IOWA STATE UNIVERSITY

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Radial Arm Saw

Description	Radial Arm Saw
Size / Horse power	10" Blade / 3/4 HP / 3450 RPM
Power source	120 volt through plugged power cord
Uses	Precision cut wood, plywood, plastic panels to size.

Safety Precautions

Hazards	
Severe cuts, potential for amputation	
Flying debris (potential eye and face damage)	
Electrical shock	
Entanglement of hair, jewelry, or clothing	
Material kickback	
Training	

Shop Safety Fundamentals Site Specific Training

Protective Equipment

Safety glasses Hearing Protection

Operation

Startup

- 1. Put on PPE listed above
- 2. Ensure cabinet wheels are raised/locked to prevent movement during use.
- 3. Inspect tool for damage or obstructions to operation
- 4. Ensure work area is clean and free of obstacles
- 5. Ensure all guards are present and function properly
- 6. Make necessary adjustments for safe operation blade height and angle, fence or miter gauge settings
- 7. Turn on saw using power switch located on the front of the saw. Pull on, push off (Requires yellow key)
- 8. Begin work

Shutdown

- 1. Turn off tool using power switch on lower the front panel
- 2. Allow table saw to stop on its own
- 3. Remove cut pieces after blade has stopped

Cross Cut

- 1. Set arm at right angle to the guide fence, at 0° on the miter scale
- 2. With the miter latch in column slot at 0° position, securely lock arm with arm clamp handle
- 3. Place material on worktable, against guide fence. Keep hands at least 8 inches away from the blade.
- 4. Draw saw blade across for the cut, after completing cut, return saw blade behind guide fence





Environmental Health and Safety | 2408 Wanda Daley Drive | Ames, IA 50011-3602 | Ph: (515) 294-5359 | www.ehs.iastate.edu

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Miter Cut

- 1. Pull arm clamp handle and swing saw into desire angle shown on the miter scale
- 2. Then miter latch locates the popular left and right angles automatically
- 3. Push clamp handle down to lock the arm
- 4. Draw saw blade across for the cut, after completing cut, return saw blade behind guide fence

Rip Cut

- 1. Start with the arm locked in the cross cut position
- 2. Revolve motor 90° and lock
- 3. Lower blade to just clear the table. Lock blade carriage desired distance from the fence
- 4. Lower riving knife to table. Lower pawls to work piece surface. Move work piece toward outfeed side until one set of pawls rests level on work piece surface. Lock in place
- 5. With material against guide strip, feed material evenly into the saw blade

The following cuts are considered to be Advanced Techniques for radial arm saws. Authorization and site-specific training must be obtained before using these techniques.

Bevel Cut

- 1. Start in the cross cut position
- 2. Elevate the saw using the height adjustment crank
- Release the bevel clamp handle and tilt the motor and yoke to angle desired on bevel scale (locking pin locks in at 0°, 45° and 90°
- 4. Lower the saw to the desired depth using the height adjustment crank
- 5. Draw saw blade across for the cut, after completing cut, return saw blade behind guide fence

Compound Miter Cut

- 1. Start in the bevel cut position
- 2. Pull the arm clamp handle and swing the arm into the desired miter position
- 3. Relock the arm clamp handle
- 4. Draw saw blade across for the cut, after completing cut, return saw blade behind guide fence

Bevel Rip

- 1. Start in the Bevel cut position
- 2. Place the saw into the rip cut position and (using rip lock) lock securely against the arm at desired point
- 3. Lower the guard at the in-feed position, adjust the kickback device
- 4. Feed material evenly and firmly against the guide

Changing Blades – Performed by Authorized Personnel Only

Maintenance

Storage	
Accessories	Blade Guard
	Blade Change Wrenches
Care	 Saw must be unplugged or have the power switch toggle locked out when changing blades. These changes must be performed by authorized personnel only Install blade with teeth pointing toward operator (rotating toward table top)



