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Clarke[™]



SHOT BLAST CABINET

MODEL No. CSB20B

Part No. 7640110



1001

OPERATING & MAINTENANCE INSTRUCTIONS

SPARE PARTS AND SERVICING

Please contact your nearest dealer, or
CLARKE International, on one of the following numbers.

PARTS & SERVICE TEL: 020 8988 7400

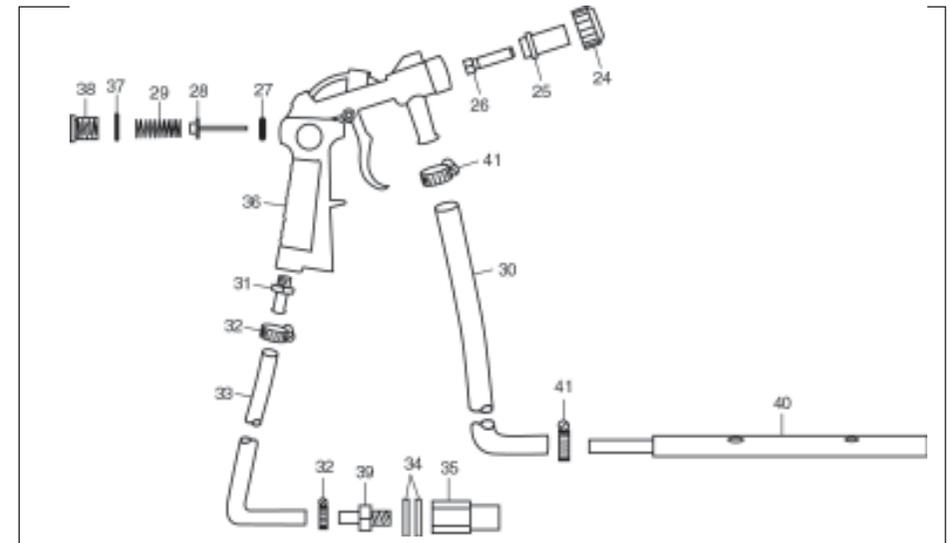
PARTS & SERVICE FAX: 020 8558 3622

or e-mail as follows:

PARTS: Parts@clarkeinternational.com

SERVICE: Service@clarkeinternational.com

Please note that the details and specifications contained herein, are correct at the time of going to print. However, CLARKE International reserve the right to change specifications at any time without prior notice.



