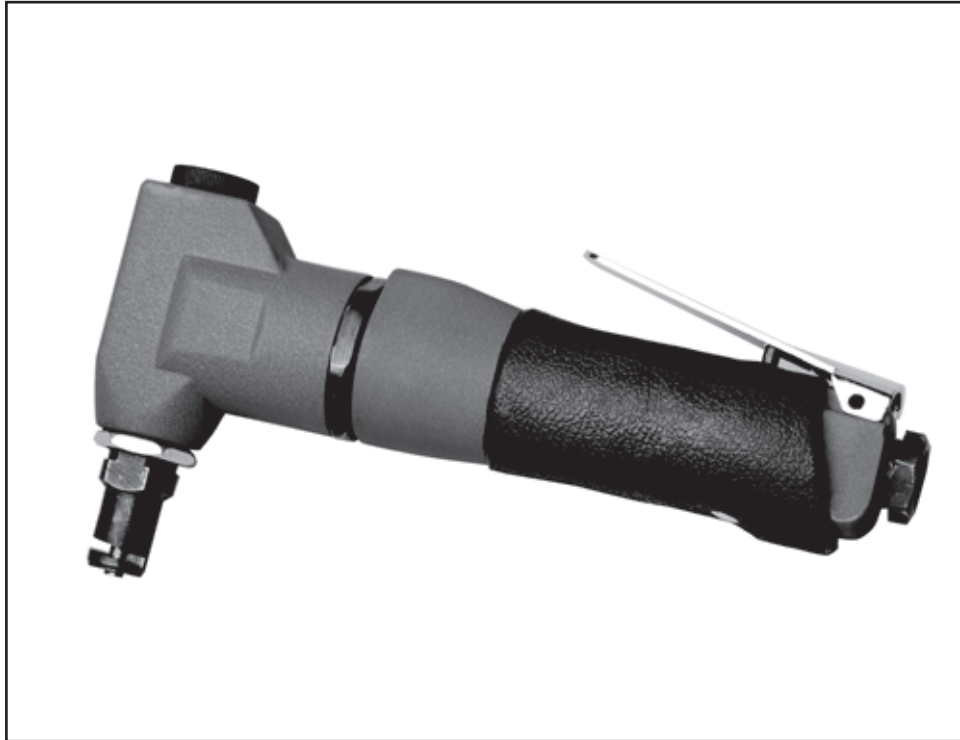




Assembly & Instruction Manual **ITEM 1155**



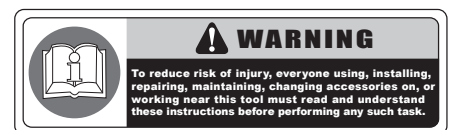
PROFESSIONAL AIR NIBBLER

THANK YOU FOR BUYING CUMMINS INDUSTRIAL TOOLS
You can purchase additional items at
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 PROFESSIONAL AIR NIBBLER 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.

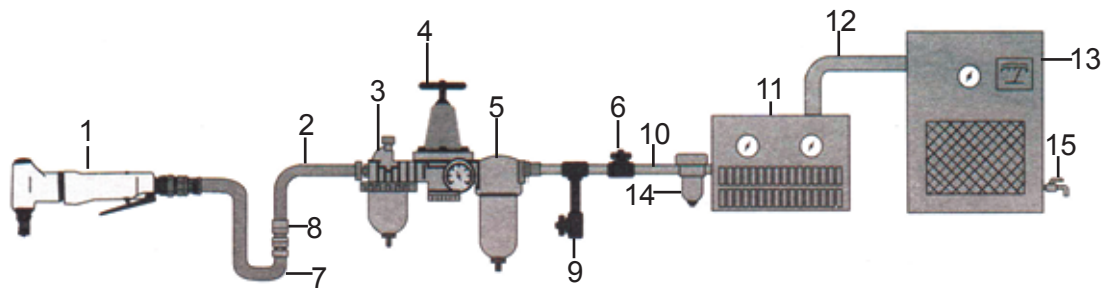
SPECIFIC SAFETY RULES

- **Industrial applications must follow OSHA requirements.**
- **Be sure to use a dust mask.** The tool operation may create dust which is harmful to health. If necessary, ear protector and gloves should be used.
- **Disconnect air hose** before changing or adjusting any inserted tools/accessories.
- **Be sure the tool is in “off” position** before connecting it to the air hose.
- **Disconnect the tool** when it is not in use. Release the on/off device in case of energy supply failure.
- **Never carry tool by hose.**
- **Never use the tool in potentially explosive atmospheres.**
- **Use clean, dry, regulated compressed air at 90 PSI.** Do not exceed the recommended 90 PSI. Never use oxygen, carbon dioxide, combustible gases or any other bottled gas as a power source for these tools.
- **Avoid excessive high air pressure and too much free rotation** as these would speed up the wear of the tool and may cause dangerous situation.
- **When connecting to air supply:**

