



Installing Side Rail Hinges

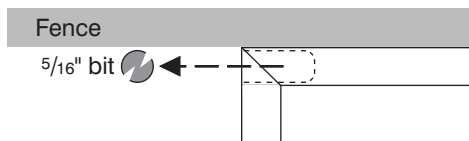
CAUTION: Carefully measure hardware prior to making any final cuts.

Tools Needed

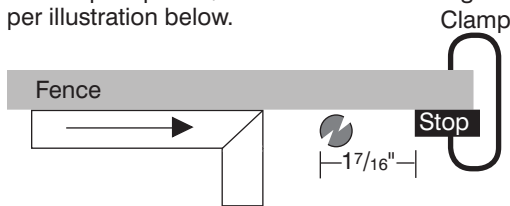
An inverted table router is the easiest method for installation. A hand router will suffice but will be slower and more cumbersome. Router bit should be $\frac{5}{16}$ " carbide tipped straight flute, 2 flutes. Ask for bits that are on the plus side of 0.3125". Note: You will also need a small laminate trimmer router with a $\frac{1}{4}$ " router bit to deepen the rear of the mortise for the hinge pivot clearance (see below). We use Freud 04-118 #828661, and Whiteside #24A04.

Installing Side Rail Hinge #161694

1. Set up a fence on the inverted router table so that the router bit runs down center line of the side rail as per illustration below.



2. Set up stop to $\frac{17}{16}$ " from the outside edge of the router bit as per illustration below.

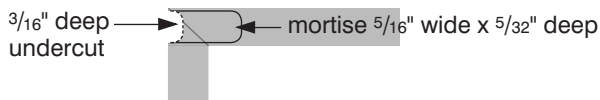


3. Set router bit height to $\frac{1}{8}$ " above the table and run a sample piece of wood to test height adjustment.

Note: Hinge should be flush with the top of side rail.

4. If you have 2 inverted router tables, you can set one up for left mortise and the other for the right mortise. This will greatly increase production. Otherwise you will have to switch left and right stops to make all four mortises.

5. After making all four mortises, the next step will be to undercut the rear of each mortise to allow movement for the hinge pivot (see illustration below).



This cut should be $\frac{1}{16}$ " deeper than the mortise cut or $\frac{3}{16}$ ". It is only $\frac{1}{4}$ " from rear of the back edge of the box. This should be done with a small hand router - preferably a laminate trimmer with a $\frac{1}{4}$ " router bit.

6. Drill 4 screw holes by using our drill guide.

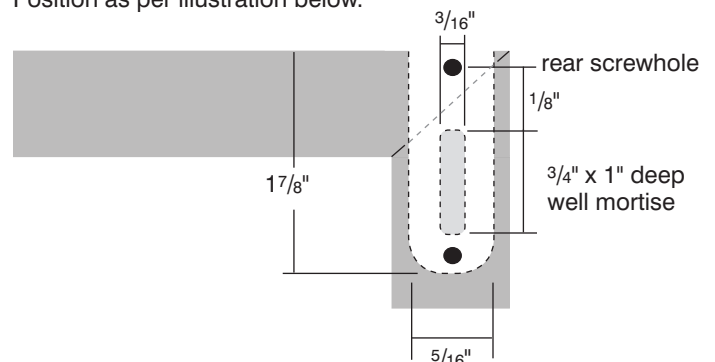
7. Install the pin blocks and you are ready to sand!

Note: The above steps can be done in a matter of minutes if you have 2 inverted router tables, a hand laminate trimmer and all of the stops are set. Be sure to make a test box first. We make these from poplar wood first and adjust the stops until the lids line-up correctly.

Product #161694, 161695

Installing Heavy Duty Side Rail Hinges #161695

1. The length of rout is $\frac{17}{8}$ " instead of $\frac{17}{16}$ ".
2. There is no rear undercut mortise necessary as the design of the hinge pivot is round vs. square.
3. An additional well mortise of 1" deep x $\frac{3}{4}$ " long x $\frac{3}{16}$ " wide is needed for the stay support in all 4 mortises. If the box lid is not deep enough for a 1" deep well mortise, adjust depth to fit available thickness. For this cut you will need a $\frac{3}{16}$ " HSS upspiral router bit. We use Whiteside RU 1800 #814915. Position as per illustration below.



Rout multiple passes of only $\frac{1}{4}$ " deep per pass. Otherwise the bit will heat up and become dull and eventually break. This operation can also be done with a $\frac{3}{16}$ " chisel mortiser on a drill press.

Note: When installing hinges we use small pieces of double stick tape under each hinge arm top and bottom so that we can adjust and level the top lid. The foam allows the hinge to spring up when loosening the screws and compresses nicely when tightening the screws. The rear screws behind the stay support are the most difficult to install but can be done easily with an extended bit driver. We use a $\frac{1}{4}$ " round diameter driver that is 2" long with a #1 point.

