

# Mast<sup>®</sup>Fence

## User Manual

Model #04001



Thank you for choosing this product from JessEm Tool Company. We appreciate your support and hope that our product serves you well. This product is designed to provide many years of reliable service provided it is used as intended and taken care of.

This user manual will assist you in assembly and general operation of this product. It is not our intent to teach you about woodworking. It is assumed that you are an experienced woodworker with the basic skills and experience necessary to use this product safely. If after reading the following instructions, if you are unsure or uncomfortable about safely using this product we urge you to seek additional information through widely available woodworking books or classes.

# JessEm

## Tool Company

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### IMPORTANT!

Read and understand the contents of this manual before assembly or operation of this product.

As part of our Continuous Product Improvement Policy, JessEm products are always advancing in design and function. Therefore there may be differences between what is shown in our catalogs, website or at retail display and what is sold at time of purchase. We reserve the right to make positive changes to our products at our discretion.

### Suggested Router Bit Speeds

Bit Diameter	Max. Speed
1" (25mm)	24,000 RPM
1-1/4" - 2" (30-50mm)	18,000 RPM
2-1/4" - 2-1/2" (55-65mm)	16,000 RPM
3" - 3-1/2" (75-90mm)	12,000 RPM

### JESSEM TOOL LIMITED WARRANTY

All JessEm products are warranted to be free from defects in material and workmanship. JessEm will repair or replace any product which upon inspection proves to be defective for a period of (1) year from dated receipt and proof of purchase. All warranty claims should be made direct to JessEm Tool Company. Contact JessEm for a warranty claim return authorization and instructions to proceed. The consumer is responsible for shipping costs to return product to JessEm Tool Company. We will repair or replace the product at our discretion and JessEm Tool will return shipment to you at no charge.

