



**ATD AIR®**

**ATD-2181**

## **Straight Line Sander Owner's Manual**



### **Features:**

- Perfect for feathering body filler on large flat areas
- Two handle design for comfortable operation
- Dual piston design provides efficient power and prevents stalling

### **Specifications:**

- Strokes per Minute: 2,500
- Pad Size: 2.5" x 15.5"
- Avg. Air Consumption: 6 CFM
- Inlet: 1/4" NPT(f)
- Length: 15.5"
- Weight: 5.29 lbs.

## **IMPORTANT:**

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

## **Technical Data**

Free Speed: 2500/min  
Air Consumption: 6 CFM  
Max air pressure: 90 psi  
Air inlet : 1/4" NPT  
Pad Size: 2-1/2" x 16"

## **SAFETY**

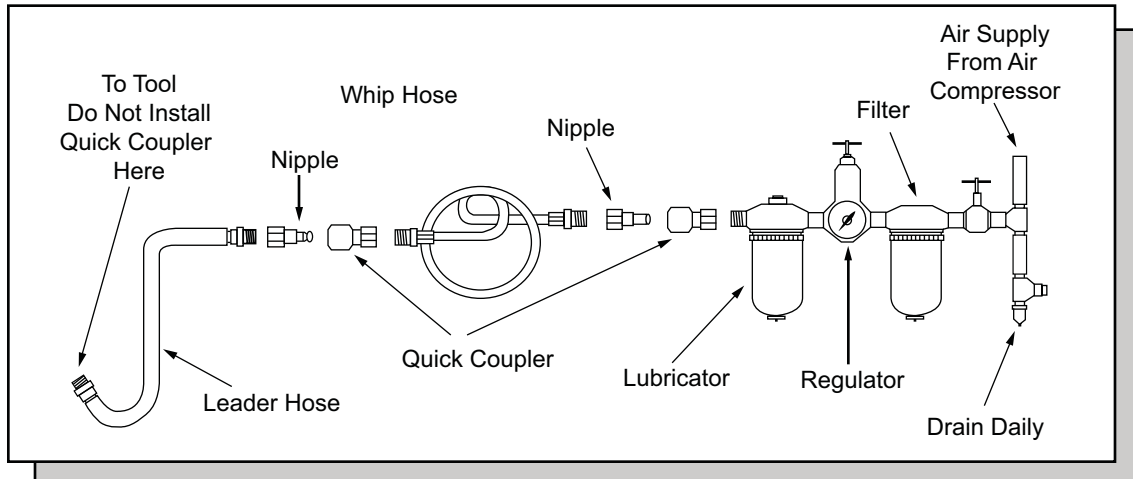
1. Always wear safety goggles or glasses.
2. Always ensure the air tool is switched off before connecting to air supply.
3. Disconnect the air tool from the air supply before changing any accessories and before servicing any type of machine.
4. Always keep your air tool clean and lubricated. Daily lubrication 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 sander. 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 sander.
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



## VIBRATION PRECAUTIONS

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

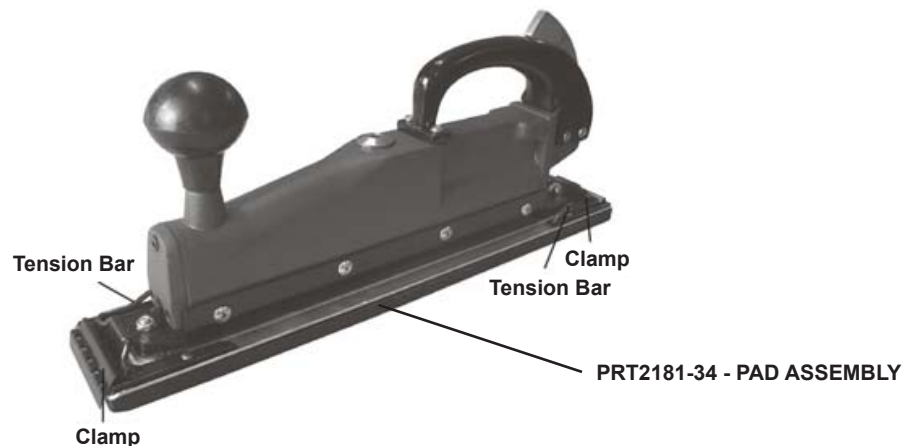
1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
3. Wear suitable gloves to reduce the vibration effects on the user.
4. Use tools with the lowest vibration when there is a choice.
5. Include vibration-free periods each day of work.
6. Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.
7. To reduce vibration, maintain tool as explained in this manual. If abnormal vibration occurs, stop immediately.

