Installation Instructions

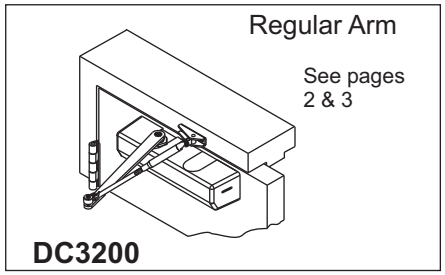
For Non-Hold Open or "A1" Hold Open Arm Option

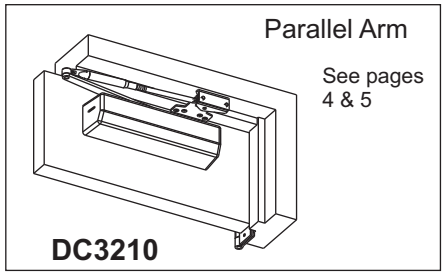
DC3200 Series
Multi-Sized 1 thru 6

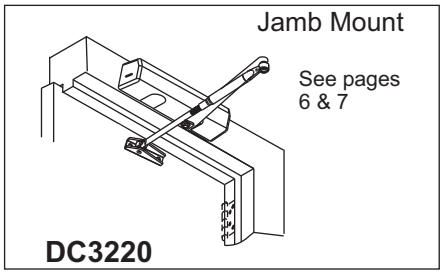
Corbin Russwin®

ASSA ABLOY

Universal Door Closers







IMPORTANT:

- An improperly installed or incorrectly adjusted door closer may cause **property damage** or **personal injury;** and will void product warranty.
- To avoid personal injury, **DO NOT DISASSEMBLE THIS DOOR CLOSER BODY.**
- Door closers must be securely fastened to a properly reinforced door and frame with fasteners provided.
- Door closers with the "A1" HOLD OPEN ARM option are not permitted to be installed in fire door assemblies.

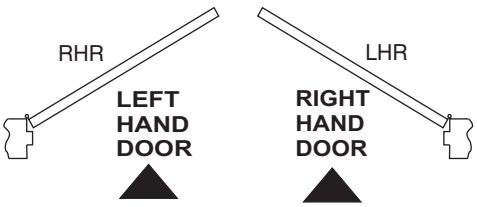
BEFORE INSTALLING:



- The Americans with Disabilities Act (ADA) requires that doors having door closers have an opening force not to exceed 5 lbf. for interior doors, 8.5 lbf exterior doors. Use standard templating for regular arm and parallel arm applications. Jamb mounted applications use the template for 140° door opening to achieve the required opening force.
- The door closer's power size adjustment feature may require adjustment to its lowest setting to comply with ADA opening force guidelines.
- ADA compliant closers are: DC3200, DC3210, DC3220

Size of Door & Door Closer					
Type of Installation	**Interior**	**Exterior In-swinging**	**Exterior Out-swinging**	**Recommended Closer Size**	****Max. Opening Force lbs/f**
Regular & Top Jamb	2'4"	———	———	1	8
	3'0"	———	———	2	14
	3'6"	2'6"	3'0"	3	16
	4'0"	3'0"	3'6"	4	22
	4'6"	3'6"	4'0"	5	24
	5'0"	*4'0"	*4'6"	6	26
Parallel Arm	2'4"	———	———	1	8
	2'6"	———	———	2	14
	3'0"	———	2'6"	3	16
	3'6"	———	3'0"	4	22
	4'0"	———	*3'6"	5	24
	4'6"	———	*4'0"	6	26

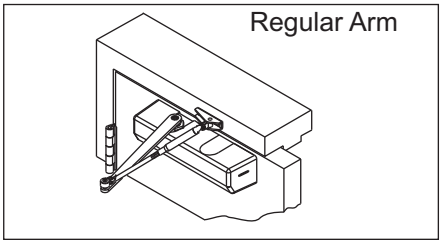
TO DETERMINE HAND OF YOUR DOOR:



****NOTE: These forces are for standard templating with bearing type hinges and do not account for pressure differentials and draft.**

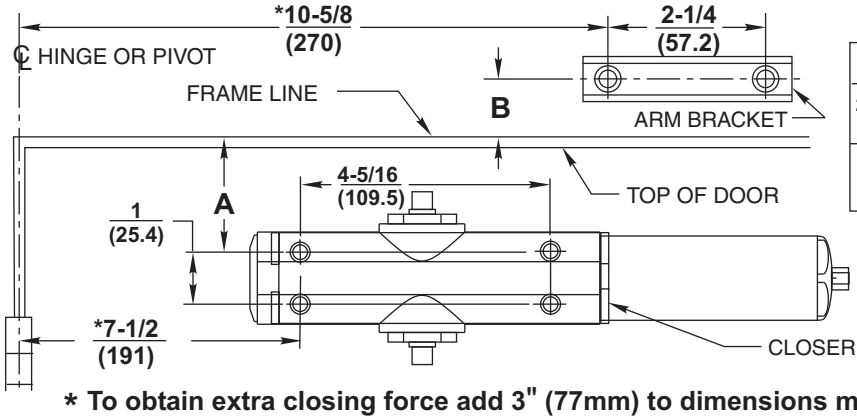
Installation Instructions

Regular Arm Application
DC3200 Series



1. Template

Mark Door and Jamb (for closer bracket and arm bracket)
If top rail is 2-1/2" (64mm) or greater, use template FM131C provided.
If top rail is 1-3/4" (44mm) to 2-7/16 (62mm), see MOUNTING DIMENSIONS chart.

