



Chicago
Pneumatic

Operator's Manual

CP872
Die Grinder



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 6159948750, before performing any such task.

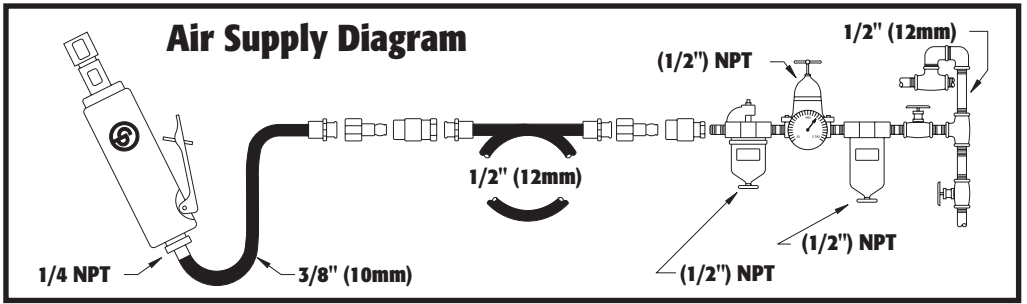


Fig. 01



Fig. 02

Model	Speed	Power	Collet		Air consumption		Weight	Dimension L	Air Inlet.	Inner hose diameter	Sound Pressure	Sound Power	Vibrations	
			Free speed	at load	ahd	k								
	[RPM]	[HP] [W]	[inch] [mm]	[inch] [mm]	[SCFM] [NI/min]	[lb.] [kg]	[in.] [mm]	[in.]	[in.] [mm]	[dB(A)]	[dB(A)]	[m/s ²]	[m/s ²]	
	1	2	3	4		5	6	7	8	9	10	11	12	
CP872	27,000	0.6 470	1/4" 6.35	0.236" 6	34 16.2	20 9.6	1.3 0.6	6.6 167	1/4"	3/8" 10	98.5	109.5	2.6	0.68

Technical Data

Model	Speed	Power	Collet	Air Consumption		Weight	Dimension L	Air Inlet	Inner Hose Dia.	Sound pressure L_{pA}	Sound power L_{wA}	Vibrations	
				Free speed	at load							a_{hd}	K
	1	2	3	4	5	6	7	8	9	10	11	12	
	[RPM]	[Hp] [W]	[inch] [mm]	[l/min] [SCFM]	[kg] [lb]	[inch] [mm]	[inch]	[mm] [inch]	[dB(A)]	[dB(A)]	[m/s ²]	[m/s ²]	

max. pressure 6.3bar(90psi)

a_v : 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 28927-12)

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.

Machine type(s)

- This product is designed for removing material using abrasives. No other use permitted. For professional use only.
- Please read the instructions carefully before starting the machine.

Operation

- Fix the accessories properly to the tool.
- Connect device as shown in Fig. 01.
- To start the machine, pull the trigger (A). Machine speed is increase by increasing pressure on the trigger. Release the trigger to stop.

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

Tune-up kit : **see 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): **Die grinder**

Declare under our sole responsibility that the product(s): **CP872** Serial Number: **00001 - 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 11148-9:2012**

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

Place & Date : Saint-Herblain,03/10/2016

Copyright 2016, 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.

INSTRUCTION MANUAL

Air Supply Requirements

1. Supply tool with 90 psig (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.
3. Do not install a quick coupler directly into the grinder throttle handle.
4. Minimum compressor requirement: 3hp (2238 w), 60 gal. air tank.

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.

Noise & Vibration Declaration*

Sound pressure level 101 dB(A), re. EN ISO 15744. For sound power, add 10 dB(A).
Vibration value < 2.5 m/s², re. ISO 8662-13.

Maintenance

1. Disassemble and inspect air motor every three months if the tool is used every day. Replace damaged or worn parts.
2. High wear parts are underlined 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, 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 CP872 Die Grinder

Machine Type Power tool equipped with 1/4 in. or 6 mm collet chuck for use with various burrs for polishing and grinding - No other use is permitted

Serial No. Tools with No. 94001A, 98001B or higher

Technical Data

1/4 in. or 6 mm collet

Free speed 22,000 RPM

Air pressure 90 psi (6.2 bar)

Harmonized Standards Applied EN792-9

National Standards Applied ISO 8662-13, EN ISO 15744

Name and Position of Issuer Stéphane Rakotoarivelo, General Manager, CP TechnoCenter, Saint Herblain, France

Signature of Issuer 



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

- ▲ Never direct air at yourself or anyone else. 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.
- ▲ 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/6.2 bar or as stated on tool nameplate.

