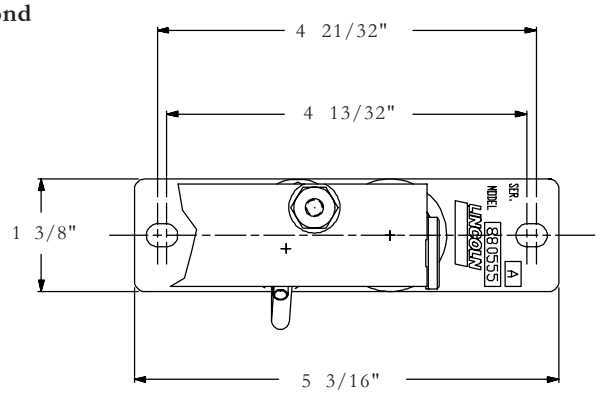
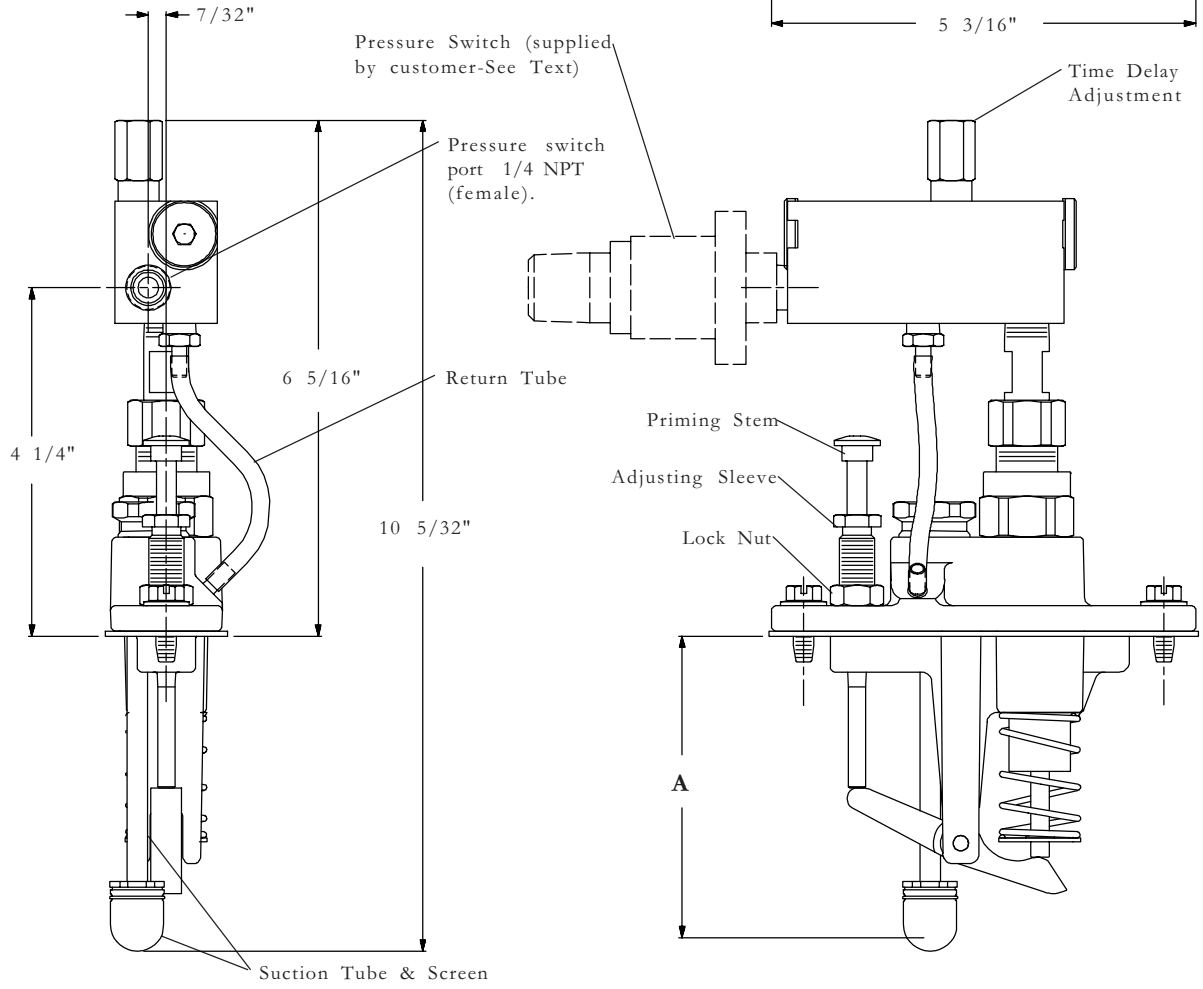
Lubricant Viscosity: 130-3000 S.U.S.
Adjustment Range: 1 to 2 minutes
Minimum Flow Rate: .060 cu. in./min. with a 90 second time delay setting.

