



Chicago  
Pneumatic

# *Operator's Manual*

## **CP825C & CP825CT**

### **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, as well as separately provided safety instructions part number 6159948710, before performing any such task.

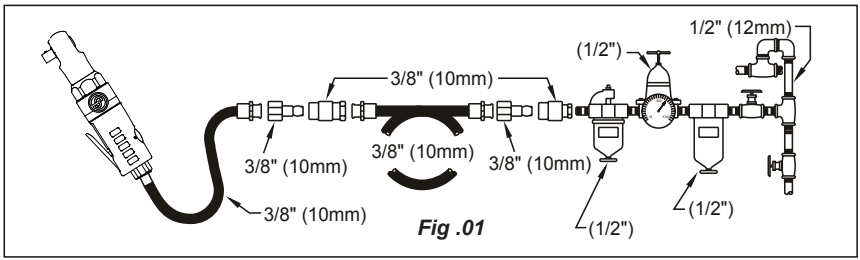


Fig. 01

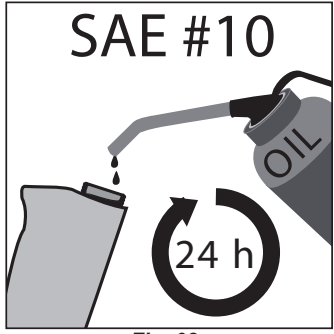


Fig. 02

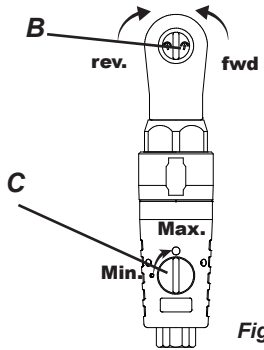
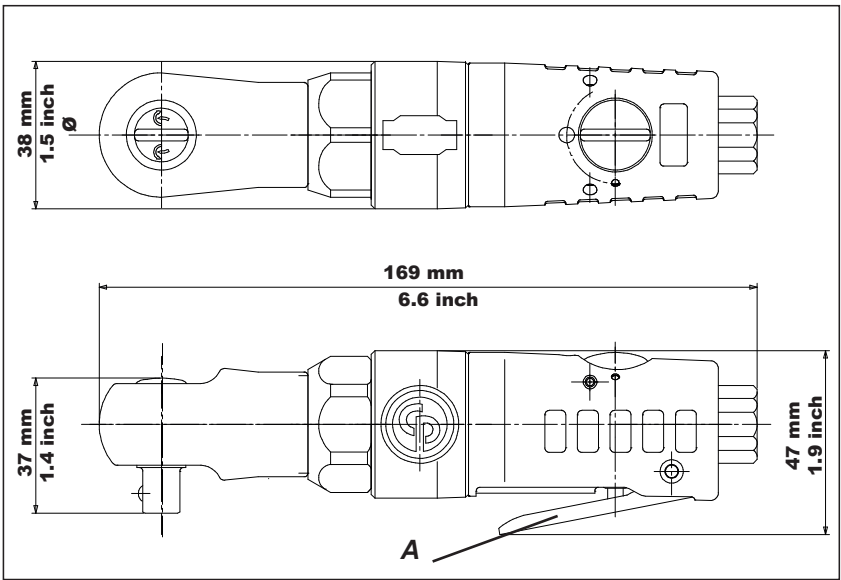


Fig. 03



Model	Drive	Torque		Free speed	Air Consumption Average	Weight	Inner Hose Dia.	Air Inlet	Sound pressure $L_{pA}$	Sound power $L_{wA}$	Vibrations	
		Working	Max								$a_{hd}$	K
	1	2	3	5	6	7	8	9	10			
[inch]	[Nm] [ft-lb]	[RPM]	[Nl/s] [SCFM]	[kg] [lb]	[mm] [inch]	[inch]	[dB(A)]	[dB(A)]	[m/s <sup>2</sup> ] [m/s <sup>2</sup> ]			
CP825C	1/4	5 - 25 4 - 18	35 26	280	1.5 3.2	0.5 1.10	10 3/8	1/4" NPT	82	93	4	1.5
CP825CT	3/8	5 - 25 4 - 18	35 26	280	1.5 3.2	0.5 1.10	10 3/8	1/4" NPT	82	93	4	1.5

# CP825C & CP825CT Ratchet Wrench

## Technical Data

Model	Drive	Torque		Free speed	Air Consumption Average	Weight	Inner Hose Dia.	Air Inlet	Sound pressure $L_{pa}$	Sound power $L_{wa}$	Vibrations	
		Working	Max								$a_{hd}$	K
	1	2	3	5	6	7	8	9	10			
	[inch]	[Nm] [ft-lb]	[RPM]	[Ni/s] [SCFM]	[kg] [lb]	[mm] [inch]	[inch]	[dB(A)]	[dB(A)]	[m/s²]	[m/s²]	

### max. pressure 6.3bar(90psi)

$a_n$  : Vibration level, k Uncertainty ;  $L_{pa}$  Sound pressure dB(A),  $K_{pa} = K_{wa} = 3$  dB Uncertainty.

