



**Non Hold Open
Door Closer**

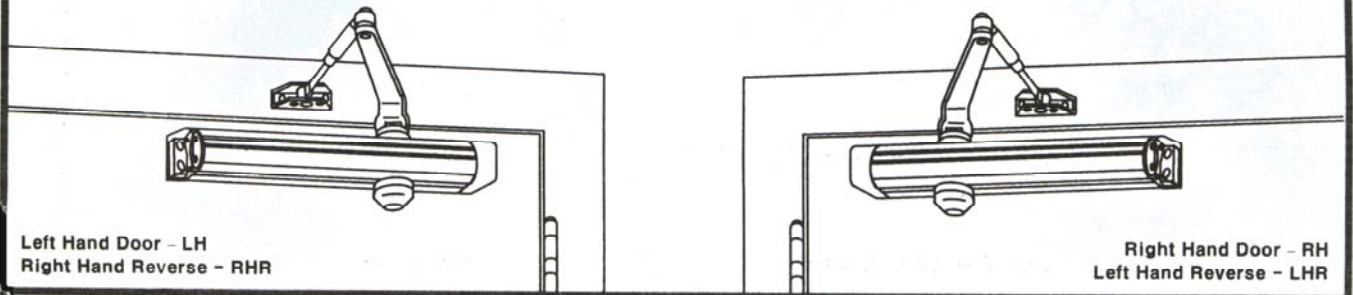
CAUTION AN INCORRECTLY INSTALLED OR IMPROPERLY ADJUSTED DOOR CLOSER CAN CAUSE PROPERTY DAMAGE OR PERSONAL INJURY. THESE INSTALLATION INSTRUCTIONS SHOULD BE FOLLOWED TO AVOID THE POSSIBILITY OF MISAPPLICATION OR MISADJUSTMENT. **CAUTION**

**Installation
Instructions
Model : CR8501**
Series can be adjusted from
Power size 2 thru 6.

NOTE : Use this instruction sheet for installation sequence and closer adjustments

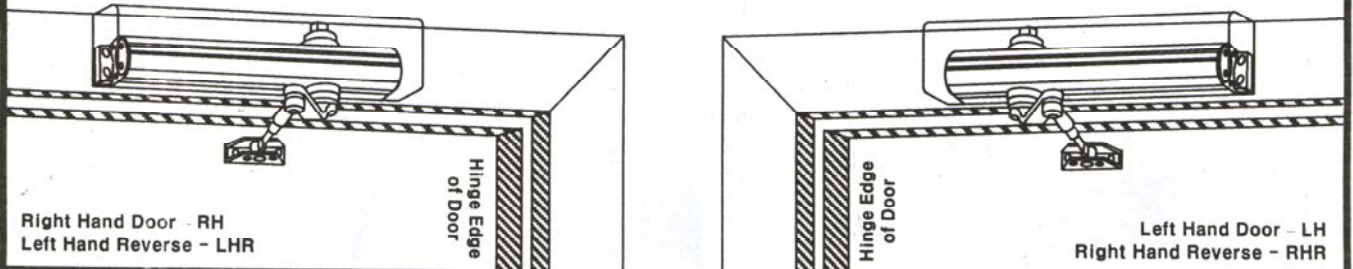
Regular Arm Installation

Closer mounts on hinge (pull) side of door. Closers illustrated with slim covers.
See Page 3.



