

# BLAST FORCE SYSTEM



## **BLASTIN' BETTY OPERATORS MANUAL**

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## MACHINE SPECIFICATIONS

Length -----	43 inches
Width -----	11.5 inches
Height -----	38 inches
Weight -----	108 pounds
Blasting Width -----	9"
Voltage -----	110 V
Hertz -----	50/60 Hz,
Amps -----	15 A

## SAFETY

### General Safety

The U.S. Department of Labor, Occupational Safety & Health Administration (OSHA) provides standards and regulations relating to the use of portable tools on construction sites. The operator of this equipment should be familiar with, and understand these Regulations and Standards. These Standards and Regulations are posted on the OSHA Website at: [www.osha.gov](http://www.osha.gov).

### Machine Specific Safety

Persons in the immediate work area must wear safety glasses with side shields and hearing protection whenever Blasting Betty is in use. Protective clothing is also recommended. Long sleeve shirts and safety shoes should be worn. Wear appropriate respiratory protection when using or servicing the machine. Silica dust may be generated by use of this product and can cause severe and permanent lung damage, cancer, and other serious diseases if inhaled. Do not breathe the dust. Silica dust may be in the air without a visible dust cloud.



Always disconnect power supply prior to adjusting or performing maintenance on Blastin' Betty. Do not operate Blastin' Betty in wet or damp conditions.



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Loose blast shot media on a floor is slippery and can be very hazardous for pedestrian traffic. Use a floor magnet frequently to pick up all loose shot and restrict access to the work area and immediate surroundings.



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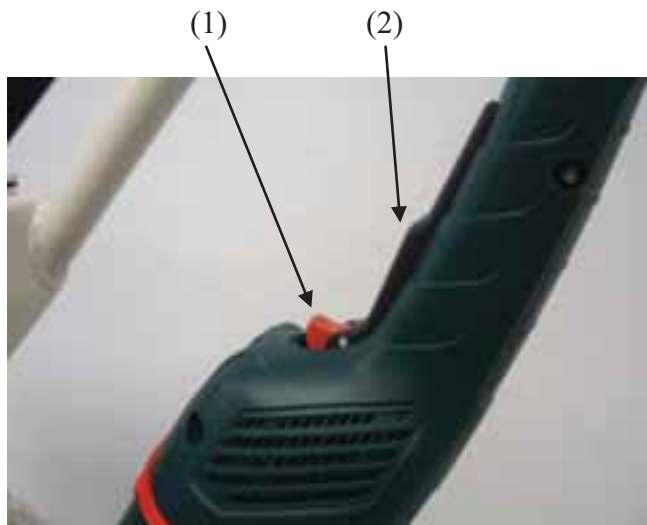
Always use a vacuum when operating Blastin' Betty. A continuous self-cleaning vacuum system is required for proper dust control, automatic media recovery and removal of dust from the recycled blast media. A HEPA certified vacuum is highly recommended.



