

INSTALLATION INSTRUCTIONS

**7901/8901, 7905/8905 SPA/SPA HO X FT102
PARALLEL ARM MOUNT
AND ACCESSORY PLATE 8960**



<p>1 (REFERENCE UNIT CARTON FOR ACCESSORIES AND OPTIONS SUPPLIED)</p> <p>Determine hand of door. Prepare door and frame utilizing full size template.</p> <div style="text-align: center;"> <p>RIGHT HAND REVERSE BEVEL LEFT HAND REVERSE BEVEL</p> <p>LEFT HAND DOOR RIGHT HAND DOOR</p> </div> <p>CAUTION: SEX NUTS ARE REQUIRED FOR ATTACHMENT OF COMPONENTS TO UNREINFORCED DOORS AND TO WOOD OR PLASTIC FACED COMPOSITE TYPE FIRE DOORS, UNLESS AN ALTERNATIVE METHOD IS IDENTIFIED IN THE INDIVIDUAL DOOR MANUFACTURER'S LISTINGS.</p>	<p>2 (8960 Plate applications only.)</p> <p>Install plate to door as shown.</p> <div style="text-align: center;"> </div> <div style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p>QTY (4)</p> </div>
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3 Attach closer to door or plate with spring adjustment facing hinges.

HINGES

(LEFT HAND DOOR)

HINGES

(RIGHT HAND DOOR)

METAL DOORS or SN1 (Sex Nuts)

QTY (4)

WOOD DOORS

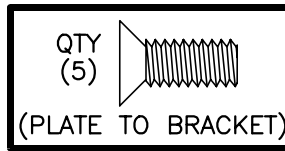
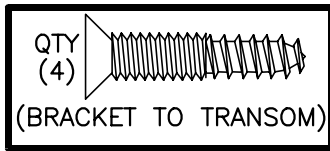
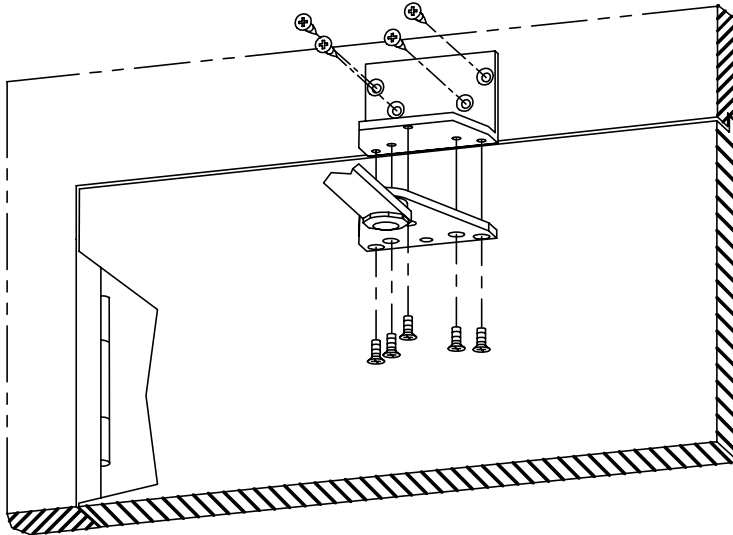
QTY (4)

PLATE

QTY (4)

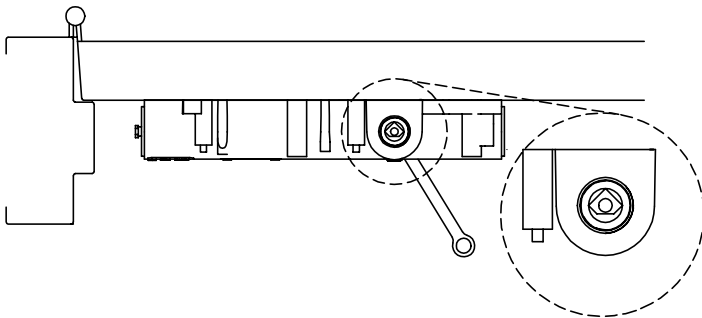
4

Install transom bracket and soffit plate.

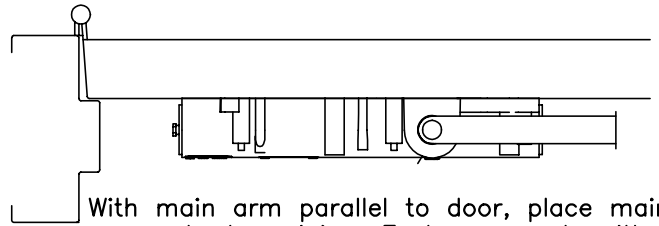


NOTE: LEFT HAND INSTALLATION SHOWN, RIGHT HAND IS A MIRROR IMAGE.

