



Service Guide

3942-B 3942-BB 3942-BC
 3942-C 3942-CB 3942-CC
 3943-B 3943-BB 3943-BC
 3943-C 3943-CB 3943-CC

Centralized Oil Lubricator

Description

CAUTION

These lubricators are to be used with mineral and synthetic oils. The use of alternate products may cause damage to components.

It is mandatory to ensure aerosol is delivered to the machine component prior to machine startup. Damage to component(s) can occur.

The lubricators in the 3942 and 3943 series are either basic models or plate mounted.

Basic Lubricator

The basic lubricator models require additional accessories prior to operation.

The lubricators in this series can contain either a 1.0 or a 2.3 cfm (28 or 65 l/m) nozzle assembly. Additional models are created by including a 120 V ac oil heater. See Figure 1.

Plate Mounted Lubricator

All of the basic models can be plate mounted. These models include a filter/regulator and can contain a 120 V ac solenoid valve. See Figure 1.

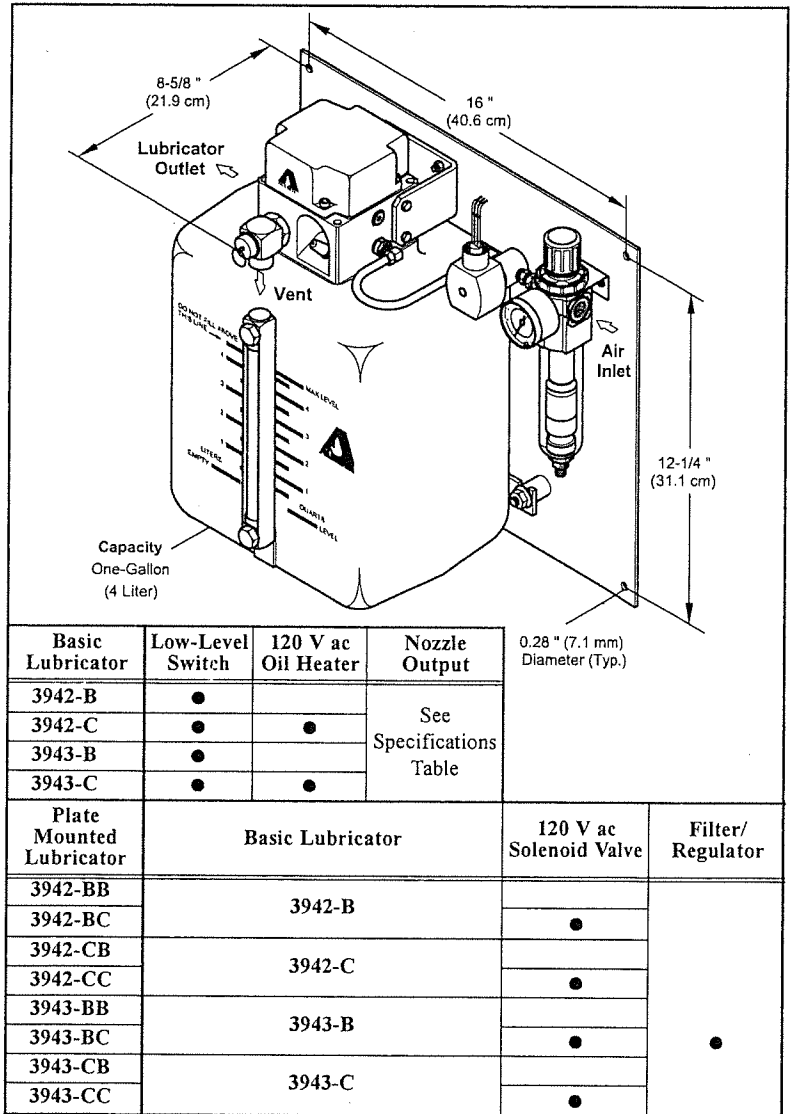


Figure 1 Lubricator Model 3942 and 3943 Series
 Plate Mounted Shown with Solenoid Valve

