





MOBILE BLASTING UNIT



Specifications

- Tank Capacity: 75 Litre
- Working Pressure: 60 125psi
- Air delivery; 400-600 Litres per minute @ 90psi
- 4 Ceramic Nozzle Tips: 2.0 2.5 3.0 3.5mm
- Hose Length: 2400mm
- Hose OD: 24mm
- Hose ID: 12mm
- Wheel Diameter: 150mm
- Nett Weight: 23kg
- Carton: 880 x 460 x 420mm
- Gross Weight: 25kg
- Replacement Ceramic Tip Set (4pk) Product #3008/3
- Replacement Hose: Product #3008-25

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 1 year trade guarantee across 1,000+ distributors Australia wide.







WARNING INFORMATION

IMPORTANT: READ ALL INSTRUCTIONS BEFORE USE



WARNING

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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STANDARD OPERATING PROCEDURE

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



Long loose hair must be contained when operating this equipment



Safety footwear must be worn when operating this equipment



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



Rings and jewellery must not be worn when operating this equipment



Wear a filter or mask over your mouth when operating this unit

PRE-OPERATIONAL SAFETY CHECKS

- Mobile Blasting Equipment produces a powerful flow of abrasive particles. To avoid personal injury and property damage, study this manual thoroughly before assembling, operating or servicing this mobile blasting unit.
- Ensure all components seal properly after assembly.
- Do not exceed the maximum operating pressure of the blasting equipment.
- Disconnect the mobile blaster from the air supply before changing accessories or attempting to install, service, relocate or perform any maintenance.
- Check hoses and air lines for weak or worn condition before each use. Make sure all the connections are secure before use.
- Do not point the abrasive blaster gun at anyone or objects.
- Before operating this equipment, consider the availability and proximity of the required air supply.
- During operation, do not expose the hands or skin directly in the line of the blast nozzle.
- Always wear personal protective gear (hood, respirator, earmuffs and gloves).
- Fire or Explosion Hazard! DO NOT USE an abrasive media blaster around combustible or flammable liquids, dusts, gases, oily rags, or other materials that can explode or burn quickly. Some abrasives create sparks when they hit a metallic surface and/or generate static electricity sparks which may cause fires or explosions in an unsafe environment.

Minimum Free Delivery required to operate this unit (using Medium grit and the Small nozzle) is 400 Litres per minute.

Recommended Compressor Air Supply Delivery is 600 Litres per minute.

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.

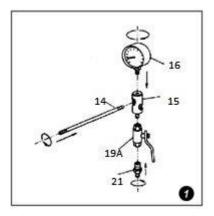
ASSEMBLY, OPERATION & PREVENTATIVE MAINTENANCE

1. FEATURES

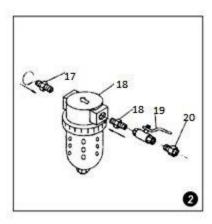
The *TradeQuip "Made for the Trade" Mobile Abrasive Blasting Kit* is perfect for a wide variety of surface preparation jobs such as removing paint, scale, rust and oxidation. Ideal for surface preparation on cars, trucks, machinery, steel, glass etching and much more. Features a 2.4m heavy-duty blast hose designed for long life and manoeuvrability. Durable wheels and built-in handle allow for easy transport. Simply add abrasive and hook up to an air supply and you're ready to blast. Some assembly required.

2. ASSEMBLY

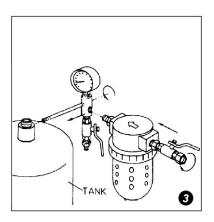
1. Step 1, assembling the intake manifold (15). First attach the pressure gauge (17) to the top of the intake manifold, turning the gauge so that it can be seen across the top of the tank. Next, attach the throttling valve (19A) to the bottom of the manifold. Attach the nipple connector (21), to the throttling valve. Attach the joint pipe (14) to the manifold.



