



Model 5045/5045P

3/8" Square Drive Butterfly Lever Impact Wrench

Form # ZCE703
Date 5-02/A



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. 250 Snap-on Drive P.O. Box 1596 Murphy, NC 28906 U.S.A. Tel No. 828-835-9765 Fax No. 828-835-9685		Product Type 3/8" Sq. Drive Butterfly Lever Impact Wrench	Max. RPM 9,700 Cycles Per Min.
		Model No/Nos 5045 (Std. Anvil) 5045P (Pin Anvil)	Serial No.
Product Net Weight 2.55 lbs 1.15 Kg	Recommended Use Of Balancer Or Support NO	Recommended Hose Bore Size – Minimum 3/8 ins 10 mm	Recommended Max. Hose Length 30 Ft 10 M
Air Pressure Recommended Working Maximum 6.2 bar 90 PSI 6.2 bar 90 PSI		Noise Level: Sound Pressure Level 96.6 dB(A) Sound Power Level 109.2 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 Use – Safety Boots Use – Breathing Masks 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 3.09 Meters / Sec² Test Method: Tested in accordance with ISO standards 8662 Parts 1 & 7	

Safety rules when using a 5045/5045P Impact Wrench

- Use only impact sockets and extensions, universal joints, etc. rated as being suitable for use with impact wrenches.
- 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 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 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 trigger/lever, etc. must always be free to

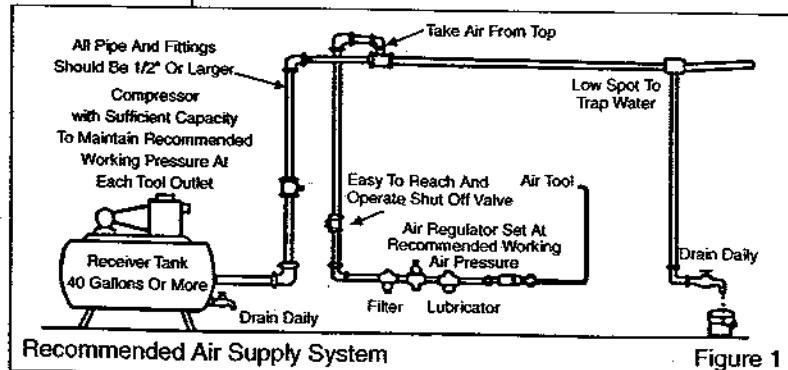


Figure 1

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 air 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 and 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 the 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 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 – 5045/5045P

The impact wrench is designed for the tightening and loosening of threaded fasteners within the range as specified by the manufacturer. It should only be used in conjunction with suitable impact type 3/8" 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 wrench and the square female 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 wrench 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 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 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 p.s.i./6.2 bar when the tool is running with the trigger fully depressed and the air regulator in its maximum opening flow position. 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 a quick connect coupling directly to the tool, but use a whip or leader hose of approximately 12 inches length. 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 throttle lever 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. When lubricating, also ensure that the air strainer in hose adaptor is clean. It is recommended that joint tightness of the threaded fastener assembly be checked with suitable measuring equipment. It is recommended that the air pressure at the tool while the tool is running is 90 p.s.i./6.2 bar.

