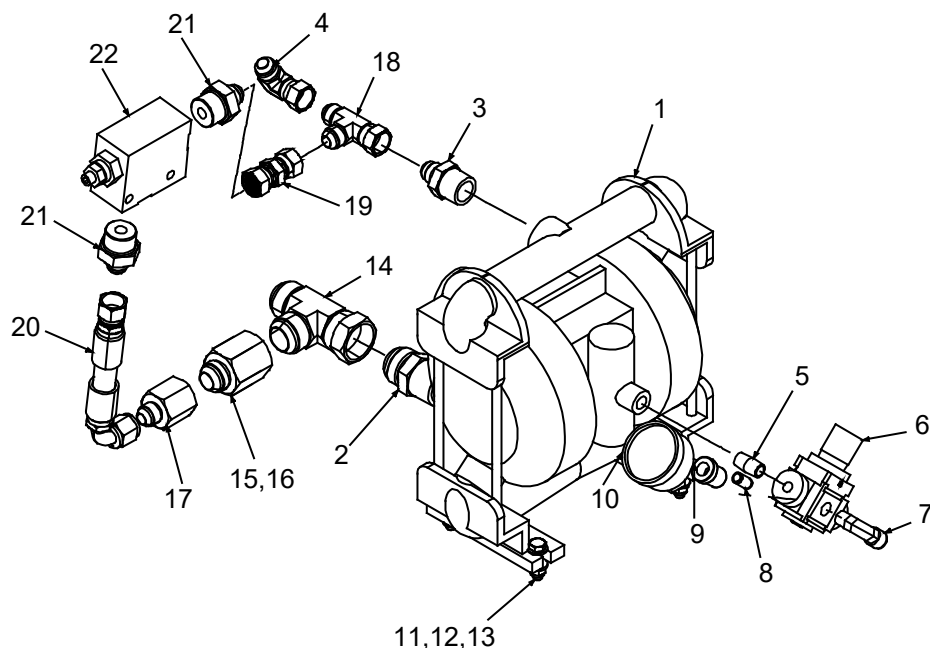
Dwg-Pump Asm Oil/Antifreeze Lube Skid (99904027) EFFECTIVE 04/2021



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1.	70731387	PUMP-WILDEN M2 / 02-2015	1
2.	72053680	ADPTR-MPT/M JIC 1.00 16	1
3.	72053671	ADPTR-MPT/M JIC .75 8	1
4.	72532658	ELBOW-M JIC/90/F JIC SW 8 8	1
5.	72053013	NIPPLE-PIPE BLK .25X CLOSE	1
6.	70048239	REGULATOR-AIR ADJ 0-60PSI .25NPT	1
7.	72533700	PUSH LOC- FTG ELBOW .38 DOT X .25 MPT	1
8.	72053000	NIPPLE-PIPE BLK .12X CLOSE	1
9.	72053431	COUPLING-RED BLK .25 - .12	1
10.	70048015	GAUGE-PRESS AIR 300 CNTR MNT	1

ITEM NO.	PART NO.	DESCRIPTION	QTY.
11.	72060026	CAP SCR .31-18X 1.25 HH GR5 Z	4
12.	72062109	NUT .31-18 HEX NYLOCK	4
13.	72063002	WASHER .31 FLAT	8
14.	72533000	TEE-SWVL NUT RUN JIC 16	1
15.	72532972	ADPTR-M JIC/F JIC 8 12	1
16.	72532657	TEE-SWVL NUT RUN JIC 8	1
17.	72534371	UNION-F JIC/SWIVEL/F JIC -8 -8	1
18.	51396939	HOSE FJ .50 X 7.00 (8-8) 100R2	1
19.	72533028	ADPTR-M JIC/F JIC 12 16	1
20.	72533029	NUT-JIC STL 16 (1.31 THD)	1
21.	72532358	ADPTR-MSTR/MJIC #8 #8	2
22.	73540667	VALVE-RELIEF ANTIFREEZE 150 PSI	1
REV D. 20210510			

Oil / Antifreeze Pump Assembly (Kit 51720381, Drawing 99904027) (Through 5-08)



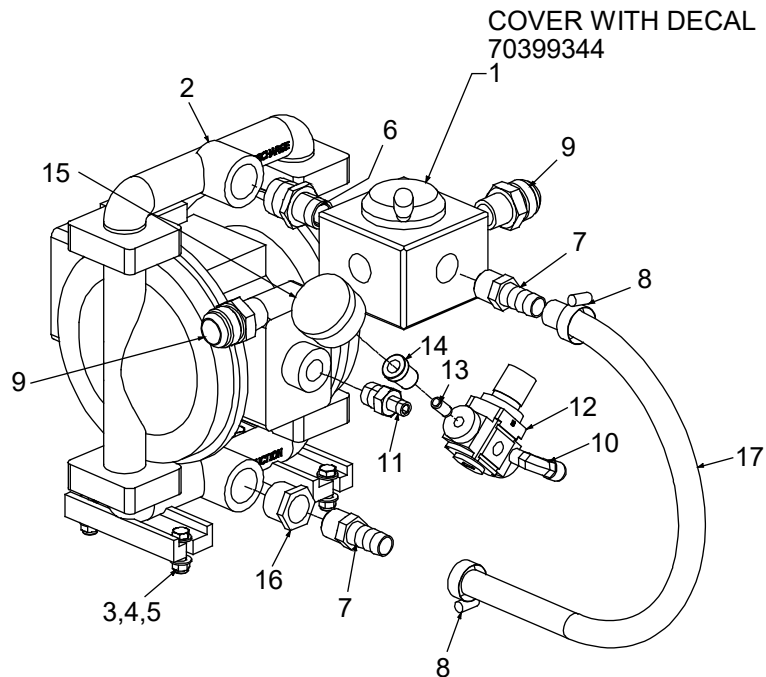
NOTE:

- 1 Note: Pump 70731387 used for oil through February 1, 2007; replaced by 70733533 Pump.
- 2 Set the pump regulator (item #6) to 45 to 55 psi for maximum fluid delivery.

99904027 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	70731387	PUMP	1
2.	72053680	ADPTR-MPT/M JIC 1.00 16	1
3.	72053671	ADPTR-MPT/M JIC .75 8	1
4.	72532658	ELBOW-M JIC/F JIC SW 8 8	1
5.	72053013	NIPPLE-PIPE BLK .25X CLOSE	1
6.	70048239	REGULATOR-AIR (WAS 70048147)	1
7.	72533700	PUSH LOC- FTG ELBOW .38 DOT X .25 MPT	1
8.	72053000	NIPPLE-PIPE BLK .12X CLOSE	1
9.	72053431	COUPLING-RED BLK .25 - .12	1
10.	70048015	GAUGE-PRESS AIR	1
11.	72060026	CAP SCR .31-18X 1.25 HH GR5 Z	4
12.	72062109	NUT .31-18 HEX NYLOCK	4
13.	72063002	WASHER .31 FLAT	8
14.	72533000	TEE-SWVL NUT RUN JIC 16	1
15.	72533028	ADPTR-M JIC/F JIC 12 16	1
16.	72533029	NUT-JIC 37DEG FLR	1
17.	72532972	ADPTR-M JIC/F JIC 8 12	1
18.	72532657	TEE-SWVL NUT RUN JIC 8	1

