Please read and save these instructions. Read through this owner's manual carefully before using product. Protect yourself and others by observing all safety information, warnings, and cautions. Failure to comply with instructions could result in personal injury and/or damage to product or property. Please retain instructions for future reference.



# **SANDBLAST BENCH TOP CABINET**



## **Unpacking**

After unpacking unit, inspect carefully for any damage that may have occurred during transit. Check for loose, missing, or damaged parts. Shipping damage claim must be filed with carrier.





Thank you for purchasing this OEM Shot Blast Cabinet which is designed for professional, workshop use.

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#### **FEATURES**

The 3 cu. ft. cabinet is lit by a low voltage (12 volt) fluorescent tube. A transformer is provided which should be plugged directly into the main supply. The attached cable is then plugged into the switch box, mounted on the left side of the cabinet. The switch box contains the ON/OFF rocker switch.

We strongly recommend that this unit be used with a vacuum extraction device. Air is extracted via a double filtration system from the facility at the right hand side of the cabinet.

Please note that when vacuum extraction is used, air will be drawn into the cabinet through the hole on the back panel of the unit. The hole is covered on the outside with a filter plate, and housed within the plate is a foam filter, which must always be in place. This is to prevent grit from being blown out, if/when the vacuum extraction is NOT used.

The lid is provided with a double clear plastic window, the inner of which may be renewed quickly and easily if it should become damaged by the sand blasting action.

A variety of abrasive nozzles is supplied with the unit to produce a useful range of power and grit densities to satisfy all requirements. The cabinet is designed for use with dry abrasives ONLY. We recommend Aluminium Oxide (for cleaning steel) and Glass Beads (for cleaning Aluminium).

It is necessary to provide a clean, dry air supply, capable of delivering a minimum of 10 cu. ft./min at 100 PSI. Please consult your air compressor manual, ensuring you comply with all safety precautions regarding the use of air compressors, and observe all necessary precautions when using compressed air.

## **SAFETY PRECAUTIONS**

- Ensure you comply with all precautions concerning the use of air compressors and compressed air.
- Ensure all air connections are secure.
- Do Not use the machine if the rubber gloves are ripped or otherwise unserviceable.
- Ensure the clear plastic lid is firmly secured before pressing the trigger.
- Keep the jet well away from the air inlet hose (from side panel to gun).
- ALWAYS wear safety glasses. (Normal eye glasses are NOT safety glasses).



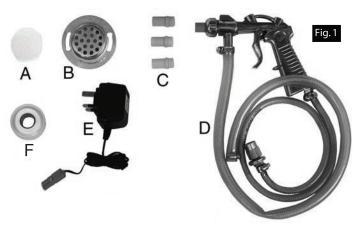


## **ASSEMBLY**

Carefully unpack the unit, and check to ensure that no damage was caused in transit.

Remove all components from inside the cabinet, and check them against the following list.

Insert the end of the grit pick up hose to the hole at the bottom of the cabinet. Then thread a flat washer, followed by the extended nut on to the adapter from the inside of the cabinet, and tighten.





Replace the grid, ensuring the feet face downwards with the cut away section at the right hand rear of the cabinet. The pick up hose should be routed through the gap made by the cut away portion of the grid.

- A Foam Vent Filter
- B Air Vent Cover
- C- Ceramic Nozzles 4, 5, 6 & 7mm (One nozzle is fitted)
- D Gun with air and pick up hoses
- E 12V transformer w/cable
- F PTFE Tape.

The unit is shipped completely assembled, except for the air vent filter and the gun with attached hoses. These should be connected as follows: First, remove the grid, and all the various components, from within the cabinet. The end of the air inlet hose, connected to the gun, is inserted through the 16mm dia. hole in the cabinet, from the inside, as shown in Fig. 2. Ensure a flat washer is threaded on to the adapter, as shown. Thread a flat washer, followed by the extended nut, on to the adapter, from the outside of the cabinet, and tighten.





Insert the circular foam filter into the recess in the Air Vent Cover, and attach the cover to the rear of the cabinet as shown in Fig.4, having first pried out the plastic bung from the vent hole.



Finally, connect the air supply to the extended nut shown in Fig.5. Use of the PTFE tape supplied will ensure an airtight seal.

The air supply should be dry, and capable of delivering a minimum of 10 cu. ft./min at 100 PSI





### **OPERATION**

Plug the transformer into the power supply and switch the power ON. Switch the lamp ON by pushing the rocker switch on the switch box "I". Switch OFF by pushing "O".

Ensure all air connections are secure, before filling the cabinet with abrasive media. Do not fill higher than the level of the grid.

