# **E100PC**

Pneumatic Pin & Collar Setting Tool

USER MANUAL







# SAFETY OPERATING INSTRUCTIONS

### Please read this user manual carefully before operating the tool!

- This tool should always be operated compressed air supply within the air pressure range 5 bar to 7 bar.
- This tool should be used exclusively to apply blind rivets within specified tool capacity. DO NOT use for other purposes (e.g. as a replacement hammer).
- DISCONNECT the air supply from the tool before changing the tool parts, such as nosepiece, etc;
- Any repair work must be carried out by skilled personnel, when in doubt, always return the tool to the distributor.
- In order to have good after-riveting effect, it's highly recommended keeping nosepiece, rivet, workpiece in a line, when operating the tool.
- Ensure the thread ring(#77) and/or the nose pedestal(#86) are not loose.
- Make sure that you have made the compressed air clean, dry, and oil lubrication.
- Before using, check all connections are firm.
- DO NOT put hands between the nosepiece and the workpiece under any circumstances.
- For safety reasons when using the tool, always use protective goggles, protective gloves, safety helmet, and other necessary protections.
- Only use genuine spare parts for repairs;
- Always keep these operating instructions together with the tester.

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### **Rights and Disclaimers**

The company provides lifelong after-sales service for its products, guaranteeing their quality. The warranty covers issues related to product quality. However, damage to tools resulting from misuse, failure to follow tool use and maintenance instructions, the use of non-original parts, and other forms of man-made damage are not covered by the warranty. It's important to note that wearing parts are also excluded from warranty coverage.

The company does not accept responsibility for any personal, property, or equipment damage or loss caused by illegal operation or actions that violate the provided instructions. Users are advised to adhere to the instructions to avoid any potential risks or damages.

## **MAIN SPECIFICATIONS**



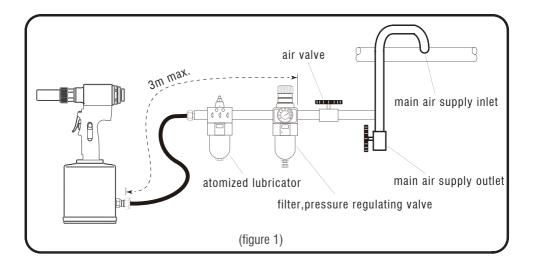
Please refer to the Parts List in this manual (page 20) to have a good understanding of the tool parts located in the tool or sets. The descriptions of the tool parts appear in this manual are in brackets with signal "#" and the parts position numbers corresponding to the tool exploded diagram.

Air cvlinder

\* Note: Tool is supplied as base unit only. Nose sets and adaptors of various sizes can be purchased separately. Please contact us for availability.



## **SETTING UP THE TOOL**



### Setting up the tool

Check the compressed air pressure is within the specified range between 0.5Mpa (5bar) and 0.7Mpa (7bar), and connect the air hose adaptor onto the tool air adaptor (#43). The length of hose should not exceed 3 metres. Recommended hose diameter is 0.8mm minimum.

The air adaptor comes in various versions tailored for different countries and regions. Typically, the tools are initially equipped with the appropriate version by default. However, if the provided air adaptor is not suitable for your air supply hose, please contact the tool distributor(s) for assistance.

To use and add different NOSE SETS on the tool, please refer to 'CAPACITIES, NOSE SETS & ADAPTORS' in this manual;

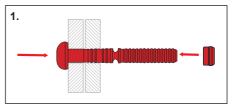
## **SETTING A LOCKBOLT**

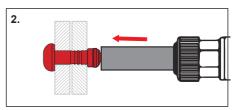
DO NOT exceed the tool's capacity when setting blind rivets or lockbolts.

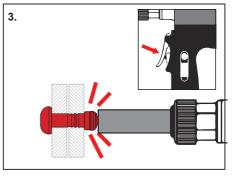
Users of this tool should possess the necessary skills for operating air tools or undergo proper training.

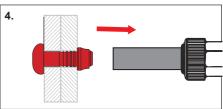
After using the tool for a certain period, there may be a reduction in the tool's hydraulic oil, leading to a loss of power and stroke. Regularly check the tool's hydraulic oil levels and add oil as needed (see instructions in this manual).

- 1. Place the pin into the hole and fit the collar onto it.
- 2. Insert the pin completely into the tool nose.
- 3. Press trigger until the pin breaks.
- 4. Broken pin will eject into the mandrel collector automatically or will be pushed through by the next pin inserted to be set.