Operating

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

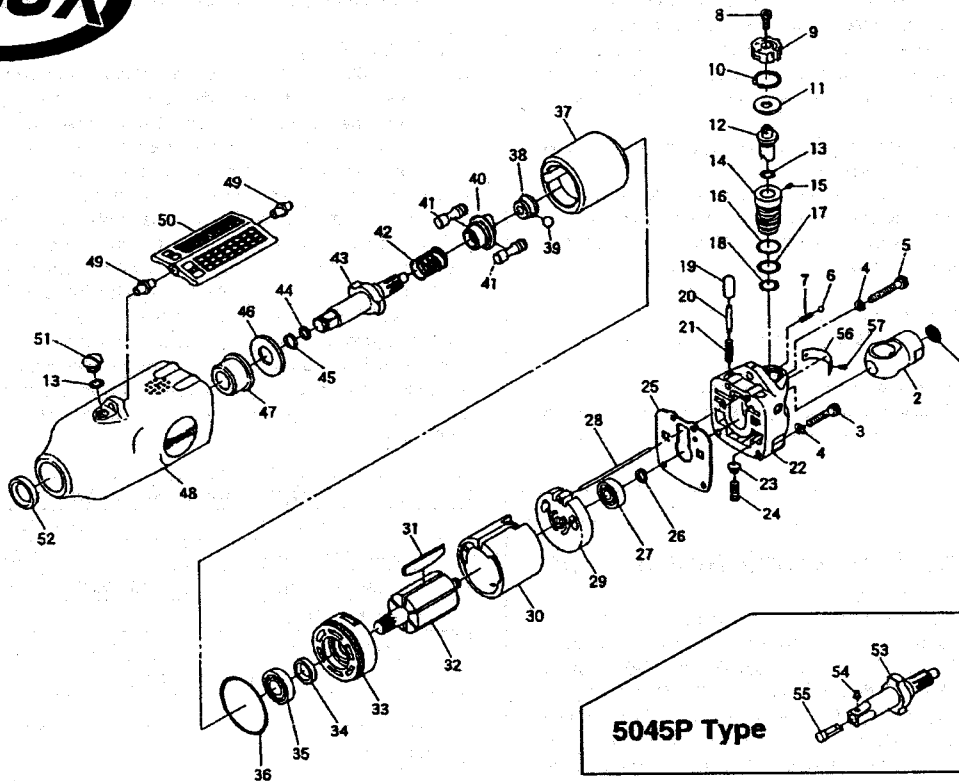
- a) the input air pressure;
- b) the time the impact wrench is operated on the joint. Normal time for joints of average tension requirement 3 to 5 seconds;
- c) the setting of the air regulator for a given joint at a given pressure operated for a given time.

The air regulator (9) can be used to regulate the output of the impact wrench 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 wrench 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 wrench 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 wrench is rated a 3/8" 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.



5045 3/8" Square Drive Butterfly Lever Impact Wrench
5045P 5045 with Pin Anvil



Ref. No.	Part No.	Description
1	67445	Screen
2	506363	Bushing
3	67086	Cap Screw (2)
4	67197	Lock Washer (4)
5	67010	Cap Screw (2)
6	67202	Steel Ball
7	67203	Regulator Spring
8	506364	Cap Screw
9	506365	Regulator Dial
10	506366	Retaining Ring
11	506367	Washer
12	506368	Regulator
13	67037	O-Ring (2)
14	506369	Swivel Shaft
15	67653	Roll Pin
16	67435	O-Ring
17	505143	O-Ring
18	66600	O-Ring
19	67190	Plunger (2)
20	67192	Valve Pin (2)
21	67191	Plunger Spring (2)
22	506370	Housing Cap
23	67193	Valve (2)
24	67194	Valve Spring (2)
25	67188	Motor Gasket
26	67187	Retaining Ring
27	66504	Ball Bearing
28	506371	Dowel Pin
29	506372	Rear Plate
30	506393	Cylinder

Ref. No.	Part No.	Description
31	506390	Rotor Blade (Set of 6)
32	506373	Rotor
33	506374	Front Plate
34	67178	Oil Seal
35	67177	Ball Bearing
36	506375	O-Ring
37	506376	Hammer Cage
38	506377	Ball Retainer
39	506378	Steel Ball
40	506379	Cam
41	506380	Hammer Pin (2)
42	506381	Cam Spring
43	506382	Anvil (5045)
44	67172	Socket O-Ring
45	67171	Socket Retainer
46	506383	Spacer
47	67169	Anvil Bushing
48	506384	Motor Housing
49	67167	Throttle Pin (2)
50	506385	Throttle Lever
51	67165	Oil Plug
52	67164	Oil Seal
53	506386	Pin Anvil (5045P)
54	506387	Pin (5045P)
55	506388	Pin Retainer (5045P)
56	506391	Nameplate (5045)
	506392	Nameplate (5045P)
57	67255	Nameplate Screw (2)
Not Shown	506394	Warning Label
Not Shown	506395	Warning Icon Label

Soak rusted nuts in penetrating oil and break rust seal before removing with impact wrench. If nut does not start to move in three to five seconds use a larger size impact wrench. Do not use impact wrench 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 controlled by the throttle lever. Be sure that it is known which side of the lever has to be pressed to give the required direction of rotation before applying the impact wrench to the joint to be fastened or loosened.

