

# COXUSA

## ASSEMBLY PROCEDURE/SERIES 21B

### STEEL FRAME, BY-PASSING DOORS WITH TOP GUIDE CHANNEL AND BOTTOM ROLLER HARDWARE

#21-708  
Self Adjusting  
Top Guide Bracket

#21-243 Steel  
Reversible Top Guide Channel.  
Full 1 7/8" (47.7mm) depth for maximum  
adjustment and appearance

#21-133  
Steel Rails

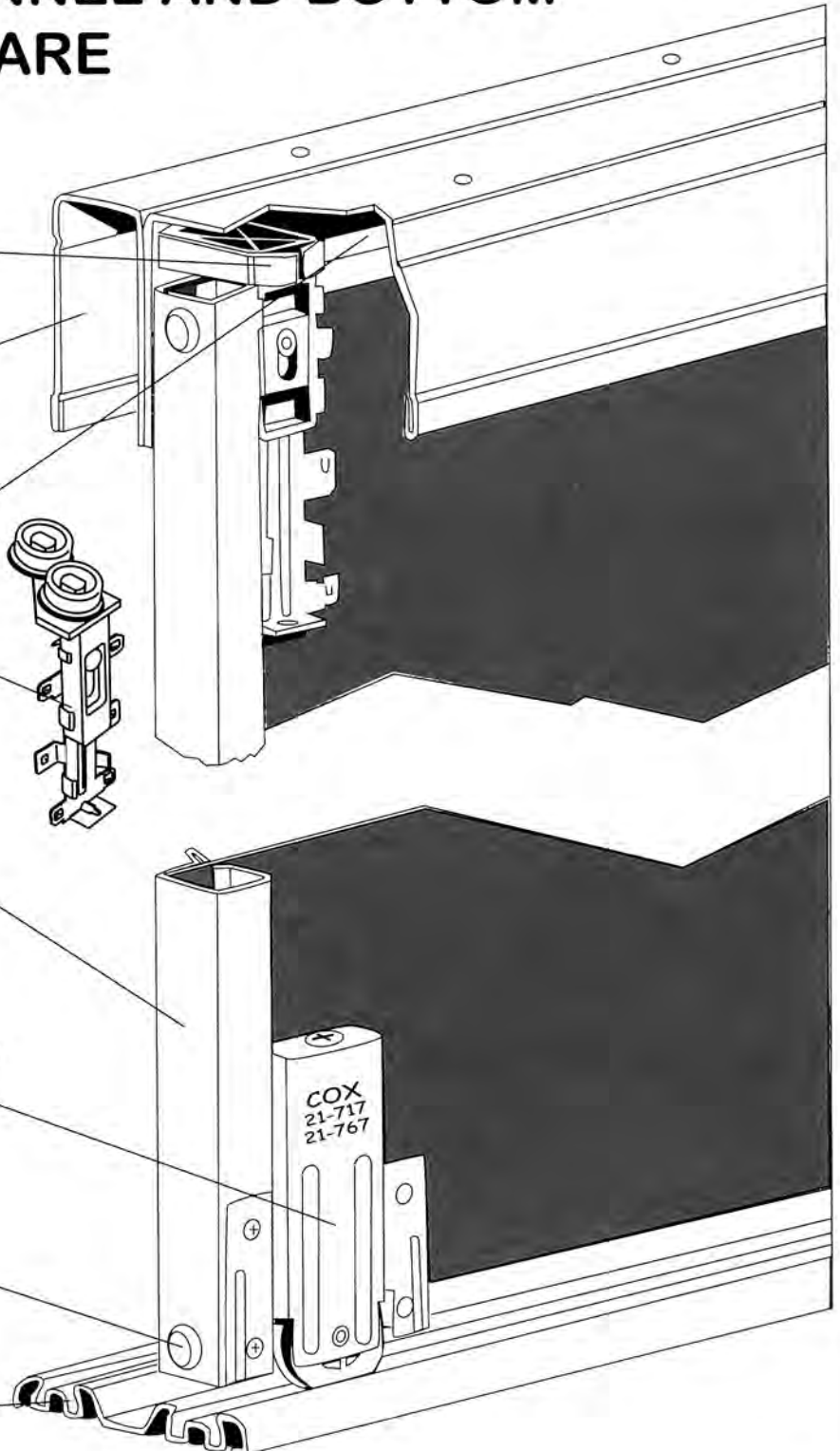
#21-702  
Self-Adjusting  
Top Roller Bracket  
(optional)

