

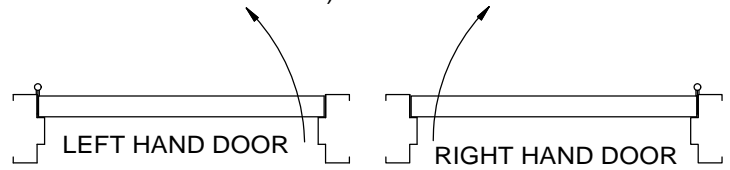
Description:

# TS93 T, TH PULL SIDE TRACK MOUNT



## 1 (REFERENCE UNIT CARTON LABEL FOR ACCESSORIES AND OPTIONS SUPPLIED)

Determine hand of door and unit type supplied, (93T, 93PT). Prepare door and frame for fasteners according to template 08279222.

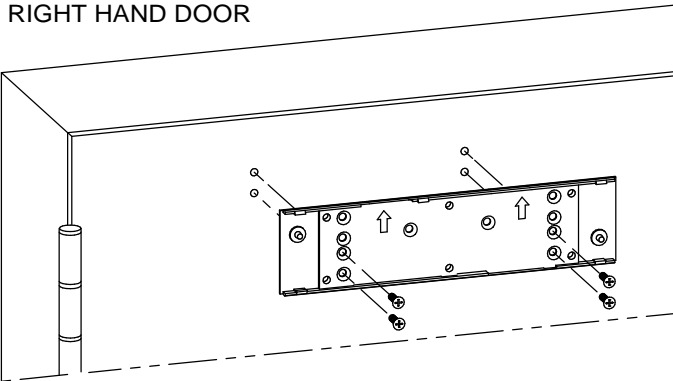


CAUTION: SEX NUTS ARE REQUIRED FOR ATTACHMENT OF COMPONENTS TO UNREINFORCED DOORS AND TO WOOD OR PLASTIC FACED COMPOSITE TYPE FIRE DOORS, UNLESS AN ALTERNATIVE METHOD IS IDENTIFIED IN THE INDIVIDUAL DOOR MANUFACTURER'S LISTINGS.

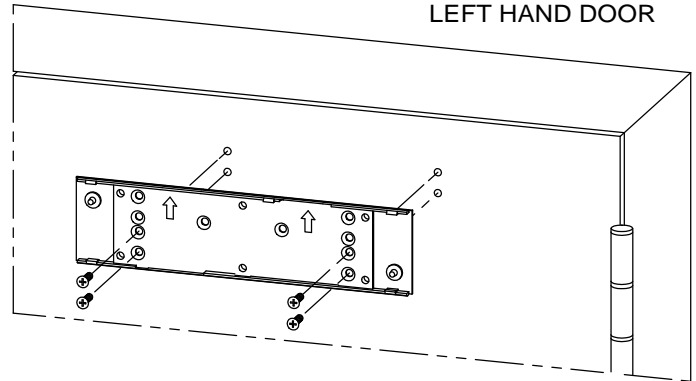
## 2 Attach mounting plate to door, using lower four holes in plate. Use upper four holes for optional mounting. Arrows on plate face top of door.



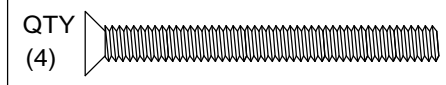
RIGHT HAND DOOR



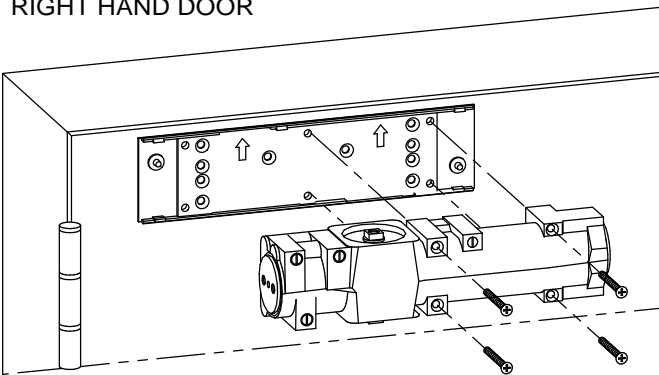
LEFT HAND DOOR



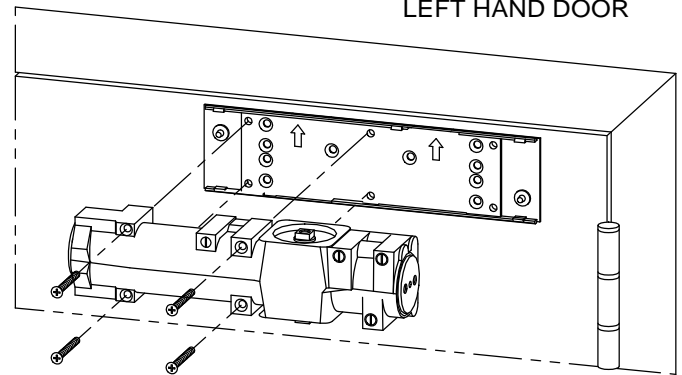
## 3 Attach closer to mounting plate.



