



# 1/2"SQ DRIVE AIR IMPACT WRENCH, TWIN HAMMER

MODEL NO: **SA602.V4**

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 instructions



Wear eye protection



Wear protective gloves



Wear ear protection



Wear a mask

## 1. SAFETY

### 1.1. GENERAL SAFETY

- × **DO NOT** discard the safety instructions; give them to the operator.
- **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.
- ✓ 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.
- **WARNING!** Check correct air pressure is maintained and not exceeded the maximum operating pressure of 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.
- ✓ Wear approved safety eye/face shield, ear defenders and hand protection.
- × **DO NOT** use the wrench for a task it is not designed to perform.
- × **DO NOT** modify this assembly power tool. Modifications can reduce the effectiveness of safety measures and increase the risks to the operator.
- × **DO NOT** use the power tool if it has been damaged.
- **WARNING! DO NOT** use wrench if damaged or thought to be faulty (contact Service Agent).
- **WARNING!** Only qualified and trained operators should install, adjust or use the assembled power tool.
- × **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 trigger in order to avoid unintentional starting.
- **WARNING!** High sound levels can cause permanent hearing loss. Use hearing protection.

### 1.2. HAZARDS

- **WARNING!** For multiple hazards, read and understand the safety instructions before installing, operating, repairing, maintaining, changing accessories on, or working near the assembly power tool for threaded fasteners. Failure to do so can result in serious bodily injury.
- **WARNING!** This tool and its accessories must not be modified.
- **WARNING!** Proceed with care in unfamiliar surroundings. Be aware of potential hazards created by your work activity.
- ✓ Keep children and non-essential persons away from the working area.
- **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.

#### 1.2.1. PROJECTILE

- **WARNING!** Serious injury can result from over-torqued or under-torqued fasteners, which can break, or loosen and separate. Released assemblies can become projectiles. Assemblies requiring a specific torque must be checked using a torque meter.
- **WARNING!** Failure of the workpiece, of accessories or even of the inserted tool itself can generate high-velocity projectiles.
- **WARNING!** 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.
- **WARNING!** Ensure that the workpiece is securely fixed.

#### 1.2.2. ENTANGLEMENT

- **WARNING!** 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.
- × **DO NOT** wear loose-fitting gloves or gloves with cut or frayed fingers.
- **WARNING!** Never hold the drive, socket or drive extension.
- **WARNING!** Keep hands away from rotating drives.
- **WARNING!** Gloves can become entangled with the rotating drive, causing severed or broken fingers.
- **WARNING!** Rotating drive sockets and drive extensions can easily entangle rubber-coated or metal-reinforced gloves.

#### 1.2.3. OPERATION HAZARDS

- **WARNING!** 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 must be physically able to handle the bulk, weight and power of the tool.
- **WARNING!** Hold the tool correctly; be ready to counteract normal or sudden movements and have both hands available.
- **WARNING! DO NOT** use in confined spaces and beware of crushing hands between tool and workpiece, especially when unscrewing.
- ✓ Release the start-and-stop device in the case of an interruption of the energy supply.
- ✓ It is not recommended to use the product in excessively humid environments. Recommended temperature range: -20°C to +50°C.

