

# 408

## FLEX HEAD REVERSIBLE HD CUT OFF TOOL



### **⚠ WARNING**

**Study, understand and follow all instructions provided with this product. Read these instructions carefully before installing, operating, servicing or repairing this tool. Keep these instructions in a safe accessible place.**



### **1 YEAR LIMITED WARRANTY**

- Astro Pneumatic Tool Co. warrants our products to the original user against defective material or workmanship for a period of 1 year from the date of 1st use. Astro reserves the right to determine whether the product failed because of defective material, workmanship or other causes and to charge back for missing parts. Astro Pneumatic Tool Co., at its discretion, will repair products covered under this warranty free of charge. The original user is to return the product (with the exceptions listed below) with the distributor's name, address, adequate proof of date of purchase or a copy of warranty card, and a short note explaining the problem. **Failures caused by accident, alteration, or misuse are not covered by this warranty.**
- Astro Pneumatic Tool Co. or its authorized service representatives must perform all warranty repairs. Any repair to the product by unauthorized service representatives voids this warranty. The rights under this warranty are limited to the original user and may not be transferred to subsequent owners.
- This warranty is in lieu of all other warranties, expressed or implied, including warranties of merchantability and fitness for a particular purpose. Some states do not allow the exclusion of limitations of incidental or consequential damages so the above limitations may not apply to you.

**⚠ PLEASE DO NOT RETURN ANY PRODUCT WITHOUT CALLING 1-800-221-9705 FOR INSTRUCTIONS**

## INTENDED USE OF THE TOOL

The 408 cut off tool is designed to be used with standard 3" cut-off wheels that are meant for 16,000rpm or above to cut sheet metals and other thin metal materials. Do not use this tool outside of the designed intent. Never modify the tool for any other purpose or use.

## BEFORE USE

Before use, check the parts diagram and part number listing on page 6 to make sure all parts are included. If any parts are missing or damaged, please call your distributor.

## PRODUCT INFORMATION

- Flex-head design allows for setting the tool 25° forward or backward for clearance
- Forward and reverse dial, you choose where the sparks are thrown
- 0.8 horsepower motor, designed for full throttle heavy-duty applications

### SPECIFICATIONS:

Wheel Size: 3" (75mm)  
 Free Speed: 16,000 RPM  
 Overall Length: 9.6" (243.84 mm)  
 Net Weight: 2.9 lbs. (1.315 kgs)  
 Air Consumption: 5.3 CFM

Power: 0.8 HP  
 Air Inlet Thread NPT: 1/4"  
 Air Pressure: 90 PSI (6.2 Bar)

## ⚠ WARNING ⚠

### CAUTION: TO HELP PREVENT PERSONAL INJURY.

- Use of this product can expose you to chemicals including ethylene glycol, gasoline vapors and engine exhaust, which are known to the State of California to cause cancer, birth defects, or reproductive harm. For more information, visit [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov). Always wear ANSI approved safety equipment, safety glasses and clothing when using this product. Study, understand, and follow all instructions provided with this product. Failure to read and follow all warnings and operating instructions may result in damages and serious injury or death.
- Always wear ANSI approved goggles when using this product. (Users and Bystanders).
- Never use this tool for any application other than for which it was designed.
- Only use accessories designed for this tool.
- Never alter or modify this tool in any way.
- Improper operation and/or maintenance of the tool, modification of the tool, or use of the tool with accessories not designed for it could result in serious injury or death.
- Always select the correct accessories of the correct size and design for the job that you are attempting to perform.
- Always work in a clean, safe, well-lit, organized and adequately equipped area.
- Do not begin repairs without assurance that vehicle is in secure position, and will not move during repair.
- Users of this tool should review the chemical composition of the work surface and any products used in conjunction with this tool for any such chemicals prior to engaging in any activity that creates dust and/or microscopic particles.
- Users should obtain the Material Safety Data Sheets for all identified chemicals, either from the manufacturer or their employer, and proceed to study, understand, and follow all instructions and warnings for exposure to such chemicals.
- Some examples of these chemicals are: lead from lead based paints; crystalline silica from bricks, cement and other masonry products; and arsenic and chromium from chemically treated lumber. A listing of the chemicals can be obtained at [www.oehha.ca.gov](http://www.oehha.ca.gov) under Proposition 65.
- In order to reduce their exposure to such chemicals, users should always:
  - work in well-ventilated areas.
  - wear appropriate safety equipment and clothes that are specifically designed to filter out microscopic particles.

