



Chicago  
Pneumatic

# *Operator's Manual*

CP7783 & CP7783-6

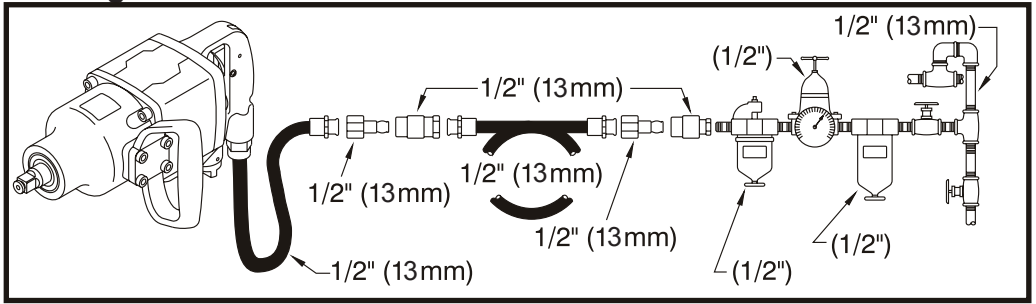
Impact Wrench



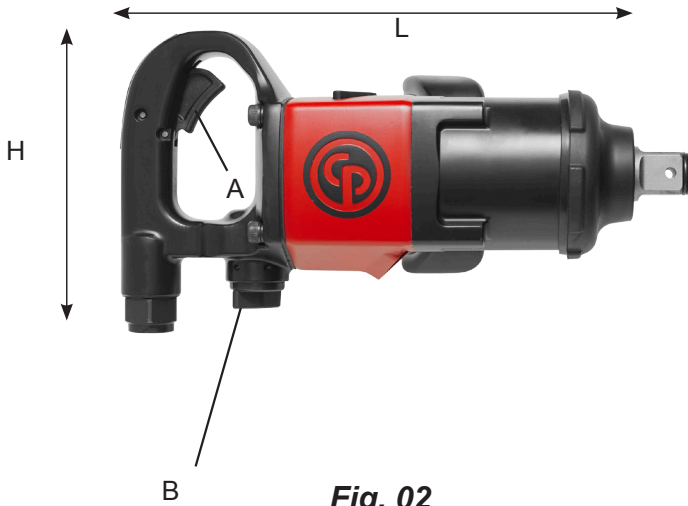
## **WARNING**

*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.*

# Air Diagram:



**Fig. 01**



**Fig. 02**

Model	Drive	Torque		Speed	Dimension L*W*H	Air consumption	Weight	Inner hose diameter	Air inlet	Sound pressure L <sub>PA</sub>	Sound power L <sub>WA</sub>	Vibrations	
		Working	Max			@ load						a	k
	1	2	3	4	5	6	7	8	9	10	11		
	in.	ft.lbs N.m	ft.lbs N.m	rpm	in. mm	SCFM Nl/s	lbs kg	in. mm	in.	dB(A)	dB(A)	m/s <sup>2</sup>	m/s <sup>2</sup>
<b>CP7783</b>	1"	413 - 1253 560 - 1700	1770 2400	6200	13.7*7.4*7.4 350*190*190	40,4 19	18,5 8,4	1/2" 12	1/2"	102	113	15,1	4,1
<b>CP7783-6</b>	1"	413 - 1253 560 - 1700	1770 2400	6200	19,6*7,4*7,4 500*190*190	40,4 19	20,9 9,5	1/2" 12	1/2"	102	113	15,1	4,1

**1. Technical Data**

Model	Drive	Torque		Free speed	Dimension L x W x H	Air Consumption		Weight	Inner Hose Dia.	Air Inlet	Sound pressure L <sub>pa</sub>	Sound power L <sub>wa</sub>	Vibrations	
		Working	Max			Average	at load						a <sub>h</sub>	K
	1	2	3	4	5	6	7	8	9	10				
	[inch]	[ft.lbs] [Nm]	[ft.lbs] [Nm]	[min <sup>-1</sup> ]	[inch] [mm]	[NI/s] [SCFM]	[kg] [lb]	[inch] [mm]	[inch]	[dB(A)]	[dB(A)]	[m/s <sup>2</sup> ]	[m/s <sup>2</sup> ]	

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

**a<sub>h</sub>** : Vibration level, **k** Uncertainty : **L<sub>pa</sub>** Sound pressure dB(A), **K<sub>pa</sub>** = **K<sub>wa</sub>** = 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.

