#### **Operating Instructions • Warning Information • Parts Breakdown**

SX231P & SX231P-2

1/2" PREMIUM

IMPACT WRENCH

## SX231P SPECIFICATIONS

**INEX**®

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Square Drive Size	
Max. Torque	500 Ft. Lbs. (677.9 Nm)
Free Speed	
Length	Length 7.4" (188 mm)
Weight	5.9 Lbs. (2.7 kg)
Avg. Air Cons	5.5 cfm Avg Air Cons (155.7 l/min)
Air Inlet	
Min. Hose Size	
Sound Pressure Level	107 dBA

## SX231P-2 SPECIFICATIONS

Square Drive Size	
Max. Torque	500 Ft. Lbs. (677.9 Nm)
Free Speed	
Length	Length 9.4" (238.8mm)
Weight	6.2 Lbs. (2.8 kg)
Avg. Air Cons	
Air Inlet	
Min. Hose Size	
Sound Pressure Level	

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READ THIS MANUAL BEFORE OPERATING TOOL.

ALWAYS WEAR EYE PROTECTION WHEN OPERATING OR PERFORMING MAINTENANCE ON THIS TOOL.

ALWAYS WEAR HEARING PROTECTION WHEN OPERATING THIS TOOL.

AVOID PROLONGED EXPOSURE TO VIBRATION

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# **A**WARNING

To reduce the risk of injury, anyone using, repairing, maintaining, or changing accessories on this tool must read and understand these instructions before performing any of these tasks.

- Always inspect, operate, and maintain this tool in accordance with American National Standards Institute Safety Code of Portable Air Tools (ANSI B186.1) and any other applicable safety codes and regulations.
- ▲ These tools are rated at 90 psi / 6.2 bar max air pressure for safety, top performance, and maximum durability of parts; do not exceed this pressure while the tool is running.
- Always shut off air supply, drain hose of air pressure and disconnect tool from air supply when not in use, before changing accessories, or when making repairs.
- A Never direct air at yourself or anyone else.
- Always wear impact-resistant eye and face protection when operating or performing maintenance on this tool.
- A High sound levels can cause permanent hearing loss. Always use hearing protection when using this tool as recommended by your employer or OSHA regulation.
- ▲ Keep away from rotating end of tool. Do not wear jewelry or loose clothing. Secure long hair. Scalping can occur if hair is not kept away from tool and accessories. Choking can occur if neckwear is not kept away from tool and accessories.
- A Do not use quick disconnect couplings at tool. See operating instructions for proper set up.
- A Whipping hoses can cause serious injury. Always carefully check for damaged or loose hoses and fittings before operating this tool.
- Avoid direct contact with accessories during and after use. Gloves should be worn to reduce the risk of cuts or burns.
- ▲ Use only sockets and accessories rated for use with Impact Wrenches which are in good condition. Sockets in poor condition or hand sockets and accessories can shatter and cause injury.
- A Never run the tool off of the work. The tool may run too fast and cause the accessory to be thrown off of the tool.
- Serious injury can result from over-torqued or under-torqued fasteners. Assemblies requiring a specific torque must be checked using a torque meter.
- Click" torque wrenches do not check for potentially dangerous over-torque conditions.
- Slipping, tripping, and/or falling while operating air tools can be a major cause of serious injury or death. Be aware of your surroundings and any excess hose left on the walking or working surface.
- Pneumatic tools can cause vibration in use. Vibration, repetitive motions or uncomfortable positions over extended periods of time may be harmful to your hands and arms. Discontinue use of tool if discomfort, tingling feeling or pain occurs. Consult a physician before resuming use if any of these symptoms occur.
- Do not stretch or overreach while using this tool.
- If tool appears to malfunction, remove from service immediately and arrange for repair.
- A Never use tool if there is any chance of coming into contact with line electricity.

- Use only Sunex certified spare parts for any repair made to tool. Repairs should only be performed by properly trained persons.
- A Do not lock, tape or wire the tool valve in the "on/off" position.
- A Do not allow the exhaust air to come in contact with hot surfaces or flames.
- Use only impact wrench sockets and accessories on this tool. Do not use chromed hand sockets and accessories.
- Avoid inhaling dust or handling debris from the work process, which can be harmful to your health. Use dust extraction and wear respiratory protective equipment when working with materials which produce airborne particles.
- ▲ Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Some examples of these chemicals are:
  - Lead from lead based paints
  - Crystalline silica bricks and cement and other masonry products
  - Arsenic and chromium from chemically-treated lumber
- ▲ Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.
- ▲ This product may contain one or more chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. *Wash hands thoroughly after handling.*

### **Additional Safety Warnings**

- Do not modify this tool or its accessories.
- A Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- A Do not force tool beyond its rated capacity.
- A Do not remove any labels. Replace damaged labels.
- A This tool is not recommended for use in explosive atmospheres or underwater use.
- Operators and maintenance personnel must be physically able to handle the bulk, weight, and power of this tool.
- A This tool is for professional use only.

