

OPERATOR INSTRUCTIONS

READ CAREFULLY BEFORE USING “MASTER UNIT”

Instructions are designed for the ArchMaster AM24, however, the same principles apply to the RailMaster RM11.

*Always wear eye protection when operating machinery.

*Never wear loose fitting clothing or gloves when operating machinery.

*It is important to use sharp cutting tools.

*Use guards and fence as recommended when operating machinery.

*Check air line pressure. Maintain approximately 85 pounds air pressure to the Master Unit at all times. Less pressure than recommended can cause the parts not to be held securely in place.

*Do not use a 24” to 36” unit with a spindle size less than 1” and 3 HP motor.

*If the shaper table has a miter slot, in most cases, it is not necessary to fill this slot. The unit is designed to float over this slot effectively. A Working surface should be at least twice the length of the unit in use. Width should be approximately 20” or more from front of table to cutters.

*Never climb mill. Climb milling is moving the material in the same direction the cutters are rotating. Always move the material against the direction of cutter rotation.

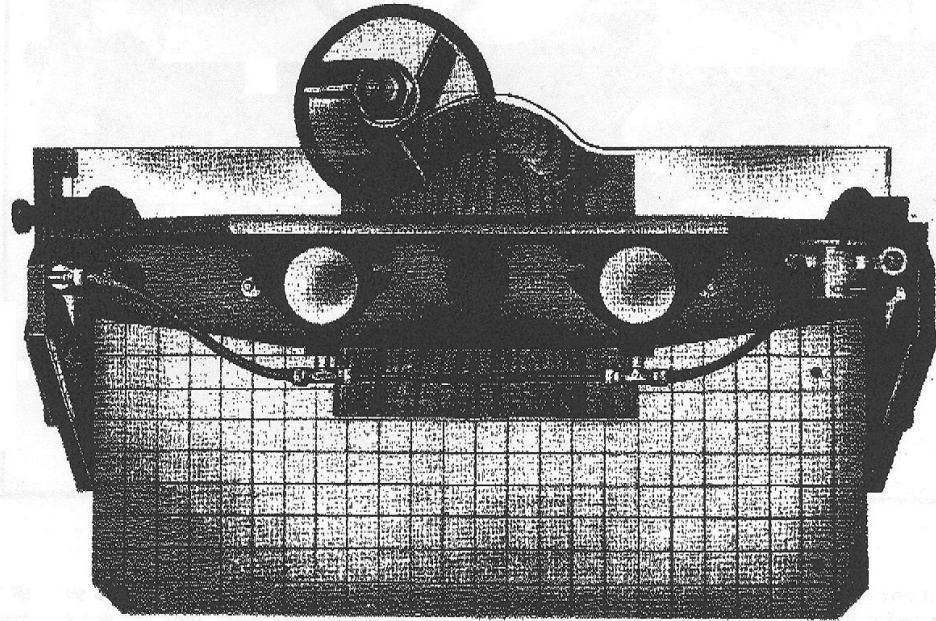
*With the power off, adjust the cutters to the proper height. Center of the plexiglass template should be in the approximate center of the ball bearing rub collar. With the ArchMaster unit moved away from the cutters, put a piece of scrap material, (same thickness as the piece you will be shaping) under the clamping bar and activate the clamping valve. Use a straight template against the fence and make a test cut to check for proper height or cutters. Make any adjustment needed and recheck the location of the template in relation to the ball bearing. If further adjustment is needed, loosen spindle nut and use shims for proper alignment. Always have the unit away from the cutters and the power off when making all adjustments.

*With power off put the female template in place. Move the unit along the ball bearing, making sure the cutters do not hit the base of the unit. Be sure material and cutters are adjusted and tight before turning on the machinery for shaping. Make the same test with male template.

*Instructions herein, are assuming the cutting tools are running in a counter clockwise rotation. This means as you start to cut, the unit will be on the right hand side of the shaper tabletop, and to the right of the spindle. Movement, as you cut, will be from right to left.

