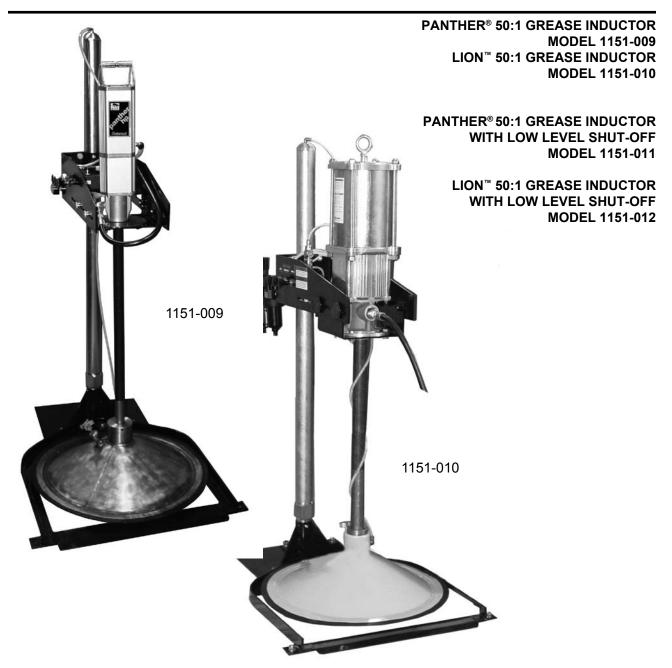
# Balerank®



Thoroughly read and understand this manual before installing, operating or servicing this equipment.

OPERATION, INSTALLATION, MAINTENANCE AND REPAIR GUIDE

## **General Safety**

Thoroughly read and understand this manual before installing, operating or servicing the described products.



## **A** IMPORTANT

Because this pump can be incorporated into a pressurized systems, the following safety precautions should be observed.

Check equipment regularly and repair or replace worn and damaged parts.

Never alter or modify any parts of this pump, doing so may cause damage to pump and/or personal injury.

Under no circumstances should the dispensing valve be aimed at any person at any time. Personal injury may result.

Release pressures built up in the system before any service or repair is begun. See the pressure relief procedure below.

Do not operate this pump above 150 PSI (10.3 BAR) air inlet pressure or 200 cycles per minute.

Always read and follow the fluid manufacturer's recommendations regarding the use of protective eyewear, clothing and respirators.



## A

### **WARNING**

Pressure Relief Procedure:

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.
- Point dispensing valve away from yourself and others.
- Ópen dispensing valve until pressure is relieved.



## **WARNING**

pump develops up to 7500 psi (517 Bar) maximum working pressure at 150 psi (10.3 Bar) maximum inlet air pressure and stall conditions. Be sure that any components or accessories used in the system are rated to withstand this pressure. To determine fluid output pressure at stall conditions, multiply the ratio of the pump by the air pressure being used.

EXAMPLE: 50:1 Pump Ratio x 100 psi air pressure = 5000 psi fluid pressure at stall.



## **CAUTION**

Be careful not to dent or damage the riser tube during operation. Dents may cause the lift to operate roughly or make it impossible to operate.



## WARNING

DANGER: Not for use with fluids that have a flash point below 100°F (38°C). Examples: gasoline, alcohol. Sparking could

result in an explosion which could result in death.



## WARNING

In the presence of explosive vapors, take action to prevent static sparking. Failure to

ground the pump, piping, valves, containers, or other miscellaneous equipment can result in fire or explosion. A green grounding lug is provided on the pump.



## WARNING

Keep fingers and hands away from moving parts when raising and lowering the lift to prevent

pinching and/or amputating them between the drum and follower plate.



## WARNING

Do not leave lift unattended in the "up" position. Loss of air pressure can cause lift to drop suddenly resulting in injury.

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## **Product Description**

The grease inductor handles thicker viscosity greases better than a standard pump and follower plate. The combined weight of the pump and inductor assembly is used to prevent pockets from forming in the grease in the drum.

#### Installation

#### Mounting

Locate the air lift where there is at least 8
feet of overhead clearance. Provide adequate
space in the front of the unit for changing
drums and around the unit for plumbing. Mark
and drill holes for 3/8" mounting bolts.

## **⚠** CAUTION

Be sure the mounting surface is strong enough to support the pump, the weight of the lubricants, and the stress caused by lifting these products off center.

- 2. Level the base using shims as needed, bolt base securely to the floor.
- 3. Connect air supply hose provided to air supply.
- 4. Set FRL regulated pressure at 75 psi.

## **Operation**

#### Installing a drum

- 1. Raise follower plate above the height of the drum by pulling out on the "Lift" valve. (see figure 1 or figure 2)
- 2. Center on opened drum under the inductor plate (item 2).
- 3. Make the top of the grease concave by scooping the grease from the center of the drum to the sides of the drum.
- 4. Open vent by turning knob (item 8) clockwise.



### WARNING

Keep fingers and hands away from moving parts when raising and lowering the lift to prevent

pinching and/or amputating them between the drum and follower plate.

- 5. Lower the inductor plate into the drum by pushing in on the "Lift" valve. Holding onto pump tube press down until grease appears at the vent opening.
- 6. Close vent by turning knob counterclockwise.

#### Tube **Ports** Air Supply to "Pump" 1 <u>^2\</u> "Lift" 2 to Top of Lift "Inductor" 2 to Inductor Plate <u> 4</u> "Pump" 2 to Pump Air Inlet <u>/\$\</u> "Pump" 4 to "Lift" 3 "Lift"3to "Inductor"3 <u> 6</u> Тор 2

## **Pumping**

- 1. Adjust FRL pressure to the lowest pump pressure necessary for good delivery. Using higher pressures may shorten pump life.
- 2. Insure "Lift" and "Inductor" valves are closed (pushed in). To pump, pull "Pump" valve out. To stop pumping push "Pump" valve in.