RIGHT HAND DOOR



LEFT HAND DOOR



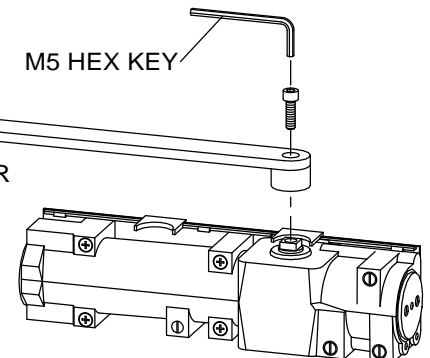
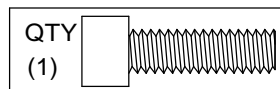
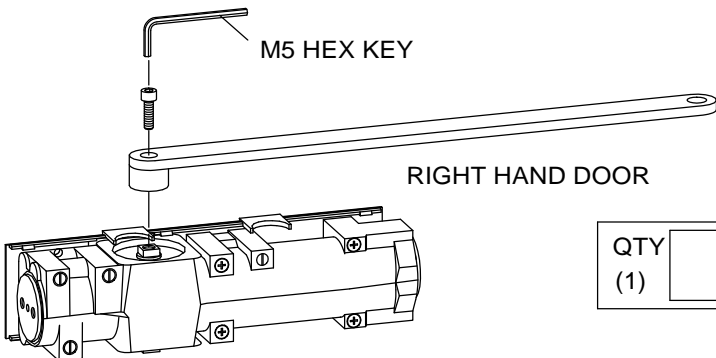
## 4 Attach arm to pinion of closer, parallel to door.

M5 HEX KEY

M5 HEX KEY

RIGHT HAND DOOR

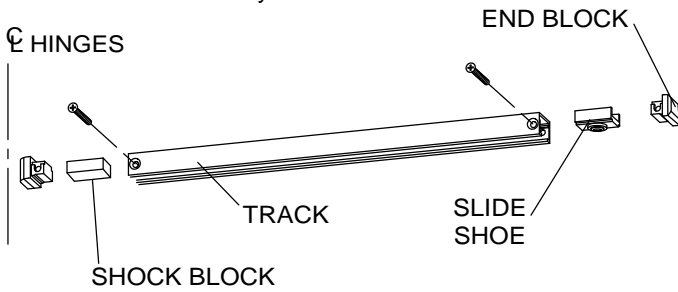
LEFT HAND DOOR



5 Assemble track and attach to frame.

(93T UNITS ONLY)

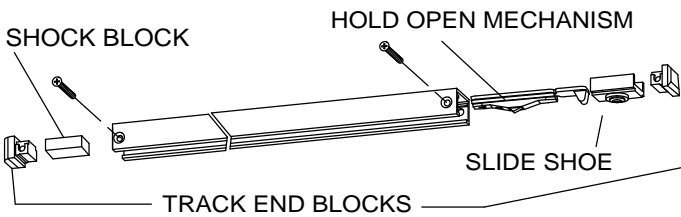
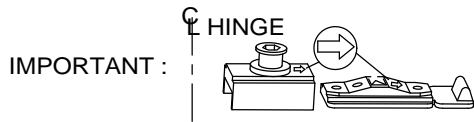
Insert slide shoe and track end blocks into track, and tighten screws.  
Attach track assembly to frame.



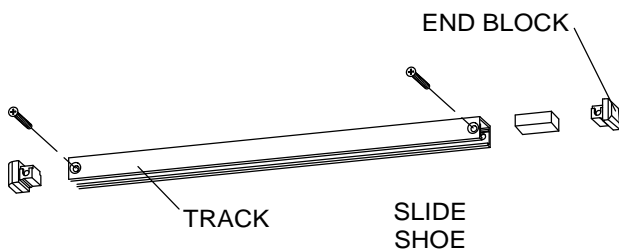
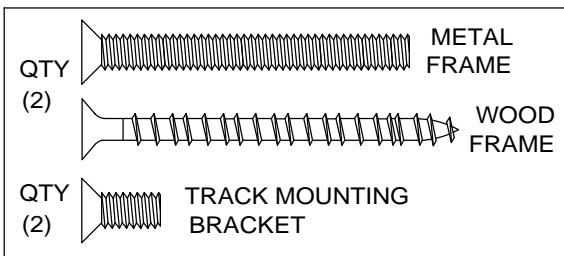
(93TH UNITS ONLY)

Insert slide shoe, hold open mechanism and track end blocks into track. Tighten mounting bracket screws. Attach track assembly to frame.

