

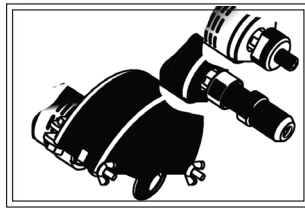
# HENRY TOOLS

Industrial Airtools at Work

MODELS  
 40 AGH  
 40 AGHL  
 40 AGHLSK  
 40 AGHLS+2"  
 40 AGHLS+3"



## General Safety and Maintenance Manual



Model Number	Exhaust Direction	Spindle Type	Throttle Type	Speed	Power Output	Case Material	Weight		Length	Diameter	Air Consumption
							Aluminum	Steel			
40AGHL	Front or Side (Side is Standard)	3/8-24 X 1.0 Inch (3/8-24 X 25 mm)	(L) Lever or (K) Safety Lever	15000-22000 R.P.M. (18000PM is standard)	0.9 H.P .675 W	(S) Steel or Aluminum	2.8 Lb. (1.3 Kg)		13.1 Inch (334 mm)	1.6 Inch (41 mm)	25 cfm (11.8 L/S)
40AGHLS								4.1 Lb. (1.9 Kg)			
40AGHLSK											
40AGHLS+2"											
40AGHLS+3"											

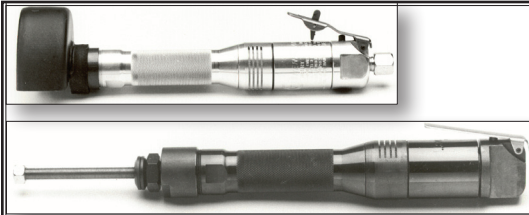
**THE HENRY TOOL CO., MANUFACTURED BY HENRY TOOLS**

498 So. Belvoir Blvd., South Euclid, OH 44121 U.S.A.

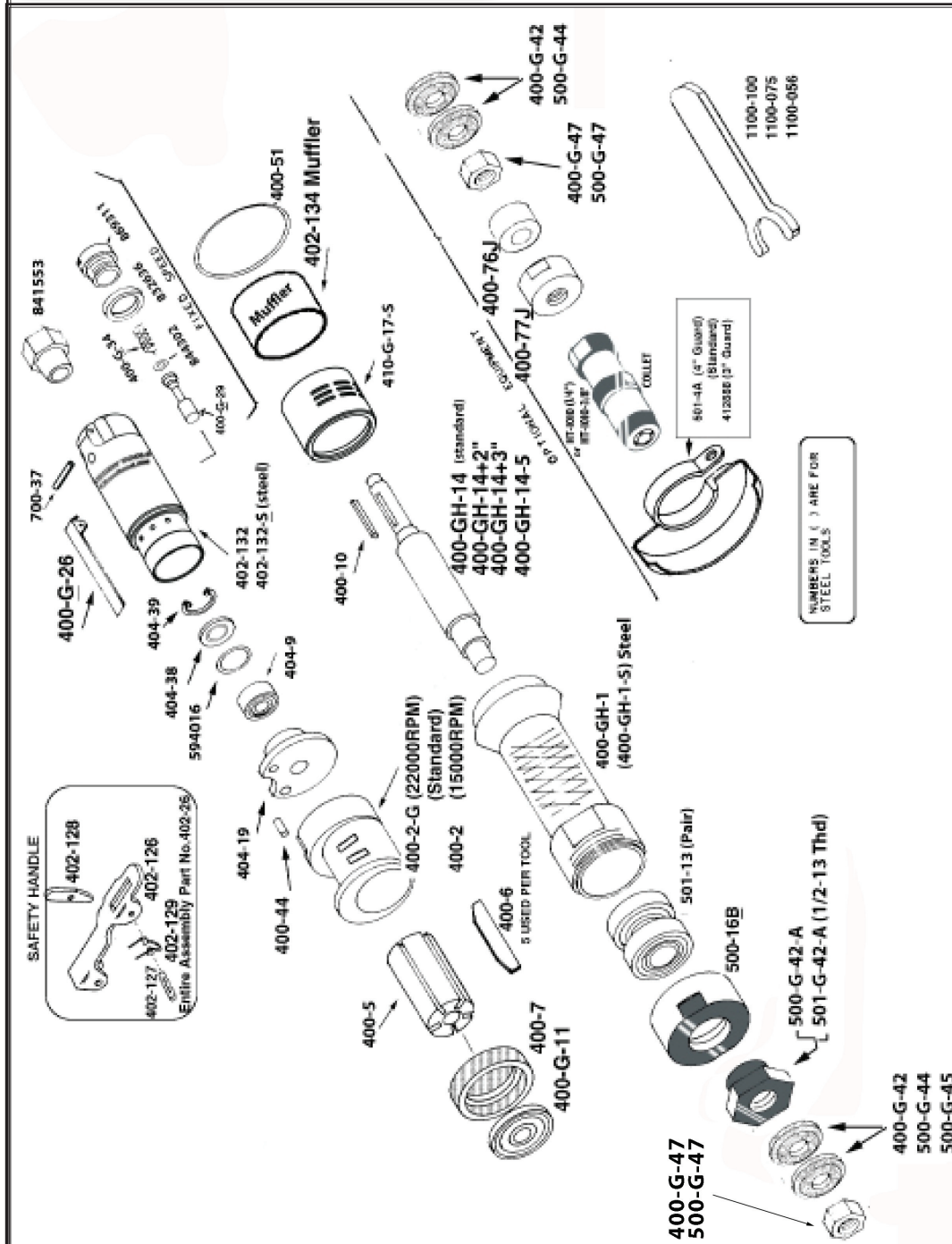
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# General Operators Instructions and Service Manual



