

# OPERATING MANUAL EBE-900VMB

VERSION 1.1

**EC DECLARATION OF CONFORMITY**

in accordance with Appendix II sub A of Directive 2006/42/EC

**BLASTRAC B.V.**

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Declare under our sole responsibility that the machine as described below conforms with the Health and Safety requirements of the European Directive of the machine Safety.

In case of changes to the machine without our written authorization this declaration loses its validity.

**Model:** **BLASTRAC EBE-900VMB**

**Serial number:** .....

1. satisfies the conditions set out in the Machine Directive (Directive 2006/42/EC); Low voltage directive

OPERATING M

(2006/95/EC, as last amended; EMC directive 2004/108/EC, as last amended)

2. satisfies the following harmonized standards:  
NEN-EN 349, NEN-EN 418, NEN-EN 294 and NEN-EN 60204

Nieuwegein .....

  
Michiel Kalisvaart



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## 1. Introduction

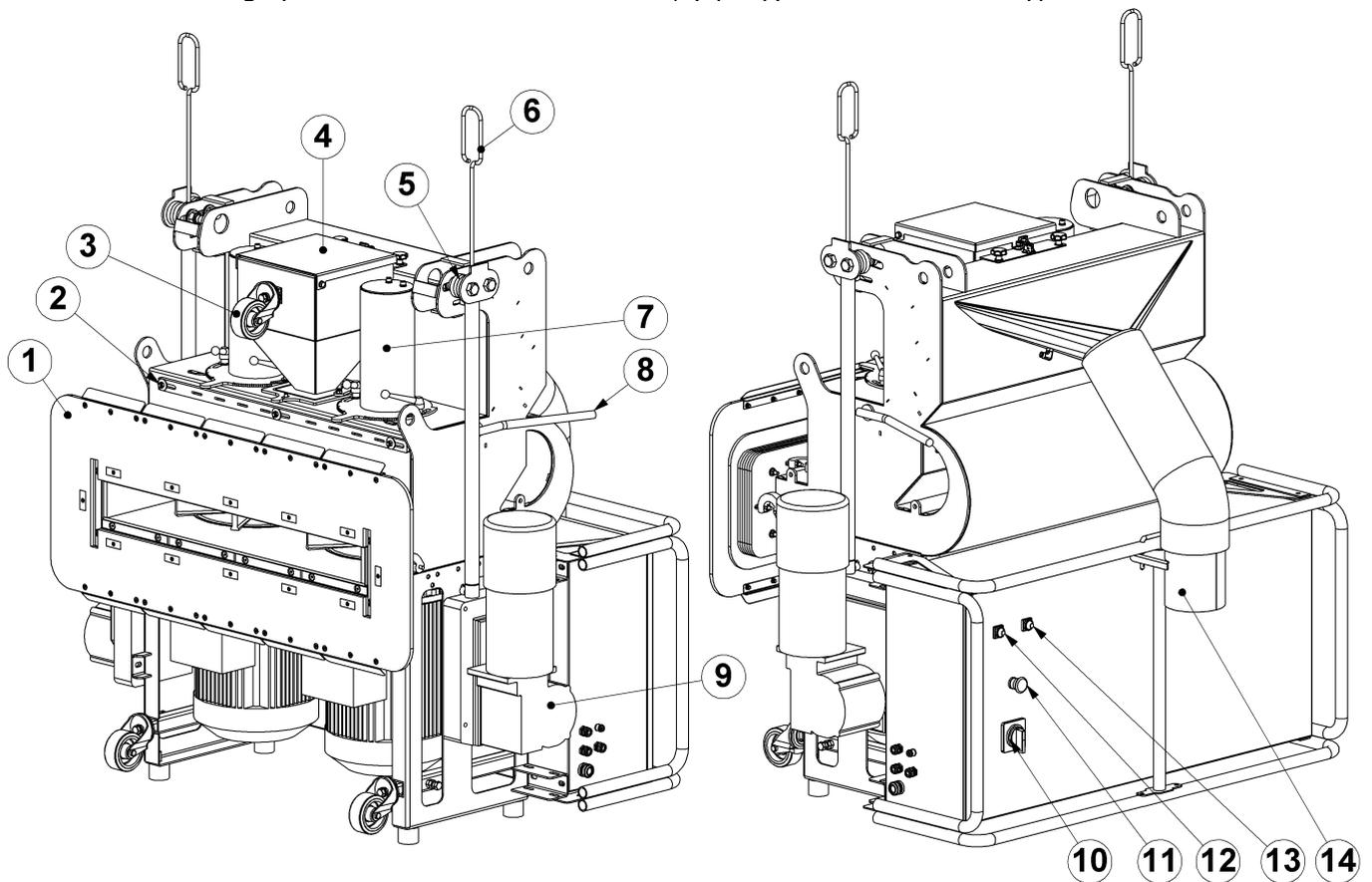
It is important that all persons who are working or maintaining this machine read the manual carefully and understand it fully.

Keep this manual near to the machine, so it can always be consulted.