NOTE: HOLD OPEN MECHANISM AND SLIDE SHOE MUST BE INSTALLED WITH ARROWS POINTING AWAY FROM THE DOOR HINGES. (ARROWS ARE STAMPED ON SLIDE SHOE & HOLD OPEN MECHANISM)

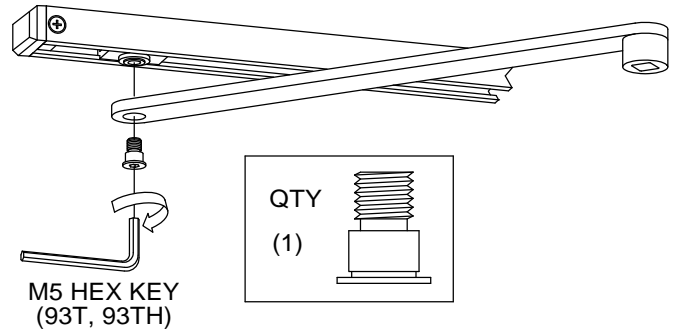


HINGES



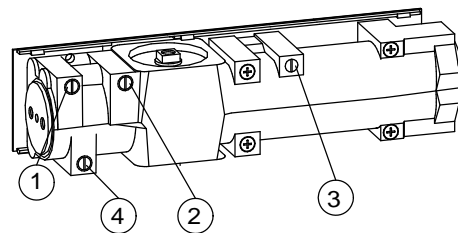
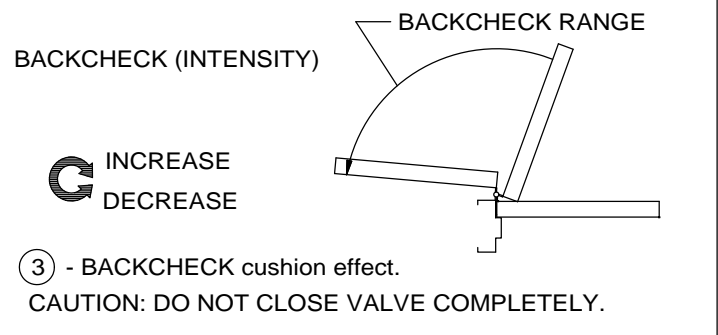
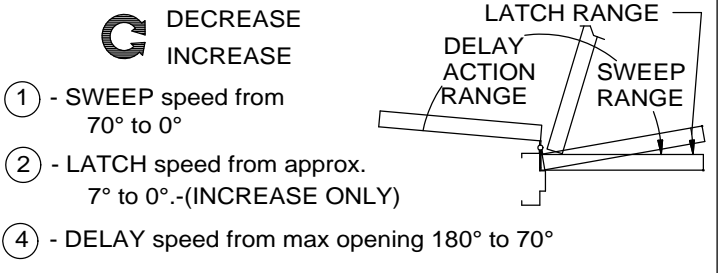
6 Attach arm to slide shoe.

Align hole in arm with slide shoe in track. Insert screw and tighten securely. Install track cover.



6 Adjust sweep, latch, backcheck and delayed action valves.

CAUTION: DO NOT REMOVE VALVES.

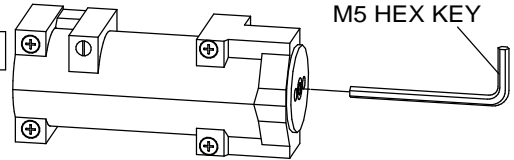


7

Adjust spring tension, if required.

**CRITICAL**

**CAUTION: DO NOT OVERTIGHTEN**



NOTE: TS93-1 supplied with a size 2 spring setting.  
 REFERENCE LABEL ON CLOSER FOR MINIMUM/MAXIMUM SETTINGS  
 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=5. Maximum number of turns clockwise =12. Depending on opening conditions, a door adjusted to meet barrier-free forces may not have sufficient power to reliably close and latch the door.

TS93-1	DOOR WIDTH		FULL TURNS OF SPRING ADJUSTER	CLOSER SIZE
	INT.	EXT.		
	2'6"	---	0	2
	3'	2'6"	+3	3
	3'6"	3'	+9	4
	4'	3'6"	+12	5

NOTE: TS93-5 supplied with a size 6 spring setting.  
 Maximum number of turns clockwise = 6  
 Adjust according to chart.

