Hinge Mortising Template 15J75.01

This set of glass-filled polycarbonate templates and aluminum rails makes it easy to rout mortises for door hinges on a doorjamb and on a door (new or replacement) that is 1 3/8″ or 1 3/4″ thick, and 6′8″ to 8′ tall, and can handle two- or three-hinge set-ups. Spacers are provided so you can adjust the template openings (in 1/2″ increments) for use with 2 1/2″ to 4 1/2″ hinges that have square corners, a 1/4″ radius or a 5/8″ radius.

Set Includes

- Three templates
- Six spacers (three left and three right)
- One 22″ long right-angle middle connecting bar
- Two 13 1/2" long right-angle outer connecting bars
- Two 19″ long bar holders
- Two 5″ long notched gauges
- Four 8-32 × 1/2″ thumbscrews, wing nuts and washers
- Six 8-32 flat-head screws
- Two 8-32 × 3/8″ pan-head screws, square nuts and washers
- Six 1″ nails

The templates are designed with a built-in 1/16″ offset so it can be used with a 1/2″ dia. straight double-flute router bit and a 5/8″ O.D. template guide (or a 1/2″ dia. hinge mortising bit and a 5/8″ bearing).

Caution: *Be sure to follow the safety instructions that came with your router. Make sure the work surface is free from nails or other foreign objects, and always maintain proper footing and balance, especially when routing the upper and lower hinge gains on a doorjamb.*

Setting Router Bit Depth

1. Chuck the bit in your router.
2. Flip the router over so you can see the bit.
3. Set one of the templates on the router's base plate, and then place the hinge (open) on top of the template, as shown in **Figure 1**.
4. Adjust bit height until it is flush with the underside of the hinge leaf.

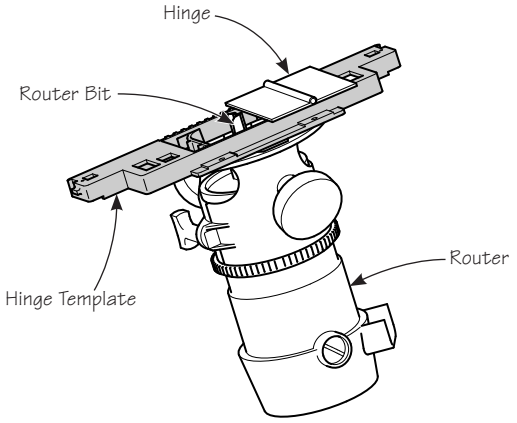

Figure 1: Setting bit depth.

Adjusting the Spacers to Match Hinge Leaf Height

1. Measure the height of the hinge leaf.
2. a. For hinges with 5/8″ radiused corners, align the spacers as shown in **Figure 2**.

   b. For hinges with 1/4″ radiused corners or square corners, align the spacers as shown in **Figure 3**.
3. Position the spacers as required to match the size of the hinges (see chart below), keeping in mind that the resulting opening will be 1/8″ **larger** than the hinge leaf height.

Note: *For 4 1/2" hinges, no spacers are used and, as such, the template cannot be used to rout corners with a 5/8" radius on this size of hinge.*

Slot	Hinge Leaf Height
1	4″
2	3 1/2″
3	3″
4	2 1/2″

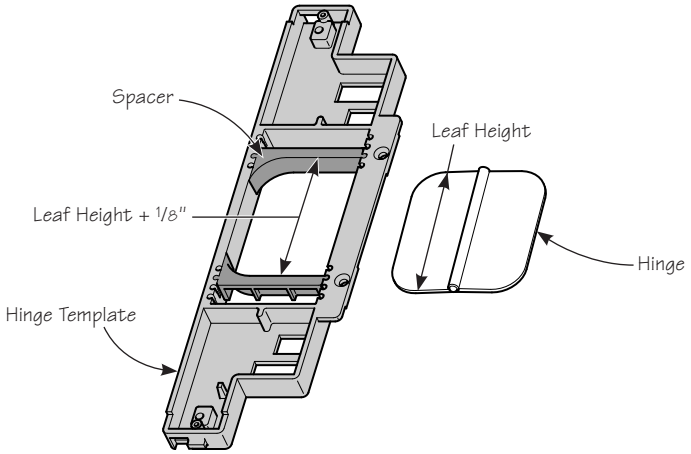

Figure 2: Aligning spacers for hinge with 5/8" radiused corners.