## Machine Controls and Operation

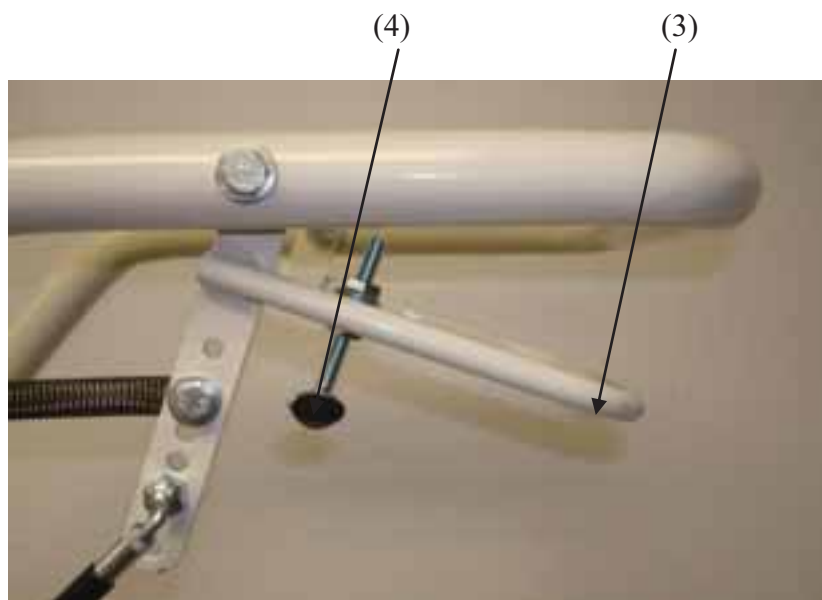
### Motor Switch

To turn the motor on, press in and down on the red tab (1) located on the paddle switch of the motor. To turn the motor off, press in and release the black paddle switch (2).



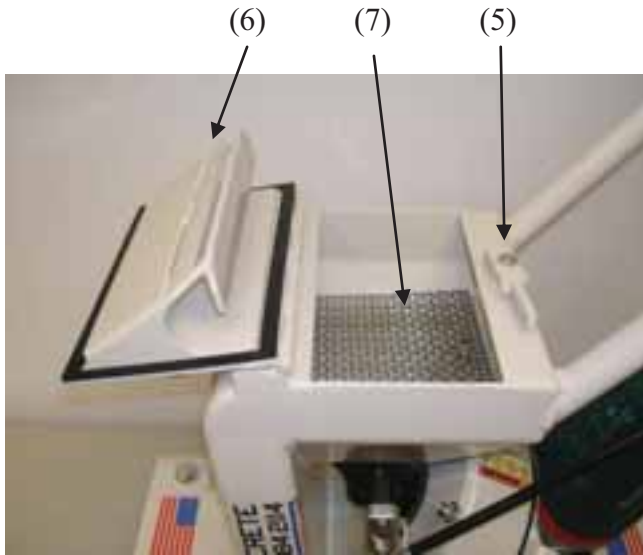
### Blast Shot Media Lever

After turning the motor on, release the blast shot media from the hopper by squeezing the lever (3). The lever actuates the butterfly valve. To regulate the amount of media being released from the hopper, adjustments can be made to the limiting screw (4).



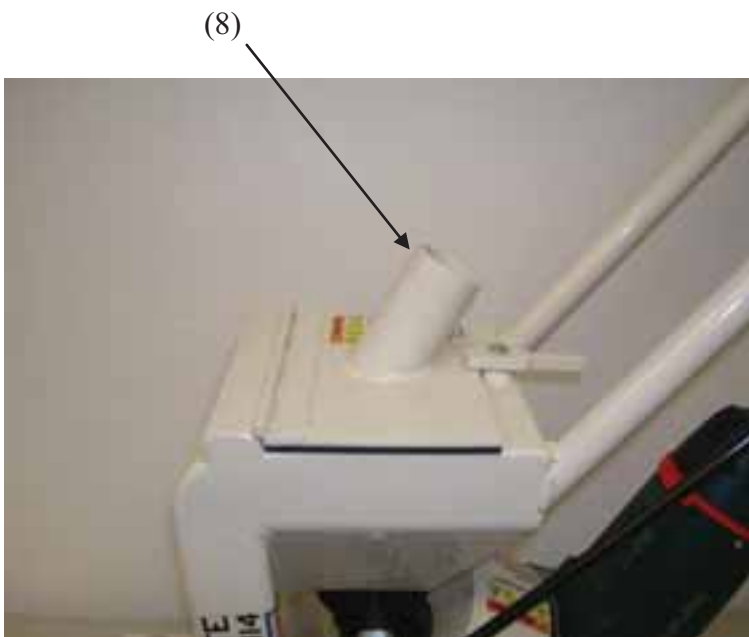
## Adding Blast Shot Media

Turn motor off and disconnect electrical supply. Release the lid latch (5) and open hopper lid (6). Pour blast shot media through the metal screen (7) to minimize possibility of unwanted debris entering the blast wheel chamber



## Vacuum Port

Attach a continuous self-cleaning vacuum to the vacuum port (8) for proper dust control, automatic media recovery and removal of dust from the recycled blast media. A HEPA certified vacuum is highly recommended.