Entanglement Hazards

- ▲ Keep away from rotating spindle and accessory.
- ▲ Do not wear jewelry or loose clothing.
- ▲ Scalping can occur if hair is not kept away from tool and accessories.
- ▲ Choking can occur if neckwear is not kept away from tool and accessories.

Operating Hazards

- ▲ Never mount a grinding wheel, cut off wheel or router cutter on a die grinder or tire buffer. A grinding wheel or other accessory that bursts can cause very serious injury or death.
- ▲ Grinding accessory's rated speed must be equal to or greater than the speed of the die grinder.
- ▲ Use only mounted wheels or tire buffing accessories with adequate speed rating and the correct shaft diameter.
- ▲ Do not use wire brushes, drill bits, or any other accessory other than mounted wheels, burrs and tire buffing accessories.
- ▲ Damaged, worn or incorrectly mounted accessories can cause higher vibration. To reduce exposures to vibration ensure burring tools are sharp and this tool and all accessories are in proper working condition.

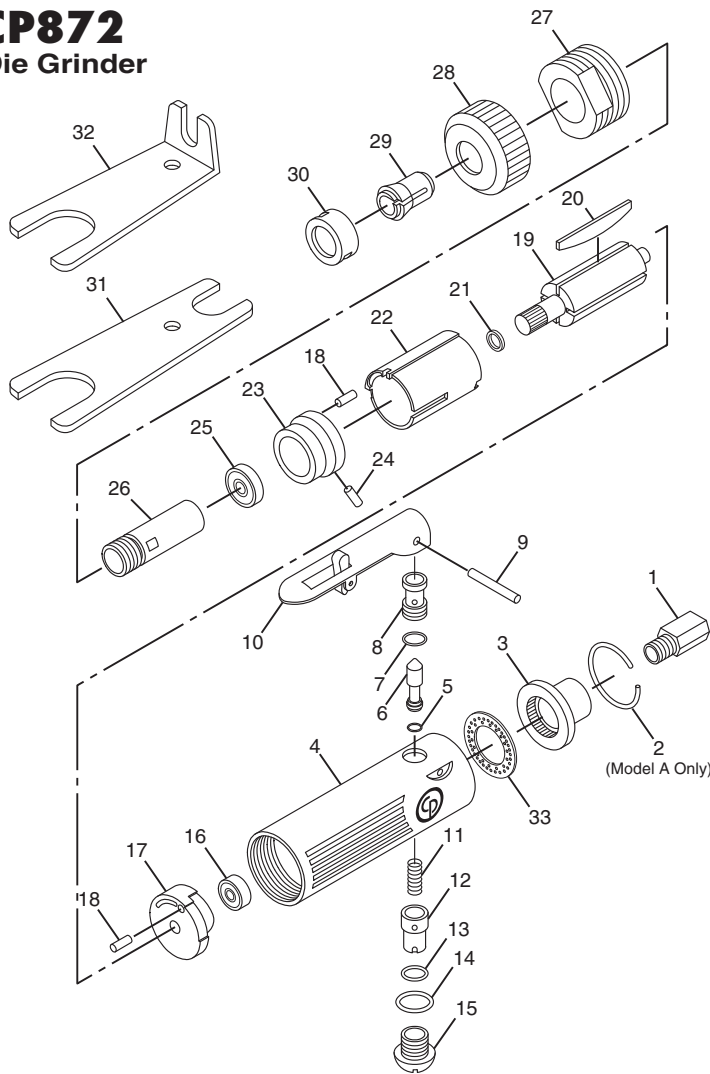
SAFETY INSTRUCTIONS

- ▲ Ensure that the workpiece is properly supported.
- ▲ Avoid direct contact with rotating spindle and accessory to prevent cutting of hands or other body parts. Wear gloves to help protect hands. Tool continues to run after the throttle lever has been released.
- ▲ Do not disable the lock off feature on the throttle lever.
- ▲ This tool and its accessories must not be modified.
- ▲ Operators and maintenance personnel must be physically able to handle the power of the tool and capable of performing the job task.
- ▲ 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. Gloves and protective clothing are recommended.
- ▲ Even small projectiles can injure eyes and cause blindness.
- ▲ Be sure all others in the area are wearing impact-resistant eye and face protection.
- ▲ Daily measure the air tool speed with a tachometer to make sure it is not greater than the RPM marked on the grinding accessory.
- ▲ Maximize the gripping length of the accessory, it must not be less than .390 in. (10mm). Increased overhang of a mounted wheel reduces its permitted speed - Refer to manufacturer's recommendations and (ANSI B7.1)

