

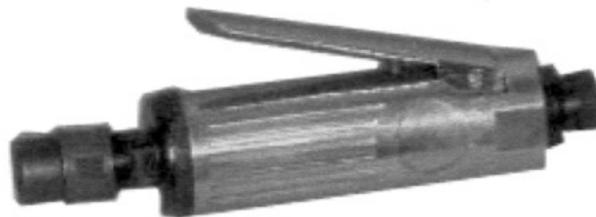
CENTRAL PNEUMATIC®

MINI AIR DIE GRINDER

WITH 5 ACCESSORIES

Model 47050

**ASSEMBLY and OPERATING
INSTRUCTIONS**



3491 Mission Oaks Blvd., Camarillo, CA 93011
Visit our Web site at <http://www.harborfreight.com>

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For technical questions and replacement parts, please call 1-800-444-3353
Manual Revised 11h

Specifications

| | |
|---|---------------|
| Collet Size | 1/4" / 1/8" |
| Air Inlet | 1/4" - 18 NPT |
| Maximum Air Pressure | 90 PSI |
| Maximum Rpm's | 21,000 |
| Air Consumption | 4 CFM |
| Accessories: 2 - 1/4" Shank Mounting Stones and 3 - 1/8" Shank Mounting Stones | |

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, extension cords, or air hoses.
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 or air hoses.
10. **Maintain tools with care.** Keep tools clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords and air hoses 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 air supply.** Disconnect air hose when not in use.
12. **Remove adjusting keys and wrenches.** Check that adjusting wrenches are removed from the tool or machine work surface before plugging it in.
13. **Avoid unintentional starting.** Be sure the Throttle Lever is not depressed when not in use and before plugging in. Do not carry any tool with your finger on the Throttle Lever, 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. **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.
16. **Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
17. **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.
18. **Do not operate tool 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.
19. **Use proper size and type extension cord.** If an extension cord is required, it must be of the proper size and type to supply the correct current to the tool without heating up. Otherwise, the extension cord could melt and catch fire, or cause electrical damage to the tool. Check your compressor's manual for the appropriate size cord.
20. **Maintenance.** For your safety, maintenance should be performed regularly by a qualified technician.
21. **Compressed air only.** Never use combustible gases as a power source.

Note: Performance of the compressor (if powered by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.

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. Additionally, read and follow all of the instructions in the compressor manual you will be using.

Unpacking

When unpacking, check to make sure the parts listed on page 7 are included. If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual as soon as possible.

WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain chemicals known [to the State of California] 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 or other masonry products**
- **Arsenic and chromium from chemically treated lumber**

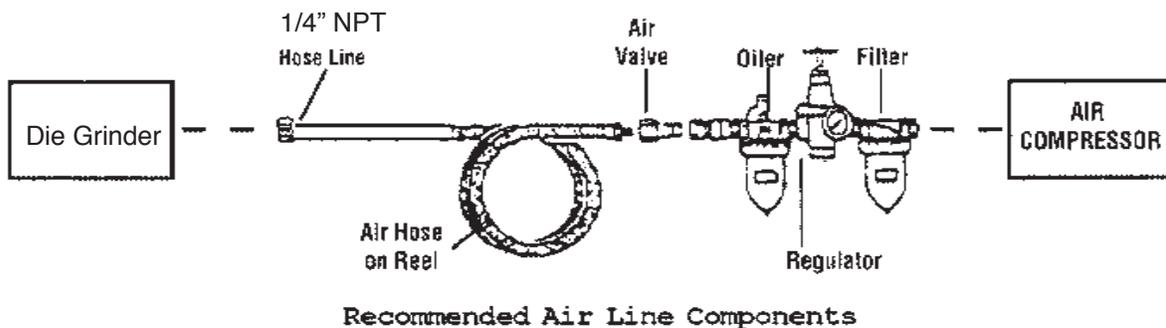
Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

(California Health & Safety Code 25249.5, *et seq.*)

Operation

Operational Warnings!!