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Revised 12/12/09

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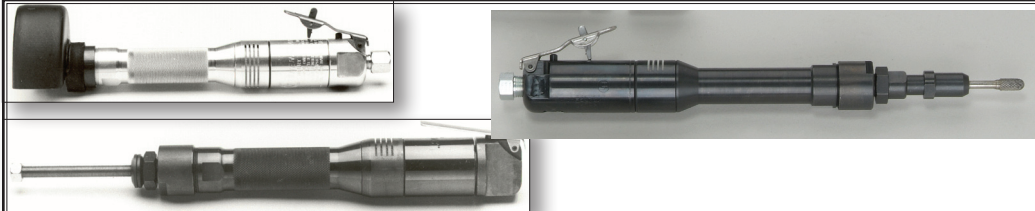
PART NUMBER	DESCRIPTION
594016	O-Ring
404-38	Wafer Bearing Cover
400-10	Key
400-2	Cylinder 15000RPM
841553	Screen Bushing
400-2-G	Cylinder(18000RPM STANDARD)(with Pin installed)
404-19	Rear End Plate
404-39	Lock Ring (844941)
400-44	Pin
400-5	Rotor
400-51	O-Ring
400-6	Blade(5 req'd)
400-7	Front Thrust
404-9	Rear Bearing (Sealed) (590004)
402-132	Case (Alum.)
402-132-S	Case (Steel)
400-G-11	Bearing(2 Req'd)
410-G-17	Alum. Exhaust Sleeve
410-G-17-S	Steel Exhaust Sleeve
400-G-26	Valve Lever
400-G-29	Valve (412451)
400-G-34	Spring
400-GH-1	Extended Case (Alum.) (412475)
400-GH-14	Spindle (40GHL) (3/8-24 Thd)
400-GH-14+2"	Spindle for (40GHL) Plus 2" length (3/8-24 Thd)
400-GH-14+3"	Spindle for (40GHL) Plus 3" length (3/8-24 Thd)
400-GH-14-5	Spindle (1/2-13 Thread)
400-GH-1-S	Extended Case (STEEL)
402-134	Muffler Screen
500-16B	Front Bearing CAP
500-21	Seal(Optional)

