CLINCH
RIVETS

CR-3 Instruction Manual

Contents:

Tool Property:

- Light weight
- High-speed operation, high power
- Low noise
- Shock absorption
- Long stroke
- Ergonomic handle
- Easy maintenance
- Sets standard rivets up to 1/4” diameter into any materials
- Designed for high strength blind rivet with 1/4” diameter i.e. monobolt, interlock, etc
- Adjustable vacuum system for powering on and off mandrel retention function
- 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 3372 lb
- CNC machined quality components ensures long life
- Mandel container can be turned easily for cleaning

Technical Specification:

Rivet size:	Diameter 0.157 – 0.252 inches for standard rivets
	Diameter 0.252 inches for high strength structural blind rivet
Air pressure:	11.0 – 15.4 lbf
Stroke:	1.02 inches
Pull force @ 5 Bar:	3372 lb
Weight:	3.75 lb

Safety Instructions:

Please read the following instructions carefully

Never dissemble 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 42 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.

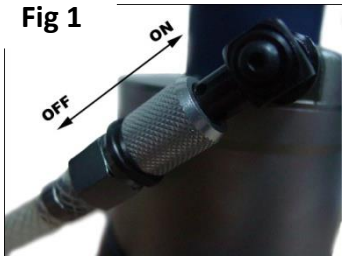
Use dry and clean materials (hose, couplings, fittings, etc.) to connect the tool to the filter. Check for leakage in the compressed air supply. IF here is leakage, replace the damaged hoses or coupling. Drain the condensate from the filter. Also check the dirt filter.

Check the compressed air supply pressure. The tool must be fitted with correct nosepiece (01) and pusher (07) before operating.

Operating Instruction:

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

Fig 1



2. Adjust the vacuum security system clockwise or counter-clockwise. Air suction will allow the rivet to be held in any orientation. (See figure 2)

Fig 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 (84) and seal (83). (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)

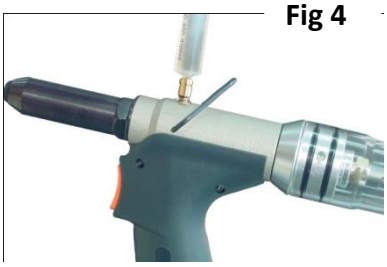


Fig 4

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)

