

Operator's Manual



CP9120, CP9121 & CP9122 4", 5" & 4.5" Angle Grinders



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 6159948760, before performing any such task.

CP9120, CP9121 & CP9122 Series Angle Grinder

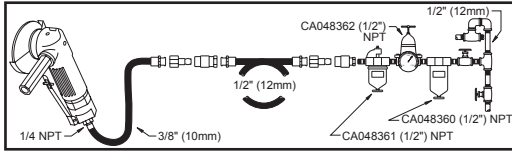
INSTRUCTION MANUAL

Machine Type:

Power tool equipped with 3/8", 5/8" & M14 spindle with various grinding wheels for grinding - No other use is permitted.

Air Supply Requirements

1. Supply tool with 90 psig (6.3 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 below.
3. Do not install a quick coupler directly into the sander throttle handle.



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

1. Disassemble and inspect tool 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.
3. To keep downtime to a minimum, the following service kits are recommended:

Tune-Up Kit:

2050504823 (Incl: 7, 8, 11, 16, 20)

Bevel Gear Kit:

2050504833 (Incl: 13, 22, 24, 27, 29, 30, 31, 32, 34)

Technical Data

CP9120CR, CP9120CRN: 3/8"-24 thread, 4" wheel

CP9121CR: 3/8"-24 thread, 5" wheel

CP9121BR: 5/8"-11 thread, 5" wheel

CP9121AR: M14 thread, 5" wheel

CP9122CR: 3/8"-24 thread, 4.5" wheel

CP9122BR: 5/8"-11 thread, 4.5" wheel

Free speed; 12,000 RPM

Power; 0.8 HP-600W

Air pressure 90 psi (6.3 bar)

Air consumption; 21 cfm (10 l/s)

Original Instructions

Copyright 2010, 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.

Guard Position



Noise & Vibration Declaration*

Sound pressure level 84 dB(A), uncertainty 3 dB(A), in accordance with EN ISO 15744. For sound power, add 11 dB(A).

Vibration value;

a = 5.3m/s², uncertainty k = 1.6m/s² (CP9120CR, CP9120CRN);

a = 8.6m/s², uncertainty k = 4.6m/s² (CP9122BR);

a = 5.4m/s², uncertainty k = 1m/s² (CP9122CR);

a = 6.7m/s², uncertainty k = 2.2m/s² (CP9121AR);

a = 11.2m/s², uncertainty k = 3.4m/s² (CP9121BR);

a = 11.2m/s², uncertainty k = 3.4m/s² (CP9121CR); re. ISO 28927-1.

Declaration of noise and vibration emission

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, 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.

We recommend a programme of health surveillance to detect early symptoms which may relate to noise or vibration exposure, so that management procedures can be modified to help prevent future impairment.



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.
- 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.
- A grinding wheel that bursts can cause very serious injury or death.
- Daily measure the air grinder speed with a tachometer to make sure that it is not greater than the RPM marked on the grinding wheel.
- Never use a grinding wheel marked with a speed lower than the air grinder speed.

▲ 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.

▲ Wheel guard usage

- Always use the recommended wheel guard to reduce the risk of injury from broken grinding wheel parts.
- If a guard has withstood a wheel breakage do not continue to use it. It may be damaged.
- Position the guard between the grinding wheel and the operator.
- Use barriers to protect others from wheel fragments and grinding sparks.

▲ 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.

▲ 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 abrasives.
- Do not use chipped or cracked wheels, or wheels which may have been dropped.
- Correct grinding wheel mounting is necessary to prevent injury from broken wheels.
- Avoid mismatch between UNC and metric threads.
- Grinding wheels should be a free fit on the spindle to prevent stress at the hole. Do not use reducing bushes to fit large hole grinding wheels.
- Use only wheel collars that come with the grinder for mounting the grinding wheel. Flat washers or other adapters may over stress the wheel. Always use heavy paper blotter discs between the wheel collars and the grinding wheel.
- If several flanges are supplied to fit different sizes and types of abrasive, always fit the correct flange(s) for the abrasive being used.
- When mounting cups, cones or plugs with threaded holes, the spindle end must not contact the bottom of the hole as it will stress the abrasive.
- Tighten the wheel on the spindle to prevent spin off when the air grinder is turned off.
- Before grinding, test grinding 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.
- Avoid wheel jamming when cutting-off. Support the workpiece on both sides of the cut line to prevent the wheel becoming trapped. If jamming occurs, release the throttle and ease the wheel free. Check the wheel is undamaged and properly secured before continuing.
- Never use cutting-off wheels for side grinding.
- Grinding sparks can ignite clothing and cause severe burns. Ensure sparks do not land on clothing. Wear fire-retardant clothing and have a bucket of water nearby.

