

Norton®

Overhead Concealed
Door Closers

Series 7900H-B, 7900H-CP & 7900H-OP
Hold-Open Models

Installation Instructions

80-9379-1203-020 (8-01)

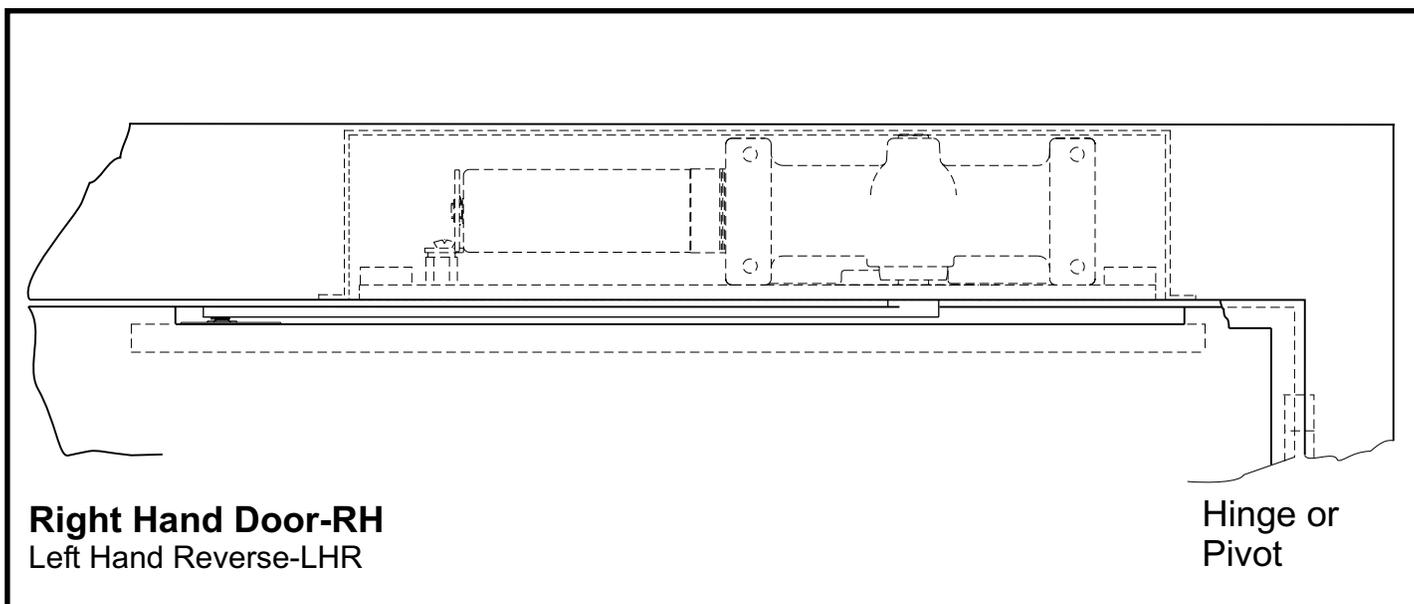
