



ATD AIR

ATD-2142

Air Body Saw Owner's Manual



SPECIFICATIONS

Strokes Per Minute.....	10,000
Stroke Length.....	.354"
Exhaust.....	Front
Average Air Consumption.....	2.5 CFM
Inlet.....	1/4" NPT
Length.....	9.25" (without blade)
Weight.....	1.45 lbs.



WARNING





Always wear ANSI approved safety goggles when using this product. Normal use of this product is likely to expose the user to dust and/or microscopic particles containing chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Wash hands after handling. Always wear appropriate safety equipment and clothing when using this product. Study, understand and follow all instructions provided with this product.



SAFETY INFORMATION



Please read and understand this entire manual before attempting to assemble, operate or install the product. If you have any questions regarding the product, please contact your distributor or sales agent.

⚠ WARNINGS IMPROPER OPERATION OR MAINTENANCE OF THIS PRODUCT COULD RESULT IN SERIOUS INJURY PROPERTY DAMAGE. READ AND UNDERSTAND ALL WARNINGS AND OPERATION INSTRUCTIONS BEFORE USING THIS EQUIPMENT. WHEN USING AIR TOOLS, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF PERSONAL INJURY.

⚠ WARNINGS RISK OF EYE OR HEAD INJURY 	
WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> • Air powered equipment and power tools are capable of propelling materials such as fasteners, metal chips, sawdust and other debris at high speed which could result in serious eye injury. 	<ul style="list-style-type: none"> • Always wear ANSI approved Z87.1 safety glasses with side shields. • Never leave operating tool unattended. Disconnect air hose when tool is not in use.
<ul style="list-style-type: none"> • Compressed air can be hazardous. The air system can cause injury to soft tissue areas such as eyes, ears, etc. Particles or objects propelled by the stream can cause injury. 	<ul style="list-style-type: none"> • For additional protection use an approved face shield in addition to safety glasses.
<ul style="list-style-type: none"> • Tool attachments can become loose or break and fly apart propelling articles at the operator and others in the work area. 	<ul style="list-style-type: none"> • Make sure that any attachments are securely assembled.


⚠ WARNINGS RISK OF FIRE OR EXPLOSION 	
WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> • Abrasive tools such as sanders and grinders, rotating tools such as drills, and impact tools such as nailers, staplers, wrenches, hammers and reciprocating saws are capable of generating sparks, which could result in ignition of flammable materials. 	<ul style="list-style-type: none"> • Never operate tools near flammable substances such as gasoline, naphtha, cleaning solvents, etc. • Work in a clean, well-ventilated area free of combustible materials. • Never use oxygen, carbon dioxide or other bottled gases as a power source for air tools.
<ul style="list-style-type: none"> • Exceeding the maximum pressure rating of tools or accessories could cause an explosion resulting in serious injury. 	<ul style="list-style-type: none"> • Use compressed air regulated to a maximum pressure at or below the rated pressure of any attachments. • Never connect to an air source that is capable of exceeding 200 psi. • Always verify prior to using the tools that the air source has been adjusted to the rated air pressure range.


 WARNINGS RISK OF LOSS OF HEARING 	
WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> • Long term exposure to noise produced from the operation of air tools can lead to permanent hearing loss. 	<ul style="list-style-type: none"> • Always wear ANSI S3.19 hearing protection.


 WARNINGS INHALATION HAZARD 	
WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> • Abrasive tools, such as grinders, sanders and cut-off tools generate dust and abrasive materials, which can be harmful to human lungs and respiratory system. 	<ul style="list-style-type: none"> • Always wear properly fitting facemask or respirator when using such tools.
<ul style="list-style-type: none"> • Some materials such as adhesives and tar contain chemicals whose vapors could cause serious injury with prolonged exposure. 	<ul style="list-style-type: none"> • Always work in a clean, dry, well-ventilated area.

