

### REVIEW ALL INSTRUCTIONS COMPLETELY BEFORE ATTEMPTING INSTALLATION

#### GENERAL NOTES:

- Instructions are intended for trained door systems technicians using proper tools and equipment.
- High performance doors and grilles do not have counterbalance springs. Releasing the brake on the motor operator, or loosening or removing any part of the motor operator drive system, can cause the curtain to uncoil and free-fall if open.



**WARNING!** – Components under extreme load can cause death or serious injury.



**WARNING!** – Releasing the door operator brake, or loosening or removing any part of the drive system, can cause the door to move uncontrolled and cause death or serious injury.

- The terms “door” and “doors” apply generally to high performance doors and grilles. If an instruction refers to a specific type, it will be noted as such.
- Instructions refer to doors operated from the left side (motor operator located on the left side).
- Illustrations refer only to high performance *Tight-Coil* grilles.
- Wall bolts are not provided. Refer to the “WALL BOLT SCHEDULE” for suggested wall bolts. Wall construction and wall bolts must be adequate for the size and weight of door and its intended use.
- The included HGH motor operator and wall mount control panel are rated NEMA 1 and intended for interior applications. If the operator is exterior mounted, it must be provided with a motor cover. The wall mount control panel cannot be covered and must be installed on the interior of the building.

#### INSTALLATION:

**NOTE:** If the door is to be mounted between the jambs, it is provided with extra “filler” angle(s) or tube(s). Install the filler(s) as shown in the installation drawings, following the same procedure as for the installation of wall angles for face mount doors.

**NOTE:** If the door is tube mount, no wall angles are provided – guides and brackets attach directly to the tube supports. Install the tubes following a similar procedure as for the installation of the wall angles. Tube support mounting plates must be adequately attached to the slab and the supporting structure. Tube supports may also require additional bracing.

**NOTE:** If a fascia is provided, evaluate field conditions and decide when the best time would be to install it. The fascia may attach to separate fascia mounting angles installed on each jamb or directly to the filler angles or tubes. If intermediate support(s) are included, space support(s) equally between the jambs. Drill holes as indicated on the “WALL BOLT SCHEDULE” and attach support(s) to the header. Attach the fascia with the sheet metal screws provided.

- 1) Measure the door opening and verify that the door size is correct for the opening. If it is not correct, contact the factory for further instruction.
- 2) Unbolt and remove guide channels/angles from wall angles.  
**If the door is face mount:** Level across the opening and mark the “heels” dimension on the jambs as shown on the “DOOR SCHEDULE”. (For a door installed with a “Z” guide configuration, “heels” is the same as the door width plus the width of both guides. For a door installed with an “E” guide configuration, “heels” is the same as the door width plus the width of both guides and the thickness of both wall angles.)  
**If the door is tube mount:** Level across the opening and mark the “heels” dimension on the floor as shown on the “DOOR SCHEDULE”.
- 3) Set the wall angles/tubes on the floor/sill at the “heels” marks. Wall angles/ tubes must be installed level and plumb. Shim up the lower wall angle/tube, if necessary, to be level.
- 4) (*Omit this step if the door is tube mount*) Using the wall angles as templates, mark, or drill through slots, for wall bolts.
  - Drill holes as indicated on the “WALL BOLT SCHEDULE” for the wall bolt type used.
  - Locate all holes at the center of the slots in the wall angles.
- 5) **If the door is face mount:** Secure the wall angles to the jambs. All wall bolts require a washer between the bolt head and the wall angle.  
**If the door is tube mount:** Secure 2 angle clips to the top and bottom of each tube and secure clips to the slab and the supporting structure. Tubes may also require additional bracing.
- 6) Slide 2 washers onto both barrel shafts before sliding the bracket plates onto the shafts. It is critical that the barrel be held snugly – but rotate freely – between the bracket plates to maintain proper alignment.
  - The drive side bracket plate (side with motor operator) goes on the end of the barrel with the keyed shaft. Set the end of the barrel tight against the washers between the barrel and bearing on the bracket plate.
  - The idle (non-drive) side bracket plate (side opposite motor operator) goes on the other end of the barrel. There should be clearance between the barrel and the washers between the barrel and bearing on the bracket plate.
- 7) It is recommended that the motor operator be attached to the drive side bracket plate and other drive components be installed now. The driven sprocket should be installed hub-out (hub away from the bracket plate) and aligned with the operator drive sprocket. *The control panel should NOT be installed now.* (As an alternative, the motor operator may be installed after the assembled barrel and bracket plates are installed.) Refer to the installation instructions provided with the motor operator.

- 8) Remove the truss head bolts from across the barrel.
- 9) Raise the assembled barrel and bracket plates into position between the tops of the wall angles or tube supports. **CAUTION: Use a hoisting method adequate to safely lift the size and weight of the assembled barrel and brackets.** Bolt the bracket plates to the inside of the wall angles/tubes with the flat head bolts, washers and hex nuts provided.

**NOTE:** It is recommended that the motor operator auxiliary hand chain be used for the following 2 steps. If the motor operator is to be used electrically for the next 2 steps, then the control panel and control station will need to be installed and connected now – see steps 18 and 19. **CAUTION: This is a high speed product – the curtain will want to coil very quickly if the motor operator is used electrically. Switch “JOG” mode ON in the control panel to reduce speed during installation for better control (remember to switch “JOG” mode OFF when installation is complete).**

- 10) Raise the curtain, with the starter slats pointing away from the wall, to below the barrel. **CAUTION: Use a hoisting method adequate to safely lift the size and weight of the curtain.** Set slings around the barrel and the curtain. **CAUTION: Use a minimum of 2 slings spaced across the barrel, but as many as required to safely support the size and weight of the curtain.** Set the curtain into the slings and cut the bands around the curtain. Unroll enough of the curtain to reach the barrel. Feed the curtain between the back of the barrel and the slings. Turn the barrel to bring the curtain over the top and around to the front of the barrel. Center the curtain between the bracket plates. Align the slots in the starter slats with the tapped holes in the barrel. Attach the starter slats to the barrel with the truss head bolts previously removed.
- 11) Carefully coil the curtain until it is nearly completely coiled around the barrel. Secure the position of the curtain.
- 12) Attach U-channel guides with special headed bolts through the channels and required washers under the flange nuts (washers/nuts not used for tube mount).
- 13) Carefully lower the curtain into the guides so the bottom bar is below the skirt of the bracket plates.
- 14) Remove the slings from around the curtain and barrel.



