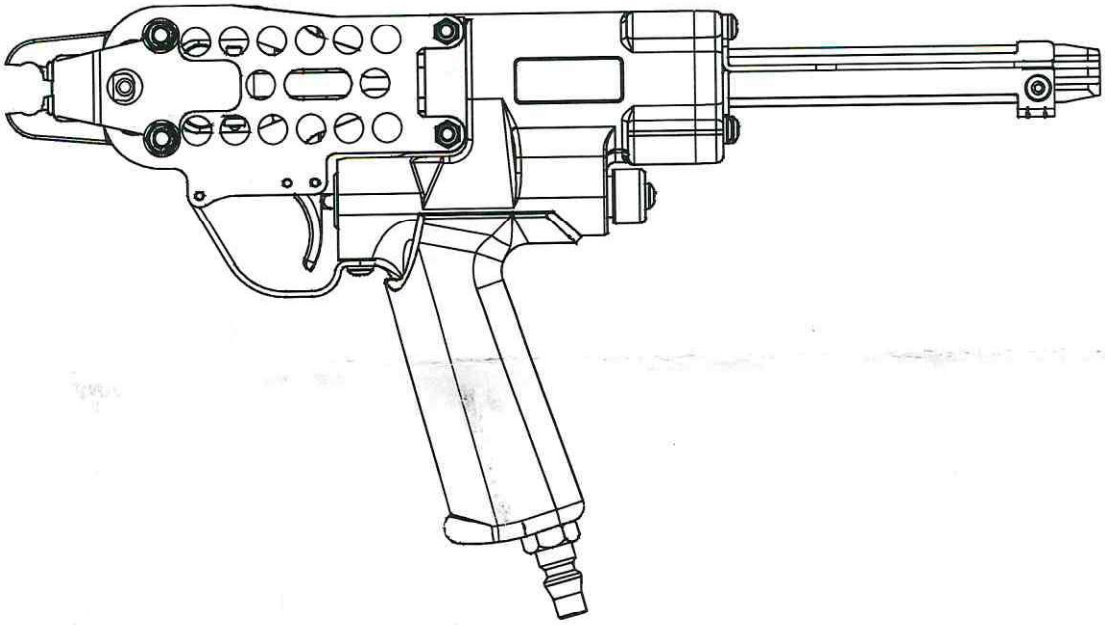
OPERATING INSTRUCTIONS AND PARTS MANUAL

MODEL SC7C

C-Ring



SENCO®

CE

CAREFULLY READ THIS MANUAL BEFORE OPERATING TOOL

MODEL OF TOOL SC7C
TOOL LENGTH ..... 7.36" (187 mm)
TOOL HEIGHT ..... 14.72" (374 mm)
TOOL WIDTH ..... 3.42" (87 mm)
WEIGHT (WITHOUT FASTENERS) ..... 3.2 lbs (1.45 kg)
AIR INLET ..... 1/4" NPT

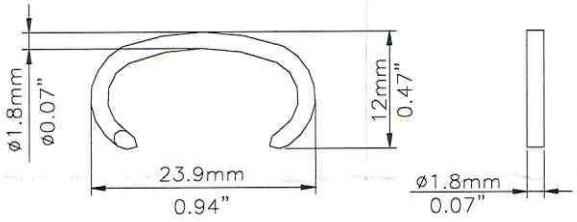
COMPRESSED AIR :
Maximum permissible operating pressure ..... 110 PSIG (7.5 bar)
Recommended operating pressure range ..... 95□110 psi (6.5□7.5 bar)
AIR CONSUMPTION..... 0.052 scfm with 25 nails per minute @ 90 psi (6.2 bar)

Noise dB(A) :
A-weighted sound pressure level LpA..... 82.31 dB(A)
A-weighted sound power level LwA.....95.31 dB(A)
Measurement uncertainty: 3dB
Vibration (m/s^2) :
Hand-arm vibration value..... 3.58 m/s^2
Measurement uncertainty: 1.5 m/s^2

Warning:
The vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used; and of the need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operation cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

List of fasteners for SC7C :

Crown	Shank Height	Shank Dia.	MAGAZINE
23.9 mm 0.94 "	12 mm 0.47 "	1.8 mm 0.07 "	100 pcs



Foreword:
This pneumatic C-ring tool is designed for using C rings. Its well balanced, ergonomic, comfort non-slip cushioned grip and heavy duty driving ensure C ring closure to different sizes and types of round shape. This C ring tool is best fitted in specialty applications for instance automotive, bedding, furniture, fencing and wires.

