

# INSTALLATION INSTRUCTIONS

## 281 Door Closers with Fusible Link Arms

### 281 NON SIZED ADJUSTABLE FROM SIZES 1 THRU 6

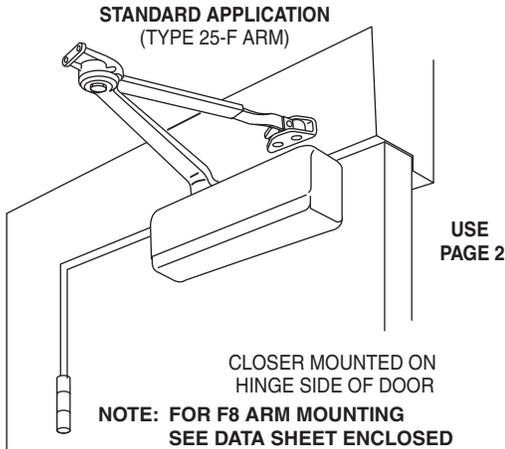
### COMPLIES WITH ADA REQUIREMENTS

# SARGENT®

# ASSA ABLOY

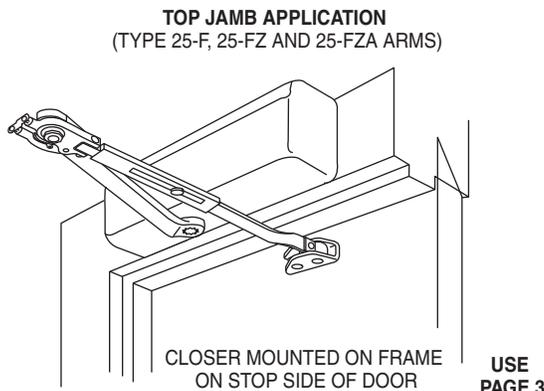
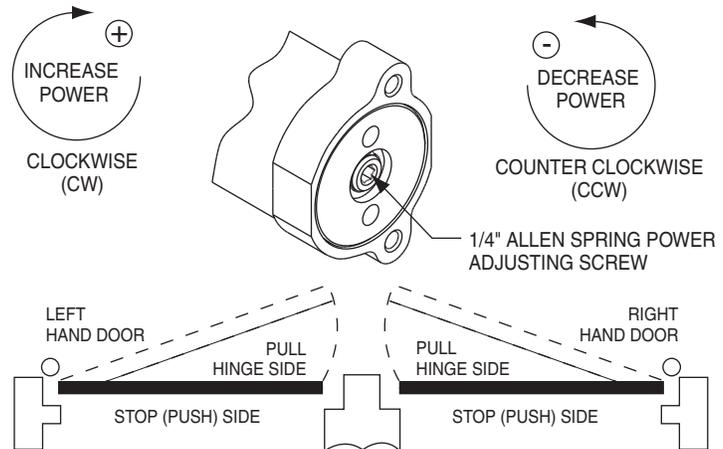
FOR INSTALLATION ASSISTANCE CALL SARGENT AT 1-800-727-5477 • www.sargentlock.com

## STANDARD & TOP JAMB APPLICATIONS

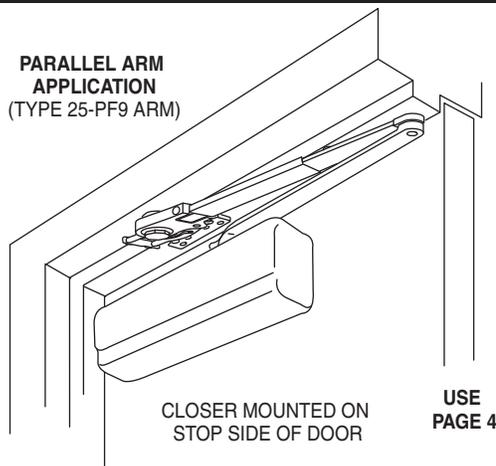


| NUMBER OF TURNS OF SPRING POWER ADJUSTING SCREW FROM FACTORY SETTING (USE CHART AS GUIDE ONLY) |                                  |                     |  |
|--|----------------------------------|---------------------|--|
| DOOR WIDTH (INCHES)  | APPROXIMATE DOOR WEIGHT (POUNDS) | 281                 |  |
|  |                                  | EXTERIOR DOORS      | INTERIOR DOORS  |
| 24   | 80                               | FACTORY SET         |  |
| 30   | 110                              | 1-5 CW              | 1-5 CCW  |
| 32   | 115                              |                     |  |
| 36   | 130                              | 5-8 CW              |  |
| 40   | 150                              |                     |  |
| 42   | 155                              | 8-13 CW             | FACTORY SET  |
| 44   | 165                              |                     |  |
| 46   | 170                              | 13-15 CW            | 1-5 CW   |
| 48   | 180                              |                     |  |
| OVER 48  |                                  | UP TO 19 CW AS REQ. | 5 CW AND UP AS REQ.  |

