

Manual Masonry Brick Splitter Operation JHA

Worked instructional example

Work and worksite

A trained masonry worker will split identified manufacturer-permitted brick units at a separated ground-level station using a Bon 11-590 hand-lever splitter. The opposing blades fracture the supported unit; no rotating saw, motor or water feed is used. Actual equipment instructions govern adjustment, placement and handle operation. The sequence ends with contained fragments and the splitter secured for the next user. This fictional learning example describes planned controls; it records no actual inspection or work authorization.

- The actual unit, permitted brick dimensions/material and required split quality are identified. The manufacturer's applicable instructions and supplied support arrangement are available; no assumption extends this brick model to every CMU or stone product.
- Stable footing, a supported station and controlled handle, blade and fragment envelopes remain clear of pedestrians. Select actual silica, handling and eye-protection controls.
- Brick/block-cutting coverage is partial: manual brick splitting only. Powered wet or dry saws, hydraulic splitters, installed-wall cutting, hard stone, oversized units, blade replacement and intrusive repair are excluded.

Questions before work

- Which actual units and split geometry are permitted by this splitter's instructions?
- How will the unit remain supported while hands stay clear of both blades and the handle path?
- What safe condition is required before a jammed piece or adjustment is approached?

Task Hazard Control

1 Accept the units and splitting method

Hazard: An oversized or unsuitable brick can break unpredictably, overload the splitter or produce an unusable piece.

Control: Cutting lead matches the identified bricks, required split and actual machine to the project's accepted preparation method. Check material/dimensional limits and required split quality. Reject incompatible units; do not substitute splitting for a specified saw-cut structural face.

Verification: Lead records accepted unit type and the applicable splitter/method requirements.

Reasoning: A machine can fracture a unit without producing an acceptable construction component.

2 Prepare the stable separated station

Hazard: A shifting machine, handle strike or flying fragment can injure the operator and nearby workers.

Control: Establish firm footing and the manufacturer-compatible supported station. Separate the full handle travel, blade approach and fragment area from other work. Arrange eye protection and assessed additional exposure controls, manageable brick supply and a close contained offcut receiver. Keep routes clear; manual operation does not eliminate exposure.

Verification: Lead verifies station stability, clear operating envelopes and the selected protection.

Reasoning: Removing a motor does not remove stored mechanical movement or debris hazards.

3 Inspect and set the unloaded splitter

Hazard: Missing adjustment pins, damaged blades or uncontrolled handle movement can cause a sudden shift during splitting.

Control: Inspect assembly, blades, handle, pins and adjustments under unit instructions. Remove defects from service. With no unit being split and the mechanism in its instructed safe position, set the required height/support arrangement and fully restore retaining parts. Keep hands away from closing blade interfaces; do not adjust components while a brick is loaded in the fracture cycle.

Verification: Operator checks the complete assembly and verifies restored adjustment retention before loading.

Reasoning: A correct setting still needs its retaining parts in place.

Complete the work and hand over

4 Place the supported brick and control hand positions

Hazard: The brick can roll or pinch fingers as the upper blade approaches the lower cutting edge.

Control: Position the permitted brick under the actual placement instructions, using the prescribed compatible support or guide. Confirm stable unit contact and clear the offcut path. Complete instructed fine positioning without placing hands between blades. Maintain a stable stance and ensure the helper stays clear before force is applied; do not use an unstable hand-held unit or improvised extended support.

Verification: Operator verifies unit seating and clear hand, helper and fragment positions.

Reasoning: Support and hand clearance must be established before the fracture force rises.

5 Apply the controlled lever split and reset

Hazard: Excessive or sudden handle force can eject fragments, shift the splitter or trap a hand at the fracture.

Control: Operate the handle by the manufacturer's designated grip and movement method from the protected position. Observe the supported split without reaching into the mechanism. Stop for shifting, unexpected resistance or failed fracture; never add a pipe, jump on the lever or strike the equipment to obtain more force. Return it to the instructed safe state before removing pieces or resetting.

Verification: Operator checks controlled fracture, stable equipment and the safe removal/reset condition.

Reasoning: The end of the handle movement does not by itself clear every pinch point.

6 Contain fragments and secure the station

Hazard: Sharp offcuts, settled dust or a defective unsecured mechanism can expose the next user.

Control: Collect pieces into the planned receiver using suitable tools and assessed dust-controlled cleanup. Hold damaged or incorrectly split units for disposition. Leave the machine in its instructed safe storage condition and identify faults; jam clearing, blade work or repair proceeds only through the authorized safe intervention method. Transfer actual findings and keep unresolved defects out of use.

Verification: Lead verifies contained residue, equipment status and the safe station handover.

Reasoning: A simple manual machine still needs a controlled closeout and defect report.

Pause and reassess

- Permitted unit identity, actual splitter instructions, stable support or accepted split method is unresolved.
- Pins, blades or handle fail inspection, the unit shifts, force becomes abnormal or a person enters a blade/fragment path.
- A jam needs unsafe reach, an extension or impact method is proposed, or cleanup/exposure controls cannot be maintained.

Improve the controls

Needs improvement: There is no powered blade, so no protection is needed.

More useful: Control opposing-blade and lever movement, flying fragments and the actual dust exposure at the supported station.

Needs improvement: Jump on the handle until the brick breaks.

More useful: Use the instructed grip and force method; stop for failed fracture and obtain the approved safe fault response.

Decisions that change the analysis

Does this duplicate the stationary masonry-saw resource?

That resource cuts brick and CMU with a powered rotating diamond blade and continuous integrated water. This manually actuated opposing-blade machine fractures a supported brick, requiring adjustment-retention, lever-travel and safe mechanical reset decisions. It makes no dust-free claim or general permission to split every masonry material.

What must the crew record for actual use?

Record the actual work boundary, governing documents, responsible people, acceptance criteria, control findings and unresolved actions. Communicate restrictions and obtain required project authorization; this fictional example records no completed inspection or installed-control acceptance.

Training needs

- Identified manual-splitter instruction covering compatible units, complete pin/adjustment checks, supported placement, handle control and safe fault response.
- Fragment and silica assessment, eye protection, safe hand positions, manageable unit supply and contained offcut cleanup.

Confirm applicable qualifications and actual training evidence for the people assigned. Related toolbox talks support discussion; they do not establish competence.

References and adaptation

Bon 11-590 Paver and Brick Buster: product and documents
<https://www.bontool.com/paver-brick-buster-11-590>

Bon 11-590 actual splitter instructions, IS11590
<https://www.bontool.com/img/product/description/IS11590.pdf>

OSHA 1926.1153: construction silica exposure controls
<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.1153>

References reviewed October 13, 2026. Use actual equipment and product instructions, project design and site requirements. This original draft supplies no fabricated inspection, signature or approval.