

SARGENT® 281 DOOR CLOSER WITH PS/PSH ARMS INSTALLATION INSTRUCTIONS

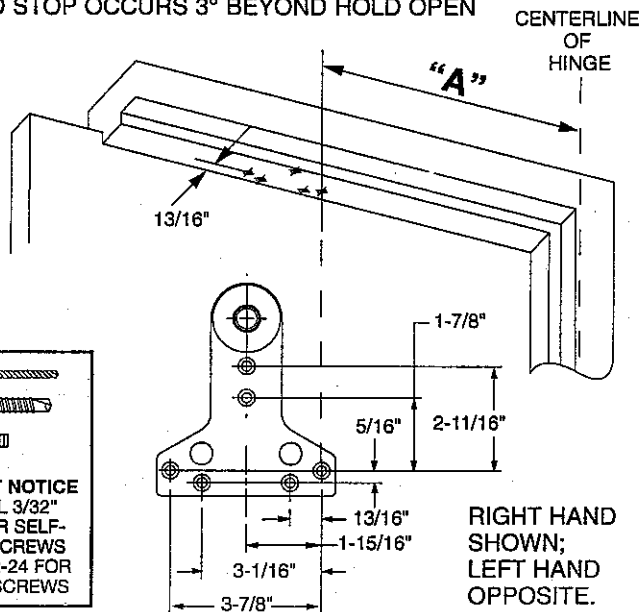
281 SERIES ADJUSTABLE FROM SIZE 1 THRU 6

**CAUTION: FAILURE TO INSTALL OR ADJUST PROPERLY MAY RESULT IN INJURY OR DAMAGE.
FOR ASSISTANCE CONTACT SARGENT AT 800-727-5477 or www.sargentlock.com**

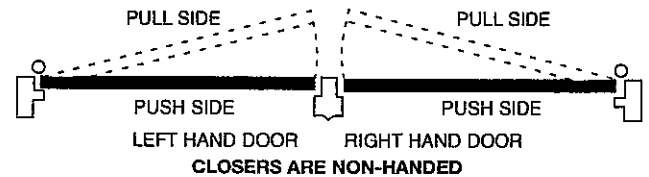
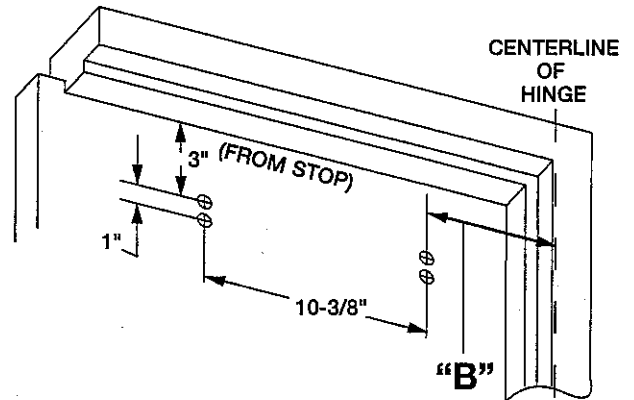
- 1** DETERMINE MAXIMUM DEGREE OF DOOR OPENING OR HOLD OPEN (PSH) REQUIRED. DRILL AND TAP DOOR AND FRAME FOR #12-24 MACHINE SCREWS. WHEN USING SELF TAPPING SCREWS PROVIDED, PREDRILL WITH 3/32" DRILL.

DEGREE OF DOOR OPENING AT "HOLD OPEN" ■						
	85°	90°	95°	100°	105°	110°
DIM. "A"	10-1/2"	9-13/16"	9-3/16"	8-9/16"	8-1/16"	7-9/16"
DIM. "B"	5-11/16"	5"	4-3/8"	3-3/4"	3-1/4"	2-3/4"

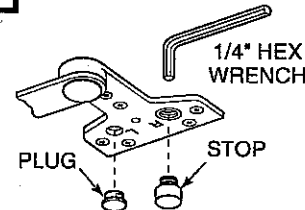
- DO NOT USE WITH SWING CLEAR HINGE FOR DOOR OPENINGS GREATER THAN 95°. USE ALTERNATE TYPE HINGES.
- DEAD STOP OCCURS 3° BEYOND HOLD OPEN