PART NUMBER	DESCRIPTION
500-G-42-A	Flange Nut, 1/2-20 Thread
501-13	Bearings (412891)(PAIR)
501-G-42A	Flange (1/2-13 Thread)
700-37	Lever Pin
832636	T.V. Cap Gasket
869311	Throttle Valve Cap
<b>ACCESSORIES</b>	
400-76-J-3/8"	Collet Spacer 3/8"
400-77J	Cone Wheel Adaptor (3/8" Thd)
400-G-42	Flange Washer (for 2" and 3" Wheels)
400-G-47	3/8" Nut
500-G-44	Flange (3/8" for 4" and 5" Wheels)
500-G-45	Flange (1/2-13 Thread) for 4" Wheels.
500-G-47	Spindle Nut (1/2-13 Thread)
HT-1010	Heavy Duty Collet Assembly (1/4")
HT-1010-3/8	Heavy Duty Collet Assembly (3/8")
1100-056	Wrench 9/16"
1100-100	Wrench 1"
1100-075	Wrench 3/4"
510244	Repair Kit (All Bearings and Blades Etc.)
<b>GUARDS</b>	
501-4A	4" Guard
412888	3" Guard (501-3A)

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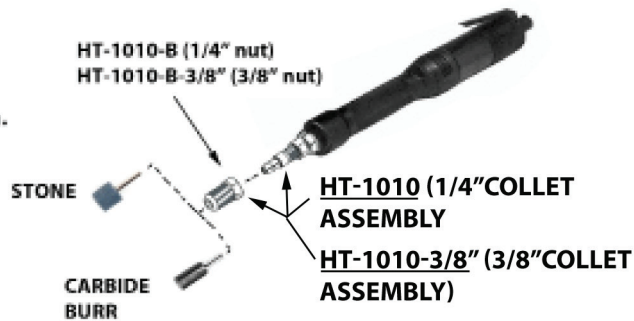
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## SAMPLE : MOUNTING OF CONE WHEELS ON HORIZONTAL GRINDERS

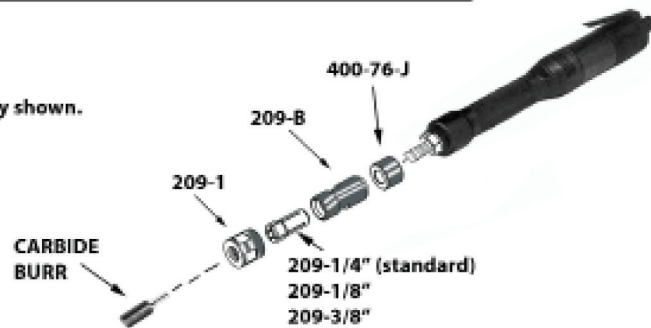


## SAMPLE : MOUNTING OF CARBIDE BURRS ON HORIZONTAL GRINDERS

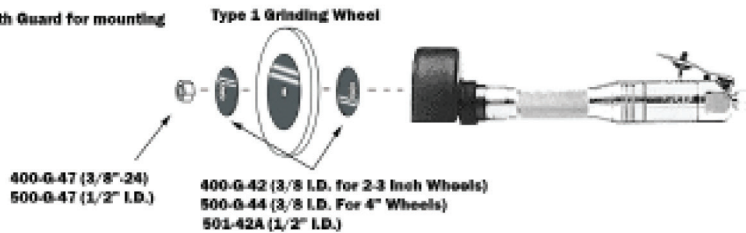
HT-1010 Collet Assembly shown.



Erickson Collet Assembly shown.



Sample: Horizontal Grinder with Guard for mounting Type 1 grinding wheels.



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### **SAFETY FIRST!**

#### **ALWAYS COMPLY WITH:**

1. General Industry Safety & Health Regulations, Part 1910, OSHA 2206, available from: Sup't of Documents; Government Printing Office; Washington DC 20402
2. Safety Code for Portable Air Tools, ANSI B186.1 available from: American National Standards Institute, Inc.; 1430 Broadway; New York, NY 10018
3. State and Local regulations.

Portions of the above codes and regulations are listed below for quick reference. THESE EXCERPTS ARE NOT INTENDED TO BE ALL INCLUSIVE - STUDY AND COMPLY WITH ALL REGULATIONS!