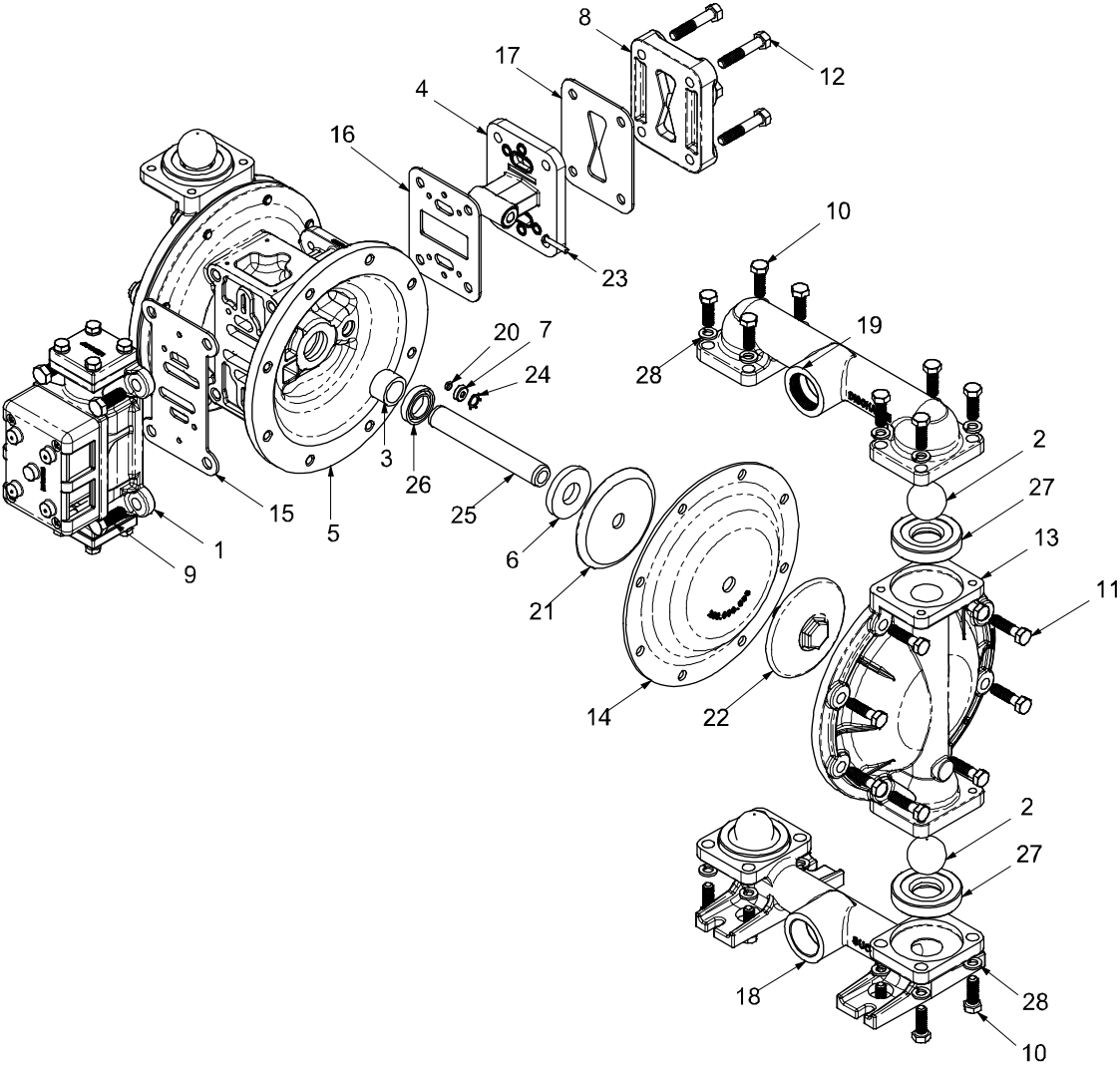
99904027 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
19.	72534371	UNION-F JIC/SWIVEL/F JIC -8 -8	1
20.	51396939	HOSE FJ .50 X 7.00 (8-8) 100R2	1
21.	72532360	ADPTR-M STR/M JIC 12 8 (WAS 72532358)	2
22.	73540311	VALVE-RELIEF IN-LINE 150PSI (WAS 73055279)	1
REV. C 20120124			

Salvage Pump Assembly (51721591) (Eff. 6-08)



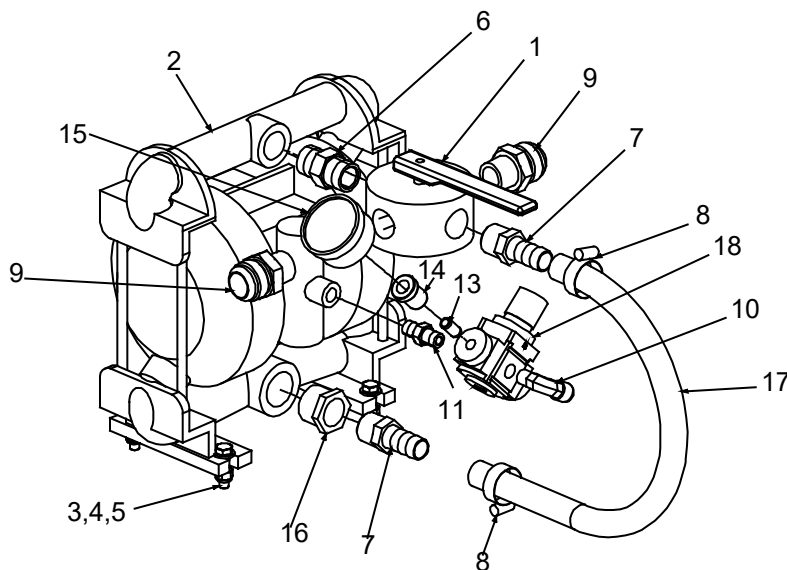
51721591 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	70732360	VALVE-4WAY/ 3/4-4117-LL-SP	1
2.	70734343	PUMP-DIAPHRAGM 1.00in METALLIC	1
3.	72060026	CAP SCR .31-18X 1.25 HH GR5 Z	4
4.	72062109	NUT .31-18 HEX NYLOCK	4
5.	72063002	WASHER .31 FLAT	8
6.	72053727	ADPTR-MPT/HEX/MPT 1.00 .75	1
7.	72053458	NIPPLE-BARB BRS .75MPT .75	2
8.	72066000	CLAMP-HOSE .50-1.25 SAE 12	2
9.	72053679	ADPTR-MPT/M JIC .75 16	2
10.	72533700	PUSH LOC- FTG ELBOW .38 DOT X .25 MPT	1
11.	72053724	ADPTR-MPT/HEX/MPT .50 .25	1
12.	70048239	REGULATOR-AIR ADJ	1
13.	72053000	NIPPLE-PIPE BLK .12X CLOSE	1
14.	72053431	COUPLING-RED BLK .25 - .12	1
15.	70048015	GAUGE-PRESS AIR 300 CNTR MNT	1
16.	72053376	REDUCER BUSH-BLK 1.00- .75	1
17.	89393634	HOSE-HYD .75 100R4	18"
REV B 20120502			

Antifreeze/Salvage/Water Pump (70734343) (Eff. 6-08)



70734343 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	73734362	AIR VALVE ASSEMBLY (PART OF 30)	1
2.	73734363	CHECK BALL (PART OF 29)	4
3.	73734364	BEARING, SLEEVE	2
4.		VALVE, PILOT (PART OF 30)	1
5.		INTERMEDIATE	1
6.		BUMPER (PART OF 30)	2
7.		BUSHING (PART OF 30)	2
8.		CAP, AIR INLET ASSEMBLY	1
9.		CAPSCREW, 3/8-16 X 1.00	4
10.		CAPSCREW, HEX 5/16-18 X 1.00	16
11.		CAPSCREW, HEX HD, 5/16-18 X 1 1/4	16
12.		CAPSCREW, HEX HD 5/16-18 X 1 3/4	4
13.		CHAMBER, OUTER	2
14.	73734365	DIAPHRAGM (PART OF 29)	2
15.	73734366	GASKET, AIR VALVE (PART OF 30)	1
16.	73734367	GASKET, PILOT VALVE (PART OF 30)	1
17.	73734368	GASKET, AIR INLET CAP (PART OF 30)	1
18.		MANIFOLD, SUCTION	1
19.		MANIFOLD, DISCHARGE	1
20.	73734369	O-RING (PART OF 30)	2
21.		PLATE, INNER DIAPHRAGM	2
22.		PLATE, OUTER	2
23.		ACTUATOR PIN (PART OF 30)	2
24.		RING, RETAINER (PART OF 30)	2
25.	73734370	DIAPHRAGM ROD	1
26.	73734371	SEAL, U-CUP (PART OF 30)	2
27.	73734372	SEAT, CHECK BALL (PART OF 29)	4
28.		LOCK WASHER, 5/16	16
29.	94744179	FLUID REPAIR KIT (INCL. 2,14,27)	REF
30.	94744180	AIR END KIT (INCL. 1,4,6,7,15-17,20,23,24,26)	REF

Salvage Pump Assembly (51720379, Dwg 99904019) (Through 5-08)