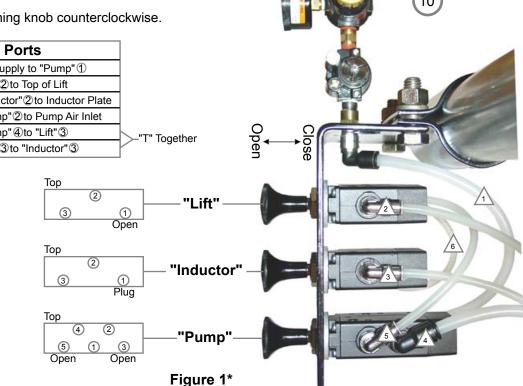
## Removing a drum

- 1. Insure "Pump" valve is closed.
- 2. Pull out "Inductor" valve until the inductor plate raises above the drum. Once inductor plate has cleared the drum push "Inductor" valve in. (May use the lift valve to assist inductor by opening and closing to supply just enough air to keep the inductor lifting.
- 3. Pull out the "Lift" valve to raise the unit to its full height.



## **WARNING**

Do not leave lift unattended in the "up" position. Loss of air pressure can cause lift to drop suddenly resulting in injury.



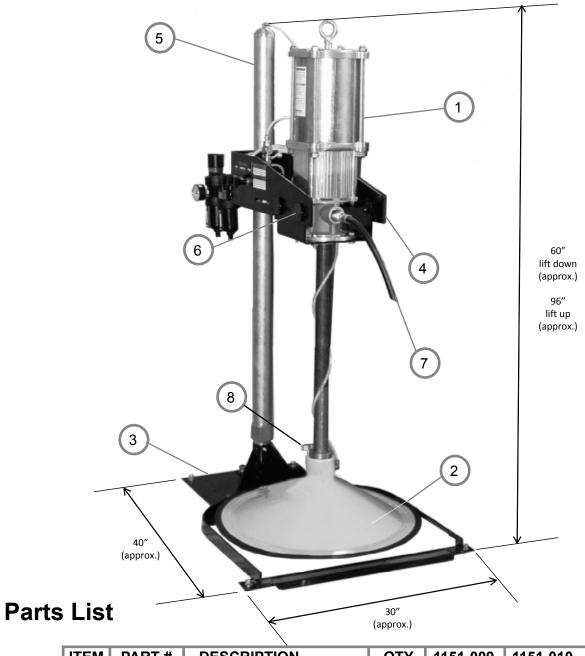
<sup>\*</sup>Set up for Model #1151-009 & 1151-010

Tube	Ports		
Â	Air Supply to "Pump" ①B		
<u>^2</u>	"Lift"②to Top of Lift		
3	"Inductor"②to Inductor Plate		
4	"Pump"②B to Pump Air Inlet		
<u>\$</u>	"Pump" 4 to "Lift" 3	-"T" Together	
<u>6</u>	"Lift"3to "Inductor"3	. iogenie.	
À	"Pump" ①A to Switch Inlet		
<u>8</u>	Outlet of Switch to ②A		
	Top ②	$\neg$	Open Close
	③ <u>(1</u> Op	"Lift"—	2
	Top ② ③ ① Plu (A)	"Inductor"	
		"Pump"—	5 7
		Figure 2*	4

<sup>\*</sup>Set up for Model #1151-011 & 1151-012

## **Troubleshooting**

TROUBLE	PROBABLE CAUSE	SOLUTION
Inductor base lifting from floor or unit not secure.	Unit not bolted to floor or bolts not tight.	Bolt to floor or tighten bolts (see installation instructions).
Pump is not priming.	Grease not feeding into center of inductor plate.  "Lift" and/or "Inductor" valve	Scoop grease into concave shape (see installing a drum).  Close (push in) "Lift" and/or
	left open.	"Inductor" valve.
Low flow rate.	Open inductor plate vent	Close inductor vent clockwise.



ITEM	PART #	DESCRIPTION	QTY	1151-009 1151-011	1151-010 1151-012
1	1150-011	Panther 50:1	1	X	
	1150-015	Lion 50:1	1		X
2	831859	Weldment Inductor Plate	1	X	X
3	831860	Weldment Base	1	X	X
4	831884	Carriage, Pump Mount	1	X	X
5	831865	Air Lift Assembly	1	X	X
6	809032	Thumb Screw	4	X	X
7	8332-007	Fluid Hose	1	X	
	8333-007	Fluid Hose	1		X
8	831869	Knob	1	X	X
9	8132-005	Air Hose (not shown)	1	X	X
10	3260-059	FRL (see figure 1)	1	X	
	3260-049	FRL (see figure 1)	1		X

## **Accessories**

#### **Dolly Base:**

• 4310-004 - 400 lb



4310-004

#### Inlet Screen:

- 4430-004 Panther® 50:1 Pump
- 4430-003 Lion™ 50:1 Pump



4430-004

#### **Pump Over-Run Control**

- 3241-001 1/2" NPT (F) Lion™
- 3241-002 1/2" NPT (F) Panther®



3241-002

#### **Low Level Cut Off**

• 4520-008



4520-008

# For Warranty Information Visit: www.balcrank.com

#### **Revision Log:**

Balcrank® Corporation Weaverville, NC 28787 800-747-5300 800-763-0840 Fax www.balcrank.com

Service Bulletin SB 1066 Rev. C 07/14 Rev. A - Added low level models

Rev. B - Added Lion pump

Rev. C - Added dimensions to parts view on page 6