



# TS93 SPT



Surface applied door closer

Installation instructions:  
Push side mount spring track (SPT)

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## Technical specifications

### Templates

### Contents

**NOTE:** Refer to the included drawing for push side door, back plate and angle bracket mounting templating.

### Size selection chart

Closer	Interior/ Exterior	Door Width				
		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	•	•	•
	Exterior	N/A	•	•	•	N/A

### Note

1. Drawing is not to scale.
2. Dimensions are in inches/[mm].
3. Left hand door is 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 manufacturer's listings.
5. Template is for 4-1/2 x 4-1/2 butt hinges & 3/4" offset pivots
6. Maximum door opening degree is 110°.
7. Minimum door with 42".
8. Hold open range is from 85° to 115° with optional hold open kit.
9. Use closer body style "G" for this installation.
10. Arrows on closer mounting plate point upward.

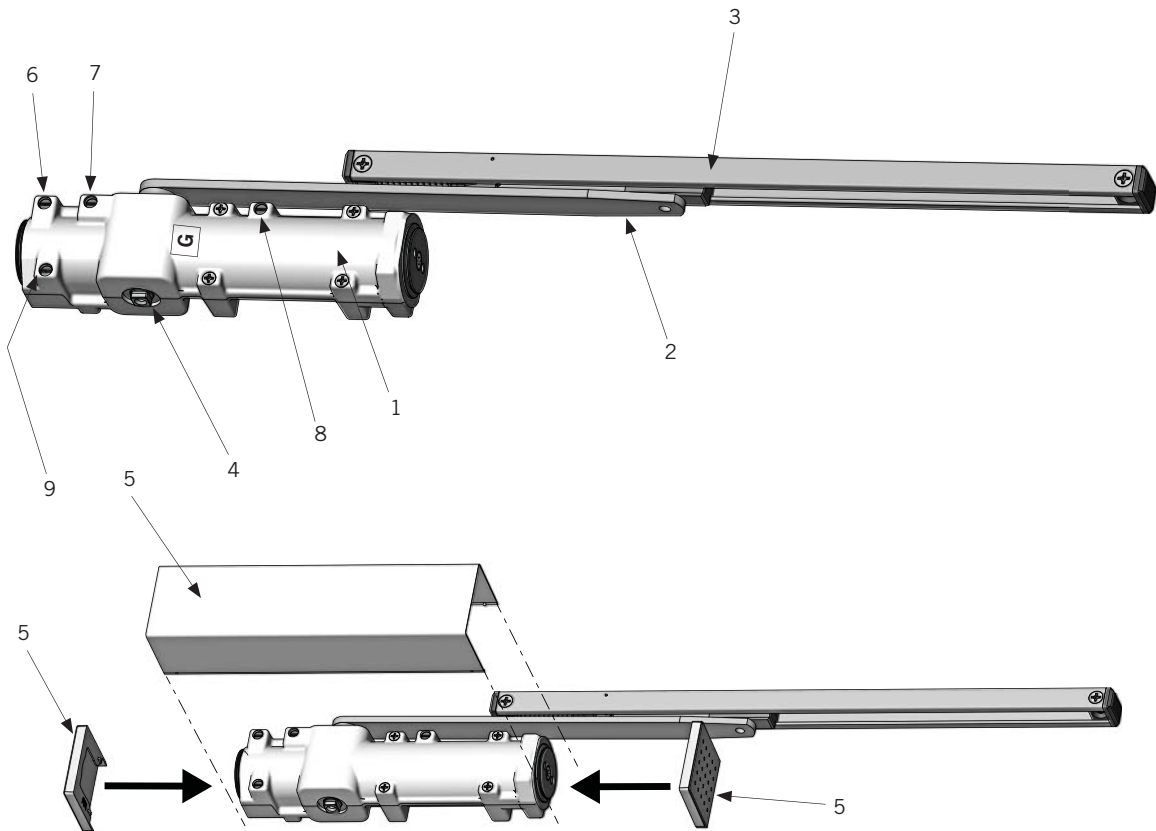
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## Closer setup