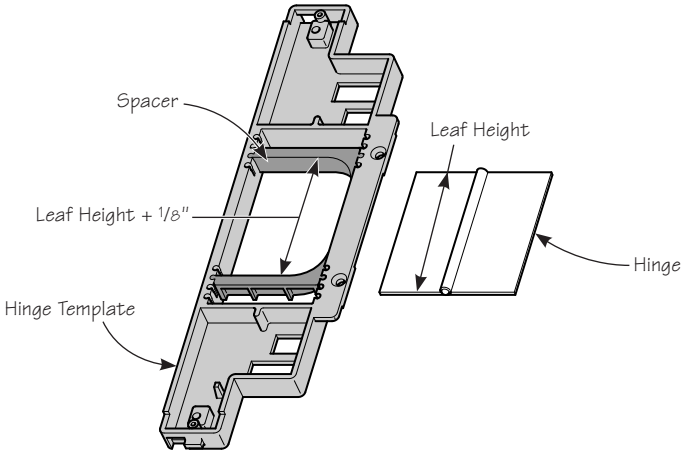

Figure 3: Aligning spacers for hinge with square or 1/4" radiused corners.

Assembling the Parts

1. Mount a notched gauge into two of the templates. (These will become the upper and lower templates.)
2. Attach the upper and lower templates to the short connecting bars, as shown in **Figure 4**.
3. Attach the remaining (middle) template to the longer connecting bar.
4. Slide the exposed end of each connecting bar into each end of the bar holders. Secure with the wing nut/thumbscrew/washers just enough for the parts to stay connected, but still loose enough to be adjusted. (See **Figure 5**.)