**Only authorized and trained personnel may operate this machine.**

## 2. Machine description

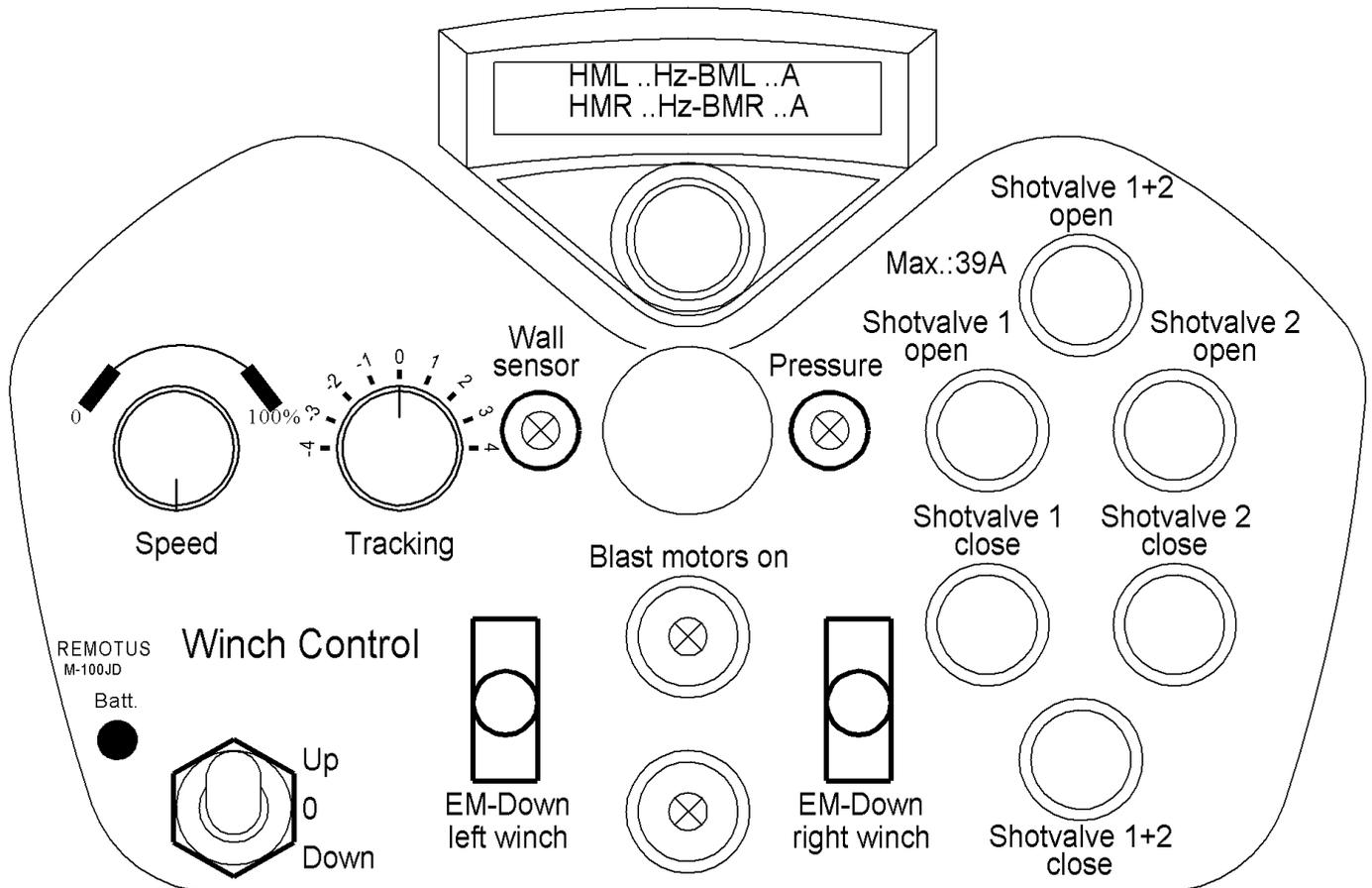
The **Blastrac** blast cleaning machine EBE-900VMB is a vertical blasting machine with a closed abrasive circuit designed for the pre-treatment of vertical surfaces. The bouncing impact of metallic abrasive onto the surface to be treated thoroughly removes surface contaminants, (epoxy) coats on different types of vertical surfaces.



The EBE-900DC filter unit must be connected to the machine in order to separate the dust from the abrasive. This specially designed dust collection system ensures dust-free operation of the machine and clean air at the workspace.

1	Mouth seal	6	Cable	11	Emergency shutdown
2	Air slide	7	Abrasive valve assy	12	Phase sequence light
3	Adjustable swivel castor	8	Abrasive equalizer	13	Power available light
4	Spare shot hopper	9	Endless winch	14	Support dust pipe
5	Cable guide roll	10	Main switch		

## Remote control



## 3. Safety

It is important that all persons who are working or maintaining this machine read the manual carefully and understand it fully.

Keep this manual near to the machine, so it can always be consulted.