**2. 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.

**3. Operation**

- 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 trigger (A). Machine speed is increase by increasing pressure on the trigger. Release the trigger to stop.
- To switch rotation, turn the switch (B) as shown in Fig. 02.
- Use the reverse switch (B) only when the drive spindle comes to a complete stop. Changing the speed before the drive spindle stops may damage the machine.
- To adjust output power, turn the regulator (B) as shown in Fig. 02.

**4. Lubrication**

**Motor**

- 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.

Recommended lubricant : CP Oil PROTECTO-LUBE

- 4 oz (0.12l) P/N: CA149661
- 20.8 oz (0.591l) P/N: CA000046
- 1gal (3.8l) P/N: P089507

**Clutch**

- Use CP Pneu-Lube synthetic clutch Grease 8940158455 : 20g (0.7 oz.)

**5. 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.
- To keep downtime to a minimum, the following service kits are recommended :

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

**6. 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.**

**7. EU Declaration of conformity**

We : **CHICAGO PNEUMATIC Tool Co. LLC, 1800 Overview Drive Rock Hill, SC 29730 - USA**

Machine type(s) : **impact wrench**

Declare under our sole responsibility that the product(s) : **CP7783 & CP7783-6** Serial Number : **0001-99999**

Origin of the product : **Taiwan**

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, **07/02/2017**

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**Original Instructions**

# CP7783 & CP7783-6

1" Lightweight Impact Wrenches



*Available with short  
or long anvil*

- ✓ More power
- ✓ Lightweight
- ✓ Super Durability

People.  
Passion.  
Performance.



Chicago  
Pneumatic

# CP7783 / CP7783-6

## 1" Lightweight Impact Wrench

Powerful & lightweight to maximize operator comfort

### HIGH OPERATOR COMFORT

Ergonomic D-handle with full teasing trigger

### HIGH DURABILITY

Pinless closed reinforced rocking dog mechanism in oil bath

### SHOCK ABSORBING

Rubber bumper protecting both applications & tool (included)

### POWERFUL & LIGHTWEIGHT

- 1770 ft.lbs / 2400 Nm in reverse
- 20.9 lbs. / 9.5 kg for the long anvil version

### USEFUL

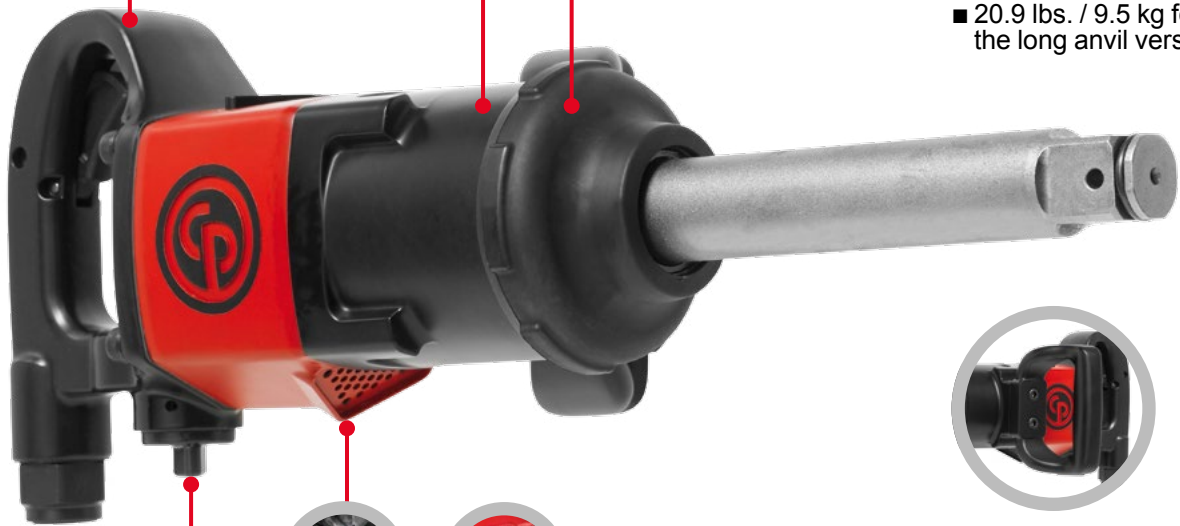
Forward/Reverse regulator with 3 power settings in both directions

