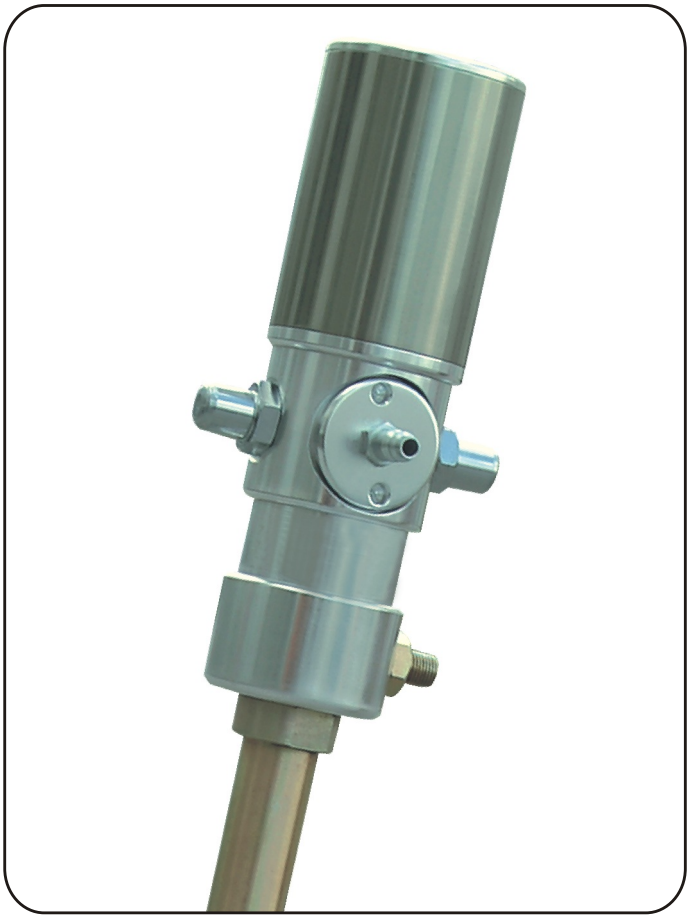
50:1 Grease Pump & Grease Pump Kits

Manual



THE MANUAL OF GREASE PUMP

Read the following precautions and instructions before you begin assembly or using. 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 drum to where it would be used.

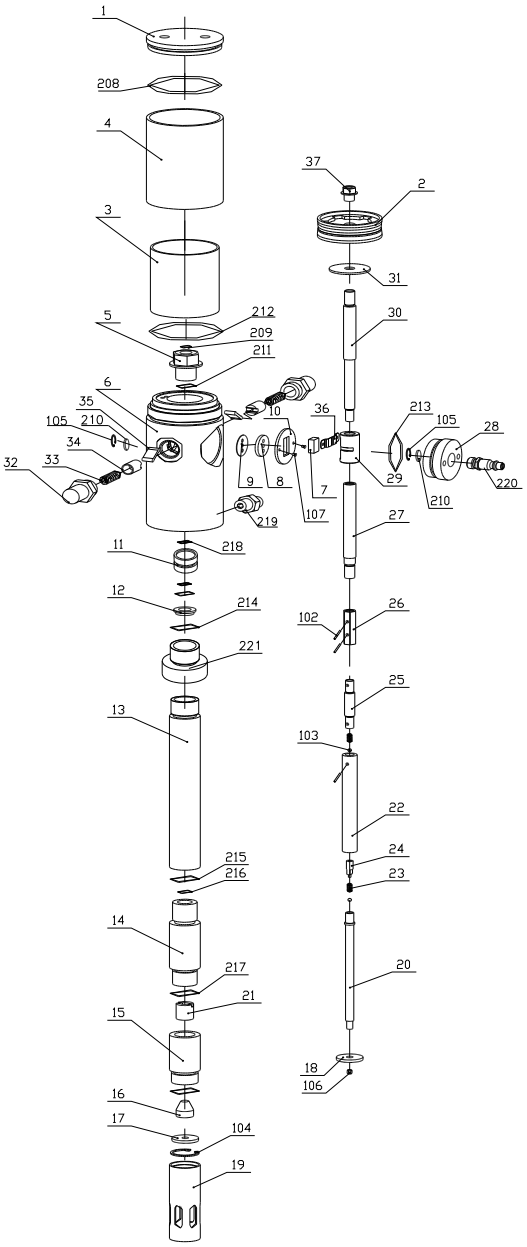
- Compressed air operated reciprocating pumps are designed for high pressure greasing.
- Be applicable to the manipulation of all types of grease (up to NLGI-2 consistency) from its original drums.
- The pumps can be supplied as separate components or as a complete system with all the elements - necessary for its installation.
- The pumps can be assembled on mobile units as well as on fixed positions, connected to steel pipes.

