INSTALLATION INSTRUCTIONS
8700, 12-8700, HC8700 & HC4-8700
SURFACE VERTICAL ROD EXIT DEVICE

FOR ASSISTANCE, CONTACT SARGENT AT 800-727-5477 or www.sargentlock.com

CAUTION: CHECK BEFORE STARTING DOOR PREP
Door should be fitted and hung.
Check box label for size of exit device, function, hand and design.

Surface of the door must be flush. Clear away any raised projections to allow exit device to rest on flat surface of the door.

AVAILABLE STOCK LENGTHS
Length “E”: 32” door, no cut off required.
Can be cut to fit doors down to 24” wide.
Length “F”: 36” door, no cut off required.
Can be cut to fit doors down to 33” wide.
Length “J”: 42” door, no cut off required.
Can be cut to fit doors down to 37” wide.
Length “G”: 48” door, no cut off required.
Can be cut to fit doors down to 43” wide.

TOOLS REQUIRED
1. Measuring tape
2. Power drill
4. Taps: #10-24, #12-24, 1/4”-20 and 7/16”-20
5. Hacksaw or any power cutter (to cut rail if necessary)
6. Screwdrivers: Phillips #2 and #3
7. Hex Wrenches: 3/16” and 3/8”
8. Level

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CYLINDER DOGGING (16- PREFIX)
For complete assembly information see Instruction Sheet A6848
Slide mounting rail insert with cylinder dogging (16- prefix) into mounting rail

Must be installed with opening in plastic cam

TO OPERATE:
• Depress push rail
• Insert key and turn counterclockwise to lockdown (dog) push rail

Standard 8700 Exit Shown
**FIRST**

**MARK VERTICAL AND HORIZONTAL REFERENCE LINES ON DOOR**

**WITH DOOR CLOSED:**
1. Determine dimension “A” to locate vertical reference line.
   - If door stile is 4-1/2" wide or wider, “A” is 2-3/4”.
   - If door stile is less than 4-1/2", “A” is 1/2 the exposed width of the door stile when the door is closed against the stop.
2. Standard rail centerline height is 41" above the finished floor.
   - Horizontal reference line is 37-5/8" standard.
   - (Location of lower chassis mounting holes)

**SECOND**

**PREPARE DOOR**

**WITH DOOR CLOSED:**
1. Tape template for Chassis/Trim on inside of door, along vertical and horizontal reference lines.
2. Fold top case template and tape on inside of door along vertical reference lines.
3. Spot and drill all holes from inside of door.
4. Mortise pockets for outside trim, if required. See trim installation instructions supplied with trim for details.

**NOTE:** Any holes drilled from the outside need pilot holes drilled from the inside to ensure good alignment.

**NOTE:** For electrical trim applications, ensure access to a raceway from the trim to the electric hinge or armored door loop.
### APPLY CENTER CHASSIS AND TRIM

#### 700 SERIES ET TRIM:
1. Secure chassis to door with (4) #10 flat head screws using corner mounting holes.

**NOTE:** Electrical functions – see instruction sheet A6374 for wire connections.
2. Position ET trim on door, align spindle with bell housing.
3. Through-bolt chassis to ET trim with (2) 1/4-20 flat head screws.

**NOTE:** Thumb Trim is not available for HC8700 Series Exit Devices

#### 800 SERIES THUMB PIECE TRIM:
Determining rim cylinder tail length

**FOR FLL, FLW, MAL, STS OR PTB TRIM:**
1. Position trim on door (except STS).
2. Insert rim cylinder through trim plate (or cylinder collar for STS trim).
3. Mark cylinder tail at 5/16" beyond inside door surface.
4. Remove cylinder and trim from door and cut tail piece as marked.

#### APPLY CHASSIS AND TRIM:
1. Hold trim plate to door.
2. Insert cylinder and secure using supplied back plate.
3. Position cylinder hub within the chassis to correct position for desired function (see drawings).
4. Position chassis on door, align cylinder tail with hub and secure chassis to door with (4) #10 flat head screws using the corner mounting holes.
5. Through-bolt chassis to trim with 1/4-20 flat head screws and to door with cup washer and 1/4-20 flat head screw.

**NOTE:**
STS, FLL, FLW and MAL thru-bolt to chassis with (1) 1/4-20 flat head screw.

PTB trim through-bolts to chassis with (2) 1/4-20 flat head screws.
**APPLY RAIL ASSEMBLY**

Check box label.

The following prefixes are provided “factory cut” to size: AL-, 56-, 57-, 58- and 59-.
If cutting is required, continue with step “A”.
If cutting is **not** required, proceed to step “B”.

