



ATD AIR[®]
ATD-2142A
Air Body Saw
Owner's Manual



Specifications:

- Strokes Per Minute: 10,000
- Stroke Length: .354" (9mm)
- Rear Exhaust
- Average Air Consumption: 8 cfm (228 l/min)
- Inlet: 1/4" NPT
- Operating Pressure: 90 psi (6.3bar)
- Weight: 1.45 lbs.
- Cutting Capacity: metal 1/16"; wood 1/2"

IMPORTANT:

Upon receipt of your new ATD-2142A Air Body Saw, read and follow all safety rules, and operating instructions before you first use it. Retain this manual for future reference.

Important Safety Rules

1. The ATD-2142A Air Body Saw is not insulated for coming into contact with electric power sources.
2. Your air body saw shall not be used in explosive atmospheres.
3. Always use hearing protection and wear safety glasses, face mask or respiratory equipment when using this saw.
4. Do not wear watches, rings bracelets or loose clothing when using air tools, and avoid drawing in or trapping of long hair.
5. Always ensure that the blade is designed for use with the saw and that the blade is properly clamped.
6. Do not use blades that are cracked or deformed.
7. Always ensure your saw is switched off before connecting to the air supply.
8. Use only lightweight coil hoses from a tool to the compressor coupling.
9. Do not increase the air pressure above the manufacturer's recommended level, as excessive overload can cause the saw casing to split. Also this creates excessive wear on moving parts and possible failure.
10. Do not overload the saw. Allow the tool to operate at its optimum speed for maximum efficiency.
11. Always keep your air body saw clean and lubricated. Daily lubrication is essential to avoid internal corrosion and possible failure.
12. In the interest of safety to the operator and/or bystanders, and possible damage to the tool or workplace, always ensure that the saw has stopped before putting it down after use.
13. Always ensure that the work piece is firmly secured leaving both hands free to control the saw.
14. Do not stop oscillation of the blade by putting a lateral pressure on it.
15. Ensure that the moveable guard is not locked in the open position.
16. Make sure that the guard for the saw blade is in place, is correctly mounted and functions properly.
17. Ensure that if sparks are emitted that they are directed away so as not to cause a hazard.

Operating Instructions

This saw cuts curved surfaces and tight circles with ease. The rear exhaust and rubber grip add comfort, with a safety trigger to prevent accidental starts. It cuts all types of aluminum, plastic, fiberglass, and metal.

WARNING: ANY OTHER USE IS UNAUTHORIZED.

Air supply

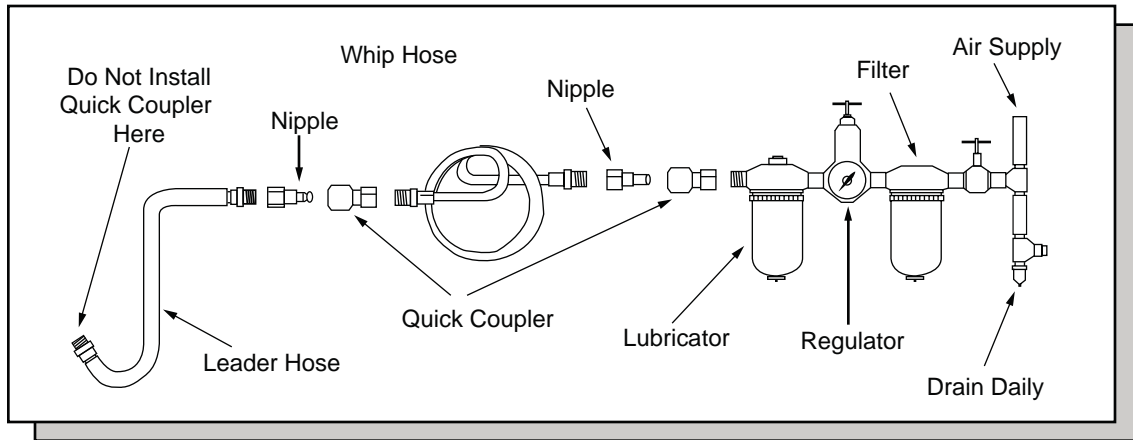
1. Ensure air valve (or trigger) is in the "off" position before connecting to the air supply.
2. This saw requires an air pressure of 90 psi.
3. Disconnect saw from the air supply before changing blades or making adjustments.
4. **WARNING!** Ensure the air supply is clean and does not exceed 90 psi while operating the saw. Too high of an air pressure and unclean air will shorten the product life due to excessive wear, and may be dangerous causing damage and/or personal injury.
5. Rest the guide plate fully on the work piece.
6. Drain the air tank daily. Water in the air line will damage the tool.
7. Clean air inlet filter weekly.
8. Line pressure should be increased to compensate for unusually long air hoses over 26' (7 meters). The hose diameter should be 3/8" ID.
9. Keep hose away from heat, oil and sharp edges. Check hose for wear, and make certain that all connections are secure.

