



Operator Instructions

Includes - Foreseen Use, Work Stations, Putting Into Service, Operating, Dismantling, Assembly and Safety Rules

Important

Read these instructions carefully before installing, operating, servicing or repairing this tool. Keep these instructions in a safe accessible place.

Manufacturer/Supplier Sioux Tools Inc. 2901 Floyd Boulevard P.O. Box 507 Sioux City Iowa 51102 U.S.A. Tel No 712-252-0525 Fax No 712-252-4267	Product Type Air Saw	RPM Cycles Per Min 10,000	
	Model No/Nos 5300	Serial No	

Product Net Weight 1.32 lbs 0.6 Kg	Recommended Use Of Balancer Or Support No	Recommended Hose Bore Size - Minimum 5/16 Ins 8 M/M	Recommended Max. Hose Length 30 Ft 10 M
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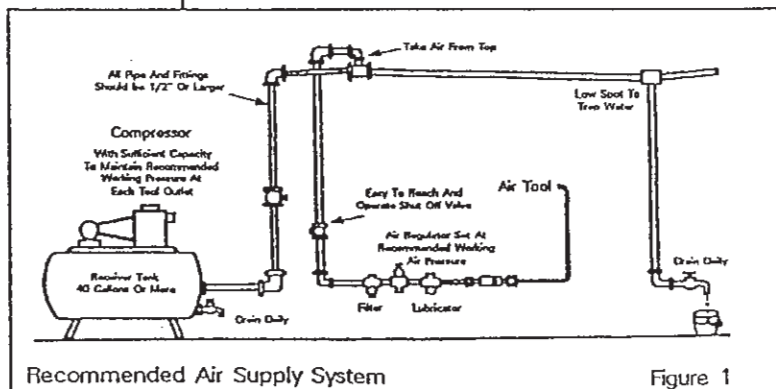
Air Pressure		Noise Level Sound Pressure Level 79.0 dB(A)	
Recommended Working	6.2 bar 90 PSI	Test Method Tested in accordance with Pneuop test code PN8NTC1 and ISO Standard 3744	
Maximum	6.2 bar 90 PSI		

SAFETY MESSAGES Personal Safety Equipment Use - Safety Glasses Yes Use - Safety Gloves Use - Safety Boots Use - Breathing Masks Use - Ear Protectors	<p> WARNING Always Read Instructions Before Using Power Tools Always Wear Safety Goggles Wear Hearing Protection Avoid Prolonged Exposure To Vibration </p>	Vibration Level 22.6 Metres/Sec² Test Method Tested in accordance with ISO standards 8662 Parts 1 & 12
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Safety rules when using a 5300 Air Saw

- Prolonged exposure to vibration can cause injury.
- Keep the work guide (guard) in place and in working order and make sure it is firmly fixed.
- Always make sure the blade is tightly fixed. Do not use improper blades. Never use blades that are oversized. Do not modify other types and sizes of blades to fit the tool.
- Read all instructions before using this tool. All operators must be fully trained in its use and aware of these safety rules.
- Do not exceed the maximum working air pressure.
- Use personal protection equipment as recommended.
- Use only compressed air at the recommended conditions.
- If the tool appears to malfunction, remove from use immediately and arrange for service and repair. If it is not practical to remove the tool from service, then shut off the air supply to the tool and write or have written a warning note and attach it to the tool.
- If the tool is to be used with a balancer or other suspension device, ensure that the tool is firmly attached to the suspension/support device.
- When operating the tool, always

- keep the body and particularly the hands away from the working attachment fixed to the tool.
- The tool is not electrically insulated. Never use the tool if there is any chance of coming into contact with live electricity.
- Always when using the tool, adopt a firm footing and/or position and grip the tool sufficiently only to overcome any reaction forces that may result from the tool doing work. Do not overgrip.
- Use only correct spare parts for maintenance and repair. Do not improvise or make temporary repairs. Major servicing and repairs should only be carried out by persons trained to do so.
- Do not lock, tape, wire, etc. the "On/Off" valve in "On" position. The trigger lever, etc. must always be free



Recommended Air Supply System

Figure 1

to return to the 'Off' position when released.