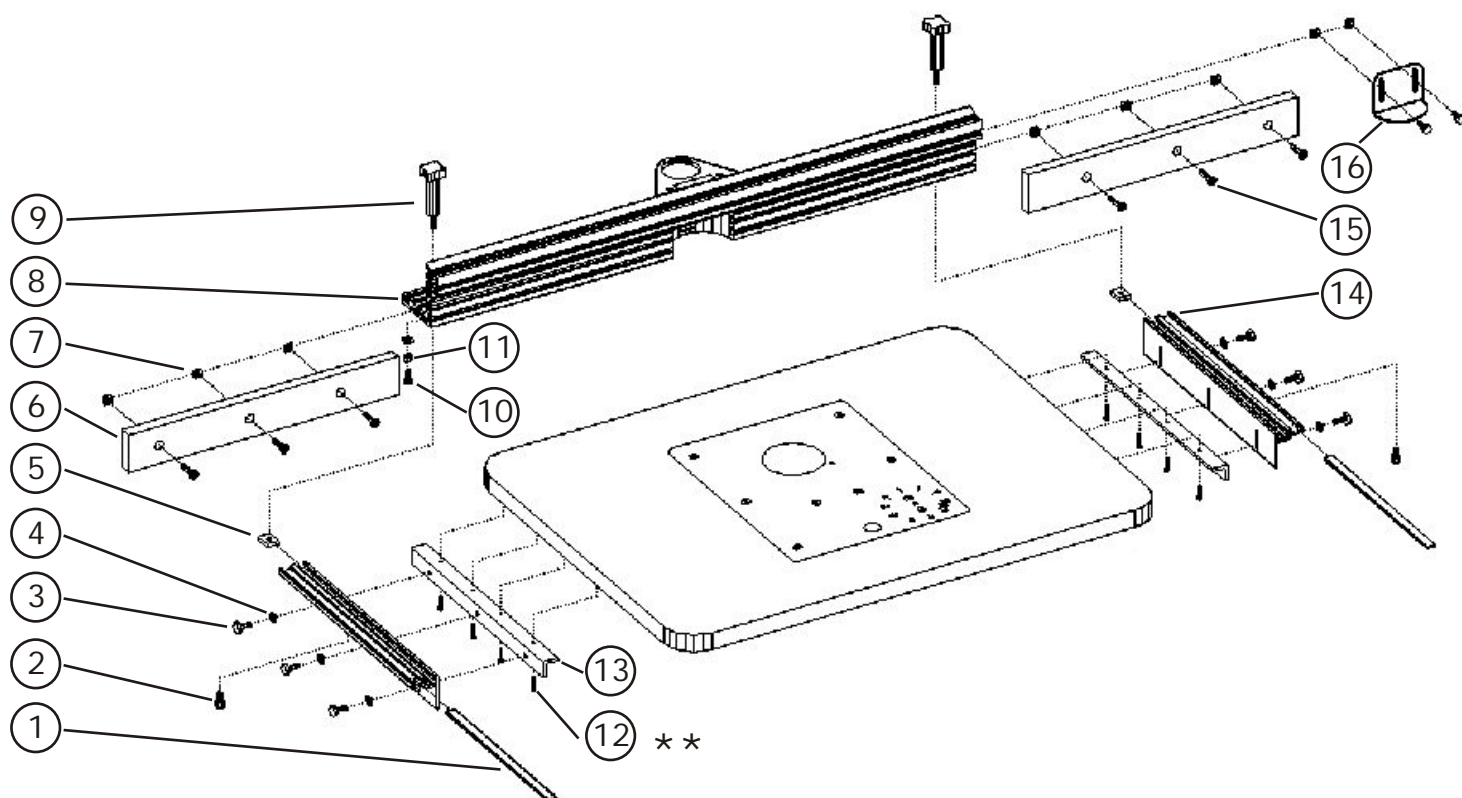
### WARRANTY LIMITATIONS

This warranty does not cover:

- Repairs or alterations made or attempted by anyone other than JessEm Tool Company or an authorized JessEm service professional.
- Normal wear and tear
- Abuse, misuse or neglect.
- Improper care or maintenance.
- Continued use after partial failure.
- Products that have been modified in any way.
- Products used with improper accessories.
- Premature thread wear due to adjusting height with electric or cordless drill.

RTD10000131AA

## MAST-R-FENCE PARTS DIAGRAM



\*\* If you are mounting the Mast-R-Fence to a JessEm phenolic table top use the F0048 screws item (12A) listed below. We provide both these and wood screws which are supplied to be used for a custom table application.

ITEM #	PART #	DESCRIPTION	QTY.
1	E0033	1/8" x 5/8" x 11-3/4" Aluminum Scale	2
2	M0028	1/4"-20 x 1/2" Stud w/Knurled Knob	4
3	F0020	1/4"-20 x 3/4" Hex Head Cap Screw	6
4	F0037	1/4" Flat Washer	6
5	S0014	1/4" x 3/4" x 1-1/2" Fence T-Nut	2
6	M0054	Sub-Fence - Phenolic	2
7	F0028	1/4" Square Nuts	14
8	E0036	Fence Frame	1
9	M0026	Extension Knobs	2
10	F0060	1/4" x 5/8" Phillips Head Bolt	1
11	F0062	Nylon Spacer 1/2"	1
12	F0016	#6 x 3/4" Wood Screw	8
12(A)	F0048	10-24 x 5/8" Socket Head Cap Screw	8
13	E0034	Track Mounting Angle	2
14	E0035	Fence Track	2
15	F0005	1/4"-20 x 1" Flat Head Cap Screw	6
16	M0040	Guard	1

## IMPORTANT SAFETY PRECAUTIONS

- Before operating any machinery or power tool, read and understand all safety instructions in the owner's manual for the tool or machine.
- If you do not have a manual, contact the manufacturer and obtain one before using any tool or machine.
- Always wear eye protection in compliance with ANSI safety standards when operating any power tools or machinery.
- Always use proper guards and safety devices when operating power tools and machinery.
- Carefully check router bits before each use. Do not use if damage or defect is suspected.
- Do not exceed the recommended RPM for any router bit.
- Do not wear loose clothing or jewelry that may catch on tools, machinery or equipment.
- Unplug the tool or machine when mounting or making any adjustments to mechanical performance.

## ROUTING SAFETY PRECAUTIONS

- Always make sure the fence on your router table is locked firmly into position before each use.
- Never force the bit or overload the router beyond the expectations of the tool.
- Be sure that at least 3/4 of the shank length is inserted securely in the router collet.
- Never bottom out the bit in the collet. Allow 1/8" clearance between bottom of shank and bottom of collet.
- Always rout in two or more passes when large amounts of stock must be removed.
- Use reduced RPM speeds for larger diameter router bits.