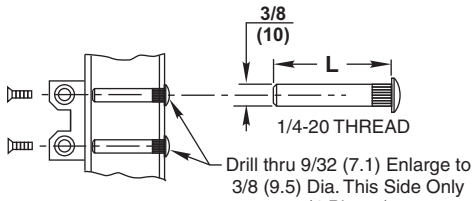


MOUNTING DIMENSIONS

TOP RAIL	A	B	MIN. CLEARANCE REQUIRED OVER DOOR NHO	MIN. CLEARANCE REQUIRED OVER DOOR HO
2-1/2" & OVER (64mm)	1" (25.4mm)	7/8" (23mm)	1-1/2" (39mm)	1-11/16" (43mm)
1-3/4" MIN. (44mm)	5/8" (16mm)	1-1/4" (32mm)	1-7/8" (48mm)	2-1/16" (53mm)

DOOR THICKNESS	SEX NUT LENGTH "L"
1-3/8" (35mm)	1-9/32" (33mm)
1-3/4" (44mm) & OVER	1-21/32" (42mm)

*** To obtain extra closing force add 3" (77mm) to dimensions marked. This will limit degree of door opening to 110°.**



NOTES:

- Check hand of door, see page 1.
- Right Hand Application Shown. Left Hand Opposite.
- Dimensions given in inches (mm). Do Not Scale Drawing.
- Closer must be installed in a true horizontal plane to ensure proper closer performance.
- Door opening (up to 180°) is dependent upon door, frame, wall and hinge/pivot conditions permitting.

MOUNTING SCREW SPECIFICATIONS

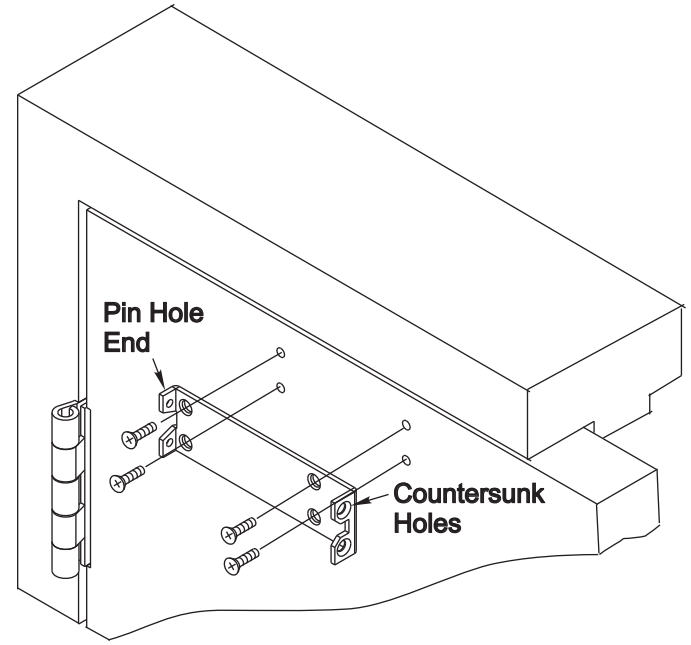
ARM AND CLOSER BRACKET

1/4-20 oval head machine screw or 1/4-14 self-drilling screw Type BSD. 3/16 (4.8) diameter pilot hole required for Wood Applications.

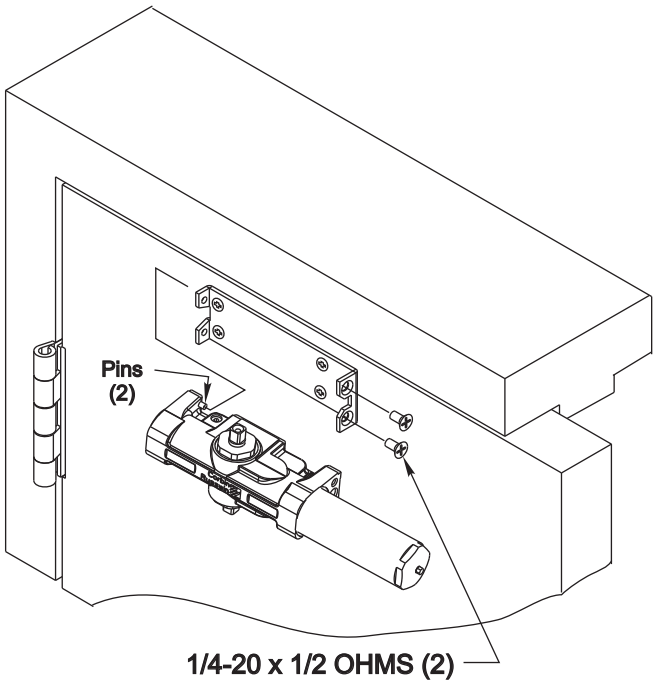
or

Option M54: Sex nuts, furnished when ordered

2. Install Closer Bracket



3. Mount Closer Body to Closer Bracket



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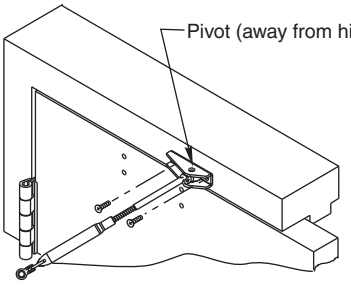
ASSA ABLOY

Regular Arm Application (Continued)

4a. Attach Arm Bracket to Frame

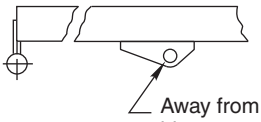
NON-HOLD OPEN ARM ONLY:

Remove elbow screw from main arm and disassemble arm.



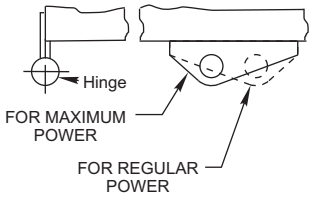
Standard Position

Normal mounting position. Position with pivot point away from hinge.



For Additional 15% Closing Force

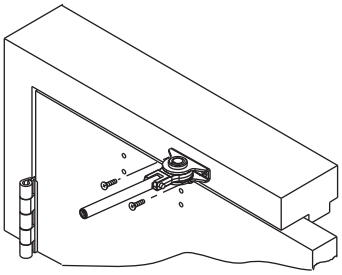
Reposition arm mounting bracket so that pivot point is toward hinge.



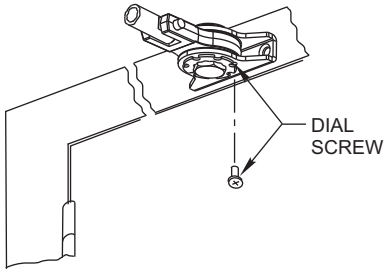
4b. Attach Arm Bracket to Frame

HOLD OPEN ARM (A1 OPTION ONLY):

Remove elbow screw from main arm and disassemble arm.