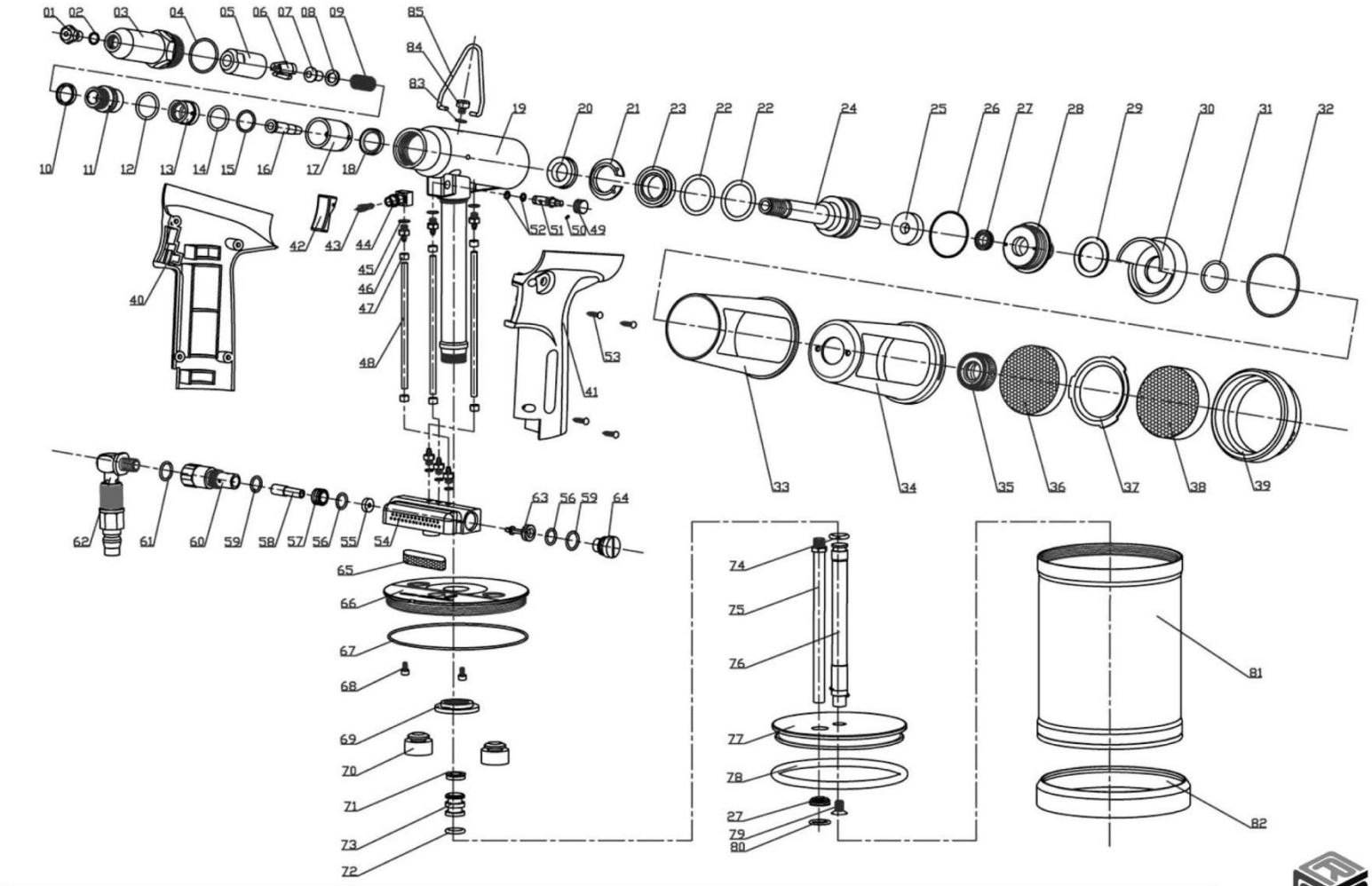
Fig 5

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	• 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	• 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	• The stem may be obstructed • The vacuum system may not be in good condition	• 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.	• Hydraulic oil level is low • The air pressure is low • The nosepiece is filled with dust and particles	• Add hydraulic oil • Adjust air pressure to the specific range • Clean and oil

CR-3 VACCUUM RVETER EXPLODED DRAWING



CLINCH RIVETS

Parts list:

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
CR-3-01	Nosepiece	CR-3-44	On/Off base
CR-3-02	O-ring (meas. 9*1)	CR-3-45	O-ring (meas.6*1)
CR-3-03	Nosepiece casing	CR-3-46	Air interface
CR-3-04	O-ring (meas.22*2)	CR-3-47	Tie ring
CR-3-05	Jaw housing	CR-3-48	Air tube
CR-3-06	Jaws (1set=3pcs)	CR-3-49	Regulatable button
CR-3-07	Pusher	CR-3-50	Retaining screw (meas.3*3)
CR-3-08	Washer	CR-3-51	Vacuum valve
CR-3-09	Jaw pusher spring	CR-3-52	O-ring (meas.4*6*1)
CR-3-10	Lock ring	CR-3-53	Tapping screw (meas.3*10)
CR-3-11	Housing	CR-3-54	Air valve body
CR-3-12	Polyurethane ring (meas.16*2)	CR-3-55	Air valve ring
CR-3-13	Set nut	CR-3-56	O-ring (meas.9.5*12.5*1.5)
CR-3-14	Polyurethane ring (meas.14.3*2)	CR-3-57	Air valve base
CR-3-15	O-ring (meas.13*16*1.5)	CR-3-58	Subordinate tube
CR-3-16	Vacuum sleeve	CR-3-59	O-ring (meas.11.5*14.5*1.5)
CR-3-17	Seal plastic housing	CR-3-60	Connecting base
CR-3-18	Seal (meas.20.5*13.5*3.5)	CR-3-61	O-ring (meas.14*2.4)
CR-3-19	Head assembly	CR-3-62	On/Off assembly
CR-3-20	Lip seal (meas.14*11*6.3)	CR-3-63	Air valve rod
CR-3-21	O-ring	CR-3-64	Screw plug
CR-3-22	O-ring (meas.26.7*30.26*1.78)	CR-3-65	Silencer
CR-3-23	Lip seal (meas.22*30*6)	CR-3-66	Cylinder cover
CR-3-24	Axis	CR-3-67	O-ring (meas.74.6*85.5*2)
CR-3-25	Buffer	CR-3-68	Bolt
CR-3-26	O-ring (meas.35*1.5)	CR-3-69	Rock nut
CR-3-27	EL (meas.8*14*5)	CR-3-70	Buffer
CR-3-28	End cap	CR-3-71	Lip seal (meas.14.6*2.4)
CR-3-29	Sealing gasket (meas.30.3*21*1.8)	CR-3-72	O-ring
CR-3-30	Stem collector adaptor	CR-3-73	Air tube piston
CR-3-31	O-ring (meas.24*2)	CR-3-74	Piston ring
CR-3-32	O-ring (meas.47*1.5)	CR-3-75	Transfer tube
CR-3-33	Stem collector outer	CR-3-76	Piston rod
CR-3-34	Stem collector body	CR-3-77	Cylinder piston
CR-3-35	Retaining nut	CR-3-78	O-ring (meas.89.6*101.5*5.7)
CR-3-36	Silencer	CR-3-79	Bolt
CR-3-37	Stem collector end cap	CR-3-80	Circlip
CR-3-38	Silencer	CR-3-80	Cylinder
CR-3-39	Silencer cap	CR-3-82	Base cover
CR-3-40	Handle (left)	CR-3-83	BS (meas.5.7*10*1)
CR-3-41	Handle (right)	CR-3-84	Seal screw
CR-3-42	Trigger	CR-3-85	Hook
CR-3-43	Trigger valve		