

ELEVETTE MRL OVERHEAD CABLE DRUM With UC601 CONTROL SYSTEM

(MACHINE ROOMLESS ELEVATOR)

MECHANICAL INSTALLATION INSTRUCTIONS

ELEVATOR INSTALLERS MUST INSTALL THIS ELEVATOR AND ALL ITS COMBINED EQUIPMENT TO COMPLY WITH ASME A17.1, N.E.C., AND ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES.

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IMPORTANT – FAMILIARIZE YOURSELF WITH THESE INSTRUCTIONS

THIS ELEVATOR MUST BE INSTALLED TO COMPLY WITH ALL STATE, LOCAL, AND NATIONAL CODES, INCLUDING BUT NOT LIMITED TO ASME 17.1 AND THE N.E.C.

PERSONAL SAFETY

- 1. Installers are cautioned that there are many potential hazards involved in the installation of elevators. Since any accident cannot only be disabling but may be fatal, installers are reminded of the hazards involved.
- 2. Installers should never work alone. It is true that there is safety in numbers. The elevator installer should be always aware of his fellow installer's presence and the area in which he is working.
- 3. Installers should be properly clothed before starting the installation. Wearing of loose clothing should be avoided. Keep all buttons, particularly the ones on cuffs, buttoned.
- 4. Installers should always be aware of the fact objects may fall in a hoistway at any time, and proper head protection should be worn.
- 5. Shaft doors should be locked or nailed shut any time an area is left unattended, and door interlocks are not installed and operating correctly.
- 6. Extreme caution must be taken when working overhead, in the pit, or around an elevator or platform when power is applied.
- 7. Power should be removed from the controller and operating systems when any electrical work is accomplished.
- 8. Installers should never enter an elevator pit when it contains water, or work in a machine space that has wet surfaces. Accidents from electric shock have occurred under these conditions, sometimes fatal.
- 9. All installers should read and familiarize themselves with a current elevator safety handbook prior to installation (available through <u>Elevator World</u>).
- 10. Turn power off when making any adjustments to elevator at main disconnect.
- 11. Installers should never place themselves in a position where they may be harmed, such as between shear points, under heavy objects, etc.
- 12. When repairing equipment you do not understand or are not familiar with, consult the manufacturer.

NOTE: All statements, technical information, and recommendations contained herein are based on data believed to be reliable, but the accuracy or completeness thereof is not guaranteed

Recommended Tool List for MRL Installation

- Plumb bob(s)
- Chalk line
- Torpedo level
- 2 ft & 4 or 6 ft level
- Tape Measure
- Socket & Wrench Set (with sizes up to 15/16")
- 12" Adjustable Wrench (that opens at least 1-1/4")
- 5/16" diameter X 6" long drill bit (Pre-drill lags)
- Drill (1/2" chuck)
- Hammer drill
- Impact driver or drill driver (Hi-torque)
- Hammer
- 1/2" concrete bit
- (2) 6" C-clamps
- Rubber mallet or dead blow hammer
- (2) 18" quick clamps
- Needle nose pliers
- Side cutters
- (2) Vise grip 11R clamps (to hold counterweight sling)
- Wire strippers
- Various screw drivers (Phillips and straight blade)
- Utility knife
- Conduit cutter (If rigid conduit is required by local codes)
- Conduit bender (If rigid conduit is required by local codes)
- 4 ft. step ladder (250-300 lb. capacity)
- Hoisting Machine Lifting fixture (available from Inclinator)

Materials Needed for Installation (not supplied by INCOA)

- 1. Concrete anchors
- 2. Shim material for under base and behind wall brackets to make level
- 3. 1/2" conduit (check local codes)
- 4. 1/2" flexible conduit (check local codes)
- 5. 3/4" conduit (check local codes)
- 6. 3/4" flexible conduit (check local codes)
- 7. 1/2" conduit fittings (check local codes)
- 8. 3/4" conduit fittings (check local codes)
- 9. 1/2" conduit clamps
- 10.3/4" conduit clamps
- 11. screws for clamps
- 12. Wire-nuts
- 13. Black tape
- 14. Screws to hold main controller in wall
- 15. Screws/anchors to hold shaft box on hoistway wall
- 16. Wire ties
- 17. Main disconnect boxes for 220VAC and 110VAC (should be provided by electrician)



CAUTION

Before the elevator installation is started, verify the following:

- Hoistway size Does the actual width and depth of the hoistway agree with the dimensions on the approved shop drawing?
- Floor to Floor Distance Measure the distance from the bottom floor to the top floor.
- Overhead and Pit Does the overhead and pit depth agree with the shop drawing?