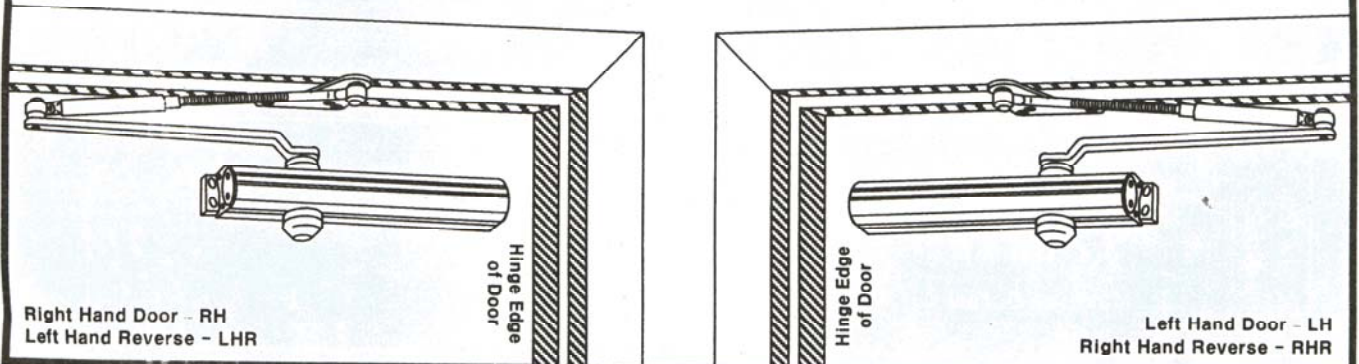
Top Jamb Installation

Closer mounts on frame face on opposite to hinge (push) side of door. Closers illustrated with full covers.
See Page 4.

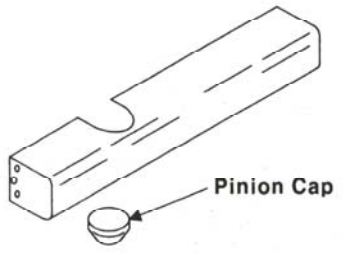
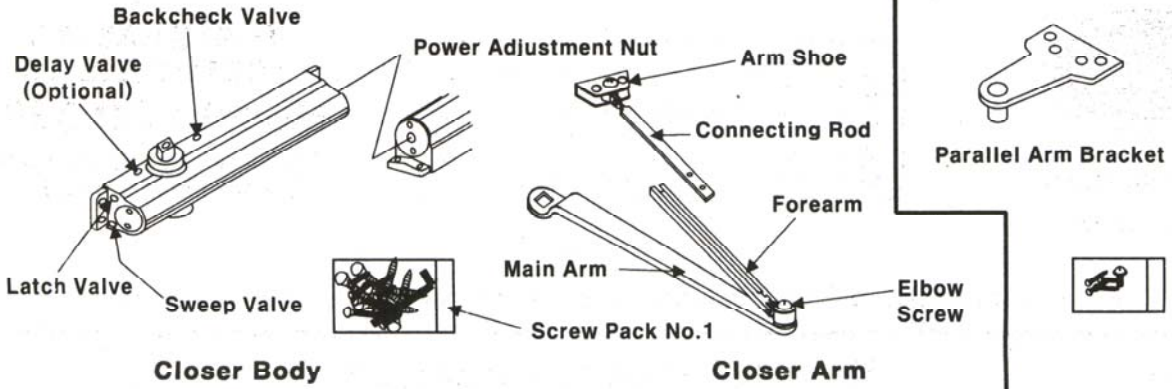


Parallel Arm Installation

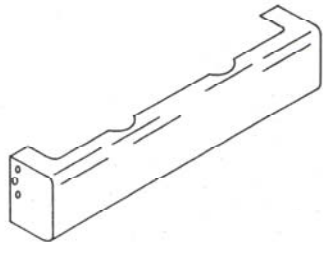
Closer mounts opposite to hinge (push) side of door. Closers illustrated without covers.
See Page 5.



Components



Standard Slim Cover



Optional Full Cover

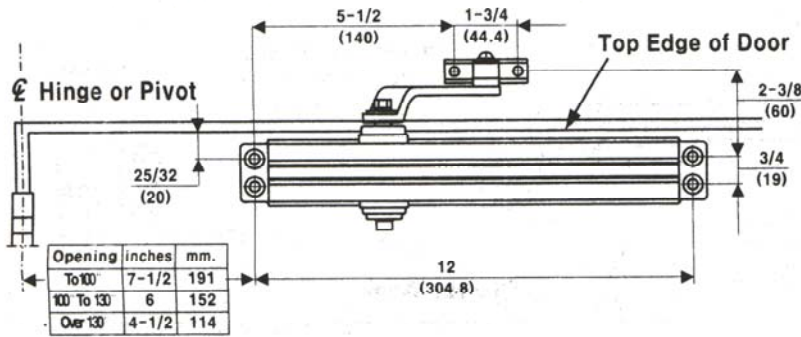
PREPARATION for FASTENERS

Fasteners		Door or Frame	Type	Drill-Size		
Screw Pack No.2	①	M6 × 1.0 19/32" (15mm)			1	
	②	S.M. Screw 1-1/4" (32mm)	Wood		7/32" (5.5mm.)	4
	③	Machine Screw 1/4" -20	Metal		Drill: #7(.201 dia.) Tap: 1/4" -20	4
	④	S.M. Screw 3/4" (19mm)	Wood		7/32" (5.5mm.)	2
	⑤	Machine Screw 1/4" -20	Metal		Drill: #7(.201 dia.) Tap: : 1/4" -20	2
	⑥	Machine Screw 1/4" -20				2
	⑦	Machine Screw M4 × 0.7				2
	⑧	4mm Hex Key Wrench				1
Screw Pack No.2	⑨	M6 × 1.0 15/32" (12mm)			1	
	⑩	S.M. Screw 3/4" (19mm)	Wood			4
	⑪	Machine Screw 1/4" -20	Metal			4