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**WARNING!** – Releasing the door operator brake, or loosening or removing any part of the drive system, can cause the door to move uncontrolled and cause death or serious injury.

- 15) *(Omit this step if no hood is provided)* Align the bracket plates so they are square (not “toed in” or “toed out”). If a hood is provided, lift the hood, set in place centered between the bracket plates and attach to the bands with sheet metal screws provided. Full (3-sided) hoods are attached to the bands on all sides of each bracket plate. L-shape (2-sided) hoods are attached to the front and bottom side of each bracket plate.

**NOTE:** Field bracing of bracket plates and motor operator may be necessary.

- 16) Install the motor operator control panel. Locate the panel within a distance to the motor operator that is suitable for the length of connection cables provided (standard length is 18 ft. – longer lengths are available). Refer to the installation instructions provided with the motor operator.
- 17) Complete all power and control connections to the motor operator and adjust limits and any other settings as necessary. Refer to the installation instructions provided with the motor operator.

**IMPORTANT NOTE:** It is critical that the open limit be adjusted so the **bottom of the bottom bar stops below the skirt of the bracket plates** as indicated on the attached CAUTION labels and as illustrated in these instructions.



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- 18) Make sure all sensing devices are installed, connected and functioning properly.

**Required sensing devices for PT High Performance *Tight-Coil* Grilles:**

- Primary monitored photo eye attached to coil side of guides 6” above the ground.
  - Secondary monitored light curtain attached to bosses on opposite coil side of wall angles.
  - Non-monitored photo eyes near 12” below top of the guides (connect as NC device – intended to stop an opening grille if the photo eyes sense a person hanging onto the curtain).
- Additional monitored or non-monitored sensing devices may also be provided.

- 19) Make sure warning labels are attached to the door as follows:

- L70011 Guide Warning Label is attached to the guide (or to the wall if the guides are concealed) at eye level on the operating side of the door
  - L70027 Operator Warning Label is attached to the operating bracket
  - 10031519 Limit Adjustment Caution Label is attached to inside of skirt on both bracket plates.
- If any warning labels are missing or not legible, contact the factory for replacement labels.

