



# Model 5203

## 3/8" Reversible Micro Drill

Form # Z551  
Date 4-99/A



### IMPORTANT

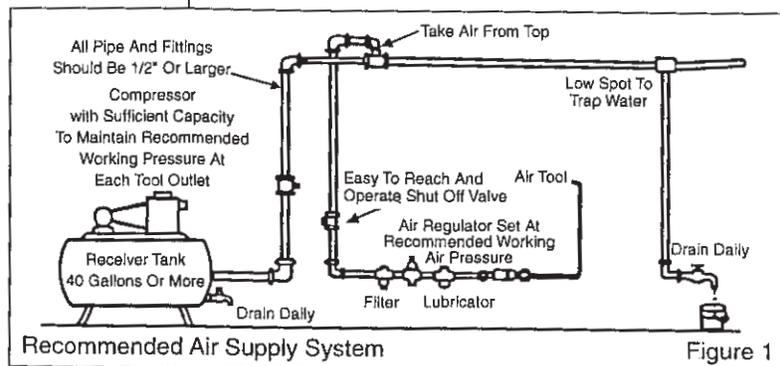
Read these instructions carefully before installing, operating, servicing or repairing this tool. Keep these instructions in a safe accessible place.

SAFETY MESSAGES		WARNING	Operator Instructions
Personal Safety Equipment			
Use – Safety Glasses	YES	Always Read Instructions Before Using Power Tools	Includes: <b>Safety Rules</b> <b>Foreseen Use</b> <b>Work Stations</b> <b>Putting into Service</b> <b>Operating</b> <b>Dismantling and Assembly.</b>
Use – Safety Gloves		Always Wear Safety Goggles	
Use – Safety Boots		Wear Hearing Protection	
Use – Breathing Masks		Avoid Prolonged Exposure To Vibration	
Use – Ear Protectors	YES		

### Safety rules when using a 5203 Drill

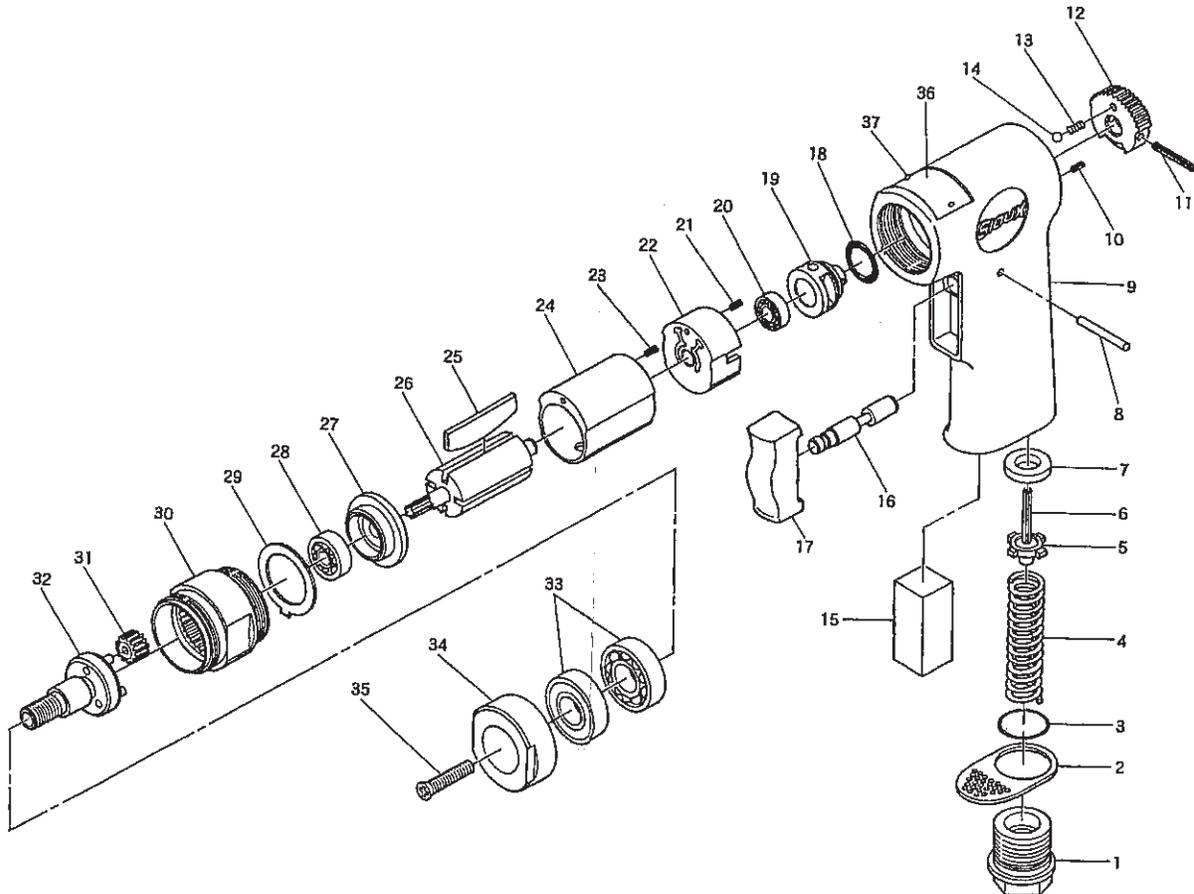
- Use may produce flying objects. Always use safety goggles.
- Use accessories rated at above 1,550 RPM.
- Prolonged exposure to vibration may cause injury.
- Read all instructions before using this tool. All operators must be fully trained in its use and aware of these safety rules.
- Do not exceed the maximum working air pressure.
- Use personal protection equipment as recommended.
- Use compressed air only 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 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 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 throttle 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 '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 air 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, jewelry, 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 throttletrigger/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.





