



# BLASTING CABINET



## Specifications:

- Cabinet Capacity: 420 Litres
- 4 Ceramic Nozzles: 2x5mm, 2x6mm
- Maximum Media Capacity: 70kg
- Maximum Air Pressure: 125psi
- Required Air Supply: 15-25CFM
- Sand Blasting efficiency: 100cm<sup>2</sup>/min
- Optimum Operating Pressure 60-110psi
- Height: 1680mm
- Depth: 940mm (including the dust extractor)
- Width: 1180mm
- Floor to the top of fully open door: 1800mm
- Internal Dimensions: 1150 x 570 x 540mm
- Nett Weight: 120kg
- Carton: 1270 x 1250 x 760mm
- Gross Weight: 157kg

## About the TradeQuip brand

The **'TradeQuip'** brand of workshop equipment, is designed for use in a demanding workshop environment by professional users. With proven and trusted "*Made for the Trade"* reliability, *'TradeQuip'* branded products offer the very best in performance for an affordable price. All backed by a 1year trade guarantee across 1,000+ distributors Australia wide.







Made in China to TQB Brands Pty Ltd specifications Visit us at www.tgbbrands.com.au

## WARNING INFORMATION

#### IMPORTANT: READ ALL INSTRUCTIONS BEFORE USE



The instructions and warnings contained in this manual should be read and understood before using or operating this equipment. Do not allow anyone to use or operate this equipment until they have read this manual and have developed a thorough understanding of how this equipment works. Failure to observe any of the instructions contained in the manual could result in severe personal injury to the user or bystanders, or cause damage to the equipment and property. Keep this manual in a convenient and safe place for future reference.

Whilst every effort has been made to ensure accuracy of information contained in this manual, the TradeQuip policy of continuous improvement determines the right to make modifications without prior warning.

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DO NOT use this machine unless you have been trained and assessed to a competent level in its sate use and operation, and have been given permission to use this



Safety glasses must be worn when operating this equipment

Safety footwear must be worn when operating this equipment



Rings and jewellery must not be worn when operating this equipment



Long loose hair must be contained when operating this equipment

Close fitting/protective clothing must be worn when operating this equipment

## **PRE-OPERATIONAL SAFETY CHECKS**

- Optimum operating pressure 80-120psi @ 15-25CFM
- **MAXIMUM OPERATING PRESSURE 125psi**
- Caution: Watch for silicosis from dust created when using silica sand as a blast media or toxic dust hazards. DO NOT USE MEDIA CONTAINING FREE SILICA.
- **DO NOT** connect to High Pressure bottle gas, rupture and explosion can occur.
- Keep work area clean, cluttered areas invite injuries.
- Observe work area conditions; Do not use this equipment in damp, wet, or poorly lit locations. Don't expose equipment to • rain.
- Keep children away; Children must never be allowed in the work area. Do not let them handle machines, tools or hoses. .
- Always use Eye and Ear Protection.
- Replace window only with Tempered or Safety Glass Size: 610mm x 3.4mm.
- Replace cabinet gloves as necessary.
- Close the latch door during operation.
- Disconnect incoming air-line when adding abrasive, or when servicing hoses, power gun, or other components. .

#### **INTENDED USE**

Blasting work using recommended abrasive media and/or glass beads to clean and abrade a surface, typically metal, of any rust, paint or other unwanted surface materials.

## ASSEMBLY, OPERATION & PREVENTATIVE MAINTENANCE

## 1. FEATURES

The TradeQuip Blasting Cabinet features include a foot-operated switch for the blasting nozzle to avoid trigger-finger fatigue and an extra bright 18-watt light to give you full vision when working. This blast cabinet is constructed of a sturdy welded-steel and a powder-coast finish to prevent rusting.

## 2. ASSEMBLY

Remove all parts from inside the cabinet including the floor grate from the bottom crate underneath the cardboard.

