

**CENTRAL PNEUMATIC.**

**AIR DIE GRINDER  
REAR EXHAUST**

**Model #52847**

**Operating and Maintenance Instructions**



Distributed exclusively by  
Harbor Freight Tools®.

3491 Mission Oaks Blvd., Camarillo, CA 93011

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**For technical questions please call 1-800-444-3353**

## SPECIFICATIONS

ITEM	DESCRIPTION
Max. Air Pressure	90 PSI
Air Speed	25,000 RPM
Fitting Size	1/4" NPT
Collet Sizes	1/4"
Accessories	11 mm Collet Wrench (Qty: 1) 17 mm Collet Wrench (Qty: 1)

## SAVE THIS MANUAL

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

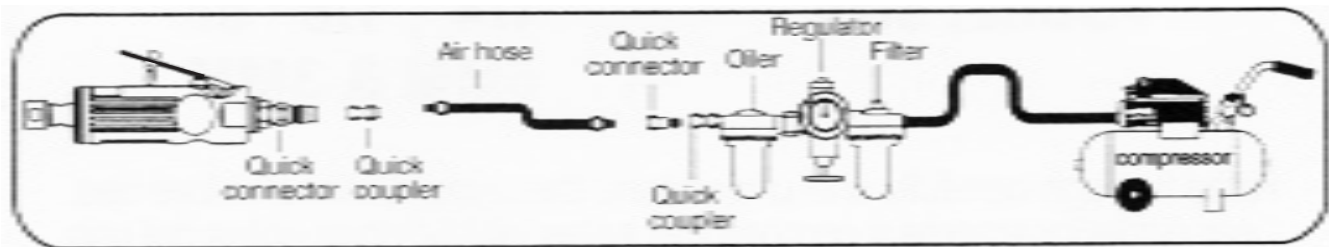
## SAFETY WARNINGS AND PRECAUTIONS

1. **KEEP WORK AREA CLEAN AND DRY.** Cluttered, damp or wet work areas invite injuries.
2. **KEEP CHILDREN AWAY FROM WORK AREA.** Do not allow children to handle the Air Die Grinder.
3. **STORE IDLE EQUIPMENT.** When not in use, the Air Die Grinder should be stored in a dry location to inhibit rust. Always lock up the Air Die Grinder and keep out of reach of children.
4. **DO NOT USE THE AIR DIE GRINDER IF UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.** Read warning labels on prescriptions to determine if your judgement or reflexes are impaired while taking drugs. If there is any doubt, do not attempt to use this product.
5. **USE EYE AND HEARING PROTECTION.** Wear ANSI approved safety impact eye glasses and ANSI approved hearing protection when working with the Air Die Grinder. ANSI approved safety impact eye glasses and hearing protection are available from Harbor Freight Tools.
6. **DRESS SAFELY.** Non-skid footwear or safety shoes should be used when working with this product. Do not wear loose clothing or jewelry as they can become caught in moving parts. Wear a protective hair covering to prevent long hair from becoming caught in moving parts. If wearing a long sleeve shirt, roll the sleeves up above the elbows.
7. **DO NOT OVERREACH.** Keep proper footing and balance at all times to prevent tripping, falling, back injury, etcetera.
8. **STAY ALERT.** Watch what you are doing at all times. Use common sense. Do not use the Air Die Grinder when you are tired or distracted from the job at hand.

9. **CHECK FOR DAMAGED PARTS.** Before using the Air Die Grinder, carefully check that it will operate properly and perform its intended function. Check for damaged parts and any other conditions that may affect the operation of the Air Die Grinder. Replace or repair damaged or worn parts immediately.
10. **REPLACEMENT PARTS AND ACCESSORIES.** When servicing, use only identical replacement parts. Only use tools and accessories intended for use with this Air Die Grinder. Approved tools and accessories are available from Harbor Freight Tools.
11. **MAINTAIN THESE PRODUCTS WITH CARE.** Keep this tool and accessories clean and dry for better and safer performance.
12. **MAINTENANCE:** For your safety, service and maintenance should be performed regularly by a qualified technician.
13. **USE THE RIGHT PRODUCTS FOR THE RIGHT JOB.** There are certain applications for which this Air Die Grinder was designed. Do not use a small tool or accessory to do the work of a larger industrial tool or accessory. Do not use this Air Die Grinder for a purpose for which it was not intended.

### **SPECIFIC PRODUCT WARNINGS AND PRECAUTIONS**

1. **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 this tool.
2. **WHEN CONNECTING TO THE AIR SUPPLY:**
  - A. If an automatic oiler is not used, add two drops of air tool oil into the air inlet of the Air Die Grinder. **(See Figure A.)**
  - B. Turn on the compressor and set the regulator to the recommended 90 PSI for this tool.
3. **ALWAYS DISCONNECT TOOL FROM ITS AIR SUPPLY AND RELEASE ALL BUILT UP AIR PRESSURE BEFORE PERFORMING ANY SERVICES OR MAINTENANCE** such as cleaning or changing accessories on the Air Die Grinder, leaving the work area, moving the Air Die Grinder from one location to another, handing the Air Die Grinder to another person, etcetera. **(See Figure A, page 4)**
4. **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.)*



**FIGURE A**

## UNPACKING

When unpacking, check to make sure all parts shown on the Parts List and Assembly Diagram are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

## OPERATING INSTRUCTIONS

**ALL PARTS BELOW REFER TO THE PARTS LISTED AND SHOWN IN THIS MANUAL.**

### **To Connect The Air Die Grinder To An Air Hose:**

1. The Air Die Grinder requires the attachment of a 1/4" NPT Quick Connector (available from Harbor Freight Tools). **(See Figure A)**
2. Wrap the male threads of the Quick Connector with about 3" of Teflon tape. Then, wrench tighten the Quick Connector into the Air Inlet of the Air Die Grinder.
3. Next, connect the Quick Coupler of an air hose onto the Quick Coupler of the Air Die Grinder. *The Air Die Grinder is now ready for use.*

