

Includes modelsK4-01
K4-02
K4-07

K4/KR SUPERLUBE™



INSTRUCTION MANUAL

Introduction

The Macnaught K4/KR Super-Lube is a portable high pressure manual greasing system, supplied with spring loaded pump, lid, rubber edged follower plate, 3 metres of special Macnaught grease hose and a KR Pressurite (High pressure / High Volume) grease gun.

Important Information

PLEASE READ THIS SAFETY INFORMATION CAREFULLY BEFORE USE.

Read and retain this instruction manual to assist you in the operation and maintenance of this product.

'CAUTIONS' are listed throughout this manual to advise of actions which may cause damage to your equipment.

NOTE: Your Super-Lube is designed for use with greases up to NLGI No2.

Assembly Procedure

- 1) Insert follower into the grease pail with the follower boss facing upwards. Push down firmly until grease emerges through the boss.
- 2) Assemble the bung adaptor to the lid using the socket head bolts and nyloc nuts.
- 3) Push the pump tube through the bung adaptor and follower boss then sit the lid on the rim of the container. Hand tighten the 3 thumb screws evenly under container rim.
- 4) To prime, push the handle down several times to start grease flowing through the grease hose. When the hose is full of grease, the handle will stay down.
- 5) Squeeze and hold the gun handle to bleed air out of the system. When fully bled, container grease will emerge from the gun coupler.

Note: It may be necessary to repeat step 4.

If the unit fails to prime, bump the container base several times on a solid surface in order for air bubbles to leave the grease.



Operating Procedure

When greasing, the handle will rise slowly. When the handle is fully up and the gun loses pressure, push the handle down once or twice to re-prime the pump and continue greasing.

Each pump prime will provide sufficient grease for up to 60 shots of grease.

The KR Pressurite gun is normally operated on HI-VOLUME. Should high pressure be required push the switch on the gun to HI-PRESSURE.

Note: Once bled of air, the Super-Lube does not usually require bleeding. To settle the grease and remove air bubbles bump container base several times on a solid surface.

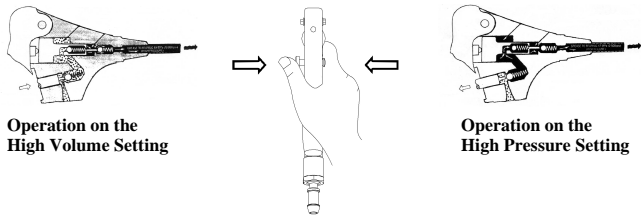
Maintenance Procedures



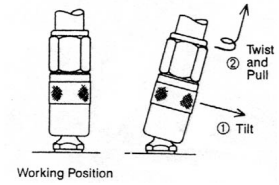
CAUTION

Springs inside tubes (4 & 7) are compressed. When removing the tubes to service seals or replace the springs, remove the handle (1) and hold tube (7) firmly against the spring pressure while removing the nut (3). Gently release the spring pressure against the tube (7).

