

## SHOT BLASTING CABINET DOUBLE ACCESS

MODEL NO: **SB974.V5** 

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.





protection



Wear protective

gloves









Vear safety Wear protective footwear clothing

Wear ear protection

Wear a mask

# instructions I. SAFETY

#### 1.1. ELECTRICAL SAFETY

#### ONLY USE THE SUPPLIED TRANSFORMER PLUG FOR CONNECTING UNIT TO THE MAIN ELECTRICAL POWER SUPPLY.

- WARNING! It is the user's responsibility to read, understand and comply with the following electrical instructions:
  You must ensure the risk of electric shock is minimised by the installation of appropriate safety devices. An RCCB (Residual Current
  - Circuit Breaker) should be incorporated in the main distribution board. We also recommend that an RCD (Residual Current Device) is used with all electrical products, particularly portable equipment which is plugged into an electrical supply not protected by an RCCB. You must also read and understand the following instructions concerning electrical safety.
- 1.1.1. The *Electricity At Work Act 1989* requires all portable electrical appliances, if used on business premises, to be tested by a qualified electrician, using a Portable Appliance Tester (PAT), at least once a year.
- 1.1.2. The *Health & Safety at Work Act 1974* makes owners of electrical appliances responsible for the safe condition of the appliance and the safety of the appliance operator. If in any doubt about electrical safety, contact a qualified electrician.

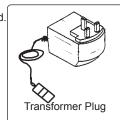
#### 1.1.3. YOU MUST ENSURE THAT YOU:

- ✓ Inspect the transformer plug, cable and connector for wear and damage to ensure items are safe before connecting to the mains power supply. If worn or damaged **DO NOT** use but immediately replace, or contact a qualified electrician.
- Check cables are always protected against short circuit and overload.
- ✓ Important: Check that the voltage marked on the transformer plug is the same as the power supply to be used.
- ✓ Uncoil the cable between the transformer and the cabinet.
- f x DO NOT pull transformer lead, or pull the transformer plug from the mains socket by the lead.
- DO NOT use any other type of transformer with this product.
- DO NOT place the power connector into any area of the cabinet other than the correct inlet socket.
- **DO NOT** try to open or dis-assemble the transformer plug.
- **DO NOT** use the transformer plug to power any other electrical item.
- **DO NOT** get the transformer wet, or use in wet, damp conditions (for indoor use only).
- WARNING! NEVER substitute a standard 13 Amp 3 pin plug, or any other type of plug, for the transformer plug.

**CABLE EXTENSION REELS.** When a cable extension reel is used it should be fully unwound before connection. A cable reel with an RCD fitted is recommended since any product which is plugged into the cable reel will be protected. The section of the cable on the cable reel is important and should be at least 1.5mm², but to be absolutely sure that the capacity of the cable reel is suitable for this product and for others that may be used in the other output sockets, we recommend the use of 2.5mm² section cable.

## 1.2. GENERAL SAFETY

- **WARNING!** Ensure Health & Safety, government and local authority regulations relating to the use of shot blasting are adhered to when using this equipment. Familiarise yourself with the applications, limitations and potential hazards peculiar to the cabinet.
- □ **WARNING!** Disconnect cabinet from mains power and air supply before changing accessories, servicing or performing any maintenance.
  - Maintain the cabinet in good condition. Replace or repair damaged parts. *Use genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.*
- Locate cabinet in a suitable work area, keep area clean, tidy and free from unrelated materials. Ensure adequate lighting.
- ▲ IMPORTANT. Use only dry abrasives such as glass bead. We recommend Sealey item B5KG. Never use fluids or mix fluids with another media in unit.
- WARNING! Always wear approved eye or face and ear protection when operating the cabinet.
- Remove ill fitting clothing. Remove ties, watches, rings and other loose jewellery and contain and/or tie back long hair.
- ✓ Keep the side doors closed and secured when in use.
- WARNING! Ensure correct air pressure is maintained and not exceeded. Always keep blast nozzle directed at the workpiece. DO NOT aim blast at gloves, glove fingers or internal light. Never use outside the unit. Regularly check that the exhaust vent at the back of the cabinet is clear and that there is space between it and any wall.
- Maintain correct balance and footing. Ensure the floor is clean and free from blasting grit spillage. Wear non-slip shoes.
- ✓ Keep children and non-essential persons away from the work area.
- DO NOT use the cabinet to achieve a task it is not designed to perform.