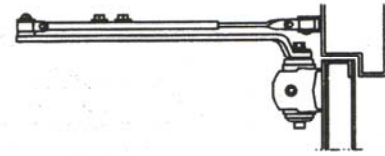
Regular Arm

Installation Instructions

Template



NOTE : DOOR OPENINGS TO 180° CONDITIONS PERMITTING



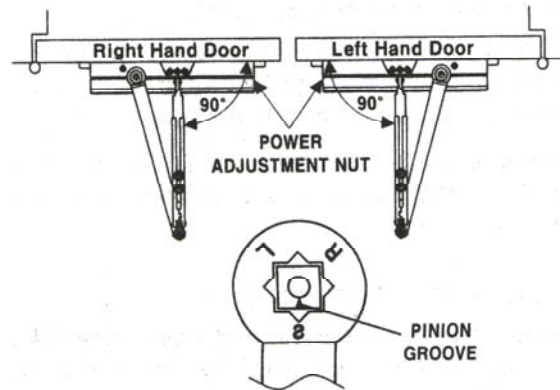
- RIGHT HAND DOOR SHOWN .
- SAME DIMENSIONS APPLY FOR LEFT HAND DOOR MEASURED FROM CENTERLINE OF PIVOT POINT.
- DIMENSIONS ARE IN $\frac{\text{INCHES}}{\text{(mm.)}}$

PLEASE NOTE

- This drawing is not to full scale.
- Therefore, do not use it as your template to locate the hole positions while you fabricate your door and frame for the installation of this product.
- Instead make the measurements needed manually without the use of the enclosed template which is not to full scale.

INSTALLATION INSTRUCTIONS

- Select angle of opening and use dimensions shown to locate 4 HOLES ON DOOR for closer body and 2 HOLES ON FRAME face for arm shoe.
- Prepare door and frame for fasteners. See "Preparation for Fasteners" , page 2.
- Set closing power for door size using Chart below right and see page 6, figure 2.
- Mount closer body on door with screws ② or ③, page 2. Be sure that power adjustment nut is away from hinge.
- Place main arm on closer pinion shaft with screw ① page 2. Indexing main arm mark "S" with pinion groove as shown at right.
- Fix arm shoe to frame with screws ④ or ⑤, page 2.
- Insert connecting rod into forearm.
- Pull main arm toward opposite side of hinge so that connecting rod will be perpendicular to door. Fix connecting rod on forearm using screws ⑥, page 2.
- Adjust closer and install cover and pinion cap. (When full cover is installed, use screws ⑦, page 2.) See page 6 for closer adjustment.

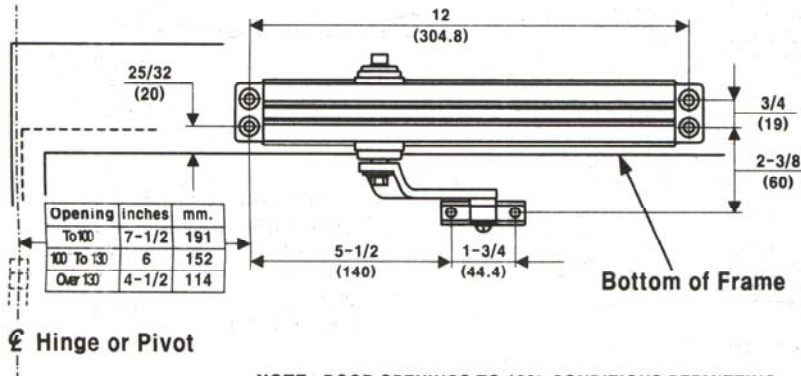


ADJUST SPRING POWER	
CLOSER SIZE	CLOCKWISE TURNS OF ADJUSTING NUT
1	0
2	2
3	4
4	8
5	12
6	16

Top Jamb

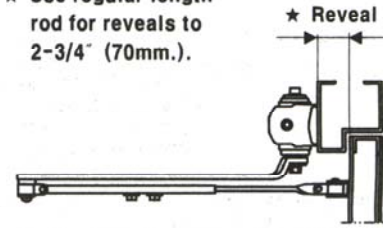
Installation Instructions

Template



NOTE: DOOR OPENINGS TO 180° CONDITIONS PERMITTING

★ Use regular length rod for reveals to 2-3/4" (70mm.).



