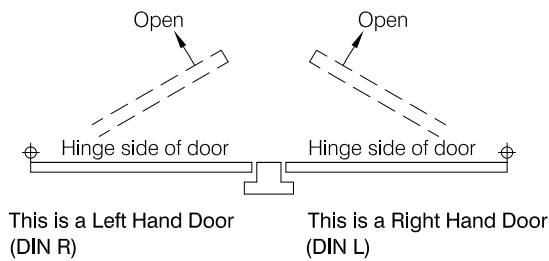


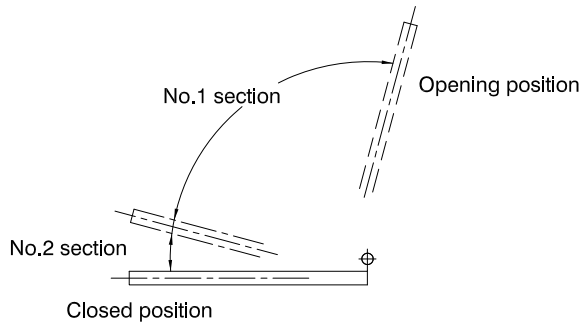
INSTRUCTIONS FOR STANDARD ARM APPLICATIONS OF MODEL NO.85V AND ITS EQUIVALENTS.  
Installation Procedure (This manual shows right-hand (DIN L) doors. Follow the same procedure for left-hand (DIN R) door.)

1

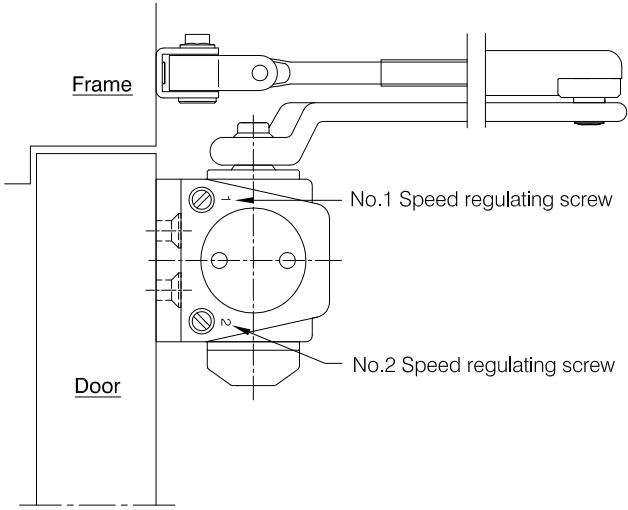
- Use this chart to determine hand of door