⚠ WARNINGS RISK OF INJURY

WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> • A tool left unattended, or with the air hose attached, can be activated by unauthorized persons leading to their injury or injury to others. 	<ul style="list-style-type: none"> • Remove air hose when tool is not in use and store tool in secure location away from reach of children and untrained users.
<ul style="list-style-type: none"> • Air tools can propel fasteners or other materials throughout the work area. 	<ul style="list-style-type: none"> • Use only parts, fasteners and accessories recommended by the manufacturer. • Keep work area clean and free of clutter. Keep children and others away from tool while it is in operation. • Keep work area well lit.
<ul style="list-style-type: none"> • A wrench or a key that is left attached to a rotating part of the tool increases the risk of personal injury. 	<ul style="list-style-type: none"> • Remove adjusting keys and wrenches before turning the tool on.
<ul style="list-style-type: none"> • Using inflator nozzles for duster applications can cause serious injury. 	<ul style="list-style-type: none"> • DO NOT use inflator nozzles for duster applications.
<ul style="list-style-type: none"> • Air tools can become activated by accident during maintenance or tool changes. 	<ul style="list-style-type: none"> • Remove air hose to lubricate or add grinding attachments, sanding discs, drills, etc. to the tool. • Never carry the tool by hose. • Avoid unintentional starting. Don't carry hook-up tool with finger on trigger. • Only an authorized service representative should do repair servicing.
<ul style="list-style-type: none"> • Air tools can cause the workpiece to move upon contact, leading to injury. 	<ul style="list-style-type: none"> • Use clamps or other devices to prevent movement.
<ul style="list-style-type: none"> • Loss of control of the tool can lead to injury to self or others. 	<ul style="list-style-type: none"> • Never use tool while using drugs or alcohol. • Don't overreach. Keep proper footing and balance. • Keep handles dry, clean and free from oil/grease. • Stay alert. Watch what you are doing. Use common sense. Do not operate tool when you are tired.
<ul style="list-style-type: none"> • Poor quality, improper or damaged tools such as grinding wheels, chisels, sockets, drills, nailers, staplers, etc., can fly apart during operation, propelling particles throughout the work area causing serious injury. 	<ul style="list-style-type: none"> • Always use tool attachments rated for the speed of the power tool. • Never use tools, which have been dropped, impacted or damaged by use. • Use only impact grade sockets on an impact wrench. • Do not apply excessive force to the tool; let the tool perform the work.
<ul style="list-style-type: none"> • Fasteners could ricochet or be propelled causing serious injury or property damage. 	<ul style="list-style-type: none"> • Never point discharge of tool at self or others. • Do not pull trigger unless tool contact safety device is against work surface. • Never attempt to drive fasteners into hard surfaces such as steel, concrete, or tile. • Avoid driving a fastener on top of another fastener. • Position tool carefully so that fasteners will be delivered to the proper location.
<ul style="list-style-type: none"> • Improperly maintained tools and accessories can cause serious injury. 	<ul style="list-style-type: none"> • Maintain the tool with care. • Keep a cutting tool sharp and clean. A properly maintained tool, with sharp cutting edges, reduces the risk of binding and is easier to control.
<ul style="list-style-type: none"> • There is a risk of bursting if the tool is damaged. 	<ul style="list-style-type: none"> • Check for misalignment or binding of moving parts, breakage of parts and any other condition that affects the tool's operation. If damaged, have the tool serviced before using.
<ul style="list-style-type: none"> • Use only accessories identified by the manufacturer to be used with specific tools. 	<ul style="list-style-type: none"> • Use of an accessory not intended for use with the specific tools increase the risk of injury to persons.

 ⚠️ WARNINGS RISK OF ELECTRIC SHOCK	
WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> Using air tools to attach electrical wiring can result in electrocution or death. 	<ul style="list-style-type: none"> Never use nail/staplers to attach electrical wiring while energized.
<ul style="list-style-type: none"> This tool is not provided with an insulated gripping surface. Contact with a “live” wire will also make exposed metal parts of the tool “live” and can result in electrocution or death. 	<ul style="list-style-type: none"> Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.
<ul style="list-style-type: none"> Fasteners coming in contact with hidden electrical wiring could cause electrocution or death. 	<ul style="list-style-type: none"> Thoroughly investigate the workpiece for possible hidden wiring before performing work.