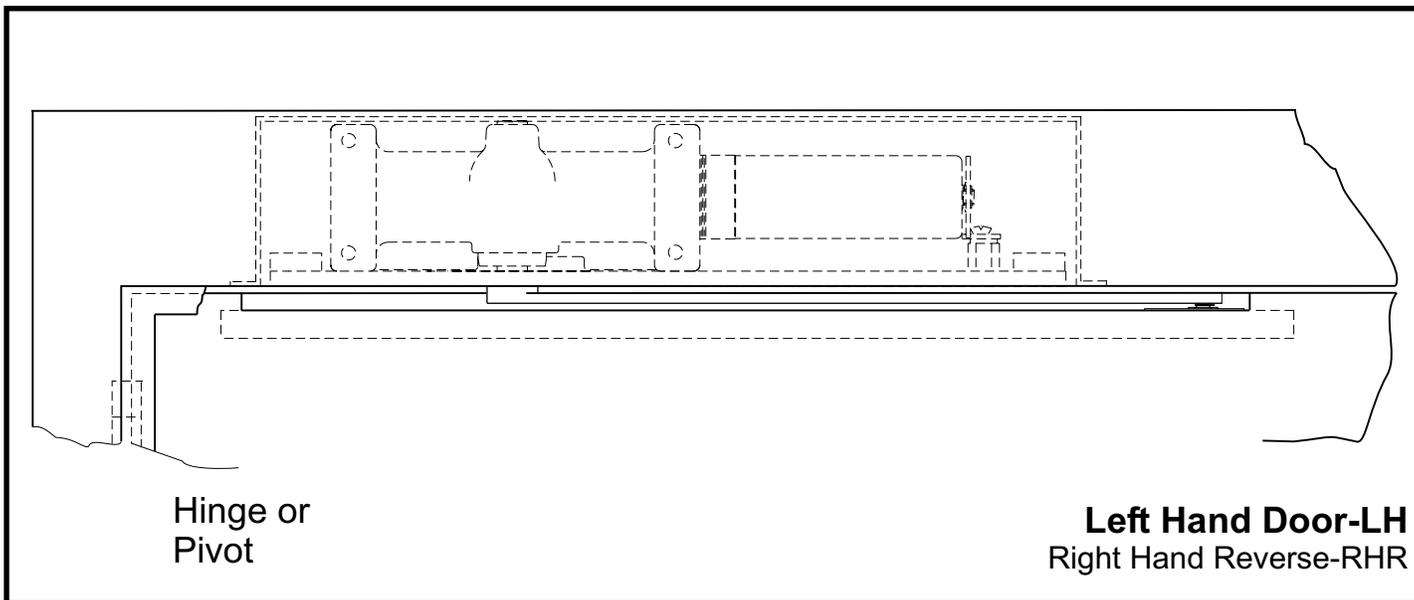
*For wood or metal doors 1- 3/4" to 2 -1/4" (45-57mm) thick
hung in a hollow metal frame
standard butt hinges, center pivots or offset pivots*