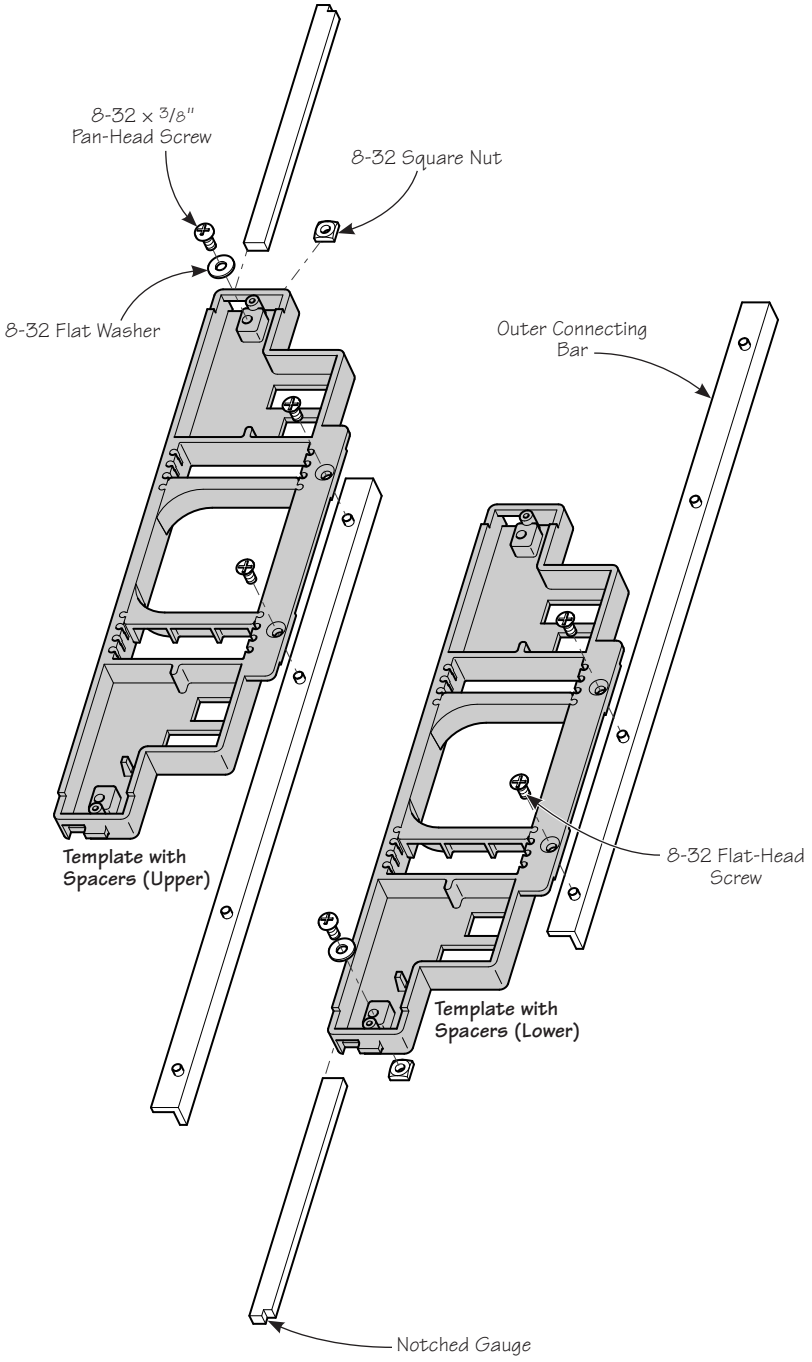

Figure 4: Attaching the upper and lower templates to the short connecting bars.

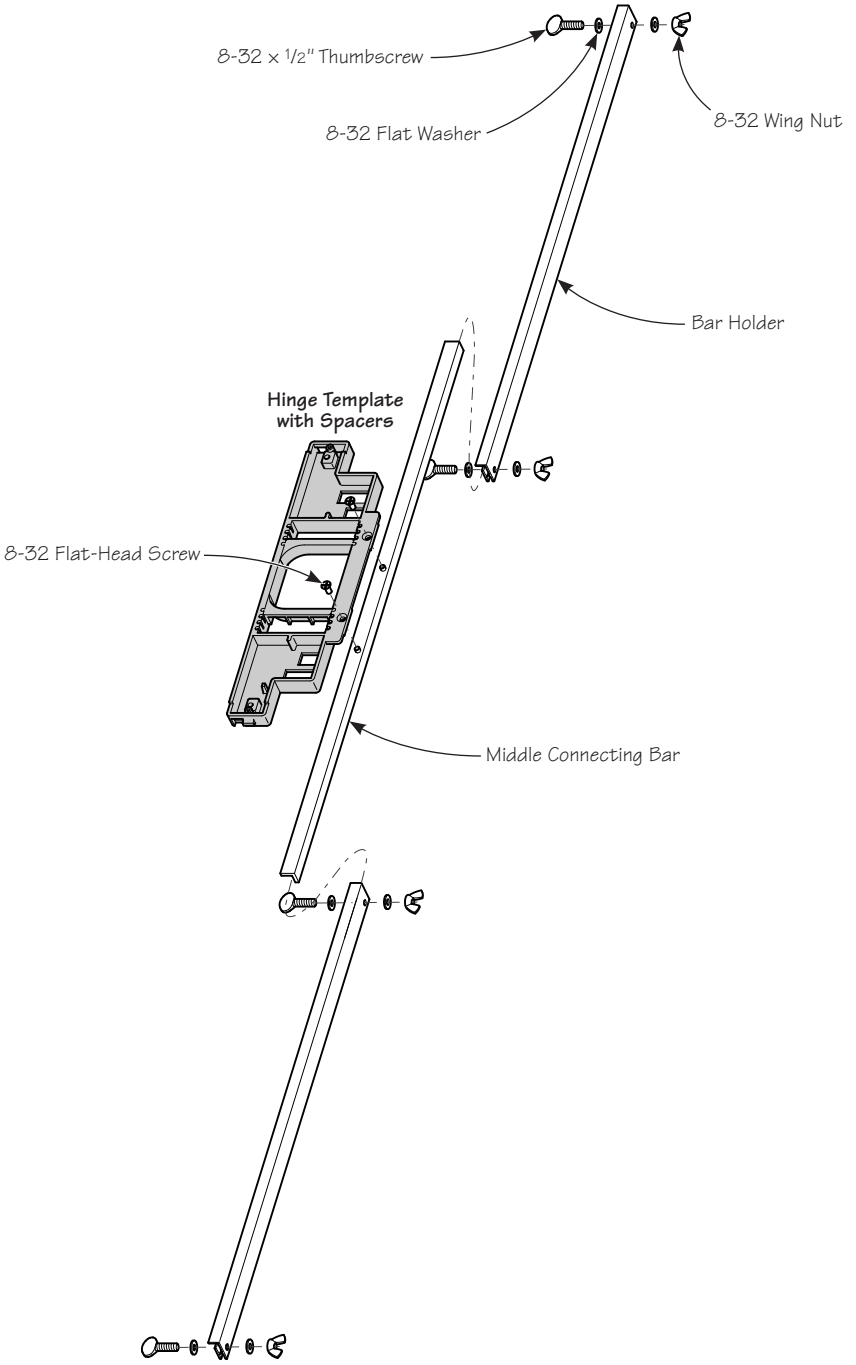

Figure 5: Joining the connecting bar onto the bar holders.