\*ADJUST SPRING POWER ACCORDING TO CHART



## PARALLEL APPLICATION ONLY



| NUMBER OF TURNS OF SPRING POWER ADJUSTING NUT FROM FACTORY SETTING (USE CHART AS GUIDE ONLY) |                                  |                     |  |
|--|----------------------------------|---------------------|--|
| DOOR WIDTH (INCHES)  | APPROXIMATE DOOR WEIGHT (POUNDS) | 281                 |  |
|  |                                  | EXTERIOR DOORS      | INTERIOR DOORS  |
| 24   | 80                               | 2-7 CW              |  |
| 30   | 110                              | 7-11 CW             | 1-5 CCW  |
| 32   | 115                              |                     |  |
| 36   | 130                              |                     |  |
| 40   | 150                              | 11-15 CW            | FACTORY SET  |
| 42   | 155                              |                     |  |
| 44   | 165                              | 15-17 CW            | 1-8 CW   |
| 46   | 170                              |                     |  |
| 48   | 180                              | UP TO 19 CW AS REQ. | 8 CW AND UP AS REQ.  |
| OVER 48  |                                  |                     |  |

\*IF INTERIOR DOORS DO NOT HAVE TO COMPLY WITH ADA  REQUIREMENTS, EXTERIOR DOOR SETTINGS ARE RECOMMENDED. WHERE STRONG DRAFTS EXIST, INCREASE SPRING POWER AS NEEDED BY TURNING SPRING ADJUSTMENT SCREW CLOCKWISE. IF NECESSARY, REDUCE SPRING POWER BY TURNING SCREW COUNTERCLOCKWISE.

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# 281 STANDARD ARM APPLICATION INSTRUCTIONS

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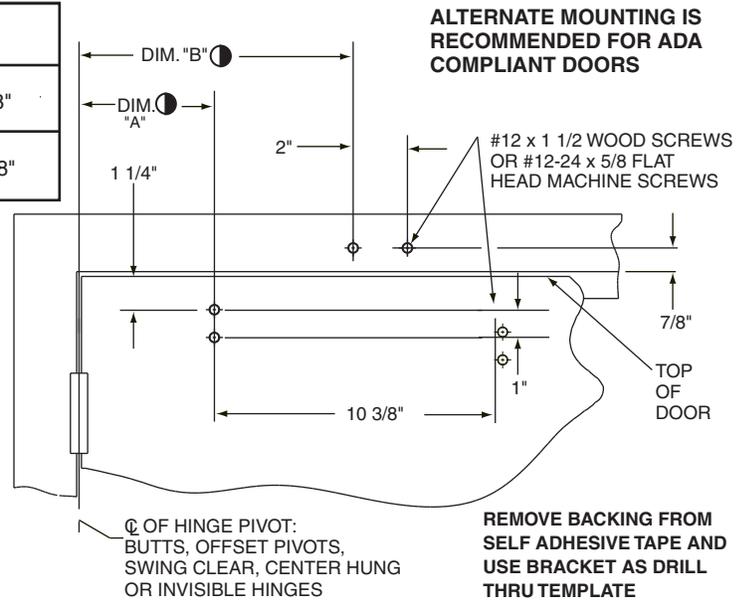
IMPORTANT: USE ALTERNATE MOUNTING IF DOOR CAN OPEN BEYOND LIMITS SHOWN FOR STANDARD MOUNTING

| ARM TYPE                        | MOUNTING  | MAX. DOOR OPENING | DIM. A | DIM. B  |
|---------------------------------|-----------|-------------------|--------|---------|
| HOLD OPEN ARM WITH FUSIBLE LINK | STANDARD  | 120°              | 7"     | 12 1/8" |
|                                 | ALTERNATE | 135°              | 5"     | 10 1/8" |

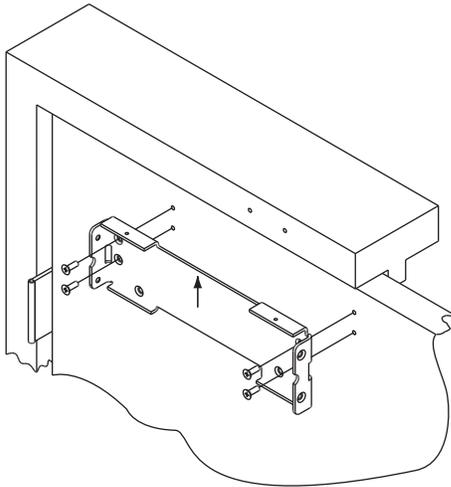
1 — RIGHT HAND DOOR SHOWN. LEFT HAND DOOR OPPOSITE.