- ✓ Use only lubricants recommended by the manufacturer.
- 1.3. OPERATION METHOD IN THE EVENT OF AN ACCIDENT OR BREAKDOWN**
- 1.3.1. In the event of an accident or breakdown on the wrench contact Sealey Service Centre.
- 1.4. FAULT IDENTIFICATION AND LOCATION FOR REPAIR**
- 1.4.1. For any fault or breakdown on the wrench contact Sealey Service Centre.
- 1.5. RESTARTING THE MACHINE AFTER AN INTERVENTION**
- 1.5.1. Always check the wrench is safe, and there is no damage before attempting to reuse.
- 1.6. REPETITIVE MOTIONS**
- ❑ **WARNING!** When using a power tool for, the operator can experience discomfort in the hands, arms, shoulders, neck, or other parts of the body.
- ❑ **WARNING!** 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.
- 1.6.1. Maintain a balanced body position and secure footing.
- ❑ **WARNING!** If the operator experiences symptoms such as persistent or recurring discomfort, pain, throbbing, 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.
- 1.7. WORKPLACE**
- ❑ **WARNING!** 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.
- ❑ **WARNING!** Proceed with care in unfamiliar surroundings. Hidden hazards, such as electricity or other utility lines, can exist.
- ❑ **WARNING!** The assembly power tool for threaded fasteners is 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.
- 1.8. ACCESSORY**
- 1.8.1. Disconnect the assembly power tool for threaded fasteners from the air 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.
- 1.8.2. 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.
- 1.8.3. Only use impact sockets which are specifically designed for use with an impact wrench.
- 1.8.4. 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.
- 1.9. WORK SPACE REQUIRED**
- 1.9.1. Always ensure adequate space is present when using the wrench.
- 1.9.2. Always ensure adequate space is present when conducting maintenance on the wrench.
- 1.10. PERMISSIBLE ENVIRONMENTAL CONDITIONS** (Temp/Moisture/Vibration)
- 1.10.1. Use wrench in a dry, clean and stable environment.
- 1.11. DUST AND FUMES**
- ❑ **WARNING!** 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.
- ❑ **WARNING!** Risk assessment should include dust created by the use of the tool and the potential for disturbing existing dust.
- ❑ **WARNING!** Direct the exhaust so as to minimize disturbance of dust in a dust-filled environment.
- ❑ **WARNING!** Where dust or fumes are created, the priority shall be to control them at the point of emission.
- ❑ **WARNING!** 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.
- ❑ **WARNING!** Use respiratory protection in accordance with employer's instructions and as required by occupational health and safety regulations.
- 1.12. NOISE**
- ❑ **WARNING!** 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.
- 1.12.1. Appropriate controls to reduce the risk may include actions such as damping materials to prevent workpieces from "ringing".
- 1.12.2. Use hearing protection in accordance with employer's instructions and as required by occupational health and safety regulations.
- 1.12.3. Operate and maintain the assembly power tool for threaded fasteners as recommended in the instructions handbook, to prevent an unnecessary increase in noise levels.
- 1.12.4. 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.
- 1.12.5. Select, maintain and replace the consumable/inserted tool as recommended in the instructions handbook, to prevent an unnecessary increase in noise.
- 1.13. VIBRATION**
- 1.13.1. Exposure to vibration can cause disabling damage to the nerves and blood supply of the hands and arms.
- 1.13.2. Wear warm clothing when working in cold conditions and keep your hands warm and dry.
- 1.13.3. 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.
- 1.13.4. Operate and maintain the assembly power 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.
- 1.13.5. 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.

1.13.6. Vibration measurement requires specialized tools. If increased noise, stronger impact, or more vibration is noticed, users are advised to return the wrench to the service centre for inspection and repair.

### 1.14. PNEUMATIC POWER TOOLS

- ❑ **WARNING!** Air under pressure can cause severe injury.
- ❑ **WARNING!** 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.
- ✗ **DO NOT** direct air from the air hose at yourself or anyone else.
- ❑ **WARNING!** Whipping hoses can cause serious 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.
- ❑ **WARNING!** Whenever universal twist couplings (claw couplings) are used, lock pins shall be installed and whip check 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.
- ✗ **DO NOT** carry the tool by the air hose, or yank the hose from the air supply.
- ❑ **WARNING!** The warnings, cautions and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood that common sense and caution are factors which cannot be built into this product, but must be applied by the operator.

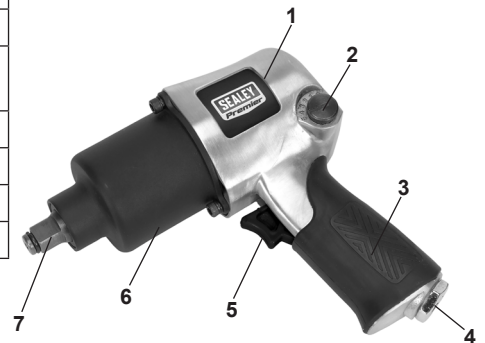
## 2. INTRODUCTION

Powerful 1/2" Sq drive impact wrench with twin hammer mechanism for increased torque. Air motor features quality bearings, steel end plates and carefully finished components to ensure smooth running and maximum power. Combination forward/reverse and speed selector.

