

Description

The EL Series G100120 is the ideal grease kit for use with all grease types up to NLGI2.

The 50:1 ratio pump delivers up to 600g/min and is suitable for use with 20kg grease drums. The grease control valve operates with a maximum pressure of 5,800psi (400bar) and connects to the 4m long grease hose via the 1/4" quick plug inlet thread. The G100120 50:1 20kg grease kit is a real value for money proposition and gives you an opportunity to upgrade from manual greasing to an efficient and effortless pneumatic greasing solution.

Should the need ever arise, spare parts are readily available upon request.

Technical Details

Item No.	G100110 Grease Pump
Ratio	50:1
Operating pressure	30-150psi (2-10bar)
Maximum air inlet pressure	150psi (10bar)
Air consumption per minute	900 @ 10bar/100L
Tube diameter	30mm
Suction tube length	480mm
Suitable for drum	20kgs
Air inlet connection	1/4" quick plug
Oil delivery connection	Male 1/4"
Noise level	82 dB



Safety Warning and Precautions

WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors that cannot be built into this product, but must be supplied by the operator.

1. Keep the work area clean and dry. Damp or wet work areas can result in injury.
 2. Keep children away from work area. Do not allow children to handle this product.
 3. Use the right tool for the job. Do not attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this equipment was designed. It will do the job better and more safely at the capacity for which it was intended. Do not modify this equipment, and do not use this equipment for a purpose for which it Was not intended.
 4. Check for damaged parts. Before using this product, carefully check that it will operate properly and perform its intended function. Check for damaged parts and any other conditions that may affect the operation of this product. Replace damaged or worn parts immediately.
 5. Do not overreach. Keep proper footing and balance at all times to prevent tripping, falling, back injury, etc.
 6. DO NOT use the equipment when tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating this equipment may result in serious personal injury.
-
1. Read the following precautions and instructions before you begin assembly or using.
 2. Failure to comply with these instructions could result in personal injury or property damage. Keep these instructions in a convenient location for future reference.

Important Note: The guarantee will be void if the pump has been altered in any way

Profile

Grease pumps are designed for transferring grease from a drum to where it would be used.

1. Compressed air operated reciprocating pumps are designed for high pressure greasing.
2. Be applicable to the manipulation of all types of grease (up to NLGI-2 consistency) from its original drums.
3. The pumps can be supplied as separate components or as a complete system with all the elements – necessary for its installation.
4. The pumps can be assembled on mobile units as well as on fixed positions, connected to steel pipes.
5. This manual is applicable to the above pump only, please confirm your pump is included.

Trouble Shooting

Problem	Possible Causes	Solutions
The pump continues to operate after the gun trigger has been released.	<ol style="list-style-type: none"> 1. Grease missing around the suction filter. 2. There is a grease leak at some point of the circuit. 3. Valve (part No. 47) closes incorrectly due to dirt or wearing. 	<ol style="list-style-type: none"> 1. Remove cover and take out pump and follower plate. Compact grease and fill the drum or replace it for a full one. 2. Check and tighten unions. Repair the leak. 3. Disassemble and clean valves. Replace them if damaged.
Reduction of the grease delivery. Or reduced pressure in the grease delivery.	<ol style="list-style-type: none"> 1. Air bags in the grease drum. 2. Silencer (23) dirtied. 3. Blocked at some point of the grease circuit. 4. Ball valve (37) closes incorrectly due to dirt or wearing. 5. Damaged O-Ring (43). 	<ol style="list-style-type: none"> 1. Remove the cover and take out the pump and the follower plate. Compact the grease and fill the drum. 2. Clean or recharge silencer. 3. Use clean grease. 4. Replace damaged elements.
Grease leaks through the air exhaust.	Seal set (28) damaged.	Replace damaged elements.

If the pump has anything wrong, please contact Alemlube.

We do not recommend customers repairing the pump themselves.

Storage and Maintenance

Pumps are delivered in appropriate cardboard boxes. Packaging material should be properly disposed of. Handling and storage of the pump do not require any special procedures. Dust in the compressed air can slow down or even block the motor cylinder. The following steps may prevent this from happening:

1. Introduce 50 grams of Vaseline oil or other lubricator into the air inlet hole.
2. Turn on the pump for several minutes until the moving parts are fully lubricated.
3. Repeat the above operation if necessary.
4. The above steps should be carried out on a weekly base.

