



SPECIFICATIONS

Free Speed	20,000 rpm
Maximum Capacity	1/4"
Air Inlet	1/4" NPT
Hose Size	3/8"
Air Pressure	90 psi
Air Consumption	3 cfm (22 scfm)
Length	5.5"
Weight	1.1 lbs. (0.5 Kgs)
Sound Level	93 dBA

!WARNING

- MAXIMUM RPM OF 20,000
- MAX AIR PRESSURE: 90 PSIG, 6.2 BAR
- RATED RPM OF THE ACCESSORY USED MUST EXCEED THE MAXIMUM TOOL RPM SHOWN



ALWAYS READ
INSTRUCTIONS
BEFORE USING
POWER TOOLS



ALWAYS WEAR
SAFETY GOGGLES



WEAR HEARING
PROTECTION



AVOID
PROLONGED
EXPOSURE TO
VIBRATION



!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.

CAT301

Multi Purpose Angle Die Grinder

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WARNING - FOLLOW THESE RULES FOR SAFE OPERATION!

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.

- 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 and face protection when operating or performing maintenance on this tool.



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

- 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 powered tools can vibrate in 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.



- 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.



- Place the tool on the work before starting the tool.
- 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.

- Correct grinding wheel mounting is necessary to prevent injury from broken wheels. Do not use chipped or cracked grinding wheels. Grinding wheels should be a free fit on the spindle to prevent stress at the hole. 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. Tighten the wheel on the spindle to prevent spin off when the air grinder is turned off.

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

- Do not force tool beyond its rated capacity.

- Do not remove any labels. Replace damaged labels.

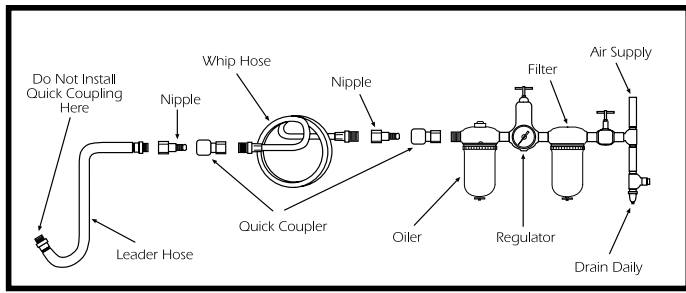


Figure 1

AIR SUPPLY

Tools of this class operate on a wide range of air pressures. It is recommended that air pressure of these tools measures 90 PSI at the tool while running free. Higher pressure (over 90 psig; 6.2 bar) raises performance beyond the rated capacity of the tool which will shorten tool life because of faster wear 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 the air tank daily. Clean the air inlet filter screen on at least a weekly schedule. The recommended hookup procedure can be viewed in the above figure.

The air inlet (Figure 2) 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.

LUBRICATION & MAINTENANCE

Lubricate the tool daily with 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. Overfilling will cause a reduction in the power of the tool. A rust inhibitive oil is acceptable for air tools.

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. If outside conditions are in order, and the tool still performs erratically, disconnect tool from hose and take tool to your nearest authorized Cornwell dealer.

OPERATION

When using the grinder be careful not to exert excessive force. Too much force could be hazardous if it causes the cutting tool spindle to bend or break.

The burning of the work piece or excessive speed reduction indicates too much force being applied. Changing to a free cutting tool may be better for the desired rate of speed and stock removal.

Avoid hazardous conditions by making sure there is sufficient force on the spindle of the cutting tool by placing the spindle 7/16" or more inside the collet.