### Safety precautions

- Do not operate this equipment on a wet surface or in vicinity of any flammable liquid or vapours.
- Never use the machine when the work floor is not clear and if there is a risk of tripping.
- Don't get disturbed during the activities.
- Check for obstacles near the electric cables and dust hose when machine is moving up and down. Cables and hoses should not get hooked on obstacles.
- Always switch on the dust collector.

### Safety regulations

- Persons who are not operating the machine must not be permitted in the surrounding area of machine.
- Never allow children on or around equipment.
- Keep the machine original; Use cables who are approved and not damaged. Never remove the earth connecting of the supply cable and machine. Use only cables with earth wire and connectors with a earth connecting.
- Connect the main power supply cable to an installation with a grounded leakage circuit breaker.
- Inspect and test the electrical components regularly. The electrical components have to satisfy the requirements which apply to these components EN60204-1.
- Always call a skilled electrician when you have questions about the safety of the electrical components.
- Work on electrical equipment or operating materials may only be undertaken by a skilled electrician or by trained persons under the guidance and supervision of a skilled electrician as well as in accordance with the electrical engineering regulations.
- Disconnect the main plug during inspection, maintenance and repairing the machine.
- Never operate the machine when workplace is wet.
- Never use machine in rain or be in the area of the machine in rain.
- Never lift the blast head during blasting.
- Never pull on the machine during blasting. Wait until the blast wheels stand still before pulling the machine from the wall.

The following sticker is placed on the machine.



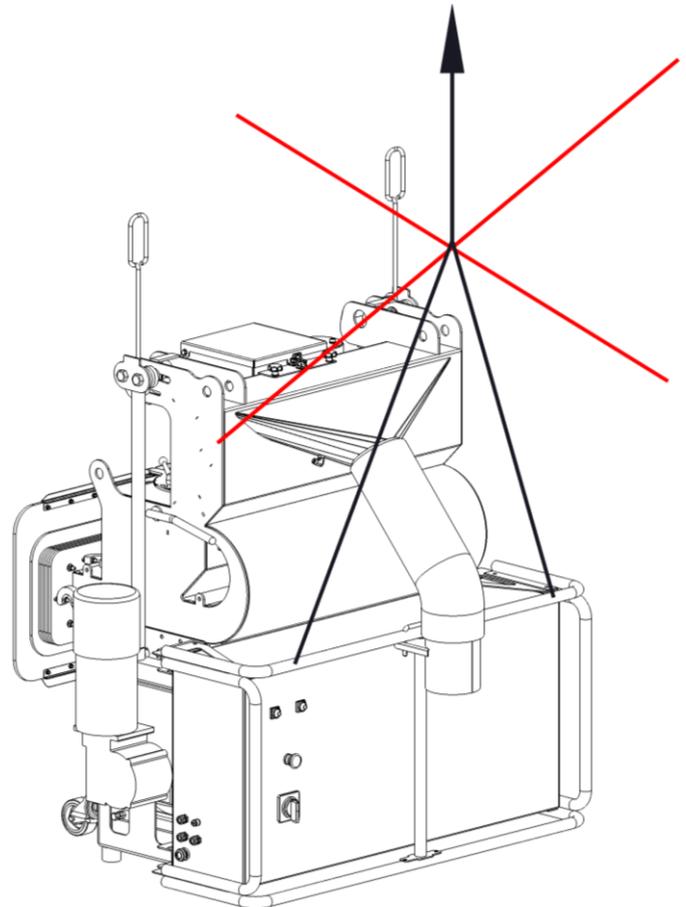
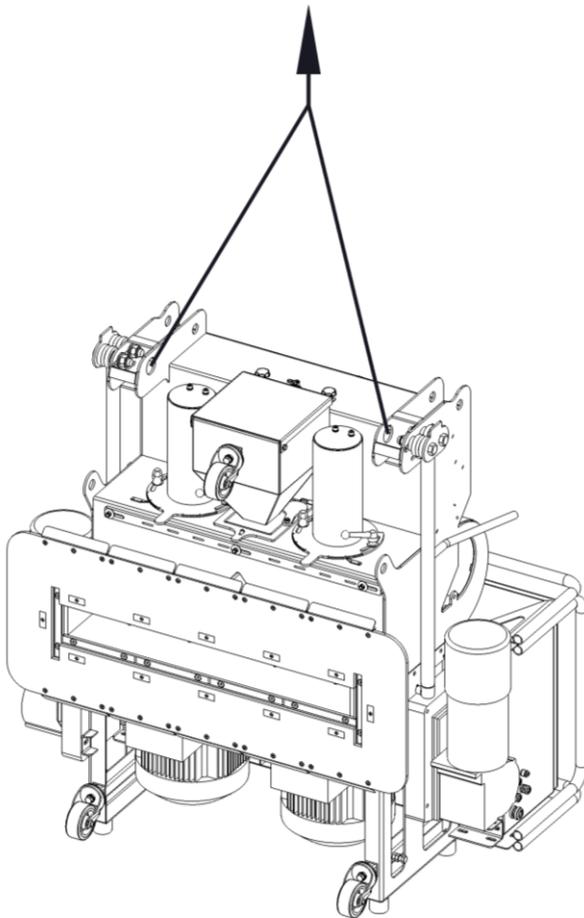
Meanings of these symbols are:

- Ear protection is obliged
- Safety glasses with lateral protection are obliged
- CE-mark on this machine
- Safety shoes obliged
- Consult the manual before operating the machine

Personnel must tie back long hair and not wear loose clothing or jewellery including rings. Wear gloves and dust mask during operating the machine.

