

**C.R. LAURENCE CO., INC.**

# **CRL "RIO" KDDLX SERIES SLIDING SCREEN DOOR KIT**

## **Assembly and Installation Instructions**

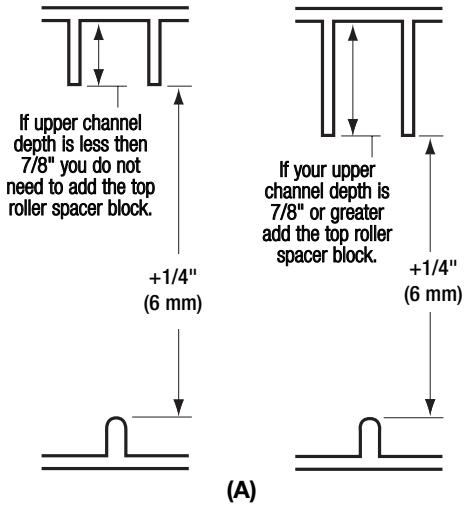
### **MEASURING THE DOOR OPENING**

- 1: Measure the door height from the top of the screen door sill, to the outer leg of the screen door header channel as shown in Illustration "A".  
**Note:** This KD Kit is not for use as a retro fit to screen doors having top hung rollers.

**Warning:** Due to possible header sag, and variations in the bottom sill, it will be necessary to take this measurement at least three times, from left to right along the entire width of the glass door opening. (See Illustration "B").

- 2: Take the shortest height measurement and add a 1/4" (6 mm). This will be your overall screen door height. **Note:** Carefully measure the depth of the upper channel, (refer to Illustration "A"). If your channel is 7/8" (22 mm) or deeper, use the optional spacer block. Please refer to section "Upper Roller Spacer Block" in these instructions.

- 3: The Rio Door is 1" (25 mm) wider than nominal door widths, giving installers enough additional frame width to accommodate a variety of door types. In most cases, the width of the screen door should be the same as the sliding glass door.



### **DOOR ASSEMBLY INSTRUCTIONS**

- 1: Layout the door frame on your screen table spline side up. Make sure that all four of the pre-installed rollers can retract into the rails so the roller is flush with the edge of the rail. This is necessary if you need to cut the rails without removing the rollers. See Illustrations "F" and "G".

- 2: Before cutting the horizontal top and bottom rails, determine the center point on each rail and mark this point with a pencil. Using the door width measurement, mark the frame for the miter cuts centered on this point (See Illustration "C"). This will keep the door roller slots an equal distance from each end. **Warning:** Never cut more than 1" (25 mm) from either rail end, otherwise the the roller housing will not seat properly.

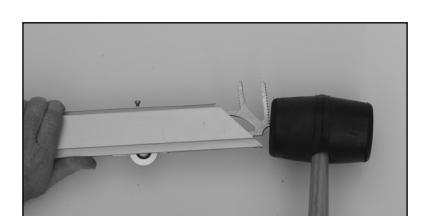
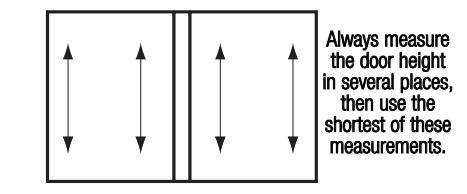
- 3: If you prefer to keep the handle height centered, measure the vertical stiles from the center of the handle and make your miter cuts equal distance.

- 4: Using a miter saw, cut the door frame slowly with a carbide tipped blade (CRL Cat. No. CSB10X144ATX). Lubricate the blade after each cut with a lubricant (CRL Cat. No. WS140 Saw Wax). **Warning:** Always wear eye protection and observe all safety recommendations from the saw manufacturer.

- 5: Place the cut door frame stiles and rails on your screen table. Using a mallet, insert corners into the frame and tap in place. **Warning:** Never hit a corner on the outer open leg, as this may cause it to bend. Insert and assemble all four corners (See Illustrations "D" and "E").

- 6: The Rio Door is to be installed into the opening with the spline side out. The handle has been pre-installed into the door stile to accommodate doors that close to the left when viewed from inside of the house. If your door closes to the right, it will be necessary to reverse the handing of the latch. Please refer to the installation instruction section "Changing the Handle".