**Do Not Throw Away These Instructions!!**

#### **IMPORTANT SAFETY INFORMATION ENCLOSED.**

**READ AND UNDERSTAND THIS MANUAL BEFORE OPERATING TOOL.**

**IT IS THE RESPONSIBILITY OF THE EMPLOYER TO PLACE THE INFORMATION IN THIS MANUAL INTO THE HANDS OF THE OPERATOR. FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.**

#### **PLACING TOOL IN SERVICE**

- Always operate, inspect and maintain this tool in accordance with all regulations (local, state, federal and country), that may apply to hand held/hand operated pneumatic tools.
- Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool.

- Do not use damaged, frayed or deteriorated air hoses and fittings.
- Be sure all hoses and fittings are the correct size and are tightly secured. Always use clean, dry air at 90 psig (6.2 bar/620 kPa) maximum air pressure. Dust, corrosive fumes and/or excessive moisture can ruin the motor of an air tool.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- Do not remove any labels. Replace any damaged label.

**1. TOOL INTENT** - Henry Tools vertical Grinders are designed for heavy material removal. For consistent, quality performance in foundries, welding shops, fabrication facilities, steel mills and shipyards. Tools shall be used only for purposes intended in their design (refer to product catalog).

**2. AIR SUPPLY** - Test and operate tools at 90 PSIG (6.2 bar/620 kPa) maximum air pressure at the inlet with 3/8" (10 mm) inside diameter air supply hose. Use recommended airline filters-regulators-lubricators. Choose tools with enough horsepower to drive the abrasive material you are using, and allow the grinder's speed to work for you.

**3. UNUSUAL SOUND or VIBRATION** - If tool vibrates or produces an unusual sound, repair immediately for correction.

**4. OPERATOR PROTECTIVE EQUIPMENT** - Wear goggles or face shield at all times tool is in operation. Other protective clothing shall be worn, if necessary. SEE REGULATIONS.

**5. SAFETY MAINTENANCE PROGRAM** - Employ a safety program to provide inspection and maintenance of all phases of tool operation and air supply equipment in accordance with "Safety Code for Portable Air Tools."

**WARNING:** The signal word "Warning" identifies all notes on safe work practices in this operating instruction, alerting to hazards for life and health of people. Observe these notes and proceed with special care in the cases described. Pass all safety instructions on to other operators. In addition to the safety instructions in this operating instruction, the general local safety and accident prevention rules must be observed.

#### **Important Notes**

**CAUTION** The signal word "caution!" identifies all portions of this operating instruction meriting special attention to

## General Operators Instructions and Service Manual

ensure that guidelines, rules, hints and the correct work procedures are observed; and, to prevent damage to and destruction of the grinder and/or parts.

A recommended spare part (or set) for every five (5) tools. Small, low cost or easily lost parts should be stocked as 3-4 per 10 tools.

**WARNING:** Disconnect the air supply hose before servicing the tool.

### INSTALLATION

For most efficient operation, 90 psig (620 kPa) of clean dry air is required at the tool with the tool running, with-out extreme fluctuation. Minimum recommended hose size is 3/8" I.D. when the length of the hose is eight feet or less. An air line filter and lubricator, should be used. Hose should be blown out before attaching to the tool.

### Loss of Power

A loss of power may not be related to the tool. First, check the air line pressure. It should be 90 psi at the tool while operating.

### LUBRICATION

Lubricate the motor with an air line lubricator, using a light air motor oil. Adjust the lubricator to dispense one drop per cycle or three drops per minute.

**CAUTION** Do not use substitutes for oil and grease. This could result in damage to the tool.

### MAINTENANCE

1. Proper and continuous lubrication.
2. Blow out air hose to assure a clean air supply.
3. Be sure the air filter and line lubricator are clean.
4. Fill the line lubricator before operation.
5. Place a few drops of oil into the air inlet of the tool before attaching the air line.
6. Use moisture separators to remove water from the air line.
7. **CAUTION** Do not use solvent on bearings or on any parts made of a synthetic material.
8. Do not remove bearings unless replacement is necessary; bearings are a press fit.