IMPORTANT NOTICE
PRE-DRILL 3/32" HOLES FOR SELF-TAPPING SCREWS OR TAP #12-24 FOR MACHINE SCREWS

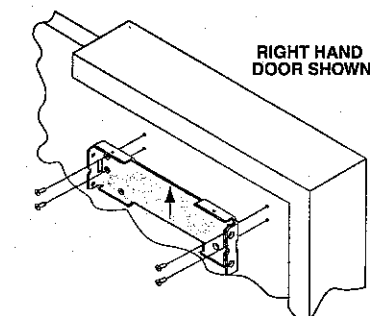


- 3A** INSTALL STOP WITH 1/4" HEX WRENCH TO MATCH HAND OF DOOR.

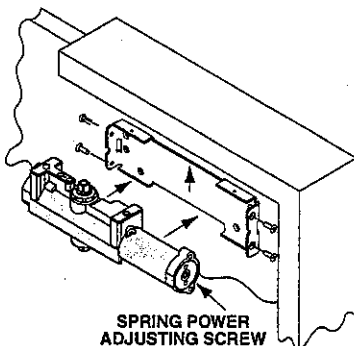


USING 1/4" HEX WRENCH, TURN STOP COUNTER-CLOCKWISE UNTIL SEATED VERY TIGHT.

- 2** INSTALL MOUNTING BRACKET WITH ARROW POINTING UP FOR BOTH RH & LH DOORS. MOUNT CLOSER WITH SPRING ADJUSTING SCREW TOWARDS HINGE. (USE TEMPLATE ENCLOSED TO LOCATE AND DRILL HOLES)



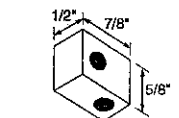
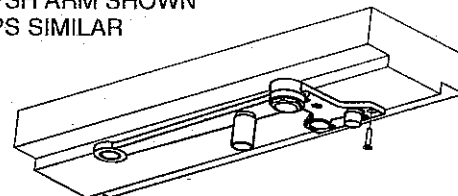
DRILL & TAP AND USE SCREWS PROVIDED OR USE MORTISE NUTS WHEN REQUIRED.



SPRING POWER ADJUSTING SCREW

- 3B** MOUNT FOOT BRACKET TO DOOR STOP.

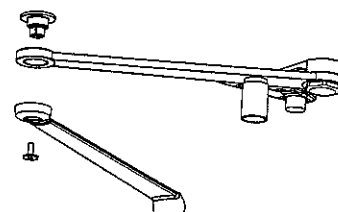
PSH ARM SHOWN
PS SIMILAR



USE FIFTH HOLE SPACER WHEN REQUIRED

IMPORTANT: USE A MINIMUM OF 5 SCREWS.

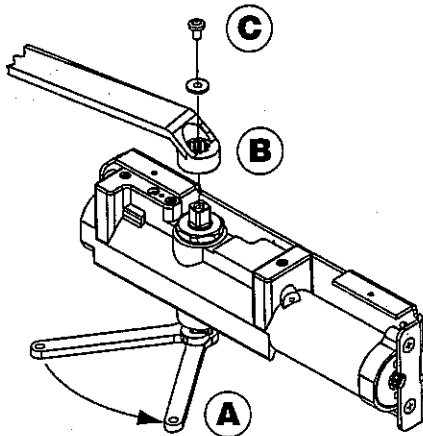
- 3C** ALTERNATE: PREASSEMBLE ARM PRIOR TO ATTACHING TO STOP.



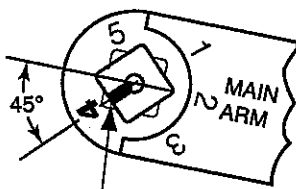
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- * A. ROTATE BOTTOM SPINDLE WITH WRENCH.
- B. ASSEMBLE MAIN ARM WITH INDEX MARK POSITIONED AS SHOWN.
- C. SECURE WITH SCREW AND WASHER.

