$3.50

PARTS MANUAL

L-1094 LIQUID FERTILIZER METERING PUMP

LU-1094 FUMIGANT METERING PUMP

JOHN BLUE CO. • 2800 Bob Wallace Ave. • Huntsville, AL 35805

PRINTED IN U.S.A.

SAFETY PRECAUTIONS

- EQUIPMENT SHOULD BE OPERATED ONLY BY RESPONSIBLE PEOPLE!
- A CAREFUL OPERATOR IS THE BEST INSURANCE AGAINST AN ACCIDENT!
- CHECK ALL VALVES, FITTINGS, HOSE CLAMPS, PLUGS, CAPS, ETC., FOR TIGHTNESS AND SOUNDNESS BEFORE ADMITTING FLUID INTO SYSTEM! ALSO CHECK AGAIN AT REGULAR INTERVALS! REPLACE HOSES WHEN WORN, CRACKED, OR LEAKING!
- BEFORE REPAIRING OR DISASSEMBLING THIS PUMP, FLUSH IT OUT THOROUGHLY WITH WARM, SOAPY WATER TO AVOID CONTACT WITH CHEMICALS THAT MAY BE INJURIOUS TO YOUR HEALTH!

—IMPORTANT—

IN THE SELECTION OF EQUIPMENT, THE USER SHOULD KEEP THE FOLLOWING IMPORTANT POINTS IN MIND:

(a) Ammonia Phosphate (neutral) Solutions and complete mixed fertilizers are CORROSIVE to aluminum. Carbon steel, lined steel, or 304 series stainless are therefore recommended.
(b) For Nitrogen Solutions, use ALUMINUM or STAINLESS STEEL for best results.
(c) DO NOT use 304 stainless for phosphoric acid. Type 316 is recommended.
(d) Proper Maintenance is absolutely essential — REGARDLESS of tank material. (1) DO rinse the tank with water when changing from one solution to another. (2) DO rinse the tank thoroughly with water after each season or before any shutdown lasting over one week. (3) DO NOT allow sludge to accumulate in the bottom of the tank.

BE CAREFUL! REMEMBER: SAFETY IS NO ACCIDENT

National Safety Council

TO THE OWNER

This manual has been prepared and illustrated to assist you in the care and operation of your John Blue pump.

Study the manual carefully to familiarize yourself with all the parts and adjustments before attempting to operate or service your pump.

Enter your pump serial number and date of purchase in the space provided below for future reference in service information or for ordering parts.

Because our Engineering Department is constantly improving products, we reserve the right to make design and specification changes without notice.