Specifications

Lubricator Model	Lubricator Assembly						Filter/Regulator				120 V ac Solenoid Valve	
	Outlet	Nozzle Output (Nominal)		Pressure Relief Valve		120 V ac Oil Heater	Filter Size	Air Inlet	Maximum Inlet Pressure		Conduit Connection	Amperage
		cfm	l/m	psi	Bar	Amperage			psi	Bars		
3942 Series	3/4 " NPT	1.0	28	10	0.7	0.9 A	5-Micron	1/4 " NPT	150	10.3	1/2 "	60 mA
3943 Series		2.3	65									

Table 1 Lubricator Model 3942 and 3943 Series Specifications

Alemite LLC
 167 Roweland Drive, Johnson City, Tennessee 37601
 www.alemite.com

Copyright © 2001 by Alemite LLC

This document contains confidential information that is the property of Alemite LLC

SER 3942-B

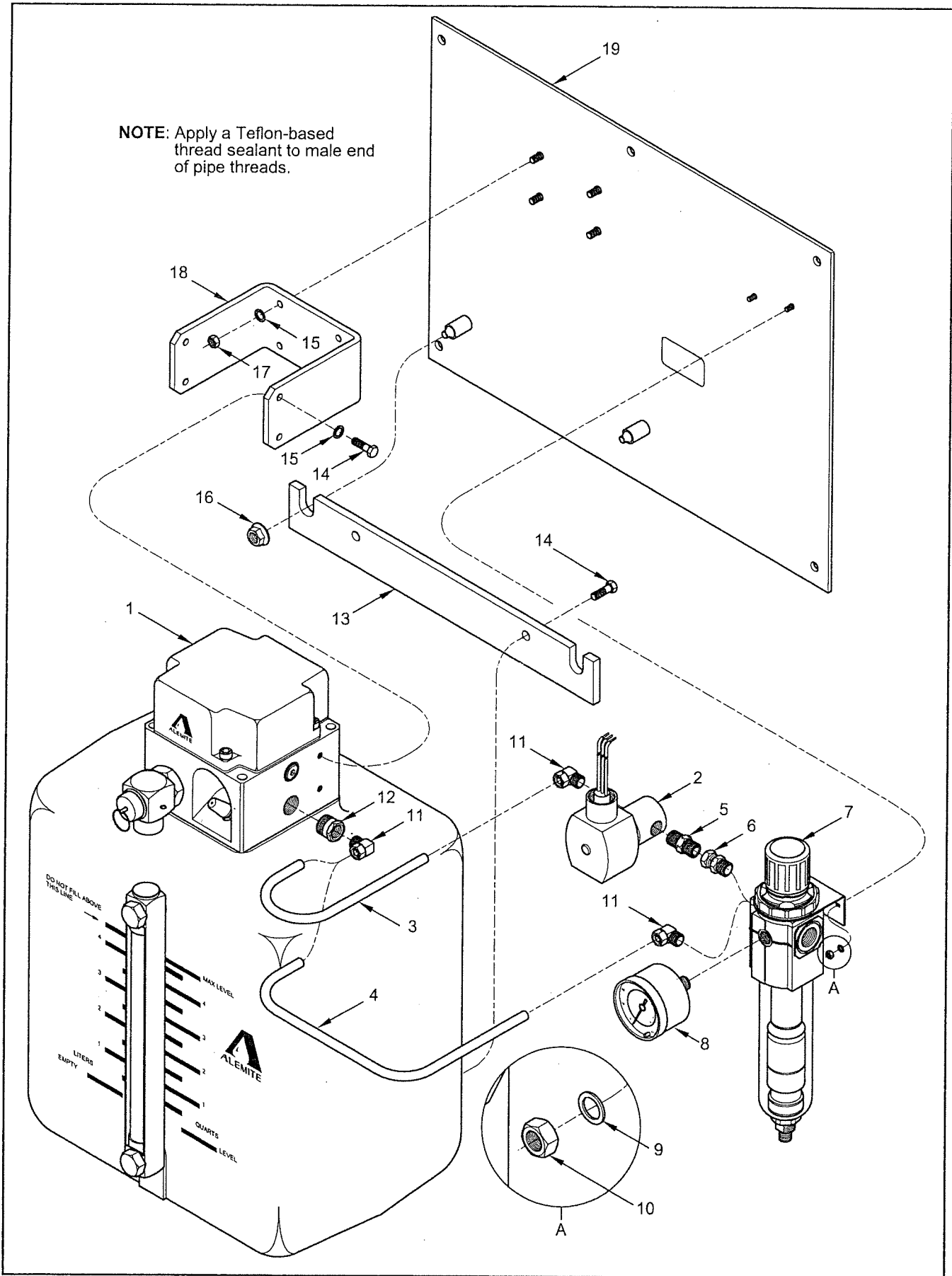


Figure 2 Lubricator Model 3942 and 3943 Series- Exploded View

Item No.	Part No.	Description	Qty	Plate-Mounted Model							Notes	Numeric Order Part # (Item #)
				3942-BB	3942-BC	3942-CB	3942-CC	3943-BB	3943-BC	3943-CB		
1	3942-B	Lubricator (w/ low-level switch & 1.0 cfm nozzle)	1	•								1000-44 (6)
	3942-C	Lubricator (w/ oil heater & 1.0 cfm nozzle)	1		•							3942-B (1)