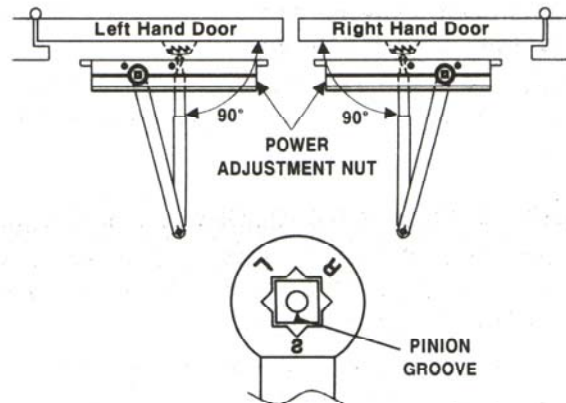
- LEFT HAND DOOR SHOWN.
- SAME DIMENSIONS APPLY FOR RIGHT HAND DOOR MEASURED FROM CENTERLINE OF PIVOT POINT.
- DIMENSIONS ARE IN **INCHES** (mm.)

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INSTALLATION INSTRUCTIONS

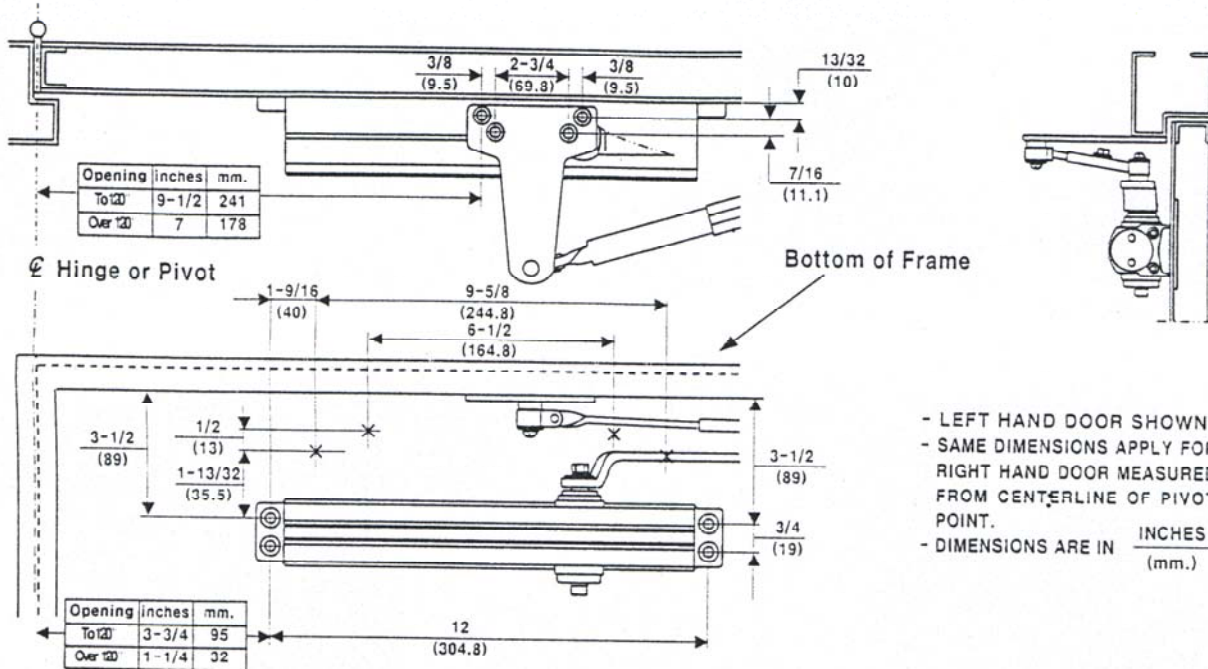
- Select angle of opening and use dimensions shown to locate 4 HOLES ON DOOR for arm shoe and 2 HOLES ON FRAME face for arm closer body.
- Prepare door and frame for fasteners. See "Preparation for Fasteners", page 2.
- Set closing power for door size using Chart below right and see page 6, figure 2.
- Mount closer body on frame with screws ② or ③, page 2. Be sure that power adjustment nut is away from hinge.
- Place main arm on closer pinion shaft with screw ① page 2. Indexing main arm mark "S" with pinion groove as shown at right.
- Fix arm shoe to door with screws ④ or ⑤, page 2.
- Insert connecting rod into forearm.
- Pull main arm toward opposite side of hinge so that connecting rod will be perpendicular to door. Fix connecting rod on forearm using screws ⑥, page 2.
- Adjust closer and install cover and pinion cap. (When full cover is installed, use screws ⑦, page 2.) See page 6 for closer adjustment.