## 3. SPECIFICATION

<b>Model No:</b>	SA602.V4
Air Consumption:	4.2cfm
Breakaway Torque:	500lb.ft(680Nm)
Drive:	1/2" Sq
Fastening Torque:	480lb.ft(653Nm)
Free Speed:	7500rpm
Inlet Size:	1/4" BSP
Nett Weight:	2.6kg
Noise Power/Pressure:	103/92dB(A)
Operating Pressure:	90psi
Vibration/Uncertainty:	5.47/1.5m/s <sup>2</sup>

1	Main Housing
2	Air Regulator
3	Main Housing Rubber Sleeve
4	Air Intake
5	Trigger
6	Clutch Housing
7	Anvil

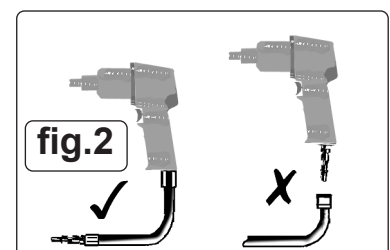
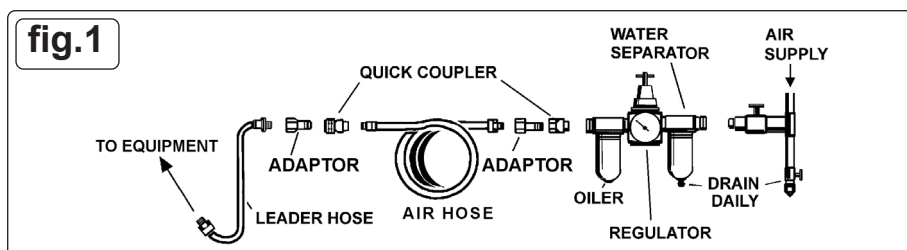


## 4. PREPARATION

- 4.1. Recommended hook-up is shown in fig 1.
- 4.2. Ensure that the trigger is in the "Off" position before connecting the air supply.
- 4.3. You will require an air pressure of 90psi and an air flow of 7cfm.
  - ❑ **WARNING!** Ensure that the air supply is clean and does not exceed 90psi. Too high an air pressure and/or unclean air will cause excessive wear and may result in damage and/or personal injury.
- 4.4. Drain the compressor air tank daily. Water in the air line will damage the wrench.
- 4.5. Clean compressor air inlet filter weekly.
- 4.6. Line pressure should be increased to compensate for unusually long air hoses (over 8 metres). Hose internal diameter and the bores of fittings should be 1/4" minimum.
- 4.7. Keep hose away from heat, oil and sharp edges. Before each use check hose for wear and make certain that all connections are secure.

### 4.8. COUPLINGS

- 4.8.1. 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 fig 1 & 2.



### SPECIFICATION PLATE



## 5. OPERATION

- ❑ **WARNING!** Ensure you read, understand and apply safety instructions before use.
- 5.1. Only use impact sockets which are specifically designed for use with an impact wrench.
- ✖ **DO NOT** use worn or damaged sockets.
- 5.1.1. Connect the wrench to the air hose as in section 4.
- 5.1.2. Place the socket over the subject nut and depress the trigger to operate the wrench.
- 5.1.3. To change direction, turn the switch on the side of the wrench (fig.3), for forward rotation.
- 5.1.4. To change direction, turn the switch on the side of the wrench (fig.4), for reverse rotation.
- 5.1.5. The flow of air may be regulated (fig.3 & 4) by the dial on the side of the wrench, there are five settings.
- ✖ **DO NOT** use any additional force upon the wrench in order to loosen/tighten a fixing.
- ✖ **DO NOT** allow wrench to free run for an extended period of time as this will shorten bearing life.

### 5.2. STOPPING & EMERGENCY STOP

- 5.2.1. To stop the wrench release the trigger on the handle, this will stop the anvil from rotating.