Lubrication

An automatic in-line filter-regulator-lubricator is recommended (figure 1) 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.

Typical Air Supply Installation



(Figure 1)

If it becomes necessary to store the tool for an extended period of time (overnight, weekend, etc.), it should receive a generous amount of lubrication before hand. 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 a high quality air tool lubricant only (Mobil Almo 525 or equivalent).

The lubricator should be a low or changing air flow type, and should be kept filled to the correct level. Use only recommended lubricants, especially made for air tool applications. Substitutes may harm the rubber compounds in the tool, 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 air inlet fitting in the tool housing.

Loading and Operation

WARNING: Be sure you read, understand and apply safety instructions before use.

1. Connect the air body saw to the air hose.
2. Press trigger to operate the tool
3. Ensure the air supply is clean and does not exceed 90 psi while operating the product. Too high of an air pressure and unclean air will shorten the product life due to excessive wear, and may be dangerous causing damage and/or personal injury.

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 tool from air supply before changing accessories, servicing or performing maintenance. Replace or repair damaged parts. Use genuine ATD repair parts only.

1. Keep the air body saw safe by performing regular maintenance.
2. Lubricate the air body saw daily with a few drops of air tool oil dripped into the air inlet.
3. Clean the saw after each use.
4. Do not use worn or damaged blades.
5. Loss of power or erratic action may be due to the following:
 - a) Excessive drain on the air line. Moisture or restriction in the air pipe. Incorrect size or type of hose connectors. To remedy, check the air supply working backwards from the working end of the air supply.
 - b) Grit or gum deposits in the saw may also reduce performance.
6. When not in use, disconnect from air supply, clean tool and store in a safe, dry and childproof location.
7. If the tool can't be used anymore, make sure to dispose it in accordance with your local regulations, so as not to impose hazards to personnel and the environment.

Other Specifications

1. Noise

An equivalent continuous A-weighted sound pressure level at workstation is according to prEN ISO 15744:1999. The noise emission value is according to EN ISO 4871. Wear approved hearing protection.

2. Vibration

The vibration level at the handle of the air body saw is according to EN 28662-1 and EN ISO 8662-12; The vibration is according to EN 12096.