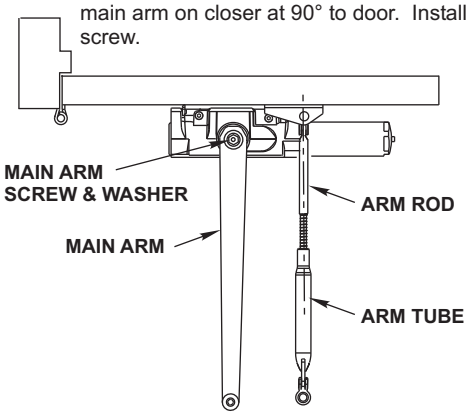
HOLD OPEN ARM:
Position so that dial screw is on UNDERSIDE of bracket



5a. Position Arm on Closer

NON-HOLD OPEN ARM ONLY:

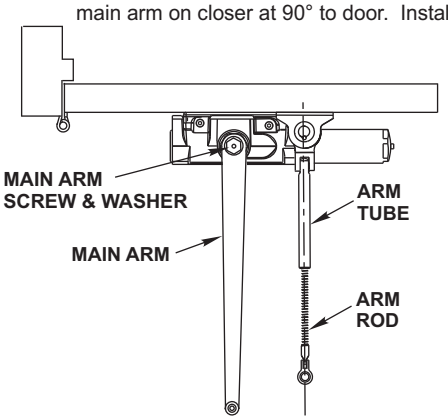
Remove elbow screw from main arm and disassemble arm. Place main arm on closer at 90° to door. Install and tighten main arm screw.



5b. Position Arm on Closer

HOLD OPEN ARM ONLY:

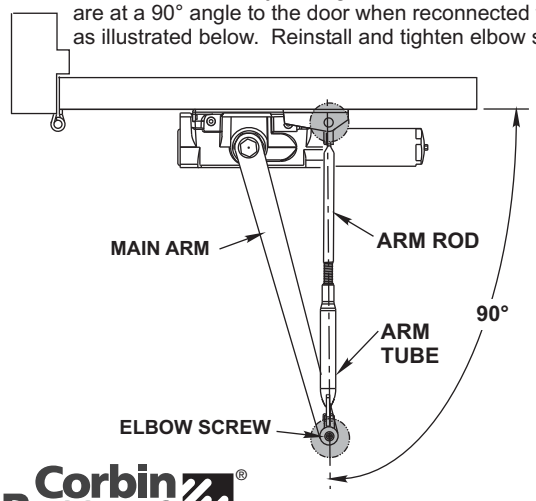
Remove elbow screw from main arm and disassemble arm. Place main arm on closer at 90° to door. Install and tighten main arm screw.



6a. Preload and Adjust Arm

NON-HOLD OPEN ARM ONLY:

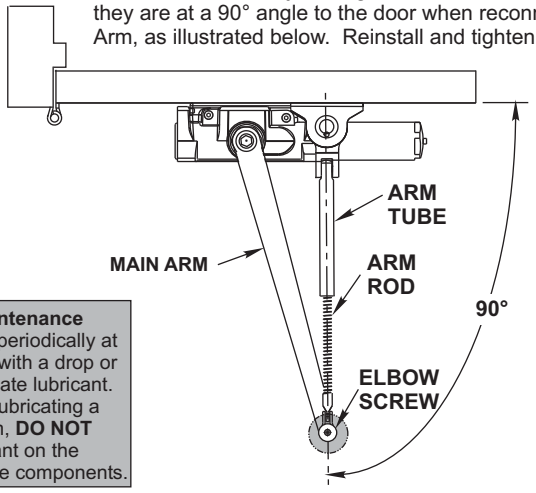
With door closed, adjust length of Arm Rod and Arm Tube until they are at a 90° angle to the door when reconnected to the Main Arm, as illustrated below. Reinstall and tighten elbow screw.



6b. Preload and Adjust Arm

HOLD OPEN ARM ONLY:

With door closed, adjust length of Arm Rod and Arm Tube until they are at a 90° angle to the door when reconnected to the Main Arm, as illustrated below. Reinstall and tighten elbow screw.



Extended Maintenance
Lubricate Arm periodically at shaded points with a drop or two of appropriate lubricant.
NOTE: When lubricating a Hold Open Arm, **DO NOT** use any lubricant on the Holding Surface components.

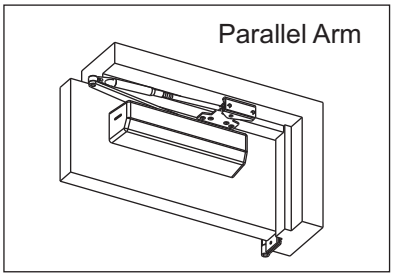
For Adjustments See Page 8

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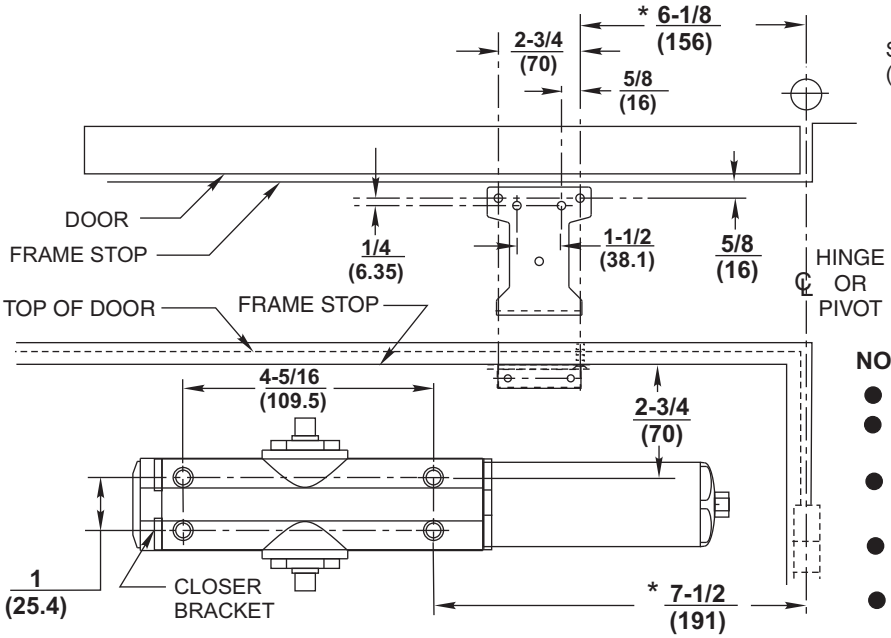
Installation Instructions

