

# CLSC15 SURFACE CLOSER INSTALLATION INSTRUCTIONS

## Tools recommended

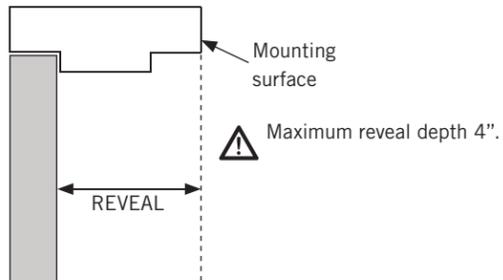
- Drill Bits
- Metal: 3/16" [#12]
- Wood: 5/32" [#22]
- #2 Phillips screwdriver
- 1/2" or 13mm box wrench
- 10" adjustable wrench
- 4mm hex key

⚠ Follow included templates to properly prepare door frame.

⚠ Verify closer spring size prior to installation. See "Spring size chart".

⚠ Verify the swing of the door which is being installed prior to installation.

⚠ Make sure door operates efficiently prior to installation.

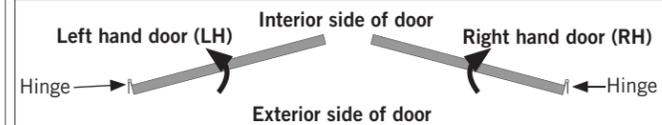


## Technical specifications

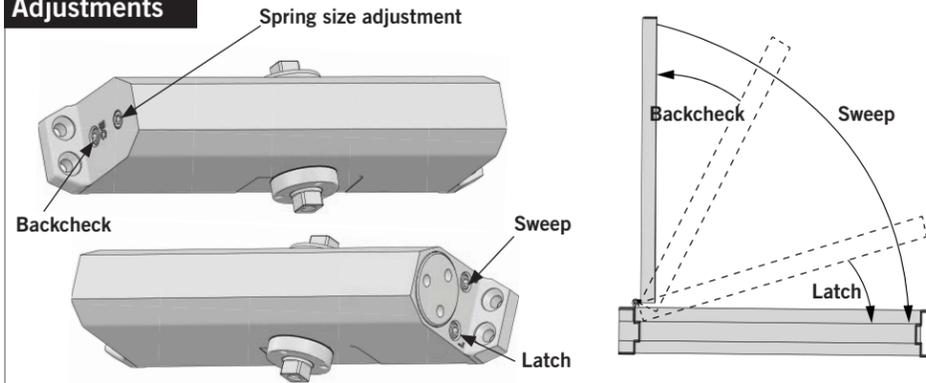
### Spring size chart

Closer is shipped at a size 3 from factory.

Closer size	Regular & top jamb closers		Parallel arm closers		# Turns from size 3
	Interior	Exterior	Interior	Exterior	
1	28"				12 CCW
2	34"	28"	28"		6 CCW
3	38"	30"	34"	28"	0 turns
4	48"	36"	38"	30"	9 CW
5	54"	42"	48"	36"	13 CW



## Adjustments



- 1.1 Adjust the **spring size** for the door width listed in the corresponding "spring size chart". **Closer is set at size 3 from the factory.**
  - Increase spring size: Turn full 360° turns clockwise
  - Decrease spring size: Turn full 360° turns counter-clockwise
- 1.2 Adjust the **sweep (closing & latch) speed** from 90° to 10°
  - Increase speed: Turn valve counter-clockwise

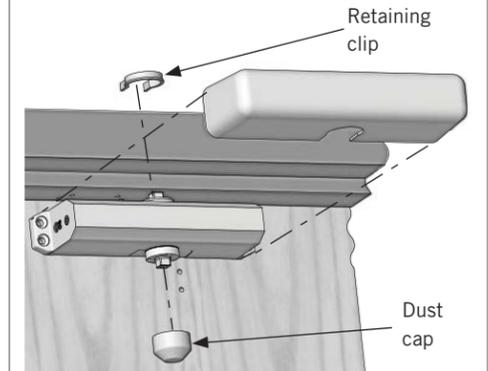
- Decrease speed: Turn valve clockwise.
- 1.3 Adjust the **latch speed** for 10° - 0°.
- 1.4 Adjust the **backcheck** starting at 70°.
  - Increase resistance: Turn valve clockwise
  - Decrease resistance: Turn valve counter-clockwise.

⚠ Do not back valves out beyond closer casting.