- DO NOT operate the cabinet if any parts are damaged or missing as this may cause failure and/or personal injury.
- DO NOT operate the cabinet with the side door open (fig.1.A).
- DO NOT use the gun without appropriate nozzles fitted.
- DO NOT stand on the cabinet.
- DO NOT get the cabinet wet or use in damp or wet locations or areas where there is condensation.
- DO NOT operate cabinet when you are tired or under the influence of alcohol, drugs or intoxicating medication.
- DO NOT leave the cabinet operating unattended.
- ▲ IMPORTANT The viewing screen is 5mm tempered glass. If the glass should break ensure that it is replaced with tempered or safety glass only.
- When not in use disconnect from the electrical mains and the air power supply.

NOTE! We strongly recommend that a suitable dust extraction system is used with this unit.

## 2. INTRODUCTION

Heavy-duty steel cabinets with toughened glass viewing screen and integral low voltage illumination. Double side doors on Model No. SB974 provide easy access for bulkier items. Includes dust extraction port. Supplied with heavy gauntlets, sand blasting gun and four ceramic nozzles. Suitable for glass beads, silicon carbide, aluminium oxide and silica sand only.

## 3. SPECIFICATION

Model No:	SB974.V5
Air Consumption:	18-39cfm
Door Size:Door Width: 580mm, Min./Max. Heigh	nt: 320/495mm
Doors:	2
Extraction Port Diameter:	Ø64mm
Inlet Size:	1/4"BSP
Operating Pressure:	60-120psi
Overall Dimensions (W x D x H):960 x 7	720 x 1500mm
Power Supply Cable Length:	1.5m
Viewing Area:	.580 x 270mm

## 4. ASSEMBLY

- **4.1. ASSEMBLY** (This cabinet should be assembled by two people).
- 4.1.1. Unpack the product and check contents. Should there be any damaged or missing parts contact your supplier immediately.
- 4.1.2. Connect the leg ends to legs (fig 1.1 & 2.) by passing screws from the outside and tightening with nuts and washers on the inside of the leg.
- 4.1.3. Attach the four legs to cabinet frame (3) with screws, washers and nuts.
- 4.1.4. Fasten shelf (4) to holes in the middle of the four legs.
- 4.1.5. Carefully peel backing paper from the foam sealing strip and lay the sticky surface on the upper edge of frame (3). Trim as required, and make screw holes in foam (in some cases the foam may already be attached).
- 4.1.6. Site funnel (5) so that it passes through the hole in shelf (4) and sits on frame (3) with the funnel outlet locking lever (A) facing to the front of the cabinet.
- 4.1.7. Sit the wire mesh shelf (6) in the top of funnel (5).
- 4.1.8. Stick further sealing strip all around the edge of the funnel.
- 4.1.9. Sit cabinet (7) on top of funnel, ensuring that all the sealing strips are intact and fix the cabinet and funnel to frame (3) with screws, washers and nuts.
- 4.1.10. If not already attached, connect gun (8) to hose (9) at the nozzle outlet end of gun (B).
- 4.1.11. Push other end of hose (9) onto the shot media input pipe inside the funnel (10).
- 4.2. INSTALLATION
- 4.2.1. You will require an air pressure of between 40-80psi, and an air volume of 15cfm for operating the unit.
  - WARNING! Ensure air supply does not exceed 100psi. Too high an air pressure and/or unclean air will shorten the cabinet life due to excessive wear, and may be dangerous causing possible damage and personal injury.
- 4.2.2. The air supply must be clean and dry. Drain the air supply tank daily. Water in the air line will damage the item being blasted and will invalidate the cleaning tank warranty.
- 4.2.3. Clean the compressor air inlet filter screen weekly. For recommended hook-up, see diagram below (fig.2).
- 4.2.4. Line pressure should be increased to compensate for unusually long air hoses (over 8 metres). The *minimum* hose diameter should be 10mm I.D. and fittings must have the same inside dimensions.
- 4.2.5. Keep hose away from heat, oil and sharp edges. Check hoses for wear. Make certain all connections are secure.
- 4.2.6. Use an appropriate coupling suitable for your air system to connect to the 1/4" inlet air coupling on the gun. Pass the air line through the cabinet inlet hole (D).
- fig.2

