

Operating Instructions • Warning Information • Parts Breakdown



! WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

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 those dust masks that are specially designed to filter out microscopic particles.

SPECIFICATIONS

Free Speed	18,000 RPM
Horsepower	0.7
Air Inlet Size	1/4" NPT
Recommended Hose Size	3/8" I.D.
Maximum Air Pressure	90 psig, 6.2 bar
Average Air Consumption	3.6 CFM
Overall Length	7.6"
Vibration Level	1.8 m/sec ²
Sound Pressure Level	90 dBA
Weight	1.85 Lbs.
Wheel Size	3"

! WARNING

- MAXIMUM RPM OF 18,000
- MAX. AIR PRESSURE:
90 PSIG, 6.2 BAR



RPM OF THE ACCESSORY
MUST EXCEED TOOL RPM



ALWAYS READ
INSTRUCTIONS BEFORE
USING POWER TOOLS



ALWAYS WEAR
SAFETY GOGGLES



ALWAYS WEAR HEARING
PROTECTION



ALWAYS WEAR FACE
PROTECTION



ALWAYS WEAR HAND
PROTECTION



AVOID PROLONGED
EXPOSURE TO VIBRATION

CAT820R Reversible Cut-Off Tool

! WARNING

FAILURE TO OBSERVE THESE WARNINGS COULD RESULT IN INJURY.

THIS INSTRUCTION MANUAL CONTAINS IMPORTANT SAFETY INFORMATION.

READ THIS INSTRUCTION MANUAL CAREFULLY AND UNDERSTAND ALL INFORMATION BEFORE OPERATING THIS TOOL.



- It is the responsibility of the owner to make sure all personnel read this manual prior to using this air tool. It is also the responsibility of the air tool owner to keep this manual intact and in a convenient location for all to see and read. If the manual or product labels are lost or not legible, contact Cornwell for replacements. If the operator is not fluent in English, the product and safety instructions shall be read to and discussed with the operator in the operator's native language by the purchaser/owner or his designee, making sure that the operator comprehends its contents.

- Always operate, inspect and maintain this tool in accordance with American National Standards Institute Safety Code of Portable Air Tools (ANSI B186.1) and any other applicable safety codes and regulations.



- For safety, top performance and maximum durability of parts, operate this tool at 90 psig: 6.2 bar max air pressure with 3/8" diameter air supply hose.



- Always wear impact-resistant eye protection when operating or performing maintenance on this tool (users and bystanders).



- Always wear hearing protection when using this tool (users and bystanders). High sound levels can cause permanent hearing loss. Use hearing protection as recommended by your employer or OSHA regulation.



- Always wear face and hand protection when operating this tool.



- Keep the tool in efficient operating condition.



- Operators and maintenance personnel must be physically able to handle the bulk, weight and power of this tool.
- Air under pressure can cause severe injury. Never direct air at yourself or others. Always turn off the air supply, drain hose of air pressure and detach tool from air supply before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool. Failure to do so could result in injury. Whip hoses can cause serious injury. Always check for damaged, frayed or loose hoses and fittings, and replace immediately. Do not use quick detach couplings at tool. See instructions for correct set-up on page 4.



- Air powered tools can vibrate during use. Vibration, repetitive motions or uncomfortable positions over extended periods of time may be harmful to your hands and arms. Discontinue use of tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.



- Slipping, tripping and/or falling while operating air tools can be a major cause of serious injury or death. Be aware of excess hose left on the walking or work surface.



- Keep body working stance balanced and firm. Do not overreach when operating the tool.
- Anticipate and be alert for sudden changes in motion during start up and operation of any power tool.



- Do not carry tool by the hose. Protect the hose from sharp objects and heat.

- Tool shaft may continue to rotate briefly after throttle is released. Avoid direct contact with accessories during and after use. Gloves will reduce the risk of cuts or burns.

- Keep away from rotating end of tool. Do not wear jewelry or loose clothing. Secure long hair. 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.

- Note direction of rotation BEFORE operating tool.