### NOTE:

PTFE tape is provided which may be used on the threads of the various connectors to ensure an airtight connection.

Select the ceramic abrasive nozzle to produce the jet required for the abrasive media being used, and assemble according to the instructions given below.

Place the object to be cleaned in the cabinet, and close the lid, securing with the two swivel clips.

If you are using a vacuum extraction device, turn it on before turning on the air supply. Set the pressure to the required value, but not higher than 100 PSI, and check to ensure there are no air leaks. Should there be any, turn off the air supply and repair where necessary, before turning the supply back on. Pull the trigger on the gun and proceed to blast the object to be cleaned.

Keep the jet facing the object and away from the clear plastic lid. Do not allow the jet to drain on the rubber gloves, the air hose within the cabinet or the fluorescent lamp.

When completed, turn off the air supply first, and, as a precautionary measure, pull the trigger before opening the lid.

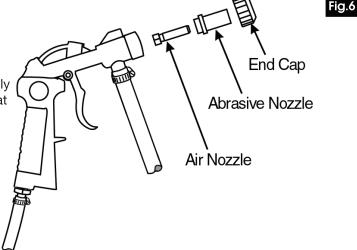
### **NOTES:**

There are no hard or fast rules governing nozzle sizes and air pressures used with different abrasives. With experience and experimentation you will quickly learn the best combinations for the required result. On more delicate parts, start with minimal air pressure to avoid unnecessary peening or excessive abrasion, and work up to a setting to produce the desired finish. Should any abrasive be spilled, ensure it is cleaned up immediately, as its slippery properties can be extremely hazardous.

## **REPLACING THE ABRASIVE NOZZLE**

Ensure the air supply is disconnected before performing this operation.

- 1. Pull the trigger of the gun as a precautionary measure.
- 2. Unscrew the End Cap and withdraw the ceramic nozzle.
- 3. Replace with the nozzle of your choice and carefully thread the end cap back on to the gun, taking great care NOT to cross thread the fine thread.



### **NOTE:**

Should it be necessary to change the Air Nozzle, first remove the abrasive nozzle as described above. A box spanner will be required to unscrew and withdraw the air nozzle.





### **MAINTENANCE**

Before use, check to ensure that all parts are serviceable, including the air inlet hose, rubber gloves and abrasive pick-up.

Ensure the air vent foam filter is in place.

The swivel clamps, securing the lid, must be secure so as not to allow the lid to open during operation. The build up of air pressure within the cabinet could force the lid open, allowing abrasive to escape. This is not only wasteful, but could be a health hazard.

Ensure the filters are serviceable and seated correctly.

Ensure you comply with all precautions regarding the use of compressed air, and air compressor operation.

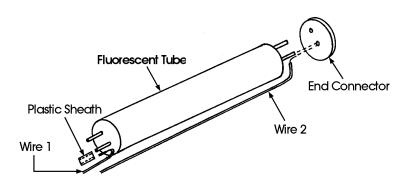
## **Changing the Fluorescent Tube**

Ensure the transformer is disconnected from the power supply before opening the lid and cutting the two ties securing the lamp to its retaining clips. Carefully pull the lamp from its retaining clips then hold the clear plastic protective outer tube firmly and ease off the plastic end cover from the non-wired end. (This may take a little persuasion and perseverance). Once the end cover has been removed, hold the end cover at the opposite end (the cable input end), and pull off the outer protective clear plastic tube.