For the pumps that are attached with compressed air treated equipment please empty the water retained in the reservoir of the filter-purger frequently.

For the pumps that are attached with a lubricator, please pay close attention to the lubricator's grease level and refill with NLGL-2 when necessary.

Note: The user should perform only routine maintenance operations (such as filters, silencers, cleaning...) in order not to damage or compromise its safety. Contact Alemlube when the pump needs further maintenance.

General Safety Regulations

When the pump is connected to the compressed air supply:

1. The compressed air must be filtered to avoid dust into the pump.
2. The maximum compressed air pressure must not exceed 0.8Mpa.
3. To deliver grease, press the knob on the delivery nozzle. Delivery stops when the knob is released but the whole system remains under pressure.
4. Position the nozzle so that the circuit can not open accidentally. Otherwise grease could leak onto the ground.
5. Never point the nozzle at people.
6. Press the nozzle knob only after you are sure that the nozzle is in the right place so that the grease doesn't leak onto the ground.
7. Always cut off the air supply after use so that grease can not leak out in case one of the pump's components break.
8. Use only original spare parts if the pump has to be repaired or its components have to be replaced.
9. Ensure the tightness of all joints and screwed unions.
10. When not loading, cut off compressed air to stop pump.
11. Do not use the pump near open flames. Do not smoke during this operation.
12. Wear oil-proof gloves.
13. The pump can be used only to deliver grease. Do not use the pump for any other purpose.

How To Use

Pump Installation

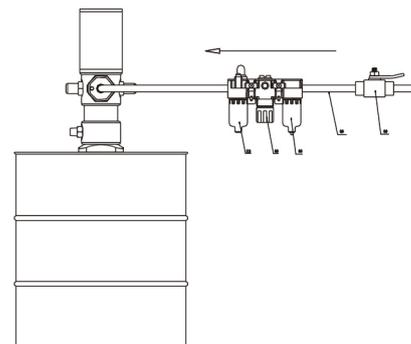
1. When the pump is applied to a high viscosity grease, or used in low temperature, a grease follower plate is recommended to avoid air pockets and to get the most out of your grease. The follower plate, which is pulled towards the bottom of the drum by suction pressure produced by the air operated pump, compress the grease, preventing the formation of air pockets which may cause a blockage in delivery. And the follower plate will always keep the grease clean to preserve its characteristics and also enable the grease to be collected from the bottom of the drum to avoid waste.
2. Loosen the bung adaptor or wall bracket adaptor star nut. Slide the bung adaptor off of the suction tube.
3. Carefully place the pump through the bung adaptor and the follower plate. Then tighten the star nut firmly in order to attach the pump.

Connection of the Air Inlet Line

1. Air inlet connection is 1/4" quick plug in all versions.
2. Compressed air connection (to be supplied by the customer) should be done using suitable tubes.
3. A compressed air treatment unit (filter and regulator) is recommended to be attached to the pump. In order to improve the efficiency of the pump, the installation of a lubricator is also recommended.

Connection of the Regulator

The lubricator (I) must be placed as close as possible to the air inlet, followed by the pressure regulator (II) and finally, the filter (III). In the case of pumps not installed on wall support it is very important to equip the pump's air inlet with an adaptor for quick coupling and the air inlet hose with a quick connector.