1. Never install a carbide tipped or steel circular saw blade for use on this Die Grinder.
2. Never install a wood carving blade, carving disc with chain saw cutters, or a cutting carving disc on this Die Grinder.
3. All accessories must be rated for at least 21,000 rpm's. Wheels and other accessories running over rated speed can fly apart and cause injury.



For best service you should incorporate an oiler, regulator, and inline filter, as shown in the diagram above. Hoses, couplers, oilers, regulators, and filters are all available at Harbor Freight Tools.

1. Attach air hose to **Air Connector (#1)**.

Note: If not using an automatic oiler system, before operation, add a few drops of Pneumatic Tool Oil to the airline connection. Add a few drops more after each hour of continual use.

2. Set the air pressure on your compressor to 90 PSI. Do not exceed the recommended air pressure of 90 PSI.
3. Check the air connection for leaks.

Operation (continued)

Usage.

Note: Always disconnect the Die Grinder from the air compressor before changing or adjusting accessories.

1. Use the two **Wrenches (#35 & #36)** to attach accessories. Place the **Wrench (#36)** on the notch of the **Spindle (#32)** to secure it. Use the **L-Wrench (#35)** to turn the **Collet Cap (#34)**.
2. Insert the desired 1/4" or 1/8" mandrel through the **Collet Cap (#34)** and into the **Collet (#33)** at least 5/8".
3. Using the **Wrenches (#35 & #36)** tighten the **Collet Cap (#34)**.

Note: Before each use check the **Collet (#33)** and make sure the accessory is securely fastened.

Note: Always wear ANSI approved impact safety goggles and 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.

4. Make sure the workpiece is securely fastened down.

Warning! Make sure your hands or fingers are not in contact with the accessory before starting the unit.

5. Turn on your compressor making sure it is not set above the recommended 90 PSI.
6. Hold the Die Grinder with both hands, away from your body, and squeeze the **Throttle Lever (#3)**. Wait until the Die Grinder gets up to speed before contacting the workpiece. Make gentle contact, allowing the Die Grinder to do the work without forcing it. If it isn't running smoothly, you are forcing it, which may burn out the Grinder.
7. The unit is equipped with an **Air Regulator (#14)** to fine tune the air pressure.
8. When finished, release the **Throttle Lever (#3)** and disconnect from the compressor.

Maintenance

1. Before and after operation, add a few drops of Pneumatic Tool Oil to the airline connection. Add a few drops more after each hour of continual use.
2. Never leave the unit connected to the compressor.
3. Wipe down or blow out with air occasionally. Never use solvents to clean the body of the Die Grinder.
4. Check that the **Collet (#33)** is clear of dirt and debris.

Parts List

| Part No. | Description | Qty. | Part No. | Description | Qty. |
|----------|-------------------|------|----------|--------------------|------|
| 1 | Air Connector | 1 | 19 | Bearing | 1 |
| 2 | Exhaust Deflector | 1 | 20 | Rear End Plate | 1 |
| 3 | Throttle Lever | 1 | 21 | Spring Pin | 1 |
| 4 | Spring Pin | 1 | 22 | Cylinder | 1 |
| 5 | Spring Pin | 1 | 23 | Rotor Blade | 4 |
| 6 | Spring | 1 | 24 | Rotor | 1 |
| 7 | Safety Stick | 1 | 25 | Washer | 1 |
| 8 | Washer | 1 | 26 | Spring Pin | 2 |
| 9 | Valve | 1 | 27 | Front End Plate | 1 |
| 10 | O-ring | 1 | 28 | Bearing | 1 |
| 11 | O-ring | 1 | 29 | Retainer | 1 |
| 12 | Throttle Valve | 1 | 30 | Cover | 1 |
| 13 | Spring | | 1 31 | Housing Cap | 1 |
| 14 | Air Regulator | 1 | 32 | Spindle | 1 |
| 15 | O-ring | 1 | 33 | Collet | 1 |
| 16 | O-ring | 1 | 34 | Collet Cap | 1 |
| 17 | Valve Screw | 1 | 35 | L - Wrench | 1 |
| 18 | Bearing | 1 | 36 | Wrench | 1 |
| | | | 37 | Air Regulator Kit | 1 |
| | | | 38 | Mounting Stone Kit | 1 |

Note: Parts 10 through 17 will not be sold separately. You must purchase all of the parts as a set called the **Air Regulator Kit (#37)**.