	3943-B	Lubricator (w/ low-level switch & 2.3 cfm nozzle)	1					•				3942-C (1)
	3943-C	Lubricator (w/ oil heater & 2.3 cfm nozzle)	1							•		3943-B (1)
2	387449-1	Valve Assembly, Solenoid, 120 V ac	1									3943-C (1)
3		Tube, 1/4 " OD x .035 " Wall	1									12369 (15)
4		Tube, 1/4 " OD x .035 " Wall	1	•								40996 (12)
5	327033	Adapter, 1/4 " NPTF (m) x 1/4 " NPTF (m)	1									327033 (5)
6	1000-44	Adapter, Union, 1/4 " NPTF (m) x 1/4 " NPSM (f)	1	•								387335 (7)
7	387335	Filter/Regulator	1									387344 (18)
8	391421	Gauge, Pressure (0-60 psi) [0-11 kg/cc]	1									387350 (14)
9		Washer, Flat, No. 6	2									387351 (10)
10		Nut, 6 -32	2									387352 (9)
11		Elbow, Compression, 1/4 " NPT (m)	2									387354 (3)
12	40996	Bushing, 3/8 " NPTF (m) x 1/4 " NPTF (f)	1									387355 (11)
13		Bar, Mounting	1									387356 (17)
14		Screw, 1/4 " -20 x 1/2 "	6									387367 (19)
15		Washer, Lock, 1/4 "	8									387368 (13)
16		Nut, 5/16 " -18	2									387370 (16)
17		Nut, 1/4 " -20	4									387449-1 (2)
18	387344	Bracket, Lubricator Mounting	1									391421 (8)
19		Plate Assembly, Mounting	1									387648 (4)

All

Legend:

Part numbers left blank (or in *italics*) are not available separately

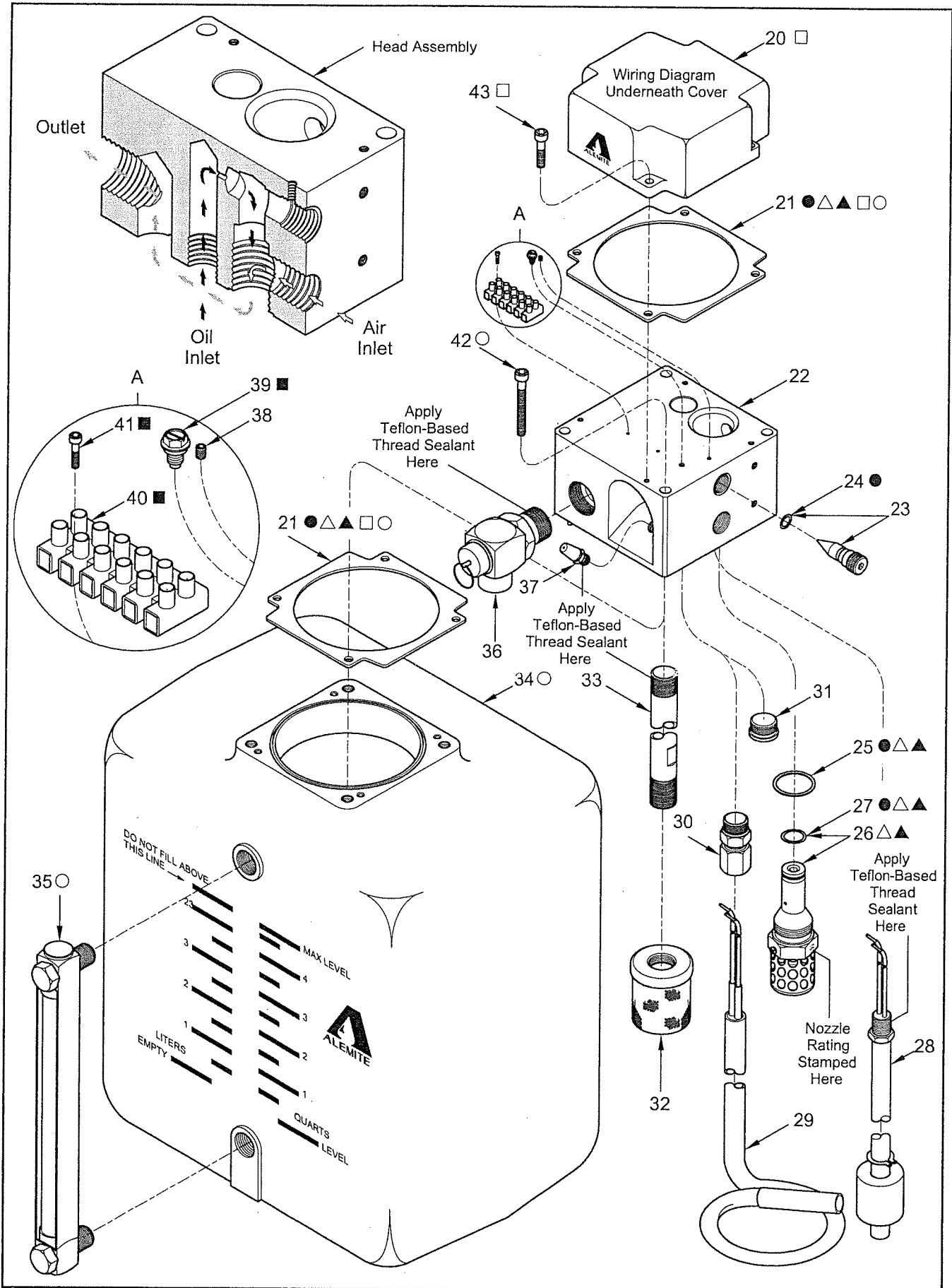


Figure 3 Lubricator Models 3942-B, 3942-C, 3943-B and 3943-C - Exploded View (w/ Section View of Head Assembly)