Suitable applications:
Bedding, cage, lobster pot, wire and wire like applications, automotive seating cover, upholstery foam secured to frame, attaching labels, training plant, cords, bag closure, cargo nets, small rope and many more....

Caution:
C-ring tools are ideal for applications where needs tying, fastening and tightening. Not suitable for stapling or nailing into concrete, masonry bricks or steel. Do not fire if nails are jammed, as this will cause damage to the C-ring tool.

⚠ **DANGER** ⚠
Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

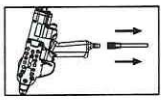
⚠ **WARNING**
Indicates an potentially hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **NOTE**
Alerts the operator to useful information.

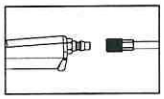
SAFETY INSTRUCTIONS

⚠ **DANGER**

1. Read this manual and understand all safety instructions before operation the tool. If you have any questions, please contact our authorized representatives.
2. Only those fasteners listed in the operating instructions may be used in the fastener driving tools.
3. Only the main energy and the lubricants listed in the operating instructions may be used.
4. Fastener driving tools equipped with contact actuation or continuous contact actuation, marked with the symbol " Do not use on scaffoldings, ladders", shall not be used for specific application for example:
—when changing one driving location to another involves the use of scaffoldings, stairs, ladders, or ladder alike constructions, e.g. roof laths,
—fitting transportation safety systems e.g. on vehicles and wagons.
5. For the maintenance of fastener driving tools, only spare parts specified by the manufacturer or his authorized representative shall be used.
6. Repairs shall carried out by agents authorized by the manufacturer or by other specialists, having due regard to the information given in the operating instruction.
7. Stands for mounting the fastener driving tools to a support for example a work table shall be designed and constructed by the stand manufacturer in such a way that the fastener driving tool can be safely fixed for the intended use, thus for example avoiding damage, distortion or displacement.
8. Fastener driving tools operated by compressed air shall only be connected to compressed air lines where the maximum allowable pressure cannot be exceed by a factor of more than 10%, which can for example be achieved by a pressure reduction valve which includes a downstream safety valve.
9. When using fastener driving tools operated by compressed air, particular attention must be paid to avoid exceeding the maximum allowable pressure.
10. When using fastener driving tools operated by compressed air should only be operated at the lowest pressure required for the work process at hand, in order to prevent unnecessarily high noise levels, increased wear and resulting failures.
11. Hazards caused by fire and explosion when using oxygen or combustible gases for operating compressed air operated fastener driving tools.
12. Carry the fastener driving tool at workpiece using only the handgrip, and never with the trigger actuated. Never carry the tool by the hose or pull the hose to move the tool.


13. Disconnect the tool from air supply before cleaning jams, servicing, adjusting, and during non-operation.

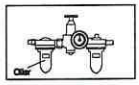
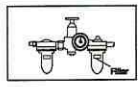
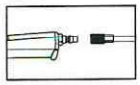

14. Wear eye protection.


15. Do not use a check valve or any other fitting which allows air to remain in the tool.


16. Do not place your hand or any part of your body in the fastener discharge area of the tool when connecting or disconnecting air supply.


17. Never point tool at yourself or at any other person.

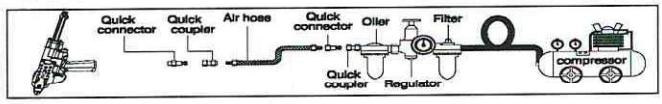
AIR SUPPLY AND CONNECTION

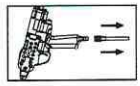
⚠ **NOTE**

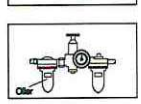
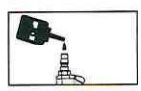
- Many air tool users find it convenient to use oiler to help provide oil circulation through tool and increase the efficiency and useful life of the tool. Check oil level in the oiler daily.
- Many air tool user find it convenient to use a filter to remove liquid and impurities which can rust or wear internal parts of the tool. A filter also increase the efficiency and useful of the tool. The filter must be checked on a daily basis and if necessary drained.
- For better performance, install a 3/8" quick connector (1/4" NPT threads) with an inside diameter of .315" on your tool and a 3/8" quick coupler on the air hose.

