



全自动气动液压铆螺母枪 M3-M12
Automatic Air-Hydro Lockbolts Tool (M3-M12)

02765



使用说明书 \ User's Manual

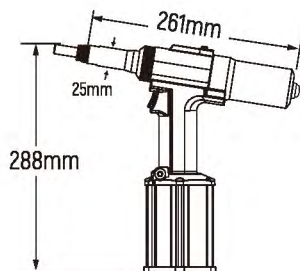


产品概述

用途：气动液压全自动铆螺母枪用于 M3—M12 的铝、铜、铁、不锈钢等各种材质的铆螺母的铆接。其主体采用优质合成材料，具有手持重量轻，操作方便，拉铆速度快，铆合紧，不死机等优点，是理想的铆螺母铆接工具。

技术参数：

工作范围：	M3-M12（所有材质/类型铆螺母）
气源压力：	5-7bar
额定压力：	5.5bar
拉铆行程：	7MM
马达转速：	2800RPM
工作拉力：	29000N
噪音小于：	80dB
重量：	2.3kg



免责声明

本产品最大工作压力不得超过 7bar

本公司对因违规操作或与其它设备并用引发故障而造成的损害不负任何责任

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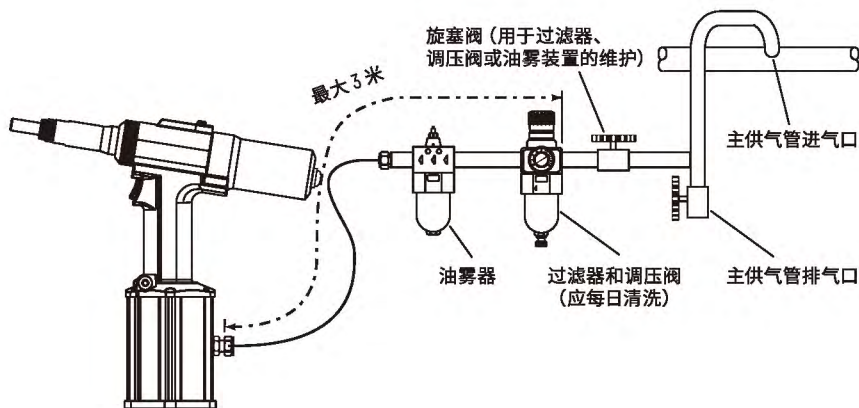
安全使用说明

本手册说明中如果看到“**▲ 警告**”或“**▲ 注意**”字符时，是涉及到安全的重要事项，请仔细阅读严格遵守。

操作与维护

操作安全须知：安装、操作或维修该工具前都必须阅读本说明书，特别要注意下列事项：

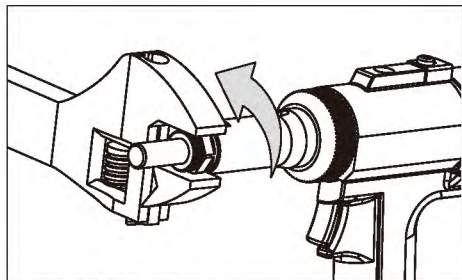
- 1、不要超设计范围使用
- 2、工具应在良好的条件下定期由训练有素的人员检查工具的损坏情况和性能状况，工具的拆卸应由训练有素的人员按照规定的方法进行，拆卸前请仔细阅读工具保养部分
- 3、工作气源压力不超过 7bar
- 4、避免衣服、领带、长发等被工具旋进
- 5、携带工具至另一处操作时，要保持手远离扳扣（33#）以避免无意启动工具
- 6、拆装零件时，必须断开气源
- 7、供气管一般不超过 3 米



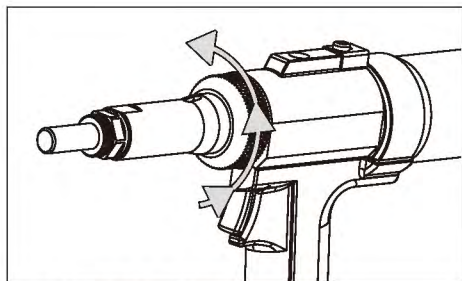
操作与维护

枪头与拉拔螺杆的安装与拆卸

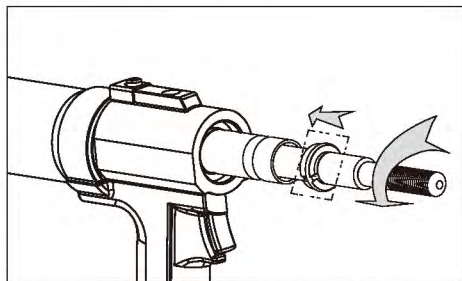
拆卸步骤



1. 扳手将枪头锁紧螺母旋下

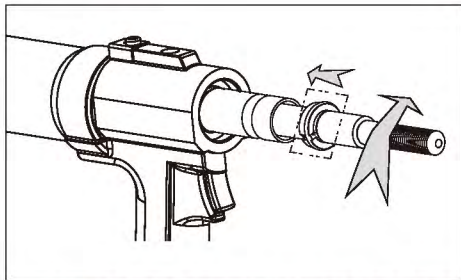


2. 旋下螺盖螺母（连带枪头座）



3. 用力向后拨动快速滑块不放，将拉拔螺杆旋出

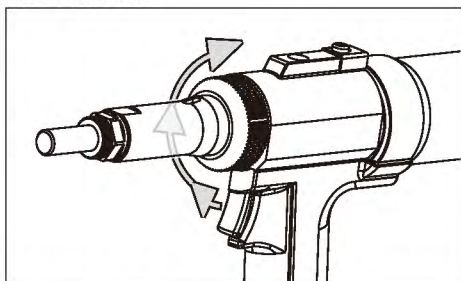
安装步骤



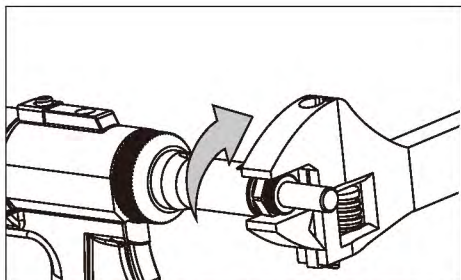
1. 向后拨动快速滑块不放，将准备好更换的拉拔螺杆正时针旋入到位后，松开快速滑块，卡紧