CAUTION

An incorrectly installed or improperly adjusted door closer can cause property damage or personal injury. These instructions should be followed to avoid the possibility of misapplication or misadjustment.

Typical Installation

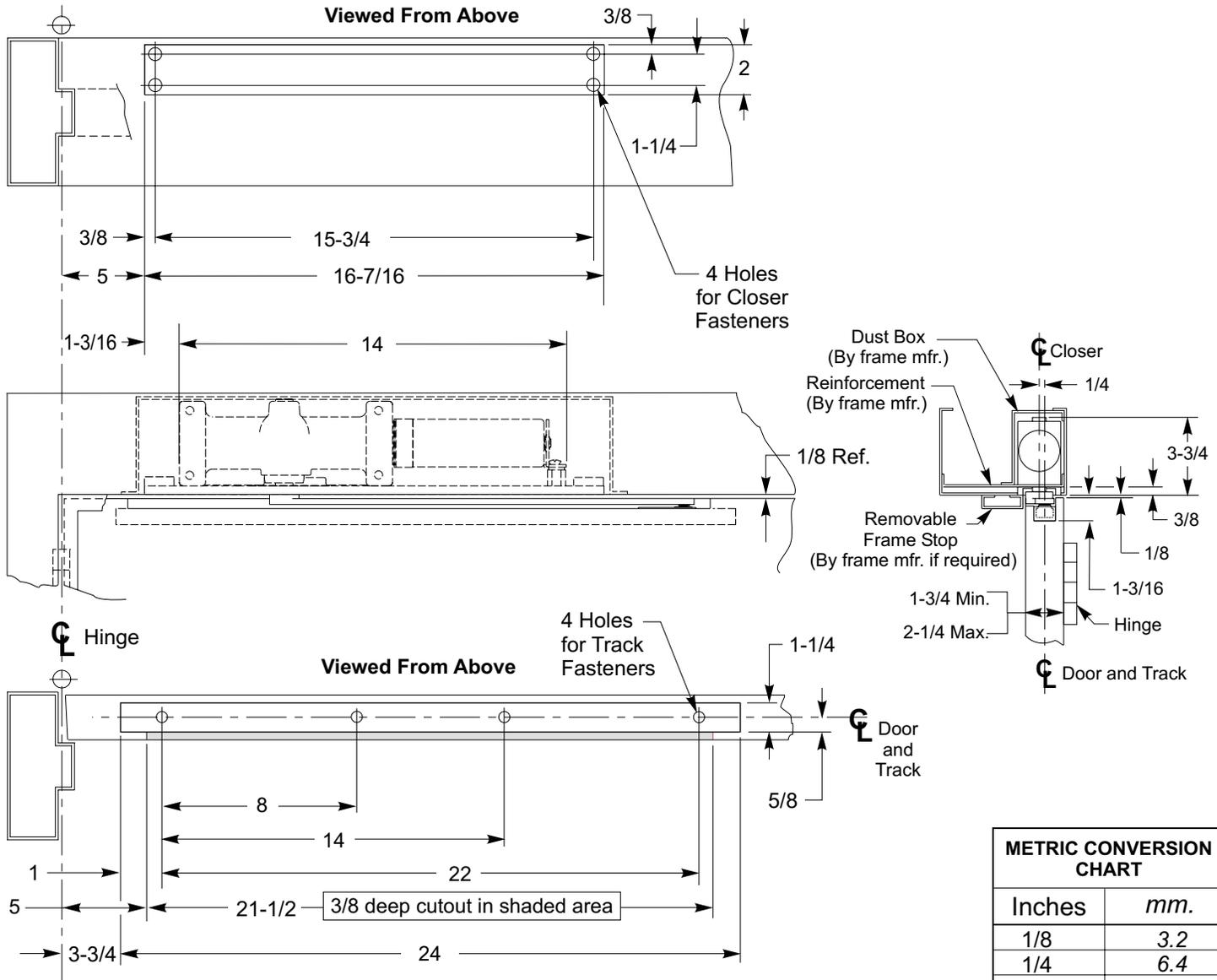
- One track & closer position for all door opening angles
- Easy arm attachment
- Removable Frame Stop Required*-Not Shown



*Not required when frame rabbet exceeds 2-3/16"

Series 7900H-B
Hold Open
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Template-Standard Butt Hinges



METRIC CONVERSION CHART	
Inches	mm.
1/8	3.2
1/4	6.4
3/8	9.5
5/8	15.9
1	25.4
1-3/16	30.2
1-1/4	31.8
1-3/4	44.5
2	50.8
2-1/4	57.2
3-3/4	95.3
5	127.0
8	203.2
14	355.6
15-3/4	400.0
16-7/16	417.5
21-1/2	546.1
22	558.8
24	609.6
29	736.6

Fastener	Use	Preparation
1/4-20 machine screw	metal frame and metal door	#7 (.201" dia.) or 5.10mm. drill 1/4-20 tap
#14 wood screw	wood door	7/32" or 5.5mm. drill

Adjustable Hold Opening
85°-110°

Door will travel 5° beyond hold open point

NOTES:

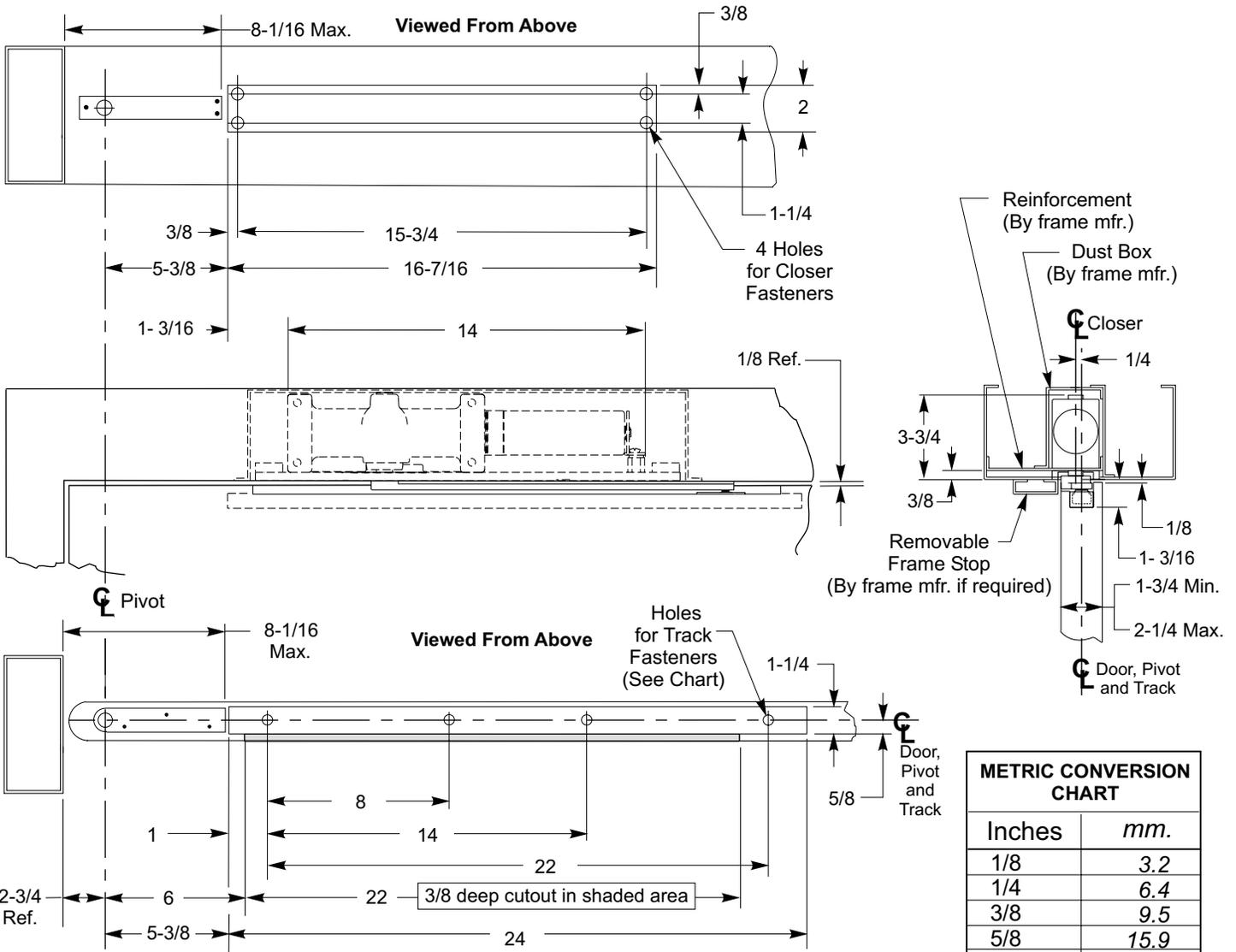
- Do not scale drawing.
- Left hand door shown.
- Hardware dimensions shown (not cutouts).
- Dimensions are in inches (see chart for metric conversion).
- Minimum door width 29 inches..
- Track 24 inches long.
- Maximum width hinge is 5 inches.

See installation sequence on page 5.

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Series 7900H-CP
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Template-Center Pivots



METRIC CONVERSION CHART	
Inches	mm.
1/8	3.2
1/4	6.4
3/8	9.5
5/8	15.9
1	25.4
1-3/16	30.2
1-1/4	31.8
1-3/4	44.5
2	50.8
2-1/4	57.2
2-3/4	69.8
3-3/4	95.3
5-3/8	136.5
6	152.4
8	203.2
8-1/16	204.8
14	355.6
15-3/4	400.0
16-7/16	417.9
22	558.8
24	609.6
33	838.2

Fastener	Use	Preparation
1/4-20 machine screw	metal frame and metal door	#7 (.201" dia.) or 5.10mm. drill 1/4-20 tap
#14 wood screw	wood door	7/32" or 5.5 mm. drill

Maximum Hold Open Angle	Dead Stop
100°	105°

NOTES:

- Do not scale drawing.
- Left hand door shown.
- Hardware dimensions shown (not cutouts).
- Dimensions are in inches (see chart for metric conversion).
- Standard track is 24" long.
- For doors less than 33" wide, contact factory for modification requirements

See installation sequence on page 5.