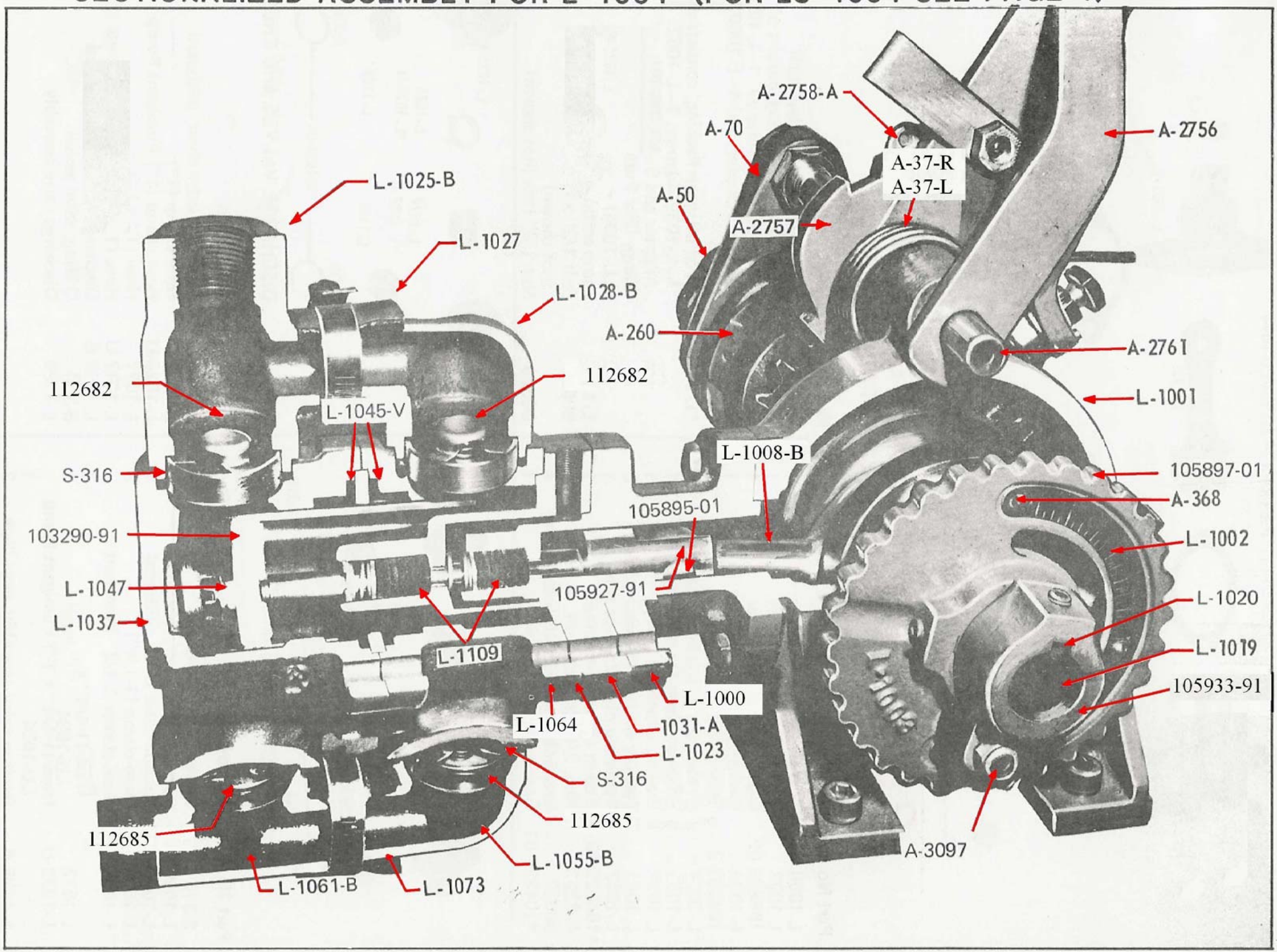
BLUE.

JOHN BLUE COMPANY
2800 Bob Wallace Ave. • Huntsville, AL 35805
Phone: 205/536-5581

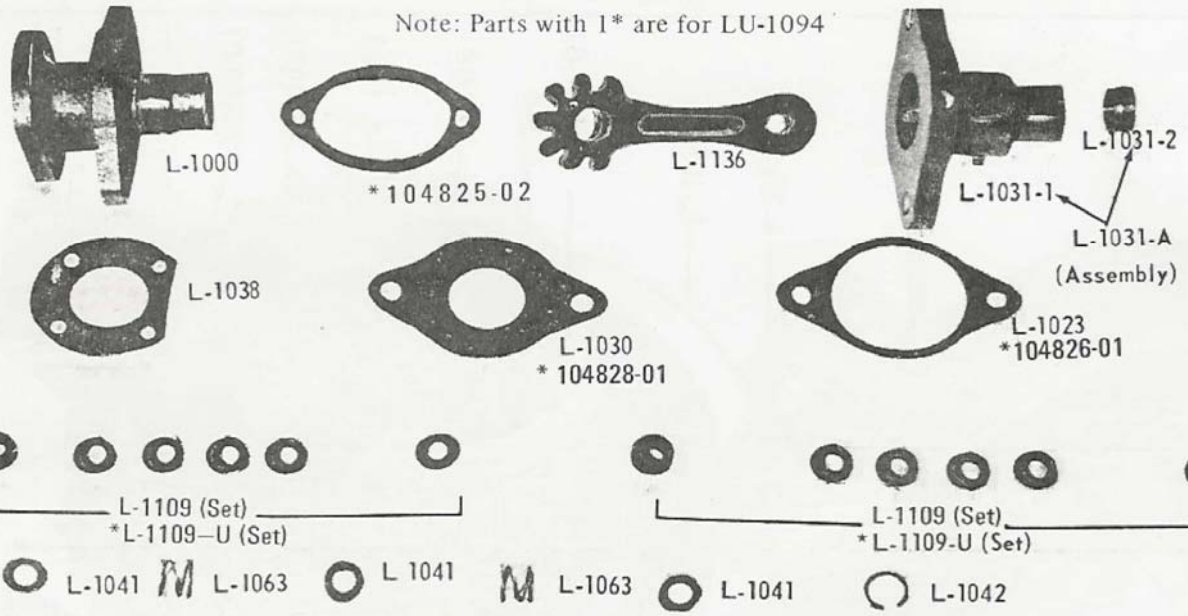
SERIAL NO.:

DATE OF PURCHASE:

SECTIONALIZED ASSEMBLY FOR L-1094 (FOR LU-1094 SEE PAGE 4)

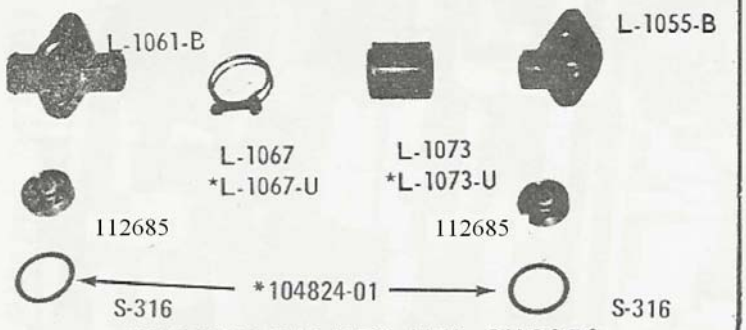


Note: Parts with 1* are for LU-1094



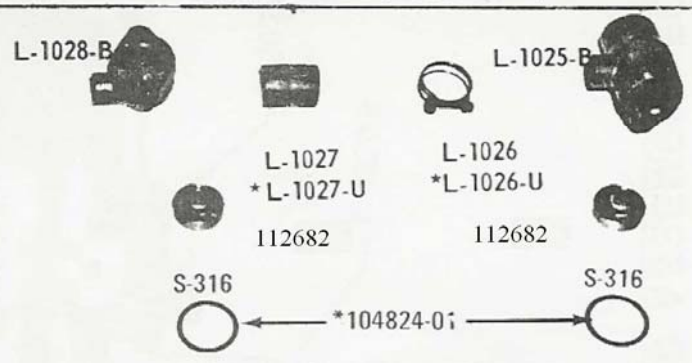
STUFFING BOX AND ROD PACKING PARTS

Part No.	Description	No. Req'd.
L-1000	Crosshead Guide	1
L-1023	Gasket, inboard cylinder	1
104826-02	Gasket, inboard cylinder	1
L-1030	Gasket, stuffing box	1
104828-02	Gasket, stuffing box	1
L-1031-1	Outboard stuffing box, less insert	1
L-1031-2	Stainless insert for stuffing box	1
L-1038	Gasket, crosshead guide	1
L-1041	Packing washer, stainless steel	3
L-1042	Retaining ring, stainless steel	1
*104825-02	Gasket (Fumigant Pump)	1
A-3223	Plug, 3/4" (not shown)	1
90637	Bolt-5/16" x 1 HHMB (not shown)	4
*104827-01	Gasket, crosshead guide	1
L-1063	Spring, packing stainless steel	2
L-1109	Set of Chevron packing, consist of 1—L-1039 Top Adapter, 1—L-1062 Bottom Adapter, and 4—L-1060 "V" Rings	2
*L-1109-U	Set of Chevron Packing, consists of 1—L-1039 Adapter, 1—L-1062 Adapter and 5—106111-01 "V" Rings (For Fumigant Pump LU-1094)	2
L-1136	Pump setting wrench	1
90695	Bolt-1/2" x 2-1/4" HHMB (not shown)	2
92029	Nut-1/2" Hex (not shown)	2