If any of these measurements differ from the shop drawing, contact inclinator before proceeding with the installation.

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GUIDE RAIL INSTALLATION

Determine where the centerline of the guide rail and cab should be located in the hoistway. This measurement can be found on the shop drawing or determined by adding half the car width to the running clearance, (car width/2 + running clearance = centerline location of guide rail). Where applicable, measure from a gate-side wall.

In the hoistway, mark the guide rail location 24" from the top of the hoistway and 12" above the pit floor. Drop a plumb bob to see if the centerlines are the same. Adjust if necessary. Mark the rail centerline location (in the hoistway) using a chalk line. Strike a 2nd chalk line 16 5/8" to the right of the rail centerline.

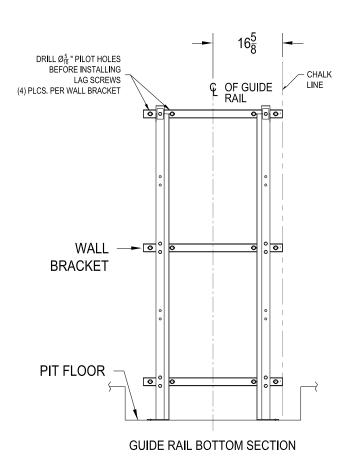


CAUTION

It is important that the guide rail frame assembly be installed in the hoistway straight and plumb.

Installation of Section One (Bottom Section)

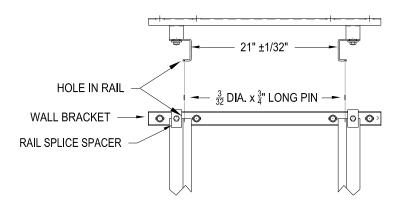
- Locate the bottom guide rail assembly. This assembly will have a plate with a single hole welded to the end of the guide rail.
- 2. Set the bottom assembly on the pit floor and align the right end of the wall bracket with the chalk line located 16 5/8" from the cab centerline.
- 3. Drill 5/16" diameter pilot holes through the center of each slot in the wall brackets.
- Install four ½" x 4" lags with flat washers into each wall bracket slot. If mounting wall brackets on drywall, be careful not to overtighten lag screws.
- 5. Check for plumb front to rear. Shim out section if necessary.



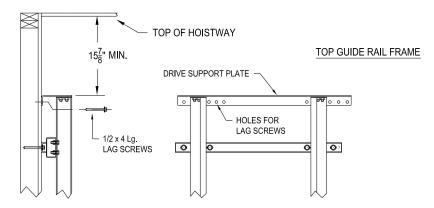
<u>Do not install base plate anchors now.</u>

Installation of Remaining Rail Sections

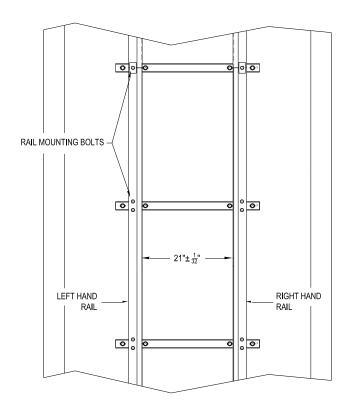
- Locate the second guide rail assembly. All intermediate rail sections will be 8 ft. in length. There is no specific order of assembly for multiple intermediate sections.
- 7. Loosen the ½" bolts holding the top wall bracket to the guide rails enough to allow the next rail to slide behind the rail splice spacer.
- 8. Place a 3/32 diameter x 3/4" long pin into the hole in the top end of each guide rail (in the bottom frame assembly).



- 9. Lift the intermediate rail assembly above the frame below and lower, being careful to align the pins in the lower rail with the holes in the rail being installed.
- 10. When the rails are aligned, tighten the rail splice spacer bolts. With right edge of wall brackets aligned with chalk line, drill 5/16" diameter pilot holes for mounting lags. Install lag screws along with flat washers,
- 11. Continue installing remaining intermediate rail assemblies or the top rail assembly. Remember to install the 3/32ø pin in the top of each rail before installing the next frame.
- 12. The Top Rail Section includes the drive support plate. The support plate has (8) holes for anchoring to wall. Recommend installing at least (6) Lag screws in the support plate in addition to the lags installed in the top guide rail wall brackets. Note that the clearance above the support plate must be at least 15-7/8" to install the drive assembly.

