CUTTING TOOLS

PRODUCT SAFETY INFORMATION

Please save these instructions

UNIVERSAL AIR TOOLS

AIRCAT PNEUMATIC TOOLS

OVERVIEW OF THE PRODUCT

A Cut-Off Air Tool is a compressed air powered hand-held rotary power tool driving a rotating shaft (shank, arbor or mandrel) on which an abrasive cut-off wheel is mounted.

RECOMMENDED ACCESSORIES

Accessories for a power tool are defined as items that are installed in or on the tool and become the working interface between the tool and the work piece. They are typically consummable and can be purchased separately from the tool. Accessories should be selected to match the work being done and the material being worked. All warning and recommendations of the accessory manufacturer must be followed in addition to the warning given here. Failure to observe these warnings could result in death or serious injury.

The accessories that may be used with this Cut-Off Air Tool are cut-off wheels. Cut-off Tools should only be used with an Universal Air Tools supplied wheel guard. Guard requirements and other requirements and limitations of cut-off wheel use, type, speed and size are given in the below warnings and may be given in other literature provided with the Cut-Off Air Tool.

WARNING

INFORMATION ABOUT GENERAL PRODUCT SAFETY

Failure to observe the following warnings, and to avoid these potentially hazardous situations, could result in death or serious injury.

Read and understand this and all other supplied manuals before installing, operating, repairing, maintaining, changing accessories on, or working near this product.

Only qualified and trained operators should install, adjust or use the tool.

It is your responsibility to make this safety information available to others that will operate this product.

The warnings given in this manual are for identified hazards that are foreseeable in the general use of this tool. However, specific applications may create other hazards that must be identified and reduced before using the tool.

Always install, operate, inspect and maintain this product in accordance with all applicable standards and regulations (local, state, country, federal, etc.).

Operate and maintain this tool as recommended in this manual, to prevent an unnecessary increase in noise, vibration, dust and fume hazards.

WARNING

WHEN PUTTING THE TOOL INTO SERVICE

- Before beginning a job the operator or their employer must assess all potential risks of using this product to do the job. These risks must be eliminated or appropriate controls must be implemented to reduce the risk to a safe level.
- Always use clean, dry air at 90 psig (6.2 bar/620 kPa) maximum air pressure at the inlet, unless a higher pressure rating is specified on the tool. Exceeding the maximum rated pressure (PMAX) shown on the tool may result in hazardous situations including excessive speed, rupture, or incorrect output torque or force.
- Ensure an accessible emergency shut off valve has been installed in the air supply line, and make others aware of its location.
- Install a properly sized Safety Air Fuse upstream of hose and use an anti-whip device across any hose coupling without internal shut-off, to prevent hose whipping if a hose fails or coupling disconnects.
- Whenever universal twist couplings (claw couplings) are used, lock pins shall be installed to prevent connection failure.
- Whipping hoses can cause severe injury. Do not use damaged, frayed or deteriorated air hoses and fittings, and check that all fittings are tight before applying air pressure.
- 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.
- Use only Recommended Accessories that are rated for this tool and in compliance with any information provided in the product manual. Verifying type, dimensions and maximum speed will reduce potential hazards and ensure compatibility with any supplied guard.

WARNING

USING THE TOOL SAFELY

GENERAL HAZARDS

- Always use Personal Protective Equipment appropriate for the job, the tool used and any material being worked. This may include breathing protection for dust and fumes, eye protection, hearing protection, as well as protection for injury to other body parts that may include gloves, apron, safety shoes, hard hat, and other special protective clothing and equipment.
- Air under pressure can cause severe injury. Never direct air at yourself or anyone else.
- Always turn off the air supply, bleed the air pressure and disconnect the air supply hose when not in use, before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool or any accessory.
- Keep clear of whipping air hoses. Shut off the compressed air before approaching a whipping 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. Modifications can reduce the effectiveness of safety measures and increase the risks to the operator.
- Do not use this tool for purposes other than those recommended.
- When a secondary handle is supplied, ensure it is properly installed and use two hands to maintain control when operating tool.

WORKPLACE HAZARDS

- Slips, trips and falls are major causes of workplace injury. Keep work area clean, uncluttered, ventilated and illuminated. Be aware of slippery surfaces caused by the use of the tool and also of trip hazards caused by the air line.

• For overhead work, safety helmets must be worn and the increased risks to the operator and others must be assessed and reduced to a safe level.
• Keep others a safe distance from your work area, or ensure they use appropriate Personal Protective Equipment.
• This tool is not designed for use in potentially explosive atmospheres, 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.
• Remove flammable objects from the work area and ensure that sparks and debris do not create a hazard when using this tool.

