



# **Additional** Hardware:

5432

**HD Panel Master** 

**Owners Manual** 

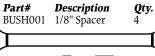
U.S. Patent #5,960,843

Please Read Carefully!

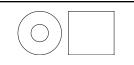
Parts listed below are not shown in the hardware drawings. Refer to photos in the instructions:

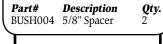
	DescQty
5432A	Fence Plate 2
5432B	Base 1
4406	6" Ultra Track2
6305	Toggle Clamps 2



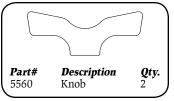


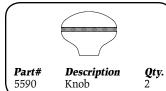






These spacers are for use with Standard Door Templates ONLY

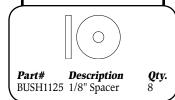




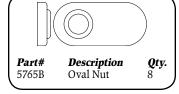
Qty.







These spacers are for use with HD Door Templates **ONLY** 



Description

Description

1/2" Screw

3/8" Screw

Qty.

Qty.

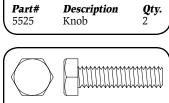
**Q**ty.

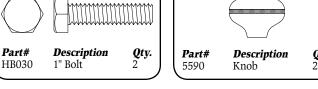
Part#

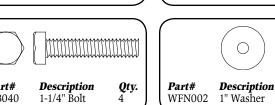
MP375

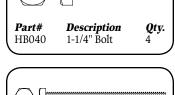
Part#

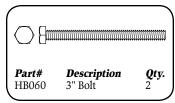
MF005

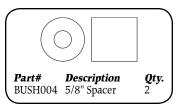






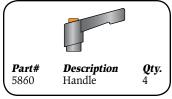






Description

BUSH5038 3/8" Spacer



#### **BEFORE BEGINNING**

Identify and verify that you have all the parts listed. The HD Panel Master was designed to be used with Woodhaven Standard or HD Door Templates. Read the instructions carefully at least once before beginning.

### **ASSEMBLY**

Insert two 1/2" screws (MF005) thru the countersunk holes in each Fence Plate (5432A) and start an oval nut (5765B - smooth side first), on each screw. Slide a 6" Ultra Track (4406) on the oval nuts. Center the track end-to-end on the plate, position the plate and track so the edges are flush and tighten the screws. See fig. 1.

Attach the fences to the base (5432B). Install two 1-1/4" bolts (HB040), one in each slot, thru the bottom of the base into the recessed slot. Install a fence on each pair of bolts, followed by a 3/8" spacer (BUSH5038) and a handle (5860). Slide the fences as far apart from each other as possible on the base and tighten the handles. See fig. 2.

There may be two clamp spindles included with each Toggle Clamp (6305), but you will only use the longer of the two spindles. For quicker spindle adjustments, replace the top nut on the spindle with the thumb nut (5525). See fig. 3.

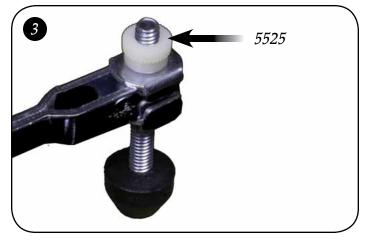
Insert two 3/8" screws (MP375) thru the two front holes of each toggle clamp base and start an oval nut (5765B - raised side first) on the end of each screw. Slide the toggle clamp on the track, with the oval nuts engaged in the T-slot of the track. Position the clamps where desired (center on track for now) and tighten the screws. See fig. 4.

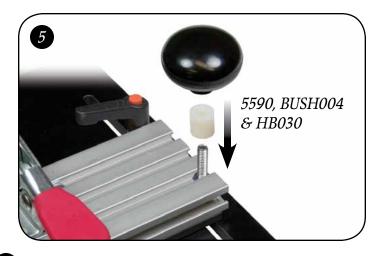
Insert a 5/8" spacer (BUSH004) on the two 1" bolts (HB030) and start a knob (5590) on the end of each bolt. Slide the bolt head into a T-slot of the fence, positioning the knob where desired for best control, and tighten. See fig. 5.

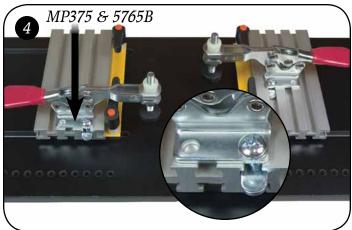
Select the panel template you wish to use from the Standard or HD Door Template set. You won't use the fences that came with the Standard Door Template set when using those templates with the HD Frame Master.