Wrap approximately 4” of Teflon tape around the male threads of a Quick Connector (not provided). Then, wrench tighten the Quick Connector into the Air Inlet Bushing (part #1) of the Air Nibbler. (See Figures A, B, and Exploded Diagram.)

If an automatic oiler is not used, add two drops of oil into the Quick Connector of the tool.

Turn on the compressor and set the regulator to the pressure recommended for this tool (90 PSI).



- | | | |
|------------------------|-------------------------------------|----------------------------------|
| 1- Air Tool | 6- Shut Off Valve | 11- Air Dryer |
| 2- Air Hose 3/8" (I.D) | 7- Whip Hose | 12- 1" Or Large Pipe And Fitting |
| 3- Oiler | 8- Coupler Body And Connector | 13- Air Compressor |
| 4- Pressure Regulator | 9- Drain Daily | 14- Auto Drain |
| 5- Filter | 10- 1/2" Or Larger Pipe And Fitting | 15- Drain Daily |

- **Avoid unintentional starting.** Make sure you are prepared to begin work before depressing the Throttle Lever (part #2). (See Figure B and Exploded Diagram.)

⚠ WARNING: The product contains or produces a chemical known to the State of California to cause birth defect (or other reproductive harm). (California Health & Safety Code 25249.5 et seq.)

PRODUCT SPECIFICATIONS

No	Description
Cutting Capacity	1/16" (16 Gauge) Steel / 5/64" Aluminum
Operating PSI	90
Air Consumption	17.5 CFM @ 90 PSI Continuous Flow
No Load Reciprocation	3500
Recommended Hose I.D.	3/8"
Air Inlet Size	1/4" NPT
Length	8-1/14"
Weight	1.95 lb.

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.

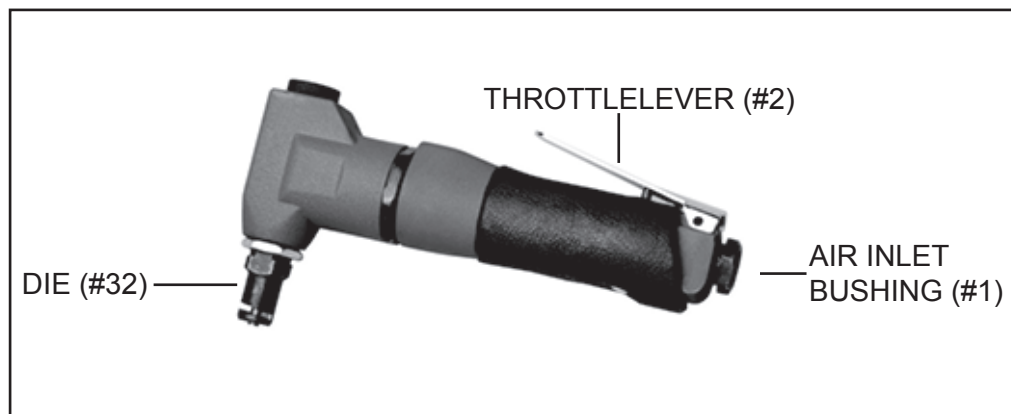
⚠ WARNING: If any part are missing do not operate the tool until the missing parts are replaced. Failure to do so could result in possible serious personal injury.

