User Guide

Blastrac BS 110

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User Guide Blastrac BS 110

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.

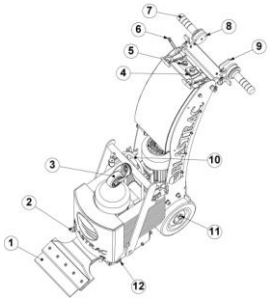
Only authorised and trained personnel may operate this machine.

Machine Description

The Blastrac BS-110 stripper is ideally suited for small and medium sized applications. The machine has a strong electric drive system with a very easy operating forward, backward and speed control function.

Main assets of BS-110:

- Electrical driven machine with two electrical motors
- Forward and backward function
- Standard speed control
- User and environmentally friendly; very low noise level; easy to operate and low vibrations
- Very high output
- Adjustable handle position
- Shock absorbing handles
- Wheel scrapers as standard
- Small and compact equipment, so easy for transportation
- Weights can be easily removed
- Heavy duty equipment, which is almost maintenance free
- Standard transport wheel on machine
- Lifting handle in front of machine and lifting eye in middle position of machine



1	Tool holder	8	Mounting hole handle narrow position
2	M12 nuts, unscrew for remove weights	9	Drive switch lever for narrow mode
3	Transport wheel	10	Lifting eye
4	Selection switch	11	Drive wheel with quick release pin
5	Speed control	12	Hole for pin for handle in transport position
6	Clamp lever adjustable steer handle		
7	Shock absorbing handle		

Safety

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

Keep this manual always with the machine, to enable it to be referred to at any time.

Safety Regulations

- Don’t change anything on the machine. Always use cables which are approved, and safety earthed, including extension cables. The machine is always equipped with an earthed connection, do not change this, and use always earthed cables with an earthed plug.
- Connect the main power supply cable to an installation with an earth leakage circuit breaker.
- Always call Martello Hire with any questions about the safety of the electrical components.
- Work on the electrical equipment or operating materials may only be undertaken by Martello Hire.
- Pull out the main plug during inspections of the machine.

The following sticker is placed on the machine:

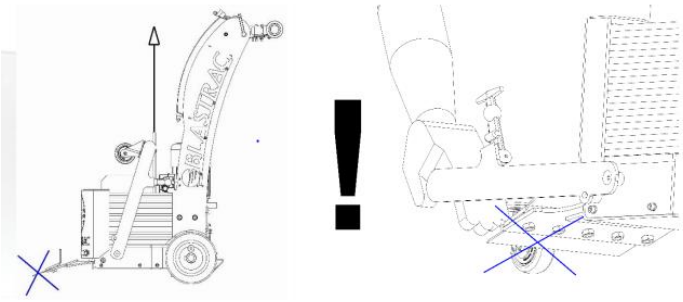
Meanings of these symbols are:

- 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 wear gloves, a dust mask and tie back long hair/not wear loose clothing or jewellery including rings when operating the machine.

Safety Instructions

- Pull out the main plug during inspections on the machine.
- Only use original Blastrac parts.
- Do not pull out the power supply cable by the wire, but by the connector.
- The weight of the BS-110 MKIII is 170kg with the weights. Use preferably appropriote applicances as a lift or crane. Use the existing lifting points to lift the machine.
- Never lift the machine with the mounted tool. This sharp tool can be very dangerous!



Initial Operation

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

Checkpoints of Electrical Safety

- 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 rolled entirely off the reels.
- Any damage to electric cables is not permitted.
- Use an electrical power supply connection with earth connection.

Checkpoints of Machine Safety

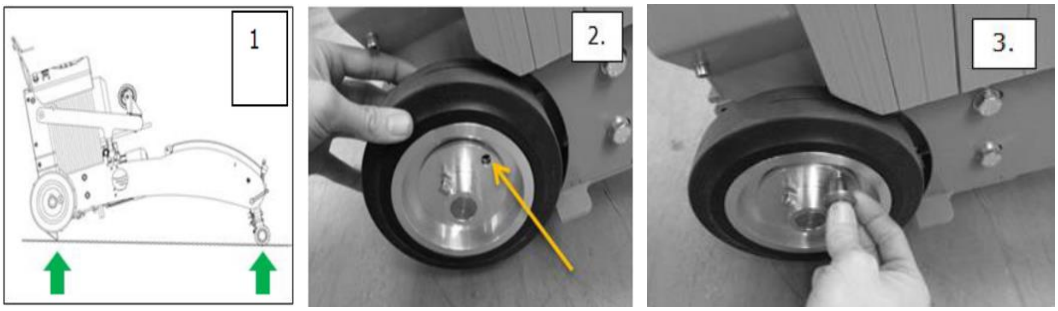
Check if

- The safety functions and operating functions work correctly.
- There are not any loose nuts or bolts.
- There are no damages on the electrical components.

