

## INSTRUCTIONS FOR:

# **REVERSIBLE 1/2" AIR DRILL**

MODEL No: SA27.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 AND CAUTIONS. USE THIS 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. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.

## 1. SAFETY INSTRUCTIONS

- □ 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 drill bits, or servicing ,or performing any maintenance.
- Maintain the drill 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 drill bit. Sharpen if necessary. If worn or damaged replace immediately.
- ✓ Ensure the speed rating (rpm) of the drill bit is the same as, or greater than, the speed rating of the drill.
- ✓ Ensure there are no flammable or combustible materials near the work area.
- ✓ Evaluate your working area before using drill. Ceilings, floors and enclosures may contain hidden electrical wiring, water pipes or gas pipes.
- □ WARNING! Always wear approved eye (or face) and hand protection when operating the drill.
- ✓ Use face, dust, or respiratory protection in accordance with COSHH regulations.
- ✓ Depending on the task, the drilling noise level may exceed 84dB in which case wear safety ear defenders.
- ✓ 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 drill. Never hold a workpiece by hand.
- ✓ Check the workpiece to ensure there are no protruding screws, bolts, nuts etc.
- ✓ Avoid unintentional starting.
- ☐ WARNING! Ensure correct air pressure is maintained and not exceeded. Recommended pressure 70-90psi
- ✓ 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.
- Prolonged exposure to vibration from this drill 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.
- X DO NOT use the drill for a task it is not designed to perform.
- X DO NOT operate drill if any parts are damaged or missing as this may cause failure and/or personal injury.
- WARNING! DO NOT drill any materials containing asbestos.
- x DO NOT carry the drill by the hose, or yank the hose from the air supply.
- X DO NOT force, or apply heavy pressure to the drill; 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.
- X DO NOT operate drill when you are tired, under the influence of alcohol, drugs or intoxicating medication.
- x DO NOT use drill where there are flammable liquids, solids or gases such as paint solvents and including waste wiping or cleaning rags etc.
- **X DO NOT** carry the drill with your finger on the trigger.
- X DO NOT direct air from the air line at yourself or others.
- ✓ When not in use disconnect from air supply and store in a safe, dry, childproof location.

## 2. INTRODUCTION / SPECIFICATION

Powerful drill with polished aluminium housing, heavy-duty, planetary gear drive assembly and 13mm keyless chuck. Fitted with flip-reverse control and supplied with side handle. Suitable for heavy workshop use.

Weight: 1.4kg	Air Inlet:
Chuck Size: 13mm	Noise Power 100.85dB(A)
Free Speed: 700rpm	Noise Pressure: 89.85dB(A)
Operating Pressure: 90psi	Vibration Figure: 2.64m/s <sup>2</sup>
Air Consumption: 4cfm	Uncertainty Value: 0.46m/s²

## 3. PREPARING DRILL FOR USE

#### 3.1. Air Supply

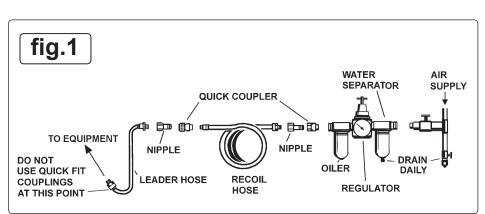
- WARNING! Ensure the air supply is clean and does not exceed 90 psi while operating the drill. Too high an air pressure and unclean air will cause excessive wear, and may be dangerous, causing damage and/or personal injury. Recommended hook-up procedure is shown in fig 1.
- 3.1.1. Ensure the drill air valve (or trigger) is not depressed before connecting to the air supply.
- 3.1.2. You will require an air pressure between 70-90psi, and an air flow according to the specification above.
- 3.1.3. Drain the air tank daily. Water in the air line will damage the drill and invalidate your warranty.
- 3.1.4. Clean air inlet filter weekly.
- 3.1.5. 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.
- 3.1.6. Keep hose away from heat, oil and sharp edges. Check hoses for wear, and make certain that all connections are secure.