FEATURES

- This nibbler can cut limited curved designs - to a minimum of 1/2" radius
- Nibbles plastic, tin, aluminum and other metals up to 18 gauge rolled steel
- Precise lever throttle control
- Designed to allow cutting in center of a panel
- Ball bearing mounted motor - designed for smooth operation
- Precision heat treated gearing - increases the longevity of the air nibbler
- Lightweight aluminum housing - reduces heat and user fatigue
- Cutter die included - precisely cuts sheet metal up to 18 gauge
- Cutting capacity (steel): 1/16"
- Cutting speed: 2800 SPM
- Air inlet: 1/4"
- Recommended air pressure: 90 PSI
- Air hose size: 3/8" ID

OPERATION

- 1- Make sure the material to be cut does not exceed the capacity for this Air Nibbler: 1/16" (16 gauge) for steel, 5/64" for aluminum.
- 2- On the material, mark the line or shape to be cut.
- 3- Grip the Air Nibbler firmly and depress the Throttle Lever (part #2) to begin cutting. (See Figure B and Exploded Diagram.)



- 4- Apply light pressure to move the Air Nibbler through the material. If the Air Nibbler stalls while cutting, release pressure on the Throttle Lever to turn off the tool. Then back the tool out an inch and restart the cutting process.
- 5- Note: The Air Nibbler is designed for cutting gradual curves, not 90 degree corners.
- 6- When finished cutting, release pressure on the Throttle Lever to turn off the tool. Then disconnect the Air Nibbler from its compressed air supply source.

MAINTENANCE

⚠ CAUTION: Always disconnect the Air Nibbler from its compressed air supply source before performing any cleaning, servicing, or maintenance.

- Before each use, inspect the general condition of the Air Nibbler. Check for loose screws, misalignment, binding of moving parts, broken parts, loose or damaged air hose, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, disconnect the Air Nibbler from its compressed air supply source immediately and have the problem corrected before further use. Do not use damaged equipment.
- Periodically inspect the condition of the Cutter (part #30). If dull or damaged, the Cutter (available from Cummins Industrial Tools) should be replaced. To replace:
 - 1- Unscrew and remove the Die (part #32).
 - 2- Unscrew and remove the Nut (part #33).
 - 3- Unscrew and remove the Screw (part #33).
 - 4- Pull the Cutter out of the Pushing Rod (part #29).
 - 5- Replace the Cutter, making sure the tip of the cutting sedge fits snugly into the Pushing Rod.
 - 6- Reverse the steps above to re-assemble the Air Nibbler.

MAINTENANCE

- If necessary, wipe with a damp cloth. You may use a mild detergent or non-flammable solvent.

Lubrication

- 1- If you are not using an air line oiler, lubricate the air motor by using an oil pot or an oil injector through the air inlet and then run the tool. Several drops of SAE #10 lubricant or sewing machine lubricant is acceptable for this purpose. Do not use detergent oil.
- 2- Before connecting the hose for operation, apply 4 or 5 drops of #10 spindle oil at the air inlet. Avoid the misuse of thicker oil which may lead to the reduced performance or malfunction.
- 3- Oiling is necessary within 1 or 2 hours of continuous operation.
- 4- After operation, take off the air hose and pour 4 or 5 drops of #60 spindle oil into the air inlet, then connect the hose again to run the tool for a few seconds, which can prolong the tool life.
- 5- Clean air filter cartridge on the air line weekly.

Storage

- Avoid storing the tool in a location subject to high humidity, which may result in rusty mechanism inside the tool. Before storing, oil the tool at the air inlet as described in Lubrication section above.

TROUBLESHOOTING

Troubles:

- Tool does not run at a normal speed or at a variable speed.
- The motor blocks.
- Automotive start when connected to compressed air.
- Torque reduces..
- Abnormal vibrating – Easy hot rising at the housing.

Causes:

- Air supply is not enough (air pressure not in a required standard).
- Speed controller/switch breaks down.
- Rotor blades break or wear out.
- Dust gets into the motor.
- Throttle lever or starting trigger malfunction.'
- Air leakage at the inlet or somewhere else.
- Bearing(s) damaged.
- Correspondent O-Ring(s) wears or out of position.
- Lack of lubrication.