Suction Tube Length

Model	Dimension A
880555	3 3/4"
880556	3 1/4"

Note: Model 55i pump standard suction tube length is approximately 4 -1/4" from mounting surface.





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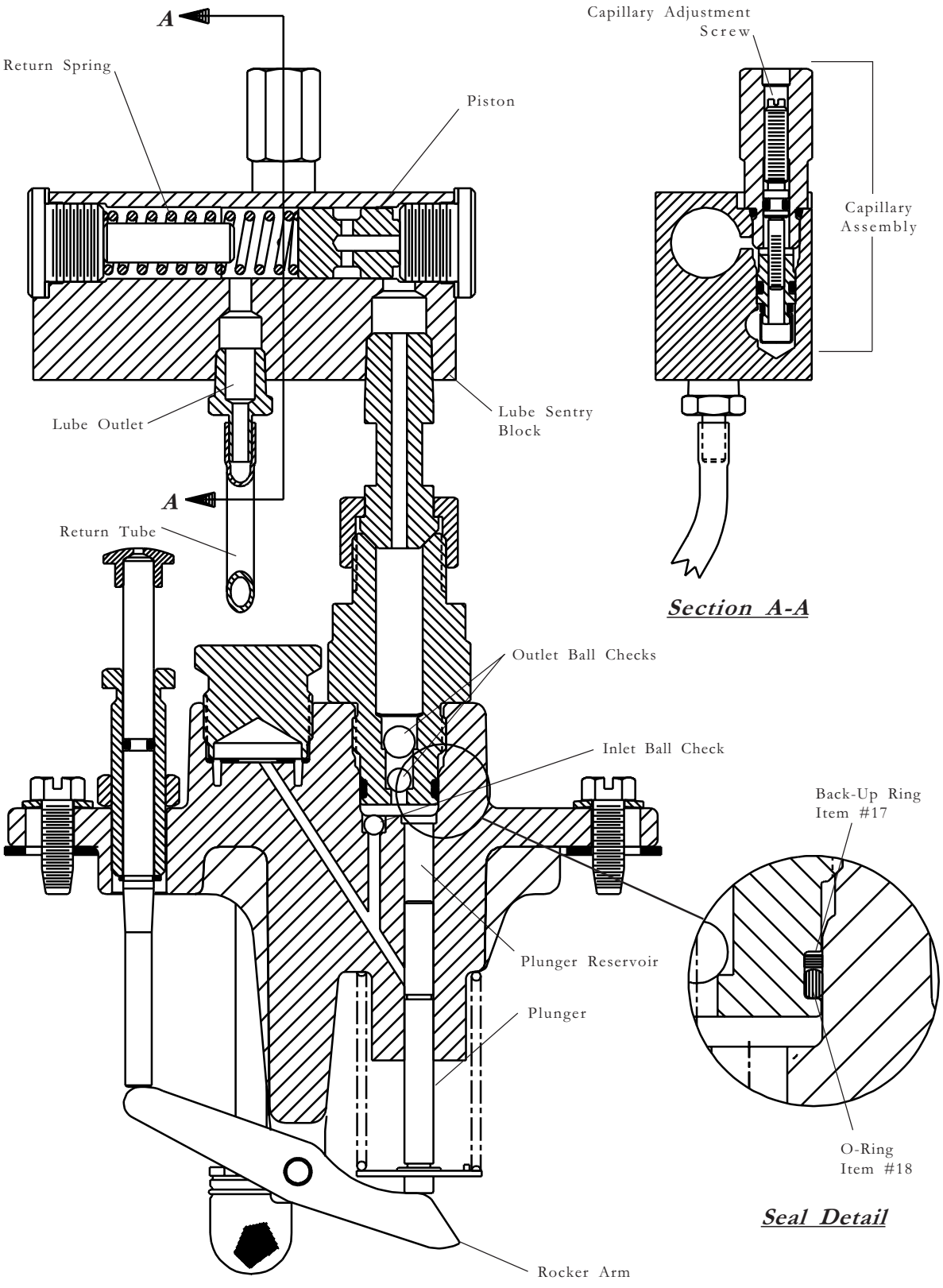