## ⚠ WARNING ⚠

- The tool shall not be used in potentially explosive atmospheres.
- Disconnect the air hose before changing or adjusting any inserted tools.
- Before using tool, please confirm all couplings and plugs are fixed securely. An air hose that is under pressure may lash out when disconnected and could lead to serious injuries.
- Prevent loose clothes, long hair or any other personal accessories from coming close to moving parts to reduce the risk of being caught, trapped or drawn into the rotating spindle.
- Excessive high air pressure that exceeds the maximum pressure may cause injuries to user.
- Exposure to strong vibration for extended time may cause harm to operator.
- Be aware of the rotation direction before starting the tool to reduce hazardous situations due to unexpected rotation direction.
- **WATCH YOUR STEP!** Leaving excess hose unattended near working area or walk path could result in injury or death.
- Wearing eye/face protection could reduce the danger to person from high speed splinters being emitted from the tool or work surface.
- Wearing correct breathing protection will help avoid inhaling dust or debris from work process that can be harmful to your health.
- High sound levels can cause permanent hearing loss. Use hearing protection while operating tool.
- Due to the material being processed, there may be a risk of explosion or fire. Be aware of work surface dangers prior to beginning work.
- There is a risk of being cut due to high speed rotation. Do not touch high speed rotating disc.
- This power tool is not insulated. If contact is made with an electric current, injury may occur.
- Dust created by sanding, sawing, grinding, drilling and other related activities may expose the user to dust and/or microscopic particles that may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

## MAINTENANCE INSTRUCTION

### LUBRICATION:

Before connection of the hose, apply 4 to 5 drops of a good quality air tool oil at the air inlet. After 3 to 4 hours of operation, oiling may be necessary again.

### TIGHTNESS OF PARTS:

Regularly check whether all connection parts are fastened securely. Follow this procedure daily before beginning work.

### DISPOSAL:

Follow national legislation of waste disposal.

### STORAGE:

Avoid storing the tool in a location subject to high humidity. If the tool is left unused, the residual moisture inside the tool can cause rust. Before storing and after operation, oil the tool at the air inlet with a good quality air tool oil and run it for a short period.

### ORDERING SERVICE PART:

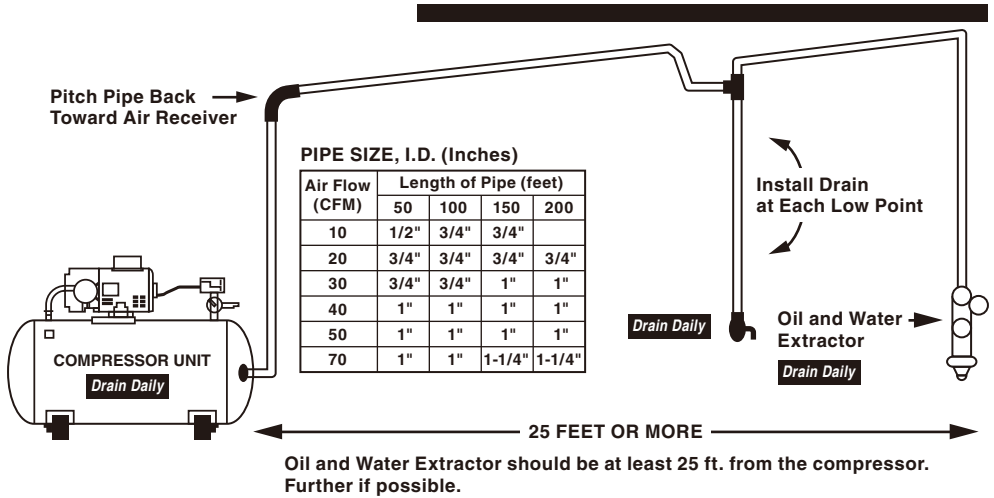
For further operational and handling information or for replacement of parts and components, contact the sales agent from where you purchased the tool, or the service division of our company, phone number 800-221-9705.

\* When ordering parts and components, give each part number, name, and quantities.

## SUGGESTED AIR LINE CONNECTION

The oil and water extractor should not be mounted on or near the air compressor.