2 — THIS DIMENSION IS TAKEN FROM HINGE EDGE OF DOOR FOR INVISIBLE HINGES.

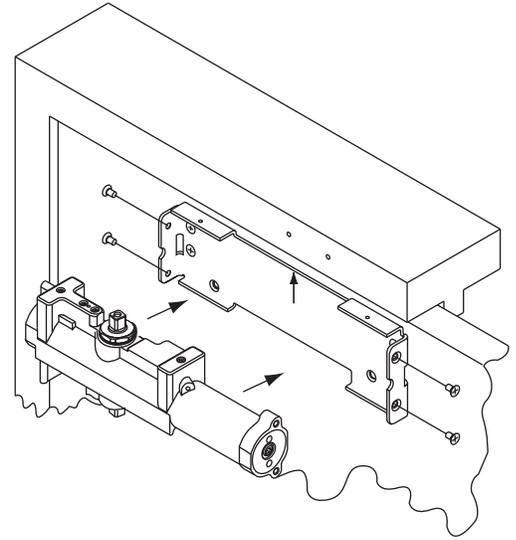
DRILL & TAP AND USE SCREWS PROVIDED OR USE MORTISE NUTS WHEN REQUIRED.



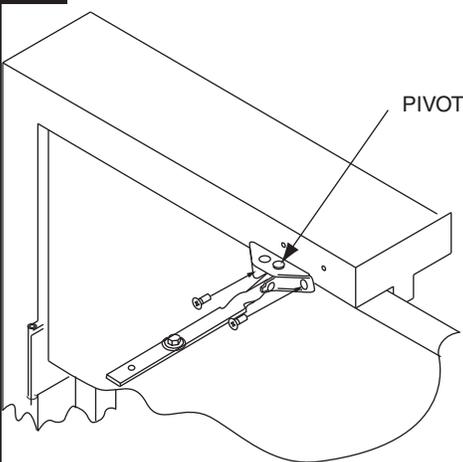
**A** INSTALL MOUNTING BRACKET WITH ARROW POINTING UP FOR BOTH RH & LH DOORS AND INSTALL CLOSER WITH SPRING ADJUSTMENT SCREW AWAY FROM HINGE.



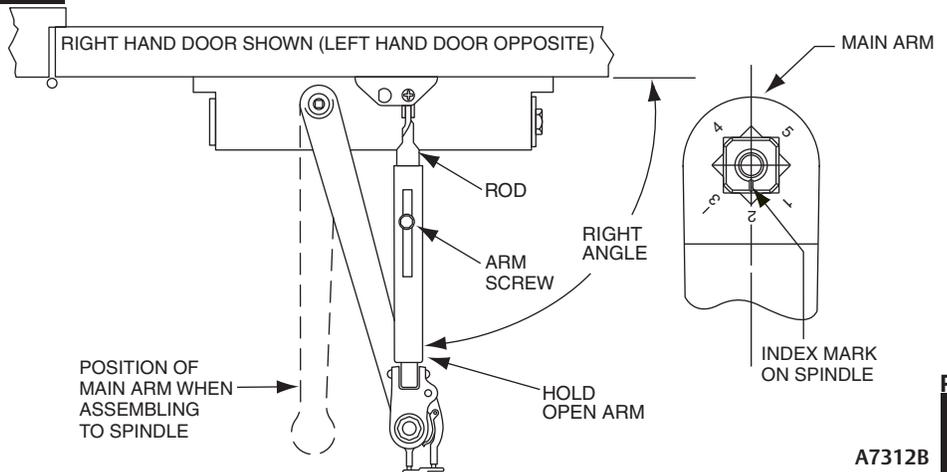
RIGHT HAND DOOR SHOWN



**B** ATTACH FOOT TO FRAME WITH PIVOT AWAY FROM HINGE.



**C** ATTACH ARM WITH INDEX MARK ON SPINDLE ALIGNED AS SHOWN. SECURE WITH SCREW AND WASHER. INSERT ROD END INTO SWIVEL ARM AND TIGHTEN ARM SCREW AS SHOWN BELOW.