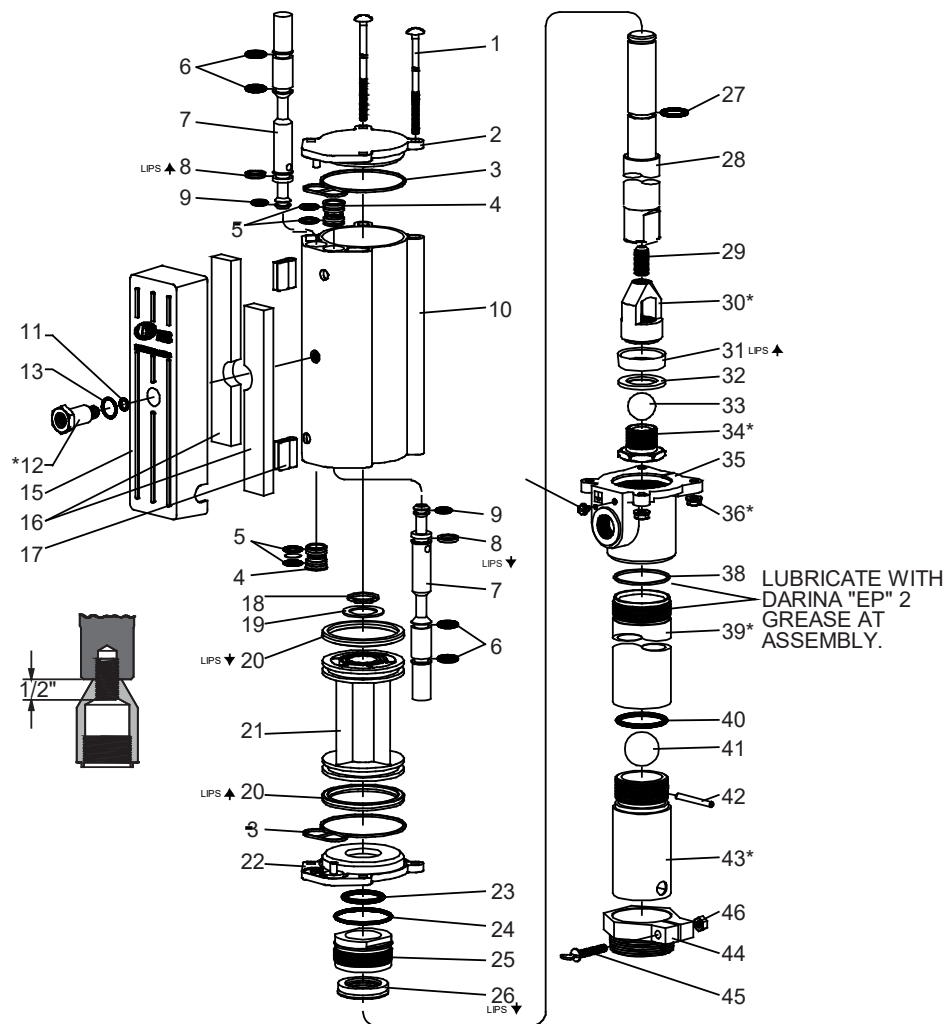
NOTE:

- 1 Use Item #1, valve, to change direction of flow.
- 2 Set the pump regulator (item #12) to 45 to 55 psi for maximum fluid delivery.

99904019 PARTS LIST

ITEM	PART #	DESCRIPTION	QUANTITY
1.	70732360	VALVE-4WAY	1
2.	70731387	PUMP	1
3.	72060026	CAP SCR .31-18X 1.25 HH GR5 Z	4
4.	72062109	NUT .31-18 HEX NYLOCK	4
5.	72063002	WASHER .31 FLAT	5
6.	72053558	ADPTR-MPT/HEX/MPT .75 .75	1
7.	72053458	NIPPLE-BARB BRS .75MPT .75	2
8.	72066000	CLAMP-HOSE .50-1.25 SAE 12	2
9.	72053679	ADPTR-MPT/M JIC .75 16	2
10.	72533700	PUSH LOC- FTG ELBOW .38 DOT X .25 MPT	1
11.	72053517	ADPTR-MPT/HEX/MPT .25 .25	1
13.	72053000	NIPPLE-PIPE BLK .12X CLOSE	1
14.	72053431	COUPLING-RED BLK .25 - .12	1
15.	70048015	GAUGE-PRESS AIR 300 CNTR MNT	1
16.	72053376	REDUCER BUSH-BLK 1.00- .75	1
17.	89393634	HOSE-HYD .75 100R4	18"
18.	70048239	REGULATOR-AIR	1
REV B 20120124			

Oil Pump (70733533) (Effective 2-1-07)



TORQUE REQUIREMENTS:
(ITEMS MARKED WITH *)

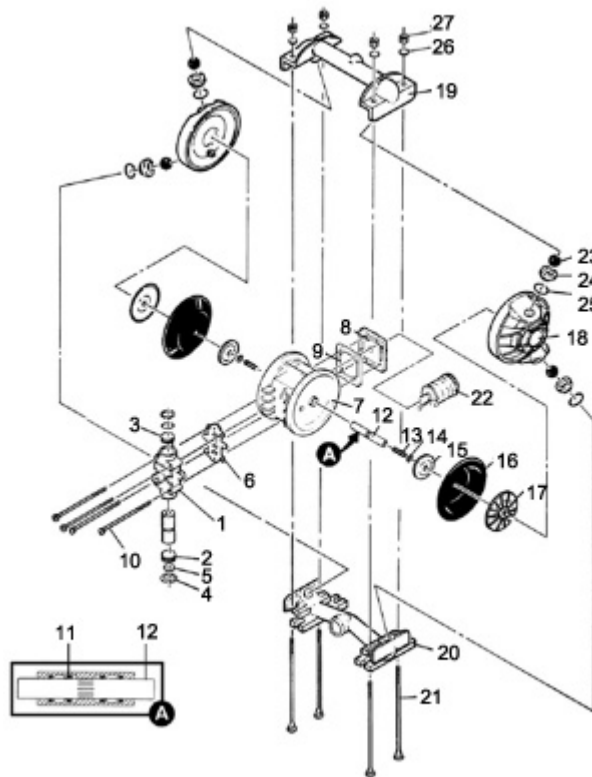
ITEM #	TORQUE
12	80 IN-LB MAXIMUM
36	80 IN-LB MINIMUM
30,34	65 FT-LB MINIMUM
39,43	140 FT-LB MINIMUM

70733533 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.		CARRIAGE BOLT, 1/4-20 X 9	4
2.		UPPER CAP	1
3.	PART OF 47	GASKET	2
4.		SLEEVE	2

70733533 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
5.	PART OF 47	O-RING, 1/16" X 11/16" OD	4
6.	PART OF	47 O-RING, 1/8" X 3/4" OD	4
7.		SPOOL	2
8.	PART OF	47 U-CUP, 1/8" X 3/4" OD	2
9.	PART OF 47	O-RING, .106 X .587" OD	2
10.		CYLINDER	1
11.	PART OF 47	O-RING, 1/16" X 7/16" OD	1
12.		ADAPTER	1
13.	PART OF 47	O-RING, 1/16" X 3/4"	1
15.		MUFFLER HOUSING	1
16.		FOAM LINER	2
17.		EDGE TRIM	2
18.		RETAINING RING	1
19.		WASHER	1
20.	PART OF 47	U-CUP, 3/16" X 3" OD	2
21.		PISTON	1
22.		LOWER CAP	1
23.	PART OF 47	O-RING, 1/8" X 1-9/16" OD	1
24.	PART OF 47	O-RING, 3/32" X 2-1/8" OD	1
25.		BUSHING	1
26.	PART OF 47	PACKING, 3/8" X 1-13/16" OD	1
27.	PART OF 47	O-RING, 3/32" X 1" OD	1
28.		PISTON ROD	1
29.		ROD	1
30.		CUP FOLLOWER	1
31.	PART OF 47	PISTON CUP	1
32.		WASHER	1
33.		BALL	1
34.		INNER CHECK SEAT	1
35.		BASE	1
36.		NUT, 1/4" - 20	4
37.		GROUND SCREW, #10 -32X1/4"	1
38.	PART OF 47	GASKET	1
39.		TUBE	1
40.	PART OF 47	O-RING, 1/8" X 1-7/8" OD	1
41.		BALL	1
42.		BALL STOP PIN	1
43.		FOOT VALVE SEAT	1
44.		BUNG ASSEMBLY	1
45.		THUMB SCREW, 1/4"-20 X	1-1/2"1
46.		NUT, 1/4"-20	1
47.	73734196	REPAIR KIT	REF
NEW 20070214			