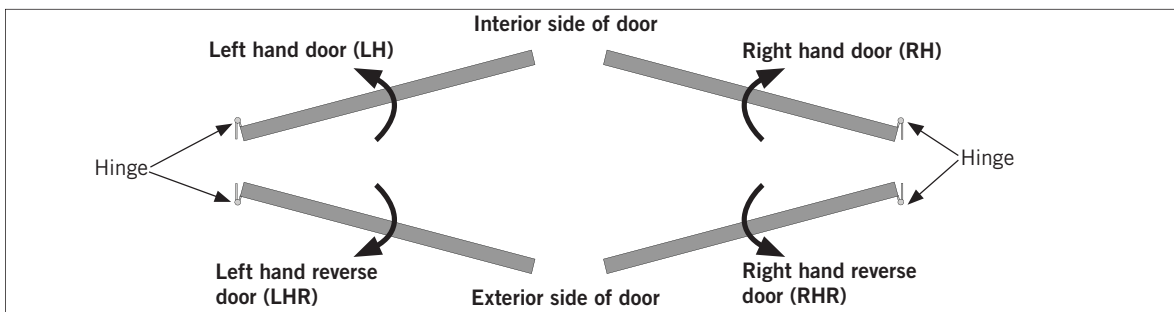
- ⚠ Follow included template to properly prepare door and frame for all accessories of the closer installation.
- ⚠ Know the swing of the door which is being installed prior to installation.
- ⚠ Verify closer spring size prior to installation. See "Size selection chart" on page 2.
- ⚠ Make sure door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

The surface closer is comprised of the following components.

1. Closer body: "G" body
2. Main arm
3. Track assembly
4. Pinion
5. Cover and end caps
6. Closing/sweep speed adjustment
7. Latch speed adjustment
8. Backcheck adjustment
9. Delayed action adjustment



## Handing the door

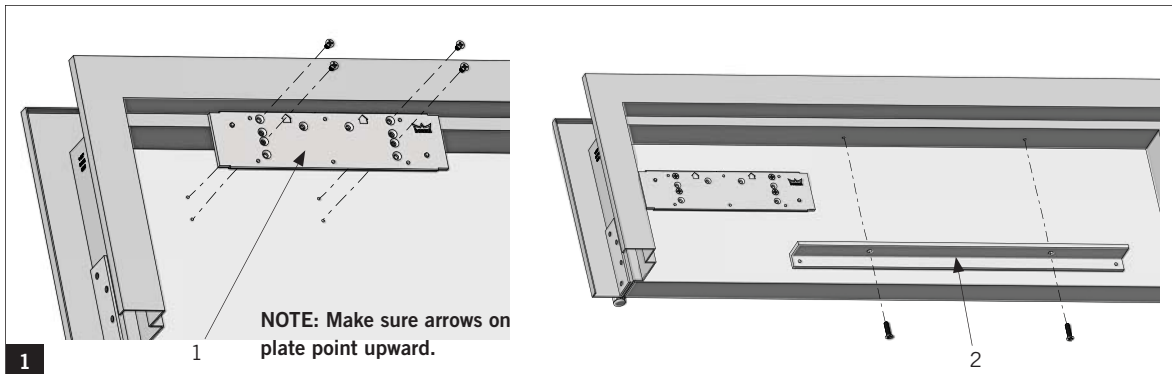


## A. Installing the surface closer

### Tools recommended

- Drill Bits
  - Metal: No. 21 & 10-32 Tap
  - No. 7 & 1/4-20 Tap
  - Wood: 9/64" & 11/64"
- #0 Phillips screwdriver
- #2 Phillips screwdriver
- 3/16" flat head screwdriver
- 3/16" and M5 Hex key

