

# Norton®

## Series 7570 / 7770

### Security Door Closer

### Installation Instructions

80-9377-0601-020 (03-13)



**TRADEMARK  
HARDWARE**

**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**

### Regular Non-Hold Open Arm

### Regular Arm is not available with a Hold Open Function

**NOTE:** For special applications a separate door and frame preparation template is packed with these instructions. Use this instruction sheet for installation sequence and closer adjustments only.

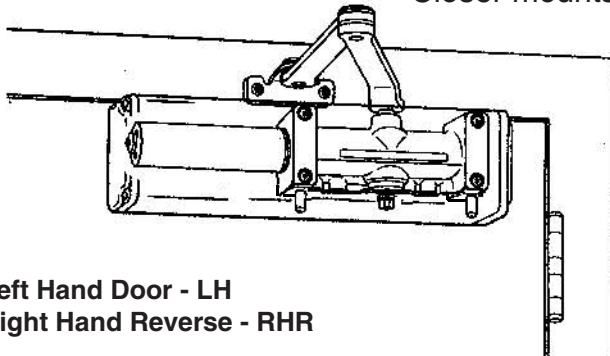
| Series                                                                                                                      |                      | Product Type                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------------------------------------------------------|
| Sized* Closer                                                                                                               | Multi-Sized** Closer |                                                                                          |
| 7770                                                                                                                        | 7570                 | <b>Security Door Closer</b><br>(Door Closer with both a Security Cover and Security Arm) |
| *7770 Series are sized door closers with 50% power increase capability. Power size 2 weakest power; power size 6 strongest. |                      |                                                                                          |
| *7570 Series can be adjusted from power size 1 thru 6.                                                                      |                      |                                                                                          |

\*For closers with or without "DA" suffix Delayed Action closing feature

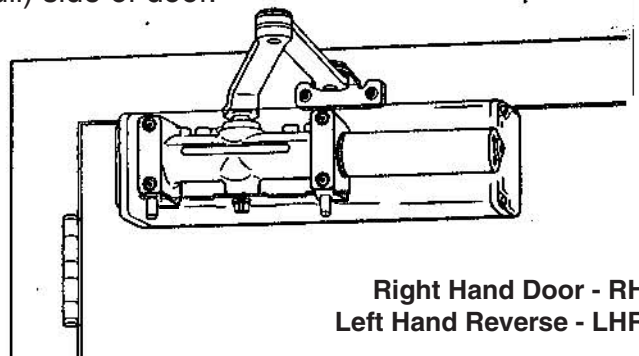
**\*\*Note:**  The closing force for series 7500 door closer is adjustable from a size 1 to a size 6, as outlined in ANSI Standard A156.4. When this series of door closer is installed and adjusted to conform to ADA reduced opening force requirements (5 lbs max.) for interior doors. It may not have adequate closing force to reliably close and latch the door. Power adjustments charted on pages 3,4 and 5 are recommended where possible, to ensure proper door control.

### Pull Side Installation

Closer mounts on hinge (pull) side of door.