Antifreeze/Salvage Pump (70731387) (Thru 5-08)

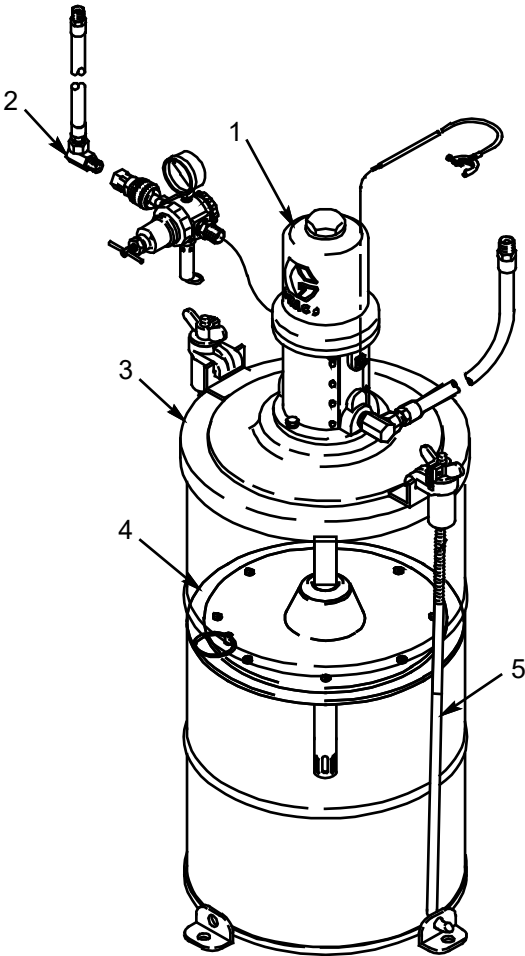
NOTE: 70731387 used for oil pumps through 1-31-07, LubeSkid serial number LUBESKID071005. 70731387 was used for antifreeze and salvage pumps through 5-2008, when it was replaced by 70734343.



70731387 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	73734090	AIR VALVE ASSEMBLY	1
2.		AIR VALVE CAP W/O GUIDE (BOTTOM)	1
3.		AIR VALVE CAP W/GUIDE (TOP)	1
4.		SNAP RING	2
5.		AIR VALVE CAP O-RING	2
6.		AIR VALVE GASKET	1
7.		CENTER SECTION	1
8.		MUFFLER PLATE	1
9.		MUFFLER PLATE GASKET	1
10.		AIR VALVE SCREWS - 1/4-20X6"	4
11.	73734091	CENTER SECTION GLYD RING	4
12.		SHAFT	1
13.		STUD 3/8" -16X1-1/4"	N/A
14.		DISC SPRING	2

70731387 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
15.		PISTONS-INNER	2
16.	73734092	DIAPHRAGM	2
17.		PISTONS-OUTER	2
18.		LIQUID CHAMBER	2
19.		DISCHARGE MANIFOLD	1
20.		INLET HOUSING	1
21.		MANIFOLD BOLT 3/8"-16X8-1/2"	4
22.		MUFFLER	1
23.	73734093	VALVE BALLS	4
24.	73734094	VALVE SEAT	4
25.	73734095	VALVE SEAT O-RING	4
26.		MANIFOLD BOLT WASHER 3/8"	4
27.		MANIFOLD BOLT NUT 3/8"-16	4

120# Grease Pump Assembly (90073283)



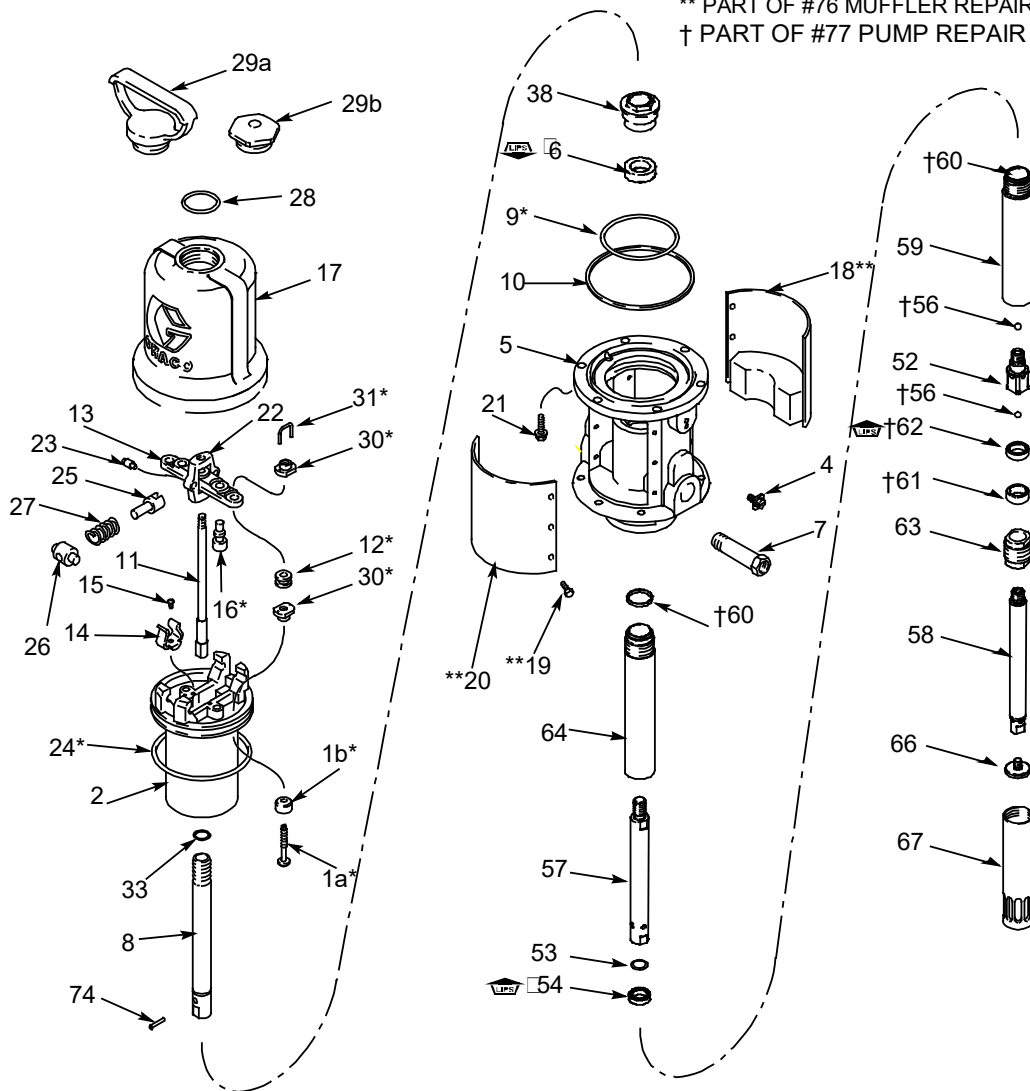
90073283 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	70734059	PUMP, GREASE	1
2.	94393039	HOSE & FITTING KIT	1
3.	70143554	COVER	1
4.	70141123	PLATE, FOLLOW	1
5.	70732109	KIT, HOLD DOWN	1

120# Grease Pump Assembly (70734059)