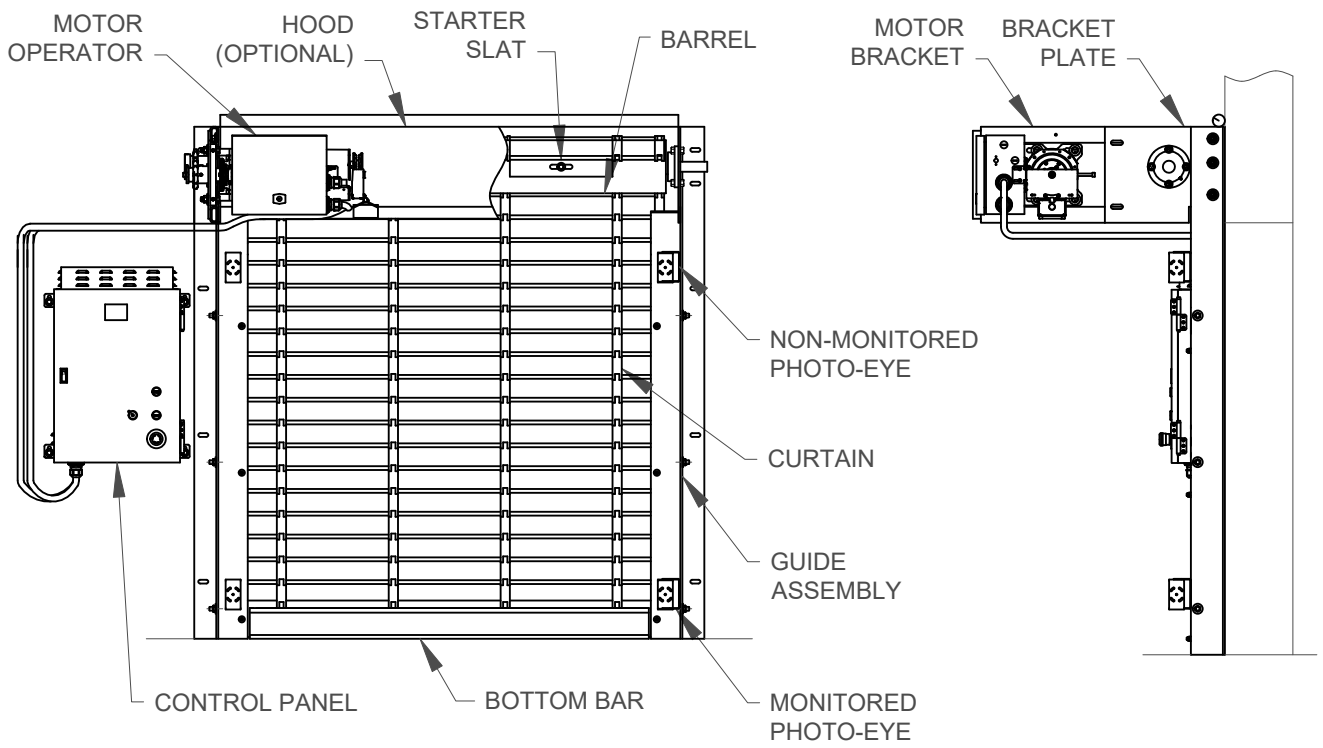
See next page for Wall Bolt Schedule

## WALL BOLT SCHEDULE

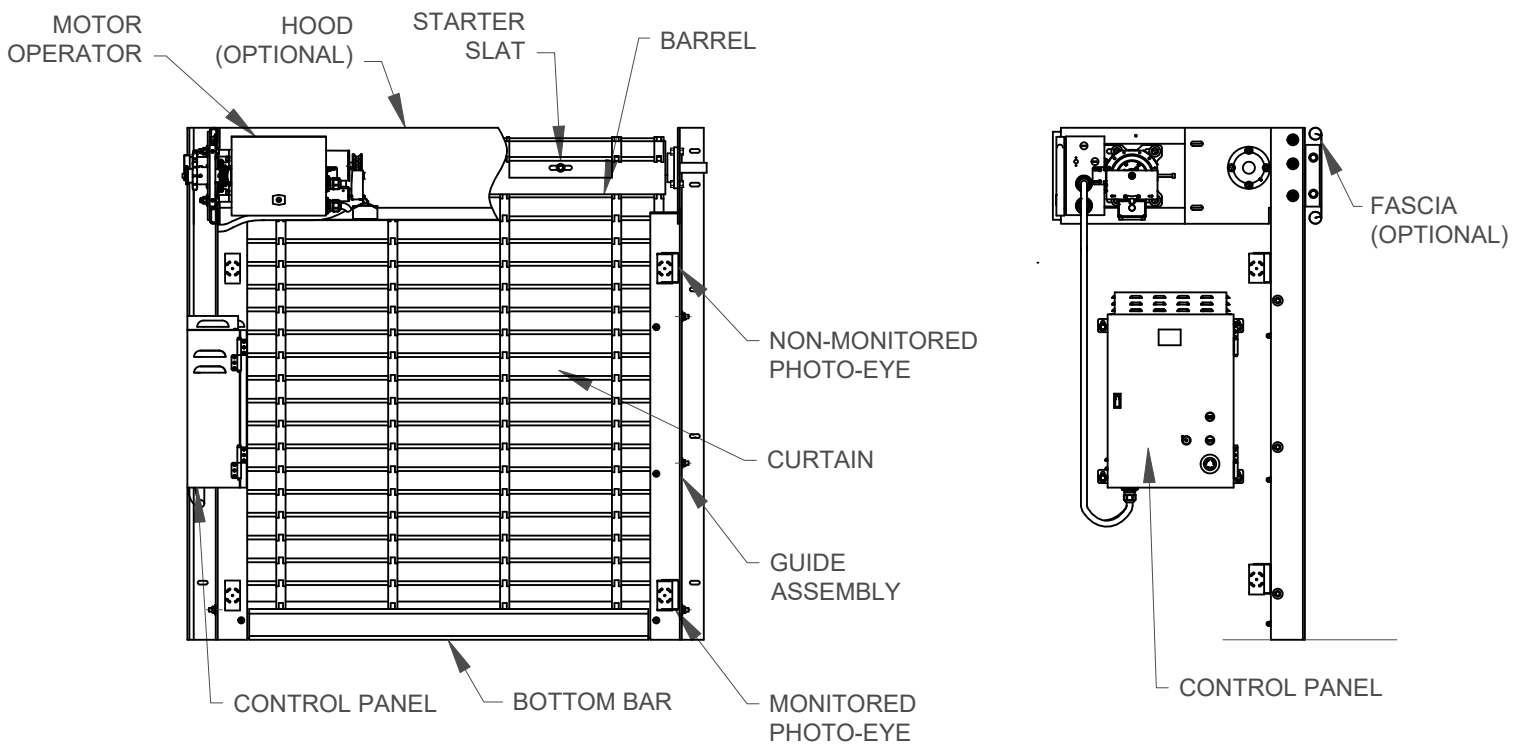
JAMB CONSTRUCTION	WALL BOLT TYPE	WALL BOLT SIZE	HOLE SIZE	HOLE DEPTH
Concrete	Wedge anchor	1/2" x 4"	1/2"	3"
Filled CMU, brick or concrete	Sleeve anchor	5/8" x 4"	5/8"	4"
3/16" (min.) structural steel	Machine screw	1/2" x 1"	27/64"	N/A

### GENERAL NOTES

- 1) Length of wall bolts is generally referenced from the bottom of the head, except for wedge anchors which are referenced by overall length.
- 2) Length of wall bolts must be increased accordingly if the door is attached to the jambs through another material (such as drywall, veneer, stucco, plaster, tile, etc.) depending on the thickness of that material.
- 3) For tube mount doors
  - Attach angle clips to tube supports with 3/8" self-tapping screws or machine bolts.
  - Attach angle clips to concrete slab with 3/8" wedge anchors.
  - Attach angle clips to structure above as appropriate for material being attached to, but no less than 3/8" diameter fasteners if mechanically attached.