- Use accessories rated at 18,000 RPM or higher.**

- Never operate this tool without required disc cover/guard in place.**

- Do not lock, tape or wire the "on/off" safety lever in the "on" position, as the lever must be free to return to the "off" position when released.**

- Correct cut-off wheel mounting is necessary to prevent injury from broken wheels. Do not use chipped or cracked cut-off wheels. Cut-off wheels should be a free fit on the spindle to prevent stress at the hole. Use only wheel collars that come with the tool for mounting the cut-off wheel. Flat washers or other adapters may over stress the wheel. Tighten the wheel on the spindle to prevent spin off when the tool is turned off.



- Do not use (or modify) the tool for any other purpose than that for which it was designed without consulting the manufacturer's authorized representative.



- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.



- This tool is not insulated against electric shock.
- This tool must not be used in explosive atmospheres.
- Servicing and repairs should only be made by an authorized service center.

- Do not force tool beyond its rated capacity.

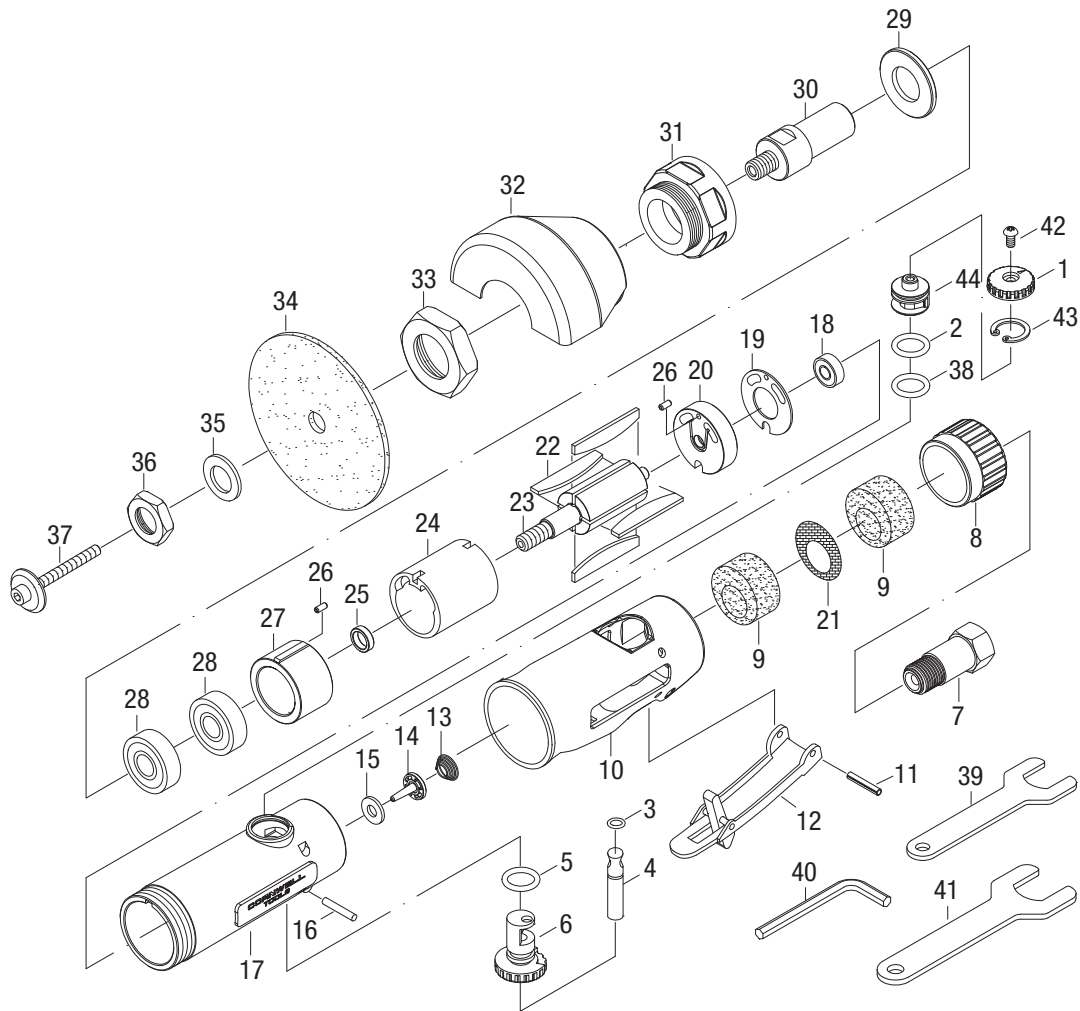
- Use accessories recommended by Cornwell Tools.**

- Keep tool out of reach of children.