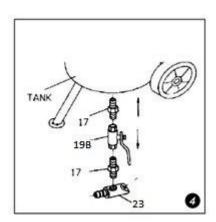
2. Step 2, to assemble the water trap filter (18). Two nipple connectors (17) are screwed into each side of the filter. On one side, attach the air supply valve (18) to the nipple connector (17). Attach the male/female connector (20) to the other side of the air supply valve. When ready to operate the blaster, the air hose from the compressor will fasten to the male/female connector (20).



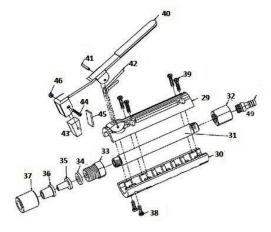
3. Step 3, place the tank (01) on a table with the four clips up. Screw the water trap filter (18) and its parts into the opening at the side of the intake manifold. Then screw the open end of the joint pipe (14) with intake manifold (15) and pressure gauge (17) attached into the threaded opening on the side of the filler pipe on top of the tank. Be sure that the manifold and gauge are vertical.



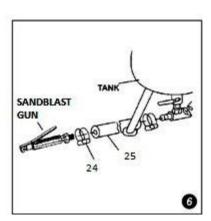
4. Step 4, assembly of the media outlet valve into the opening at the bottom of the tank. Attach in order; nipple connector (17), media metering valve (19B), nipple connector (17), and media outlet pipe (25).



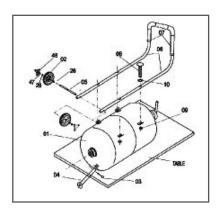
5. Step 5, assembly of the blast gun nozzle. In this assembly process select one of the four nozzles (35/36). This is not a permanent selection, as you can change nozzles according to the job being done. Screw the adaptor (49) into the blast gun nozzle. Screw the last nipple connector (17) into the other side of the valve. Screw the gasket (34) into the nipple connector then add nozzle (35/36) and the nozzle cap-nut (37).



6. Step 6, to connect the media metering valve assembly (step 4) and the nozzle shut off assembly (step 5) slide the two hose clamps (24) over each end of the sand hose (24). Press one end of the hose over the nipple on the media outlet pipe (25) and the other end over the adapter (49). Both hose ends should be firmly seated on the nipples. Slide the hose clamps along the hose to each nipple and tighten the clamps firmly. They have to resist the force of 65-125psi.



- 7. Step 7, fasten the handlebar (06) to the tank using four pan screws (08) four washers (50) and four hex nuts (09). Note: keep the handle curve ends upward.
- 8. Step 8, locate the axle (05) and slide it through the openings in the sides of the handlebar (06). Place one wheel (02) at each end of the axle and fasten them into place with cotter pins (03) and washer (51).
- 9. Step 9, insert the fixed foot onto the fitting on the bottom of the tank near the edge. Use the last cotter pin (03) to hold the foot to the tank.
- 10. Step 10, before operation go back over each connection, double checking to ensure that all are tight and properly sealed.



3. BEFORE USE

Conduct a thorough visual inspection checking for leaks and any abnormal conditions, such as cracked welds, leaks, and damaged, loose, or missing parts.

To protect your air compressor from damage it may receive from blasting

- 1. Keep the air compressor in a separate area, or
- 2. Always position the air compressor up-wind of the blasting area.

Setting the Air Flow

1. Ideal setting up of the 3008.3032T,3060 Blast kit begins with the regulator set to 90psi input and the media valve at the base of the blaster tank fully closed.





2. Hold the gun trigger open fully and check to see if there is a steady stream of air with no loss of pressure at the gauge.



3. Gradually increase the air pressure via the regulator adjustor knob while holding the trigger open, if your compressor has a free air delivery rating above that of the blasters specifications the gauge reading should rise with the adjustment.



Ideal pressure will be dependent on the ability of the air supply to remain constant and without pressure drop at the gauge, as there are many variables including media type and nozzle size. However, in most cases this pressure generally around 90 to 110 PSI. Keep note that the blaster will have a peak operating pressure rating and should not be operated above this rating.

