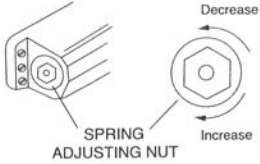


POWER ADJUSTMENT CHART FOR DOOR SELECTIONS

Spring Power Control

- To increase opening force and closing force turn the spring adjusting nut clockwise.
- To decrease opening force and closing force turn the spring adjusting nut anticlockwise.



NOTE : MAXIMUM ADJUSTMENT IS APPROXIMATELY 10 TURNS. DO NOT FORCIBLY EXTEND. ADJUSTMENT BEYOND LIMITS.

HOW TO ADJUST SPRING POWER

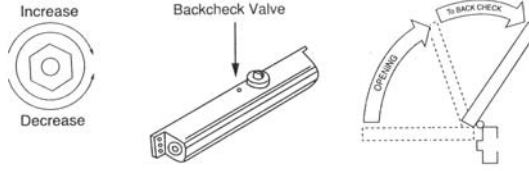
BE NOTED THAT 900 SERIES ARE SET DOWN AS DOOR CLOSER SIZE 3 FROM THE FACTORY.
EX: SIZE 2 CLOSER CAN BE MADE BY ROTATING SPRING ADJUSTING NUT ANTI-CLOCKWISE 3 TURNS BECAUSE IT WAS SET DOWN AS SIZE 3 FROM THE FACTORY ORIGINALLY. ALSO IN A SAME WAY, SIZE 6 CLOSER CAN BE MADE BY ROTATING SPRING ADJUSTING NUT CLOCKWISE 9 TURNS.

DOOR CLOSER SIZE		CLOCKWISE TURNS OF ADJUSTING NUT		APPLICABLE DOOR SIZE		APPLICABLE DOOR WEIGHT
900-P/PDA (SIZE 1/2-6)	900-FBF/BFDA (SIZE 1/2-4)	900-P/PDA (SIZE 2-6)	900-PBF/BFDA (SIZE 1/2-4)	INTERIOR	EXTERIOR (SWING OUT)	
NOT RECOMMENDED USE 900-PBF/BFDA	1/2	N/A	-9	28"(0.71m)	24"(0.61m)	22-33 Lbs (10-15kg)
NOT RECOMMENDED USE 900-PBF/BFDA	1	N/A	-6	32"(0.81m)	24"(0.71m)	33-55 Lbs (15-25kg)
2	2	+3	-3	36"(0.91m)	24"(0.81m)	66-88 Lbs (30-45kg)
3	3	0 (FACTORY SET)	0 (FACTORY SET)	42"(1.07m)	30"(0.91m)	99-143 Lbs (45-65kg)
4	4	3	3	48"(1.22m)	42"(1.07m)	143-187 Lbs (65-85kg)
5	NOT RECOMMENDED USE 900-P/PDA	6	N/A	54"(1.37m)	48"(1.22m)	187-264 Lbs (85-120kg)
6	NOT RECOMMENDED USE 900-P/PDA	9	N/A	58"(1.47m)	52"(1.32m)	264-330 Lbs (120-150kg)

+ 3 MEANS 3 TURNS TO ANTI-CLOCKWISE

Back Check Control

- To increase back check intensity, turn back check control valve clockwise.
- To decrease back check intensity, turn back check control valve anticlockwise.



● NEVER close this valve completely

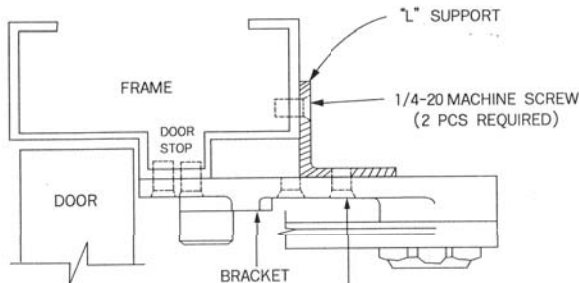
Opening Cycle

INSTRUCTIONS FOR INSTALLING BRACKET SUPPORT ("L" SUPPORT)

(AFTER BRACKET IS INSTALLED) IT frame (or door stop) is not wide enough to fix the bracket wholly use "L" support to support and lasten between the frame and the bracket as shown below:

HOW TO INSTALL

- Set "L" support on top of bracket and hold & match with frame.
- Fasten the 2 pieces of 1/4-20 machine screws to the frame.
- To the proper position. DRILL & TAP one or two holes of 1/4-20 from the bracket through "L" support.
- Tighten the 1/4-20 screw(s) securely.

