



Power TOOLS

INSTRUCTIONS FOR:

**AIR DIE GRINDER MIDI SIZE
90°**

MODEL No: **SA653.V3**

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 OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.

1. SAFETY INSTRUCTIONS

- ✓ Follow all workshop Health & Safety rules, regulations and conditions when using tool.
- ❑ **WARNING!** Disconnect from air supply before changing grinding bit or servicing.
- ✓ Maintain die grinder 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 recommended 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!** Before each use check grinding bit is secure, and the bit is not worn or damaged. If damaged, replace immediately.
- ✓ Ensure replacement grinding bits are not damaged (cracks, deformations or splinters etc).
- ✓ Always use the correct grinding bit suitable for the material being ground. Ensure the maximum speed specification of the bit is higher than that indicated on the machine data plate.
- ❑ **WARNING!** Always wear approved eye or face protection when operating the die grinder.
- ✓ Use breathing protection in accordance with COSHH regulations if fumes or dust pose a hazard. Wear ear defenders and gloves if necessary.
- ✓ Keep hands and body clear of the workpiece when operating the die grinder.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- ✓ Secure unstable workpiece with a clamp, vice or other adequate holding device.
- ✓ Keep children and non essential persons away from the working area.
- ✓ Avoid subjecting grinding bit to excessive strain, always ease grinding bit against workpiece (a harsh impact may break the bit). Maintain a controlled progression.
- x **DO NOT** hold the workpiece by hand. Use clamps or a vice to secure the workpiece.
- x **DO NOT** use the die grinder for a task it is not designed to perform.
- ❑ **WARNING! DO NOT** use die grinder if damaged or faulty. Contact your local service agent.
- x **DO NOT** use die grinder unless you have been instructed in its use by a qualified person.
- x **DO NOT** carry the die grinder by the air hose, or yank the hose from the air supply.
- x **DO NOT** direct air from the air hose at yourself or others.
- ❑ **WARNING! DO NOT** grind any materials containing asbestos.
- x **DO NOT** turn the die grinder on whilst the grinding bit is in contact with the workpiece.
- x **DO NOT** use die grinder where there are flammable liquids, solids or gases such as paint solvents, including waste wiping or cleaning rags etc as generated sparks may be dangerous.
- x **DO NOT** touch the workpiece close to the ground surface as it will be very hot. Allow to cool. The workpiece may also be very sharp.
- x **DO NOT** operate die grinder if you are tired, under the influence of alcohol, drugs or intoxicating medication.
- ✓ When not in use disconnect from air supply and store in a safe, dry, childproof location.

2. INTRODUCTION & SPECIFICATION

Composite cover moulded around lightweight aluminium alloy housing reduces effects of chill on operator's hands and provides added control. Air motor with quality bearings for smooth and powerful operation. Exhaust outlet adjusts 360° keeping air flow away from operator. Safety trigger prevents inadvertent operation. Ideal for re-shaping, deburring and smoothing off rough edges on castings. Suitable for the professional workshop.

Collet Size: 6mm
Free Speed: 22,000rpm
Air Consumption: 3cfm
Operating Pressure: 90psi
Air Inlet Size: 1/4" BSP
Weight: 0.5kg
Noise Power: 95.0dB(A)
Noise Pressure: 84.0dB(A)

3. PREPARING TOOL FOR USE

3.1. Air Supply

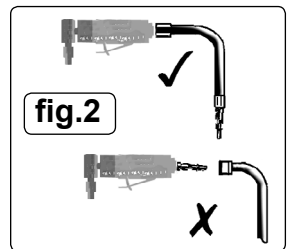
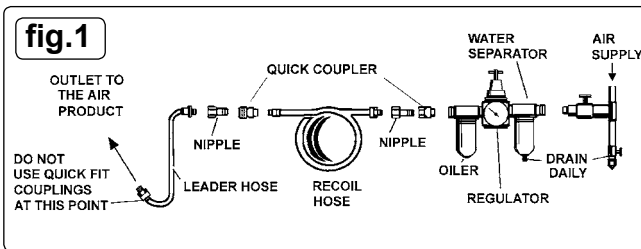
Recommended hook-up procedure is shown in fig.1.

- 3.1.1. Ensure die grinder air valve (or trigger) is in "Off" position before connecting to the air supply.
- 3.1.2. You will require an air pressure of 90psi, and an air flow according to specification.
- 3.1.3. ☐ **WARNING!** Ensure the air supply is clean and does not exceed 90psi while operating the die grinder. 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.
- 3.1.4. Drain the air tank daily. Water in the air line will damage the die grinder.
- 3.1.5. Clean air inlet filter weekly.
- 3.1.6. 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.
- 3.1.7. Keep hose away from heat, oil and sharp edges. Check hose 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 die grinder.

To overcome this, connect a leader hose to the grinder. A quick change coupling may then be used to connect the leader hose to the air line recoil hose. See fig.1 & 2.



4. OPERATING INSTRUCTIONS

4.1. FITTING Grinding Stone

- ☐ **WARNING!** Disconnect from the air supply before changing grinding bit.
- 4.1.1. Check that grinding stone are not damaged in any way such as cracks, deformations or splinters etc. Damaged stones must not be used.
- 4.1.2. Use spanners enclosed to loosen collet locking collar. Insert grinding bit and re-lock collar.

4.2. OPERATING

- ☐ **WARNING!** Ensure you have read, understood and apply safety instructions.
- 4.2.1. Connect the die grinder to the air supply.
- 4.2.2. To start, hold firmly and push the trigger locking lever forward whilst depressing trigger.
- 4.2.3. The bit must be running at its maximum speed before attempting to grind the workpiece.
- 4.2.4. Slowly and smoothly bring the grinding bit toward the workpiece (avoid jerky movements). Exert adequate pressure on the die grinder to grind according to the type and size of the material you are working with. Avoid subjecting bit to excessive strain or harsh impacts. Always hold die grinder firmly and ease grinding bit against workpiece. Maintain a controlled progression.
- ☒ **DO NOT** allow die grinder to free run for an extended period of time as this will shorten its life.

5. MAINTENANCE

- ☐ **WARNING!** Disconnect die grinder 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.*
- 5.1. If air supply does not have an oiler, lubricate the air die grinder daily with a few drops of Sealey air tool oil dripped into the air inlet to prolong its life.
- 5.2. Clean the die grinder after use.
- 5.3. 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 chapter 3.

- b) Grit or gum deposits in the die grinder 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 die grinder out with gum 0solvent oil or an equal mixture of SAE No 10 oil and paraffin. Allow to dry before use.
- 5.4. For a full service contact your local Sealey service agent.
- 5.5. When not in use, disconnect from air supply, clean die grinder and store in a safe, dry, childproof location.
- 5.6. Periodically lubricate crown and pinion gear with general purpose grease through the grease nipple on head.

Danger of Fire/Explosion Hazard

- ☐ **WARNING!** The grinding process can produce streams of sparks (especially when grinding metal), which are a potential source of ignition.
- ☒ **DO NOT** use the grinder where there are flammable liquids, solids or gases.
- ☒ **DO NOT** allow grinder sparks to make contact with the operator's clothing or any other fabric such as cleaning rags. Fabrics contaminated with inflammable materials such as petrol, oil, grease, paint and solvents are a particular fire hazard.
- ☒ To reduce the risk of clothing catching fire the operator should wear wool or cotton outer garments treated with a fire retardant in preference to man-made fibres.

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): **1.25m/s²**

Uncertainty value (k): **0.61m/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.