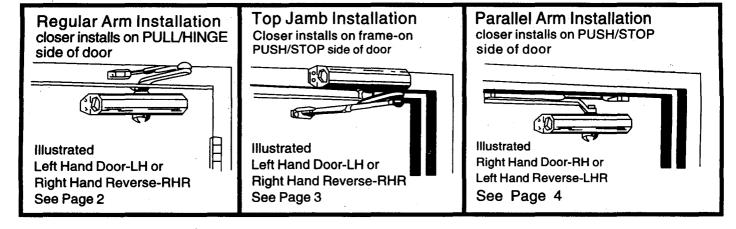
Surface Mounted
Size:1,2,3,4,5
Optional BackCheck
And Hold open

Installation Instructions Sheet



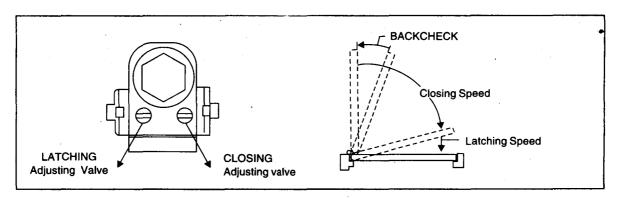
CLOSER ADJUSTMENT

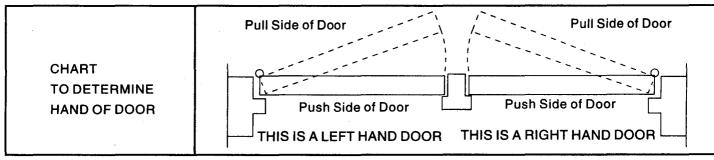
CLOSING CYCLE

NOTE:Closing arcs("CLOSE" and "LATCH") are controlled by two(2) separate speed adjusting valves Adjust the CLOSING speed first, then adjust the LATCHING speed.

- 1 "CLOSING" speed adjustment is accomplished by full rotations of the speed adjusting valve.
- -Turn the speed adjusting valve CLOCKWISE for a SLOWER closing speed.
- -Turn the speed adjustment valve COUNTER-CLOCKWISE for a FASTER closing speed.
- 2"LATCH" speed adjustment is acomplished by full rotation of the speed adjusting valve.
- -Turn the speed adjusting screw CLOCKWISE for a SLOWER latching speed.
- -Turn the speed adjusting screw COUNTER CLOCKWISE for a FASTER latching speed.

CAUTION!! Do not turn speed adjusting valve more than two (2)full turns counter-clockwise from its factory set position as two speed adjusting valves could become dislodged form the door closer body, resulting in the loss of internal fluid and failure of the device.

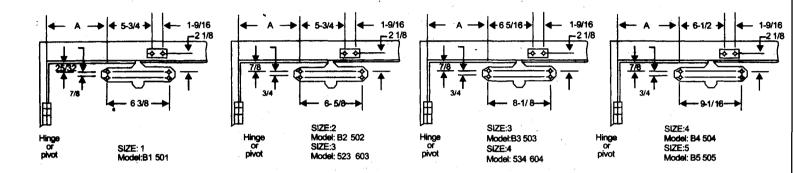




Surface Mounted
Size:1,2,3,4,5
Optional Backcheck
And Hold open

Installation Instructions for REGULAR ARM(PULL SIDE) Mounting

THIS TEMPLATE COVERS REGULAR ARM INSTALLATIONS TO 180° OPENINGS.



- Right hand door shown
- · Left hand door opposite
- Dimensions are in inches
- Drawing not to scale

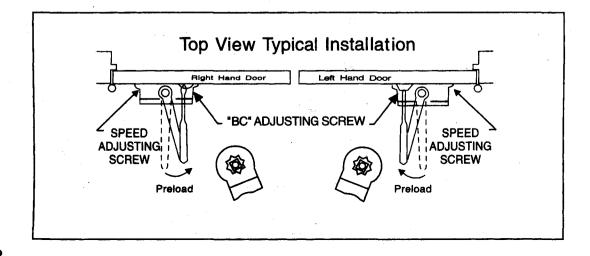
| OPENING | DIM.A | DIM.A | DIM.A | DIM.A |
|----------|----------|----------------|-----------------|---------------|
| | B1,501 | B2,502 523 603 | B3, 503 534,604 | 84,504 B5,505 |
| TO-120° | 3 3/4 | 4 5/16 | 4 23/32 | 4 5/16 |
| | (95.3MM) | (110MM) | (120MM) | (110MM) |
| TO -180° | 2 9/16 | 2 9/16 | 3 5/32 | 3 5/32 |
| | (65MM) | (65MM) | (80MM) | (80MM) |

INSTALLATION INSTRUCTIONS

- 1.Select door opening angle and use dimensions shown above. mark four(4) holes on door for door closer and two(2)holes on frame for arm shoe.
- 2.Drill pilot holes in door and frame for #14 all-purpose screws or drill and tap for 1/4-20 machine screws.
- Install forearm/arm shoe assembly to frame using screws provided.
- 4.Mount closer on door using screws provided.

 SPEED ADJUSTING VALVE MIJST BE POSITIONED TOWARD HINGE EDGE

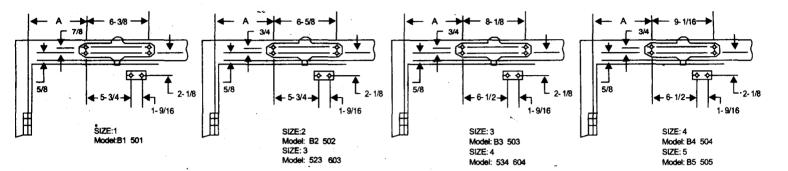
- 5.Install main arm to top pinion shaft, perpendicular to door as shown below .Secure tightly with arm screw/washer assembly provided.
- 6.Adjust length of forearm so that forearm is perpendicular to frame when assembled to preloaded main arm (Illustration below). Secure forearm to main arm with screw/washer assembly provided.
- 7. Snap pinion cap over shaft at bottom of closer.
- 8. Adjust closing speed of door, following instructions as shown page 1.