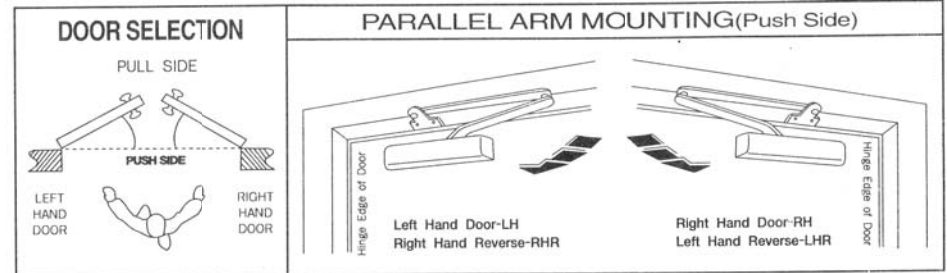


"PLEASE DRILL & TAP HERE"

900 SERIES SUPER RIGID PARALLEL ARM

INSTALLATION INSTRUCTIONS FOR
900 SERIES DOOR CLOSERS
(HOLD-OPEN & NON HOLD-OPEN TYPE)

MODEL NO.: SPAS/900 (NON HOLD-OPEN)
HOSRPS/900 (HOLD-OPEN)



GENERAL DESCRIPTIONS

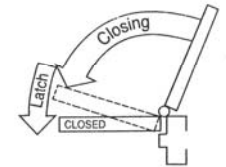
The 900 series closers are non-handed for right or left hand doors designed to meet entrance accessibility requirements. The 900 series are spring power adjustable for all exterior/interior doors up to 58" (1470mm) wide doors and up to 330 Lbs (150Kg) weight.

Adjust the spring power before installing the door closer according to the "POWER ADJUSTMENT CHART FOR DOOR SELECTION" as shown on page 4.

The 900 series closers are installed BACK CHECK function as a standard which is essential to the proper operation of the SUPER RIGID PARALLEL ARM. Use just enough to prevent arm from striking stop with impact.

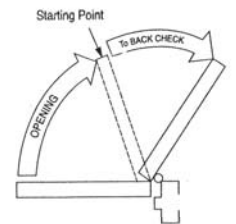
The delayed action (optional) function can not be used for this arm because this arm permits maximum 100° door open angle.

Closing Speed Control



Standard Closing Cycle

Back Check Control



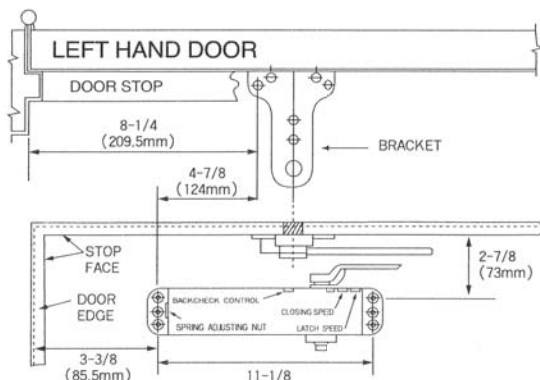
INSTALLATION INSTRUCTIONS

MODEL No. : SPAS/900 (NON HOLD-OPEN)
HOSRPS/900 (HOLD-OPEN)