**Safety instructions**

- Abrasive can escape from the sides of the blast head at high speed. Wear safety glasses with lateral protection and close-fitting protective clothing.
- The machine, specially the handle grip must be free of fats and has to be dry.
- The dust container / bag of the filter unit must be emptied regularly. Comply with the local waste treatment regulations considering the removed material.
- The weight of the EBE-900VMB is 850 kg/1,874 lb. Transport the machine with a crane or lift, use the lifting eyes of the machine.





## 4. Initial operation

Before using the machine it is of great importance to inspect the machine. It is not permitted to use the machine if the machine safety is not according with the checkpoints below.

### Check points power supply

- Use only extension cables for extending the main cable that are sized and marked in accordance with the overall power consumption of the machine.
- Electrical cables must be fully unwind of them reels.
- No damage is permitted for electrical cables.
- Use an electrical power supply connection with a grounded connection.

### Check points of machine

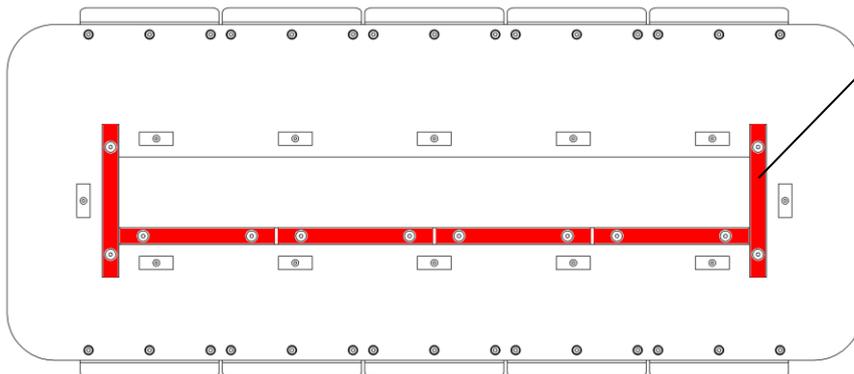
- Safety functions and operating functions must work correct.
- Check the following parts for damage and wear: blast wheel, cage, impeller, blast housing, mouth seal and hoist cables.
- No loose bolts and nuts permitted.
- No damage of electrical components permitted.
- Dust hose must be undamaged and the connection must be reliable.
- Check the parts of the separator on wear and defects. Remove foreign bodies and dust deposits.
- The cover of the spare shot hopper must be closed to keep the vacuum in the machine.

## 5. Operating

During operating the EBE-900VMB, the following additional safety instructions must be followed closely.

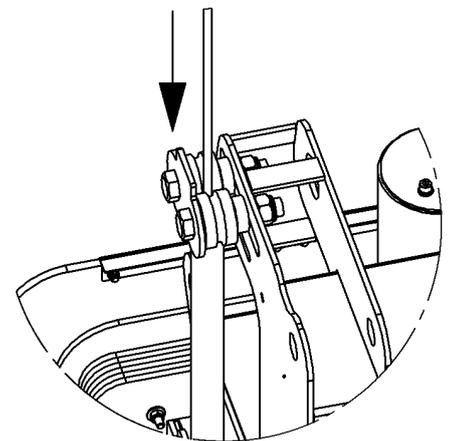
### Before switching on

- Fill the spare shot hopper with the selected abrasive up to the square tube of castor wheel clamp. Check level regularly. When level is too low this could wear out the abrasive valves in short time.
- The magnets of the mouth seal must be covered over the whole surface with abrasive.



**Cover magnets with abrasive**

Item 5

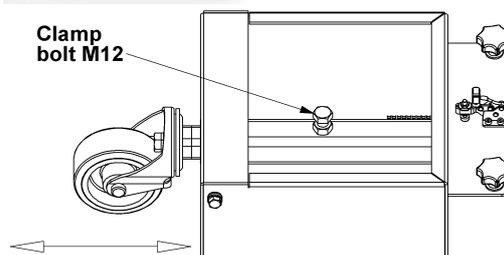
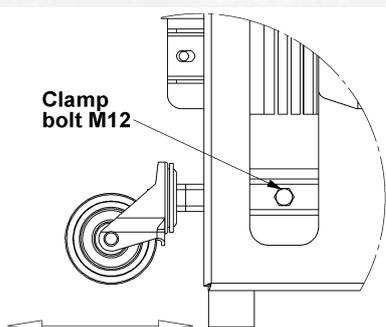
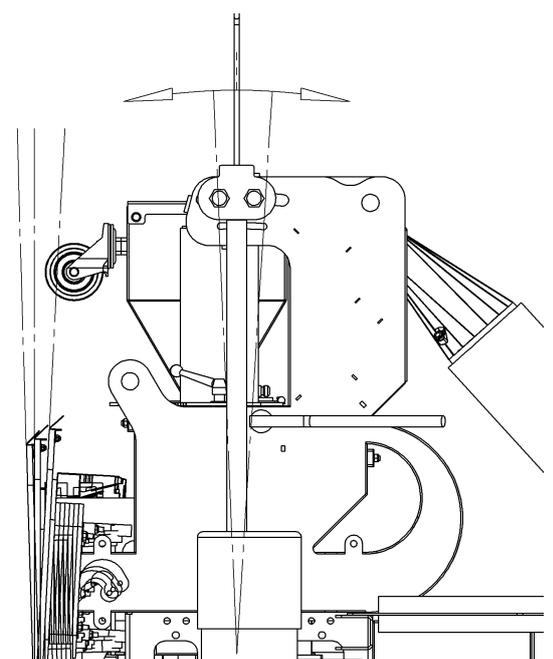