注意

如果快速滑块不到位，或未卡紧，可反复拨动至复位卡紧为止。



2. 将螺盖（连带枪头座）按方向旋紧

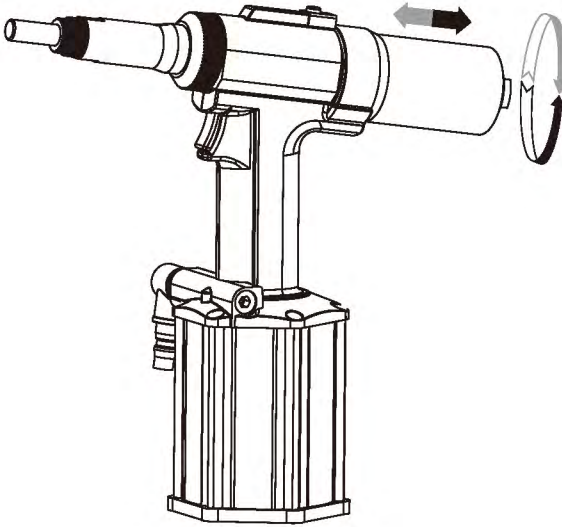


3. 将枪头对准枪头座，然后扳紧，完成安装操作

操作与维护

行程调节: 对于保证达到最坚固的铆接效果, 下述调节是必不可少的。因此, 建议备有相同厚度和相同孔洞的测试板作为本机上流水线前的调节样板

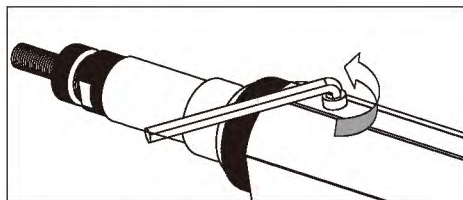
- 行程太小, 铆螺母变形不足, 工作铆合不紧
- 行程太大, 铆螺母过度变形, 易拉坏铆螺母和拉拔螺杆的螺纹
- 行程太小由压簧调节套 [32] 调节, 调节 [21] 行程滑块, 退出定位杆 [23]
- 若缩短行程, 须将压簧调节套 [32] 顺时针方向旋转; 若增大行程, 须将压簧调节套 [32] 逆时针方向旋转。压簧调节套 [32] 从螺紋頂逆时针方向旋转不要多于 5 圈。直到获得最佳铆接位置, 再将定位杆 [23] 锁住压簧调节套 [32]



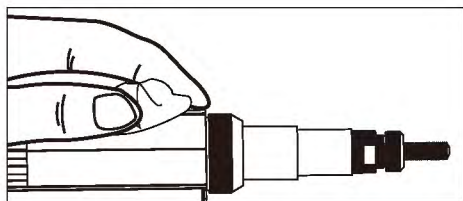
操作与维护

操作方法:把工具接上气源,将铆螺母旋进枪嘴螺杆1-2牙,再向里轻推,螺母即自动旋上,将铆螺母放进工件之孔内,紧贴工件,然后按动扳扣 [33] 铆螺母即自动铆于工件上,枪头螺杆会自动倒转出来,松开扳扣 [33] 铆接结束。

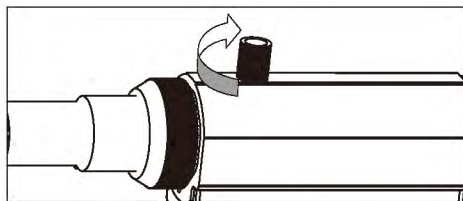
加注液压油:经行程调节仍达不到铆接最佳效果应检查添加液压油,先压簧调节套 [32] 逆时针旋转 6 圈。具体加油方法如下:



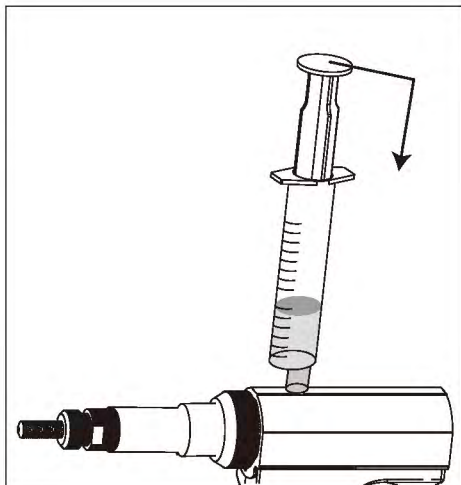
1. 使用内六角扳手,将加油螺丝旋下



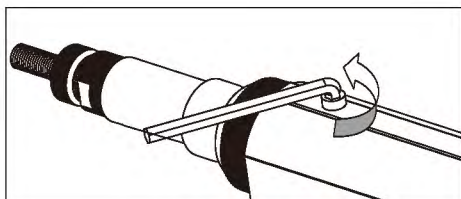
2. 将油缸内的残余液压油排出,在接通气源的状态下,用废旧抹布



3. 将附件包内注油针筒上的注油螺丝取下,并注意注油螺丝上的胶圈是否破损。然后将注油螺丝轻轻旋入



4. 用注油针筒吸入约 15ML 的液压油,对准注油螺丝孔,然后缓缓推入,直到推不动时,此时已完成加油。然后将渗出的液压油擦干净。最后将补油螺丝拧紧



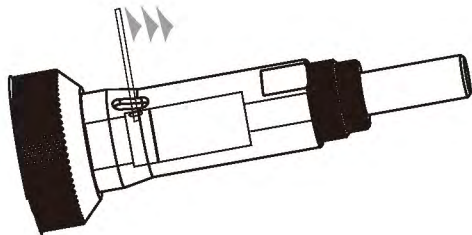
5. 刚加满油后以该枪最大铆接范围进行实铆测试,如果行程仍短,说明气缸内有空气,需要进行放气处理,首先接通气源,然后往复扣动扳机 6-7 次后,将补油螺丝拧松 2 丝,待气体排出后,拧紧补油螺丝。重新进行实铆测试

维护养护

- 1、检查机身有否漏油。
- 2、使用前检查机身，扳机处和接气口有否漏气。
- 3、检查枪嘴螺杆是否安装及配套正确，及磨损程度。
- 4、气源出口若未装油雾器，为确保工具运行良好，请安装油雾器。
- 5、经常检查各连接部件是否可靠连接。
- 6、任何磨损配件应当及时更换。

