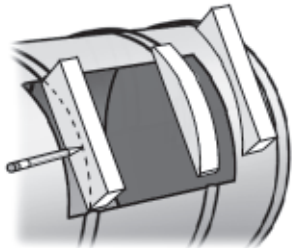


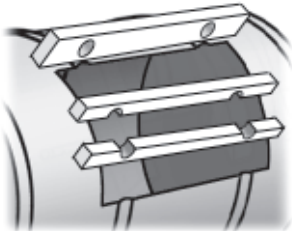
Building the rotating barrel bin represents an investment of time and money greater than that of most composting bins. As those who are willing to make that investment are also likely to “go the extra yard” to build a more refined bin, we have developed a few recommendations. The following suggestions also address safety issues associated with exposed metal edges and moving parts—not a concern with most other bin types.

WOODEN DOOR FRAME

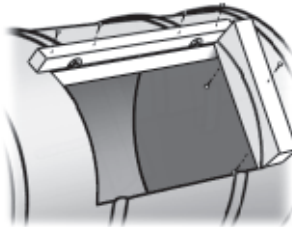
1. After cutting out the door from the side of the bin, be sure to carefully file the metal to remove any burrs or sharp edges. Cut two lengths of good scrap 2x 4 about 1/2 inch less than the edge-to-edge height of the doorway, hold each piece against the curve of the doorway sides, and scribe the curve onto each piece. Cut along these curved lines with a coping or jig saw.



2. Cut two lengths of 2x4 about 3” longer than the edge-to-edge width of the doorway. Hold one piece against the barrel ribs, being careful that it extends 1-1/2” beyond the doorway edges on either side. Mark a line vertically across the 2x4, above the dead centre of each barrel rib. At the mid-point of each line marked, bore a hole using a wood auger blade of the same width as the barrel ribs. Cut both pieces of 2x4 length-wise, leaving two 2x2” lengths with ‘half-circles’, and two 2x2” lengths without.

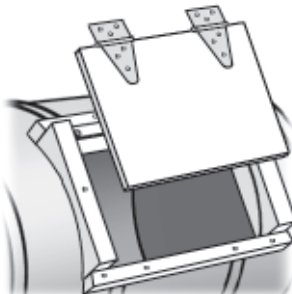


3. Place each piece as shown, being careful that the metal edge is concealed by 1/4” of wood along every edge. You may want to trim the outer side pieces for a better fit. Pre-drill holes for 3-1/2” deck screws or 4-1/4” bolts.



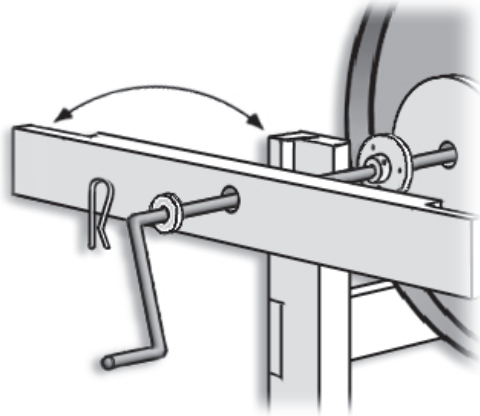
4. Mix up to a half-cup of sawdust with a quarter-cup of wood glue, and apply generously between the wood parts and any gaps which conceal metal edges. Screw or bolt everything tightly in place, wiping away excess or adding more sawdust/glue filler as required.

5. Cut and finish a door from scrap plywood, being sure that it fits inside the edge-framing. Attach hinges and a hasp to the door before pre-drilling and screwing the hinges and hasp to the edge-frame.



See over for more ideas....



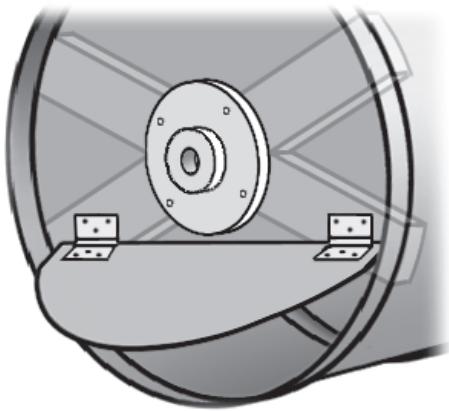


TURNING CRANK FOR ROTATING BIN

The standard plans for building a rotating barrel bin don't include a hand crank for four reasons: It's easier to build it without the crank; it works just as well without the crank; a spinning barrel means a moving crank, which presents a significant threat to the eyes or teeth of a child; and finally, you'd probably rather work out some kind of wind-powered device anyway....

If you are determined to build a hand-cranked model, you will need the steel rod which passes through the barrel to be an extra foot long, with right-angle bends made 11" from the end (for the shaft, and providing a little bit of clearance from the frame) and at the 4" mark (for the handle).

You will also have to consider a more sturdy attachment of the rod to the barrel itself, rather than the plywood disks on either end—which merely keep the barrel rim from rubbing on the frame. A metal flange which clamps to the rod should do the trick. Substitute the flange for the smaller (2") plywood spacer, and firmly bolt the flange and the 8" spacer to the barrel.



BARREL-END DISCHARGE DOOR

It can be a bit of a reach trying to get every last ounce of compost from a rotating barrel bin, as the door is in the side of the bin and will usually need to be turned downward for unloading. A semi-circular door cut into one of the ends will allow reaching in with a hoe or rake, and scraping every last bit of compost from end-to-end.

Be sure to leave enough metal on the drum ends to properly affix the plywood spacer disks—and avoid weakening the entire end by radical cutting. You may need to reinforce this door (and protect against sharp edges) by building a frame similar to the side door, which includes crossed 2x4s bolted to the inside of the barrel end. The axial rod would pass through a hole drilled at the centre of these 2x4s.

You will also need to make sure that the end-door is not blocked by the cross-brace on the frame legs. This brace may have to be placed quite low, and horizontally rather than at an angle. To retain strength, substitute a length of 2x4 for the 1x3 bracing, and use lapped, glued and screwed joints.