Always wear eye protection when operating or performing maintenance on this tool.

Always wear hearing protection when operating this tool.

Keep hands, loose clothing and long hair away from rotating end of tool.

Anticipate and be alert for sudden changes in motion during start up and operation of any power tool.

Keep body stance balanced and firm. Do not overreach when operating this tool. High reaction torques can occur at or below the recommended air pressure.

Tool accessories may continue to rotate briefly after throttle is

## DIE GRINDER SAFETY INSTRUCTIONS

released.

Air powered tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions may be harmful to your hands and arms. Stop using any tool if discomfort, tingling feeling or pain occurs.

Seek medical advice before resuming use.

Use accessories recommended by Henry Tools.

This tool is not designed for working in explosive atmospheres.

This tool is not insulated against electric shock.

### WARNING

General Product Safety Information

• IT IS YOUR RESPONSIBILITY TO MAKE THIS SAFETY INFORMATION AVAILABLE TO OTHERS THAT WILL OPERATE THIS PRODUCT.

• Failure to observe the following warnings could result in injury.

### WARNING

Product Safety information - When Placing the Tool in Service

• **NEVER MODIFY ANY PART OF THIS TOOL!!!!** Always install, operate, inspect and maintain this product in accordance with all applicable standards and regulations (local, state, country, federal, etc.).

• Always use clean, dry air at 90 psig (6.2 bar/620 kPa) maximum air pressure at the inlet. Higher pressure may result in hazardous situations including excessive speed, rupture, or incorrect output torque or force.

• Be sure all hoses and fittings are the correct size and are tightly secured.

• Install a properly sized Safety Air Fuse upstream of hose and use an anti-whip

### DIE GRINDER SAFETY INSTRUCTIONS

device across any hose coupling without internal shut-off, to prevent hose whipping if a hose fails or coupling disconnects.

- Ensure an accessible emergency shut off valve has been installed in the air supply line, and make others aware of its location.
- Do not use damaged, frayed or deteriorated air hoses and fittings.
- Keep clear of whipping air hoses. Shut off the compressed air before approaching a whipping hose.
- Always turn off the air supply, bleed the air pressure and disconnect the air supply hose before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool or any accessory.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel. Use only recommended lubricants.
- Use only proper cleaning solvents to clean parts. Use only cleaning solvents which meet current safety and health standards. Use cleaning solvents in a well ventilated area.
- Keep work area clean, uncluttered, ventilated and illuminated.
- Do not remove any labels. Replace any damaged label.
- For those grinders designed for use with wheels of four inches diameter and larger, separate the grinder from any quick-disconnect couplings by a hose whip. Never install a quick-disconnect directly into these tools.

#### WARNING

#### PRODUCT SAFETY INFORMATION

##### - WHEN USING THE TOOL:

- Always wear eye protection when operating or performing maintenance on this tool.
- Always wear hearing protection when operating this tool.
- Always use Personal Protective Equipment appropriate to the tool used and

material worked. This may include dust mask or other breathing apparatus, safety glasses, ear plugs, gloves, apron, safety shoes, hard hat and other equipment.

When wearing gloves always be sure that the gloves will not prevent the throttle mechanism from being released.

- Prevent exposure and breathing of harmful dust and particles created by power tool use.

- Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known 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 and other masonry products, and 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.
- Keep others a safe distance from your work area, or ensure they use appropriate Personal Protective Equipment.
- This tool is not designed for working in explosive environments, including those caused by fumes and dust, or near flammable materials.
- This tool is not insulated against electric shock.

- Be aware of buried, hidden or other hazards in your work environment. Do not contact or damage cords, conduits, pipes or hoses that may contain electrical wires, explosive gases or harmful liquids.
- Keep hands, loose clothing, long hair and jewelry away from working end of tool.
- Power tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions may be harmful to your hands and arms. Stop using any tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.
- Keep body stance balanced and firm. Do not overreach when operating this tool. Anticipate and be alert for sudden changes in motion, reaction torques, or forces during start up and operation.
- Tool and/or accessories may briefly continue their motion after throttle is released.
- To avoid accidental starting - ensure tool is in "off" position

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## General Operators Instructions and Service Manual

before applying air pressure, avoid throttle when carrying, and release throttle with loss of air.