⚠ Use a 4mm hex key

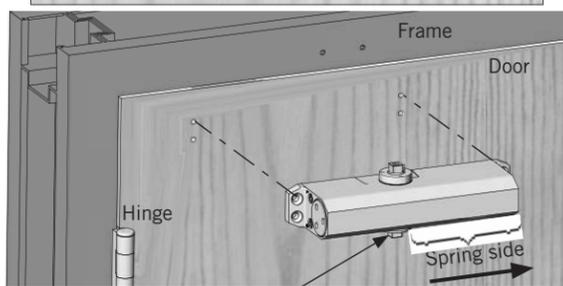
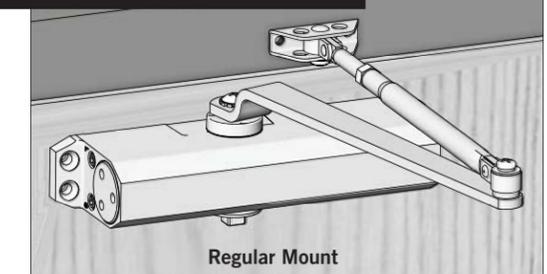
⚠ Door should close in 3 to 6 seconds from 90°.

## INSTALLING THE OPTIONAL COVER



- 1.1 Lay retaining clip on pinion, open side toward door.
- 1.2 Slide cover over closer body and snap onto retaining clip.
- 1.3 Slide dust cap over bearing housing.

## REGULAR MOUNT: PULL SIDE

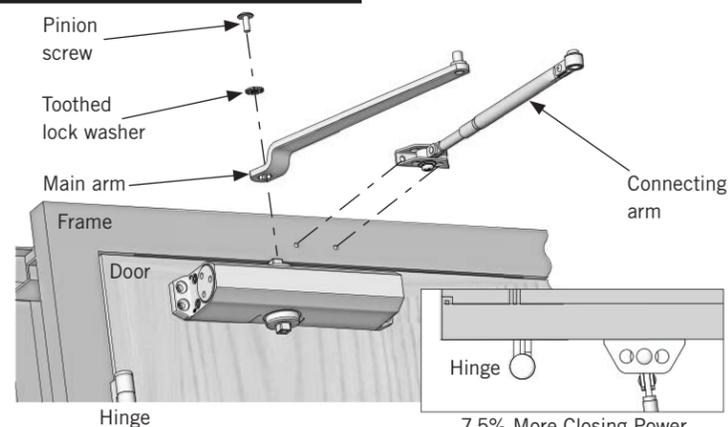


**NOTE:** Orient spring side away from the hinge.

Refer to regular mount template for drill hole dimensions.

- 1.1 Secure closer body to door.
  - Use four #14 x 1-1/2" wood screws [1/4" x 1-1/2" self-tapping flat head screws]

## REGULAR MOUNT (CONTINUED)

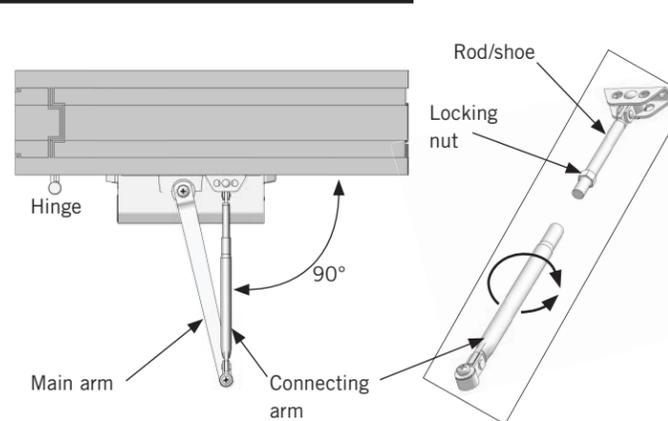


- 2.1 Secure connecting arm assembly to frame.
  - Use two #14 x 1-1/4" wood screws [1/4" x 1-1/4" self-tapping round head screws]
- 2.2 Secure main arm to closer pinion.
  - Use pinion screw and toothed lock washer

⚠ To increase latch power by 7.5%, fasten the connecting arm in the hole towards the hinge. See image above.