# SAFETY INSTRUCTIONS - DO NOT DISCARD - GIVE TO USER

#### SX231P & SX231P-2: Parts Breakdown & Operating Manual

### **Instruction Manual**

This product is designed to tighten or loosen threaded fasteners. No other use is permitted.

### **Air Supply Requirements**

Tool is designed to operate at 90 psi (6.2 bar) at free speed measured at the tool, of clean, dry air. Operating this tool at higher pressures will drastically reduce the tool life and could cause injury.

The air inlet thread on this tool is a standard 1/4" NPT. Line pressure should be increased for any unusually long air hose run (over 25 feet). Minimum hose diameter should be 3/8" I.D. and all fittings should have the same inside diameter. See diagram below for proper air supply setup.



### Lubrication

Lubricate the tool each day after use with quality SAE #10 air motor oil. Add the oil to the air inlet or into the hose at the nearest connection to the air supply, then run the tool until all excess oil is expelled from the exhaust. Total oil quantity needed for this procedure is approximately 1/2 ounce.

### Operation

This tool includes an adjustable power management system that allows the operator to adjust power in the clockwise direction (forward) and counter clockwise direction (reverse).

To set tool up with full power output in forward direction and full power in the reverse direction; rotate the power dial until the notch on the dial aligns with the number 5 setting on each side of the tool.

To set tool up with reduced power output in forward direction and full power in the reverse direction; push the reversing valve out in the clockwise direction (forward) and adjust the dial to the desired number in the forward direction. You will see that when the reversing valve is switched back to counter clockwise, the tool will have full power output.

To set tool up with full power output in forward direction and reduced power in the reverse direction; push the reversing valve out in the counter clockwise direction (reverse) and adjust the dial to the desired number in the reverse direction. You will see that when the reversing valve is switched back to clockwise, the tool will have full power output.

The Power management system is only for reference and does not act as a torque control tool. This tool includes a plunger style variable speed trigger that further allows the operator to control output power in the clockwise direction.

This impact wrench is rated at 1/2" SAE bolt size. Rating must be down graded 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 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. The reversing valve is used to change the rotation of the tool. When the valve is out, the tool is in a forward or right hand rotation. When the valve is pushed in, the rotation is reverse or left hand.

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.



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	RS708A01S	Housing Assembly	
		(includes #1, 2, 3, 5, 43)	1
2	RS708A02S	Name Plate	1
3	RS708A03	Grease Fitting	1
4	RS708A04	0-Ring	2
5	RS708A05	Reverse Valve Sleeve	1
6	RS708A06	Detent Ball	1
7	RS708A07	Detent Spring	1
8	RS708A08	Reverse Valve	1
9	RS708A09	Trigger Pin	1
10	RS708A10	Valve Seat	1
11	RS708A11	Valve Stem	1
12	RS708A12	0-Ring	2
13	RS708A13	Air Inlet	1
14	RS708A14	Valve Spring	1
15	RS708A15	Throttle Valve Assembly	
	(includes #10, 11, 12, 14)	1	
16	RS708A16	Trigger	1
17	RS708A17	Set Screw	1
18	RS708A18	Rear Gasket	1
19	RS708A19	Rear Bearing	1
20	RS708A20	Knob for Reverse Valve	1
21	RS708A21	Screw	1
22	RS708A22	Rear End Plate	1

REF. NO.	PART No.	DESCRIPTION	QTY.
23	RS708A23	E-Ring	1
24	RS708A24	Rotor	1
25	RS708A25	Rotor Blade	
	(Pack of 6 Blades)	1	pack
26	RS708A26	Cylinder	1
27	RS708A27	Front End Plate	1
28	RS708A28	Front Bearing	1
29	RS708A29	Cylinder Dowel Pin	1
30	RS708A30	Motor Clamp Washer	2
31	RS708A31	Washer	1
32	RS708A32	Hammer Cage	1
33	RS708A33	Hammer	2
34	RS708A34	Hammer Pin	2
35	RS708A44	2" Anvil Assembly (includes #12, 36)	1
	RS708A35	Standard Anvil Assembly (includes #12, 36	i) 1
36	RS708A36	Socket Retaining Ring	1
37	RS708A37	Anvil Bushing	1
38	RS708A38	Protect Ring	1
39	RS708A39	Front Gasket	1
40	RS708A40	Hammer Case Assembly	
		(includes #37)	1
41	RS708A41	Spring Washer	3
42	RS708A42	Cap Screw	3
43	RS708A43	Warning Label	1

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12/03/13 Shop for other air tools & compressors on our website.