80-9379-1203-020 (8-01)

Installation Sequence

- **Determine hand of door** from illustration on page 1. Closers are handed. Hand of closer must match hand of door.

- **Using template dimensions** on page 2, 3 or 4, locate & prepare holes and cutouts in frame and door.

Door:

Prepare door for track. Prepare (4) holes for 1/4-20 machine or #14 wood screws.

Frame:

Prepare the frame for mounting closer. Drill and tap (4) holes for 1/4-20 machine or #14 wood screws.

Note: Generally on new construction hardware cutouts are made by suppliers at their shop.

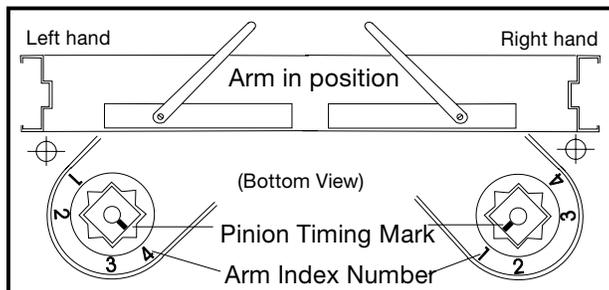
- **Mount closer to frame.**

Position spring tube away from hinge or pivot and mounting plate flush with frame rabbet. Secure with 1/4-20 x 5/8 or #14 x 1-1/4 phillip drive mounting screws.

- **Install arm on closer pinion** (see illustration below).

Position arm counterbore facing down with index number next to pinion index mark. Install onto pinion. Number "4" - Left hand
Number "1" - Right hand

Secure with countersunk washer and 1/4-20 x 3/4" long flat head hex drive arm screw with threadlock.



