



# ATD-2131

## 1/4" MINI AIR DIE GRINDER

### **WARNING**

- **MAXIMUM RPM OF 25,000**
- **ALWAYS WEAR APPROVED EAR AND EYE PROTECTION.**
- **ALWAYS OPERATE AT MAX. AIR PRESSURE OF 90 PSIG, 6.2 BAR.**
- **REPETITIVE MOTION/EXTENDED EXPOSURE TO VIBRATION MAY HARM HANDS/ARMS.**
- **ACCESSORY USED MUST BE RATED HIGHER THAN 25,000 RPM**

### **WARNING**



**ALWAYS READ INSTRUCTIONS BEFORE USING POWER TOOLS**

*THIS INSTRUCTION MANUAL CONTAINS IMPORTANT SAFETY INFORMATION*

*READ CAREFULLY AND UNDERSTAND ALL INFORMATION BEFORE OPERATING THIS TOOL!*

*SAVE THIS MANUAL FOR FUTURE REFERENCE.*

### **WARNING**

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.

### **S P E C I F I C A T I O N S**



Free Speed . . . . .	25,000 RPM
Collet Size . . . . .	1/4"
Air Inlet . . . . .	1/4"-18 NPT
Hose Size . . . . .	3/8" I.D.
Rec. Air Pressure . . . . .	90 psig (6.2 bar)
Avg. Air Consumption . . . . .	2.81 cfm
Sound Level . . . . .	97 dBA
Length . . . . .	4.7"
Shipping Weight . . . . .	1.5 Lbs.



# ⚠ WARNING!

## FAILURE TO OBSERVE THESE WARNINGS COULD RESULT IN INJURY.

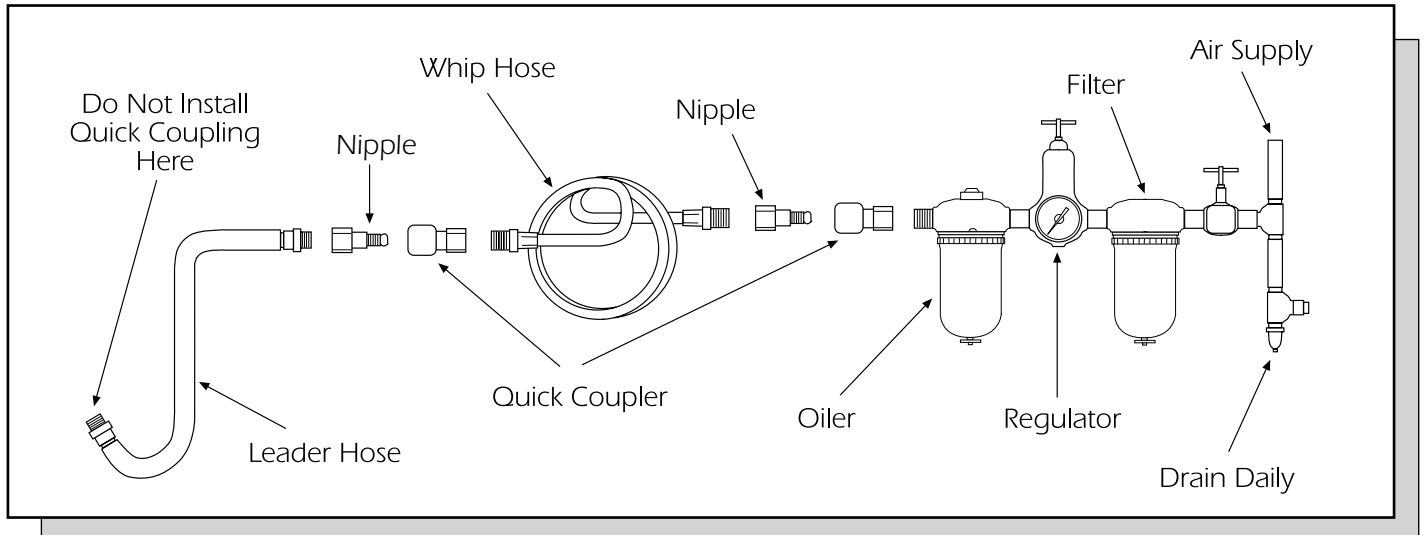
THIS INSTRUCTION MANUAL CONTAINS IMPORTANT SAFETY INFORMATION.

READ THIS INSTRUCTION MANUAL CAREFULLY AND UNDERSTAND ALL INFORMATION BEFORE OPERATING THIS TOOL.