Connection of the Grease Discharge

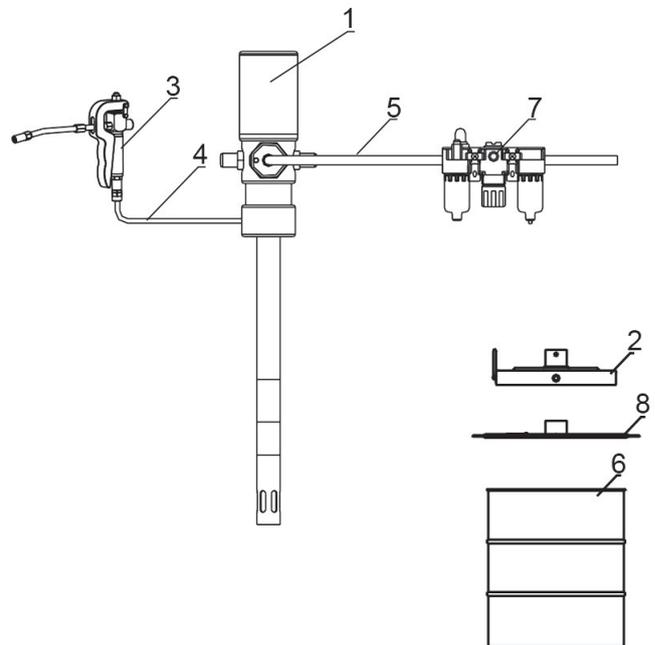
1. The Grease discharge outlet is a 1/4" thread. Connect the outlet to the high pressure hose (according to DIN-SAE norms) through the corresponding adapter and terminal.
2. Ensure the nozzle or corresponding valve is closed.
3. Slowly open the pump's compressed air inlet valve. The pump will start to function, filling the feed circuit with grease. Maintain pressure on the nozzle until the grease starts to come out. The pump is now ready for its usual function.

Pump Operation

If the pump has already been primed and the compressed air feed is connected to the appropriate work pressure level (5-10 bar,) the pump will start automatically when the nozzle or nozzle situated at the end of the grease delivery circuit is opened. To stop the pump, simply close the nozzle or disconnect the air inlet line.

Connect the Pump with other Accessories

Part No.	Description
1	Grease Pump
2	Drum Cover
3	Grease Control Valve
4	Hose with Fitting
5	Air Hose with Quick Coupling
6	Drum
7 (7-1, 7-2, 7-3)	Filter, Pressure Regulator and Lubricator
8	Follower Plate



Manual of Grease Pump Distribution Kits

Pressure Relief Procedure

To reduce the risk of serious body injury, including fluid injection, splashing in the eyes or on the skin, or injury from moving parts, please always follow this procedure whenever you shut off the pump, when checking or servicing any part of the spray/dispensing system, when installing, cleaning or changing spray tips/nozzles, and whenever you stop spraying/dispensing.

1. Shut off the air to the pump.
2. Point the outlet of grease control valve to container and trigger the grease control valve to relieve pressure.

Important Notes

1. If you suspect that the spray tip/nozzle or hose is completely clogged, or that pressure has not been fully relieved after following the steps above, **VERY SLOWLY** loosen the retaining nut or hose end coupling and relieve pressure gradually, then loosen completely. Now clear the tip/nozzle or hose.
2. On the pump downstroke, the shovel washer extends beyond the intake cylinder to pull the material into the pump. The shovel washer works under extreme force. During operation and whenever the pump is charged with air, the shovel washer can severely injure or amputate a hand or finger or break a tool, if caught between it and the intake cylinder. Always follow the Pressure Relief Procedure below, before checking, clearing, cleaning, flushing or servicing any part of the pump.
3. This equipment conducts very high fluid pressure. Spray from the grease control valve, leaks or ruptured components can inject fluid through your skin and into your body and cause serious body injury.

NEVER point the grease control valve at anyone or at any part of the body.

NEVER put hand or fingers over the spray tip.

ALWAYS follow the Pressure Relief Procedure, right, before cleaning or removing the spray tip or servicing any system equipment.

NEVER try to stop or deflect leaks with your hand or body.

Be sure equipment safety devices are operating properly before each use.

4. Any misoperation of the system equipment or accessories, such as overpressure, modifying parts, using incompatible chemicals and fluids or using worn or damaged parts, can cause them to rupture and result in fluid injection, splashing in the eyes or on the skin, or other serious injury, or fire, explosion or property damage.

NEVER alter or modify any part of this equipment; doing so could cause if any malfunction.

CHECK all equipment regularly and immediately repair or replace worn or damaged parts.

System Pressure

NEVER exceed the recommended working pressure or the maximum air inlet pressure stated on your pump.