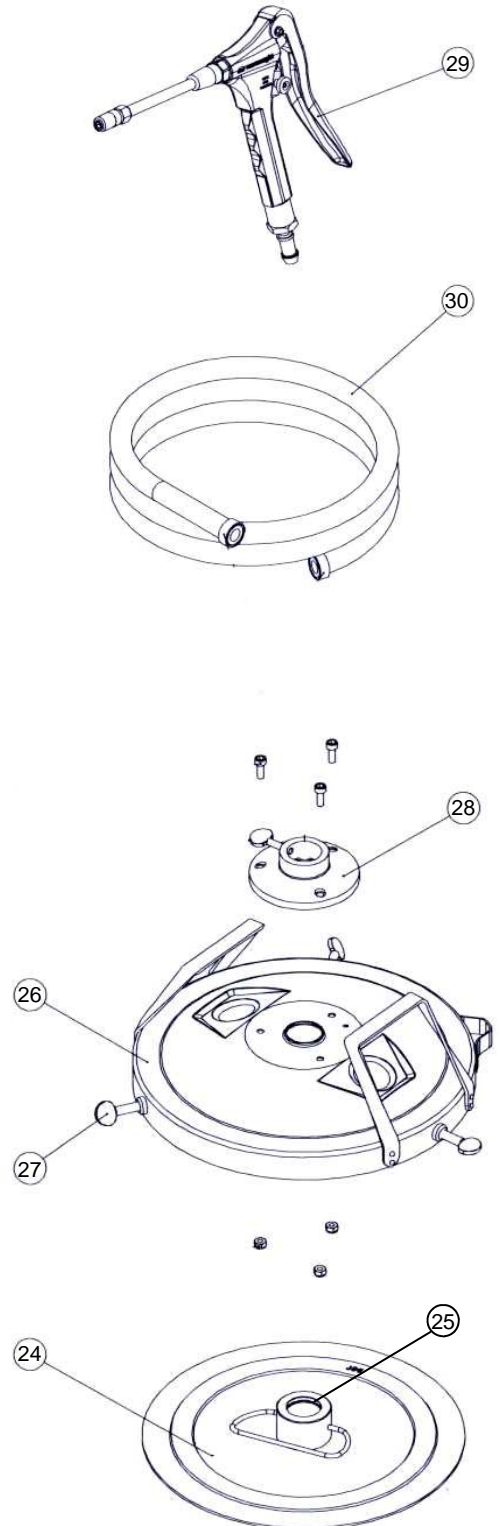
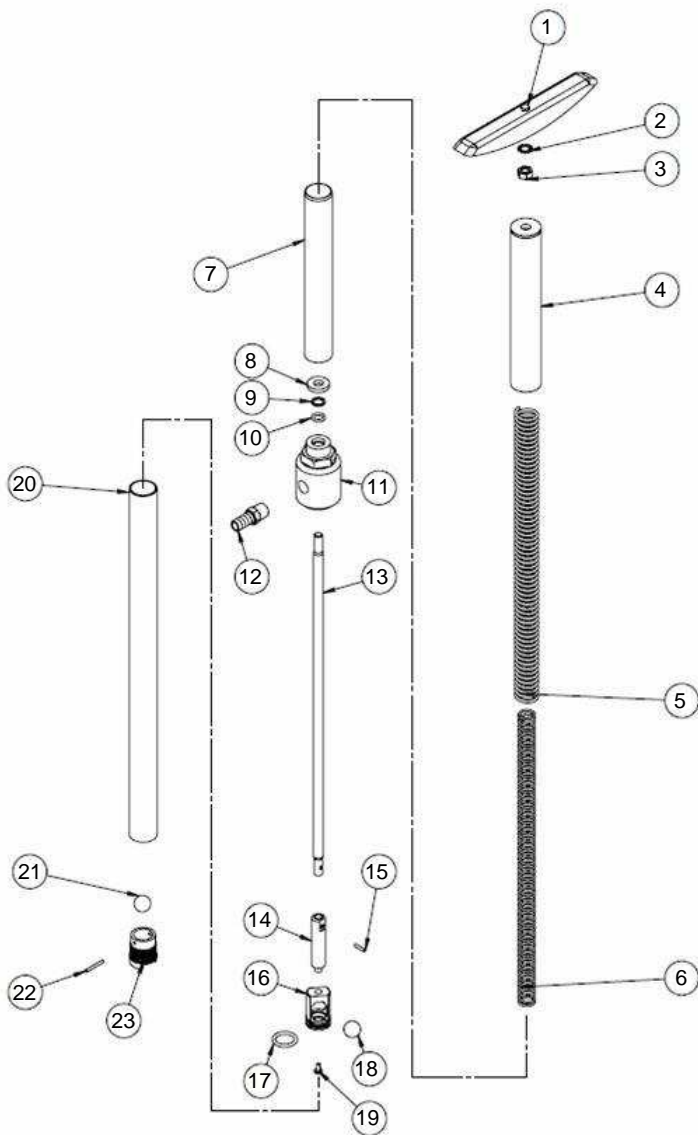
Product Features



Removing a KY Coupler from a Grease Nipple



K4 Pump Unit Parts Diagram



K4 Pump Parts Listing

ITEM	No. off	Order for replacement	KIT. REF	Description
		K4-1K	(A)	Overhaul kit
1	1	KA90s		Handle
2	1			Shakeproof Washer
3	1			3/8" NUT
4	1			Upper Spring Cover
5	1			Outer Spring
6	1			Inner Spring
7	1			Lower Spring Cover
8	1		A	Washer
9	1		A	Back up Washer
10	1		A	O'ring (BS111)
11	1	N/A - New pump required		Pump Body
12	1	N/A		Hose Tail 5/8" x 3/8" BSP
13	1			Upper Piston Rod
14	1			Lower Piston Rod
15	1		A	Roll Pin
16	1			Piston
17	1		A	O'ring (BS212)
18	1		A	Ball - 3/4"
19	1		A	Screw
20	1	n/a		Suction Tube
21	1	AG54s	A	Ball - 3/4"
22	1		A	Pin
23	1		A	Footvalve
24	1	* Refer model specific part		Follow er Assembly
25	1		A	O'Ring (BS218) - Follow er
26	1	* refer model specific part		Lid assembly
27	3		A	Thumb Screw Set
28	1	J27s		Lid adaptor set (incl screw /nut set)
29	1	KR		KR Gun
30	1	KH45s		Hose Assembly

