



Model 5272, 5273 & 5274 Air Hammer

Form # Z492
Date 4-98/A



IMPORTANT

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

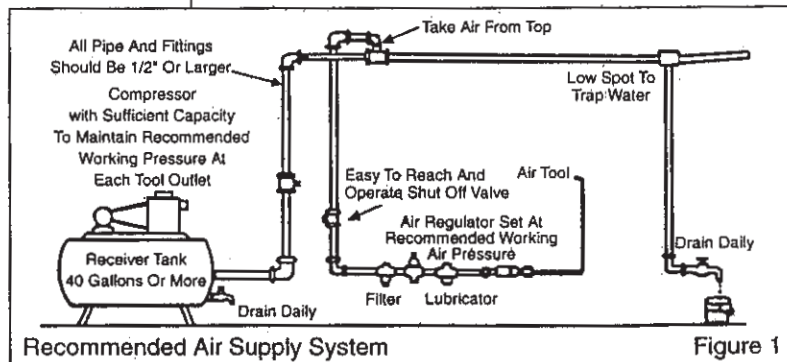
SAFETY MESSAGES	WARNING	Operator Instructions
Personal Safety Equipment. Use – Safety Glasses YES Use – Safety Gloves YES Use – Safety Boots Use – Breathing Masks YES Use – Ear Protectors YES	Always Read Instructions Before Using Power Tools Always Wear Safety Goggles Wear Hearing Protection Avoid Prolonged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

Safety rules when using a 5272, 5273 or 5274 Air Hammer

- Always wear safety goggles as use of tool may cause flying objects.
- 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 throttle 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.
- Wherever 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 – 5272, 5273 & 5274

This tool is designed for the purpose of chipping, riveting and scaling of metals and stone. In general terms, a reciprocating free piston in the cylinder of the tool imparts a blow to the chisel or working attachment. A list of suitable equipment to use with this tool can be provided by the manufacturer. Do not use the tool for any other purpose than that for which it was designed without first consulting the manufacturer or the manufacturer's authorized representative.

Do not modify the tool even for its use as a chipper, etc. or for any other purpose without first consulting the manufacturer or his authorized representative.

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 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 air hammer.

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 hose adaptor 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 while the tool is running is 90 psi/6.2 bar.

Operating

With the air supply disconnected, select the appropriate chisel/attachment to perform the work task. The Quick Change Chuck (21) is designed to accept only 0.401" (10.2mm) diameter round shank chisels. They can be quickly attached as follows. Screw the Quick Change Chuck (21) on the threaded end (tapered) of the cylinder (20). Using a hex wrench, tighten the three hex screws in the base of the chuck against the cylinder to prevent the turning of the chuck due to vibration. Then, to install a chisel, pull the textured ring on the chuck back towards the cylinder, insert chisel until bit collar passes the four steel balls. Release textured ring and make sure the chisel is locked in place. To use the spring retainer, screw the spring clockwise on the threaded barrel. Insert the chisel through the spring from the drive end. The small end of the spring must face the working end of the chisel. Move it to one side, allowing it to grip the outer shoulder flange of the chisel bit. Never fit or remove a chisel with the air supply connected as accidental starting could cause the chisel to fly out of the tool causing serious injury.

The trigger (13) is the on/off valve for the tool. The power regulator (6) on the bottom of the handle regulates the flow of compressed air fed to the piston, which regulates the blow rate and the power of each blow.

An air strainer is built into the air inlet bushing (3). This should be checked periodically for blockage, particularly if the tool appears to lose power. It can be cleaned by removing air inlet bushing (3).

Dismantling & Assembly Instructions

Disconnect tool from air supply.

Pull textured ring on chuck back toward cylinder or move the end of the spring to one side and take out chisel as fitted. Grip housing (1) in a vise fitted with soft jaws and unscrew cylinder (20). If this proves to be difficult to unscrew, use an extension bar on the spanner and/or provide local heating to the threaded area to soften and break the grip of the thread locking sealant. If the valve assembly is not attached to the end of the cylinder (20), remove tool from vise and tap front end of housing (1) to dislodge the valve assembly. Note at this time the location of small and large dowel pins (17) and (18) to cylinder (20), lower valve block (16), valve disc (15) and upper valve block (14) for reassembly. Return housing (1) to vise and unscrew inlet bushing with screen (3). Remove pin (2) to allow air regulator (6) to be pulled out complete with O-rings (5) and cap (4). Tap out roll pin (2) and grip trigger (13) to pull out the valve assembly complete. Grip valve stem (8) and pull off trigger (13). This will release the valve parts, i.e. spring (12), O-ring (11), valve bushing (10), and O-ring (7).

