

Router Table Operating Instructions and Parts Manual

Part 1 – Mast-R-Lift

- Part 2 Mast-R-Fence
- Part 3 Mast-R-Slide Miter Gauge



Operating Instructions and Parts Manual

Mast-R-Lift

Models: 02101A and 02102A



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Important!!

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

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.

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Model 02101A - Fits Table Opening 9-1/4" x 11-3/4"

Fits Porter Cable 7518/7519 Router Motor

Model 02102A - Fit Table Opening 8-1/4" x 11-3/4"

This unit is for non-JessEm Router Tables

Adapter Collars for Model 02101A

Model 02111 – Fits Porter Cable 690/890, Bosch 1617/1618, DeWalt 610/616/618

Model 02113 (3-1/4" diameter) - Fits Makita 1101

Model 02115 – Fits Hitachi M12VC and KM12VC

Model 02118 - Fits Milwaukee 5615/5616/5619

Shim Kit Model 02116 – Fits Milwaukee 5625

IMPORTANT SAFETY PRECAUTIONS

- Before operating any router, read and understand all safety instructions in the owner's manual that came with the router.
- If you do not have a manual, contact the manufacturer and obtain one before using any power tool.
- Always wear eye protection in compliance with ANSI safety standards when operating any power tool.
- 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 or equipment.
- Unplug the tool or machine when mounting or making any adjustments to mechanical performance.

DO NOT USE A CORDLESS DRILL TO RAISE AND LOWER THE LIFT CARRIAGE. THE AMOUNT OF FRICTION WILL CAUSE PREMATURE WEAR OF THE THREADS.

ROUTER SAFETY PRECAUTIONS

- 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 shank and bottom of collet.
- Always make sure the fence on your router table is locked into position before each use.
- Always rout in two or more passes when large amounts of stock must be removed.
- Use reduced RPM speeds for large diameter bits.

CALIFORNIA PROPOSITION 65 WARNING

This product contains lead known to the State of California to cause cancer or reproductive harm. Components made of brass are known to contain lead. Wash hands after using this product.

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) 3" - 3-1/2" (75-90mm)	16,000 RPM 12,000 RPM

JessEm Tool Company Limited Warranty

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- 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

CONTENTS:

(1) Mast-R-Lift, (1) Height Adjustment Handle, (1) Insert Ring, (1) Insert Ring Wrench, (1) Hex Key, (1) Start Pin

TOOLS REQUIRED FOR ASSEMBLY: 6mm and 8mm Hex Key

TOOLS REQUIRED FOR ADJUSTMENT: 10mm Wrench



Figure 1

Installing the Router

Place the crank handle into the hex hole in the lift's dial on the top plate. Crank the lift carriage up so that it just contacts the O-rings at the top of the carriage shafts. The carriage should be all the way toward the top plate. With a 5/16" hex wrench, loosen the cap screw on the carriage clamp to allow the motor to slide into the carriage assembly (Fig. 1). The Mast-R-Lift will accept the Porter Cable 7518 out of the box. If you are using a smaller diameter router motor insert the adapter collar into the opening.

Before installing the router motor, prop the unit up on blocks of wood (Fig. 2) so the router's collet can extend through the center hole in the top plate. The motor housing must slide all the way through and contact the inside back of the center hole on the plate.

Now slide the router motor into the carriage so the top of the motor housing just makes contact with the inside surface of the center hole in the top plate.

Installing the Router (cont'd)

Rotate the router so that when the final installation is made all router controls will be positioned for convenient access. Then back the motor off approx. 1/16" from contacting the top plate and tighten the cap screw on the carriage assembly.

Installing a JessEm Lift in a Custom Router Table Application

A JessEm router lift is similar to using a router mounting plate. Your table top must have a port machined into the top. JessEm offers solid phenolic router tables tops with pre-machined ports for all JessEm router lifts. If you are installing this Lift in a custom table application you will have to fabricate this opening yourself. JessEm offers a separate template for this operation. See your JessEm distributor for the proper template for your JessEm router lift.