* PART OF #75 AIR MOTOR REPAIR KIT

** PART OF #76 MUFFLER REPAIR KIT

† PART OF #77 PUMP REPAIR KIT

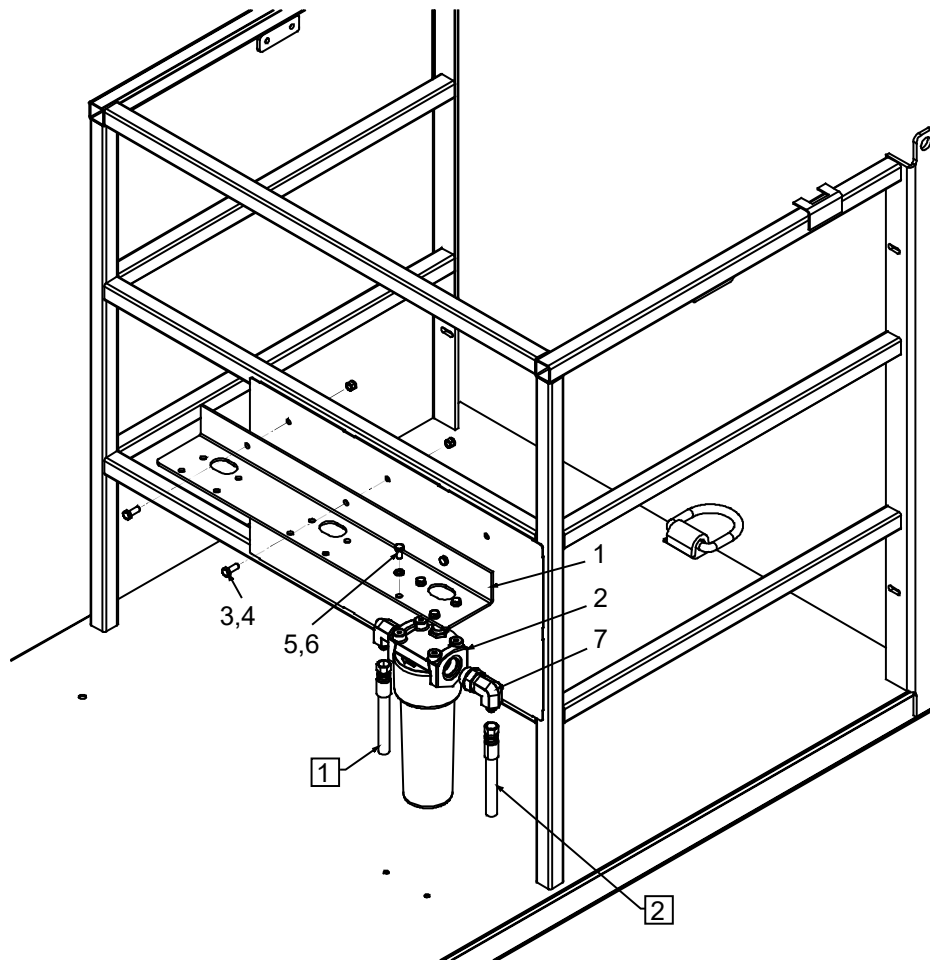


70734059 PARTS LIST

ITEM	PART #	DESCRIPTION	QUANTITY
1.	PART OF 75	VALVE, POPPET (INCL 1A & 1B)	
1A.		STEM, VALVE	1
1B.		POPPET, VALVE; URETHANE	1
2.		PISTON, AIR MOTOR	1
4.		SCREW, GROUNDING	1
5.		BASE	1
6.	PART OF 77	SEAL, THROAT; POLYURETHANE	1
7.		ADAPTER; 3/8 NPT(M) X 1/4 NPT(F)	1
8.		ROD, DISPLACEMENT	1

70734059 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
9.		O-RING, BUNA-N	1
10.		O-RING, BUNA-N	1
11.		ROD, TRIP	1
12.	PART OF 75	GROMMET, RUBBER, AIR INTAKE	2
13.		ACTUATOR, VALVE	1
14.		CLIP, SPRING	2
15.		SCREW, RD HD MACH; 6-32X25	
16.	PART OF 75	POPPET, VALVE; URETHANE	2
17.		CYLINDER, AIR MOTOR	1
18.	PART OF 76	PLATE, IDENTIFICATION; WITH MUFFLER	1
19.	PART OF 76	SCREW , HEX HEAD; 8-32X3/8	12
20.		PLATE, WARNING; WITH MUFFLER	1
21.		SCREW, HEX HEAD;8-32X3/8	
22.		YOKE, ROD, TRIP	1
23.		PIN, TOGGLE	2
24.		O-RING, NITRILE RUBBER	1
25.		ARM, TOGGLE	2
26.		ROCKER, TOGGLE	2
27.		SPRING, HELICAL COMPRESSION	2
28.		O-RING; BUNA-N	1
29.		NUT, CYLINDER, CAP	
30.	PART OF 75	NUT, ADJUSTING	4
31.	PART OF 75	LOCKWIRE, TRANSFER VALVE	2
33.		GASKET; COPPER	1
38.		NUT, PACKING	1
52.		PISTON	1
53.		RETAINER, PISTON SEAL	1
54.	PART OF 77	SEAL, PISTON; BLUE FLUOROTREL	1
56.	PART OF 77	BALL	2
57.		ROD, EXTENSION	1
58.		ROD, SHOVEL	1
59.		CYLINDER, PUMP	1
60.	PART OF 77	SEAL, GASKET	2
61.	PART OF 77	BEARING, SHOVEL ROD	1
62.	PART OF 77	SEAL, SHOVEL ROD; POLYURETHANE	1
63.		CONNECTOR, TUBE	1
64.		TUBE, EXTENSION	
66.		SHOVEL	1
67.		TUBE, SHOVEL	1
74.		PIN, SPRING, STRAIGHT	1
75.	73734099	AIR MOTOR REPAIR KIT	REF
76.	73734100	MUFFLER REPAIR KIT	REF
77.	73734101	PUMP REPAIR KIT	REF
78.	73734102	PLIER, PADDED	REF
79.	73734103	GAUGE	REF

Installation - Final Filters (99904700)



NOTE (SEE REFERENCE NUMBER IN BOX):

1 #8 JIC TO REEL

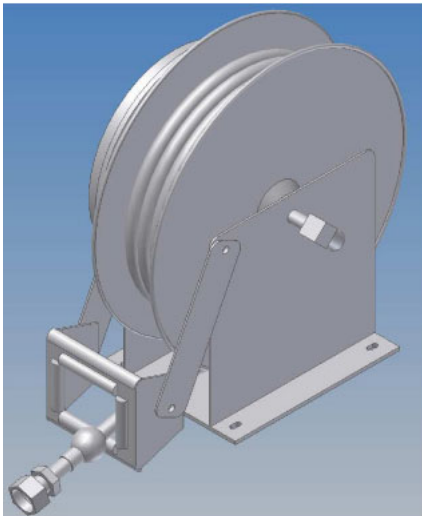
2 #8 JIC FROM PUMP

3 QUANTITIES FOR ITEMS 5, 6, AND 7 ARE PER FILTER.

99904700 PARTS LIST

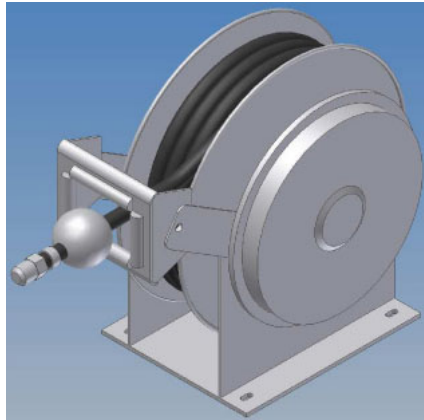
ITEM	PART #	DESCRIPTION	QUANTITY
1.	60129688	FILTER MOUNTING BRACKET	1
2.	73540000	FILTER-PRESSURE	AS REQUIRED
	73540001	ELEMENT-FILTER 5 MICRON	AS REQUIRED
3.	72060046	CAP SCREW .38-16X 1.00 HH GR5 Z	3
4.	72062103	NUT .38-16 HEX NYLOCK	3
5.	72063051	WASHER .38 LOCK	4
6.	72060044	CAP SCREW .38-16X .75 HH GR5 Z	4
7.	72534549	ELBOW-M STR/90/M JIC 16 8	2
NEW 20090722			

Hose Reel Assembly, Oil & Antifreeze, 1/2" x 50' (70732362)