**Left Hand Door - LH**  
**Right Hand Reverse - RHR**

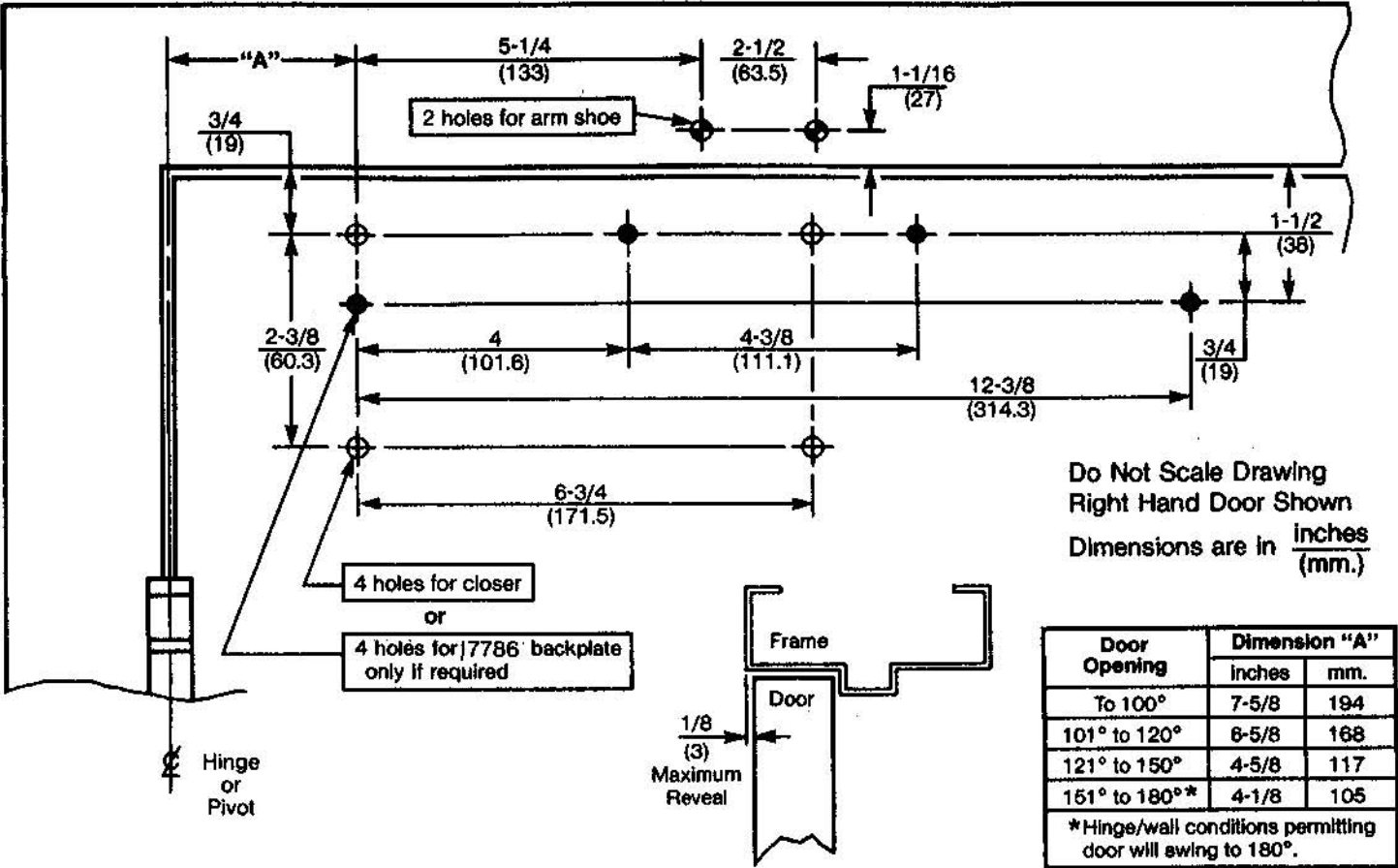


**Right Hand Door - RH**  
**Left Hand Reverse - LHR**

- MAXIMUM HINGE SIDE FRAME REVEAL IS 1/8" (3mm).
- Security Door Closers only: Door closer cover is handed and cannot be reversed. All other components are non handed.
- It is recommended that the door, on which the door closer will be installed, be hung on ball bearing hinges or offset pivots. Door must swing freely.
- A separate door stop, supplied by others, is recommended to prevent damage to the door closer, closer arm, door, frame, or adjacent walls.
- Door and frame must be properly reinforced, or use of special fasteners employed, to prevent the mounting screws from pulling out.
- All dimensions are given in inches with corresponding metric dimensions (millimeters) in parenthesis.
- Torx tamper resistant drive machine screws are normally supplied with this product.

Template

Right Hand Door Shown (Left Hand Installation is opposite.)