ADJUST SPRING POWER	
CLOSER SIZE	CLOCKWISE TURNS OF ADJUSTING NUT
1	0
2	2
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6	16

Parallel Arm Template

Installation Instructions



- LEFT HAND DOOR SHOWN.
 - SAME DIMENSIONS APPLY FOR RIGHT HAND DOOR MEASURED FROM CENTERLINE OF PIVOT POINT.
 - DIMENSIONS ARE IN INCHES (mm.)

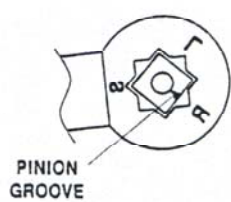
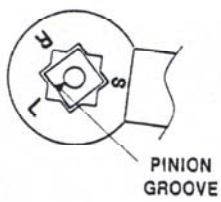
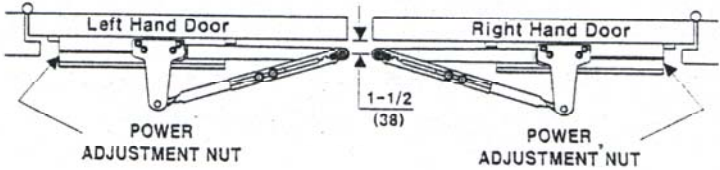
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- Instead make the measurements needed manually without the use of the enclosed template which is not to full scale.

INSTALLATION INSTRUCTIONS

- Select angle of opening and use dimensions shown to locate 4 HOLES ON DOOR for closer body and 4 HOLES ON FRAME face for parallel arm bracket.
- Prepare door and frame for fasteners. See "Preparation for Fasteners", page 2.
- Set closing power for door size using Chart below right and see page 6, figure 2.
- Mount closer body on door with screws ② or ③, page 2. Be sure that power adjustment nut is toward hinge.
- Place main arm on closer pinion shaft with screw ① page 2, indexing main arm mark "L" or "R" with pinion groove as shown at right.
- Fix parallel arm bracket to frame with screws ⑩ or ⑪, page 2.
- Disconnect arm shoe from connecting rod by removing screw. Remove arm shoe from connecting rod and discard. Assemble parallel arm bracket to connecting rod with Screw ⑨, page 2.
- Insert connecting rod into forearm.
- With door closed, adjust length of forearm and connecting rod so that the tip of the main arm is 1-1/2" (38mm.) from parallel with door. Secure with screws ⑥, page 2.
- Adjust closer and install cover and pinion cap. (When full cover is installed, use screws ⑦, page 2.) See page 6 for closer adjustment.



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CLOSER SIZE	CLOCKWISE TURNS OF ADJUSTING NUT
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Unit Adjustment

Control Valve Adjustments

(see Figure 2)

Closing Speed Controls (Figure 1A or 1B And 2.)

- Valve "1" Controls Sweep Range.
- Valve "2" Controls Latch Range.
- Valve "D" Controls Delay Range. (Optional)

Opening Cycle

- "Backcheck" valve controls the strength of cushioning in Backcheck Range. NEVER close this valve completely- it is not to provide a positive stop. (see Figure 4 and Figure 5).

Closing Power Adjustment

Using "Power Adjustment Chart" from page 3,4 or 5, Select the correct number of turns for power adjustment nut that corresponds with the installation. With 4mm Hex key, rotate adjustment nut full 360° clockwise turns to desired setting. After closer has been installed and proper adjustments made to the sweep and latch, it may be necessary to readjust spring power for good closing action.