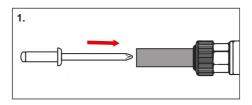


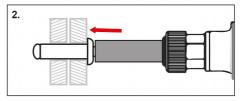


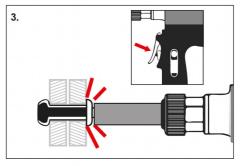


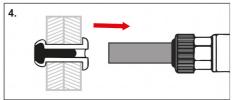
## **SETTING A RIVET**

- 1. Place the rivet mandrel into the nosepiece.
- 2. Place the rivet body in the hole of the assembling part.
- 3. Operate the trigger until the rivet mandrel breaks.
- 4. Broken pin will eject into the mandrel collector automatically or will be pushed through by the next pin inserted to be set.









## **CAPACITIES, NOSE SETS & ADAPTORS**

Several nosepiece sets and adaptors are available to set a range of types and sizes of high strength rivets. Locate your rivet type & size in the following table and refer to the correct section for installation instructions.

RIVET TYPE	RIVET DIAMETER	NOSE SETS	ADAPTOR SETS	SECTION & Page no.
LOCKBOLT	5/16" (8.0mm)	A00183-00 (optional)	N/A	A page 9
	3/8" (10.0mm)	A00179-00 (optional)	N/A	
	-			
MULTIGRIP LOCKBOLT	5/16" (8.0mm)	A00181-00 (optional)	N/A	B page 11
	3/8" (10.0mm)	A02108-00 (optional)	N/A	
SUPER RIV				
	3/8" (10.0mm)	A02431-00 (optional)	A02045-02	C page 13
HYPER RIV				
	5/16"(7.8mm)	A02446-00 (optional)	A02045-02	C page 13
BOM RIVET	5/16" (8.0mm)		N/A	
	3/8" (10.0mm)	Please enquire for more details.	N/A	

Note: Tool is supplied as base unit only.

Nose sets and adaptors of various sizes can be purchased separately.

Please contact us for availability.

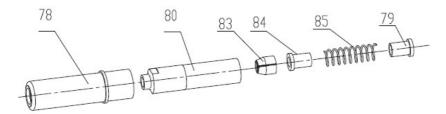
### FITTING NOSE ASSEMBLY FOR LOCKBOLT

5/16" nose set: A00183-00



3/8" nose set: A00179-00

### **SECTION 1A - NOSE SET**



A00183-00 5/16" (Φ8.0) Huck's Lockbolt C6L

ID NO.	PARTS NO.	PARTS	QTY
78	P03306-00	front sleeve	1
79	P60966-01	spring seat	1
80	P03307-00	jaw case	1
83	P03308-00	jaw set	1
84	P60964-01	pusher	1
85	L60965-00	pusher spring	1

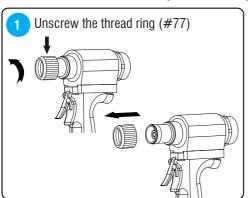
A00179-00 3/8" (Φ10.0) Huck's Lockbolt C6L

ID NO.	PARTS NO.	PARTS	QTY
78	P60960-01	front sleeve	1
79	P60966-01	spring seat	1
80	A60637-01	jaw case	1
83	P60963-01	jaw set	1
84	P60964-01	pusher	1
85	L60965-00	pusher spring	1

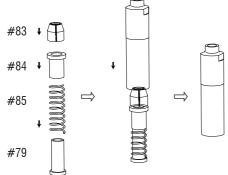
## A

### FITTING NOSE ASSEMBLY FOR LOCKBOLT

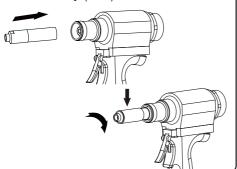
5/16" Noseset (A00183-00) & 3/8" Noseset (A00179-00)



Assemble the jaw case(#80).
Connect Jaw set(#83), pusher(#84),
pusher spring(#85) and spring set (#79).



Install the nose set into piston assembly (#70)



Assemble the front sleeve (#78) and the thread ring (#77).

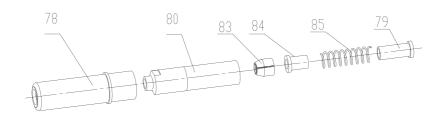
between the jaw case (#80) and front sleeve (#78) should be 2-3mm, after the assembly.

Note: The distance of the top edge

To uninstall, reverse the installation process above.