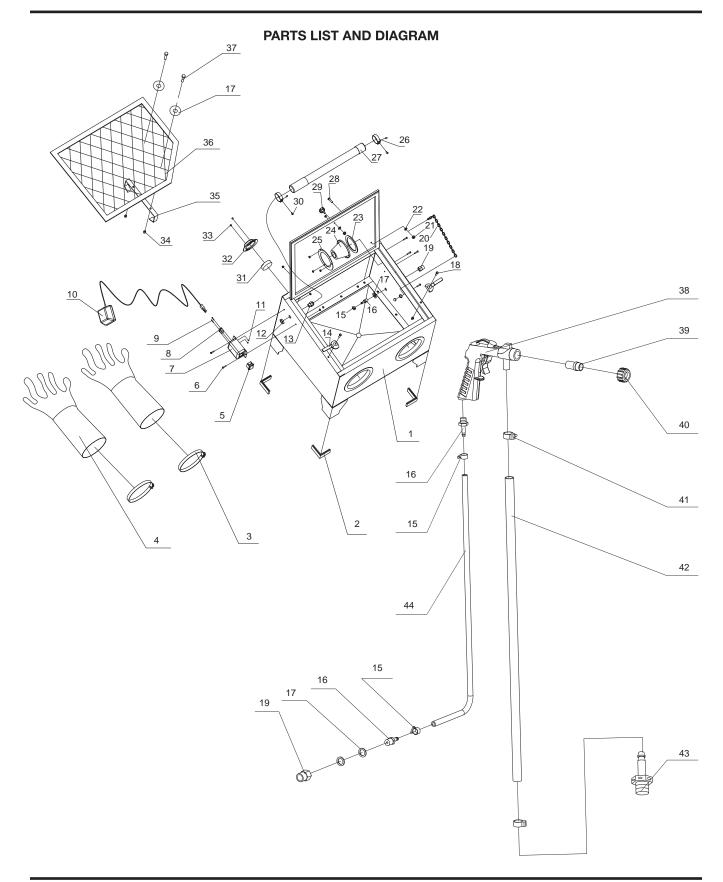
The fluorescent tube is now fully revealed. Pull off the end connector, which secures a wire to one of the pins, taking care not to distort the aluminium reflector. Then pull off the wire secured by a plastic sheath to one of the pins at the cable input end.

Assemble in reverse order, ensuring the wires are correctly held by the plastic sheath at one end and the end connector at the other, with the reflector correctly in position.

Replace the assembly into its retaining clips and test its operation by plugging the transformer in to the mains.









# PARTS LIST AND DIAGRAM

Item	Description	Quantity	Part No.	Item	Description	Quantity	Part No.
1	Cabinet only (minus lid)	1	24815-01	25	Retaining Disc	1	24815-25
2	Foot Pad	4	24815-02	26	End Connector	2	24815-26
3	Clamp	2	24815-03	27	Fluorescent Tube 12V	1	24815-27
4	Rubber Gloves (pair)	2	24815-04	28	Philip Screw	1	24815-28
5	Switch	1	24815-05	29	Knob	2	24815-29
6	Philip Screw	1	24815-06	30	Philip Screw	2	24815-30
7	Cable Connection Box	1	24815-07	31	Filter	1	24815-31
8	Adaptor Connector	1	24815-08	32	Filter Cover	1	24815-32
9	Philip Screw	2	24815-09	33	Rivet	2	24815-33
10	Adaptor	1	24815-10	34	Hex Nut	4	24815-34
11	Hex Nut	2	24815-11	35	Worm Drive Clip	1	24815-35
12	Cable Clip Nut	1	24815-12	36	Grid	1	24815-36
13	Cable Clip	1	24815-13	37	Philip Screw	1	24815-37
14	Lid Swivel Clamp	2	24815-14	38	Gun	1	24815-38
15	Clamp	2	24815-15	39	Nozzle 4mm	1	24815-39
16	Air Inlet Connector	1	24815-16		Nozzle 5mm	1	
17	Flat Washer	2	24815-17		Nozzle 6mm	1	
18	Philip Screw	6	24815-18		Nozzle 7mm	1	
19	Connector Nut	1	24815-19	40	Nozzle adapter nut	1	24815-40
20	Chain	1	24815-20	41	Worm drive clip	2	24815-41
21	Hex Nut	1	24815-21	42	abrasive intake hose	1	24815-42
22	Rubber Pad	4	24815-22	43	pick up connector	1	24815-43
23	Big Rubber Pad	1	24815-23	44	air hose	1	24815-44
24	Filter	1	24815-24				



# **TROUBLESHOOTING**

Problem	CAUSE	REMEDY	
Excessive dust in cabinet.	Air vent or airflow is blocked. Abrasive media worn. Too much abrasive medium in the cabinet. Loose air line or fitting connections.	Clean rear vent, and keep vent away from any wall. Replace abra- sive media Remove excessive media Tighten fittings and make sure air lines are secure	
Uneven blasting action.	Too much abrasive media inside cabinet. Abrasive damp. Moisture present inside cabinet. Remove excessive media. Renew abrasive, or dry thoroughly before use. Check air line to ensure it is free from moisture.		
Inadequate speed or inefficient blast.	Abrasive media worn. Pressure too low.	Replace abrasive media. Increase inlet pressure and ensure control valve is fully opened	
Static electricity present	Dry weather conditions.	Leave the item to be cleaned on the grid	
Excessive Media blown into sur- rounding atmosphere when no vacuum extraction is being used	Lid not secure Air vent filter missing	Secure lid with swivel clips, and adjust them if necessary Replace filter, or blank off hole in rear panel temporarily with masking tape. (Remember to remove masking tape when using vacuum extraction.	