## Tool Set Up

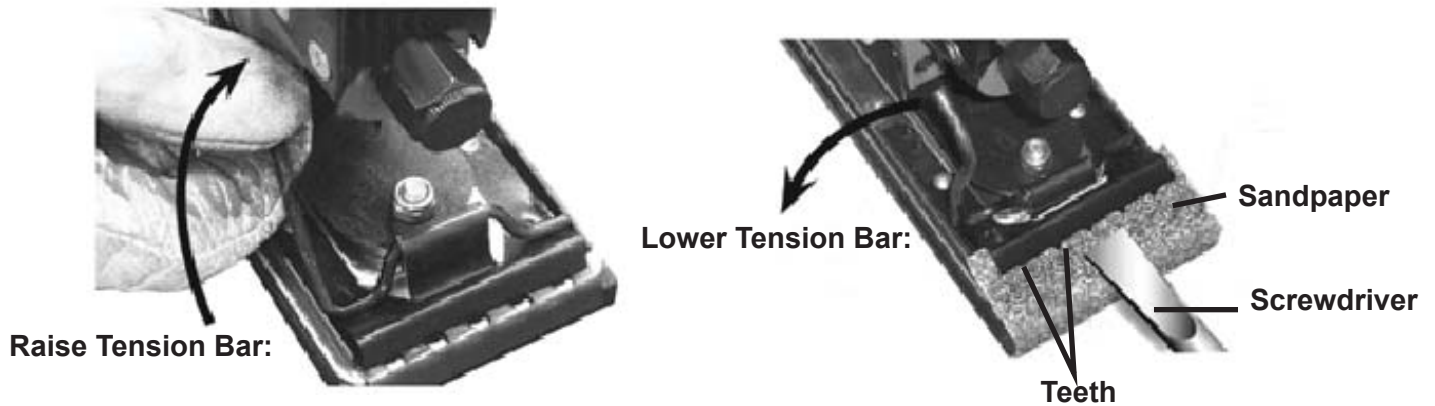
**WARNING: TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:** Turn off the tool, detach the air supply, safely discharge any residual air pressure in the tool, and release the Trigger before performing any inspection, maintenance, or cleaning procedures.

## TO PREVENT SERIOUS INJURY:

Do not adjust or tamper with any control or component in a way not specifically explained within this manual. Improper adjustment can result in tool failure or other serious hazards.



## To install the sandpaper (sold separately):



1. Pull up on the tension bar at each end of the sander.
2. Center the sander over the back side of the sandpaper. Slide one end of the sandpaper under the teeth. Hold in place with a screwdriver (sold separately) and lower the tension bar to secure the end.
3. Check that the sandpaper is aligned along the length of the sanding pad and slide the sandpaper under the teeth at the other end of the sander, pushing the sander towards the clamped end to make sure the sandpaper is taut. Hold in place with the screwdriver and lower the tension bar.

To remove the sandpaper: Pull up on the tension bar at each end of the inline sander and pull out the sandpaper.

## Work Piece and Work Area Set Up

1. Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent distraction and injury.
2. Route the air hose along a safe route to reach the work area without creating a tripping hazard or exposing the air hose to possible damage. The air hose must be long enough to reach the work area with enough extra length to allow free movement while working.
3. Secure loose workpieces using a vise or clamps (not included) to prevent movement while working.
4. There must not be hazardous objects (such as utility lines or foreign objects) nearby that will present a hazard while working.

