

MLCS Manual for #9767 Horizontal "Flatbed" Router Table





General Guidelines, Tips, and Safety:

- Always wear your safety glasses, hearing and dust protection.
- Read and understand the instructions for both the machinery and cutters before starting to work.
- Use safety devices such as pushblocks, featherboards or bit guards/blade guards where appropriate.
- As a general rule of safety, keep your fingers and hands **at least** one hand-length from any cutting blade.
- When using the router, pay particular attention to the condition of the collet. Frequently, bit breakage and poor performance can be directly attributed to a worn or damaged router collet.
- Always inspect a router bit before use. Make sure the wax is removed from the cutting blades and bearing. Check for chips in the carbide, frozen bearings, worn shaft, and be sure set screws and nuts are tight in bit assemblies.
- Always change bits or make adjustments with the router unplugged.
- Make sure the router bit shaft is set at least 3/4" into the collet, but <u>not</u> bottomed out. The end of the shank should be about 1/16" up from the bottom of the collet.
- Two light passes cut more smoothly and easily than one heavy pass. Proper bit RPM is important, especially with larger, heavier bits. In general, burning of the wood or excessive vibration can be corrected with a slower rpm and a lighter cutting pass.
- Use a variable speed router or speed control to reduce the speeds when cutting large diameter bits, as follows: 1/4" to 2" Dia. --- 18,000 RPM; 2-1/8" to 2-1/2" Dia.--- 16,000 RPM; 2-5/8" to 3-1/2" Dia. --- 12,000 RPM. Bits with a carbide height greater than 1-1/2" should also be run at 16,000 RPM or less and it is EXTREMELY IMPORTANT to make multiple passes with these router bits.
- Be aware that some cleaning solvents can dissolve the lubricating oil in bit bearings. Either remove the bearing or re-oil it after cleaning a bit.
- Failure to follow all safety instructions and warnings can result in serious bodily injury.
- In no event shall we be liable for death, injuries to persons or property arising from use of our products.
- Defects from misuse, abuse, negligence, or alterations are not covered by the warranty. Our liability is limited to replacement or refund of the product.



Safety First: After assembly of the table, secure the table to your work surface before using, as the table with the router mounted will be weighted toward the back and could tip over backwards. We recommend either screwing it to your work surface or using clamps. To ensure the safest operation, always make sure the router bit is not positioned above your stock and feed your stock from left to right into the rotation of the cutter.

Assembly of the Table Base Unit

1.) Start the assembly by installing the (2) vertical table supports (part#23) to the router table base (part #24) using (8) screws (part #22) and flat washers. The table base should have the countersunk holes on the bottom. The vertical table supports should have the threaded inserts facing the rear of the table.

2.) Using the (6) M6 x 1.0 x 50mm long hex bolts (#14) and flat washers, attach the left and right aluminum columns (part #'s 10 &18) to the vertical supports.

Preparing the Router Mounting Plate

3.) Center your router base over the hole in the router mounting plate and mark the mounting hole locations for your router. (Note: It may be helpful to remove the base plate from the router and use it as a marking/drilling guide). Drill and countersink the holes for the router. The countersinks for router mounting holes must be drilled on the face of the plate that is opposite of the face the router will be mounted to.

Installing the Router Plate/Drive Block to the Top Support

4.) Make sure you have completed the instructions for marking and drilling the Router Mounting Plate (#25) to accept your router. The aluminum drive block should already come attached, from the factory, to the acrylic mounting plate by (2) M6 x 1.0 x 13mm machine screws (part #16), flat washers and 6mm hex nuts.

5.) Check the plate to see if it is flush with the aluminum columns. Place a washer between the column and acrylic plate to act as a shim if needed. *If your router plate is still not flush with the aluminum extrusion, a few pieces of masking or slick tape may be applied to the back side of the plate where the plate contacts the extrusions or shimming washers to shim the plate flush.*

6.) Once you have the router mounting plate adjusted to be flush with the aluminum columns, screw the drive rod (part #3) through the hex nut in the aluminum top support (part #5), with the smooth turned down section facing the top of the top support (the screws that secure the hex nut in the top support are on the bottom side of the top support).