- Adjusting Section of Closing Speed



- Adjustment of Closing Speed



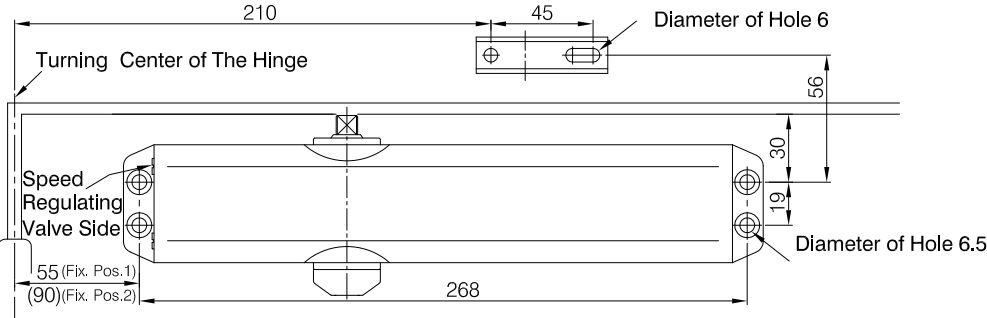
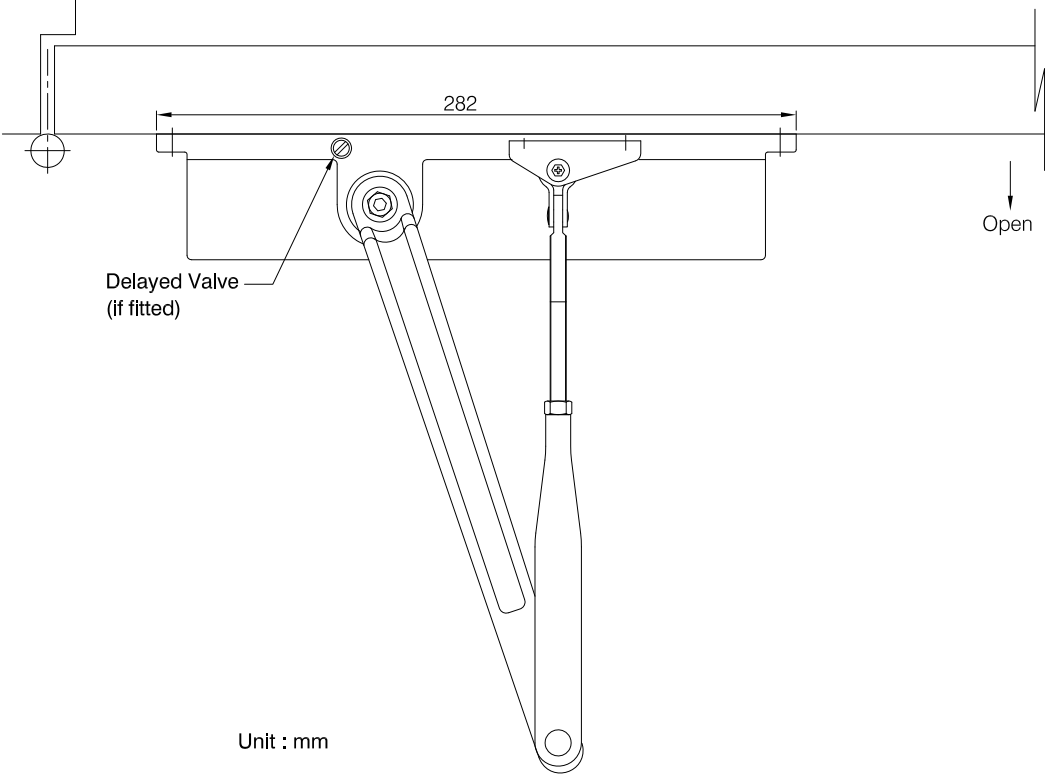
**Speed :** The door closing speed and the latching speed are controlled by the speed regulating screws .  
No.1 section is to be adjusted with No.1 speed regulating screw .  
No.2 section with No.2 speed regulating screw .  
Turn clockwise to reduce speed . Turn counterclockwise to increase speed .

**Note :** For parallel arm applications a separate template is included with the parallel arm bracket .  
Use this instruction sheet for installation sequence and closer adjustments only .

2

Standard Installation Closer mounted on Hinge Side of Door

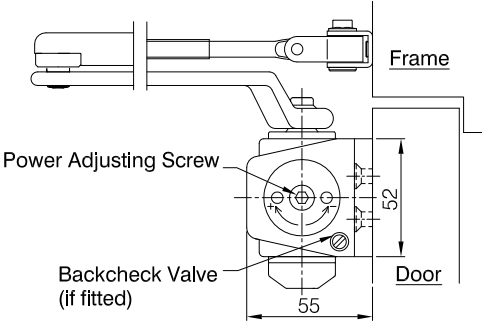
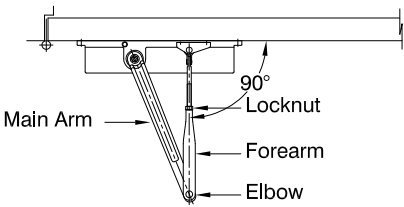
This drawing is Right handing (DIN L).



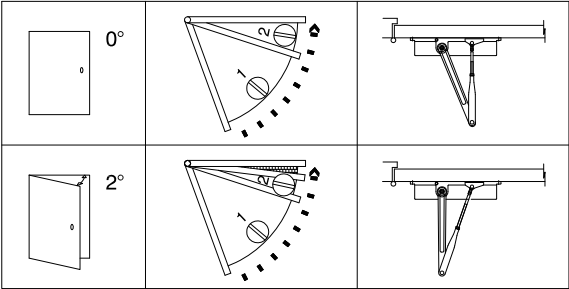
Installation Instructions

1. Use the dimensions shown on the enclosed template to mark four holes on the door for the closer and two holes on the frame for the shoe .
2. Drill holes in the door and frame for wood screws or drill and tap for machine screws .
3. Mount the closer on the door WITH THE SPEED REGULATING SCREW TOWARD THE HINGE .
4. Disconnect the forearm from the main arm at the elbow and attach the shoe to the frame .
5. Attach the main arm to the shaft at the top of the closer .
6. Adjust the length of the forearm so that it will be at 90° to the door when the door is closed and the arms are connected at the elbow .
7. Screw the pinion cap on the pinion or clip on the cover (See step 5) .

- Position of Arm



- Adjust the latching angle



This latching action plays an important role in fire and smoke control in the building. Once set at the time of installation, this latching speed should be readjusted only when absolutely necessary.