SETTING THE AIR/MEDIA FLOW

Once a solid uninterrupted air flow is achieved, we need to then open the media flow valve. Ideally a sample of the item to be blasted should be on hand to test while the adjustment process is done.

TUNING YOUR BLASTER

The media valve (abrasive media valve) at the bottom of the tank determines how much abrasive mixes in with the air going to the nozzle.

4. Open the media metering valve to approximately 1/8th of its total swing and test the blast against your test sample.



You may need to adjust a further 1/8th if a quicker cutting degree is required but keep in mind that adding media into the air stream will slow the velocity and effectiveness of the blast stream and raising the air pressure a further 10psi may be required.

Please note that a fully open media metering valve can cause media to stall in the hose behind the gun assembly due to the added weight in the flow stream and dramatic slowing of the stream velocity. Should this occur, close the media valve, and repeat the settings instructions 1 to 4.

Be aware of abrasive clogging the system. Depressurise if necessary and replace the abrasive media with drier or cleaner abrasive media and repeat steps 1 to 4.

4. OPERATION

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

Abrasive Selection:

The type of media you choose will greatly influence the amount of time needed to clean a given surface area. TradeQuip's recommended blasting media materials include garnet, glass beads, steel grit and soda bi-carbonate. Some of these will absorb moisture much more readily than the others depending on the humidity. As a result, this may cause clogging of the media metering valve. If this occurs, empty the abrasive media material from the tank, clear the clogging of the media metering valve and ensure the replacement media is clean and dry.

If you decide to continue to re-use abrasive media for prolonged periods, remember it does wear out. The sharp edges become rounder, and are less effective. It's at the point you should replace the batch of abrasive media you are using.

Loading Abrasive:

- 1. Check that the new bag of abrasive media is dry and won't clog the meter valve (19B), media outlet pipe (25), hose (24) or other components.
- 2. Always wear personal protective gear.
- 3. Turn the air supply valve (18) to the off (horizontal) position.
- 4. Open the blast gun nozzle (42) (vertical) position.
- 5. Ensure the pressure gauge (17) reads zero ("0 psi") pressure.
- 6. Remove the filler cap (13) from the top of the tank.
- 7. Insert the funnel (27) and pour the abrasive into the funnel. Be sure to load enough into the tank to do the job at hand. If it is a big job, fill the tank only ¾ full and reload as needed to finish the work.
- 8. Note: if the humidity is 90-100% the water trap (18) won't be able to trap all of the moisture in a ¾ full tank. Reduce the amount of abrasive, load more frequently and empty the water trap frequently. This will reduce the possibility of clogging the bottom of the tank or line.
- 9. With the correct amount of abrasive in the tank close the filler cap (13).
- 10. Close the nozzle shut-off valve (42) and open the air supply valve (18).
- 11. Check for air leaks at the filler cap as you begin to pressurise the tank from the compressor.



Correct Air Pressure:

Pressure should not exceed 125psi. If pressure exceeds 125psi the safety relief valve (11) is designed to release the excess pressure. If this does not happen stop all work immediately and use the air compressor to reduce the excess pressure. Do not investigate the blaster's pressure until the pressure gauge (16) reads zero.

To Setup for Abrasive Blasting

Note: Start with all valves in closed position.

- 1. Point the blasting gun to a safe direction away from people, pets or anything around you that may be damaged by abrasive spray.
- 2. Press and hold blasting gun until air starts flowing through the trigger
- 3. While pressing and holding the blasting gun, slowly open the abrasive control valve until abrasive material begins to flow out of the blasting gun
- 4. Adjust the abrasive valve to an appropriate position (about 45°) when desired amount of abrasive material is flowing through the trigger nozzle

To Begin Blasting

- 1. Choose a larger nozzle for a broader spray pattern. Choose a smaller nozzle for more focussed abrasive blasting
- 2. Adjust abrasive flow with the abrasive control valve
- 3. Be aware of abrasive clogging the system. Depressurise if necessary and replace the abrasive media with drier or cleaner abrasive media

To Stop Blasting

- 1. Whilst continuing to press and hold the blasting gun, turn the abrasive control valve to the closed position
- 2. When noticing only air is coming through the gun, stop the air flow by releasing the gun