Drive Wheel Engagement and Disengagement

The drive wheels are engaged with quick release pins, remove them for easy transport by hand.

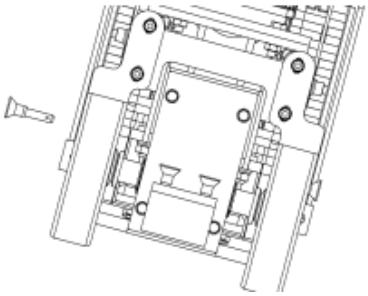
- Line up the wheen hub hole to insert pins.
- Lay the machine all the way back on the steering handle (Pic. 1).
- Rotate wheel to align holes (Pic. 2)
- Insert the quick relese pin (Pic. 3)
- Repeat step 2 & 3 on other wheel



Disengage Mode (Pic 2), allows the machine to be moved around freely not under power.

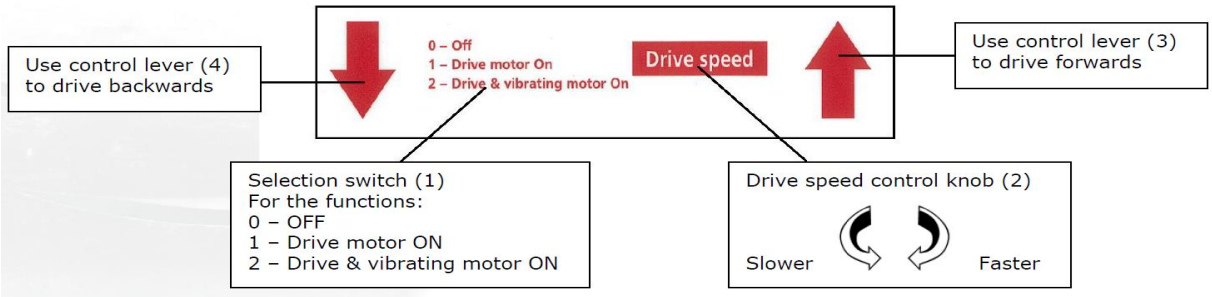
Engage Mode (Pic 3), wheels secured with quick release pins engages the wheels to drive the machine self-propelled.

Push the machine sidewards so that the drive wheel lifts up and rotate it to line up the holes. Never load or unload the machine on a ramp or incline when wheels are in the disengage mode. Failure to do so could cause machine runaway, damage to machine, damage to property or cause serious injury.



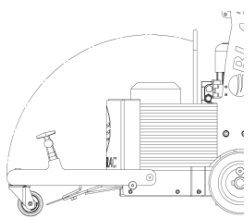
NOTE

When you drive forward and you also press the left switch lever (4), you will have the maximum speed forward. If you release the left switch lever (3) while still driving forward, the machine will return to the driving speed that was set with the drive speed control (2). **When you engage the machine in reverse, the machine will travel with the highest speed.**



Transport Wheel

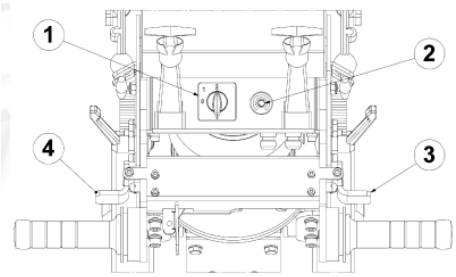
The transport wheel helps to move the machine easily and eliminates damaging the floor. Loosen the 2 rubber clamps and rotate the handle forwards. Secure the handle by inserting 2 quick release pins.



Operation

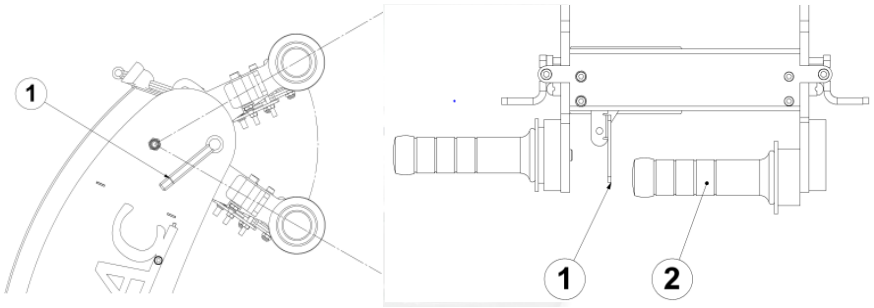
Electric Controls

The selection switch (1) is mounted on top of the machine. Switch to 1 to activate the frequency driver and the machine is ready to drive with drive motor. The drive speed can be adjusted with the drive speed control (2). The right switch, lever (3) is to drive the motor to forward and the left switch lever (4) is to the drive motor backward. Switch the selection switch to 2 to activate the vibration motor. Placing the switch in the zero position, switches off all functions.