### Installing the back plate and angle bracket

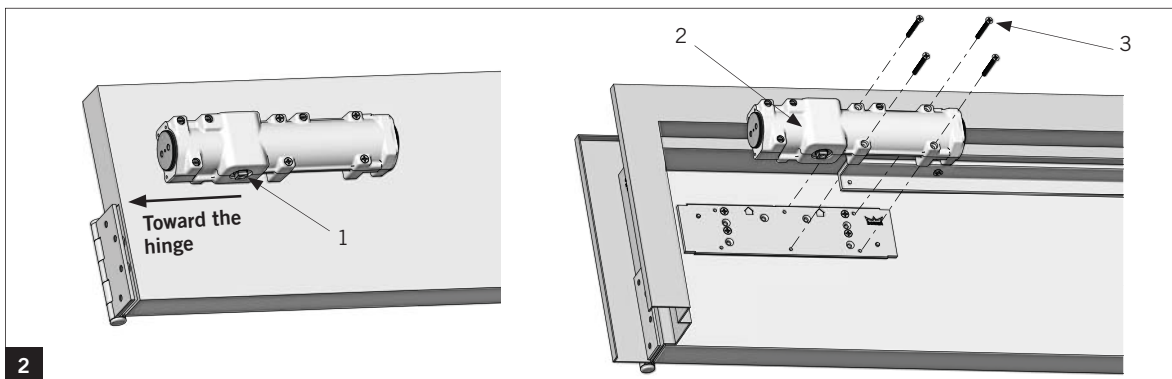


### Reference template 08280192

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

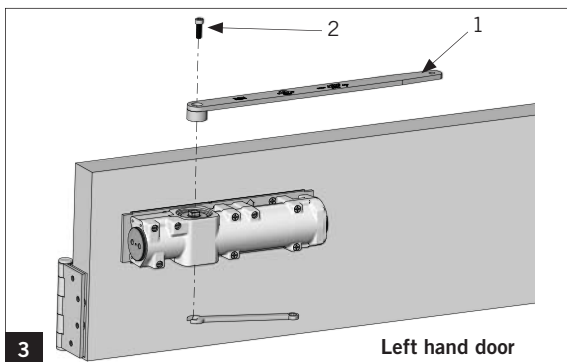
- 1.1 Attach the back plate (1) to the mounting surface using the four screws [10-32 machine screws or #10 wood screws] provided with the surface closer.
- 1.2 Attach the angle bracket (2) to the bottom of the soffit using the three [1/4-20 machine screws or #10 wood screws] provided.

### Installing the surface closer



**NOTE:** Orient pinion (1) closest to hinge.

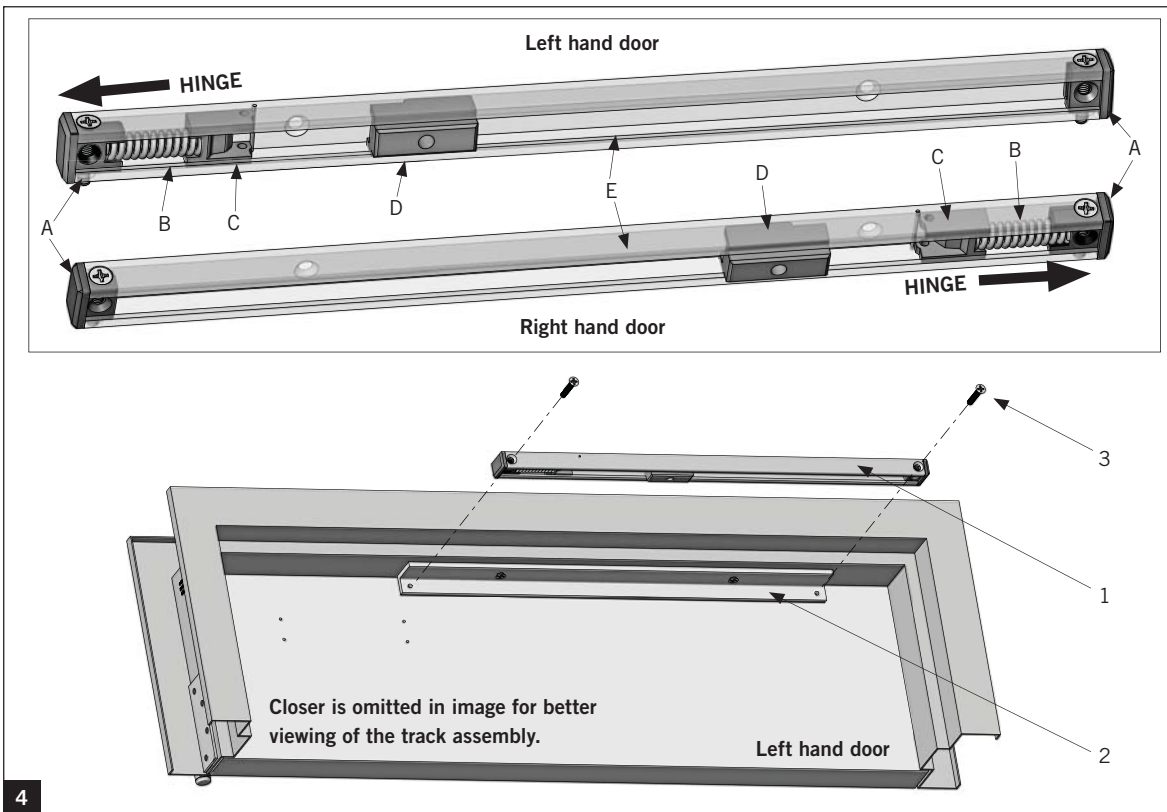
- 2.1 Attach the closer body (2) to the plate using the four screws (3) provided with the plate itself [M5x45mm flat head screw].