Be sure that all dispensing equipment and accessories are rated to withstand the maximum working pressure of the pump. **DO NOT** exceed the maximum working pressure of any component or accessory used in the system.

Fluid Compatibility

The system is only suitable for grease.

5. High pressure fluid in the hoses can be very dangerous. If the hose develops a leak, split or rupture due to any kind of wear, damage or misoperation, the high pressure spray emitted from it can cause a fluid injection injury or other serious injury or property damage.

TIGHTEN all fluid connections securely before each use. High pressure fluid can dislodge a loose coupling or allow high pressure spray to be emitted from the coupling.

NEVER use a damaged hose. Before each use, check the entire hose for cuts, leaks, abrasion, bulging cover, damage or movement of the hose couplings. If any of these conditions exist, replace the hose immediately.

DO NOT try to mend it with tape or any other device. A repaired hose cannot safely contain the high pressure fluid.

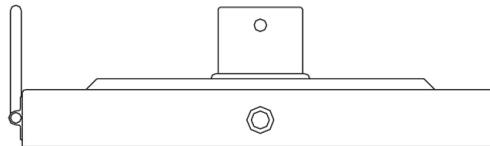
Kit List

50:1 Ratio pump	G100110
Drum application	20kgs
Drum cover	G100110-52
Follower plate	G100110-53
1/4" 4m connection hose	G100110-54
Grease gun	0300130
Z-swivel	0300130-32

Drum Cover and Follower Plate List

Put the drum cover onto the drum and tighten the three locks crew.

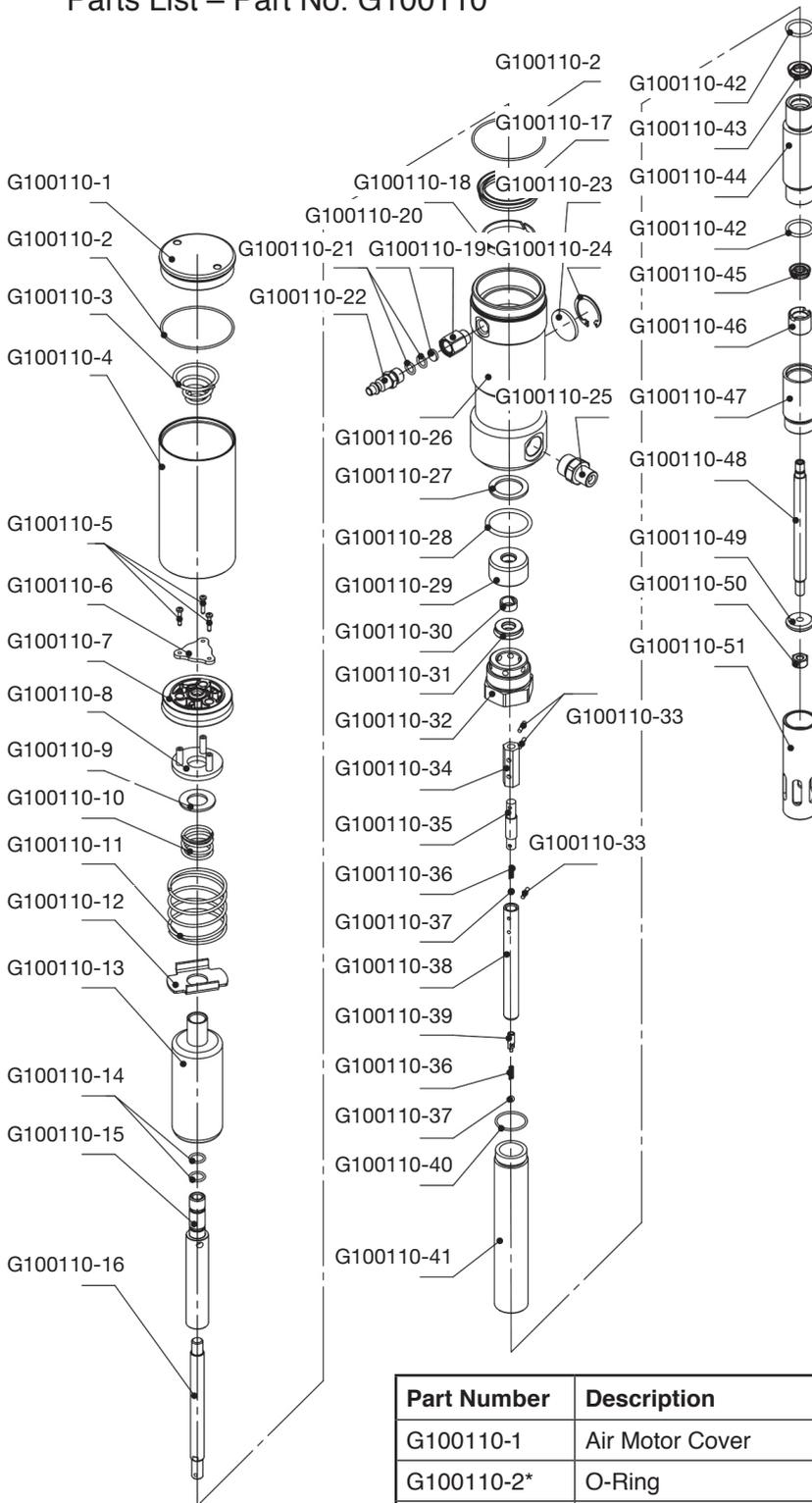
Put the follower plate into the grease drum, on the grease surface horizontally, pressure it as much as possible to exhaust the air between follower plate and grease.