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# 281 TOP JAMB APPLICATION INSTRUCTIONS

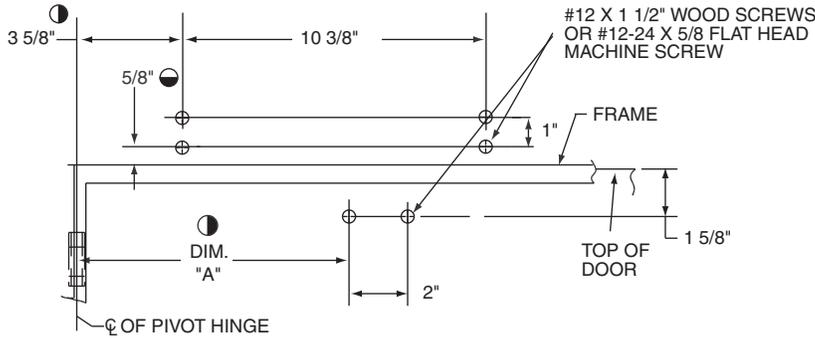
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IMPORTANT: USE ALTERNATE MOUNTING IF DOOR CAN OPEN BEYOND LIMITS SHOWN FOR STANDARD MOUNTING

| ARM TYPE  | REVEAL DEPTH | DIM. A    | MAX. DOOR OPENING | RANGE OF HOLD OPEN |
|-----------|--------------|-----------|-------------------|--------------------|
| "F" ARM   | 0" TO 2"     | 9 5/16"   | 140°              | 80°-130°           |
| "FZ" ARM  | 2 1/8" TO 5" | 10 1/8"   | 140°              | 80°-130°           |
| "FZA" ARM | 5 1/8" TO 8" | 10 15/16" | 140°              | 80°-130°           |

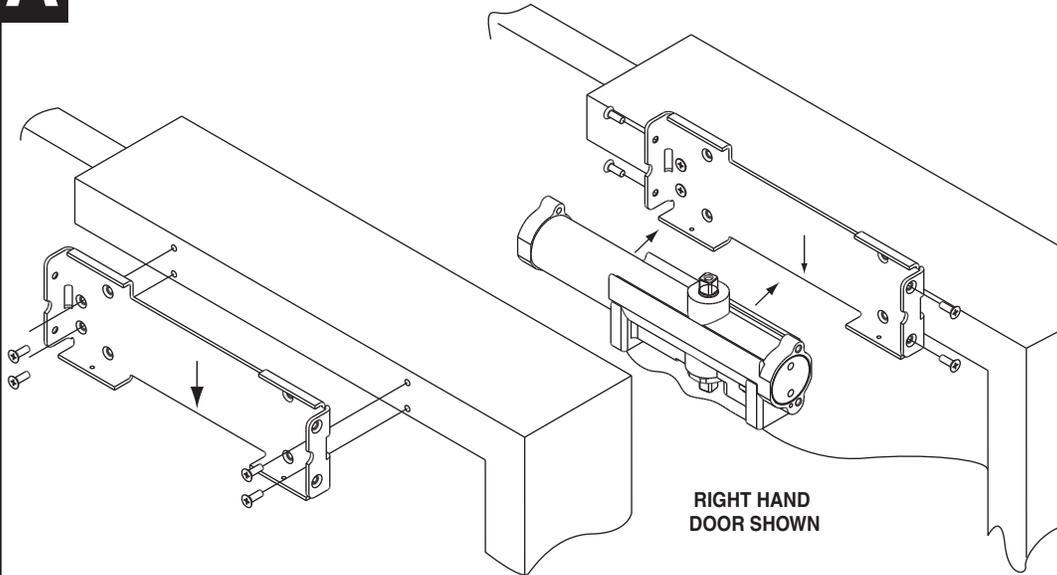
- ① LEFT HAND DOOR SHOWN, RIGHT HAND DOOR OPPOSITE.
- ② THESE DIMENSIONS MAYBE REDUCED TO 3/8" MIN. IF RAIL ON TOP CASING IS NARROW OR LOW CEILING CONDITION EXISTS. CLOSER FOOT SHOULD BE MOVED ACCORDINGLY.
- ③ THIS DIMENSION IS TAKEN FROM HINGE EDGE OF DOOR FOR INVISIBLE HINGES.



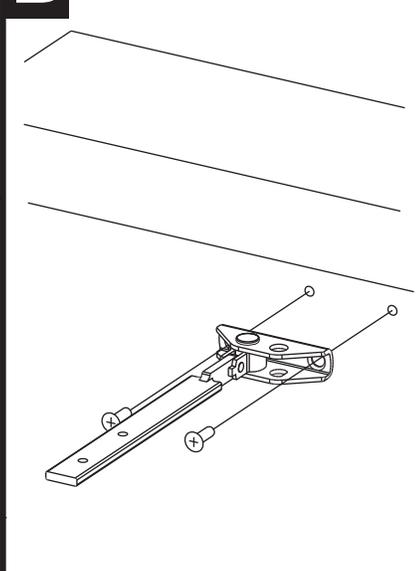
DRILL & TAP AND USE SCREWS PROVIDED OR USE MORTISE NUTS WHEN REQUIRED.

