1”SQ DRIVE AIR IMPACT WRENCH - PIN CLUTCH

MODEL NO: **SA297.V2**

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.


Refer to instruction manual


Wear eye protection


Wear ear protection


Wear protective gloves


Wear a mask


Wear safety footwear

1. SAFETY

- ✓ Follow all workshop safety rules, regulations, and conditions when using wrench.
- ✓ Only qualified and trained operators should install, adjust or use the assembly power tool for threaded fasteners.
- × **DO NOT** modify this assembly power tool for threaded fasteners. Modifications can reduce the effectiveness of safety measures and increase the risks to the operator.
- × **DO NOT** discard the safety instructions; give them to the operator.
- × **DO NOT** use the power tool for threaded fasteners if it has been damaged.
- ✓ Tools shall be inspected periodically to verify that the markings are legibly marked on the tool. The user shall contact the manufacturer to obtain replacement marking labels when necessary.

1.1. **HAZARDS:**

1.1.1. **PROJECTILE**

- ✓ Failure of the workpiece, of accessories or even of the inserted tool itself can generate high-velocity projectiles.
- ✓ Always wear impact-resistant eye protection during the operation of the assembly power tool for threaded fasteners. The grade of protection required should be assessed for each use.
- ✓ Ensure that the workpiece is securely fixed.

1.1.2. **ENTANGLEMENT**

- ✓ Entanglement hazards can result in choking, scalping and/or lacerations if loose clothing, personal jewellery, neckwear, hair or gloves are not kept away from the tool and accessories.
- ✓ Gloves can become entangled with the rotating drive, causing severed or broken fingers. Rotating drive sockets and drive extensions can easily entangle rubber-coated or metal-reinforced gloves.
- × **DO NOT** wear loose-fitting gloves or gloves with cut or frayed fingers.
- × Never hold the drive, socket or drive extension.
- ✓ Keep hands away from rotating drives.

1.1.3. **OPERATING**

- ✓ The use of the tool can expose the operator’s hands to hazards including crushing, impacts, cuts and abrasions and heat. Wear suitable gloves to protect hands.
- ✓ Operators and maintenance personnel shall be physically able to handle the bulk, weight and power of the tool.
- ✓ Hold the tool correctly; be ready to counteract normal or sudden movements and have both hands available.
- ✓ Maintain a balanced body position and secure footing.
- ✓ In cases where the means to absorb the reaction torque are requested, it is recommended to use a suspension arm whenever possible. If that is not possible, side handles are recommended for straight case and pistol-grip tools.
- ✓ Release the start-and-stop device in the case of an interruption of the energy supply.
- ✓ Use only lubricants recommended by the manufacturer.
- ✓ Fingers can be crushed in open-ended crow-foot nutrunners.
- × **DO NOT** use in confined spaces and beware of crushing hands between tool and workpiece, especially when unscrewing.

1.1.4. **REPETITIVE MOTIONS**

- ✓ When using a power tool for, the operator can experience discomfort in the hands, arms, shoulders, neck, or other parts of the body. While using an assembly power tool for threaded fasteners, the operator should adopt a comfortable posture while maintaining secure footing and avoiding awkward or off-balanced postures. The operator should change posture during extended tasks, which can help avoid discomfort and fatigue.
- ✓ If the operator experiences symptoms such as persistent or recurring discomfort, pain, throbbing, aching, tingling, numbness, burning sensations or stiffness, these warning signs should not be ignored. The operator should tell the employer and consult a qualified health professional.

1.1.5. **ACCESSORIES**

- ✓ Disconnect the assembly power tool for threaded fasteners from the energy supply before changing the inserted tool or accessory.
- × **DO NOT** touch sockets or accessories during impacting, as this increases the risk of cuts, burns or vibration injuries.
- ✓ Use only sizes and types of accessories and consumables that are recommended by the assembly power tool for threaded fasteners manufacturer; do not use other types or sizes of accessories and consumables.
- ✓ Use only impact-wrench-rated sockets in good condition, as poor condition or hand sockets and accessories used with impact wrenches can shatter and become a projectile.