To Release Pressure from Tank

- 1. When finished blasting, point the blasting gun in a safe direction away from people, pets or anything around you that may be damaged by direct or indirect spray
- 2. Switch off power to the compressor
- 3. Turn the abrasive control valve to the closed position whilst pressing and holding the blasting gun to expel remaining abrasive material from abrasive hose
- 4. Release air pressure via the safety relief valve. Ensure gauge reads "0 psi"
- 5. Disconnect the air supply hose from the blasting unit

Nozzle and Rubber Nozzle Replacement

- 1. Ensure air supply is disconnected from blaster
- 2. Whilst holding the blasting gun against spring pressure in the open position, unthread the knurled nozzle retaining collar of the blasting gun and remove the retaining collar, nozzle and seal
- 3. Insert the replacement nozzle into the retaining collar followed by the rubber seal, then thread the knurled nozzle retaining collar onto the blasting gun and tighten securely
- 4. Choose a larger nozzle for a broader spray pattern. Choose a smaller nozzle for a smaller more focussed abrasive blasting

Health Considerations:

- 1. Protect yourself and those around you from 'overspray'. Remember that your mobile blaster is shooting powerful spray of abrasive material
- 2. Do not point it at yourself or anyone around you
- 3. Always wear personal protective equipment
- 4. Wear a filter or mask over your mouth when operating this unit. You will create a cloud of abrasive material and debris which is dangerous to inhale
- 5. Remove, cover, and/or protect anything around you that might be damaged from direct or indirect contact with the abrasive spray or particles.

5. STORAGE

This mobile blasting unit should always be stored in a dry indoor location on a level surface.

6. MAINTENANCE

Before opening the tank release the air pressure on the media tank;

- 1. Turn off the air supply valve (19);
- 2. Open the nozzle valve to release pressure in the line;
- 3. Ensure the tank pressure gauge (16) reads zero;
- 4. Open and empty the tank
- 5. Check for worn abrasive hose and fittings. The abrasive control valve, manifold and all parts after the abrasive is ejected from the tank are subject to rapid wear due to the flow of abrasive media. Check for leaks, blistering, bulging or thinness of the hose. Replace all parts which appear worn immediately.

7. SERVICE & REPAIR

Any mobile blasting unit 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 mobile blasting unit 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.

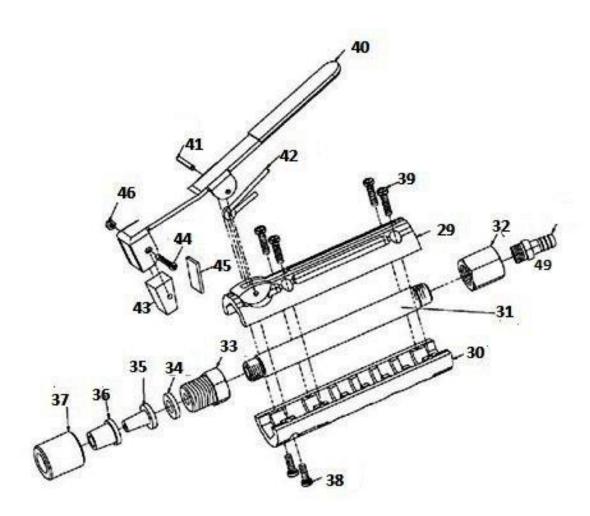
TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	ACTION
Surging of Blast Flow	Air pressure to low	See "lack of air pressure"
	Too much media	Adjust abrasive control valve
Excessive Media Consumption	Abrasive control valve open too far	Close slightly
	Air pressure too low	Check pressure gauge
Clogging and Plugging of Blast Flow	Debris in media	Purge and screen
	Media size too large	Use smaller grit size
	Nozzle plugs	 Use large nozzle or adjust abrasive control valve
	Wet media	Dry media, drain water from air
Moisture in Abrasive Media	Wet media	Change or use dry media
	Water in air	Drain water from air lines
	Water in tank	Empty, dry out and refill
Humid weather	Moderate humidity	Keep media as dry as possible
		Use drier or moisture separator
	High humidity	Avoid that period of use if possible
Overtaxed Compressor	Compressor too small	Restrict time used
	Nozzle size too large	Use smaller size
	Too many leaks in air lines	Seal and tighten air lines
	Holes in abrasive hose	Replace hose
	 Air filter on compressor clogged or blocked 	• Clean filter
Lack of Air Pressure	Compressor too small	Use larger compressor
	 Supply valves not on full position 	Open valves
	Nozzle size too large	Use smaller size nozzle
	Leaks in air lines	Seal and tighten air lines
	Holes in air lines	Replace hose
	Air filter on compressor clogged or	Clean filter
	blocked	
	Urethane washer dirty or worn	Clean or replace washer
Lack of Abrasive Flow	Blaster tank empty	Fill tank
	Moisture in media	Dry media
	 Not enough air pressure 	Check system
	Abrasive hose kinked	Straighten
	Debris in media	Clean or screen media