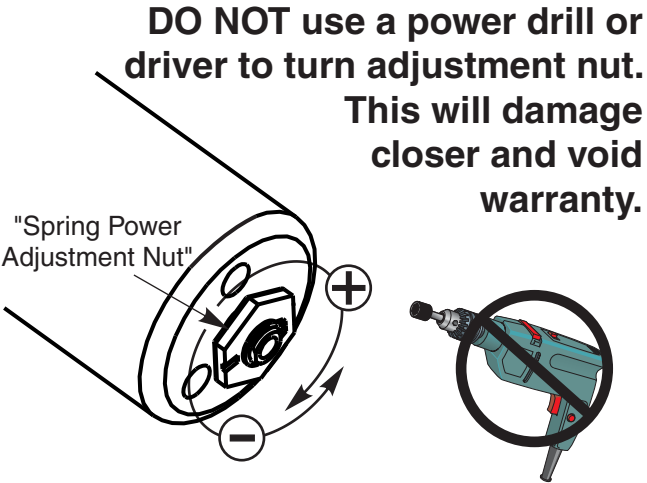


| Preparation for Fasteners |                          |                  |                                                                                |
|---------------------------|--------------------------|------------------|--------------------------------------------------------------------------------|
| Fasteners                 |                          | Door or Frame    | Drill-Sizes                                                                    |
| Standard                  | 1/4" - 20 Machine Screw  | Metal            | Drill: #7 (0.201" dia.)<br>Tap: 1/4" - 20                                      |
|                           |                          |                  |                                                                                |
| Optional                  | Sex Nuts and Bolts (SNB) | Hollow Metal     | 9/32" (7 mm); through 3/8" (9.5 mm) on door or transom-face opposite to closer |
|                           |                          | Aluminum or Wood | 3/8" (9.5 mm) through                                                          |

• For 7570 MODELS ONLY set closer power for door size using chart below.

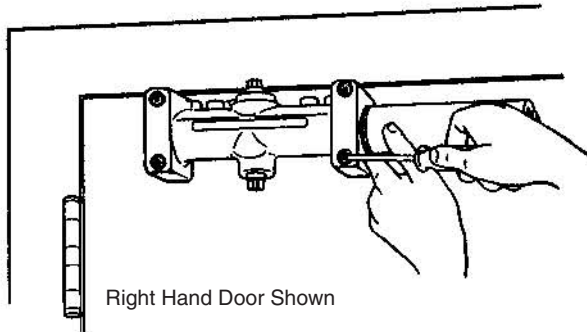
| Door Size<br>Inches<br>(mm)                             | Turns from Zero |               |
|---------------------------------------------------------|-----------------|---------------|
|                                                         | Interior Door   | Exterior Door |
| 28-32<br>(711-813)                                      | 0               | 2             |
| 33-36<br>(838-914)                                      | 2               | 5             |
| 37-42<br>(940-1067)                                     | 5               | 8             |
| 43-48<br>(1092-1219)                                    | 8               | 11            |
| NOTE: Maximum of 16 -360° turns of Power Adjustment Nut |                 |               |

Install closer per instructions with the proper pre-load applied to the arm then adjust spring power. The power adjustment will not work properly if the closer spring is not pre-loaded. To increase power, use 11/16" wrench to turn power adjustment nut clockwise. To decrease power, turn nut counter clockwise.

