

Portable Circular Saw Framing Cuts JHA

Worked instructional example

Work and worksite

A trained framer will make marked straight cuts in untreated wood framing stock with a corded handheld circular saw at a separated outdoor ground-level station. Work rests on planned supports and clamps; the operator controls the moving saw while a helper stays outside the cut and offcut paths. This fictional learning example describes planned controls; it records no actual inspection or work authorization.

- The actual saw manual identifies the permitted material, blade, guards, operating grip, depth adjustment and stopping procedure; the marked cuts require no plunge entry.
- The stable station has a protected electrical supply, supported stock and offcuts, clear blade travel beneath the work and assessed wood-dust and noise controls.
- Partial framing-power-saw coverage only: miter stations, metal or masonry cutting, installed-member demolition, treated stock and overhead cuts are excluded.

Questions before work

- What keeps the stock stable without pinching the blade or putting a helper beneath the cut?
- How will the operator verify lower-guard return and the clear blade path before energizing?
- What safe state is required before a binding cut is investigated or the saw is set down?

Task Hazard Control

1 Plan the cut and separated station

Hazard: An unsupported piece, obstructed footing or misplaced offcut can expose people to the moving blade.

Control: Cutting lead confirms untreated stock, marked lines and cuts suited to the actual handheld saw. Establish a stable supported station outside deliveries, with clear operator footing and a controlled offcut area. Reject a setup requiring the operator to hold stock on a leg or reach beneath it.

Verification: Lead walks the intended cut, offcut and helper positions before connecting power.

Reasoning: The saw travels through the work, so clearance must extend beneath the support.

2 Inspect the isolated saw

Hazard: A sticking guard, incompatible blade or damaged cord can cause blade contact, kickback or shock.

Control: With the supply disconnected, inspect the approved blade, mounting, upper guard, lower-guard movement, controls, shoe and cord under the actual manual. Verify automatic lower-guard return and permitted blade travel at the planned settings. Remove a defective saw from service; never tie its guard open.

Verification: Operator records defects and checks guard movement before the pre-use release.

Reasoning: A guard that moves once may still bind at the selected cutting position.

3 Secure the work and select controls

Hazard: Sagging stock or a closing kerf can bind the blade; dust and noise can expose nearby workers.

Control: Arrange supports and clamps for the actual stock and cut so the retained piece remains stable and the offcut can separate without closing the kerf. Set depth and any guide with power disconnected. Provide assessed dust controls and eye/hearing protection, and route the protected electrical supply clear of cutting.

Verification: Lead checks support behavior, underside clearance, settings and the selected exposure controls.

Reasoning: Adding a helper's hand does not correct an unstable or pinching support arrangement.

Complete the work and hand over

4 Make the marked straight cut

Hazard: The saw can kick back or contact hands if grip, alignment or support is lost.

Control: Use the instructed two-hand grip and body position outside the blade line. Keep the shoe supported, allow the saw to reach its operating condition and advance under the manual without twisting or forcing it. Maintain stock restraint and keep the helper outside blade and falling-offcut paths throughout travel.

Verification: Operator checks grip and clear travel; the helper monitors the agreed work boundary.

Reasoning: The moving tool needs continuous control even when the stock was clamped correctly.

5 Stop a cut or clear a fault

Hazard: Withdrawing a rotating blade from a binding cut or reaching for scrap can cause uncontrolled movement.

Control: For binding or interrupted travel, release the control and hold the saw as instructed until the blade stops; do not pull it backward while rotating. Disconnect the supply before investigating, adjusting or clearing. Correct the cause and repeat setup checks before any permitted restart.

Verification: Operator verifies stopped motion and disconnected power before entering the blade area.

Reasoning: Releasing the trigger does not instantly remove stored blade motion.

6 Secure the saw and cutting area

Hazard: A coasting blade, exposed offcut or loose electrical lead can injure the next worker.

Control: Observe the stopped blade and closed lower guard before setting the saw in its designated stable location. Disconnect power when the station is finished, collect wood residue using the assessed dust-control method and secure useful stock. Report defects and transfer any incomplete cuts or station restrictions.

Verification: Cutting lead checks tool state, scrap collection and clear access at handover.

Reasoning: The operating cycle ends only when the tool and remaining materials are secured.

Pause and reassess

- Lower guard sticks, the blade or electrical supply is defective, or safe control checks cannot be completed.
- Stock shifts, the kerf binds, the helper enters a danger area or dust controls become ineffective.
- Work changes to plunge cutting, treated stock, demolition, another material or an unsupported/elevated position.

Improve the controls

Needs improvement: Hold the short piece tightly and cut slowly.

More useful: Use a supported clamped setup suited to the piece, with clear blade travel and an offcut arrangement that does not close the kerf. Reject a piece that cannot be secured safely.

Needs improvement: The trigger is released, so clear the scrap.

More useful: Wait for blade motion to stop, verify the guard position and disconnect the supply before fault clearing or adjustment requiring entry into the blade area.

Decisions that change the analysis

Does the miter-saw example cover this operation?

No. Its cutting head moves on a fixed station. This operator carries and guides the saw through supported work, so lower-guard return, travel beneath the stock, two-hand grip and kerf behavior need their own checks.

What must the crew record for actual use?

Record the actual work boundary, equipment and materials, responsible people, applicable criteria, control checks and unresolved actions. Keep changed conditions on hold, communicate restrictions to affected crews and obtain the required project authorization before work.

Training needs

- Model-specific circular-saw instruction covering guarding, two-hand control, support arrangement, kickback response and safe stopping.
- Task-specific electrical, wood-dust, hearing and eye protection, including defect reporting and separation of the helper from the cutting path.

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

References and adaptation

Milwaukee 6391 circular saw operator's manual
<https://documents.milwaukeeetool.com/58-14-6391d11.pdf>

OSHA 1926.304 Woodworking tools
<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.304>

OSHA 1926.21 Safety training and education
<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.21>

References reviewed October 9, 2026. Use actual equipment and product instructions, project design and site requirements. This original draft supplies no fabricated inspection, signature or approval.