## TOOLS REQUIRED FOR ASSEMBLY:

Phillips screw driver or #3 square drive

7/16" wrench or socket

If you are not mounting to a JessEm table top you will also need:

3/16" Drill Bit

1/16" Drill Bit

Pencil

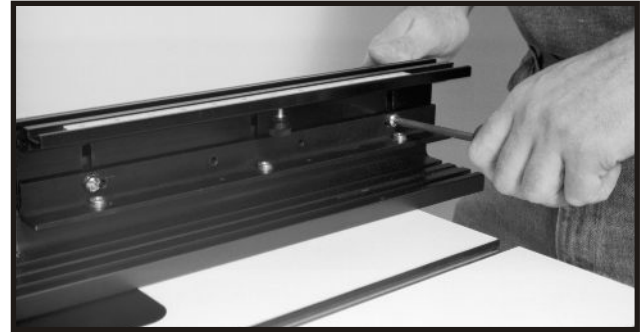


FIG. 1

## ASSEMBLING THE FENCE TRACKS

1. Using a phillips or square drive screw driver remove the four 1/4"-20 bolts that are used to attach the fence tracks to the back side of the fence for packaging/shipping. Once these bolts are removed put them aside as you will no longer need them for future assembly.



FIG. 2

2. Take one of the fence tracks (Part #14 - shown in the parts list diagram page 2) and one of the track mounting angle (Part #13) and align the three 1/4" threaded holes in the angle to the slots on the fence track. Take one of the 1/4"-20 x 3/4" hex head bolts and place one 1/4" flat washer (Part #4) over the bolt and thread the bolt with washer through the slotted hole and into the threaded hole in the fence bracket and hand tighten to allow some movement for final adjustment after it is mounted to the table. Repeat step 2 for assembling the second fence track and track mounting angle.

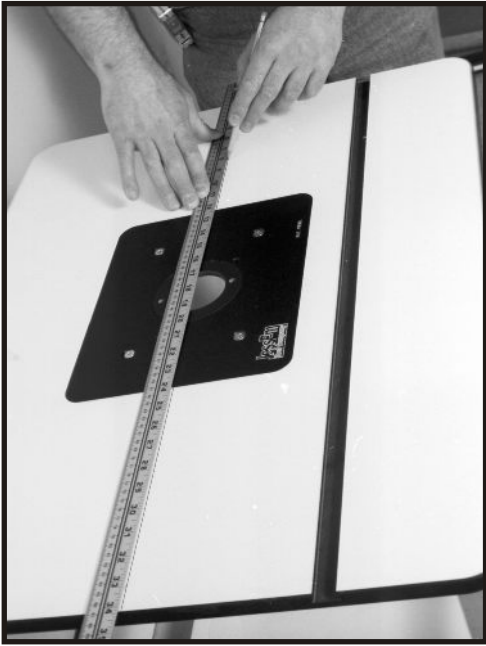


FIG. 3

### MOUNTING THE TRACKS TO THE TABLE

IF YOU ARE MOUNTING THE FENCE TO A JESSEM TABLE TOP PROCEED TO STEP 7A.

3. Measure the distance from the front edge of your table to the center of the bit hole in the table top. Transfer a mark the same distanced on both the left and right edges of the table top. Then draw a center line across the top of the table from one side to the other (Fig. #3).



FIG. 4

4. From the center line you drew, come three inches toward the front of the table and mark a small line on both the left and right sides of the table (Fig. #4).



FIG. 5

5. Take one of the fence track assemblies and line it up with the mark you made in step 4. Make a mark on the underside of the table top to locate the same position on the bottom of the table (Fig. 5).



FIG. 6

6. Flip the table top over and position the fence bracket upside down and line up the front edge with the mark you made in step 5. Using a pencil or a 3/16" diameter drill bit mark the 4 holes for mounting the fence bracket. Pre-drill the holes using a 1/16" diameter drill bit and be sure you don't drill through the table top surface (Fig. 6).



7. Using the #6 x 3/4" Wood Screws (Part #12) secure the fence track assembly to the table.

Repeat steps 5 thru 7 for the second fence bracket.

#### FOR JESSEM TABLE TOP

7A. If you are mounting the fence to a JessEm table top the top is already pre-drilled for the fence mounting angle brackets. With the table upside down position the left and right fence track assemblies and attach to the table with the 10-24 x 5/8" socket head cap screws (Part #12A) and proceed to step 8.