不退铆解决方法一：

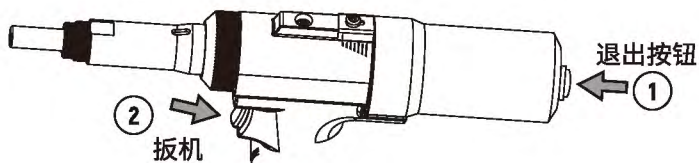
不合格的铆螺母或螺杆牙损坏或行程调整过头，都有可能造成不退铆。可按以下方法操作解决。



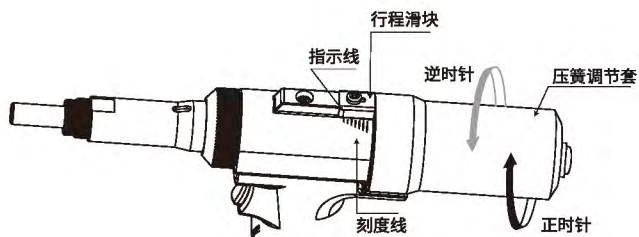
- 1、使用 4mm 助退销插入接弹簧座（8#）内，并逆时针旋转即可将卡住的铆螺母退出。

不退铆解决方法二：

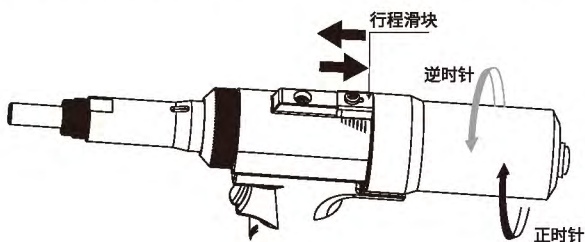
铆螺母在工具上退不出时，用手指按住①开关，然后点动扳机②即可轻易将铆螺母从工具上退出来。



行程调节：



请根据铆接技术需求来调节行程大小，正时针行程变小，逆时针行程变大。

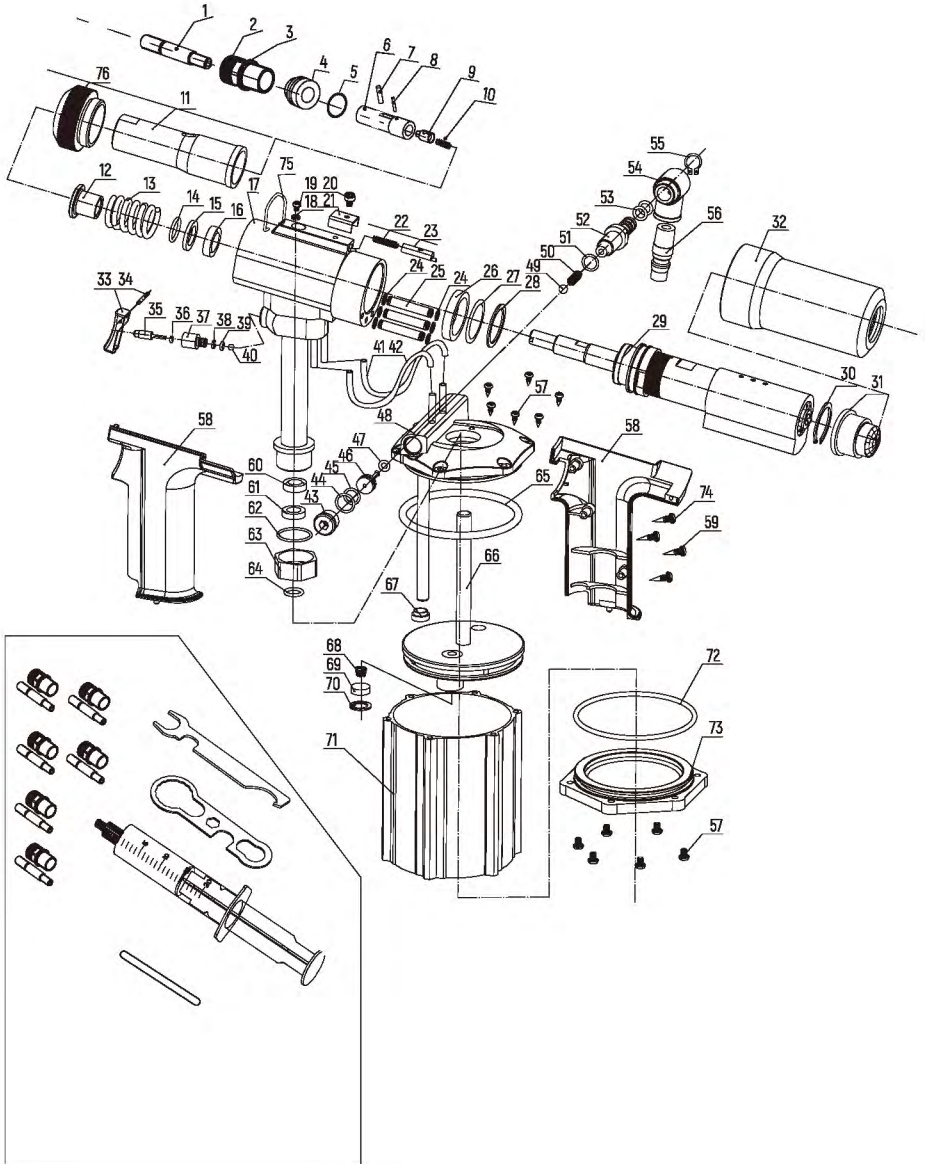


- 1、将滑块拨开
- 2、旋转压簧调节套调整至合适行程，调整完后将行程滑套松回，完成调整。

故障诊断

故障	原因	排除措施
枪头螺杆一直倒转	气压低于 0.5MPA 密封件缺少润滑	调校气压 0.5MPA-0.7MPA 马达 29# 密封件加润滑脂
铆螺母折边不当 或欠紧固	行程不正确 气压太小 液压油不足 工件板厚不符	重新调校行程 调校气压 加注液压油 检查铆螺母 检查铆螺母与铆接板厚
拉拔螺杆正转	马达拉杆六角磨损 马达 24# 密封件磨损	更换 更换 24# 密封件
铆螺母不能自动 套进枪头螺杆	8# 弹簧座与 12# 复位座之间 间隙过小 气动马达阻塞	重新调整间隙 1.5-2.0mm 马达拆开清洁及润滑
扳机失效	气压不够 扳机机件阻塞 49# 球阀磨损	调正气压 从扳机侧面加数滴润滑油及按 动扳机数次若无效则须拆开扳 机清洁及润滑机件 更换 49# 球阀
铆螺母铆好后不能退出	检查马达倒转开关	调整更换密封件，涂加润滑脂
枪头螺杆不能倒转	马达密封圈 (29) 磨损漏气 供气管 (25) 闭塞 气动马达阻塞	调整行程，更换 29 密封圈 加润滑脂使之润滑 须拆开马达清洁及润滑机件

