



Operating Instructions and Parts Manual

Rout-R-Lift FX

Models: 02303A, 02303A, 02304A, & 02305A



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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.

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.

Model #02302A

Fits Porter Cable 690, 890 series, Bosch 1617, 1618 series,

DeWalt 610, 616, 618 series

Model #02303A

Fits Makita 1101 series

Model #02304A

Fits Milwaukee 5615, 5616, 5619 series

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

<u>Bit Diameter</u>	<u>Max. Speed</u>
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 Company 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

CONTENTS:

(1) Rout-R-Lift FX, (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

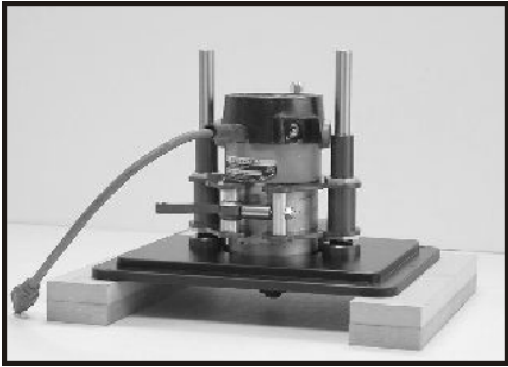


Figure 1

Installing the Router

1. 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 top of the carriage shafts. The carriage should be all the way toward the top plate.

2. Before installing the router motor, prop the unit up on blocks of wood (Fig. 1) 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.

3A. Open the cam lock clamp to accept the router motor and slide the 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. Then back it off approx. 1/16".

Note: If the cam lock clamp does not secure the router motor properly, or is too tight, you may have to adjust the clamp tension see step 3B.



Figure 2

Clamp Open

The cam lock design spreads the clamp when fully open (Fig. 2).



Figure 3

Clamp Closed

The cam lock design secures the router motor in the carriage when fully closed (Fig. 3).

Adjusting the Cam Lock Clamp

3B. The tolerances on many router motor Housing diameters vary slightly. If the clamp does not appear to hold the router motor securely, or if you are unable to close the clamp entirely because it is too tight, you may have to adjust the tension on the cam lock clamp. Using an open end wrench, turn the lock nut counter-clockwise to loosen the clamp or clockwise to tighten (Fig. 4). A small adjustment is all that is needed. Test and repeat in small increments until a correct fit is achieved. The cam lever should be closed completely with the router

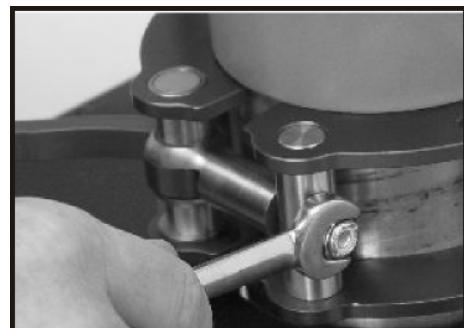


Figure 4

4. Rotate the motor so that the on/off switch and variable speed adjustment switches are in your most desired position relative to being able to access them from the front, side or rear of the router table, whichever you prefer. Close the cam lock clamp to secure the motor in the carriage. The lift is now ready to be placed in a router table.

Installing a JessEm Lift in a Custom Router Table Application

Using a JessEm router lift in a router table 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

Leveling the Lift in the Table Top

1. With the Rout-R-Lift FX in the table top opening, install (10) set screws into the holes around the lift perimeter. Adjust (Fig. 5) the four corners first to align the lift surface to the table surface so that both are flush. Adjust the remaining set screws on the sides to provide added support.

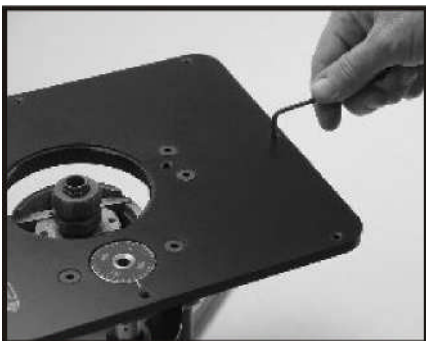


Figure 5

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 Rout-R-Lift FX

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.

