



TS93 PT/PTH



Surface applied door closer

Installation instructions:

Push side track mount with dead stop (PT)

Optional hold open (PTH)

TABLE OF CONTENTS



Technical specifications		
	Size selection chart	2
Closer setup		
	Surface closer system	
	Handing of the door	
	Tools recommended	3
INSTALLATION INSTRUCTIONS:		
	Installing back plate and angle bracket	
	Installing the surface closer	
	Installing main arm	4
	Installing track assembly	5
ADJUSTMENTS		
	Adjusting the closing speeds	
	Adjusting the optional hold open	6
	Adjusting the spring force	7
	Installing the closer cover	7

Technical specifications

Size selection chart

Closer	Interior/ Exterior	Door Width					
		2'-6" min.	3'-0" max.	3'-6" max.	4'-0" max.	4'-6" max.	5'-0" max.
TS9315	Interior	•	♿	♿	♿	N/A	N/A
	Exterior	•	•	•	•	N/A	N/A
TS9356	Interior	N/A	N/A	N/A	•	•	•
	Exterior	N/A	N/A	•	•	•	N/A

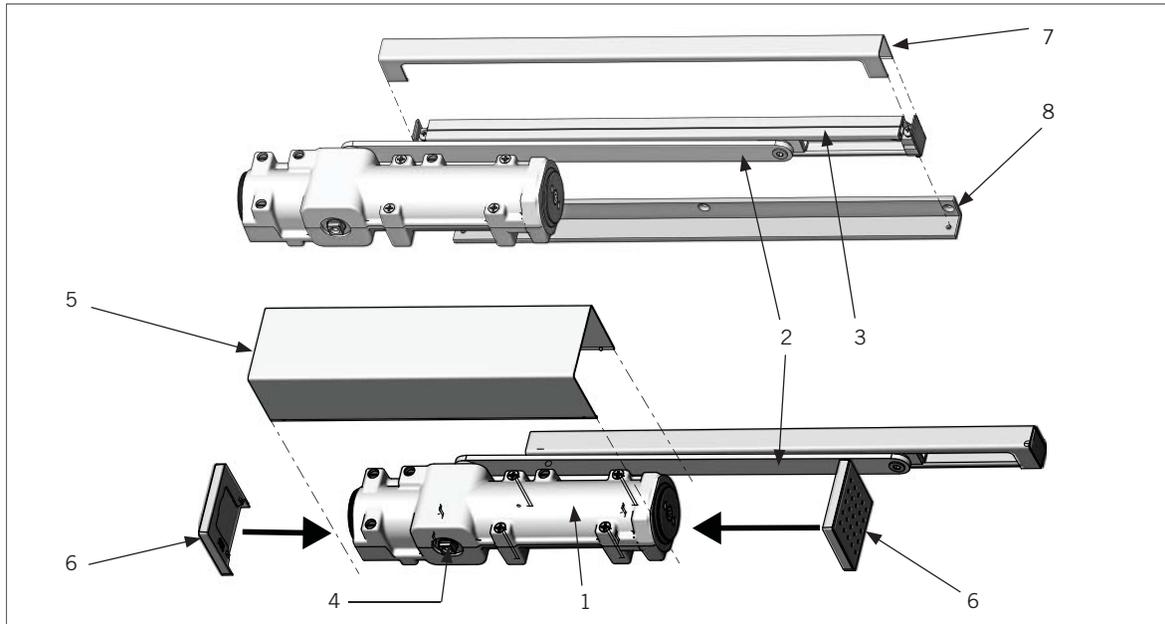
Closer setup

-  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.
-  Maximum door opening degree is 110°.
-  Minimum door with 26".
-  Hold open range is from 55° to 105° with optional hold open kit.

-  Arrows on closer mounting plate point upward.
-  Follow included template to properly prepare door and frame for all accessories of the closer installation.
-  Know the swing of the door which is being installed prior to installation.
-  Verify closer spring size prior to installation. See "Size selection chart" on page 2.
-  Make sure door efficiently operates prior to installing closer.