- Always shut off the air supply to the tool and press the 'On/Off' valve to exhaust the air from the feed hose before fitting, removing or adjusting the working attachment fitted to the tool.
- Before using the tool make sure that a shut off device has been fitted to the supply line and the position is known and easily accessible so that the supply to the tool can be shut off in an emergency.
- Check hose and fittings regularly for wear.
- Take care against entanglement of the moving parts of the tool with clothing, hair, ties, cleaning rags, rings, jewellery, watches, bracelets, etc. This could cause the body or parts of the body to be drawn towards and in contact with the moving parts of the tool and could be very dangerous.
- It is expected that users will adopt safe working practices and observe all local, regional or country legal requirements when installing, using or maintaining the tool.
- Take care that the exhaust air does not point towards any other person or material or substance that could be contaminated by oil droplets. When first lubricating a tool or if the tool exhaust has a high oil content, do not allow the exhaust air to come near very hot surfaces or flames.
- Never lay the tool down until the working attachment has stopped moving.
- When the tool is not in use, shut off the air supply and press trigger/lever to drain the supply line. If the tool is not to be used for a period of time, first lubricate, disconnect from air supply and store in a dry average room temperature environment.
- If the tool is passed from one user to a new or inexperienced user, make sure these instructions are available to be passed with the tool.
- Do not remove any manufacturer fitted safety devices where fitted, i.e. wheel guards, safety trigger, speed governors, etc.
- Where ever possible, secure workpiece with clamps, a vise, etc. to make it rigid so it does not move during the work operation. Keep good balance at all times. Do not stretch or overreach.
- Try to match the tool to the work operation. Do not use a tool that is too light or heavy for the work operation. If in doubt, seek advice.
- In general terms this tool is not suitable for underwater use or use in explosive environments – seek advice from manufacturer.
- Try to make sure that the work area is clear to enable the work task to be performed safely. If practical and possible, try to clear unnecessary obstructions before starting work.
- Always use air hose and couplings with minimum working pressure ratings at least 1 1/2 times the maximum working pressure rating of the tool.

Foreseen Use Of The Tool

This tool is designed for the purpose of sawing materials when fitted with the saw blades supplied by, or recommended by the manufacturers. Do not use the tool for any other purpose than that specified without consulting the manufacturer or the manufacturers authorized representative. Do not modify the tool even for intended use as a saw.

Work Stations

The tool should only be used as a handheld hand operated tool. It is always recommended that the tool is used when standing on the solid floor. It can be used in other positions but before any such use, the operator must be in a secure position having a firm grip and footing.

Putting Into Service

Air Supply

Use a clean lubricated air supply that will give a measured air pressure at the tool of 90 p.s.i./6.2 bar when the tool is running with the trigger fully depressed. Use recommended hose size and length. It is recommended that the tool is connected to the air supply as shown in figure 1. Do not connect the tool to the air line system without incorporating an easy to reach and operate air shut off valve. The air supply should be lubricated. It is strongly recommended that an air filter, regulator, lubricator (FFRL) is used as shown in Figure 1 as this will supply clean, lubricated air at the correct pressure to the tool. Details of such equipment can be obtained from your supplier. If such equipment is not used then the tool should be lubricated by shutting off the air supply to the tool, depressurising the line by pressing the trigger on the tool. Disconnect the air line and pour into the inlet bushing a teaspoonful (5ml) of a suitable pneumatic motor lubricating oil preferably incorporating a rust inhibitor. Reconnect tool to air supply and run tool slowly for a few seconds to allow air to circulate the oil. If tool is used frequently lubricate on daily basis and if tool starts to slow or lose power.

It is recommended that the air pressure at the tool whilst the tool is running is 90 p.s.i./6.2 bar.

Operating

To install, adjust or change saw blades see diagrams. The 5300 Saw makes cutting in tight places fast and easy and has the ability to make straight and scroll cuts for pipe, mild steel, aluminium, fibreglass and plastics. The best of saw blades will not cut efficiently if they are not kept clean and sharp. Using a dull blade will place a heavy load on the saw and increase the danger of kickback. Keep extra blades on hand so that sharp blades are always available.

Gum and wood pitch hardened on the blade will slow it down. Use gum and pitch remover, hot water or kerosene (paraffin) to remove these accumulations. Do not use gasoline (petrol). The trigger on the saw is an on/off valve. The air flow can be controlled by adjusting the black knob opposite the throttle lever. Align the mark on the knob with the high or low mark on the housing or any setting in between. An air strainer is located at the air inlet to the tool. It can be cleaned by removing the air inlet fitting item(42) Use pipe sealant on the air inlet fitting thread during reassembling to prevent air leakage.

When using the saw, let the saw blade cut and do not load it too heavily. Also try to keep the blade straight. Bending the saw blade and/or loading it too heavily can cause the blade to break.

