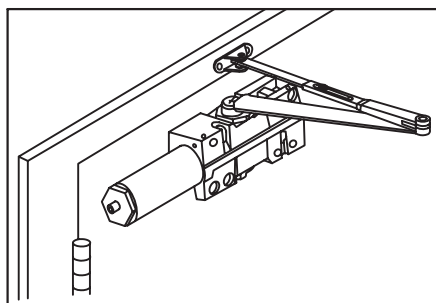


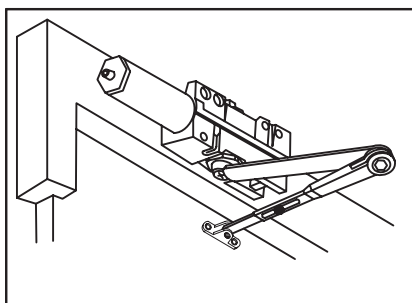
416-Series Adjustable Hold Open Arm Installation Instructions

APPLICABLE DOOR WEIGHT: 44LBS-187LBS

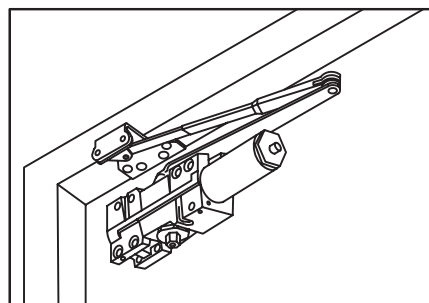
STANDARD MOUNT
(PULL SIDE)



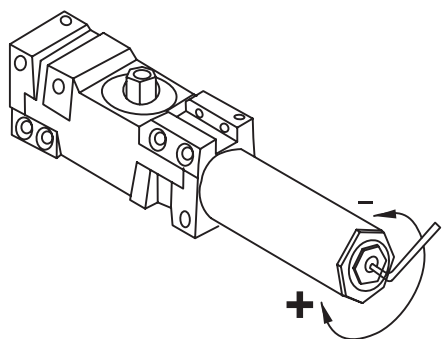
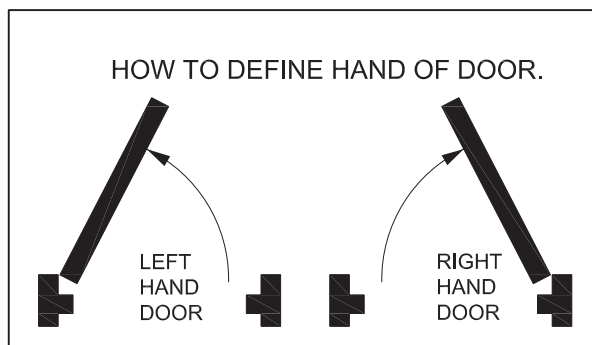
TOP JAMB MOUNT
(PUSH SIDE)



PARALLEL MOUNT
(PUSH SIDE)

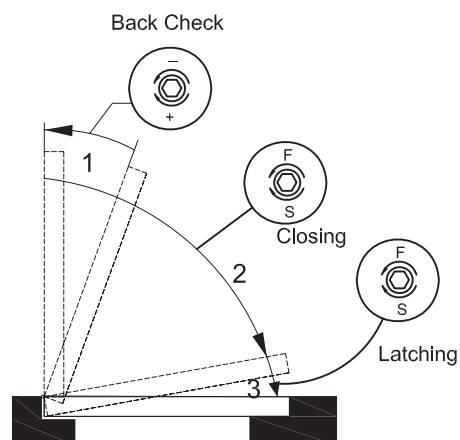


MAXIMUM DOOR WIDTH		FULL TURNS REQUIRED
EXTERIOR DOORS	INTERIOR DOORS	
————	5 lb-f*	5 TURNS C.C.W.
8.5lb-f*	34"	2 TURNS C.C.W.
30"	38"	0 TURNS
36"	48"	5 TURNS C.W.