爆炸图

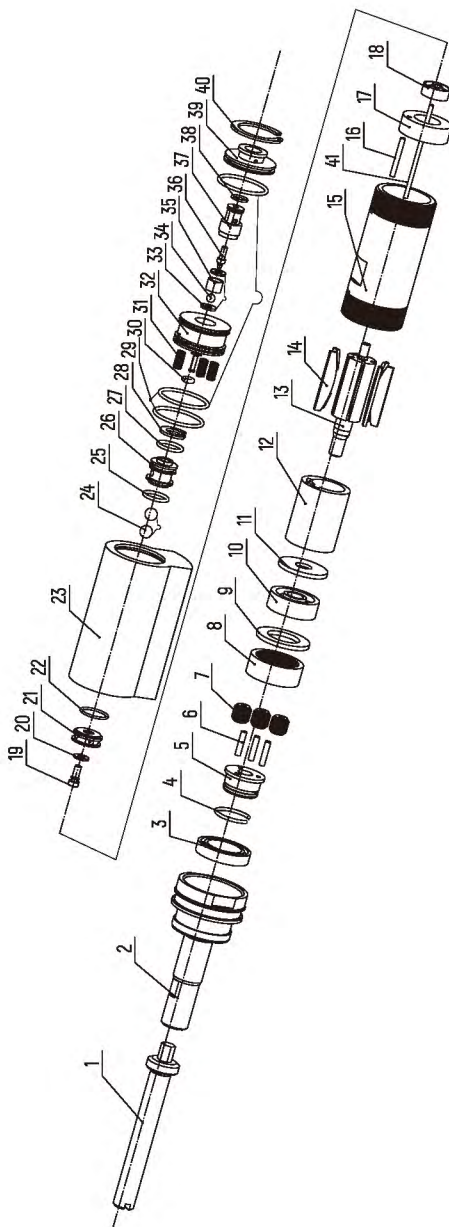


爆炸图目录表

序号	配件编号	名称	数量
1	SCP02765-01	拉拔螺杆 M12	1
2	SCP02765-02	枪头 M12	1
3	SCP02765-03	枪头锁母	7
4	SCP02765-04	快换滑套	1
5	SCP02765-05	"O"型圈	1
6	SCP02765-06	接套	1
7	SCP02765-07	滚针	1
8	SCP02765-08	弹性销	1
9	SCP02765-09	快换内接套	1
10	SCP02765-10	更换弹簧	1
11	SCP02765-11	枪头座 (普通)	1
12	SCP02765-12	复位座	1
13	SCP02765-13	复位弹簧	1
14	SCP02765-14	"O"型圈	1
15	SCP02765-15	活塞轴支撑圈	1
16	SCP02765-16	"U"型圈	1
17	SCP02765-17	油缸总成 (螺钉)	1套
18	SCP02765-18	自定心组合垫圈	1
19	SCP02765-19	垫圈螺钉	1
20	SCP02765-20	行程滑块螺钉	1
21	SCP02765-21	行程滑块	1
22	SCP02765-22	行程调节弹簧	1
23	SCP02765-23	调节限位杆	1
24	SCP02765-24	"O"型圈	6
25	SCP02765-25	供气管	3
26	SCP02765-26	"U"型圈	1
27	SCP02765-27	"O"型圈	1
28	SCP02765-28	活塞轴座支撑圈	1
29	SCP02765-29	风动马达总成	1套
30	SCP02765-30	六用弹性挡圈	1
31	SCP02765-31	退出按钮组件	1套
32	SCP02765-32	压簧调节套	1
33	SCP02765-33	扳机 (黑色)	1
34	SCP02765-34	扳机销	1
35	SCP02765-35	开关杆	1
36	SCP02765-36	"O"型圈	1
37	SCP02765-37	开关套	1
38	SCP02765-38	"O"型圈	1

序号	配件编号	名称	数量
39	SCP02765-39	"O"型圈	1
40	SCP02765-40	钢珠闷头	1
41	SCP02765-41	气管	1
42	SCP02765-42	气管	1
43	SCP02765-43	控制闷头	1
44	SCP02765-44	"O"型圈	1
45	SCP02765-45	"O"型圈	1
46	SCP02765-46	控制杆	1
47	SCP02765-47	"O"型圈	1
48	SCP02765-48	气缸上盖组件	1套
49	SCP02765-49	橡胶球	1
50	SCP02765-50	换向弹簧	1
51	SCP02765-51	"O"型圈	1
52	SCP02765-52	接头体	1
53	SCP02765-53	"O"型圈	2
54	SCP02765-54	气源接头座	1
55	SCP02765-55	轴用弹性挡圈 A 型	1
56	SCP02765-56	气动快速接头	1
57	SCP02765-57	盖螺钉	6*
58	SCP02765-58	手柄组件 (世达绿)	1套
59	SCP02765-59	十字盘头无尾自攻螺钉	3
60	SCP02765-60	"U"型圈	1
61	SCP02765-61	活塞杆支撑圈	1
62	SCP02765-62	"O"型圈	1
63	SCP02765-63	油缸总成锁母	1
64	SCP02765-64	"O"型圈	1
65	SCP02765-65	"O"型圈	1
66	SCP02765-66	活塞总成	1
67	SCP02765-67	防尘圈	1
68	SCP02765-68	排气宝塔弹簧	1
69	SCP02765-69	排气垫	1
70	SCP02765-70	孔用弹性挡圈 A 型	1
71	SCP02765-71	气缸	1
72	SCP02765-72	"O"型圈	1
73	SCP02765-73	气缸底盖	1
74	SCP02765-74	十字盘头无尾自攻螺钉	1
75	SCP02765-75	螺盖	1

