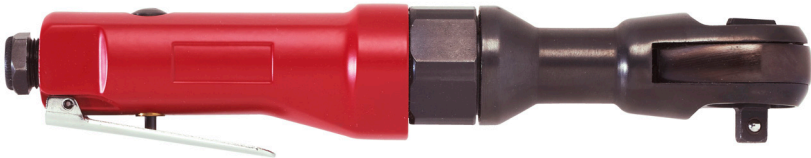


# Operator's Manual



## **CP824 & CP824T & CP886 & CP886H** **1/4" & 3/8" & 1/2" Ratchet Wrench**



### **⚠ WARNING**

To reduce risk of injury, everyone using, installing, repairing, maintaining, changing accessories on, or working near this tool must read and understand these instructions before performing any such task.

## INSTRUCTION MANUAL

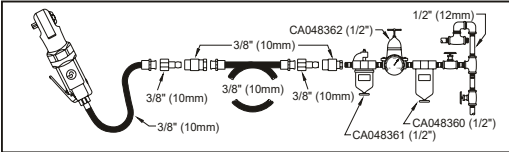
# CP824 & CP824T & CP826 & CP886H 1/4" & 3/8" & 1/2" Ratchet Wrench

### Machine Type:

This product is designed for installing and removing threaded fasteners in wood, metal and plastic. No other use permitted. For professional use only.

### Air Supply Requirements

1. Supply tool with 90 psig (6.2 bar) of clean, dry air. Higher pressure drastically reduces tool life.
2. shown in the diagram below.



### Lubrication

1. Use an air line lubricator with SAE #10 oil, adjusted to two (2) drops per minute. If an air line lubricator cannot be used, add air motor oil to the inlet once a day.
2. Monthly, lubricate the drive bushing and ratchet yoke with a good grade bearing grease. Periodically, depending upon use, the ratchet head assembly should be removed, cleaned and re-greased.

### Maintenance

1. Tool should be oiled on a daily basis for best performance. Every 3 to 6 months the tool's head should be greased using approved CP Gear Grease. If the tool loses performance over time, tool should be sent to a CP

needed.

2. High wear parts are underlined in the parts list.
3. To keep downtime to a minimum, the following service kits are recommended:

**Tune-Up Kit:** see part list

### Technical Data

CP824 & CP824T Free speed: 220 RPM

CP886 & CP886H Free speed: 160 RPM

### Original Instructions

Copyright 2012 Chicago Pneumatic Tool Co. LLC

All rights reserved. Any unauthorized use or copying of the contents or part thereof is prohibited. This applies in particular to trademarks, model denominations, part numbers and drawings. Use only authorized parts. Any damage or malfunction caused by the use of unauthorized parts is not covered by Warranty or Product Liability.

### Noise & Vibration Declaration

Sound pressure level 90.4 dB(A) CP824 & CP824T, 98.2 dB(A) CP886 & CP886H, uncertainty 3 dB(A), in accordance with EN ISO 15744. For sound power, add 11 dB(A).

Vibration value:

CP824 & CP824T: 4.1 m/s<sup>2</sup>, uncertainty k = 2 m/s<sup>2</sup>, re. ISO 28927-2.

CP886 & CP886H: 3.7 m/s<sup>2</sup>, uncertainty k=1.7 m/s<sup>2</sup>, re. ISO 28927-2.

Declaration of noise and vibration emission

All values are current as of the date of this publication. For the latest information please visit cp.com.

These declared values were obtained by laboratory type testing in accordance with the stated standards and are suitable for comparison with the declared values of other tools tested in accordance with the same standards. These declared values are not adequate for use in risk assessments and values measured in individual work places may be higher. The actual exposure values and risk of harm experienced by an individual user are unique and depend upon the way the user works, the workpiece and the workstation design, as well upon the exposure time and the physical condition of the user. We, Chicago Pneumatic, cannot be held liable for the consequences of using the declared values, instead of

assessment in a work place situation over which we have no control.

This tool may cause hand-arm vibration syndrome if its use is not adequately managed. An EU guide to managing hand-arm vibration can be found at [www.pneurop.eu/uploads/documents/pdf/PN3-02-NV\\_Declaration\\_info\\_sheet\\_0111.pdf](http://www.pneurop.eu/uploads/documents/pdf/PN3-02-NV_Declaration_info_sheet_0111.pdf) We recommend a programme of health surveillance to detect early symptoms which may relate to noise or vibration exposure, so that help prevent future impairment.

