



## Product Instructions


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### Engraving pen

CP9361



	<p style="text-align: center;"><b>⚠ WARNING</b></p> <p><b>Read all safety warnings and instructions</b></p> <p>Failure to follow the safety warnings and instructions may result in electric shock, fire and/or serious injury.</p> <p><b>Save all warnings and instructions for future reference</b></p>
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## Product information

### General information

#### **WARNING Risk of Property Damage or Severe Injury**

Ensure that you read, understand and follow all instructions before operating the tool. Failure to follow all the instructions may result in electric shock, fire, property damage and/or severe bodily injury.

- ▶ Read all Safety Information delivered together with the different parts of the system.
- ▶ Read all Product Instructions for installation, operation and maintenance of the different parts of the system.
- ▶ Read all locally legislated safety regulations regarding the system and parts thereof.
- ▶ Save all Safety Information and instructions for future reference.

### Website

Log in to Chicago Pneumatic: [www.cp.com](http://www.cp.com).

You can find information concerning our products, accessories, spare parts and published matters on our website.

### Service overview

#### Maintenance instructions

- **Follow local country environmental regulations for safe handling and disposal of all components.**
- Maintenance and repair work must be carried out by qualified personnel using only original spare parts. Contact the manufacturer or your nearest authorised dealer for advice on technical service or if you require spare parts.
- Always ensure that the machine is disconnected from energy source to avoid accidental operation.
- Disassemble and inspect the tool every three 3 months if the tool is used every day. Replace damaged or worn parts.
- To keep downtime to a minimum, the following service kit is recommended : **Tune-up kit**

#### Lubrication

Use an air line lubricator with SAE #10 oil, adjusted to two (2) drops per minute.

#### Disposal

- The disposal of this equipment must follow the legislation of the respective country.
- All damaged, badly worn or improperly functioning devices **MUST BE TAKEN OUT OF OPERATION.**
- The disposal of this equipment must follow the legislation of the respective country.
- Repair only by technical maintenance staff.

## Operation

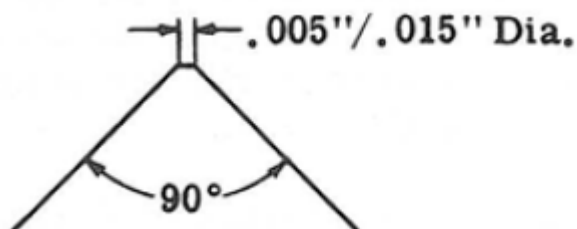
### Changing from stylus to chisel

- Unscrew the cylinder sleeve from inlet and cylinder assembly. (Right Hand Thread)
- Withdraw inlet and cylinder assembly from sleeve. Avoid damage to "O" ring.
- Get the stylus out of cylinder sleeve.
- Be sure that the two "O" rings are assembled under shoulder of anvil. Drop anvil into cylinder sleeve, small end down. Shake sleeve until small end of anvil enters hole in bottom of sleeve.

### Sharpening the Stylus

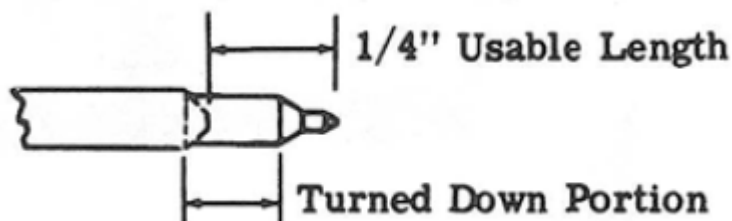
Best results are obtained with a diamond wheel mounted on a tool post grinder in a lathe. This is followed by polishing first with a Norton stone No. 37C4006V or equivalent then with carborundum paper No. A935K500 or equivalent to a 10-15 micro finish. If such facilities are not available, the stylus can be sharpened with No. 19A 60L8V Norton wheel on a bench grinder.

Sharpen to an included angle of  $90^\circ$  with a point diameter of  $.005''$  to  $.015''$  fiat.



The stylus may be sharpened until the turned down portion at the end of the stylus holder is ground off.

This gives a usable length of stylus of approximately  $1/4$  inch as shown on drawing below.



### Hardening Chisel Blanks

A blank chisel is provided for special jobs. It can be heated and formed to any desired shape.

To harden chisel after forming, heat to cherry red and quench in oil. Polish a surface with emery cloth and reheat to a light straw color.

If heat treating facilities are available, harden by heating to  $1550^\circ\text{F}$  for five minutes, quenching in oil and drawing at  $425^\circ$  for one hour. Hardness should be 55- 60 Re.