- Always operate, inspect and maintain this tool in accordance with American National Standards Institute Safety Code of Portable Air Tools (ANSI B186.1) and any other applicable safety codes and regulations.
- For safety, top performance and maximum durability of parts, operate this tool at 90 psig 6.2 bar max air pressure with 3/8" diameter air supply hose.
- Always wear impact-resistant eye and face protection when operating or performing maintenance on this tool. Always wear hearing protection when using this tool. 
- High sound levels can cause permanent hearing loss. Use hearing protection as recommended by your employer or OSHA regulation.
- Keep the tool in efficient operating condition.
- Operators and maintenance personnel must be physically able to handle the bulk, weight and power of this tool.
- Air under pressure can cause severe injury. Never direct air at yourself or others. Always turn off the air supply, drain hose of air pressure and detach tool from air supply before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool. Failure to do so could result in injury. Whip hoses can cause serious injury. Always check for damaged, frayed or loose hoses and fittings, and replace immediately. Do not use quick detach couplings at tool. See instructions for correct set-up. 
- Air powered tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions over extended periods of time may be harmful to your hands and arms. Discontinue use of tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.
- Place the tool on the work before starting the tool. Do not point or indulge in any horseplay with this tool.

- Slipping, tripping and/or falling while operating air tools can be a major cause of serious injury or death. Be aware of excess hose left on the walking or work surface. 
- Keep body working stance balanced and firm. Do not overreach when operating the tool.
- Anticipate and be alert for sudden changes in motion during start up and operation of any power tool.
- Do not carry tool by the hose. Protect the hose from sharp objects and heat.
- Tool shaft may continue to rotate briefly after throttle is released. Avoid direct contact with accessories during and after use. Gloves will reduce the risk of cuts or burns.
- Keep away from rotating end of tool. Do not wear jewelry or loose clothing. Secure long hair. Scalping can occur if hair is not kept away from tool and accessories. Choking can occur if neckwear is not kept away from tool and accessories. 
- Wear gloves and protective clothing to avoid injuries caused by chips or pieces, malfunctioning accessories, or improperly clamped work.
- When possible, secure work with clamps or vise so both hands are free to operate tool.
- Correct grinding wheel mounting is necessary to prevent injury from broken wheels. Do not use chipped or cracked grinding wheels. Grinding wheels should be a free fit on the spindle to prevent stress at the hole. Use only wheel collars what come with the grinder for mounting the grinding wheel. Flat washers or other adapters may over stress the wheel. Always use heavy paper blotter discs between the wheel collars and the grinding wheel. Tighten the wheel on the spindle to prevent spin off when the air grinder is turned off.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- Don't force tool beyond its rated capacity.
- Do not remove any labels. Replace any damaged labels.
- Use accessories recommended by ATD Tools.

## Operating Instructions • Warning Information • Parts Breakdown



### Air Supply...

Tools of this class operate on a wide range of air pressures. It is recommended that air pressure of these tools measure 90 PSI at the tool while running free. Higher pressure (over 90 psig; 6.2 bar) raises performance beyond the rated capacity of the tool which will shorten the tool's life because of faster wear and could cause injury.

Always use clean, dry air. Dust, corrosive fumes and/or water in the air line will cause damage to the tool. Drain the air tank daily. Clean the air inlet filter screen on at least a weekly schedule. The recommended hookup procedure can be viewed in the above figure.

The air inlet used for connecting air supply, has standard 1/4" NPT. Line pressure should be increased to compensate for unusually long air hoses (over 25 feet). Minimum hose diameter should be 3/8" I.D. and fittings should have the same inside dimensions and be tightly secured.

### Operating Instructions...

When using the grinder be careful not to exert excessive force. Too much force could be hazardous if it caused the cutting tool spindle to bend or break.

The burning of the work piece or excessive speed reduction indicated too much force being applied. Changing to a free cutting tool may be better for the desired rate of speed and stock removal.

Avoid hazardous condition by making sure there is sufficient gripping force on the spindle of the cutting tool by placing the spindle 7/16" or more inside the collet.

### Troubleshooting...

Other factors outside the tool may cause loss of power or erratic action. Reduced compressor output, excessive drain on the air line, moisture or restrictions in the air pipes or the use of hose connections of improper size or poor conditions may reduce air supply. Grit or gum deposits in the tool may cut power and may be corrected by cleaning the strainer and flushing out the tool with gum solvent oil or an equal mixture of SAE #10 and kerosene. If outside conditions are in order, disconnect tool from hose and take tool to your nearest authorized service center.