Drum cover	Diameter(mm)	Flower plate	Diameter(mm)	For drum with capacity of (kgs)
G100110-52	310	G100110-53	310	20

Ordering Spare Parts

Parts List – Part No. G100110



Note: The Part Numbers with “**” are included in repair kit G100110-RK

Part Number	Description	Qty
G100110-1	Air Motor Cover	1
G100110-2*	O-Ring	2
G100110-3	Spring	1
G100110-4	Air Motor Shell Inside	1
G100110-5	Screw	3
G100110-6	Fixing Plate	1
G100110-7*	Piston	1
G100110-8	Fixing Plate	1
G100110-9	Washer	1
G100110-10	Spring	1

Part Number	Description	Qty
G100110-11	Spring	1
G100110-12	Baffle	1
G100110-13	Piston	1
G100110-14*	O-Ring	2
G100110-15	Shaft	1
G100110-16	Shaft	1
G100110-17*	Sealing Ring	1
G100110-18	Guiding Ring	1
G100110-19	Connector	1
G100110-20*	Silencer	1
G100110-21*	O-Ring	2
G100110-22	Quick Coupling	1
G100110-23	Silencer	1
G100110-24	Circlip	1
G100110-25	Outlet	1
G100110-26	Air Control Center	1
G100110-27	Washer	1
G100110-28	O-Ring	1
G100110-29	Valve Seat	1
G100110-30	Guiding Ring	1
G100110-31*	Sealing Ring	1
G100110-32	Connector	1
G100110-33	Pin	3
G100110-34	Connect Shell	1
G100110-35	Shaft	1
G100110-36	Spring	2
G100110-37	Ball	2
G100110-38	Shaft	1
G100110-39	Spring Seat	1
G100110-40	O-Ring	1
G100110-41	Connect Tube	1
G100110-42	O-Ring	2
G100110-43*	Sealing Ring	1
G100110-44	Valve Seat	1
G100110-45*	Sealing Ring	1
G100110-46	Valve	1
G100110-47	Valve Seat	1
G100110-48	Shaft	1
G100110-49	Shovel Washer	1
G100110-50	Nut	1
G100110-51	Suction Tube	1

NSW/ACT
TEL: (02) 9939 0711
FAX: (02) 9939 0411

QLD/PNG
TEL: (07) 3889 8480
FAX: (07) 3889 8490

VIC/TAS
TEL: (03) 8787 8288
FAX: (03) 8787 8266

WA
TEL: (08) 9209 3066
FAX: (08) 9209 3933

SA/NT
TEL: (08) 8241 7111
FAX: (08) 8241 7011

NZ
TEL: (09) 447 1007
FAX: (09) 447 1008

O300130 Grease Control Valve

Read the safety warnings and instructions in this manual carefully, before installation and start-up of the control handle. It is the responsibility of the purchaser to retain this manual for future reference. Failure to comply with the recommendations stated in this manual may damage the control handle and void factory warranty.