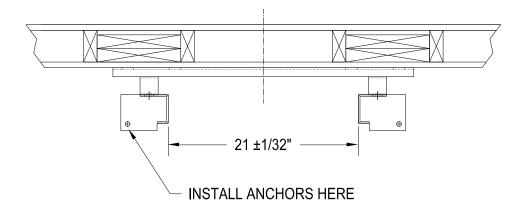


- 13. Check for plumb both side to side and front to rear. Install shims behind wall brackets if necessary, to achieve this. (Shims not supplied by Inclinator)
- 14. Verify the distance between rails is 21" ±1/32" from top to bottom. If any portion of the rail assembly is outside this tolerance, <u>loosen</u> the ½" bolts holding the <u>left-hand</u> guide rail in the length needing adjustment. Move the LH rail in or out as needed to get the proper spacing, then re-tighten all bolts (60 ft-lbs.). A wood block cut to 21" length can be used to help space the rails.



15. With rails installed and plumb, install concrete anchors (not supplied) through the two holes at the base of the rails as shown below.

ANCHORING GUIDE RAILS TO PIT FLOOR

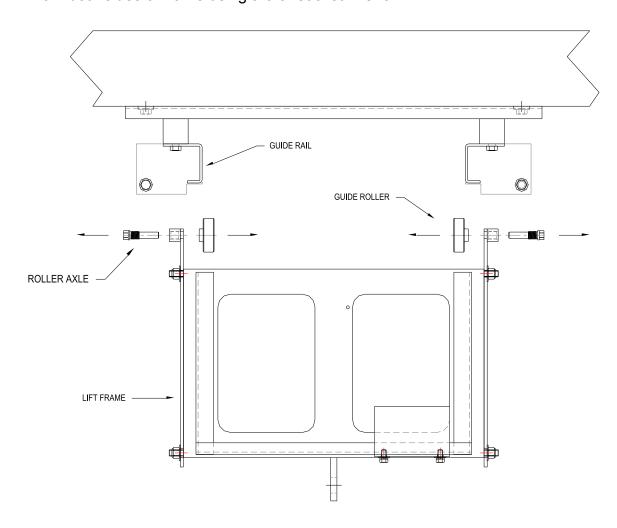


DRIVE ASSEMBLY LIFT FRAME INSTALLATION

A lift frame is available from Inclinator to be used to lift the drive assembly to the top of the shaft. The hoisting means to move the frame is not supplied by Inclinator Company. A structural beam capable of supporting at least 1000 lbs. must be available above the hoistway for attaching a hoist or pulley for lifting. **DO NOT ATTEMPT USING THIS LIFT IF AN ADEQUATE SUPPORT STRUCTURAL IS NOT AVAILABLE.**

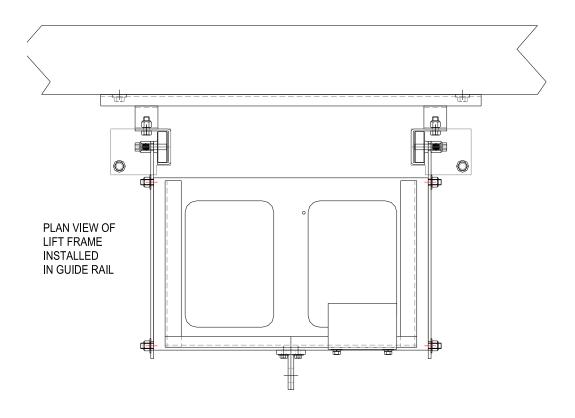
Lift Frame Installation:

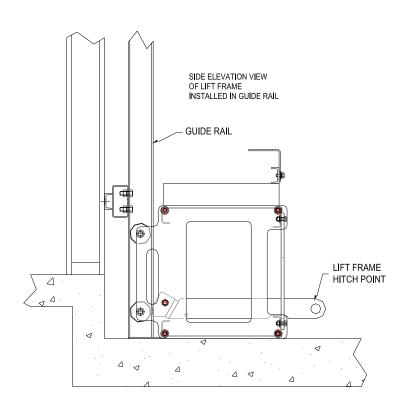
1. Move the lift frame into the shaft and set on the pit floor. Remove the Roller Axles from both sides of frame using a 5/8" socket wrench.