# INSTRUCTIONS FOR STANDARD ARM APPLICATIONS OF MODEL NO.85V AND ITS EQUIVALENTS.

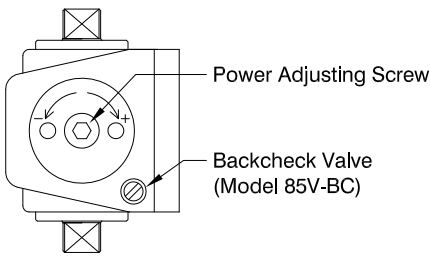
Installation Procedure (This manual shows right-hand (DIN L) doors. Follow the same procedure for left-hand (DIN R) door.)

## 3

### ● Adjust Spring Power According to The Chart

#### Adjust Spring Power as Follows

Turn the spring adjusting screw clockwise the required number of turns to match the door width as indicated in the chart . Where strong drafts exist increase the spring power as needed .



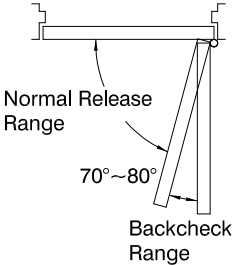
Fixing Position 1	Size	No.of turns	Direction	Opening (Max.)
	3	0	*	180°
Fixing Position 2	Size	No.of turns	Direction	Opening (Max.)
	4	1	+	180°
Fixing Position 2	Size	No.of turns	Direction	Opening (Max.)
	5	0	*	180°
Fixing Position 2	Size	No.of turns	Direction	Opening (Max.)
	6	4	+	130°

\* : Factory pre-set at size 3. (EN1154+A1)  
 △ Opening angle is based on the use of normal butt hinges with turning center at max. 10mm .

### ● Regulating Backcheck (Model no.85V-BC)

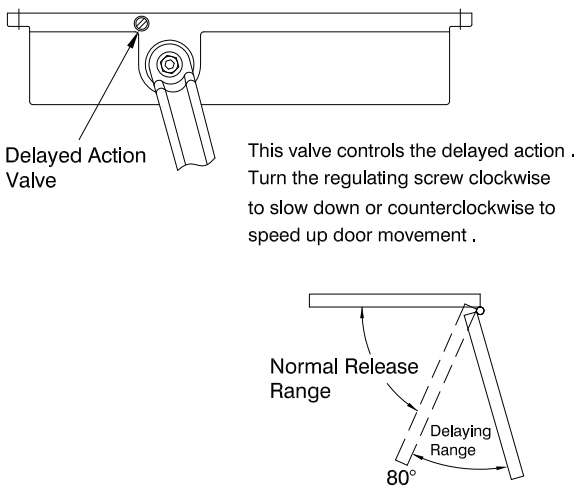
The power of the backcheck action is regulated by the valve shown . Turn clockwise to increase or counterclockwise to decrease .

Caution :  
 Set the valve for a slight cushioning effect to avoid damage to the door. Backcheck should never be used instead of a door stop .



### ● Delayed Action (Model no. 85V-DA)

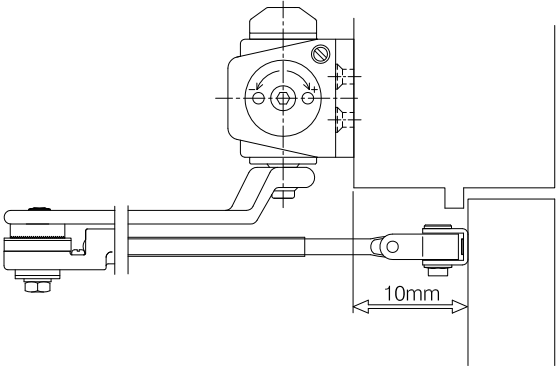
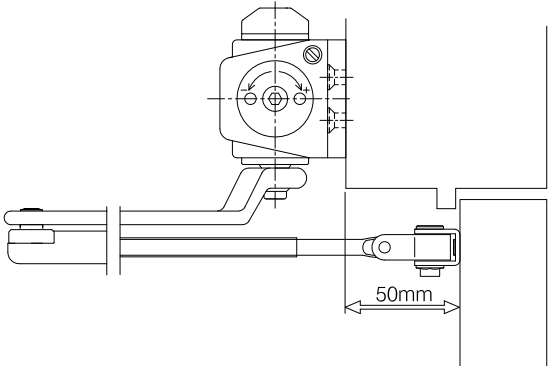
Delayed action is obtained by opening the door into the delaying range as shown . Upon release , the door closes slowly through the delaying range and then continues at regular speed in the normal release until fully closed . The normal release range is approximately at the 80° angle .