- **Install track in door.**

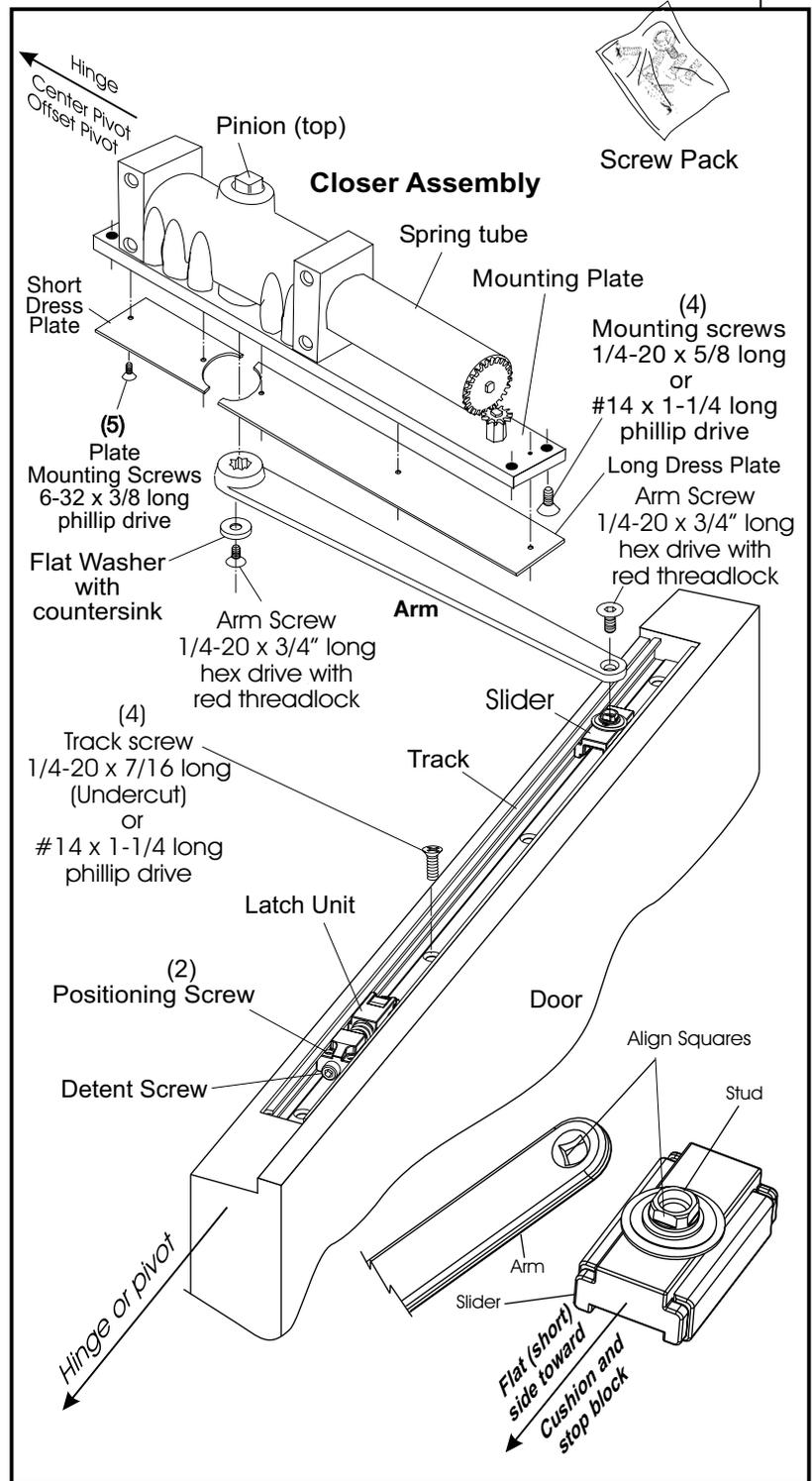
Place the assembled track into door cutout with open side up, cushion and stop block toward the hinge or pivot. Move slider to the opposite end of track (see illustration). Secure track with (4) 1/4-20 undercut machine screws or #14 wood screws.

- **Connect arm to track.**

Open door to approximately 5" (127mm), rotate arm to slider and place end on stud. Use a screw driver through arm square to align slider's stud square with the arm square (see illustration to right). Push down on arm to seat stud and to prevent stud from rotating. Secure with arm screw, 1/4-20 x 3/4" long flat head hex drive with red threadlock.

- **Determine door opening angle.**

See pages 2, 3 & 4.



- **Set Door opening angle** With latch unit free, open door until slider and hold open unit are latched. Move door to hold open angle and secure latch unit by tighten 2 positioning screws with 1/8" hex wrench (supplied). Turn the detent screw clockwise to increase and counter clockwise to decrease hold open force with 3/16" hex wrench (supplied). Leave approximate 1" clearance from end of track for hex wrench to adjustment Detent. Release door.