2. Move the lift frame toward the guide rails so the threaded bosses on the side plates are centered on the guide rail. On both sides, drop a guide roller into the rail. Insert the roller axles into the lower threaded bosses, align the roller with the pin and thread the axle into the boss and tighten. Do the same with rollers and axles in the upper bosses.

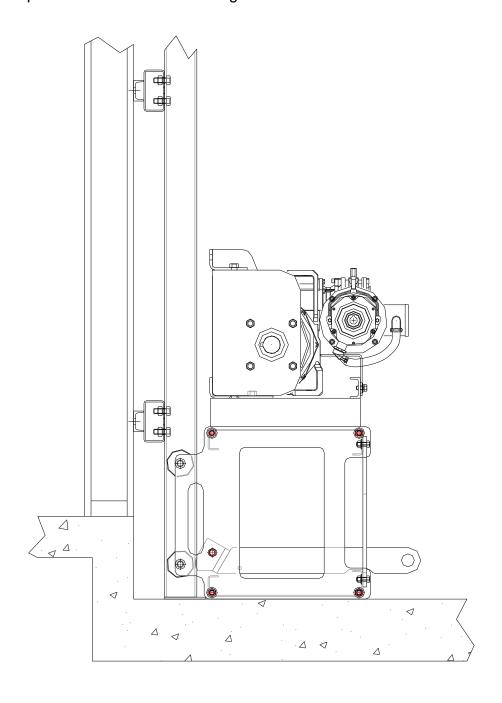
Lift Frame Installation (continued):





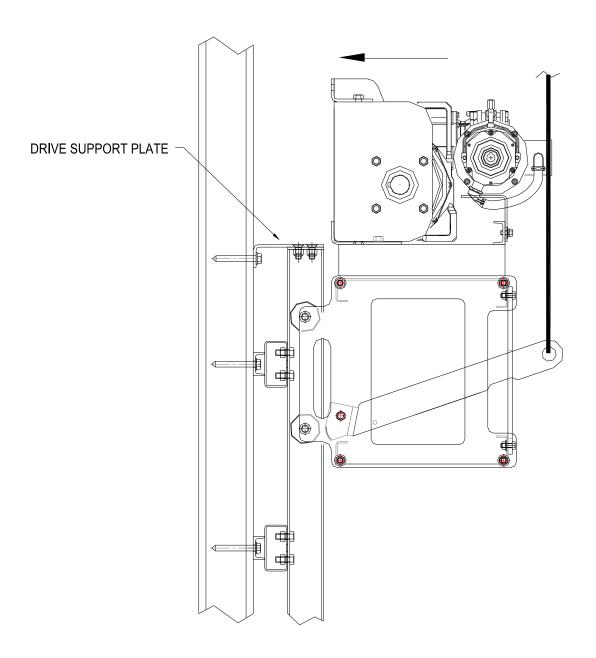
DRIVE ASSEMBLY INSTALLATION

- 1. Move the drive assembly into the shaft and set on top of the lift frame. The drive assembly is heavy use caution when handling.
- **2.** Use C-clamps or some other clamping means to secure the drive assembly to the top of the lift frame before lifting.



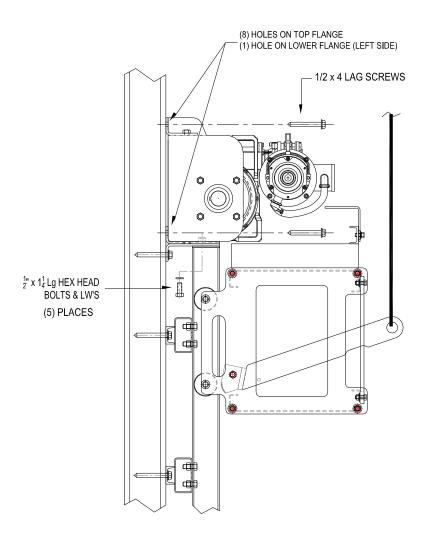
DRIVE ASSEMBLY INSTALLATION (continued)

- 3. Attach lifting means to the lift frame hitch point. CAUTION: DO NOT ALLOW ANYONE IN THE SHAFT BELOW THE LIFT FRAME ASSEMBLY WHEN IN USE.
- **4.** Move the lift frame up the shaft until the bottom of the drive assembly is level with the top of the guide rail frame.