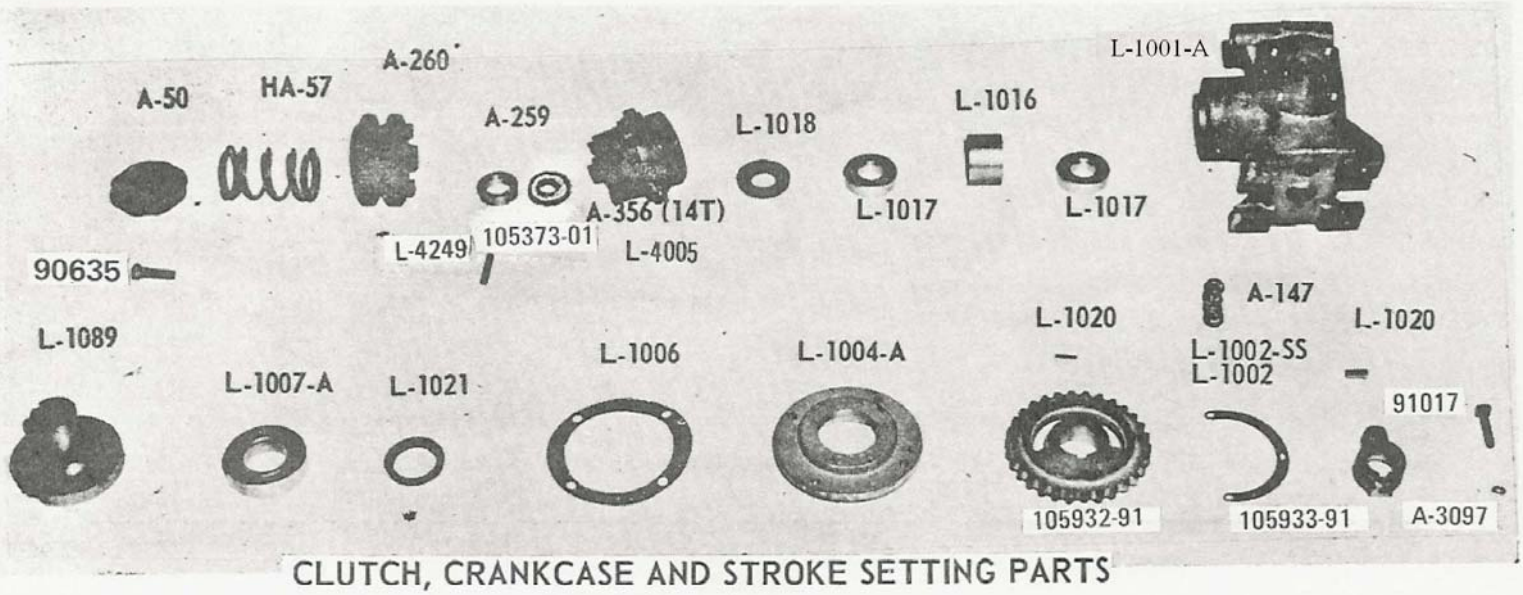
SUCTION VALVES AND CHESTS

Part No.	Description	No. Req'd.
S-316	O'Ring, valve gasket	2
L-1055-B	Suction valve chest, inboard	1
L-1061-B	Suction valve chest, outboard	1
L-1067	Hose clamp (1-1/4")	2
L-1067-U	Hose clamp, 1-1/2" Fumigant Pump	2
L-1073	Hose (1-1/4" x 1" long)	1
L-1073-U	Hose (1-1/4" x 1") Fumigant Pump LU-1094	1
L-1135-A	Suction valve assembly, cage type	2
104824-01	O'Ring (Viton)(Fumigant Pump)	4
90651	Bolt-3/8" x 1 HHMB (not shown)	8



DISCHARGE VALVES AND CHESTS

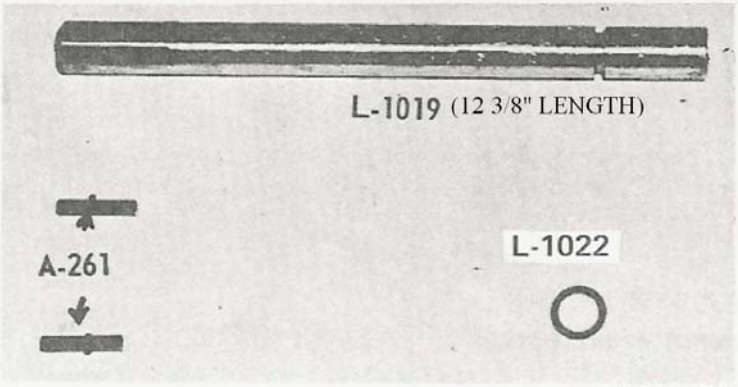
Part No.	Description	No. Req'd.
L-1025-B	Discharge valve chest, outboard	1
L-1026	Hose clamp (1")	2
L-1026-U	Hose clamp (1") Fumigant Pump	2
L-1027	Hose (1" x 1")	1
L-1027-U	Hose (1" x 1") Fumigant Pump	1
L-1028-B	Discharge valve chest, inboard	1
S-316	O'Ring, valve gasket	2
L-1129	Discharge valve assembly	2