Figure 2

WARRANTY

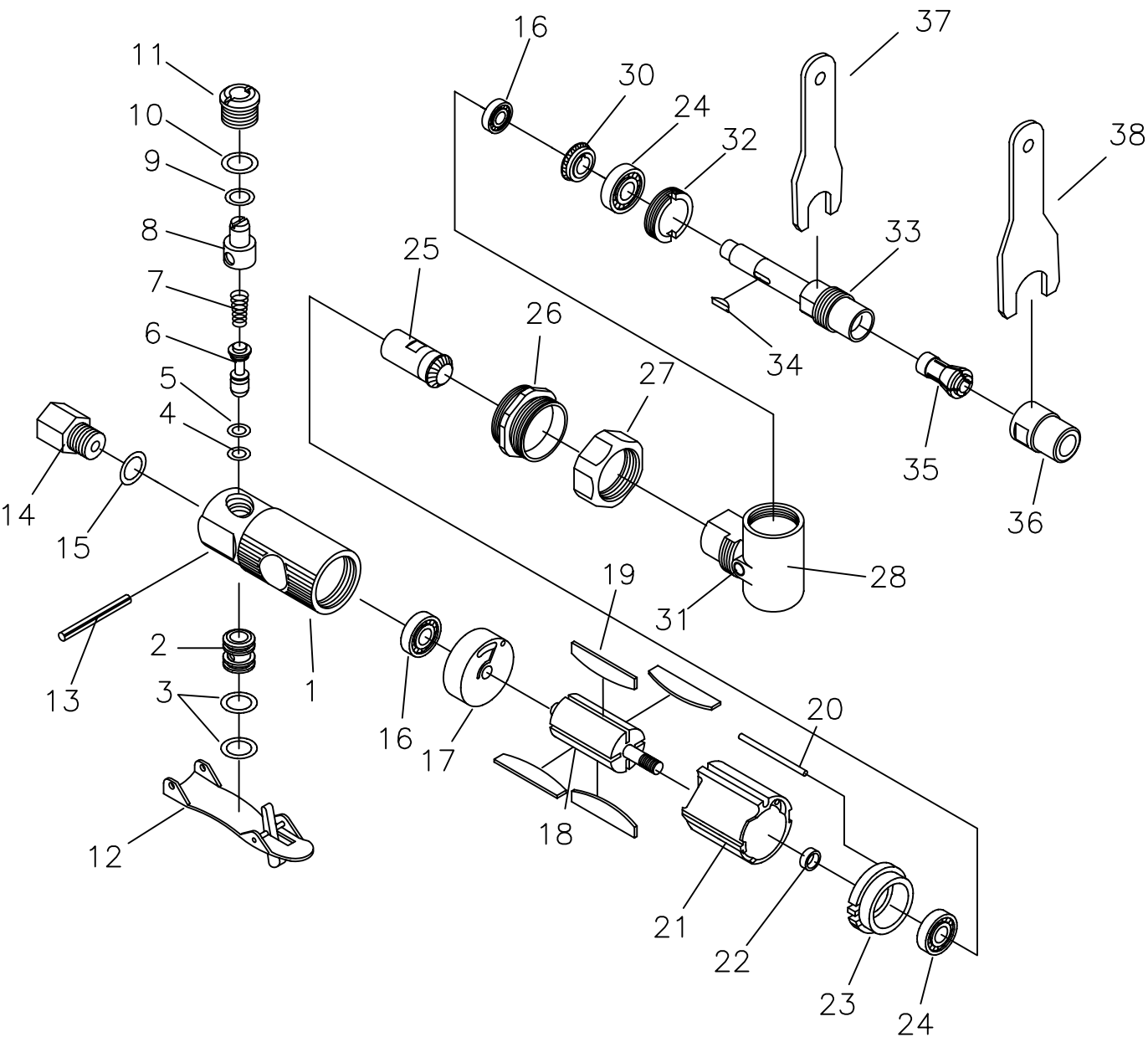
Cornwell warrants the CAT301 for a period of 1 year to the consumer. We will replace the CAT301 covered under this warranty if it is defective in material or workmanship during the warranty period. In order to have your tool replaced, return the tool to your authorized Cornwell dealer. Please provide 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, the CAT301 will be replaced free of charge.

This warranty gives you specific rights. You may also have other rights which vary from state to state.

The foregoing obligation is Cornwell's sole liability under this or any implied warranty and under no circumstances shall Cornwell be liable for any incidental or consequential damages.

Note: Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

PARTS BREAKDOWN - CAT301



Item	Part No.	Description	Qty	Item	Part No.	Description	Qty
1	RS70801W	Motor Housing	1	21	RS70621	Cylinder	1
2	RS305A02	Throttle Valve Bushing	1	22	RS305A22	Spindle Collar	1
3	RS305A03	O-Ring	2	23	RS305A23	Front End Plate	1
4	RS305A04	O-Ring	1	24	RS305A24	Ball Bearing	2
5	RS305A05	O-Ring	1	25	RS305A25	Bevel Gear Shaft (14T)	1
6	RS305A06	Throttle Pin	1	26	RS32226	Clamp Nut	1
7	RS305A07	Spring	1	27	RS32227	Housing Cap	1
8	RS305A08	Air Regulator	1	28	RS305A28	Angle Housing (Incl. #31)	1
9	RS305A09	O-Ring	1	30	RS305A29	Bevel Gear (18T)	1
10	RS305A10	O-Ring	1	31	RS305A30	Grease Fitting (6mm)	1
11	RS70611CH	Valve Plug	1	32	RS305A31	Clamp Nut	1
12	RS70612BCH	Safety Throttle Lever	1	33	RS305A32	Spindle Chuck	1
13	RS706132	Pin	1	34	RS305A33	Woodruff Key	1
14	RS101311	Air Inlet	1	35	RS305A34	Collet (1/4")	1
15	RS305A15	O-Ring	1	36	RS305A35	Collet Nut	1
16	RS30516	Ball Bearing	2	37	RS70630A6	Wrench (12mm)	1
17	RS305A17	Rear End Plate	1	38	RS70630B6	Wrench (17mm)	1
18	RS305A18	Rotor	1				
19	RS305A19	Rotor Blade	4				
20	RS305A20	Long Pin	1				

Note: Only parts identified by part number above are available for purchase.