- Connect the blast machine and filter unit with the dust hose. This connection must be reliable.
- Connect the power supply cable of the filter unit with the generator. Be sure that electrical power supply is correct.
- The hoist cables must be free from dust, abrasive and damage.
- Put in the hoist cables through the cable guide rolls (item 5 machine description) carefully. Switch on the winch motors and let it run on minimum speed. Keep pressure on the cable until the winch motor takes it over and pull the cable through the winch.

### Adjust cable guide rolls and swivel castors

The mouth seal must be parallel to the wall when the machine is hang freely in the hoist cables. The position of this mouth seal can be changed due loosening the 2 bolts of the cable guide rolls.

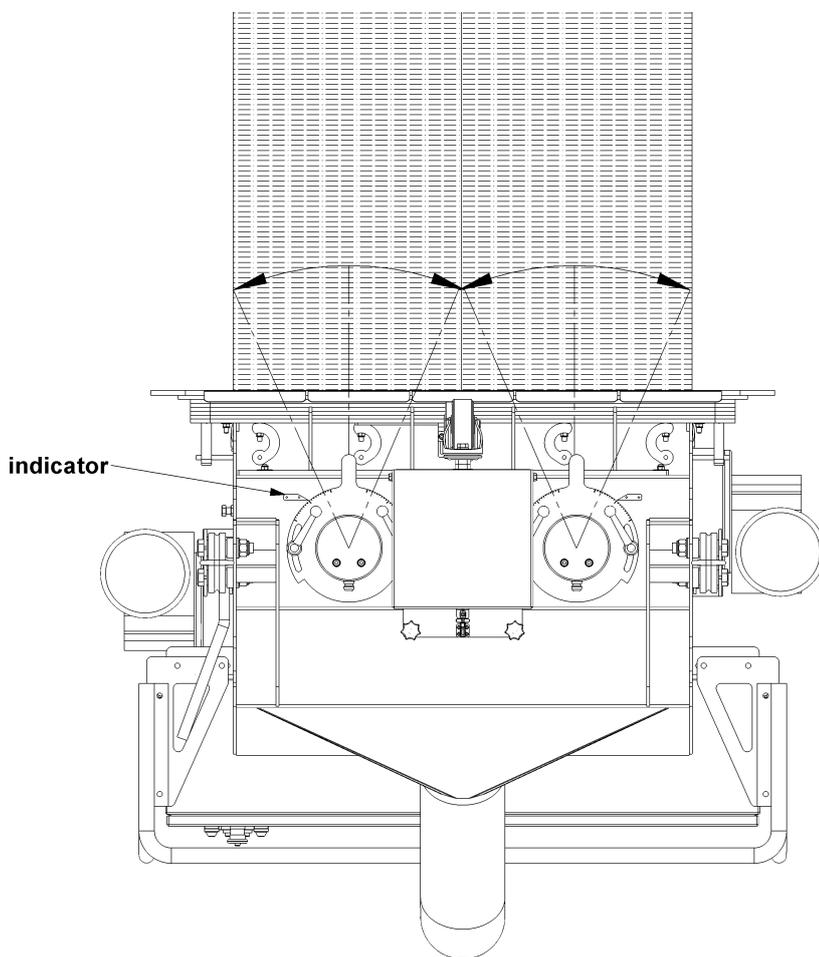
When guide rolls are in good position the swivel castor must adjust close to the wall. Keep a distance of 10 to 20 mm (0.393701 to 0.787402 inches) to the wall.





### Switch on the machine

- Before switching on the blast machine, switch on the filter unit.
- Lift the machine a little bit above the ground and allow it to suck to the wall.
- Press the push button "Blast wheels ON" and check the rotating direction of the blast motor. The correct direction is given with an arrow on the housing of the motors.
- Select the speed using the speed control knob. (page 5 remote description)
- When the machine is traveling open the abrasive valves. Observe the ammeter on the display. It may be possible that one blast wheel takes more amperage than other side. Equalize the load amperage of left and right blast wheel as close as possible. To do so, open or close one of the shot valves separately. After having blasted approx. 2 m (78.74 inches), close the abrasive valves, stop the machine and check the blasted surface.
- If one of the 'hotspots' must move to the right, turn the cage a little bit to the right. Never adjust the cage during blasting.