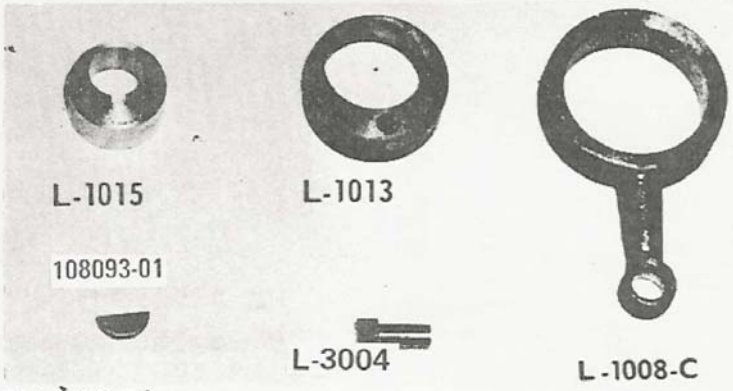


CLUTCH, CRANKCASE AND STROKE SETTING PARTS

Part No.	Description	No. Req'd.
A-50	Hand wheel	1
A-147	Leg mounting pads	4
L-4249	Pin, clutch collar	1
90653	Cap screw, 3/8" x 1-1/4"	1
105373-01	Clutch collar	1
A-260	Clutch	1
A-356-(14T)	Sprocket, 14 tooth, roller chain	1
HA-57	Clutch spring	1
L-1001	Crankcase	1
L-1002	Pump setting scale	1
L-1002-SS	Pump setting scale (optional)	1
105932-91	Stroke setting flange	1
C-431-B	Pipe plug (not shown)	2
A-3557	Drive screw (not shown)	2
111964-01	Name plate (not shown)	1
H-28	Grease fitting (not shown)	3
110155-01	Thrust washer (not shown)	1

Part No.	Description	No. Req'd.
L-1004-A	Cover plate	1
L-1006	Gasket, cover-plate	1
L-1007-A	Bearing, locating sleeve, precision type	1
105933-91	Stroke setting arm	1
91017	Bolt, dial	1
A-3097	Nut, self-locking	1
L-1016	Bearing spacer	1
L-1017	Ball bearing, crankshaft	2
L-1018	Oil seal, crankshaft	1
L-1020	Key, stroke setting arm	2
L-1021	Oil seal, cover plate	1
L-1089	Stroke locating sleeve	1
L-4004	Sprocket-16T (not shown) new type	1
L-4005	Sprocket-18T (not shown) new type	1
A-368	Pump setting scale screw, 5-40 x 1/8" long (not shown)	3
90636	Bolt, 5/16" x 3/4" HHMB (not shown)	4





CRANKSHAFT PARTS

Part No.	Description	No. Req'd.
A-261	Clutch key	2
108093-01	Woodruff Key	1
L-1008-C	Connecting rod w/bushing	1
L-1013	Large eccentric	1
L-3004	Eccentric pin	1

Part No.	Description	No. Req'd.
L-1015	Small eccentric	1
L-1019	Crankshaft	1
L-1022	O'Ring seal, crankshaft	1
H-30	Grease fitting (not shown)	2