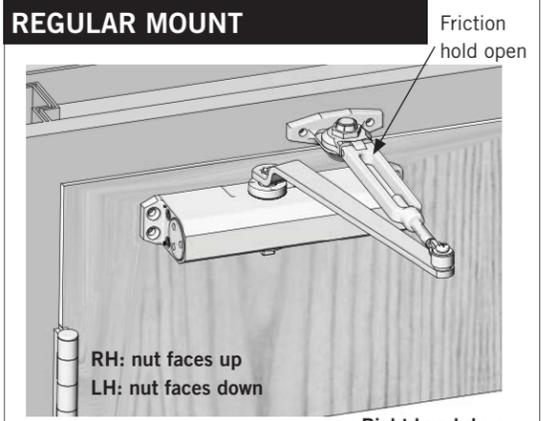
**Main arm must be initially mounted as shown**

## REGULAR MOUNT (CONTINUED)



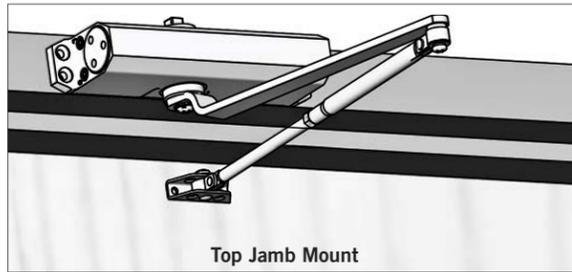
- 3.1 Line up ends of arms. **Do not fasten together yet.**
- 3.2 Secure main arm with connecting arm together to proper length reveal. **Keep connecting arm at a 90°.**
  - Use provided pan head screw, lock washer, & flat washer.
- 3.3 Tighten locking nut on connecting arm.

## FRICITION HOLD OPEN OPTION: REGULAR MOUNT

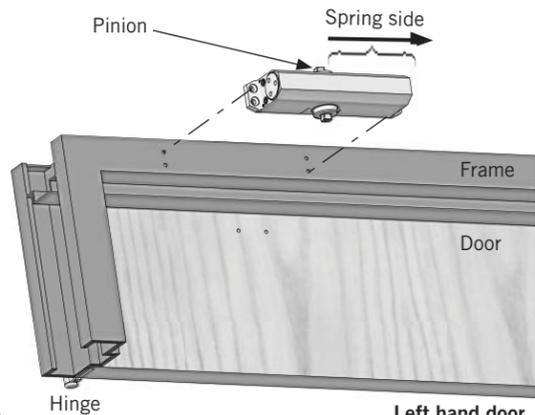


- 1.1 Follow steps 1-3. Substitute for friction hold open arm.
- 1.2 Set hold open position.
  - Loosen hold open nut.
  - Open door 10° before desired hold open position.
  - Tighten hold open nut securely.
- 1.3 **To disengage hold open:** Pull/push door closed until hold open releases and closer takes over.

## TOP JAMB MOUNT: PUSH SIDE



Top Jamb Mount



**NOTE:** Orient spring side away from the hinge.

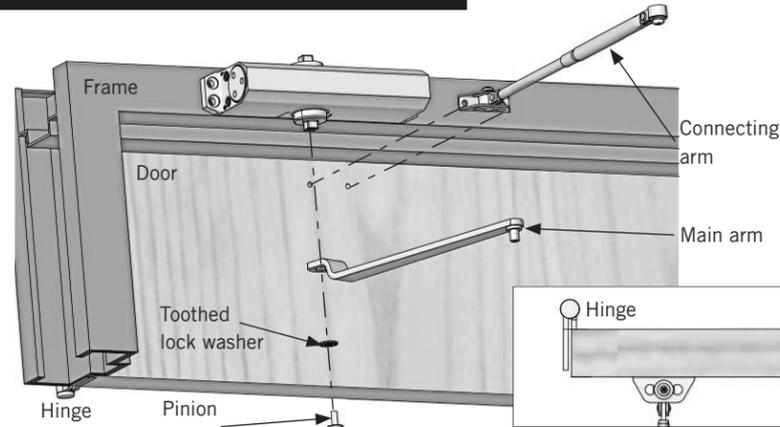
Refer to top jamb mount template for drill hole dimensions.