## Leg Installation:

- 1. Place cabinet on its top (#24).
- 2. Attach legs using for 6mm x 13mm bolts
  - a. Front leg has name plate.
  - b. Rear legs will each take 2 self-tapping screws.
- 3. Stand cabinet upright on legs.
- 4. Attach bracket with pressure gauge (#8) to the left front leg with two 6mm x 13mm bolts, lock washers and nuts.
- 5. Place the foot pedal between the front legs.
- 6. Loosen the bolts on the door catches (27#) and move out to full extent and tighten the bolts. Moving them in slightly will tighten the door seal.
- 7. Place glass (#3) on top of the cabinet.
- 8. Place the light fixture (#31) on glass with light switch on right side. Fasten to the cabinet with four 6mm x 13mm bolts and flat washers.
- 9. Dust collector
  - a. Attach the body of the dust collector to the rear panel (right side) aligning the pipe with the hole. Use 6mm x 13mm bolts and flat washers.
  - b. Place the top of the dust collector (with motor and filter) into top of unit. Fasten the two catches.
  - c. Remove the inlet box that covers the dust collector pipe inside the cabinet and place a bead of caulking around the pipe to seal it. Replace the inlet box.
- 10. Tighten all bolts, nuts and screws.
- 11. Place the floor grate with cut out corner to the front right of the cabinet. Bring hoses through opening.
- 12. Plug dust collector into female plug coming from light. Then plug the male cord from the light into 240Volt power supply. Turn on the vacuum switch, the switch on the cabinet will turn on the light and vacuum or dust collector.
- 13. Place media into cabinet through the floor grate, approx. 6-8kg.

## 3. BEFORE USE

Prior to each use conduct a visual inspection checking for abnormal conditions, such as cracked welds, leaks, and damaged, loose, or missing parts.

- 1. Supply air line should be sized according to the table below. All hoses should be rated at least 125psi and an isolation valve should be installed so that supply air can be turned off and then disconnected from the blast cabinet before servicing.
- 2. Supply air should be dry and clean from oil and other contaminants.
- 3. Blast cabinet must be grounded to avoid shock.
- 4. Electrical extension cords should be three wire grounded, and rated for the amperage of the blast cabinet. Check the nameplate for rated amps.

**Caution:** Watch for silicosis from dust created when using silica sand as a blast media or toxic dust hazards. **DO NOT USE MEDIA CONTAINING FREE SILICA.** 

Unless otherwise specified, working pressure of blast cabinet and related components must not exceed 125psi.

## 4. OPERATION

## **Preparing Parts for Blasting:**

All parts processed must be free of oil, grease and moisture. Ensure parts are dry before putting into the cabinet for cleaning.

#### Air Pressure:

- Operating pressure from 80 to 120psi.
- Maximum pressure of 125psi can be used. However, this pressure breaks down some types of media prematurely eg; glass beads.
- Operating pressure of 80psi is suitable for most blast cleaning of light gauge steel, aluminium. Start as a lower pressure and gradually increase the pressure until the desired finish is achieved.
- **DO NOT** connect to High Pressure bottle gas, rupture and explosion can occur.

#### Gun Angle and Distance:

Direct the gun at parts at a 45-60 degree angle with ricochet towards the back of the cabinet. Do not hold the gun at a 90 degree angle to parts. This will cause the media blast to bounce back into the blast stream and slow the blasting action. A 90 degree angle will cause excessive wear on the gun and viewing window. Hold the gun approximately 150mm from parts.

**WARNING:** Ensure the gun is always pointed away from the operator and towards the item being processed. Never blast with the cabinet doors open. While loading and unloading no person should be at the front of the blast cabinet/operator station.

#### Media:

- Media should be of good quality and dry. Moisture will cause the media not to flow and will clog the gun and hopper.
- NEVER USE SAND.
- There are many types and sizes of media for different finishes. Choose the correct media for the specific job.

#### Nozzle Size:

By changing the nozzle to a larger size nozzle, production can increase significantly. Larger sized nozzles produce a larger cleaning pattern. However, this requires more air (ensure your compressor is suitable).

## 5. INSPECTION

Prior to each use conduct a visual inspection checking for abnormal conditions, such as cracked welds, leaks, and damaged, loose, or missing parts.

## 6. STORAGE

This TradeQuip Blasting Cabinet should always be stored in a dry location on a level surface.

