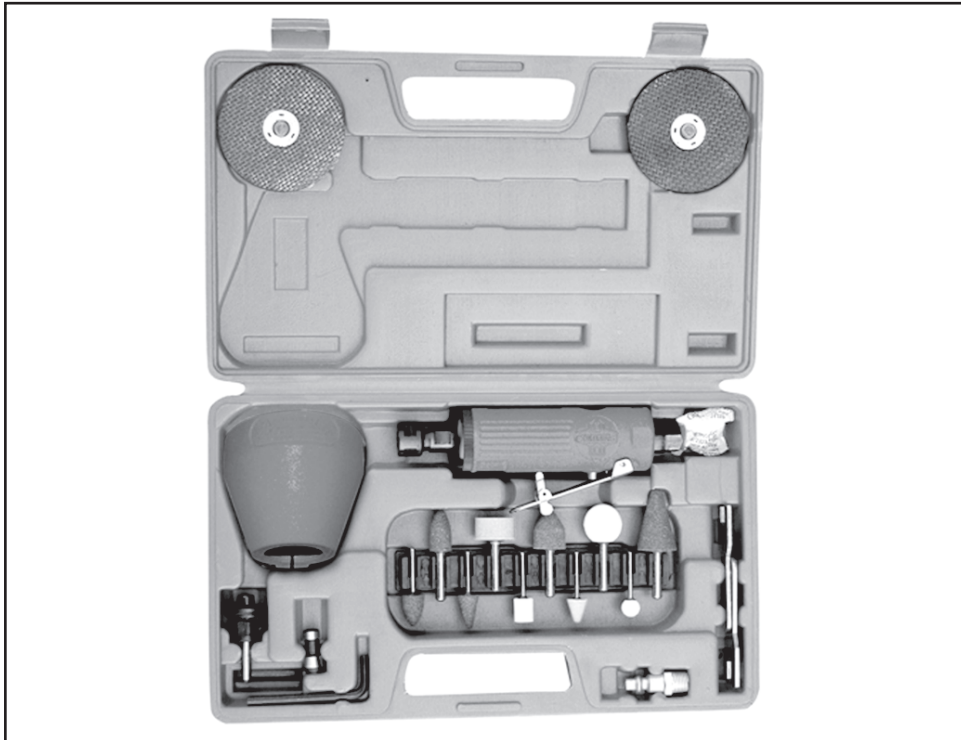




# Assembly & Instruction Manual **ITEM 1109**

**!WARNING! ONLY USE GRINDING WHEELS RATED FOR USE OVER 20,000RPMS  
NOT FOLLOWING THIS WARNING MAY RESULT IN SERIOUS PERSONALLY INJURY, EVEN DEATH!**



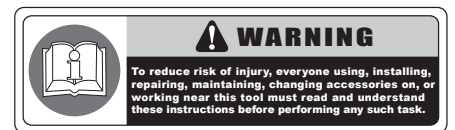
## **22PC AIR DIE GRINDER/ CUT-OFF KIT**

THANK YOU FOR BUYING CUMMINS INDUSTRIAL TOOLS  
You can purchase additional items at  
[www.cumminstools.com](http://www.cumminstools.com)

**SAVE THIS MANUAL FOR FUTURE REFERENCE**



Customer Service Postal Address:  
1290 35 Road  
Minden, NE 68959  
Voice: 1-(308) 832-2070  
Fax: 1-(308) 832-2069



Your new 22PC AIR DIE GRINDER/ CUT-OFF KIT has been engineered and manufactured to Cummins Industrial Tools high standards for dependability, ease of operation, and operator safety. Pay close attention to the Rules for Safe Operation, Warnings, and Cautions. If you use your machine properly and only for what it is intended, you will enjoy years of safe, reliable service.

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## INTRODUCTION

- THIS PRODUCT has many features for making the use of this product more pleasant and enjoyable. Safety, performance, and dependability have been given top priority in the design of this product making it easy to maintain and operate.

**⚠ WARNING:** Do not attempt to use this product until you thoroughly read and completely understand the operator's manual. Pay close attention to the safety rules, including Dangers, Warnings, and Cautions. If you use your product properly and only as intended, you will enjoy years of safe, reliable service.