REMOVE BACKING FROM SELF ADHESIVE TAPE AND USE BRACKET AS DRILL THRU TEMPLATE

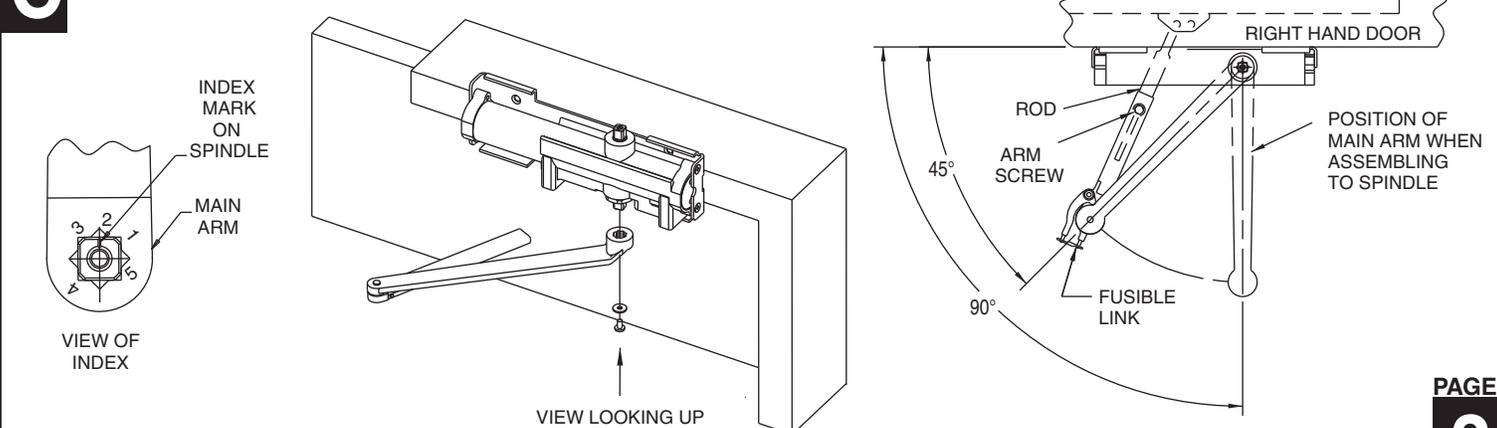
**A** INSTALL MOUNTING BRACKET WITH ARROW POINTING DOWN FOR BOTH RH & LH DOORS AND INSTALL CLOSER WITH SPRING ADJUSTMENT SCREW AWAY FROM HINGE.



**B** ATTACH FOOT TO DOOR WITH PIVOT AWAY FROM HINGE.



**C** INSTALL MAIN ARM TO SPINDLE AND SECURE WITH SCREW AND WASHER AS SHOWN. INSERT ROD END INTO MAIN ARM AND TIGHTEN ARM SCREW.



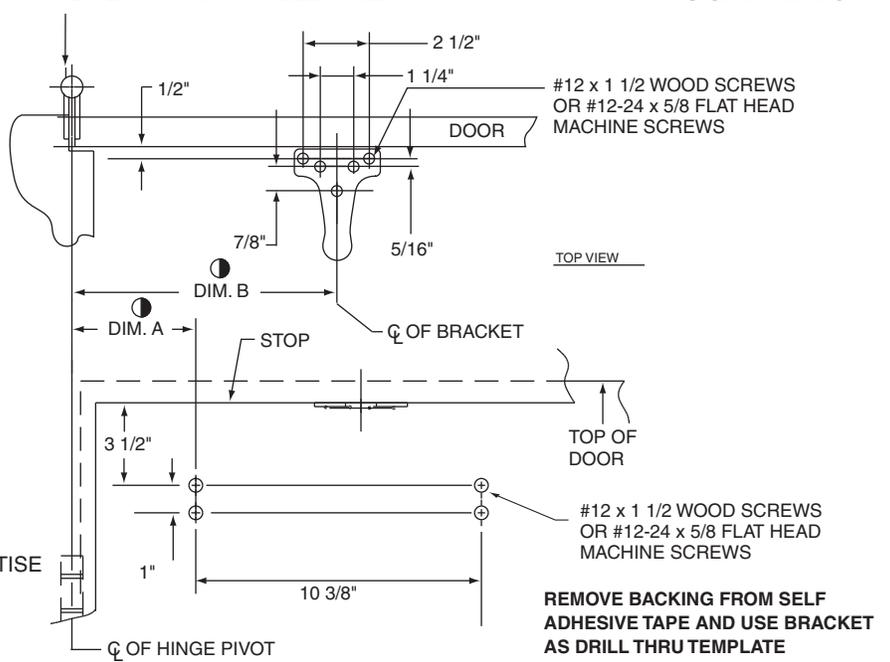
# 281 PARALLEL ARM APPLICATION INSTRUCTIONS