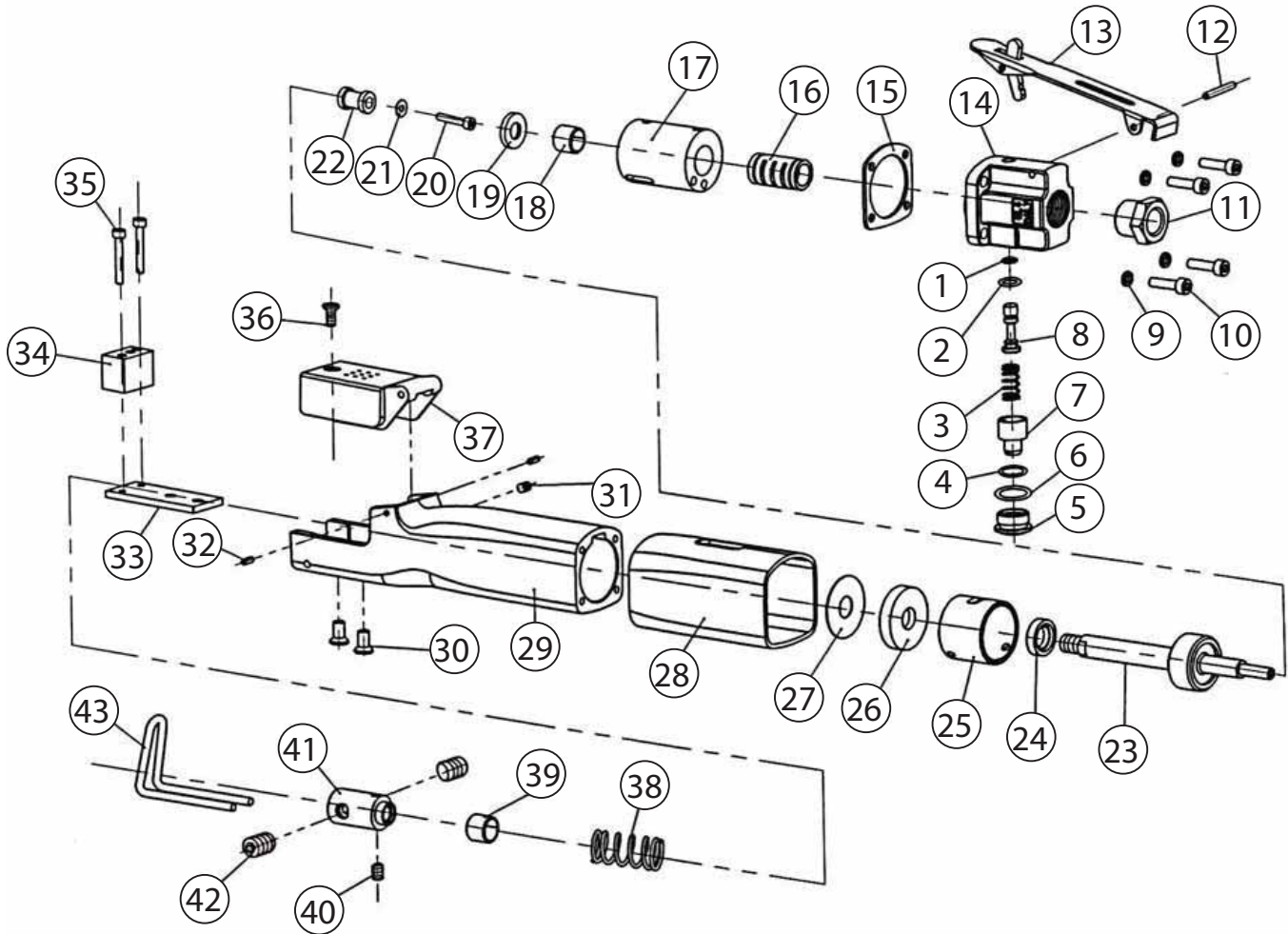
Troubleshooting

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 appear during your operating, stop using the tool immediately, or serious personal injury could result. Only 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.

PROBLEM	POSSIBLE CAUSES	REMEDIES
Tool runs at normal speed but loses speed under load	• Motor parts worn	• Lubricate clutch housing
	• Cam clutch worn or sticking due to lack of lubricant	• Check for excess clutch oil. Clutch cases only need be half full. Overfilling can cause drag on high speed clutch parts. A typical oiled/lubricated saw requires 1/2 ounce of oil GREASE LUBRICATION NOTE: Heat usually indicates insufficient grease in chamber. Severe operating conditions may require more frequent lubrication
Tools run slowly. Air flows slightly from exhaust	• Motor parts jammed with dirt particles	• Check air inlet for blockage
	• Power regulator in closed position	• Pour air tool lubricating oil into air inlet per instructions
	• Air flow blocked by dirt	• Operate tool in short bursts quickly. Repeat 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 oil into air inlet per instructions
		• Operate tool in short bursts quickly. Repeat as needed.
		• Tap motor housing gently with plastic mallet
		• Disconnect air supply. Free motor by rotating drive shank manually.
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-2142A



ITEM#	ORDERING PART#	DESCRIPTION
1	PRT2142A-01	O-RING 3.5 x 1.5
2	PRT2142A-02	O-RING 4 x 2
3	PRT2142A-03	SPRING
4	PRT2142A-04	O-RING 7 x 2
5	PRT2142A-05	SCREW CAP
6	PRT2142A-06	O-RING 11 x 2
7	PRT2142A-07	ADJUSTER
8	PRT2142A-08	VALVE STEM
9	PRT2142A-09	SPRING WASHER D=4 (4PCS)
10	PRT2142A-10	BOLT M4 X 16*4PCS
11	PRT2142A-11	AIR INLET
12	PRT2142A-12	PIN 3 x 22
13	PRT2142A-13	TRIGGER ASSEMBLY
14	PRT2142A-14	END CAP
15	PRT2142A-15	GASKET
16	PRT2142A-16	PISTON VALVE BUSH
17	PRT2142A-17	PISTON VALVE SEAT
18	PRT2142A-18	BUSHINGS P10 x 8 x 5.7
19	PRT2142A-19	RUBBER GASKET
20	PRT2142A-20	BOLT M3 x 12
21	PRT2142A-21	WASHER D=3.5
22	PRT2142A-22	PISTON VALVE

ITEM#	ORDERING PART#	DESCRIPTION
23	PRT2142A-23	PISTON ROD
24	PRT2142A-24	BUMPER
25	PRT2142A-25	CYLINDER
26	PRT2142A-26	WASHER
27	PRT2142A-27	GASKET
28	PRT2142A-28	HAND RUBBER
29	PRT2142A-29	GUN BODY
30	PRT2142A-30	BOLT M5 x 10*2PCS
31	PRT2142A-31	BOLT M4 x 6
32	PRT2142A-32	PIN 2.5 x 6 (2PCS)
33	PRT2142A-33	FIXING PLATE
34	PRT2142A-34	UPPER PAD
35	PRT2142A-35	BOLT M3 x 22 (2 PCS)
36	PRT2142A-36	BOLT M4 x 10
37	PRT2142A-37	SAFETY CAP
38	PRT2142A-38	SPRING
39	PRT2142A-39	BUSHINGS P12 x 10 x 10
40	PRT2142A-40	BOLT M5 x 5
41	PRT2142A-41	CHUCK ASSEMBLY
42	PRT2142A-42	BOLT M8 x 8 (2PCS)
43	PRT2142A-43	SAFETY NOZZLE