## 7. MAINTENANCE

#### Blasting Gun:

After 10-12 hours of blasting time, the nozzle should be checked. If it shows uneven wear turn a ¼ turn every 10 hours of use.

## Caking of Media:

Media caking is caused by moisture in the air supply or from oily and greasy parts. If this is not corrected media will not flow evenly and will clog up the gun. Check air supply, if water is present install a good moisture trap. If oily or greasy parts are being blasted, you should degrease and dry the parts prior to blasting.

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## **Reverse Pressure:**

If media stops flowing, place your thumb over the nozzle (hold tight) and push foot pedal down for 2 seconds. This will cause the system to back blast through the gun and up the media hose. This will help loosen blockages.

## Gun Air Pressure Drop:

Set the air pressure to 80psi on the air gauge regulator. Push the foot pedal while holding the gun and check if the gauge pressure drops significantly. If the pressure drops, this indicates that there is a restriction in the supply line. This could be that the hose is too small. A reducer or quick coupler, a plugged filter, or other piping that doesn't allow enough air through. Also if the cabinet is too far from the air compressor, a pressure drop will occur. The air supply line should be 13mm or larger.

## Poor Visibility – Excessive Dust:

- Air inlet at front left above regulator, should be free to allow air into cabinet.
- Dust container is full and needs to be cleaned and emptied. (Undo latch at bottom of dust collector or remove back cover on vacuum.
- Dust cartridge contaminated. Clean or replace filter in dust collector (#29).
- Media breakdown. Eventually the media becomes so small that it is essentially dust. Replace media and clean dust collector.

## Poor Visibility – Viewing Window:

The Sandblasting Cabinet is supplied with a clear plastic protector on the window. As these become pitted they can be easily replaced to extend the life of the window.

## Poor Media Flow:

- Check for moisture as indicated above. Install moisture trap as needed. Replace damp media and clean hoses and pump.
- Holes in media hose will cause poor media delivery. Replace the hose.
- Debris in media. Replace and screen media.

## 8. SERVICE & REPAIR

Any TradeQuip Blasting Cabinet found damaged in any way, or found to be worn or operates abnormally should be removed from service until repaired by an authorised service agent. Owners and / or operators should be aware that repair of this product may require specialised equipment and knowledge. Only authorised parts, labels, decals shall be used on this equipment. Annual inspection of the Sandblasting Cabinet is recommended and can be made by an authorised repair facility to ensure that your equipment is in optimum condition and that the equipment has the correct decals and safety labels specified by the manufacturer.

## TROUBLESHOOTING

A properly maintained suction cabinet should provide years of constant service. When production rates fall the operator can usually locate the problem by checking;

#### Air Supply:

If the pressure gauge on the regulator shows an adequate no-load supply (when the blaster is no running), press the foot pedal. If the pressure drops more than a few psi your air supply is restricted or inadequate. Clean the filters and moisture separators all the way back to the air compressor. Straighten any kinks in the line. Use a master gauge to check the air pressure or replace the existing gauge if you suspect it is giving you false readings.

#### Blast Gun:

The nozzle will wear our eventually. Replace the nozzle if it measures 2mm over its original size or if it shows uneven wear. Adjust as needed for different media and conditions.

#### **Dust Collector:**

Inadequate cabinet ventilation can result in reduced cleaning power at the nozzle as well as diminished view of the work in progress. Use the dust collector's shaker every 20-30 minutes when the cabinet is turned off. Empty the dust collector at least once a day. Remove filter and blow out occasionally to keep the dust collector or vacuum working efficiently. Replace as needed.