5/16" Nose Set: **A00181-00** 

3/8" Nose Set: **A02108-00** 



A00181-00 5/16"(Φ8.0) for MagnaGrip Lockbolts

		·, · · · · · · · · · · · · · · · · · ·	
ID NO.	PARTS NO.	PARTS	QTY
78	P03398-00	front sleeve	1
79	P60966-01	spring seat	1
80	P03399-00	jaw case	1
83	P03400-00	jaw set	1
84	P60964-01	pusher	1
85	L60965-00	pusher spring	1

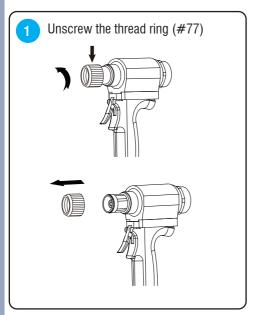
A02108-00 3/8"(Φ10.0) for MagnaGrip Lockbolts

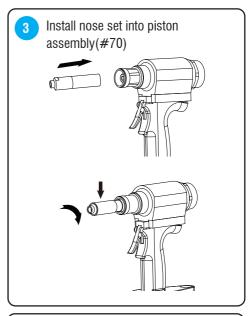
ID NO.	PARTS NO.	PARTS	QTY
78	P03402-00	front sleeve	1
79	P60966-01	spring seat	1
80	P03404-00	jaw case	1
83	P03405-00	jaw set	1
84	P60964-01	pusher	1
85	L60965-00	pusher spring	1

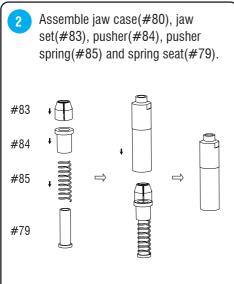
## B

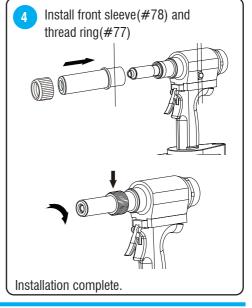
# FITTING NOSE ASSEMBLY AND ADAPTOR SET FOR MULTIGRIP LOCKBOLT

5/16"(A00181-00) & 3/8"(A02108-00) Nose sets





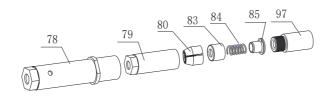




# FITTING NOSE ASSEMBLY AND ADAPTOR SET FOR SUPER RIV & HYPER RIV

3/8" Nose Set: **A02431-00** 

5/16" Nose Set: **A02446-00** 



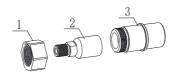
A02431-00 for 3/8" ( $\Phi$ 10) Monobolt / Magnalok

7.02.0		. ,	
ID NO.	PARTS NO.	PARTS	QTY
78	P04430-00	front sleeve	1
79	P04431-00	jaw case	1
80	P04432-00	jaw set	1
83	P03784-00	pusher	1
84	P03785-00	pusher spring	1
85	P03786-00	spring seat	1
97	P03780-00	spring case	1

A02446-00 for 5/16" (Φ7.8) Hemlok

ID NO.	PARTS NO.	PARTS	QTY
78	P04283-00	front sleeve	1
79	P03824-01	jaw case	1
80	P00166-02	jaw set	1
83	P03695-00	pusher	1
84	P03449-00	pusher spring	1
85	P03786-00	spring seat	1
97	P04282-00	spring case	1

Adaptor Set: **A02045-02** 



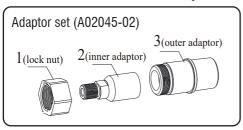
#### A02045-02

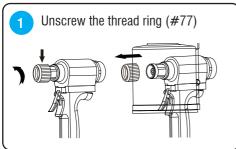
ID NO.	PARTS NO.	PARTS	QTY
1	P03793-00	lock nut	1
2	P03795-00	inner adaptor	1
3	P03792-00	outer adaptor	1

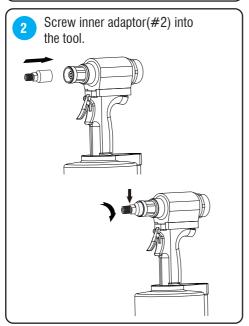
C

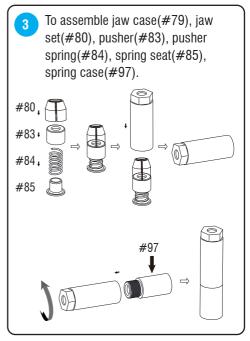
# FITTING NOSE ASSEMBLY AND ADAPTOR SET FOR SUPER RIV & HYPER RIV

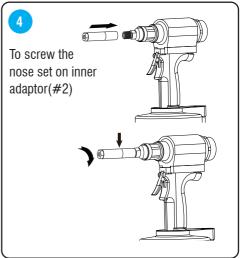
5/16"(A02431-00) & 3/8"(A02446-00) Nose sets & Adaptor set (A02045-02)

