

## MANUAL

### CONTENTS:

Page	1	Specifications
	2	Warning Information
	3	Setup Instructions and Operating Instructions
	4	Preventative Maintenance, Inspection, Proper Storage, Troubleshooting
	5	Exploded View Drawing
	6	Replacement Parts
	7	Owner/User Responsibility and Warranty Information



### SPECIFICATIONS

Capacity.....	22 Ton @ 90-145 psig
Minimum Height .....	9"
Maximum Height .....	13.5"
Maximum Height with Adapter .....	20.8"
Ram Travel .....	4.5"
Wheel Diameter .....	8"
Handle Length .....	42.7"
Shipping Weight .....	117 lbs.

Complies with ASME PASE-2014 Safety Standard

## WARNING INFORMATION



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

### WARNING

WARNING: Indicates a hazardous situation which, if not avoided, could result in death or serious injury.



### IMPORTANT: READ THESE INSTRUCTIONS BEFORE OPERATING

BEFORE USING THIS DEVICE, READ THIS MANUAL COMPLETELY AND THOROUGHLY, UNDERSTAND ITS OPERATING PROCEDURES, SAFETY WARNINGS AND MAINTENANCE REQUIREMENTS.

It is the responsibility of the owner to make sure all personnel read this manual prior to using the device. It is also the responsibility of the device owner to keep this manual intact and in a convenient location for all to see and read. If the manual or product labels are lost or not legible, contact Sunex for replacements. If the operator is not fluent in English, the product and safety instructions shall be read to and discussed with the operator in the operator's native language by the purchaser/owner or his designee, making sure that the operator comprehends its contents.








## THE NATURE OF HAZARDOUS SITUATIONS

### WARNING

The use of portable automotive lifting devices is subject to certain hazards that cannot be prevented by mechanical means, but only by the exercise of intelligence, care, and common sense. It is therefore essential to have owners and personnel involved in the use and operation of the equipment who are careful, competent, trained, and qualified in the safe operation of the equipment and its proper use. Examples of hazards are dropping, tipping or slipping of loads caused primarily by improperly securing loads, overloading, off-centered loads, use on other than hard level surfaces, and using equipment for a purpose for which it was not designed.

## METHODS TO AVOID HAZARDOUS SITUATIONS

### WARNING

-  • Read, study, understand and follow all instructions before operating this device.
-  • Inspect the jack before each use. Do not use jack if damaged, altered, modified, in poor condition, leaking hydraulic fluid, or unstable due to loose or missing components. Make corrections before using.
-  • Lift only on areas of the vehicle as specified by the vehicle manufacturer.
-  • Wear eye protection that meets ANSI Z87.1 and OSHA standards (users and bystanders).
-  • Do not use jack beyond its rated capacity.
-  • **No persons should be under vehicle when jack is in use.**
-  • **This is a lifting device only. Immediately after lifting, support the vehicle with appropriate means.**
- No alterations shall be made to this product.
- Use only on a hard level surface.
- Always lower the jack slowly and carefully.
- Do not use saddle adapters or saddle extenders between the stock lifting saddle and the load.
- This product may contain one or more chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. *Wash hands thoroughly after handling.*
- Failure to heed these warnings may result in serious or fatal personal injury and/or property damage.

## CONSEQUENCES OF NOT AVOIDING HAZARDOUS SITUATIONS

### WARNING

Failure to read this manual completely and thoroughly, failure to understand its OPERATING INSTRUCTIONS, SAFETY WARNINGS, MAINTENANCE INSTRUCTIONS and comply with them, and failure to comply with the METHODS TO AVOID HAZARDOUS SITUATIONS could cause accidents resulting in serious or fatal personal injury and/or property damage.