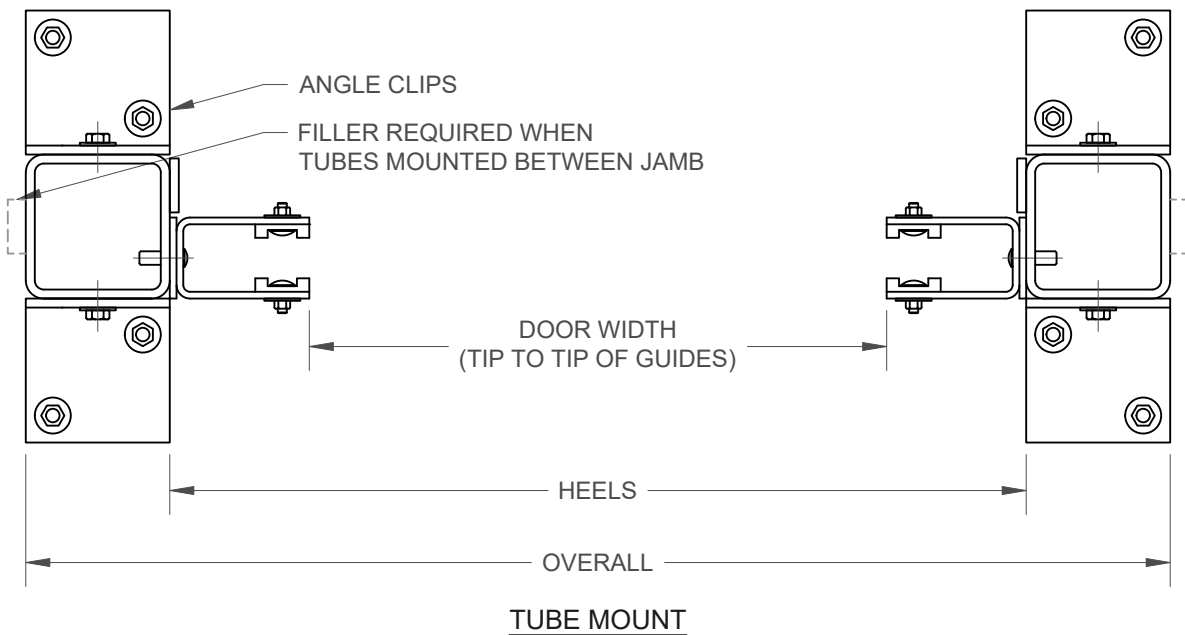
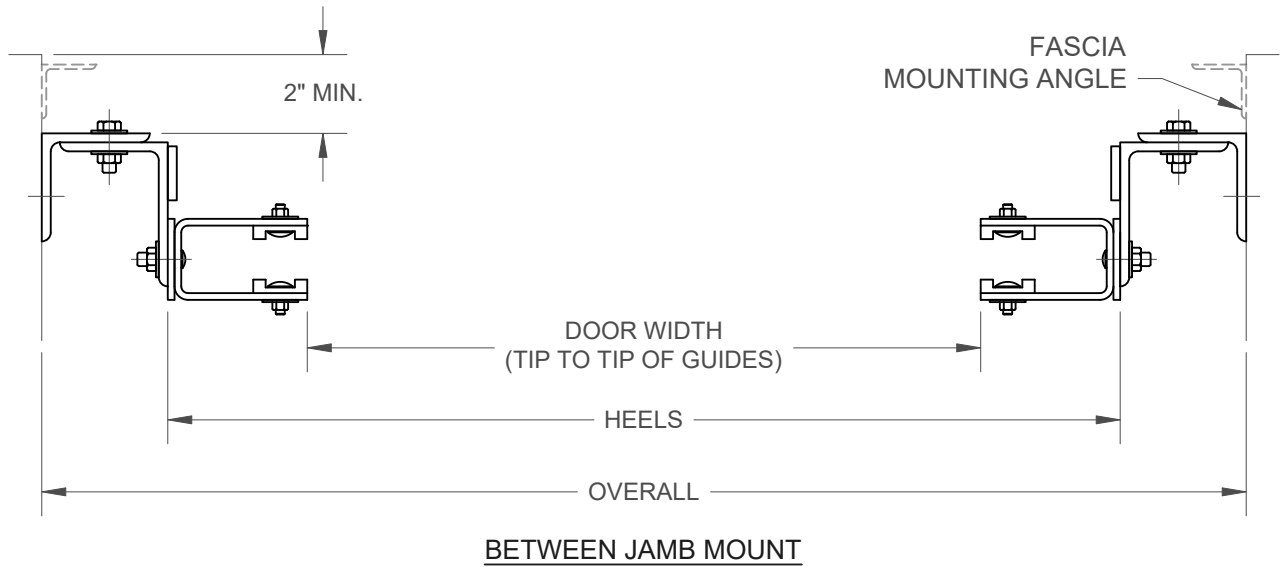
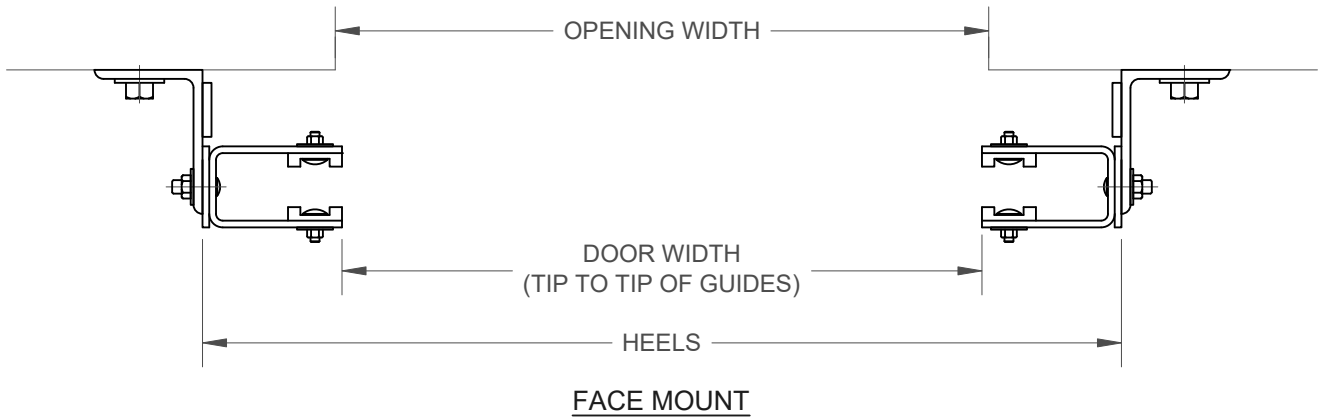