### 5.3. UNBLOCKING THE PRODUCT

- 5.3.1. Use a properly regulated air compressor to maintain consistent pressure.
- 5.3.2. Regularly inspect hoses and connectors for leaks that can reduce air pressure.
- 5.3.3. Like any tool, an air impact wrench requires regular maintenance to function optimally. Neglecting maintenance can lead to reduced performance, increased wear and tear, and costly repairs or replacements.
- 5.3.4. Check and replace worn parts, such as O-rings or impact sockets, to prevent malfunctions.

## 6. MAINTENANCE

### 6.1. REGULAR PREVENTATIVE MAINTENANCE

- 6.1.1. When the regular preventative maintenance shall be carried out.
- ❑ **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.
- 6.1.2. If the air system does not have an oiler then lubricate the air wrench daily with a few drops of Sealey air tool oil dripped into the air inlet.
- 6.1.3. Clean the wrench after use.
- 6.1.4. 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. If your model has an air strainer (located in the area of the air inlet), remove the strainer and clean it. Flush the wrench out with gum solvent oil or an equal mixture of SAE No 10 oil and paraffin.
- 6.1.5. Allow to dry before use.
- 6.1.6. For a full service contact your local Sealey Service Centre.

### 6.2. SERVICE OPERATIONS

- 6.2.1. There are several ways to keep your pneumatic impact wrench properly lubricated. These tools have two important mechanisms, the "air motor" and the impact mechanism. Unlike their cordless counterparts, these parts are lubricated separately.

### 6.3. AIR MOTOR LUBRICATION

- 6.3.1. There are two ways of doing this. The first is as easy as running an inline air tool oil. It's as easy as installing an inline lubricator in your compressor and filling it with oil, and that's it; your air tools will always be properly lubricated.
- 6.3.2. If you don't have a two-way compressor, or you don't have separated air pipelines for other purposes like paint guns or inflating tires, you will have to drop oil inside your impact wrench's air inlets to keep it clean and well-lubed. It's important to oil the tool every time you use it if you don't use it often. If you use the machine all day long, it's recommended to oil it at least twice a day.

### 6.4. GREASE IMPACT

- 6.4.1. Open the tool by removing the hammer case, and you will have access to the impact mechanism. Then remove the anvil, bushing, hammers, hammers' frame, and the anvil lugs. Clean all the parts with a rag and apply a small coat of regular grease to the anvil, hammers, and the inside of the hammer's frame. Put the hammers back inside the hammers' case and, before reassembling it, put a good amount of grease on the anvil, the inside part of the hammer case, the anvil lugs, and the bushing. Repeat this process approximately every 48-60 hours of use.

### 6.5. CHECK SPEED

- 6.5.1. If you use the tool a lot, consider buying an impact wrench tester. They come in a wide range, you don't need a sophisticated tester to check your tool's power output. For simple DIY or light work, it's not necessary to purchase one.

### 6.6. CHECK FOR VIBRATION LEVEL AFTER EACH SERVICE

- 6.6.1. Using a vibration meter offers real time vibration analysis.

### 6.7. SPARE PARTS

- 6.7.1. Refer to the attached spare parts list.

### 6.8. TRANSPORT, HANDLING STORAGE

- 6.8.1. Disconnect from air when moving between tasks.
- 6.8.2. Use a suitable storage box, or original packaging when transporting the wrench.
- 6.8.3. When not in use, disconnect from air supply, clean wrench and store in a safe, dry, childproof location.

### 6.9. END OF LIFE

- 6.9.1. Through years of normal wear, the wrench will eventually become unserviceable. When this happens ensure that it is disposed of in accordance with local authority regulations.

**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): 5.47m/s<sup>2</sup>.

Uncertainty value (k): 1.5m/s<sup>2</sup>.

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.



REGISTER YOUR  
PURCHASE HERE

**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](mailto:technical@sealey.co.uk) or 01284 757505.

**Important:** No Liability is accepted for incorrect use of this product.

**Warranty:** Guarantee is 36 months from purchase date, proof of which is required for any claim.

Sealey Group, Kempson Way, Suffolk Business Park, Bury St Edmunds, Suffolk. IP32 7AR



01284 757500



[sales@sealey.co.uk](mailto:sales@sealey.co.uk)



[www.sealey.co.uk](http://www.sealey.co.uk)