Set-Up for Use on New Door and New Doorjamb

Caution: *Be sure that the door you are working on is braced in a door buck, stand, or clamped onto a workbench.*

1. Set the notched gauge on the upper and lower templates such that it is 7″ from the hinge spacer, as shown in **Figure 6**.

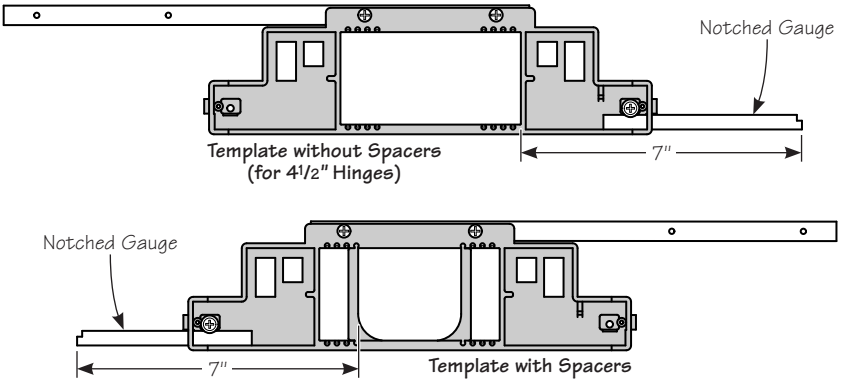

Figure 6: Setting notched gauge on upper and lower templates.

2. Place the upper template on the door, aligning the notch on the gauge with the top of the door, and the appropriate window ($1\frac{3}{4}$″ or $1\frac{3}{8}$″) with the edge of the door. Tack the template to the door using two 1″ nails.
3. Ensure the wing nuts/thumbscrews are loose. Adjust the lower template such that the lower spacer is 11″ from the bottom of the door. Align the lower template to the edge of the door, as indicated for the upper template. Tack in place.
4. Set the middle template by making the space between the upper and middle templates **exactly equal** to the space between the lower and middle templates. (*Dimension A* on **Figure 7**.) Tack in place.