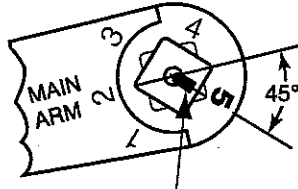


LEFT HAND DOOR



INDEX MARK ON SPINDLE

RIGHT HAND DOOR

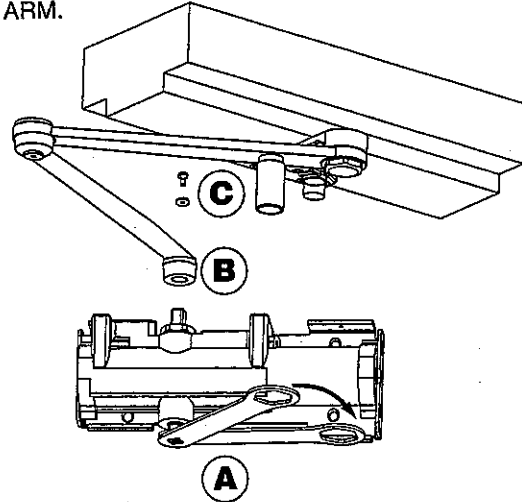


INDEX MARK ON SPINDLE

!! * WARNING: IF NOT PROPERLY INDEXED, DOOR CLOSER WILL NOT FUNCTION PROPERLY. !!

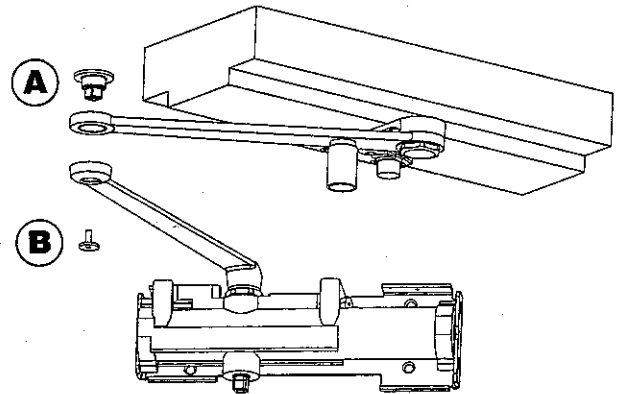
4A

ALTERNATE METHOD FOR ATTACHING PREASSEMBLED ARM.



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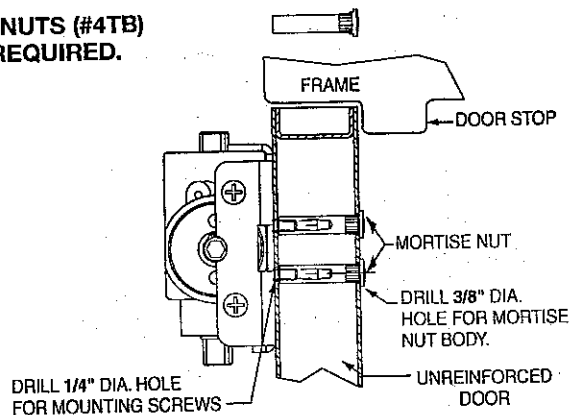
- A. OPEN DOOR AND INSTALL PIVOT AS SHOWN.
- B. USE SCREW TO SECURE PIVOT AND ARMS AS SHOWN.



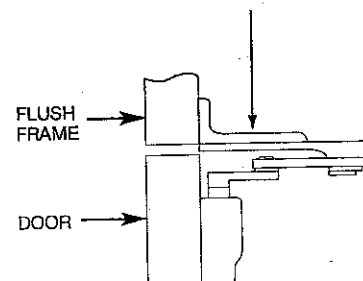
ACCESSORIES

OPTIONAL: USE MORTISE NUTS (#4TB) WHEN THRU-BOLTING IS REQUIRED.

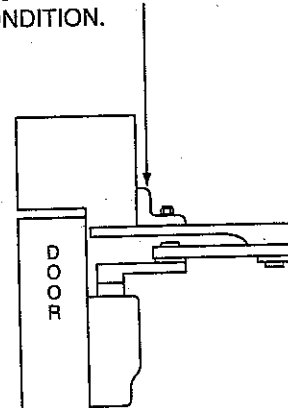
SEE PAGES 1 AND 4 FOR TEMPLATING DIMENSIONS



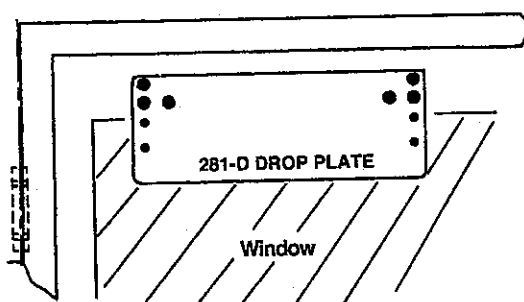
125 VF BRACKET FOR FLUSH FRAME AND DOOR CONDITION.