## OWNER'S MANUAL

### SETUP INSTRUCTIONS

**PLEASE REFER TO THE EXPLODED VIEW DRAWING IN THIS MANUAL IN ORDER TO IDENTIFY PARTS.**

1. Remove the bolt (#30) from under the handle yoke (#32). Insert the handle tube (#11) in the handle yoke (#32) while simultaneously inserting the locking rod (#12) in the handle yoke guide holes.
2. Raise the lock lever (#7) on the handle assembly up so the locking rod does not have to come in contact with the handle yoke bracket. Rotate the release knob (#1) at the top of the handle back and forth until you feel the bottom of the handle engage the release valve fitting (#51) inside and at the bottom of the handle yoke.
3. Align the handle yoke hole that accepts the bolt with the receiving hole in the bottom of the handle. Once the holes are lined up, secure the handle to the handle yoke with the bolt (#30) provided.
4. Move the handle assembly (#3) up and down while simultaneously pushing down on the lock lever (#7) until the locking rod engages one of the locating holes in the handle yoke bracket (#33). There are three holes in the handle yoke bracket that are used to lock the handle in either a horizontal, angular or almost vertical position.
5. Install the quick disconnect of your choice in the back of the air valve (#23). The air valve and hose are equipped with a loop that secures them to the "L" shaped hook on the upper portion of the handle (#3).
6. Secure the air valve and hose to the handle and connect a shop air line to the air valve.
7. Sometimes air gets trapped in the hydraulic system during shipment. An air bound hydraulic system feels spongy when pumped.

### PURGING AIR FROM THE HYDRAULIC SYSTEM

- a. Open the release valve by turning the knob (#1) at the top of the handle in a counterclockwise direction two full turns from the closed position.
- b. Depress the air valve (#3) for approximately 30 seconds.
- c. Close the release valve by turning the knob (#1) in a clockwise direction until tight.
- d. Depress the air valve until the ram raises to maximum height.
- e. Repeat steps "a" through "d" until all the air is purged from the system.

### OPERATING INSTRUCTIONS



This is the safety alert symbol used for the OPERATING INSTRUCTIONS section of this manual to alert you to potential personal injury hazards. Obey all instructions to avoid possible injury or death.

**IMPORTANT:** Before attempting to raise any vehicle, check vehicle service manual for recommended lifting surfaces.

#### OPERATION:

1. Become familiar with the identification and function of the operating jack components.
  - a. The ram is the shaft that comes out of the jack when you depress the air valve and lifts the load.
  - b. The ram is equipped with an extension screw which can be unscrewed to extend from the ram if there is not enough hydraulic stroke to raise the load to the desired height. If additional height is required, extension adapters can be inserted in the hole on top of the extension screw.
  - c. Larger diameter saddles can be inserted in the extension screw when requiring a larger diameter saddle surface.
2. Chock the vehicle's tires that will not be lifted off the ground prior to lifting the vehicle and if available, apply the emergency brake or any other method of braking.
3. Position the jack at the designated lift point. Estimate the required ram travel to raise the vehicle to the desired height. If the desired vehicle height exceeds the entire ram travel, unscrew the extension screw to make up the difference and add an extension adapter if necessary.
4. Turn the knob at the top of the handle all the way in a clockwise direction until tight. Lock the handle in a position that will not interfere with the vehicle when raised or lowered. Keep the handle in that locked position until the work is completed and you are ready to remove the jack from use.
5. With the jack in the lowered position, push the jack under the vehicle. **IMPORTANT:** Use the vehicle manufacturer's recommended lifting procedures and lifting points before lifting loads.
6. In most cases 100 psig input air pressure (do not exceed 200 psig) will lift the maximum capacity load not to exceed 22 tons. Depress the air valve until the top of the ram comes close to the designated lift point. Make sure the designated lift point is flat, parallel to the ground and free from grease, any kind of lubricant, and debris. Proceed with pumping the jack in order to lift the vehicle to the desired height. During lifting, inspect the position of the jack in relation to the ground and the ram in relationship to the load to prevent any unstable conditions from developing. If conditions look like they are becoming unstable, slowly lower the load and make appropriate setup corrections after the load is fully lowered.
7. When the vehicle or load is lifted to its desired height, immediately place safety support stands (jack stands) in their designated locations and adjust the stands' support columns up as close to the designated vehicle support points as possible. Although jack stands are individually rated, they are to be used in a matched pair to support one end of the vehicle only. Stands are not to be used to simultaneously support both ends or one side of a vehicle. Slowly and carefully turn the release knob in a counterclockwise direction to gently lower the vehicle onto the safety support stands (jack stands). Make sure the vehicle is safely supported by the safety support stands' (jack stands) saddles and not the locating lugs of the saddles. Inspect the relationship of the safety support stands (jack stands) with the ground and the safety support stand (jack stand) columns and saddles with the vehicle to prevent any unstable conditions. If conditions look unstable, close the jack's release knob and depress the air valve to raise the vehicle off the safety support stands (jack stands). Make the appropriate setup changes and slowly and carefully lower the vehicle onto the safety support stand saddles.