TS93 PT/PTH PUSH SIDE, REGULAR MOUNT

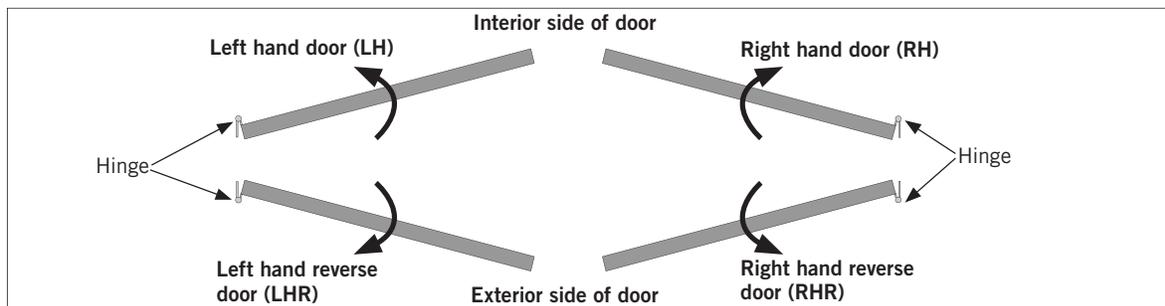
Surface closer system



The surface closer is comprised of the following components.

- | | |
|--------------------------|----------------------|
| 1. Closer body: "G" body | 5. Closer cover |
| 2. Main arm | 6. Closer end covers |
| 3. Track assembly | 7. Track cover |
| 4. Pinion | 8. Angle bracket |

Handing the door



Tools recommended

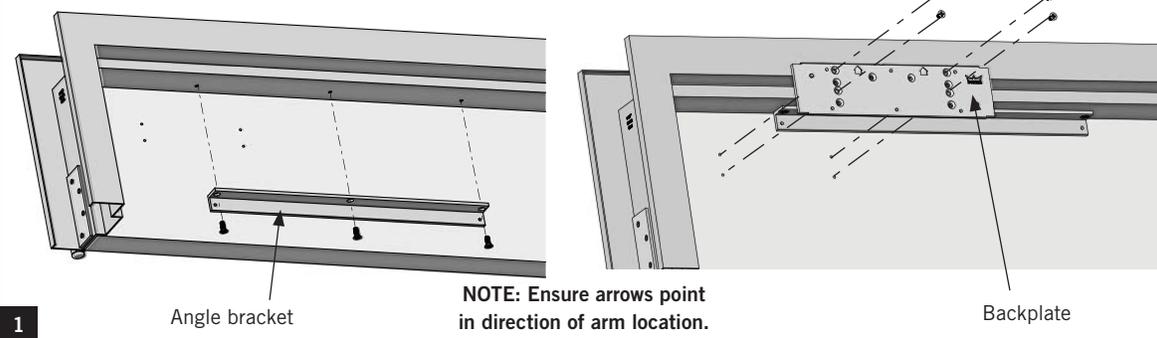
- | | |
|--|--|
| <ul style="list-style-type: none"> ▪ Drill Bits Metal: No. 21 & 10-32 Tap Wood: 9/64" | <ul style="list-style-type: none"> ▪ Pozidriv PZ-2 ▪ #2 Phillips screwdriver ▪ 3/16" flat head screwdriver ▪ M2.5 & M5 Hex key |
|--|--|

TS93 PT/PTH PUSH SIDE, REGULAR MOUNT

Installation Instructions

Installing the back plate and angle bracket

Left hand door



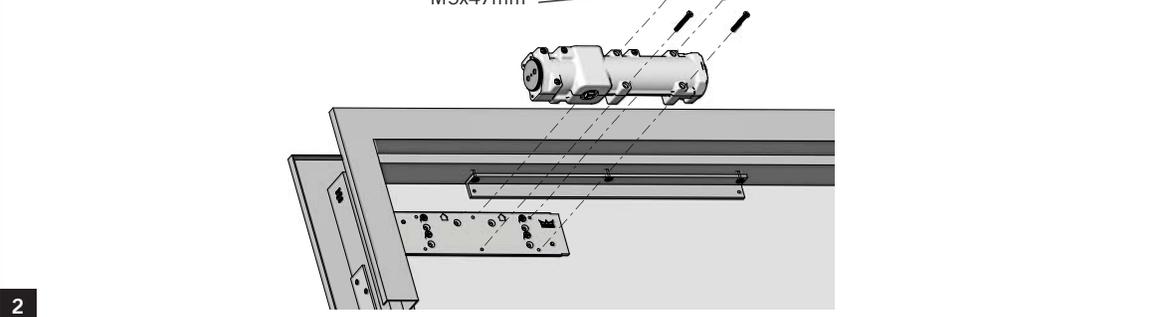
Reference template 08279212

NOTE: For use on regular mount applications on the push side of the door.