# DO NOT DISCARD - GIVE TO USER

### INSTRUCTION MANUAL

#### Air Supply Requirements

1. Supply tool with 90 psi (6.2 bar) of clean, dry air. Higher pressure drastically reduces tool life.
2. Connect tool to air line using pipe, hose, and fitting sizes shown in the diagram on page 12.

#### Lubrication

1. Use an air line lubricator with SAE #10 oil, adjusted to two (2) drops per minute. If an air line lubricator cannot be used, add air motor oil to the inlet once a day.
2. Monthly, lubricate the drive bushing and ratchet yoke with a good grade bearing grease. Periodically, depending upon use, the ratchet head assembly should be removed, cleaned and re-greased.

#### Noise & Vibration Declaration\*

Sound pressure level 90.4 dB(A) in accordance with Pneuop PN8NTC1.2. For sound power, add 10 dB(A).  
Vibration value 6.2 m/s<sup>2</sup>, re. ISO 8662-7.

#### Maintenance

1. Disassemble and inspect air motor every three (3) months if the tool is used every day. Replace damaged or worn parts.
2. High wear parts are underlined in the parts list.
3. To keep downtime to a minimum, refer to service kits, detailed in the parts list.

\* These declared values were obtained by laboratory type testing in compliance with the stated standards and are not adequate for use in risk assessments. Values measured in individual work places may be higher than the declared values. The actual exposure values and risk of harm experienced by an individual user are unique and depend upon the way the user works, the workpiece and the workstation design, as well as upon the exposure time and the physical condition of the user. We, Chicago Pneumatic, cannot be held liable for the consequences of using the declared values, instead of values reflecting the actual exposure, in an individual risk assessment in a work place situation over which we have no control.

### EC DECLARATION OF CONFORMITY

We, Chicago Pneumatic Tool Company, 1800 Overview Drive, Rock Hill, SC 29730 USA, declare under our sole responsibility that the product to which this declaration relates, is in conformity with the requirements of the Council Directive of June 1989 on the approximation of the laws of the Member States relating to machinery (89/392/EEC).

**Machine Name** CP824/824T Air Ratchet

**Machine Type** Assembly Power Tool for Threaded Fasteners - No other use is permitted.

**Serial No.** Tools with No. 01105P or higher

#### Technical Data

1/4" (6mm) Sq. Dr. Std. (CP824)

3/8" (10 mm) Sq. Dr. Std. (CP824T)


Air pressure 90 psi (6.2 bar)

Torque range 4-12.5 ft.-lb. (5-17 Nm)

**Harmonized Standards Applied** EN292

**National Standards Applied** ISO 8662-7, Pneuop PN8NTC1.2

**Name And Position Of Issuer** Yves Antier, General Manager, Chicago Pneumatic Tool Company

**Signature Of Issuer** 

**Place And Date Of Issue** Rock Hill, SC 29730 USA, April 15, 2001



## WARNING

To reduce risk of injury, everyone using, installing, repairing, maintaining, changing accessories on, or working near this tool must read and understand these instructions before performing any such task.

The goal of Chicago Pneumatic is to produce tools that help you work safely and efficiently. The most important safety device for this or any tool is YOU. Your care and good judgment are the best protection against injury. All possible hazards cannot be covered here, but we have tried to highlight some of the important ones.

### Air Supply and Connection Hazards

- ▲ Air under pressure can cause severe injury.
- ▲ Always shut off air supply, drain hose of air pressure and disconnect tool from air supply when not in use, before changing accessories or when making repairs.
- ▲ Never direct air at yourself or anyone else.
- ▲ Whipping hoses can cause serious injury. Always check for damaged or loose hoses and fittings.
- ▲ Do not use quick disconnect couplings at tool. See instructions for correct set-up.
- ▲ Whenever universal twist couplings are used, lock pins must be installed.
- ▲ Do not exceed maximum air pressure of 90 psi/6.2 bar or as stated on tool nameplate.