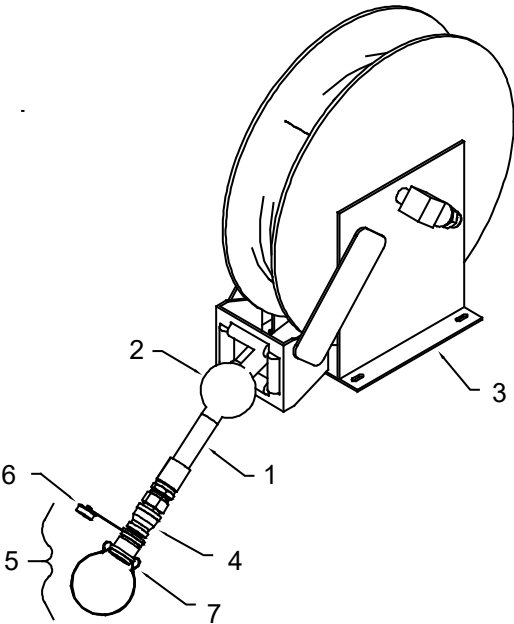
70732362 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	72533654	SWIVEL JOINT, 1/2 90°	1REF
	70146314	SEAL KIT	REF
2.	73051731	SPRING MOTOR	1REF
3.	70145660	RATCHET WHEEL	1REF
4.	70146309	SPRING ARBOR	1REF
5.	70146312	PAWL & PIN	1REF

Hose Reel Assembly, Grease, 3/8" x 50' (70733061)



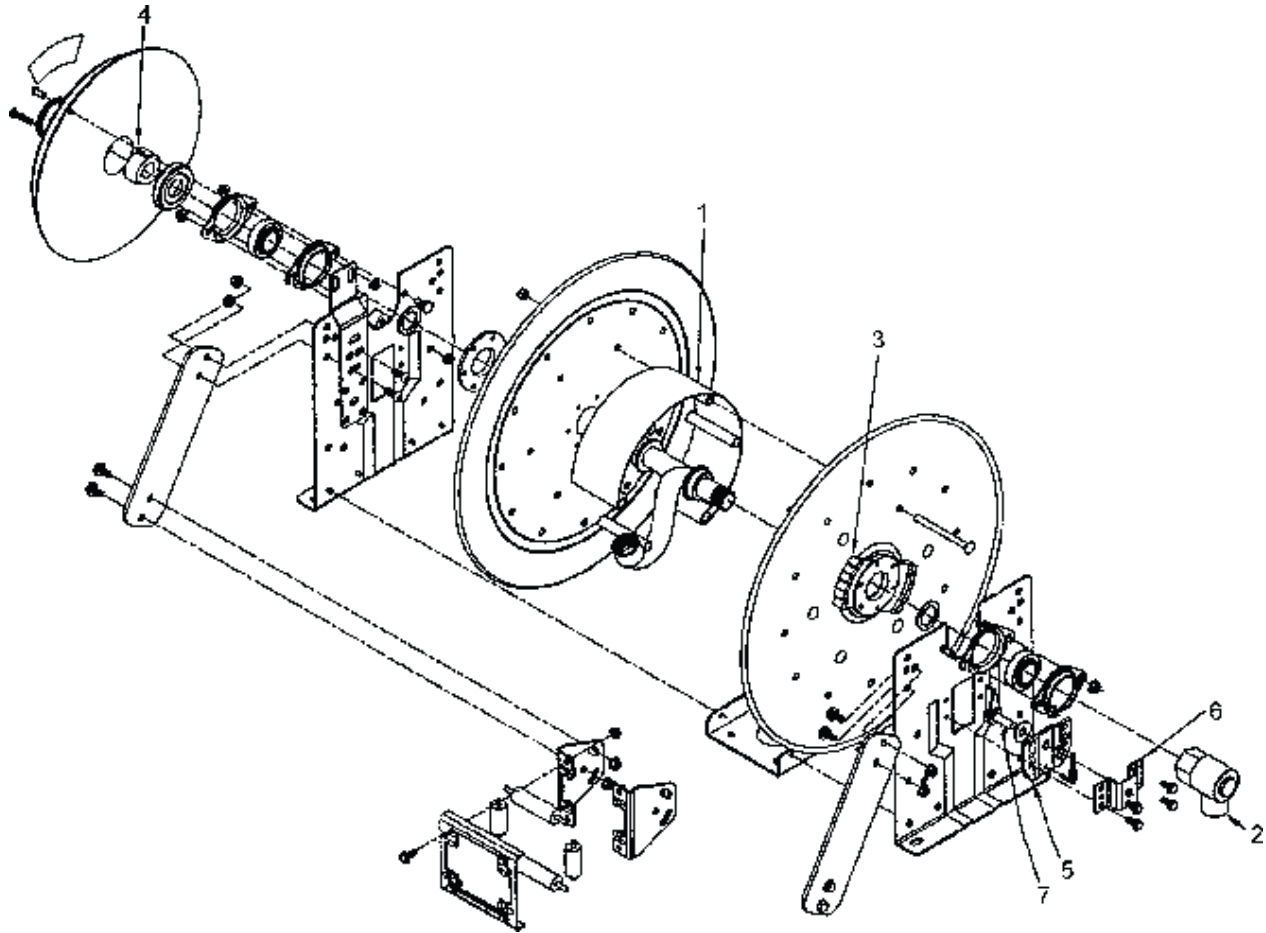
70733061 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	70146306	DRUM-10.5" DIA	1REF
	70146307	DRUM-15.5" DIA	1REF
2.	70146418	SWIVEL JOINT, 3/8" 8000 PSI	1REF
	70146307	SEAL KIT	REF
3.	70145660	RATCHET WHEEL	1REF
4.	70146309	SPRING ARBOR	1REF
5.	70146310	RATCHET PAWL HOUSING, INNER	1REF
6.	70146311	RATCHET PAWL HOUSING, OUTER	1REF
7.	70146312	PAWL & PIN	1REF
	73051731	SPRING MOTOR	1REF

Hose Reel Kit, Salvage, 1" x 35' (51713740)



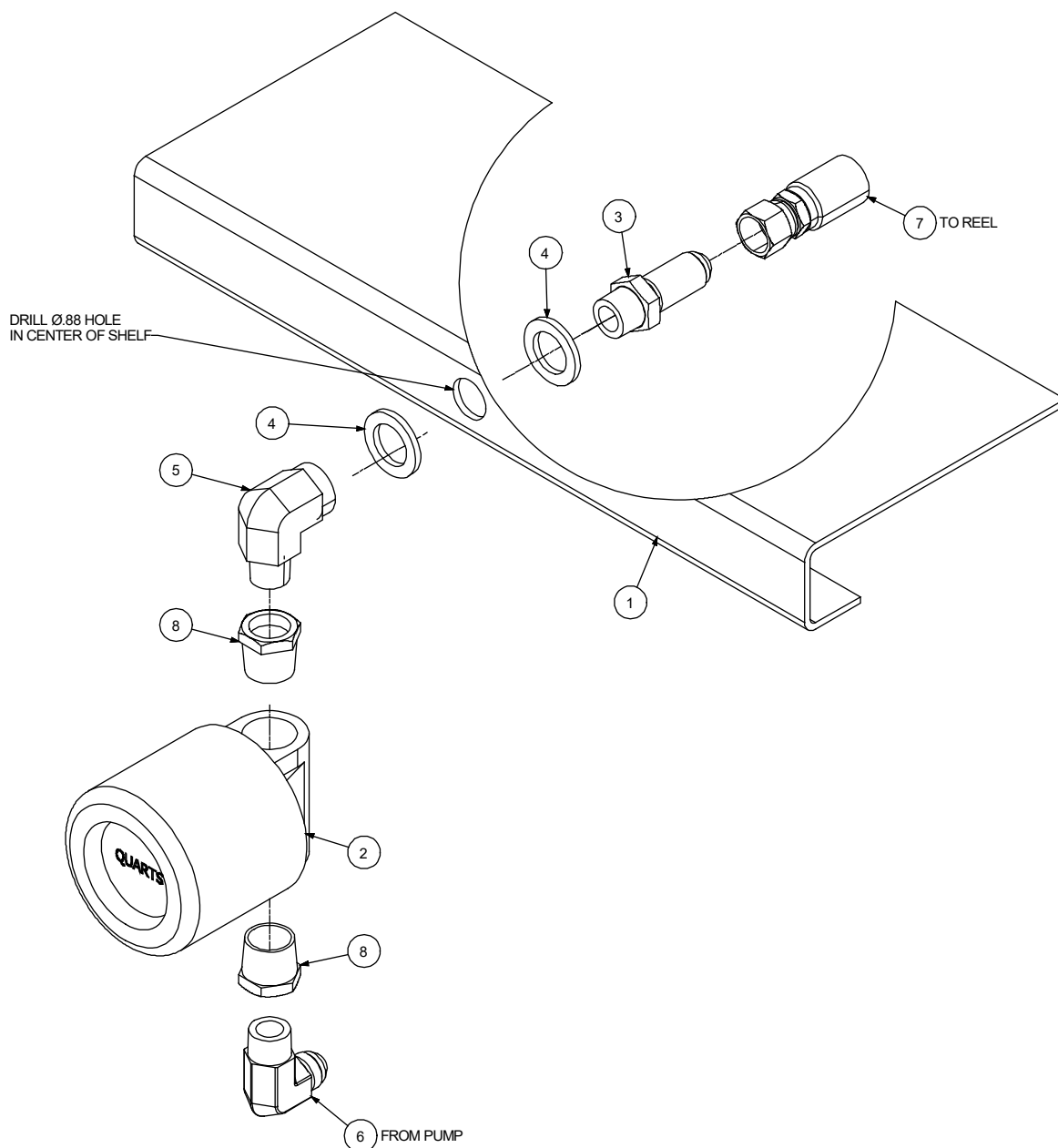
51713740 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	51392355	HOSE ASSEMBLY, 1" X 35' (SUCTION)	1
2.	70391369	BALL STOP, 1" HOSE	1
3.	70732174	REEL, SALVAGE	1
4.	72053436	COUPLING, BLACK, 1 - .75	1
5.	72532422	FAST-FILL SOCKET	1
6.	72532421	FAST-FILL NOZZLE (PART OF 5)	1REF
7.	72532423	FAST-FILL CAP (PART OF 5)	1REF
8.	72532408	FAST-FILL RECEIVER (NOT SHOWN)	1REF
NEW 20060907			