- Ensure work pieces are secure. Use clamps or vises to hold work piece whenever possible.
  - Do not carry or drag the tool by the hose.
  - Do not use power tools when tired, or under the influence of medication, drugs, or alcohol.
  - Never use a damaged or malfunctioning tool or accessory.
  - **DO NOT MODIFY THE TOOL, SAFETY DEVICES, OR ACCESSORIES.**
  - Do not use this tool for purposes other than those recommended.
  - Use accessories recommended by Henry tools.
  - Do not use this tool if the actual free speed exceeds the rated rpm. Check the free speed of the Grinder before mounting a wheel, after all tool repairs, before each job and after every 8 hours of use. Check speed with a calibrated tachometer, without the abrasive product installed.
  - Do not use any wheel or other abrasive accessory whose maximum operating speed, as defined by its manufacturer, is less than the rated speed of the Grinder.
  - Inspect all grinding wheels for chips or cracks prior to mounting. Do not use a wheel that is chipped, cracked or otherwise damaged.
  - Inspect arbor, threads & clamping devices for damage & wear prior to mounting wheel or other abrasive accessory.
  - Do not use a grinding wheel that has been exposed to freezing temperatures, extreme temperature changes, high humidity, solvents, water or other liquids.
  - Make certain grinding wheel or other abrasive accessory properly fits the spindle. The wheel should not fit too snugly or too loosely. Plain hole wheels should have about .007" (0.17 mm) maximum diametral clearance. Do not use reducing bushings to adapt a wheel to any arbor unless such bushings are supplied by and recommended by the wheel manufacturer.
  - Blotters shall always be used between flanges and abrasive wheel surfaces to ensure uniform distribution of flange pressure (except type 27 & 28 wheels) and shall cover the entire contact area of the wheel flange.
  - Always use the wheel flanges furnished by the manufacturer and appropriate for the wheel size and type.
- Never use a makeshift flange or plain washer. Flanges should be in good condition and free of nicks, burrs and sharp edges.
- Ensure that the thread type and size of the threaded abrasive product exactly matches the thread type and size of the spindle.
  - Prevent the spindle end from touching the bottom of the hole of cups, cones or plugs with threaded holes, intended to be mounted on machine spindles, by comparing dimensions and

## DIE GRINDER SAFETY INSTRUCTIONS

other relevant data for them.

- Ensure that the grinding wheel or other abrasive accessory is correctly mounted and tightened before use.
- Before starting this tool, the operator shall make sure that no one is in the plane of rotation.
- Wear Personal Protective Equipment and remove flammable objects from the work area to ensure that sparks and debris do not create a hazard when using this tool.
- After mounting a wheel or other abrasive accessory, the Grinder shall be run in a protected enclosure, at gradually increasing speed, for at least 60 seconds. Make certain no one is in front of or in line with the wheel or other abrasive accessory. Be aware that it may fail at this time if it is defective, improperly mounted or the wrong size and speed. Stop immediately if considerable vibration or other defects are detected. Shut off the air supply and determine the cause.
- Do not use this tool on materials whose dust or fumes can cause a potentially explosive environment.
- When starting a cold wheel, apply it to the work slowly until the wheel gradually warms up. Make smooth contact with the work, and avoid any bumping action or excessive pressure.
- If the grinder is dropped or bumped, turn off the air supply and carefully examine the grinding wheel or other abrasive accessory. Discard it if damaged, chipped or cracked. Before reuse, run the grinder in a protected enclosure following the same precautions used after first mounting.
- Before a grinder is put down, the throttle shall be released and the wheel or other accessory shall come to a stop.



## General Operators Instructions and Service Manual

### DIE GRINDER SAFETY INSTRUCTIONS

Tool rests, hangers, and balancers are recommended.