PARTS LIST BLAST GUN NOZZLE

Part #	Description	Qty
31	Body Upper	1
32	Body Lower	1
33	Metal Pipe	1
34	Intake Connector	1
35	Adaptor	1
36	Gasket	1
37	Ceramic Nozzle	4
38	Rubber Adaptor	4
39	Nozzle Cap Nut	1
40	Screw ST 4.2x16	4

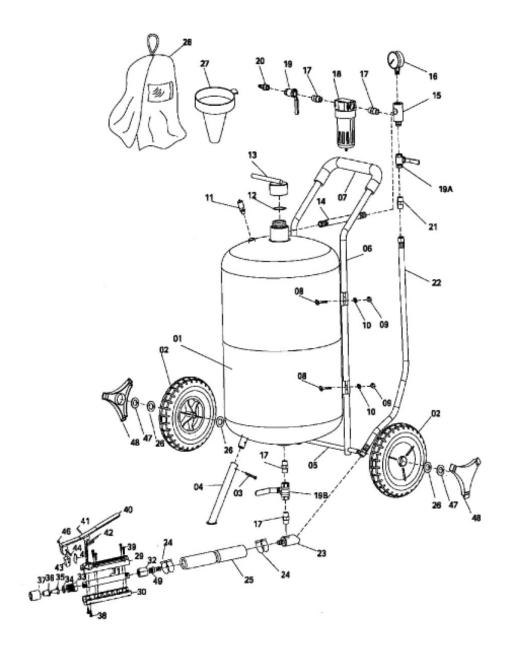
Part #	Description	Qty
41	Screw ST 4.2x12	2
42	On/Off Control Lever	1
43	Spring Pin	1
44	Spring	1
45	Rubber Pad	1
46	Screw M3x25	1
47	Hard Alloy Pad	1
48	Nut M3	1
49	Hose Adaptor	1



PARTS LIST

Part #	Description	Qty
1	Tank	1
2	Wheels	2
3	Cotter Pin	1
4	Front Arm	1
5	Wheel Axle	1
6	Handle Bar	1
7	Handle Grip	1
8	Pan Screws	4
9	Hex Nuts	4
10	Washers	4
11	Safety Relief Valve	1
12	O-Ring	1
13	Tank Filler Cap	1
14	Joint Pipe	1
15	Intake Manifold	1
16	Pressure Gauge	1
17	3/8" Nipple Connectors	4

Part #	Description	Qty
18	Water Trap	1
19	3/8" Brass Air Supply Valve	1
19A	3/8" Brass Throttling Valve	1
19B	3/8" Steel Abrasive Control Valve	1
20	Air Inlet Connector	1
21	Nipple Connector	1
22	Air Pipe	1
23	Abrasive Outlet Pipe Fitting	1
24	Hose Clamps	2
25	Discharge Nozzle Hose	1
26	Washers	4
27	Funnel	1
28	Hood	1
47	Washers	2
48	Wheel Caps	2



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 12-month 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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