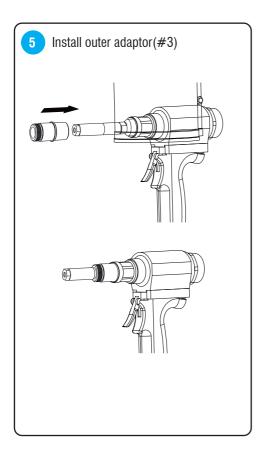


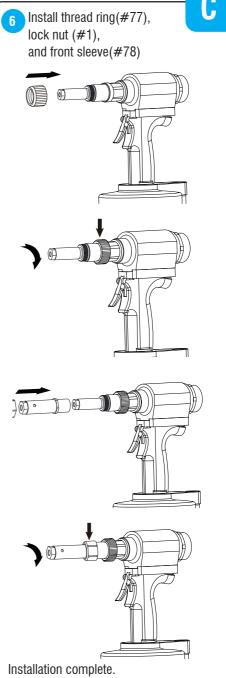












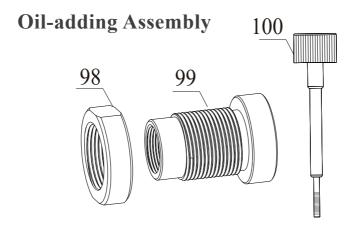
## **MAINTENANCE OF THE E100PC**

### **REFILL & REPLACE HYDRAULIC OIL**

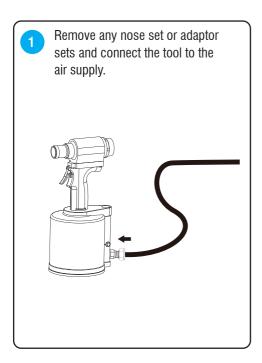
After a certain period of use, the tool's performance may decline, indicating the need to refill or change the hydraulic oil.

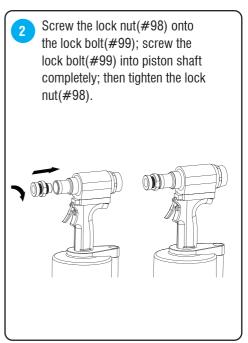
**IMPORTANT:** DO NOT PULL THE TRIGGER during the process of adding hydraulic oil as the tool is connected to the air supply.

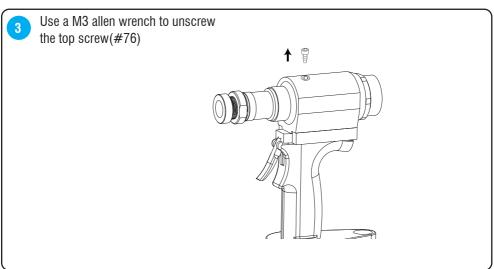
#### PARTS FOR OIL REPLENISHMENT:



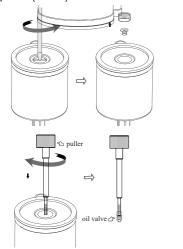
ID NO.	PARTS NO.	PARTS	QTY
98	L61135H00	lock nut	1
99	L61134H00	lock bolt	1
100	Z00053H01	puller	1



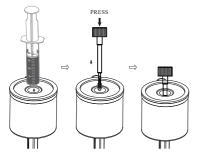




Turn the tool upside down; unscrew the bottom screw (#17) with a flathead screwdriver, and remove the plug (#10); Screw into the oil valve(#8) with the puller (#100) and remove it.



Add hydraulic oil into the piston cylinder then press the puller, with the oil valve(#8) attached, into the piston cylinder.

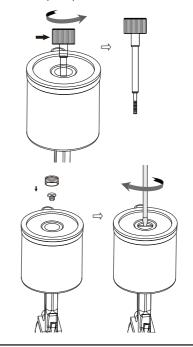


Repeat this action until no bubbles emerge from top of the screw hole - then tighten the top screw(#76).