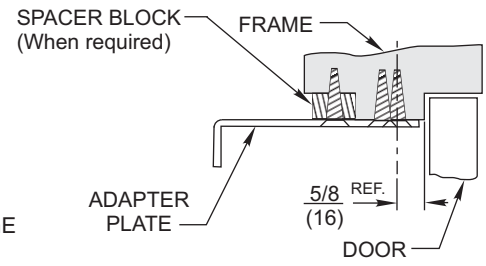
Parallel Arm Application
DC3210 Series



1. Template

Mark Door and Jamb (for closer bracket and adapter plate)
Use template FM131C provided or use dimensions in this template.





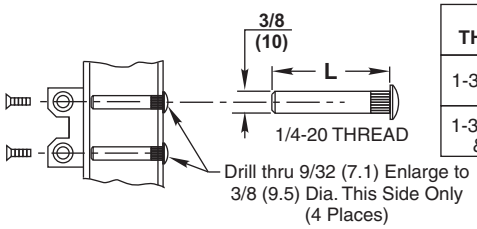
NOTES:

- Check hand of door, see page 1.
- Right Hand Application Shown. Left Hand Opposite.
- Dimensions given in inches (mm). Do Not Scale Drawing.
- Closer must be installed in a true horizontal plane to ensure proper closer performance.
- Door opening (up to 180°) is dependent upon door, frame, wall and hinge/pivot conditions permitting.

*** To obtain extra closing force add 3" (77mm) to dimensions marked. This will limit degree of door opening to 110°.**

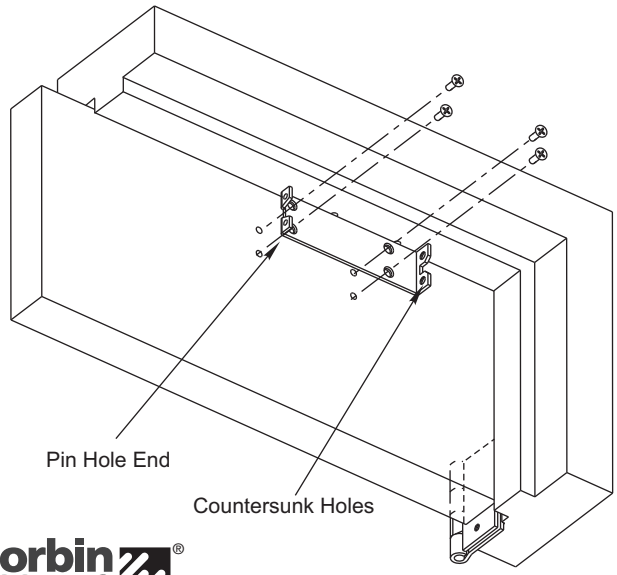
MOUNTING SCREW SPECIFICATIONS

ARM AND CLOSER BRACKET
1/4-20 oval head machine screw or 1/4-14 self-drilling screw Type BSD } or { Option M54: Sex nuts, furnished when ordered

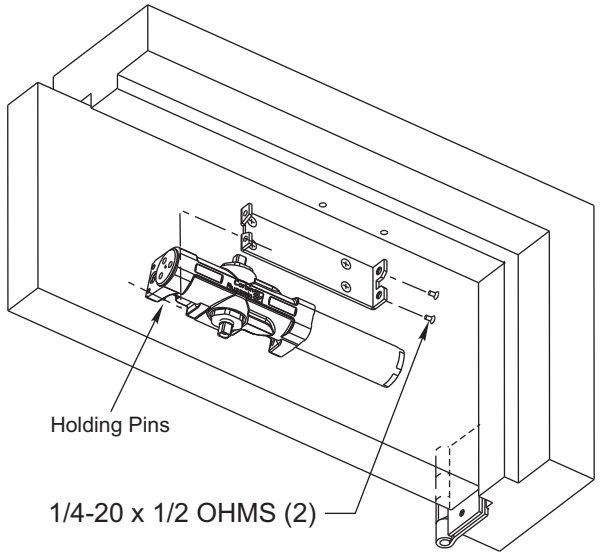


DOOR THICKNESS	SEX NUT LENGTH "L"
1-3/8" (35mm)	1-9/32" (33mm)
1-3/4" (44mm) & OVER	1-21/32" (42mm)

2. Install Closer Bracket



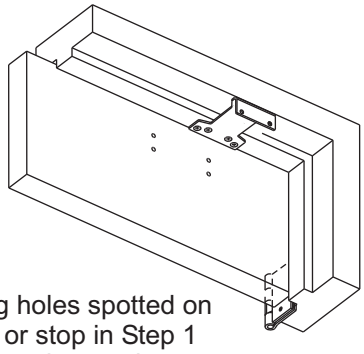
3. Mount Closer Body to Closer Bracket



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Parallel Arm Application (Continued)

4. Mount Adapter Plate Bracket on Jamb

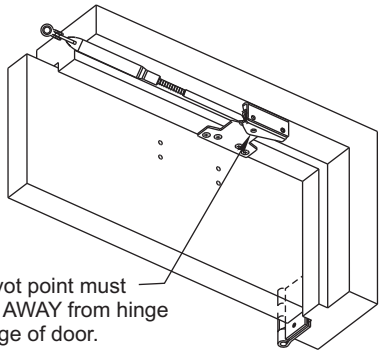


Using holes spotted on soffit or stop in Step 1 mount adapter plate bracket.

5. Mount Arm Bracket

Remove elbow screw from main arm and disassemble arm. Fasten arm bracket to adapter plate as illustrated.