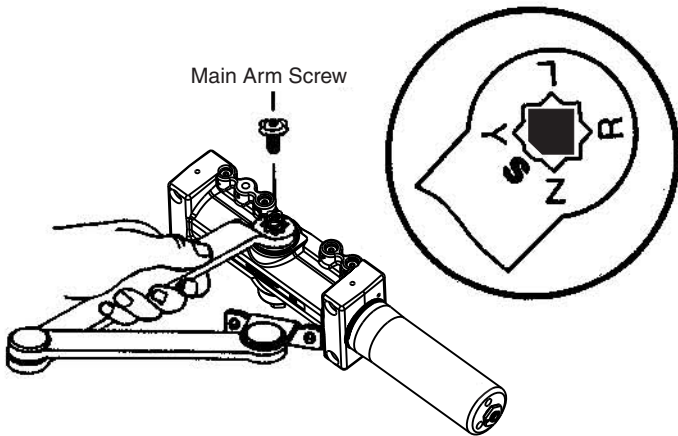


## Installation Sequence

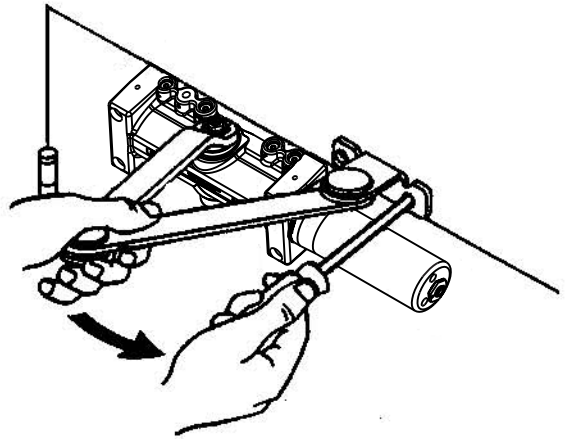
1. Use template on page 2 to locate holes on door and frame:  
4 on door for closer or backplate  
2 on frame face for arm shoe.
2. Prepare door and frame for fasteners using chart above.
3. **Mount closer on door.** (A drop plate is available for use on doors having narrow top rails.) Power Adjustment Nut should be away from hinge. Valves are **DOWN** for **Left Hand Door**. Valves are **UP** for **RIGHT HAND DOOR**.



4. **Place main arm on shaft**, aligning "S" mark on arm with pinion flat on pinion shaft. Push down into position. Secure with 1/4-20 x 1/2 (13) with hex head machine screw.



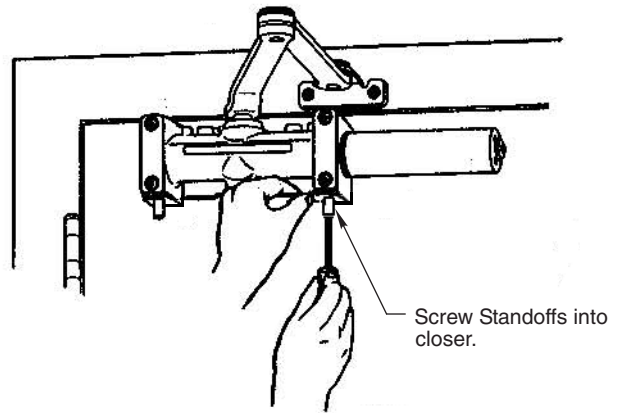
5. With door closed, rotate arm away from hinge and align shoe with mounting holes in frame. Fasten arm shoe to frame with round head screws provided.  
**CAUTION:** Closer arm is under spring tension and may be difficult to rotate.



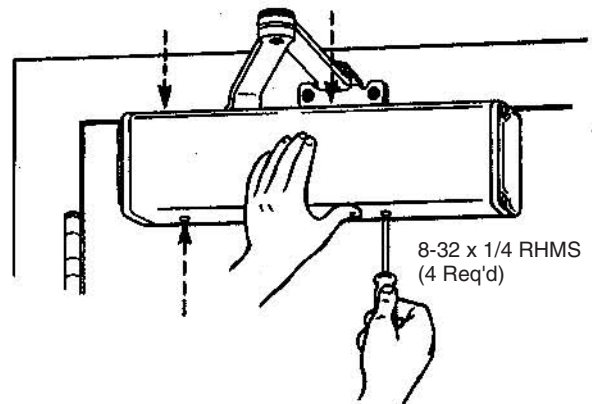
**CAUTION:** Do not back valves out of closer or a leak will result!

6. **Make closer adjustments** (see back page) before installing cover.

7. **Install Cover:**  
Screw Standoffs into holes in closer.