Hose Reel – AF/SALVAGE (70732174)



70732174 PARTS LIST			
ITEM	PART #	DESCRIPTION	QUANTITY
1.	70146306	DRUM 10-1/2" DIA	1
2.	70732529	SWVL JOINT 1" 90° FF	1
	70146315	SEAL KIT	REF
3.	70145660	RATCHET WHEEL	1
4.	70146309	SPRING ARBOR	1
5.	70146310	RATCHET PAWL HSG-INNER	1
6.	70146311	RATCHET PAWL HSG-OUTER	1
7.	70146312	PAWL & PIN	1

Remote Meter Installation (99904486)



ITEM NO.	PART NO.	DESCRIPTION	QTY
1.	REF	REEL PLATFORM-LUBE SKID 2006	1
2.	70733122	METER-ELEC QUARTS GRACO 244-075 REMOTE	A/R
2.	70733311	METER-ELEC LITERS GRACO 244076 REMOTE	A/R

ITEM NO.	PART NO.	DESCRIPTION	QTY
3.	72533430	UNION-BULKHEAD 8MJIC/.50MPT	1
4.	72063032	MACHY BUSHING .88X10 GA NR	2
5.	72531133	ELBOW-STREET STL .50 X 90 DEG	1
6.	72531421	ELBOW-MPT/90/M JIC .50 8	1
7.	51395892	HOSE-FF .50 X 36.00 (8-8) 100R17	1
8.	72531833	REDUCER BUSH-STL .75- .50	2
REV. B 20190502 CN816			

Nozzles

PART #	DESCRIPTION	SIZE
70143310	METERED NOZZLE - HIGH VOLUME	1/2" SWIVEL, RIGID EXTENSION
	70143310 INCLUDES 71414700 NUT (SEAL, 1/2-14 NPT), 71414701 TUBE (3/4 BEND-1/2NPT)	
70731830	NON-METERED NOZZLE - HIGH FLOW	1/2" SWIVEL, RIGID EXTENSION
70143289	NON-METERED NOZZLE - NON-DRIP	1/2" SWIVEL, OIL NOZZLE / EXTENSION

CHAPTER 4

Miscellaneous

In This Chapter

Parts Ordering Information 55
Thread Torque Chart (English) 56
Thread Torque Chart (Metric) 57
Warranty Policy 56

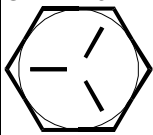

Parts Ordering Information

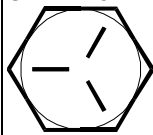

When placing orders or requesting assistance, refer to the information below:

MODEL #	
SERIAL #	
PART NUMBER, DESCRIPTION, AND QUANTITY REQUIRED:	
(Please specify left or right side.)	

Contact IMT at the following address:
Iowa Mold Tooling Co., Inc.
Box 189, Garner, IA 50438-0189
Telephone: 641-923-3711
Technical Support Fax: 641-923-2424

Thread Torque Chart (English)

FINE THREAD BOLTS (ENGLISH)					
SIZE	BOLT DIA.	 SAE J429 GRADE 5		 SAE J429 GRADE 8	
(DIA-TPI)	(INCHES)	PLAIN	PLATED	PLAIN	PLATED
		(FT-LB)	(FT-LB)	(FT-LB)	(FT-LB)
5/16-24	0.3125	19	14	27	20
3/8-24	0.375	35	26	49	35
7/16-20	0.4375	55	41	78	58
1/2-20	0.5	90	64	120	90
9/16-18	0.5625	120	90	170	130
5/8-18	0.625	170	130	240	180
3/4-16	0.75	300	225	420	315
7/8-11	0.875	445	325	670	500
1-12	1	645	485	995	745
1 1/8-12	1.125	890	670	1445	1085
1 1/4-12	1.25	1240	930	2010	1510
1 3/8-12	1.375	1675	1255	2710	2035
1 1/2-12	1.5	2195	1645	3560	2670

COARSE THREAD BOLTS (ENGLISH)					
SIZE	BOLT DIA.	 SAE J429 GRADE 5		 SAE J429 GRADE 8	
(DIA-TPI)	(INCHES)	PLAIN	PLATED	PLAIN	PLATED
		(FT-LB)	(FT-LB)	(FT-LB)	(FT-LB)
5/16-18	0.3125	17	13	25	18
3/8-16	0.375	31	23	44	33
7/16-14	0.4375	49	37	70	52
1/2-13	0.5	75	57	105	80
9/16-12	0.5625	110	82	155	115
5/8-11	0.625	150	115	220	160
3/4-10	0.75	265	200	375	280
7/8-9	0.875	395	295	605	455
1-8	1	590	445	910	680
1 1/8-7	1.125	795	595	1290	965
1 1/4-7	1.25	1120	840	1815	1360
1 3/8-6	1.375	1470	1100	2380	1780
1 1/2-6	1.5	1950	1460	3160	2370

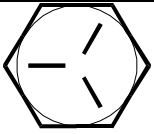
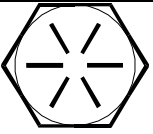
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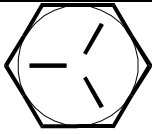
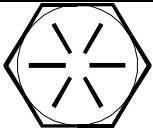
- 1 Tightening torques provided are midrange.
- 2 Consult bolt manufacturer's particular specifications, when provided.
- 3 Use flat washers of equal strength.
- 4 All torque measurements are given in foot-pounds.
- 5 Torque values specified are for bolts with residual oils or no special lubricants applied. If special lubricants of high stress ability, such as Never-Seez compound graphite and oil, molybdenum disulphide, colloidal copper or white lead are applied, multiply the torque values in the charts by the factor .90. The use of Loctite does not affect the torque values listed above.

WARNING

Anytime a gear-bearing bolt is removed, it must be replaced with a new bolt of the identical grade and size. Once a bolt has been torqued to 75% of its proof load and then removed, the torque coefficient may no longer be the same as when the bolt was new thus giving indeterminate clamp loads after torqueing. Failure to replace gear-bearing bolts may result in bolt failure due to metal fatigue causing death or serious injury.