 ⚠️ WARNINGS RISK OF ENTANGLEMENT	
WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> Tools which contain moving elements, or drive other moving parts, such as grinding wheels, sockets, sanding discs, etc., can become entangled in hair, clothing, jewelry and other loose objects, resulting in severe injury. 	<ul style="list-style-type: none"> Never wear loose fitting clothes or apparel that contains loose straps or ties, etc., which could become entangled in moving parts of the tools. Remove any jewelry, watches, identifications, bracelets, necklaces, etc., which might become caught by the tool. Keep hands away from moving parts. Tie up or cover long hair. Always wear proper fitting clothing and other safety equipment when using the tool.

 ⚠️ WARNINGS RISK OF CUT OR BURNS	
WHAT COULD HAPPEN	HOW TO PREVENT IT
<ul style="list-style-type: none"> Tools that cut, shear, drill, staple, punch, chisel, etc. are capable of causing serious injury. 	<ul style="list-style-type: none"> Keep the working part of the tool away from hands and body.

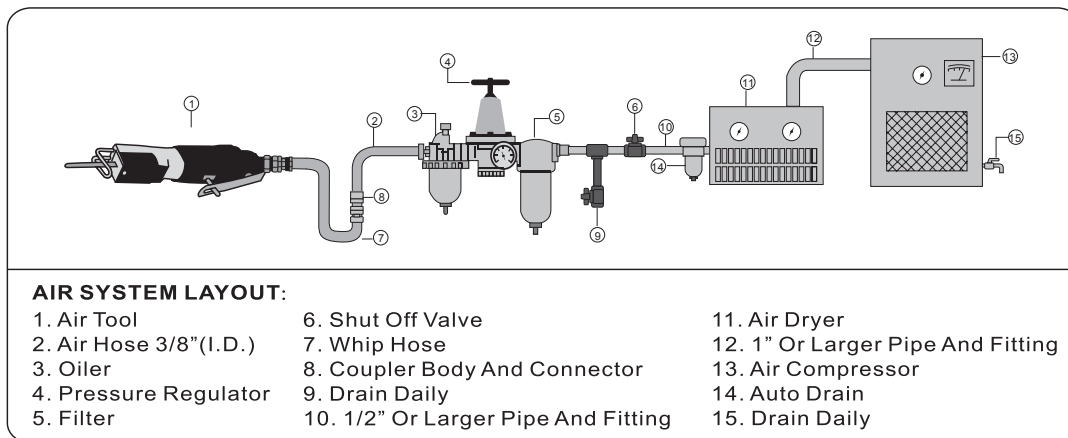
⚠️ WARNINGS

- Replace warning labels if they become obscured or removed.
- Do not use this tool for other than its intended use.
- Excessive air pressure or too much free rotation will decrease the life of the tool and may cause a hazardous situation.
- Check air hose for wear, and keep them away from heat and sharp edges. Do not carry the tool by the air hose.
- Slipping, tripping and falling is a major cause of serious injury or even death. Be aware of excess hose in your path on the floor or on your work area, and be aware of the whip hose as well.
- Continuous operation and bad working conditions will injure hands. Once hand numbs or aches, operator shall stop the tool for a while to relax it and re-start the work after recovery. Operator should see a doctor if immediately serious symptoms occur.
- Keep visitors and children a safe distance from the work area.
- This product may contain one or more chemicals known to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

AIR SUPPLY

Please refer to the diagram below.

1. Make sure that the air compressor being used for the air tool operation supplies the correct output (CFM).
2. Have the tool in the "off" position when connecting the tool to the air supply.
3. Use normal 90 psi (or ranging from 6.0 to 8.0kg.) air pressure while running the tool. High pressure and unclean air will shorten the tool's life due to faster wear and also may create a hazardous situation.
4. Drain water from air compressor tank daily, as well as any condensation in the air lines. Water in the air line may enter the tool and damage the tool mechanisms when tool is used.
5. Clean the air inlet filter cartridge weekly. The recommended hook-up procedure can be viewed in the diagram below.
6. Line pressure should be increased accordingly to make up for extra long air hoses (usually over 26 feet). The minimum hose diameter should be 1/4" I.D. and the fittings should have the same inside dimensions. But usually a 3/8" I.D. air hose is recommended for air supply to get the best function of air tool operation.
7. Use proper hoses and fittings. We do not suggest connecting quick change couplings directly to the tool since they may cause failure due to vibration. Instead, add a leader hose and connect coupling between air supply and hose whip.
8. Check hoses for wear before individual use. Make certain that all connections are in security.