#### Additional Warnings for Guarded Grinders

- Do not use this Grinder without the furnished Wheel Guard.
- Incorrect combinations of grinder wheel, wheel guard and tool speed could result in injury. Ensure that combinations are correct per the Product Specifications.
- Always replace a damaged, bent or severely worn wheel guard. Do not use a wheel guard that has been subjected to wheel failure.
- Guard opening must face away from the operator. Bottom of wheel must not project beyond guard.

#### Additional Warnings for Use of Cut-off Wheels (Type 1 and 27A)

- When cutting, support the workpiece so the slot is kept at constant or increasing width during the whole operation.
- If the abrasive product gets jammed in a cut slot, shut off the grinder and ease the wheel free. Check that the wheel is still correctly secured and not damaged before continuing the operation.
- A cut-off wheel shall not be used for side grinding.

#### Additional Warnings for Unguarded Grinders

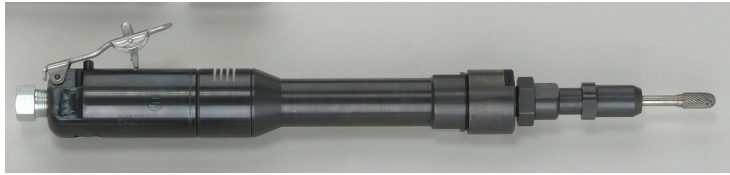
- Do not use an unguarded grinder unless used for internal work and only operated when the work offers protection.
- Do not use any Type 1 wheels that are larger than 2 inches (50mm) in diameter or more than 1/2 inch (13mm) thick, or that operate at peripheral speeds greater than 1800 Surface Feet Per Minute (9 Surface Meters per Second).
- Do not use any small cones and plugs and threaded hole pot balls unless their size does not exceed 3 inches (75mm) in diameter by 5 inches (125mm) long. (Please see your Product Specifications).
- Do not use other types of grinding wheels. Do not use wire wheels with a

diameter that is greater than 2 inches (50mm) or cut-off wheels with this unguarded grinder.

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### DIE GRINDER SAFETY INSTRUCTIONS

Work gloves with vibration reducing liners and wrist supports are available from some manufacturers of industrial work gloves. Tool wraps and grips are also available from a number of different manufacturers. These gloves, wraps, and wrist supports are designed to reduce and moderate the effects of extended vibration exposure and repetitive wrist trauma. Since they vary widely in design, material, thickness, vibration reduction, and wrist support qualities, it is recommended that the glove, tool wrap, or wrist support manufacturer be consulted for items designed for your specific application. **WARNING!** Proper fit of gloves is important. Improperly fitted gloves may restrict blood flow to the fingers and can substantially reduce grip strength.

#### USE QUALITY ACCESSORIES

The primary source of vibration when using a die grinder is an accessory that is out of balance, out of round, untrue, or possibly any combination of all three.

The use of accessories which are well balanced, round, and true is highly recommended as they have been found to significantly reduce vibration. Some accessories lose their balance, roundness, and trueness as they wear from use. Because of the abusive nature of the vibration caused by out of balance, out of round, and untrue condition of some mounted wheels and carbide burrs, it is felt that these accessories are more susceptible to failure. Excessive vibration may signal eminent wheel failure. Out of balance accessories are dangerous. Flat spotting of a mounted wheel, caused by grinding the wheel to a stop after the power has been shut off can result in changes to the balance and shape of the wheel. Be sure the mounted wheel has stopped before setting the tool down. Set the tool in a tool rest or tool holder when not in use.

#### WIRE BRUSHES

If a die grinder is used for wire brushing applications the same problems of balance, roundness, and trueness as experienced with mounted wheels and other accessories prevail. Use quality wire brushes.

