Operating Instructions • Warning Information • Parts Breakdown





AWARNING

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.

AWARNING

- MAXIMUM RPM OF 11,000
- MAX AIR PRESSURE: 90 PSIG, 6.2 BAR
- RPM OF THE ACCESSORY MUST EXCEED TOOL RPM
- USE RECOMMENDED GUARD
- RPM ON WHEEL MUST EXCEED GRINDER RPM



ALWAYS READ INSTRUCTIONS BEFORE USING POWER TOOLS



ALWAYS WEAR SAFETY GOGGLES



WEAR HEARING PROTECTION



AVOID PROLONGED EXPOSURE TO VIBRATION

SPECIFICATIONS						
Max. Free Speed11,000 RPM	Sound Level86 dBA					
Air Inlet1/4 NPT	Pad Size4"					
Hose Size3/8" I.D.	Height3-1/2"					
Air Pressure90 PSI	Length9-1/2"					
Air Consumption6 CFM	Shipping Wt4 Lbs.					

CAT-400HDG 4" HEAVY DUTY

AIR GRINDER

CAT400HDG 1 Rev. 01/27/03

AWARNING

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 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.



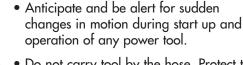
 Air powered tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions over extended periods of time may be harmful to your



- hands and arms. Discontinue use of tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.
- Place the tool on the work before starting the tool. Do not point or indulge in any horseplay with this 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.





- 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.

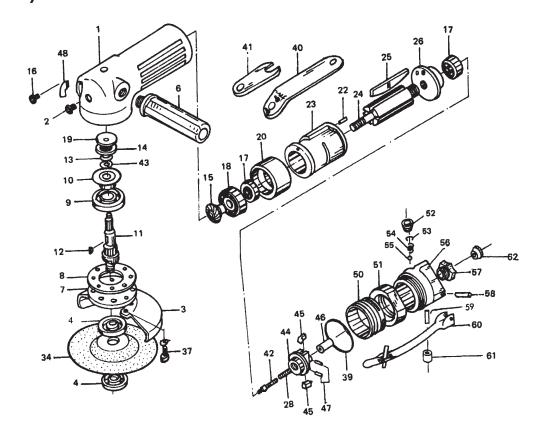


- Keep away from rotating end of tool.
 Do not wear jewelry or loose clothing.
 Secure long hair. Scalping can occur
 if hair is not kept away from tool and
 accessories. Choking can occur if
 neckwear is not kept away from tool
 and accessories.
- Correct grinding wheel mounting is necessary to prevent 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.
- Don't force tool beyond its rated capacity.
- Do not remove any labels. Replace any damaged labels.
- Use accessories recommended by Cromwell Tools.

CAT-400HDG

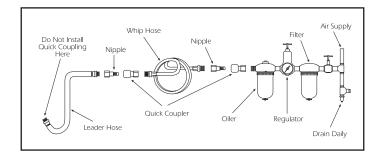
4" Heavy Duty Air

Grinder



Ref. #	Item #	DESCRIPTION	QTY	Ref. #	ltem#	DESCRIPTION	QTY
1	21101	Body	1	34	21134	Disc Wheel	1
2	21102	Screw	1	37	21137	Cap Screw	4
3	21103	Disc Cover	1	39	21139	O-Ring	1
4	21104	Disc Nut	2	40	21140	Disc Spanner	1
6	21106	Grip	1	41	21141	Stop Spanner	1
7	21107	Retainer	1	42	21142	Adjust Screw & Nut	1
8	21108	Gasket	1	43	21143	Wave Washer	1
9	21109	Ball Bearing	1	44	21144	Governor Assembly	1
10	21110	Bevel Gear	1	45	21145	Pendulum	8
11	21111	Gear Shaft	1	46	21146	Plunger	1
12	21112	Key	1	47	21147	Spring Pin	2
13	21113	Ret. Ring	1	48	21148	Exhaust Cover	1
14	21114	Ball Bearing	1	50	21150	Lock Ring	1
15	21115	Pinion Gear	1	51	21151	Coupling Nut	1
16	21115	Screw	2	52	21152	Valve Screw	1
17	30531	Ball Bearing	2	53	21153	O-Ring	1
18	21118	Ball Bearing	1	54	21154	Valve Spring	1
19	21119	Spacer	1	55	21155	O-Ring	1
20	21120	Front Plate	1	56	21156	Valve Housing	1
22	21122	Spring Pin	1	57	21157	Hose Adapter	1
23	21123	Cylinder	1	58	21158	Spring Pin	1
24	21124	Rotor	1	59	21159	Valve Pin	1
25	21125	Rotor Blade	4	60	21160	Throttle Lever	1
26	21126	Rear Plate	1	61	21161	Valve Bushing	1
28	21128	Spring	1	62	21162	Plastic Cover	1

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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 the tool's 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 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...

Lubricate the air motor daily with quality air tool oil. If no air line oiler is used, run a teaspoon 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.

Operation...

• Always use the recommended wheel guard to prevent injury from broken grinding wheel 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 grinding wheel and the operator. Use barriers to protect others from wheel fragments and grinding sparks.

• Always wear impact-resistant eye and face protection when involved in the operation of this tool. Even small projectiles can



injure eyes and cause blindness. A grinding wheel that bursts can cause very serious injury. Daily measure the air grinder speed with a tachometer to make sure it's 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.

• Before grinding, test grinding wheel by briefly running the tool at full throttle. Be sure to use a barrier (such as under a heavy work table) to stop any possible broken wheel parts.

To Assemble Grinding Discs:

- 1. Use stop spanner (#41) to hold gear shaft (#11).
- Screw on disc nut (#4) with shoulder side facing tool. Tighten.
- 3. Attach grinding disc wheel.
- 4. Screw on other disc nut, shoulder side facing tool. Secure tightly!

Limited Warranty...

Cornwell warrants its air tools for a period of 1 year to the consumer. We will repair any air tool covered under this warranty which proves to be defective in material or workmanship during the warranty period. 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.

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.