SPECIFICATIONS

Strokes Per Minute.....	10,000
Stroke Length.....	.354"
Exhaust.....	Front
Average Air Consumption.....	2.5 CFM
Inlet.....	1/4" NPT
Length.....	9.25" (without blade)
Weight.....	1.45 lbs.

CONTENTS

DESCRIPTION	Qty
Air Body Saw	1
Saw Blade (1) 18 TPI, (1) 24 TPI	2
Wrenches	2
Manual	1
1/4" Quick Connect Air Hose Fitting	1
Air Tool Oil	1

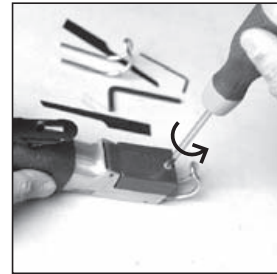


Figure 1

PREPARATION

Before beginning assembly or operation of the product, make sure that all parts are present. Compare the parts with the package contents list. If any part is missing or damaged, do not attempt to assemble, install or operate the product. Contact your distributor or sales agent for replacement.

OPERATING INSTRUCTIONS

1. Lubricate the tool before operating. See "CARE AND MAINTENANCE" section for oiling instructions.

2. SAW BLADE INSTALLATION

- (1) Release the screw (Part #41) with a screwdriver (not provided). (See Figure 1)
- (2) Open the chuck cover (Part #39). (See Figure 2)
- (3) Loosen the two set screws (Part #46) on both sides with the provided hex key. (See Figure 3)
- (4) Insert a saw blade into the blade chuck (Part #45). Make sure that the blade is set correctly and securely. (See Figure 4)

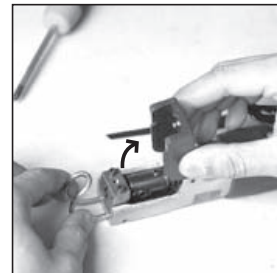


Figure 2

⚠ WARNINGS Only use qualified saw blades that have an RPM rating equal to or greater than the tool itself.

- (5) Tighten the two set screws to fix the blade stable with hex key provided. (See Figure 5)
- (6) Pull down the chuck cover and tighten the screw with a screwdriver (not provided). (See Figure 6)

3. Remove the air cap from the tool air inlet and mount the male plug. Connect the air supply hose to the tool. Set the air pressure at 90 PSI. (See Figure 7)
4. Push forward the lever of the trigger and press down on the trigger to start the tool. (See Figure 8)

NOTE: The tool speed can be adjusted by rotating the valve screw (Part #17) either clockwise or counterclockwise with a screwdriver (not provided). (See Figure 9)