1.1.6. WORKPLACE

- ✓ Slips, trips and falls are major causes of workplace injury. Be aware of slippery surfaces caused by the use of the tool and also of trip hazards caused by the air line or hydraulic hose.
- ✓ Proceed with care in unfamiliar surroundings. Hidden hazards, such as electricity or other utility lines, can exist.
- × Not intended for use in potentially explosive atmospheres and is not insulated against coming into contact with electric power. Make sure there are no electrical cables, gas pipes, etc., that can cause a hazard if damaged by use of the tool.

1.1.7. **DUST AND FUMES**

- ✓ Dust and fumes generated when using assembly power tools for threaded fasteners can cause ill health (for example cancer, birth defects, asthma and/or dermatitis); risk assessment and implementation of appropriate controls for these hazards are essential.
- ✓ Risk assessment should include dust created by the use of the tool and the potential for disturbing existing dust.
- ✓ Direct the exhaust so as to minimize disturbance of dust in a dust-filled environment.
- ✓ Where dust or fumes are created, the priority shall be to control them at the point of emission.
- ✓ All integral features or accessories for the collection, extraction or suppression of airborne dust or fumes should be correctly used and maintained in accordance with the manufacturer's instructions.
- ✓ Use respiratory protection in accordance with employer's instructions and as required by occupational health and safety regulations.

1.1.8. **NOISE**

- ✓ Exposure to high noise levels can cause permanent, disabling hearing loss and other problems, such as tinnitus (ringing, buzzing, whistling or humming in the ears). Therefore a risk assessment and implementation of appropriate controls for these hazards are essential.
- ✓ Appropriate controls to reduce the risk may include actions such as damping materials to prevent workpieces from "ringing".
- ✓ Use hearing protection in accordance with employer's instructions and as required by occupational health and safety regulations.
- ✓ Operate and maintain the assembly power tool for threaded fasteners as recommended in the instructions handbook, to prevent an unnecessary increase in noise levels.
- ✓ If the assembly power tool for threaded fasteners has a silencer, always ensure it is in place and in good working order when the assembly power tool for threaded fasteners is operating.
- ✓ Select, maintain and replace the consumable/inserted tool as recommended in the instructions handbook, to prevent an unnecessary increase in noise.

1.1.9. **VIBRATION**

- ✓ Exposure to vibration can cause disabling damage to the nerves and blood supply of the hands and arms.
- ✓ Keep the hands away from the sockets.
- ✓ Wear warm clothing when working in cold conditions and keep your hands warm and dry.
- ✓ If you experience numbness, tingling, pain or whitening of the skin in your fingers or hands, stop using the assembly power tool for threaded fasteners, tell your employer and consult a physician.
- ✓ Operate and maintain the tool for threaded fasteners as recommended in the instructions handbook, to prevent an unnecessary increase in vibration levels.
- × **DO NOT** use worn or ill-fitting sockets or extensions, as this is likely to cause a substantial increase in vibration.
- ✓ Select, maintain and replace the consumable/inserted tool as recommended in the instructions handbook, to prevent an unnecessary increase in vibration levels.
- ✓ Sleeve fittings should be used where practicable.
- ✓ Support the weight of the tool in a stand, tensioner or balancer, if possible.
- ✓ Hold the tool with a light but safe grip, taking account of the required hand reaction forces, because the risk from vibration is generally greater when the grip force is higher.