A
Return Spring
Piston
Lube Outlet
Lube Sentry Block
A
Return Tube
Outlet Ball Checks
Inlet Ball Check
Plunger Reservoir
Plunger
Rocker Arm
Capillary Adjustment Screw
Capillary Assembly
Section A-A
Back-Up Ring Item #17
O-Ring Item #18
Seal Detail

Description:

The Lube Sentry is used to monitor both camshaft rotation and reservoir oil level. The Lube Sentry oil suction tube is shorter than the suction tube on a standard lubricator pump, such as the Lincoln model 55i. The oil pick up points of the Lube Sentries are either 1/2" or 1" above the pick up points of the standard lubricator pumps, depending on the model of Lube Sentry. The higher pick up point of the Lube Sentry will cause it to run out of oil before the remaining pumps in the reservoir box, thus providing an early warning of a low lubricant level.

The rotation of the lubricator camshaft causes the Lube Sentry to maintain pressure on a pressure switch attached to the Lube Sentry block. If the camshaft fails to rotate, or the oil level in the reservoir drops below the suction tube pick up, the oil pressure in the Lube Sentry will drop and signal an alarm. There is an adjustable time delay of 1 to 2 minutes before the alarm signal is given, to allow up to 2 minutes between lube cycles.

Output from the Lube Sentry is directed back into the lubricator reservoir in which it is mounted. The Lube Sentry is not intended to be used as a lubricator pump.

The Lube Sentry will not monitor the lubricating oil supply if used with direct feed or manifold feed pumps. It will only monitor camshaft rotation and the level of the oil in the lubricator in which it is mounted.

Lube Sentry Operation: (See Page 2)

1. The cam rotates and through the action of the rocker arm, causes the plunger to reciprocate within the bore in the pump body.

2. As the plunger moves downward, the outlet ball checks seat and oil is drawn through the inlet ball check into the plunger reservoir. On the plungers upwards stroke, the inlet ball check seats and oil is forced through the outlet ball checks and enters the Lube Sentry block.

3. During normal system operation, lubricant entering the Lube Sentry block pushes the piston back, compressing the return spring. A pressure switch must be attached to the Lube Sentry block which will activate at 35 PSI and oil circulates through the Lube Sentry block at 100 PSI. Lubricant flows through the piston, down the lube outlet and back to the lubricator reservoir through the return tube and pump body.

4. If lubricant flow ceases, due to failure of the camshaft or an exhausted oil supply, the return spring forces the piston forward closing the outlet to the return tube, forcing the trapped lubricant to pass around the controlled fit of the piston, through the capillary and out through the return tube. After the lubricant pressure drops below 35 PSI, the pressure switch deactivates sending a signal of a no flow condition.