### USER FRIENDLY

Top or down exhaust, easy and quick to change

### CONVENIENT

Four positions for D-handle placement to provide ultimate operator comfort



### 2 MODELS

- Available with short or long anvil



Model	Part #	Square Drive	Anvil	Socket Retainer	Free Speed RPM	Working Torque		Max Torque		Tool Weight		Air Cons. @ Load		Sound Pressure dB(A)	Sound Power dB(A)	Vibration m/s <sup>2</sup> (k)
						ft-lbs.	Nm	ft-lbs.	Nm	lbs.	kg	cfm	l/s			
CP7783	894 107 7830	1"	Short	Ring & hole	6200	413-1253	560-1700	1770	2400	18.5	8.4	40.4	19	102	113	15.1 (4.1)
CP7783-6	894 107 7836	1"	6"	Ring & hole	6200	413-1253	560-1700	1770	2400	20.9	9.5	40.4	19	102	113	15.1 (4.1)

Hose int. 3/4" (19 mm) - @ 90 PSI (@6.3 Bar)  
See back page for dimension details.

Listed specifications are for reference only.  
Please check tool documentation.

# IMPROVED



# PERFORMANCES

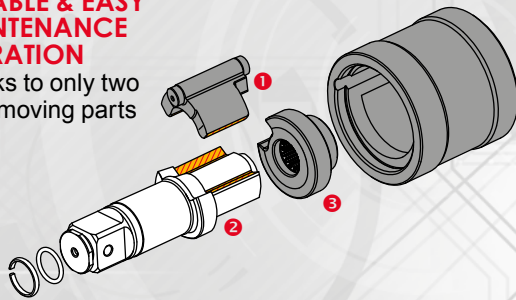
- Higher torque than its predecessor the CP7780
- Lighter than competitive products within an equivalent durability range
- Reduced weight: 20.9 lbs / 9.5 Kg\* for reduced operator fatigue  
\* for the long anvil version
- Operator comfort & easy to use:
  - Features an adjustable top or down exhaust
  - Regulator integrated in forward/reverse button with 3 power settings in both directions
  - Consume less air for lower operating costs
  - Improved ergonomics for greater operator comfort

## SUPER DURABILITY: ROCKING DOG CLUTCH

Pinless closed reinforced rocking dog mechanism

### DURABLE & EASY MAINTENANCE OPERATION

Thanks to only two main moving parts



### EFFICIENT

Thanks to the heavy cage blow efficiency, this clutch is well performing even with limited airflow.

### MAXIMUM POWER

The "dog" ① strikes a blow on the anvil ②; the cam ③ kicks off the dog out of engagement, 360° rotation, strikes again. The impact zone on the anvil is maximum, and ensures an optimum power transmission.

- Excellent durability, good for soft pull-up jobs

## DESIGNED FOR HEAVY VEHICLE TIRE CHANGING APPLICATIONS

Tire changing and general mechanics on medium and heavy vehicles: in workshops or on roadside assistance.



Medium and heavy duty trucks and tractor trailers



Buses and coaches



Agricultural and road construction equipment



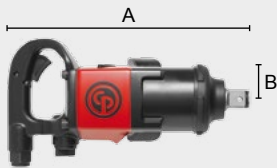
## Over 110 years of experience

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.



## DIMENSIONS



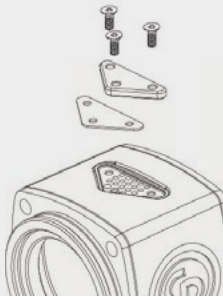
Model	A		B - side to center	
	in.	mm	in.	mm
CP7783	13.7	350	3.34	85
CP7783-6	19.6	500	3.34	85

## TUNE-UP KIT

Model	TUNE-UP KIT
CP7783 & CP7783-6	894 017 3927

## GASKET KIT

Part #
894 017 3926
Kit Content
1 Gasket 1 Exhaust Deflector 3 Screws



## OIL

Part #	Volume
CA149661	4 oz / 20 ml
CA000046	20.8 oz / 591 ml

## ACCESSORIES SELECTION

### FILTER-REGULATOR-LUBRICATOR

Part # NPT	Part # BSP	Size	Type	Max. Flow Rate	
		in.		cfm	l/sec
894 016 8519	894 016 8483	3/4	2 stage	220	100
894 016 8520	894 016 8484	3/4	3 stage	220	100



FRL UNITS

### CP AIR FLEX (360° swivel)

Part # NPT	Part # BSP	Female Inlet	Male Inlet	Max. Flow	
		in.	in.	cfm	l/sec
894 017 1567	894 017 1566	1/2	1/2	74	35