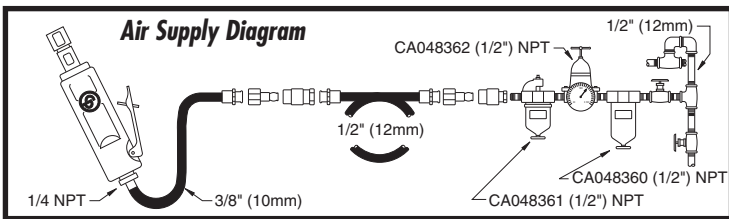
Workplace Hazards

- ▲ Slip/Trip/Fall is a major cause of serious injury or death. Be aware of excess hose left on the walking or work surface.
- ▲ High sound levels can cause permanent hearing loss. Use hearing protection as recommended by your employer or OSHA regulation (see 29 CFR part 1910).
- ▲ Maintain a balanced body position and secure footing.
- ▲ 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.
- ▲ Avoid inhaling dust or handling debris from the work process which can be harmful to your health. Use dust extraction and wear respiratory protective equipment when working with materials which produce airborne particles.
- ▲ This tool is not intended for use in explosive atmospheres and is not insulated for contact with electric power sources.
- ▲ Potentially explosive atmospheres can be caused by dust and fumes resulting from sanding or grinding. Use dust extraction or suppression system which are suitable for the material being processed.
- ▲ 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.
- ▲ For professional use only.

CP872 Die Grinder



Index No.	Part No.	Description	No. Req'd.
1	CA144870	Bushing-Air Inlet (Model A)	1
	CA157739	Bushing-Air Inlet (Model B)	1
2	CA144871	Ring-Retaining (Model A Only)	1
3	CA144872	Deflector-Exhaust (Model A)	1
	CA157734	Deflector-Exhaust (Model B)	1
4	CA144873	Housing-Motor (Model A)	1
	CA157736	Housing-Motor (Model B)	1
5	CA144874	O-Ring	1
6	CA144875	Valve-Throttle	1
7	CA144876	O-Ring	1
8	CA144877	Bushing-Throttle Valve	1
9	CA144878	Pin-Roll	1
10	CA144879	Lever-Throttle	1
11	CA144880	Spring-Throttle Valve	1
12	CA144881	Regulator-Air	1
13	CA144882	O-Ring	1
14	CA144883	O-Ring	1
15	CA144884	Plug-Throttle Valve	1
16	CA144885	Bearing-Ball	1
17	CA144886	Plate-Rear End (Incl: Index No. 18)	1
18	CA144887	Pin-Roll	2
19	CA144888	Rotor	1
20	CA144889	Blade Set-Rotor (4)	1
21	CA144890	Collar-Rotor	1
22	CA144891	Liner	1
23	CA144892	Plate-Front End (Incl: Index Nos. 18 & 24)	1
24	CA144893	Pin-Roll	1
25	CA144894	Bearing-Ball	1
26	CA144905	Spindle	1
27	CA144896	Nut-Clamp	1
28	CA144897	Cap-Housing	1
29	C138727	Collet (1/4 in.)	1
	C139289	Collet (6 mm)	1
30	KF124525	Nut-Collet	1
31	CA144908	Wrench-Spindle	1
32	CA144909	Spanner-Angle	1
33	CA157735	Silencer (Model B)	1
	CA144813	Decal-Safety Warning (Not Shown)	1
	CA145448	Motor Assy. (Incl: Index Nos. 16, 17, 19, 20, 21, 22, 23, 25 & 26) (Not Shown)	1
	CA127175	Rear Exhaust Accessory Kit (Not Shown) (Model A)	1



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 judgement 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 repairs.
- Never direct air at yourself or anyone else.
- Whipping hoses can cause severe 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 6.3 bar / 90 psig, or as stated on tool nameplate.