Thread Torque Chart (Metric)

FINE THREAD TORQUE CHART (METRIC)					
TIGHTENING TORQUE					
SIZE (DIA- TPI)	BOLT DIA. (INCHES)	 SAE J429 GRADE 5		 SAE J429 GRADE 8	
		PLAIN (KG-M)	PLATED (KG-M)	PLAIN (KG-M)	PLATED (KG-M)
5/16-24	0.3125	3	2	4	3
3/8-24	0.375	5	4	7	5
7/16-20	0.4375	8	6	11	8
1/2-20	0.5	12	9	17	12
9/16-18	0.5625	17	12	24	18
5/8-18	0.625	24	18	33	25
3/4-16	0.75	41	31	58	44
7/8-11	0.875	62	45	93	69
1-12	1	89	67	138	103
1 1/8-12	1.125	123	93	200	150
1 1/4-12	1.25	171	129	278	209
1 3/8-12	1.375	232	174	375	281
1 1/2-12	1.5	304	228	492	369

COARSE THREAD TORQUE CHART (METRIC)					
TIGHTENING TORQUE					
SIZE (DIA- TPI)	BOLT DIA (INCHES)	 SAE J429 GRADE 5		 SAE J429 GRADE 8	
		PLAIN (KG-M)	PLATED (KG-M)	PLAIN (KG-M)	PLATED (KG-M)
5/16-18	0.3125	2	2	3	2
3/8-16	0.375	4	3	6	5
7/16-14	0.4375	7	5	10	7
1/2-13	0.5	10	8	15	11
9/16-12	0.5625	15	11	21	16
5/8-11	0.625	21	16	30	22
3/4-10	0.75	37	28	52	39
7/8-9	0.875	55	41	84	63
1-8	1	82	62	126	94
1 1/8-7	1.125	110	82	178	133
1 1/4-7	1.25	155	116	251	188
1 3/8-6	1.375	203	152	329	246
1 1/2-6	1.5	270	210	438	328

NOTES

- 1 Tightening torques provided are midrange.
- 2 Consult bolt manufacturer's particular specifications, when provided.
- 3 Use flat washers of equal strength.
- 4 All torque measurements are given in kilogram-meters.
- 5 Torque values specified are for bolts with residual oils or no special lubricants applied. If special lubricants of high stress ability, such as Never-Seez compound graphite and oil, molybdenum disulphite, colloidal copper or white lead are applied, multiply the torque values in the charts by the factor .90. The use of Loctite does not affect the torque values listed above.

WARNING

Anytime a gear-bearing bolt is removed, it must be replaced with a new bolt of the identical grade and size. Once a bolt has been torqued to 75% of its proof load and then removed, the torque coefficient may no longer be the same as when the bolt was new thus giving indeterminate clamp loads after torqueing. Failure to replace gear-bearing bolts may result in bolt failure due to metal fatigue causing death or serious injury.

Warranty Policy



Warranty Coverage – Products manufactured by Iowa Mold Tooling Co., Inc. (IMT) are warranted to be free from defects in material and workmanship, under proper use, application and maintenance in accordance with IMT's written recommendations, instructions and specifications as follows:

One (1) year: labor on IMT workmanship from the date the unit is put into service by the selling IMT dealer, as indicated on the warranty registration, not to extend beyond two (2) years from the date of manufacture by IMT.

One (1) year: original and replacement IMT parts from the date the unit or part is put into service by the selling IMT dealer, as indicated on the warranty registration, not to extend beyond two (2) years from the date of manufacture by IMT.

Two (2) years: original rotary screw air end assembly from the date the unit is put into service by the selling IMT dealer, as indicated on the warranty registration, not to extend beyond three (3) years from the date of manufacture. All other compressor components are warranted for one year, not to extend beyond 18 months from the date of shipment from IMT.

Three (3) years: original IMT Crane structural parts from the date the unit is put into service by the selling IMT dealer, as indicated on the warranty registration, not to extend beyond four (4) years from the date of manufacture by IMT. Structural items are exclusively specified to be the crane base, mast, and booms.

Three (3) years: paint coverage on structural components such as crane bases, masts, booms, truck body doors and body panels to be free from defects such as corrosion, blisters, unreasonable color or gloss loss, or delamination determined to result from paint film failure. This warranty is effective from the date the unit is put into service by the selling IMT dealer, as indicated on the warranty registration and not to extend beyond four (4) years from the date of manufacture from IMT. Damage such as chips, scratches, corrosion due to dirt build-up, etc., that occurs through usage of the product is not covered under this warranty. Rust bleed out from inaccessible structural features as a result of prolonged moisture exposure does not constitute a failure in paint coverage or adhesion and is not covered under this warranty.

Five (5) years: Dominator rust through coverage for body panels, doors, and wheel wells from the date the unit is put into service by the selling IMT dealer, as indicated on the warranty registration, not to extend beyond six (6) years from the date of manufacture. Rust-through damage as a result of surface and/or paint damage, product neglect or abuse, or structural modification is not covered under this warranty.

Five (5) year: Sitestar Lubrication Tanks structural coverage from the date the unit is put into service by the selling IMT dealer, as indicated on the warranty registration, not to extend beyond six (6) years from the date of manufacture.

Ninety (90) days: Rebuilt parts from the date of shipment from IMT.

IMT's obligation under this warranty is limited to, and the sole remedy for any such defect shall be the repair or replacement (at IMT's option) of unaltered parts returned to IMT, freight prepaid, and proven to have such defect, provided such defect occurs within the above stated warranty period, is reported to IMT within fourteen (14) days of its occurrence, and all claims and failing parts are returned to IMT within thirty (30) days after the repair is completed. Parts not of IMT manufacture are warranted only to the extent they are warranted by the original manufacturer.

IMPLIED WARRANTY EXCLUDED - Only authorized IMT warranties are valid and applicable to IMT product. These warranties are in lieu of all other express or implied warranties or representations, including warranties of merchantability or fitness for any particular purpose or of any other obligations on the part of IMT. IMT may, in specific instances and by written approval of an officer of the firm in advance of any bid or sale, modify or extend the terms of the Standard IMT Warranty.

WARRANTY REGISTRATION AND CLAIMS – The unit warranty is instated by completion of the product registration by the end-user. Failure to return the completed product registration form to IMT at the time of purchase may result in invalidation of product warranty. Warranty claims must be submitted and shall be processed in accordance with IMT's established warranty claim procedures.

WARRANTY SERVICE - Warranty service will be performed by any IMT distributor authorized to sell new IMT products of the type involved or by any IMT Service Center authorized to service the type of product involved or by IMT in the event of direct sales made by IMT. At the time of requesting warranty service, the purchaser must present evidence of the date of delivery of the product. The purchaser shall pay any premium for overtime labor requested by the purchaser, any charge for making service calls and for transporting the equipment to the place where warranty work is performed, unless otherwise authorized in writing by IMT.

PARTS & LABOR RATE - PARTS AND LABOR RATE - Labor reimbursement for warranty claims will be one-hundred percent (100%) of the standard hourly retail labor rate, as reported to IMT, multiplied by the number of work hours listed on the warranty service report. IMT reserves the right to modify those claims for warranty work hours which appear excessive. Part reimbursement for warranty claims will be one-hundred percent (100%) of the selling price paid by the distributor to IMT. Labor is not included on service parts.

WARRANTY VOIDED - All obligations of IMT under this warranty shall be terminated: (1) if service other than normal maintenance or normal replacement of service items is performed by someone other than an authorized IMT dealer, (2) if product is modified or altered in ways not approved by IMT.

PURCHASER'S RESPONSIBILITY - This warranty covers only defective material and workmanship. It does not cover depreciation or damage caused by normal wear, accident, improper protection in storage, or improper use. The purchaser has the obligation of performing the care and maintenance duties discussed in IMT's written recommendations, instructions and specifications. Any damage which results because of purchaser's failure to perform such duties shall not be covered by this warranty. The cost of normal maintenance and normal replacement of service items such as wear pads, oil, etc. shall be paid by the purchaser.

CONSEQUENTIAL DAMAGES - The only remedies the purchaser has in connection with the breach of performance of any warranty on IMT products are those set forth above. In no event will the dealer, IMT or any company affiliated with IMT, be liable for business interruptions, loss of sales and/or profits, rental or substitute equipment, costs of delay for any other special, indirect, incidental or consequential losses, costs or damages.

REPRESENTATIONS EXCLUDED - IMT products are subject to no expressed, implied or statutory warranty other than herein set forth, and no agent, representative or distributor of the manufacturer has any authority to alter the terms of this warranty in any way whatsoever or to make any representations or promises, express or implied, as to the quality or performance of IMT products other than those set forth above.

CHANGE IN DESIGN - IMT reserves the right to make changes in design or improvements upon its products without imposing any obligation upon itself to install the same upon its products theretofore manufactured.

Effective January 1, 2002