#### USE A PREVENTIVE MAINTENANCE PROGRAM

Tool abuse or poor maintenance procedures can amplify and contribute to the vibration produced by a mounted wheel or carbide burr. A preventive maintenance program featuring scheduled periodic inspections and proper maintenance is the best way to assure safety in your portable grinding operations. A well managed program can, for example, detect such things as speed variations due to wear, flanges or spindles that have been dam-

aged from abuse, or bad bearings damaged by foreign matter or lack of lubrication. Problems such as these can affect the wheel trueness when the grinder is running and contribute to the vibration. Rotor blades that are worn or chipped can lock up the motor and damage motor components. Rotor blades should be checked periodically and replaced if they measure less than 3/16" (4.7mm) at either end. Proper repair procedures and the use of original Cleco service parts and bearings rather than substitutes will return the tool to factory specifications of precision and balance, and minimize vibration.

#### PROPER LUBRICATION

An automatic in-line filter-regulator-lubricator is recommended as it increases tool life and keeps the tool in sustained operation. The in-line lubricator should be regularly checked and filled with a good grade of 10W machine oil. Proper adjustment of in-line lubricator is performed by placing a sheet of paper next to exhaust ports and holding throttle open approximately 30 seconds. Lubricator is properly set when a light stain of oil collects on paper. Excessive amounts of oil should be avoided.

#### STORAGE

In the event it becomes necessary to store tool for an extended period of time (overnight, weekend, etc.), it should receive a generous amount of lubrication at that time and run for several seconds to distribute oil before disconnecting from air supply. This will reduce corrosion and displace water that may be trapped in tool.

This information is a compilation of general safety practices obtained from various sources available at the date of production. However, our company does not represent that every acceptable safety practice is offered herein, or that abnormal or unusual circumstances may not warrant or require additional procedures. Your work may require additional specific safety procedures.

Follow these procedures as required by your company. For more information, see the latest edition of ANSI B186.1, Safety Code for Portable Air Tools, and ANSI B7.1, Safety Requirements for the Use, Care, and Protection of Abrasive Wheels, available from the American National Standards Institute, Inc., 11 West 42nd street, New York, NY 10036.

#### Safety

#### ACCESSORY MOUNTING

The collet should be checked to assure it is in good operating condition and is secure to the tool. Accessories should be inserted to full depth of the collet. Avoid excessive overhang that can result in vibration, or a bent spindle if excessive down force is used. Possible loss or ejection of accessory can result.


Collet equipped grinders are intended for use with small carbide burrs and mounted wheels only. Do not use these tools for Type 1 wheel grinding. If your application calls for a Type 1 wheel, consult Henry tools for a wheel grinder equipped with the proper wheel guard.

#### BEGINNING GRINDING OPERATION

## General Operators Instructions and Service Manual



### DIE GRINDER SAFETY INSTRUCTIONS

FAULT	CAUSE	SOLUTION
Insufficient Power	Air pressure too low	Minimum air pressure <i>should</i> be 90 PSI for maximum performance
	Restriction in air hose	Remove bends or other restrictions
	Hose I.D. is too small	Use required hose I.D.
	Worn vanes	Exchange vanes
	Screen Support clogged	Clean screen support or exchange with new one
Machine does not start	No air, shut-off valve is closed.	Open shut-off valve
	Worn vanes due to lack of oil or vanes are jammed	Exchange vanes . (cylinder might also be worn out)
Grinder does not want to stop	Worn O-Ring	Replace o-ring in handle (844302) for example.
Spindle wobbles or vibrates.	Bearings worn out  Danger!!	Disconnect tool from the air supply. <i>Immediate</i> servicing is required.



Before using or after mounting an accessory, tool must be run for one minute in a protected enclosure to check the integrity of the accessory. During this time or any other time, no one should stand in front or in line of the accessory. When starting work with a cold wheel, apply it gradually to the workpiece until it becomes warm. Do not continue to use a grinder if:

- The speed rating of the accessory is less than the speed of the grinder
- If tool vibrates repair immediately.
- You sense changes in tool speed or an unusual increase in noise that would indicate tool is running at excessive speed.
- You notice excessive end play in spindle
- You hear any unusual sound from grinder

**RETURN THE TOOL TO THE TOOL CRIB FOR SERVICE IMMEDIATELY**



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