马达爆炸图



附件单：

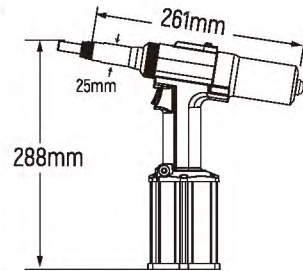
序号	编号	品名	数量
1	SCP02765-76	助退销	1
2	SCP02765-77	勾形扳手	1
3	SCP02765-78	塑料针筒组件	1
4	SCP02765-79	拉拔镙杆 M10	1
5	SCP02765-80	拉拔镙杆 M8	1
6	SCP02765-81	拉拔镙杆 M6	1
7	SCP02765-82	拉拔镙杆 M5	1
8	SCP02765-83	拉拔镙杆 M4	1
9	SCP02765-84	拉拔镙杆 M3	1
10	SCP02765-85	枪头 M10	1
11	SCP02765-86	枪头 M8	1
12	SCP02765-87	枪头 M6	1
13	SCP02765-88	枪头 M5	1
14	SCP02765-89	枪头 M4	1
15	SCP02765-90	枪头 M3	1
16	SCP02765-03	枪头锁母	6
17	SCP02765-92	扳手	1

About the Tool

Pneumatic fully automatic rivet nut tool can set rivet nuts from M3 up to M12 with materials aluminium, steel and stainless steel. The tool is basically made of synthetic material, and it is light and easy and fast to operate. It can fasten the rivet nuts with high clamping force and tool block-free. It is an ideal rivet nuts setting tool.

Specifications

Capacity:	M3-M12 all materials and type of rivet nuts
Air Supply:	5-7bar
Rated Air Pressure:	5.5bar
Stroke:	7MM
Motor Speed:	2800RPM
Traction Power:	29000N
Noise:	80dB
Weight:	2.3kg



Disclaimer

The maximum air supply pressure can not be higher than 7 bar.

We are not responsible for any loss caused by misoperation of the tool or the tool is used simultaneously with other devices.

We are not responsible for any loss caused by any operations not following the instructions described in this manual.

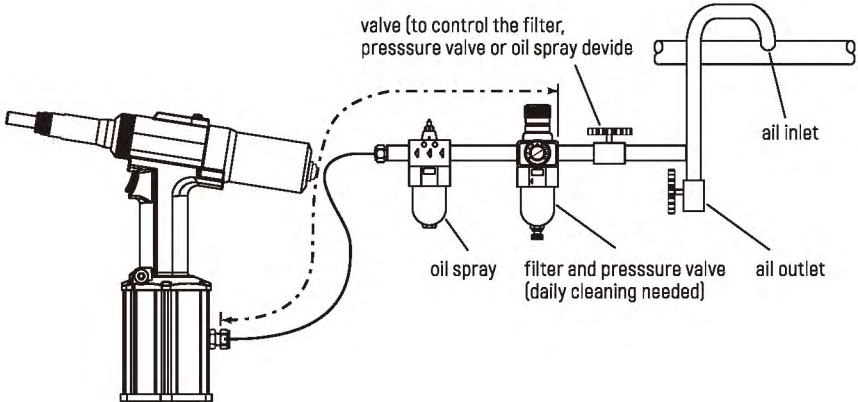
About the Manual

⚠ It is very important to read the part with warranting. It is related to the safety related instructions.

Operations and Maintenance

Notice in Use: Read this manual carefully before installation, operation or repair the tool

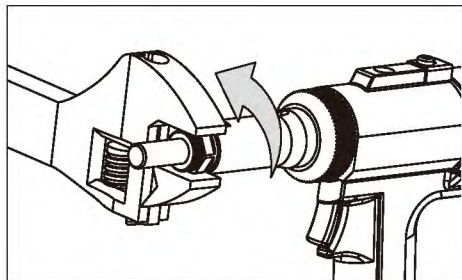
1. Do not use the tool beyond its capacity;
2. The tool should be periodically maintained by skilled personnel. The uninstallation of the tools should be done by skilled personnel, according to the relative instructions in this manual;
3. Air supply pressure never higher than 7 bar;
4. Avoid clothes, tie, long hair to be sucked into the tool;
5. When moving the tool, be sure not to touch onto the button (#33) preventing the tool starting by mistake;
6. Disconnect the air supply when change the parts;
7. Air supply hose should be shorter than 3 meters in length;



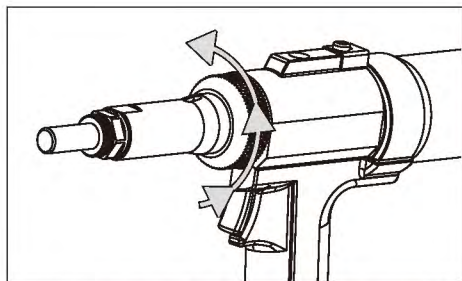
Operations and Maintenance

Change the mandrel

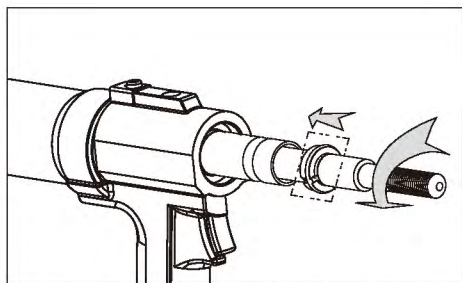
uninstall the mandrel



1. uninstall the locknut with spanner

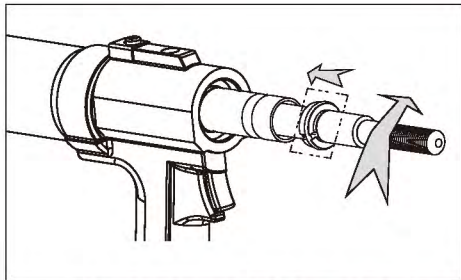


2. uninstall the retaining nut together with the sleeve



3. push the slider back then screw off the mandrel to be changed

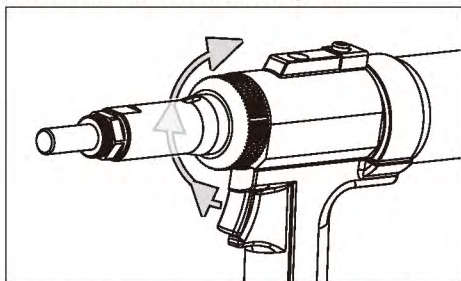
install the mandrel



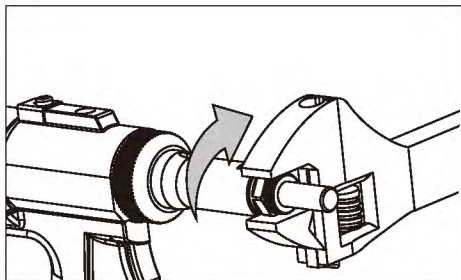
1. push the slider back and hold, screw on the correct mandrel and screw on, then release the slider

NOTICE

If the slider not returned in its position, repeat several time until it returned its position



2. install the retaining ring with the sleeve back to the tool.