- 7: Check door frame squareness; this can be done with either a framers square, drywall T-Square, or simply by measuring the diagonals of the outside corners of the frame, making sure the distance is the same.



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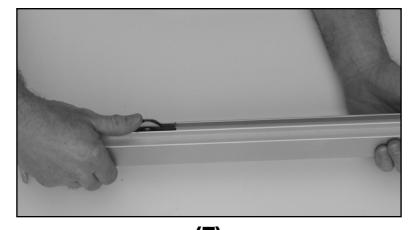
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**8:** Install your choice of screen wire. The Rio Door will accept fiberglass, aluminum, pet screen, or sunscreen. **Note:** For common fiberglass wire 18 x 16, a spline size of .185 is recommended.

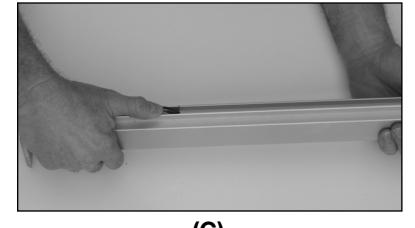
## INSTALLING THE SCREEN DOOR

**1:** Check to insure that the bottom rollers retract into the door bottom rail completely so that they are flush with the bottom of the door. This is necessary when installing the door over the bottom sill track on the threshold. (See Illustrations "F" and "G").



(F)

**2:** Insert the door into the upper header channel. Swing the bottom of the door over the top of the screen door track onto the sill. Move the door close to the side jamb in the closed position, and let the door rest on the bottom track.



(G)

**3:** To adjust the bottom door rollers, turn the adjustment screw of one roller so that the bottom of the door lifts up off of the track approximately 1/8" (3 mm). Repeat this step for the other bottom roller, this time adjust the second roller until the lead stile edge of the screen door is parallel with the door jamb. Slide the door back and forth along the full length of the track. If the bottom of the door rail rubs against the bottom sill at any point adjust both rollers equally to raise the door, keeping the gap to the jamb parallel.

## MOUNTING THE STRIKE

**1:** Once the door height adjustment is complete, slide the door into the closed position and mark the jamb at the center of the handle. Inside the center of the screen door jamb channel, measure down 1-1/2" (38 mm) and drill a 7/64" (2.8 mm) diameter pilot hole. Mount the keeper with the hook facing up, using the supplied screw through the slotted hole. The screw should be just tight enough to hold the keeper snug so that it can be adjusted by tapping it either up or down. Test the door, and make any fine adjustments to the keeper, then continue to tighten the screw. Once this is done, drill another 7/64" (2.8 mm) diameter pilot hole and install the second supplied screw tightly. (See Illustrations "H", "I", and "J")



(H)

(I)

**2:** Adjusting the keeper height to obtain optimum door closure to jamb. The keeper versus handle location on the door's vertical stile should leave approximately an 1/8" (3 mm) clearance to the jamb when the door is closed and latched. Some door jambs can bow in or out slightly, also if the screen cloth is installed too tightly, the door frame may bow in at the center. To compensate for either of these conditions, remove the keeper from the jamb and using two pliers bend the hook slightly up or down, thereby opening or closing the gap between the door edge and the jamb.

## INSTALLING THE BUG STRIP

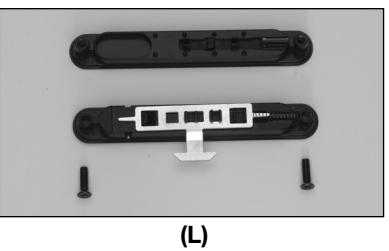
**1:** With the screen door in the closed position, start at the top and push the bug strip vinyl into the channel along the back edge of the screen door. **Note:** Look at the back of the bug strip, and you will see small score lines. The bug strip should just touch the glass, and not bind or drag across the glass. Determine how much bug strip is needed, find the appropriate score line and snip the first 1/2" (12 mm) along the score line. Using your fingers, pull and rip the bug strip vinyl along the score line. Finish installing the bug strip. You may choose to cut a small notch in both the top and bottom edges of the bug strip vinyl where it hits against the metal frame. Be careful not to cut too much, just enough to eliminate any drag against the top and bottom of frame. (See Illustration "K").