- 1.1 Secure angle bracket to bottom of soffit.
 - Use three 10-32x5/8" machine screws provided.
- 1.2 Secure back plate to door.
 - Use four 10-32x5/8" machine screws [#10x1" wood screws] provided.

Installing the surface closer

Left hand door

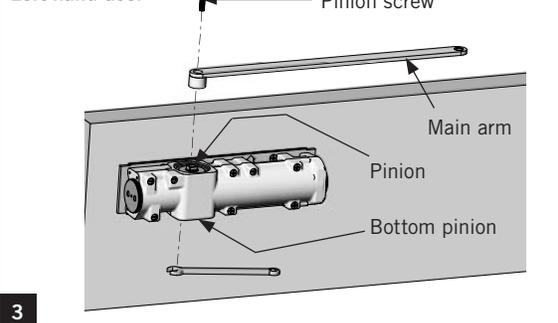


NOTE: Orient pinion closest to hinge.

- 2.1 Secure closer body to plate.
 - Use four M5x47mm screws.
- NOTE:** Use ONLY hand Phillips bit driver #2 or Posidriv PZ-2.

Installing main arm

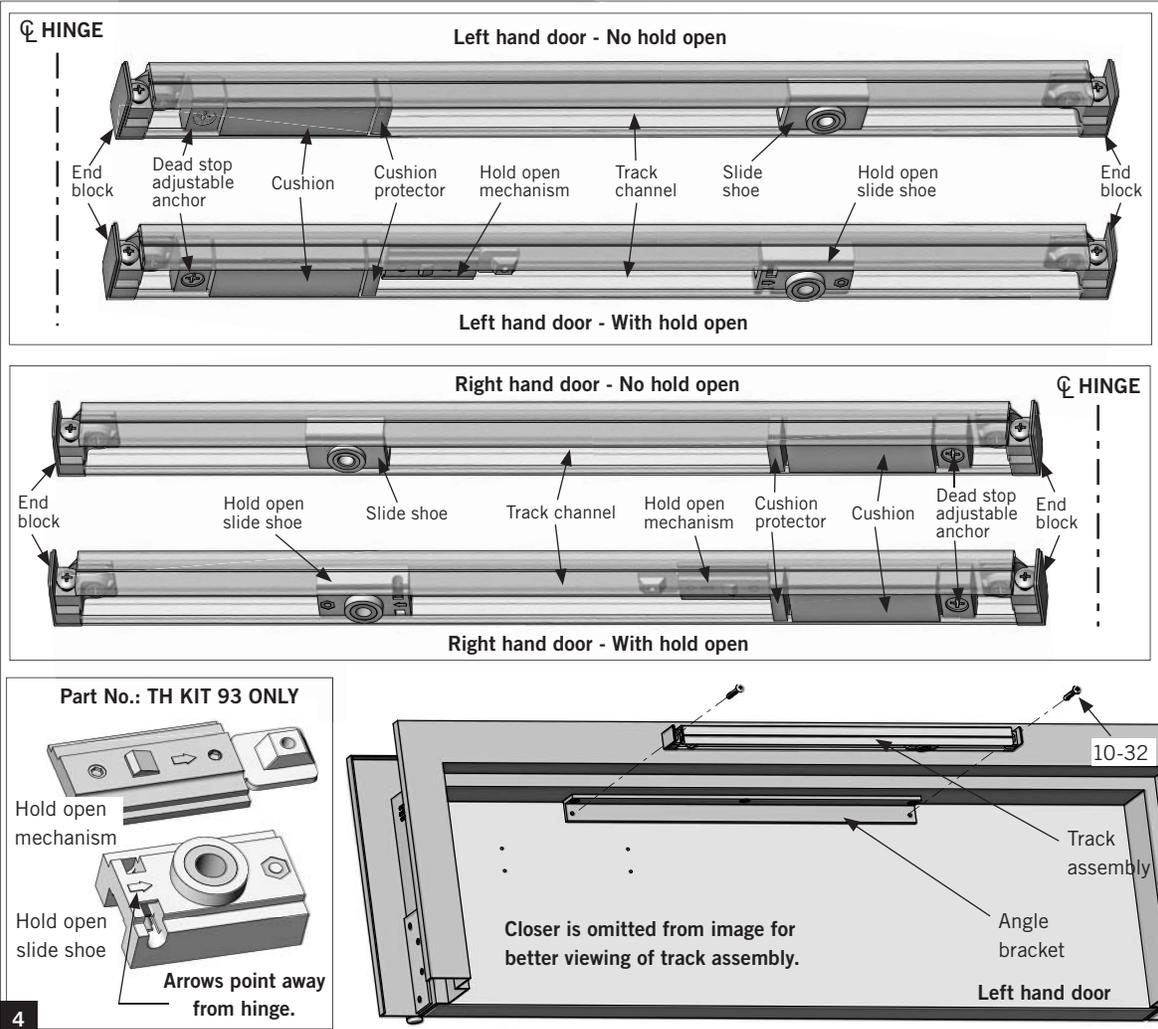
Left hand door



- 3.1 Attach 1/2" wrench to bottom pinion.