## Magnetic Blast Curtain

# ***BEFORE EVERY USE!***

Prior to the first use on a project, pre-load the under-perimeter magnets with shot.

- Place a pile of blast shot media on the floor then repeatedly roll Bastin' Betty over the pile in order to coat the entire perimeter of magnets with the shot.



The magnets and shot act as a curtain to keep the blast shot media from ricocheting out from under the machine.



## Blast Shot Media Pick Up

Loose blast shot media on a floor is slippery and can be very hazardous for pedestrian traffic. Use a floor magnet frequently to pick up all loose shot. Lay shot funnel flat on ground and release the blast shot media onto it. Use the handles to pick up the funnel and easily pour the blast shot media back into the machine or bucket.

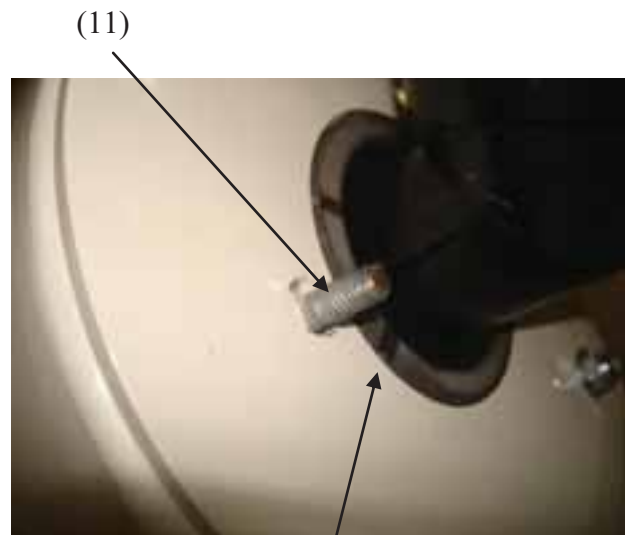
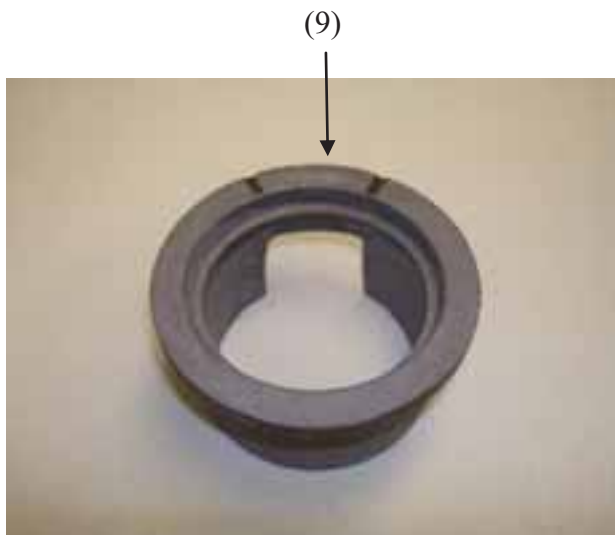


## Blast Shot Pattern

The blasting pattern is governed by the control cage (9). The positioning of the opening of the control cage is critical to the proper blast pattern. The lower opening edge of the control cage (10) will be positioned below the mounting clamp stud (11). The control cage opening faces the right side (from the operator's position) of the machine.

The operator can adjust the blast pattern by rotating the control cage. Counterclockwise rotation of the control cage will create a heavy left-sided blast pattern. It is most efficient to have a balanced blast pattern.

\*Note: Your machine has been tested prior to shipping to verify correct blast pattern.