Spring Power Adjustment

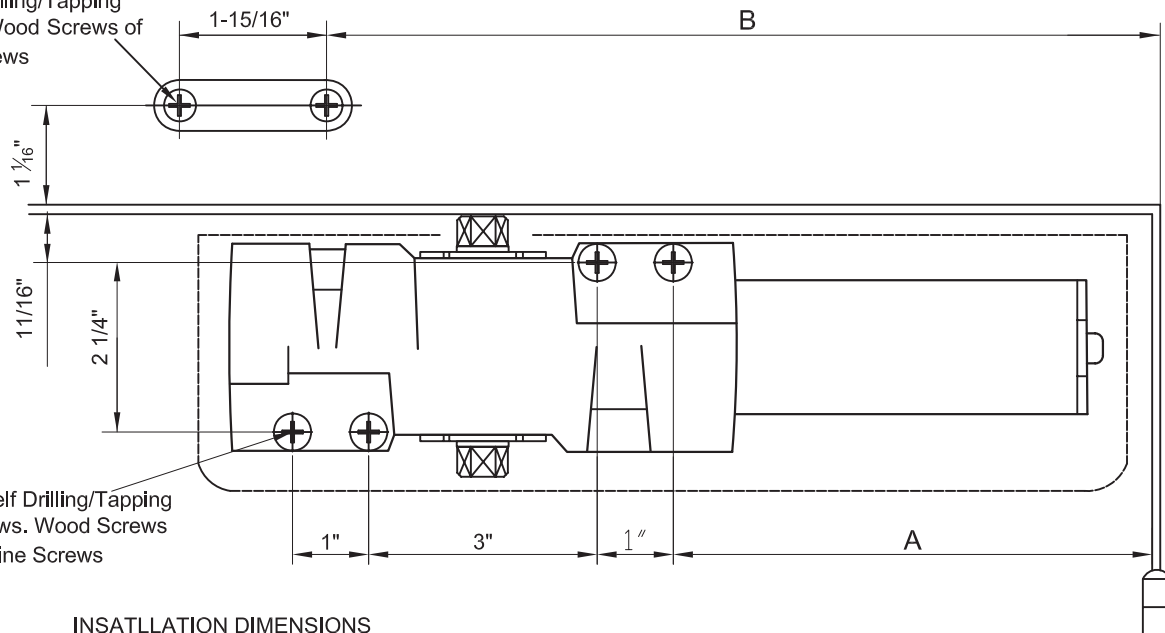
CONTROL RANGE



STANDARD INSTALLATION CLOSER MOUNTED ON DOOR ON PULL SIDE

This drawing shown is LEFT HAND DOOR, For RIGHT HAND DOOR should be install in symmetry

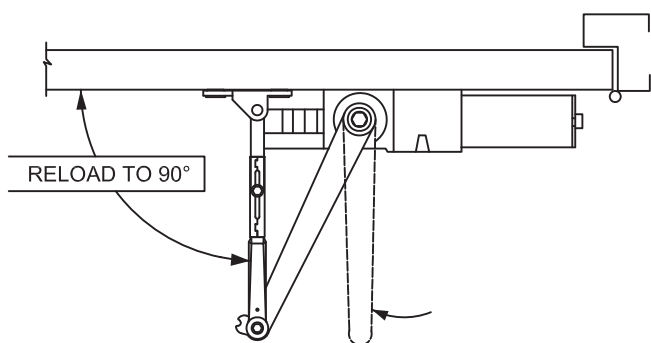
2 Holes for Self Drilling/Tapping machine screws. Wood Screws of $\frac{1}{4}$ -20 Machine Screws



4 Holes for Self Drilling/Tapping machine screws. Wood Screws of $\frac{1}{4}$ -20 Machine Screws

INSATLLATION DIMENSIONS

OPENNING	"A"	"B"
TO 100°	7- $\frac{5}{16}$ "	11- $\frac{13}{16}$ "
TO 130°	6- $\frac{1}{4}$ "	10- $\frac{13}{16}$ "



1. Adjust spring power to match door width as indicated by chart on page 1.
2. Mount closer on door as dimensions shown. Tube end toward hinge. If pivots are used, locate closer and shoe from CENTERLINE OF PIVOT. (For offset pivots, please increase the marked dimensions by $\frac{1}{8}$ ")
3. place main arm on top shaft, 100° to closer body, insert arm screw into top of shaft and tighten.
4. Attach shoe to frame as dimensions shown. (If more latching power is required, rotate shoe 180°)
5. Open door and insert rod in forearm.
6. With forearm at right angle to door (90°), insert forearm set screw and tighten.
7. Loosen the outer hex screw at the elbow of the main arm, open the door to the angle you need, then tighten the outer hex screw by open wrench to hold the door open.