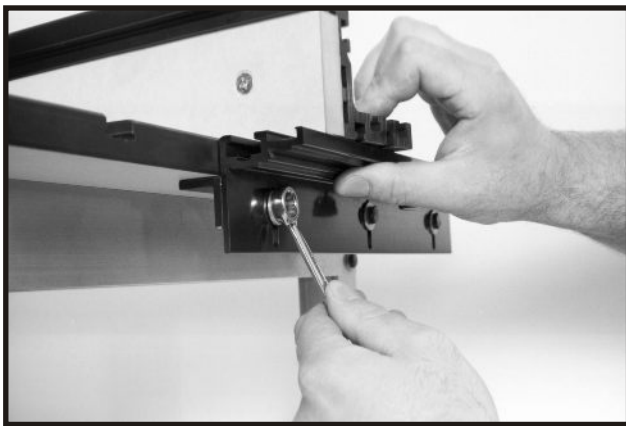


FIG. 7

#### LEVELING THE FENCE TRACK

8. Place the fence on the table top in it's upright position and allow it to hang over the table edge and lie across the front end of the fence track. Raise the fence track assembly so that it is positioned flush to the bottom of the fence as it rests on the table top. With a 7/16" wrench or socket tighten the front bolt of the fence assembly (Fig. 7). Move the fence back and use it to position the rear end of the bracket in the same way and tighten the rear bolt. Then tighten the center bolt to complete the leveling of the fence track.

Repeat step 8 to level the fence track on the other side of the table.



FIG. 8

#### MOUNTING THE FENCE TO THE TRACKS

9. Slide the 3/4" x 1-1/2" rectangular T-nut for the extension knob (Part #5) into the T-slot next to the scales on the fence track (Fig. 8). The extension knobs (Part #9) will thread into these nuts to hold the fence in position. To do so, position the end of the fence over the track and look directly down through the open slot in the base of the fence frame and visually line up the hole in the rectangular T-nut. Then insert the threaded tip of the extension knob through the slot fence and into the threaded hole in the T-nut (Fig. 9). Twisting the lock-down knob clockwise will fasten the fence to the tracks and hold the fence firmly in position.

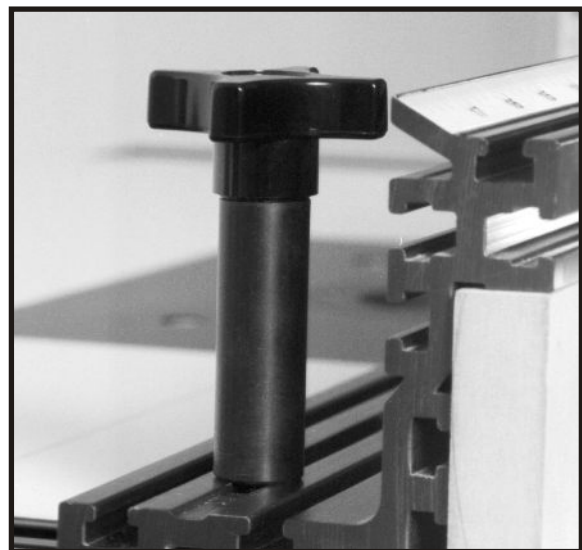


FIG. 9

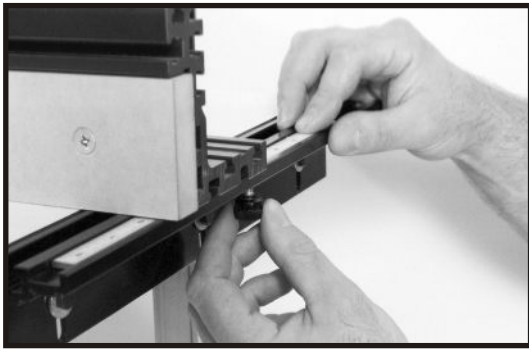


FIG. 10

#### ADJUSTING THE SCALES ON THE TRACKS

10. The scales on the fence tracks are adjustable for added versatility in positioning the fence. To adjust the scales loosen the knurled nut underneath the fence track adjust the scale and re-tighten the nut (Fig. 10). You can use the scales as a zero reference point by adjusting the scales to "0" once your fence is set up in your desired position relevant to the router bit you are using.