CUTTING TOOLS NEEDED FOR MAKING RAISED PANEL CABINET DOORS

Stile and Rail Set of Cutters
Panel Raising Cutter for face of door
Panel Raising Cutter for inside of door (optional)
Ball Bearing Rub Collars to match Panel and Stile Cutters
Straight Cutter for trimming end of Arched Raised Panel (Optional)
(Without the trim cutter, panel will have to be band sawed exactly to size)



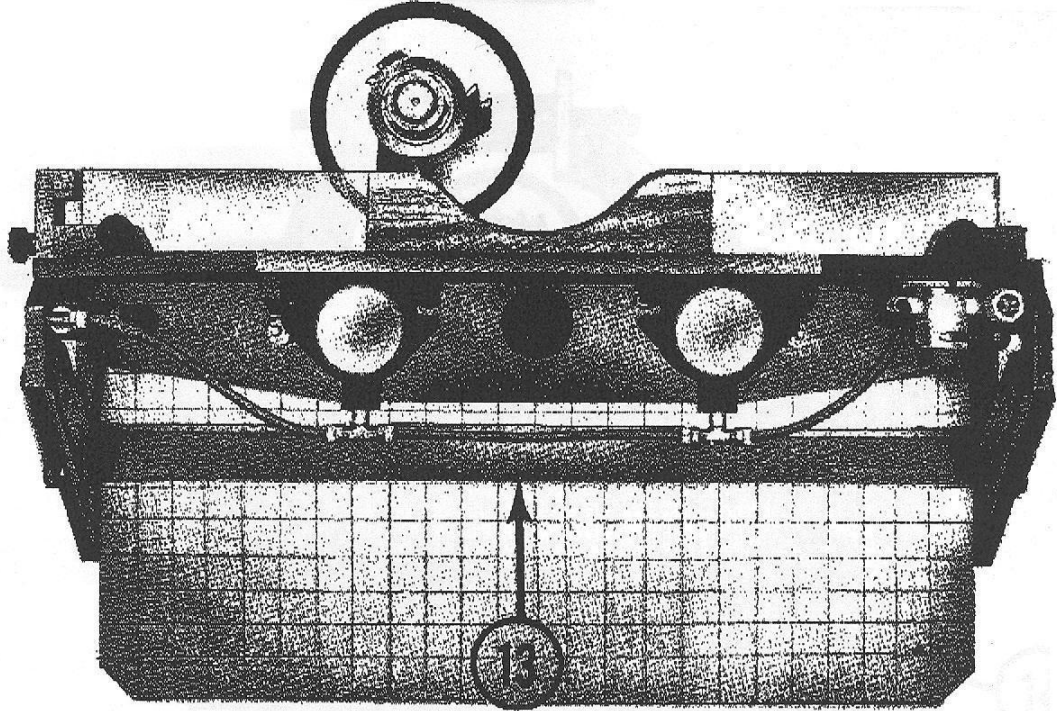
Set depth adjustment, (#9) just high enough to accept material being shaped, 1/32" clearance is fine. Only the basic fixture is used in this procedure. Part #13, top rail fence and part #14, cope fence are not used.

Place the male template being used in the template holders and tighten template holding knobs (#7). Place the panel under the pressure bar and extend out under the template so that the material is flush or just beyond the farthest point on the template. Use your shaper fence or a block of wood to line up your material flush. Turn the material centering knob counter clockwise until the material no longer moves and your material is centered under the template. Use one of the grid lines running from front to back as a reference point to see that the wood is square.

Activate the clamp valve (#5) clamping the material to the base. Next adjust the brake mechanism (#4) so that the brake is flush with the leading edge of the template. Adjust the airflow control valve (#6). Use enough air to reduce the friction (approximately 85 lbs.) on the base, so the unit is easy to push, but not too sensitive. Make a final check to be sure the spindle nut is tight and the cutters and ball bearing rub collar is in proper alignment. You are ready to shape the panel.

With the ArchMaster unit to the rear of the table and on the right side of the table (assuming counterclockwise rotation), start the shaper motor. Advance the ArchMaster unit toward the spindle with the brake mechanism in line with the ball bearing rub collar. Immediately move the unit to the left so the rub collar comes in contact with the template. Keep enough forward pressure so the collar rolls, but does not build up speed as you make the cut. As soon as the cut has been finished, pull the unit to the rear of the shaper table and turn off power. Release the clamp valve (#5) and remove the work. You are now ready to shape the next panel.