The following illustration shows the correct mode of connection to the air supply system which will increase the efficiency and useful life of the tool.



LUBRICATION AND MAINTENANCE



⚠ **NOTE**

- Disconnect the air supply from the tool before lubricating.
- Your tool requires lubrication before you use it for the first time.
- Wipe off excessive oil at the exhaust. Excessive oil will damage O-rings of tool. If in-line oiler is used, manual lubrication through the air inlet is not required on a daily basis.
- Turn the tool so the inlet is facing up and put one drop of high speed spindle oil, UNOCAL RX22, or 3-IN-1 oil into air inlet. Never use detergent oil or additives. Operate the tool briefly after adding oil.

LOADING THE TOOL

⚠ WARNING

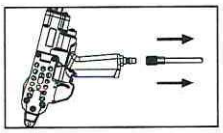


- Do not place your hand or any part of your body in the fastener discharge area of the tool when connecting or disconnecting air supply.

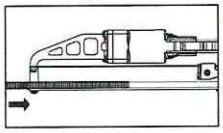
⚠ WARNING



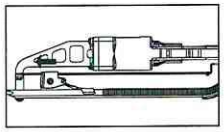
- Never point any operational fastener driving tool at yourself or at any other person.



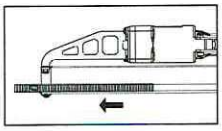
1. Disconnect air hose.



2. Depress the magazine latch. Pull back on the magazine cover.



3. Insert a stick of fasteners into the magazine. Make sure the pointed ends of the fasteners are loaded with the points downward. Also make sure fasteners are not dirty or damaged.



4. Push the magazine cover forward until the latch catches.

OPERATING THE TOOL

⚠ WARNING



Protect your eyes and ears. Wear z87.1 safety glasses with side shields. Wear hearing protection. Employers and users are responsible for ensuring the user or anyone near the tool wear this safety protection.

⚠ NOTE

Check and replace any damaged or worn components on the tool. The safety warning labels on the tool must also be replaced if they are not legible.

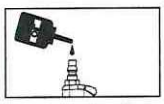


Fig.1

1. Add a few drops of UNOCAL RX22 or 3-in-1 oil into the air inlet. (See Fig. 1)

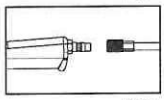


Fig.2

2. Attach a high flow quick connect fitting to the tool. (See Fig. 2)

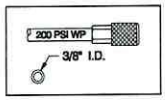


Fig.3

3. Empty the magazine.

4. Connect the tool to an air compressor using a 3/8" I.D hose. Make sure the hose has a rated working pressure exceeding 200 PSI (13.8bar) and a female quick coupler. (See Fig. 3)

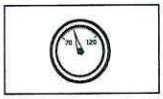


Fig.4

5. Regulate the air pressure to obtain 70 PSI (4.8 bar) at the tool. (See Fig. 4)

6. Disconnect the air supply from the tool.

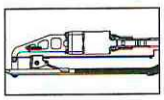
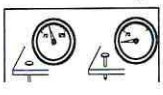


Fig.5

7. Load fasteners into your tool following the instructions in this manual. (See Fig. 5)

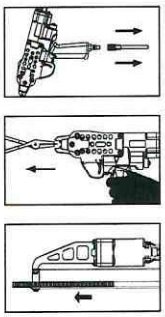
8. Reconnect the air supply to the tool.



9. Test for proper fastener penetration by driving nails into a sample piece of wood. If the fasteners do not achieve the desired penetration, adjust the air pressure to a higher setting until the desired penetration is achieved. Do not exceed 110 PSI (7.6 bar) at the tool. (See Fig. 6)

CLEARING A JAM FROM THE TOOL

⚠ WARNING

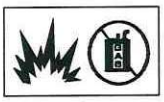


Disconnect the tool from air compressor before adjusting, clearing jams, servicing, relocating and during non-operation.