1.2. **PNEUMATIC POWER TOOLS**

- ✓ Air under pressure can cause severe injury:
- ✓ 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;
- ✓ Never direct air at yourself or anyone else.
- ✓ Whipping hoses can cause severe injury. Always check for damaged or loose hoses and fittings.
- ✓ Cold air shall be directed away from the hands.
- × **DO NOT** use quick-disconnect couplings at tool inlet for impact and air-hydraulic impulse wrenches. Use hardened steel (or material with comparable shock resistance) threaded hose fittings.
- ✓ Whenever universal twist couplings (claw couplings) are used, lock pins shall be installed and whipcheck safety cables shall be used to safeguard against possible hose-to-tool and hose-and-hose connection failure.
- × **DO NOT** exceed the maximum air pressure stated on the tool.
- ✓ For torque-control and continuous-rotation tools, the air pressure has a safety critical effect on performance. Therefore, requirements for length and diameter of the hose shall be specified.
- ✓ Never carry an air tool by the hose.
- ❑ **WARNING!** Disconnect from air supply before changing accessories or servicing.
- ✓ Maintain the wrench in good condition and replace any damaged or worn parts. Use genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
- ❑ **WARNING!** Check correct air pressure is maintained and not exceeded. We recommend 90psi.
- ✓ Keep air hose away from heat, oil and sharp edges. Check air hose for wear before each use and ensure that all connections are secure.
- ❑ **WARNING!** Due to the possible presence of asbestos dust from brake linings, when working around vehicle brake systems we recommend you wear suitable respiratory protection.
- ✓ Keep children and non essential persons away from the working area.
- × **DO NOT** use the wrench for a task it is not designed to perform.
- × **DO NOT** operate wrench if you are tired or under the influence of alcohol, drugs or intoxicating medication.
- × **DO NOT** carry wrench with your hand on the power trigger in order to avoid unintentional starting.
- ✓ When not in use disconnect from air supply and store in a safe, dry, childproof location.

2. INTRODUCTION

Powerful twin hammer mechanism gives high torque output suitable for commercial and agricultural use. 3-Position torque control with reverse. Supplied with extra handle for added control.

3. SPECIFICATION

Model No:	SA297.V2
Air Consumption:	7.76cfm
Breakaway Torque:	1548lb.ft(2100Nm).
Drive:	1”Sq
Fastening Torque:	1476lb.ft(2000Nm)
Free Speed:	4300rpm
Inlet Size:	1/2”BSP
Noise Power/Pressure:	108/97dB(A)
Operating Pressure:	90psi
Vibration/Uncertainty:	12.58/1.5m/s²

4. PREPARATION

4.1. For recommended hook-up, procedure is shown in figs 1 & 2**.**

4.2. AIR SUPPLY

4.2.1. Ensure wrench air valve (or trigger) is in the “off” position before connecting to the air supply.

4.2.2. You will require an air pressure of 90psi and an air flow according to specification.

❑ **WARNING!** Ensure the air supply is clean and does not exceed 90psi while operating the wrench. Too high an air pressure and unclean air will shorten the product life due to excessive wear and may be dangerous causing damage and/or personal injury.

4.2.3. Drain the compressor air tank daily. Water in the air line will damage the wrench.

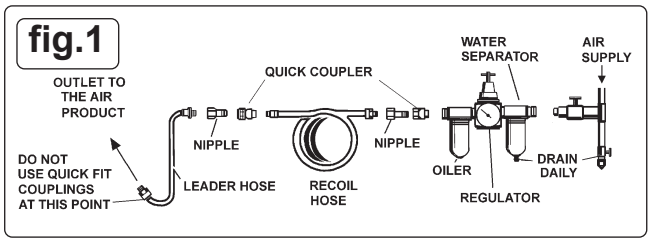
4.2.4. Clean compressor air inlet filter weekly.

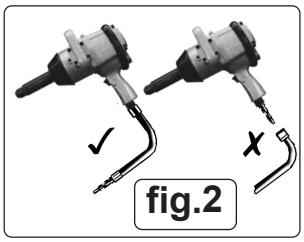
4.2.5. Line pressure should be increased to compensate for unusually long air hoses (over 8 metres). The minimum hose diameter should be 1/4” I.D. and fittings must have the same inside dimensions.

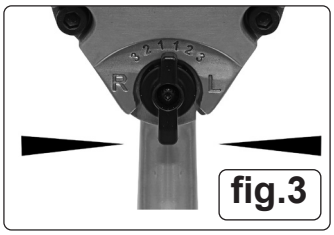
4.2.6. Keep hose away from heat, oil and sharp edges. Check hose for wear and make certain that all connections are secure.

4.3. **COUPLINGS**

4.3.1. Vibration may cause failure if a quick change coupling is connected directly to the wrench. To overcome this, connect a leader hose to the wrench. A quick change coupling may then be used to connect the leader hose to the air line recoil hose. See figs 1 & 2.