### Switch off the machine

- Close the abrasive valves.
- Switch off the winch motors
- Switch off the blast motors
- Switch the main switch to "OFF" position
- Disconnect the main power supply of the machine.
- Switch off the filter unit.
- Wait for standstill of all drives before any inspection or maintenance works are started.



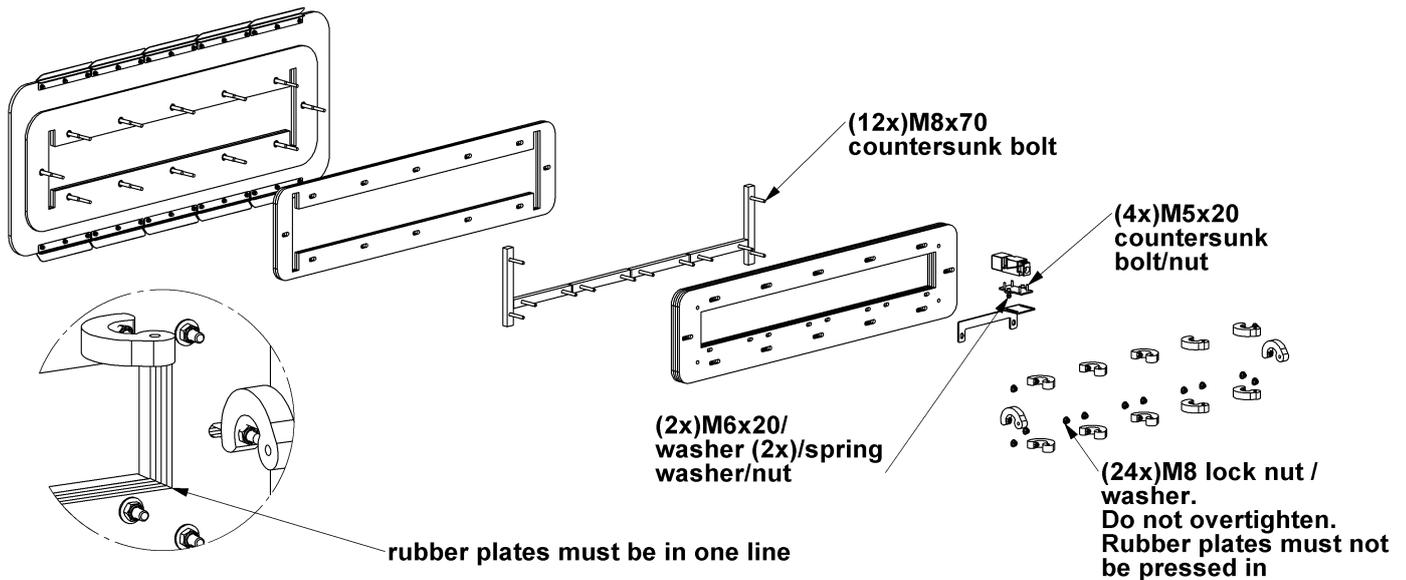
## 6. Maintenance

### Changing the mouth seal complete

- Disconnect the proximity switch.
- Pull off all 12 rubber springs from the threaded ends.
- Remove mouth seal completely from the housing.

### Assembly a mouth seal complete

Be sure that all rubber plates are in one line. If plates are not mounted in line, the mouth seal will not move easy back and forward. Do not over tighten the nuts, the plates must not be pressed in.



### Changing the blast wheel blades and impeller

- Remove the spare shot hopper.
- Remove the clamps of the abrasive valves.
- Disconnect the wire of the abrasive valves.
- Lift out both abrasive valves.
- Remove all abrasive and clean the blast wheels and blades with air.
- Block the blast wheels and remove the central fixing bolt.
- Remove the impeller using a wooden or brass drift.
- Through the opening of the blast housing: use a wooden or brass drift to tap out all six blades from the blast wheel towards the center of the blast wheel. Place the wooden or brass tool at lowest position of the blade.

Use a new central fixing bolt when mounting new blast wheel blades.

Replace the blades with six new ones and re-assemble the machine in reverse order. Note: blast wheel blades must be replaced as a set. Replacing only some of the blades can cause imbalance of the blast wheel.