## Operation

To start the tool, turn sleeve valve indicator approximately to the mid-point of the operating range. If necessary, jar stylus lightly against bench to start piston. After starting, adjust sleeve valve to the operating speed, causing the stylus to make a mark to the desired depth.

The CP9361 Air Scribe is capable of marking material as hard as RC 64. When marking material of this hardness, the operator is cautioned to regulate the impact of the stylus with the throttle valve so that the stylus makes a legible mark and no more than this. If the stylus is driven harder, excessive wear and breakage of the stylus point may result on very hard materials.

When scribing, do not bear down on the work and cause stylus to dig in. Guide the tool and let the stylus do the work. Tool should be held approximately 15° off perpendicular to the work surface in order to scribe smoothly and to minimize excessive force on the side of the stylus point.

When using a chisel, it is necessary to bear against the work as with a Chipping hammer. The tool may be used at full throttle on softer materials and, by varying the throttle setting, speed may be adjusted to suit the particular job and to give the operator full control of the tool. The amount of force the operator exerts on the Air Scribe directly affects the chisel blow, Applying lighter, force when starting or stopping a cut results in good control of the tool.

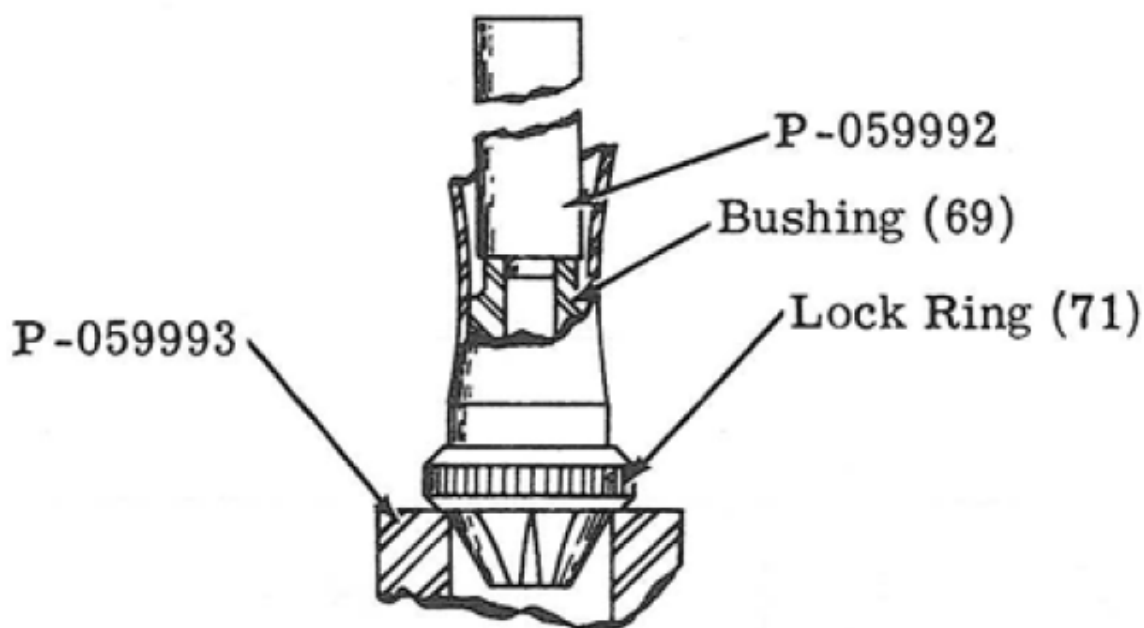
## Service

### Disassembly

When disassembling tool, use a 3/32" pin punch to remove roll pin (34).

Support tool firmly on a suitable surface and drive pin out carefully to avoid damage to cylinder (65) or inlet (32). Take precautions to avoid losing roll pin. When removing sleeve valve (14) align mark on sleeve with "OFF" on inlet (32) to avoid cutting "O" ring (7).

To remove accessory bushing (69) support lock ring (71) on bore of P-059993 Holder and press bushing out of cylinder sleeve (60) from interior of sleeve with P-059992 Drift.



