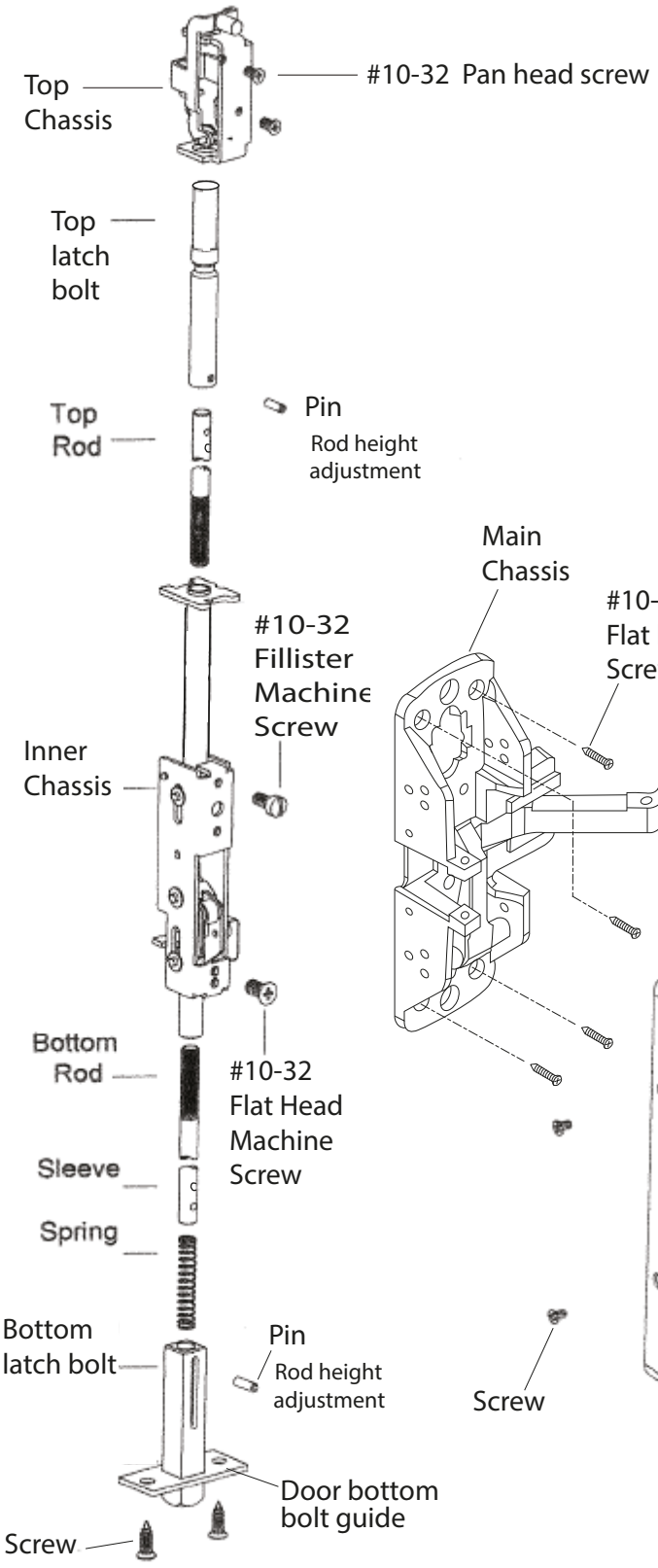
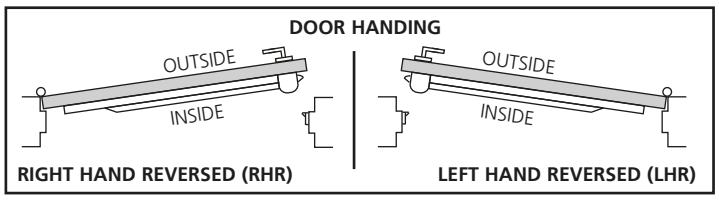
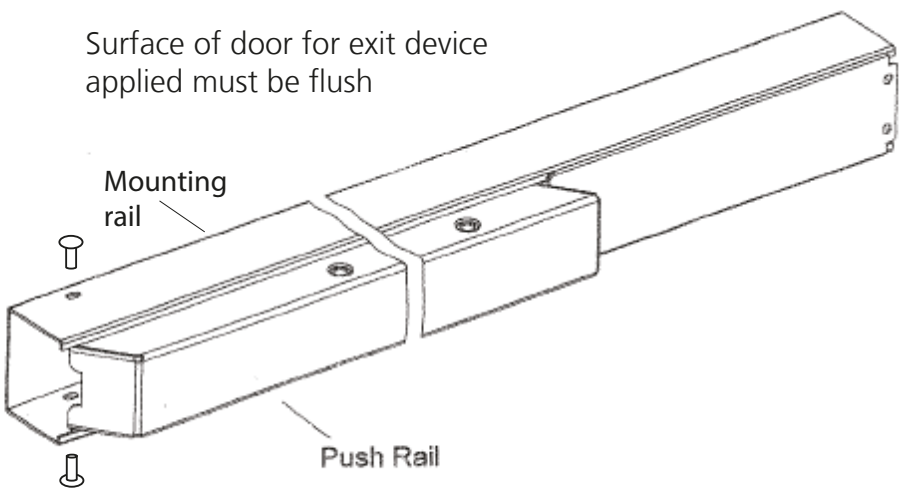
DOREX® 9500FC EXIT DEVICE - FIRE (F) CONCEALED VERTICAL ROD (C) INSTALLATION INSTRUCTIONS