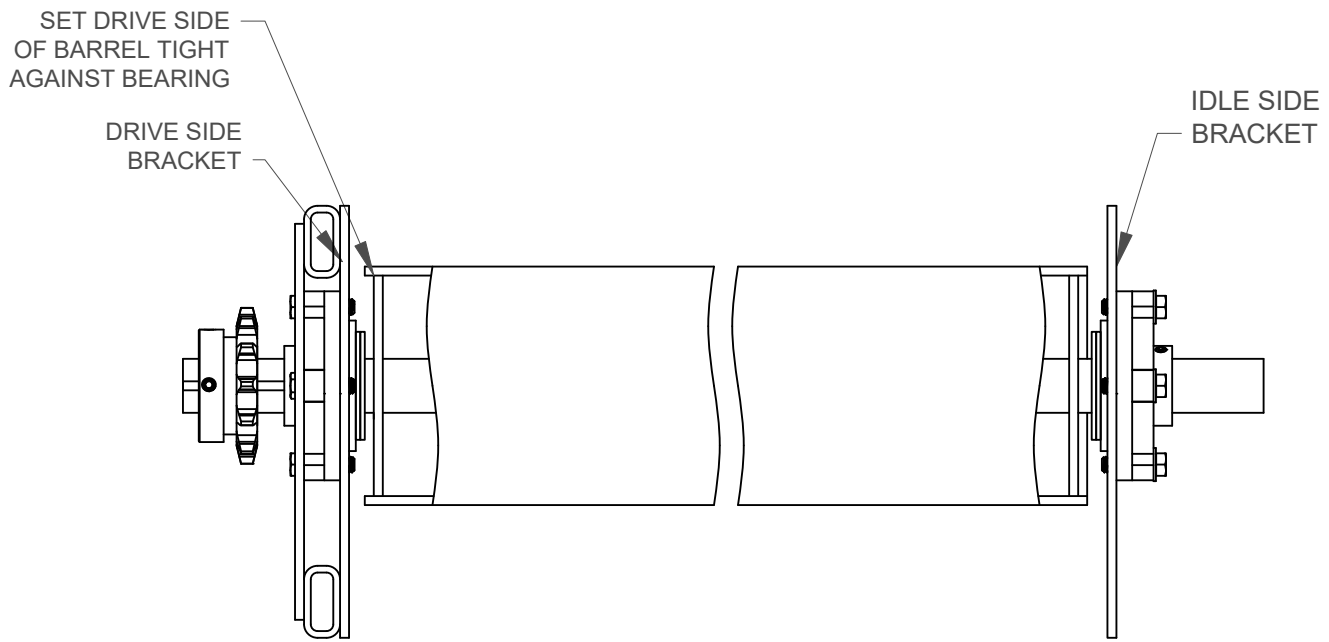
FACE MOUNT



BETWEEN JAMB MOUNT

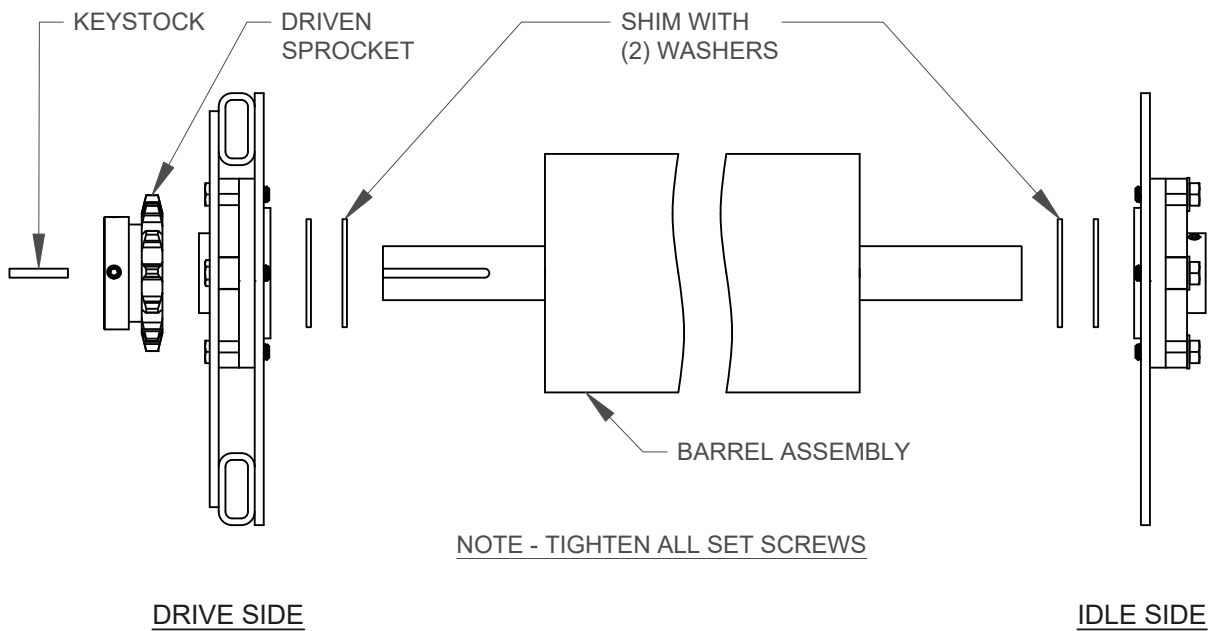
GENERAL NOTE:  
DOOR WIDTHS MAY NOT BE  
THE SAME AS OPENING WIDTHS