L-1064

L-1098

L-1045-V

L-1044

L-1045-V

L-1037

105895-01

105926-91

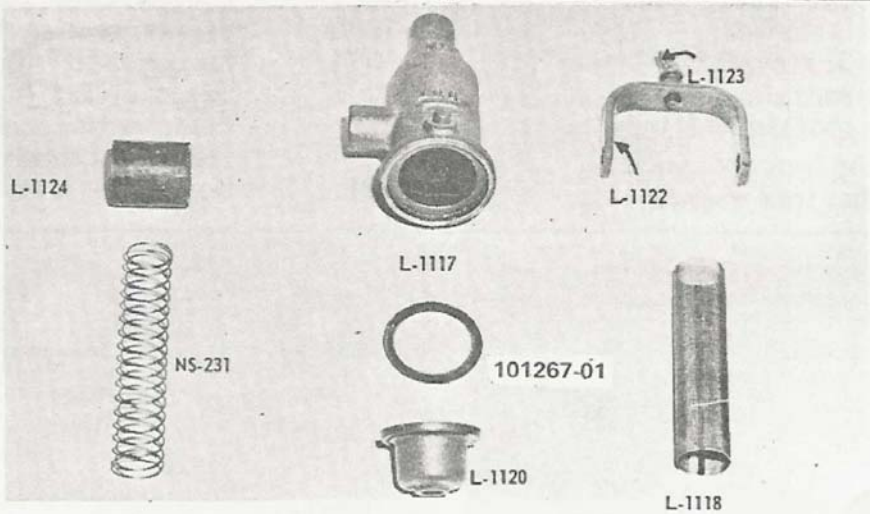
103290-91

L-1047

CYLINDER, CROSSHEAD, AND PLUNGER PARTS

Part No.	Description	No. Req'd.
L-1037	Outboard cylinder	1
L-1044	Flange packing washer	1
L-1045-V	Plunger packing	2
L-1047	Self-locking nut, stainless steel	1
103290-91	Piston plunger, assembly	1

Part No.	Description	No. Req'd.
105926-91	Piston rod assembly	1
105895-01	Crosshead wrist pin	1
L-1098	Gasket, packing adjustment	0-2
L-1064	Inboard cylinder	1
90689	Bolt, 1/2'' x 1-1/2'' HHMB (not shown)	2
92029	Nut, 1/2'' Hex (not shown)	2



L-1116 AND L-1116-A STRAINERS

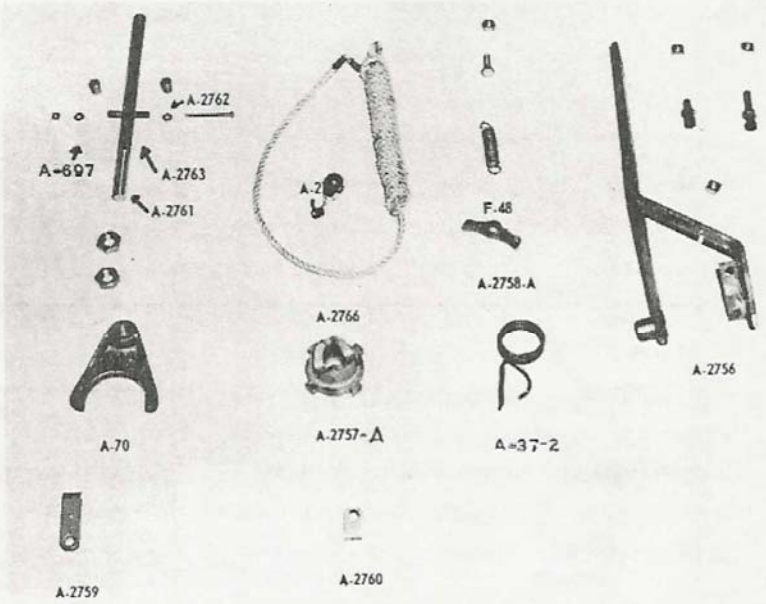
(Assemblies are alike except where noted)

Part No.	Description	No. Req'd.
L-1117	Body	1
L-1117-A	Body (aluminum)	1
L-1118	S.S. screen - 30 mesh	1
L-1118-12	S.S. screen - 12 mesh (optional)	1
101267-01	Gasket	1
L-1120	Cap	1
L-1120-A	Cap (aluminum)	1

Part No.	Description	No. Req'd.
L-1122	Yoke	1
L-1123	S.S. wing bolt	1
L-1124	Hose coupling - 1-1/4''	1
NS-231	Spring, stainless	1
T-2435	Hose clamp (not shown)	2
90636	Bolt, 5/16'' x 3/4'' HHMB	1
93023	Washer, 5/16'' lock	1