SHAPING ARCHED TOP RAILS



Remove the male template and replace with the matching female template for the panel you have cut. Attach the top rail stop, using two of the screw knobs. With the shaper motor off, load a test piece of material that has been cut to the same width as the top rail pieces you will be shaping. Push the stop rail forward so that it contacts the rear of the material. Place a wood block in front of the template and continue to push the material forward until it touches the block. Use the centering device, as in raised panels, and clamp the material to the base. Follow the same procedure as in shaping raised panels to shape the top rail.

DIRECT ANY QUESTIONS TO YOUR DEALER

or contact

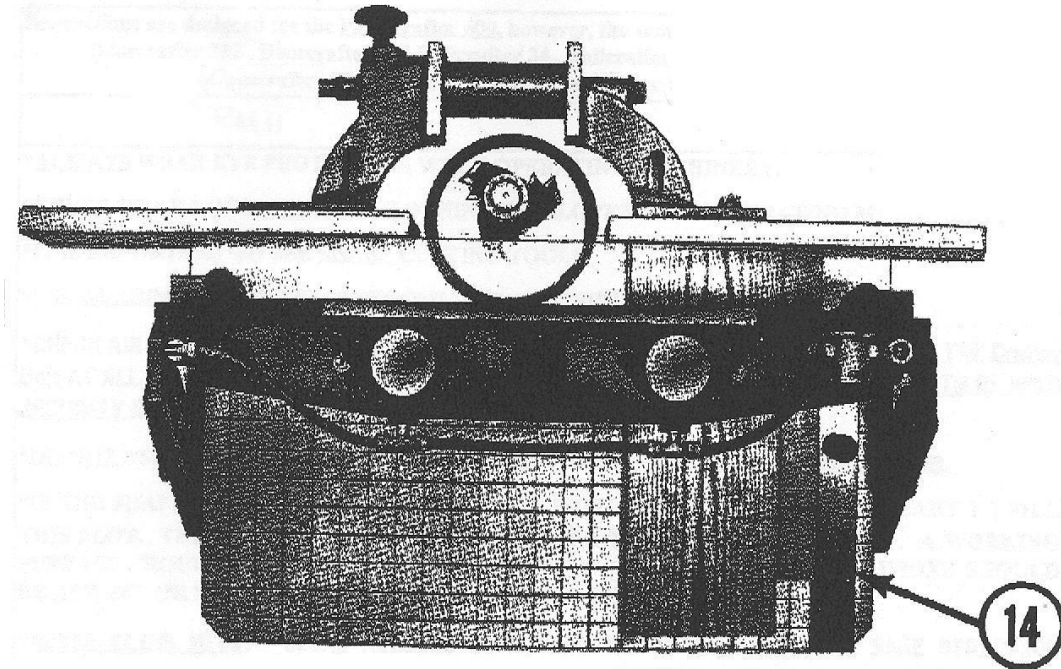
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SHAPING THE COPE (TENON) CUT



Set up a RailMaster unit for this procedure. If using an ArchMaster do the following.

Remove the female template and replace with a straight template. (If a straight template is not available turn any female template over so the straight edge is forward). Replace the top rail stop with the cope fence (#14) using the two screw knobs to attach to the right side of the base.

A backer board (blowout bar) of thinner wood should be attached to the cope fence using the two countersunk holes provided. This will reduce, if not eliminate, blowout as the cutter passes through the material. This is very important, as the cope is almost always a short cross grain cut. If you are using different cope and stile patterns, make the backer board with the design and save it for the next time you run this design. Many of our customers buy extra cope fences and leave the backer board attached. See the master parts breakdown for the proper part number of the cope fence. Be absolutely sure the backer board is thinner than the material being shaped. A 1/64" is customary. If the backer board is thicker than the material being shaped, the clamp bar will make contact with the backer board first and the material will not be held in place causing the cope material and/or cutters to be ruined.

Care should be taken when coping one or two pieces that the clamping bar does not slant down toward the end where no material is being cut. To eliminate this possible problem use a dummy piece of material, the same thickness as the material being shaped, at the opposite end of the cope station and under the clamping bar.

*No ball bearing rub collar is used when the standard shaper fence is in place. The straight template rides on the fence. With this procedure, the template rides on both sides of the cutterhead. A miter fence is not required as in conventional cope shaping.