BARREL AND SPROCKET ASSEMBLY

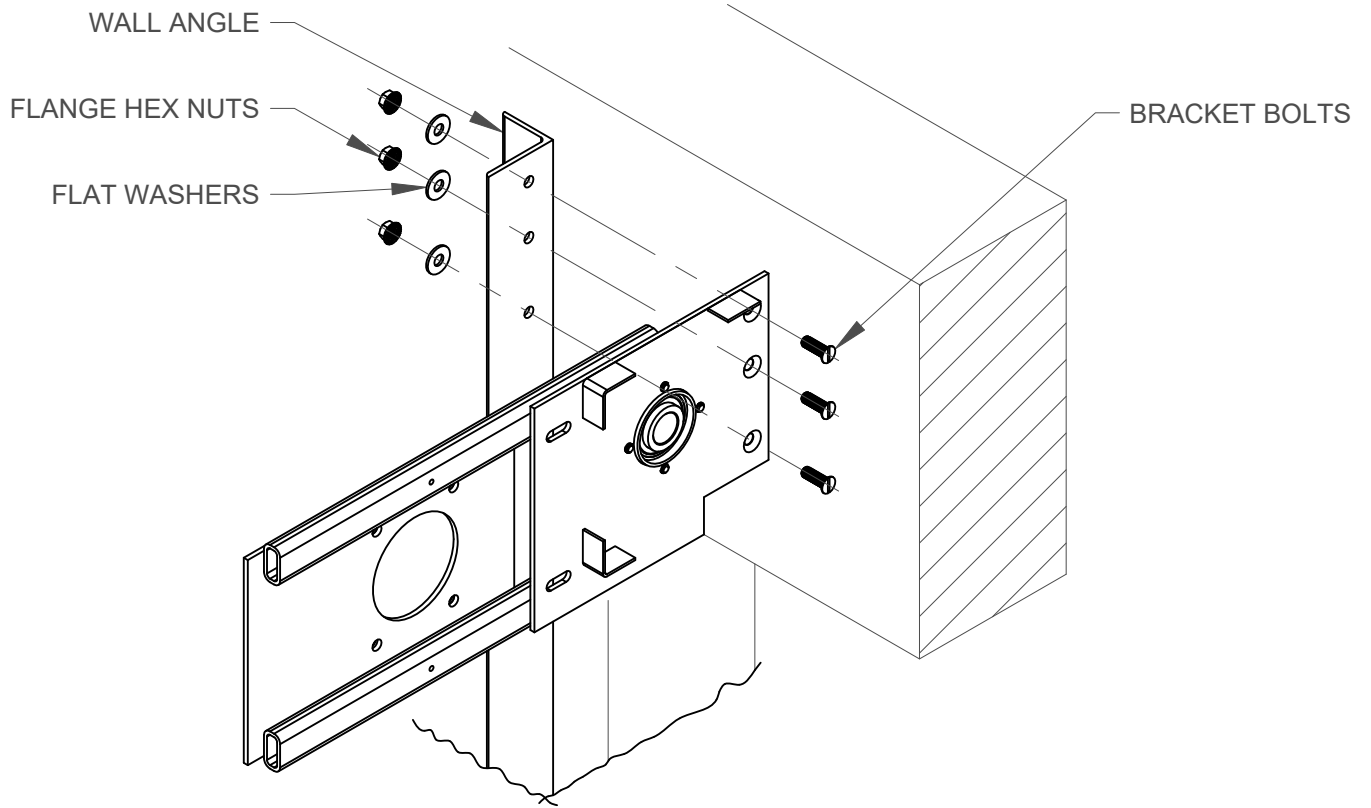
LEFT HAND OPERATION IS SHOWN-  
RIGHT HAND OPERATION IS OPPOSITE



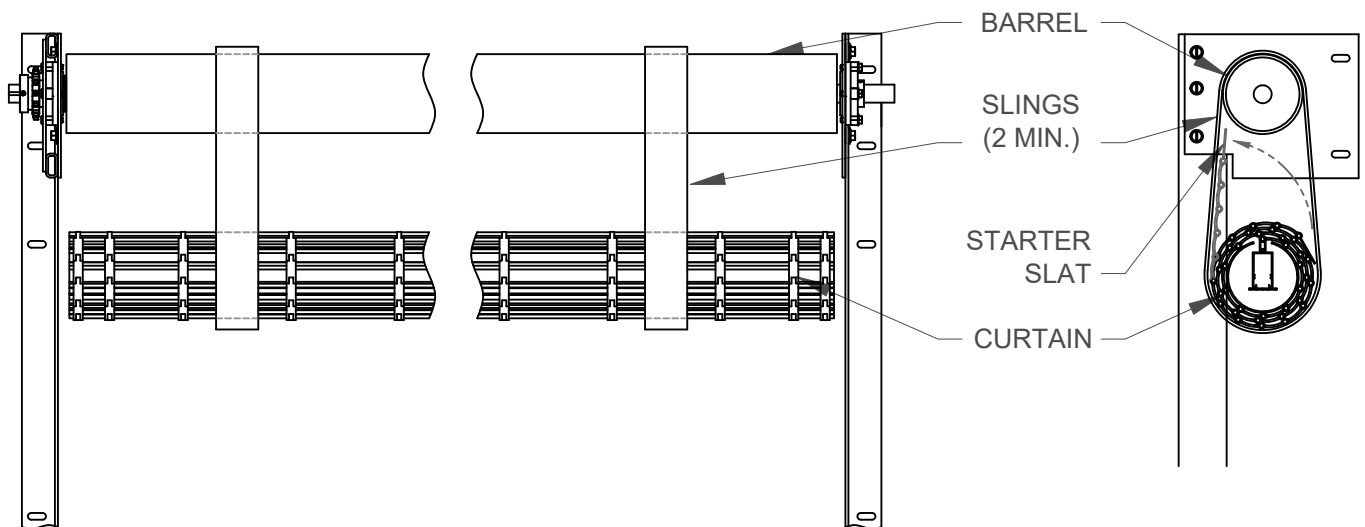
NOTE - TIGHTEN ALL SET SCREWS

EXPLODED VIEW

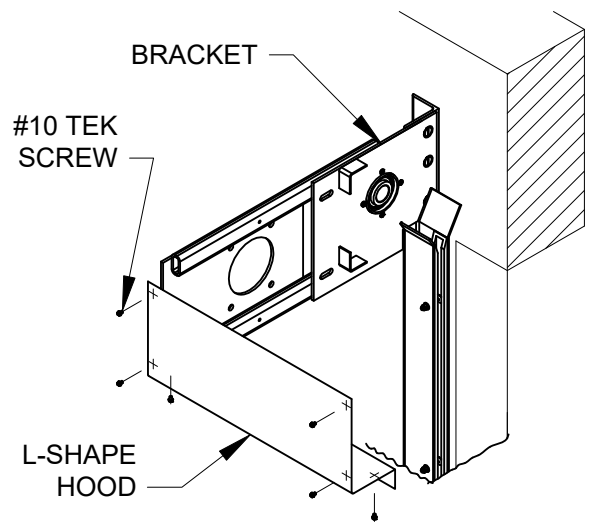
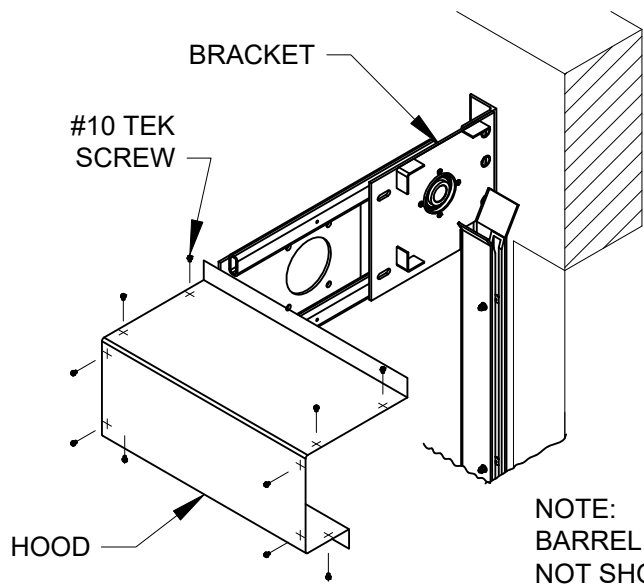