PROJECTILE HAZARDS

• Always wear eye protection when operating or performing maintenance on this tool. The grade of protection required should be assessed for each use. When operating this tool the minimum requirement is goggles or a full face shield over impact-resistant glasses with side shields. Work conducted in close or confined spaces will require additional personal protective equipment.
• Ensure work pieces are secure. Use clamps or vises to hold work piece whenever possible.
• Failure of the workpiece, the rotating parts of the tool or accessory, or debris from the material being worked, can generate high-velocity projectiles.
• Before starting this tool and during operation, the operator shall pay attention that no bystanders are in the vicinity.
• After mounting a cut-off wheel, the tool 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. 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 if the actual free speed exceeds the rated rpm. Check the free speed of the tool before installing an accessory, after all tool repairs, before each job and after every 8 hours of use. Check speed with a calibrated tachometer, without any accessory installed.
• Do not use any accessory whose maximum operating speed, as defined by its manufacturer, is less than the rated speed of the tool.
• Ensure that the accessory is correctly mounted and tightened before use.
• Inspect shaft, threads & clamping devices for damage & wear prior to installing an accessory.

NOISE HAZARDS

• Always wear hearing protection when operating this tool.
• Exposure to high noise levels can cause permanent, disabling hearing loss and other problems, such as tinnitus (ringing, buzzing, whistling or humming in the ears). Therefore, risk assessment and the implementation of appropriate controls for these hazards are essential.
• Appropriate controls to reduce the risk from noise hazards may include actions such as damping materials to prevent workpieces from “ringing”.
• If the tool has a silencer, always ensure it is in place and in good working order when the tool is being operated.
• Accessories should be selected, inspected, properly installed, maintained and replaced when worn to prevent an unnecessary increase in noise.

OPERATING HAZARDS

• Operators and maintenance personnel shall be physically able to handle the bulk, weight and power of the tool.
• 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. The operator should change posture during extended tasks, which can help avoid discomfort and fatigue.
• Use of the tool can expose the operator’s hands to hazards, including crushing, impacts, cuts, abrasions and heat. Wear suitable gloves to protect hands, however, ensure that the gloves do not restrict your ability to release the trigger or throttle mechanism.
• Avoid contact with the working end of the tool and any accessory during and after use, as they can cause servere injury including burns, abrasions and cuts.
• Grinding sparks can ignite clothing and cause severe burns. Ensure sparks do not land on clothing. Wear fire-retardant clothing and have suitable fire suppresive equipment nearby.
• To avoid accidental starting - ensure tool is in “off ” position before applying air pressure, avoid throttle when carrying, and release throttle with loss of air.
• Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel. Use only recommended lubricants.
• Do not carry or drag the tool by the hose.
• Tool and/or accessories may briefly continue their motion after throttle is released.
• 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 cut-off tool is dropped or bumped, turn off the air supply and carefully examine the cut-off wheel. Discard it if damaged, chipped or cracked. Before reuse, run the tool in a protected enclosure following the same precautions used after first mounting.
• Before the tool is put down, the throttle shall be released and the accessory shall come to a stop. Tool rests, hangers, and balancers are recommended.
• Do not use this Cut-off Tool without the furnished Wheel Guard. Do not alter the Wheel Guard. Regularly inspect the Wheel Guard to ensure it is securely mounted and without cracks or other damage. Replace a damaged Wheel Guard before using the tool.
• Guard opening must face away from the operator.
• 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.

ACCESSORY HAZARDS

• Use only sizes and types of accessories that are recommended by the tool manufacturer; do not use other types or sizes of accessories.
• Inspect all accessories prior to mounting. Do not use an accessory that is chipped, cracked, non-concentric, excessively worn or otherwise damaged.
• Do not use a cut-off wheel that has been exposed to freezing temperatures, extreme temperature changes, high humidity, solvents, water or other liquids.
• Make certain cut-off wheel properly fits the shaft. The wheel should not fit too snugly or too loosely. Plain hole wheels should have about .007” (0.17 mm) maximum diametrical clearance. Do not use reducing bushings to adapt a wheel to any shaft unless such bushings are supplied by and recommended by the wheel manufacturer.
• Where cut-off Wheels are supplied with reducing bushings, the user shall ensure that the bushing does not contact the face of the flange and that the clamping force provides sufficient rotational driving action to prevent the wheel from slipping.
• 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.
• Accessory manufacturers’ safety precautions and warnings, operating restrictions, and installation or mounting instructions shall be followed, unless it contradicts information provided in this manual or other literature provided with the tool. For contradictory information follow whichever is the most restrictive guideline.