TS93-5	DOOR WIDTH		FULL TURNS OF SPRING ADJUSTER	CLOSER SIZE
	INT.	EXT.		
	4'	3' 6"	-4	5
	4' 6"	4'	0	6

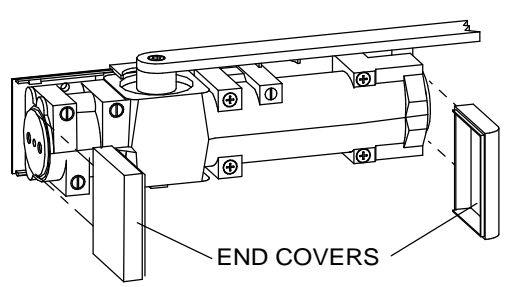
**NON-BARRIER-FREE OPENINGS:**

ULC LABELED UNITS "ONLY"  
 Adjust according to chart.

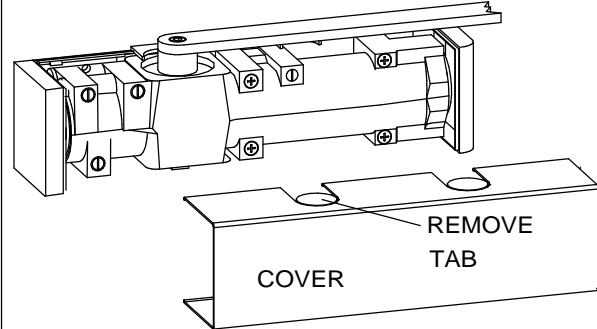
CLOSER TYPE	MAX. DOOR WEIGHT (LBS)	SPRING SIZE	FULL TURNS OF SPRING ADJUSTER
TS93-1	100	2	0
	125	3	+3
	150	4	+9
	200	5	+12
TS93-5	200	5	-4
	250	6	0

8

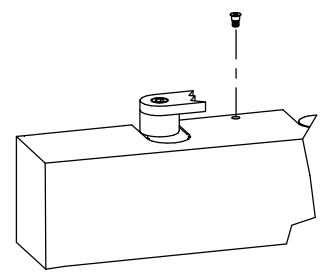
Install cover.



Slide end covers over closer body end caps.



Remove tab that aligns with arm hub. Slide cover onto plate.



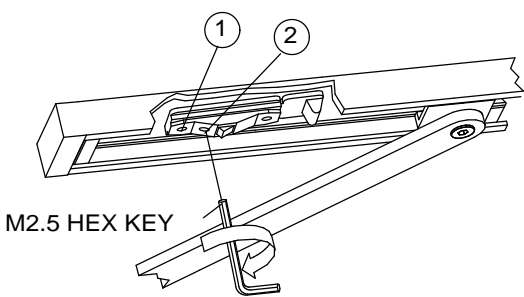
Secure with (1) 4-40 locking screw.

9

(HOLD OPEN UNITS ONLY) Set hold open.

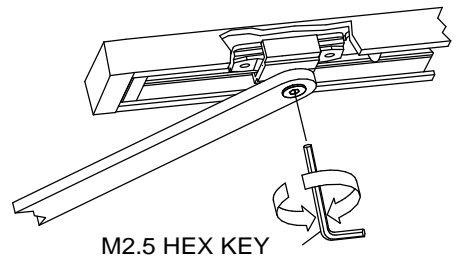
A

Place the hold open mechanism in desired position. Tighten screws #1 and #2 securely.



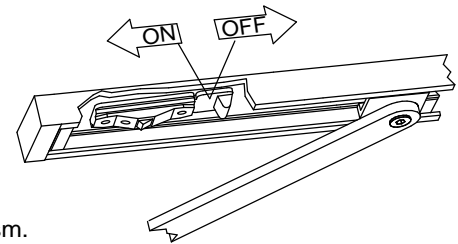
B

To adjust hold open force, turn clockwise to increase force, and counter clockwise to weaken force.



C

To enable hold open, push the white slide into the hold open mechanism. To disable hold open, pull the white slide away from hold open mechanism.



Description:

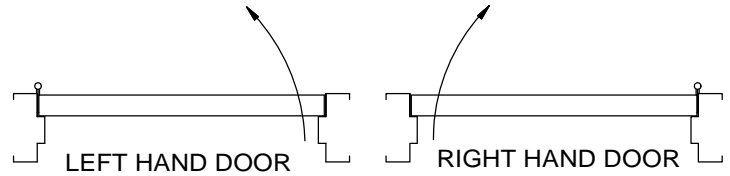
# TS93 PT, PTH PUSH SIDE TRACK MOUNT



## 1 (REFERENCE UNIT CARTON LABEL FOR ACCESSORIES AND OPTIONS SUPPLIED)

Determine hand of door and unit type supplied, (93PT, 93PTH). Prepare door and frame for fasteners according to template 08279212.

