SAT102 IMPACT WRENCH

OWNER'S MANUAL



SPECIFICATION

MODEL No	SAT102
WORKING PRESSURE	90 PSI
AIR CONSUMPTION	7 SCFM
MAX TORQUE	680 Nm
WEIGHT	2.59kg

WARNING



Read and understand instructions before use.



Always wear eye/face and hand protection.



IMPROPER OPERATION OR MAINTENANCE OF THIS PRODUCT COULD RESULT IN SERIOUS INJURY AND PROPERTY DAMAGE.

SAFETY INSTRUCTIONS



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SAFETY INSTRUCTIONS

RISK OF LOSS OF HEARING						
WHAT COULD HAPPEN	HOW TO PREVENT IT					
Long term exposure to noise produced from the operation of air tools can lead to permanent hearing loss.	Always wear hearing protection.					
INHALATION HAZARD						
WHAT COULD HAPPEN	HOW TO PREVENT IT					
Abrasive tools such as grinders, sanders and cut-off tools generate dust and abra- sive materials which can be harmful to the lungs and respiratory system.	Always wear a properly fitting facemask or respirator when using such tools.					
Some materials such as adhesives and tar contain chemicals whose vapours could cause serious injury with exposure.	Always work in a clean, dry, well-ventilated area.					
WHAT COULD HAPPEN	HOW TO PREVENT IT					
Using air tools to attach electrical wiring can result in electrocution or death.	Never use nail/staplers to attach electrical wiring while energized					
This tool is not provided with an insulated gripping surface. Contact with a "live" wire will also make exposed metal parts of the tool "live" and can result in electrocu- tion.	Avoid body contact with grounded sur- faces such as pipes, radiators and refriger- ators. There is an increased risk of electric shock if your body is grounded.					
Fasteners coming in contact with hidden electrical wiring could cause electrocution or death.	Thoroughly investigate the work piece for possible hidden wiring before performing work.					
RISK OF CUT OR BURNS						
WHAT COULD HAPPEN	HOW TO PREVENT IT					
Tools that cut, shear, drill, staple, punch & chisel are capable of causing serious injury.	Keep the working part of the tool away from hands and body.					

SAFETY INSTRUCTIONS

RISK OF INJURY						
WHAT COULD HAPPEN	HOW TO PREVENT IT					
A tool left unattended or with the air hose attached can be activated by unauthorized persons leading to injury.	Remove air hose when tool is not in use and store tool in secure location away from reach of children and untrained users.					
Air tools can inadvertently propel fasteners or other materials in work area.	Use only parts, fasteners and accessories recommended by SGS Engineering. Keep work area clean and free of clutter. Keep children and others away from tool while it is in operation. Keep work area well lit.					
A wrench or a key that is left attached to a rotating part of the tool increases the risk of personal injury.	Remove adjusting keys and wrenches before turning the tool on.					
Using inflator nozzles for duster applica- tions can cause serious injury.	DO NOT use inflator nozzles for duster applications.					
Air tools can become activated by acci- dent during maintenance or tool changes.	Remove air hose to lubricate or add grind- ing attachments, sanding discs, drills, etc. to the tool. Never carry the tool by the hose. Avoid unintentional starting. Don't carry the tool with a finger on the trigger. Only an authorised service representative should perform repair servicing.					
Air tools can cause the work piece to move upon contact, leading to injury.	Use clamps or other devices to prevent movement.					
Loss of control of the tool can lead to injury to self or others.	Never use tool while using drugs or alcohol. Don't over-reach. Keep proper footing and balance. Keep handles dry, clean and free from oil/grease. Stay alert. Watch what you are doing. Use common sense. Do not operate the tool when you are tired.					

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SAFETY INSTRUCTIONS

RISK OF INJURY						
WHAT COULD HAPPEN	HOW TO PREVENT IT					
Fasteners could ricochet or be propelled causing serious injury or property damage.	Never point or discharge tool at self or others. Do not pull trigger unless tool con- tact safety device is against work surface. Never attempt to drive fasteners into hard surfaces such as steel, concrete, or tile. Avoid driving a fastener on top of another fastener. Position tool carefully so that fasteners will be delivered to the proper location.					
Improperly maintained tools and accesso- ries can cause serious injury.	Maintain the tool with care. Keep a cutting tool sharp and clean. A properly maintained tool, with sharp cut- ting edges, reduces the risk of binding and is easier to control.					
There is a risk of bursting if the tool is damaged.	Check for misalignment or binding of mov- ing parts, breakage of parts and any other condition that affects the tool's operation. If damaged, have the tool serviced and repaired before use.					
Use only accessories identified by SGS En- gineering as suitable for use with specific tools.	Use of an accessory not intended for a specific tool increases the risk of injury to persons.					
	ANGLEMENT					
WHAT COULD HAPPEN	HOW TO PREVENT IT					
Tools which contain moving elements, or drive other moving parts, such as grinding wheels, sockets, sanding discs, etc. can become entangled in hair, clothing, jewel- lery and other loose objects resulting in severe injury.	Never wear loose fitting clothes or appartial that contains loose straps or ties which could become entangled in moving part of the tools. Remove any jewellery, water es, identifications, bracelets or necklace which might become caught by the tool Keep hands away from moving parts. The up or cover long hair. Always wear prop fitting clothing and other safety equipment when using the tool.					