▲ Entanglement hazards

- Keep away from rotating drive spindle and abrasive. Rotation may continue for several seconds after the throttle has been released. Do not lay the tool down until rotation has stopped.
- Choking, scalping and / or lacerations can occur if loose clothing, gloves, jewellery, neck ware and hair are not kept away from tool and accessories.

▲ Projectile hazards

- Failure of the accessory or abrasive, or of the workpiece, can generate high-velocity projectiles. Even small projectiles can injure eyes and cause blindness.
- 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
- Use barriers to protect others from wheel fragments and grinding sparks.
- Daily measure the air tool speed with a tachometer to make sure that it is not greater than the RPM marked on the grinding accessory.
- Ensure that the abrasive is securely clamped to the die grinder using the tools provided.

- Ensure that the workpiece is securely fixed.

▲ Accessory hazards

- Always shut off air supply, relieve hose of air pressure and disconnect tool from air supply when changing accessories.
- Use only recommended sizes and types of accessories and consumables.
- Do not use mounted wheels which are chipped or cracked, or may have been dropped.
- Never mount a grinding wheel, cut-off wheel or router cutter on a die grinder. A grinding wheel that bursts can cause very serious injury or death.
- Never use an abrasive with a permitted speed lower than the air grinder speed.
- Correct mounting is necessary to prevent injury from broken mounted wheels.
- Ensure the shaft diameter of the accessory is correct for the size of collet.
- Maximise the gripping length of the accessory: it must not be less than 10mm (0.39 inch). Increased overhang of a mounted wheel reduces its permitted speed – refer to manufacturer's recommendations and ANSI B7.1.
- Before grinding, test mounted wheel by briefly running tool at full throttle. Be sure to use a barrier (such as under a heavy work table) to stop any possible broken wheel parts. Stop immediately if vibration is excessive.

▲ 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.
- You can be cut or burned if you come into contact with the accessory, grinding sparks or the work surface. Avoid contact and wear protective equipment such as gloves, apron and helmet.
- Do not use if vibration becomes excessive: check the accessory for damage or incorrect mounting.
- Ensure that sparks do not cause a hazard to people or materials.
- There is a risk of electrostatic discharge if used on plastic and other non-conductive materials.

▲ 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 off-balance 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 support

the weight of the tool with a balancer.

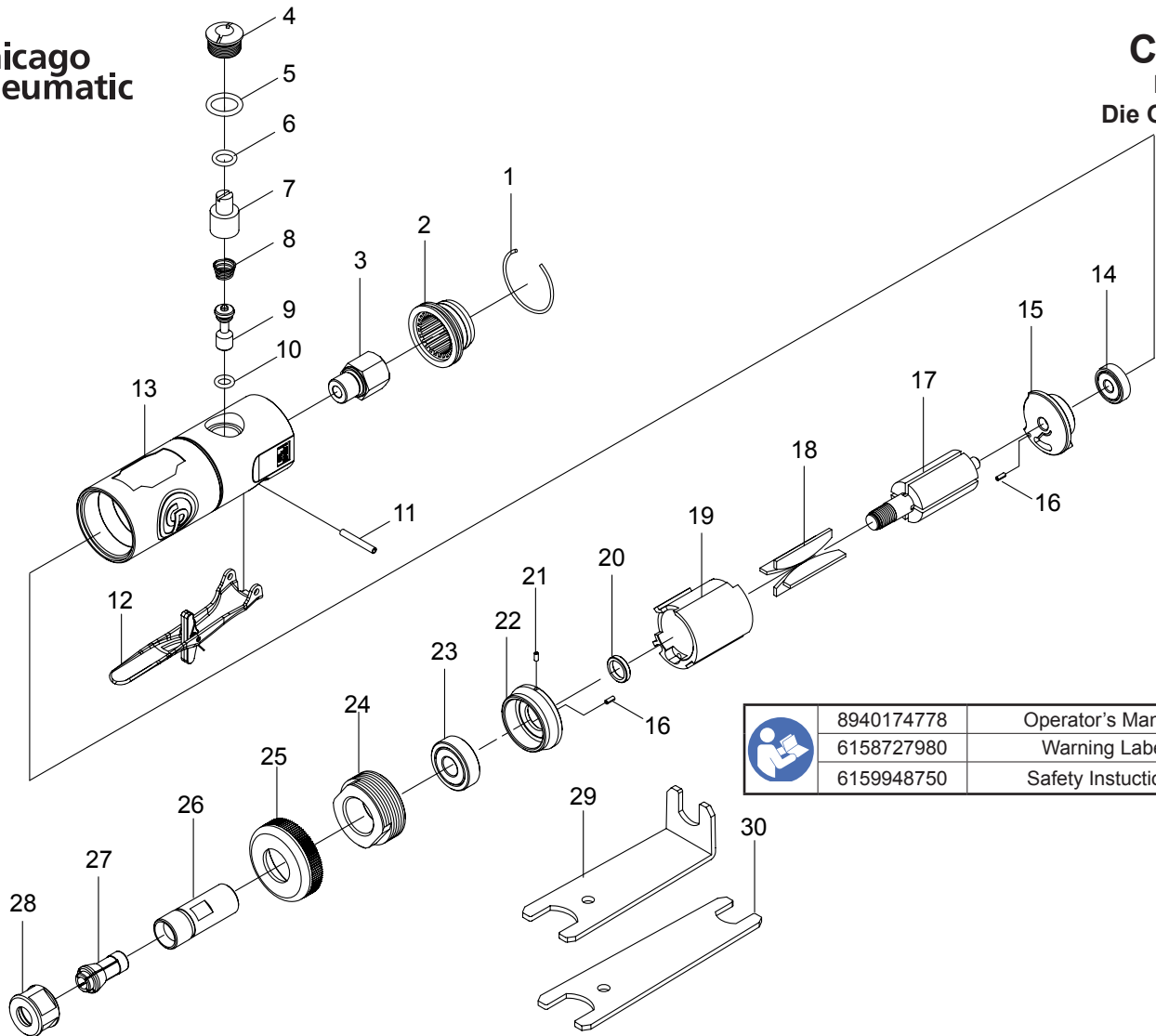
- To prevent unnecessary increases in noise and vibration levels:
 - Operate and maintain the tool, and select, maintain and replace the accessories and consumables, in accordance with this instruction manual;
 - Use damping materials to prevent workpieces from "ringing".