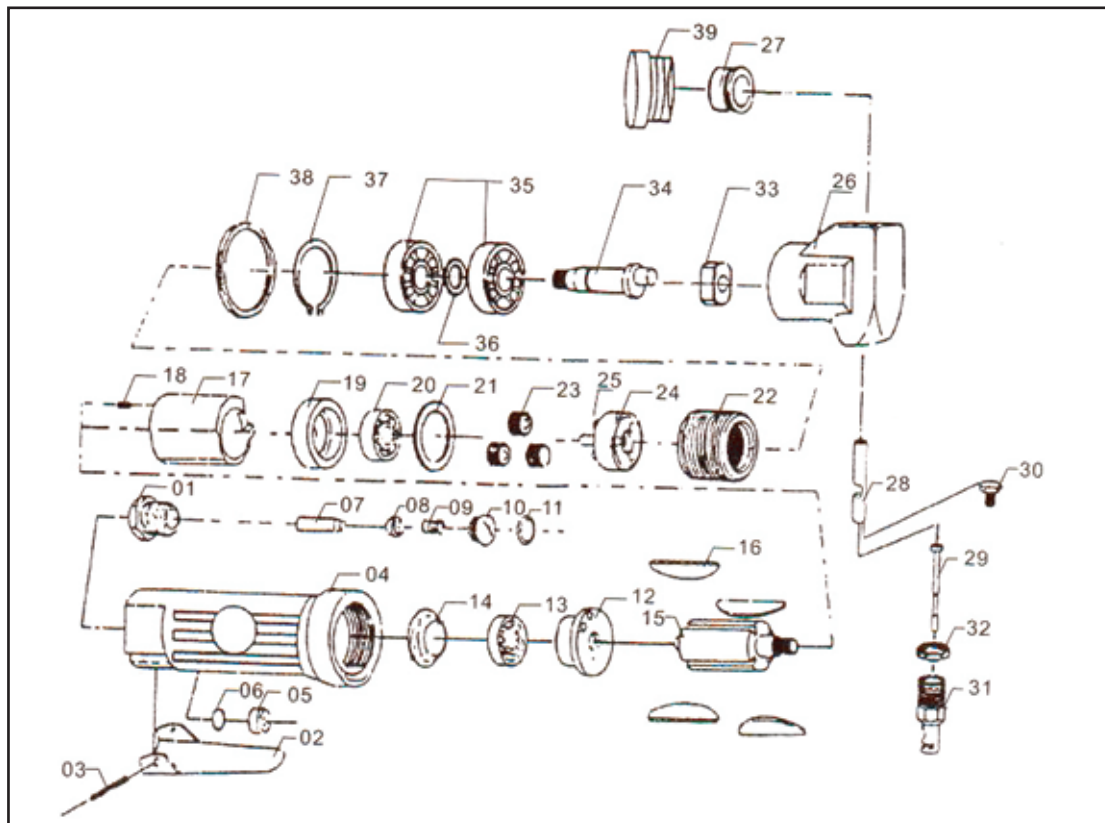
TROUBLESHOOTING

Solutions:

- Check the air hose to see whether it is blocked or twisted for less air supply.
- Check the air compressor to gain the correct air pressure required.
- Replace rotor blades.
- Disassemble the tool and clean the inner structure under proper instructions.
- Check and fix the throttle lever or starting trigger for accurate operation.
- Check the air leakage and fix it under proper instruction.
- Replace new bearing(s).
- Replace the damaged O-Ring(s) or put it back in correct position.
- Oil/Lubricate the tool consistently until it gains the right speed and torque.

Note: For any other special trouble that you are not able to solve, please contact the sales agent from whom you purchased the tool.

EXPLODED DIAGRAM & PARTS LIST



No	Description	Qty	No	Description	Qty
1	Air Inlet Bushing	1	21	Washer	1
2	Throttle Lever	1	22	Gear Case	1
3	Handle Pin	1	23	Idler-Gear	3
4	Handle Throttle	1	24	Rear Spindle	1
5	O-Ring Keeper	1	25	Idler Gear Pin	3
6	O-Ring	1	26	Nibble Head	1
7	Valve Stem	1	27	Pushing Rod Bushing	1
8	Valve Ball	1	28	Pushing Rod	1
9	Spring	1	29	Cutter	1
10	Plug	1	30	Screw	1
11	O-Ring	1	31	Die	1
12	Rear End Plate	1	32	Nut	1
13	Bearing	1	33	Drive Bushing	2
14	End Plate Cap	1	34	Shaft	1
15	Rotor	1	35	Bearing	2
16	Rotor Blade	4	36	Washer	1
17	Cylinder	1	37	Snap Ring	1
18	Pin	1	38	Nut	1
19	Front End Plate	1	39	Plug	1
20	Bearing	1			