BRACKET ATTACHMENT

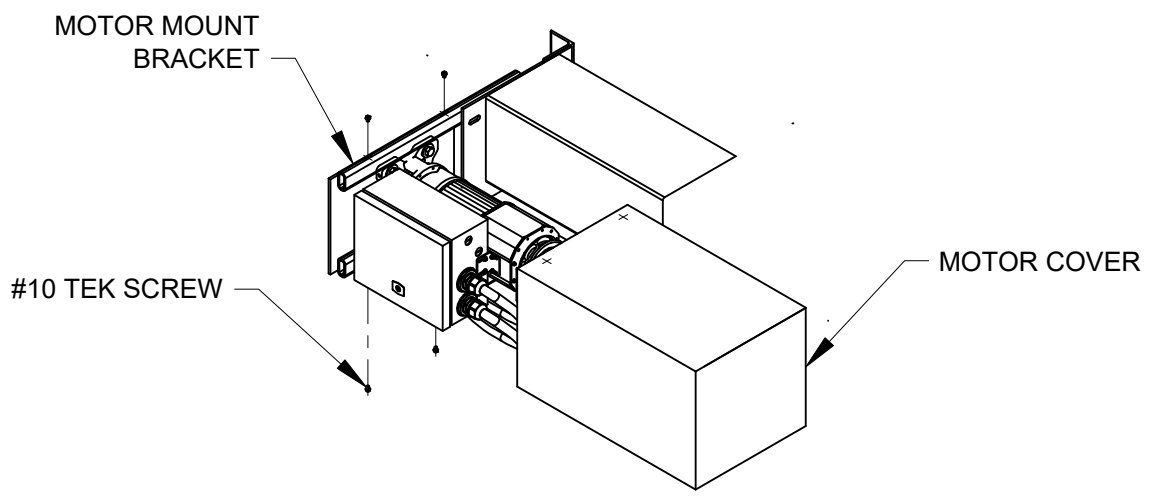


LOADING THE CURTAIN

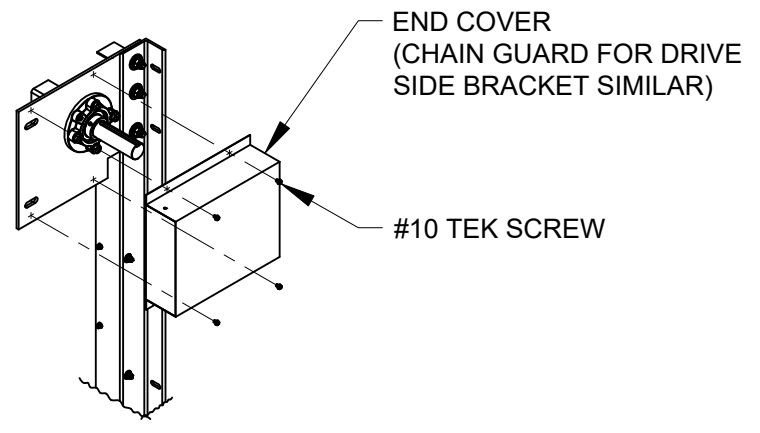


NOTE:  
BARREL & CURTAIN ASSEMBLY  
NOT SHOWN FOR CLARITY

HOOD

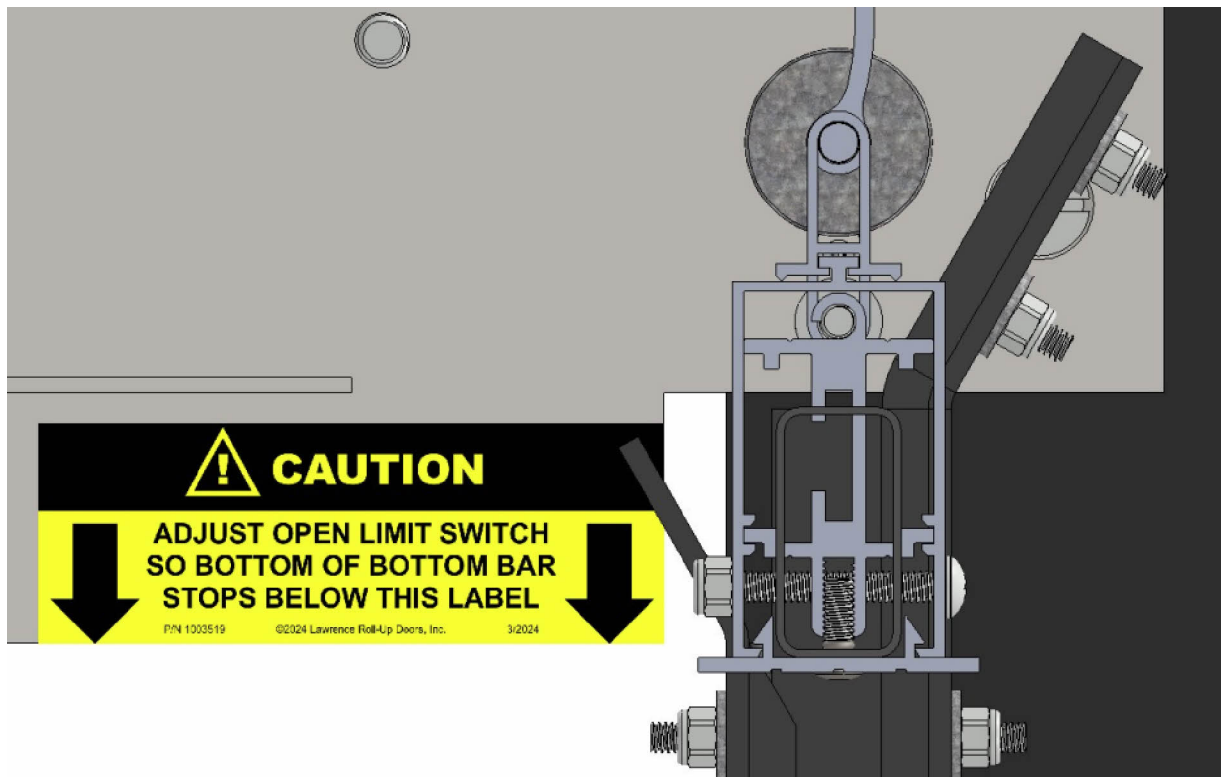


MOTOR COVER

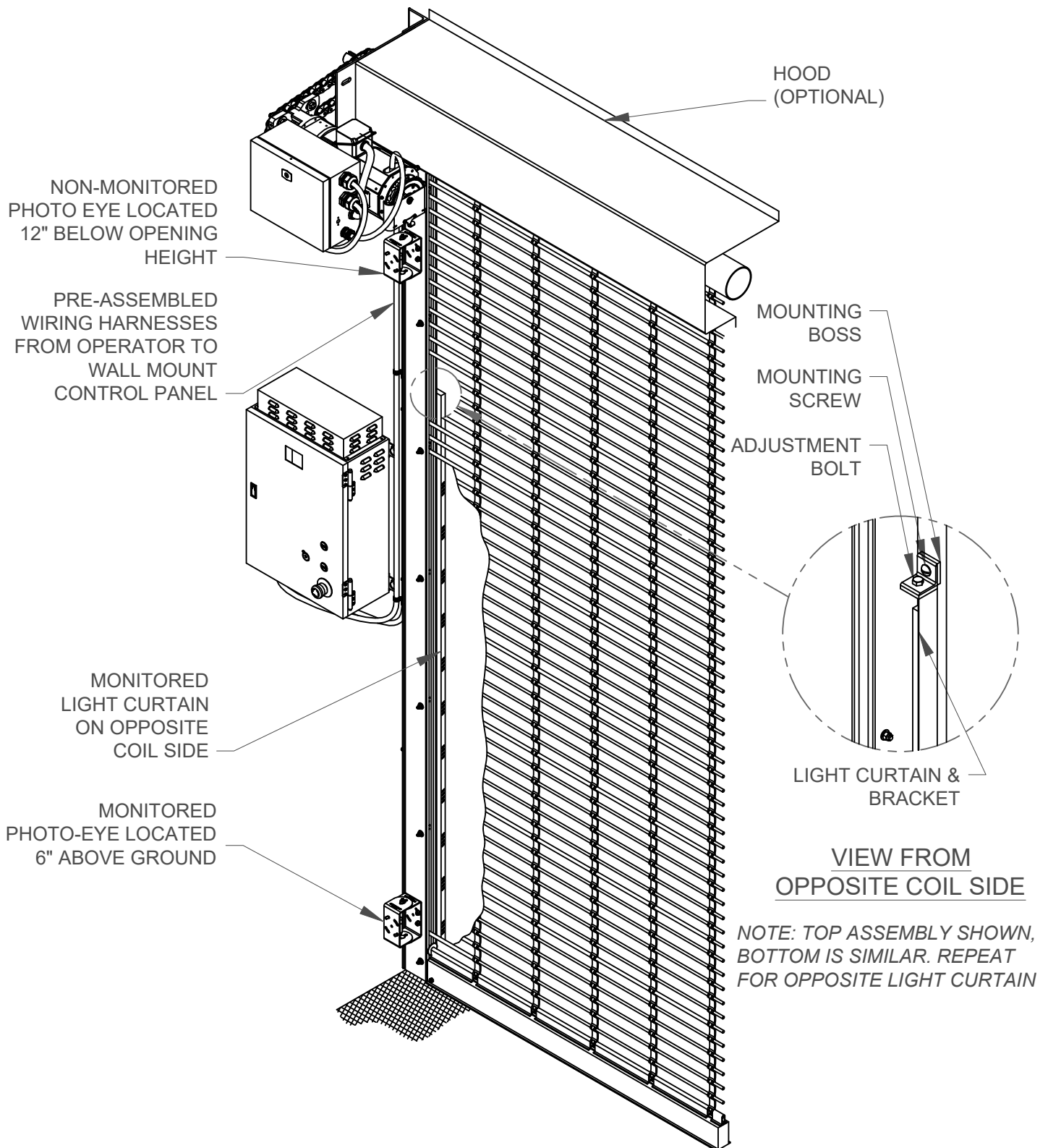


END CAP

**IMPORTANT NOTE:** It is critical that the open limit switch be adjusted so the bottom of the bottom bar stops below the skirt of the bracket plates as indicated on the CAUTION labels as illustrated below.



BOTTOM BAR POSITION  
AT FULL OPEN



SENSING DEVICES