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





# AWARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- 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.

#### **SPECIFICATIONS**

Square Drive	Sound Level
Free Speed10,000 RPM	Length
Max. Torque	Air Inlet Thread1/4" NPT
Torque Range	Avg. Air Consumption 4 cfm
Weight	Rec. Air Pressure90 psi (6.2bar)

#### AWARNING



ALWAYS READ INSTRUCTIONS BEFORE USING POWER TOOLS



ALWAYS WEAR SAFETY GOGGLES



WEAR HEARING PROTECTION



AVOID PROLONGED EXPOSURE TO VIBRATION

**SX111** 

3/8" Dr.
Palm Grip
Impact Wrench

# AWARNING

#### FAILURE TO OBSERVE THESE WARNINGS COULD RESULT IN INJURY.



THIS INSTRUCTION MANUAL CONTAINS IMPORTANT SAFETY INFORMATION.

READ THIS INSTRUCTION MANUAL CAREFULLY AND UNDERSTAND ALL INFORMATION *BEFORE* OPERATING THIS TOOL.

- Always operate, inspect 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.
- For safety, top performance and maximum durability of parts, operate this tool at 90 psig 6.2 bar max air pressure with 3/8" diameter air supply hose.



 Always wear impact-resistant eye and face protection when operating or performing maintenance on this tool. Always wear hearing protection when using this tool.



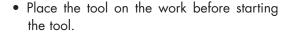
- High sound levels can cause permanent hearing loss. Use hearing protection as recommended by your employer or OSHA regulation.
- Keep the tool in efficient operating condition.
- Operators and maintenance personnel must be physically able to handle the bulk, weight and power of this tool.



• Air under pressure can cause severe injury. Never direct air at yourself or others. Always turn off the air supply, drain hose of air pressure and detach tool from air supply before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool. Failure to do so could result in injury. Whip hoses can cause serious injury. Always check for damaged, frayed or loose hoses and fittings, and replace immediately. Do not use quick detach couplings at tool. See instructions for correct set-up.



 Air powered tools can vibrate 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. Seek medical advice before resuming use.





- Slipping, tripping and/or falling while operating air tools can be a major cause of serious injury or death. Be aware of excess hose left on the walking or work surface.
- Keep body working stance balanced and firm. Do not overreach when operating the tool.
- Anticipate and be alert for sudden changes in motion during start up and operation of any power tool.



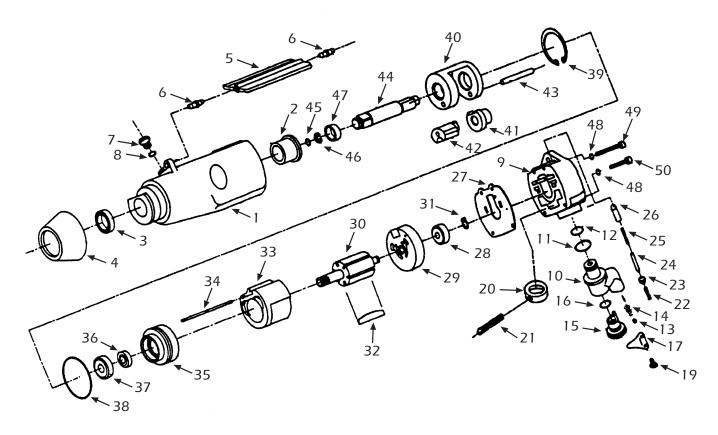
- Do not carry tool by the hose. Protect the hose from sharp objects and heat.
- Tool shaft may continue to rotate briefly after throttle is released. Avoid direct contact with accessories during and after use. Gloves will reduce the risk of cuts or burns.



- 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.
- Impact wrenches are not torque control devices. Fasteners with specific torque requirements must be checked with suitable torque measuring devices after installation with an impact wrench.
- Use only impact wrench sockets and accessories on this tool. Do not use hand sockets and accessories.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- Don't force tool beyond its rated capacity.
- Do not remove any labels. Replace any damaged labels.

