

# **INSTRUCTIONS FOR:**

# SHOT BLASTING CABINET

MODEL No: SB970

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. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.

## 1. SAFETY INSTRUCTIONS

#### 1.1. ELECTRICAL SAFETY

#### REGARDING DIRECT MAINS POWER USE WITH THE TRANSFORMER PLUG.

□ 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 plug for wear and damage to ensure items are safe before connecting to the mains power supply. If worn or damaged **DO NOT** use and 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 lead from the transformer before use.
- X DO NOT attempt to pull the transformer plug from the mains socket by the lead.
- **X DO NOT** use any other type of transformer with the cabinet.
- **X DO NOT** try to open or dis-assemble the transformer plug or charging base.
- **X DO NOT** use the transformer plug to power any other electrical item.
- X 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.

#### 1.2GENERAL SAFETY

- □ WARNING! Ensure Health & Safety, government and local authority regulations relating to the 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 the cabinet from the mains power and the air supply before attempting to change accessories or carry out any servicing or 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 and keep area clean, tidy and free from unrelated materials. Ensure there is adequate lighting.
- Use only dry abrasives such as proprietary brands of glass beads, silicon carbide, aluminium oxide and silica sand. We recommend Sealey item B5KG. Never use fluids or mix fluids with another media in the unit.
- ☐ **WARNING!** Always wear approved eye or face and ear protection when operating the cabinet.
- ✓ Keep the unit lid closed and secured when in use.
- □ WARNING! Ensure correct air pressure is maintained and not exceeded. (Max 90psi).
- Always keep the blast nozzle directed at the workpiece. Never use outside the unit and always use with the lid closed.
- Regularly check that the exhaust vent at the back of the cabinet is clear and not blocked and that there is space between it and any wall.
- ✓ Maintain correct balance and footing. Ensure the floor is clean and free from blasting media spillage. Wear non-slip shoes.
- ✓ Remove ill fitting clothing. Remove ties, watches, rings, and other loose jewellery and contain and/or tie back long hair.
- ✓ Keep children and non-essential persons away from the work area.
- x DO NOT use the cabinet for a task it is not designed to perform.
- x DO NOT operate the cabinet if any parts are damaged or missing as this may cause failure and/or personal injury.
- **x DO NOT** operate the cabinet with the lid open.
- x DO NOT stand on the cabinet.
- x DO NOT get the cabinet wet or use in damp or wet locations or areas where there is condensation.
- x DO NOT operate the cabinet when you are tired or under the influence of alcohol, drugs or intoxicating medication.
- x DO NOT leave the cabinet operating unattended.
- ✓ When not in use disconnect from the electrical mains and the air supply.

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

If dust extraction is not used, media may be forced out of the joints as pressure builds up. You can alleviate this to some extent by removing the white blanking plug (Fig.1) situated on the upper left corner at the rear of the tank when viewed from the front. This however will not substitute a suitable dust extraction system.

## 2. DESCRIPTION & SPECIFICATION

The SB970 shot blasting cabinet is constructed of steel with double side doors, replaceable viewing screen and internal illumination. Supplied with a shot blasting gun the unit is suitable for glass beads, silicon carbide, aluminium oxide and silica sand. Excellent for use in a wide variety of workshop and bodyshop cleaning applications. The cabinet requires a standard, clean, dry, workshop air supply.

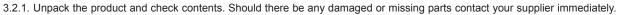
Max. Air Pressure	60-90psi	Door Aperture:	
Max Air Flow	5cfm	Width	475mm
Air Jets Ø5/64", 3/3	32", 15/128", 5/32"	Height	. max 410/min 240mm
NozzlesØ3/16", 13.	/64", 15/64, 17/64"	Air Inlet Size	1/4"BSP
Length x Width x Height69	90 x 575 x 620mm	Lamp1	2Vdc 10W Fluorescent
Capacity	0.14m <sup>3</sup>	Viewing Area:	485 x 275mm