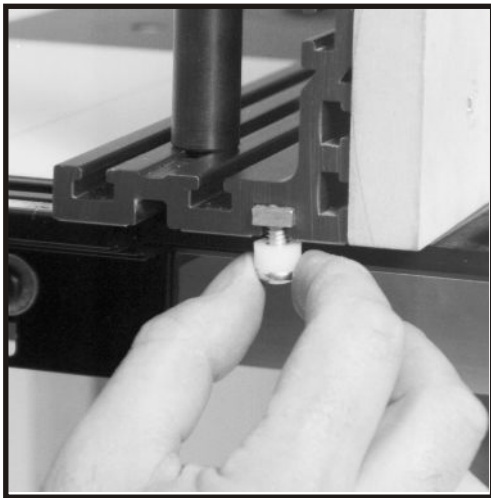


FIG. 11

#### CENTERING THE FENCE TO THE TABLE

11. The Mast-R-Fence offers a unique means of keeping the fence centered on the table with a nylon bushing. Take the 1/4"-20 x 5/8" bolt (Part #10) and insert into the 1/2" nylon spacer (Part #11) and thread on one of the square 1/4-20 nuts (Part #7). Do not thread the square nut on all the way

12. Slide the square nut into the front T-slot under the left end of the fence (Fig. 11). Leave the assembly loose and approximately 1" in from the end of the fence.

13. Slide the fence with the nylon spacer attached into the T-slot on the left fence track (Fig. 12). The nylon spacer should be slightly loose to allow for some movement.

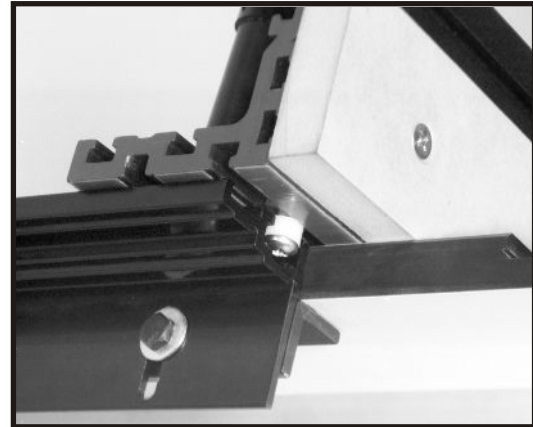


FIG. 12

14. Now slide the fence back and center the fence left to right with the center of the bit opening. Make sure it is parallel with the front edge of the table or miter track.

15. Now slide the fence, keeping it square (use the scales on the fence track to ensure you are square) to the front of the table, just until the nylon spacer comes out of the track. Then tighten the bolt on the spacer being very careful not to change its position (Fig. 13).

16. Slide the fence back to the center of the table. Re-check to see if the fence is centered on the table. If not repeat until you achieve your desired result.

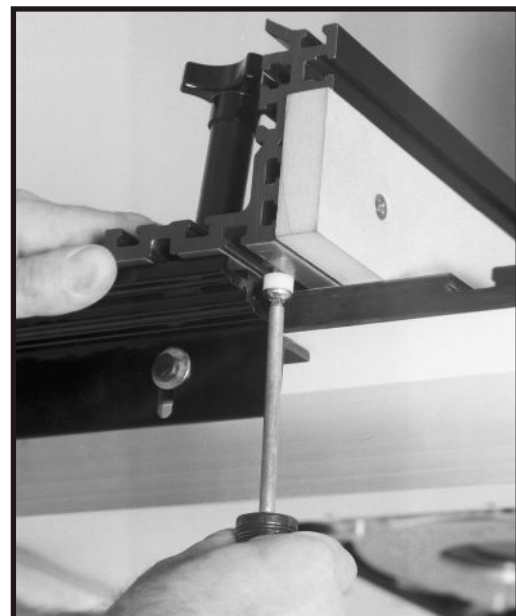


FIG. 13

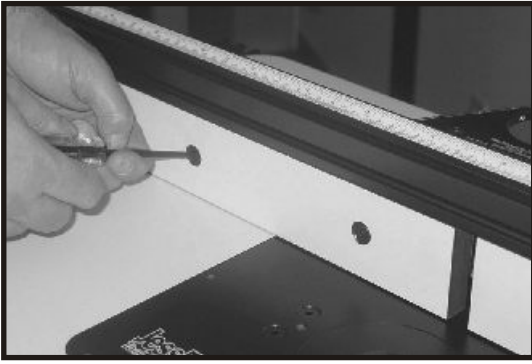


FIG. 14

#### INSTALLING THE JOINTING SHIM BEHIND THE OUTFEED SUBFENCE.

17. Take the hex shape ball driver and loosen the machine screws on the left side subfence. Then slide the left subfence completely off the left end of the fence.



FIG. 15

18. Once removed from the fence frame take off all three of the 1/4" square retaining nuts and set aside. Take either the 1/32" or 1/16" thick shim and line up the three holes in the shim with the three machine screws protruding out the backside of the subfence.