This manual is applicable to the following pump only, please confirm your pump is included.

Specification

Item No.	1701501	1701502	1701503
Compression ratio	50:1		
Operating pressure(bar/psi)	5-8/70-115		
Maximum pressure(bar/psi)	8/115		
Air consumption(L/min Gallon/min	800/1.76		
Capacity(L/min Gallon/min)	18/5		
Tube diameter(mm/inch)	30/1.18	30/1.18	30/1.18
Suction tube length(mm/inch)	480/19	740/29	940/37
Suitable for drum(kgs/lbs)	12-30/26-66	50-60/110-132	180-220/396-484
Air inlet connection	1/4'' quick plug/1/4'' NPT female		
Oil delivery connection	Male 1/4''		
Noise level(dB)	82		

50:1 SERIES GREASE PUMP EXPLODED VIEW



50:1 SERIES GREASE PUMP PART LIST

Code	Name	Quantity
1	Air motor cover	1
2	Piston	1
3	Air motor shell inside	1
4	Air motor shell outside	1
5	Bracket	1
6	Air control center	1
7	Slider	1
8	Gasket	1
9	Soft gasket	1
10	Securing washer	1
11	Bracket	1
12	Washer	1
13	Connect tube	1
14	Piston shell	1
15	Valve seat	1
16	Taper washer	1
17	Filter	1
18	Shovel washer	1
19	Suction tube	1
20	Shovel rod	1
21	Valve	1
22	Piston	1
23	Spring	2
24	Spring seat	1
25	Connect shaft	1
26	Connect shell	1
27	Middle shaft	1
28	Air center cover	1

Code	Name	Quantity
29	Slider shell	1
30	Piston shaft	1
31	Washer	2
32	Spring shell	2
33	Spring	2
34	Spring Seat	2
35	Trip shoe guide	2
36	Press piece	1
37	Nut	1
102	Pin	3
103	Ball	2
104	Circlip	1
105	Small circlip	2
106	Nut	1
107	Screw	2
208	O-ring	2
209	O-ring	2
210	Silencer	2
211	O-ring	1
212	O-ring	1
213	O-ring	1
214	O-ring	1
215	O-ring	1
216	O-ring	1
217	O-ring	1
218	OD-ring	2
219	Outlet	1
220	Quick coupling	1
221	Connector	1

Troubleshooting

Problem	Possible Causes	Solutions
The pump continues to operate after the gun trigger has been released	1.Grease missing around the suction filter 2.There is a grease leak at some point of the circuit 2.Valve(part No. 15) closes incorrectly due to dirt or wearing.	1.Remove cover and take out pump and follower plate. Compact grease and fill the drum or substitute it for a full one. 2.Check and tighten unions. Repair the leak. 3.Disassemble and clean valves. Substitute them if danged
Reduction of the grease delivery. Or reduced pressure in the grease delivery.	1. Air bags in the grease drum 2. Silencer(210) dirtied 3.Blocked at some point of the grease circuit 4.Ball valve (103) closes incorrectly due to dirt or wearing. 5. Damaged O-ring(216)	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.Substitute damaged elements
Air loss through the air exhaust	1.The sliding valve(7) does not close properly 2.The press piece(36) broken 3.Damaged O-ring(208, 209 or 211) 4.Damaged piston(2) 5.Damaged washer(31) 6.Broken spring(33)	1.Disassemble and clean. Substitute them if danaged 2.Substitute damaged elements
Grease leaks through the air exhaust	Seal set (11) damaged	Substitute damaged elements

If the pump has anything wrong, please contact dealer or their technical supporter.
We don't recommend customer repair the pump themselves.