- 1.1 Secure closer body to frame.
  - Use four #14 x 1-1/2" wood screws [1/4" x 1-1/2" self-tapping flat head screws]

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Left hand door shown

## TOP JAMB MOUNT (CONTINUED)



- 2.1 Secure connecting arm assembly to door.
  - Use two #14 x 1-1/4" wood screws [1/4" x 1-1/4" self-tapping round head screws]
- 2.2 Secure main arm to closer pinion.
  - Use pinion screw and toothed lock washer

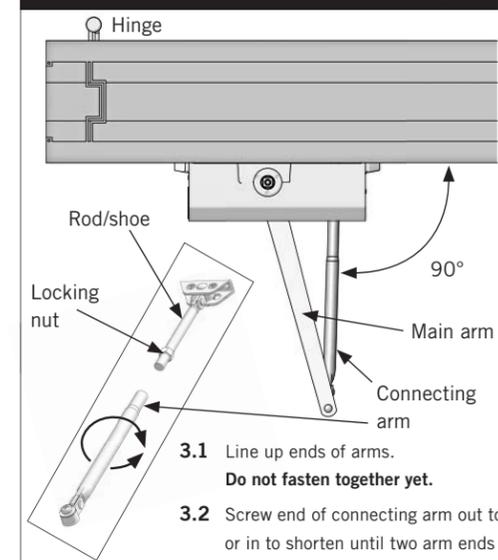
**!** To increase latch power by 7.5%, fasten the connecting arm in the hole towards the hinge.

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7.5% More Closing Power  
7.5% Less Closing Power

Main arm must be initially mounted as shown

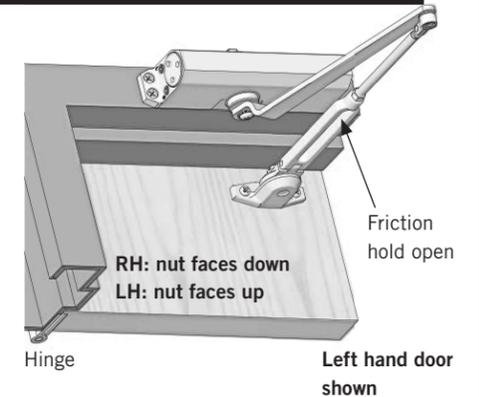
## TOP JAMB MOUNT (CONTINUED)



- 3.1 Line up ends of arms. Do not fasten together yet.
- 3.2 Screw end of connecting arm out to lengthen or in to shorten until two arm ends meet. Keep connecting arm at a 90°.
- 3.3 Secure main arm and connecting arm together to proper reveal length.
  - Use provided pan head screw, lock washer, & flat washer.
- 3.4 Tighten locking nut on connecting arm.

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## FRICITION HOLD OPEN OPTION: TOP JAMB

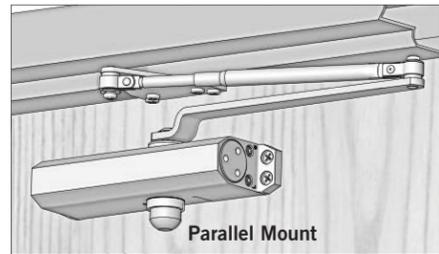


Hinge

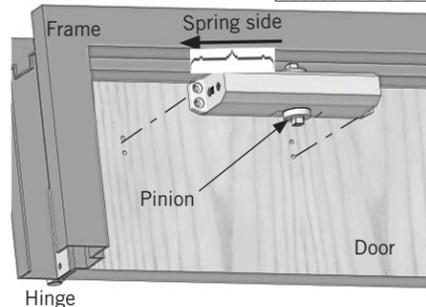
Friction hold open  
Left hand door shown

- 1.1 Follow steps 1-3. Substitute friction hold open arm.
- 1.2 Set hold open position.
  - Loosen hold open nut.
  - Open door 10° before desired hold open position.
  - Tighten hold open nut securely.
- 1.3 To disengage hold open: Pull/push door closed until hold open releases and closer takes over.

## PARALLEL MOUNT

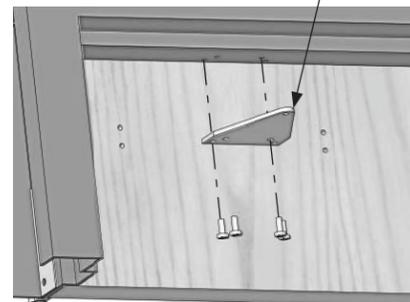


Parallel Mount



Left hand doors shown

Parallel bracket



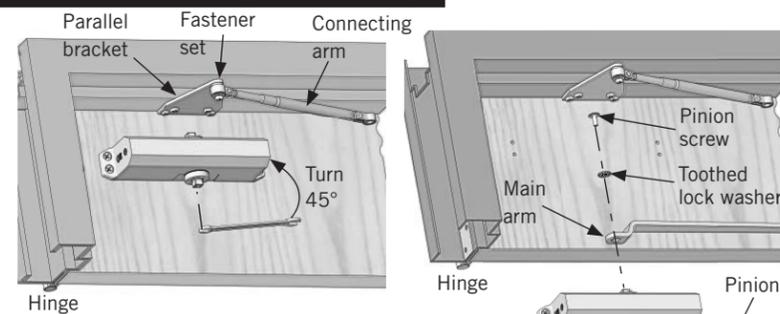
**Note:** Orient spring side closer to the hinge. Refer to parallel mount template for drill hole location and dimensions.