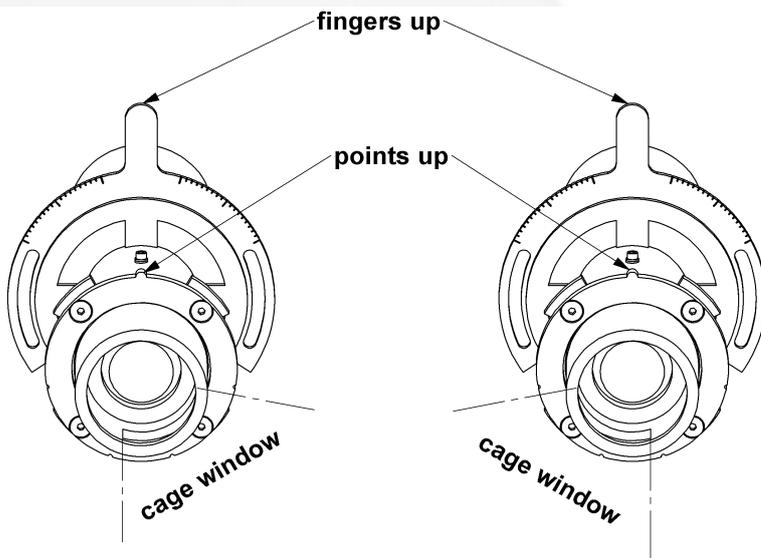


positioning the brass drift at lowest position of the blade

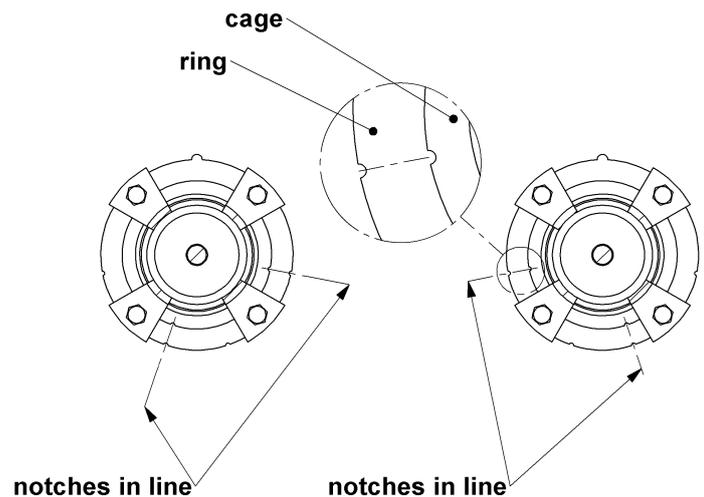


### Changing the control cages

- Remove the spare shot hopper.
- Remove the clamps of the abrasive valves.
- Disconnect the wire of the abrasive valves.
- Lift out both abrasive valves.
- Unscrew 4x M10 nuts of the cage ring and remove ring
- Notice the position of cage (the left and the right cage have a different position!)
- Place the cage ring with the marking point in the same direction as the finger
- The notches of the cage must be in one line of the notches in the cage ring. Two positions are possible: the cage window at left and the cage window at right. The windows must facing each other.



BOTTOM VIEW



TOP VIEW

Clean the machine every day with air and non-aggressive materials. Never use a high pressure water to clean the machine.



Store the clean machine in a dry room. Protect the electrical motors from moisture, heat dust and shocks. Remove the abrasive out of the abrasive storage hopper.

All repair work has to be done by qualified Blastrac personnel, this guarantees a save and reliable machine.

Any warranty on this machine will be void if:

- By not using original Blastrac spare parts and abrasive.
- When repair work is not done by qualified Blastrac personnel.
- When changes, add-ons or conversions are undertaken without written permission of Blastrac NA.

## 7. Selection of abrasive

### **Abrasive shot S330 – S390 –S460:**

*Applications:*

Removes coatings with a thickness of 1-3-mm and cleaning of steel surfaces.

### **Abrasive shot S330 –S390 – S460 or /with SG25 – SG18 – SG16**

The type of abrasive (mix) is depending on the profile requirements.

*Applications:*

- Removes polyurethane coatings
- Removes adhesive remnants
- Removes rubber deposits
- Penetrates coatings hard to remove





## Contact

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[www.blastrac.com](http://www.blastrac.com)



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## Product Warranty

### Standard Equipment Products:

Blastrac warrants its Blastrac Standard Equipment Products against defects in quality of material and workmanship, under normal and proper use for a period of **1 Year** from the date of delivery, as noted on the returned warranty registration card, or, in the case of **Rental Fleet Machines, 180 Days** from the date of assignment to Rental Fleet. This warranty is non-transferable and is extended to machines purchased and entered into the normal service of surface preparation by a recognized professional or qualified contractor. Blastrac makes this warranty only to the buyer who purchases the products directly from Blastrac or its Authorized Distributor. This warranty does not include expendable parts such as, but not limited to, blades, blast wheels, wear plates, liners, seals, and electrical components. All purchased parts utilized in the manufacture will be honored to the original manufacturer's specified warranty.

If the buyer does not return the warranty card or register the product online at [www.blastrac.com](http://www.blastrac.com) within 30 days after taking delivery of Blastrac Standard Equipment Products, the warranty period is limited to 6 months from the date of delivery noted on shipping receipt.

### Hand Tool Products:

Blastrac warrants its BLASTRAC Hand Tool Products, including hand grinders and accessories, against defects in material and workmanship under normal and proper use for a period of **90 days** from the date of delivery or, in the case of Rental Fleet Machines, from the date of assignment to a Rental Fleet. Blastrac makes this warranty only to the buyer who purchases the products directly from Blastrac or its authorized distributor. This warranty does not include expendable parts such as blades.