- 3.2 While looking up, rotate pinion (square) until it aligns to square hole on arm.
 - LH = turn 5° counter-clockwise
 - RH = turn 5° clockwise
- 3.3 Arm is parallel to door.
- 3.4 Secure with M6x20 socket head fastener.
 - Use M5 hex key.

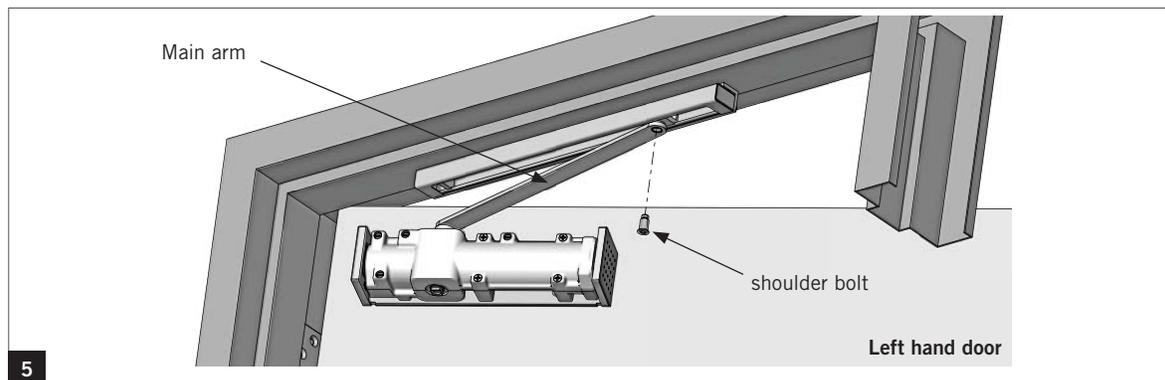
TS93 PT/PTH PUSH SIDE, REGULAR MOUNT

Installing track assembly



4.1 Position individual components inside track channel and screw down each fitting with a Phillips flat head driver.

4.2 Attach track assembly to angle bracket through end blocks with two M5x____ flat head Phillips screws.



5.1 Secure arm to slide shoe.

Secure with a shoulder bolt and an M5 hex key.