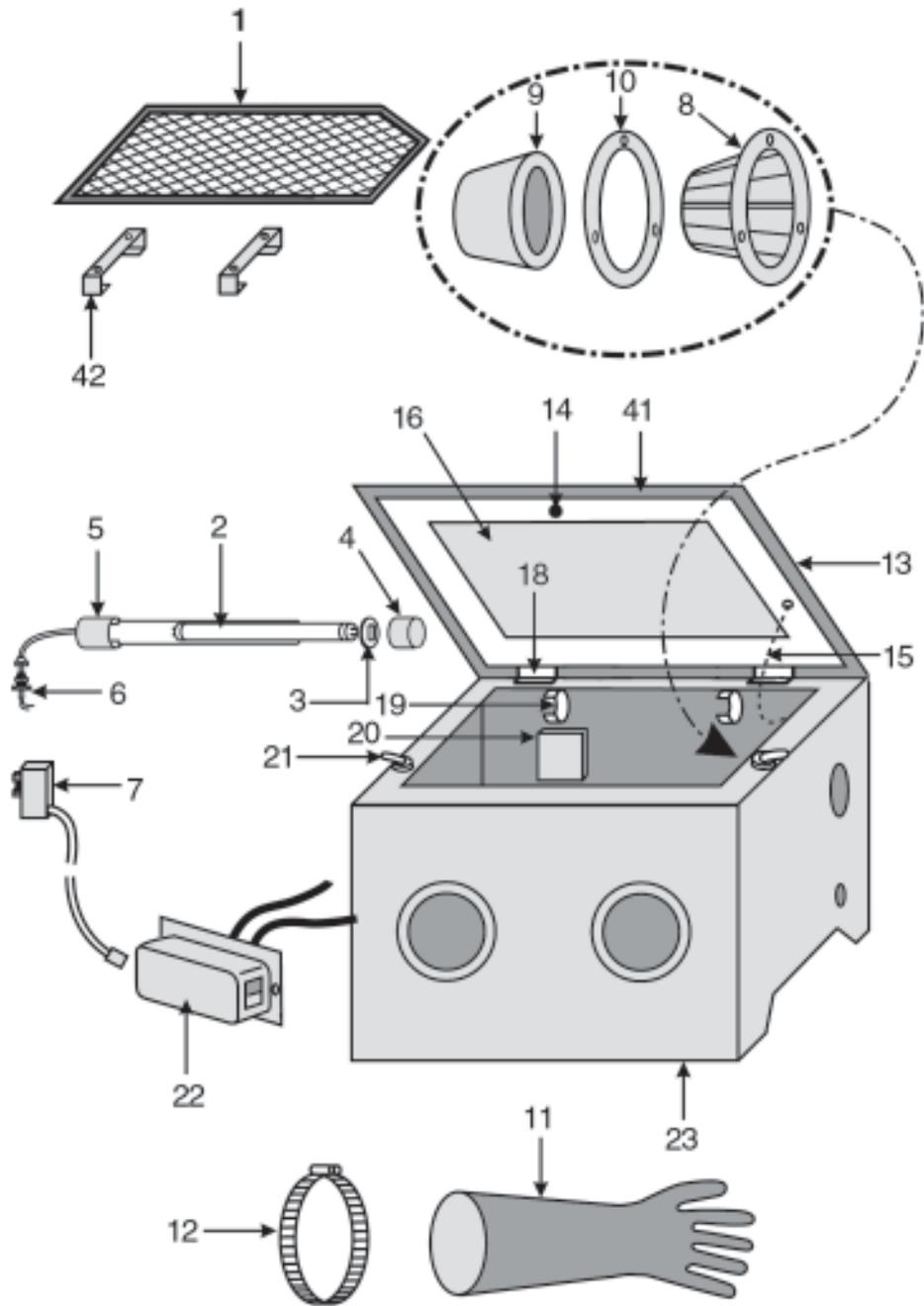
Item	Description	Part No.	Item	Description	Part No.
1	Grid	HTCSB2001	24	End Cap	HTCSB2024
2	Flourescent Tube 12V	HTCSB2002	25	Abrasive Nozzle 4mm	HTCSB2025A
3	End Connector	HTCSB2003		Abrasive Nozzle 5mm	HTCSB2025B
4	Plastic cover	HTCSB2004		Abrasive Nozzle 6mm	HTCSB2025C
5	Input Cable Assy* ¹	HTCSB2005		Abrasive Nozzle 7mm	HTCSB2025D
6	Cable Gland assembly	HTCSB2006	26	Air Nozzle	N/A
7	Power Cable Assembly* ²	HTCSB2007	27	O-Ring	HTCSB2027
8	Main Filter	HTCSB2008	28	Push Rod	HTCSB2028
9	Secondary Filter	HTCSB2009	29	Return Spring	HTCSB2029
10	Retaining disc.	HTCSB2010	30	Abrasive Intake Hose	HTCSB2030
11	Rubber Gloves (pair)	HTCSB2011	31	Air Hose Adapter	HTCSB2031
12	Worm Drive Clip	HTCSB2012	32	Worm Drive Clip	HTCSB2032
13	Clear Plastic Lid	HTCSB2013	33	Air Hose	HTCSB2033
14	Knob	HTCSB2014	34	Flat Washer	HTCSB2034
15	Lid Retaining Chain	HTCSB2015	35	Adapter Nut	HTCSB2035
16	Clear Plastic Window	HTCSB2016	36	Gun* ³	HTCSB2036
17	Window Retaining Strip	HTCSB2017	37	O-Ring	HTCSB2037
18	Lid Hinge	HTCSB2018	38	Plug	HTCSB2038
19	Florescent Tube Clip	HTCSB2019	39	Adapter	HTCSB2039
20	Air Vent Foam Packing	HTCSB2020	40	Abrasive Pickup	HTCSB2040
21	Lid Swivel Clamp	HTCSB2021	41	Worm Drive Clip	HTCSB2041
22	Cable Connection Box	HTCSB2022	42	Grid Foot	HTCSB2042
23	Cabinet only (minus lid)	HTCSB2023			

*1 - comprising; wiring, plastic end cover and reflector.

*2 - comprising; cable, transformer with 3-pin plug and connector.

*3 - includes items 24 and 26

PARTS DIAGRAM



Clarke®

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

Please read this booklet thoroughly and follow the instructions carefully, in doing so you will ensure the safety of yourself and that of others around you, and you can look forward to the Shot Blast Cabinet giving you long and satisfactory service.

