

# Model 5075A & 5075AL 3/4" Square Drive Pistol **Grip Impact Tools**





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

#### SAFETY MESSAGES

Personal Safety Equipment

YES

YES

Use – Safety Glasses

Use - Safety Gloves

Use - Safety Boots

Use - Breathing Masks

Use - Ear Protectors

#### WARNING

Always Read Instructions Before **Using Power Tools** 

**Always Wear Safety Goggles** 

Wear Hearing Protection

Avoid Prolonged Exposure To Vibration

Operator Instructions

Includes:

Safety Rules Foreseen Use **Work Stations** 

**Putting Into Service** 

Operating

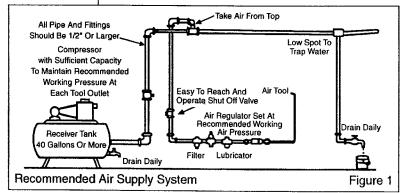
Dismantling and Assembly.

## Safety rules when using a 5075A/5075AL Impact Tool

- Use only impact sockets and extensions, universal joints, etc., rated as being suitable for use with impact tools.
   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.
- Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects and other reproductive harm.
- 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
- 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 - 5075A/5075AL

The impact tool is designed for the tightening and loosening of threaded fastener within the range as specified by the manufacturer. It should only be used in conjunction with suitable impact type 3/4" square female drive nut running sockets. Only use sockets which are of the impact type.

It is allowed to use suitable extension bars, universal joints and socket adaptors between the square output drive of the impact tool and the female square drive of the socket.

Do not use the tool for any other purpose than that specified without consulting the manufacturer or the manufacturer's authorized supplier. To do so may be dangerous.

Never use an impact tool as a hammer to dislodge or straighten cross threaded fasteners. Never attempt to modify the tool for other uses and never modify the tool for even its recommended use as a nutrunner.

#### **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 that when loosening fasteners the tool can move quite quickly away from the fastener being undone. An allowance must always be made for this rearward movement so as to avoid the possibility of hand/arm/body entrapment.

#### **Putting Into Service**

#### Air Supply

Use a clean lubricated air supply that will give a measured air pressure at the tool of 90 PSIG (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, depressurizing 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 joint tightness of the threaded fastener assembly be checked with a torque wrench.

It is recommended that the air pressure at the tool while the tool is running is 90 PSI/6.2 bar.

#### Operating

The output of the impact tool in prime working condition is governed by mainly three factors:

- a) the input air pressure;
- b) the time the impact tool is operated on the joint. Normal time for joints of average tension requirement 3 to 5 seconds;
- c) the setting of the air regulator for a given joint at a given pressure operated for a given time.

The air regulator (24) can be used to regulate the output of the impact tool if no other means of control is available. It is strongly recommended that an external pressure regulator, ideally as part of a filter/regulator/lubricator (FRL), is used to control air inlet pressure so that the pressure can be set to help control the tension required to be applied to the threaded fastener joint.

There is no consistent, reliable torque adjustment on an impact tool of this type. However, the air regulator can be used to adjust torque to the approximate tightness of a known threaded joint. To set the tool to the desired torque, select a nut or screw of known tightness of the same size, thread pitch and thread condition as those on the job. Turn air regulator to low position, apply tool to nut and gradually increase power (turn regulator to admit more air) until nut moves slightly in the direction it was originally set. The tool is now set to duplicate that tightness, note regulator setting for future use. When tightening nuts not requiring critical torque values, run nut up flush and then tighten an additional one-quarter to one-half turn (slight additional turning is necessary if gaskets are being clamped). For additional power needed on disassembly work, turn regulator to its fully open position. This impact tool is rated a 3/4" bolt size.

Rating must be downgraded for spring U bolts, tie bolts, long cap screws, double depth nuts, badly rusted conditions and spring fasteners as they absorb much of the impact power. When possible, clamp or wedge the bolt to prevent springback.

Soak rusted nuts in penetrating oil and break rust seal before removing with impact tool. If nut does not start to move in three to five seconds use a larger size impact tool. Do not use impact tool beyond rated capacity as this will drastically reduce tool life.

NOTE: Actual torque on a fastener is directly related to joint hardness, tool speed, condition of socket and the time the tool is allowed to impact. Use the simplest possible tool-to-socket hook up. Every connection absorbs energy and reduces power.