Figure 2



Figure 4

Leveling the Lift to the Table Top

The Mast-R-Lift features 8 drilled and tapped holes around the perimeter of the insert plate with adjustable set screws (Fig. 4). Using the hex wrench included with your lift, turn the set screws in the clockwise direction to raise the insert plate or turn the set screws in the counter clockwise direction to lower the insert plate until the insert plate is level (flush) with the router table surface. Start at one corner of the insert plate and work your way around the perimeter of the insert plate until all set screws have been adjusted properly so that the insert plate does not rest above or below the table surface. Once the insert plate has been leveled properly, please see figure 4 for adjusting the insert plate to the table.

Securing the Mast-R-Lift to the Table

After adjusting the leveling screws and getting the lift plate level and flush with the table top, the Mast-R-Lift can be secured by inserting a bolt through the top of the lift then screwing the bolt into the corresponding corner hole in the table opening using a hex key (Fig. 5). This will secure the lift or plate from moving during operation. Refer to the router lift or plate manual for more details on leveling the lift or plate to the table.



Figure 5

Tab-Loc Insert Rings

The Rout-R-Lift FX comes with one insert ring with a pre-drilled 1-1/2" diameter center hole. Additional ring sets are available with different diameter pre-drilled holes and/or no pre-drilled holes for creating your own custom center hole diameters. See your JessEm distributor for these and other accessories.



Figure 6

1. Place the insert ring into the center hole of the Lift's top plate (Fig. 6).

2. With the insert wrench provided, insert the prongs of the wrench into the corresponding holes in the insert ring and turn the insert ring counter clockwise to tighten.

3. Turn the insert wrench clockwise to loosen and remove the ring. If the insert ring becomes too tight to loosen with hand pressure, a tap clockwise on the insert wrench with a block of wood will loosen it.

Using the Mast-R-Lift

To raise your router, turn the height adjustment handle clockwise. To lower, turn the handle counter-clockwise. Keep in mind that one complete revolution equals 1/16" of change. When your adjustment is complete, remove the handle and place somewhere off the work surface for safety. Refer to the chart below for fractional and decimal adjustments based on amount of revolutions made.

Fraction	Decimal	Number of
		Revolutions
1/64"	0.016"	1/4
1/32"	0.031"	1/2
1/16"	0.062"	1 Revolution
1/8"	0.125"	2
1/4"	0.250"	4
1/2"	0.500"	8

Re-Adjusting the Thread Tensioning

All JessEm Lifts feature our patented thread tensioning design. This feature is why it is not necessary to lock the router into position after setting the cutting height. The design keeps tension on the position wherever you set the height. Thread tension is set at the factory and depending on the amount of use you may have to reset this adjustment periodically. If the bit height ever begins to change (or drop) during use, the thread tensioning likely needs to be reset.

1. Turn the Lift upside down on a table with the threaded height adjustment rod facing you.

2. With an open end wrench, (Fig. 7) loosen the hex nut that is located on the right side of the brass post next to the threaded rod. Then use a hex wrench to back out the set screw that threads through the nut until the brass tensioning collar can be turned.



Figure 7

3. Then route the brass tensioning collar (Fig. 8) with vertical grooves, so it tightens against the rubber washer. Note: A drop of oil on the rubber washer eases the rotation of the brass collar.

