

Hidden Hinge Pin

Perfect for when you don't want hinges to show in your finished small box or cabinet project, these hinges are a snap to install. Even better, since no glue is used, the hinges can be removed after installation for fine tuning the fit of the lid.

The 1 1/4" long stainless-steel pins are offered in two diameters (1/8" and 1/4") for use on small or medium cabinet doors, box lids, or anything of a similar size that calls for a concealed pivoting hinge.

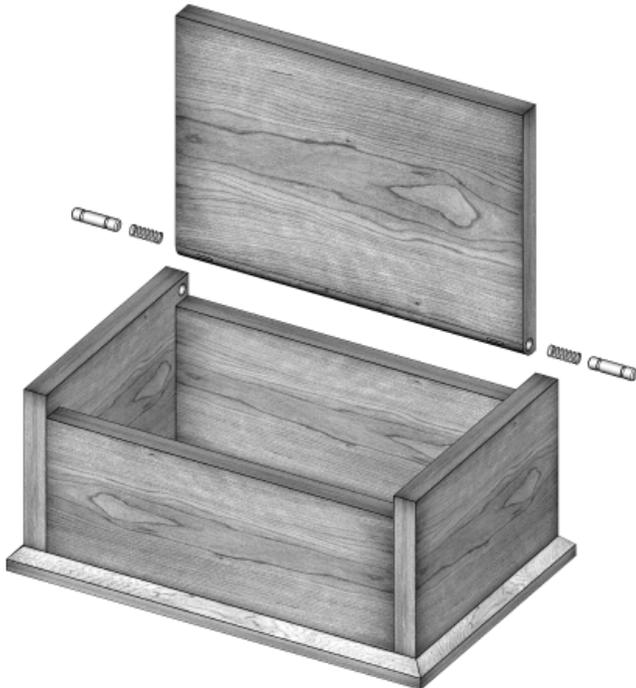


Figure 1: Exploded view of hinge installation.

Installation

Note: The holes for the hidden hinge pins must be drilled before the box is assembled.

1. On each side of the lid edges, mark the location of the holes such that they are **centered relative to the thickness of the lid**, as shown in Figure 2.
2. Mark the location of the holes on the inside face of the carcass sides, **also centered relative to the thickness of the lid**.

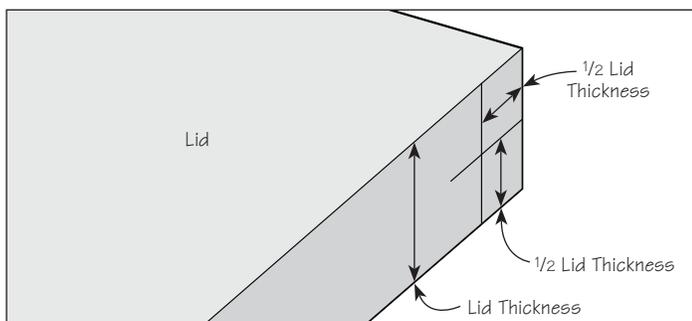


Figure 2: Hole location on the lid.

*Note: Ensure that the locational markings inside the carcass are **longer** than the diameter of the hole to be drilled and that they remain visible until you have completed installing the hinge (see Troubleshooting).*

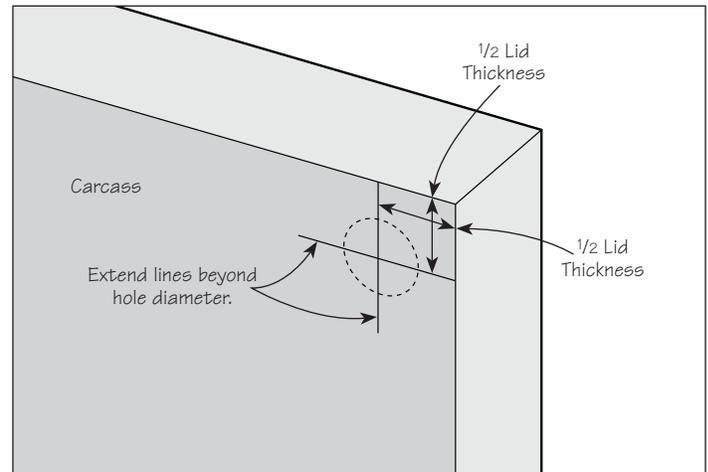


Figure 3: Hole location inside the carcass.

Tip: To improve the accuracy of the locational markings, mark both the lid and the carcass **without** adjusting your marking tool (e.g., marking gauge, square or depth gauge).

3. On the inside of the lid, mark the location of the two 3/8" long by 1/16" wide slots, centered on the hole and 7/16" in from the ends of the lid, as shown in Figure 4.

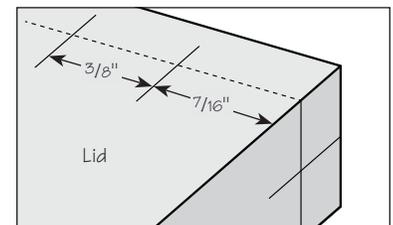


Figure 4: Slot location.

4. Use a 1/8" diameter brad-point bit mounted in a drill press for the 1/8" diameter pin or a 1/4" diameter brad-point bit for the 1/4" diameter pin to drill a 15/16" deep hole where marked on each side of the lid edges.
5. Use the same bit to drill a 1/4" deep hole in each inside face of the carcass sides.
6. Drill out the slots with a 1/16" diameter bit mounted in a drill press.