Height Adjustment Steering Handle

Adjusting the height of the steering handle is possible by loosening the clamp levers (1) to find a comfortable working position.



Narrow Mode Steering Handle

To work as close as possible along the wall it is possible to remove the right handle grip. The handle grip (2) can be screwed into the opposite side of the handle. The internal switch (1) lever can be used to switch the drive motor to forwards.

Blade Choice

Proper blade size and placement, depending on material and sub-floor type, affects performance.

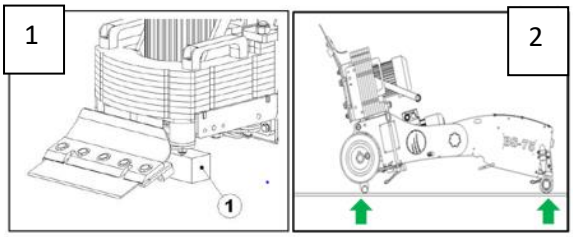
- The harder a job is to remove, for best results, use a smaller blade.
- Start with a narrow blade, then increase the blade size to optimise the cutting pass.
- Narrower blades work easier than wider blades.
- Narrow blades usually clean the floor better.
- Normally bevel on blade is up for concrete. Bevel down for wood or soft sub-floors.

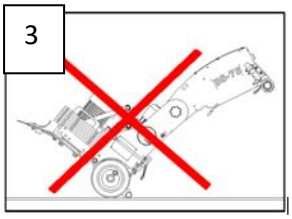
Blade Changing

Dull blades greatly reduce cutting ability. Replace as needed. Always wear gloves when changing blades. Use extended wrench to keep hand safely away from the edge of the blade. Place a block (1) under the front of the machine and loosen the five hex head bolts and replace the blade. It is not necessary to remove the bolts. Be sure that the blade is far enough under the blade holder, to insure a secure hold.

- Use an extended wrench to keep hands away from sharp edges

- Wear cut resistant gloves
- Ensure plug is removed from power supply
- Place a block under the front of the machine
- Loosen the 5 bolts
- Remove existing blade if there is one
- Replace with a sharp blade
- Ensure new blade is far enough into blade holder to be secure
- Retighten bolts
- Only replace blades when machine is stable, on a block (as shown in Pic. 1) or lay on its back (as shown in Pic. 2). Never on an incline or unstable position (as shown in Pic. 3).





Start-up Machine

The machine must be off before plugging the machine into the power source.

1. Selection switch must be in the '0' position.
2. Turn speed control to slowest position.
3. Plug in mains
4. Turn the selection switch to position '2'
5. Engage forward or reserve switch.
6. Increase speed control to desired speed.

The frequency drive has been factory set, do not change any setting of the frequency drive. Do not lock the wheel drive into a permanent position. If the operator should lose control or be disabled, the machine continues to operate.

Types of Tear Outs

Keep blades sharp. Keep your work area clean and clear of debris. Always wear eye and ear protection when working with the machine.

VCT – Tile

Never use a blade wider than the size of the tile being removed.

If goods being removed still do not come up clean or the machine jumps on top of goods, reduce blade size to a smaller blade until proper blade size is found or use a smaller portion of the blade.

Vinyl, Rubber, PVC, Direct Glued Carpet

Goods will need to be scored down to 254 to 305mm for proper removal.

Pre-scored carpet makes the machine easier to control and blades stay sharper for longer. Blades up to 685cm wide can be used. Normally 305mm blades are used on direct glued carpet, secondary backed, unitary, double glued, vinyl foam, urethane foam. Latex foams come up easily with a 685mm blade.

Self-scoring blades can be used with some materials. A 254mm blade is recommended for this product but determine what size blade works best.

Ceramic (glued with double duty or mud sets):

Before removing ceramic tile, tiles will have to be pre-broke with a mallet or larger hammer. On small random block styles of tile, pre-breaking may not be necessary.

Open an area large enough for the machine or blade to fit in or start from a doorway.

Keep work area clean to keep good wheel contact with the floor. Use slow speed and small blades.

Blades can be offset in cutting head for easier access to toe kicks or removal along the wall.

