



CR-1 Instruction Manual



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Tool Property:

- Light weight
- High-speed operation, high power
- Low noise
- Shock absorption
- Long stroke
- Easy maintenance
- Sets standard rivets up to 3/16" diameter into any materials
- Rear adjustable vacuum security system for powering on and off mandrel retention function. It is a safety device for operation with the mandrel container detached and saves compressed air by adjusting air flow volume
- The tool can operate without the mandrel container
- The tool can mount the rivet in single operation
- Effective air pressure is 44 to 102 psi
- Max pull force is 1798lb
- CNC machined quality components ensures long life
- Mandel container is made of PC, which is transparent and will not break easily

Technical Specification:

Rivet size:	Diameter 0.9 – 1.9 inches
Air pressure:	8.8 – 15.4 lbf
Stroke:	0.787 inches
Pull force @ 5 Bar:	1798 lb
Weight:	2.87 lb
Tool dimension (inches):	11.8 X 4.8 X 10.4

Safety Instructions:

Please read the following instructions carefully

Never disassemble the tool without reading the following safety instructions.

- Always use the tool in accordance with the specified safety instructions. Direct any queries regarding safety and operation to our company.
- Never connect the tool to any medium other than compressed air. Set the air pressure between 72 to 101 psi.
- Do not use the tool for purpose other than installing rivets.
- The tool must be maintained in a safe working condition at all times and examined at regular intervals for damage.
- Do not dismantle this tool without prior reference to the maintenance and service instructions.
- Always disconnect the air pipe from the tool inlet before maintenance and service.
- Do not point tool towards people or persons.
- When using the tool, wear safety glasses.

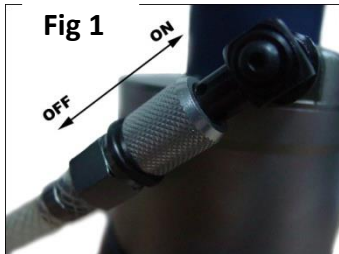
Tool Preparation:

The tool must be connected to an air filter. This unit filters the compressed air to separate dirt and condensate. A pressure regulator with a preferred setting of 87 psi must be installed. Air supply must be free of moisture and particles.

Use dry and clean materials (hose, couplings, fittings, etc.) to connect the tool to the filter. Check for leakage in the compressed air supply. IF there is leakage, replace the damaged hoses or coupling. Drain the condensate from the filter. Also check the dirt filter.

Check the compressed air supply pressure. The tool must be fitted with correct nosepiece (01) and pusher (06) before operating. The 0.19 inch nosepiece and larger bore diameter pusher are fitted in the tool as standard.

Operating Instruction:



1. Connect the air supply, switch ON/OFF vale (48) to ON position. (See figure 1)

2. Adjust the vacuum security system counter-clockwise when the vacuum system is ON, then adjust to optimal air volume so that the rivet can be held in any orientation. (See figure 2)



Attention: If you don't want to use vacuum system, you can turn vacuum security system clock wise and turn it off.

3. Direct the riveter with rivet to the hole and then pull the trigger. The stems automatically reverse to the collector and the rivet is set.

Priming:

After 100,000 cycles, the stroke is reduced and rivets are not set by one operation, then the tool needs to be oiled. Please use the attached bottle of lubrication oil in the box.

1. Disconnect air supply to tool and switch ON/OFF valve (48) to OFF position.
2. Remove seal screw (70) and seal (69). (See figure 3)



Fig 3

3. Screw the priming pump oil into the bleed screw hole. Press down and release several times until resistance is felt. (See figure 4)



Fig 4

4. Remove the priming pump and the excessive oil will flow out. Clean out the excessive oil and replace the seal screw and seal.