4. Make certain the set screw seats in one of the vertical grooves when tightening the brass collar.

5. Tighten the nylon lock nut with the open end wrench again and the adjustment is complete.



Figure 8

02101A Mast-R-Lift Parts List

Item No.	Part No.	Description	Qty	Specification
1	02101A-001	Guide Tube Base	2	
2	02101A-002	Shaft Mtg Block Bolt	9	M6X12
3	02101A-003	Rubber O-ring	2	M29.4X18.6X5.4
4	02101A-004	Bearing Tube	2	
5	02101A-005	Rubber O-ring	2	M25.4X18.6X3.4
6	02101A-006	washer	2	M8.5X25X2.5
7	02101A-007	Screw	2	M8X16
8	02101A-008	Carriage Bolt long	6	M6X63
9	02101A-009	Carriage Tube Retainer	2	
10	02101A-010	Guide Tube	2	
11	02101A-011	Carriage Lock bolt	1	M10X60
12	02101A-012	Clamp pin	1	
13	02101A-013	Carriage Adjusting Lock Nut	2	M10
14	02101A-014	Clamp pin	1	
15	02101A-015	Down carriage plate	1	
16	02101A-016	Carriage Spacer	10	
17	02101A-017	Upper Carriage Plate	1	
18	02101A-018	Retainer Bolt	2	M6X25
19	02101A-019	Carriage bolt short	4	M6X50
20	02101A-020	Retainer	1	
21	02101A-021	Rubber O-ring	3	M32X25.2X3.4
22	02101A-022	Pin	1	
23	02101A-023	Shaft Bushing	1	
24	02101A-024	Backlash Lock Nut	1	M6
25	02101A-025	Backlash set screw	1	M6X25
26	02101A-026	Backlash Pin	1	
27	02101A-027	Rubber Washer	1	
28	02101A-028	Brass Backlash Nut	1	
29	02101A-029	Lead Screw w/spring pin	1	
30	02101A-030	Mtg Block Bolt	4	M6X18
31	02101A-031	Spindle Mounting Block	1	
32	02101A-032	Brass Washer	1	
33	02101A-033	Spring Washer	1	
34	02101A-034	Rubber Washer	1	
35	02101A-035	Height Dial	1	
36	02101A-036	Top Plate	1	
Α	02101A-A	2" Insert Ring	1	
В	02101A-B	Hex Key	1	M6
С	02101A-C	Hex Key	1	M8
D	02101A-D	Starter Pin	1	
Е	02101A-E	Leveling Screw	11	M6X8
F	02101A-F	Crank Handle	1	
G	02101A-G	Wrench	1	





Operating Instructions and Parts Manual

Mast-R-Fence and Rout-R-Fence

Models: 04010 and 04100



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- 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 sank 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.

Suggested Router Bit Speeds

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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

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Tools Required for Assembly

- Phillips screw driver
- 10 mm wrench or socket
- 3/16" Drill Bit*
- 1/16" Drill Bit*

*Note: This is required if you are not mounting to a JessEm table top.

Assembling the Fence Tracks

There are two different types of fence tracks depending upon which model fence you have purchased.

Fence model 04010 (Master Fence) has a table mounting bracket provided with a T-nut slot for mounting the fence to the bracket (Fig 1). When assembling the table mounting bracket to the fence track use a 6mm hex bolt with a flat washer and insert the bolt into the lower slots on the fence track. Screw the T-nuts onto the bolts. Slide the T-nuts into the T-slot on the table mounting bracket. Do not tighten this assembly at this stage.

Fence model 04100 (Router Fence) has a table mounting bracket but does not have the T-slot in the bracket as Model 04010. Mount the table bracket directly to the fence track using 6mm hex bolts and flat washers (Fig. 2). Do not tighten this assembly at this stage.



Figure 1



Figure 2



Figure 3

Mounting the Fence Tracks to the Table

Note: If you are mounting the fence to a JessEm table top proceed to the next page section "For JessEm table".

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



Figure 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).



Figure 5

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



Figure 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). Using the #6 x $\frac{3}{4}$ " wood screws secure the fence track assembly to the table. Repeat all steps for the second fence bracket.

For JessEm Table Top

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 6mm x45mm socket head cap screws for phenolic tables and 4.8mm x 25mm wood screws for MDF tables and proceed to the next step.