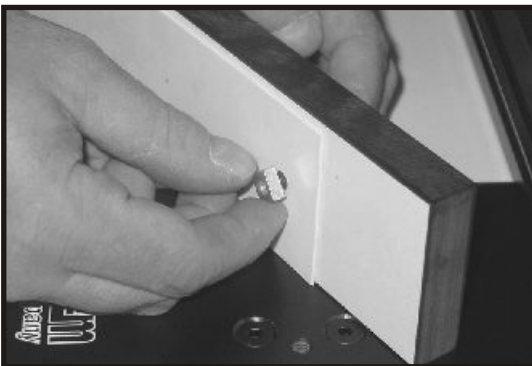


FIG. 16

19. Thread the three 1/4" square nuts onto the machine screws just until the bolt tip is flush to the outside of the nut.

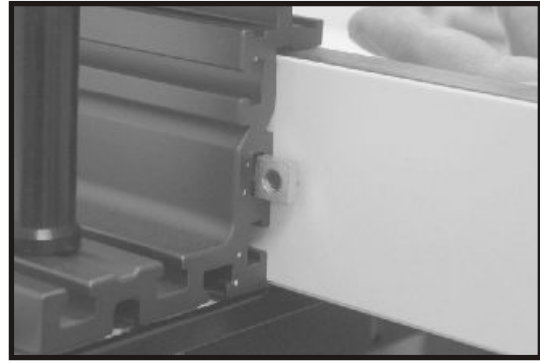


FIG. 17

20. With the shim mounted to the back side of the subfence and the square nuts threaded onto the three machine screws, line up each square nut and feed them one at a time into the T-slot on the inside back of the fence frame (Fig. 17). When all three nuts are in the T-slot slide the subfence into position and tighten the three machine screws with the ball driver to complete the installation of the shim.

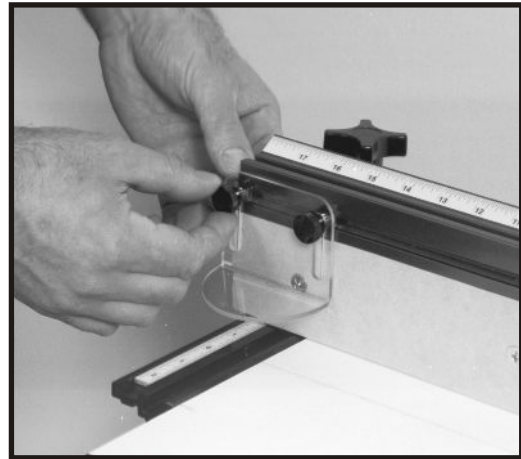


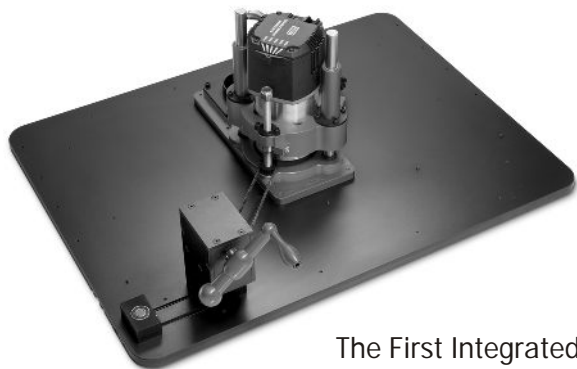
FIG. 18

#### ATTACHING THE ROUTER BIT GUARD

21. Take the clear polycarbonate guard (Part #16) and two of the black knurled knobs (Part #2) and two 1/4" square nuts (Part #7). Insert each knob through each slot in the guard and thread a square nut onto each bolt end.

22. Line up the nut on the guard assembly and slide each nut into the T-slot starting from the end of the fence (Fig. 18). Then slide the guard to the center of the fence and adjust the guard slightly higher than and above the router bit. Be sure the guard clears the bit. Adjust and tighten securely before each use and after all bit changes.

# Mast<sup>R</sup>Lift Excel



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# Mite<sup>R</sup>Slide

MODEL 06001



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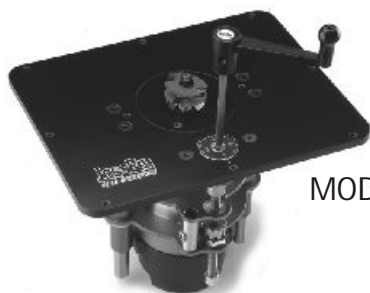
# Mast<sup>R</sup>Fence



MODEL 04001

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Of Aluminim Frame  
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# Rout<sup>R</sup>Lift FX



MODEL 02302

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