If the buyer does not return the warranty card, or register online at [www.blastrac.com](http://www.blastrac.com) within 15 days after taking delivery of Blastrac Hand Tool Products, the warranty period is limited to 30 days from the date of delivery noted on shipping receipt.

## WARRANTY TERMS AND CONDITIONS:

1. Blastrac's obligation under this warranty is limited to the replacement or repair, at Blastrac's option, of products and does not include, labor, the cost of transportation, loss of operating time, or normal maintenance services.
2. This warranty does not apply to failure occurring as a result of abuse, misuse, negligence, corrosion, erosion, normal wear and tear, alterations or modifications made to products without the express written consent of Blastrac.
3. The buyer must submit all warranty claims no later than thirty (30) days after buyer becomes aware of the basis for any such claim, or should have become aware of the basis for any such claim in the exercise of reasonable diligence.

To return parts for warranty consideration, please call Blastrac Customer Service at **800-256-3440**. Your customer service representative will obtain the necessary information to complete the Blastrac Returned Merchandise Authorization (RMA) Form. Blastrac will then send the RMA form to the customer authorizing the return of the parts for warranty evaluation. The parts must be received within sixty (60) days following the RMA origination date or the warranty claim will be denied. Once the parts are received they will be evaluated for warranty.

If the customer cannot wait for the evaluation/replacement of the parts during this process, the customer must issue a new purchase order to Blastrac for the replacement parts before they can be shipped. Once the evaluation process is complete and parts are deemed a valid warranty claim, a credit will be issued against this invoice.

**4.** The buyer may not return Blastrac products without written authorization to do so through a Blastrac RMA.

**5.** Blastrac reserves the right to inspect and determine the scope of its warranty responsibilities for any returned Blastrac products.

**6.** Blastrac makes no warranty with respect to accessories it does not manufacture, including but not limited to, engines, motors, batteries, tires and all other parts. See component manufacture warranty.

**7.** Blastrac reserves the right to make product changes or improvements without prior notice and without undertaking any obligation for such changes or improvements on previously sold products.

**8.** The above warranty conditions can only be altered by Blastrac. Blastrac must confirm alterations in writing for each specific transaction.

**9.** Blastrac reserves the right to modify this warranty for used or demo products on an individual transaction basis. Blastrac will include warranty modifications on its invoices for used or demo products.

**10.** BLASTRAC DOES NOT AUTHORIZE ANY PERSON, REPRESENTATIVE, SERVICE OR SALES OUTLET TO MAKE ANY WARRANTY DIFFERENT FROM THIS PRODUCT WARRANTY.

**11.** EXCEPT FOR ITS PRODUCT REPAIR OR REPLACEMENT OBLGATIONS DESCRIBED IN THIS PRODUCT WARRANTY, UNDER NO CIRCUMSTANCES SHALL BLASTRAC BE LIABLE TO THE BUYER, OR ANY OTHER PERSON, FOR ANY DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE BLASTRAC PRODUCT, OR FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER, INCLUDING WITHOUT LIMITATIONS, DAMAGES FOR ANY LOSS OF GOODWILL, WORK STOPPAGE, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR LOSSES.

**12.** BLASTRAC MAKES NO OTHER PRODUCT WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



# IMPORTANT!

## TO THE DELIVERING DISTRIBUTOR OR END USER

To ensure the proper warranty coverage is extended to the owner of this machine, fill in the necessary information below **COMPLETELY** and **ACCURATELY** and retain for your records. **Go to [www.blastrac.com](http://www.blastrac.com) and register online.** Click on the Register icon in the left column of the homepage, and fill out the product registration form with the same information that will be recorded here.

**The warranty period will start upon the delivery date of the machine.**

The distributor or the end user must provide the machine warranty information when the machine is delivered. Registration of the machine will extend the warranty period from the recorded delivery date entered with product registration. **Failure to comply will make any and all warranties on the equipment void after 6 months.**

### OWNER/END USER'S REFERENCE INFORMATION

Delivery Date _____	Machine Model No. _____
Delivering Distributor's Name and Address _____	Machine Serial No. _____
_____	Modifications _____
_____	_____
_____	_____
_____	_____
_____	_____

Signature of Delivering Distributor's Representative

Blastrac is a registered trademark of Blastrac,NA  
Fold and Detach Here if Mailing

## Warranty Registration

**IMPORTANT!** To ensure that your Blastrac® machine is covered under warranty, please provide the information recorded here by registering online at [blastrac.com](http://blastrac.com), or complete this page and fax to 866-485-1046, or if you prefer, detach and mail to:

**Blastrac, 13201 North Santa Fe Avenue, Oklahoma City, OK 73114-9901**

(Please print legibly)

Company \_\_\_\_\_

Address \_\_\_\_\_

City, State, & Zip \_\_\_\_\_

Telephone No. \_\_\_\_\_ Contact Person \_\_\_\_\_

Date of Purchase \_\_\_\_\_ Date Received \_\_\_\_\_

Machine Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_

Distributor Name \_\_\_\_\_

End User Name \_\_\_\_\_

End User E-mail \_\_\_\_\_