1. Fastener jammed in fastener discharge area:
   - Disconnect tool from air hose.
   - Grab jammed fastener with pliers and remove.
2. Fastener jam inside magazine:
   - Disconnect air tool from air hose.
   - Pull back on fastener pusher until locked.
   - Removed jammed fastener.
   - Release fastener pusher.

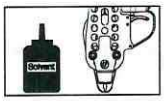
CLEANING THE TOOL

⚠ DANGER ⚠

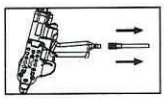


Never use gasoline or other flammable liquids to clean the tool. Vapors in the tool will ignite by a spark and cause the tool to explode and result in death or serious personal injury.

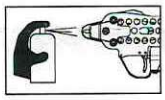
⚠ NOTE



Solvents used to clean the nose of the tool and contacr safety trip mechanism may soften the tar on the shingles and cause the buildup to be accelerated. Make sure to dry the tool thoroughly after cleaning and before operating the tool again.



1. Disconnect the air supply from the tool.

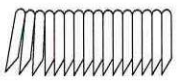


2. Remove tar buildup with kerosene #2 fuel oil or diesel fuel. Do not allow solvent to get into the cylinder or damage may occur. Dry off the tool completely before use.

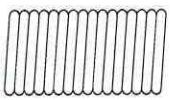
"C" RING

Hogringers are designed to operate with rings manufactured within standard tolerances. As can be seen in the preceding pages, visibly defective rings can be the cause of many ring forming troubles.

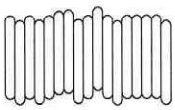
Flared Rings In A Strip



Rings Skewed On A Strip

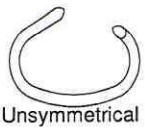


Rings Out Of Line On A Strip

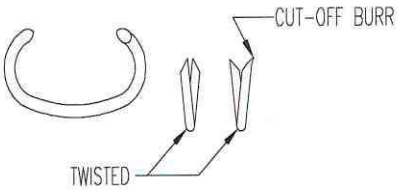


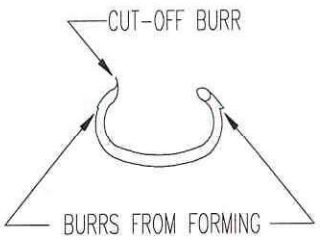
Long Hanging Leg

Short Leg



Unsymmetrical





The source of air leakage is most commonly the throttle assembly or the liner housing seal. The procedure will assist the repairman is solving this problem quickly

The throttle is basically a pair of two-way valve that divert air in front of, or behind the piston to crimp a ring or load a ring in the jaws respectively. The figures below show the air routings for both positions.

Follow the disassembly instructions and replace all o-ring.

Verify that the trigger contact area is not worn. If worn, the valve will not cycle completely(replace the trigger)

Follow the re-assemble and adjustment instructions.

If the air leak persists, inspect the piston, piston o-ring, piston rod bushing and bushing o-ring. Replace if any appear worn.

If the tool still leaks air, the throttle valve bushing or piston liner may be leaking. Have tool serviced at your dealers.

To Disassemble:

1. Remove front sub-assembly from housing
2. Remove air deflector parts (#1, #2).
3. Loosen set screws (#15)on both ends.
4. Remove rear valve seat(#3)
5. Remove throttle spring and locator parts(#4,#5)
6. Remove front valve seat(#13) and throttle stem(#14) using a wrench.
7. Using two 3mm Allen wrenches, unscrew throttle valve screws(#6) to remove valve unit. Hint: Hold housing so the the valve is vertical to help prevent loosing parts.
8. One valve screw will remain with other valve parts on spacer(#12), and can be disassembled after removal from housing.