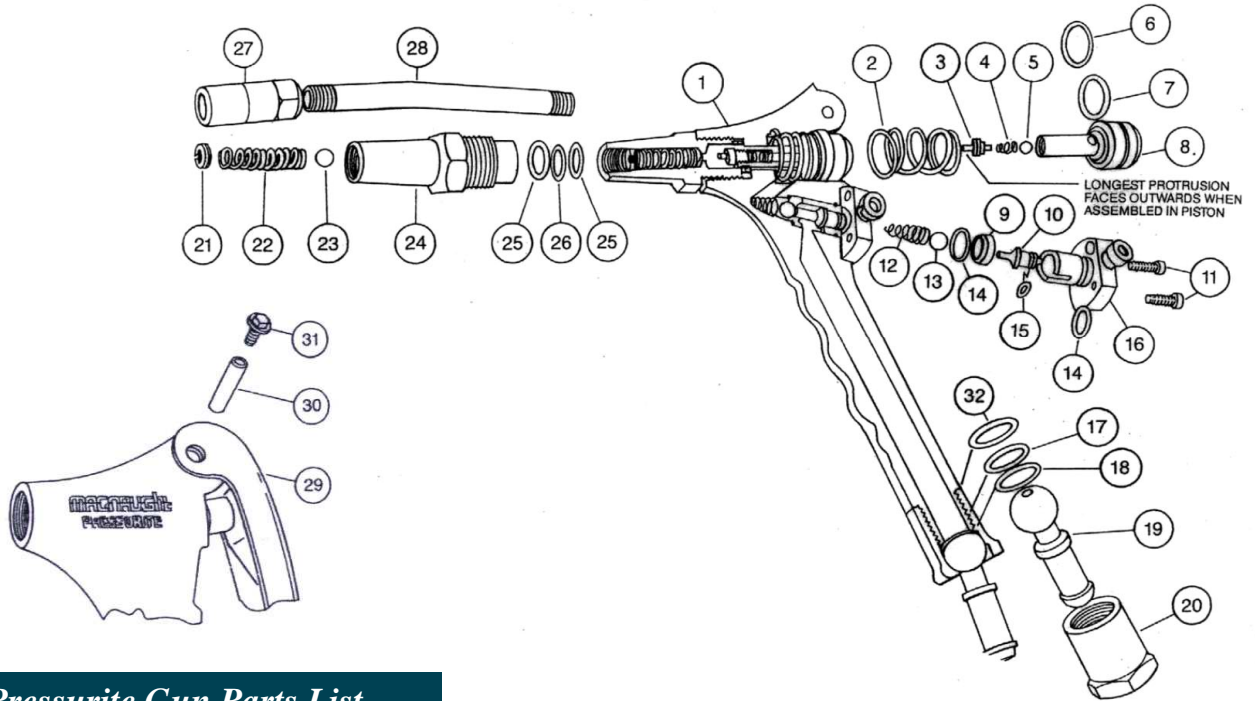
Lid Assemblies *

PK85GENs - K4-01 / K4-04
 PK92s - K4-02
 PK98s - K4-07

Follower Assemblies *

J11s - K4-01 / K4-04
 J77s - K4-02
 J78s - K4-07

KR Pressurite Gun Parts Diagram



KR Pressurite Gun Parts List

		Order for replacement		
Item	No. off	New part/set	KIT. REF	DESCRIPTION
		KR-1K (Kit A)	(A)	OVERHAUL KIT
		KR-2K (Kit B)	(B)	PISTON KIT
1	1	N/A - new gun required		Gun Body
2	1		A & B	Piston spring
3	1		A & B	Valve Stem (Piston)
4	1		A & B	Spring, Piston Check
5	1		A & B	7/32" Ball, Piston
6	1		A & B	Glyde Ring
7	1		A & B	Glyd Ring O'ring (BS111)
8	1		A & B	Piston
9	1	KR12s	A	Valve Seat
10	1			Operating Plunger Control
11	2			Cap Socket 1/2"X3/16" w hit
12	1		A	Spring, (inlet check)
13	1		A	5/16" Ball Inlet
14	2		A	O' ring, Seal Body (BS013)
15	1		A	O' ring, Plunger Control (BS008)
16	1			Control Body Assy
17	1		A	Washer, Hose Adaptor
18	1		A	O' ring, Hose Adaptor (BS113)
19	1			Ball End, Hose Adaptor
20	1			Ball. Socket Retainer
21	1			A Keeper Screw (outlet)
22	1			A Spring (Outlet)
23	1			A 1/4" Ball (outlet)
24	1			Outlet Body
25	2		A Teflon Back Up Washer	
26	1		A O'ring, Piston (BS012)	
27	1	KY		Coupler
28	1	KH23s		Extension Tube
29	1	N/A - new gun required		Handle
30	1		A & B	Handle pin
31	2		A & B	Drive Screw
32	1		A	Retainer O'ring (BS017)