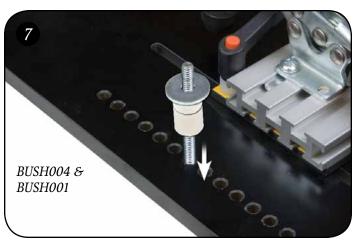


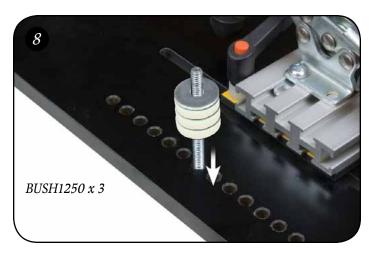
Center the template side-to-side on the base. Install two 3" bolts (*HB060*) thru the recessed slot in the bottom of the base, in the holes that line up with the holes in the template. *See fig. 6*.

For Standard Door Templates: Place one 5/8" spacer (BUSH004) on each bolt. The height of the spacer stack on each bolt should be slightly more then the thickness of the panel. Use the 1/8" & 1/4" spacers (BUSH001 & BUSH002 - extras included) as needed to achieve this height. For example, if you're panels are 5/8" thick, install a 1/8" spacer on top of each 5/8" spacer for a total height of 3/4". Place a 1" washer (WFN002) on each bolt/spacer stack. Install the template on the bolts and another 1" washer on each bolt, on top of the template. Place a knob (5560) on each bolt and tighten. See fig. 7.

For HD Door Templates: To start, place three 1/4" spacers (BUSH1250 - extras included) on each bolt. The height of the spacer stack on each bolt should be more then the thickness of the panel. Use whatever 1/4" or 1/8" spacers (BUSH1125 - extras included) are necessary to achieve this height. For example, if you're using a 5/8" thick panel, the three 1/4" spacers provide a height of 3/4" to clear the panel. Next, make sure the template clears the shaper cutter (flush or raised panel cutter) and that the shaper cutter bearing is riding on the template. Stack as many additional spacers as necessary to achieve the best template height for your cutter and bearing. Place a 1" washer (WFN002) on each bolt/spacer stack. Install the template on the bolts and another 1" washer on each bolt, on top of the template. Place a knob (5560) on each bolt and tighten. See fig. 8.







#### USING THE HD PANEL MASTER

Mark a centerline on your panel and cut one end square. Insert the panel between the template and the base of the HD Panel Master. Lay the Panel Master on a bench, clamp a 3/4" thick piece of scrap to your bench and butt the back edge of the HD Panel Master and the square end of the panel up against it. This serves to square the fences/panel on the base. Slide the fences up against each side of the panel, center the panel to the template and tighten the fence knobs. *See fig. 9.* 

Place the panel in the Panel Master at the desired finished length. Trace the outline of the template on the panel, remove the panel and cut it to shape, staying 1/8" or less from the line. *See fig. 10* 

### FLUSH TRIM PANEL

Clamp the panel in the HD Panel Master, hold the handles and flush trim the panel to shape using a flush trim cutter on your router or shaper. *See fig. 11.* 

Next operation is cutting the raised panel, and you can use the HD Panel Master for that too. Install the cutter and adjust the height, taking into account the 1/2" thickness of the base. You may want to set up an extra machine so you can switch between flush trimming and panel raising operations quickly.

#### FOR ROUTER PANEL RAISING

The door template (you can use either Standard or HD Door Templates) can be removed (not mandatory) as the bearing will follow the panel, not the template. It's important that the panel project past the edge of the base approximately 1-3/4" so there is no risk of the router bit striking the base. This is the automatic position of the panel if using the larger HD Door Templates, but not the smaller Standard Door Templates. Make sure you have at least 3/4" of the bit shank in the router. If extra bit height is needed, you may need to use a router lift or collet extension. *See fig. 12.* 

## FOR SHAPER PANEL RAISING

DO NOT use Standard Door Templates with a shaper!! If possible (depends on raised panel cutter & bearing set up), keep the HD Door Template on the HD Panel Master for the raised panel cut. The templates are extra long so the bearing can make contact with the template before the cutter makes contact with the panel, allowing the template to act as a starting pin. Make sure the template is in line with the raised panel cutter bearing. Clamp the panel in the HD Panel Master with the toggle clamps, hold the the handles and cut the raised panel using the raised panel cutter on your shaper. See cover image.

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