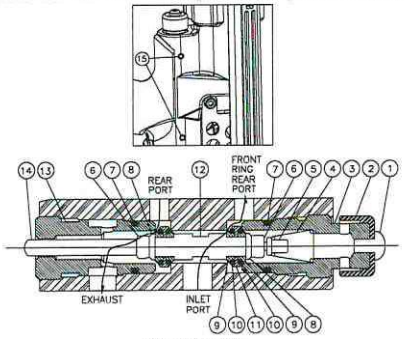
To Re-assemble

1. Assemble one side of the o-ring support assemble (#6, #8, #9, #10, #11, #10 and #9) on spacer(#12). The chamfer on both washer(#8) should be installed, with chamfer side against cap screw head(#7)
2. Hold housing vertically and install o-ring support assembly with spacer into bushing from the top.
3. Holding cap screw with an Allen wrench, bring second o-ring support assemble(mounted on screw(#7)) in front opposite side and complete valve assembly. The valve should have free motiom od travel of about (2.5mm).
4. Insert valve spring locator and spring(#5 and #4) into the socket head cap screw(#7) int the rear of the valve port.
5. Screw rear seat with lubricated o-ring (#3 and #7) into rear of the valve port.
6. Insert throttle stem(#14) into front valve seat(#13) so that the rounded end is out and slowly screw front valve seat with lubricated o-ring(#7) into front of the valve port.
7. Leave trigger guard loose for adjusting the valve. See throttle valve adjustment procedure for proper valve adjustment instructions.

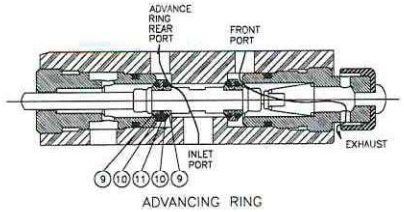
Throttle valve adjustment instruction

Follow these steps after complete tool assembly in order to minimize the time and effort required for optimum throttle valve adjustment.

1. Using the valve stem(#14), slowly screw in the front valve seat(#13) until it bottom, then back it out 1-1/2 turns.
2. Do the same with the rear valve seat(#3)
3. Attach an air line and fully depress the trigger. Air Should Leak OUT OF THE REAR VALVE SEAT. While depressing the trigger, slowly turn in the rear valve seat(#3) until the air stops leaking.
4. Release the trigger. AIR SHOULD LEAK OUT OF THE HANDLE. Place a 5mm wrench on the trigger valve stem air stops leaking from the handle.
5. Gently depress the trigger. Air should flow evenly from the rear exhaust to the handle exhaust.
6. The valve should now be adjusted-test the tool.
7. Tighten the front and rear valve seat locking screw(#15) and re-test the tool.

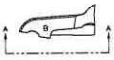
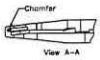
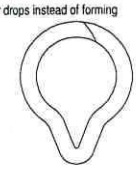
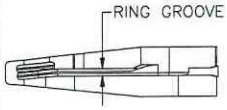


FORMING RING



ADVANCING RING

Stop using the tool immediately if any of the following problems occur. Serious personal injury could. Any repairs or replacements must be done by a qualified person or an authorized service center only.