Figure 7

Leveling the Fence Track

Place the fence on the table top in its 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 10mm 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 this process for the fence track on the other side of the table.

When tightening the fence track mounting bolt on Model 04010, the T-nut will tighten in the T-track and hold the fence track securely. When tightening the fence track mounting bolt on Model 04100 you will need a 10mm wrench to hold the hex nut while tightening the hex bolt securely.



Figure 8

Mounting the Fence to the Tracks

Slide the ¾" hex T-nut for the extension knob into the T- slot next to the scales on the fence track (Fig. 8). The extension knobs 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.



Figure 9



Figure 10

Adjusting the Fence Track Scales

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. Please note that fence scales are only available on Model 04010. Fence scales are not available for Model 04100.



Figure 11

Centering the Fence to the Table

The Mast-R-Fence offers a unique means of keeping the fence centered on the table with a nylon bushing. Take the 6mm x 15mm bolt and insert into the 1/2" nylon spacer and thread on one of the square 6mm nuts. Do not thread the square nut on all the way. 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.

Note: Fence Model 04100 does not come with the nylon bushing for centering. Model 04010 is the only fence equipped with this feature.



Figure 12

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.

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.

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).



Figure 13

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.

Installing the Sub-Fences

Locate the sub-fences in the packaging. Place the sub-fence against the front of the fence extrusion (Fig. 14). Align the holes in the sub-fence with the slots in the fence extrusion. Insert the 6mm x 45mm screws through the hole in the front of the sub-fences (Fig. 15). Place the 6mm washer over the subfence bolt. Screw the black knob onto the sub-fence bolt (Fig. 16). Repeat these steps for the remaining two holes. Repeat these for the other sub-fence.



Figure 15



Figure 16



Figure 14





Installing Sub-Fence Offset Track

Fence Model 04010 and Model 04100 are both equipped with sub-fence off**se**t tracks. These offset tracks are designed to be installed two allow for a 1/32" or 1/16" offset of the sub-fence. Notice the female profile of the extrusion, you will see that one side of the profile is deeper than the other side. The small side is 1/32" and the deeper side is 1/16".

The sub-fence offset tracks are located on the backside of the fence in a specially designed storage location (Fig. 17).

Remove one side of the fence sub-fences by unscrewing the black knob and removing the sub-fence bolts (Fig. 18). Once the sub-fence has been removed, notice the end of the fence extrusion. The fence extrusion is designed with mating male profiles designed to accept the offset tracks (Fig. 19). Side the offset tracks onto the fence extrusion take care that you install both offsets on the same side (Fig. 20). Both offsets should always be installed on the same side to insure the sub-fence is offset the same distance at the top and bottom of the sub-fence. Once the offset tracks are securely in place, reinstall the sub-fence with the sub-fence bolt, washer , and black locking knob.



Figure 18



Figure 19



Figure 20

Attaching the Router Bit Guard

Take the clear polycarbonate guard and two of the black knurled knobs and two 1/4" square nuts. Insert each knob through each slot in the guard and thread a square nut onto each bolt end.

Line up the nut on the guard assembly and slide each nut into the T-slot starting from the end of the fence (Fig. 21). 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.



Figure 21



Tools That Make A Difference!

04100 Rout-R-Fence Parts List

Item No.	Part No.	Description	Qty	Part Specification
1	04100-001	Fence Track Mtg Angle Wood Screw	8	4.8MX25M
2	04100-002	Fence Track Mtg Nut	6	M6
3	04100-003	Fence Track Mtg Angle	2	
4	04100-004	Fence Miter Track	2	
5	04100-005	Fence Track Mtg Washer	6	6.5MX14.5MX1.2M
6	04100-006	Fence Track Mtg Bolt	6	M6X16
7	04100-007	Fence Face Mtg Bolt	6	M6X45
8	04100-008	Fence Face	2	
9	04100-009	Fence Clamping Knob	2	
10	04100-010	Fence Clamping Nut	2	M8
11	04100-011	Knob Extension	2	
12	04100-012	Clamping Knob	6	
13	04100-013	Vacuum Port Mtg Screw	2	M6X20
14	04100-014	Vacuum Port/Dust Chute	1	
15	04100-015	Vacuum Port Square Nut	4	M6
16	04100-016	Fence Extrusion	1	
17	04100-017	Fence Shimming Bar	2	
18	04100-018	Fence Guard	1	
19	04100-019	Fence Guard Locking Knob	2	