Airborne particles and loud noise hazards.

Wear ear and eye protection.

Before doing any maintenance on the control handle, be certain all pressure is completely vented from the pump, suction, discharge, piping, and all other openings and connections.

Be certain the air supply is locked out or made non-operational, so that it cannot be started while work is being done on the control handle. Be certain that approved eye protection and protective clothing are worn at all times in the vicinity of the control handle.

Failure to follow these recommendations may result in serious injury or death.

CAUTION

Maximum fluid pressure is 5,800psi (400bar).

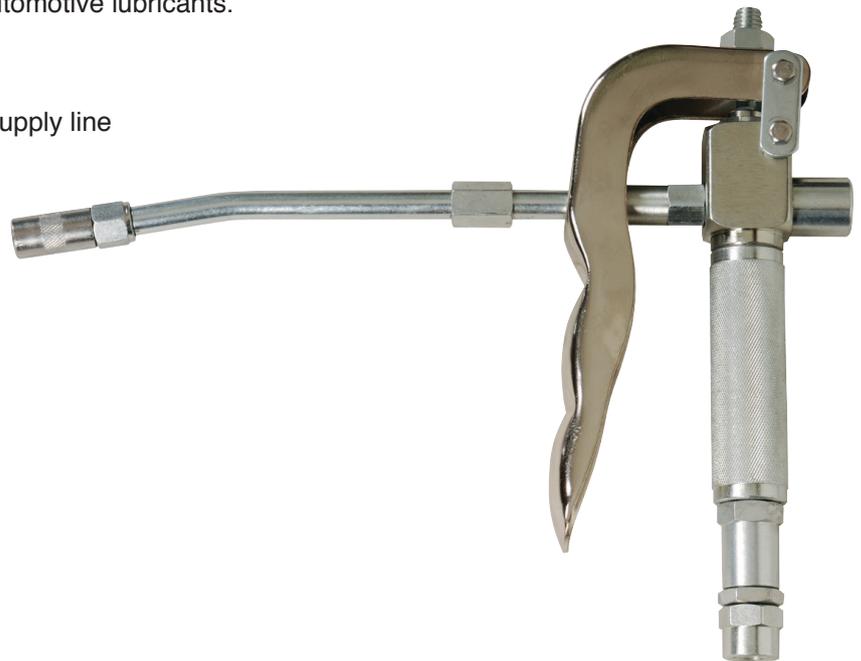
Under no circumstances should the control handle be aimed at any person. Personal injury may result.

Product Description

The control handles are used for dispensing automotive lubricants.

Operation

1. Connect the control handle to the lubricant supply line (1/4 quick plug thread required).
2. Open the manual tip.
3. Squeeze control handle trigger. When the required amount of product has been dispensed, release the trigger to stop delivery. Close the manual tip.