**A**

Determine rail length dimension “X” by subtracting 1-3/4" from dimension “Y”.

**TOP VIEW OF EXIT DEVICE**

For doors with stile, the rail must overlap stile by 1/2" or more

Vertical reference line (CL of chassis)

1-3/4" min.

“X”

Cut off mark

1. Dog push rail and cut off at mark.
2. Cut must be straight.
3. For (43-) flush end cap use cutting guide provided.
4. Remove sharp edges with file.

**B**

1. Slide rail assembly over lift arm and onto chassis.
2. Attach rail assembly to chassis with two (2) #8-32 truss head machine screws.
   **NOTE:** DO NOT tighten screws.
3. Level rail and position mounting plate tight against rail and attach to door with two (2) #10 round head screws.
4. Tighten all screws securely.

**FIFTH**

**MOUNT TOP CASE**

1. Verify rail is not dogged.
2. Screw rod into top case until finger tight.
3. Slide top rod into main slide – do **not** pin in place.
4. Attach top case as located in second step.
   **Through-bolts required and supplied for fire rated top cases on wood doors.**
5. Unscrew top rod until the center hole is aligned with the hole in the main slide.
6. Insert rod adjustment pin.
Sixth

Mount Bottom Case

1. Verify rail is not dogged.
2. Screw rod into bottom case until finger tight.
3. Slide bottom rod into main slide.
4. Insert adjustment pin into middle hole.
5. Position bottom case on door, centered on vertical reference line. Raise or lower to achieve gap indicated for strike application (see drawings below).
6. Drill and tap mounting holes.
7. Mount bottom case. Tighten fasteners securely.

Seventh

Attach Strikes

Top Strikes

Mount top strike in position. Tighten screws securely.

Attach Top Case

(2) No. 12 Fl. Hd Screws

Note: Use two (2) No. 10 steel screws and mortise nuts (when provided) in the position illustrated in the top case. Steel mortise nuts are twin knurled for identification.
SEVENTH

ATTACH STRIKES (Continued)

BOTTOM STRIKES
For thresholds with integral strikes, skip to next step.
For surface applied strikes 624 or 653:

WITH DOOR CLOSED:
1. Transfer vertical centerline to floor or threshold and mark.
2. Engage bottom strike with latchbolt and center on line marked.
3. Mark mounting holes.
4. Drill holes for required fasteners.
5. Mount strike with fasteners provided.
6. Tighten screws securely.
For mortised strikes: 636 or 655
Follow steps above. Mark mounting holes and outline of strike.

EIGHTH

ADJUST TOP & BOTTOM RODS

1. Fine adjustment is made by turning rod into top and bottom case to shorten or out of top and bottom case to lengthen.
2. Rough adjustment is made by changing hole used for adjustment pin.
3. Top Rod Adjustments: Push on door as you push on the rail assembly. As soon as the door opens, release rail, the top bolt should be in the hold back position. If not, extend top bolt.
   Note: the top bolt must go into hold back position prior to the door opening.
4. Bottom Bolt Adjustments: Extend bottom bolt for maximum engagement with the bottom strike. When the top bolt is in, hold back, it also holds the bottom bolt in the retracted position. Always verify that when the bottom bolt is in the retracted position, that the bolt clears the finish floor by at least 1/8" through the swing of the door.

Be sure that both top and bottom latch bolts are adjusted for maximum engagement

NINTH

ELECTRICAL FUNCTION PREFIXES
To access wire channel in door, drill three (3), 1/4" holes in “U” shaped cutout of mounting bracket.

59- Prefix
Connect switch cable to cable coming from the front of the rail.
Refer to instruction book A7690 for additional wire connections and operating instructions.

AL- Prefix
There are no external wire connections unless used with 546 wiring harness.
Refer to instruction book A7224 for operating instructions.

55- Prefix
Refer to instruction sheet A6808 for wire connections.

56- Prefix
Refer to instruction sheet A6876 for wire connections.

57- Prefix
Refer to instruction sheet A6810 for wire connections and operating instructions.

58- Prefix
Refer to instruction sheet A6835 for wire connections.
1. Confirm operation of exit device. Adjust rods as needed.
2. Install top, bottom and center chassis covers as shown.
3. Install end cap as shown.
4. Install top and bottom rod guides at center of rod. Rod must float freely in guide without rubbing.
5. For doors over 96": Install two (2) top rod guides equally spaced between the top case and chassis cover. Rod must float freely in guides.