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.

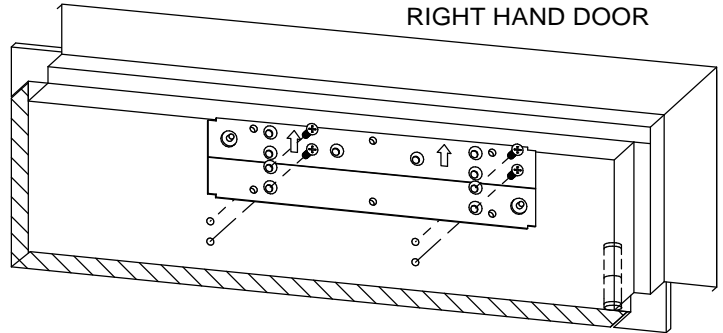
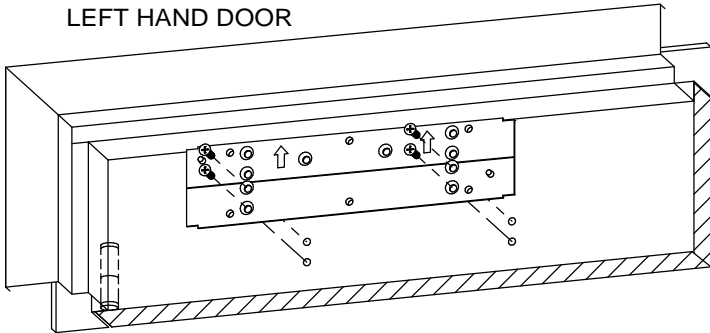


## 2 Attach mounting plate to door, using lower four holes in plate. Use upper four holes for optional mounting. Arrows on plate face top of door.

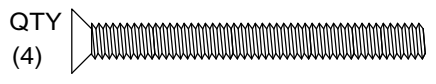
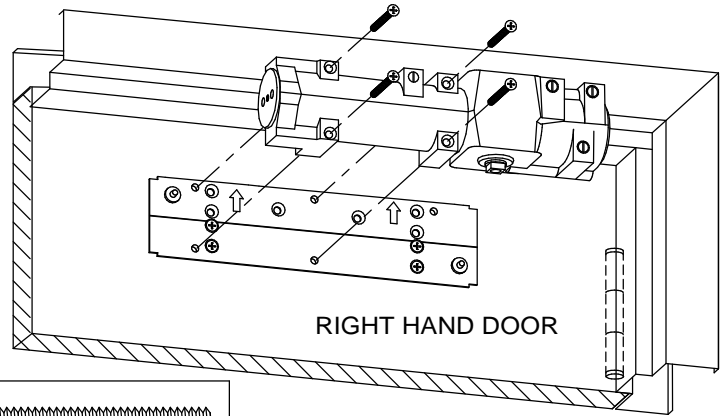
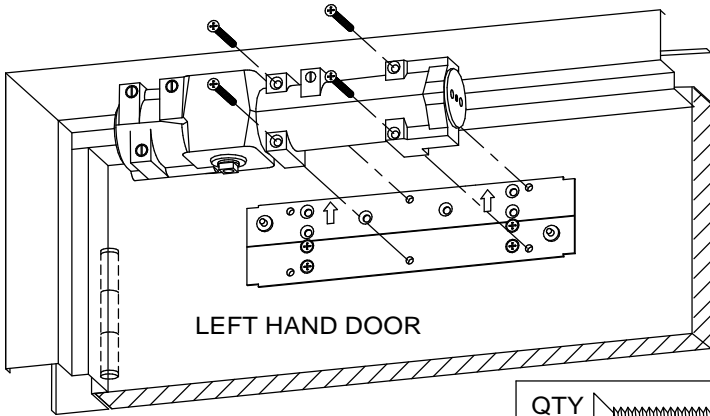