## 3. AIR SUPPLY & ASSEMBLY

#### 3.1. Air supply

- 3.1.1. You will require an air pressure of 60-90psi, and an air flow of 5cfm to operate the unit efficiently.
- 3.1.2. MARNING! Ensure air supply is clean, dry and does not exceed 90psi. Too high an air pressure and/or unclean or damp air will shorten the product life due to excessive wear and may be dangerous, causing possible damage and/or personal injury.
- 3.1.3. Drain the air supply tank daily. Clean compressor air inlet filter weekly. For recommended hook-up see diagram below.
- 3.1.4. Line pressure should be increased to compensate for unusually long air hoses (over 8 metres). The *minimum* hose and fittings bore should be 10mm.
- 3.1.5. Keep hoses away from heat, oil and sharp edges. Check hoses for wear and poor connections.
- 3.1.6. Cabinet input connection is 1/4"BSP.
- 3.2. Assembly

Note: Numbers in brackets refer to item numbers shown in the Parts List.



- 3.2.2. Push clear plastic suction hose (26) onto small diameter end of steel suction tube (27). Place suction tube in base of cabinet via cut-out in screen (8).
- 3.2.3. Remove fitting (23) and one steel washer (22) from air hose connector (21), leaving on one steel washer (22) and rubber washer (22A). Put connector (21) through hole in front of cabinet and secure with washer (22) and fitting (23).
- 3.2.4. Remove plug. Fig.1.

## 4. OPERATING INSTRUCTIONS

□ WARNING! Ensure you read, understand and apply safety instructions in Section 1 before using the unit.

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

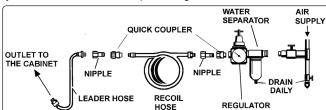
If dust extraction is not used, media may be forced out of the joints as pressure builds up. You can alleviate this to some extent by removing the white blanking plug (Fig.1) situated on the upper left corner at the rear of the tank when viewed from the front. This however will not substitute a suitable dust extraction system.

- 4.1. Connect the air supply to the inlet on the front of the cabinet. Ensure the gun valve is in the "off" position before connecting the air supply.
- 4.2. Check all fittings to ensure that there are no air leaks.
- 4.3. Pour the abrasive media into the centre of the cabinet. **DO NOT** use more than 10lbs (4.5kg). Excessive amounts of abrasive will impair visibility, create poor blasting performance and could block the air exhaust.
- 4.4. Fit suitably sized jet (33A) and nozzle (33) into the gun bore and retain with the set screws. The larger the abrasive particles the larger the jet and nozzle required.
- 4.5. Plug the transformer into a mains socket and the transformer lead into the socket on the back of the cabinet.
- 4.6. Place the workpiece in the cabinet and close and latch the door(s) securely.
- WARNING! Failure to securely close the doors could result in damage and/or personal injury.
- 4.7. Turn on light (switch to left of viewing window) and air supply and insert hands into cabinet gloves. Grasp gun and depress the trigger to start the blasting process.
- 4.8. 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 surface 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.



Fig.1

Remove Plug From Rear Of Tank. Picture For Diagrammatic Purposes Only.



## 5. MAINTENANCE

- WARNING! Ensure the cabinet is disconnected from the electrical mains and the air supply before attempting any maintenance.
- Ensure the blasting media does not become damp. Keep the air supply dry at all times. Dispose of any damp media. 5.1.
- Replace media when it has become excessively dusty, loses its granular or spherical appearance, or is significantly contaminated 5.2. with debris from workpieces. This is usually noticed when media from the nozzle looks like a smoke cloud rather than steam.
- 5.3. Regularly check that the exhaust vents at the side of the cabinet are clear.
- 5.4. Regularly check gun blast nozzle to ensure that it does not become blocked with media. Immediately replace worn or damaged nozzle.
- If abrasive pick-up hose becomes blocked, cover the gun tip to force air back through the hose (ensure that the doors are closed). 5.5.
- Replace the transparent protective sheet on the underside of the window when visibility becomes reduced.

## 6. 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. Max:90psi
Static electricity.	Dry weather conditions.	Leave the workpiece to stand for a while.
Blast pattern too wide or ineffective.	Nozzle blocked or worn.	Unblock or replace nozzle

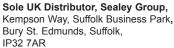
NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. **IMPORTANT:** No liability is accepted for incorrect use of this product.

**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.











01284 703534 sales@sealey.co.uk

www.sealey.co.uk