### Entanglement Hazards

- ▲ Keep away from rotating drive.
- ▲ Do not wear jewelry or loose clothing.
- ▲ Choking can occur if neckwear is not kept away from the tool and accessories.
- ▲ Scalping can occur if hair is not kept away from the tool and accessories.
- ▲ Avoid direct contact with accessories during use.
- ▲ Use only proper accessories designed for use with pneumatic screwdrivers, nutrunners, ratchets and pulse tools.

### Projectile Hazards

- ▲ Always wear impact-resistant eye protection when involved with or near the operation, repair or maintenance of the tool or changing accessories on the tool.
- ▲ Be sure all others in the area are wearing impact-resistant eye protection.
- ▲ Even small projectiles can injure eyes and cause blindness.
- ▲ Do not use hand sockets as they can shatter. Use only power or impact sockets in good condition.
- ▲ Always use the simplest hook-up possible. Long, springy extension bars and

## SAFETY INSTRUCTIONS

- ▲ adapters absorb power and could break. Use deep sockets where possible.
- ▲ Never operate the tool off of the work. It may run too fast and cause the accessory to be thrown off the tool.
- ▲ Serious injury can result from over-torqued or under-torqued fasteners, which can break, or loosen and separate. Released assemblies can become projectiles. Assemblies requiring a specific torque must be checked using a torque meter.

Note: So-called "click" torque wrenches do not check for potentially dangerous over-torque conditions.

### Workplace Hazards

- ▲ Slip/Trip/Fall is a major cause of serious injury or death. Be aware of excess hose left on the walking or work surface.
- ▲ Maintain a balanced body position and secure footing.
- ▲ High sound levels can cause permanent hearing loss. Use hearing protection as recommended by your employer or OSHA regulation (see 29 CFR part 1910).
- ▲ Repetitive work motions, awkward positions and exposure to vibration can be harmful to hands and arms. If numbness, tingling, pain or whitening of the skin occurs, stop using tool and consult a physician.
- ▲ Always support the tool's handle securely, in the direction opposite of the spindle rotation, to reduce the effect of sudden torque reaction during final tightening and initial loosening.
- ▲ An additional support handle or absorption bar may be needed to resist torque reaction. Absorption bars must be positioned correctly to avoid injury.
- ▲ Proceed with care in unfamiliar surroundings. Be aware of potential hazards created by your work activity.
- ▲ Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Some examples of these chemicals are:
  - Lead from lead based paints
  - Crystalline silica bricks and cement and other masonry products
  - And Arsenic and chromium from chemically-treated rubber

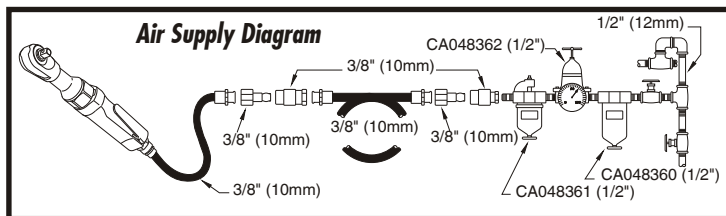
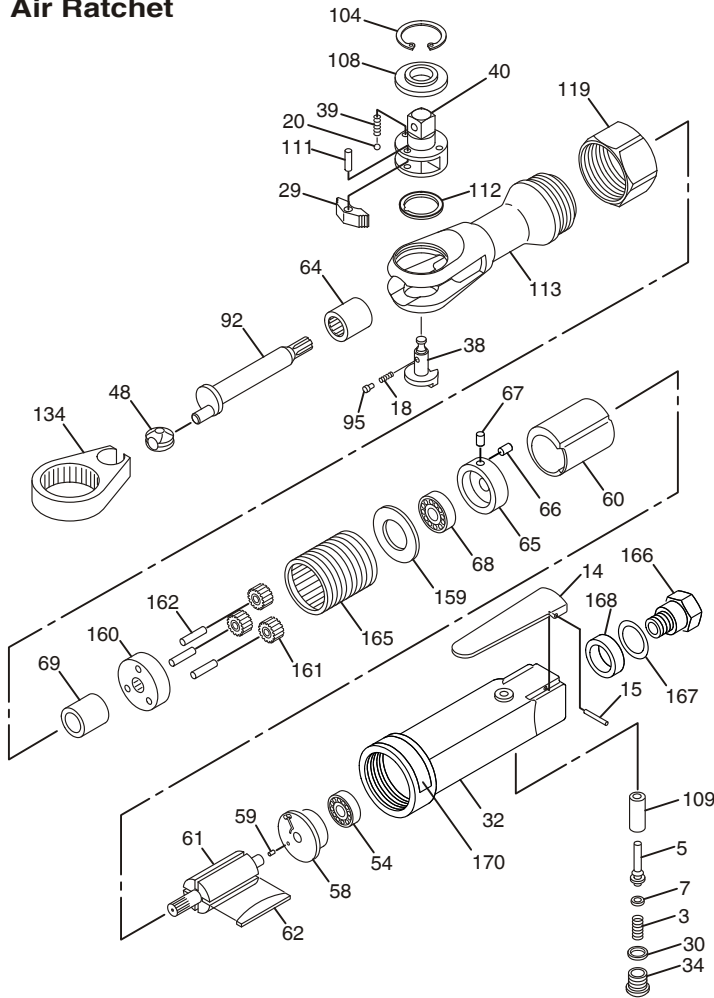
Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