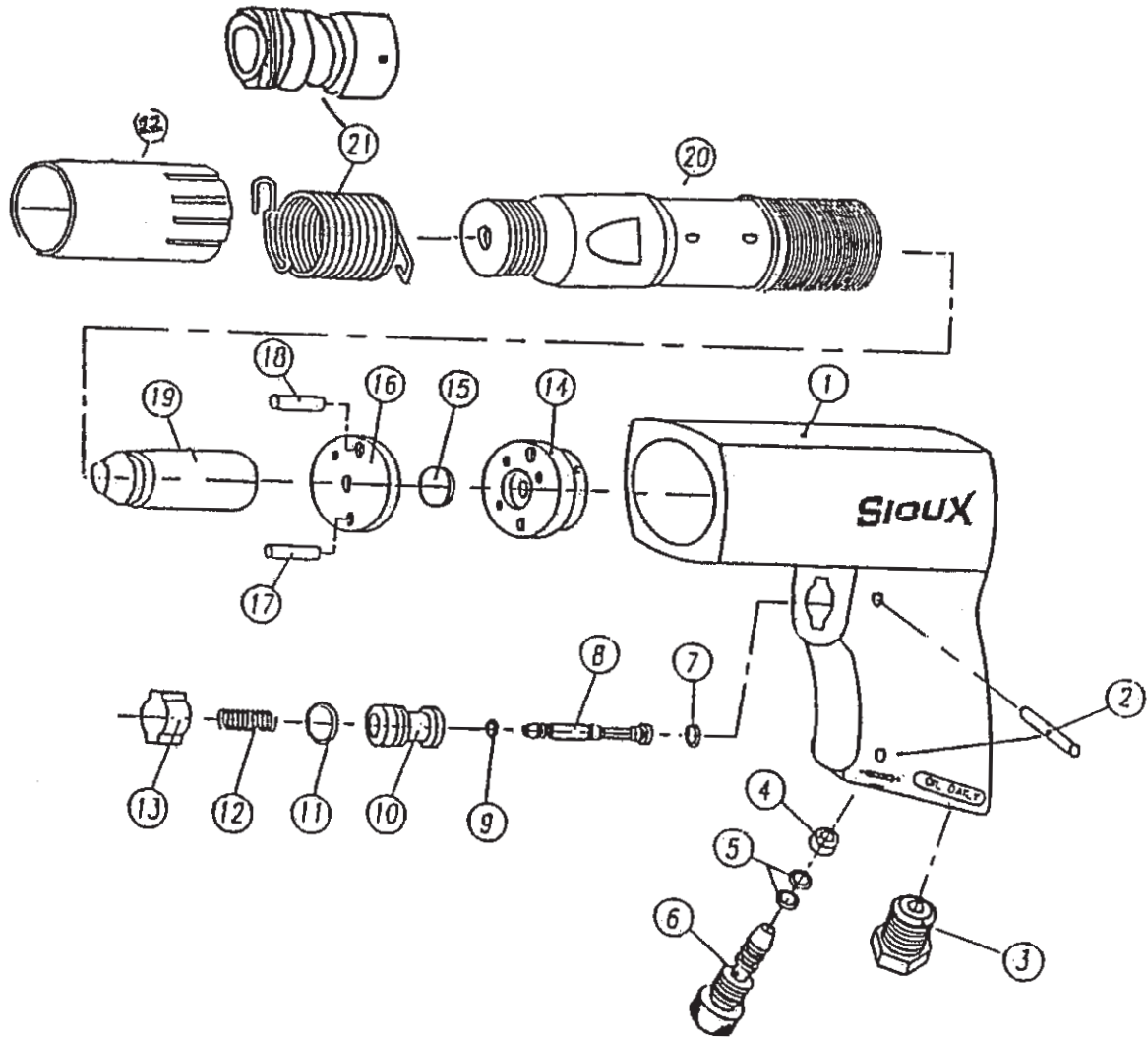
Reassembly

Clean all parts and examine for wear. Replace any components with parts obtained from the manufacturer or authorized distributor. Lightly coat all parts with a suitable pneumatic lubricating oil and pack bearings with a lithium or molybdenum based general purpose grease and assemble in reverse order. With the trigger (13) depressed, pour into hose adaptor (3) 5ml of a suitable pneumatic motor lubricating oil. Release trigger and connect to a suitable air supply and run tool slowly for 2 to 3 seconds to allow the oil to circulate.