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 wrench so the socket fits squarely on the fastener. Hold the wrench firmly, but not too tightly, pressing forward slightly.

Dismantling & Assembly Instructions

Disconnect tool from air supply.

Unscrew oil plug (51) and O-ring (13) and drain oil from the tool into a suitable container. Unscrew cap screw (8) and remove regulator dial assembly (9, 7, 6). Remove retaining ring (10), washer (11), regulator (12) with O-ring (13), swivel shaft (14) including roll pin (15) and 3 O-rings (16, 17, 18). Pull out bushing (2) with screen (1) from housing cap (22). Unscrew 2 each cap screws (5, 3) with lock washers (4) to remove housing cap (22) and motor gasket (25). Note that cap screws (5) are longer than cap screws (3) and must be placed in the same holes during reassembly. Remove throttle lever (50) with 2 throttle pins (49). Remove valves (23), valve springs (24), plunger springs (21), valve pins (20) and plungers (19). Pull out dowel pin (28) and extract the entire assembly consisting of retaining ring (26), rear plate (29) with ball bearing (27), rotor (32) 6 rotor blades (31), cylinder (30) and front plate (33) with oil seal (34), ball bearing (35) and O-ring (36). Remove complete hammer mechanism. Note how cylinder (30) is removed for reassembly. The chamfer end must face the front of the tool. Remove rotor blades (31) from rotor (32). Take off retaining ring (26) and pull rotor (32) through rear plate (29) and bearing (27). Using a suitable punch, bearing (27) may be removed from rear plate (29). Pull out front plate (33) complete with O-ring (36). Carefully pry off O-ring (36). Remove bearing (35) and oil seal (34) from front plate (33).

For 5045, remove spacer (46), anvil (43) with O-ring (44) and socket retainer (45). For 5045P, remove pin anvil (53), pin (54) and pin retainer (55).

Now, remove cam spring (42), cam (40), hammer pins (41), ball retainer (38), steel ball (39) and hammer cage (37). Do not remove O-ring (44) and socket retainer (45) from anvil (43), unless

replacement is needed. Oil seal (52) may be hooked out and anvil bushing (47) pressed out of motor housing (48), if necessary.

Reassembly

Clean all parts for wear and examine O-rings and seals for signs of cuts and wear, etc. Particularly examine anvil (43 or 53), around the area of the square drive cam (40), hammer cage (37), and hammer pins (41) for cracks and wear. Replace all parts where necessary with manufacturer supplied parts. Clean and lightly coat all parts with a suitable pneumatic tool lubricating oil and assemble in the reverse order. On completing assembly, make sure the anvil is free to rotate and the lever and regulator operate freely. Remove oil plug (51) and O-ring (13) and pour in 3/8 fl. oz. (12cc) of a standard SAE20 grade oil. Replace oil plug (51) and O-ring (13). Do not overfill as this will result in a reduction in power of the tool. Pour in approx. 5ml of a good quality lubricating oil (one preferably containing a rust inhibitor) into the air inlet and connect to a suitable air supply and operate tool slowly for a few seconds to allow the oil to circulate and reset for operation. Refer to section on Operating.

Operation Specification

Air Consumption	2.5 cfm (18 scfm)
Maximum Torque	175 ft. lb. (237 Nm)
Working Torque	15-160 ft. lb. (20-217 Nm)
Air Inlet Thread	1/4-18NPT
Overall Length	7.63 ins. (194 mm)
at 90 PSIG/6.2 bar	

Notes

CE

Declaration of Conformity

Sioux Tools Inc.

250 Snap-on Drive, P.O. Box 1596, Murphy, NC 28906, U.S.A.

declare under our sole responsibility that the product

Model 5045/5045P Butterfly Lever Impact Wrench, 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
Gerald E. Seebeck (President)

Name and signature or equivalent marking of authorized person

This pdf incorporates the following model numbers:
5045, 5045P