**Declaration of noise and vibration statement** (ISO 15744 and ISO 28927-2)

All values are current as of the date of this publication.

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 TOOLS, 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. This tool may cause hand-arm vibration syndrome if its use is not adequately managed.

### Additional Vibration Information

**This tool may cause hand-arm vibration syndrome if its use is not adequately managed.**

This additional vibration information may be of assistance to employers in meeting their obligations (for example under EU Directive 2002/44/EC) to assess the risks to their workers arising from hand arm vibration associated with the use of this tool.

Ratchet wrenches are suitable for assembly and disassembly operations in confined spaces.

- The declared vibration value can be used to estimate vibration during rundown. Continuous ratcheting against a run-down bolt may produce a vibration emission in the range 4.1 m/s<sup>2</sup> to 9.3 m/s<sup>2</sup> (vibration total values)
- Only use this tool for work which other types of wrenches, which present lower vibration risks, are unable to perform satisfactorily.
- The vibration emission varies greatly with task and operator technique. Emissions outside the quoted range may occur for some applications.
- Operators should optimize their technique and select a suitable wrench in order to minimize the ratcheting time at the end of each run-down or when backing-off assembled fasteners.
- For the intended application of this tool, we estimate that normal operation should involve a ratcheting time against a run-down fastener of less than 0.5s per fastener on a hard joint and up to 3s on a soft joint. We point out that application of the tool to a sole specialist task may produce a different average emission and in such cases we strongly recommend a specific evaluation of the vibration emission.

### Machine type(s)

- This product is designed for installing and removing threaded fasteners in wood, metal and plastic. No other use permitted. For professional use only.
- Please read the instructions carefully before starting the machine.

### Operation (See figures)

- Fix the accessories properly to the tool.
- Connect device as shown in Fig. 01 to a clean and dry air supply.
- To start the machine, pull the lever A. Machine speed is increase by increasing pressure on the trigger. Release the lever to stop.
- To switch rotation, turn the switch (B) as shown in Fig. 03.
- To adjust output power, turn the regulator (C).

### Lubrication

- Use an air line lubricator with SAE #10 oil, adjusted to two drops per minute. If an air line lubricator cannot be used, add air motor oil to the inlet once a day.

### Maintenance instruction

- 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.
- High wear parts are underlined in the parts list.

### 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.
- Repair only by technical maintenance staff.

### EU Declaration of Conformity

Machine type(s): **Ratchet Wrench**

Declare under our sole responsibility that the product(s): **CP825C & CP825CT** Serial Number: **00000 - 99999**

Origin of the product : **JAPAN**

is in conformity with the requirements of the council Directives on the approximation of the laws of the Member States relating to "Machinery" **2006/42/EC (17/05/2006)** applicable harmonised standard(s) : **EN ISO 11148-6:2012**

Name and position of issuer : **Pascal Roussy (R&D Manager)**

Place & Date : Saint-Herblain, **01/2018**

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## 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.

# SAFETY INSTRUCTIONS

## DO NOT DISCARD - GIVE TO USER

- Our goal 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.
- Only qualified and trained operators should install, adjust or use this power tool.
- This tool and its accessories must not be modified in any way.
- Do not use this tool if it has been damaged.
- If the rated speed, operating pressure or hazard warning signs on the tool cease to be legible or become detached, replace without delay.

### ⚠ 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 repair.
- 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 setup.
- Whenever universal twist couplings are used, lock pins must be installed.
- Do not exceed maximum air pressure of 90 psi/6.3 bar or as stated on tool nameplate.

### ⚠ Entanglement Hazards

- Keep away from rotating drive. Choking, scalping and / or lacerations can occur if loose clothing, gloves, jewellery, neck ware and hair are not kept away from tool and accessories.
- Gloves can become entangled with the rotating drive, causing severed or broken fingers.
- Rotating drive sockets and drive extensions can easily entangle rubber-coated or metal reinforced gloves.
- Do not wear loose-fitting gloves or gloves with cut or frayed fingers.
- Never hold the drive, socket or drive extension.

### ⚠ Projectile Hazards

- Always wear impact-resistant eye and face 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 and face protection. Even small projectiles can injure eyes and cause blindness.
- 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.