Head Cleaning and Oiling:

Every 10,000 cycles the tool should be oil on the jaws. (See figure 5)



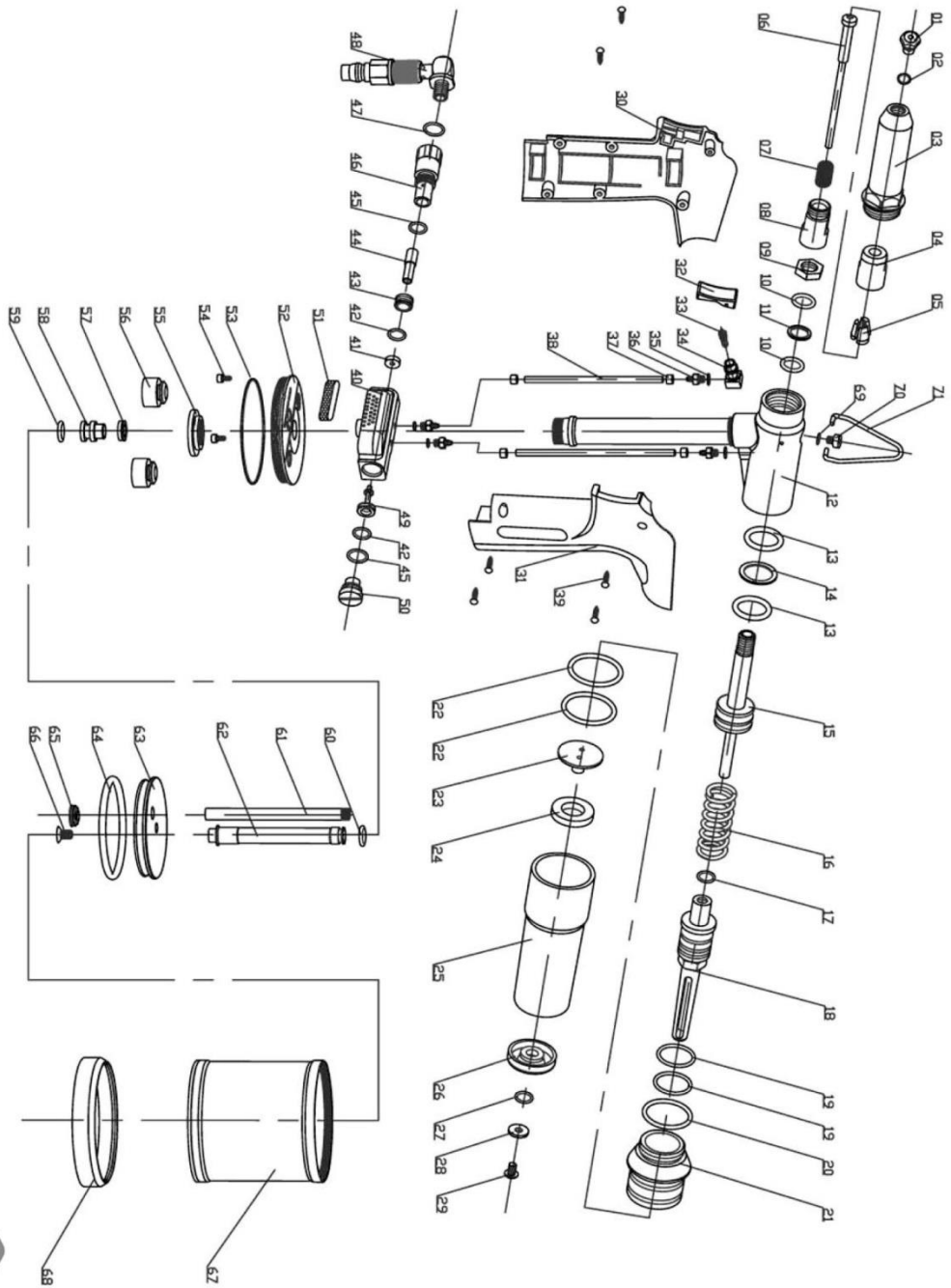
Fig 5

1. Disconnect air supply and air valve switch.
2. Dismantle the riveter head by wrench.
3. Use wrench to disassemble head components and cleaning these parts, and then lubricate them before assembling. (See figure 5)