5. ASSEMBLY

5.1. Fit handle to the body in the desired orientation, fig.3.

6. OPERATION

❑ **WARNING! Ensure you read, understand and apply safety instructions before use.**

6.1.1. Only use impact sockets which are specifically designed for use with an impact wrench.

6.1.2. Connect the wrench to the air hose as in Section 4.

6.1.3. Place the socket over the subject nut and depress the trigger to operate the wrench.

6.1.4. To change drive direction turn the control on the rear of the body to the desired direction, fig.3.

6.1.5. The torque may be adjusted in the forward gear by adjusting the torque control on the rear of the body, between 1 low power and 3 full power, fig.3.

6.1.6. The wrench incorporates two exhausts, one at the bottom of the handle and one at the front above the trigger. The handle exhaust is adjustable allowing you to adjust the flow through either the handle or front exhaust. When the handle exhaust is fully open the speed of the wrench is increased, when the handle exhaust is closed the wrench speed will decrease and the air will be vented through the front exhaust.

× **DO NOT** use any additional force upon the wrench in order to remove a nut.

× **DO NOT** allow wrench to free run for an extended period of time as this will shorten its life.

7. MAINTENANCE

❑ **WARNING!** Disconnect wrench from air supply before changing accessories, servicing or performing maintenance.
Replace or repair damaged parts. *Use genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.*

7.1. If the air system does not have an oiler lubricate the air wrench daily with a few drops of Sealey air tool oil dripped into the air inlet.

7.2. Clean the wrench after use. **DO NOT use worn or damaged sockets.**

7.3. Loss of power or erratic action may be due to the following:
a) Excessive drain on the air line. Moisture or restriction in the air pipe. Incorrect size or type of hose connectors. To remedy, check the air supply and follow instructions in Section 4.
b) Grit or gum deposits in the wrench may also reduce performance. Remove the strainer, clean it and flush the wrench out with gum solvent oil or an equal mixture of SAE No 10 oil and paraffin. Allow to dry before use.
For a full service contact your local Sealey service agent.

5.5. When not in use, disconnect from air supply, clean wrench and store in a safe, dry, childproof location.

❑ WARNING! – Risk of Hand Arm Vibration Injury.

This tool may cause Hand Arm Vibration Syndrome if its use is not managed adequately.
This tool is subject to the vibration testing section of the Machinery Directive 2006/42/EC.
This tool is to be operated in accordance with these instructions.

Measured vibration emission value (a): 12.58m/s²
Uncertainty value (k): 1.5m/s²
Please note that the application of the tool to a sole specialist task may produce a different average vibration emission. We recommend that a specific evaluation of the vibration emission is conducted prior to commencing with a specialist task.

A health and safety assessment by the user (or employer) will need to be carried out to determine the suitable duration of use for each tool.
NB: Stated Vibration Emission values are type-test values and are intended to be typical.
Whilst in use, the actual value will vary considerably from and depend on many factors.
Such factors include; the operator, the task and the inserted tool or consumable.
NB: ensure that the length of leader hoses is sufficient to allow unrestricted use, as this also helps to reduce vibration.

The state of maintenance of the tool itself is also an important factor, a poorly maintained tool will also increase the risk of Hand Arm Vibration Syndrome.

Health surveillance.
We recommend a programme of health surveillance to detect early symptoms of vibration injury so that management procedures can be modified accordingly.

Personal protective equipment.
We are not aware of any personal protective equipment (PPE) that provides protection against vibration injury that may result from the uncontrolled use of this tool. We recommend a sufficient supply of clothing (including gloves) to enable the operator to remain warm and dry and maintain good blood circulation in fingers etc. Please note that the most effective protection is prevention, please refer to the Correct Use and Maintenance section in these instructions. Guidance relating to the management of hand arm vibration can be found on the HSC website www.hse.gov.uk - Hand-Arm Vibration at Work.

ENVIRONMENT PROTECTION
Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. Please note that other versions of this product are available. If you require documentation for alternative versions, please email or call our technical team on technical@sealey.co.uk or 01284 757505.
Important: No Liability is accepted for incorrect use of this product.
Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.

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