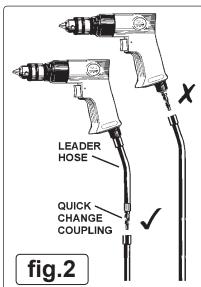
#### 3.2. Couplings

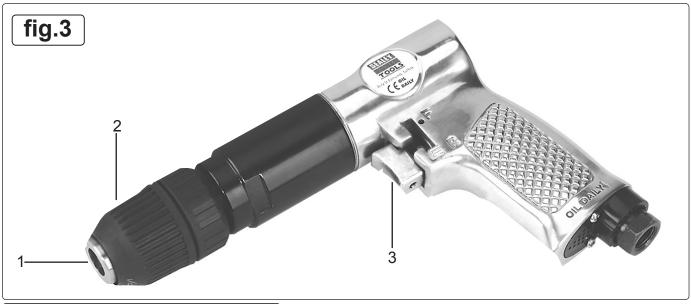
Vibration may cause failure if a quick change coupling is connected directly to the air drill. To overcome this, connect a leader hose - Sealey model number AH2R or AH2R/38 - to the drill. A quick change coupling may then be used to connect the leader hose to the air line recoil hose. See figs.1 & 2.

## 3.3. Fitting Handle

Slide the split brass ring over the chuck and onto the main black body of the drill. Squeeze the split thread together and screw the handle partially onto the ring. Move the handle to your desired orientation and continue to screw the handle until it is locked in position.







## 4. OPERATING INSTRUCTIONS

- □ WARNING! Ensure you read, understand and apply safety instructions before use.
- 4.1 DRILL BIT FITTING. Regularly check the drill bit and always change if worn, cracked or otherwise damaged.
- ☐ WARNING! Unplug from the air supply before placing bit into chuck.
- 4.1.1 Open or close the chuck jaws (fig 3.1) to a point where the opening is slightly larger than the drill or tool bit to be used. Insert the drill bit into the chuck as far as it will go. Rotate the forward section of the chuck (fig 3.2) clockwise, in order to secure the drill bit.
- 4.2. Connect air supply to drill. Squeeze the trigger (fig 3.3) to check that the drill is working correctly before starting work.
- 4.2.1 **DO NOT** allow drill to run freely for an extended period of time as this will shorten the life of bearings.

#### STANDARD DRILLING INSTRUCTIONS. 4.3.

- WARNING! Ensure you wear approved safety goggles and any other safety item required for the job. Ensure chuck is locked П before using the drill. Also ensure that all other safety requirements are followed.
- 4.3.1.
- For drilling purposes ensure the drill is turning in the forward direction by checking that the lever adjacent to the trigger is next to the 4.3.2. forward symbol (F). If not, flip the lever over to the forward position.
- Hold tool firmly and place the bit tip to the point to be drilled. 433
- Depress the trigger to start drill. Move the drill bit into the work piece applying only enough pressure to keep the bit cutting. DO NOT force or apply side pressure to elongate the hole.
- If the material to be drilled is free standing it should be secured in a vice or with clamps to keep it from turning as the drill bit rotates. 4.3.5.
- When drilling metals, use a light oil on the drill bit to keep it from overheating. Oil will prolong life of bit and improve the drilling action. 4.3.6.
- For hard smooth surfaces use a centre punch to mark desired hole location. This will prevent bit from slipping as your start to drill. 437
- 4.3.8. A pilot hole may be necessary to assist the final drill size through the work piece. Lock a pilot drill (smaller size drill than the finished hole size) into the chuck. Follow steps 4.3.1. to 4.3.3. above and drill a pilot hole in the middle of the centre punch mark where final hole is to be drilled. Insert the final sized bit in chuck. Hold drill firmly and place the bit at the entrance of the pilot hole and depress the trigger.
- WARNING! Be prepared for drill binding or break through. When these situations occur the drill has a tendency to grab and kick П in the opposite direction which could cause loss of control. If you are not prepared, this loss of control can result in damage and/or personal injury.
- If the bit jams in the workpiece or if the drill stalls, release the trigger switch immediately. Remove the bit from the workpiece and 439 determine the reason for jamming. It may be necessary to reverse the direction of rotation by moving the lever adjacent to the trigger to the reverse (R) position (the reverse action is also useful for undoing fixings).