Thread (2) 3/4" hex nuts (part #7) onto the drive rod. Slide the aluminum drive block (part #8) on the drive rod with the four plate mounting screw holes facing upward. Finally, place the 3/4" hex nut with the nylon locking insert on the bottom of the drive rod. Tighten the two hex nuts that are above the drive block against each other as close to the drive block as possible while still allowing the drive block to spin freely around the drive rod.

7.) This next step is easier to accomplish with the table laid backward on the work surface with the aluminum columns lying flat on the work surface to keep the bolts from sliding down the track. Slide four M8 hex bolts (part #17) into the t-slot on each aluminum column. Once you have all four bolts aligned with the holes in the router mounting plate, secure the router mounting plate (part #25) on the Horizontal Router Table with the four M8 locking knobs (part #20). Do not tighten these at this time. You can return the table to the upright position.

Attaching the Router Plate Height Adjusting Mechanism to the Aluminum Columns

8.) Slide the plate/drive rod and top support (part #5) into position so the holes in the top support are aligned with the threaded holes in the top of the aluminum columns. Use the (2) M6 X 1.0 x 35mm hex bolts (part #6) and flat washers to secure the top support to the columns. Do not over-tighten as you may bend the aluminum parts. Continue by installing the router table top (part #21) to the vertical table supports (part #23) using eight screws and flat washers (part #22). The countersunk holes will be facing up on the router tabletop.

Attaching the Extension Fences

9.) Attach the extension fences (part #'s 13 & 19) to the tabletop using (4) screws (parts #22) and flat washers. Complete this step by attaching the top of the extension fences (part #'s 13 & 19) to the aluminum columns using screws (part #12) and screwing through the angle support brackets (part #11)

Assembly of the Handle and Height Wheel

10.) The handle (part #2) has two flattened sides on the stud that is protruding from the bottom of the handle. These will allow you to tighten the handle to the height wheel. See figure 1.



(figure 1)



11.) Use a 10mm open-end wrench to secure the handle to the height wheel. The handle will be able to rotate freely even when the stud is secured to the height wheel. See figure 2.



(figure 2)

12.) Use an open-ended wrench to secure the handle to the height wheel.

13.) The handle (part #2) should now be able to turn freely.

Attaching the Handle to the Drive Rod

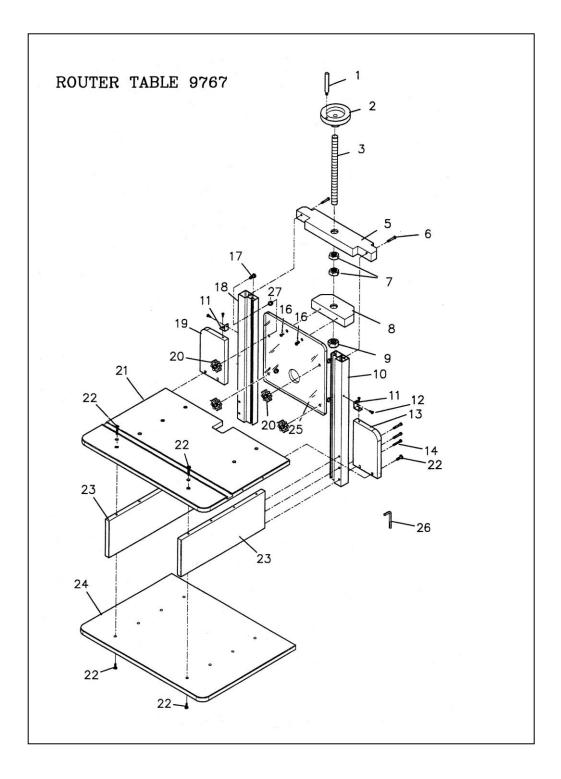
14.) Place Handle (part #1) and Height Wheel (part # 2) assembly onto the drive rod (part #3) so that the allen set screw is oriented towards the flat spot on the drive rod. Secure by tightening the setscrew.