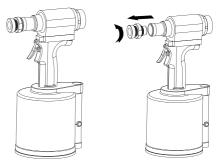


When enough oil has been added - leave the oil valve(#8) in the piston cylinder and unscrew the puller(#100);

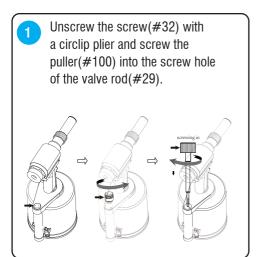
Tighten the plug(#10) and the bottom screw(#17).

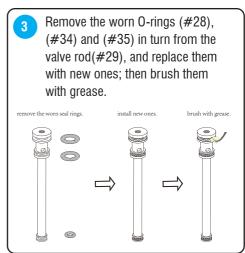


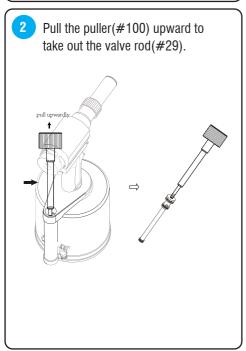
Loosen the oil-adding assembly (lock nut(#98) and lock bolt(#99)). The oil filling is now complete.

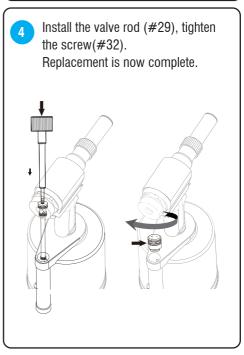


### REPLACING THE O-RINGS (#28, #34, #35)

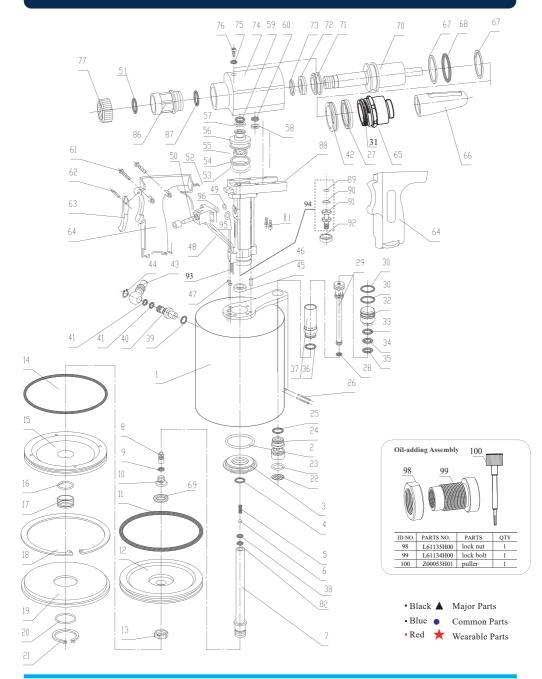








## **E100PC EXPLODED DIAGRAM**



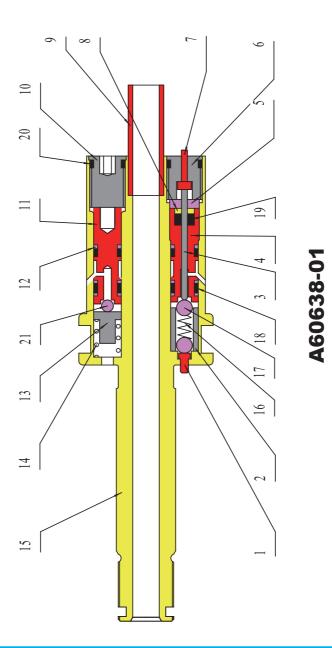
## **E100PC PARTS LIST**

Color	ID NO.	PART NO.	PART	QTY
<b>A</b>	1	P61000A-01	air cylinder	1
*	2	F60049-00	O-ring	1
•	3	P60993-01	oil cylinder nut	1
*	4	S60166-00	O-ring	1
*	5	QH264-280000	spring	1
•	6	F00052-00	steel ball	1
•	7	P61012-01	piston shaft	1
•	8	P60953-01	oil valve	1
*	9	F00113-00	O-ring	1
•	10	QH264-340000	plug	1
*	11	S60035-00	O-ring	1
•	12	P61013-01	piston pedestal	1
•	13	QH264-350000	nut	1
*	14	S60129-00	O-ring	1
•	15	P61015-01	upper cover	1
*	16	F60057H00	O-ring	1
•	17	QH264-330000	screw	1
•	18	L61016-00	retaining ring	1
•	19	P61014-01	lower cover	1
*	20	F00027-00	O-ring	1
•	21	S60307-00	circlip f36	1
•	22	P61007-01	acoustic board	1
*	23	F60077-00	O-ring	1
•	24	P61006-01	ring	1
*	25	F60037-00	O-ring	1
•	26 27	L61133-00 S60227-00	pin 2x30	2
*	28	F00045-00	Y-ring 35x45x6 O-ring	1
•	29	P61005-01	valve rod	1
*	30	F60041H00	O-ring	2
•	31	p60947-01	ring	1
•	32	P61003-01	screw	1
*	33	F60075H00	O-ring	1
*	34	F60075H00	O-ring	1
*	35	F00117-00	O-ring	1
*	36	F60037-00	O-ring	1
•	37	P61004-01	sleeve	1
*	38	F00020-00	O-ring	1
*	39	F00112-00	O-ring	1
•	40	P61008-01	adaptor body	1
•	41	F60030H00	O-ring	2
•	42	P60975-00	buffer ring	1
•	43	A02074-00	adaptor assembly	1
*	44	F00048-00	circlip	1
*	45	L60994-00	valve ring	1
•	46	F60460-00	pin 4.5x8	1

Color	ID NO.	PART NO.	PART	QTY
*	47	F00115-00	O-ring	2
•	48	L61131-00	air tube f3x90	2