COMMERCE CALIFORNIA

PARALLEL ARM (PUSH SIDE) Mounting

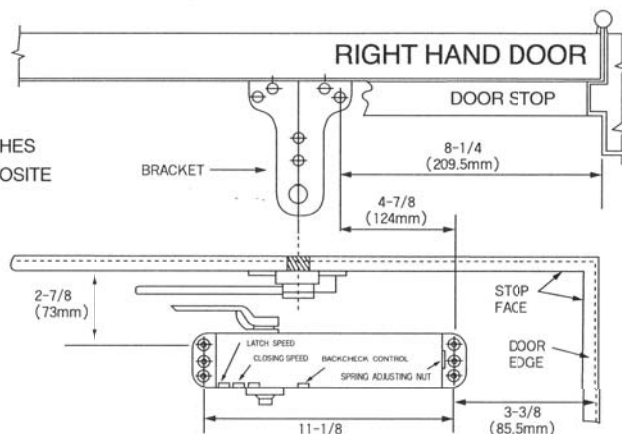
LEFT HAND DOOR SHOWN



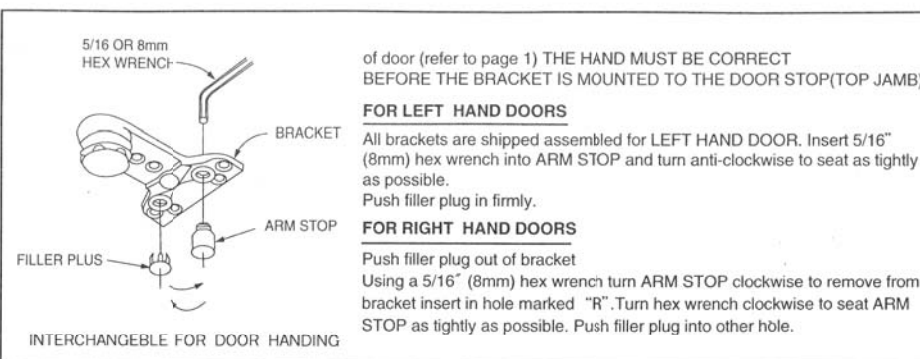
- DIMENSIONS ARE IN INCHES
- RIGHT HAND DOOR OPPOSITE
- DO NOT SCALE

PARALLEL ARM (PUSH SIDE) Mounting

RIGHT HAND DOOR SHOWN



- DIMENSIONS ARE IN INCHES
- RIGHT HAND DOOR OPPOSITE
- DO NOT SCALE



of door (refer to page 1) THE HAND MUST BE CORRECT BEFORE THE BRACKET IS MOUNTED TO THE DOOR STOP(TOP JAMB).

FOR LEFT HAND DOORS

All brackets are shipped assembled for LEFT HAND DOOR. Insert 5/16" (8mm) hex wrench into ARM STOP and turn anti-clockwise to seat as tightly as possible.

Push filler plug in firmly.

FOR RIGHT HAND DOORS

Push filler plug out of bracket

Using a 5/16" (8mm) hex wrench turn ARM STOP clockwise to remove from bracket insert in hole marked "R". Turn hex wrench clockwise to seat ARM STOP as tightly as possible. Push filler plug into other hole.

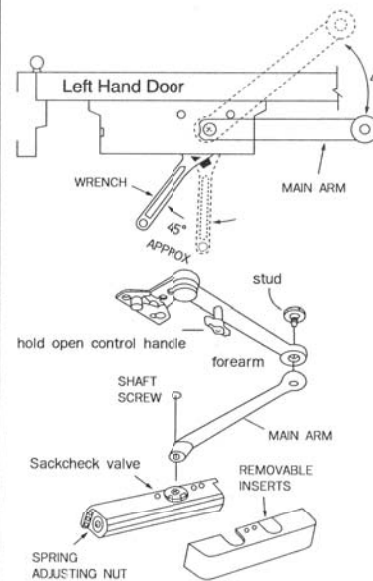
INSTALLATION SEQUENCE

LEFT HAND DOOR SHOWN- RIGHT HAND DOOR OPPOSITE

CAUTION

IMPROPER INSTALLATION OR REGULATION
MAY RESULT IN PERSONAL INJURY OR
PROPERTY DAMAGE FOLLOW ALL
INSTRUCTIONS CAREFULLY.

1. Adjusting spring power to match door width or weight as indicated by DOOR SELECTION CHART shown on page 4.
2. Mount closer on door to dimensions shown on page 2.
3. Attach MAIN ARM as follows:
 - (a) Remove stud at junction between MAIN ARM and FOREARM
 - (b) -IMPORTANT- place open end wrench (spanner) on bottom shaft and turn toward hinge edge about 45°
 - (c) place MAIN ARM on top shaft parallel with door and secure with shaft screw with wrench (13/32" ≈ 10mm)
4. Attach BRACKET to door stop (Top jamb) as shown on page 2.
5. Swing door open about 45° join main arm and forearm insert stud and tighten securely.



IMPORTANT REMARKS

REGULATION

Do not allow door to slam into frame.
A normal standard closing time from 90° open position is 5 to 7 seconds evenly divided between main closing (sweep) speed and latching speed Adjust the CLOSING speed first, then adjust the LATCHING speed.

For slow closing speed of door turn speed adjusting valve of "C" (closing speed) clockwise and anti-clockwise for fast.
Latching speed control of door is the same manner as closing speed adjustment.

ADJUSTABLE BACK CHECK FUNCTION

This function is essential to the proper operation of the SUPER RIGID PARALLEL ARM. Use just enough to prevent arm from striking stop with impact. See page 4.

ATTACH COVER

Slide cover insert into the un-used cutout in cover.
Install cover securely using screw provided.

HOW TO HOLD-OPEN (90° STOP)

A quarter turn on the HOLD-OPEN CONTROL HANDLE engages or disengages hold-open.