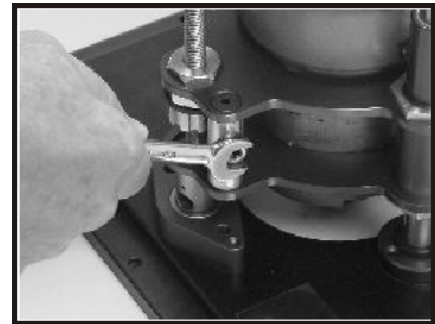


Figure 7

<u>Fraction</u>	<u>Decimal</u>	<u>Number of Revolutions</u>
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.

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.

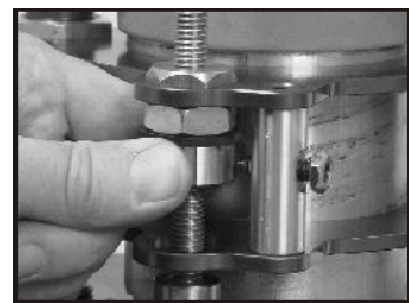
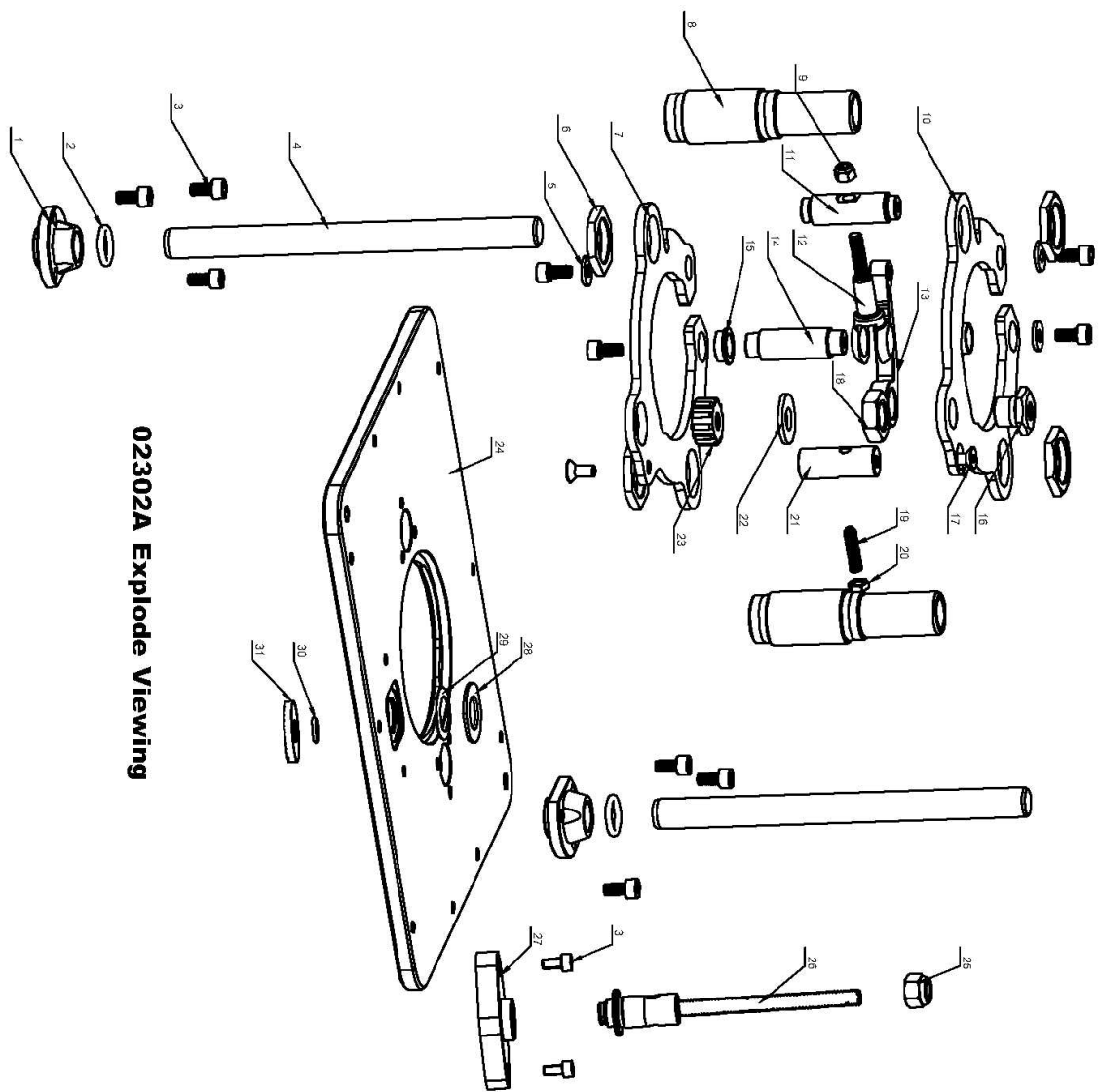