  QUICK COUPLER

  QUICK COUPLER

  ADAPTER

  OILER

  REGULATOR

  DRAIN

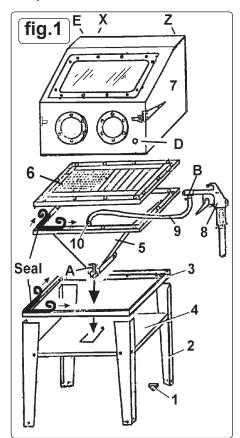
  DAILY

  DRAIN

  DAILY

  LEADER HOSE

  AIR HOSE
- 4.2.7. Ensure the air gun (8) trigger is 'Off' before connecting to the air supply.
- 4.2.8. Check all fittings to ensure there are no leaks and check that the media supply hose is tightly attached to the underside of the gun.
- 4.2.9. Place abrasive into the centre of cabinet funnel, by pouring through the side door, until it is half full.
  - **DO NOT** exceed the stated amount. Excessive amounts of abrasive will impair visibility, create poor blasting performance and could block the air exhaust at the rear of the cabinet.
- 4.2.10. Plug the transformer connector into the electrical inlet (E) at the rear of the blast cabinet. Plug the transformer into the mains socket.
- **4.3. DUST EXTRACTION** If <u>not</u> using an extraction system, remove the cover from air flow outlet (Z) at rear right hand side of the cabinet to allow air flow.



#### 4.4. We strongly recommend that a suitable dust extraction system is used with this unit.

The blast cabinet should be connected to a dust extraction unit. To do so, remove the plastic sealing plate (X) from the rear of the cabinet and use the same screws to attach the plastic dust outlet. Fit a filter over the dust outlet to ensure that no abrasive is taken into the extraction unit. Finally, connect the outlet to the extraction unit and use in accordance with the extractor instructions.

#### 5. OPERATION

- □ WARNING! Ensure you have read, understood and apply safety instructions in Section 1 before using the unit.
- **5.1.** A Ceramic Nozzle must be fitted to the gun output head.
- 5.1.1. Different Ceramic Nozzle sizes will increase or decrease shot blast flow.
- 5.1.2. The Ceramic Nozzle is fixed to the gun head by loosening the head screw, inserting the Ceramic Nozzle and re-tightening the screw.
- 5.2. There is a small metal nozzle located within the gun head. This is the Air Jet. The Air Jet may need to be replaced due to general wear and tear. To fit a replacement Air Jet you will need to remove the Ceramic Nozzle first, and then use a 1/4" Drive 10mm Socket to remove the old Air Jet and fit a replacement. Air Jet Part No.SB974/23-1.
- **5.3.** Place the workpiece in the centre of the cabinet and ensure you close and latch both side doors.
  - WARNING! Failure to securely close the doors could result in damage and/or personal injury.
- **5.4.** Turn on the mains power supply and switch on the internal cabinet light.
- 5.4.1. Turn the air supply on (set to between 40-80psi). If attached, start the dust extraction unit.
- 5.5. Insert your hands into the rubber gloves inside the cabinet making sure that your fingers are correctly positioned and check that you are able to easily move your hand and grasp objects correctly.
- 5.5.1. Grasp the gun with one hand and point the nozzle at the bottom of the cabinet. Depress the trigger to start the blasting process and to ensure everything is working correctly. If there are any leaks, stop and fix before use. If no flow is achieved, momentarily cover the gun nozzle in order to force the compressed air back through the grit hose to clear any lodged media.
- 5.5.2. Hold the work piece with the other glove. Hold and move the workpiece to ensure you keep glove and fingers out of the abrasive blast.