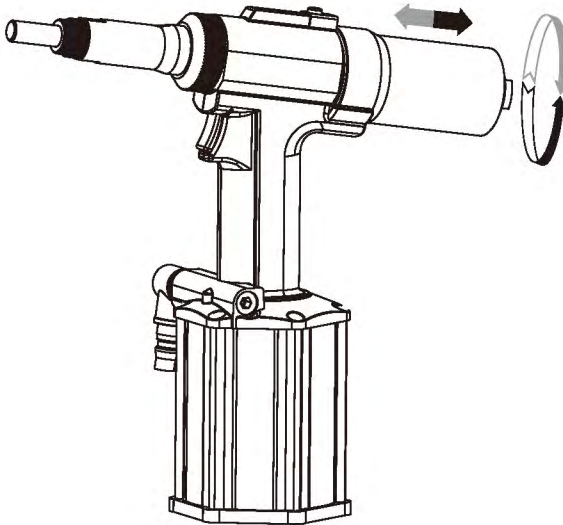


3. put the anvil back to the sleeve and and screw in tight

Operations and Maintenance

Adjust the Stroke: It is necessary to adjust the stroke before setting a rivet nut properly. It is strongly recommended to have an initial trial set same as the riveting application before using on production line.

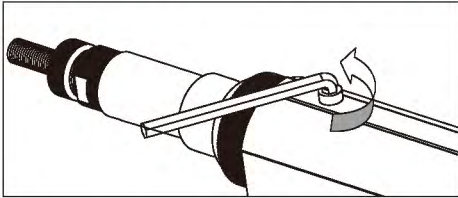
- Too small stroke will cause rivet nuts clamping not strong enough
- Too big stroke will cause rivet nuts deformed and damaged the threads of the mandrels
- To increase the stroke, slide the stroke setting slider [#21] in the direction of the tool front (mandrel), turning the stroke setting knob [#32] anti-lock wise, release the stroke setting slider [#21] back (to be sure the small needle tip [#23] seated back into the hole on the edge of the stroke setting knob) and checking the indicated line pointing
- Repeat the operation until the indicate line pointing at the defined stroke; To reduce the stroke, operating in the same way but turning the stroke setting knob [#32] clock wise. Never turn the stroke setting knob [#32] anti-lock wise over 5 circles.



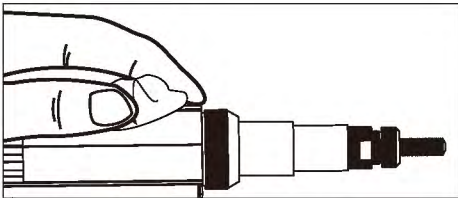
Operations and Maintenance

Riveting Operation: To connect the tool with air supply, screw the rivet nut onto the mandrel one or two threads, push the rivet nut, the rivet nut will be feeded onto the mandrel; To insert the rivet nut into the hole of the workpiece, push it to th workpiece, press button [#33], the rivet nut will be fastented automatically, the tool will be released automatically.

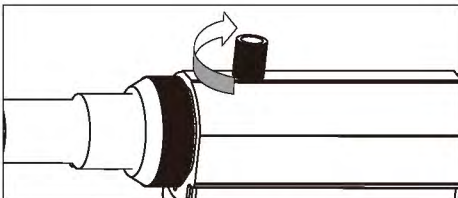
Refill Hydraulic Oil: When stroke ajust can not get a good result, the tool needs to b add on hydraulic oil. To turn the stroke setting knob [#32] anti-lock wise 6 circles, and



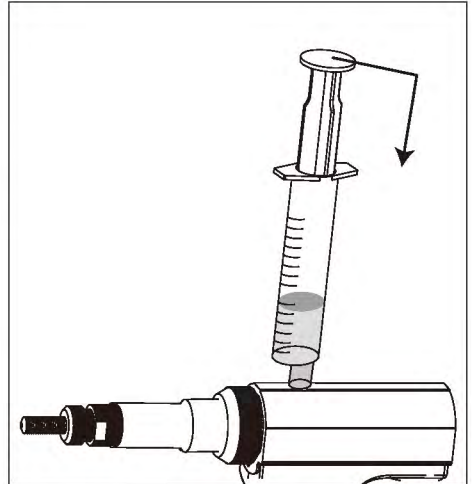
1. To remove the screw on the top of the tool by hexagon wrench;



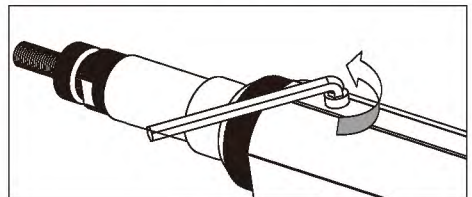
2. To connect the air supply and to cover some cloth over the hole where the screw removed, then to press the button and the oil will be leaked out from the tool, then disconnect the air supply;



3. To screw the oil inject adaptor (on oil injection tube set in the accessories pack) into the hole where screw removed;



4. To use the oil injection tube (in the accessories pack) to inject the oil slowly until not able to refill, to remove the injection tube and its adaptor, then clean the oil on the tool and tightly screw on the screw back to the tool;



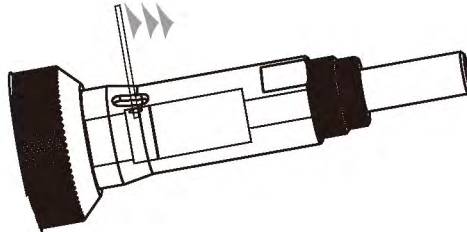
5. To test the tool stroke. If the strok still not enough as it should be, it meanss there could be some air in the oil cylinder when you refilling the oil to the tool. Then the extra air needs to be released from the tool. To connect the tool with air supply, to pull the tool button 6 or 7 times, then loosen the screw, let the extra air leaking out, then screw on the screw tight again.

