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Fixtured Air Drill

Product Safety Information



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Product Description

A Fixtured Air Drill is a compressed air powered, rotary power tool whose output shaft (shank, arbor or mandrel) is typically fitted with a chuck or taper socket to hold and drive an accessory. The fixture in which the tool is permanently mounted may be automated or manually operated.

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 a Fixtured Air Drill are drill bits, counter sinks, hole saws, hones and reamers. Tappers are Air Drills designed to be used with thread taps. Requirements and limitations of accessory use, type, speed and size are given in the below warnings and may be given in other literature provided with the Fixtured Air Drill.

WARNING

General Product Safety Information

- 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.
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WARNING

Product Safety Information - When Placing the Tool in 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.
- 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.

WARNING

Product Safety Information - When Using the Tool

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 suspension device is used, ensure that it is securely fastened.
- When a tool is fixture mounted, check that the tool is securely fastened in the fixture before each job and after every 8 hours of use. Failure to secure may result in injury due to unexpected motion, or dropping of the 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.
- 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.

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 and may include impact-resistant glasses with side shields, goggles, or a full face shield over those glasses.
- 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.
- Do not use any accessory whose maximum operating speed, as defined by its manufacturer, is less than the rated speed of the tool.
- Securely tighten drill bits or other accessories in the chuck before operating the drill. When using a chuck key, remove it before starting the drill.

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

- 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. The operator should change posture during extended tasks, which can help avoid discomfort and fatigue.
- Avoid contact with the working end of the tool and any accessory during and after use, as they can cause severe injury including burns, abrasions and cuts.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel. Use only recommended lubricants.
- Tool and/or accessories may briefly continue their motion after throttle is released.
- For reversible models note the position of the reversing mechanism before operating the tool so as to be aware of the direction of rotation when operating the throttle.

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 drill bits and other cutting accessories before use. Do not use these accessories if dull or damaged.
- 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.
- Never hold the rotating chuck, drill bit or other accessory, even when wearing gloves.

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.



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



Read Manuals Before
Operating Product

**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 Ingersoll Rand 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 Ingersoll Rand Authorized Service Center.

NOTICE

Original instructions are in English. Other languages are a translation of the original instructions. Manuals can be downloaded from ingersollrandproducts.com. Refer all communications to the nearest **Ingersoll Rand** Office or Distributor.



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