## General Operating Instructions

1. If an automatic oiler is not used, add a few drops of pneumatic tool oil to the airline connection before use. Add a few drops more after each hour of continual use.
2. Install a sheet of sandpaper onto the sander.
3. Connect the sander to the air compressor's hose. If leaking is detected, disconnect the air hose and repair before use.
4. Firmly grip the handle with one hand and the knob with the other hand.
5. Depress the trigger before making contact with the work surface to ensure the inline sander does not jump from your hands.
6. Move the inline sander along the work surface in a smooth steady motion. Keep the sander moving from side to side to avoid sanding a pattern into the work surface.  
Note: Do not put too much pressure on the inline sander while sanding. Let the weight of the tool do the work. If the inline sander stalls during use, release the trigger immediately.
7. If the tool requires more force to accomplish the task, verify that the tool receives sufficient, unobstructed airflow (CFM) and increase the pressure (PSI) output of the regulator up to the maximum air pressure rating of this tool.  
**CAUTION! TO PREVENT INJURY FROM TOOL OR ACCESSORY FAILURE:** Do not exceed the tool's maximum air pressure rating. If the tool still does not have sufficient force at maximum pressure and sufficient airflow, then a larger tool may be required.
8. To prevent accidents, turn off the tool, detach the air supply, safely discharge any residual air pressure in the tool, and release the trigger after use. Clean external surfaces of the tool with clean, dry cloth, and apply a thin coat of tool oil. Then store the tool indoors out of children's reach.

## MAINTENANCE

Procedures not specifically explained in this manual must be performed only by a qualified technician

**TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:** Turn off the tool, detach the air supply, safely discharge any residual air pressure in the tool, and release the throttle and/or turn the switch to its off position before performing any inspection, maintenance, or cleaning procedures.

**TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:** Do not use damaged equipment. If abnormal noise, vibration, or leaking air occurs, have the problem corrected before further use.

**TO PREVENT SERIOUS INJURY FROM EXPLOSION:** Lubricate the tool only with specified lubricants. Other lubricants may damage the mechanism and may be highly flammable, causing an explosion.

## Cleaning, Maintenance, and Lubrication

**NOTE:** These procedures are in addition to the regular checks and maintenance explained as part of the regular operation of the air-operated tool.

1. Daily - Air supply maintenance: Every day, maintain the air supply according to the component manufacturer's instructions. Maintain the lubricator's oil level. Drain the moisture filter regularly. Performing routine air supply maintenance will allow the tool to operate more safely and will also reduce wear on the tool.
2. After each use, wipe off the tool, clean out any accumulated saw dust, and replace the sandpaper as needed.
3. If the trigger begins to stick, apply a few drops of oil and pump the trigger to distribute the oil.

## TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	REMEDIES
Tool runs at normal speed but loses speed under load	<ul style="list-style-type: none"> <li>▪ Motor parts worn.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lubricating clutch housing.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Cam clutch worn or sticking due to lack of lubricant.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Check for excess clutch oil. Clutch cases need only be half full. Overfilling can cause drag on high speed clutch parts. A typical oiled straight line sander requires 1/2 ounce of oil.</li> </ul> <p><b>NOTE:</b> Heat usually indicates insufficient grease in chamber. Severe operating conditions may require more frequent lubrication.</p>
Tool runs slowly. Air flows slightly from exhaust	<ul style="list-style-type: none"> <li>▪ Motor parts jammed with dirt particles</li> </ul>	<ul style="list-style-type: none"> <li>▪ Check air inlet filter for blockage.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Power regulator in closed position</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pour air tool lubricating oil into air inlet as per instructions.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Air flow blocked by dirt.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Operate tool in short bursts quickly reversing rotation back and forth where applicable.</li> <li>▪ Repeat above as needed.</li> </ul>
Tool will not run. Air flows freely from exhaust	<ul style="list-style-type: none"> <li>▪ One or more motor vanes stuck due to material build up.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pour air tool lubricating tool into air inlet.</li> </ul>
		<ul style="list-style-type: none"> <li>▪ Operate tool in short bursts of forward and/or reverse rotation where applicable.</li> </ul>
		<ul style="list-style-type: none"> <li>▪ Tap motor housing gently with plastic mallet.</li> </ul>
		<ul style="list-style-type: none"> <li>▪ Disconnect supply. Free motor by rotating drive manually where applicable</li> </ul>
Tool will not shut off	<ul style="list-style-type: none"> <li>▪ O-rings throttle valve dislodged from seat inlet valve.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Replace o-ring.</li> </ul>

Note: Repairs should be carried out by qualified personnel only.



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

PURCHASED FROM: \_\_\_\_\_

DATE PURCHASED: \_\_\_\_\_

INVOICE/RECEIPT NUMBER: \_\_\_\_\_

Your ATD-2181 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]