The temperature of air is greatly increased during compression. As the air cools down to room temperature, in the air line, on its way to the Air Power Tool, the moisture contained in it condenses. Thus, for maximum effectiveness, the oil and water extractor should be mounted at some point in the air supply system where the temperature of the compressed air in the line is likely to be lowest. Air lines must be properly drained daily. Each low point in an air line acts as a water trap. Such points should be fitted with an easily accessible drain. See diagram below. Pitch all air lines back towards the compressor so that condensed moisture will flow back into the air receiver where it can be drained off. **Drain daily.**



## **OPERATING INSTRUCTIONS**

Always turn off the air supply, drain the hose of air pressure and detach tool from air supply before installing, removing or adjusting any accessory or attachment to this tool, or before performing any maintenance.

**DO NOT** place this tool on the ground or work surface with air source attached, while not in use. The trigger could be accidentally engaged. This could result in damage to the tool and/or other incidental items and/or serious injury to the user or bystanders.

### **CHANGING THE WHEEL:**

Disconnect the tool from the air source. Place one of the supplied wrenches on the drive shaft, interlocking the flat sides. Place the other wrenches on the hex bolt head at the end of the shaft. While holding the wrench on the shaft, turn the hex bolt counter-clockwise. Remove the hex bolt while holding the flange. To reinstall the wheel, align the lower drive flange and drive shaft. Then center the wheel on the drive shaft. Place the upper flange on the wheel and thread the hex bolt into the drive shaft. Place one supplied wrenches on the drive shaft and the other on the hex bolt head. While firmly holding the lower wrenches, turn the upper wrench clock-wise to tighten.

**NOTE: THE BOTTOM DRIVE FLANGE HAS A SLOT IN IT THAT MUST ALWAYS BE ALIGNED WITH THE WITH FLAT SIDES OF THE DRIVE SHAFT. FAILURE TO DO SO COULD CAUSE THE DISC LOOSENS DURING OPERATION, LEADING TO THE POSSIBILITY OF CAUSING DAMAGE AND /OR INJURY.**

This tool is equipped with a 360° swiveling exhaust port. Use this function to direct air away from your face and/or debris around the work area.

### **POSITIONING THE FLEX HEAD:**

Disconnect the tool from air source. Firmly grasp the tool with one hand below the knurled lock sleeve. With the thumb and forefinger of that hand push the lock sleeve outward. With the other hand, you may now choose from three positions of the wheel end (25° upward, 25° downward, and standard-straight operation).

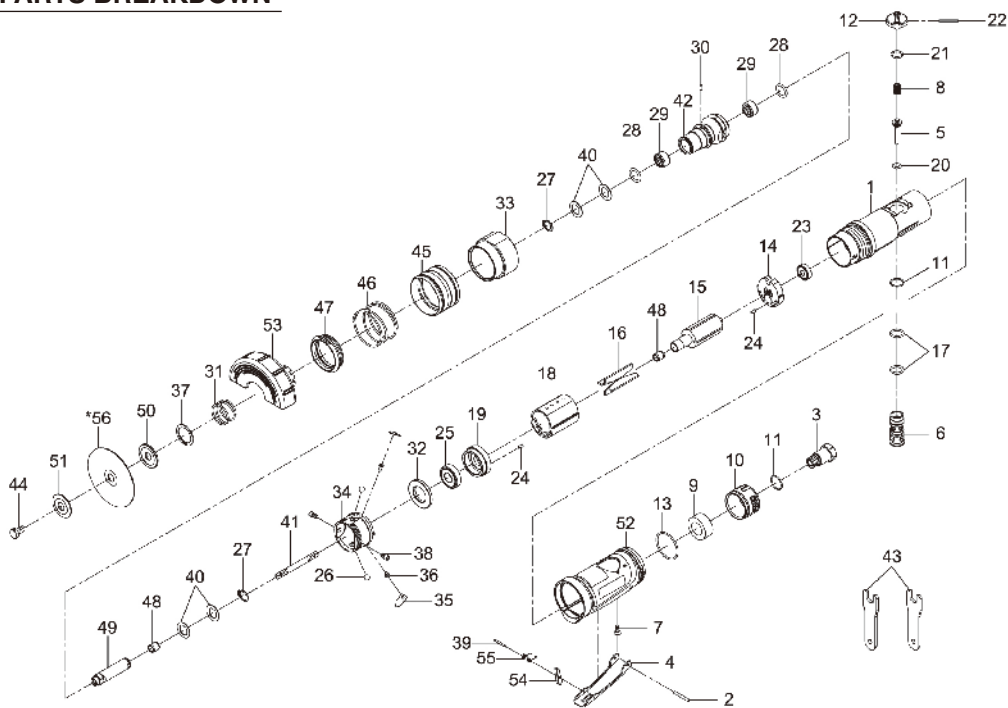
### **ROTATING THE GUARD:**

Disconnect the tool from air source. Firmly grasp the tool with one hand, and with other, gently pull the guard in an outward direction. You may now rotate the guard to the desired position. Always keep the guard in a position to direct debris away from you and others.