125 V BRACKET FOR NARROW FRAME CONDITION.



281 DROP PLATE USED WITH NARROW TOP RAILS.



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FINAL ADJUSTMENT AND REGULATING PROCEDURES

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MINIMUM RECOMMENDED DOOR CLOSING TIME IS 6 SECONDS FOR DOORS OPENED TO 90 DEGREES.



USE 1/8" HEX (ALLEN) WRENCH TO ADJUST VALVES AS NEEDED.

CLOSING AND LATCHING SPEEDS:

TURN VALVES CLOCKWISE TO SLOW DOWN OR COUNTERCLOCKWISE TO SPEED UP DOOR MOVEMENT.

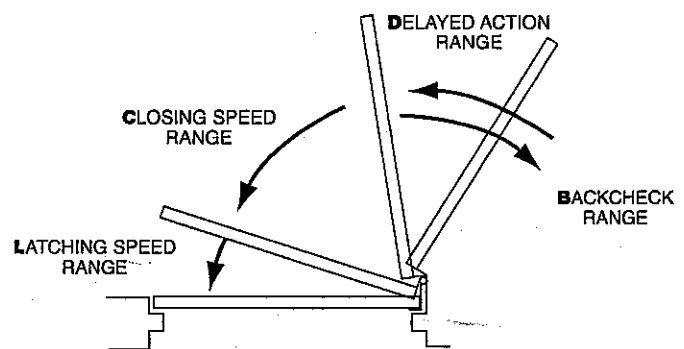
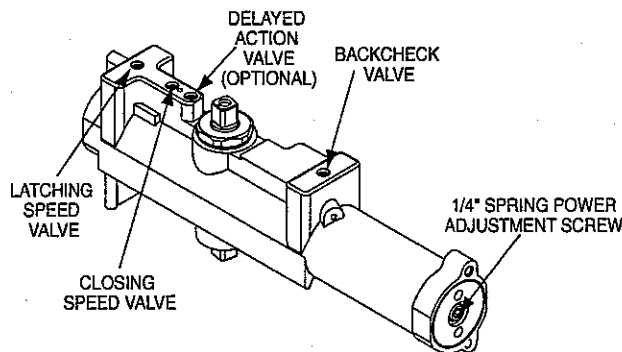
BACKCHECK:

TO REGULATE THE INTENSITY OF BACKCHECK ACTION TURN VALVE CLOCKWISE TO INCREASE OR COUNTERCLOCKWISE TO DECREASE CHECKING.

CAUTION: SET VALVE FOR SLIGHT CUSHIONING EFFECT; CLOSER CAN BE DAMAGED IF THE CHECKING ACTION IS TOO ABRUPT. NEVER USE THE BACKCHECK AS A DOOR STOP. ALWAYS USE A DOOR STOP TO STOP THE DOOR.

DELAYED ACTION FEATURE (OPTIONAL FEATURE ON SOME MODELS):

"DELAYED ACTION" PROVIDES SLOW DOOR CLOSING THROUGH THE DELAYED ACTION RANGE. TURN VALVE CLOCKWISE TO SLOW DOWN OR COUNTERCLOCKWISE TO SPEED UP DOOR MOVEMENT.



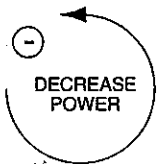
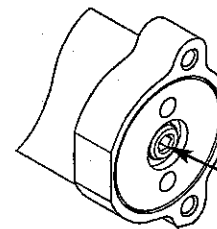
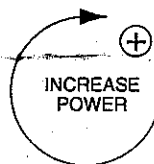
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ADJUST POWER TO ALLOW DOOR TO CLOSE AND LATCH.