The direction of rotation is determined by the position of the reverse valve. Be sure it is in the required position before pressing the trigger. The tool incorporates an air strainer in the hose adaptor. Check periodically to see if this is becoming blocked as blockage will reduce both speed and power. To clean the strainer, it is necessary to remove the hose adaptor from the motor housing. For best results:

- 1) Always use the correct size impact type socket.
- 2) Use extra deep sockets in place of extension bars where possible.
- 3) Do not use oversized, worn or cracked sockets.
- 4) Hold the tool so the socket fits squarely on the fastener. Hold the tool firmly, but not too tightly, pressing slightly forward.

### **Dismantling & Assembly Instructions**

Disconnect tool from air supply.

Unscrew and remove oil plug (3) and drain the oil from the front end into a suitable container. Grip motor housing (1) in a vise fitted with soft jaws and unscrew 4 screws with washers (31) and pull off steel housing (44) with O-ring (43). Anvil spacer (39) and oil seal (45) may be pressed out of steel housing (44), if replacements are required. Remove anvil spacer (39) and pull off complete hammer mechanism and pull it apart to separate anvil (38) or (47), spring (37), 2 hammer pins (35), hammer cam (36), cam ball (34), cam ball pilot (33) and hammer cage (32). Socket ring (41) and O-ring (40) may be pried off of anvil (38) or (47).

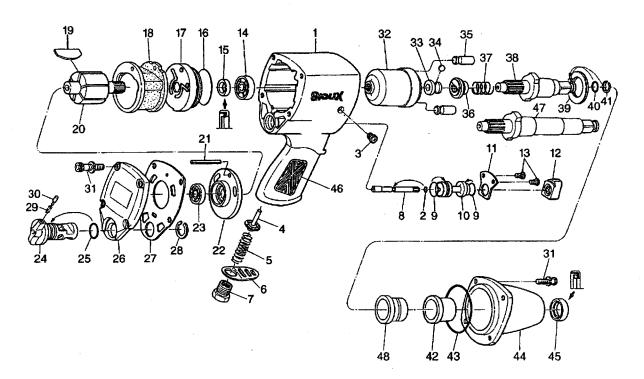
Remove 4 screws with washers (31) and carefully pull off end cap (26) and gasket (27) complete with air regulator assembly. Remove "C" ring (28) and regulator assembly can be pulled through end cap (26) being careful not to lose spring (29) and stop pin (30). Remove O-ring (25) from air regulator reverse (24). Note in particular the orientation of the parts to each other for reassembly.

Unscrew hose adaptor (7) and take off exhaust deflector (6). Pull out rear end plate (22) with bearing 23), rotor (20), 6 rotor blades (19), cylinder (18) and guide pin (21) from motor housing (1). Tap out front end plate (17) complete with O-ring (16), bearing (14) and oil seal (15) from motor housing (1). Bearing (23) may be tapped out of rear end plate (22) and bearing (14) removed from front end plate (17) and carefully and slowly pull out the trigger assembly motor housing. Remove 2 screws (13) and pull out the complete trigger assembly and separate into parts, trigger (12), stop cover (11), throttle bushing (10) with 2 O-rings (9), throttle pin (8) and O-ring (2). Note the orientation of throttle pin (8) to trigger (12) for reassembly to ensure that throttle pin (8) correctly locates on the small stem on valve stem (4).



5075A 5075AL 3/4" Square Drive Pistol Grip Impact Tool

3/4" Square Drive Pistol Grip Impact Tool with 6" Extended Anvil



Ref. No.	Part No.	Description	
1	505590	Motor Housing	
2	66686	O-Ring	
3	66604	Oil Plug	
4	505591	Valve Stem	
5	505592	Throttle Spring	
6	505593	Deflector	
7	505594	Hose Adaptor	
8	505595	Throttle Pin	
9	505596	O-Ring (2)	
10	505597	Throttle Bushing	
11	505598	Stop Cover	
12	505599	Trigger	
13	66646	Tapping Screw (2)	
14	505601	Bearing	
15	505272	Oil Seal	
16	505602	O-Ring	
17	505603	Front Plate	
18	505604	Cylinder	
19	505605	Rotor Blade (6)	
20	505606	Rotor	
21	505607	Guide Pin	
22	505608	Rear Plate	
23	66612	Bearing	
24	505609	Regulator Reverse	
25	505630	O-Ring	
26	505610	End Cap	
27	505611	Gasket	