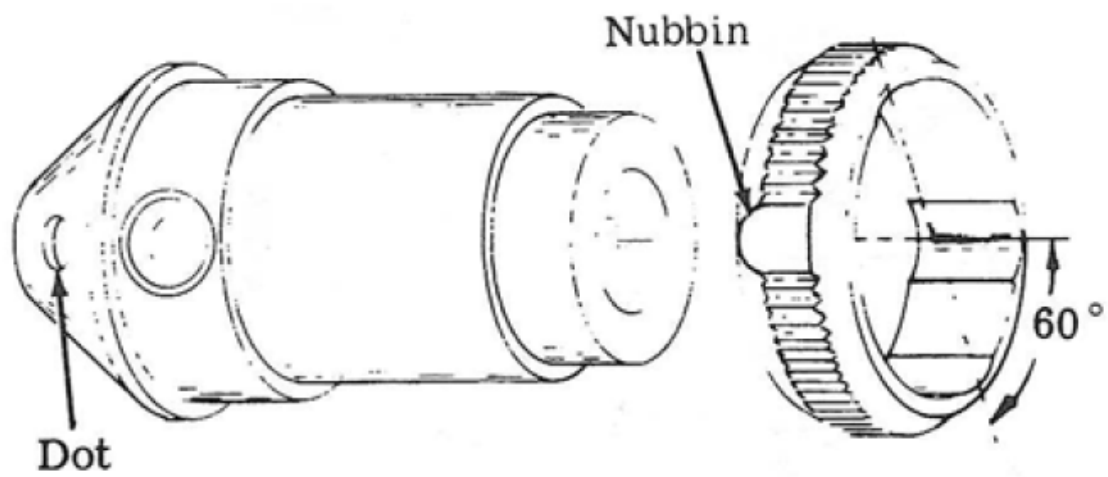
### Assembly

When assembling inlet (32) with sleeve valve (14"), first lubricate "O" ring (7) LIGHTLY with a good rubber lubricant and place in counterbored air port in inlet. Lubricate two "O" rings (8) and assemble in grooves on either side of air port. To avoid cutting "O" ring in air port align indicator mark on valve with "OFF" on inlet and slide valve carefully on inlet. Place retaining ring (15) in groove in inlet, lubricate third "O" ring (8) and assemble in groove next to shoulder between retaining ring groove and threads on inlet. Be sure this "O" ring is assembled between the slight ridge and the shoulder (shown in enlarged view on tool drawing, pg. 7) to prevent "O" ring from being forced into inlet threads.

When installing a new piston (61) in cylinder (65), it may be necessary to lap the piston to secure a close yet free fit in cylinder. No. 12-24 UNC internal threads in piston allow handling during this operation. Use a good grade FINE lapping compound, thoroughly clean parts and lubricate with recommended air tool oil before assembly.

After assembling piston and cylinder, lubricate and install "O" ring (41) on inlet and carefully slip cylinder on inlet. Do not injure "O" ring. Align transverse holes in cylinder and inlet and carefully install roll pin (34) through parts. Support parts firmly and avoid injury or distortion of parts while driving roll pin.

Assemble "O" ring (70) and 1/8" steel ball (73) in accessory bushing (69) with lubricant to hold in place. Lubricate and assemble 5/32" steel ball (74) in larger opening. Referring to Fig. 15 align nubbin at smooth spot on lock ring (71) with dot on accessory bushing (69). Nubbin should be on side of lock ring toward bushing. Slip ring on bushing. Orient dot on bushing with any corner of hex. on cylinder sleeve (60) and press bushing into sleeve up to bushing shoulder.



## Trouble shooting

Because of the close clearance between piston (61) and cylinder ( 65), foreign matter in the air supply may cause piston to stick. To correct, remove cylinder sleeve ( 60), drive roll pin (34) out of cylinder and inlet (32) and remove piston from cylinder. Thoroughly clean parts, blow dry and lubricate with recommended air tool oil. Check clearance and free movement of piston and reassemble tool.

If sleeve valve must be removed, remove "O" ring (8) between retaining ring (15) and threads on inlet, remove retaining ring, set sleeve valve at "OFF" and pull valve off inlet. Inspect "O" rings, replace if worn, relubricate and reassemble. Do not overlubricate "O" ring (7) in counterbored air port and risk impeding air flow.









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## ABOUT CHICAGO PNEUMATIC



Since 1901 the Chicago Pneumatic (CP) name has represented reliability and attention to customer needs, with construction, maintenance and production tools and compressors designed for specific industrial applications. Today, CP has a global reach, with local distributors around the world.

Our people start every single day with a passion to research, develop, manufacture and deliver new products that are meant to meet your needs not only today, but tomorrow as well.

**TO LEARN MORE, VISIT [WWW.CP.COM](http://WWW.CP.COM)**



To find more information about your tool, scan the QR code or go to [m.cp.com](http://m.cp.com)