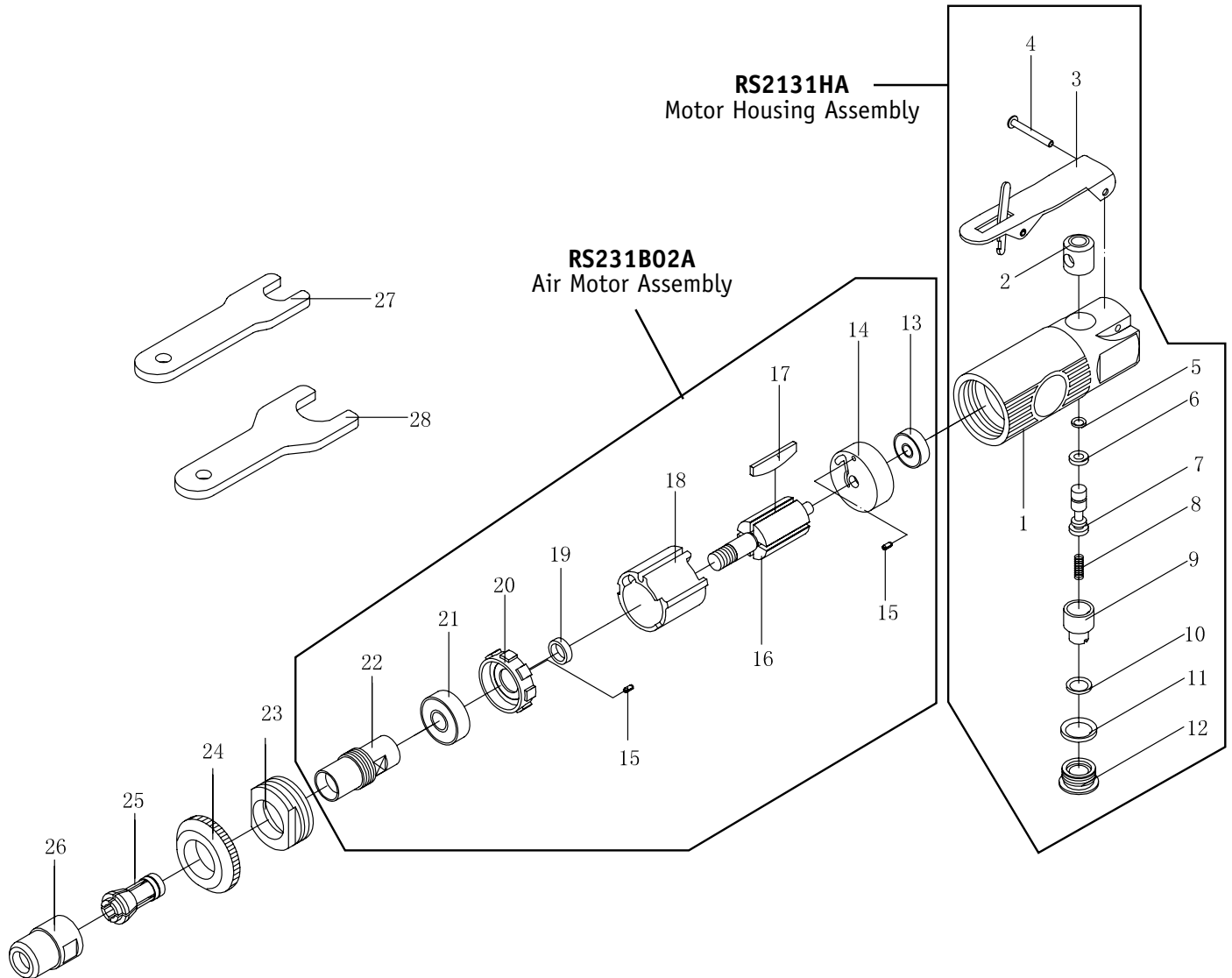
### Lubrication & Maintenance...

Lubricate the air motor daily with quality air tool oil. If no air line oiler is used, run 1/2 oz. of oil through the tool. The oil can be squirted into the tool air inlet or into the hose at the nearest connection to the air supply, then run the tool. Overfilling will cause a reduction in the power of the tool.

**WARNING:** After an air tool has been lubricated, oil will discharge through the exhaust port during the first few seconds of operation. The exhaust port must be covered with a towel before applying air pressure to prevent serious injury.

# ATD-2131

## 1/4" Mini Air Die Grinder



Ref. No.	Part No.	Description
1-12	RS2131HA	Motor Housing Assembly
13-22	RS231B02A	Air Motor Assembly
23	RS231B28	Retainer
24	RS231B29	Housing Cap
25	RS26437	1/4" Collet
26	RS26438	Collect Nut
27	RS26439	Wrench
28	RS26440	Wrench

Only parts indentified by Part No. above are available for purchase.