



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 7" Dia Pad Right Angle Sander/Polisher	RPM (See Below) Cycles Per.Min	
	Model No/Nos 5287 - 6,000 RPM Angle Sander 5238 - 3,000 RPM Angle Polisher	Serial No	

Product Net Weight 5.0 lbs 2.3 Kg	Recommended Use Of Balancer Or Support No	Recommended Hose Bore Size - Minimum 3/8 Ins 10 M/M	Recommended Max. Hose Length 30 Ft 10 M
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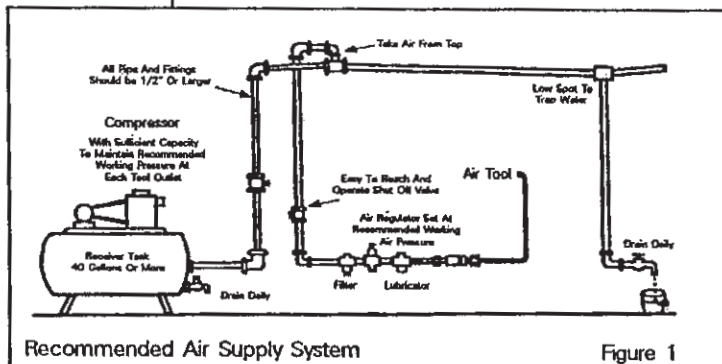
Air Pressure Recommended Working 6.2 bar 90 PSI Maximum 7 bar 100 PSI	Noise Level Sound Pressure Level 97.0 dB(A) Sound Power Level 107.40 dB(A) Test Method Tested in accordance with Pneurop test code PN8NTC1 and ISO Standard 3744
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SAFETY MESSAGES Personal Safety Equipment Use - Safety Glasses Yes Use - Safety Gloves Yes Use - Safety Boots Use - Breathing Masks Yes 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 Less than 2.5 Metres / Sec² Test Method Tested in accordance with ISO standards 8662/1 & 8662/4
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Safety rules when using a 5287 Sander and 5238 Polisher

- Do not use the tool as a grinder.
- Do not use polystyrene pads.
- For Sander, use accessories rated at least 6,000 RPM.
- For polisher use accessories rated at least 3,000 RPM.
- Prolonged vibration may cause injury.
- 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 to return to the 'Off' position when released.
- Always shut off the air supply to the tool and press the



Recommended Air Supply System

Figure 1

'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 angle tool is designed for use with 7" diameter coated abrasive discs of various grades of grit which are designed to be used at the same or higher speed of this tool. The spindle thread is 5/8 - 11 UNC-2A and the tool can be used with other abrasive devices that have the same female thread size and are designed to run without a guard and have a rated speed equal to or higher than the speed of the tool. Do not attempt to use any bonded abrasive devices, i.e. grinding wheels, as those which could be fitted because of their size, cannot be used without a suitable guard. A guard is not available for this tool. Do not fit any form of saw blade. Do not fit any other abrasive or cutting device before checking the

suitability for use with this tool with the manufacturer or the manufacturer's authorised distributor.

Do not modify this tool for other use, or for its use as a sander/polisher before checking the intended alternative use with the manufacturer or his authorised distributor.

Work Stations

The tool should only be used as a hand held hand operated tool. It is always recommended that the tool is used when standing on a 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 and be aware of the safety rules to be obeyed when using the sander/polisher.

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/lever 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 (FRL) 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 intake 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. The tool can run at lower and higher pressures with the maximum permitted working air pressure of 100 p.s.i./7 bar. The tool incorporates an air regulator to reduce the speed of the tool if required.

Operating

Select a suitable abrasive disc (see Section "Foreseen use of the tool") and make sure that it is fixed securely to the tool. Connect to suitable air supply as recommended. Make sure that the side handle is tightened securely.

Apply the sander lightly to the work and allow the abrasive disc to cut. Take great care when sanding around sharp edges and surfaces to avoid the disc snagging i.e. the disc may be brought to an abrupt stop or considerably slowed that will cause the tool to kick in the hands. It is always recommended to use safety glasses and a breathing mask. The sanding of certain materials may create a hazardous dust which may require special breathing equipment. Check before using the tool. Even if the machine has a low noise level the actual sanding process may cause a noise level such that ear protectors will be required. If there are sharp areas on the material being sanded safety gloves are recommended.

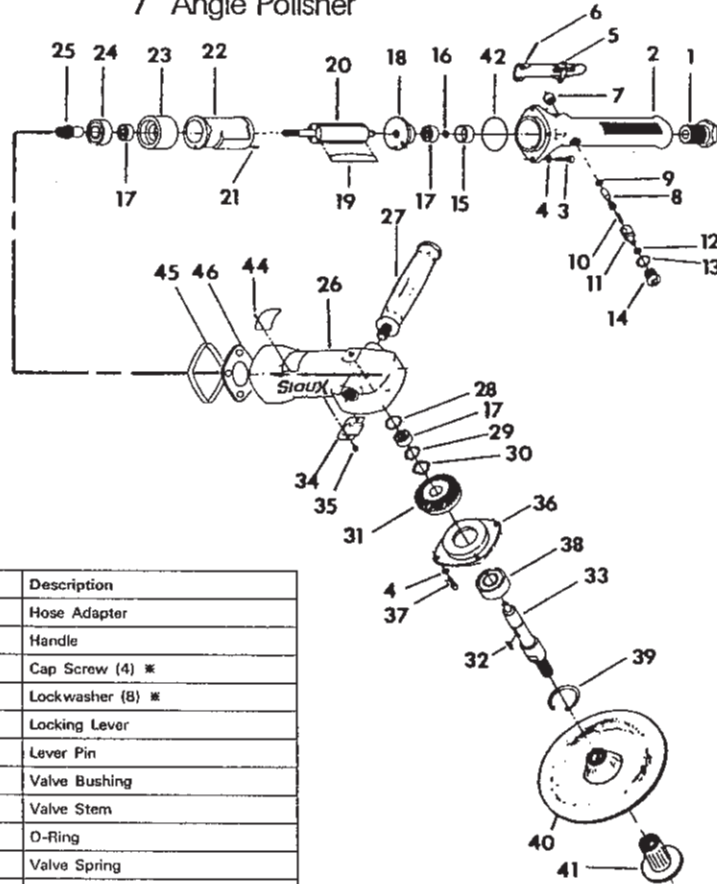
Do not continue to use abrasive discs that are worn or clogged. This will make the sanding process inefficient and the need to apply unnecessarily high forces to the tool.