STORAGE AND MAINTENANCE

Pumps are delivered in appropriate cardboard boxes. Packaging material should be properly disposed.
Handling and storage of the new pump do not require any special procedures.
The dust in compressed air can slow down or even block the motor cylinder. The following steps may prevent this from happening:
1) Let in 50 gram of Vaseline oil or other lubricator from the air inlet hole weekly operate the pump for several minutes after having lubricator into the pump.
2) Turn on the pump for several minutes until moving parts is fully lubricated.
3) You may 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 treatment 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 conditions when necessary.

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

GENERAL SAFETY REGULATIONS

When the pump is connected to the compressed air supply:
- The compressed air must be filtered to avoid dust into pump
- The max compressed air pressure must not exceed 0.8Mpa
- To deliver grease, press the knob on the delivery gun; delivery stops when the knob is released but the whole system remains under pressure.
- Position the gun so that the circuit can't open accidentally. Otherwise grease could leak onto the ground.
- Never point the gun at people
- Press the gun knob only after you are sure that the gun is in the right place so that the grease doesn't leak onto the ground.
- Always cut off the air supply after use so that grease can't leak out in case one of the pump's components should break
- Use only original spare parts in case the pump has to be repaired or its components have to be replaced
- Ensure the tightness of all joints and screwed unions.
- When no load, cut off compressed air to stop pump.
- Do not use the pump near open flames. Do not smoke during this operation.
- Wear oil-proof gloves
- The pumps can be used only to deliver grease. Do not use the pump for any other Substance. Please contact us if you have any special request.

HOW TO USE

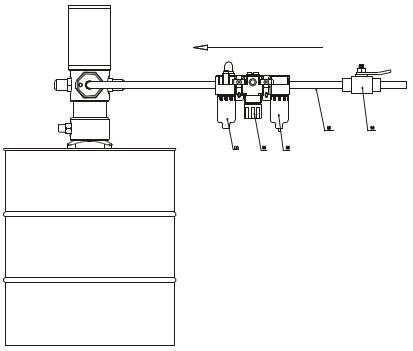
PUMP INSTALLATION

- 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.
- Loosen the bung adaptor or wall bracket adaptor star nut. Slide the bung adaptor off of the suction tube.
- 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
Air inlet connection is 1/4''quick coupling (or 1/4''NPT female) in all versions.
Compressed air connection (to be supplied by the customer) should be done using suitable tubes.
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.

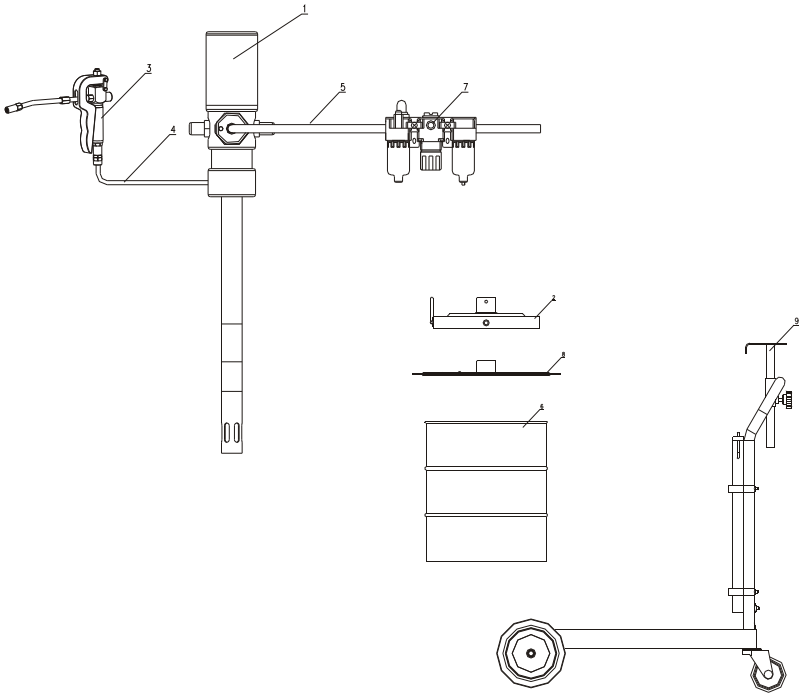
CONNECTION OF THE REGULATOR
The lubricator (I) must be placed as close as possible to the air inlet, followed by the pressure regulator (II) and finally, the filter (III). In the case of pumps not installed on wall support it is very important to equip the pump's air inlet with an adaptor for quick coupling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