CP AIR FLEX

### CP HOSE REELS High durability ■ User friendly design ■ Full reparability

Model	Part # NPT	Part # BSP	Hose Diameter		Material	Type	Thread	Hose Length	
			in.	mm				in.	ft.
HR8113	894 017 1998	894 017 1999	1/2	13	Composite	Closed	1/2	52.5	16
HR9113	894 017 2002	894 017 2003	1/2	13	Steel	Open	1/2	52.5	16

## 1" SQUARE DRIVE IMPACT SOCKET SETS

Model	Part #	Description [sizes]
<b>Metric sets (mm)</b>		
SS818	894 016 4476	8PC - Standard set [27, 30, 32, 33, 35, 36, 38 & 41 mm]
SS8107WS	894 016 7877	7PC - Wheel Service Set [Deep: 27, 33, 35, 36, 38, 41 mm   Square: 17, 21 mm]
SS814D	894 016 6016	4PC - Deep set [27, 32, 33 & 36 mm]
<b>SAE (in.) &amp; Metric (mm) sets</b>		
SS8205WS	894 016 6943	5PC - [Deep: 33 mm, 1-1/2"   Thin wall 1-1/8", 1-1/4"   Square: 13/16"]
SS8208WS	894 016 7876	8PC - [Std. 7/8", 1" & 33 mm   Deep: 1-1/8", 1-1/4", 1-1/2"   Square: 13/16"   Controlled depth: 1-1/2"]
SS8210HDW	894 016 6939	10PC - [Deep: 33 mm, 1", 1-1/8", 1-3/4"   Thin wall deep: 1-1/8", 1-1/4", 1-1/2"   Square: 13/16", 15/16"   Controlled depth: 1-1/2"]

More references available in the CP Socket Catalog



### 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.

### ⚠ 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

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.



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

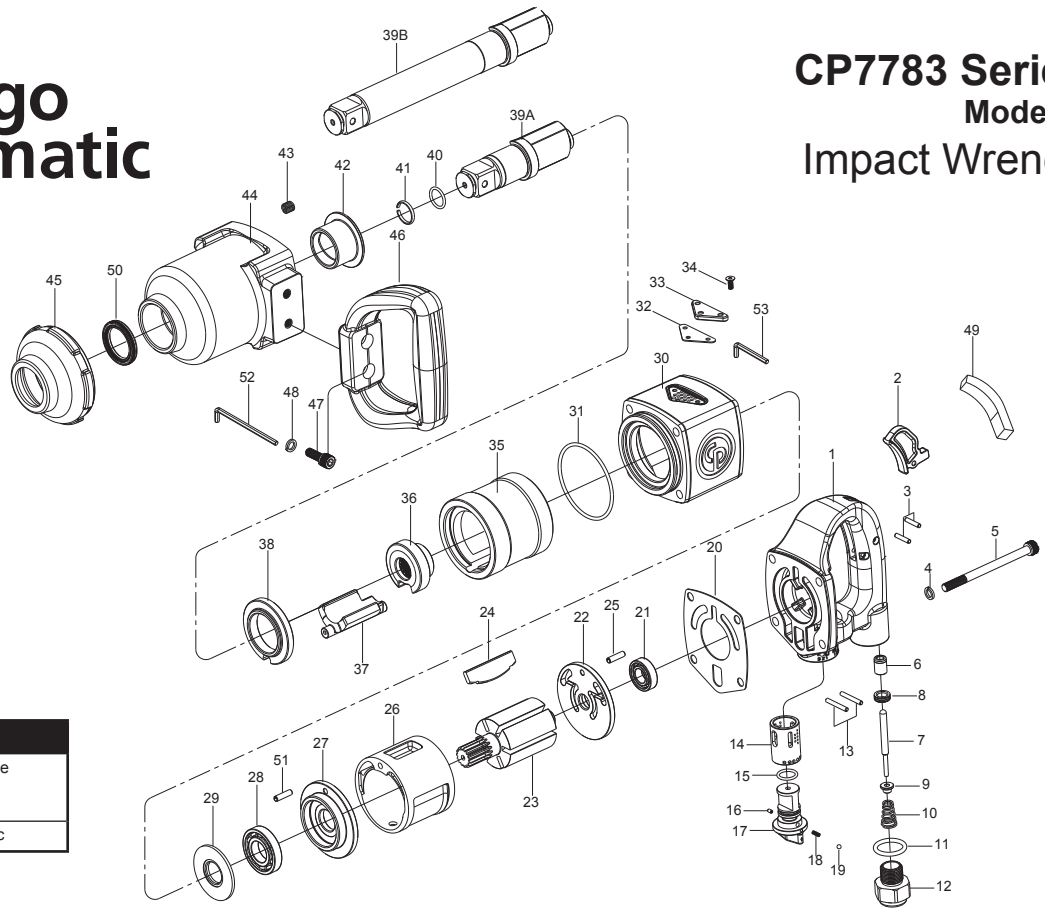
Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

- 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.