- ⚠ **Look for this symbol to point out important safety precautions. It means attention!!! Your safety is involved.**



**⚠ WARNING:** The operation of any tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning operation, always wear safety goggles or safety glasses with side shields and a full face shield when needed. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always wear eye protection which is marked to comply with ANSI Z87.1.

# GENERAL SAFETY RULES

**▲ WARNING:** When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment. Read all instructions before using the tool!

- **Work area conditions.** Cluttered areas invite injuries.
- **Additional work area conditions.** Do not use machines or power tools in damp or wet locations. Do not expose to rain. Keep work area well lighted.
- **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools or extension cords.
- **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
- **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
- **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
- **Use eye protection.** Always wear ANSI approved impact safety glasses underneath a full face shield during use. Also, wear heavy duty work gloves.
- **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
- **Maintain tools with care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. The handles must be kept clean, dry, and free from oil and grease at all times.
- **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before starting work.
- **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
- **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Any part that is damaged should be replaced.
- **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Cummins Industrial Tools.
- **Do not operate tools if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.

**▲ WARNING:** The warnings, cautions, and instructions discussed in this instruction manual can not cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which can not be built into this product, but must be supplied by the operator.

## SPECIFIC SAFETY RULES

- Never allow an air tool to operate at full throttle without a workload on the tool.
- Never start a percussion type air tool (chippers, breakers, buster, etc.) without securing the tooling in the retainer and placing the tip against the work surface.
- When operating an air impact wrench or ratchet wrench, place the abrasive wheel against the work surface immediately after starting.

## PRODUCT SPECIFICATIONS

- Air Inlet: 1/4" N.P.T.
- Air Pressure: 70-100 P.S.I. (90 P.S.I.)\*
- Air Consumption: 5 CFM
- Free Speed: 20,000 RPM
- **Pressure in excess of 100 P.S.I. will shorten the life of the tool and cause unnecessary down time.**

## UNPACKING

### INSTRUCTIONS

#### When unpacking the tool:

- Carefully remove the tool and accessories from the box.
- Make sure that all items listed in the packing list are included.
- Inspect the tool carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.

**⚠ WARNING:** If any part are missing do not operate the tool until the missing parts are replaced. Failure to do so could result in possible serious personal injury.

## PACKING LIST

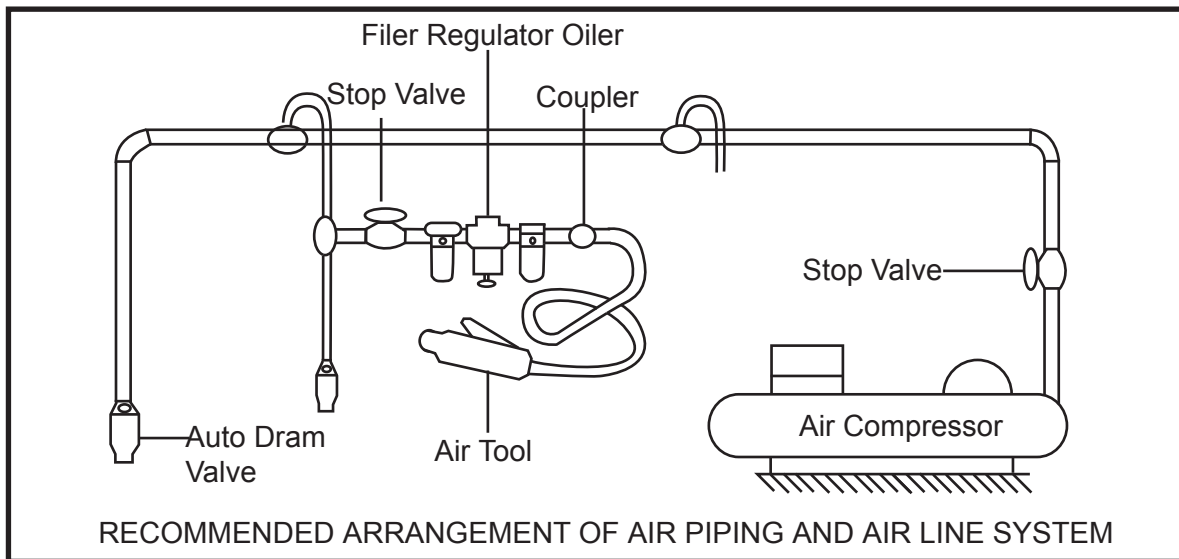
- 1 combination air tool
- 1 each, 1/4" and 1/8" collet
- 2 cutting wheels (3")
- 10 mounted stones
- 1 safety guard
- 2 open end wrenches
- 1 cutting wheel shank
- 1 Allen wrench
- 1 nipple
- 1 collet
- 1 mounted stone holder
- 1 blow molded case