LEFT HAND DOOR

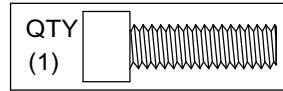
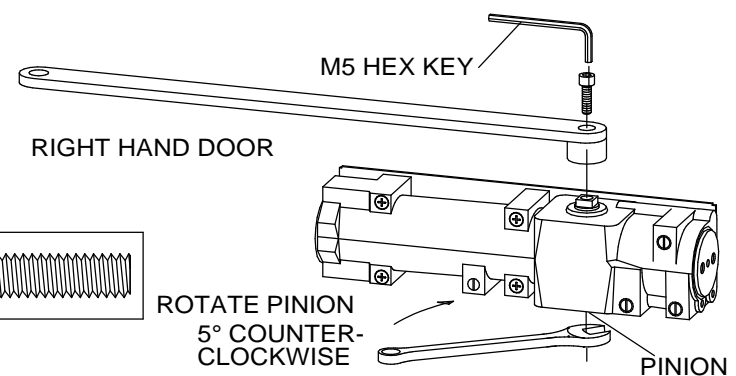
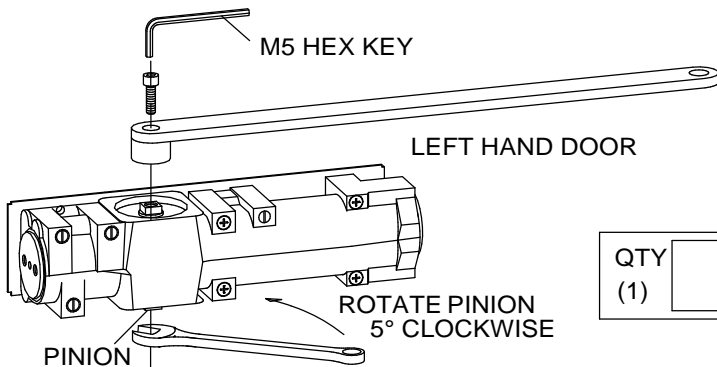
RIGHT HAND DOOR



## 3 Attach closer to mounting plate.



## 4 Place wrench on bottom pinion and rotate pinion 5° as shown. With main arm parallel to door, place main arm onto top pinion. Fasten securely with pinion screw.

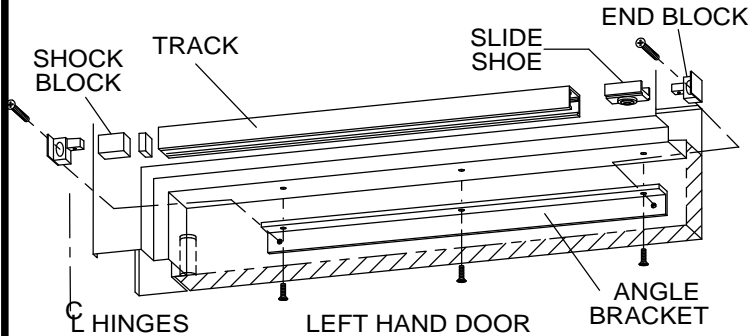


INSPK NO. 08279210 Rev.02/10

5 Assemble track and attach to frame.

(93PT UNITS ONLY)

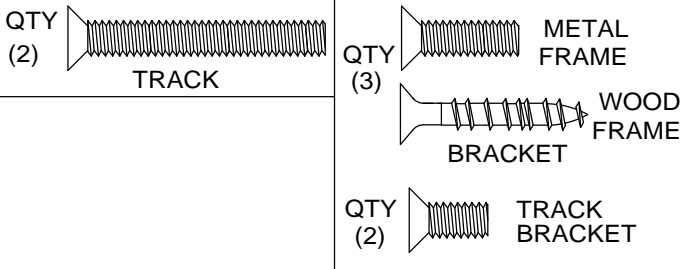
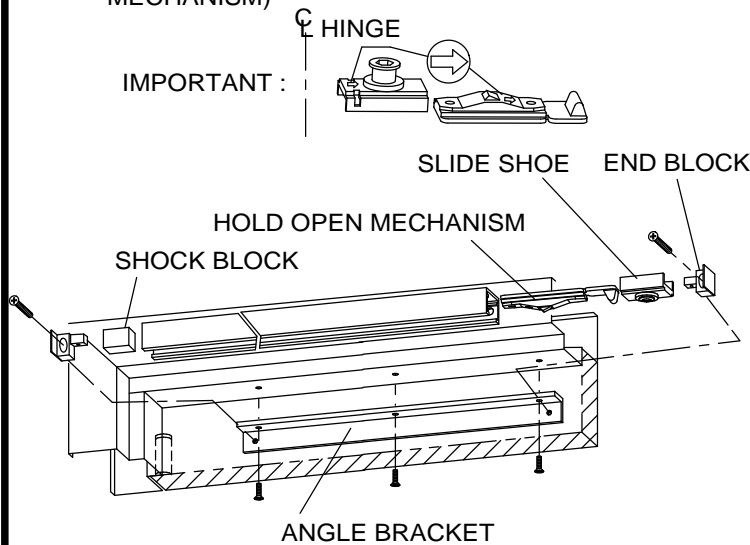
Attach angle bracket to soffit. Insert slide shoe, rubber stop and end blocks into track, and tighten screws. Attach track assembly to angle bracket by attaching screws through end blocks to angle bracket.