### Additional Safety Topics

- ▲ The workpiece must be held securely.
- ▲ This tool and its accessories must not be modified.
- ▲ This tool is not insulated for coming into contact with electric power sources and is not recommended for use in explosive atmospheres.
- ▲ Operators and maintenance personnel must be physically able to handle the bulk, weight and power of the tool and be capable of performing the job task.

# CP824/824T

## Air Ratchet



Index No.	Part No.	Description	No. Req'd.
3	CA146388	Spring-Throttle	1
5	CA157831	Valve-Throttle	1
7	C087316	O-Ring (-006)	1
14	CA157832	Lever-Throttle	1
15	P143294	Pin-Roll 3.0 x 22	1
18	CA157833	Spring-Ratchet	1
20	S000821	Ball-Steel .125	2
29	CA157834	Pawl-Ratchet	1
30	CA146397	O-Ring	1
32	CA157835	Handle-Throttle (Incl: Index No. 109)	1
34	CA157836	Plug-Throttle Valve	1
38	CA157837	Button-Reverse (CP824)	1
	CA157838	Button-Reverse (CP824T)	1
39	CA157839	Spring-Friction	2
40	CA157840	Shank-Ratchet 1/4" (CP824)	1
		(Incl: Index No. 110)	
	CA157841	Shank-Ratchet 3/8" (CP824T)	1
		(Incl: Index No. 110)	
48	CA157842	Bushing-Drive	1
54	CA157867	Bearing-Ball	1
58	CA157843	Plate-Rear End (Incl: Index No. 59)	1
60	CA157844	Liner	1
61	CA157845	Rotor	1
62	CA157869	Blade-Rotor (Set of 4)	1
64	KF138213	Bearing-Needle	1
65	CA157847	Plate-Front End	1
		(Incl: Index Nos. 66 & 67)	
68	CA146415	Bearing-Ball	1
69	CA157848	Bearing-Plain	1
92	CA157849	Shaft-Crank	1
95	CA157864	Pin-Lock	1
104	CA157868	Ring-Retaining	1
108	CA157850	Washer-Thrust (CP824)	1
	CA157851	Washer-Thrust (CP824T)	1
109	CA157852	Bushing-Throttle	1
111	CA157853	Pin-Dowel	1
112	CA157854	Washer	1
113	CA157855	Housing-Ratchet (Incl: Index Nos. 64 & 69)	1
119	CA157856	Clamp-Housing	1
134	CA157857	Yoke-Ratchet	1
159	CA157858	Washer	1
160	CA157859	Spindle-Idler	1
161	CA157860	Gear-Idler	3
162	CA157861	Roller-Needle	3
165	CA157862	Gear-Internal	1
166	CA157863	Bushing-Air Inlet	1
167	CA157865	Deflector-Exhaust	1
168	CA157866	Muffler	1
170	CA155262	Warning Decal	1
	CA157928	Cover-Protective (Optional)	1

### Tune-Up Kit

CA157871 (Incl: Index No's 3, 7, 18, 20, 30, 39, 62, 95, & 104)

### Ratchet Head Replacement Kit (CP824)

CA157872 (Incl: Index No's 18, 20, 29, 38, 39, 40, 95, 104, 108, 111 & 112)

### Ratchet Head Replacement Kit (CP824T)

CA157873 (Incl: Index No's 18, 20, 29, 38, 39, 40, 95, 104, 108, 111 & 112)