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| MAX. DOOR OPENING | DIM. A | DIM. B |
|-------------------|--------|--------|
| 110°              | 4 1/2" | 9 1/2" |
| 180°              | 1 5/8" | 6 5/8" |

Range of hold open is 90°-180°

HINGE PIVOT:  
BUTT, OFFSET PIVOTS, SWING CLEAR,  
CENTER HUNG OR INVISIBLE HINGES



1 LEFT HAND DOOR SHOWN. RIGHT HAND DOOR DIMENSION OPPOSITE.

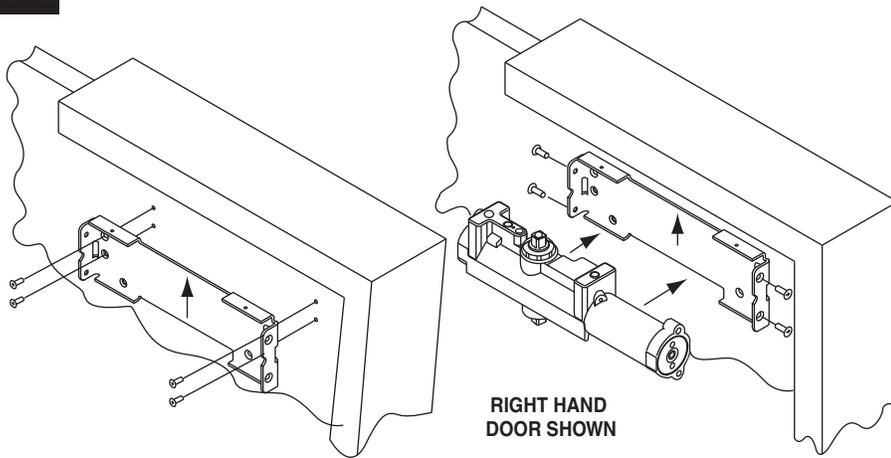
2 DO NOT USE THIS MOUNTING FOR "SWING CLEAR" HINGES.

3 THIS DIMENSION IS TAKEN FROM HINGE EDGE OF DOOR FOR INVISIBLE HINGES.

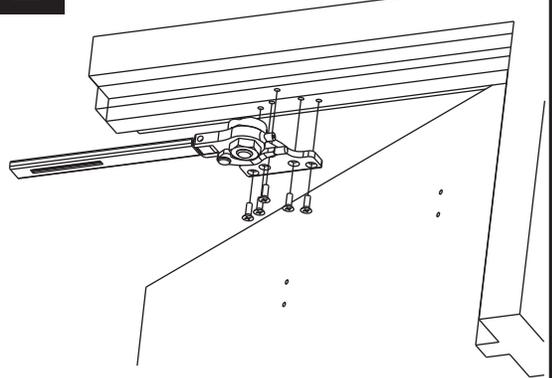
DRILL & TAP AND USE SCREWS PROVIDED OR USE MORTISE NUTS WHEN REQUIRED.

REMOVE BACKING FROM SELF ADHESIVE TAPE AND USE BRACKET AS DRILL THRU TEMPLATE

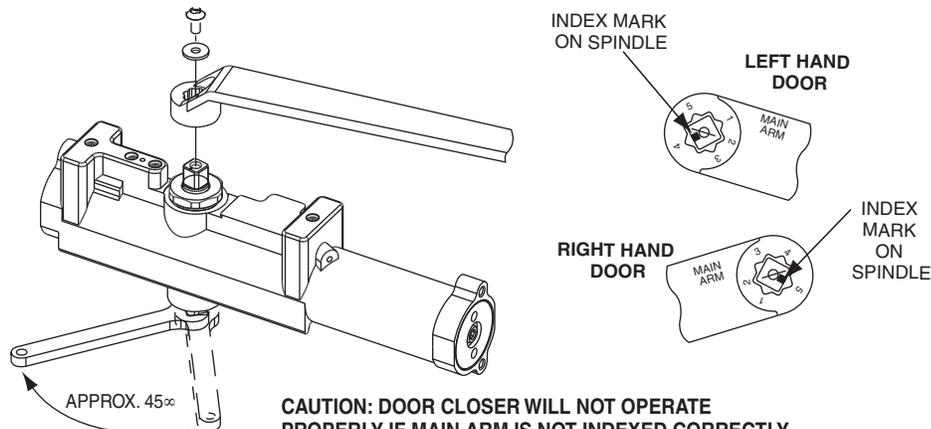
**A** INSTALL MOUNTING BRACKET WITH ARROW POINTING UP FOR BOTH RH & LH DOORS AND INSTALL CLOSER WITH SPRING ADJUSTING SCREW TOWARDS HINGE.