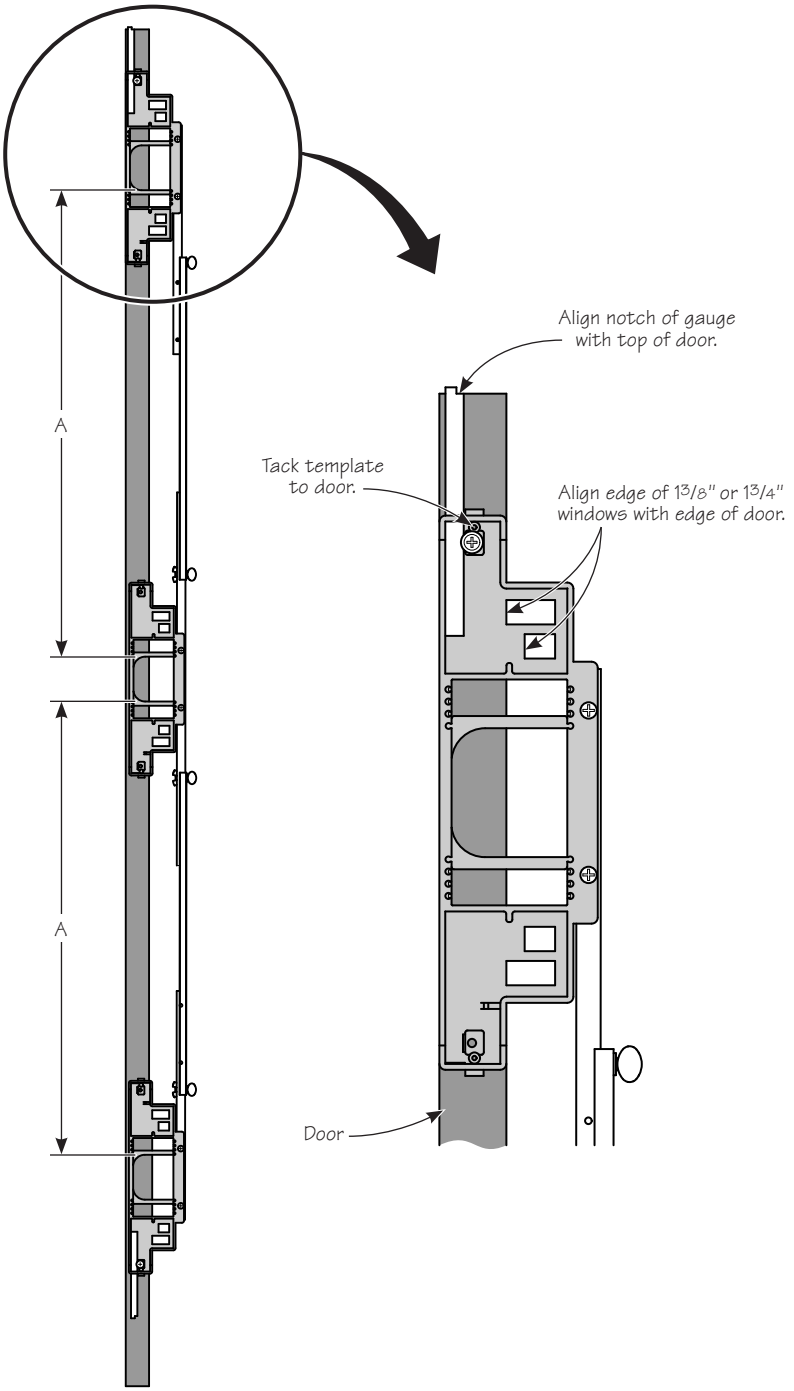

Figure 7: Aligning notched gauge and window on door.

5. Tighten all the wing nuts/thumbscrews.
6. Rout the hinge mortises into the edge of the door.

Note: *For best results, rout in the clockwise direction. Proceed with caution when using the mortising bit and bearing for shallow cuts, as only a portion of the bearing will be in contact with the template.*

7. Pry under the flange behind the nail holder to remove the templates from the door. (Be sure not to loosen any of the wing nuts to maintain the template settings.)
8. Flip the template set-up end for end. Take the end of the template that made the bottom hinge mortise on the door and place it on the doorjamb head (placing the end of the notched gauge right up against the doorjamb head). Align the $1\frac{3}{4}$″ or $1\frac{3}{8}$″ window with the edge of the doorjamb and tack the templates to the doorjamb.
9. Rout the hinge mortises into the doorjamb.
10. Pry under the flange behind the nail holder to remove the templates from the doorjamb.

Tip: *Use a corner chisel to quickly square the corners of a routed hinge mortise.*

Set-Up for Use on Replacement Door and an Existing Doorjamb

Caution: *Be sure that the door you are working on is braced in a door buck, stand, or clamped onto a workbench.*

Note: *Hinges are still fastened to doorjamb.*

The following instructions assume that the hinges on the existing doorjamb are equally spaced. Before beginning the set-up for use on a replacement door, verify that the hinges are equally spaced, as some adjustments will be required if they are not.

1. To copy the hinge distance on the doorjamb, first determine the end of the template that will be used on the top end of the door. (It will be the opposite end of the template that would have been used to rout the doorjamb.)
2. Place that end of the template opening on the top hinge of the jamb.
3. Adjust the rails until the top hinge opening straddles the top hinge on the doorjamb, the middle hinge opening straddles the middle hinge, and the bottom hinge opening straddles the bottom hinge, keeping in mind that the opening is $\frac{1}{16}$″ **larger** on each side than the hinge to accommodate the router bit/bushing offset.

4. Tighten all the wing nuts/thumbscrews.
5. Place the **top** end of the template on the **bottom** end of the door edge, aligning the notch on the gauge with the top of the door, and tack the template to the edge of the door.
6. Rout the hinge mortises into the edge of the door.

Note: *For best results, rout in the clockwise direction. Proceed with caution when using the mortising bit and bearing for shallow cuts, as only a portion of the bearing will be in contact with the template.*

7. Pry under the flange behind the nail holder to remove the templates from the edge of the door.

Hinges Not Equally Spaced

If the hinges are not equally spaced on an existing doorjamb, you will have to take measurements rather than simply place the templates over the existing hinges, since you will not be able to flip the templates when transferring the set-up from doorjamb to the door. The top measurement will be the distance between the bottom and middle spacer, and the bottom measurement will be the distance between the top and middle spacer.

Accessory

15J76.01 Strike and Latch Plate Template