DRIVE ASSEMBLY INSTALLATION (continued)

5. Slide the drive assembly onto the guide rail top plate. Align the assembly with the guide rail top plate so the five (5) holes in the rail top plate align with the holes in the bottom plate of the drive assembly. <u>CAUTION</u>: The assembly must be held in place until the ½" bolts are installed.



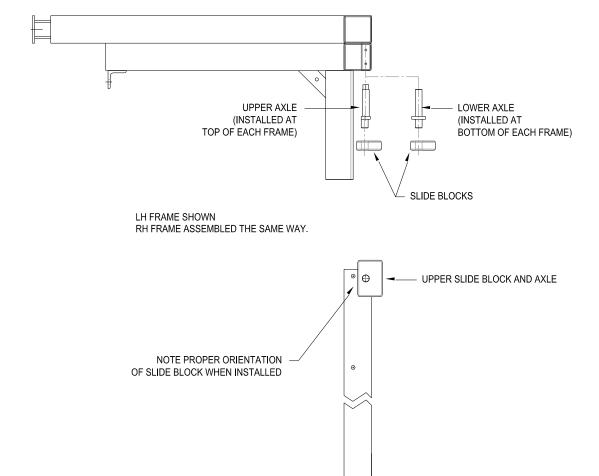
- 6. Install ½ x 4" lg. lag screws into the top flange of the drive assembly frame (drill 5/16" diameter pilot holes before installing lag screws. There are (8) holes in the top flange, install a minimum of six (6) screws in this flange. There is also (1) hole on the left hand side of the lower flange for a lag screw.
- 7. After the drive frame is securely fastened in place, lower the lift frame to the pit floor. Remove the Guide Roller Axles and move lift frame away from guide rails.
- 8. Note The suspension ropes are held in place on the drum with plastic wrap. Do not remove plastic until ropes can be connected to the sling hitch assembly.

INSTALLING SLING ASSEMBLY

The sling assembly consists of the LH and RH Sling Frames, Hitch Assembly, Plank Extension, Top Cross Bracket and Plank Cross Bracket. The Plank Extension channels are shipped installed in the sling. Do not remove the extensions from the sling frames. They will need to be adjusted later in the assembly.

Slide Block Axle Location & Slide Block Installation

- 1. The upper and lower slide block axles are shipped installed in the sling. The upper axles have a hex shaped extension on one end and an eccentric shaft extension (where the slide block mounts). The upper axles can be used to level the cab floor as explained on pg. 21.
- 2. The lower axles are not eccentric and have a larger flange (shoulder). The flange on both the top and bottom axles must be tight against the sling tube (as shipped).

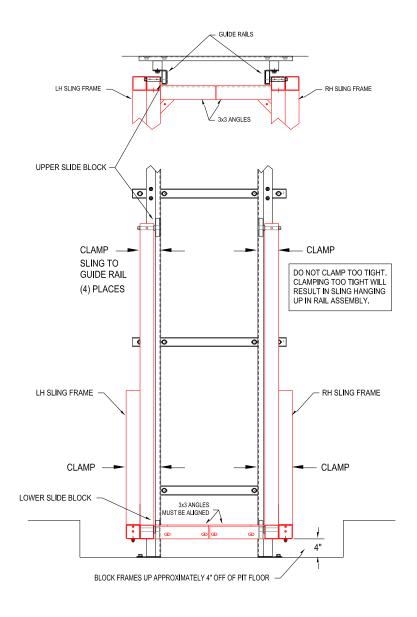


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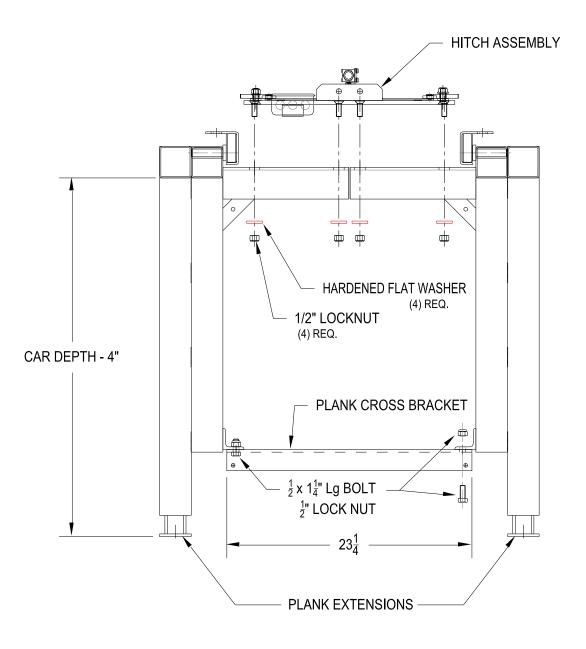
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LOWER SLIDE BLOCK AND AXLE

