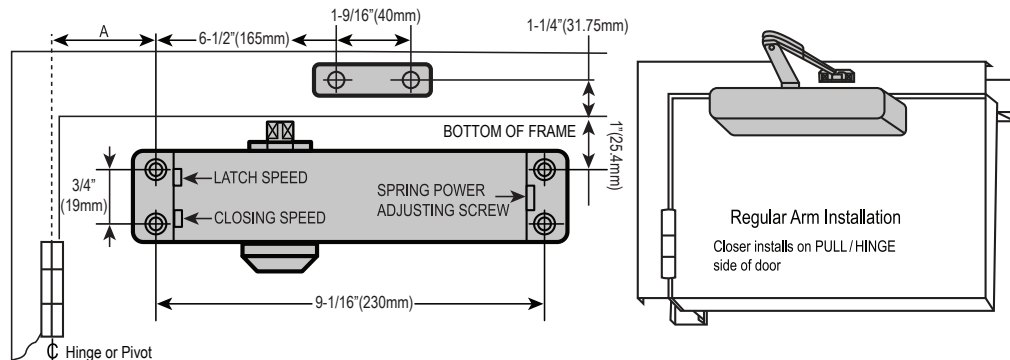
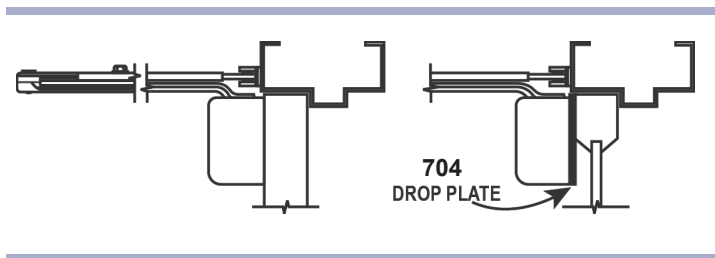


500 SERIES INSTALLATION GUIDELINE:

REGULAR ARM INSTALLATION (PULL SIDE) MOUNTING



OPENING	DIM A
TO 100°	4-23/32\"/>

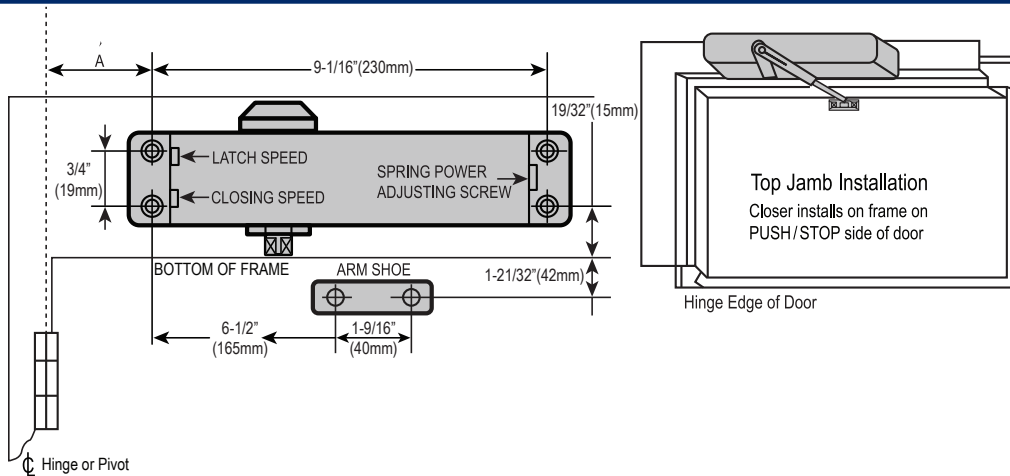


- RIGHT HAND DOOR SHOWN
- LEFT HAND DOOR OPPOSITE
- DIMENSIONS ARE IN INCHES
- DRAWING NOT TO SCALE

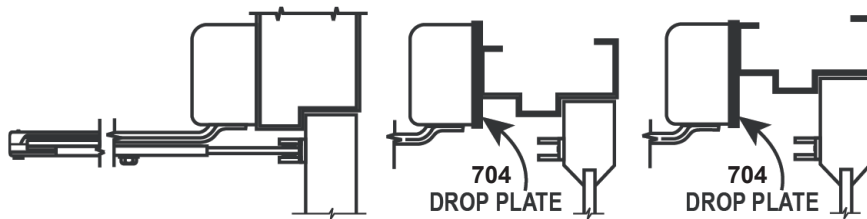
INSTALLATION GUIDELINES:

1. Select degree of opening from table and use template dimension shown in above. Mark 4 holes on the door for door closer and two (2) holes on the 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.
3. Install adjustable forearm/arm shoe assembly to frame using screw provided.
4. Install main arm to top pinion shaft using screw provided.
5. Mount closer on door using screws provided, SPRING POWER ADJUSTING NUT MUST BE POSITIONED AWAY FROM HINGE EDGE.
6. Adjust length of adjustable forearm so that adjustable forearm is perpendicular to frame when assembled to preloaded main arm (Illustration). Secure forearm to main arm with screw provided.
7. Snap pinion cap over shaft at bottom of closer, (When using full cover, pinion cap is not necessary).
8. Adjust closing speed, back check control and spring power of door, following instruction as shown.
9. Shown Illustration above in regards for 704 drop plate use to accommodate the door closer body mounting in some cases.