#21-323  
Steel Stiles with Integral Pull

#21-717/767  
Plated Steel Roller Assembly  
1 1/4" (31.8mm) overall vertical adjustment  
with durable Delrin® spoked axle or  
double steel race ball bearing wheels,  
1 1/2" (38.1mm) diameter.

#22-004  
Clear Bumper (optional)

#21-673  
Steel Threshold



# ASSEMBLY INSTRUCTIONS

## 1. SIZE DOORS TO FIT OPENINGS

### STILE HEIGHT

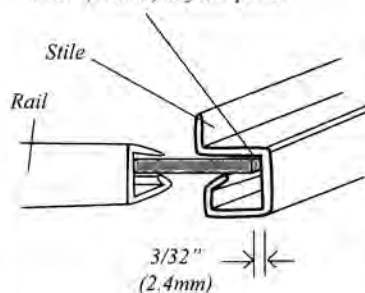
NET FINISHED OPENING HEIGHT	PANEL LENGTH	STILE LENGTH
80 1/2" (204.5cm)	77 7/8" (197.8cm)	78" (198.1cm)
84" (213.4cm)	81 3/8" (206.7cm)	81 1/2" (207.0cm)
96" (243.8cm)	93 3/8" (237.2cm)	93 1/2" (237.5cm)
98 1/2" (250.2cm)	95 7/8" (243.5cm)	96" (243.8cm)

### RAIL WIDTH

NET FINISHED OPENING WIDTH	NO. DOORS	PANEL WIDTH	RAIL WIDTH
47" (119.4cm)	2	24" (61.0cm)	22 1/2" (57.2cm)
54" (137.2cm)	2	27 1/2" (69.9cm)	26" (66.0cm)
59" (149.9cm)	2	30" (76.2cm)	28 1/2" (72.4cm)
66" (167.6cm)	2	33 1/2" (85.1cm)	32" (81.3cm)
71" (180.3cm)	2	36" (91.4cm)	34 1/2" (87.6cm)
78" (198.1cm)	2	39 1/2" (100.3cm)	38" (96.5cm)
83" (210.8cm)	2	42" (106.7cm)	40 1/2" (102.9cm)
90" (228.6cm)	2	45 1/2" (115.6cm)	44" (111.8cm)
95" (241.3cm)	2	48" (121.9cm)	46 1/2" (118.1cm)
106" (269.2cm)	3	36" (91.4cm)	34 1/2" (87.6cm)
118" (299.7cm)	3	42" (106.7cm)	40 1/2" (102.9cm)
142" (360.7cm)	3	48" (121.9cm)	46 1/2" (118.1cm)

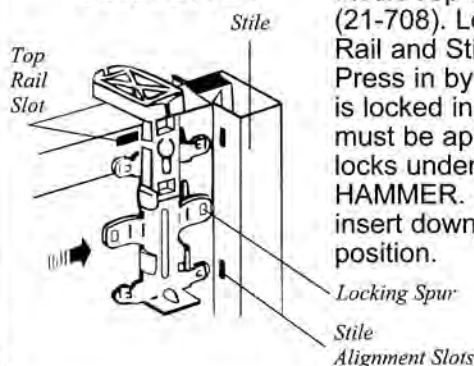
## 2. ASSEMBLE RAILS AND STILES TO MIRROR OR PREFINISHED PANEL

Stiles should extend  
1/16" (1.6mm) beyond panel



TAP ON RAILS AND STILES WITH WHITE RUBBER Mallet- First center rails on each end of Panel. Then tap stiles onto sides of Panel. Align corners to receive Top Guide Bracket and Bottom Roller Bracket. Allow 3/32" (2.4mm) gap as shown. Edges of mirror should be taped to prevent chipping.