Dismantling & Assembly Instructions

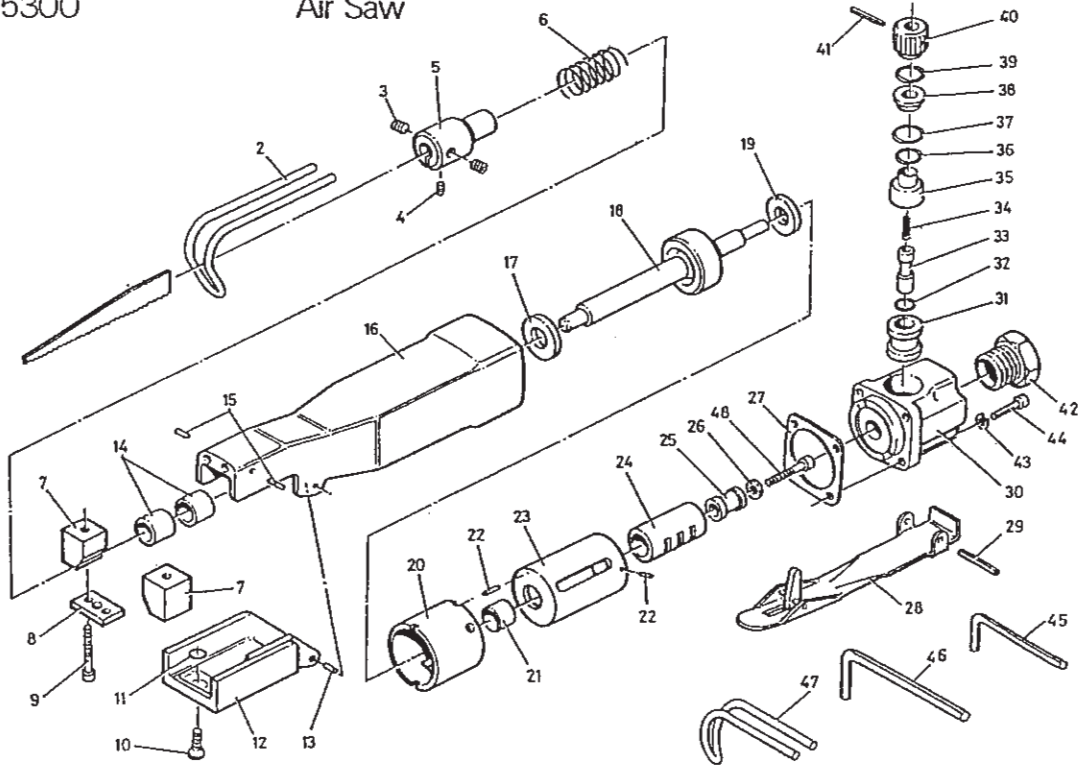
Disconnect tool from air supply.

Unscrew 2 of set screws (15) and pull out work guide from Motor-Housing (16) and unscrew screw (38) and pull back blade chuck cover (12). Unscrew 2 cap screws (9) to remove bridge (8) and blade-guide (7). Note the orientation of the blade guides for reassembling. Unscrew 2 of set screws (3) to remove blade (1). Take out set screw (4) and locate a 7mm spanner on the flats of piston assembly (18) and unscrew blade chuck (5) from piston assembly (18) with using allen wrench (46). Take out spring (6). To separate housing assembly (16) and valve block assembly (30), unscrew 4 off cap screws (44) and remove 4 off washers (43). Take off gasket (27). Hold the valve block assembly (30) in a vise and drive out lever pin(29) to remove throttle lever (28). Drive out roll pin (41) and pull out controller dial (40) with O-Ring (39). Unscrew valve screw (38) and remove it with O-Ring (37). Pull out air controller (35) with O-Ring (36). Remove spring (34), valve stem (33) with



5300

Air Saw



Ref No	Part No	Description
2	67049	Work Guide-Long
3	67050	Set Screw (2) ✖
4	67013	Set Screw
5	67051	Blade Chuck
6	67052	Spring
7	67053	Blade-Guide (2) ✖
8	67054	Bridge
9	67055	Cap Screw (2) ✖
10	67056	Screw
11	67057	Retainer
12	67058	Chuck Cover
13	67059	Roll Pin (2) ✖
14	67060	Bush (2) ✖
15	67061	Set Screw (2) ✖
16	67062	Housing
17	67063	Front Bumper
18	67064	Piston Assembly
19	67065	Rear Bumper
20	67066	Cylinder
21	67067	Bushing
22	67068	Pin (2) ✖
23	67069	Valve Case
24	67070	Valve Sleeve
25	67071	Actuate Valve
26	67072	Washer
27	67073	Gasket
28	67074	Throttle Lever
29	66540	Pin
30	67075	Valve Block