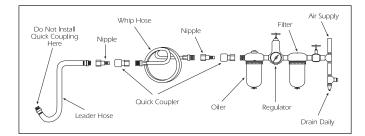
### **SX111**

## 3/8" Dr. Palm Grip Impact Wrench



Ref. #	Item #	DESCRIPTION	QTY	Ref#	Item#	DESCRIPTION	QTY
1	106101	Motor Housing	1	26	106126	Plunger	1
2	106102	Anvil Bushing	1	27	106127	Back Cap Gasket	1
3	106103	Oil Seal	1	28	106128	Ball Bearing	1
4	106104	Rubber Nose Guard	1	29	106129	Rear End Plate	1
5	106105	Throttle Lever	1	30	106130	Rotor	1
6	106106	Throttle Pin	2	31	106131	Retaining Ring	1
7	106107	Oiler Screw	1	32	106132	Rotor Blade	6
8	106108	O-Ring	1	33	106133	Cylinder	1
9	106109	Back Cap	1	34	106134	Motor Pin	1
10	106110	Air Inlet Block	1	35	106135	Front End Plate	1
11	106111	O-Ring	1	36	106136	Oil Seal	1
12	106112	O-Ring	1	37	21114	Ball Bearing	1
13	106113	Regulator Ball	1	38	106138	O-Ring	1
14	106114	Regulator Spring	1	39	106139	Snap Ring	1
15	106115	Regulator	1	40	106140	Hammer Cage	1
16	106116	O-Ring	1	41	106141	Cam	1
17	106117	Retainer Plate	1	42	106142	Hammer	1
19	106119	Screw	2	43	106143	Hammer Pin	1
20	106120	Fixing Ring	1	44	106144	Anvil	1
21	106121	Pin	1	45	106145	O-Ring	1
22	106122	Valve Spring	2	46	106146	Socket Retaining Ring	1
23	106123	Valve Seat	2	47	106147	Cage Bushing	1
24	106124	Valve	2	48	106148	Lock Washer	4
25	106125	Plunger Spring	2	49	106149	Cap Screw - Long	2
				50	106150	Cap Screw - Short	2

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#### Air Supply...

Tools of this class operate on a wide range of air pressures. It is recommended that air pressure of these tools measure 90 PSI at the tool while running free. Higher pressure (over 90 psig; 6.2 bar) raises performance beyond the rated capacity of the tool which will shorten the tool's life because of faster wear and could cause injury.

Always use clean, dry air. Dust, corrosive fumes and/or water in the air line will cause damage to the tool. Drain the air tank daily. Clean the air inlet filter screen on at least a weekly schedule. The recommended hookup procedure can be viewed in the above figure.

The air inlet used for connecting air supply, has standard 1/4" NPT. Line pressure should be increased to compensate for unusually long air hoses (over 25 feet). Minimum hose diameter should be 3/8" I.D. and fittings should have the same inside dimensions and be tightly secured.

#### Lubrication...

Lubricate the air motor daily with quality air tool oil. If no air line oiler is used, run a teaspoon of oil through the tool. The oil can be squirted into the tool air inlet or into the hose at the nearest connection to the air supply, then run the tool. The amount of oil to be used is 1 ounce. Overfilling will cause a reduction in the power of the tool.

#### Operation...

The air regulator knob can be used as an air throttle, if there are no other means of regulating air. Turn the air regulator knob all the way to position 4 for maximum power.

The air regulator can be used to adjust torque to the approximate tightness of a known fastener. To set the tool to 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 onequarter 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 at 3/8" USS 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.

#### **Limited Warranty...**

### SUNEX INTERNATIONAL, INC. WARRANTS TO ITS CUSTOMERS THAT THE COMPANY'S SUNEX TOOLS® BRANDED PRODUCTS ARE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS.

Sunex International, Inc. will repair or replace its Sunex Tools® branded products which fail to give satisfactory service due to defective workmanship or materials, based upon the terms and conditions of the following described warranty plans attributed to that specific product. This product carries a ONE-YEAR warranty. During this warranty period, Sunex Tools will repair or replace at our option any part or unit which proves to be defective in material or workmanship.

#### Other important warranty information...

This warranty does not cover damage to equipment or tools arising from alteration, abuse, misuse, damage and does not cover any repairs or replacement made by anyone other than Sunex Tools or its authorized warranty service centers. The foregoing obligation is Sunex Tools' sole liability under this or any implied warranty and under no circumstances shall we be liable for any incidental or consequential damages.

Note: Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Return equipment or parts to Sunex Tools, or an authorized warranty service center, transportation prepaid. Be certain to include your name and address, evidence of the purchase date, and description of the suspected defect.

If you have any questions about warranty service, please write to Sunex Tools. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. Repair kits and replacement parts are available for many of Sunex Tools products regardless of whether or not the product is still covered by a warranty plan.

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