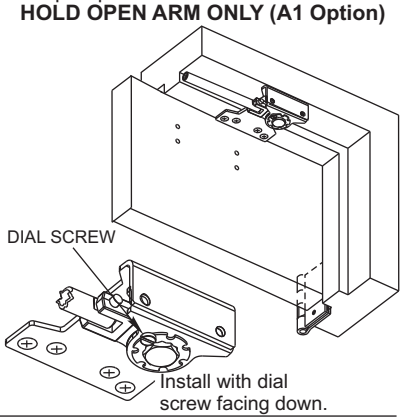
NON-HOLD OPEN ARM ONLY



Pivot point must be AWAY from hinge edge of door.

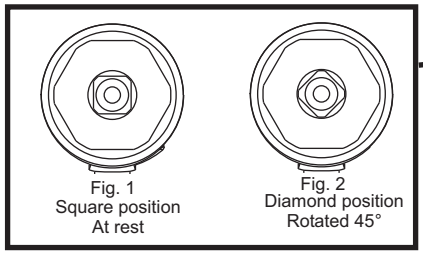
Remove elbow screw from main arm and disassemble arm. Fasten arm bracket to adapter plate as illustrated.

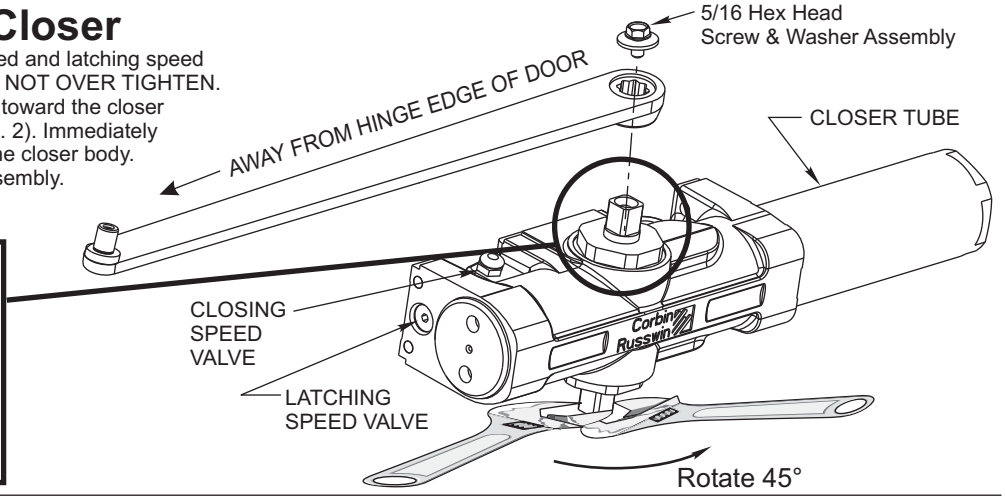
HOLD OPEN ARM ONLY (A1 Option)



6. Position Arm onto Closer

Using hex wrench provided, turn closing speed and latching speed valves clockwise until completely closed. DO NOT OVER TIGHTEN. Using wrench, turn under side of spindle 45° toward the closer tube until it reaches the diamond position (fig. 2). Immediately place arm on spindle so that it is parallel to the closer body. Install and tighten arm screw and washer assembly.

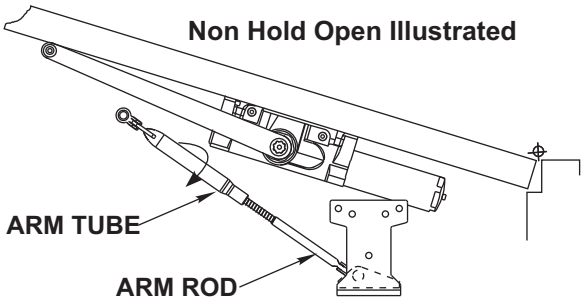




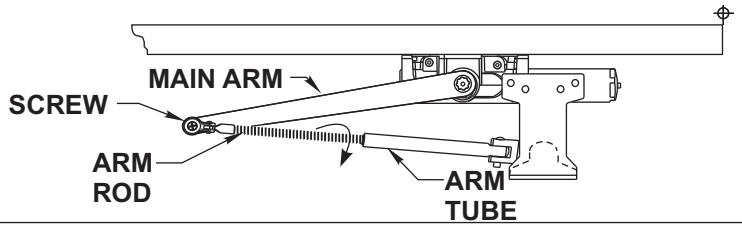
7. Connect and Position Arms

With door closed, adjust length of Arm Rod and Arm Tube so the arm forms a "V" when reconnected to the Main Arm, as illustrated below. Reinstall and tighten elbow screw.

Non Hold Open Illustrated



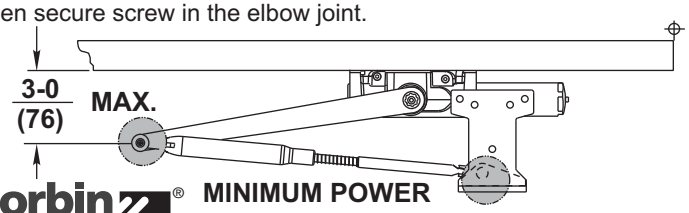
Hold Open Illustrated

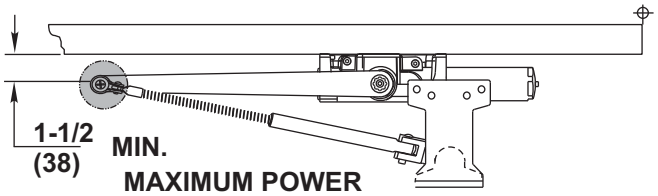


8. Power Adjustment

To increase the power of the closer, re-adjust the arm so it is nearer the door. To decrease power, re-adjust the arm so it is farther away from the door and then secure screw in the elbow joint.

Extended Maintenance
Lubricate Arm periodically at shaded points with a drop or two of appropriate lubricant.
NOTE: When lubricating a Hold Open Arm, **DO NOT** use any lubricant on the Holding Surface components.