Surface Mounted Size:1,2,3,4,5 Optional Backcheck And Hold open

Installation Instructions for TOP JAMB(PUSH SIDE) Mounting

THIS TEMPLATE COVERS TOP JAMB INSTALLATIONS TO 180° OPENINGS.

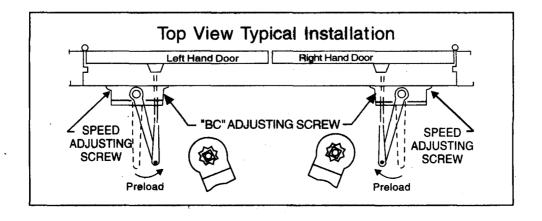


- Left hand door shown
- Right hand door opposite
- Dimensions are in inches
- Drawing not to scale

| OPENING | DIM.A | DIM.A | DIM.A | DIM.A |
|----------|---------|----------------|-----------------|---------------|
| | B1,501 | B2,502 523 603 | B3, 503 534,604 | B4,504 B5,505 |
| TO-120° | 4 5/16 | 4 5/16 | 5 1/8 | 5 1/8 |
| | (110MM) | (110MM) | (130MM) | (130MM) |
| TO -180° | 3 5/32 | 3 5/32 | 3 15/16 | 3 15/16 |
| | (80MM) | (80MM) | (100MM) | (100MM) |

INSTALLATION INSTRUCTIONS

- 1. Select door opening angle and use dimensions shown above. mark four(4)holes on frame door for door closer and two (2) holes on for arm shoe.
- 2.Drill pilot holes in door and frame for #14 all-purpose screws or drill and tap for 1/4-20 machine screws.
- Install forearm/arm shoe assembly to frame using screws provided.
- 4.Mount closer on door using screw provided.SPEED ADJUSTING .VALVE MUST BE POSITIONED TOWARD HINGE EDGE
- 5.Install main arm to top pinion shaft, perpendicular to door as shown below Secure tightly with arm screw/washer assembly provided.
- 6.Adjust length of forearm so that forearm is perpendicular to frame when preloaded main arm (Illustration below)..Secure forearm to main arm with screw/washer assembly provided.
- 7. Snap pinion cap over shaft at bottom of closer.
- 8.Adjust closing speed of door, following instructions as shown page 1.

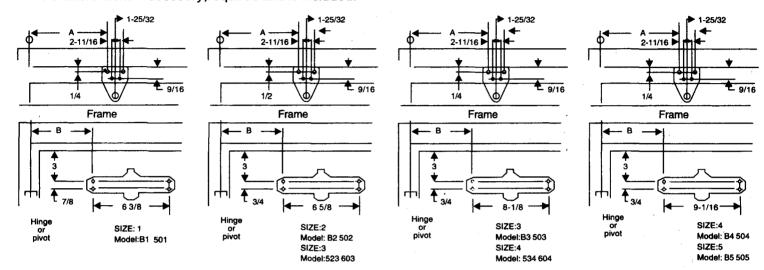


Surface Mounted
Size:1,2,3,4,5
Optional Backcheck
And Hold open

Installation Instructions for PARALLEL ARM(PUSH SIDE) Mounting

THIS TEMPLATE COVERS PARALLEL ARM INSTALLATIONS TO 180° OPENINGS.

Parallel bracket accessory, required and is included.



- Left hand door shown
- Right hand door opposite
- Dimensions are in inches
- Drawing not to scale

| OPENING | DIM.A B1,501 B2,502 523,603 | DIM.B B1,501 B2,502 523,603 | DIM.A B3,503 534,604 B4,504 B5,505 | DIM.B B3,503 534,604 | DIM.B B4,504 B5,505 |
|---------|-----------------------------------|-----------------------------------|--|-------------------------|------------------------|
| TO-120° | 5 29/32 | 4 3/4 | 7 7/ 8 | 6 11/16 | 5 29/32 |
| | (150MM) | (120MM) | (200MM) | (170MM) | (150MM) |
| TO-180° | 4 3/4 | 3 17/32 | 6 11/16 | 5 1/ 2 | 4 23/32 |
| | (120MM) | (90MM) | (170MM) | (140MM) | (120MM) |

INSTALLATION INSTRUCTIONS

- 1. Select door opening angle and use dimensions shown above, mark four (4) holes on door for door closer and four (4) holes under side of frame for parallel bracket.
- 2. Drill pilot holes in door and frame for #14 all-porpose screws of drill and tap for 1/4-20 machine screws.
- 3.Mc int closer on door using screws provided. SPEED ADJUSTING VALVE MUST BE POSITIONED AWAY FROM HINGE EDGE.
- 4.Install Parallel Arm Bracket frame using screws provided.
- 5. Using a wrench on the square shaft at bottom of closer, rotate shaft approximately4 / 5 "toward hinge edge of door.Hold and place main arm of shaft on top of closer at Proper index mark as illustrated.FOR LEFT HAND DOOR "R" (Illustration "A").FOR RIGHT HAND DOOR "R" (Illustration "B") Tighten arm screw with lockwasher securely.
- 6.Remove arm shoe from forearm and discard. Install ROD end of forearm to bracket using screw/washer assembly provided.
- 7. Adjust length of adjustable forearm so that adjustable forearm is parallel to frame.
- 8. Adjust closing speed of door, following instructions as shown page 1.

Typical Installation