### **To Insert/Change Collets In The Air Die Grinder:**

1. The Air Die Grinder comes with a 1/4" Collet (part #27). This allows the Air Die Grinder to accept grinding wheels with a 1/4" shank. **(See Assembly Diagram.)**

2. To change Collet (part #27) you will need to use the two accessory Collet Wrenches.
3. With one Wrench hold the Collet Holder (part #24) in place. Use the other Wrench to turn the Collet Nut (part #28) *counterclockwise*.
4. Remove the Collet Nut (part #28) and insert the appropriate size Collet (part #27) into the Collet Holder (part #24).
5. With one Wrench, hold the Collet Holder (part #24) in place. Use the other Wrench to turn the Collet Nut (part #28) *clockwise* to tighten and lock the Collet firmly in place.

**To Install A Grinding Wheel:**

1. With one Wrench hold the Collect Holder (part #24) in place. Use the other Wrench and turn the Collet Nut (part #28) *counterclockwise* to loosen.  
**(See Assembly Diagram.)**
2. Insert the shank of a grinding wheel in the Collet (part #27).  
**(See above for installing/changing Collets.)**
3. With one Wrench, hold the Collet Holder (part #24) in place. Use the other Wrench to turn the Collet Nut (part #28) *clockwise* to tighten and lock the grinding wheel firmly in place.

## **CLEANING AND MAINTENANCE**

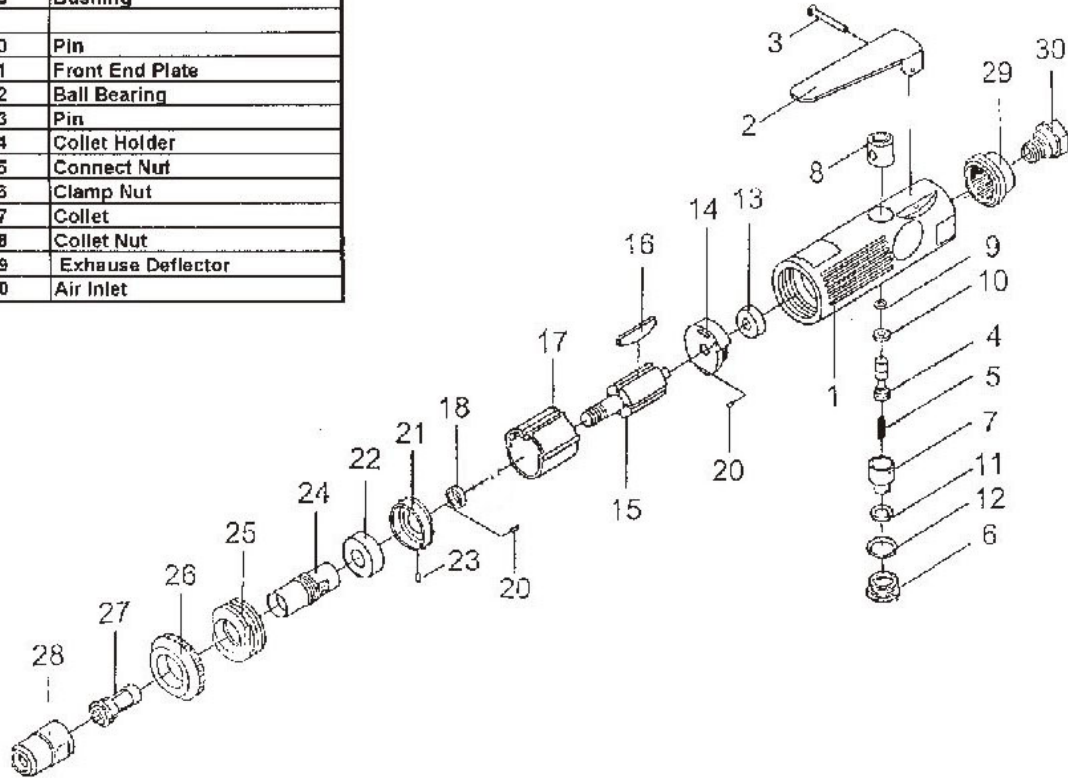
1. Before each use, examine the general condition of the entire compressor system. Inspect guards, switches, power plug and cord assembly, extension cord, and air hoses for damage. Check for loose screws, misalignment, binding of moving parts, improper mounting, broken parts and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, turn off the air compressor immediately and have the problem corrected before further use. **Do not use a damaged tool.**
2. **Caution:** Always disconnect the Air Die Grinder from its air supply source and release all built up air pressure before performing any cleaning, servicing, or maintenance.
3. To clean the outside of the Air Die Grinder, wipe with a clean, damp cloth and dry. If necessary, use a mild detergent. Do not immerse the Air Die Grinder in liquids.

## **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.

# PARTS LIST / ASSEMBLY DIAGRAM

Part Number	Description
1	Housing
2	Throttle Lever
3	Roll Pin
4	Valve
5	Valve Spring
6	Valve Plug
7	Air Regulator
8	Valve Bushing
9	O-Ring
10	O-Ring
11	O-Ring
12	O-Ring
13	Ball Bearing
14	Rear End Plate
15	Rotor
16	Rotor Blade
17	Cylinder
18	Bushing
20	Pin
21	Front End Plate
22	Ball Bearing
23	Pin
24	Collet Holder
25	Connect Nut
26	Clamp Nut
27	Collet
28	Collet Nut
29	Exhaust Deflector
30	Air Inlet



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

## 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.