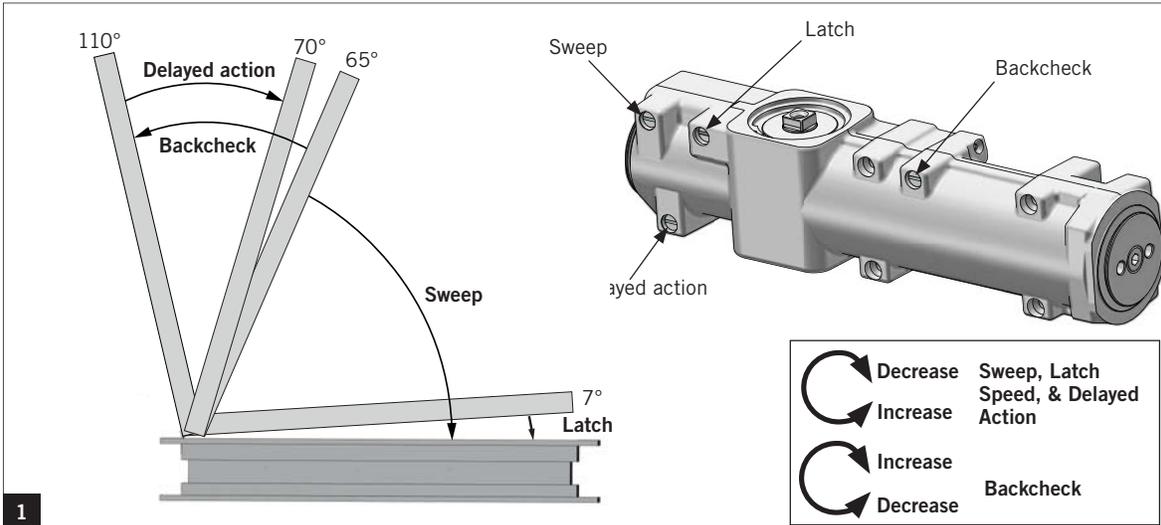
TS93 PT/PTH ADJUSTMENTS

Adjustments

-  Confirm closer spring size prior to making any closing speed adjustments.
-  Do not back valve heads out beyond closer casting.

-  Maximum opening angle is 110°.
-  Door should close in 3 to 6 seconds from 90°.
-  Do not close valves completely.

Adjusting the closing speeds: sweep, latch or backcheck and delayed actions



1.1 Adjust closing sweep speed: 70° to start of latch speed.

- Increase sweep speed: Turn valve counter-clockwise
- Decrease sweep speed: Turn valve clockwise.

1.2 Adjust closing latch speed: 7° to close.

- Increase latch speed: Turn valve counter-clockwise

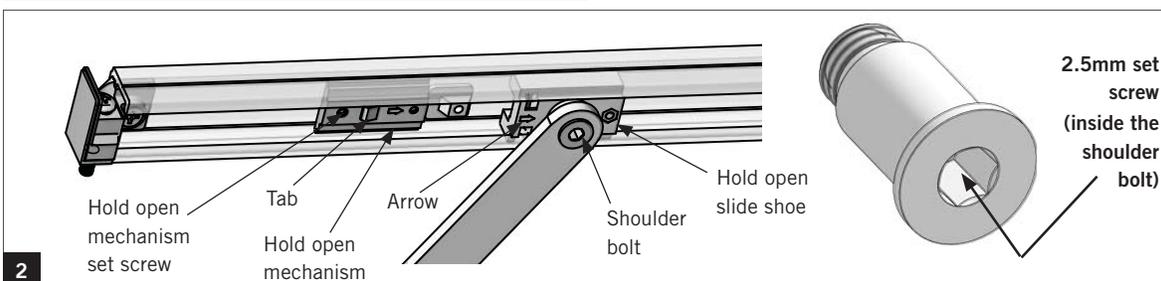
1.3 Adjust opening backcheck: beginning at 65°.

- Increase resistance: Turn valve clockwise
- Decrease resistance: Turn valve counter-clockwise.

1.4 Adjust closing delayed action: angle 110° to start of sweep.

- Increase delayed action: Turn valve clockwise
- Decrease delayed action: Turn valve counter-clockwise

Adjusting the optional hold open



2.1 Adjust door position:

- Slide hold open mechanism to desired hold open location inside track.

NOTE: Refer to step #4 for hold open mechanism location dependent upon handing of door.

- Secure hold open mechanism set screw with M2.5 hex key.