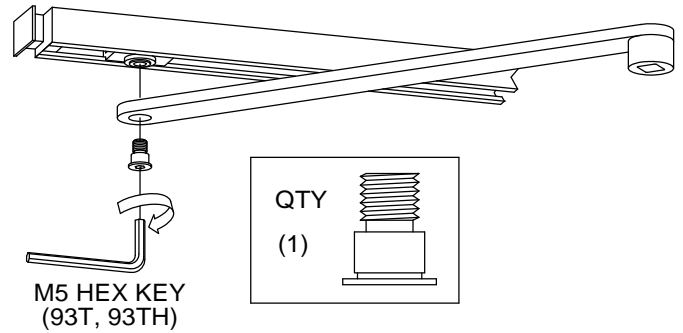
(93PTH UNITS ONLY)

Attach angle bracket to soffit. Insert slide shoe, rubber stop, hold open mechanism and track end blocks into track and tighten screws. Attach track assembly to angle bracket by attaching screws through end blocks to angle bracket.

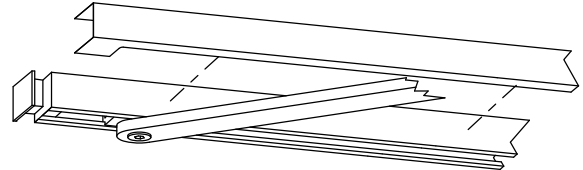
NOTE: HOLD OPEN MECHANISM AND SLIDE SHOE MUST BE INSTALLED WITH ARROWS POINTING AWAY FROM THE DOOR HINGES. (ARROWS ARE STAMPED ON SLIDE SHOE & HOLD OPEN MECHANISM)



6 Attach arm to slide shoe. Align hole in arm with slide shoe in track. Insert screw and tighten securely.

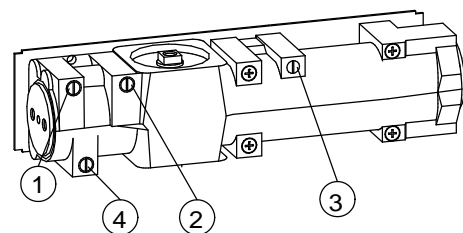
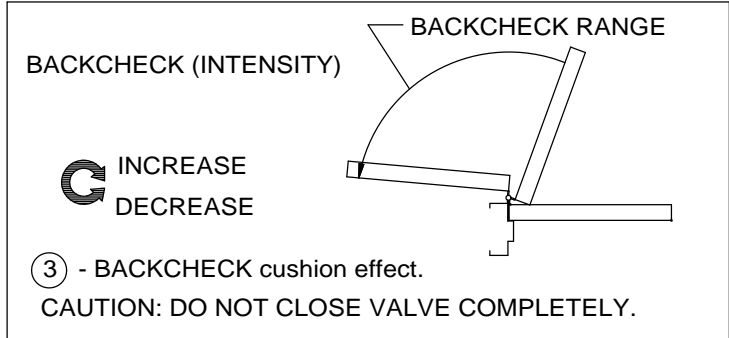
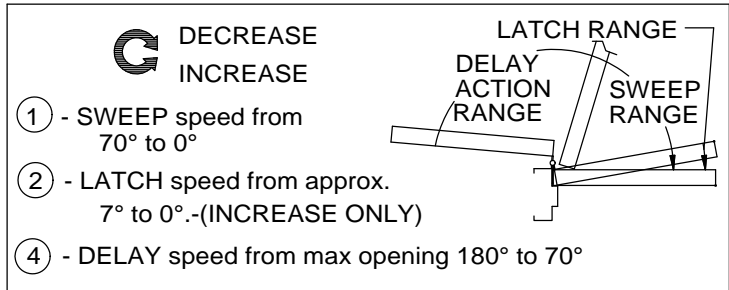


7 Install track cover by sliding it over track assembly. Cover will snap into place when fully installed.



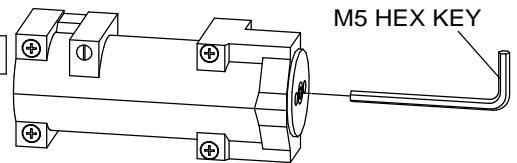
8 Adjust sweep, latch, backcheck and delayed action valves.

CAUTION: DO NOT REMOVE VALVES.



9

Adjust spring tension, if required.