## 4

### ● Non hold-open model

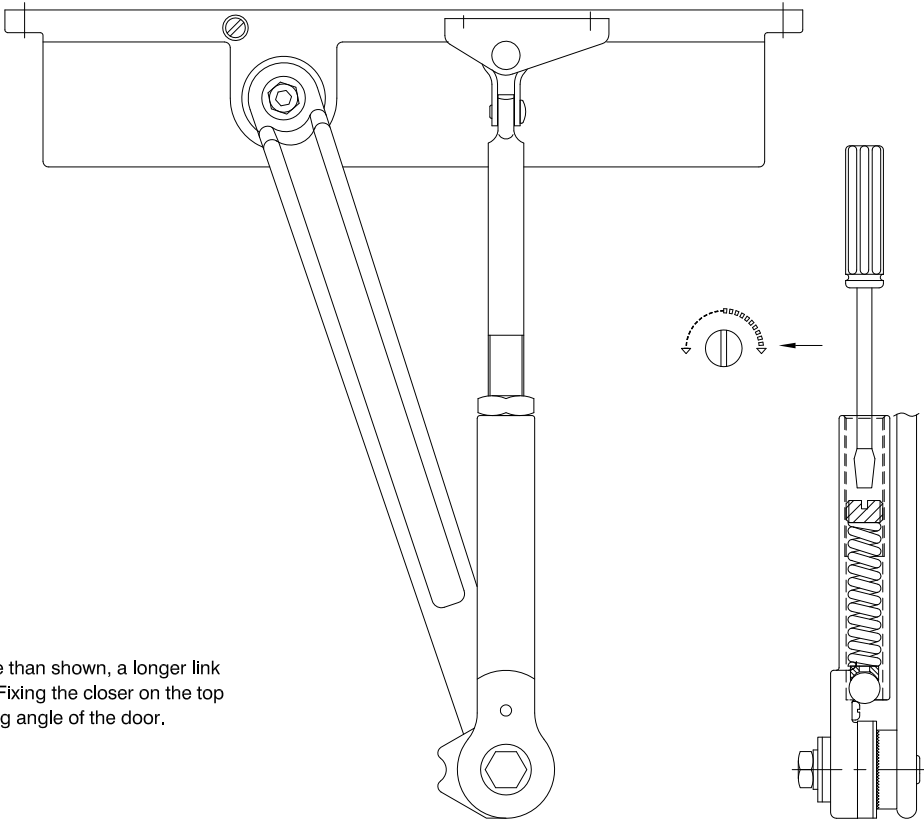
Top Jamb fixing for outswinging door application. Measure the distance between closer and shoe .



When the reveal of the door is more than shown, a longer link can be purchased with the dealer. Fixing the closer on the top jamb restricts the maximum opening angle of the door.

### ● Hold-open model

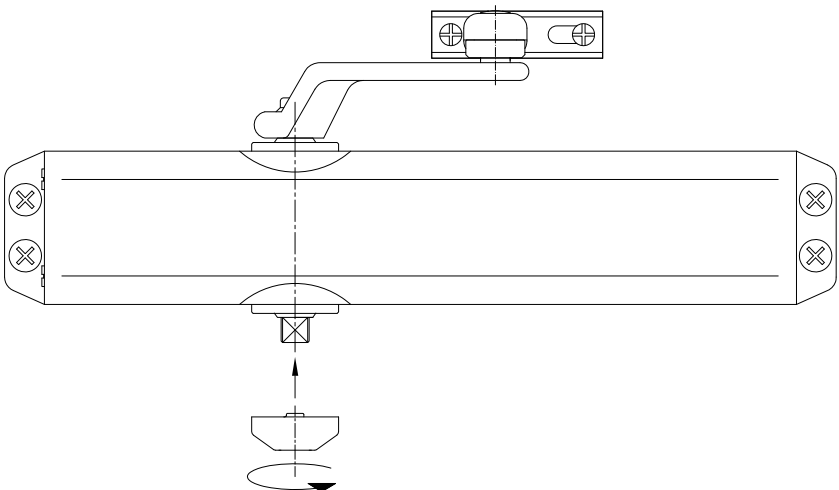
Adjust the hold-open power, only when necessary.



## 5

### ● Fit the cap

Fit the cap by screwing on the pinion.



### ● Install the cover (if purchased)

1. Click out the correct part for the pinion.
2. Clip the cover on to the closer (when using the cover, do not fit the cap on the pinion).