# OPERATION

## Preparing Tool For Use

### Air Supply

- Make sure the compressor being used with the air tool supplies adequate output (CFM).
- Equip the air compressor intake with a replaceable air filter that can be easily cleaned.
- Always use moisture traps at the compressor for the main distribution line. Use moisture traps and in-line oilers on each downline that is to be used for air tools. (See figure below). Place oiler as close to the air tool as possible for the best lubrication.



- Keep air hose away from heat, oil and sharp edges. Check hose for wear, and make certain that all connections are secure.

### Coupling

- Vibration may cause failure if a quick change coupling is connected directly to the die grinder. To overcome this, connect a leader hose to the grinder. A quick change coupling may then be used to connect the leader hose to the air line recoil hose.

### Fitting Grinding Bit

**▲ WARNING:** Disconnect from air supply before changing grinding bit.

- Use wrenches enclosed to loosen collet locking collar.
- Insert grinding bit and re-lock collar.

# OPERATION

## Operating Instructions

**▲ WARNING:** Do not allow the grinder to free run for an extended period of time as this would shorten its life.

- 1- Connect the die grinder to the air supply.
- 2- To start, hold firmly and push the trigger locking lever forward while depressing trigger.
- 3- The bit must be running at its maximum speed before attempting to grind the workpiece.
- 4- Slowly and smoothly bring the grinding bit toward the workpiece (avoid jerky movements). Exert adequate pressure on the die grinder to grind according to the type and size of the material you are working with. Avoid subjecting bit to excessive strain or harsh impact. Always hold die grinder firmly and ease grinding bit against workpiece. Maintain a controlled adequate progression.

# MAINTENANCE

**▲ WARNING:** Disconnect grinder from air supply before changing accessories, servicing or performing maintenance.

- Lubricate the air grinder daily with:
  - a light oil containing rust inhibitors such as SAE #5W or SAE #10W.
  - a grease that is highly water resistant for the front case components on air impact wrench, ratchet wrench, etc.
- Clean the tool after use.
- When not in use, disconnect from air supply, clean the grinder and store in a safe, dry, and childproof location.
- For a full service contact your local sales agent.

# TROUBLESHOOTING

**CHECK!** If the tool is not performing to specifications check the following:

- Check if the air compressor has the CFM output to support the air tool.
- Check compressor regulator settings.
- Check if the air transmission lines are too small.
- Check if the hose fitting and coupling are too small.