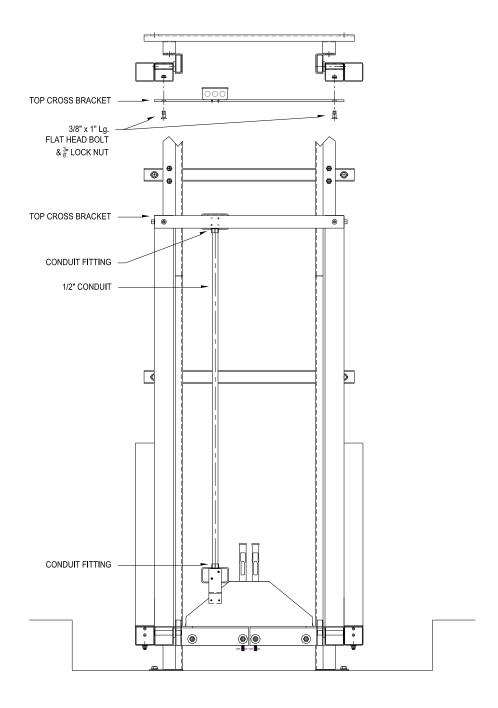
- 3. Set the LH and RH Sling Frames in the hoistway. Have blocking available to set below the frames so they are about 4" off the pit floor.
- 4. Install a slide block onto each axle. The hole in the plastic slide block is offcenter and must be oriented as shown on pg. 13, when the sling is positioned in the guide rails.
- 5. Position the frames so the slide blocks are inside the guide rail. Use clamps or straps to hold the frames in place with the slide blocks held against the inside of the rails. It is important to have any side to side play in the assembly removed by clamping the sling frames in the rail. Do not attempt to move the slide block axles out to eliminate side play. The axle shoulder must be tight against the square tube (on sling).



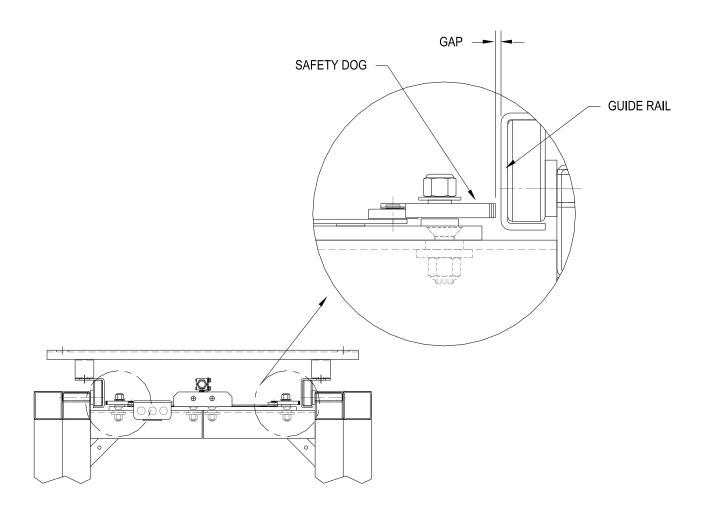
- 6. Install the Plank Cross Bracket using ½" x 1 ¼" Lg. Hex Head bolts and lock nuts, but do not tighten the two bolts.
- 7. Place the Hitch Assembly behind the 3 x 3 angles at the bottom of the sling frame with the four (4) bolts thru the slots in the angles. Install the hardened flat washers onto the four bolts along with the $\frac{1}{2}$ " locknuts. Center and loosely fasten the hitch assembly to the frame.



