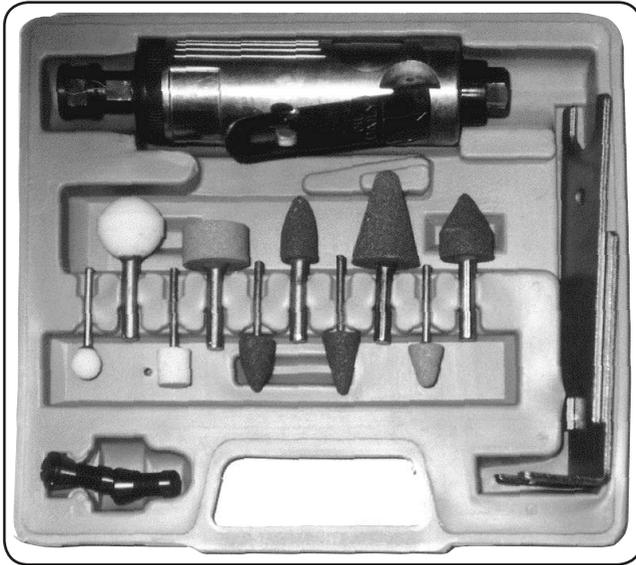


AIR DIE GRINDER KIT

Model 44716

SET UP AND OPERATING INSTRUCTIONS



Diagrams within this manual may not be drawn proportionally.

Due to continuing improvements, actual product may differ slightly from the product described herein.

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**Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.**

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For technical questions or replacement parts, please call 1-800-444-3353.

SPECIFICATIONS

Trigger	Lever, with safety latch
Tool Exhaust	Rear
Air Inlet Size	1/4-18 NPT
Air Hose Required	3/8"
Working Pressure	90 PSI
Max Rated RPM	22,000

Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

SAFETY WARNINGS AND PRECAUTIONS

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 this tool!

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids.
3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
4. **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.
5. **Do not force tool.** It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool capacity.
6. **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. Do not modify this tool and do not use this tool for a purpose for which it was not intended.

7. **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.
8. **Use eye and ear protection.** Always wear ANSI approved impact safety goggles. Wear a full face shield if you are producing metal filings or wood chips. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.
9. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
10. **Maintain tools with care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have them repaired by an authorized technician. The handles must be kept clean, dry, and free from oil and grease at all times.
11. **Disconnect power.** Unplug tool from power source when not in use.
12. **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before plugging it in.
13. **Avoid unintentional starting.** Be sure the switch is in the Off position when not in use and before plugging in or hooking up. Do not carry any tool with your finger on the trigger, whether it is plugged in or not.
14. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
15. **Take caution as some woods contain preservatives such as copper chromium arsenate (CCA) which can be toxic.** When cutting these materials extra care should be taken to avoid inhalation and minimize skin contact.
16. **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. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn On and Off properly.
17. **Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.

18. **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 Harbor Freight Tools.
19. **Do not operate 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 tool.
20. **Maintenance.** For your safety, service and maintenance should be performed regularly by a qualified technician.
21. **WARNING: This product contains or, when used, produces a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. (California Health & Safety Code § 25249.5, et seq.)**

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

VIBRATION HAZARD

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any medical or physical symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
3. Wear suitable gloves to reduce the vibration effects on the user.
4. Use tools with the lowest vibration when there is a choice between different processes.

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5. Include vibration-free periods each day of work.
6. Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.
7. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.

UNPACKING

When unpacking, check to make sure all parts listed on Page 8 are included.

If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual.

AIR CONNECTION

Note: Air Compressor is not supplied.

1. Acquire a Union fitting (not supplied) and screw into the Air Inlet fitting. Tighten with the wrench.
2. Attach a quick-coupler (not supplied) to the Union fitting if desired. This allows quick exchange of the Air Hose to other air tools.
3. Connect the Air Hose to the Air Inlet Coupling.

Warning: Follow all air compressor warnings before using tool.

This air tool requires lubrication during operation. For best results, it is recommended to have an oiler and water filter in line with the air supply as shown on Page 6. This will extend the life of the tool.

AIR CONNECTION

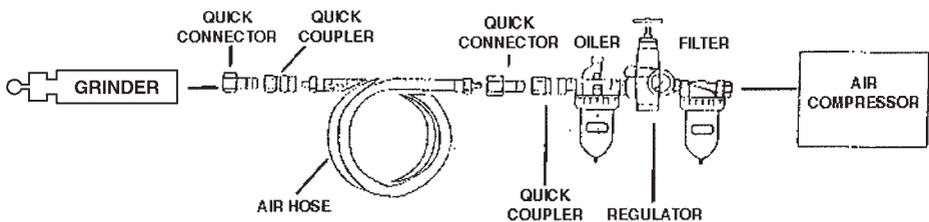
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Warning: Follow all air compressor warnings before using tool.