Maintenance

1. Check if any oil leakage from the tool;
2. Check any leakage of air at the button and adaptor;
3. Check if the mandrel and anvil are correct, and worn off or not;
4. To equip filter system for the air supply;
5. Periodically check the parts of the tools are fixed without any loosen;
6. Any worn off or damaged parts found, to renew;

Solution to Release the Blocked Tool (1):

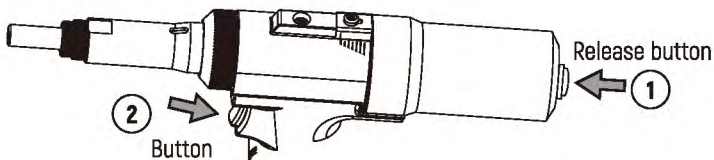
If the tool operator used a bad quality rivet nut or improper stroke setting, the tool might be blocked on the set rivet nut and work piece and can not be released.



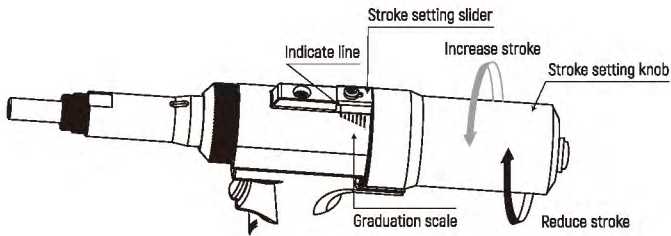
1. To use a rescue stick 4mm inserted to the sleeve (#8) as shown, turn anti-lock wise until released the blocked to

Solution to Release the Blocked Tool (2):

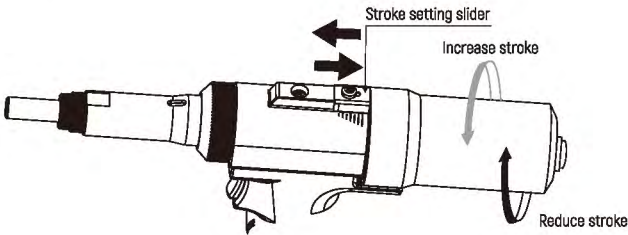
If the tool blocked with the set rivet nut, press the release button (#1), and press the button (#2).



Stroke Setting



According to the application, turn the stroke setting knob lock-wise to reduce the stroke and anti-lock wise to increase the stroke.

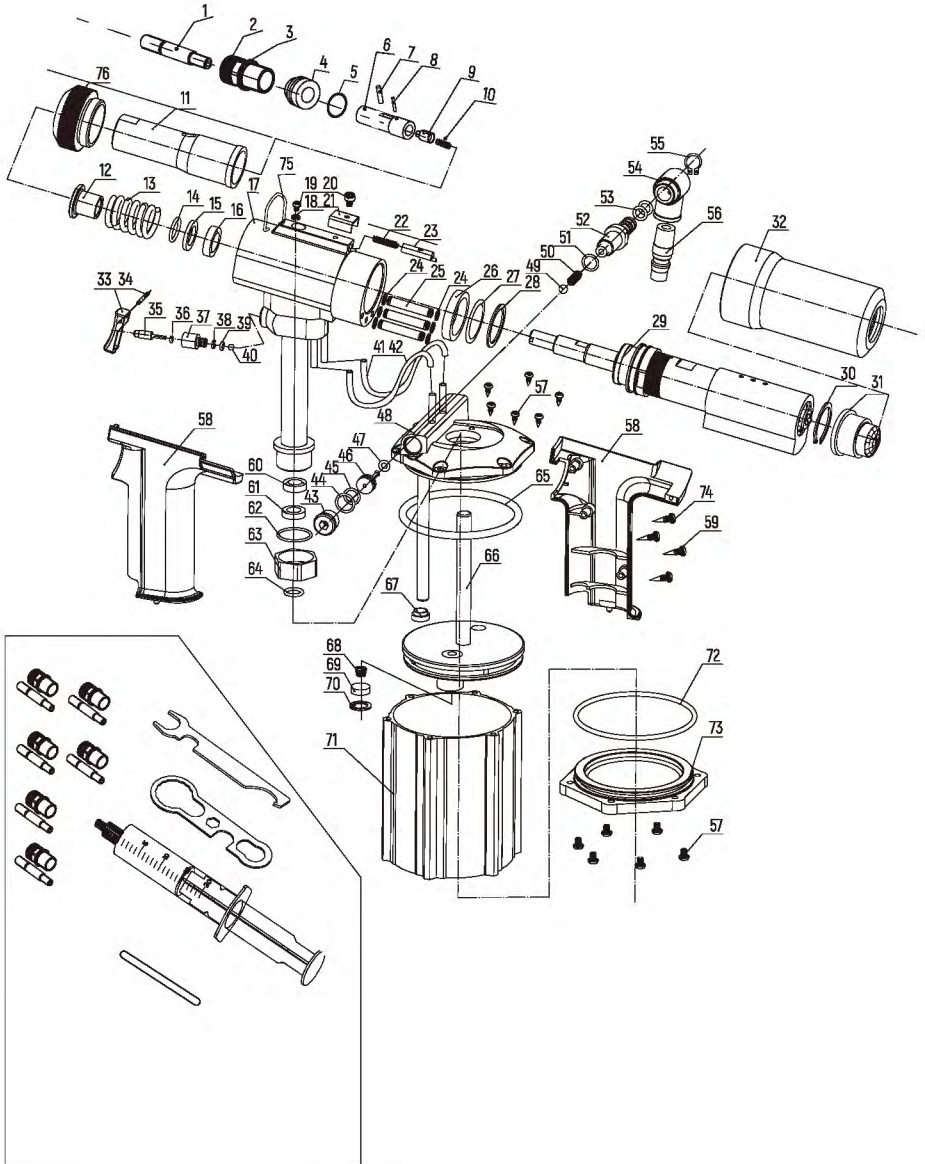


1. push the stroke slider;
2. turn the stroke setting knob to the proper stroke, then release the stroke slider;

Troubles Shooting

Problems	Causes	Solutions
mandrel turn reversely without stop	air pressure less than 0.5MPa seals needs lubricants	adjust the air pressure 0.5MPa ~ 0.7MPa lubricate seal (#29) of the motor with grease
rivet nuts upset not correct or lost clamping	stroke not correct air pressure less short of hydraulic oil workpiece thickness not correct	adjust the stroke adjust the air pressure refill hydraulic oil check rivet nut check rivet nut and thickness of workpiece
rivet nuts do not feed onto mandrel automatically	main puller of the motor worn off worn off seal (#24) of the motor	change with new main puller change with new seal (#24) of the motor
button does not work	air pressure less button block valve (#49) worn off	adjust air pressure lubricate the button at the side, repeat the operations clean the button; change with new valve (#49)
tool not release after setting	check release button at the back	adjust and or change the seals and lubrication
mandrel does not reverse turning	air leakage at seal (#29) hose (#25) block air motor block	adjust stroke, renew seal (#29) lubrication open the air motor and clean it and lubrication