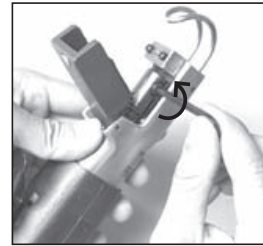


Figure 3

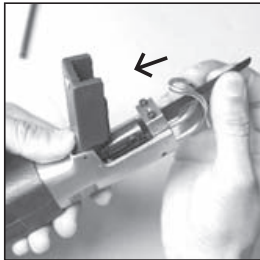


Figure 4

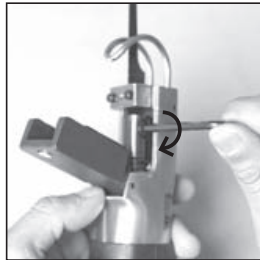


Figure 5

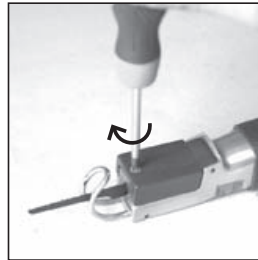


Figure 6

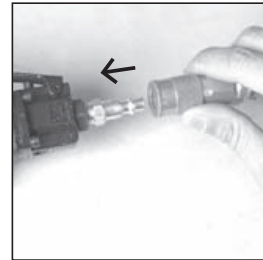


Figure 7

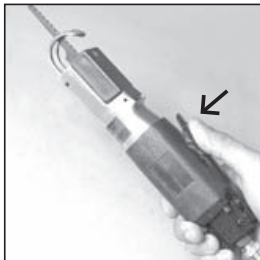


Figure 8

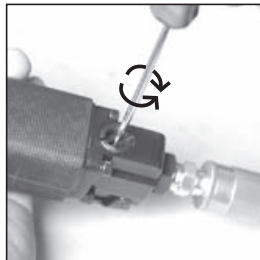


Figure 9

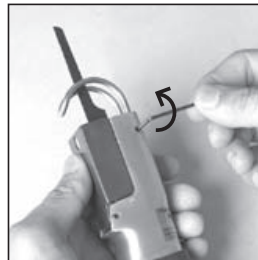


Figure 10

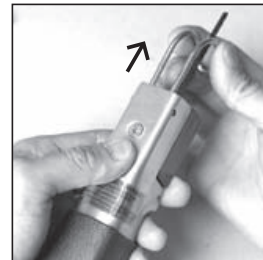


Figure 11

HOW TO ADJUST WORK GUIDE

NOTE: The blade guard (Part #47) functions as an adjuster of cut depth. You can control depth of cut by adjusting the height of the blade guard.

1. Loosen the two set screws (Part #34) on both sides by rotating it counterclockwise with the provided hex key. (See Figure 10)
2. Pull out the blade guard with hand to reach the height required. (See Figure 11)
3. Tighten the two set screws and make sure that the blade guard is set correctly and securely. (See Figure 12)

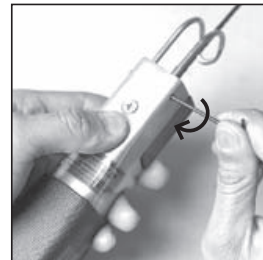


Figure 12

CARE AND MAINTENANCE

The tool should be lubricated daily (or before each use) with air tool oil.

NOTE: Air tool oil is available at major tool hardware stores. SAE #10 weight oil or sewing machine lubricant or any other high grade turbine oil containing moisture absorbent, rust inhibitors, metal wetting agents and an EP (extreme pressure) additive may be used as a substitute. Do not use detergent oil.

During continuous operation, the tool should be oiled every 1 to 2 hours. This may be done using an in-line oiler, or manually. If done manually, proceed as follows:

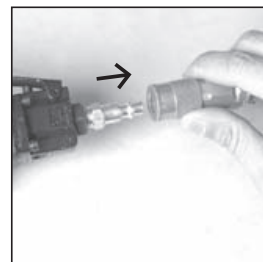


Figure 13

1. Disconnect the tool from air supply. (See Figure 13)
 2. Place a few drops of air tool oil into the air inlet. (See Figure 14)
- NOTE:** Avoid the misuse of thicker oil which may lead to the reduced performance or malfunction.