- Use only impact wrench sockets and accessories in good condition. Sockets in poor condition or hand sockets and accessories used with impact wrenches can shatter.
- Never operate the tool off of the work. It may run too fast and cause the accessory to be thrown off the tool.
- Ensure that the workpiece is securely fixed.

### ⚠ Accessory hazards

- Use only proper accessory retainers (see parts list). Use deep sockets wherever possible.
- For tools using the pin and O-ring socket retention system, use the O-ring to retain the socket pin securely.
- Always use the simplest hook-up possible. Long, springy extension bars and adapters absorb impact power and could break. Use deep sockets wherever possible.

### ⚠ Operating hazards

- Operators and maintenance personnel must be physically able to handle the bulk, weight and power of the tool.
- Hold the tool correctly; be ready to counteract normal or sudden movements – have both hands available.
- Do not use with reduced air pressure or in a worn condition: the clutch may not operate, resulting in sudden rotation of the tool handle.
- Be in control of the throttle at all times. Do not get caught between the tool and the work.

### ⚠ Repetitive motion hazards

- When using a power tool to perform work-related activities, the operator might experience discomfort in the hands, arms, shoulders, neck, or other parts of the body.
- Adopt a comfortable posture whilst maintaining secure footing and avoiding awkward or offbalance postures. Changing posture during extended tasks can help avoid discomfort and fatigue.
- Do not ignore symptoms such as persistent or recurring discomfort, pain, throbbing, aching, tingling, numbness, burning sensation, or stiffness. Stop using the tool, tell your employer and consult a physician.

### ⚠ Noise and Vibration hazards

- High sound levels can cause permanent hearing loss and other problems such as tinnitus. Use hearing protection as recommended by your employer or occupational health and safety regulations.
- Exposure to vibration can cause disabling damage to the nerves and blood supply of the hands and arms. Wear warm clothing and keep your hands warm and dry. If numbness, tingling, pain or whitening of the skin occurs, stop using tool, tell your employer and consult a physician.
- Hold the tool in a light but safe grip because the risk from vibration is generally greater when the grip force is higher. Where possible use a suspension arm or fit a side handle.
- To prevent unnecessary increases in noise and vibration levels:
  - Operate and maintain the tool, and select, maintain and replace the accessories and consumables, in accordance with this instruction manual;
  - Do not use worn or ill-fitting screwdriver bits, sockets or extensions.
  - Do not touch sockets or accessories during impacting.

### ⚠ 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.
- Avoid inhaling dust or fumes or handling debris from the work process which can be harmful to your health (for example, cancer, birth defects, asthma and/or dermatitis). Use dust extraction and wear respiratory

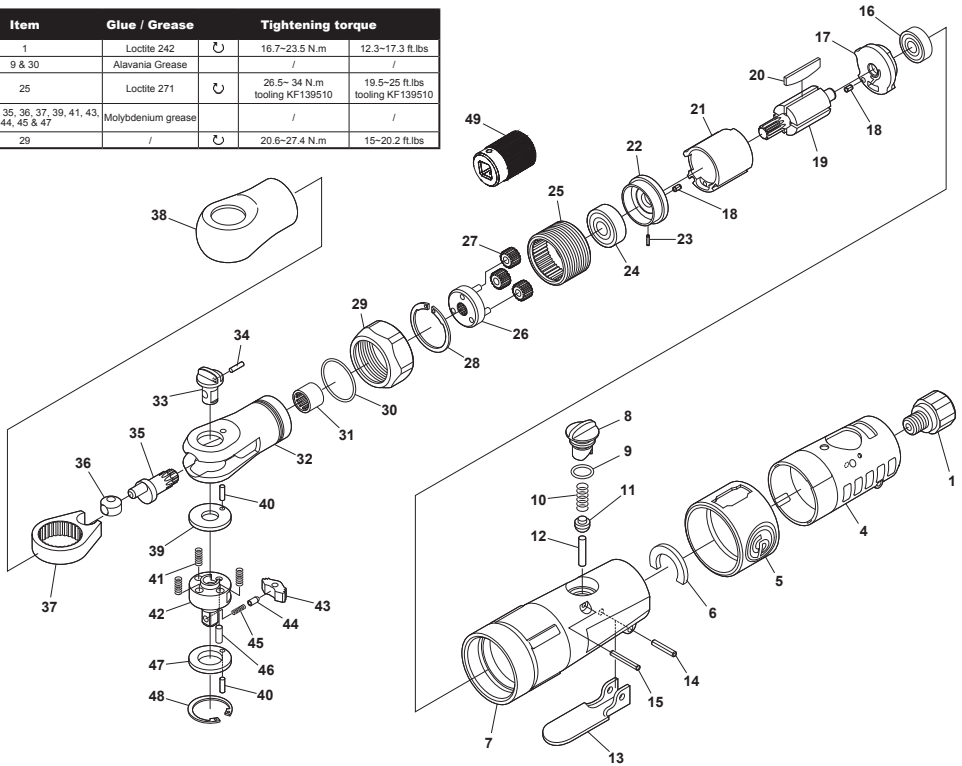
protective equipment when working with materials which produce airborne particles.