## 3. INSTALL TOP GUIDE BRACKET

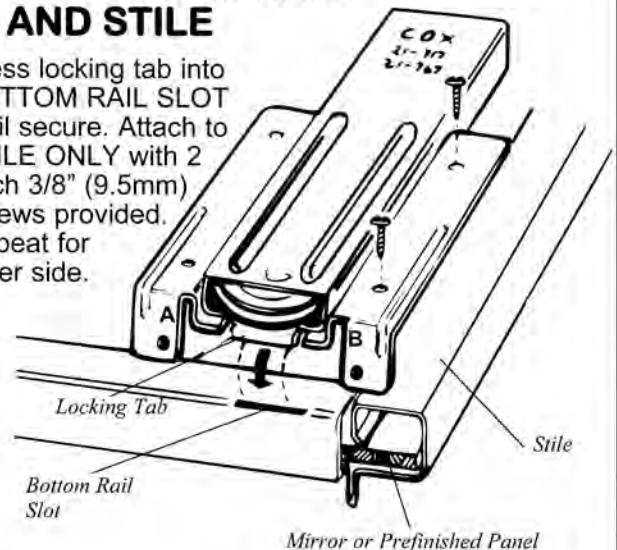


Insert Top Guide Bracket (21-708). Lock Tabs into Top Rail and Stile Alignment slots. Press in by HAND until corner is locked in place. Pressure must be applied until spur locks under Stile. DO NOT HAMMER. Press Top Guide insert down until in locked position.

Locking Spur  
Stile Alignment Slots

## 4. ATTACH BOTTOM ROLLER BRACKETS (21-717 OR 21-767) TO BOTTOM RAIL AND STILE

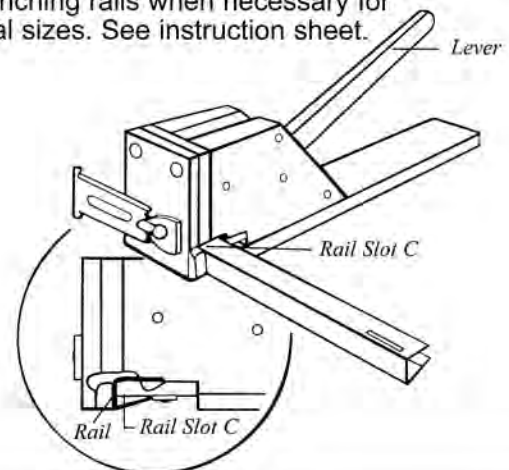
Press locking tab into BOTTOM RAIL SLOT until secure. Attach to STILE ONLY with 2 each 3/8" (9.5mm) screws provided. Repeat for other side.



NOTE: Do not install screws in holes (A) and (B), they are not used with Series 21 stiles and rails.

## 5. SPECIAL COX HAND TOOL # 05-210 FOR PUNCHING OF RAIL ALIGNMENT SLOTS

This special tool (No. 05-210) is available for punching rails when necessary for special sizes. See instruction sheet.



### TO FIGURE SPECIAL SIZES:

- MIRROR HEIGHT: -Finished opening height less (-) 2 5/8" (66.7mm)
- MIRROR WIDTH: -Finished opening width plus (+) 1" (25.4mm) per overlap divided by number of doors.<sup>1</sup>
- STILE LENGTH: -Cut bottom end only, 1/8" (3.2mm) longer than mirror height.
- RAIL LENGTH: -Cut 1 1/2" (38.1mm) less than mirror width and repunch with 05-210 tool.

NOTE: When cutting stiles and rails, use a fine tooth hacksaw (32 teeth per inch).