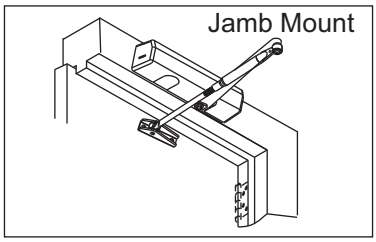




For Adjustments See Page 8

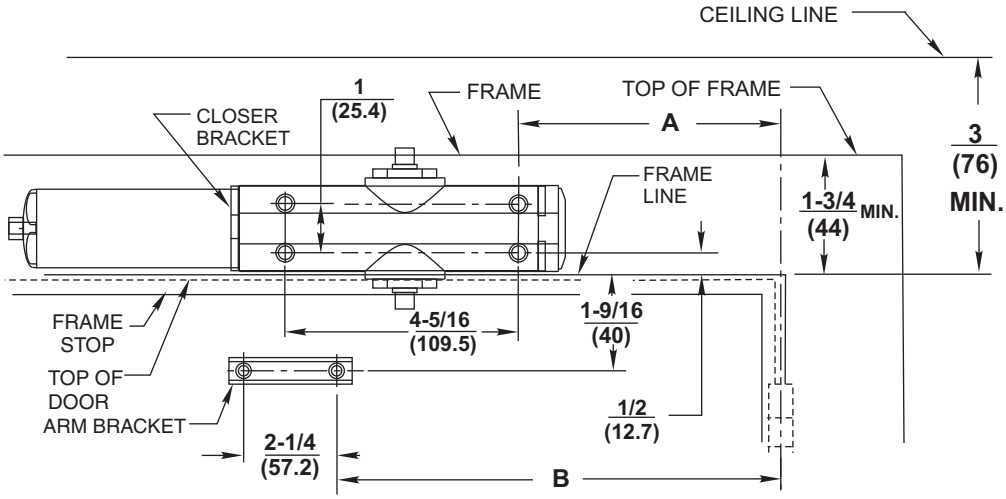
Installation Instructions

Jamb Mount Application
DC3220 Series



1. Template

Mark Door and Jamb (for closer bracket and arm bracket) use dimensions in template below.

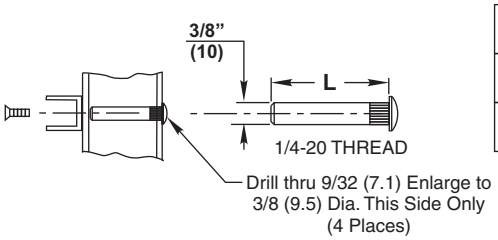


OPENING MAXIMUM	A	B	HINGE CONDITION
110°	8-7/8 (225)	13-3/8 (340)	Butts, Offset Pivots, and Swing Clear Hinges
140°	7-3/8 (187)	11-7/8 (302)	
180°	5-7/8 (149)	10-3/8 (264)	
140°	7-3/8 (187)	11-7/8 (302)	* CENTER HUNG

Dimensions "A" and "B" are taken from centerline of hinge as shown and apply to pivot point of swing clear hinges. Offset and centerhung pivots.
*Must be single acting door.

MOUNTING SCREW SPECIFICATIONS

ARM AND CLOSER BRACKET
1/4-20 oval head machine screw or 1/4-14 self-drilling screw Type BSD } or { Sex nuts, Option M54, furnished when ordered

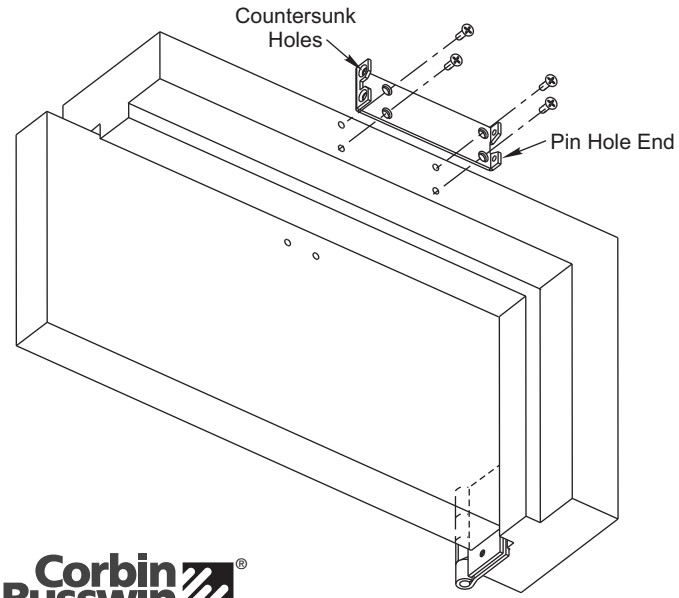


DOOR THICKNESS	SEX NUT LENGTH "L"
1-3/8" (35mm)	1-9/32" (33mm)
1-3/4" (44mm) & OVER	1-21/32" (42mm)

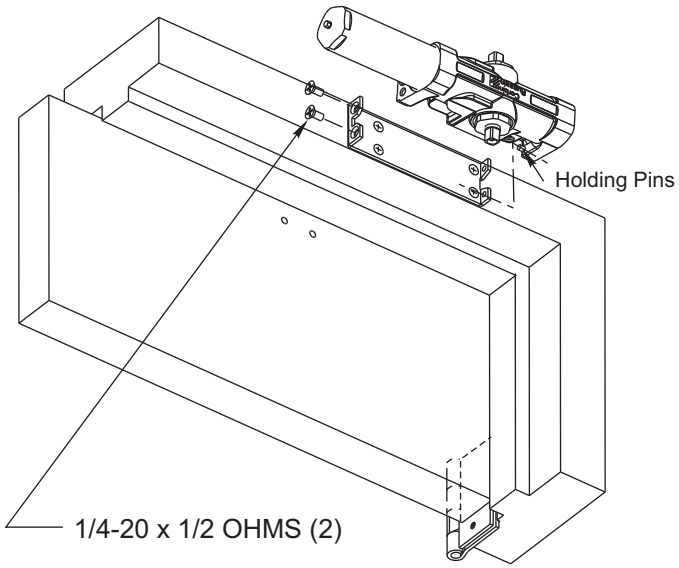
NOTES:

- Check hand of door, see page 1.
- Right Hand Application Shown. Left Hand Opposite.
- Dimensions given in inches (mm). Do Not Scale Drawing.
- Closer must be installed in a true horizontal plane to ensure proper closer performance.
- All degrees of door opening are dependent upon door, frame, wall and hinge/pivot conditions permitting.