**B** ATTACH FOOT BRACKET TO FRAME STOP.



**C** USING WRENCH ON BOTTOM END OF SPINDLE, ROTATE 45° AND ASSEMBLE MAIN ARM TO CLOSER AS SHOWN, AND THEN INSERT ROD END INTO SWIVEL ARM AND TIGHTEN ARM SCREW POSITIONING ARM 1/2" AWAY FROM DOOR.



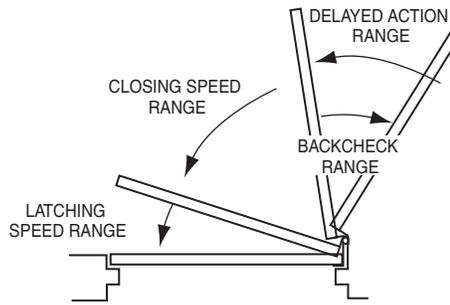
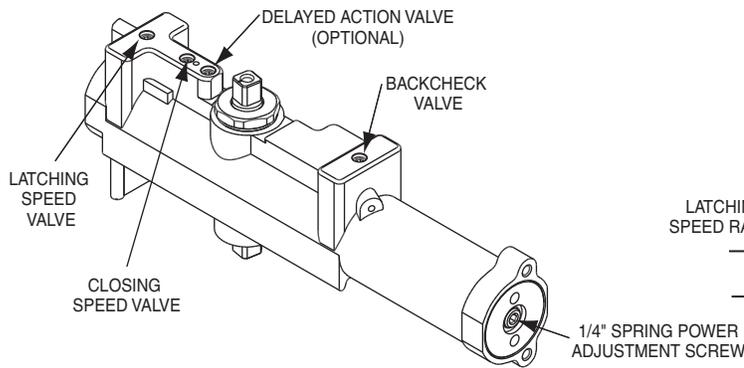
**CAUTION: DOOR CLOSER WILL NOT OPERATE PROPERLY IF MAIN ARM IS NOT INDEXED CORRECTLY.**

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# FINAL ADJUSTMENT AND REGULATING PROCEDURE

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## A REGULATING DOOR SPEED AND LATCHING SPEED AS NEEDED.

USE HEX SOCKET (1/8" ALLEN) WRENCH AND TURN VALVES CLOCKWISE TO SLOW DOWN OR COUNTER CLOCKWISE TO SPEED UP DOOR MOVEMENT.



## B REGULATING BACKCHECK

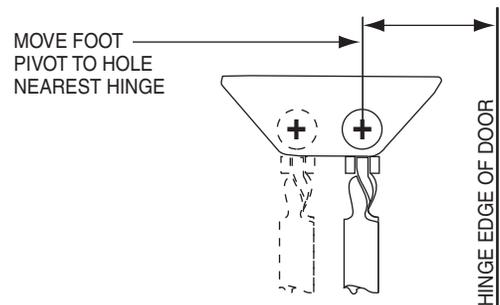
TO REGULATE THE INTENSITY OF BACKCHECK ACTION TURN VALVE CLOCKWISE TO INCREASE OR COUNTER CLOCKWISE TO DECREASE CHECKING.  
**CAUTION:** SET VALVE FOR SLIGHT CUSHIONING EFFECT. IT IS DAMAGING TO THE CLOSER IF THE CHECKING ACTION IS TOO ABRUPT. NEVER USE BACKCHECK AS A DOOR STOP.  
**ALWAYS USE A DOOR STOP TO STOP THE DOOR.**