2.2 Hold open activation:

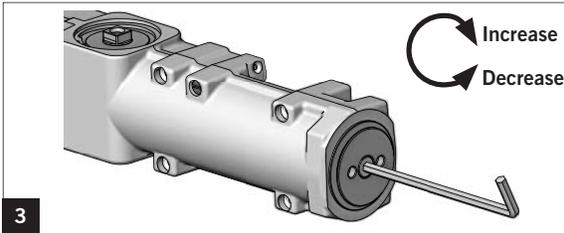
- Place door in hold open.
- *Deactivate:* Push tab, attached to end of hold open mechanism, in direction of arrow.
- *Activated:* When tab is pressed against hold open mechanism.

2.3 Adjust hold open force:

- Slide hold open slide shoe over hold open mechanism and click into place.
- Use an M2.5 hex key and rotate set screw to set desired hold open force. (*located inside shoulder bolt.*)
- *Increase force* = clockwise
- *Decrease force* = counter-clockwise

TS93 PT/PTH ADJUSTMENTS

Adjusting the spring force



TS9315

NOTE: Supplied with a size 2 spring setting.

Barrier free openings: Take an opening force reading from the pull on the door. If required, adjust the spring force to meet the barrier-free requirement.

- Decrease force: turn counter-clockwise
- Increase force: turn clockwise

Depending on opening conditions, a door adjusted to meet barrier-free forces may not have sufficient power to reliably close and latch the door.

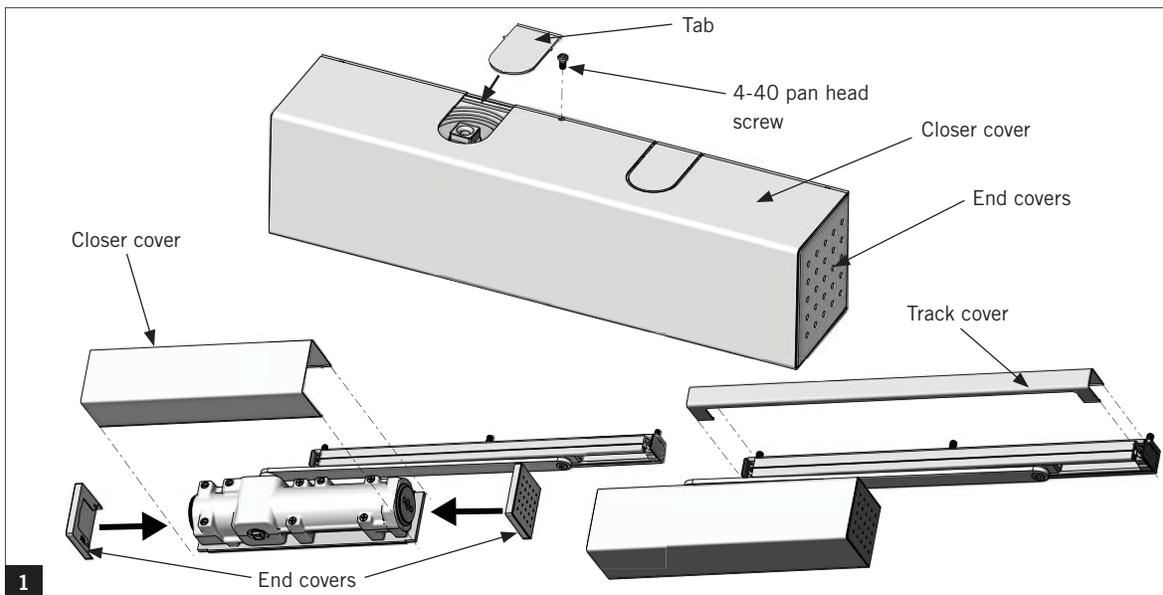
TS9356

NOTE: Supplied with a size 6 spring setting.

- Increase force: turn clockwise 6 times (max)

Regular Mount, Pull side closers					
	Closer size	Max door weight (lbs)	Door width		Full turns
			Interior	Exterior	
TS9315	2	100	2'6"	---	0
	3	125	3'	2'6"	+3
	4	150	3'6"	3'	+9
	5	200	4'	3'6"	+12
TS9356	5	200	4'	3'6"	-4
	6	250	4'6"	4'	0

Installing the closer covers



1.1 Snap both end covers onto close body end caps.

1.2 Remove un-needed tab and snap cover over closer body.

1.3 Secure with one 4-40 Phillips pan head screw.

1.4 Snap track cover onto track.



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