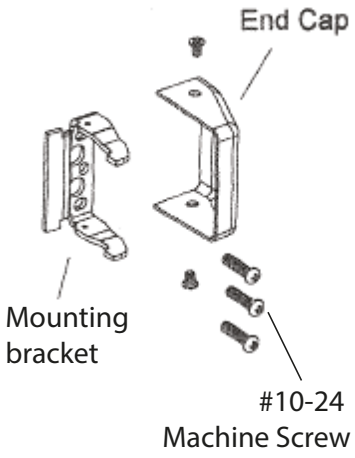
GENERAL NOTES - Before installing exit device, verify or note the following:

1. **Fire exit hardware is to be installed only on <u>hollow metal fire doors</u> bearing the marking: *Fire Door To Be Equipped with 'Fire Exit Hardware'*.**
2. **Any retrofit or other field modification to a fire rated opening can potentially impact the fire rating of the opening. The exit device manufacturer makes no representations or warranties concerning what such impact may be in any specific situation. When retrofitting any portion of an existing fire rated opening, or specifying and installing a new fire rated opening, please consult with a code specialist or local code official (Authority Having Jurisdiction) to ensure compliance with all applicable codes and ratings.**
3. **The door surface must be flat and properly reinforced at the exit device mounting locations. If door is not reinforced, the door surface may collapse or bow-in, causing malfunction in the exit device operation.**
4. Door must be properly fitted and hung.
5. The 3' exit device model can be cut to fit doors from 30" (762mm) to 36" (914mm) in width (refer to section 5 on sheet 2).
   The 4' exit device model can be cut to fit doors from 36" (914mm) to 48" (1219mm) in width (refer to section 5 on sheet 2).
6. Determine door handing (see illustration below). Concealed vertical exit device is handed. If handing change is required refer to handing instructions below
7. Refer to sheet 2 for door preparation and frame and installation instructions.





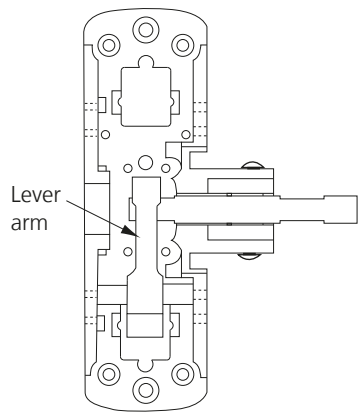




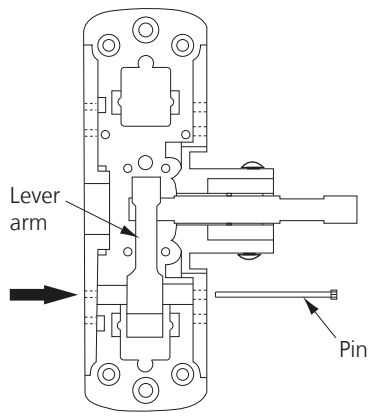
LEFT HAND REVERSED SHOWN

TO CHANGE HAND OF EXIT DEVICE CHASSIS:

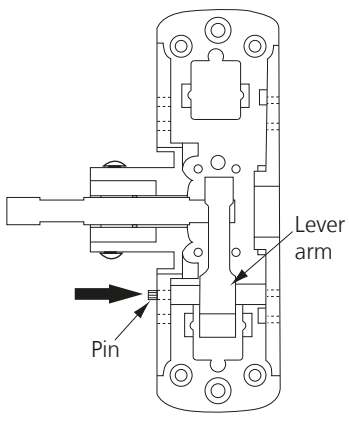
1. a) If device is factory pre-set as LHR, follow this instruction to convert to RHR
   b) If device is factory pre-set as RHR, follow same instruction in reverse to convert to LHR



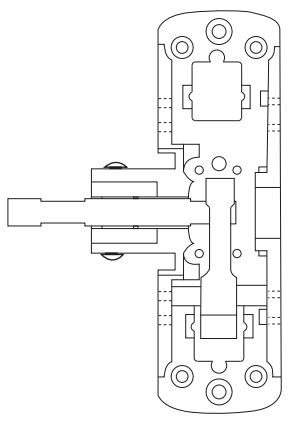
2. Knock out the pin in the direction (as shown), take out the lever arm assembly



3. Rotate the chassis and install the lever arm and insert pin as shown



4. Device is converted to RHR

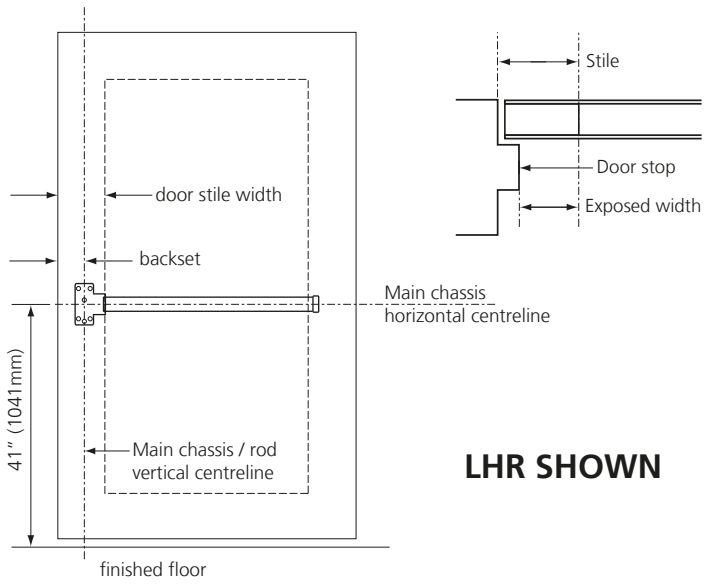


DOREX® 9500FC EXIT DEVICE - FIRE (F) CONCEALED VERTICAL ROD (C) INSTALLATION INSTRUCTIONS

1. MARK VERTICAL AND HORIZONTAL REFERENCE LINES ON DOOR

Determine main chassis backset to locate the chassis vertical reference line.

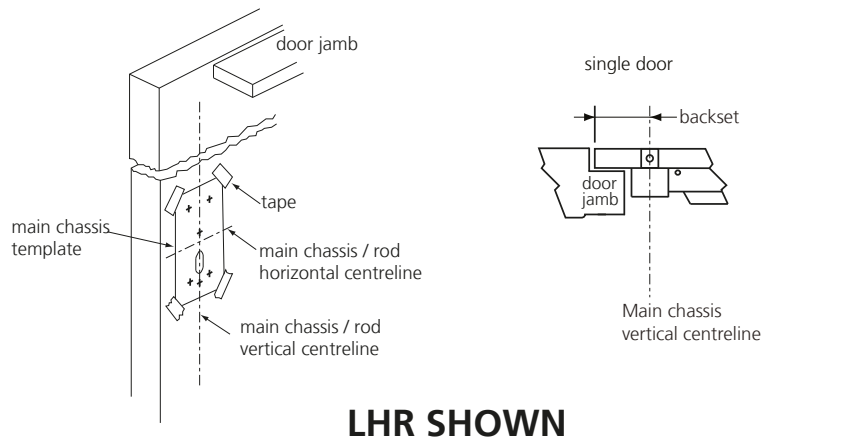
a) Determine the main chassis backset or vertical reference line and the horizontal reference line
b) If door stile width is more than 4-1/2" (114 mm) use a backset of 2-3/4" (73 mm)
c) If door stile width is less than 4-1/2" (114 mm), establish the vertical centreline at middle of the exposed width of the door stile