### OWNER'S MANUAL

8. After the work is done, close the release knob and depress the air valve until the jack is high enough to remove the vehicle or load from the safety support stand saddles. Be sure load is stable. If it is not, lower load back onto safety support stands. Make appropriate setup corrections and repeat the step again. Remove the safety support stands from under the vehicle, being very careful not to move the vehicle.
9. Turn the release knob in a counterclockwise direction very slowly and carefully to lower the vehicle or load down to the ground.

### PREVENTATIVE MAINTENANCE



This is the safety alert symbol used for the PREVENTATIVE MAINTENANCE section of this manual to alert you to potential personal injury hazards. Obey all instructions to avoid possible injury or death.

**IMPORTANT:** The number one cause of jack failure in air/hydraulic jacks is dirt and moisture in the air motor and/or hydraulic system. The shop air supply should be equipped with water and dirt filter traps that should be emptied or cleaned according to a monthly maintenance schedule. An in line oil lubricator will extend the life of air/hydraulic jacks. Inoperable jacks caused by poorly equipped or maintained shop air systems are not eligible for warranty consideration. Contaminants can also enter the air/hydraulic system when the shop air line is disconnected from the jack air line and the line is dropped on the floor. Contaminants in the air couplers, once reconnected, will be driven into the system.

1. Always store the jack in a well protected area where it will not be exposed to inclement weather, corrosive vapors, abrasive dust, or any other harmful elements. The jack must be cleaned of water, snow, sand, grit, oil, grease or other foreign matter before using.
2. The jack must be lubricated periodically in order to prevent premature wearing of parts. A general purpose grease must be applied to the threads on the extension screw. Do not lubricate any portion of the lift saddle and make sure the saddle is free from grease, any kind of lubricant, or debris before using the jack. Jacks found to be defective due to worn parts resulting from inadequate or no lubrication are not eligible for warranty consideration.
3. It should not be necessary to refill or top off the reservoir with hydraulic fluid unless there is an external leak. An external leak requires immediate repair which must be performed in a dirt-free environment by an authorized service center.

**IMPORTANT:** In order to prevent seal damage and jack failure, never use alcohol, hydraulic brake fluid or transmission oil in the jack. Use Chevron Hydraulic Oil AW ISO 32 or its equivalent Unocal Unax AW 150.

4. Every jack owner is responsible for keeping the jack labels clean and readable. Use a mild soap solution to wash external surfaces of the jack but not any moving hydraulic components. Contact Sunex for replacement labels if not readable.
5. Inspect the jack before each use. Do not use the jack if any component is cracked, broken, bent, shows sign of damage or leaks hydraulic fluid. Do not use the jack if it has loose or missing hardware or components, or is modified in any way. Take corrective action before using the jack again.
6. Any hydraulic repairs within the warranty period must be performed by an authorized service center.

### INSPECTION

Visual inspection should be made before each use of the jack, checking for leaking hydraulic fluid and damaged, loose or missing parts. Each jack must be inspected by a manufacturer's repair facility immediately if subjected to an abnormal load or shock. Any jack which appears to be damaged in any way, is found to be badly worn, or operates abnormally **MUST BE REMOVED FROM SERVICE** until necessary repairs are made by a manufacturer's authorized repair facility. It is recommended that an annual inspection of the jack be made by a manufacturer's authorized repair facility and that any defective parts, decals or warning labels be replaced with manufacturer's specified parts. A list of authorized repair facilities is available from the manufacturer.

### PROPER STORAGE

It is recommended that the jack be stored in a dry location with all wheels touching the ground on a relatively level surface.

### TROUBLESHOOTING

PROBLEM	ACTION
1. Unit will not lift rated load.	Purge air from hydraulic system by following procedure under SETUP.
2. Unit will not sustain rated load or feels "spongy" under rated load.	Purge air from hydraulic system as above.
3. Unit will not lift to full height.	Purge air from hydraulic system as above.
4. Handle tends to raise up while the unit is under rated load.	Pump the handle rapidly several times to push oil past ball valves in power unit.
5. Unit still does not operate.	Contact Sunex authorized hydraulic service center.

