ATD-2143
3/8” Reversible Air Drill With Keyless Chuck
Owner’s Manual

Features:
- Perfect tool for all light-duty drilling needs
- Keyless chuck allows quick change of bits

Specifications:
- Free Speed: 1,800 rpm
- 3/8” Keyless Chuck
- Average Air Consumption: 4 CFM
- Inlet: 1/4” NPT(f)
- Length: 7.7”
- Weight: 2.65 lbs.

IMPORTANT:
Before using this product, read, understand and follow all safety rules, operating instructions.
Retain this manual for future reference.

Technical Data

Chuck size	3/8” (10mm)
Free speed	1,800 rpm
Air consumption	4 CFM (114 l/min)
Operating pressure	90 psi (6.3bar)
Air inlet size	1/4” NPT
A weighted sound pressure level	86.5 dB(A)
Sound power level	97.5 dB(A)
Vibration in the handle	1.20 m/s2

SAFETY

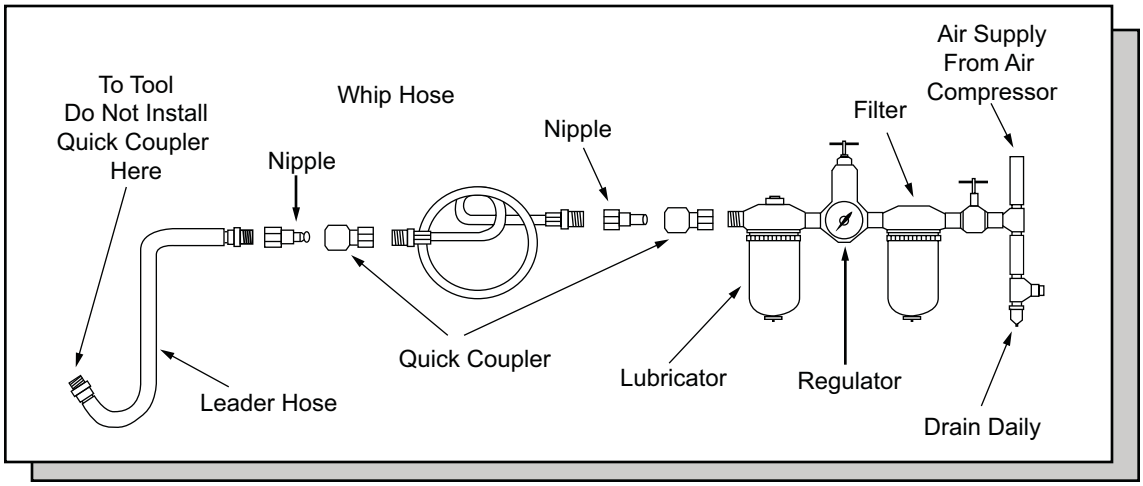
1. Always wear safety goggles or glasses.
2. Always ensure the air tool is switched off before connecting to air supply.
3. Disconnect the air tool from the air supply before changing any accessories and before servicing any type of machine.
4. Always keep your air tool clean and lubricated. Daily lubrication is essential to avoid internal corrosion and possible failure.
5. Do not wear watches, rings bracelets or loose clothing when using air tools.
6. Using only light weight coil hoses from a tool to the wall or compressor coupling. Do not use quick change couplings onto the machine as vibration can cause the coupling to fail.
7. Do not overload the air tool. Allow the tool to operate at its optimum speed for maximum efficiency.
8. Do not increase the air pressure above the manufacturer’s recommended level, as excessive overload can cause the machine casing to split. Also this creates excessive wear on moving parts and possible failure.
9. In the interests of safety and possible damage to the machine/operator, always ensure that the air tool has stopped before putting it down after use.
10. Always ensure that the workplace is firmly secured leaving both hands free to control the machine.
11. Always ensure that the accessories are designed for use with the machine. Also correctly and securely fasten before connecting the machine to the air supply.
12. When operating always wear an appropriate face mask or respiratory equipment.

OPERATING INSTRUCTIONS

Air supply

1. Ensure the air valve (or trigger) is in the “off” position before connecting to the air supply.
2. You will require an air pressure of 90 psi, and an air flow according to specification.
3. **WARNING!** Ensure the air supply is clean and does not exceed 90 psi while operating the drill. Too high of an air pressure and unclean air will shorten the product life due to excessive wear, and may be dangerous causing damage or personal injury.
4. Drain the air tank daily. Water in the air line will damage the drill.
5. Clean air inlet filter weekly.
6. Line pressure should be increased to compensate for unusually long air hoses (over 8 meters). The hose diameter should be 3/8” I.D.
7. Keep hose away from heat, oil and sharp edges. Check hose for wear, and make certain that all connections are secure.

Typical Air Supply Installation



Lubrication

An automatic in-line filter/regulator/lubricator is recommended (as shown above) as it increases tool life and keeps the tool in sustained operation. The in-line lubricator should be regularly checked and filled with air tool oil. Proper adjustment of the in-line lubricator is performed by placing a sheet of paper next to the exhaust ports and holding the throttle open approximately 30 seconds. The lubricator is properly set when a light stain of oil collects on the paper. Excessive amounts of oil should be avoided.
In the event that it becomes necessary to store the tool for an extended period of time (overnight, weekend, etc.), it should receive a generous amount of lubrication at that time. The tool should be run for approximately 30 seconds to ensure oil has been evenly distributed throughout the tool. The tool should be stored in a clean and dry environment.

- It is most important that the tool be properly lubricated by keeping the air line lubricator filled and correctly adjusted. Without proper lubrication the tool will not work properly and parts will wear prematurely.