  DO NOT aim the blast at your fingers, gloves or the internal light.
- 5.6. Aim the nozzle directly at the surface of the workpiece and move the blast media (which looks like steam) continuously over the workpiece in an even and circular motion. To avoid undesirable peening, the flow should not be too hard or concentrated. The work finish may vary from coarse to fine depending on the size of the abrasive media. On delicate workpieces, to avoid unnecessary peening or excessive abrasion, begin the blasting with a low airflow.
- **5.7.** Before opening the cabinet to check progress or to access content, release the trigger and lay the gun on the mesh shelf. Remove your gun hand first and then your other hand. Only then is it safe to open the side door.
- 5.8. When work is complete, disconnect gun from the air line, unplug from the mains electrical supply and switch off dust extraction.

## 6. MAINTENANCE

- □ WARNING! Ensure the cabinet is disconnected from the electrical mains and the air supply before attempting any maintenance.
- **6.1.** Keep the blast cabinet clean and dry. **DO NOT** use abrasives to clean the unit.
- 6.2. Ensure the blasting media does not become damp. Keep the air supply dry at all times. Dispose of any damp media.
- Replace media when it has become excessively dusty, lost its granular or spherical appearance, or when workpiece debris has mixed in with it. This is usually noticed when media from the nozzle looks like a smoke cloud rather than steam.
- **6.4.** To change media, place an appropriate container under funnel outlet and turn the locking lever to open. Wear a dust mask when performing this task.
- **6.5.** If used, regularly check that the exhaust vent at the back of the cabinet (fig 1.Z) is clear.
- 6.5.1. If you use an extraction unit change the filter from time to time, according to use.
- **6.6.** Regularly check gun blast nozzle to ensure that it does not become blocked with media. Immediately replace worn or damaged nozzles.
- 6.7. If the abrasive pick-up hose becomes blocked, ensure the doors are correctly closed and then re-power the unit. Cover the gun tip to force air back through the hose to clear any media.
- 6.8. The transparent screen has a replaceable covering on the underside of the lid. If visibility is reduced, replace the protective cover.
- **6.9.** Check that the gloves are in good condition. If damaged, replace immediately.
- 6.10. TO REPLACE INTERNAL CABINET LIGHT:
- 6.10.1. Un-clip light unit from each end clamp. Remove each plastic end (these are a tight fit). Disconnect the electrical terminals and gently slip the rubber retaining rings from the tube releasing it from the back reflector. Use a light tube not greater than 70 watts.

## 7. TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	REMEDY
Excessive dust in the cabinet.	Exhaust vent or air flow is blocked.     Abrasive is worn.     Too much abrasive in the cabinet     Loose air line or fittings.	Clean vent and keep vent away from any wall.     Connect to a suitable dust extraction system.     Replace.     Remove excess.     Check and tighten all air fittings.
Uneven blasting.	Too much abrasive in cabinet.     Moisture inside cabinet.	Remove excess.     Check air line for moisture.
Inadequate speed or efficiency of blast.	Abrasive is worn.     Pressure is too low.	Replace.     Check that there are no supply blockages or leaks.     Increase pressure. Recommended 40-80psi, Max:90psi
Static electricity.	Dry weather conditions.	Leave the workpiece to stand for a while.
Blast pattern too wide or ineffective.	1. Nozzle blocked or worn.	Unblock or replace nozzle



## **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.





## 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.

**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.