Figure 8

02302A Rout-R-Lift FX Parts List

Item No.	Part No	Description	Qty	Specification
1	02302A-001	Guide Tube Base	2	
2	02302A-002	Rubber O-Ring	2	M15.4X22.2X3.4
3	02302A-003	Bolt	12	M6X12
4	02302A-004	Guide Tube	2	
5	02302A-005	Washer	4	M6.5X16X1.2
6	02302A-006	Tube lock Nut	4	
7	02302A-007	Down Carriage Plate 02302A	1	
7	02302A-007A	Down Carriage Plate 02303A		
7	02302A-007B	Down Carriage Plate 02304A		
7	02302A-007C	Down Carriage Plate 02305A		
8	02302A-008	Guide Tube	2	
9	02302A-009	Nylon Nut	1	M6
10	02302A-010	Upper Carriage Plate 02302A	1	
10	02302A-010A	Upper Carriage Plate 02303A		
10	02302A-010B	Upper Carriage Plate 02304A		
10	02302A-010C	Upper Carriage Plate 02305A		
11	02302A-011	Clamp Block	1	
12	02302A-012	Cam handle Screw	1	
13	02302A-013	Cam handle	1	
14	02302A-014	Clamp Block	1	
15	02302A-015	Spacer	2	
16	02302A-016	Shaft Mount Nut	1	3/8"-16 and M16X2
17	02302A-017	Screw	2	M6X10
18	02302A-018	Nut	1	M16X2
19	02302A-019	Locking Adjustment Screw	1	M6X25
20	02302A-020	Adjustment locking screw	1	M6
21	02302A-021	Spacer	1	
22	02302A-022	Rubber Washer	1	
23	02302A-023	Backlash Nut	1	3/8"-16
24	02302A-024	FX Lift Top Plate	1	
24	02302A-024A	ID Label	1	
25	02302A-025	Nylon Nut	1	3/8"-16
26	02302A-026A	Drive Spindle Base	1	
26	02302A-026	Drive Spindle	1	
26	02302A-026B	Spring Pin	2	M3X16
27	02302A-027	Spindle Mounting Block	1	
28	02302A-028	Brass Washer	1	
29	02302A-029	Spring Washer	1	
30	02302A-030	Rubber O-Ring	1	M16X12X2
31	02302A-031	Height Dial	1	
A	02302A-A	Insert Ring	1	
B	02302A-B	Hex Key	1	M6
C	02302A-C	Hex Key	1	M8
D	02302A-D	Starting Pin	1	M3X3.4/M6X25
E	02302A-E	Leveling Screw	10	M8X6
F	02302A-F	Crank Handle	1	
G	02302A-G	Insert Wrench	1	



02302A Explode Viewing