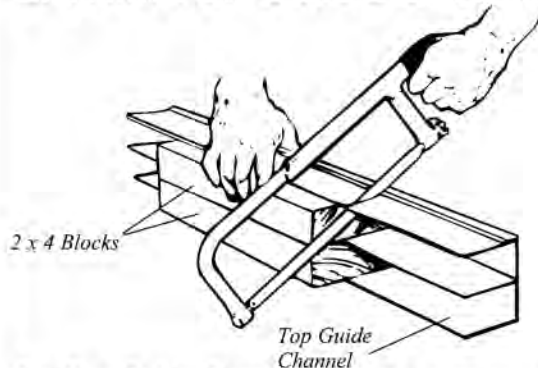
# INSTALLATION INSTRUCTIONS

## 1. FIT DOORS TO OPENINGS

WIDTHS				HEIGHTS			
OPENING		DOOR WIDTH		OPENING		DOOR HEIGHT	
47"	(119.4cm)	24"	(61.0cm)	80 1/2"	(204.5cm)	78"	(198.1cm)
54"	(137.2cm)	27 1/2"	(69.9cm)	84"	(213.4cm)	81 1/2"	(207.0cm)
59"	(149.9cm)	30"	(76.2cm)	96"	(243.8cm)	93 1/2"	(237.5cm)
66"	(167.6cm)	33 1/2"	(85.1cm)	98 1/2"	(250.2cm)	96"	(243.8cm)
71"	(180.3cm)	36"	(91.4cm)				
78"	(198.1cm)	39 1/2"	(100.3cm)				
83"	(210.8cm)	42"	(106.7cm)				
90"	(228.6cm)	45 1/2"	(115.6cm)				
95"	(241.3cm)	48"	(121.9cm)				
106"	(269.2cm)	36"	(91.4cm)				
118"	(299.7cm)	42"	(106.7cm)				
142"	(360.7cm)	48"	(121.9cm)				

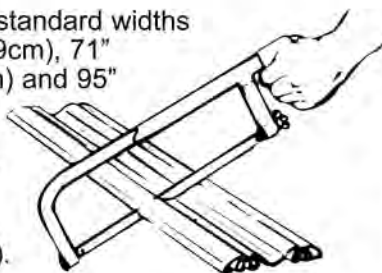
Door should be 2 1/2" (63.5mm) less than finished opening height. Doors should overlap a minimum of 1" (25.4mm).

## 2. TRIM TOP GUIDE CHANNEL



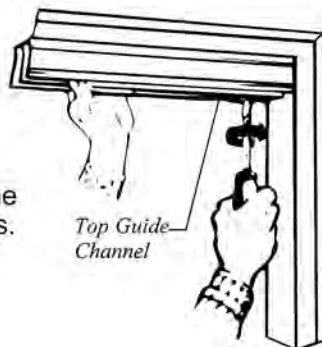
Cut Top Guide Channel to exact opening width using a fine tooth hacksaw (32 teeth per inch blade). Support channel with 2" x 4" (50.8mmx101.6mm) blocks while making cut.

Threshold is pre-cut for standard widths 47"(119.4cm), 59" (149.9cm), 71" (180.3cm), 83" (210.8cm) and 95" (241.3cm). For other non-standard widths, Threshold must also be cut to size using a fine tooth hacksaw (32 teeth per inch blade).



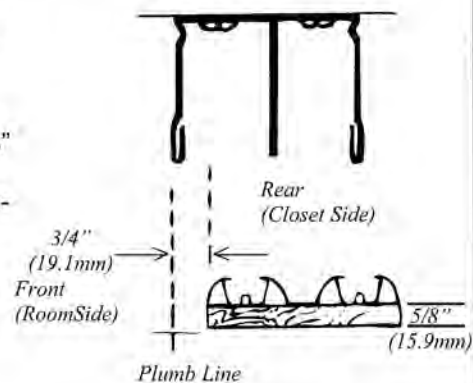
## 3. INSTALL TOP GUIDE CHANNEL

Top Guide Channel has the same design on both sides. Locate channel flush with front edge of jamb.