REGUALTION:

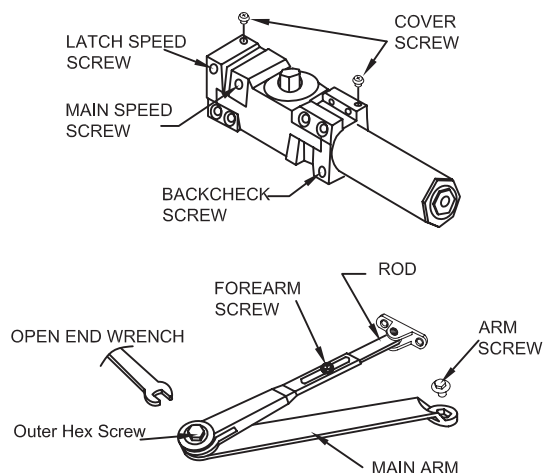
A 'normal' closing time from 90° open position to door stop position is 4-6 secs, evenly divided between main swing speed and latch swing speed. Use allen wrench (Furnished) to adjust speed. To slow main speed of door, turn regulating screw nearest shaft clockwise. To slow latch speed, turn regulating screw nearest hinge clockwise.

BACKCHECK

To increase back-check force, turn regulating screw nearest hinge clockwise. DO NOT USE ABRUPT BACKCHECK OR EXPECT DOOR CLSOER TO ACT AS A DOOR STOP.

COVER

Place insert in Proper cutout, then push cover against door. Tighten both cover screws securely.

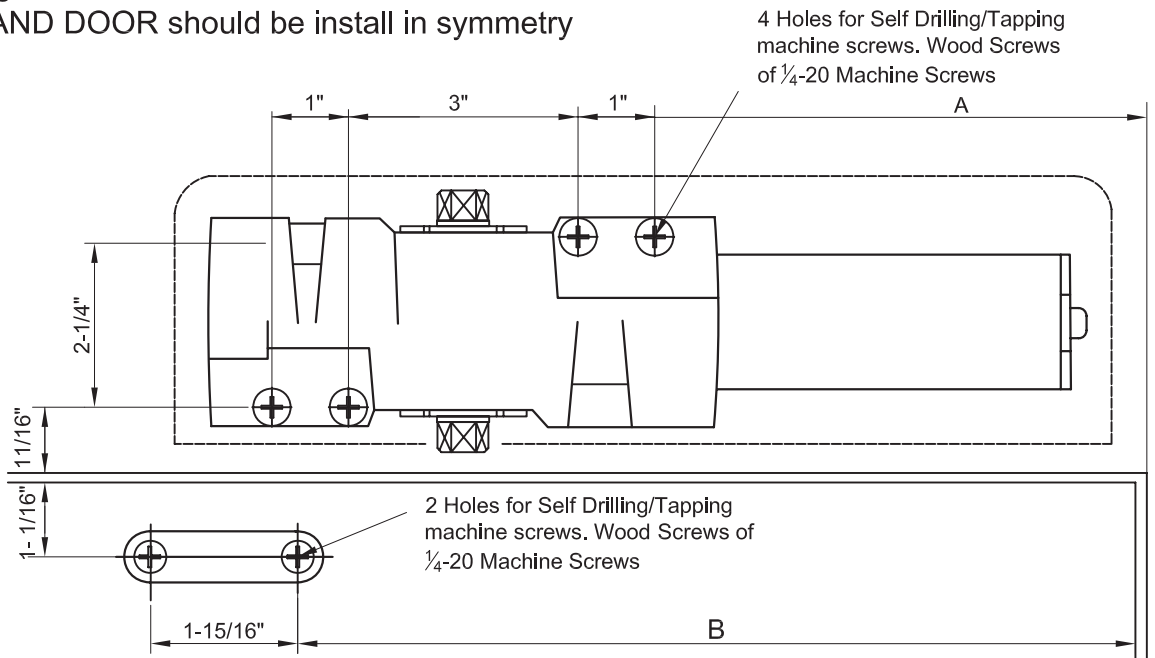


Not to scale 1:1. Measurements are for reference only. Not a drilling template.