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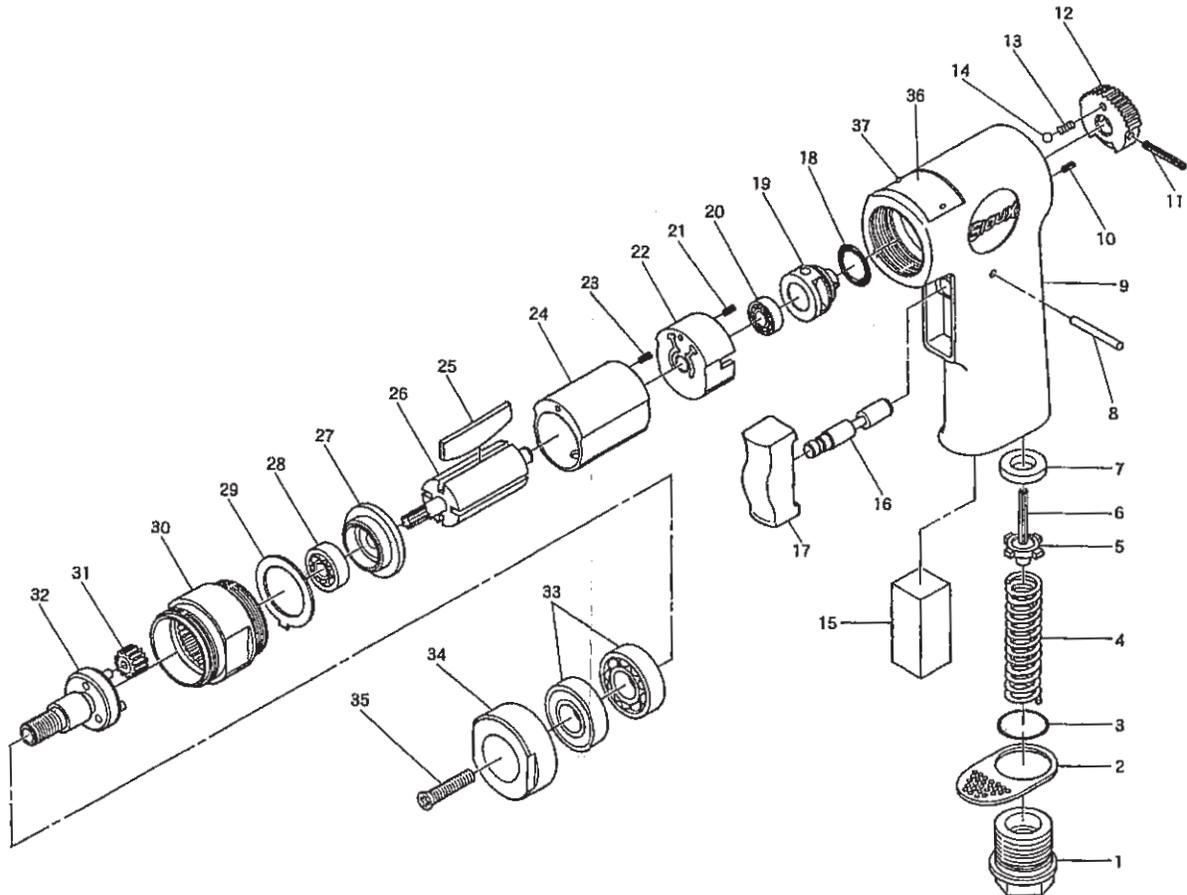
Ref. No.	Part No.	Description
1	505372	Inlet Bushing with Screen
2	505709	Deflector
3	505371	O-Ring
4	505710	Valve Spring
5	505367	Valve
6	505366	Valve Pin
7	505365	Valve Seat
8	505713	Roll Pin
9	505867	Motor Housing
10	505868	Roll Pin
11	505869	Roll Pin
12	505870	Reverse Lever
13	505871	Spring
14	67202	Steel Ball
15	505711	Muffler
16	505714	Valve Shaft
17	505715	Trigger
18	67081	O-Ring
19	505872	Reverse Valve
20	505873	Ball Bearing

