



AIR ENGRAVER

MODEL NO: SA96

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

1. SAFETY

- WARNING!** Ensure Health & Safety, local authority, and general workshop practice regulations are adhered to when using this equipment.
- WARNING!** Disconnect from air supply before changing engraving tips, or servicing, or performing any maintenance.
- ✓ Maintain the engraver in good condition (use an authorised service agent).
- ✓ Replace or repair damaged parts. Use genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
- ✓ Use in a suitable work area. Keep area free from unrelated materials and ensure that there is adequate lighting.
- ✓ Before each use check condition of engraving tip. Sharpen if necessary. If worn or damaged replace immediately.
- ✓ Ensure there are no flammable or combustible materials near the work area.
- WARNING!** Always wear approved eye (or face) and hand protection when operating the engraver.
- ✓ Use face, dust, or respiratory protection in accordance with COSHH regulations.
- ✓ Remove ill fitting clothing. Remove ties, watches, rings, other loose jewellery and contain and/or tie back long hair.
- ✓ Wear appropriate protective clothing and keep hands and body clear of working parts.
- ✓ Maintain correct balance and footing. Do not over reach, ensure the floor is not slippery, wear non-slip shoes.
- ✓ Keep children and unauthorised persons away from the working area.
- ✓ Check moving parts alignment on a regular basis.
- ✓ Ensure workpiece is secure before operating the engraver.
- ✓ Avoid unintentional starting.
- WARNING!** Ensure correct air pressure is maintained and not exceeded. Max air pressure = 60PSI
- ✓ 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.
- ✓ Prolonged exposure to vibration from this equipment poses a health risk. It is the owner's responsibility to correctly assess the potential hazard and issue guidelines for safe periods of use and offer suitable protective equipment.
- ✗ **DO NOT** use the engraver for a task it is not designed to perform.
- ✗ **DO NOT** operate the engraver if any parts are damaged or missing as this may cause failure and/or personal injury.
- ✗ **DO NOT** carry the engraver by the hose, or yank the hose from the air supply.
- ✗ **DO NOT** force, or apply heavy pressure to the engraver; let the tool do the work.
- ✗ **DO NOT** place air line attachments close to your face and do not point at other people or animals.
- ✗ **DO NOT** operate engraver when you are tired, under the influence of alcohol, drugs or intoxicating medication.
- ✗ **DO NOT** use engraver where there are flammable liquids, solids or gases such as paint solvents and including waste wiping or cleaning rags etc.
- ✗ **DO NOT** direct air from the air line at yourself or others. When not in use, disconnect from the air supply and store in a safe, dry, childproof location.

2. INTRODUCTION

Composite bodied high quality tool with Tungsten Carbide tip for engraving metals and plastics. Suitable for security marking loan products, applying service date information to tools and for marking components prior to storage. Supplied with 1.5m of small-bore hosing and 1/4" BSP adaptor.

3. SPECIFICATION

Model no: SA96
 Air inlet size: 1/4" BSP
 Consumable parts: SA96/03 - Tungsten tip
 Free speed: 3000spm
 Noise power/pressure: 84/73dB(A)
 Operating pressure: 60psi
 Vibration/Uncertainty: 3.89/0.88m/s²

4. PREPARATION

4.1. AIR SUPPLY

- WARNING!** Ensure the air supply is clean and does not exceed 60psi while operating the tool.
- 4.1.1. Too high an air pressure and unclean air will shorten the product life due to excessive wear and may cause damage and/or personal injury.
- 4.1.2. Ensure that the tool air valve (or trigger) is in the "off" position before connecting to the air supply.
- 4.1.3. Monitor the compressor daily to ensure that moisture is not present in the compressed air. Water in the air line will damage the tool.
- 4.1.4. Line pressure should be increased to compensate for unusually long air hoses (over 8 metres).
- 4.1.5. The minimum hose diameter should be ¼" internal diameter. Fittings must have compatible inside dimensions.
- 4.1.6. Keep hoses away from heat, oil and sharp edges. Check hoses for wear and ensure that all connections are secure.

4.2. COUPLINGS

- 4.2.1. Vibration may cause failure if a quick change coupling is connected directly to the tool.
- 4.2.2. To overcome this, connect a leader hose to the tool (Sealey ref: AH2R or AH2R/38).
- 4.2.3. A quick change coupling may then be used to connect the leader hose to the air line recoil hose.

5. OPERATION

- 5.1. Check that the outer sleeve of the ON/OFF valve is set in the "OFF" position.
- 5.2. Connect the tool to an air supply. Pressure must be between 40-60 PSI.
- 5.3. Switch the engraver on and check the pressure by testing on scrap material. The pressure should be adjusted to suit the material being worked on. The life of the tool will be extended if the pressure is kept to the minimum required by each workpiece.
- 5.4. For consistent performance, the engraving tip must have a sharp point.

6. MAINTENANCE

- 6.1. Position clamp blocks on the body (recommended position shown in parts diagram) and clamp in a vice.
- 6.2. Unscrew the nose (1) and withdraw the spring (2), stylus (3) and the distance tube (4).
- 6.3. Unscrew the ON/OFF valve (14) and withdraw the air filter (8).
- 6.4. Using a clean length of rod, push it very carefully through the air inlet to remove the cylinder and piston assembly (6).
- 6.5. The tip of the stylus may be re-ground using a Green Silicone Carbide stone, grind to an angle of 60°.
- 6.6. Clean components, replace parts as necessary, then re-assemble the engraver by reversing the process above.
 - WARNING!** The nose (1) should be tightened to a torque of: 38lbf.in (4.3Nm).
- 6.7. **LUBRICATION**
 - 6.7.1. The air system does not have an oiler, lubricate the air tool daily with a few drops of Sealey air tool oil dripped into the air inlet.
- 6.8. Clean the tool after use.
- 6.9. Loss of power or erratic action may be due to the following:
 - 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 the PREPARING FOR USE section.
 - Grit, residual deposits (gum) in the tool may also reduce performance. Flush the tool out with gum solvent oil or an equal mixture of SAE No: 10 oil and paraffin. Allow the tool and strainer to dry then lubricate before use.
- 6.10. **CLEAN AIR FILTER (Refer to Parts list)**
 - 6.10.1. Remove nose (1) and internal components. Clean air filter in paraffin, allow to dry and reassemble.
 - 6.10.2. For a full service, contact your local Sealey service agent.
- 6.11. When not in use, disconnect the tool from the air supply, clean the tool and store the tool in a safe, 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): 3.89 m/s²

Uncertainty value (k): 0.88 m/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.



WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.



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.

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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