5. The time delay between the end of lubricant flow and pressure switch deactivation, is controlled by the capillary adjustment screw. The Lube sentry can be adjusted for a minimum of 1 minute to a maximum of 2 minutes delay. Turning the screw clockwise will increase the delay, counterclockwise will reduce the delay.

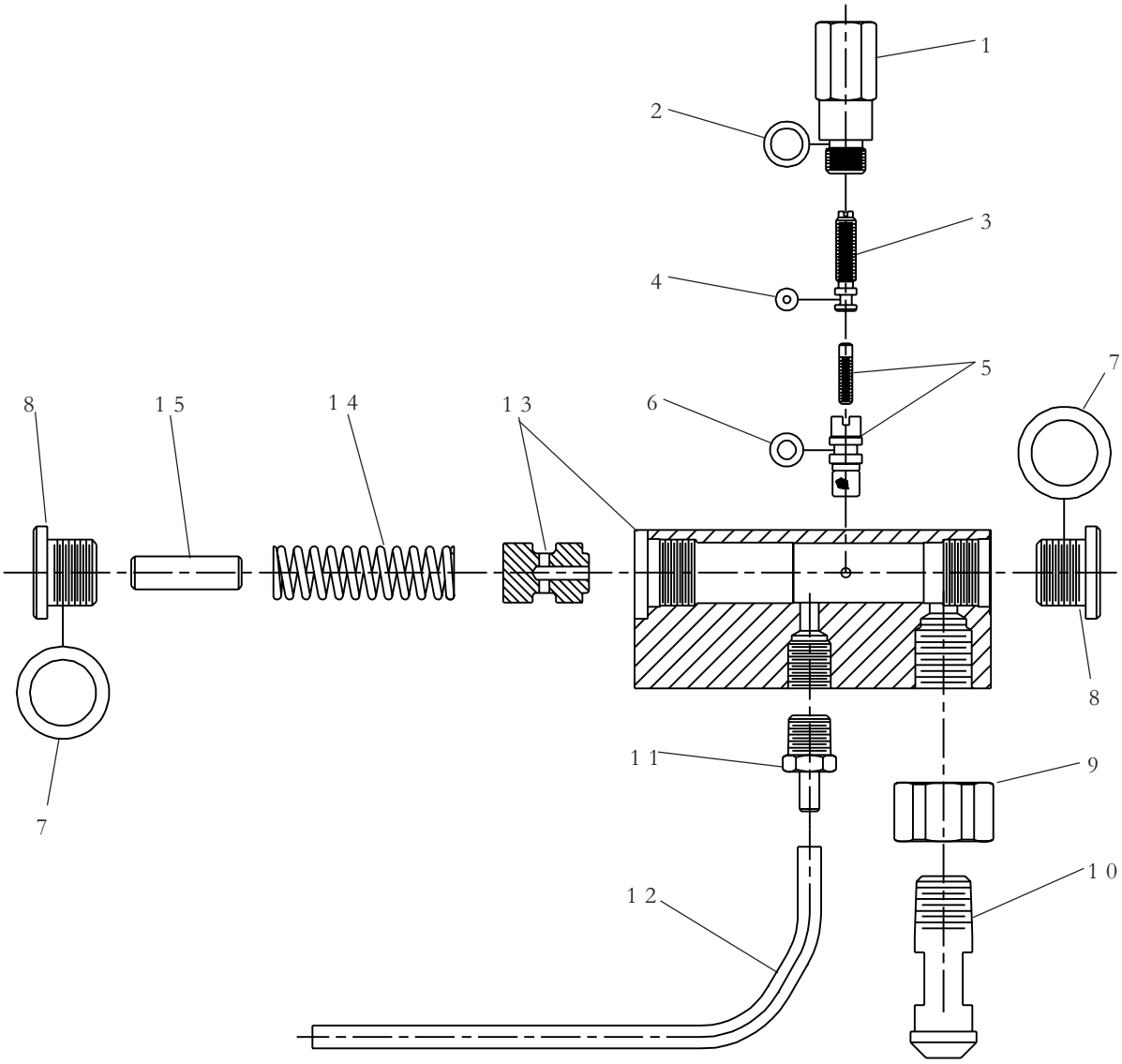
Pressure Switch Specifications

The pressure switch must be preset for 30-35 PSI decreasing pressure, (dead band open). It should have a proof pressure of 1000 PSI and a maximum operating pressure of 500 PSI. Switch contact configuration and ratings per customer specifications.