Note: You may purchase the **Mounting Stone Kit (#38)** as a set including 2 - 1/4" Mounting Stones and 3 - 1/8" Mounting Stones.

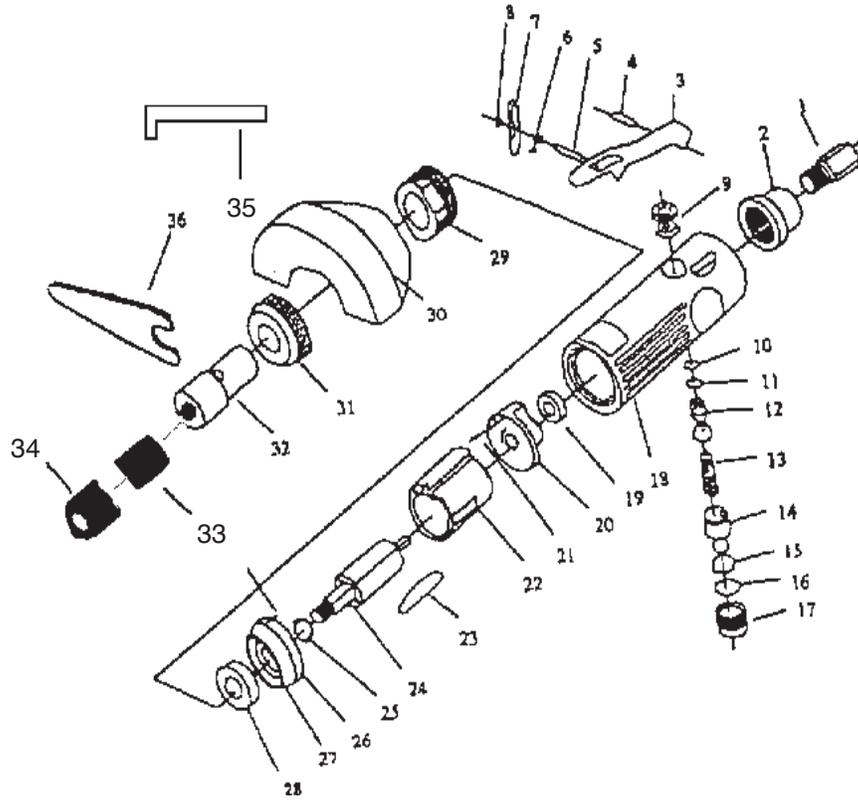
PLEASE READ THE FOLLOWING CAREFULLY

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 THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

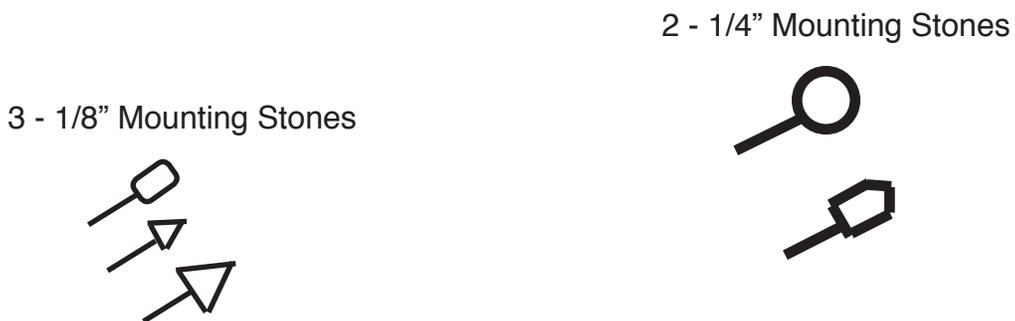
NOTE: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

Assembly Drawing

Note: Parts 10 through 17 will not be sold separately. You must purchase all of the parts as a set called the **Air Regulator Kit (#37)**.



Note: You may purchase the **Mounting Stone Kit (#38)** as a set including 2 - 1/4" Mounting Stones and 3 - 1/8" Mounting Stones.



90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

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