## C FOR MODELS WITH OPTIONAL DELAYED ACTION FEATURE

"DELAYED ACTION" PROVIDES SLOW DOOR CLOSING THROUGH DELAYED ACTION RANGE

TURN VALVE CLOCKWISE TO SLOW DOWN OR COUNTER CLOCKWISE TO SPEED UP DOOR MOVEMENT

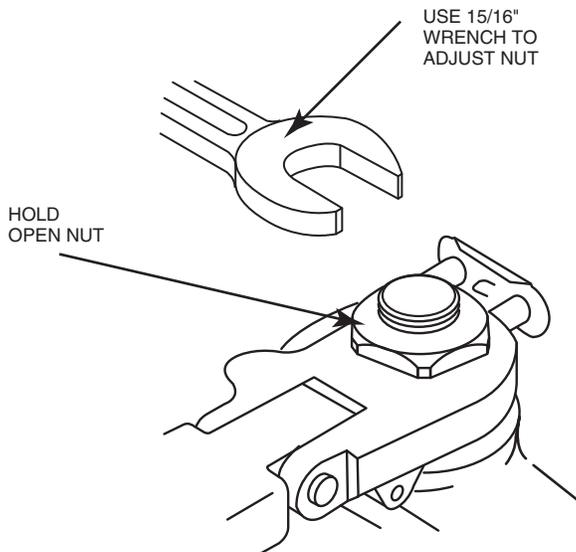
## D ADJUSTING FOOT FOR ADDITIONAL CLOSING POWER (FOR STANDARD AND TOP JAMB APPLICATIONS ONLY)



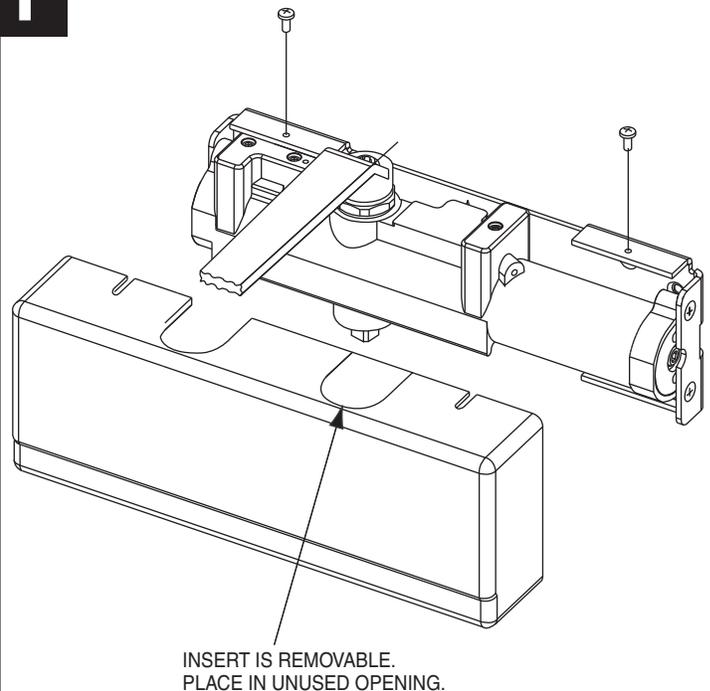
## E ADJUSTMENT HOLD OPEN ARM

SLIGHT TIGHTENING OR LOOSENING OF HOLD OPEN NUT CHANGES HOLDING POSITION OF DOOR.

NOTE: TO PROTECT WALL, TRIM AND CLOSER, USE A DOOR STOP, LOCATED 10" BEYOND HOLD OPEN POSITIONS BUT NOT BEYOND THE MAXIMUM DOOR OPENING SHOWN ON INSTRUCTIONS.



## F INSTALL COVER WITH TWO SCREWS AS SHOWN.



# USING MORTISE NUTS WITH SARGENT DOOR CLOSER

**SARGENT**

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1. SEE INSTRUCTIONS OR DATA SHEET PACKED WITH DOOR CLOSER FOR DIMENSIONS LOCATING THE CLOSER BODY AND FOOT ON DOOR AND FRAME.
2. MORTISE NUT SHOWN IS DESIGNED FOR AN UNREINFORCED METAL DOOR.
3. FOR TOP JAMB AND CORNER BRACKET APPLICATIONS: THE DOOR CLOSER FOOT WILL BE ATTACHED TO THE DOOR IN A MANNER SIMILAR TO THAT SHOWN FOR MOUNTING THE CLOSER BODY.
4. FOR DOORS 2 1/4" THICK: MORTISE NUT SHOWN FOR 1 3/4" THICK DOORS WILL BE FURNISHED ALONG WITH APPROPRIATE LENGTH THRU-BOLTS. DOOR CONSTRUCTION MUST PROVIDE A BRIDGE TYPE REINFORCEMENT TO PREVENT THE DOOR RAIL FROM COLLAPSING WHEN THRU-BOLTS ARE TIGHTENED.