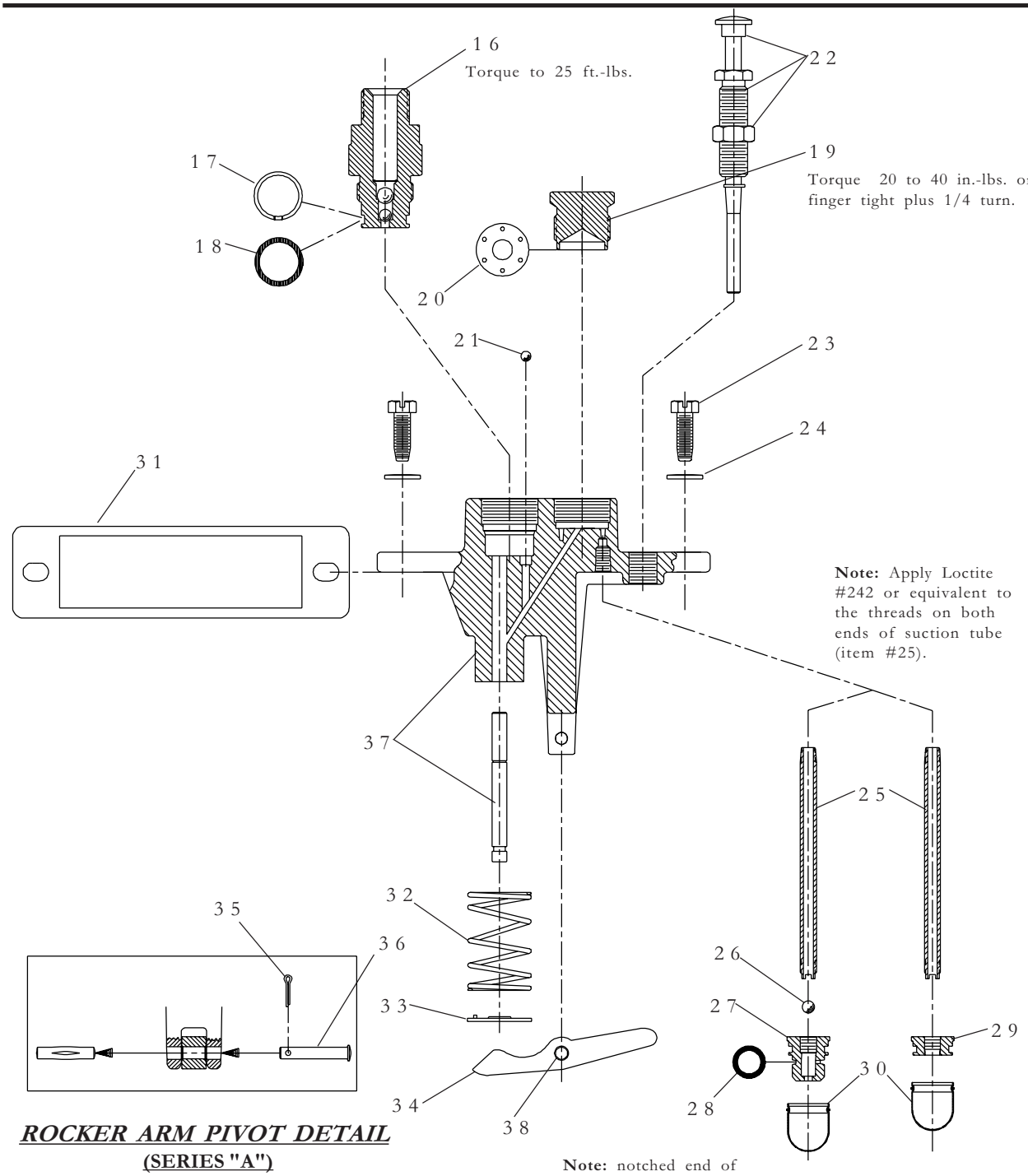
Service Parts

ITEM	DESCRIPTION	PART NO.	QUAN
1	Adjustment Housing	16130	1
2	O-Ring (Buna-N)	34729	1
3	Adjustment Screw	16129	1
4	O-Ring (Buna-N)	34653	1
5	Capillary Assembly	93264	1
6	O-Ring (Buna-N)	34179	1
7	Gasket	31159	2
8	Plug	15061	2
9	Packing Nut	15460	1
10	Union Sleeve	16251	1
11	Outlet Adapter	16629	1
12	Return Tube	62572	1
13	Body & Plunger Ass'y.	N/A	1
14	Return Spring	55442	1
15	Pin	16250	1
	Check Kit Contents	250173	1
16	Adapter Ass'y. (w/balls)		1
17	Back-up Ring		1
18	O-ring (Viton)		1
19	Plug	250212	1
	Pump Seal Kit Contents	250172	
17	Back-up Ring		1
18	O-ring (Viton)		1
20	Seal (Viton)		1
21	Inlet Check Ball		1
26	Suction Tube Ball		1
28	O-ring (Viton), suction tube		1
*	O-ring (Viton) (Not Used)		1
22	Priming Unit Ass'y.	250169	1
	Pump Mounting Kit Contents	250143	1
23	Mounting Screws		2
24	Belleville Washers		2
31	Pump Mounting Gasket		1
25	Suction Tube	250213	1
27	Strainer Plug (model 880555)	93420–1	1
29	Strainer Plug (model 880556)	92787–3	1
30	Screen Assembly	69879	1
	Rocker Arm Kit Contents	250167	