**CRITICAL****CAUTION: DO NOT OVERTIGHTEN**

M5 HEX KEY

NOTE: TS93-1 supplied with a size 2 spring setting.  
 REFERENCE LABEL ON CLOSER FOR MINIMUM/MAXIMUM SETTINGS  
 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=5. Maximum number of turns clockwise =12. Depending on opening conditions, a door adjusted to meet barrier-free forces may not have sufficient power to reliably close and latch the door.

TS93-1	DOOR WIDTH		FULL TURNS OF SPRING ADJUSTER	CLOSER SIZE
	INT.	EXT.		
	2'6"	---	0	2
	3'	2'6"	+3	3
	3'6"	3'	+9	4
	4'	3'6"	+12	5

NOTE: TS93-5 supplied with a size 6 spring setting.  
 Maximum number of turns clockwise = 6  
 Adjust according to chart.

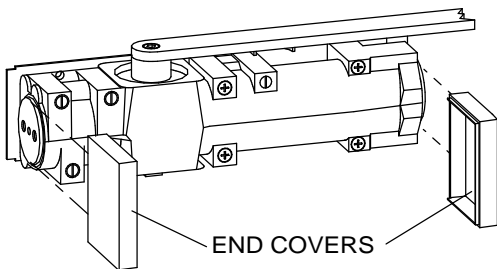
TS93-5	DOOR WIDTH		FULL TURNS OF SPRING ADJUSTER	CLOSER SIZE
	INT.	EXT.		
	4'	3' 6"	-4	5
	4' 6"	4'	0	6

**NON-BARRIER-FREE OPENINGS:****ULC LABELED UNITS "ONLY"**

Adjust according to chart.

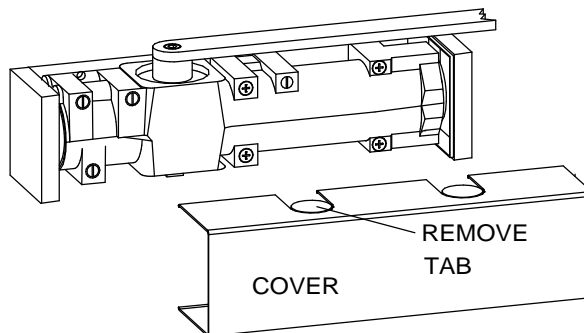
CLOSER TYPE	MAX. DOOR WEIGHT (LBS)	SPRING SIZE	FULL TURNS OF SPRING ADJUSTER
TS93-1	100	2	0
	125	3	+3
	150	4	+9
	200	5	+12
TS93-5	200	5	-4
	250	6	0

10 Install cover.



END COVERS

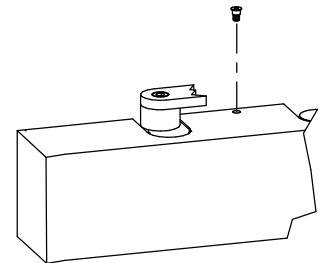
Snap end covers to closer body end caps.



COVER

REMOVE TAB

Remove tab that aligns with arm hub. Slide cover onto plate.

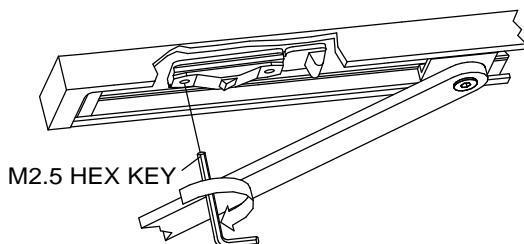


Secure with (1) 4-40 locking screw.

11 (HOLD OPEN UNITS ONLY) Set hold open.

A

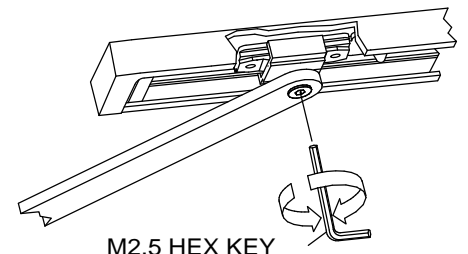
Place the hold open mechanism in desired position. Tighten screw securely.



M2.5 HEX KEY

B

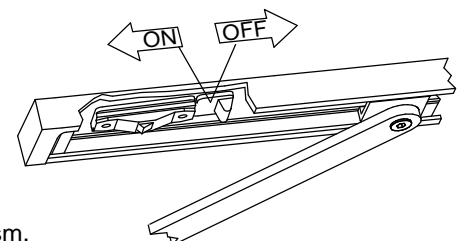
To adjust hold open force, turn clockwise to increase force, and counter clockwise to weaken force.



M2.5 HEX KEY

C

To enable hold open, push the white slide into the hold open mechanism.  
 To disable hold open, pull the white slide away from hold open mechanism.



ON OFF