2. Install Closer Bracket to Jamb



3. Mount Closer Body to Closer Bracket



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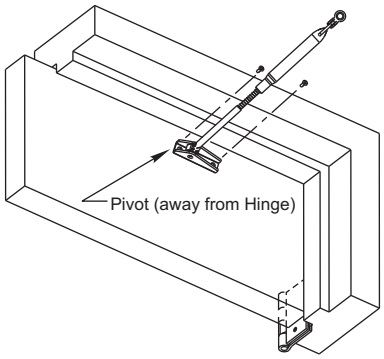
ASSA ABLOY

Jamb Mount Application (continued)

4a. Attach Arm Bracket to Door

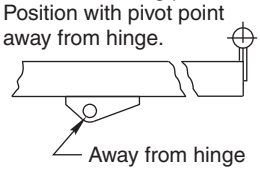
Remove elbow screw from main arm and disassemble arm. Attach Arm Bracket to door as shown.

NON-HOLD OPEN ARM ONLY



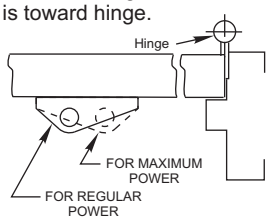
Standard Position

Normal mounting position. Position with pivot point away from hinge.



For Additional 15% Closing Force

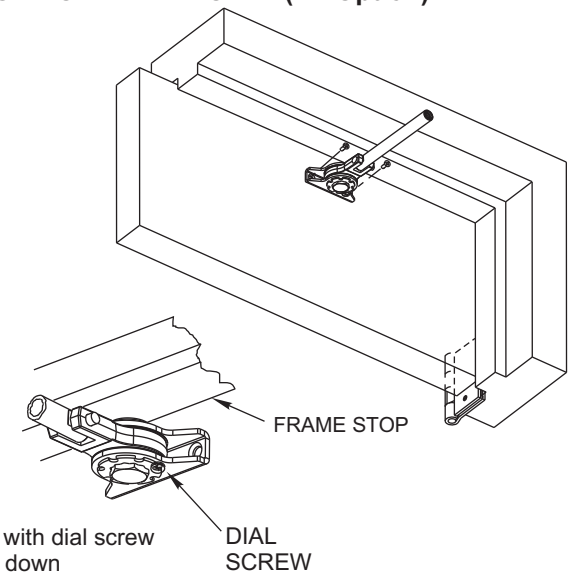
Reposition arm mounting bracket so that pivot point is toward hinge.



4b. Attach Arm Bracket to Door

Remove elbow screw from main arm and disassemble arm. Attach Arm Bracket to door as shown.

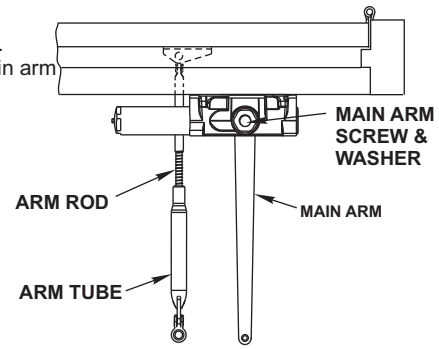
HOLD OPEN ARM ONLY (A1 Option)



5a. Position Arm on Closer

NON-HOLD OPEN ARM ONLY:

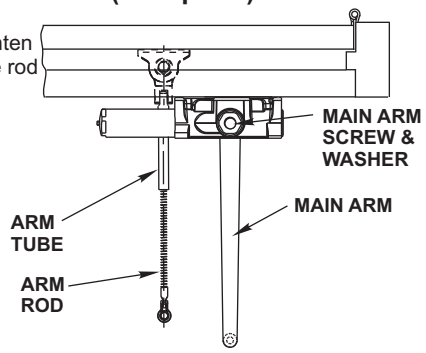
Place main arm on closer at 90° to frame. Install and tighten main arm screw.



5b. Position Arm on Closer

HOLD OPEN ARM ONLY (A1 Option):

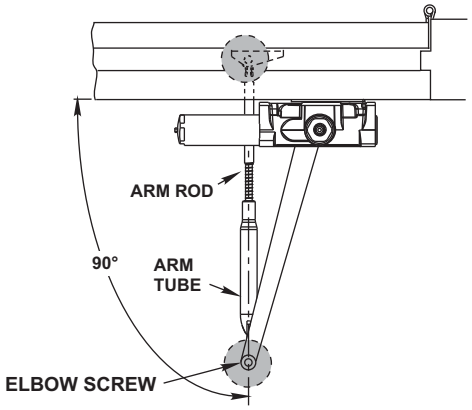
Place main arm on closer at 90° to frame. Install and tighten main arm screw. Thread the rod into the Arm Tube as shown.



6a. Preload and Adjust Arm

NON-HOLD OPEN ARM ONLY:

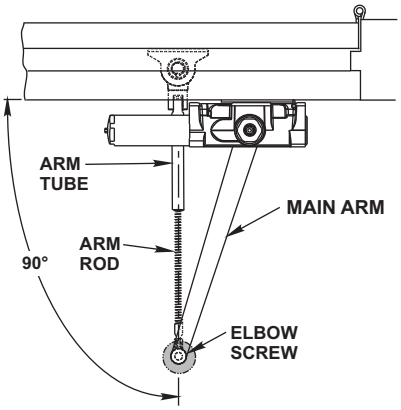
With door closed, adjust length of Arm Rod and Arm Tube until they are at a 90° angle to the door when reconnected to the Main Arm, as illustrated below. Reinstall and tighten elbow screw.



6b. Preload and Adjust Arm

HOLD OPEN ARM ONLY (A1 Option):

With door closed, adjust length of Arm Rod and Arm Tube until they are at a 90° angle to the door when reconnected to the Main Arm, as illustrated below. Reinstall and tighten elbow screw.



Extended Maintenance

Lubricate Arm periodically at shaded points with a drop or two of appropriate lubricant. **NOTE:** When lubricating a Hold Open Arm, **DO NOT** use any lubricant on the Holding Surface components.