LHR SHOWN

2. PREPARE DOOR AND FRAME

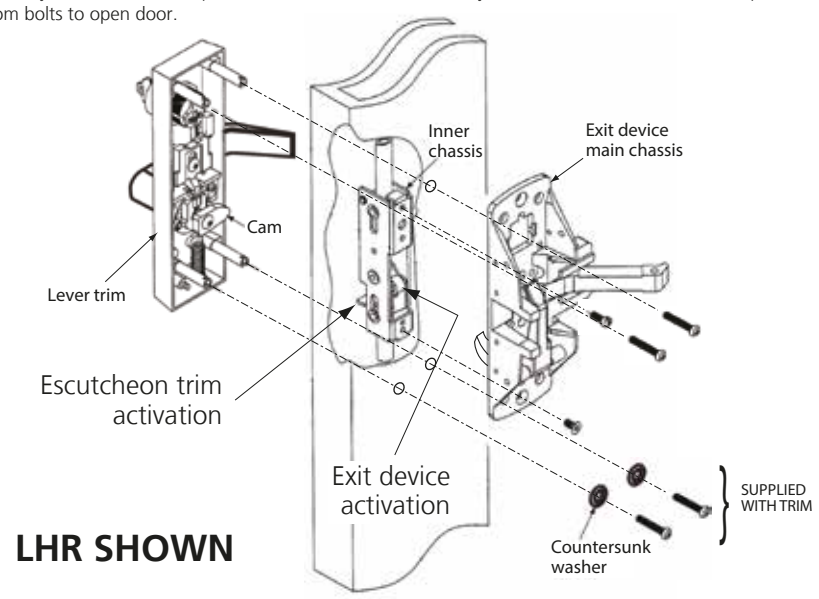
a) It is recommended that the door and door frame top jamb be prepared at the door fabrication shop to ensure the precise holes and cutouts positions. The position of all respective holes should be within ± 1/64" (0.5 mm)
b) If door is not prepared, use the supplied template and the dimensions on the supplied door preparation drawing to locate and make the required cutouts and mounting holes. After marking the holes on the door, verify with the actual part to ensure the holes are positioned properly before drilling holes.
c) Attach main chassis template on the door interior surface at the defined horizontal and vertical reference lines.
   a. Drill and tap for # 10-24 machine screw (4-holes) for the main chassis mounting on the interior door surface only.
   b. Drill two holes 7/32" (5.6 mm) for the inner chassis mounting on the interior door surface only
   c. Make slotted cutout at the specified location for the exit device actuator lever
d) Mark the top chassis mounting holes on the door interior surface at the defined vertical reference line and specified distance from door top edge.
   a. Drill two holes 7/32" (5.6 mm) for the top latch bolt chassis mounting on the interior door surface only
   b. Make slotted cutout at the specified location for the top latch actuator lever
   c. Make access cutout for the bolt on the door top edge as indicated in the supplied door preparation drawing.
e) Prepare door frame top jamb to install the top bolt strike. It is recommended that the strike bottom surface is flush with the frame surface. The top strike preparation and installation maybe done after the installation of the exit device and top chassis.
   a. Ensure that the top strike centreline aligns with the vertical exit device bolt centreline.
   b. Make the required frame modification to enable the strike installation as indicated in the supplied door preparation drawing.
   c. Drill and tap for # 10-24 machine screws (2-holes) for the attachment of the top strike to the door frame.
f) Prepare door bottom edge to install the bottom bolt guide
   a. A clearance of 1/8" (3 mm) is required between the door bottom edge and the top surface of the bottom strike (after is mounted on the floor
   b. Make the required door bottom modification to enable the bottom bolt guide installation as indicated in the supplied door preparation drawing.