ROPE THROW-OUT – Clutch Control – PARTS

Part No.	Description	No. Req'd.
A-37-R	Torsion spring, right hand	1
A-70	Shifter yoke	1
A-2756	Throw-out lever	1
A-2757-A	Throw-out cam	1
A-2758-A	Pawl (cast iron)	1
A-2759	Spring clip (lower)	1
A-2760	Spring clip (upper)	1
A-2761	Shifter rod	1
A-2762	Cam roller	2
A-2763	Roll pin	1
A-2765	Rope pulley (1/4")	1
A-2766	Throw-out rope	1
F-48	Spring (tension)	1
A-697	Washer 3/16	2
*90653	Bolt, 3/8" x 1-1/4" HHMB	2
*92024	Nut, 3/8" Hex	3
*90657	Bolt, 3/8" x 2" HHMB	
*90953	Screw, No. 10-24 x 2-1/4"	1
*92014	Nut, No. 10-24 sq.	1
92037	Nut, 5/8" Hex jam	2
*90655	Bolt, 3/8" x 1-1/2" HHMB	4
*93011	Washer, 3/8" flat	4
*93024	Washer, 3/8" lock	4
*92081	Nut, 3/8" sq.	4
*105913-91	Chart assembly-pump setting	1
*94013	3/16 x 1 Cotter pin (not shown)	1
*H-28	Grease fitting (not shown)	1



L-1095-B GASKET AND PACKINGS REPAIR KIT – Models L-1094 and L-1094-P

1 - L-1006	Gasket, cover plate	1 - L-1038	Gasket, crosshead guide
1 - L-1018	Crankshaft oil seal	4 - L-1098	Flange packing gaskets
1 - L-1021	Oil seal, cover plate	2 - L-1109	Packing set
1 - L-1022	Crankshaft O'Ring seal	2 - L-1045-V	Plunger packing
1 - L-1023	Gasket, inboard cylinder	1 - L-1065	Plain bearing
1 - L-1030	Gasket, stuffing box	1 - 110155-01	Thrust washer
4 - S-316	O'Ring valve gaskets		

L-1095-U GASKET REPAIR KIT FOR MODEL LU-1094 FUMIGANT PUMP

1 - L-1006	Gasket, Cover Plate	1 - L-1038	Gasket, Crosshead Guide
1 - L-1018	Crankshaft Oil Seal	4 - L-1098	Flange Packing Gaskets
1 - L-1021	Oil Seal, cover plate	1 - 104825-02	Gasket, Cylinder Flange (not shown)
1 - L-1022	Crankshaft "O" Ring Seal	2 - L-1109-U	Packing set
1 - 104826-02	Gasket, Inboard Cylinder	2 - L-1045-V	Plunger Packing
1 - 104828-02	Gasket, Stuffing Box	1 - L-1065	Plain Bearing
4 - 104824-01	"O" Ring Gaskets	1 - 110155-01	Thrust washer

LIMITED WARRANTY

THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES AND REPRESENTATIONS. ANY IMPLIED WARRANTIES INCLUDING MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE ARE EXPRESSLY LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. BLUE SHALL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES.

Each new machine or component (hereinafter called the "equipment") manufactured by Blue is warrantied by Blue to buyer and to any party or parties to whom buyer may resell, lease or lend the equipment to be free from defects in material and workmanship under normal use and service. The obligation of Blue under this warranty is limited to the repair or replacement of defective parts or correction of improper workmanship of any parts of such equipment which shall within ninety days from the date of Blue's original delivery thereof, be returned to Blue's factory, transportation charges prepaid, and which Blue shall determine to its satisfaction upon examination thereof to have been thus defective. When it is impractical to return the defective parts of such equipment to Blue's factory, then Blue shall have no liability for the labor cost involved in repairing or replacing any such parts and shall be liable solely for supplying the material necessary to replace or repair the defective parts, provided that prior thereto Blue shall have determined to its satisfaction that any such parts are thus defective.

This warranty shall not apply to any equipment which shall have been repaired or altered outside Blue's factory in any way so as to affect its durability, nor which has been subjected to misuse, abuse, negligence or accident or operated in any manner other than in accordance with operating instructions provided by Blue. This warranty does not extend to repairs made necessary by the use of inferior or unsuitable parts or accessories, or parts or accessories not recommended by Blue.

Blue makes no warranties in respect to parts, accessories, or components not manufactured by Blue, same ordinarily being warrantied separately by their respective manufacturers.

JOHN BLUE COMPANY

DIVISION OF BURNLEY CORPORATION
HUNTSVILLE, ALABAMA