# Chicago Pneumatic

## CP7783 Series Model C Impact Wrench



### Assembly instructions

Item	Tightening torque	Loctite
5 & 47	19.6 Nm	0.1 cc

### Recommended accessories



Pneu-lube Clutch Grease  
(for clutch lubrication)  
8940158455 (3.5 oz. - 100g)  
8940158456 (14 oz. - 400g)



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



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

Item No.	Part No.	Description	Q'ty
23	8940173889	Rotor	1
26	8940173892	Cylinder	1
35	8940173901	Hammer cage	1
36	8940173902	Cam	1
37	8940173903	Hammer	1
38	8940173904	Anvil Spacer	1
45	8940173910	Clutch Housing Bumper	1
<b>A</b>	<b>8940173917</b>	<b>Side Handle Kit</b>	
46		Handle	1
47		Screw	2
48		Washer	2
<b>B</b>	<b>8940173918</b>	<b>Anvil Kit</b>	
39A		1" Anvil	1
40		O-ring	1
41		Anvil Collar	1
<b>C</b>	<b>8940173919</b>	<b>Anvil Kit Extended</b>	
39B		6" Anvil	1
40		O-ring	1
41		Anvil Collar	1
<b>D</b>	<b>8950251282</b>	<b>Anvil collar Kit (Set of 5)</b>	
40		O-ring	5
41		Anvil Collar	5
<b>E</b>	<b>8940173921</b>	<b>Hammer case Complete</b>	
42		Anvil Bushing	1
43		Insert Recoil	4
44		Hammer case	1
50		Oil Seal	1
<b>F</b>	<b>8940173922</b>	<b>Motor Housing Complete</b>	
30		Motor Housing	1
31		O-ring	1
<b>G</b>	<b>8940173923</b>	<b>Bearing Kit</b>	
21		Bearing	1
28		Bearing	1
<b>H</b>	<b>8940173924</b>	<b>Front end plate Kit</b>	
27		End Plate	1
28		Bearing	1
29		Washer	1
51		Pin	1
<b>I</b>	<b>8940173925</b>	<b>Rear end plate Kit</b>	
21		Bearing	1
22		End Plate	1
25		Spring Pin	1

Item No.	Part No.	Description	Q'ty
<b>J</b>	<b>8940173926</b>	<b>Exhaust Kit</b>	
32		Gasket	1
33		Exhaust Deflector	1
34		screw	3
<b>K</b>	<b>8940173927</b>	<b>Tune up Kit</b>	
4		Washer	4
20		Gasket	1
24	8940173890	Rotor blade (set of 6)	1
31		O-ring	1
43		Insert Recoil	4
<b>L</b>	<b>8940173928</b>	<b>Trigger Kit</b>	
2		Inside Trigger	1
3		Spring Pin	2
49		Rubber cap (for inside trigger)	1
<b>M</b>	<b>8940173929</b>	<b>Rear Handle Frame Kit</b>	
1		Backhead Assembly	1
4		Washer	4
5		Screw	4
6		Bushing	1
14		Reverse Valve Bushing	1
20		Gasket	1
49		Rubber cap (for inside trigger)	1
<b>N</b>	<b>8940173930</b>	<b>Throttle valve Kit</b>	
7		Throttle Valve Plunger	1
8	8940175158	Throttle valve Seat	1
9		Throttle Valve	1
10		Spring	1
11		O-ring	1
<b>O</b>	<b>8940173931</b>	<b>Reverse valve Kit</b>	
13		Spring Pin	2
15	8950030034	O-ring	1
16		Spring Pin	1
18	8940175159	Spring	1
19	8950000008	Steel ball	1
<b>P</b>	<b>8940173920</b>	<b>Air Inlet Kit</b>	
11		O-ring	1
12		Air Inlet	1



8940174566	Operator's Manual
8940175160	Warning label
6159948710	Safety Instructions

Spare parts without part number are not sold separately

Rely only on high-grade air tools and compressors offered on our virtual shelves.