You may now install your router on the Horizontal Table after completing the full assembly instructions.



Router Table 9767 Part List			
REF NO.	PART NAME	QTY	NOTE
1	Handle	1	
2	Height wheel	1	
3	Drive rod (3/4" x 16tpi)	1	
5	Top support	1	
6	Hex head bolt (M6 x 1 x 35mm) plus Flat Washer	2	
7	Hex nut (3/4" x 16tpi)	2	
8	Aluminum Drive block	1	
9	Lock nut (M18 x 1.5mm)	1	
10	Aluminum column (Right)	1	
11	Angle support bracket	2	
12	Screws (M4 x 12mm)	4	
13	Extension fence (right)	1	
14	Hex head bolt (M6 x 1 x 50mm) plus Flat Washer	6	
16	Machine Screw (M6 x 13mm) w/Washer and Nut	2	
17	Hex head bolt (M8 x 1.25 x 25mm)	4	
18	Aluminum column (left)	1	
19	Extension fence (left)	1	
20	Lock knob (M8 x 1.25mm)	4	
21	Router table top, Miter Track & Threaded Inserts	1	
22	Screws (M6 x 1 x 30mm) & 6mm Flat Washers	20	
23	Vertical table support	2	
24	Router table base	1	
25	Acrylic Router Mounting Plate	1	
26	Hex wrench (Accessory)	1	

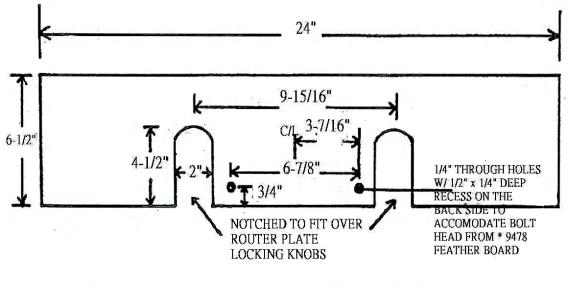




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FEATHER BOARD HOLDER DESIGNED TO BE CLAMPED ON TO #9767 HORIZONTAL "FLATBED" ROUTER TABLE



MATERIAL NEEDED: 24" x 6-1/2" x 3/4" MATERIAL FOR FEATHER BOARD MOUNT

TOOLS NEEDED: 1/4" x 1/2" DRILL OR FORSTNER BITS AND DRILL JIG SAW ACCESSORIES NEEDED: (1) MLCS #9478 FEATHER BOARD (2) MINIMUM 1-1/2" CAPACITY CLAMPS TO HOLD THIS ASSEMBLY TO THE HORIZONTAL "FLATBED " ROUTER TABLE



Making Raised Panels on the HORIZONTAL ROUTER TABLE #9767

Note: The Horizontal Router Table cannot be used to make cathedral doors.

1) Start by cutting your panel to its finished size. You may choose to allow a small 1/16" to 1/8" gap inside the rail & stile for seasonal wood movement.

2) After you have cut your panel to its finished dimension, install a vertical raised panel bit in your router.

3) Adjust the router bit depth so the router bit will cut a 3/8" depth flat cut before the profile cut starts. Position the router plate height so that the router bit's edge is just above the surface of the tabletop. Turn the locking knobs to secure the router and plate in place.

4) Turn on the router and working from left to right, make the first pass on the end grain of the panel. Cut the end grain first so that any tear out can be cleaned up when you cut with the grain.

5) After cutting the end grain on the panel, cut the two remaining edges (with grain cuts).

6) Turn off the router and wait for the router bit to come to a complete stop.

7) Loosen the two locking knobs on the router plate and adjust the bit up a small amount. Lock the knobs to secure the plate and make your second pass on the panel.

8) Repeat until you have a 1/4" tongue to fit into the slot on the rails and stiles. *TIP*: Taking many shallow passes will yield a better cut than trying to cut too aggressively which may lead to a poor cut quality or excessive tear-out.

Remember Safety Rules: Wear proper eye protection, keep hands away from router bit and never rout with the router bit above your workpiece – always keep your workpiece above the router bit.