### **REVERSING MOTOR ROTATION:**

Disconnect the tool from air source. On side Opposite of the throttle is a black knob. You may choose from F=Forward or R=Reverse. Turn the downward to switch direction.

## PARTS BREAKDOWN



## PARTS LIST

| Index | Part No. | Description      | Qty | Index | Part No. | Description             | Qty | Index | Part No. | Description            | Qty |
|-------|----------|------------------|-----|-------|----------|-------------------------|-----|-------|----------|------------------------|-----|
| 1     | 408-01   | House            | 1   | 20    | 408-20   | O-Ring                  | 1   | 39    | 408-39   | Spring Pin             | 1   |
| 2     | 408-02   | Spring Pin       | 1   | 21    | 408-21   | O-Ring                  | 1   | 40    | 408-40   | Washer                 | 4   |
| 3     | 408-03   | Air Inlet        | 1   | 22    | 408-22   | Spring Pin              | 1   | 41    | 408-41   | Power Shaft            | 1   |
| 4     | 408-04   | Throttle Lever   | 1   | 23    | 408-23   | Ball Bearing            | 1   | 42    | 408-42   | Flex Shaft             | 1   |
| 5     | 408-05   | Valve Shaft      | 1   | 24    | 408-24   | Spring Pin              | 2   | 43    | 408-43   | Spanner                | 2   |
| 6     | 408-06   | Bushing          | 1   | 25    | 408-25   | Ball Bearing            | 1   | 44    | 408-44   | Screw                  | 1   |
| 7     | 408-07   | Screw            | 1   | 26    | 408-26   | Steel Ball              | 2   | 45    | 408-45   | Lock Sleeve            | 1   |
| 8     | 408-08   | Spring           | 1   | 27    | 408-27   | Retaining Ring          | 2   | 46    | 408-46   | Spring                 | 1   |
| 9     | 408-09   | Muffler          | 1   | 28    | 408-28   | O-Ring                  | 2   | 47    | 408-47   | Clamp Nut              | 1   |
| 10    | 408-10   | Exhaust Diffuser | 1   | 29    | 408-29   | Needle Bearing          | 2   | 48    | 408-48   | Bushing                | 2   |
| 11    | 408-11   | O-Ring           | 2   | 30    | 408-30   | Pin                     | 1   | 49    | 408-49   | Drive Shaft            | 1   |
| 12    | 408-12   | Knob             | 1   | 31    | 408-31   | Spring                  | 1   | 50    | 408-50   | Drive Flange           | 1   |
| 13    | 408-13   | O-Ring           | 1   | 32    | 408-32   | Spacer Ring             | 1   | 51    | 408-51   | Flange                 | 1   |
| 14    | 408-14   | Rear End Plate   | 1   | 33    | 408-33   | Clamp Nut               | 1   | 52    | 408-52   | Grip                   | 1   |
| 15    | 408-15   | Rotor            | 1   | 34    | 408-34   | Socket Joint            | 1   | 53    | 408-53   | Guard                  | 1   |
| 16    | 408-16   | Vane             | 4   | 35    | 408-35   | Flex Spacer             | 2   | 54    | 408-54   | Safety Bar             | 1   |
| 17    | 408-17   | O-Ring           | 2   | 36    | 408-36   | Screw                   | 2   | 55    | 408-55   | Spring                 | 1   |
| 18    | 408-18   | Cylinder         | 1   | 37    | 408-37   | Inverted Retaining Ring | 1   | 56    | 408CW3   | 3" 1/32" Cut-Off Wheel | 1   |
| 19    | 408-19   | Front End Plate  | 1   | 38    | 408-38   | Screw                   | 2   |       |          |                        |     |

Call 1.800.221.9705 for questions concerning performance of the product or other inquiries.