- Do not remove any labels. Replace any damaged labels.

- This product may contain one or more chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. *Wash hands thoroughly after handling.*

PARTS BREAKDOWN - CAT820R

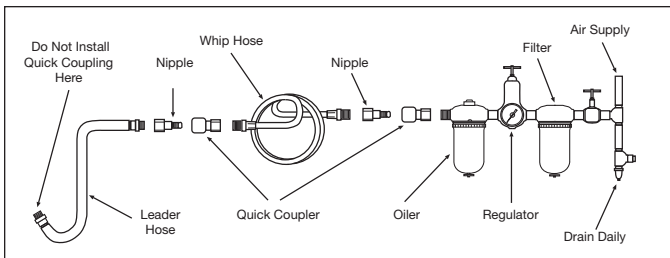


Ref. #	Item #	DESCRIPTION	QTY	Ref. #	Item #	DESCRIPTION	QTY
1	** RS621001	Regulator	1	23	RS820R23	Rotor	1
2	RS820R02	O-Ring (AS015)	1	24	RS820R24	Cylinder	1
3	RS246002	O-Ring (3.5 x 1.4)	1	25	RS820R25	Bearing Spacer	1
4	RS820R04	Valve Stem	1	26	RS288323	Pin (2.5 x 6L)	2
5	RS288302	O-Ring (P10)	1	27	RS820R27	Front Plate	1
6	RS820R06	Regulator	1	28	RS10920	Bearing (6000ZZ)	2
7	RS820R07	Air Inlet	1	29	RS820R29	Washer (22 x 33.2 x 3T)	1
8	RS820R08	Exhaust Sleeve	1	30	RS820R30	Disc Retainer	1
9	RS820R09	Silencer	2	31	RS820R31	Clamp Nut	1
10	RS820R10	Housing Cover	1	32	RS820R32	Guard	1
11	RS820R11	Pin (3.1 x 16L)	1	33	RS20830	Nut	1
12	RS820R12	Safety Lever	1	34	*	Disc Wheel	1
13	RS820R13	Spring	1	35	RS820R35	Washer (9.6 x 21 x 1.5T)	1
14	RS820R14	Valve	1	36	RS820R36	Nut	1
15	RS820R15	Washer (6 x 13.8 x 1.6T)	1	37	RS820R37	Screw with Washer	1
16	RS820R161A	Pin (2.8 x 25.8L)	1	38	** RS850XLR60	O-Ring (S16)	1
17	** RS820R17A	Housing	1	39	RS31535	Stop Spanner Wrench (14mm)	1
18	RS21114	Bearing (626ZZ)	1	40	RS165051	Hex Wrench (4mm)	1
19	RS820R19	Washer (17 x 33.2 x 0.8T)	1	41	RS305A37	Stop Spanner Wrench (17mm)	1
20	RS820R20	Rear Plate	1	42	RS850XLR77	Screw (M4 x 8L)	1
21	RS820R21	Muffler	1	43	RS850XLR78	Snap Ring (RTW-18)	1
22	RS820R22	Rotor Blade	4	44	RS850XLR79	Forward/Reverse Valve	1

* Replacements available as CAT820CW (5 PK). ** New improved parts as of serial number 111290001.

For tools with earlier serial numbers, order RS820R17 Housing, RS820R01 Regulator, RS820R38 O-Ring and RS820R161 Pin.

Guard Warning Label available as RSCAT820RWL.



AIR SUPPLY

Tools operate on a wide range of air pressures. It is recommended that air pressure measures 90 psig at the tool with the trigger fully depressed and no load applied to the tool. Higher pressure (over 90 psig; 6.2 bar) raises performance beyond the rated capacity of the tool, which will shorten tool life and could cause injury.

Always use clean, dry air. Dust, corrosive fumes and/or water in the air line will cause damage to the tool. Drain water from air lines and compressor prior to running tool. Clean the air inlet filter screen weekly. The recommended hookup procedure can be viewed in the above figure.

The air inlet used for connecting air supply has standard 1/4" NPT. Line pressure should be increased to compensate for unusually long air hoses (over 25 feet). Minimum hose diameter should be 3/8" I.D. and fittings should have the same inside dimensions and be tightly secured.