LHR SHOWN

3. TRIM INSTALLATION

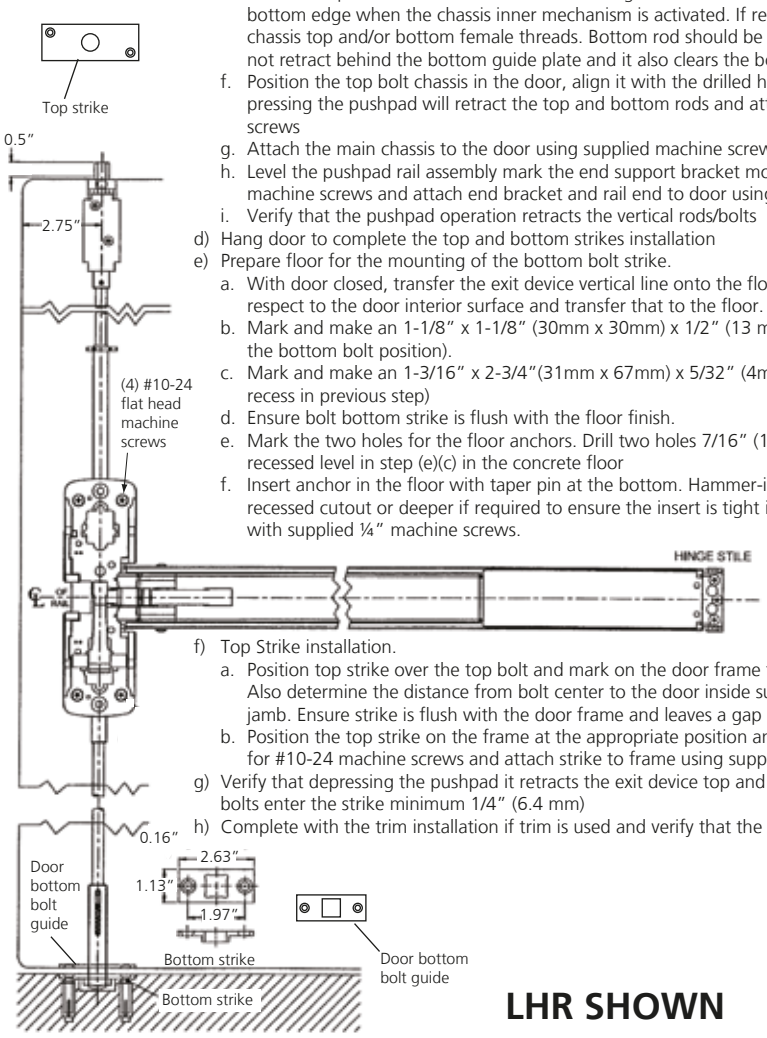
a) If no trim is used, complete exit device installation by mounting the exit device pushpad (main chassis and mounting bracket)
b) If exterior trim is used prepare door exterior using the template and installation instructions supplied with the trim. Verify that the trim will operate the vertical exit device rod system and ensure it retracts the top and bottom bolts to open door.



LHR SHOWN

4. MAIN CHASSIS, PUSH PAD, LATCHBOLTS, VERTICAL RODS AND STRIKES INSTALLATION

a) Before start of installation ensure door is properly hung with the required clearances between the door edges and the door frame, as well the finished floor level. The recommended clearance around the door should be 1/8" (3 mm)
b) Remove door and place it on a horizontal surface. Protect door surfaces from being damaged
c) Main Chassis, Concealed Vertical Rods, Top Bolt Chassis and Bottom Bolt Guide Plate installation
   a. Assemble the top and bottom rods with the inner chassis and slide into the door from the top door edge
   b. If exterior trim is used, install trim at the same time as the exit device chassis or after the exit device is installed.
   c. Align inner chassis with the drilled holes and attach to the door interior surface using the supplied fillister and flat head machine screws.
   d. Position the bottom bolt guide plate at the door bottom edge, mark, drill and tap for # 10-24 machine screws (2-holes) for the attachment of bottom bolt guide to the door bottom edge.
   e. Install bottom bolt guide plate under the door bottom edge using supplied # 10-24 machine screws. Guide should not protrude below the door bottom edge. Ensure that bolts are retracted at the door top and bottom edge when the chassis inner mechanism is activated. If required, adjust rod threading in the inner chassis top and/or bottom female threads. Bottom rod should be adjusted such that when retracted it does not retract behind the bottom guide plate and it also clears the bottom strike.
   f. Position the top bolt chassis in the door, align it with the drilled holes and ensure that all holes line-up and pressing the pushpad will retract the top and bottom rods and attach with supplied pan head machine screws
   g. Attach the main chassis to the door using supplied machine screws (# 10-24)
   h. Level the pushpad rail assembly mark the end support bracket mounting holes, drill and tap for # 10-24 machine screws and attach end bracket and rail end to door using supplied machine screws.
   i. Verify that the pushpad operation retracts the vertical rods/bolts
d) Hang door to complete the top and bottom strikes installation
e) Prepare floor for the mounting of the bottom bolt strike.
   a. With door closed, transfer the exit device vertical line onto the floor. Determine the bolt position with respect to the door interior surface and transfer that to the floor.
   b. Mark and make an 1-1/8" x 1-1/8" (30mm x 30mm) x 1/2" (13 mm) deep recess in the floor (centered on the bottom bolt position).
   c. Mark and make an 1-3/16" x 2-3/4"(31mm x 67mm) x 5/32" (4mm) deep recess in the floor (centered with recess in previous step)
   d. Ensure bolt bottom strike is flush with the floor finish.
   e. Mark the two holes for the floor anchors. Drill two holes 7/16" (11mm) x 1-9/16" (40 mm) deep from the recessed level in step (e)(c) in the concrete floor
   f. Insert anchor in the floor with taper pin at the bottom. Hammer-in insert till top surface is flush with recessed cutout or deeper if required to ensure the insert is tight in the floor hole. Attach the strike to floor with supplied ¼" machine screws.