Tip: To make the slots, you can simply drill a series of holes along the centerline between the 3/8" marks. There is no need to mark the perimeter of the slots since the drill bit will yield the desired slot width.

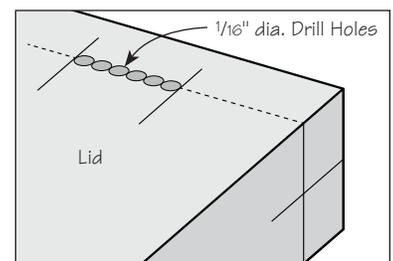


Figure 5: Drilling the slot.

7. Remove the waste from the slot with a fine knife or chisel.

8. To provide clearance for opening the lid, round over the slotted edge of the lid, as shown in **Figure 6**.

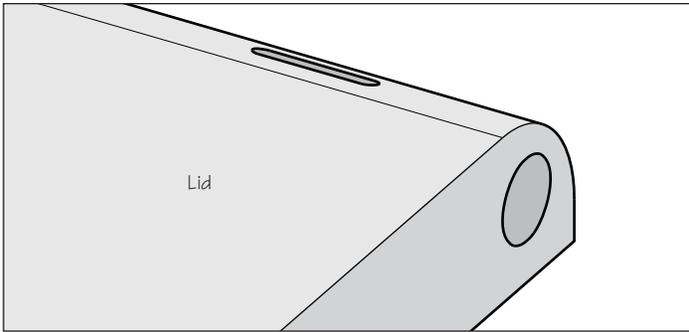


Figure 6: Rounding over the lid.

Note: Lid shown upside down for clarity.

9. Assemble the carcass.
10. Place a spring and a pin into each hole in the lid. Ensure that the pin can be pushed below the surface of the lid and that it will pop out on its own.
11. Compress both pins into the lid and slide the lid, rounded edge facing in, into place until the pins pop into the holes in the carcass.
12. Test the fit of the lid. For fine tuning the fit, remove the lid, make any necessary adjustments, reinstall the hinges and test again until you are satisfied with the fit.

Removing the Lid

To remove the lid, insert a small tool (e.g., hex key) into the 1/16" slots. Retract the pins into the lid, and lift the lid out, as shown in **Figure 7**.

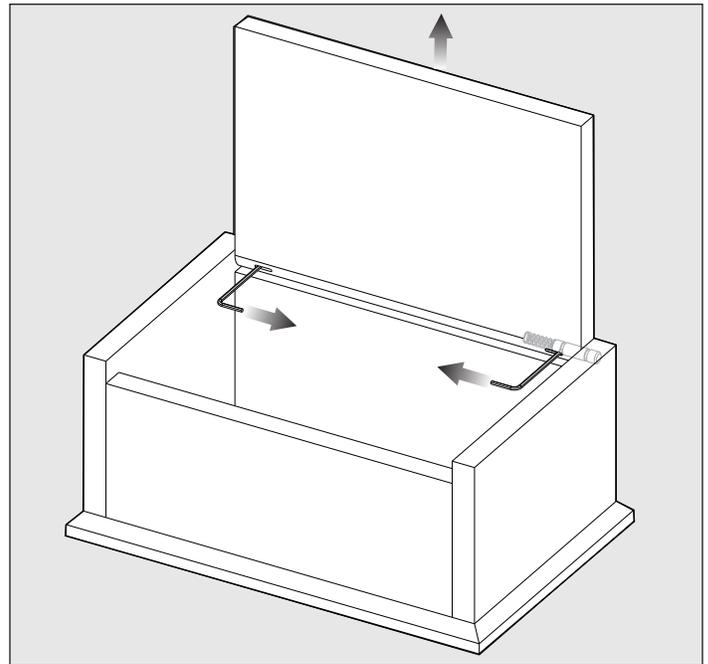


Figure 7: Removing the lid.

Troubleshooting

Problem	Solution
The lid is tight.	Remove the lid and take a small amount of material off each end.
The lid is loose.	Place a brass, stainless-steel or plastic washer between the lid and the carcass. Or Glue a piece of veneer (of the same thickness) on each side of the lid. Or Make a new lid.
The pin sticks in the lid.	Check for debris or rough sidewalls inside the hole. Remove any debris, making sure that there are no chips caught in the spring. Smooth rough sidewalls with a small piece of medium-grit sandpaper rolled into a cylinder.
The pin does not fully retract.	If the object being used to retract the pin is hitting the edge of the slot, lengthen the slot. Or Remove the pin and spring and drill the hole deeper by the same amount that the pin would not retract.
The pin does not extend beyond the side of the lid.	Ensure that the pin is not jammed in the lid. Or If the hole in the lid is too deep, place a short piece of dowel into the hole before inserting the spring and pin. Do not use glue, as little beads of it can get caught on the sidewalls and interfere with the spring and pin action.
The holes do not line up.	Glue a dowel into the improperly located hole in the lid , then cut the dowel flush. Reset your marking gauge using the location lines for the hole in the carcass as a starting point, remark the hole location and drill the lid. Ensure that you can still retract the pins.
The lid opens less than 90°.	Remove more material from the rounded edge of the lid. Or Remove a small amount of material from the outside back edge of the carcass.

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