- 3.1 Using an adjustable wrench (and looking up at the bottom of the closer):
  - Left hand door - turn the bottom pinion counter-clockwise 5°.
  - Right hand door - turn the bottom pinion clockwise 5°.
- 3.2 Attach the main arm (1) to the top pinion with an M6x20 socket head cap screw (2) using an M5 hex key.

**⚠** Be sure the main arm is parallel to the door during application.

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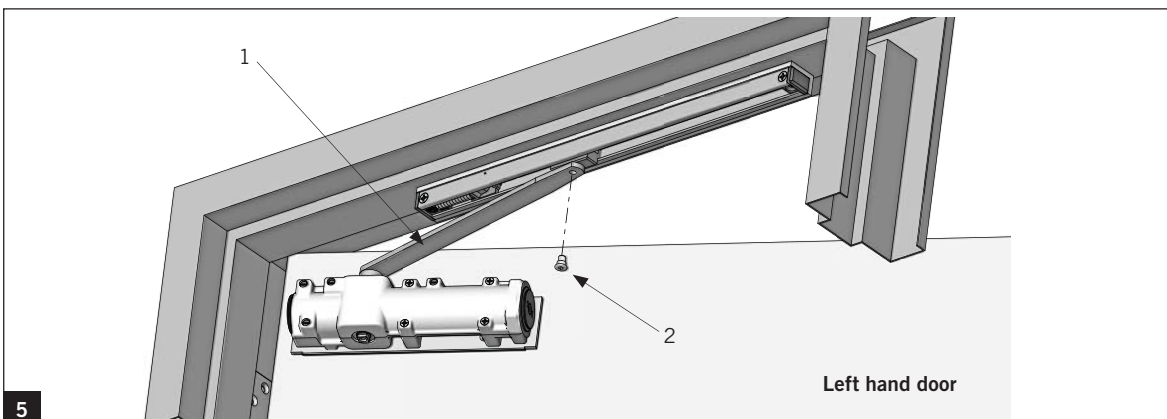
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**NOTE: Spring tracks are preassembled.**

**4.1** Attach the track channel (1) to the angle bracket (2) through the end blocks with two flat head Phillips screws (3) [1/4-20 x 1-3/4" flat head screws or #14 - 2-3/4" wood screws].

A. End block  
B. Spring  
C. Shock block

D. Slide shoe  
E. Track channel



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**5.1** Align the arm (1) with the slide shoe of the track channel.

**5.2** Attach with one 3/8-24 x 1/2" shoulder bolt (2) using an M5 hex key.

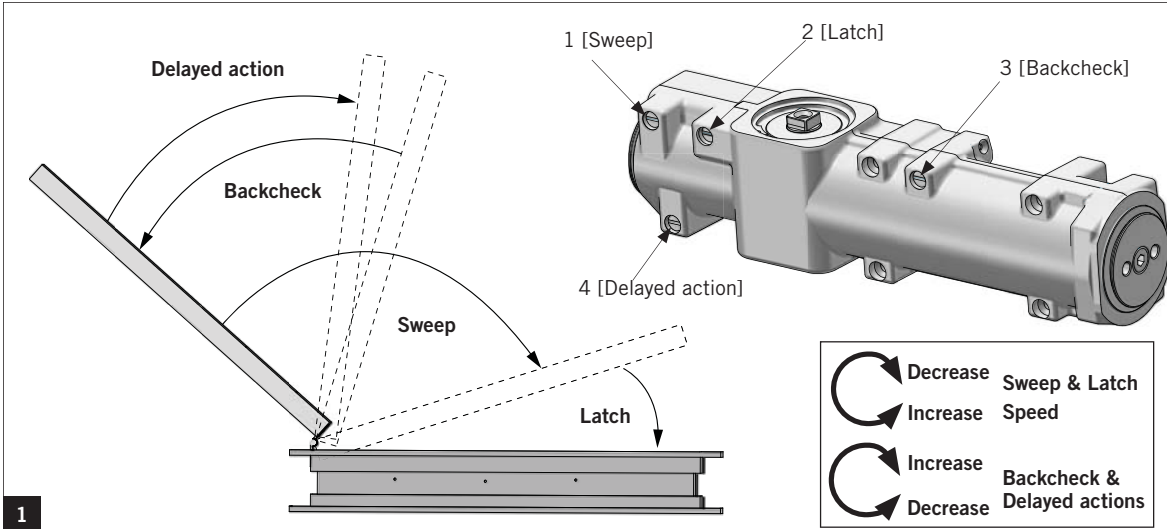
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## B. Adjustments