	Series "A" Replacement Kit		1
32	Plunger Return Spring		1
33	Spring Retainer		1
34	Rocker Arm		1
35	Cotter Pin		1
36	Pivot Pin		1
	Rocker Arm Kit Contents	250225	
	Series "B" Replacement Kit		
32	Plunger Return Spring		1
33	Spring Retainer		1
34	Rocker Arm		1
38	Grooved Pin		1
37	Body and Plunger	N/A	

N/A - Not sold as a service part
* - Not used on Models 880555 or 880556



LUBESENTRYBLOCKASSEMBLY

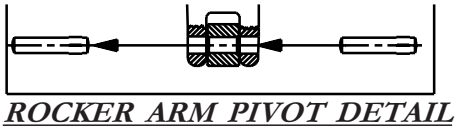


ROCKER ARM PIVOT DETAIL

(SERIES "A")

NOTE: WHEN REPLACING ROCKER ARM, THE EXISTING PIVOT IS TO BE PRESSED OUT AND DISCARDED. REPLACE WITH PIVOT PIN (ITEM #36) , AND SECURE WITH COTTER PIN, (ITEM #35).

Note: notched end of suction tube (item #25) is to be assembled into the strainer plug (item #27 or #29)



ROCKER ARM PIVOT DETAIL

(SERIES "B")

NOTE: WHEN REPLACING ROCKER ARM, THE EXISTING PIVOT IS TO BE PRESSED OUT AND DISCARDED. REPLACE WITH GROOVED PIN (ITEM # 38).

RETAIN THIS INFORMATION FOR FUTURE REFERENCE

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

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