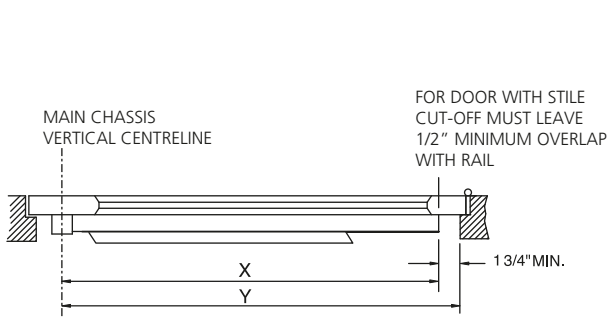


f) Top Strike installation.
   a. Position top strike over the top bolt and mark on the door frame top jamb the vertical position of the strike. Also determine the distance from bolt center to the door inside surface and transfer to the door frame top jamb. Ensure strike is flush with the door frame and leaves a gap of 1/8" (3 mm) from the door top edge
   b. Position the top strike on the frame at the appropriate position and mark the mounting holes. Drill and tap for #10-24 machine screws and attach strike to frame using supplied screws
g) Verify that depressing the pushpad it retracts the exit device top and bottom bolts. Ensure that the extended bolts enter the strike minimum 1/4" (6.4 mm)
h) Complete with the trim installation if trim is used and verify that the trim operates the exit device as required.

LHR SHOWN

5. RAIL MODIFICATION AND INSTALLATION

a) Confirm length of device and determine if rail cutting is required.
b) Determine length 'X' by subtracting 1 3/4" (45 mm) from 'Y'. Mark cut-off point on rail and sliding cover and cut-off.
c) Deburr and remove all sharp edges after cutting and install as per section 1.



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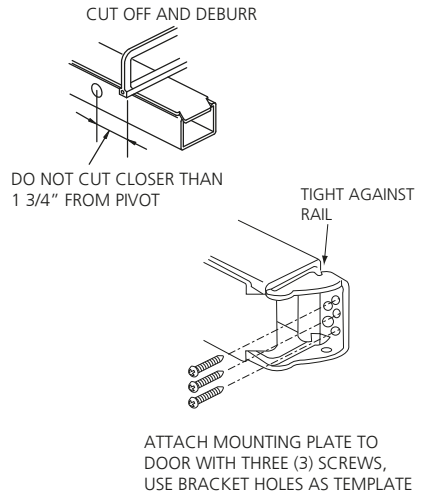
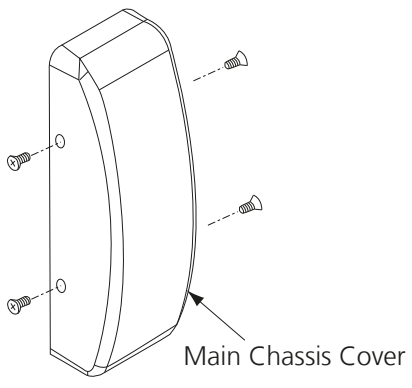
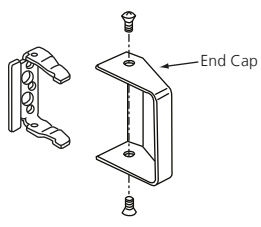


6. COVERS INSTALLATION

CHECK FINAL OPERATION OF DEVICE AND ADJUST, THEN FASTEN COVERS



Attach cover to main chassis with (4) #6-32 flat head machine screws.



Attach end cap to mounting plate with (2) #6-32 flat head machine screws.