HOLD OPEN DEVICES CAN NOT BE INSTALLED ON FIRE RATED DOORS

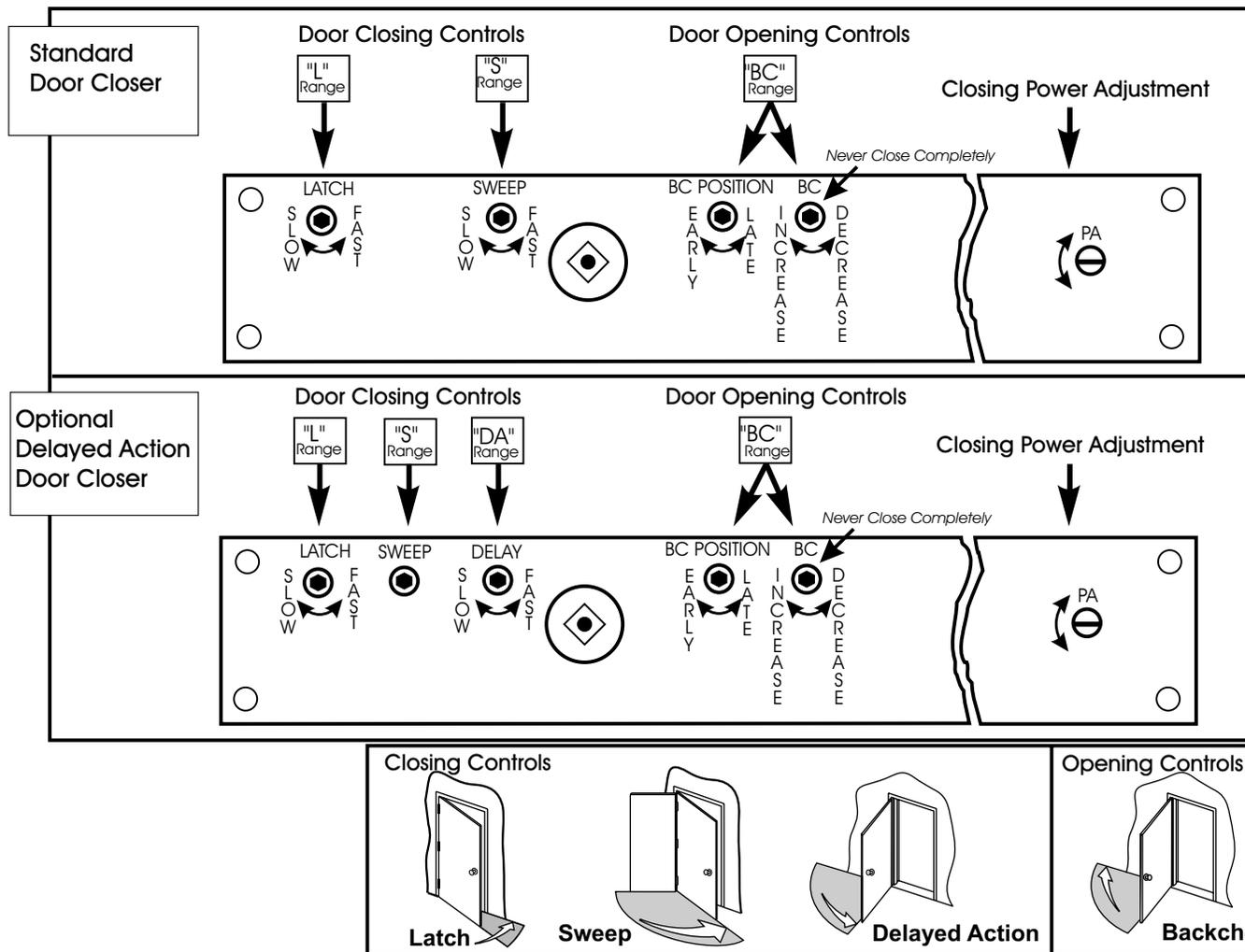
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Closer Adjustment

80-9379-1203-020 (8-01)

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



- **Closer Controls** accessible through mounting plate for closer adjustment:
Use 1/8" (3mm.) hex-key for valve adjustments.
Use standard screwdriver for power adjustment.
- **Power Adjustment** permits increasing door closing force.
Controlled by slotted screw marked "P.A."
- **Closing Speed** controlled by valves marked "SWEEP" and "LATCH".
Attention: Adjust closing speed time to between 4 to 7 seconds from 90°. Use of the door by handicapped, elderly, or small children may require greater closing time.
- **Delayed Action** option permits door to creep from fully open to about 70°. Creeping time controlled by valve marked "DELAY".
- **Backcheck** cushions or slows the opening of a door that is forced to travel faster than conditions require.
Backcheck controlled by valves marked "BC POSITION" (open for backcheck start at a greater door opening angle) and "BC" (for adjusting backcheck intensity). Never close "BC" valve completely.
- **Optional Enhanced Backcheck** provides adjustable backcheck intensity beginning at approximately 15° of the door opening cycle. Backcheck positioning valve is omitted when this feature is provided.

Norton

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