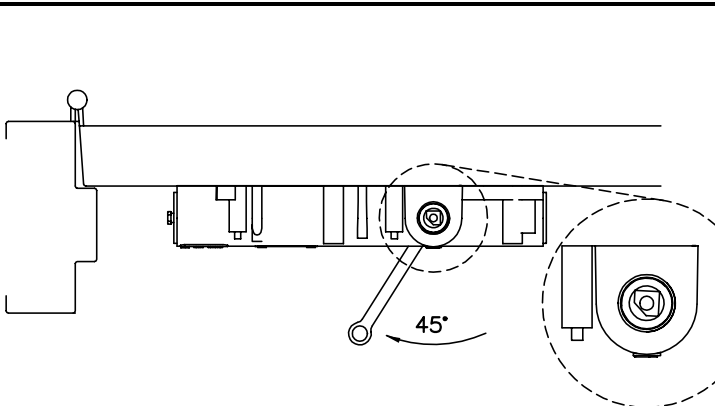
5 Install main arm



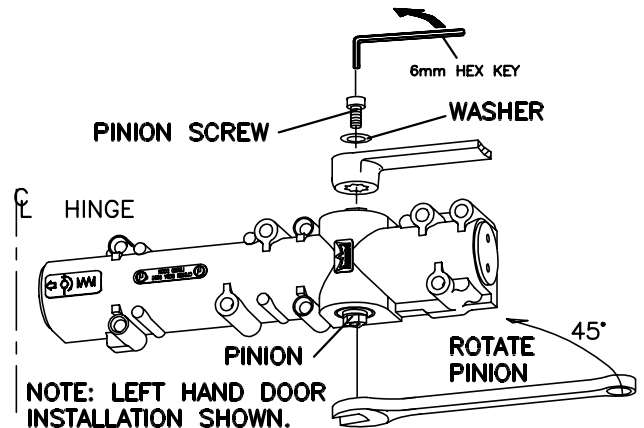
Place wrench on bottom pinion.



With main arm parallel to door, place main arm onto top pinion. Fasten securely with pinion screw and washer.



Rotate pinion 45° TOWARD HINGE edge of door.



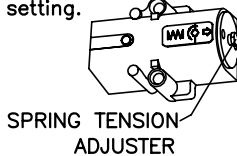
NOTE: LEFT HAND DOOR INSTALLATION SHOWN. RIGHT HAND IS A MIRROR IMAGE.

6

Adjust spring tension, if required, using a 1/4" wrench.

NOTE: 7901/8901 supplied with size 3 spring setting.
7905/8905 supplied with size 6 setting.

G± CRITICAL



7901/8901 ONLY

BARRIER-FREE OPENINGS - Take an opening force reading from the pull on the door. If required, adjust the spring tension to meet the barrier-free requirement. Maximum number of turns counter clockwise=8. Maximum number of turns clockwise =14. Depending on opening conditions, a door adjusted to meet barrier-free forces may not have sufficient power to reliably close and latch the door.

NON-BARRIER-FREE OPENINGS - Adjust according to chart.

CLOSER TYPE	DOOR WIDTH		FULL TURNS OF SPRING ADJUSTER	SPRING SIZE
	EXTERIOR	INTERIOR		
7901/8901	-	2'-6"	0	3
	2'-6"	3'-0"	+4	4
	3'-0"	3'-6"	+9	5
	3'-6"	4'-0"	+13	6
7905/8905	3'-0"	3'-6"	-8	5
	3'-6"	4'-0"	0	6
	4'-0"	-	+4	6+

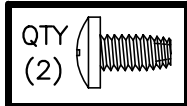
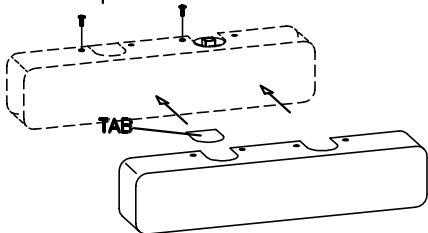
ULC LABELED UNITS ONLY

ADJUST SPRING TENSION ACCORDING TO THE FOLLOWING CHART.

CLOSER TYPE	MAX. DOOR WEIGHT	SPRING SIZE	FULL TURNS OF SPRING ADJUSTING NUT
7901/8901	100	3	0
	125	4	+4
	150	5	+9
	200	6	+13
7905/8905	150	5	-8
	200	6	0
	250	6+	+4

8

Place tab in cover slot opposite main arm. Place cover over closer and fasten securely with screws provided.

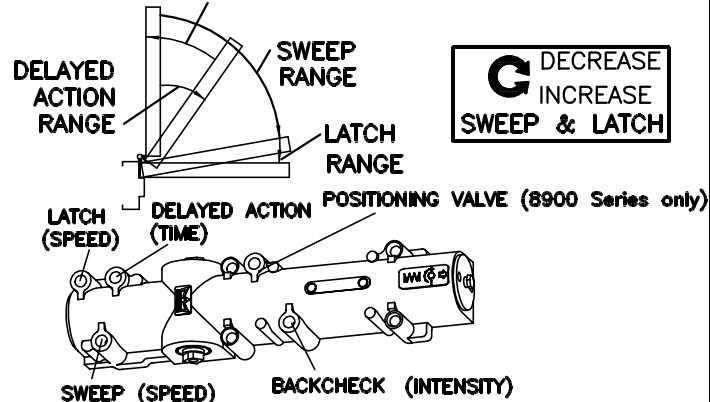


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7

Adjust sweep, latch and backcheck valves. Closing time from 90° to 15° (sweep range) is generally adjusted to take a minimum of 3 seconds. Closing time from 15° to fully closed (latch range) should take a minimum of 1.5 seconds. Backcheck intensity should be adjusted to insure that the door is under control during the opening cycle protecting the door and objects behind the door. Thumping backcheck feature provides full intensity for doors opened quickly and less intensity for doors opened slower. Closing the backcheck positioning valve (clockwise turns) advances the backcheck range approximately 15°. Optional delayed action offers additional closing speed control when extra time is required to pass through the door. All valve adjustments are made with a 3/32" hex key.