Ensure an accessible emergency shut off valve has been installed in the air supply line and make others aware of its location.

LUBRICATION

Lubricate the air motor daily with high quality air tool oil. If no air line oiler is used, run 1/2 oz. of oil through the tool. The oil can be squirted into the tool air inlet or into the hose at the nearest connection to the air supply, then run the tool. A rust inhibitive oil is acceptable for air tools.

WARNING: After an air tool has been lubricated, oil will discharge through the exhaust port during the first few seconds of operation. The exhaust port must be covered with a towel before applying air pressure to prevent serious injury.

TROUBLESHOOTING

Other factors outside the tool may cause loss of power or erratic action. Reduced compressor output, excessive drain on the air line, moisture or restrictions in air pipes or the use of hose connections of improper size or poor conditions may reduce air supply. Grit or gum deposits in the tool may cut power and may be corrected by cleaning the air strainer and flushing out the tool with gum solvent oil or an equal mixture of SAE #10 and kerosene. If outside conditions are in order, disconnect tool from hose and take tool to your nearest authorized service center.

OPERATION

OPERATION NOTE: 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.

NOTE: Before using, test cut-off wheel by briefly running the tool at full throttle under a barrier (such as under a heavy work table) to stop any possible broken wheel parts.



Always wear impact-resistant eye and face protection to guard against flying rust and chips (users and bystanders). Even small projectiles can injure eyes and cause blindness. A cut-off wheel that breaks can cause very serious injury. Daily measure the tool speed with a tachometer to make sure the speed is not greater than the RPM marked on the cut-off wheel. **Never use a cut-off wheel marked with a speed lower than the tool speed.**

When using the cut-off tool, be careful not to exert excessive force. Too much force could be hazardous if it causes the tool spindle to bend or break. The burning of the work piece or excessive speed reduction indicates too much force being applied. Start the tool off the work, set it down on the work evenly and move in the direction desired to make the cut. When finished cutting, lift off the work before stopping the motor. Always use the required wheel guard to prevent injury from broken cutting parts. **If a guard has withstood a wheel breakage, discontinue its use and replace it with a new guard.** It may be damaged. Position the guard between the cut-off wheel and the operator. Use barriers to protect others from wheel fragments and sparks.

WARNING: Correct cut-off wheel mounting is necessary to prevent injury from broken wheels. Do not use chipped or cracked cut-off wheels. Cut-off wheels should be a free fit on the spindle to prevent stress at the hole. Use only wheel collars that come with the tool for mounting the cut-off wheel. Flat washers or other adapters may over stress the wheel. Tighten the wheel on the spindle to prevent spin off when the tool is turned off.



WARNING: NEVER OPERATE THIS TOOL WITHOUT REQUIRED DISC COVER/GUARD IN PLACE.

Ensure an accessible emergency shut off valve has been installed in the air supply line and make others aware of its location.

To Assemble Cutting Wheel:

1. Use #41 double ended spanner to hold #30 spindle.
2. Use #40 hex wrench to remove #37 screw.
3. Use #39 spanner wrench to remove #36 nut and #35 washer.
4. Place cutting wheel onto spindle end and reverse steps 1-3.

WARRANTY

Cornwell Quality Tools Company ("Cornwell") warrants this product against defects in material and workmanship for a period of ONE (1) YEAR from the date of original retail purchase. Subject to the conditions and limitations set forth below, Cornwell will, at its option, either repair or replace any part of the product(s) that proves defective by reason of improper workmanship or materials.

This warranty does not cover any damage to this product that results from accident, abuse, misuse, natural or personal disaster, or any unauthorized disassembly, repair, or modification. Repairs, disassembly and modification are only authorized to be made by Cornwell or a Cornwell Authorized Warranty Center.

WARRANTY SERVICE

In order to have your tool repaired, return the tool to any Cornwell Authorized Warranty Center, freight prepaid. Please include a copy of your proof of purchase and a brief description of the problem. The tool will be inspected and if any part or parts are found to be defective in material or workmanship, they will be repaired free of charge, and the repaired tool will be returned to you freight prepaid.

EXCLUSIONS AND LIMITATIONS

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Repair kits and replacement parts are available for many Cornwell products, regardless of whether or not the product is still covered by a warranty plan.