GUARANTEE

This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt as proof of purchase. This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not affect your statutory rights.

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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 mains supply. The attached cable is then plugged into the switchbox, mounted on the left side of the cabinet. The switchbox 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 cuft/min at 100 lbf/in². 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).

TROUBLESHOOTING

PROBLEM	CAUSE	REMEDY
Excessive dust in cabinet	Air vent or airflow is blocked Abrasive media worn Too much abrasive media in the cabinet Loose air line or fitting connections	Clean rear vent, and keep vent away from any wall. Replace abrasive 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 surrounding 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.

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).

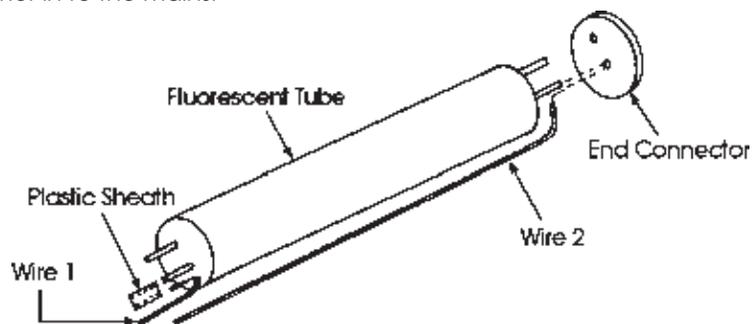
Once the end cover has been removed, hold the end cover at the opposite end (the cable input end), and pull off the outer protective clear plastic tube.

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.

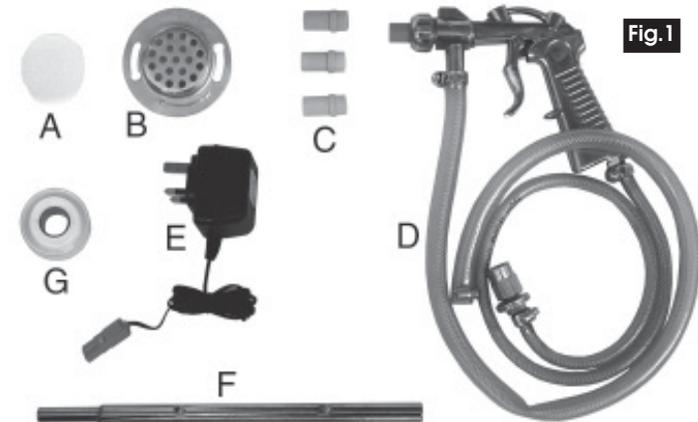
Assemble in reverse order, ensuring the wires are correctly held by the plastic sheath at one end and the end connector at the other, with the reflector correctly in position.

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



ASSEMBLY

Carefully unpack the unit, and check to ensure that no damage was caused in transit. Should any damage be apparent, please contact your Clarke dealer immediately. Remove all components from inside the cabinet, and check them against the following list.



A - Foam Vent Filter

B - Air Vent Cover

C - Ceramic Nozzles 4, 5, 6 & 7mm
(One nozzle is fitted)

D - Gun c/w air and Pick up hoses

E - 12V transformer w/cable

F - Abrasive pick up

G - 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.



Connect the grit pick up hose to the pick-up and tighten the worm drive clip securely. Locate the pick up on the floor of the cabinet. It is secured with the two spring clips as shown in Fig 3.

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.



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 prised 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 cufm/min at 100 lbf/in²

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, and the pick up is correctly located beneath the grid, 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 100lbf/in², 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 train 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.

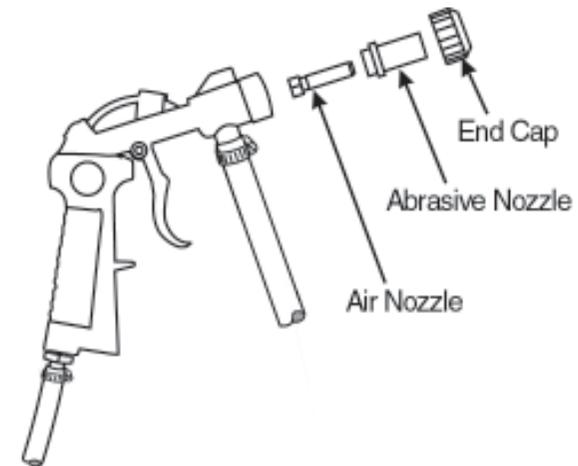
NOTES:

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. An box spanner will be required to unscrew and withdraw the air nozzle.