04010 Mast-R-Fence II Parts List

Item No.	Part No.	Description	Qty	Specification
1	04010-001	Scale Mounting Bar and Scale	2	
2	04010-002	Fence Track	2	
3	04010-003	Fence Bracket Mtg Track Screw	8	M5X12
4	04010-004	Track Mounting Angle	2	
5	04010-005	Flat Washer	12	6.5X14.5X1.2
6	04010-006	Fence Track Scale Locking Knob	4	
7	04010-007	Fence Track Mtg bolt	6	M6X16
8	04100-010	Fence Clamping Nut	2	M8
9	04010-009	Centering bushing bolt	1	M6X15
10	04010-010	1/2" Nylon Spacer	1	
11	04100-007	Fence Face Bolt	6	M6X45
12	04010-012	Fence Face	2	
13	04100-012	Clamping Knob	6	
14	04100-015	Centering bushing nut	11	M6
15	04100-011	Knob Extension	2	
16	04100-009	04100-009 Fence Clamping Knob		M8
17	04010-017	Fence Extrusion	1	
18	04100-013	Vacuum Port/Dust Chute Screw	2	M6X20
19	04100-014	Vacuum Port/Dust Chute	1	
20	04010-020	Fence Shimming Bar	2	
21	04100-018	Fence Guard	1	
	04100-015	Vacuum Port/Dust Chute nut	2	
	04010-023	Fence Scale	1	



Mite **B**Slide

User Manual





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The Mite-R-Slide is designed to fit the JessEm Mast-R-Fence only.

We do not recommend or support the application of our Mite-R-Slide to other commercial or custom made fences and therefore will not commit to resolving any issues for applications other than our Mast-R-Fence model #04001.

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- 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.

IMPORTANT RECOMMENDATIONS FOR USING YOUR JESSEM MITE-R-SLIDE

The Sub-Fence (or white face) on the Miter Fence is made of solid phenolic. Phenolic is a synthetic material offering superior strength and stability. We recommend that you do not cut into the phenolic sub-fence as the material is very hard and abrasive to carbide cutting tools.

It is best to remove the phenolic subfence and use it as a template to create your own sacrificial sub-fences from MDF or Plywood. Working with a sacrificial backer board will help reduce chipping or tear-out of the wood fibers on the back end of the workpiece.

Make sure the under carriage of the Mite-R-Slide will clear the cutter and all knobs are tightened and secure before each use.

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.

