

Instructions for use of The Burgess Edge Shaper Bits

Before we start: The Burgess Edge comes with four .020" and four .010" shims. Start with two .020" in each bit. This will work for most 3/4" plywood. Add .010" shims as necessary to both bits in order to produce a thinner veneer edge. You may need all four .020" shims for melamine and MDF. The bits are designed to cut .662" without shims. When you add two .020" shims, you are cutting .702". Plywood measures in the neighborhood of .724", so you are attempting to leave about .011" of veneer on both sides of the plywood. (.750 is equal to 3/4")

Step 1. Stack the "two bearing" (plywood) bit onto the shaper spindle. Place the shims between the cutters. If you do not have a 1 1/4" spindle, reducers to 1" or 3/4" are available from me. The thickness difference between the .010" and the .020" shims is easily discernable.

Step 2. Adjust the spindle height so that approximately 1/64" of the upper bearing is visible between the cutting profile of the bit and the table. Test the cut on a scrap of 3/4" plywood.

Step 3. Check your test cut for two things. First, make sure that the width of the cut removes core material approximately half way through the outer veneer of both faces of the plywood. The width of the cut can be adjusted with shims between the cutters as necessary. If you shim to less than .032" between the cutters, make certain the carbide of the upper cutter slips between the wings of the lower cutter. The second thing to do is to center the cut on the plywood. This is achieved by incremental changes in the spindle height moving 1/64" at a time.

Step 4. When the bit is centered and cutting into the face veneer, shape the plywood that you intend to edge.

Step 5. Stack the "center bearing" (insert) bit in the shaper spindle. If you adjusted the width of the "two bearing" bit in step 3, adjust the insert bit with the same thickness shim at this time. It may be necessary to add an extra .010 shim to insure a snug fit of the insert into the plywood.

Step 6. Prepare 3/4" boards of the same species as the plywood veneer. *Please Note:* The thickness of the boards to be used for filler do not have to match the plywood exactly as the shaper bit will properly size the insert. Adjust spindle height so that the "center bearing" bit is centered on the wood board.

Step 7. When adjustment is deemed satisfactory, shape the edge of the board and rip, on the table saw, to approximately 1/2" so that you are left with a 1/2" X 3/4" ripping with the insert profile. Repeat this operation until you have as many inserts as you have plywood edges. *Please Note:* The inserts are intentionally ripped wider than necessary at this stage because doing so lends them some structural integrity during the gluing process.

Step 8. You are now ready to apply your edges. Apply glue according to manufacturer's instructions. Insert the positive wood edge banding into the negative recess on the edge of the plywood. Clamp your assembly and allow it to dry. *Please Note:* It is not necessary to clean glue as long as you do not allow the glue to run over the face of the plywood veneer.

Step 9. When the glue has set, remove the excess of the insert by ripping on the table saw to the extent of the plywood face veneer. You can join the edge on the joiner, or sand to finish.

It is as simple as that. You have recreated the patented, strong and beautiful Burgess Edge.

Please Note: Router Bits are inherently dangerous, respect this tool and, use at your own risk.