- 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.

- Proceed with care in unfamiliar surroundings. Be aware of potential hazards created by your work activity. This tool is not insulated for coming into contact with electric power sources.
- This tool is not recommended for use in explosive atmospheres.


Item	Glue / Grease	Tightening torque
1	Loctite 242	16.7-23.5 N.m / 12.3-17.3 ft.lbs
9 & 30	Alavania Grease	/
25	Loctite 271	26.5-34 N.m tooling KF139510 / 19.5-25 ft.lbs tooling KF139510
25, 26, 27, 35, 36, 37, 39, 41, 43, 44, 45 & 47	Molybdenum grease	/
29	/	20.6-27.4 N.m / 15-20.2 ft.lbs



Ref	CP Part No.	Description	Q'ty
<b>A</b>	<b>8940175209</b>	<b>Motor housing kit</b>	
4		Body-Housing cover	1
5		CP-Logo Collar	1
6		Muffler	2
7		Body-Housing	1
<b>B</b>	<b>8940175210</b>	<b>Regulator kit</b>	
8		Regulator	1
9		O-Ring	1
10		Spring Throttle	1
11		Ball Valve	1
12		Pin-Idler	1
15		Pin Roll	1
<b>C</b>	<b>8940175211</b>	<b>Lever kit</b>	
13		Lever	1
14		Pin Roll	1
<b>D</b>	<b>8940175212</b>	<b>Rear end-plate kit</b>	
16	CA155004	Ball Bearing	1
17		Plate Back End	1
18		Pin Roll	1
<b>E</b>	<b>8940175213</b>	<b>Front end-plate kit</b>	
18		Pin Roll	1
22		Plate Front End	1
23		Pin	1
24	C087834	Ball Bearing	1
<b>F</b>	<b>8940175214</b>	<b>Gear kit</b>	
26		Planetary cage (incl. Idler pin)	1
27		Gear Idler	3
30		Spring	1
<b>G</b>	<b>8940175215</b>	<b>Ratchet housing kit</b>	
28		Ring Retaining	1
29		Lock Nut	1
30		O-ring	1
31	KF138213	Bearing Needle	1
32		Ratchet Housing	1
<b>H</b>	<b>8940175216</b>	<b>Reverse lever kit</b>	
33		Reverse lever	1
34		Needle Roller	1

Ref	CP Part No.	Description	Q'ty
<b>I</b>	<b>8940175217</b>	<b>Ratchet head replacement kit</b>	
39		Washer	1
40		Pin Dowel	2
41		Thrust Spring	3
43		Pawl Ratchet	1
44		Reverse pin	1
45		Reverse spring	1
46		Pin Dowel	1
47		Washer w/Pins. (CP825C)	1
48		Washer w/Pin. (CP825CT)	1
48		Ring Internal	1
<b>J</b>	<b>8940175218</b>	<b>Small Parts Kit</b>	
Include 14, 15, 18, 23, 34, 40 (x2) & 48			
<b>K</b>	<b>8940175219</b>	<b>Tune-up Kit</b>	
Include 6, 9, 11, 20, 30, 41 (x3), 43, 44, 45 & 48			

1	8940175061	Bushing Air Inlet (incl. screen)	1
19	CA155002	Rotor	1
20	KF138202	Rotor Blade (set of 4)	1
21	KF138199	Liner	1
25	KF138204	Housing Spindle	1
35	8940175018	Crank Shaft	1
36	KF138186	Bushing Drive	1
37	KF138206	Yoke	1
38	CA154993	Ratchet Boot (Black)	1
42	8940175021	Spindle 1/4" (CP825C)	1
42	8940175022	Spindle 3/8" (CP825CT)	1
49	KF139510	Spindle Wrench	1

	895090061	Warning Label
	8940174905	Operator's Manual
	6159948710	Safety Instructions

**Recommended Accessories**



Protecto-lube Oil (to clean motor parts)  
CA149661 (4 oz - 0.12 l)  
CA000046 (20 oz - 0.59 l)



Airolene Oil (for air lubrication)  
P089507 (1 gal - 3.8 l)

Spare parts without part number are not sold separately