8. Fasten cover to closer with 4 #8-32 x 1/4 RHMS provided.



# Unit Adjustment

## Closing Speed Controls (Figure 2A or 2B and 3.)

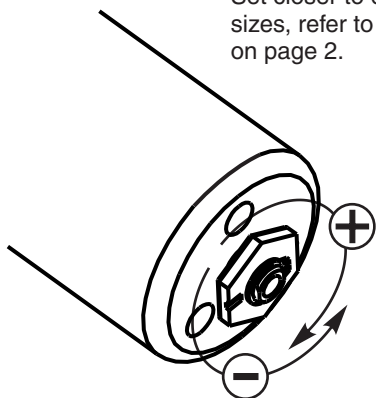
- Valve "S/D" Controls Sweep Range on Standard closer  
(or Delay Range on Delayed Action closer).
- Valve "L" Controls Latch Range.
- Valve "S" Controls Sweep Range only on Delayed Action closer.

## Closing Power Control

Figure 1

### For 7570 Only

Set closer to desired size. For recommended sizes, refer to the Power Adjustment Chart on page 2.



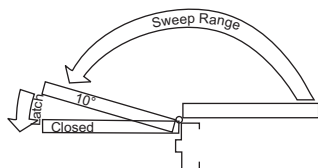
Install closer per instructions with the proper pre-load applied to the arm then adjust spring power. The power adjustment will not work properly if the closer spring is not pre-loaded. To increase power, use 11/16" wrench to turn power adjustment nut clockwise. To decrease power, turn nut counter clockwise.



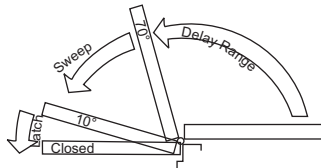
**DO NOT** use a power drill or driver to turn adjustment nut. This will damage closer and void warranty.

## Closing Speed Controls

Figure 2



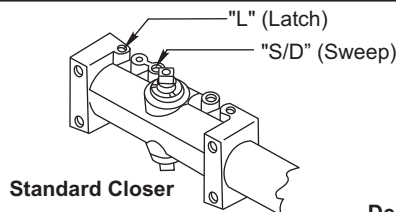
Standard Closing Cycle **2A**



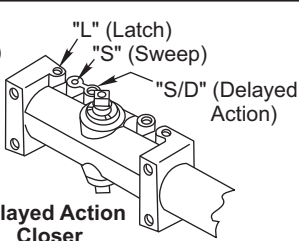
Delayed Action Closing Cycle **2B**

## Closing Speed Controls

Figure 3



Standard Closer



Delayed Action Closer

Do not force valves counter-clockwise out of closer body or a fluid leak will occur.



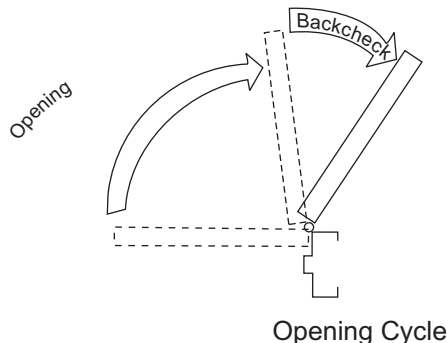
All Valves

## Opening Door Control (Figure 4.)

- Backcheck ("B") valve controls the hydraulic resistance to door opening. NEVER close this valve completely – it is not to provide a positive stop.
- Backcheck position ("P") valve controls the door angle where backcheck cushioning starts. Valve normally closed.

## Opening Door Controls

Figure 4



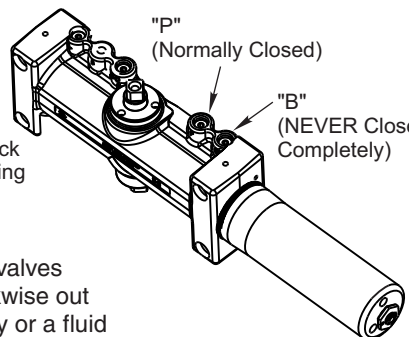
## Backcheck

Figure 5

### Backcheck Position



Open for backcheck later in door-opening cycle.



### Backcheck Cushion

Increase



Decrease

Do not force valves counter-clockwise out of closer body or a fluid leak will occur.

**Norton**

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