This air tool requires lubrication during operation. For best results, it is recommended to have an oiler and water filter in line with the air supply as shown on Page 5. This will extend the life of the tool.

AIR COMPRESSOR ASSEMBLY DIAGRAM



OPERATION

Warning: Before installing the attachment, make sure Grinder is not attached to the air supply and make sure no built up air pressure remains in the Air Die Grinder.

1. Select the desired grinding attachment.
2. As shown in the diagram on Page 7, use the Wrenches (28) to hold the Retainer [24] while removing the Collet Nut (27).
3. Insert the shaft of the grinding attachment into the Collet (26).
4. Reassemble the Collet and Collet Nut. Tighten with both Wrenches.
5. Set the Air Compressor's pressure regulator to 90 PSI.
6. Connect the Die Grinder to the Air Compressor's hose.

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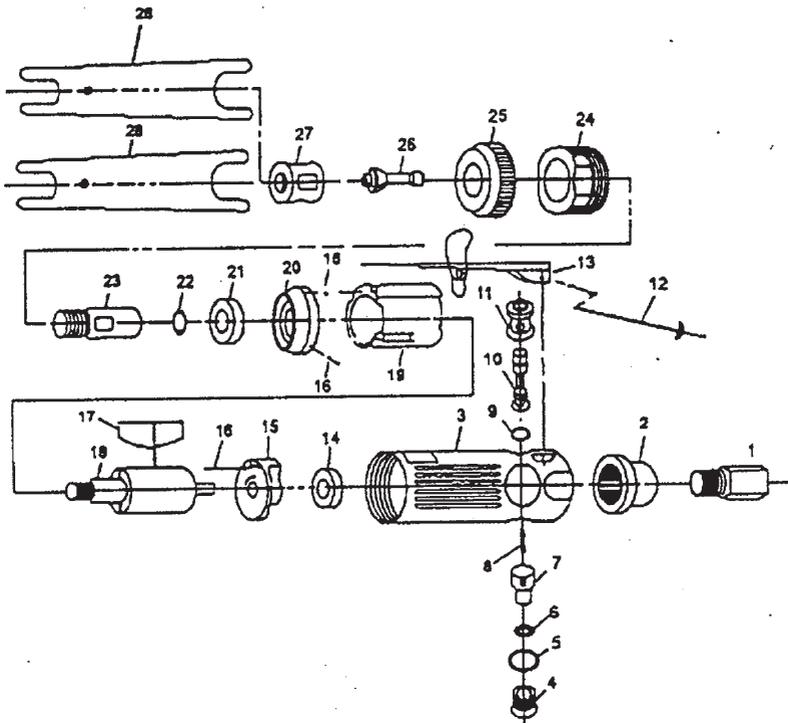
MAINTENANCE

1. If an in-line oiler is not used, disconnect the air hose and apply a few drops of pneumatic tool oil through the air inlet coupling before each use. Do this for every hour of continuous use.
2. Apply a few drops of oil to the Lever mechanism and work the Lever a few times to lubricate.

Note: Do not use detergent, oil or additives; these will cause accelerated wear to the tool's air seals.

3. Wipe the Die Grinder clean of oil and grease with a clean cloth.
4. Do not allow the attachments to come in contact with oil or grease.
5. Replace the Die Grinder and attachments to the case and store in a clean and dry location.

ASSEMBLY DIAGRAM



NOTE: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

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ATTACHMENTS

PART	DESCRIPTION	QTY
1	Inlet Bushing	1
2	Exhaust Deflector	1
3	Motor Housing	1
4	Valve Screw	1
5	"O" Ring	1
6	"O" Ring	1
7	Air Regulator	1
8	Spring	1
9	"O" Ring	1
10	Throttle Valve	1
11	Valve	1
12	Throttle Lever Rivet	1
13	Safety Throttle Lever	1
14	Ball Bearing	1

PART	DESCRIPTION	QTY
15	Rear Plate	1
16	Ball	3
17	Rotor Blades	4
18	Rotor	1
19	Cylinder	1
20	Front End Plate	1
21	Ball Bearing	1
22	Washer	1
23	Spindle	1
24	Retainer	1
25	Housing Cap	1
26	Collet - 1/4"	1
27	Collet Nut	1
28	Wrenches	2



Diag. Using Wrenches

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERE-TO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

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