Trouble Shooting

Symptoms	Possible Causes	Solutions
The jaws cannot release the mandrel	<ul style="list-style-type: none"> • The nosepiece, jaws, jaw carrier and out cylinder may not be assembled correctly • The spring may be worn out or broken • The oil may be insufficient • There is oil or air leakage somewhere 	<ul style="list-style-type: none"> • Check the nosepiece, jaws, jaw carrier and out cylinder • Replace the defective coupling and components • Add hydraulic oil
The rivet cannot be put into the tool nosepiece	<ul style="list-style-type: none"> • The stem may be obstructed • The vacuum system may not be in good condition 	<ul style="list-style-type: none"> • Check the jaws • Adjust the vacuum security system to the optimal volume
The tool works very slowly or requires more than one trigger-pull to set the rivet.	<ul style="list-style-type: none"> • Hydraulic oil level is low • The air pressure is low • The nosepiece is filled with dust and particles 	<ul style="list-style-type: none"> • Add hydraulic oil • Adjust air pressure to the specific range • Clean and oil

CR-1 VACCUUM RIVETER EXPLODED DRAWING



Parts list:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CR-1-01	Nosepiece	CR-1-37	Tie ring
CR-1-02	O-ring (meas.9*1)	CR-1-38	Air tube
CR-1-03	Nosepiece casing	CR-1-39	Tapping screw
CR-1-04	Jaw carrier	CR-1-40	Air valve body
CR-1-05	Jaw	CR-1-41	Air valve ring
CR-1-06	Pusher	CR-1-42	O-ring (meas.9.5*12.5*1.5)
CR-1-07	Jaw pusher spring	CR-1-43	Air valve base
CR-1-08	Jaw housing	CR-1-44	Subordinate tube
CR-1-09	Lock ring	CR-1-45	O-ring (meas.11.5*14.5*1.5)
CR-1-10	O-ring (meas.16.4*2.4)	CR-1-46	Connecting base
CR-1-11	Teflon ring (meas.16*1.4)	CR-1-47	O-ring (meas.14*2.4)
CR-1-12	Head assembly	CR-1-48	ON/OFF assembly
CR-1-13	O-ring (meas.26*3.5)	CR-1-49	Air valve rod
CR-1-14	Teflon ring (meas.26*1.4)	CR-1-50	Screw plug
CR-1-15	Principle axis unit	CR-1-51	Silencer
CR-1-16	Restore spring	CR-1-52	Cylinder cover
CR-1-17	O-ring (meas.7*2)	CR-1-53	O-ring (meas.66*2)
CR-1-18	Vacuum valve assembly	CR-1-54	Bolt (meas.3*6)
CR-1-19	O-ring (meas.21*2.4)	CR-1-55	Rock nut
CR-1-20	O-ring (meas.30*1.9)	CR-1-56	Buffer
CR-1-21	Airproof lid	CR-1-57	Lip seal (meas.8*14*6)
CR-1-22	O-ring (meas.38*3.1)	CR-1-58	Air tube piston
CR-1-23	Partition	CR-1-59	O-ring (meas.14.6*1.5)
CR-1-24	Silencer	CR-1-60	Piston ring
CR-1-25	Nail container	CR-1-61	Transfer tube
CR-1-26	Rear cover	CR-1-62	Piston rod
CR-1-27	O-ring (meas.12*2)	CR-1-63	Cylinder piston
CR-1-28	Washer	CR-1-64	O-ring (meas.74.6*86*5.7)
CR-1-29	Screw (meas.5*8)	CR-1-65	EL (meas.8*14.2*5)
CR-1-30	Handle (Left)	CR-1-66	Bolt (meas.6*10)
CR-1-31	Handle (Right)	CR-1-67	Cylinder
CR-1-32	Trigger	CR-1-68	Base cover
CR-1-33	Trigger valve	CR-1-69	BS (meas.5.7*10*1)
CR-1-34	ON/OFF valve	CR-1-70	Seal screw (meas.5*6)
CR-1-35	O-ring (meas.6*1)	CR-1-71	Hook
CR-1-36	Air interface		