## 5. MAINTENANCE

- П WARNING! Disconnect drill from air supply before changing drill bit, servicing or performing maintenance. Replace or repair damaged parts. Use genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
- Lubricate the drill daily with a few drops of good grade air tool oil, such as Sealey ATO/500 or ATO/1000, dripped into the air inlet 5.1. before use or dispensed automatically through an air system oiler, such as Sealey model SA100L or SA1/L.
- Clean the drill after use and change the bit when worn or damaged.
- Loss of power or erratic action may be due to the following:
  - a) Excessive drain on the air supply. Moisture or restriction in the air line. Incorrect size or type of hose connectors. To remedy check the air supply and follow instructions in Section 3.
  - b) Grit or gum deposits in the drill may also reduce performance. Flush the grinder with gum solvent oil or an equal mixture of SAE No 10 oil and kerosene. Allow to dry before use.
  - If you continue to experience problems, contact your local Sealey service agent.
- For a full service contact your local Sealey service agent.
- When not in use, disconnect from air supply, clean drill and store in a safe, dry, childproof location.

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 will be required for any claim.

INFORMATION: For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address, including postcode.









#### 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 to be operated in accordance with these instructions.

Measured vibration emission value (a):  $\dots 2.64 \text{m/s}^2$ Uncertainty value (k):  $\dots \dots 0.46 \text{m/s}^2$ 

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.

## PREPARING FOR USE.

Air Supply.

## **WARNING!**

Ensure the air supply is clean and does not exceed 90psi while operating the tool.

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. Ensure that the tool air valve (or trigger) is in the "off" position before connecting to the air supply.

Monitor the compressor daily to ensure that moisture is not present in the compressed air. Water in the air line will damage the tool.

Line pressure should be increased to compensate for unusually long air hoses (over 8metres).

The minimum hose diameter should be  $\frac{1}{2}$  internal diameter. Fittings must have compatible inside dimensions.

Keep hoses away from heat, oil and sharp edges. Check hoses for wear and ensure that all connections are secure.

#### Couplings.

Vibration may cause failure if a quick change coupling is connected directly to the tool.

To overcome this, connect a leader hose to the tool (Sealey ref: AH2R or AH2R/38).

A guick change coupling may then be used to connect the leader hose to the air line recoil hose.

#### CORRECT USE

Vibration emission is closely linked to the operating pressure in the air supply. The user should ensure that the pressure is set in accordance with our recommendations to assure optimum efficiency and minimise vibration exposure.

- · Ensure that the tool is correctly aligned to the work. Misalignment increases the risk of vibration injury.
- · Ensure that consumables are selected, maintained and replaced in accordance with Sealey Instructions.
- · Sleeve fittings must be used where possible.
- · Always support the tool in a stand or on a balancer or a tension device where possible.
- · Ensure that the operator is sufficiently experienced in order to be able to handle and operate the tool correctly.
- · Ensure that the tool is held with a light but secure grip. Avoid excessive grip force as this will increase the risk of vibration injury.

## MAINTENANCE.

If 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. Clean the tool after use.

**DO NOT** use worn or damaged grinding discs (if applicable).

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.

Remove the strainer. Clean the strainer and 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.

For a full service, contact your local Sealey service agent.

When not in use, disconnect the tool from the air supply, clean the tool and store the tool in a safe, childproof, location.

## 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.