CONNECTION OF GREASE DISCHARGE
1. The Grease discharge outlet is a 1/4''G thread. Connect the outlet to the high pressure hose (according to DIN-SAE norms) through the corresponding adapter and terminal.
2. Ensure the gun 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 gun 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 (5-8 bar,) the pump will start automatically when the nozzle or gun 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:



Note:

Code	Name
1	Greae 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
9	Trolley

THE MANUAL OF GREASE PUMP DISTRIBUTION KITS

PRESSURE RELIEF PROCEDURE

To reduce the risk of serious bodily 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 check or service any part of the spray/dispensing system, when instal, clean or change spray tips/nozzles, and whenever you stop spraying/dispensing.

1. Shut off the air to the pump.
2. Point the outlet of grease gun to container and trigger the grease gun 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, 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 gun, leaks or ruptured components can inject fluid through your skin and into your body and cause extremely serious bodily injury, including the need for amputation. Also, fluid injected or splashed into the eyes or on the skin can cause serious damage.

NEVER point the grease gun 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 misuse 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 bodily 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 misuse, the high pressure spray emitted from it can cause a fluid injection injury or other serious bodily 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.

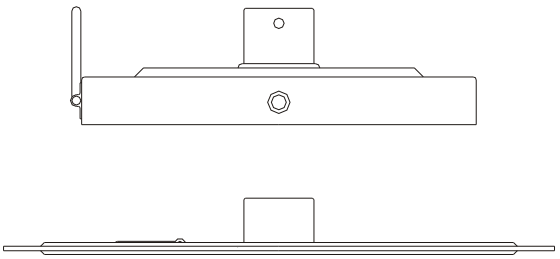
Kits List

Item No.	1700512	1700524
50:1 Ratio pump	1701501	1701502
Drum application	20-30kgs/25-30lgs	50-60kgs/120kgs
Drum trolley	1708001	1708001
Drum cover	1709002	1709004
Follower plate	1709012	1709014
1/4"*13' connection hose	1762213	1762213
Grease gun	1785701	1785701
Z-swivel	1785702	1785702

Item No.	1700536	1700536R
50:1 Ratio pump	1701503	1701503
Drum application	180-220kgs/400lbs	180-220kgs/400lbs
Drum trolley	1708002	1708003
Drum cover	1709006	1709006
Follower plate	1709016	1709016
1/4"*13' connection hose	1762213	***
Grease gun	1785701	1785701
Z-swivel	1785702	1785702
1/4"*50' grease hose reel	***	H820152
1/4"*5' connection hose	***	1762205

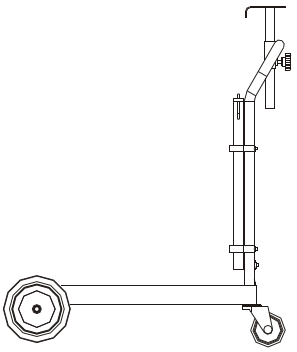
Drum Cover and Follower Plate List

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)
1709001	280	1709011	265	12-20
1709002	310	1709012	310	16-30
1709003	350	1709013	340	20-30
1709004	385	1709014	370	50-60
1709005	420	1709015	410	50-60
1709006	600	1709016	585	180-200

Drum Trolley List



Item No.	For drum with capacity(kgs)
1708001	12-60
1708002	180-220
1708003	180-220