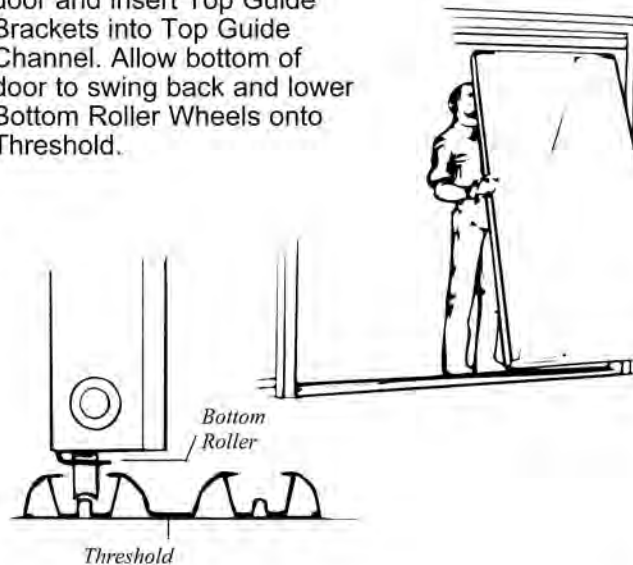
## 4. INSTALL THRESHOLD

Locate Threshold 3/4" (19.1mm) back from front edge of Jamb. If carpet is used, 5/8" (15.9mm) wood riser under Threshold is recommended.



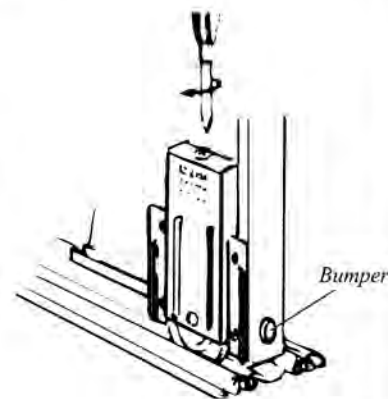
## 5. INSTALL DOORS

Install rear door first. Raise door and insert Top Guide Brackets into Top Guide Channel. Allow bottom of door to swing back and lower Bottom Roller Wheels onto Threshold.



## 6. ADJUST DOORS

ADJUST DOORS as shown to align side of doors to jambs and to clear high points of Threshold.



# SERIES 21B

## FRAMING COMPARISON

*Typical*

*Series 21B*



## ARCHITECTURAL SPECIFICATIONS

Sliding doors shall be guided by Cox Series 21 prefinished reversible top guide channel. Top guide brackets shall be Cox Series 21, plated steel with guide inserts of polyethylene and self-adjusting anti-rattle design or plated steel with dual nylon wheels with rubber tires.

Doors shall roll at the bottom on Cox Series 21 sheave threshold by adjustable sheave type rollers. Wheels shall be 1 1/2" (38.1mm) diameter double steel race ball bearing, or spoke design axle bearing, with Delrin® sheave shape tires. Doors shall be assembled with Cox Series 21B steel door pull stiles and rails on 1/8" or 5/32" (3 or 4mm) prefinished panels or safety-backed mirror.

Top guide channel, threshold and all other hardware shall be manufactured by Arthur Cox and Sons, Industry, CA.

## MIRROR PANEL SPECIFICATIONS

Cox Series 21B Mirror Door hardware is manufactured ready to assemble on pre-cut 1/8" or 5/32" (3 or 4mm) safety-backed mirror. Mirror for reach-in closet applications must conform to ANSI Z 97.1-1984 Category 1 Safety Glazing Standards.\* Mirror for passage door applications must conform to CPSC 42 FR 1428; 16 CFR Part 1201 Category 2 Safety Glazing Standards.\*\*

\*American National Standards Institute 1430 Broadway, New York, NY 10018  
 \*\*U.S. Consumer Product Safety Commission, Washington, D.C. 20207

# COXusa

4755 E. ZINFANDEL COURT, SUITE D | ONTARIO, CA 91761  
 P 909/545-8900 | F 909/975-4801 | WWW.COXUSA.US

## ARCHITECTURAL CLEARANCES