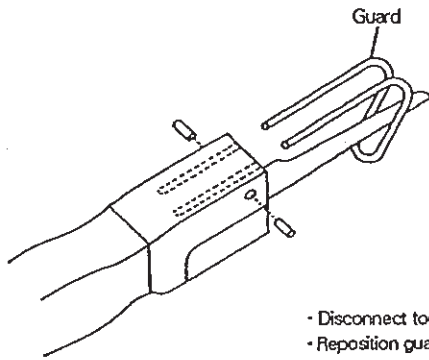
Ref No	Part No	Description
31	67076	Valve Bushing
32	67077	O-Ring
33	67078	Valve Stem
34	67039	Valve Spring
35	67079	Air Controller
36	66600	O-Ring
37	66691	O-Ring
38	67080	Valve Screw
39	67081	O-Ring
40	67082	Controller Dial
41	67083	Roll Pin
42	67084	Inlet Bushing W/Screen
43	67085	Spring Washer (4) ✖
44	67086	Cap Screw (4) ✖
45	67087	Hexagon Wrench-2mm
46	67088	Hexagon Wrench-4mm
47	67089	Work Guide-Short
48	6740 3	Screw
	67090	Name Plate (Not Shown)
	67045	Label Warning (Not Shown)

Accessories Available

	1824	Bi-Metal Blade 24TPI, 4" long (5)
	1823	Bi-Metal Blade 18TPI, 4" long (5)
	1825	Bi-Metal Blade 32TPI, 4" long (5)

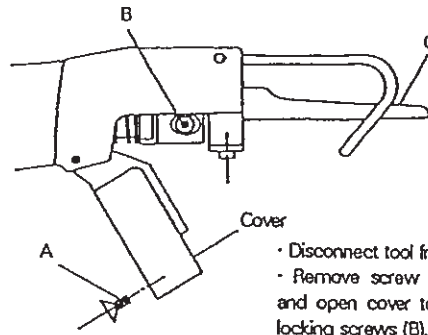
✖Order quantity as needed

Installing or Adjusting Blade Guard



- Disconnect tool from air line.
- Reposition guard by loosening screws and sliding guard in or out.
- Retighten screw.

Changing Saw Blades



- Disconnect tool from air line.
- Remove screw (A) from cover and open cover to expose blade locking screws (B).
- Loosen both locking screws (B) using large hex key provided.
- Remove Blade (C).
- Insert new blade as far as it will go.
- Retighten both locking screws (B).
- Close door and reinstall screw (A).

O-Ring (32). Remove O-Ring (32) from valve stem (33). Do not disassemble valve bushing (31) from valve block (30) unless a replacement is required. Grip housing (16) and tap the front end of piston assembly (18) to drive it out of the rear of housing (16). Take out front bumper (17) and cylinder (20) from housing. Do not remove bushes (14) from housing. Fix piston assembly (18) with using 7mm spanner and unscrew cap screw (48) with washer (26). Pull out piston assembly from the valve case (23). Take out rear bumper (19) and actuate valve (25) from the valve case (23). Do not remove 2 off pins (22), bush (21) and valve sleeve (24) from valve case (23).

Reassembly

Clean all component parts and examine for wear. Use only distributor or manufacturer supplied replacement parts. Look for wear on seals and bearings. Coat all parts with a suitable pneumatic tool lubricating oil, preferably one containing a rust inhibitor and reassemble in the reverse order. Ensure saw blade is fitted correctly. Pour approx. 5ml of pneumatic motor lubrication oil into inlet bushing (42) with lever (28) depressed. Release lever, connect to suitable air supply and run tool for 2 to 3 seconds to allow oil to circulate.

Operation Specification *

Air Consumption	2.5c/min (18 scfm)
Blade Strokes per min based on 0.3" Stroke	10,000 per min
Air Inlet Thread	1/4-18NPT
Overall Length	11ins (278mm)

* Average performance data at 90 PSIG using 3/8" (10mm) bore hose

Notes

Declaration of Conformity

Sioux Tools Inc.

2901 Floyd Boulevard, P.O. Box 507, Sioux City, Iowa 51102, U.S.A.

declare under our sole responsibility that the product

Model 5300 Air Saw, Serial Number

to which this declaration relates is in conformity with the following standard(s) or other normative document(s)

EN792 (Draft), EN292 Parts 1 & 2, ISO 8662 Parts 1 & 12, Pneurop PN8NTC1

following the provisions of **89/392/EEC as amended by 91/368/EEC & 93/44/EEC Directives**

R.V.Caskey (V.P./General Manager)

Name and signature or equivalent marking of authorized person

This pdf incorporates the following model numbers:
5300