MITE-R-SLIDE PARTS DIAGRAM



ITEN	M PART#	DESCRIPTION QTY.		ITEN	/I PART #	DESCRIPTION QTY.	
1	* F0004	1/4" x 20 x 1" Socket Cap Screw	10	16	E0059-1	Miter Gauge Top Plate	1
2	* F0037	1/4" Flat Washer	10	17	E0059-2	Miter Gauge Base Plate	1
3	* S0014	Fence Clamping Spacers	3	18	F0001	1/4"-20 x 3/4" Flat Head Cap Screw	5
4	* F0007	1/4" x 20 x 1-1/4" Socket Cap Screw	4	19	F0108	6/32 x 3/8" Socket Head Cap Screw	2
5	* S0005-7	Tapped Mounting Block	2	20	F0107	#6 Flat Washer	2
6	* F0028	1/4"-20 Square Nuts	8	21	S0015-1	Detents On/Off Switch	1
	t	(6 PCS. #F0028 IN PARTS BAG)		22	S0017	Detent Track	1
7	E0061-2	Fence Clamping Bracket-Large	1	23	S0016	Detent Gauge	1
8	E0061-1	Fence Clamping Bracket-Small	1	24	* S0010-3	Brass Washer	1
9	F0001	1/4"-20 x 3/4" Flat Head Cap Screw	2	25	E0054-2	Knurled Handle	1
10	M0054-4	Phenolic Sub-Fence	1	26	E0069-1	Miter Gauge Upright Bracket	1
11	* S0014	3/4" x 1-1/2" Fence T-Nut	2	27	E0062-1	Bearing Tube Mounting Bracket	2
12	S0013-1	Chrome Plated Steel Shaft	1	28	F0109	6/32-1/4" Cup Point Set Screw	4
13	S005-4	Miter Fence Mounting Bar	1	29	E0001-11	Shaft Mounting Bracket	2
14	E0056	Miter Fence	1	30	F0096	3/4" 0-Ring	2
15	* S0010-4	Fence Adjustment Knob (Brass)	2	31	E0054-3	Bearing Tube	2
						-	

* Indicates Items In Separate Parts Bag Needed For Assembly



FIG. 1

ASSEMBLING THE MITER GAUGE

1. Remove the 3/8" shipping bolt from the miter gauge (Fig. 1).



FIG. 2

2. Install the 1" brass washer (from the parts bag) over the stud on the miter gauge knurled handle and thread the handle with the washer into the assembly and lightly tighten (Fig. 2).



3. Take the Miter Fence Mounting Bar (Item 13 on the parts diagram - page 3) and slide it in between the miter gauge top plate and the gauge base plate until the 1/4" threaded holes line up. (Fig. 3)



FIG. 4

4. Assemble the two brass fence adjustment knobs (from the parts bag) through the top of the Miter Gauge and into the threaded holes in the fence mounting bar. Start the knobs into the holes two to three turns only (Fig. 4).



FIG. 5

5. Now attach the fence to the gauge assembly by sliding the fence clamping bar into the matching slot machined into the fence extrusion (Fig. 5). Center the miter gauge assembly to the fence extrusion and lightly tighten the two brass fence adjustment knobs.



FIG. 6

MOUNTING THE MITER GAUGE TO THE BAR

6. You must now mount the miter gauge assembly to the bearing tube mounting brackets on the shaft. From the parts bag take four of the $1/4-20 \times 1^{\circ}$ cap screws and attach the miter gauge assembly to the miter gauge upright bracket (Fig. 6).



FIG. 7

MOUNTING THE MITE-R-SLIDE ASSEMBLY

7. Using two of the 1/4"-20 x 1-1/4" cap screws and two 1/4" flat washers attach each of the large and small fence clamping brackets (Items 7 & 8 on the parts diagram page 3) to each end of the shaft using the 3/4" x 1-1/4" tapped mounting blocks. Now position the Mite-R-Slide resting against the Mast-R-Fence (Fig. 7). Position the Mite-R-Slide assembly so the sub-fence on the miter fence backs up to the edge of the table top (Fig. 8) for maximum cross cutting capacity.





8. Using the 1/4"-20 square nuts from the parts bag, slide the square nuts into the two T-slots on the back of the fence. You will need 4 nuts for the large clamping bracket and two nuts for the small bracket on the opposite end of the shaft (Fig. 9).



FIG. 10

FIG. 9

9. Align the square nuts with the slots in each of the large and small fence clamping brackets (Fig. 10) - Large bracket shown.



FIG. 11

10-A. Once you have the square nuts aligned, attach the large clamping bracket to the fence with four of the 1/4" - 20 x 1" cap screws, four washers and two spacer blocks (Fig. 11). DO NOT TIGHTEN HARDWARE AS FINE ADJUSTMENTS NEED TO BE MADE.