(K)

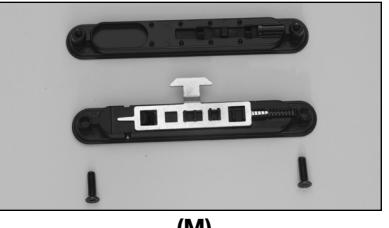
## CHANGING THE HANDING

**1:** Remove the two screws on inside face of the handle.



(L)

**2:** Remove the outside handle, then carefully lift and slide the inside handle back toward the spline side of the frame from the slot. This will allow the handle to be removed with the stamped steel latch hook still attached.



(M)

**3:** Note the position of the slots in the stamped steel latch in relation to the fingers on the back of the plastic slide. Lay the inside handle upside down on a flat surface. Using a flat screw driver carefully pry the stamped steel latch from the plastic slide. Once removed, rotate the latch 180 degrees so that the hook is protruding from the other side of the handle. Lay the latch back onto the slide and using the screwdriver, press down on the latch so that the locking fingers engage the latch. (See Illustrations "L" and "M").

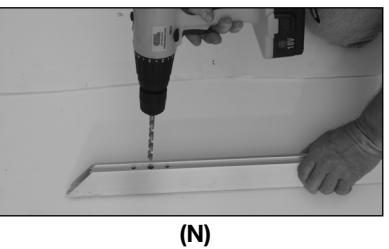
**4:** Install the small spring onto the latch and into the slot in the back of the die cast latch body.

**5:** Re-install the latch into the door stile. Position the outside handle and install the screws.

## UPPER ROLLER SPACER BLOCK

The spring in the top roller should provide adequate upper tension and downward pressure preventing the door from rocking or jumping off of the lower track as it slides. However, some doors are made with very deep header channels as shown in section "Measuring the Door Opening" (Illustration "A"). Measure your upper channel depth, if it is 7/8" (22 mm) or deeper you may need to install the upper roller spacer blocks (included). These spacers will add 9/16" (14 mm) additional height to the upper rollers. To remove the existing roller and install the spacer, first remove the adjustment screw, and then both roller mounting screws.

It will be necessary to re-drill the center (adjustment screw) hole to 3/8" (9.5 mm) diameter. Slip the roller housing into the slot in the spacer, then insert into the door frame. Using the 1" (25 mm) long screws provided with the spacer, install the new screws through the frame, through the spacer and into the roller housing. (See Illustrations "N", "O" and "P").



(N)



(O)



(P)

**Note:** It is not recommended to tighten the adjustment screws on the top rollers. Variations in header to sill height along the full length of travel may cause the door to bind as it rolls.

Do to the many variations in upper door channel widths or channel openings; slide guides are not included with the Rio KD Screen Door Kit. If guides are required to eliminate noise associated with door frame to channel rubbing, CRL Cat. No. B564 guides fit the Rio Screen Door frame and have an overall width of 9/16" (14 mm) preventing metal to metal contact.



Your installation is now complete.

C.R. Laurence also offers Pet Grills to protect screen doors from pets. Pet Grills are available in a variety of sizes and colors. (See chart below).

CAT. NO.	FINISH	WIDTH RANGE	QTY/CTN
PG26	Gray	29" to 31" (737 to 787 mm)	6
PG26BRZ	Bronze	29" to 31" (737 to 787 mm)	6
PG26W	White	29" to 31" (737 to 787 mm)	6
PG30	Gray	35" to 37" (889 to 940 mm)	6
PG30BRZ	Bronze	35" to 37" (889 to 940 mm)	6
PG30W	White	35" to 37" (889 to 940 mm)	6
PG40	Gray	47" to 49" (1194 to 1245 mm)	6
PG40BRZ	Bronze	47" to 49" (1194 to 1245 mm)	6
PG40W	White	47" to 49" (1194 to 1245 mm)	6

Minimum order for shipment is six each; fewer than six may be purchased in Will Call at any CRL Warehouse. Sizes and finishes can be combined for quantity pricing.