For Adjustments See Page 8

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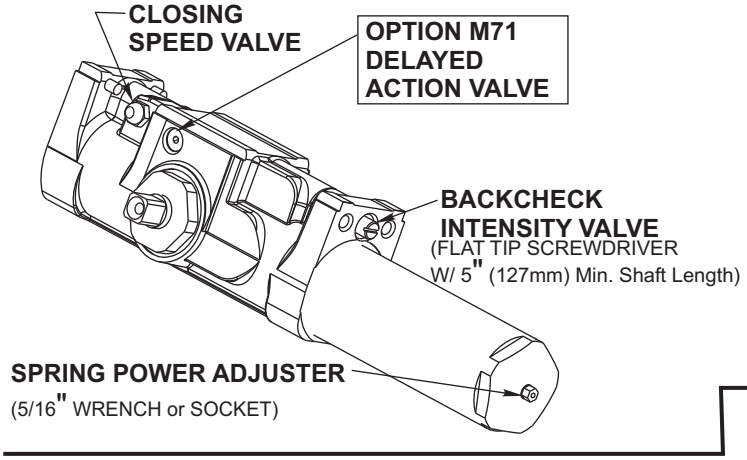
Spring Power Adjustment

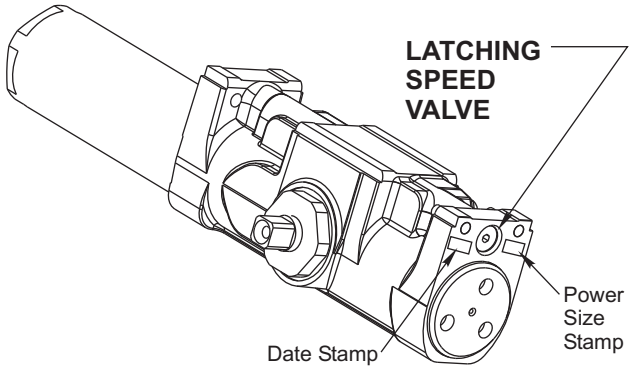
Locate spring power adjuster from Illustration below
DC3200 Size 1 thru 6 Adjustment See Chart

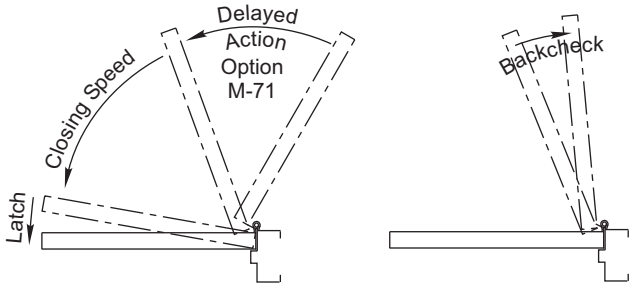
Size of Door			No. of Full (360°) Turns Clockwise of Power Adjuster	Equivalent Closer Size (Approx.)
Interior	Exterior In Swing	Exterior Out Swing		
2' 4" (712)	2'6" (764)		4	2
2' 6" (764)	3'0" (915)		8	3
3' 0" (915)	3'6" (1067)	2'6" (764)	12	4
3' 6" (1067)	4'0" (1219)	3'0" (915)	16	5

DC3200 SPRING POWER ADJUSTMENT CHART

- All DC3200 closers are factory set at an approximate **Size 3.**
- Adjust closer as necessary for door size using this chart.
- Readjustment may be required to suit prevailing conditions.







Closing Speed Valve (3/32 Allen Wrench Provided)

To adjust speed of door closing from fully open to a position 2" to 5" from closed, turn Closing Speed Valve CLOCKWISE to SLOW closing, COUNTER-CLOCKWISE to SPEED closing.

Latching Speed Valve (3/32 Allen Wrench Provided)

After closing speed has been obtained, turn latching speed valve CLOCKWISE to SLOW latching or COUNTER-CLOCKWISE to SPEED latching for last 2" to 5" of door travel.

NOTE: Set combination of CLOSING and LATCHING speeds to between 3 and 7 seconds. Use of door by handicapped, elderly or small children may require even greater closing time.

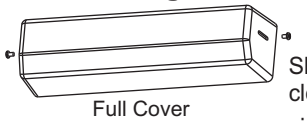
Delayed Action Valve (3/32 Allen Wrench Provided)

Turn valve CLOCKWISE to SLOW closing, COUNTER-CLOCKWISE to SPEED closing. Delayed action may be adjusted from 20 seconds to 90 seconds, depending on degree of door swing. Delay occurs at the beginning of the door closing cycle from fully open down to 70°, where the closing speed valve then begins its control.

Backcheck Intensity Valve

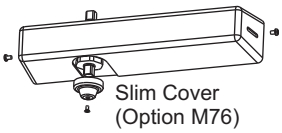
Turn valve COUNTER-CLOCKWISE to reduce backcheck or CLOCKWISE to increase backcheck. (Backcheck should be set to give a soft cushioning action, not a sudden stop.)

Installing Cover



Full Cover (Standard)

Slip cover over closer. Hold tightly against closer mounting surface. Secure on each side with 6-32 x 1/4" PBHMS screws.

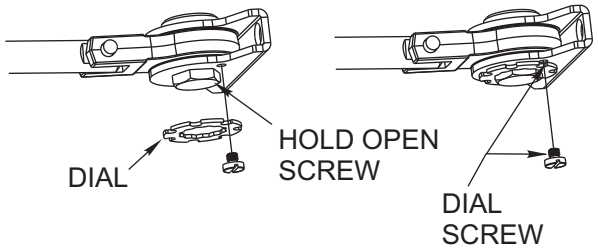


Slim Cover (Option M76)

Slim Cover Option M76 only
Position spindle cap over unused spindle and secure with truss head screw.

To Adjust Hold Open (A1 Option)

Open the door to desired position and tighten the hold open screw firmly (For RH application, turn screw on underside CLOCKWISE. For LH application, turn screw COUNTER-CLOCKWISE.) Place the hold open dial over the hex head of the bracket screw so that one of the slots in the dial is directly over small screw hole tapped in bracket. Seat the dial tightly over the bracket. INSERT DIAL SCREW AND TIGHTEN SECURELY.



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