PROBLEM	CAUSE	SOLUTION
Inside diameter of ring too large after clinching 	Latch worn Wrong latch used(too short) Latch spring broken Wrong piston rod(too short) Low power 1.air pressure set too low 2.air leaks in supply hose 3.air leak in tool 4.Throttle valve not adjusted properly Wrong jaws used Worn Jaws(helix, cam surface, bolt holes. jaw bushings Worn rollers Wrong rollers- 1.wire too hard 2.rough surface 3.cut-off burrs	Replace latch Verify and replace latch Replace latch spring Verify and replace piston rod Verify pressure 1 check air pressure setting (operator manual) 2. Replace air supply hose 3. See page 5 4.Adjust throttle valve valve properly Verify and replace jaws Replace jaws Replace rollers Verify and replace rollers A further ring test to be done please return sample of rings to your dealers.
Inside diameter of ring too small after clinching 	Wrong jaws Jaw stops worn or polished off	Verify and replace jaws Replace jaws
Ring point not entering opposite jaw  Figure A  Figure B  Figure C	Tip of jaw broken off Mismatched jaws- 1.jaws should be replaced only in pairs Defective rings- 1.Points not equal 2.Ring not symmetrical 3.Cut-off burrs Helix in jaw "A" worn so that it dose not properly guide the ring point into the rotating helix in jaw "B" as shown Rings only curling in one jaw	Replace jaws Verify and replace jaws A further ring test to be done please return sample of rings to your dealers. Correct by chamfering the tip of helix that the ring is entering as shown in the shaded area in figure "C" Replace jaws
Ring tear drops instead of forming 	Latch worn Wrong latch(too short) Latch spring bent or broken(spring must hold latch tightly against end of side plate and against jaws) Feeder blade- 1.wrong feeder blade(too short) 2.Modified by customer 3.worn(rounded on leading edge) Wrong or worn side plate Defective ring- 1.Burrs 2.Twisted 3.Not symmetrical	Replace latch Verify and replace latch Replace latch spring Feeder blade 1.Verify and replace 2.Do not modify parts 3.replace feeder blade Replace side plate A further ring test to be done please return sample of rings to your dealers.
Rings jam  Figure D	Magazine- 1.Damaged or bent(changes position of shoe) 2.Too many shims(ring passes under shoe without raising shoe, ring out of control) 3.Too few shims(ring must be forced under shoe which bottoms out" and may deflect magazine itself) 4.Worn shoe 5.Magazine shoe groove worn 6.Frequent jamming can cause the shoe groove in the magazine to bend and increase the groove width 7.Loose or lost rear magazine mounting screw(magazine is not supported properly) Pusher spring loose Feeder blade- 1.worn(holes, length, thickness, leading edge) 2.broken 3.bent Ring groove in Jaw worn(see figure "D" Defective rings- 1.Burrs 2.rings skewed on stick 3.Rings out of line on stick 4.Ring twisted 5.Ring not symmetrical 6.Ring formed to size 7.Ring strip flare at the ends Wrong wire gauge for model of tool	Magazine— 1.Replace magazine 2.Adjust—see operator manual 3.Adjust—see Operator manual 4.Replace shoe 5.Replace magazine 6.Replace magazine 7.Tighten or replace mounting screw Adjust pusher spring Feeder blade 1.Replace feeder blade 2.Replace feeder blade 3.Replace feeder blade Replace jaw A further ring test to be done please return sample of rings to your dealers. Verify wire size 1.16ga.. 06dia.[1.5mm] 2.15ga.. 07dia.[1.8mm] 3.11ga.. 12dia.[3.0mm]
Rings don't feed down magazine	Pusher spring- 1.spring too loose 2.spring broken Damaged or bent magazine Defective rings- 1.undersized(tight on magazine) 2.burrs 3.rings twisted 4.rings skewed on stick 5.rings out of line on stick 6.ring strip flares at the ends	Pusher spring- 1.Adjust pusher spring 2.Replace pusher spring Replace magazine A further ring test to be done please return sample of rings to your dealers.
Ring spitting	Air pressure too high Pusher spring loose Magazine- 1.Damaged or bent(changes position of shoe) 2.Too many shims(ring passes under shoe without raising shoe, ring not contained) 3.Too few shims(ring must be forced under shoe which "bottom out" and may produce snapping or clicking noise as ring is fed from magazine.) 4.Worn shoe or magazine shoe groove worn. Worn Jaws(replace only in sets) One(or both) jaws rubbing side plate. Jaws must move freely; the ring should have equal force on it as it leaves the shoe of the magazine. If one jaw is hard to move, the ring will contact it first. causing the ring to rotate and spin out of control. Build up of material in jaw helix, (when using plated, aluminum or plastic coated rings) Defective ring- 1.Burr on outside curve of ring 2.Rings skewed on stick 3.Rings out of line on stick 4.Rings not symmetrical 5.Wrong wire gauge for model of tool 6.Rings twisted opposite to jaw helix 7.Ring strip flares at the ends	Verify proper air pressure Adjust pusher spring Magazine— 1.Replace magazine 2.Adjust—see operator manual 3.Adjust—see operator manual 4.Replace shoe or magazine Replace jaws Adjust jaws Remove build up of material A further ring test to be done please return sample of rings to your dealers.
Snapping noise as ring is being fed from magazine	Too few shims under magazine 1.Ring is being forced under the shoe that has "bottomed out" and is deflecting the magazine. Magazine shoe rocking in magazine groove Rings of wrong wire gauge used in tool-too large	Adjust magazine—see operator manual Replace magazine Verify rings and use correct rings for the given tool