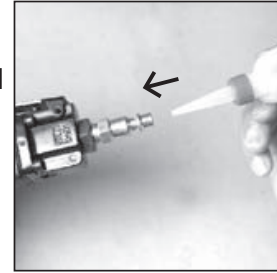


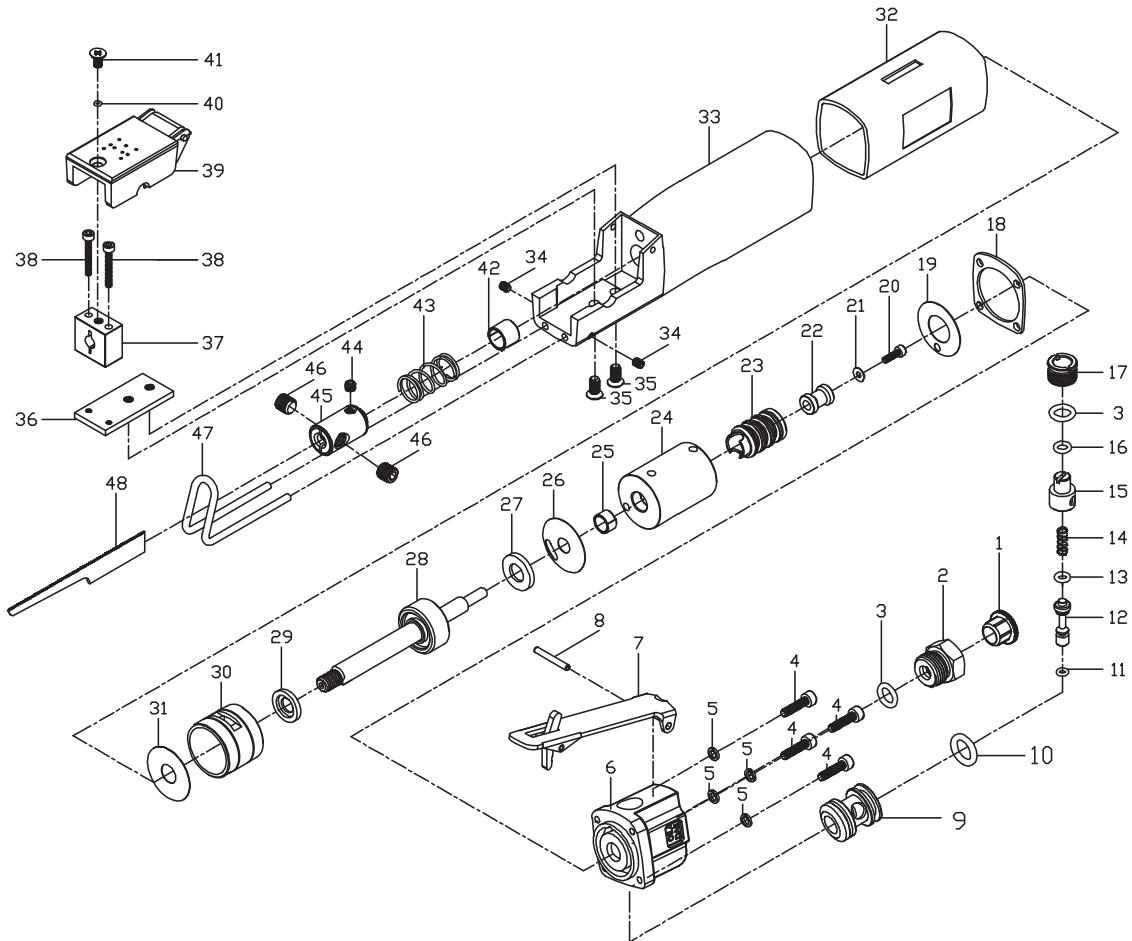
Figure 14

3. Connect the tool to the air supply. Run the tool without load for a few seconds to distribute the oil through the tool.
- NOTE:** Any excess oil may be propelled from the air exhaust area. So keep the tool away in a safe direction.
4. After operating the tool and before storing the tool, disconnect the air hose and place 4 or 5 drops of air tool oil into the air inlet, then re-connect the air hose and run the tool to evenly distribute the oil throughout the tool for 30 seconds approximately. This will prolong the tool life.
 5. Avoid storing the tool in a humid environment which promotes rusting of internal mechanisms. Always oil the tool before storage.
 6. When the tool is seriously damaged or out of life, it should be left in a resource recycling can. Never drop it into fire.