5272, 5273 & 5274

Air Hammer



Ref. No.	Part No.	Description
1	505461	Housing – Long (5274, 5274K)
	505462	Housing – Medium (5273, 5273K)
	505463	Housing – Short (5272, 5272K)
2	505464	Roll Pin (3 x 18mm) (2)*
3	505465	Inlet Bushing
4	505466	Cap
5	505467	O-Ring (9 x 2mm) (2)*
6	505468	Regulator
7	505469	O-Ring (3.5 x 1.6mm)
8	505470	Valve Stem
9	505471	O-Ring (3.5 x 1.1mm)
10	505472	Valve Bushing
11	505473	O-Ring (16 x 2mm)
12	505474	Spring
13	505475	Trigger Button



Ref. No.	Part No.	Description
14	505476	Upper Valve Block
15	505477	Valve Disc
16	505478	Lower Valve Block
17	505479	Valve Pin (5 x 19mm)
18	505480	Valve Pin (6 x 19mm)
19	505481	Piston – Long (5274, 5274K)
	505482	Piston – Medium (5273, 5273K)
	505483	Piston – Short (5272, 5272K)
20	505484	Cylinder – Long (5274, 5274K)
	505485	Cylinder – Medium (5273, 5273K)
	505486	Cylinder – Short (5272, 5272K)
21	2207	Retainer Spring (5272, 5273 & 5274 only)
	2270	Quick Change Retainer (5272K, 5273K & 5274K only)
22	505487	Exhaust Deflector (5274, 5274K Only)
Not Shown	505488	Warning Label

*Order Quantity as Needed

Operation Specification			
	5272	5273	5274
Average Air Consumption	4.0 cfm (28 scfm)	4.0 cfm (28 scfm)	4.0 cfm (28 scfm)
Blows Per Minute	4,800	3,000	2,200
Piston Stroke	1-5/8"	2-5/8"	3-1/2"
Air Inlet Thread	1/4-18NPT	1/4-18NPT	1/4-18NPT
Length (with Q.C. Chuck)	7.48" (190mm)	8.86" (225mm)	10.63" (270mm)


at 90 PSIG /6.2 bar

NOTES

Manufacturer/Supplier Sioux Tools Inc. 2901 Floyd Boulevard P.O. Box 507 Sioux City, IA 51102 U.S.A. Tel No. 712-252-0525 Fax No. 712-252-4267		Product Type 0.401" Shank Air Hammer	BPM See Above	
		Model No/Nos 5272 - Short 5273 - Medium 5274 - Long	Serial No.	
Product Net Weight 5272 5273 5274 3.0 3.75 4.40 lbs 1.4 1.70 2.00 Kg	Recommended Use Of Balancer Or Support NO	Recommended Hose Bore Size – Minimum 1/4 Ins 10 M/M	Recommended Max. Hose Length 30 Ft 10 M	
Air Pressure Recommended Working 6.2 bar 90 PSI Maximum 6.2 bar 90 PSI		Noise Level: Sound Pressure Level 100.0 dB(A) Sound Power Level 110.0 dB(A) Test Method: Tested in accordance with Pneurop test code PN8NTC1 and ISO Standard 3744		
SAFETY MESSAGES Personal Safety Equipment Use – Safety Glasses YES Use – Safety Gloves YES Use – Safety Boots Use – Breathing Masks YES Use – Ear Protectors YES	 WARNING Always Read Instructions Before Using Power Tools Always Wear Safety Goggles Wear Hearing Protection Avoid Prolonged Exposure To Vibration	Vibration Level 13.9 Meters / Sec² Test Method: Tested in accordance with ISO standards 8662 Part 1		

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 5272, 5273, & 5274 Air Hammer, 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, Pneurop PN8NTC1
 following the provisions of **89/392/EEC as amended by 91/368/EEC & 93/44/EEC Directives**


Jan E. Albertson (V.P./General Manager)

 Name and signature or equivalent marking of authorized person

This pdf incorporates the following model numbers:
5272, 5273, 5274