SETTING UP THE AIR LINE

- 1. Make sure that the air compressor being used for the air tool operation supplies the correct output (CFM).
- 2. Have the tool in the "off" position when connecting the tool to the air supply.
- 3. Use normal 90 PSI (or ranging from 6.0 to 8.0kg) air pressure while running the tool. High pressure and unclean air will shorten the tool's life due to faster wear and may also create a hazardous situation.
- 4. Drain water from air compressor tank daily as well as any condensation in the air lines. Water in the air line may enter the tool and damage the tool mechanisms at operation.
- 5. Clean the air inlet filter cartridge weekly. The recommended hook-up procedure can be viewed in the diagram below.
- 6. Line pressure should be increased accordingly to make up for extra long air hoses (usually over 8 metres). The minimum hose diameter should be 1/4" I.D. and the fittings should have the same inside dimensions. But usually a 3/8" I.D. air hose is recommended for air supply to get the best function of air tool operation.
- 7. Use proper hoses and fittings. We do not suggest connecting quick change couplings directly to the tool since they may cause failure due to vibration. Instead, add a leader hose and connect coupling between air supply and hose whip.
- 8. Check hoses for wear before individual use. Make certain that all connections are securely fastened.



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OPERATING INSTRUCTIONS

How to install/tighten threaded fasteners.

- 1. Push the F/R valve knob (D) backward. Press the trigger (C).
- 2. Then the tool anvil (B) runs clockwise. (See Figure 1-a)

How to remove/loosen threaded fasteners

- 1. Push the F/R valve knob (D) forward. Press the trigger (C).
- 2. Then the tool anvil (B) runs counter-clockwise. (See Figure 2-a)
- 3. This tool features a power regulator valve. Rotate the F/R valve knob (D) until desired output is achieved. The settings 1, 2, 3 are only for reference and do not denote a specific power output. "Setting 1" is the least amount of power while "Setting 3" is the most amount of power. Rotate the F/R valve knob (D) either clockwise or counter-clockwise having the triangle mark or hollow line on the knob (D) pointing at any setting to get the desired power. (See Figure 3-a & Figure 3-b)

CARE & MAINTENANCE

The tool should be lubricated before each use with air tool oil (not included). Air tool oil is available from SGS Engineering. During continuous operation, the tool should be oiled every 1 to 2 hours. This may be done using an in-line oiler or manually.

- 1. Disconnect the tool from air supply. (See Figure 6)
- 2. Place a few drops of air tool oil into the air inlet. (See Figure 7) Avoid the misuse of thicker oil which may lead to the reduced performance or malfunction.
- 3. Connect the tool to the air supply. Run the tool without load for a few seconds to distribute the oil through the tool. Any excess oil may be propelled from the air exhaust area so point the tool in a safe direction.
- 4. After operating the tool and before storing the tool, disconnect the air hose and place 4 or 5 drops of air tool oil into the air inlet, then re-connect the air hose and run the tool to evenly distribute the oil throughout the tool for approximately 30 seconds. This will prolong the tool life.
- 5. Avoid storing the tool in a humid environment.

OPERATING INSTRUCTIONS



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PARTS DIAGRAM



PARTS LIST

Ref	Description	Qty	Part No	Ref	Description	Qty	Part No
1	Main housing	1	902555	23	Retainer ring	1	902577
2	Trigger sleeve	1	902556	24	Rear rotor bearing	1	902578
3	Trigger	1	902557	25	Rear plate	1	902579
4	Trigger shaft	1	902558	26	Cylinder	1	902580
5	Screw	2	902559	27	Rotor	1	902581
6	F/R valve knob	1	902560	28	Rotor blade	6	902582
7	Valve bushing	1	902561	29	Front plate	1	902583
8	O-ring	2	902562	30	Bearing	1	902584
9	Valve	1	902563	31	Washer	1	902585
10	Spring	1	902564	32	Washer	1	902586
11	Steel ball	1	902565	33	Hammer	2	902587
12	F/R valve knob	1	902566	34	Hammer cage	1	902588
13	Valve seat	1	902567	35	Hammer pin	2	902589
14	Throttle valve	1	902568	36	Anvil	1	902590
15	Valve spring	1	902569	37	O-ring	1	902591
16	Exhaust deflector	1	902570	38	Retainer O-ring	1	902592
17	Washer	1	902571	39	Anvil bushing	1	902593
18	Air inlet	1	902572	40	Gasket	1	902594
19	Screw	1	902573	41	Protector cover	1	902595
20	O-ring	1	902574	42	Spacer	4	902596
21	Dowel pin	1	902575	43	Cap screw	4	902597
22	Gasket	1	902576	44	Soft grip	1	902598

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SGS Engineering (UK) Ltd West Side Park Raynesway Derby, DE21 7AZ

EC Declaration of Conformity

This is an important document and should be retained

MANUFACTURER'S NAME: SGS Engineering (UK) Ltd

TYPE OF EQUIPMENT: AIR IMPACT WRENCH

PART NUMBER: SAT102

APPLICATION OF EC COUNCIL DIRECTIVES / STANDARD:

2006/42/EC Machinery Directive

EN 1494:20000+A1:2008

I, the undersigned, hereby declare that the equipment specified above conforms to the above European Communities Directive(s) and Standard(s).

PLACE: Derby, UK

DATE: 24th MAY 2018

(Signature) Robert Wyatt Company Secretary