500 SERIES: TOP JAMB INSTALLATION (PUSH SIDE)



OPENING	DIM A
TO 100°	5-1/2" (140 mm)
100° - 120°	5-1/8" (130 mm)
OVER 180°	3-17/32" (90 mm)

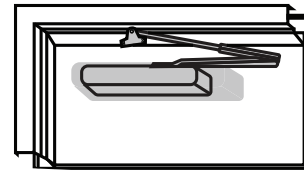
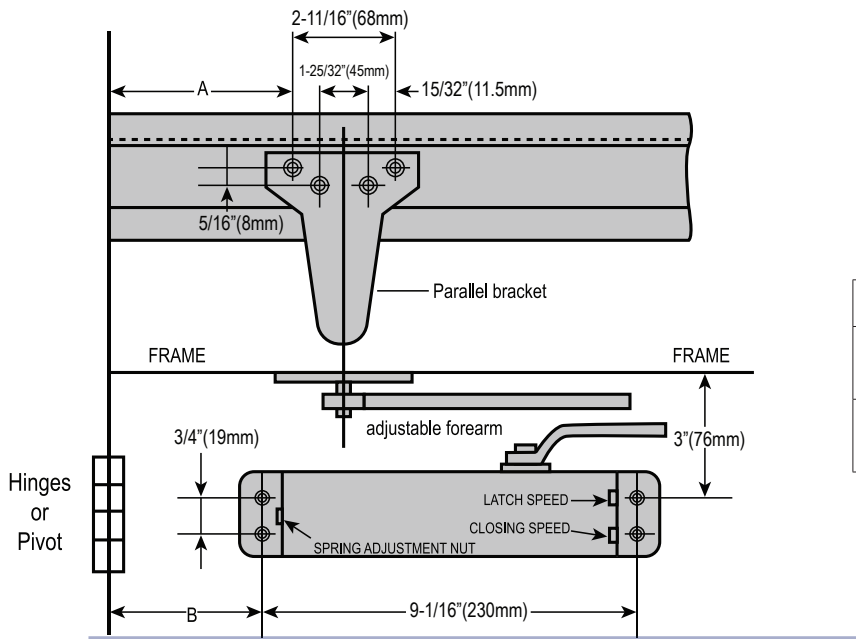


- LEFT HAND DOOR SHOWN
- RIGHT HAND DOOR OPPOSITE
- DIMENSIONS ARE IN INCHES
- DRAWING NOT TO SCALE

INSTALLATION GUIDELINES:

1. Select degree of opening from table and use template dimension shown in above. Mark 4 holes on the door for door closer and two (2) holes on the 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.
3. Install adjustable forearm/arm shoe assembly to frame using screw provided.
4. Install main arm to top pinion shaft using screw provided.
5. Mount closer on door using screws provided, SPRING POWER ADJUSTING NUT MUST BE POSITIONED AWAY FROM HINGE EDGE.
6. Adjust length of adjustable forearm so that adjustable forearm is perpendicular to frame when assembled to preloaded main arm (Illustration). Secure forearm to main arm with screw provided.
7. Snap pinion cap over shaft at bottom of closer, (When using full cover, pinion cap is not necessary).
8. Adjust closing speed, back check control and spring power of door, following instruction as shown.
9. Shown Illustration above in regards for 704 drop plate use to accommodate the door closer body mounting in some cases.

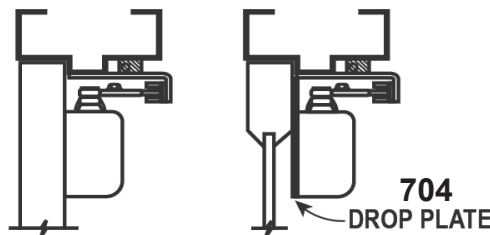
500 SERIES : PARALLEL ARM INSTALLATION (PUSH SIDE)



Parallel Arm Installation
Closer installs on frame on PUSH/STOP side of door

OPENING	DIM A	DIM B
TO 100°	7-7/8" (200 mm)	5-29/32" (150 mm)
120° - 180°	6-11/16" (170 mm)	4-23/32" (120 mm)

- LEFT HAND DOOR SHOWN
- RIGHT HAND DOOR OPPOSITE
- DIMENSIONS ARE IN INCHES
- DRAWING NOT TO SCALE



INSTALLATION GUIDELINES:

1. Select degree of opening from table and use template dimension shown in above. Mark 4 holes on the door for door closer and two (4) underside of frame for bracket..
2. Drill pilot holes in door and frame for #14 all-purpose screws or drill and tap for 1/4; 20 machine screws.
3. Mount closer on door using screws provided, SPRING POWER ADJUSTING NUT MUST BE POSITIONED TOWARD HINGE EDG.
4. Install paralled arm bracket to frame using screw provided.
5. Using a wrench on the square shaft at bottom of closer, rotate shaft approximately 45 Degree 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 "L" (Illustration "A"). FOR RIGHT HAND DOOR "R" (Illustration "B"). Tighten arm screw with lockwasher securely.
6. Remove arm shoe from the forearm and discard (arm shoes is not used for parallel installation) and tighten screw securely.
7. Adjust length of adjustable forearm so that adjustable forearm is parallel to frame.
8. Snap pinion cap over shaft at bttom of closer. (When using full cover. pinion cap is not necessary).
9. Adjust closing speed, back check control and spring power of door, following instruction as shown page 4.

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.

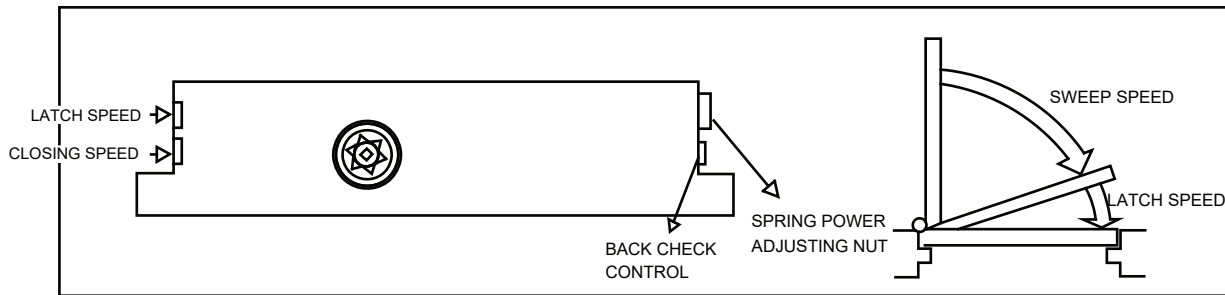
1. "CLOSING" speed adjustment is accomplished by full rotations of the speed adjusting valve.

- Turn the speed adjusting valve CLOCKWISE for a SLOWER closing speed.
- Turn the speed adjusting valve COUNTER-CLOCKWISE for a FASTER closing speed.

2. "LATCH" speed adjustment is accomplished 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 from the door closer body resulting in the loss of internal fluid and failure of the device.



BACK CHECK CONTROL

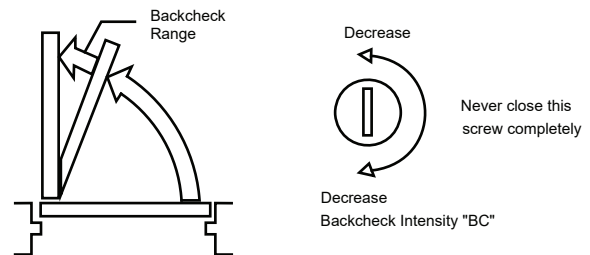
- To increase back check intensity, turn back check control valve clockwise.
- To decrease back check intensity, turn back check valve anticlockwise.

SPRING POWER CONTROL

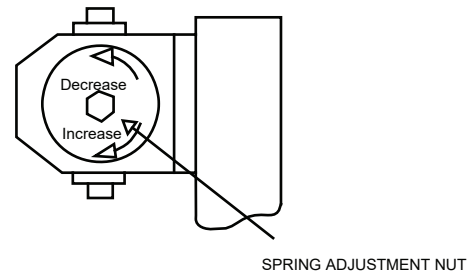
- To increase opening force and closing force, turn the spring adjusting screw clockwise.
- To decrease opening force and closing force, turn the spring adjusting screw anticlockwise.

FULLY ADJUSTABLE SPRING

(800 SERIES CLOSERS ARE SHIPPED AS SIZE 2 ON BF (BARRIER FREE) MODELS, AND SIZE 3 ON NON BF MODEL.) ROTATE SPRING ADJUSTMENT SCREW COUNTER - CLOCKWISE TO REDUCE THE SIZE, ROTATE SPRING ADJUSTMENT SCREW CLOCKWISE TO INCREASE SPRING POWER.



ADJUSTABLE SPRING MODELS



BC	CLOSER SIZE		CLOCKWISE TURNS OF ADJUSTING NUT
		BF	
3		1	0
4		2	6
5		3	12
6		4	18

NOTE: MAXIMUM ADJUSTMENT IS APPROXIMATELY 18 TURNS FROM MINIMUM SETTING
DO NOT FORCIBLY EXTEND ADJUSTMENT BEYOND LIMITS