FIG. 12

10-B. As in steps 8 thru 10 use the same hardware to attach the small clamping bracket at the other end of the shaft (Fig. 11). DO NOT TIGHTEN HARDWARE AS FINE ADJUSTMENTS NEED TO BE MADE.



FIG. 13

11. The Mite-R-Slide should now be attached to your Mast-R-Fence with a loose fit (Fig. 13). To begin final adjustments check to make sure the shaft is running parallel to the Mast-R-Fence. You can sight down the length of the fence from above the shaft to see if the shaft is aligned with the fence. Adjust the shaft if necessary and lightly tighten the cap screws on top of each end bracket on the shaft.



FIG. 14

12. Make sure the miter gauge bracket and the miter fence are not riding against the Mast-R-Fence. There should not be any contact with the face of the Mast-R-Fence. If you need to adjust the miter fence loosen the two brass knobs on the miter gauge and slide the fence over. Re-tighten the knobs when complete (Fig. 14 & 15). If the miter gauge bracket contacts the Mast-R-Fence readjust the shaft assembly forward.



FIG. 15

13. Now adjust the shaft so that it is level from end to end. First make sure the cap screws on the large and small clamping brackets on the back of the fence are loose enough to allow some movement (Fig. 16 shows large bracket). Now slide the miter gauge on the shaft to it's most forward position and snug up the two cap screws on the small fence clamping bracket. Then slide the miter gauge back to it's most rearward position and snug up the four cap screws on the large fence clamping bracket (Fig. 16). Check the slide for a smooth action. If not smooth slightly loosen all cap screws to release any possible torque in the shaft. Retighten cap screws and check for a smooth sliding action. If necessary re-check the shaft for parallel and repeat steps 11 thru 13.



FIG. 16

ADJUSTING THE GAUGE FOR SQUARE

14. Turn the detent switch to the off position (Fig. 17) and loosen the large knurled handle on the miter gauge. With a square, align your Mite-R-Slide Fence so that it is 90 degrees to the Mast-R-Fence and tighten the miter gauge handle to lock the position.



FIG. 17

15. Check your scales on the gauge and the brass detent to see if they are lined up to the zero position. If they are not you will need to zero the scales.



FIG. 18

16. If your gauge is not zeroed roll the miter gauge assembly up over the guide shaft (Fig. 18). There are machined recesses along the top edge of the mounting bracket for the miter gauge to rest in an upside down position when not in use.



FIG. 19

17. Using a 7/64" hex key, loosen the two cap screws that hold the detent mechanism in place - NOT TOO LOOSE THAT THE SCREWS FALL OUT (Fig. 19).



FIG. 20

18. Flip the miter gauge assembly back to it's upright position and align the zero indicators. Then without moving the scale finger tighten the two cap screws enough to hold the position (Fig. 20). Then flip the miter gauge upside down again. Using a 7/32" hex key tighten securely the two cap screws. Flip the gauge upright again and check the zero alignment. Repeat if necessary.



FIG. 21

SQUARING THE FENCE TO THE TABLE TOP 19. The top of the bearing tube bracket on the shaft has tapped holes with a set screw in the outer left and outer right holes. These are used to square the miter fence to the table surface (Fig. 21).



FIG. 22

20. Check to see if the miter fence is square to the table top (Fig. 22). If not you will need to make the following adjustment (Fig. 21). Loosen the two cap screws on the upright miter gauge bracket (Item 26 on the parts diagram page 3). Now loosen the cap screws on both bearing tube brackets (Item 27 on the parts diagram). To tip the fence forward turn the far left set screw until it bottoms out. Then loosen the left cap screw until it torques or 1/4 turn. Then turn the set screw clockwise again until it bottoms out. Check for square and repeat if necessary. When the fence is square, tighten all cap screws again. To tip the fence back - make the same adjustments but adjust the right side set screw instead of the left. Adjust the set screw on the left side bearing tube bracket to tilt forward, adjust the right side to tilt back.

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