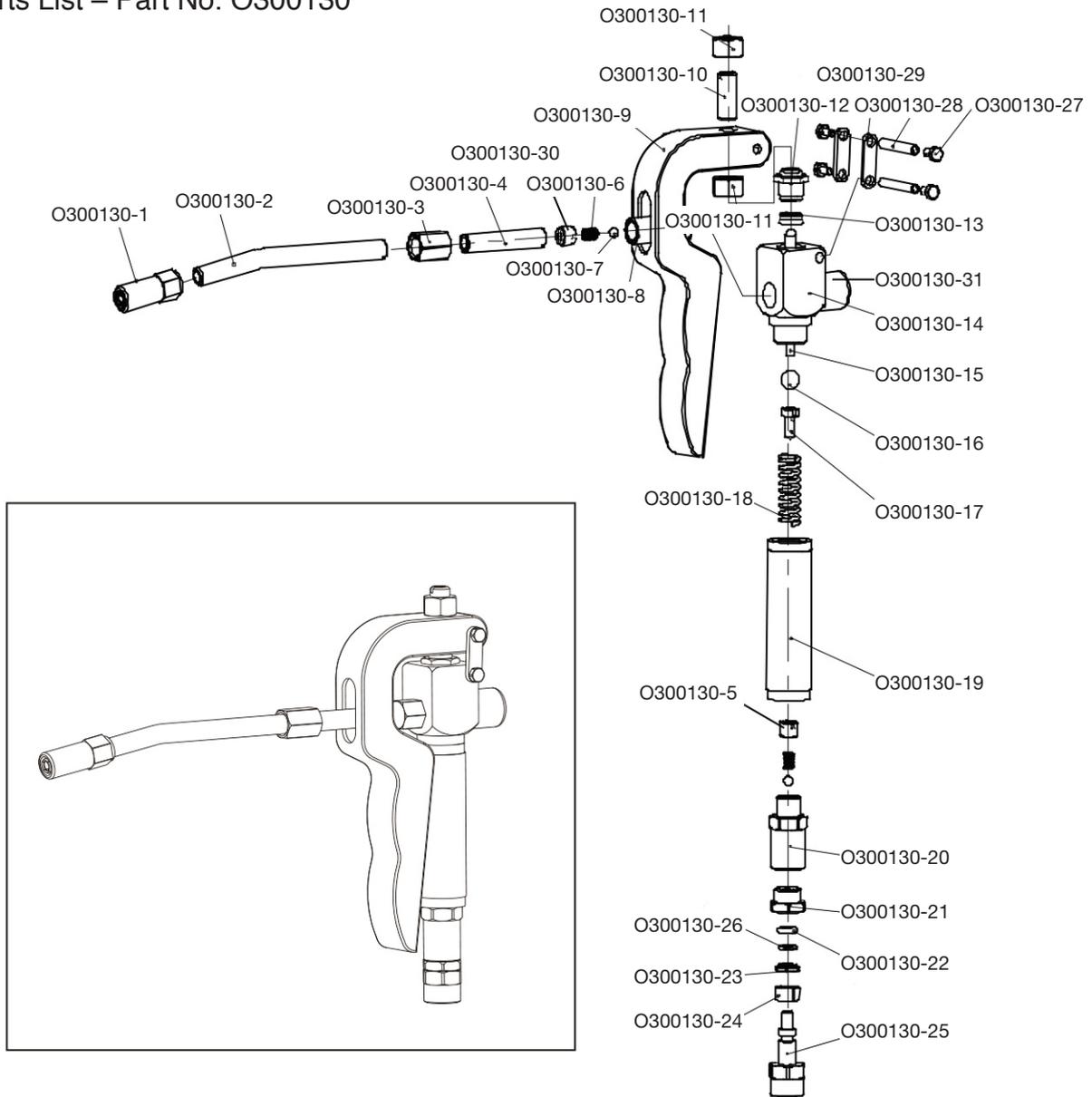


Trouble Shooting

1. If lubricant leaks around inlet and threads, apply thread sealant to tighten threads.

Ordering Spare Parts

Parts List – Part No. O300130



Part Number	Description	Qty	Part Number	Description	Qty
O300130-1	4 Jaws Gease Fitting	1	O300130-17	Set	1
O300130-2	Rigid Delivery Pipe	1	O300130-18	Spring	1
O300130-3	Hexad Tie-in	1	O300130-19	Handle	1
O300130-4	Take-over Tube	1	O300130-20	Valve Seat	1
O300130-5	Adjust Bolt	1	O300130-21	Nut	1
O300130-6	Spring	2	O300130-22	O-Ring	1
O300130-7	Steel Ball	2	O300130-23	Block Ring	1
O300130-8	Unilateralism Valve	1	O300130-24	Axis Tile	2
O300130-9	Wrench	1	O300130-25	Axes	1
O300130-10	Adjust Bolt	1	O300130-26	Liner Ring	1
O300130-11	Nut	2	O300130-27	Hexad Bolt	4
O300130-12	Guide	1	O300130-28	Join Pipe	2
O300130-13	Gasket	1	O300130-29	Join Piece	2
O300130-14	Gun Seat	1	O300130-30	Adjust Bolt	1
O300130-15	Rod	1	O300130-31	Clump Weight	1
O300130-16	Steel ball	1	O300130-32	Z-swivel	1