- 1.1 Secure closer body to door.
  - Use four #14 x 1-1/2" wood screws [1/4" x 1-1/2" self-tapping flat head screws]

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- 1.2 Secure parallel bracket to door frame.
  - Use four #14 x 1-1/4" wood screws [1/4" x 1-1/4" self-tapping round head screws]

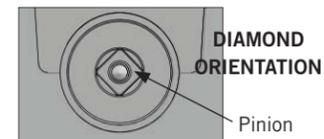
## PARALLEL MOUNT (CONTINUED)



- 2.1 Remove shoe from connecting arm; reuse fasteners.
- 2.2 Secure connecting arm to parallel bracket.
  - Use provided fastener set [shoe pan head screw, lock washer & flat washer].
- 2.3 Close latch and sweep valves on closer. (See Adjustments section for valve locations.)
- 2.4 To apply pre-load: Place wrench on lower pinion and rotate, towards hinge, until wrench is 45° to door.

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**NOTE:** Pinion should be at a diamond orientation to the closer to connect main arm.

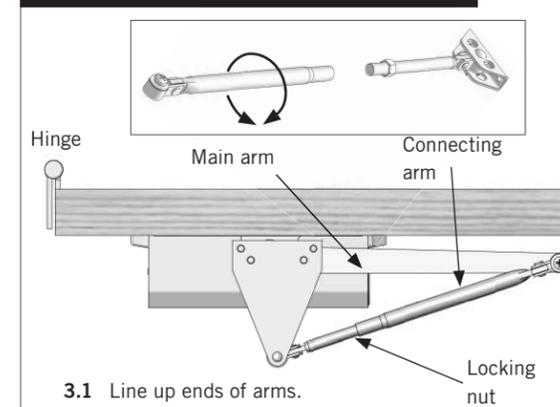


DIAMOND ORIENTATION

- 2.5 Secure main arm to closer pinion.
  - Use pinion screw and toothed lock washer

**NOTE:** Be sure main arm is parallel to door; towards the latch.

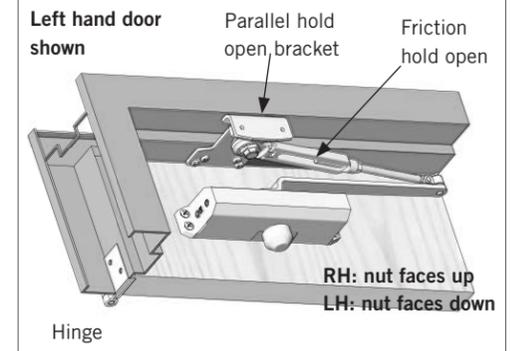
## PARALLEL MOUNT (CONTINUED)



- 3.1 Line up ends of arms. Do not fasten together yet.
- 3.2 Screw end of connecting arm out to lengthen or in to shorten until two arm ends meet. Main arm must be parallel to door (not hitting or touching the door).
- 3.3 Secure main arm and connecting arm together
  - Use provided pan head screw, lock washer & flat washer.
- 3.4 Tighten locking nut on connecting arm.
- 3.5 Reopen the latch and sweep valves.

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## FRICITION HOLD OPEN OPTION: PARALLEL MOUNT



Hinge

Left hand door shown

Parallel hold open bracket  
Friction hold open

RH: nut faces up  
LH: nut faces down

- 1.1 Follow steps 1-3. Substitute for friction hold open arm.
- 1.2 Secure parallel hold open bracket to door frame, using four 1/4-20x5/8" pan head screws provided [#14 wood screws].
  - 1.1 Secure hold open arm to hold open bracket, using two 1/4-20x5/8" pan head screws.
  - 1.2 Set hold open position.
    - Loosen hold open nut.
    - Open door 10° before desired hold open position.
    - Tighten hold open nut securely.
  - 1.3 To disengage hold open: Pull/push door closed until hold open releases and closer takes over.