TOP JAMB INSTALLATION

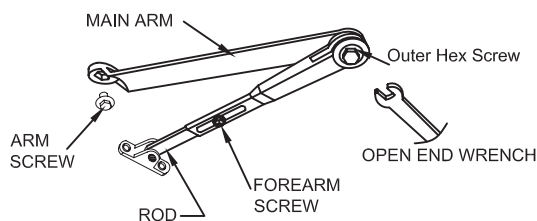
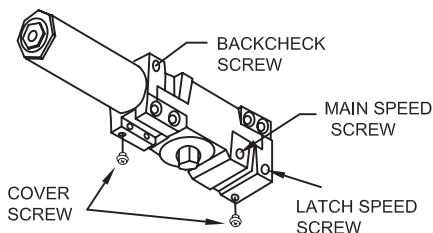
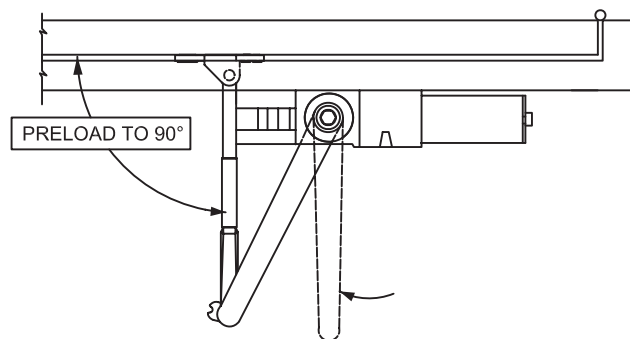
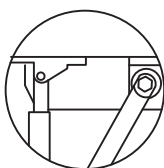
CLOSER MOUNTED TOP JAMB ON PUSH SIDE OF DOOR.

This drawing shown is RIGHT HAND DOOR,
For LEFT HAND DOOR should be install in symmetry



INSATLLATION DIMENSIONS

OPENNING	"A"	"B"
TO 100°	7-5/16"	11-13/16"
TO 130°	6-1/4"	10-13/16"



1. Adjust spring power to match door width as indicated by chart on page 1.
2. Mount closer on frame as dimensions shown. Tube end toward hinge. If pivots are used, locate closer and shoe from CENTERLINE OF PIVOT.
- (For offset pivots, pls increase the marked dimensions by 1/8")
3. place main arm on top shaft 100° to closer body, insert arm screw into top of shaft and tighten.
4. Attach shoe to door as shown. (if more latching power is required, rotate shoe 180)
5. Open door and insert rod in forearm-for reveal 2 5/8" through 4 13/16" use long rod. for reveals 4 7/8" to 8" use FOREARM EXTENDER (ROD) -available from dealer.
6. With forearm at right angle to door (90°), insert forearm set screw and tighten.
7. Loosen the outer hex screw at the elbow of the main arm, open the door to the angle you need, then tighten the outer hex screw by open wrench to hold the door open.

REGULATION:

A 'normal' closing time from 90° open position to door stop position is 4-6 secs, evenly divided between main swing speed and latch swing speed. Use socket key (Furnished) to adjust speed. To slow main speed of door, turn regulating screw nearest shaft clockwise. To slow latch speed, turn regulating screw nearest hinge clockwise.

BACKCHECK

To increase back-check force, turn regulating screw nearest hinge clockwise. DO NOT USE ABRUPT BACKCHECK OR EXPECT DOOR CLOSER TO ACT AS A DOOR STOP.

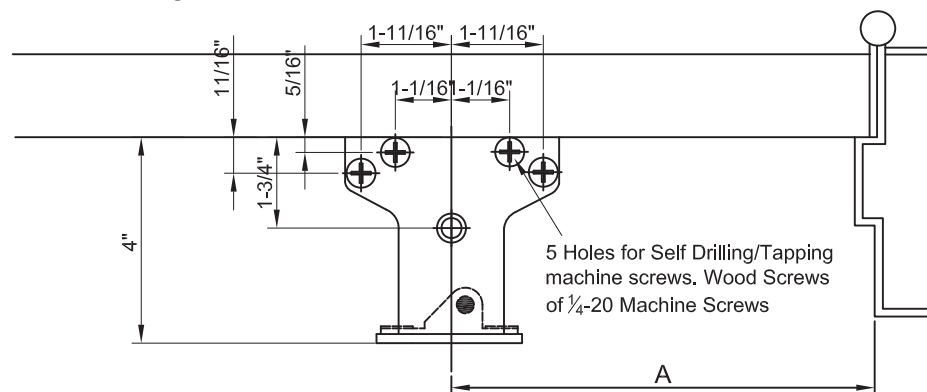
COVER

Place insert in Proper cutout, then push cover against door. Tighten both cover screws securely.

Not to scale 1:1. Measurements are for reference only. Not a drilling template.