- 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".

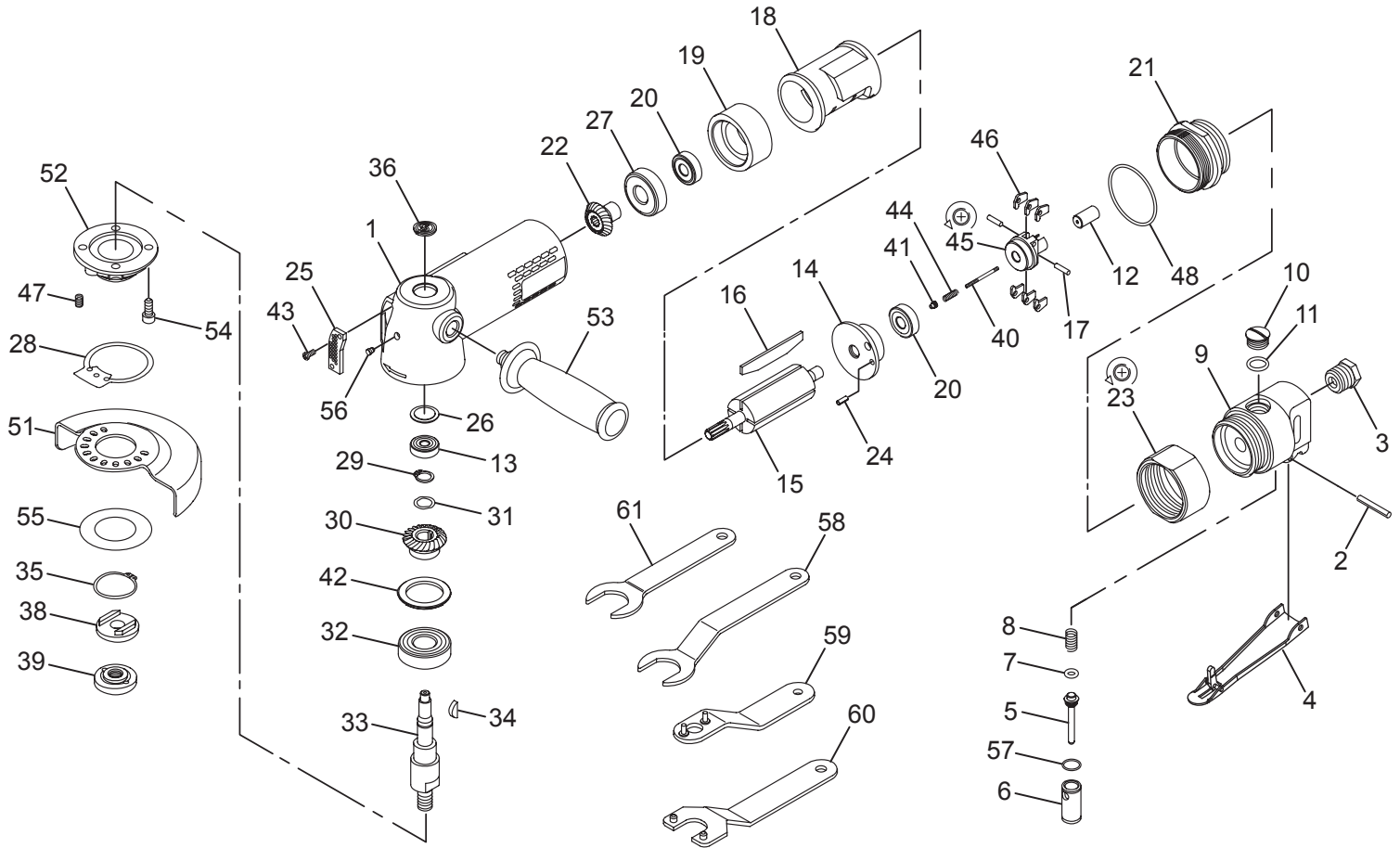
Workplace hazards

- Slip/Trip/Fall is a major cause of serious injury or death. Be aware of excess hose left on the walking or work surface.
- High sound levels can cause permanent hearing loss. Use hearing protection as recommended by your employer or occupational health and safety regulations.
- 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.
- 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.