DUST AND FUME HAZARDS

• Wear appropriate respiratory protection if dust or fumes are present in the work area.
• Dust and fumes generated when using power tools, and existing dust disturbed by their use, can cause ill health (for example, cancer, birth defects, asthma and/or dermatitis). Risk assessment and implementation of appropriate controls for these hazards are essential. The priority shall be to control them at the source.
• Direct the exhaust so as to minimize disturbance of dust in a dust-filled environment.
• All integral features or accessories for the collection, extraction or suppression of airborne dust or fumes should be correctly used and maintained in accordance with the manufacturer's instructions.
• 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.
• Do not use this tool on materials whose dust or fumes are flammable or that can cause a potentially explosive environment.
• Accessories should be selected, inspected, properly installed, maintained and replaced when worn to prevent an unnecessary increase in dust or fumes.

ENTANGLEMENT HAZARDS

• Entanglement of loose clothing, personal jewelry, neckwear, hair, gloves or other items can occur if not kept away from the working end of the tool. Entanglement can result in choking, scalping, lacerations, broken bones and/or severed extremities.

VIBRATION HAZARDS

• Power tools can vibrate in use. Exposure to vibration can cause disabling damage to the nerves and blood supply of the hands and arms. If you experience numbness, tingling, pain or whitening of the skin in your fingers or hands, stop using the tool and seek advice from a qualified health professional before resuming use.
• Hold the tool with a light but safe grip, taking account of the required hand reaction forces because the risk arising from vibration is generally greater where the grip force is higher.
• Wear warm clothing when working in cold conditions and keep your hands warm and dry.
• Support the weight of the tool in a stand, tensioner or balancer, if possible.
• Do not allow the accessory to chatter on the workpiece as this is likely to cause a substantial increase in vibration.
• Accessories should be selected, inspected, properly installed, maintained and replaced when worn to prevent an unnecessary increase in vibration levels.
• 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.

REPETITIVE MOTIONS HAZARDS

• Repetitive motions or uncomfortable positions may be harmful to your hands, arms, shoulders, neck, or other parts of the body. Stop using any tool if symptoms such as persistent or recurring discomfort, pain, throbbing, aching, tingling, numbness, burning sensations or stiffness occur. These warning signs should not be ignored. Seek advice from a qualified health professional before resuming use.

WARNING

PRODUCT SAFETY INFORMATION - WHEN MAINTAINING THE TOOL

- Keep the tool operating safely through regular preventive maintenance including regular checks of speed and vibration.
- When maintaining the tool, avoid exposure or breathing of hazardous dust and other substances deposited on the tool during use.
- 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.
- Do not remove any labels. Replace any damaged label. Ensure that all information on the tool is legible.

NOTICE

REFER TO PRODUCT INFORMATION MANUAL FOR MODEL SPECIFIC SAFETY INFORMATION.

SAFETY SYMBOL IDENTIFICATION

WEAR RESPIRATORY PROTECTION

WEAR EYE PROTECTION

WEAR HEARING PROTECTION

SAFETY INFORMATION - EXPLANATION OF SAFETY SIGNAL WORDS

DANGER INDICATES AN IMMINENTLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, WILL RESULT IN DEATH OR SERIOUS INJURY.

WARNING INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY.

CAUTION INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, MAY RESULT IN MINOR OR MODERATE INJURY OR PROPERTY DAMAGE.

NOTICE INDICATES INFORMATION OR A COMPANY POLICY THAT RELATES DIRECTLY OR INDIRECTLY TO THE SAFETY OF PERSONNEL OR PROTECTION OF PROPERTY.

PRODUCT PARTS INFORMATION

CAUTION

THE USE OF OTHER THAN GENUINE UNIVERSAL AIR TOOLS/AIRCAT REPLACEMENT PARTS MAY RESULT IN SAFETY HAZARDS, DECREASED TOOL PERFORMANCE AND INCREASED MAINTENANCE, AND MAY INVALIDATE ALL WARRANTIES.

REPAIRS SHOULD BE MADE ONLY BY AUTHORIZED TRAINED PERSONNEL. CONSULT YOUR NEAREST UNIVERSAL AIR TOOLS/AIRCAT AUTHORIZED SERVICE CENTER.

Original instructions are in English. Other languages are a translation of the original instructions. Manuals can be downloaded from ut-tools.com