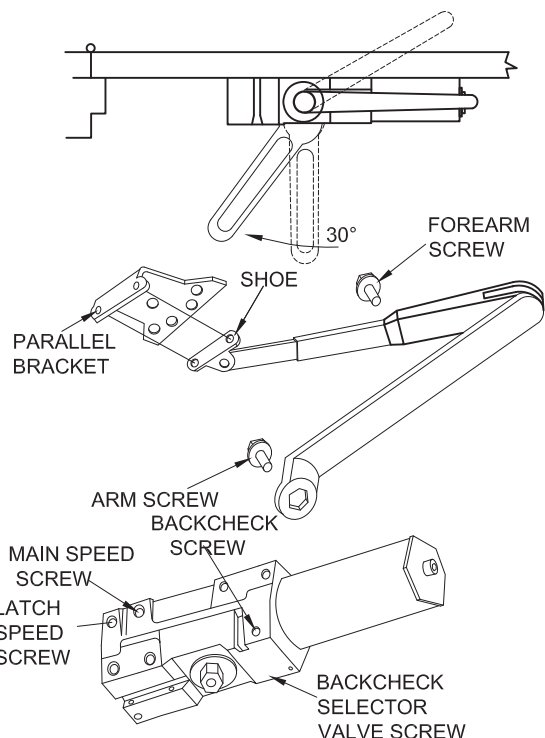
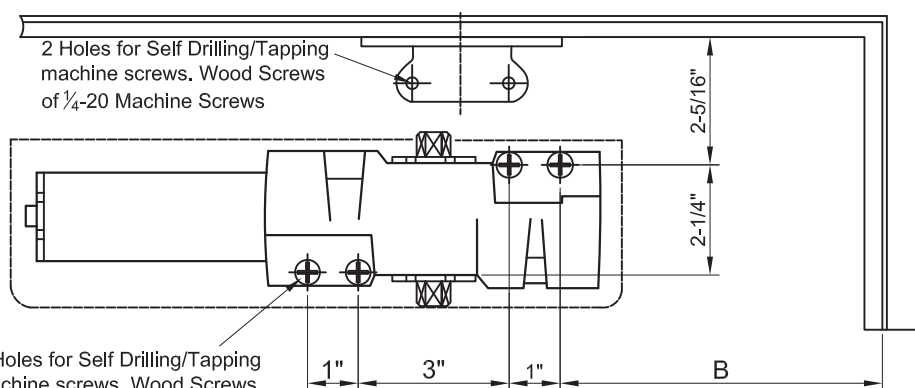
PARALLEL ARM INSTALLATION CLOSER MOUNTED ON DOOR ON PUSH SIDE

This drawing shown is RIGHT HAND DOOR, For LEFT HAND DOOR should be install in symmetry



INSATLLATION DIMENSIONS

OPENNING	"A"	"B"
TO 120	8 ⁵ / ₈ "	7 - ⁵ / ₁₆ "
OVER 140°	7 - ⁷ / ₈ "	6 - ¹ / ₂ "



1. Before installation, turn Back selector valve (Found on the opposite side of closer from backcheck screw side) ALL THE WAY IN (CLOCKWISE).

2. Adjust spring power to match door width as indicated by chart on page 1.

3. Mount closer on door as dimensions shown. Tube end toward latch. If pivots are used, locate closer and parallel bracket from CENTERLINE OF PIVOT.

4. Place open end wrench on bottom shaft and turn toward hinge jamb about 30° and then place main arm on top shaft, insert arm screw into top of shaft and tighten.

5. Attach parallel bracket on frame as dimensions shown.

6. Attach rod and shoe to parallel bracket as shown.

7. Insert rod into forearm, and then adjust length of forearm so main arm is parallel to door. Then insert forearm set screw and tighten.

8. Loosen the outer hex screw at the elbow of the main arm, open the door to the angle you need, then tighten the outer hex screw by open wrench to hold the door open.

REGUALTION:

A 'normal' closing time from 90° open position to door stop position is 4-6 secs, evenly divided between main swing speed and latch swing speed. Use allen wrench (Furnished) to adjust speed. To slow main speed of door, turn regulating screw nearest shaft clockwise. To slow latch speed, turn regulating screw nearest hinge clockwise.

BACKCHECK

To increase back-check force, turn regulating screw nearest hinge clockwise. DO NOT USE ABRUPT BACKCHECK OR EXPECT DOOR CLOSER TO ACT AS A DOOR STOP.

COVER

Place insert in Proper cutout, then push cover against door. Tighten both cover screws securely.

Not to scale 1:1. Measurements are for reference only. Not a drilling template.