

DIFFICULTY







Skilled

TIME REQUIREMENT

20 Minutes



Materials Required:

Warning: Do not use any power tools to adjust hinges

- Phillips Screw Driver
- Feeler Gauges (if available)
- Safety glasses and gloves



Safety Precautions:

This activity is appropriate for individuals with an understanding of how to use simple hand tools. Remember to wear eye protection and to make sure that pets and small children are not present when performing these activities.

Instructions:

IMPORTANT: Start adjustment steps only after frame is installed plumb, level, and square, and the hinge anchor screws have been installed so that the hinge leaves and the door frame are securely mounted to the rough opening.

Part 1: Equal Loading of Hinges

1. Close the door panels within the door frame. Using a .020" feeler gauge (if available), inspect each hinge for any gaps between top and bottom of the hinge barrels (Image 1).

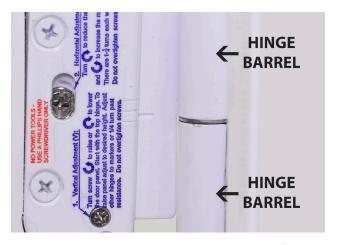


Image 1

2. Hinges with gaps between the top and bottom barrels are not carrying any of the panel load. Each hinge will need to be adjusted to completely eliminate the gap.

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3. Open the door panel(s) to gain access to the hinge adjustment screws. Open the middle hinge gap to the maximum and begin with closing the hinge gap at the upper and lower hinges first. Adjust the hinge gap with the vertical gap adjustment screw (Image 2). Close gap by using a #2 Phillips head screwdriver to rotate the adjustment screw over the top towards the "V" indicator. Each full turn equals about .008". Once the upper and lower hinge gaps have been sufficiently closed, close the middle hinge gap.



Image 2

- 4. Once the hinge barrels are touching rotate the Vertical Adjustment screw up to one additional turn to fully load the hinge, making sure that loading the hinge doesn't create an additional gap on any of the other hinges.
- 5. Repeat steps until all the gaps between the hinge barrels have been eliminated.

Part 2: Vertical Gap Adjustment

- 1. With door panel(s) closed, measure the gap between the top of the door panel and frame head and the gap between the bottom of door panel and the frame sill using the feeler gauges (if available). Make sure that the measurements are taken near jambs.
- 2. Subtract the smaller gap from the larger gap and divide that by two to get the amount that the door panel needs to be adjusted.
- 3. Remove panel(s) prior to vertical adjustment so that there isn't any unnecessary stress put on any one of the hinges during that adjustment.
- 4. Adjust the hinge gap with the vertical gap adjustment screw (Image 2). Raise the panel by using a #2 Phillips head screwdriver to rotate the adjustment screw over the top towards the

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"V" indicator and rotating the opposite direction to lower the panel. It takes approximately 15 full revolutions to move from tick mark to tick mark. Each tick mark is roughly 1/8" from the other.

5. Rehang panel(s) and repeat steps until the gap between the top of the door panel and frame head and the gap between the bottom of door panel and frame sill are equal.

Part 3: Horizontal Gap Adjustment

- 1. Measure the gaps above and below each hinge between the door panel(s) and the frame jamb using the feeler gauges (See Picture Set 4). If the each gap is .090" ± .060" and the door panel operates without clashing, no further adjustment is needed.
- 2. If hinges require horizontal adjustment, open the door panel and remove it from the frame prior to adjustment.
- 3. Once panel is off, use the horizontal gap adjustment screw which adjusts the gap between the panel and the jamb: clockwise closes the gap while counterclockwise opens the gap (image 3). Adjustment range achieved in approximately 3 revolutions where each revolution moves the hinge roughly 0.060".
- 4. Rehang panel(s) and check horizontal gaps explained in Step 1. If the gaps are within the specified range, open and close the door panel(s) a few times to make sure that there is no clashing.
- 5. Repeat steps until the gaps between the door panel(s) and the frame are within the specified range and the adjusted door panel is not clashing with the rest of the door.



Image 3