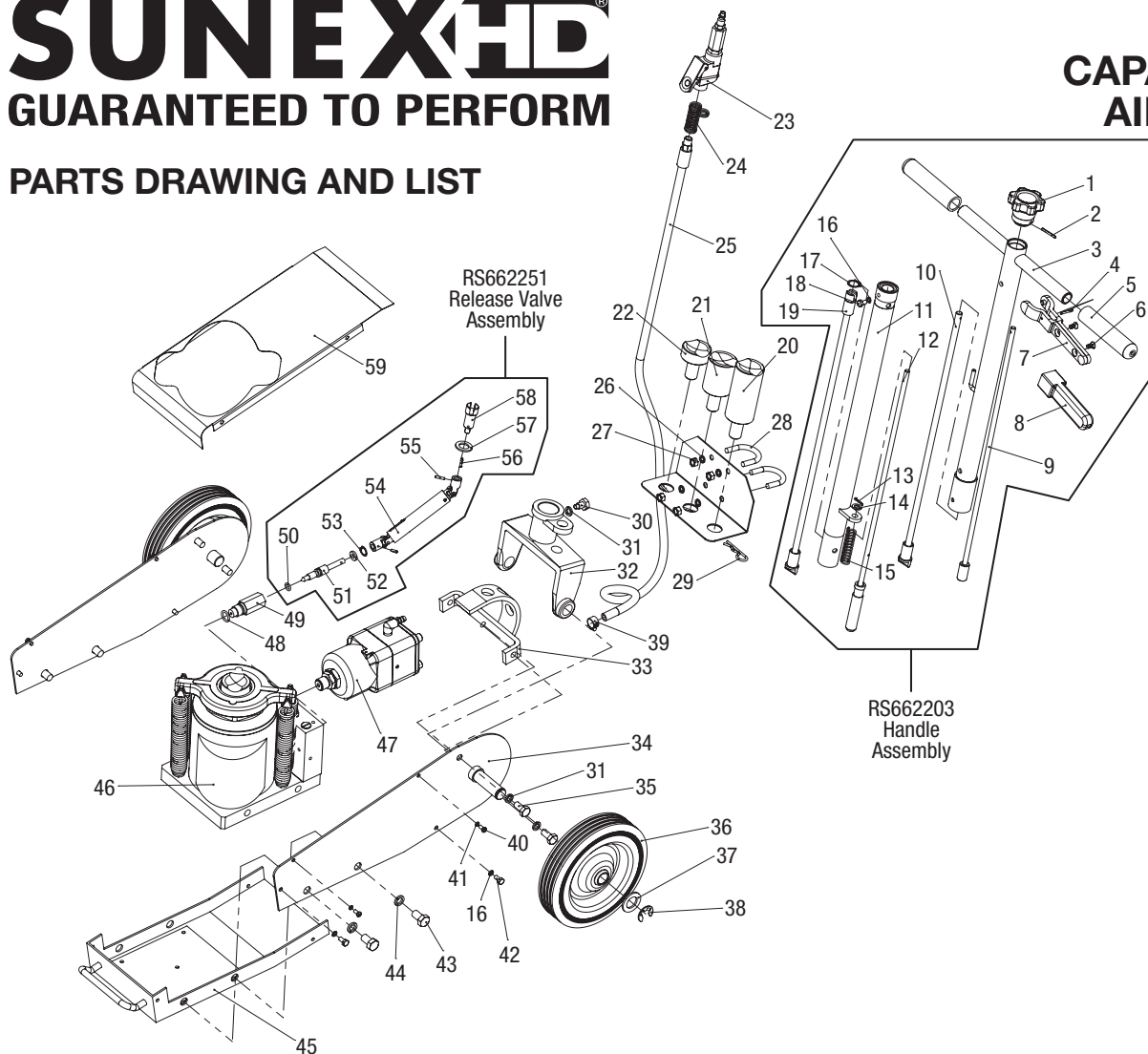
# SUNEX HD<sup>®</sup>

## GUARANTEED TO PERFORM

### PARTS DRAWING AND LIST

# 6622

## CAPACITY: 22 TON AIR/HYDRAULIC TRUCK JACK



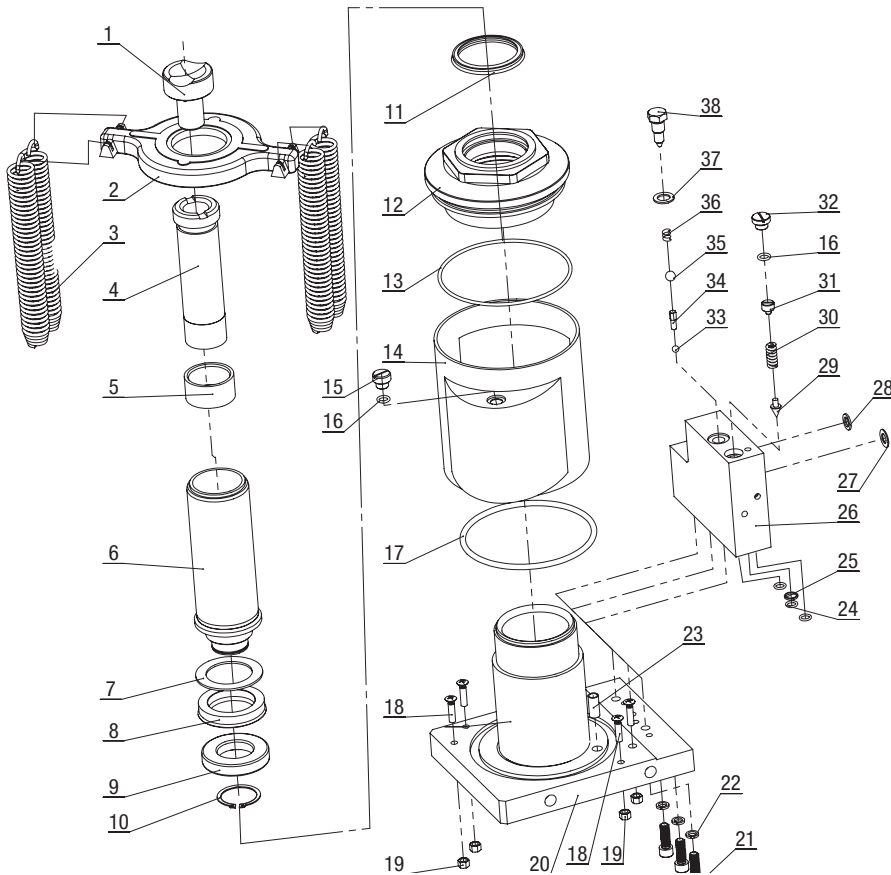
REF #	PART#	DESCRIPTION	QTY
1	RS662252	Knob	1
2		Spring Pin	1
3	RS662203	Handle Assembly (incl. #1-19)	1
4		Spring Pin	1
5		Handle Cap	2
6		Screw	2
7		Lock Lever	1
8		Handle Cap	1
9	RS662255	Stopper Assembly (incl. #9, 12, 15)	1
10		Rod Upper	1
11		Handle Lower	1
12		Stopper Lower	1
13		Split Pin	1
14		Washer	1
15		Spring	1
16		Spring Washer (6)	5
17		Retaining Ring (18)	1
18		Bolt (M6x10)	1
19		Rod Lower	1
20	RS6622124	Adapter D	1
21	RS6622123	Adapter C	1
22	RS6622122	Adapter B	1
23	RS662223	Air Valve Assembly	1
24		Spring	1
25	RS66221015	Air Hose	1
26	*	Spring Washer (8)	4
27	*	Nut (M8)	4
28	*	U-Bolt	2
29	*	R-Pin	3
30	RS6622512	Bolt	1
31		Spring Washer (10)	5

REF #	PART#	DESCRIPTION	QTY
32	RS6622511	Handle Fork	1
33		Handle Fork Bracket	1
34		Frame	2
35		Bolt (M10x20)	4
36	RS662213	Wheel	2
37	RS662212	Washer	2
38	RS662214	Snap Ring	2
39		Hose Band	1
40		Screw	4
41		Spring Wssher (5)	4
42		Bolt (M6x12)	4
43		Bolt M12x20)	4
44		Spring Washer (12)	4
45		Lower Cover	1
46	RS662246	Complete Power Unit	1
47	RS662270	Air Pump Assembly	1
48		O-Ring	1
49		Guide	1
50		Valve	1
51	RS662251	Release Valve Assembly (incl. #50-58)	1
52		Washer	1
53		Retaining Ring	1
54		Connecting Assembly	1
55		Spring Pin	2
56		Split Pin	1
57		Washer	1
58		Connecting Rod	1
59	RS662266	Upper Cover	1
	RS6622PLK	Product Label Kit (not shown)	1

\* Available in Holder Bolt Kit RSHDRBK

Only items identified by part number are available for purchase.