Exploded View

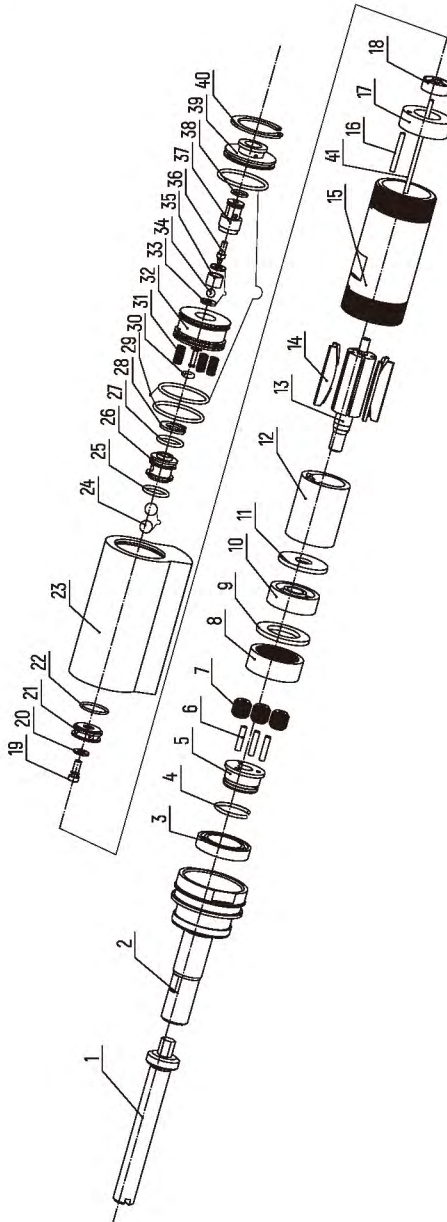


Parts List

No.	Part No.	Parts Descriptions	Qty.
1	SCP02765-01	mandrel M12	1
2	SCP02765-02	anvil for M12	1
3	SCP02765-03	locknut	7
4	SCP02765-04	slider	1
5	SCP02765-05	O-ring	1
6	SCP02765-06	adaptor sleeve	1
7	SCP02765-07	pin	1
8	SCP02765-08	pin	1
9	SCP02765-09	inner adaptor sleeve	1
10	SCP02765-10	spring	1
11	SCP02765-11	nose sleeve	1
12	SCP02765-12	spring seat	1
13	SCP02765-13	return spring	1
14	SCP02765-14	O-ring 18x1.9	1
15	SCP02765-15	support ring	1
16	SCP02765-16	U-ring	1
17	SCP02765-17	oil cylinder	1
18	SCP02765-18	washer	1
19	SCP02765-19	screw	1
20	SCP02765-20	screw	1
21	SCP02765-21	stroke setting slider	1
22	SCP02765-22	spring	1
23	SCP02765-23	lock pin	1
24	SCP02765-24	O-ring	6
25	SCP02765-25	hose	3
26	SCP02765-26	U-ring	1
27	SCP02765-27	O-ring	1
28	SCP02765-28	support ring	1
29	SCP02765-29	air motor	1
30	SCP02765-30	circlip	1
31	SCP02765-31	stroke setting knob	1
32	SCP02765-32	release button set	1
33	SCP02765-33	button	1
34	SCP02765-34	pin	1
35	SCP02765-35	switch pusher	1
36	SCP02765-36	O-ring	1
37	SCP02765-37	switch sleeve	1
38	SCP02765-38	O-ring	1

No.	Part No.	Parts Descriptions	Qty.
39	SCP02765-39	O-ring	1
40	SCP02765-40	steel ball	1
41	SCP02765-41	hose	1
42	SCP02765-42	hose	1
43	SCP02765-43	blockage end	1
44	SCP02765-44	O-ring	1
45	SCP02765-45	O-ring	1
46	SCP02765-46	control rod	1
47	SCP02765-47	O-ring	1
48	SCP02765-48	air cylinder lid	1
49	SCP02765-49	rubber ball	1
50	SCP02765-50	spring	1
51	SCP02765-51	O-ring	1
52	SCP02765-52	connector	1
53	SCP02765-53	O-ring	2
54	SCP02765-54	air swivel joint	1
55	SCP02765-55	A-circlip	1
56	SCP02765-56	air adaptor	1
57	SCP02765-57	screw	6
58	SCP02765-58	grip	1
59	SCP02765-59	self-drilling screw	3
60	SCP02765-60	U-ring	1
61	SCP02765-61	support ring	1
62	SCP02765-62	O-ring	1
63	SCP02765-63	nut	1
64	SCP02765-64	O-ring	1
65	SCP02765-65	O-ring	1
66	SCP02765-66	piston	1
67	SCP02765-67	dust ring	1
68	SCP02765-68	spring	1
69	SCP02765-69	gasket	1
70	SCP02765-70	circlip	1
71	SCP02765-71	air cylinder blue	1
72	SCP02765-72	O-ring	1
73	SCP02765-73	air cylinder bottom	1
74	SCP02765-74	self-drilling screw	1
75	SCP02765-75	retaining ring	1

Motor Exploded View



Accessories pack

No.	Part No.	Parts Descriptions	Qty.
1	SCP02765-76	rescue stick	1
2	SCP02765-77	hook-shaped wrench	1
3	SCP02765-78	injector	1
4	SCP02765-79	mandrelM10	1
5	SCP02765-80	mandrelM8	1
6	SCP02765-81	mandrelM6	1
7	SCP02765-82	mandrelM5	1
8	SCP02765-83	mandrelM4	1
9	SCP02765-84	mandrelM3	1
10	SCP02765-85	anvilforM10	1
11	SCP02765-86	anvilforM8	1
12	SCP02765-87	anvilforM6	1
13	SCP02765-88	anvilforM5	1
14	SCP02765-89	anvilforM4	1
15	SCP02765-90	anvilforM3	1
16	SCP02765-03	locknut	6
17	SCP02765-92	wrench	1

适用型号 / Model : 02765

版本号 / Version No. : V-SE-02765-210816

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