Chicago Pneumatic

CP9120, CP9121 & CP9122 Series 4", 5" & 4-1/2" Angle Grinders



Item No.	Parts No.	Description	Qty
1	2050533803	Motor Housing	1
2	2050484613	Spring Pin (4x28)	1
3	2050484083	Air Inlet	1
4	2050484623	Throttle Lever	1
5	2050484633	Valve Shaft	1
6	2050484643	Bushing	1
7	2050533813	O-Ring (4, 8x1.9)	1
8	2050484663	Valve Spring	1
9	2050533823	Throttle Valve Housing	1
10	2050533833	Throttle Lever Plug	1
11	2050485153	O-Ring (9, 8x1.9)	1
12	2050484693	Plunger	1
13	2050486913	Ball Bearing (626zz)	1
14	2050484703	Rear End Plate	1
15	2050484713	Rotor	1
16	2050484723	Blade Set (x4 pcs)	1
17	2050487003	Spring Pin (3x12)	2
18	2050484733	Cylinder	1
19	2050484743	Front End Plate	1
20	2050486823	Ball Bearing (608zz)	2
21	2050533843	Lock Nut	1
22	2050484763	Bevel Gear	1
23	2050533853	Coupling Nut	1
24	2050487013	Spring Pin (3x8)	1
25	2050484783	Deflector	1
26	2050484793	Spacer	1
27	2050486953	Ball Bearing (6201zz)	1
28	2050533863	Lock Ring	1
29	2050484573	Retainer Ring (STW-10)	1
30	2050533873	Bevel Gear	1
31	2050484823	Wave Washer	1
32	2050486883	Ball Bearing	1
33	2050533883	Spindle(3/8"-24) for CP9120CR, CP9121CR, CP9122CR	1
	2050533893	Spindle M14 x 2 for CP9121AR	1
	2050535053	Spindle (5/8"-11) for CP9121BR & CP9122BR	1
34	2050484843	Key	1
35	2050533903	Retainer Ring (STW-27)	1
36	2050533913	CP Logo Ring (15mm)	1
38	6155031630	Flange (3/18"-24) for CP9120CR	1
	6155031590	Flange (M14*2) for CP9121AR	1
	2050533943	Flange (3/8"-24 UNF) for CP9121CR & CP9122CR	1
	6155031600	Flange (5/8"-11) for CP9121BR & CP9122BR	1

Item No.	Parts No.	Description	Qty
39	6156060430	Flange Nut (3/8"-24) for CP9120CR	1
	6155020770	Flange Nut (M14x2) for CP9121AR	1
	2050533973	Flange Nut (3/8"-24) for CP9121CR & CP9122CR	1
	6155020780	Flange Nut (5/8"-11) for CP9121BR & CP9122BR	1
40	2050484903	Adjust Screw	1
41	2050484913	Adjust Nut	1
42	2050533983	Spacer	1
43	2050484193	Screw (TS2.9)	2
44	2050484933	Spring Pin	1
45	2050484943	Governor	1
46	2050484953	Pendulum	6
47	2050533993	Spring	1
48	2050484963	O-Ring (37, 8x1, 78)	1
51	2050534003	4" Disc Guard for CP9120 Series	1
	2050534013	4 1/2" Disc Guard for CP9121 Series	1
	2050534023	5" Disc Guard for CP9121 Series	1
52	2050534053	Bearing Cap	1
53	2050524063	Side Handle	1
54	2050534063	Screw (M5x12)	4
55	2050534073	Spacer	1
56	2050534083	Oil Cap	1
57	2050484483	O-Ring (10, 5x1)	1
58	2050534043	Spanner (24 mm)	1
59	2050485003	Pin Wrench for CP9120CR	1
60	2050486673	Pin Wrench for CP9121 & CP9122 Series	1
61	2050534033	Spanner (21 mm)	1
	2050504823	Tune-up Kit (Incl: Index No. 7, 8, 11, 16, 20)	
	2050504833	Bevel Gear Kit (Incl: Index No. 13, 22, 24, 27, 29, 30, 31, 32, 34)	

	8940167754	Operator's Manual
	6158727980	Warning Labels
	6158726900	
	6158727560	
	6159948760	Safety Instructions

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

Check out the collection of air tools and compressors we offer.