*	49	S60026-00	O-ring	1
•	50	P60996-01	valve assembly	1
*	51	F60038H00	O-ring	1
•	52	F60282H00	self-drilling screw	1
*	53	F60039H00	O-ring	1
•	54	L60991-00	ring	1
•	55	P60989-01	flow plate	1
•	56	P60990-01	cylinder core	1
•	57	QH264-380000	support ring	1
•	58	P60987-01	ring	1
•	59	F60030H00	O-ring	1
*	60	F60029H00	O-ring	1
•	61	F60283H00	self-drilling screw	3
•	62	F60252H00	pin	1
•	63	P61009-01	trigger	1
•	64	Z60603H01	handle assembly	1
•	65	P60642-01	back cover	1
•	66	L61098H01	protector	1
•	67	P60973-01	piston ring	2
•	68	S60194-00	O-ring	1
*	69	F60035H00	O-ring	1
•	70	A60638-01	pinston assembly	1
•	71	P60972-01	buffer ring	1
*	72	S60217-00	Y-ring 20x28x5	1
•	73	P60971-01	ring	1
•	74	P60969-01	oil cylinder	1
*	75	F00020-00	O-ring	1
•	76	P60970-01	screw	1
	77	P60967-01	thread ring	1
•	81	F00132-00	screw	6
*	82	F60012-00	O-ring	1
•	86	P60968-01	nose pedestal	1
*	87	F60079-00	O-ring	1
•	88	A60635-01	assembly oil cylinder	1
•	89	L60973-00	piston ring	2
•	90	F60075H-00	O-ring	1
•	91	L601010-00	piston puller	1
•	92	F00006-00	U-ring	1
•	93	F60339H00	pin	2
•	94	A02229-00	piston puller assembly	1
*	95	F60031-00	O-ring	1
^				

Red \star Wearable Parts

## **PISTON ASSEMBLY ILLUSTRATION**



## 22

### **PART LIST OF A60638-01**

Color	ID NO.	PART NO.	PART	QTY
•	1	QH264-100100	valve pusher	1
•	2	QH264-100200	spring case	1
<b>A</b>	3	QH264-100300	pusher	1
•	4	L60978H01	valve	1
*	5	QH264-100500	valve washer	1
•	6	QH264-100600	screw seat	1
*	7	QH264-100700	limit plunger	1
*	8	QH264-100800	nylon washer	1
•	9	L60982H01	discharge tube	1
•	10	QH264-10100	screw seat	1
•	11	L60979H01	valve seat	1

Color	ID NO.	PART NO.	PART	QTY
*	12	QH264-101200	valve washer	6
•	13	QH264-101300	spring seat	1
*	14	L60981H01	valve spring	1
•	15	L60976H01	piston shaft	1
•	16	QH264-101600	valve spring	1
•	17	F00052-00	steel ball	2
*	18	F00203-00	O-ring	4
*	19	F00192-00	O-ring	1
*	20	F00045-00	O-ring	2
•	21	F00018-00	steel ball	1

- Black ▲ Major Parts
- Blue 

  Common Parts
- Red ★ Wearable Parts