- Use the proper lubricant in the air line lubricator. The lubricator should be of low air flow or changing air flow type, and should be kept filled to the correct level. Use only recommended lubricants, specially made for pneumatic applications. Substitutes may harm the rubber compounds in the tools O-rings and other rubber parts.

IMPORTANT!!!

If a filter/regulator/lubricator is not installed on the air system, air operated tools should be lubricated at least once a day or after 2 hours work with 2 to 6 drops of oil, depending on the work environment, directly through the male fitting in the tool housing.

Loading and operation

WARNING: Ensure you read, understand and apply safety instructions before use.
1. Connect the tool to the air hose.
2. Press the trigger to operate the tool.
3. To change direction: Switch the button at the handle. Direction of ”R” for reverse and “F” for forward
4. The flow of air may be regulated by adjusting flow valve at the base of the handle.

DO NOT use any additional force upon the tool.
DO NOT allow tool to free run for an extended period of time as this will shorten its life.

Maintenance

WARNING: Disconnect drill from air supply before changing accessories, servicing or performing maintenance. Replace or repair damaged parts. Use genuine parts only. Non-authorized parts may be dangerous and will invalidate the warranty.

1. Lubricate the air drill daily with a few drops of air tool oil dripped into the air inlet
2. Clean the drill after use. **DO NOT** use worn or damaged accessories.
3. Loss of power or erratic action may be due to the following:
   a) Excessive drain on the air line.
   b) Moisture or restriction in the air pipe; Incorrect size or type of hose connectors. To correct this, check the air supply.
   c) Grit or gum deposits in the drill may also reduce performance. If your model has an air strainer (located in the area of the air inlet), remove the strainer and clean it.
4. When not in use, disconnect from air supply, clean drill and store in a safe, dry, location away from children.

The following form lists the common operating system with problem and solutions. Please read the form carefully and follow it.

WARNING: If any of the following symptoms appears during your operating, stop using the tool immediately, or serious personal injury could result. Only a qualified persons or an authorized service center can perform repairs or replacement of tool. Disconnect tool from air supply before attempting repair or adjustment. When replacing O-rings or cylinder, lubricate with air tool oil before assembly.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	REMEDIES
Tool runs at normal speed but loses speed under load	▪ Motor parts worn.	▪ Lubricating clutch housing.
	▪ Cam clutch worn or sticking due to lack of lubricant.	▪ Check for excess clutch oil. Clutch cases need only be half full. Overfilling can cause drag on high speed clutch parts. A typical oiled drill requires 1⁄2 ounce of oil. **NOTE:** Heat usually indicates insufficient grease in chamber. Severe operating conditions may require more frequent lubrication.
Tool runs slowly. Air flows slightly from exhaust	▪ Motor parts jammed with dirt particles	▪ Check air inlet filter for blockage.
	▪ Power regulator in closed position	▪ Pour air tool lubricating oil into air inlet as per instructions.
	▪ Air flow blocked by dirt.	▪ Operate tool in short bursts quickly reversing rotation back and forth where applicable. ▪ Repeat above as needed.
Tool will not run. Air flows freely from exhaust	▪ One or more motor vanes stuck due to material build up.	▪ Pour air tool lubricating tool into air inlet.
		▪ Operate tool in short bursts of forward and/or reverse rotation where applicable.
		▪ Tap motor housing gently with plastic mallet.
		▪ Disconnect supply. Free motor by rotating drive manually where applicable
Tool will not shut off	▪ O-rings throttle valve dislodged from seat inlet valve.	▪ Replace O-ring.
Note: Repairs should be carried out by qualified personnel only.		

ATD AIR®

WARRANTY

1 YEAR LIMITED WARRANTY

THIS WARRANTY AND CONFIRMED RECEIPT(S) SHOULD BE *RETAINED BY THE CUSTOMER* AT ALL TIMES

PURCHASED FROM: _____

DATE PURCHASED: _____

INVOICE/RECEIPT NUMBER: _____

Your ATD-2143 is warranted for a period of 12 months from the original purchase date.

For a period of one (1) year from your purchase date, ATD Tools, Inc. will repair or replace (at its option) without charge, your ATD product if it was purchased new and the product has failed due to a defect in material or workmanship which you experienced during normal use of the product. This limited warranty is your exclusive remedy.

To access the benefits of this warranty, contact your supplier, or point of sale directly. You may be advised to return the product under warranty, freight prepaid, to your supplier for warranty determination.

If this ATD product is altered, abused, misused, modified, or undergoes service by an unauthorized technician, your warranty will be void. We are not responsible for damage to ornamental designs you place on this ATD product and such ornamentation should not cover any warnings or instructions or they may void the warranty. This warranty does not cover scratches, superficial dents, and other abrasions to the paint finish that occur under normal use. It also does not cover normal wear items such as but not limited to brushes, batteries, drill bits, drill chucks, pads or blades.

Subject to the law in your state:
(1) Your sole and exclusive remedy is repair or replacement of the defective product as described above.
(2) ATD is not liable for any incidental damages, including but not limited to, lost profits and unforeseeable consequences.
(3) The repair and replacement of this product under the express limited warranty described above is your exclusive remedy and is provided in lieu of all other warranties, express or implied. All other warranties, including implied warranties and warranties of merchantability or fitness for a particular purpose are disclaimed and, if disclaimer is prohibited, these warranties are limited to one year from your date of purchase of this product.

Some states' laws do not allow limited durations on certain implied warranties and some states' laws do not allow limitations on incidental or consequential damages. You should consult the law in your state to determine how your rights may vary.

[Affix receipt or invoice here for safe keeping]