On solid wood floors like plank, run in the same direction as the plank, not cross grain, or cross plank. Removing the front counterweights will help on all soft surfaces.

Wood and Wood Like Floors

Pound down or remove any nails or metal obstruction to avoid blade damage.

Glued hard wood flooring. A 254mm blade is recommended for regular adhesive, a 152mm blade for epoxy.

A proper removal of hardwood flowing (plank solid, plank laminated, parquet, parquetry laminated flooring) must be scored to blade width. This is done by using a circular saw set at a depth of 99% of the thickness of the board, just missing the subfloor surface when on concrete. A chalk line for scoring lines can be used across the floor the width of the blade.

True parquet floor, scoring is not necessary. It will come up in small pieces.

Gibcrete and Soft Poured Flooring

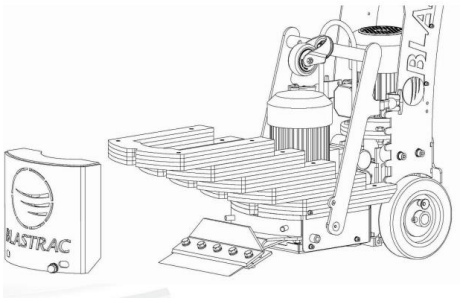
Usually require blade bevel down to create a better wearing surface, although bevel up may work if some weights are removed. Beware of expansion joints and floor mounted receptacles or other obstacles in the floor.

Concrete

When working on concrete slab, normal blade position is bevel up for best performance, especially when cleaning adhesive. On occasion, bevel down gives better blade life.

Remove Weights

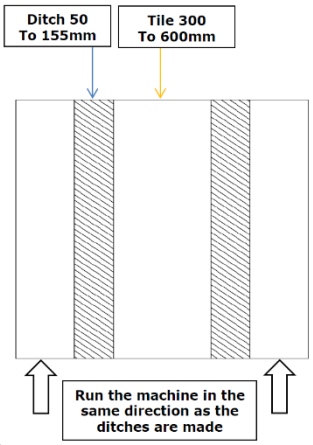
To remove weights, unscrew two M12 nuts at the front and remove the cover. Now it is possible to remove weights by hand. When replacing the cover, ensure the cover is back in the correct position and that the two nuts are tightened.



Ditching

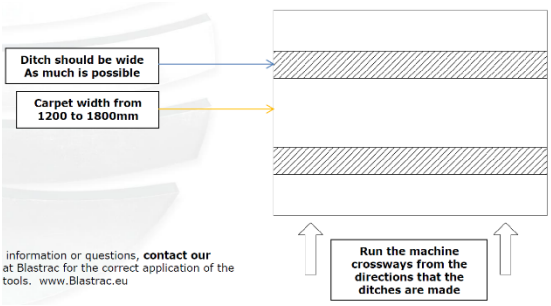
Cross Room Ditching:

- When removing hard to remove ceramic or VCT
- Cross room ditch with a 50 to 155mm blade
- Ditches 300mm to 600mm apart
- In the same direction as floor removal
- This relieves pressure of tiles holding each other
- If ditching helps, increase blade width if possible



Checker-Board Ditching:

- To make carpet removal and clean up easier
- Use a wide self-scoring blade across the floor
- Remove remaining flooring in the opposite direction, this will create smaller pieces of debris that are easier to dispose of.
- Fold debris with sticky side inside



Sound and Vibration Data

Noise Emission Pressure Level

The A-weighted emission sound pressure level	L_{pAd}	70 dB(A)
The associated uncertainty	K_{pA}	2,5 dB

The A-weighted emission sound pressure level at the operating position is relative to 20uPa.
The declaration of noise emission is in conformance with EN-ISO 4781.
The measurements and calculations are executed in full conformance with EN-ISO 11202:2010 and EN-ISO 3437:2010.
There is no machine specific noise test code available.

Although the sound pressure level at the operator's position does not exceed 80 dB(A), ear protection is still strongly recommended when working with this machine.

Emission of Hand-Arm Vibration

Measured hand-arm vibration	a_{hv}	4,0 m/s²
Uncertainty	K	2,0 m/s²

Declaration in conformance with EN 12096: 1997
Measurements in conformance with vibration test code EN-ISO 20643: 2008 + Amd 1: 2012
Expanded uncertainty K (EN 12096 annex B).

Time to reach EAV 2,5 m/s² A(8):	3 hours, 8 minutes
Time to reach ELV 5 m/s² A(8):	12 hours, 30 minutes

Because the value is above 2,5 m/s², we recommend taking measures to decrease hand-arm vibrations.

For a full copy of the User Manual please visit www.martellohire.co.uk