CAUTION: DO NOT REMOVE VALVES. BACKCHECK RANGE



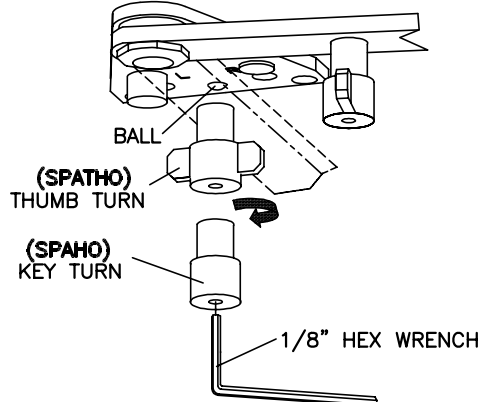
G DECREASE INCREASE SWEEP & LATCH

G INCREASE DECREASE BACKCHECK OR DELAYED ACTION
NOTE: DELAYED ACTION IS AN OPTIONAL FEATURE.

9

(HOLD OPEN UNITS ONLY)

Engage SPATHO/SPAKHO with 1/4 turn. Open door until mechanism locks onto ball on plate.



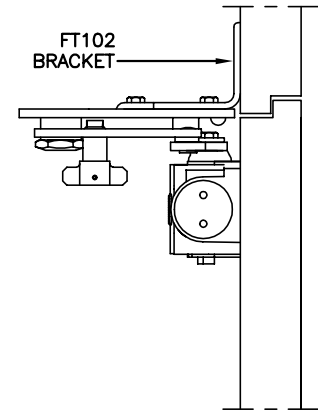
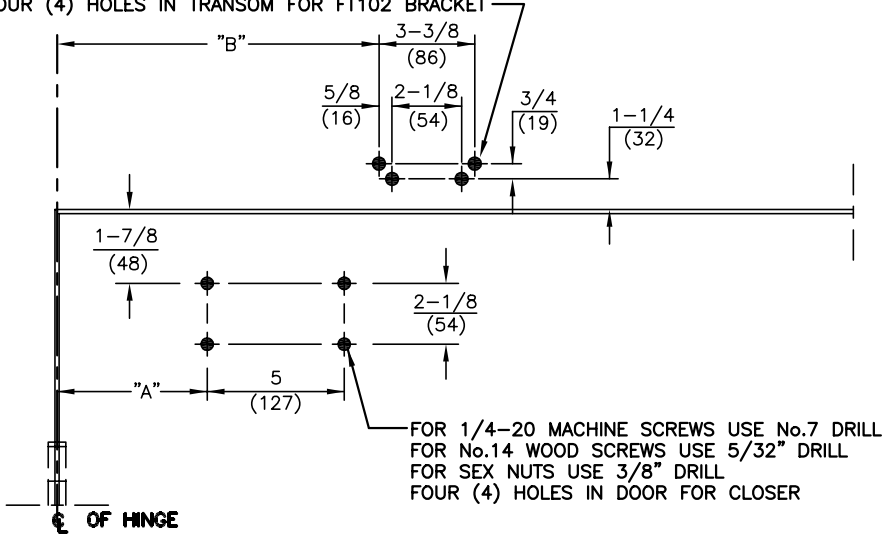
WITHOUT PLATE

NOTES:

1. DO NOT SCALE DRAWING.
2. DIMENSIONS ARE IN INCHES/(MM).
3. LEFT HAND DOOR SHOWN.
4. CAUTION: SEX NUTS ARE REQUIRED FOR ATTACHMENT OF COMPONENTS TO UNREINFORCED DOORS AND TO WOOD OR PLASTIC FACED COMPOSITE TYPE FIRE DOORS, UNLESS AN ALTERNATIVE METHOD IS IDENTIFIED IN THE INDIVIDUAL DOOR
5. MINIMUM DOOR WIDTH 26".
6. TEMPLATING BASED ON 4-1/2" X 4-1/2" BUTT HINGES.
7. MAXIMUM OPENING 180°

ANGLE OF OPENING HOLD OPEN	DIM. "A" CLOSER	DIM. "B" FT102 BRACKET
TO 100°	7-1/8	10-1/16
H.O. 90°	(181)	(256)
TO 180°	3-1/2	6-7/16
H.O. 127°	(89)	(164)

FOR 1/4-20 MACHINE SCREWS USE No.7 DRILL
FOR No.14 WOOD SCREWS USE 5/32" DRILL
FOUR (4) HOLES IN TRANSOM FOR FT102 BRACKET



8960 PLATE

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