Troubleshooting Guide—K4 Pump Unit

<i>Problem</i>	<i>Cause</i>	<i>Remedy</i>
The handle rises slowly when not in use.	Dirt trapped between inlet ball (18) and piston (16).	a) Unscrew the Pump Body (11) from the Suction Tube (20) and withdraw the assembly. Clean the ball (18) and piston (16) then reassemble.
	The piston O-Ring (17) is worn.	Replace the piston O-Ring (17).
The handle springs up and the unit will not pump grease.	Air lock: 1) Dent in the container. 2) Damaged follower O-Ring.	1) Remove dent or tilt the follower under the dent. 2) Replace the O-Ring in the follower.
	Grease container empty.	Change container or refill the old container.
	The foot valve assembly (21, 23 & 22) is faulty.	Unscrew the old foot-valve assembly (21, 23 & 22) and replace.
The handle stays down, but the unit will not pump grease.	The grade of grease is too heavy	Use up to NLGI No 2 grease.
Grease leaks out from between the lower spring cover (7) and the pump body (11)	Pump Body O-Ring (10) is Damaged.	Use a 15mm spanner to hold the nut (3) underneath the pump handle (1) and untighten the pump handle (1). Remove the shake-proof washer (2) and hold down the upper spring cover (4) against the spring tension and undo the nut (3). Slowly and carefully release the spring tension of the upper spring cover (4). Once complete, remove the one or two springs (5 & 6) and the lower spring cover (7). Remove the steel washer (8) and replace the back-up washer (9) and O-Ring (10). Reassemble the pump in the same way as above but in the reverse order.
Grease leaks from the bottom of the pump body (11)	Thread sealant damaged	Unscrew the suction tube (20) from the pump body (11), clean the threads of both the pump body and suction tube, apply thread sealant to the suction tube and re-assemble the pump.

Troubleshooting Guide—KR Pressurite Gun

<i>Problem</i>	<i>Cause</i>	<i>Remedy</i>
Coupler leaks.	a) Dirt under the outlet ball (23) seat Note: There is nothing wrong with the coupler itself.	a) Remove the extension tube (28), spring keeper screw (21), spring (22) and ball (23). Clean the seat and replace the ball, spring and spring keeper screw (part way). Prime the pump and screw in the spring keeper screw until the grease stops leaking. Then screw in an extra 2 full turns. Reassemble extension tube (28). Note: If the coupler still leaks, replace the complete outlet body assembly. When refitting the outlet body (24) hold the handle (29) in the closed position. Enable the back-up washer and o'ring to enter squarely onto the piston.
	b) The valve stem (3) is holding the outlet ball (23) off its seat.	b) Replace the piston assembly.
Gun leaks at the back end of the piston.	Glyd ring worn	Replace the piston assembly.
Gun fails to deliver grease on the high pressure setting.	a) Faulty piston.	a) Replace the piston assembly.
	b) Seals (25, 26) are worn.	b) Replace seals (25, 26) in the outlet body.
	c) Valve stem (3) has become loose from the piston (8).	c) Replace piston assembly.
Gun fails to deliver grease on the high volume setting.	a) Dirt on the inlet valve seat (9)	a) Remove control body (16), tap out the valve seat (9), o'ring (14), ball (13) and spring (12). Clean parts and replace in the correct order.
	b) Operating plunger control (10) sticking in body (16).	b) Replace the control body assembly.
Push rod in the control body leaks	O'ring (15) damaged.	Remove the control body and replace worn or damaged parts.
The gun leaks at the swivel joint.	Worn seals (18, 32)	Replace swivel seals.
When on the high volume the gun is too slow or hard to operate.	a) Springs (2 or 4) may have collapsed.	a) Fit KR-1K overhaul kit.
	b) Grade of grease is too heavy.	b) Change to NLGI No 2 grease or lighter.
	c) Too much compression on the outlet spring (22).	c) Reset the spring tension (Refer to A , a) in trouble shooting guide) or replace the outlet body assembly.



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