TROUBLESHOOTING

Problem	Possible Cause	Corrective Action
Tool runs slowly or will not operate	<ol style="list-style-type: none"> 1. Grit or gum in tool. 2. No oil in tool. 3. Low air pressure. 4. Air hose leaks. 5. Pressure drops. 6. Worn rotor blade. 7. Moisture blowing out of tool exhaust. 	<ol style="list-style-type: none"> 1. Flush the tool with air-tool oil or gum solvent. 2. Lubricate the tool according to the lubrication instructions in this manual. 3. a. Adjust the regulator on the tool to maximum setting. b. Adjust the compressor regulator to tool maximum of 90 PSIG. 4. Tighten and seal hose fittings if leaks are found. Use sealing tape. 5. a. Be sure the hose is the proper size. Long hose or tools using large volumes of air may require a hose with an I.D. of 1/2 in. or larger depending on the total length of the hoses. b. Do not use a multiple number of hoses connected together with quick-connect fittings. This causes additional pressure drops and reduces the tool power. Directly connect the hoses together. 6. Replace rotor blade. 7. Water in tank: drain tank. (See air compressor manual). Oil tool and run until no water is evident. Oil tool again and run 1-2 seconds.
Abnormal vibration and/or excessive heat develops in the tool.	Improper lubrication.	Follow proper lubrication procedures in this manual.

NOTE: For any problems not listed above, please contact your supplier, or distributor from where the tool was purchased.



ITEM#	ORDERING PART#	PART DESCRIPTION
1	PRT2142-01	PLUG CAP
2	PRT2142-02	AIR INLET
3	PRT2142-03	O-RING
4	PRT2142-04	SOCKET HEAD CAP SCREW
5	PRT2142-05	SPRING LOCK WASHER
6	PRT2142-06	BACK COVER
7	PRT2142-07	THROTTLE TRIGGER
8	PRT2142-08	PIN
9	PRT2142-09*	VALVE SEAT
10	PRT2142-10*	O-RING
11	PRT2142-11*	O-RING
12	PRT2142-12*	VALVE STEM
13	PRT2142-13*	O-RING
14	PRT2142-14	SPRING
15	PRT2142-15*	ADJUSTING KNOB
16	PRT2142-16*	O-RING
17	PRT2142-17	VALVE SCREW
18	PRT2142-18*	SEALING GASKET
19	PRT2142-19*	PACKING FILLER SEAL
20	PRT2142-20	SOCKET HEAD CAP SCREW
21	PRT2142-21	WASHER
22	PRT2142-22*	ACTUATOR VALVE
23	PRT2142-23*	VALVE SLEEVE
24	PRT2142-24	VALVE CORE

ITEM#	ORDERING PART#	PART DESCRIPTION
25	PRT2142-25*	BUSH BEARING
26	PRT2142-26*	PACKING FILLER SEAL
27	PRT2142-27*	BUMPER WASHER
28	PRT2142-28	PISTON ASSEMBLY
29	PRT2142-29*	BUMPER WASHER
30	PRT2142-30	CYLINDER
31	PRT2142-31*	PACKING FILLER SEAL
32	PRT2142-32	GRIP
33	PRT2142-33	HOUSING
34	PRT2142-34	SET SCREW
35	PRT2142-35	SCREW
36	PRT2142-36	GUIDE PLATE
37	PRT2142-37	BLADE GUIDE
38	PRT2142-38	SOCKET HEAD CAP SCREW
39	PRT2142-39	CHUCK COVER
40	PRT2142-40*	O-RING
41	PRT2142-41	SCREW
42	PRT2142-42*	BUSH BEARING
43	PRT2142-43	CHUCK SPRING
44	PRT2142-44	SET SCREW
45	PRT2142-45	BLADE CHUCK
46	PRT2142-46	SET SCREW
47	PRT2142-47*	BLADE GUARD
48	PRT2142-48*	BLADE

Some parts are listed and shown for illustration purposes only, only the parts shown in bold with asterisks are available for replacement.



1 YEAR REPLACEMENT WARRANTY

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

The warranty is only made available by returning the product to the point of sale.

Your supplier may elect to replace just the defective portion of this tool for you.

PURCHASED FROM: _____

DATE PURCHASED: _____

INVOICE/RECIEPT NUMBER: _____

Your ATD-2142 is warranted for a period of 12 months from the original date of purchase, when purchased new. The warranty given on this tool is against defects in workmanship and materials only. Any misuse, abuse or accidental and incidental damage is not covered by warranty. The following actions will also result in the warranty being void:

- If the tool shows signs of damage or defects caused by or resulting from abuse, accidents or alterations.
- If the tool is disassembled or tampered with in any way.

[Affix receipt or invoice here for safe keeping]