Do not use undersized or oversized sanding discs. The disc should be no more than 1/4" larger in diameter than the pad, and not smaller than the pad.



5287
5238

7" Angle Sander
7" Angle Polisher



Ref No	Part No	Description
1	67710	Hose Adapter
2	67711	Handle
3	67712	Cap Screw (4) *
4	67713	Lockwasher (8) *
5	67662	Locking Lever
6	66540	Lever Pin
7	67714	Valve Bushing
8	67038	Valve Stem
9	67037	O-Ring
10	67039	Valve Spring
11	67040	Air Regulator
12	66600	O-Ring
13	67502	O-Ring
14	67042	Throttle Valve Plug
15	67715	Bearing Cap
16	67716	Retaining Ring
17	67472	Ball Bearing (3)
18	67717	Rear End Plate
19	67718	Rotor Blade (Set of 4)
20	67719	Rotor (5238)
20	67720	Rotor (5287)
21	67721	Pin
22	67722	Cylinder
23	67723	Front End Plate
24	67724	Ball Bearing
25	67725	Pinion Gear (5238)
25	67726	Pinion Gear (5287)
26	67727	Motor Housing
27	67728	Dead Handle
28	67729	Bearing Plate
29	67730	Retaining Ring
30	67731	Wave Washer
31	67732	Bevel Gear (5238)
31	67733	Bevel Gear (5287)

Ref No	Part No	Description
32	67734	Key
33	67735	Work Spindle
34	67736	Exhaust Deflector
35	67737	Screw (2) *
36	67738	Housing Cap
37	67739	Cap Screw (4) *
38	67740	Ball Bearing
39	67741	Retaining Ring
40	5207	7" Backing Pad (Includes 41)
41	67630	Nut
42	67742	O-Ring
44	66580	Name Plate Screw (2) *
45	67743	Housing Band
46	67744	Motor Gasket
	Not Shown	
	67672	Spindle Wrench
	67526	Name Plate (5238)
	67527	Name Plate (5287)
	67500	Warning Label
	67536	Pad Warning Label for 5207

* Order quantity as needed

Dismantling & Assembly Instruction

Disconnect tool from air supply.

Grip work spindle (33) with the spanner provided and grip the pad (40) and unscrew this together with pad nut (41) and abrasive sanding disc. Remove dead handle (27). Unscrew 2 off screws (35) and take off exhaust deflector (34). Unscrew 4 off cap screws (37) and take off lockwashers (4) and pull out housing cap (36) with spindle ass'y from motor housing (26). Take off bearing plate (28) and ball bearing (17).

Remove retaining ring (29) and take off wave washer (30), bevel gear (31) and key (32). Remove retaining ring (39) from the front side of housing cap (36). Grip housing cap (36) and tap spindle (33) to separate housing cap (36) and spindle with bearing. Support bearing (38) on the threaded shaft side, press non threaded end of the spindle to release bearing and spindle.

Take off housing band (43) and unscrew 4 cap screws (3) with 4 off washers (4), pull out motor ass'y with pinion gear (25) from motor housing (26) and take off O-ring (42) and gasket (46). Pull out pinion gear from motor ass'y and press apart pinion gear (25) and bearing (24). To dismantle motor ass'y, hold (grip) the motor ass'y by hand and tap the splined end of rotor (20) with a non metallic and/or soft metal hammer to drive the rotor (20) through the front end plate (23) and bearing (17) assembly. Remove bearing (17) from front plate (23) with using suitable equipment. Remove cylinder (22) with roll pin (21) and 4 off rotor blades (19). Don't remove roll pin (21) from cylinder (22) unless replacement is required. Take off bearing cap (15) and retaining ring (16) from rear end plate (18). Supporting rear end plate (18) in a piece of tube with a bore as close as possible to the maximum diameter of the rotor (20) and tap the non splined end of rotor through rear end plate (18) and ball bearing (17) ass'y. With using a suitable punch, tap outside of bearing (17) from rear end plate (18).

Unscrew valve screw (14) with O-ring (13) and take out O-ring (12), regulator (11), valve spring (10), O-ring (9) and valve stem (8).

Drive out lever pin (6) and take off locking lever (5).

Don't disassemble inlet bushing (1) unless replacement is required.

Reassembly

Clean all component parts and examine for wear. Use only distributor or manufacturer supplied replacement parts.

Check carefully in particular for wear and tears of O-rings and rotor blades. Lightly coat all parts with a suitable pneumatic tool lubricating oil, preferably one containing a rust inhibitor and reassemble in the reverse order.

Operation Specification *	
Air Consumption	4.8 CFM
Spindle Thread	5/8-11 UNC
Overall Length	12.6" (320mm)
Air Inlet Thread	1/4-18 NPT

* at 90 PSIG

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

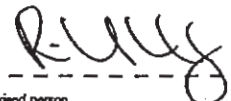
Model 5287/5238 7" Dia R/A Sander/Polisher, Serial Number

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 & 8, 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