NUMBER OF TURNS OF SPRING POWER ADJUSTING NUT

DOOR WIDTH (INCHES)	EXTERIOR DOORS	*INTERIOR DOORS
24-30	Turn screw 2-7 ↘	Turn screw 1-5 ↘
30-36	Turn screw 7-11 ↘	Turn screw 3-6 ↘
36-42	Turn screw 11-15 ↘	FACTORY SET
42-48	Turn screw 15-17 ↘	Turn screw 8 & up ↘

DOOR ADJUSTED TO CLOSE DUE TO HIGH DRAFT CONDITIONS MAY EXCEED ADA STANDARDS. CONSULT LOCAL ORDINANCES WHEN FIRE DOORS ARE INVOLVED.

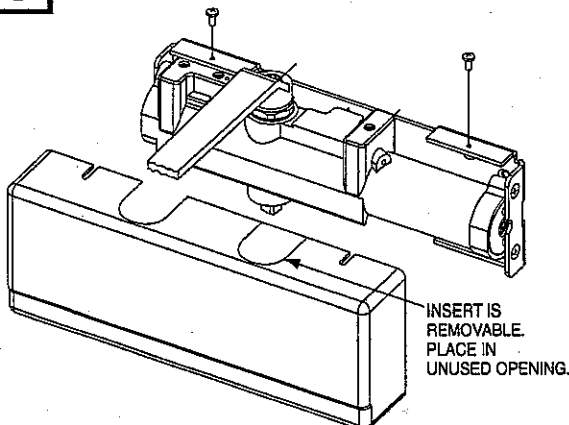


1/4" ALLEN SPRING POWER ADJUSTING SCREW*

*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.

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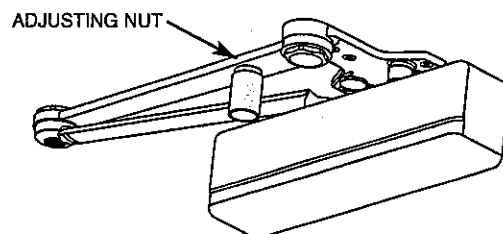
INSTALL COVER WITH TWO SCREWS AS SHOWN.



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TO ADJUST HOLDER ARM (PSH ONLY)

ALL PSH ARMS ARE SHIPPED IN NON-HOLD OPEN FROM THE FACTORY. TO SET IN HOLD OPEN, TURN THE ADJUSTING NUT APPROXIMATELY 1-1/2 TURNS CLOCKWISE.



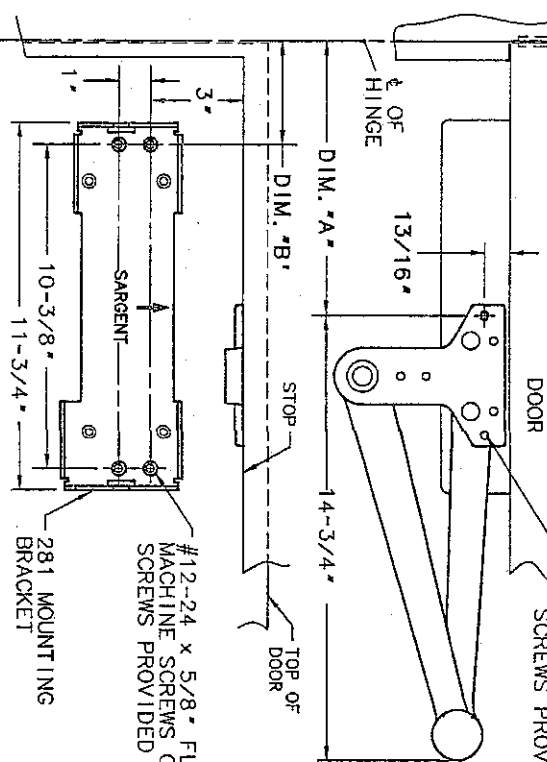
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DEGREE OF DOOR OPENING AT "HOLD OPEN" 					
85°	90°	95°	100° 	105° 	110° 
DIM. "A" 10-1/2"	9-13/16"	9-3/16"	8-9/16"	8-1/16"	7-9/16"
DIM. "B" 5-11/16"	5"	4-3/8"	3-3/4"	3-1/4"	2-3/4"