Item No.	Part No.	Description	Qty	Notes	Numeric Order Part # (Item #)
20		Cover (w/o wiring diagram)	1	□	131266 (25)
21		Gasket	2	● △ ▲ □ ○ Qty of 2 in ● Kit	171000-5 (24)
22		Head Assembly (w/ locating pins)	1		171018-12 (27)
23	387366	Screw Assembly, Oil Adjustment	1		383831-4 (26)
24	171000-5	O-Ring, 1/4 " ID x 3/8 " OD	1	●	387291 (22)
25	131266	Gasket	1	● △ ▲	387292 (34)
26		Nozzle Assembly, 1.0 cfm (28 l/m)	1	△	Model 3942-B, 3942-C 387294 (20)
		Nozzle Assembly, 2.3 cfm (65 l/m)	1	▲	Model 3943-B, 3943-C 387295 (32)
27	171018-12	O-Ring, 3/8 " ID x 1/2 " OD	1	● △ ▲	387297 (28)
28	387297	Switch Assembly, Low-Level, 120 V ac	1		387299 (21)
29	387323	Heater Assembly, Oil, 120 V ac	1		Model 3942-C, 3943-C 387304 (33)
30	387333	Connector, 3/4 " -16	1		387306 (38)
31	387340	Plug, 3/4 " -16	1		Model 3942-B, 3943-B 387309-7 (35)
32	387295	Screen, Inlet	1		387312 (40)
33		Tube Assembly, Oil Pickup	1		387313 (41)
34		Reservoir Assembly (1-gallon) [4 liter]	1	○	387323 (29)
35	387309-7	Gauge Assembly, Level	1	○	387333 (30)
36	387345	Valve Assembly, Safety Relief	1		387340 (31)
37	387342	Valve Assembly, Loader	1		387341 (43)
38		Setscrew, 5 -40 x 1/4 "	1		387342 (37)
39		Screw, Ground, 10 -32 (Green)	1	■	387345 (36)
40		Strip, Terminal	1	■	387346 (39)
41		Screw, 3 -48 x 7/16 "	2	■	387348 (42)
42		Screw, 1/4 " -20 x 2-1/4 "	4	○	387360-1 (26)
43		Screw, 10 -32 x 5/8 "	4	□	387366 (23)

Legend:

Part numbers left blank (or in *italics*) are not available separately

● △ ▲ □ ■ ○ designates a repair kit item

Repair Kits

Part No.	Kit Symbol	Description	Part No.	Kit Symbol	Description
393685	●	Kit, Seal	393688	□	Kit, Cover
393686	△	Kit, Nozzle (for 1.0 cfm nozzles)	393689	■	Kit, Terminal Strip
393687	▲	Kit, Nozzle (for 2.3 cfm nozzles)	393690	○	Kit, Reservoir

Basic Lubricator

The basic lubricator is comprised of the following components:

- head assembly
- oil adjustment screw
- loader fitting (for filling)
- pressure relief valve
- nozzle and baffle assembly
- oil inlet screen and pickup tube
- one-gallon (4 liter) reservoir
- low-level switch
- oil heater (optional)

Wiring and Installation

A wiring diagram mounts on the underneath side of Cover (20) for systems that include the low-level switch and/or the oil heater. See Figure 3.

Refer to Service Guide SER COLS for details on the installation of these lubricators.

Operation

These lubricators mix oil with compressed air to create a fine aerosol.

The amount of aerosol dispensed is dependent on the following. The:

- size of the nozzle
- setting of the adjustment screw
- air pressure setting

120 V ac Solenoid Valve

The 120 V ac solenoid valve on the plate mounted lubricator functions as an automatic on/off switch.

Refer to Service Guide SER COLS for further details on lubricator operation.

Overhaul

NOTE: Lubricate O-Rings 24 and 27 with clean oil prior to installation. See Figure 3.

Troubleshooting Chart

Indications	Possible Problems
High Manifold pressure	<ol style="list-style-type: none"> 1. Oil trap in delivery line/s 2. Clogged Reclassifier/s 3. Oversized Mist Generating Head (Mist Generating Head much larger in CFM total output than requirements. 4. Defective Manifold Pressure Switch
Low Manifold pressure	<ol style="list-style-type: none"> 1. Oil Mist line/s loose or broken 2. Missing Reclassifier/s 3. No Reclassifiers Present 4. Undersized Mist Generating Head 5. Defective Manifold Pressure Switch
Low oil consumption	<ol style="list-style-type: none"> 1. Mist Generating Head Clogged 2. Mist Generating Nozzle Clogged 3. Improper Oil being used 4. Oil Adjustment Screw Closed 5. Excessive Manifold pressure (Above 50" Water Column) 6. Over filling of Oil Mist Reservoir

Changes Since Last Printing

Troubleshooting Chart