#### Media:

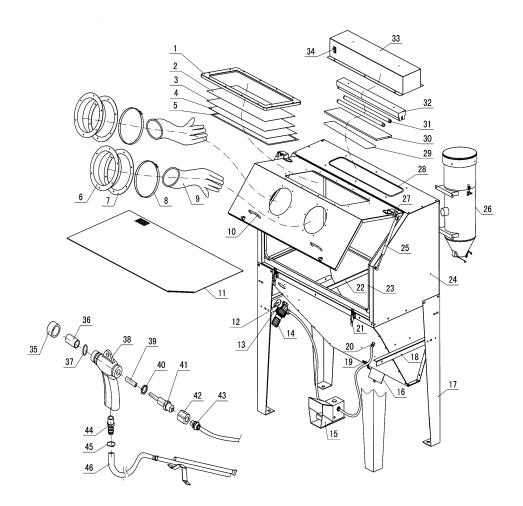
Use quality blast media for the job. Damp or contaminated media can bring blasting to an instant halt. Store media in a dry are and load the appropriate quantity. Add enough media through the flooring 150mm deep of media. If you run out of media during blasting add enough so it keeps circulating to the gun. The media will eventually break down or become too contaminated to use.

#### Media Delivery:

Replace any media hose that has soft spots or visible wear. Adjust the air regulator to provide adequate flow. A mixture that is too rich will cause pulsating at the gun. An unusually load noise while blasting means the mixture it too lean. A rich mixture can result in lower impact velocities, while a lean mixture reduces the number of impacts. Both will reduce the cleaning rate.

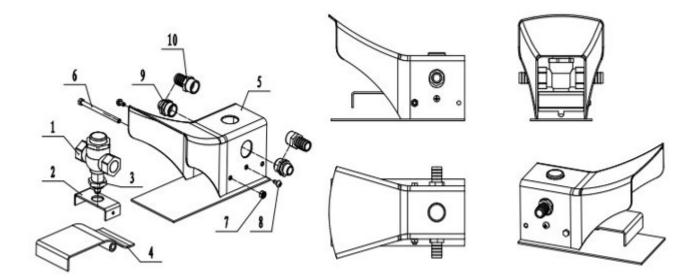
Item	Description	Qty	Item	Description	Qt
1	Windows Frame Cover	1	24	Cabinet	1
2	Plastic Board	1	25	Main Support Poles	2
3	Glass	1	26	Dust Collector	1
4	PE Protection Film	1	27	Fixing Seat	2
5	Sealing Tape View Window	1	28	Sealing Tape – Light	1
6	Mounting Ring – Gloves	1	29	Protection Film PE	1
7	Sealing Tape – Gloves	2	30	Glass	1
8	Clamp – gloves	2	31	Light	2
9	Gloves	2	32	Lamp Fixture – 2 bulbs	1
10	Handle	2	33	Lamp Housing	1
11	Web	1	34	Switch	1
12	Fixing Seat	1	35	Nozzle Holding Nut brass	1
13	Pressure Gauge	1	36	Nozzle	1
14	Air Regulator	1	37	O-ring Nozzle	1
15	Foot Pedal Complete	1	38	Gun Body	1
16	Cover	1	39	Sleeve – Air Jet	1
17	Leg	4	40	Air Jet hex nut – brass	1
18	Brace	1	41	Air Jet	1
19	Latch	1	42	Air inlet Fitting	1
20	Air Inlet Fitting	1	43	Air inlet Fitting	1
21	Latch	2	44	Air inlet Fitting	1
22	Brace	2	45	Clamp	1
23	Sealing Tape – Dorr	1	46	Hose - Media	1

## PARTS DIAGRAM



## PARTS LIST – FOOT PEDAL

Item	Description	Qty
1	Air Valve	1
2	Air Valve fixing seal	1
3	Cooper Nut	1
4	Foot Pedal	1
5	Foot Body	1
6	Nut M6	1
7	Bolt M6x90	1
8	Screw M5x10	1
9	Quick Twist	1
10	Quick Adaptor	1



## WARRANTY

TradeQuip products have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship for a period of 12 months from the date of purchase except where tools are hired out when the guarantee period is ninety days from the date of purchase.

Should the machine develop any fault, please return the complete tool to your nearest authorised warranty repair agent or contact TQB Brands Pty Ltd Warranty team – <u>warranty@tqbbrands.com.au</u>.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accident, or repairs attempted or made by any personnel other than the authorised TQB Brands Pty Ltd repair agent.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your TQB Brands Pty Ltd guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the 12month period.

#### **Consumer Guarantee**

Our goods come with a guarantee that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.



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