⚠ 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 cause ill 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
- 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. Hidden hazards may exist, such as electricity or other utility lines.
- Potentially explosive atmospheres can be caused by dust and fumes resulting from sanding or grinding. Always use dust extraction or suppression systems which are suitable for the material being processed.
- This tool is not intended for use in potentially explosive atmospheres and is not insulated from coming into contact with electric power.



	8940174778	Operator's Manual
	6158727980	Warning Label
	6159948750	Safety Instructions

Index No.	Parts No.	Description	Qty
3	8940158688	Air Inlet	1
13	8940174750	Motor Housing	1
17	8940174751	Rotor	1
19	2050485193	Cylinder	1
26	2050496383	Spindle	1
27-1/4"	2050484293	Collet 1/4"	1
27-6mm	2050495833	Collet 6mm	1
28	2050496423	Collet Nut	1
29	8950290127	Angle Double Ended Spanner	1
30	2050496453	Double Ended Spanner	1
A	8940174767	Diffuser Kit	
1		Retainer Ring	1
2		Exhaust Diffuser	1
B	8940174761	Valve Kit	
4		Throttle Valve Plug	1
5		O-Ring	1
6		O-Ring	1
7		Air Regulator	1
8		Valve Spring	1
9		Valve Stem	1
10		O-Ring	1

Index No.	Parts No.	Description	Qty
C	8940173447	Lever Assembly	
11		Spring Pin	1
12		Throttle Lever Complete	1
D	8940174763	Rear End Plate Assembly	
14	2050486803	Ball Bearing	1
15		Rear End Plate	1
16		Spring Pin	1
E	8940174764	Front End Plate Assembly	
16		Spring Pin	1
20		Spacer	1
21		Spring Pin	1
22		Front End Plate	1
23	8940158685	Ball Bearing	1
F	8940174765	Cap Kit	
24		Retainer	1
25		Housing Cap	1
	8940174766	Tune Up Kit	
<u>5</u>		<u>O-Ring</u>	1
<u>6</u>		<u>O-Ring</u>	1
<u>10</u>		<u>O-Ring</u>	1
18	2050484273	Blade (set of 4)	1

Recommended Accessories

2050516623	Collet 1/8"
2050484292	Collet 3mm

8940174834 Hose kit



Spare parts without part number are not sold separately - High wear parts are underlined

[View other air tools and compressors made by Chicago Pneumatic on our website.](#)