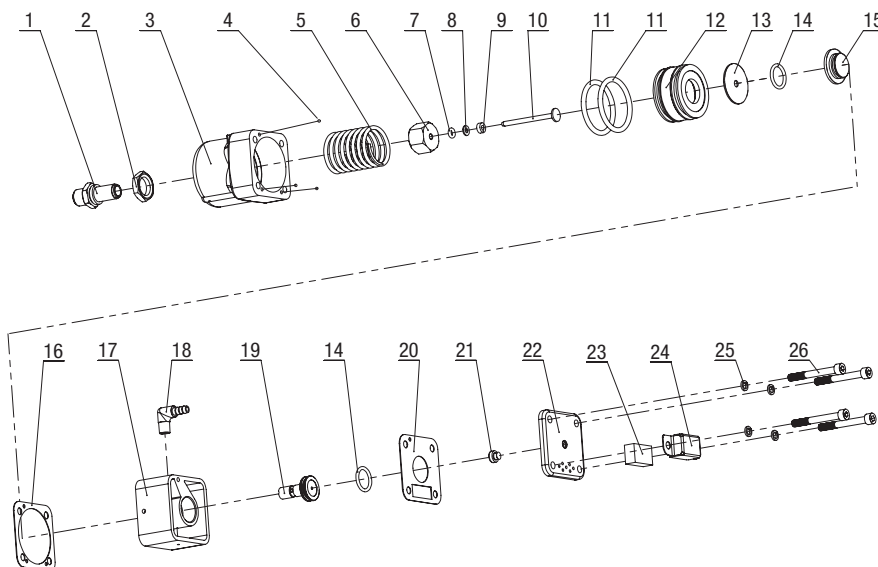
## POWER UNIT ASSEMBLY RS662246



\* Available in RS6622HRK.  
Only items identified by part number are available for purchase.

REF #	PART#	DESCRIPTION	QTY
1	RS6622121	Adapter	1
2	RS6622222	Spring Holder	1
3	RS6622221	Spring	4
4		Screw Rod	1
5		Bushing	1
6	RS662220	Piston Rod	1
7	*	Back-Ring	1
8	*	U-Seal	1
9		Piston	1
10		Snap Ring	1
11	*	Dust Seal	1
12		Tank Nut	1
13	*	O-Ring	1
14		Oil Tank	1
15	RS6622227	Breathing Screw	1
16	*	Packing	2
17	*	O-Ring	1
18		Screw	4
19		Nut	4
20	RS662228	Cylinder	1
21		Screw	3
22		Spring Washer	3
23	*	Oil Strainer	1
24	*	O-Ring	3
25	*	Backup Ring	1
26		Oil Box	1
27		Washer	1
28		Washer	1
29	*	Safety Valve	1
30	*	Spring	1
31	*	Screw	1
32		Screw	1
33	*	Steel Ball	1
34	*	Separator	1
35	*	Steel Ball	1
36	*	Spring	1
37	*	Copper Packing	1
38		Bolt	1

## AIR PUMP ASSEMBLY RS662270



\* Available in RS6622AMK.  
Only items identified by part number are available for purchase.

REF #	PART#	DESCRIPTION	QTY
1	RS662281	Plunger Cover	1
2		Nut	1
3		Air Pump Body	1
4	*	Ball	1
5		Spring	1
6		Nut	1
7	*	O-Ring	1
8	*	NL Retainer	1
9	*	Packing Guide	1
10		Plunger	1
11	*	O-Ring	2
12		Piston	1
13		Washer	1
14	*	O-Ring	2
15		Retainer	1
16	*	Packing Washer	1
17		Muffler Cover	1
18		Pipe Joint	1
19		Valve Rod	1
20	*	Packing Washer	1
21	*	Rubber Pad	1
22		Cover	1
23	*	Filter Element	1
24		Filter Cover	1
25		Spring Washer	4
26		Hex-Socket Screw	4