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

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

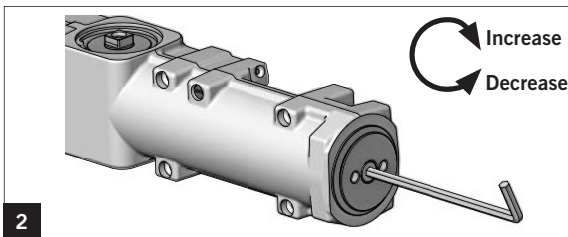
### Adjusting the closing speeds: sweep, latch or backcheck and delayed actions



- 1.1** Adjust the **sweep speed** (1) for the area from 70° - 0°
- Increase sweep speed: Turn valve counter-clockwise
  - Decrease sweep speed: Turn valve clockwise.
- 1.2** Adjust the **latch speed** (2) for the area from 7° - 0°.
- Increase latch speed: Turn valve counter-clockwise

- 1.3** Adjust the **backcheck** (3) for the area from 65° - 110°.
- Increase resistance: Turn valve clockwise
  - Decrease resistance: Turn valve counter-clockwise.
- 1.4** Adjust the **delayed action** (4) for the area from 110° - 70°.
- Increase delayed action: Turn valve clockwise
  - Decrease delayed action: Turn valve counter-clockwise

### 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 5 times (max)
- Increase force: turn clockwise 12 times (max)

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.

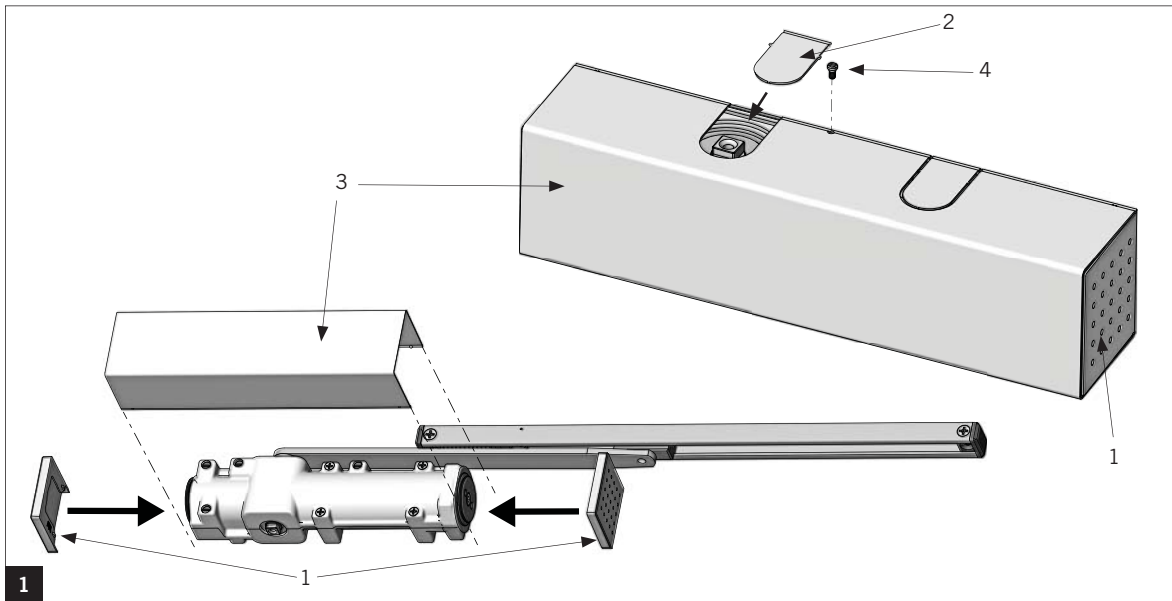
- Increase force: turn clockwise 6 times (max)

CLOSER TYPE	MAX DOOR WEIGHT (LBS)	SPRING SIZE	FULL TURNS OF SPRING ADJUSTER
TS9315	100	2	0
	125	3	+3
	150	4	+9
	200	5	+12
TS9356	200	5	-4
	250	6	0

	DOOR WIDTH		FULL TURNS OF SPRING ADJUSTER	CLOSER SIZE
	INT.	EXT.		
TS9315	2'6"	-----	0	2
	3'	2'6"	+3	3
	3'6"	3'	+9	4
	4'	3'6"	+12	5
TS9356	4'	3'6"	-4	5
	4'6"	4'	0	6

## C. Installing the closer covers

### Installing the covers



**1.1** Snap both end covers (1) into place.

**1.2** Remove the un-needed tab (2), and snap the closer body cover (3) into place.

**1.3** Attach with a 4-40 Phillips pan head screw (4).



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