Ref. No.	Part No.	Description
28	505612	C-Ring
29	66701	Stop-Pin Spring
30	66702	Stop-Pin
31	505613	Screw with Lock Washer (8)
32	505614	Hammer Cage
33	505615	Pilot
34	505616	Cam Ball
35	505617	Hammer Pin (2)
36	505618	Hammer Cam
37	505619	Cam Release Spring
38	506281	Anvil (Std.)
39	505621	Anvil Spacer
40	66626	O-Ring
41	66625	Socket Ring
42	505946	Anvil Bushing
43	505624	O-Ring
44	505948	Steel Housing - Chrome
45	66631	Oil Seal
46	505627	Rubber Handle
47	505727	Anvil (Ext.)
48	505947	Anvil Collar
Not Shown	506282	Suspension Bail
Not Shown	505001	Warning Label
Not Shown	505629	Nameplate (5075A)
Not Shown	505735	Nameplate (5075AL)
Not Shown	67255	Nameplate Screws (2)

Reassembly

Clean all parts and examine for wear, damage, cracks, etc. particularly anvil (38) or (47) around the square drive area. Examine O-rings and oil seals for cuts and wear. Replace all parts where necessary with manufacturer supplied parts. Make sure that the faces of end plates (17) and (22) that abut cylinder (18) are flat and free from surface defects and burrs. If necessary, lap faces with a very fine grade of abrasive paper. Lightly coat all parts with a suitable pneumatic tool lubricating oil and assemble in the reverse order. On completing assembly, ensure that all parts are locked tight, the anvil will rotate, and the trigger reverse valve and air regulator mechanism operate freely. Remove oil plug (3) and pour in 5/8 fl. oz. (15cc) of a standard SAE20 grade oil. Do not overfill as this will result in a reduction in performance. Pour in approx. 5 ml of a good quality lubricating oil (one preferably containing a rust inhibitor) into the hose adaptor (7) with the trigger depressed. Connect to a suitable air supply and run the tool for a few seconds to allow the oil to circulate and reset for operation. Refer to section Operating.

Operation Specification					
	5075A	5075AL			
Air Consumption (Free Speed)	5.8 cfm (41 scfm)	5.8 cfm (41 scfm)			
Maximum Torque	1200 ft. lbs (1627 Nm)	1200 ft. lbs (1627 Nm)			
Torque Range	300-800 ft. lbs (407-1085 Nm)	300-780 ft. lbs (407-1058 Nm)			
Air Inlet Thread	3/8-18NPT	3/8-18NPT			
Overall Length	10.2* (259 mm)	16.2" (411 mm)			
at 90 PSIG/6.2 bar					

NOTES	,	

Manufacturer/Supplier Sioux Tools, Inc.		Product Type 3/4" Square Drive Pistol Grip Impact Tools	5,000 Cycles Per Min.	
117 Levi Drive Murphy, NC 28906 U.S.A. Tel No. 828-835-9765	Fax No. 828-835-9685	Model No/Nos 5075A - Std. Anvil 5075AL - 6" Ext. Anvil	Serial No.	
Product Net Weight 5075A 5075AL 12.6 15.7 lbs 5.7 7.1 Kg	Recommended Use Of Balancer Or Support <b>N0</b>	Recommended Hose Bore Size – Minimum 3/8 Ins 10 M/M	Recommended Max. Hose Length 30 Ft 10 M	
Air I	Pressure	Noise Level: Sound Pressure Level 92.0 dB(A) Sound Power Level 102.0 dB(A)		
Recommended Working Maximum	g 6.2 bar 90 PSI 6.2 bar 90 PSI	Test Method: Tested in accordance with Pneurop test code PN8NTC1 and ISO Standard 3744		
SAFETY MESSAGES Personal Safety Equipment Use – Safety Glasses  VES  WARNING Always Read Instructions Before Using Power Tools			6 (Std.) Meters / Sec <sup>2</sup> I (6") Meters / Sec <sup>2</sup>	
Use – Safety Gloves Use – Safety Boots Use – Breathing Masks Use – Ear Protectors	Always Wear Safety Goggles  Wear Hearing Protection  Avoid Prolonged Exposure To Vibration	100111101111011111111111111111111111111	ccordance with ISO 8662 Parts 1 & 7	

Œ

# Declaration of Conformity Sioux Tools Inc. 117 Levi Drive, Murphy, NC 28906, U.S.A.

declare under our sole responsibility that the product

Model 5075A/5075AL 3/4" Impact Tools, 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 & 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