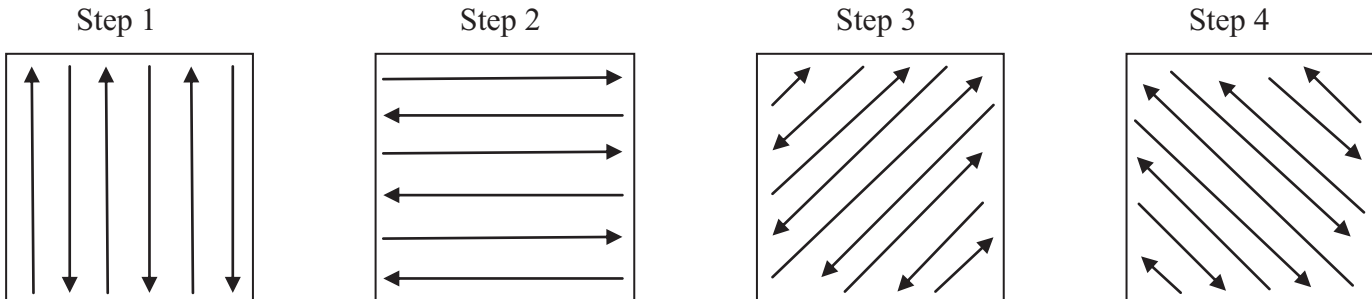


(10)



## Blasting Operation Pattern

To achieve a uniform surface blasting that does not show any “corn rows” or specific tracking lines, it is important to use the following directional sequence. With each blasting step, the goal is to remove 25% of the total surface to be removed.



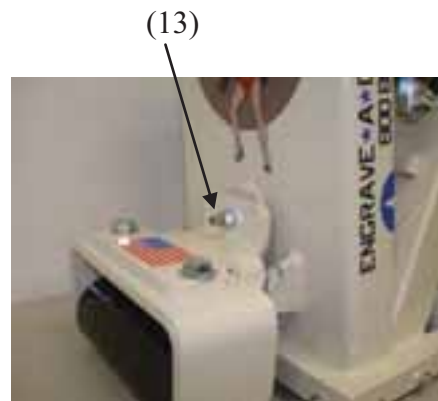
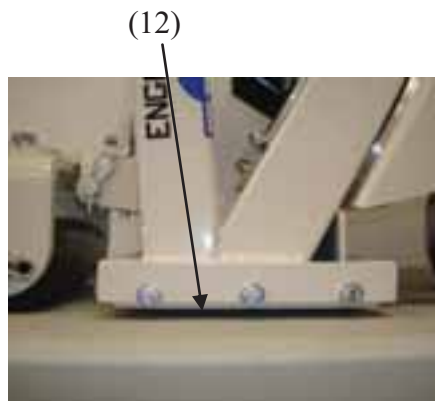
## Template Blasting

When blasting with templates or on very uneven surfaces, attach the included brush seal. Press the brush seal into the channel and secure with the bolts provided. It may be necessary to remove the magnets prior to installing the brush seal. Be sure to reinstall magnets prior to operating Blastin' Betty.