OFFSET PIVOTS, CONTINUOUS, BUTT, 

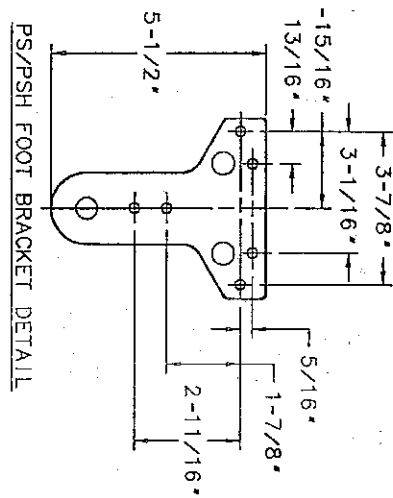
#12-24 x 5/8" FLAT HEAD MACHINE SCREWS OR #12 x 1-3/4"



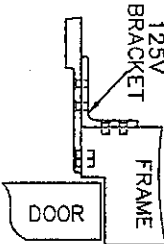
#12-24 x 5/8" FLAT HEAD MACHINE SCREWS OR #12 x 1-3/4"

NOTES:

1. REINFORCE METAL DOORS AND FRAMES PER ANSI A250.8 AND SDI-100 STANDARDS. 12 GAUGE RECOMMENDED.
2. DIM. "A" AND "B" ARE TAKEN FROM THE EDGE OF THE DOOR FOR INVISIBLE HINGES.
3. FOR THIN RAIL DOORS, USE 281-D DROP PLATE, SEE DATA SHEET A7244.
4. 281-J COVER PLATE MAY BE USED WHEN CLOSER IS VISIBLE THROUGH GLASS.
5. DO NOT USE THESE MOUNTINGS FOR SWING CLEAR HINGES.
6. LEFT HAND DOOR SHOWN, RIGHT HAND OPPOSITE.
7. DIMENSIONS "A" & "B" ARE BASED ON A 4-1/2" BUTT HINGE. IF A 3-1/2" OR 6" BUTT HINGE WERE USED, THE HOLD OPEN ANGLE WILL CHANGE BY LESS THAN 1/2°.
8. DEAD STOP OCCURS APPROX 3" BEYOND HOLD OPEN.
9. WHEN SOFFIT IS LESS THAN 3" USE A 125V BRACKET.
10. IF DOOR CLOSER BODY INTERFERES WITH LIGHT KIT, USE 281-B PLATE, SEE DATA SHEET A7242 FOR PLATE DIMENSIONS ONLY.

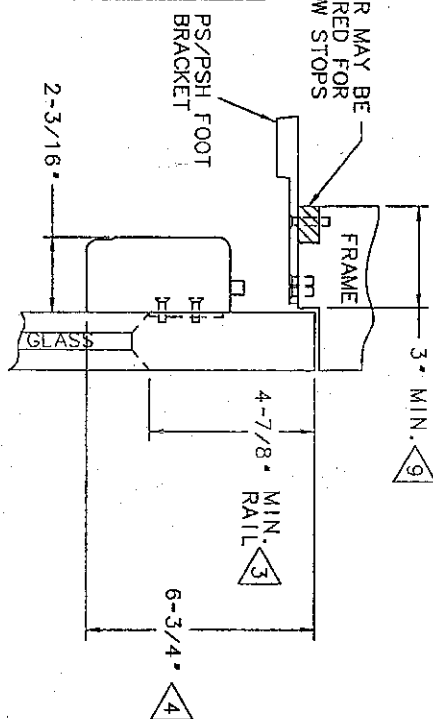


PS/PSH FOOT BRACKET DETAIL



NARROW FRAME INSTALLATION

USE 125V BRACKET (NOT SHOWN) FOR FLUSH FRAME CONDITIONS



SARGENT® Manufacturing Company
100 Sargent Drive New Haven, CT 06511

DATA SHEET: 281 SERIES DOOR CLOSER WITH PS OR PSH HEAVY DUTY PARALLEL ARM

TERMINAL NO. A7383 B

EFFECTIVE DATE AUG. 02