Ref. No.	Part No.	Description
21	66570	Roll Pin
22	505874	Rear Plate
23	66502	Roll Pin
24	505875	Cylinder
25	66507	Rotor Blade (Set of 4)
26	505768	Rotor
27	505876	Front Plate
28	66504	Ball Bearing
29	505722	Spacer
30	505877	Internal Gear
31	505878	Idler Gear (3)*
32	505879	Spindle including Pin x 3
33	67328	Ball Bearing (2)*
34	505736	Clamp Nut
35	67421	Chuck Screw
36	505880	Name Plate
37	67255	Name Plate Screw (2)*
Not Shown	505001	Warning Label
Not Shown	505881	3/8" Keyless Chuck

\*Order Quantity Needed



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## Reassembly

Clean all parts and examine for wear before reassembling. Look in particular for wear and cuts on O-rings, wear on rotor blades, gear and clutch components. Lightly coat all parts with a suitable pneumatic tool lubricating oil, preferably one incorporating a rust inhibitor and grease all bearings, gears, and clutch parts with a molybdenum or lithium based general purpose grease. Before reassembling the motor, make sure that the faces of end plates (22, 27) that abut cylinder (24) are flat and free from burrs and sharp edges. If necessary, lap on a flat very fine grade of abrasive paper. Reassemble in the reverse order. When refitting the complete motor assembly to the housing (9) first, make sure that the assembly is clamped tightly together and the rotor spins freely.

When assembling clamp nut (34) to motor housing (9), tighten clamp nut to between 3.0 kg/m and 4.0 kg/m by using a Torque wrench.

Operation Specification	
Air Consumption	2.5 cfm (18 scfm)
Air Inlet Thread	1/4-18NPT
Overall Length	6.6" (168 mm)
Minimum Hose Length	8 feet of 5/16" (8mm) Dia.
at 90 PSIG/6.2 bar	

## NOTES

<b>Manufacturer/Supplier</b> <b>Sioux Tools Inc.</b> <b>2901 Floyd Boulevard</b> <b>P.O. Box 507</b> <b>Sioux City, IA 51102</b> <b>U.S.A.</b> <b>Tel No. 712-252-0525 Fax No. 712-252-4267</b>		<b>Product Type</b> <b>3/8" Reversible</b> <b>Micro Drill</b>	<b>RPM</b> <b>1,550</b> <small>Cycles Per Min.</small>	
		<b>Model No/Nos</b> <b>5203</b>	<b>Serial No.</b>	
<b>Product Net Weight</b> <b>2.25 lbs</b> <b>1.02 Kg</b>	<b>Recommended Use Of</b> <b>Balancer Or Support</b> <b>NO</b>	<b>Recommended Hose Bore</b> <b>Size – Minimum</b> <b>5/16 Ins 8 M/M</b>	<b>Recommended Max.</b> <b>Hose Length</b> <b>30 Ft 10 M</b>	
<b>Air Pressure</b> <b>Recommended Working</b> <b>6.2 bar 90 PSI</b> <b>Maximum</b> <b>6.2 bar 90 PSI</b>		<b>Noise Level: Sound Pressure Level 82.0 dB(A)</b> <b>Test Method: Tested in accordance with Pneurop test code PN8NTC1 and ISO Standard 3744</b>		
<b>SAFETY MESSAGES</b> <small>Personal Safety Equipment</small> <b>Use – Safety Glasses YES</b> <b>Use – Safety Gloves</b> <b>Use – Safety Boots</b> <b>Use – Breathing Masks</b> <b>Use – Ear Protectors YES</b>	 <b>WARNING</b>  Always Read Instructions Before Using Power Tools  Always Wear Safety Goggles  Wear Hearing Protection  Avoid Prolonged Exposure To Vibration	<b>Vibration Level</b> <b>Less Than 2.5 Meters / Sec<sup>2</sup></b> <b>Test Method: Tested in accordance with ISO standards 8662 Part 1 &amp; 7</b>		



### Declaration of Conformity Sioux Tools Inc.

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

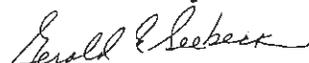
declare under our sole responsibility that the product

### Model 5203 Micro Drill, 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 Part 1 & 7, Pneurop PN8NTC1**

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

  
**Gerald E. Seebeck (President)**

Name and signature or equivalent marking of authorized person