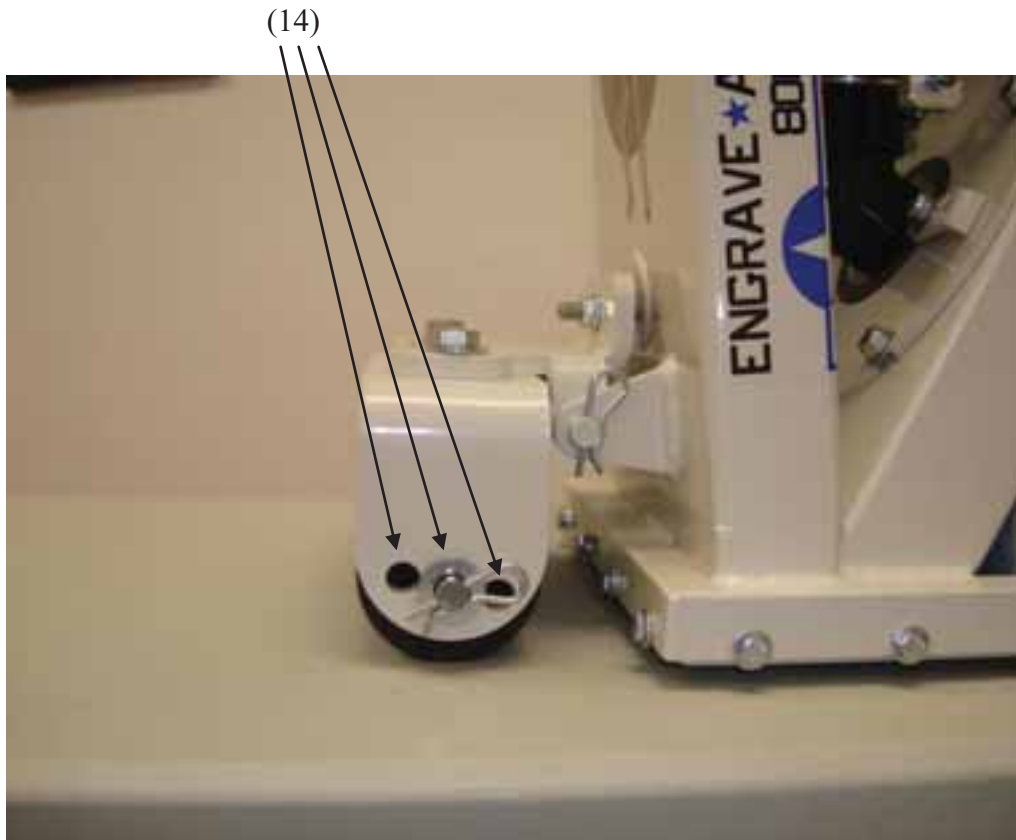
## Leveling / Quick Height Adjustment

To level or slightly adjust the height of the Blastin' Betty shroud (12), turn the set screw located on the front roller pivot (13).



## Roller Wheel Height

Both the front and back rollers have 3 height adjustment settings (14). For most blasting operations the middle hole will be optimal, allowing enough clearance for minor surface variations. When blasting surfaces such as stamped concrete, it may be necessary to raise the overall shroud clearance from the surface to avoid high centering.



## Blast Wheel & Control Cage Replacement

Disconnect Blastin' Betty from power supply.



Remove the urethane blast shot media funnel.



Use a 7/16" wrench to unscrew the ball swivel from the butterfly valve rod block.



Use a 3/16" hex key and a 7/16" wrench to remove the butterfly valve assembly.



Use a 1/2" wrench to loosen both control cage mounting clamps. Remove the control cage.



Use a 1/2" wrench to remove the 4 bolts holding the blast wheel cover plate. Remove the cover plate.



While depressing the red spindle lock button on the motor, remove the blast wheel hub nut using a 1" socket.



Remove the blast wheel and drive hub and inspect them for damage and wear.



Replace the drive hub on the motor spindle and install new blast wheel. Make sure the posts on the drive hub engage the indents on the blast wheel.



Replace and tighten the hub nut using a 1" socket while depressing the red spindle lock button on the motor.



Replace the cover plate and tighten the nuts.



Insert new control cage. Make sure the lower opening edge of the control cage is positioned below the mounting clamp stud (refer to page 8 for detailed positioning instructions). \*Note: The control cage opening faces the right side (from the operator's position) of the machine.



Replace both control cage mounting clamps.



Replace butterfly valve and urethane blast shot media funnel.



Attach the valve rod.



Test run Blastin' Betty to verify correct blast shot pattern. Adjust position of the control cage as necessary to produce an evenly distributed blast shot pattern. Refer to page 8 for adjustment instructions.