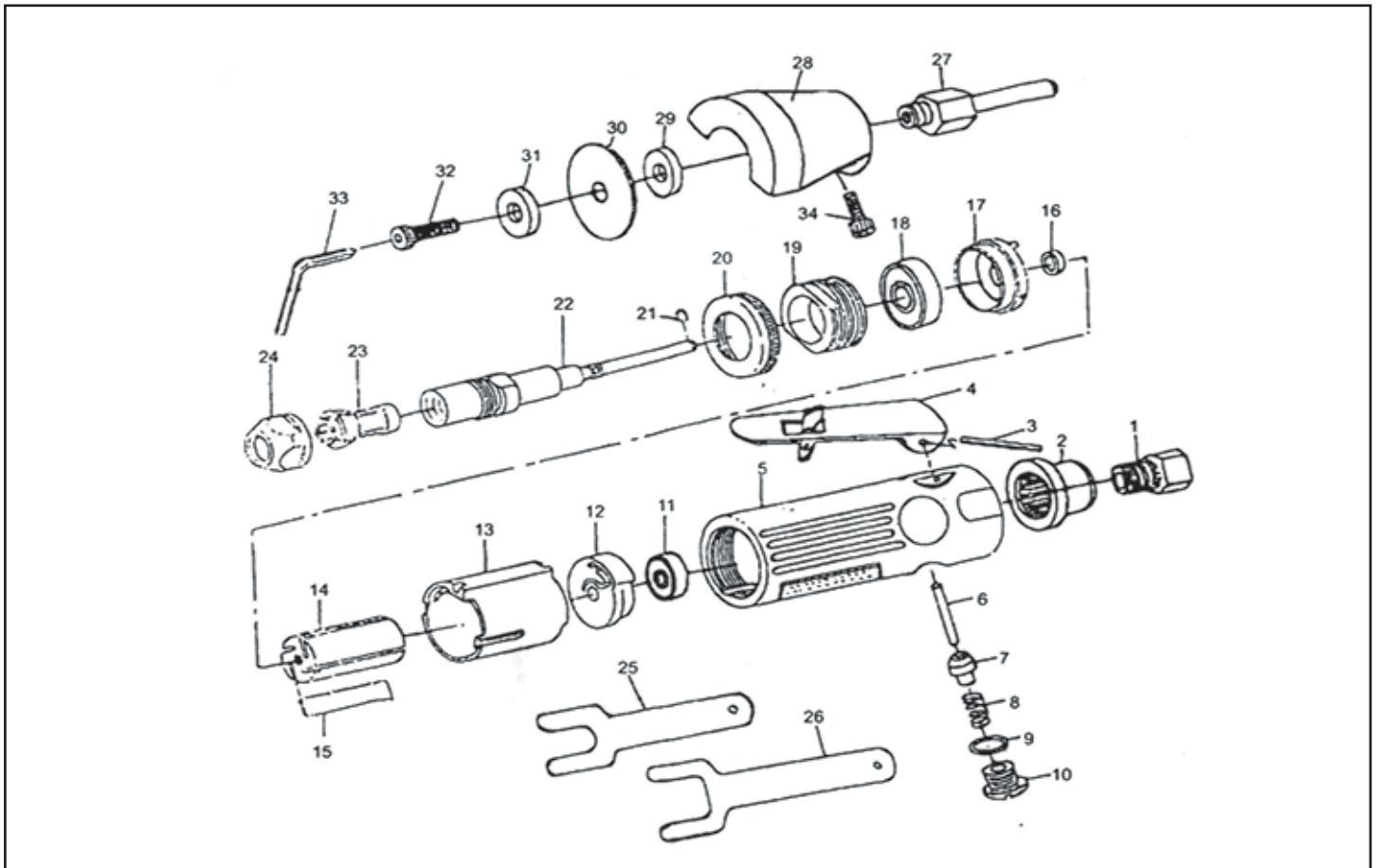
**ATTENTION!** Following are some common factors that causes your tool to reduce its performance:

- Air hose size too long. Excessive air hose length causes drop in air pressure.
- Dirt or water in air system.
- Poor maintenance practices such as using excessive air pressure or air volume.
- Improper or no lubrication.

## **Rule of Thumb**

- If it takes more than 8 seconds to tighten or loosen a bolt or nut with an air impact wrench, the air wrench is too small or the air compressor CFM is not powerful enough for the job. Continuing using it will cause damage to the tool. Air tools, as well as tools with moving parts, require attention from time to time. Please read the Specific Safety Rules to ensure proper performance of the tool.

# EXPLODED DIAGRAM & PARTS LIST



Part No.	Description	Quantity
1	Inlet	1
2	Exhaust Deflector	1
3	Pin	1
4	Trigger	1
5	Housing	1
6	Valve Pin	1
7	Valve	1
8	Spring	1
9	O-Ring	1
10	Valve Screw	1
11	Ball Bearing	1
12	Rear Plate	1
13	Cylinder	1
14	Rotor	1
15	Rotor Blade	4
16	Bearing Spacer	1
17	Front Plate	1

Part No.	Description	Quantity
18	Ball Bearing	1
19	Nut	1
20	Cap	1
21	Washer	1
22	Spindle	1
23	Collet	1
24	Collet Nut	1
25	Spanner	1
26	Spanner	1
27	Shank	1
28	Safety Guard	1
29	Washer	1
30	Cutting Wheel	1
31	Washer	1
32	Hex Screw	1
33	Allen Wrench	1
34	Hex Screw	1