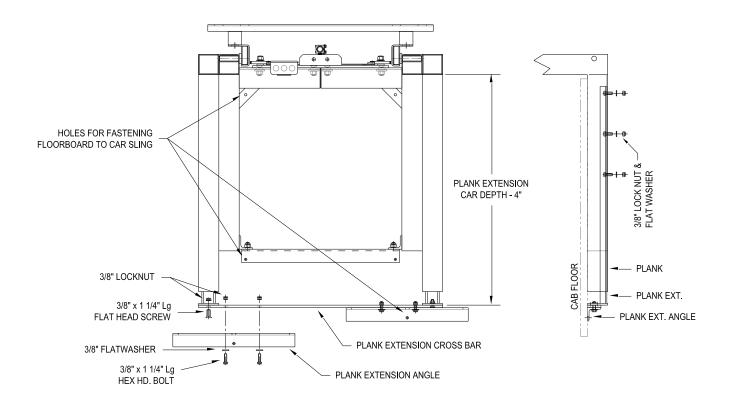
- 8. Using the 2-conductor cord provided, connect the cord to the two wires in the 2x4 electrical box on the hitch assembly (slack rope switch wiring). Route the wire through the conduit, then attach the conduit to the electrical box.
- 9. At the top of the sling, route the slack rope electrical cord into the 2 x 4 electrical box on the Top Cross Bracket. Position the electrical box over the conduit then secure the Top Cross Bracket to the sling using 3/8" Flat Head Screws and lock nuts.



- 7. Verify the gap between the safety dogs (on the hitch assembly) and the guide rails is the same on both dogs. If not, adjust the hitch assembly side to side to get an equal gap.
- 8. When the proper gap is achieved, tighten all four (4) lock nuts on the Hitch Assembly to <u>82 ft-lbs</u>.

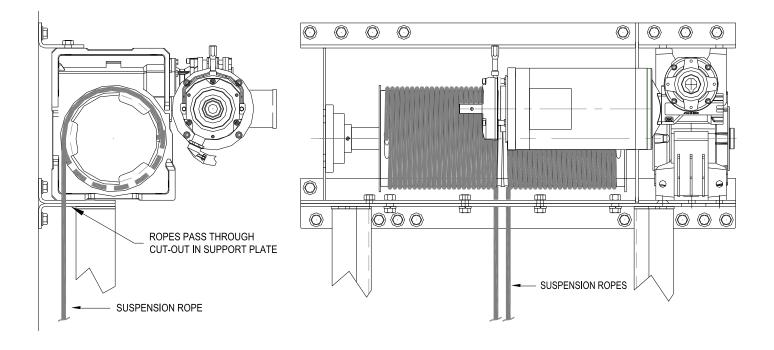


- 9. The position of the plank extension channel is based on the car depth. The distance from the end of the extension channel to the vertical tube on the sling should be the car depth 4" (car depth is the dimension out from support wall). Loosen the (3) hex nuts that hold the extension channels to the sling plank and slide out as needed. Depending on the car depth, it may be necessary to remove the (3) nuts and move the extension ahead by (1) slot on the plank.
- 10. Install the Plank Extension Cross Bar to both Plank Extensions using (4) 3/8 x 1-1/4" flat hd. Bolts and locknuts.
- 11. Attach the Plank Extension Angles to the Extension Cross Bar with (2) 3/8 x 1-1/4" hex hd. Bolts per angle. Position the angles as for out as possible but must not extend beyond edge of cab floor. Tighten hardware after floorboard is installed and angles are secured to floor.
- 12. Verify all sling assembly hardware has been tightened.



SUSPENSION ROPE INSTALLATION

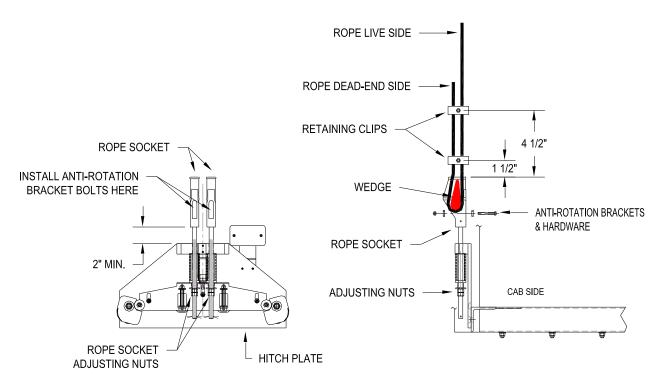
- 1. Suspension ropes are shipped installed on the machine winding drum.
- 2. Connecting the ropes to the car sling should be done after power is available to operate the drive motor.
- 3. Be careful when removing the plastic wrap from the ropes. Restrain the ends of the ropes to prevent the extra wraps from un-winding.
- 4. Feed the ropes down through the cut-out in the machine support plate as shown below.



SUSPENSION ROPE INSTALLATION (CONT.)

<u>IMPORTANT</u> – UNWIND JUST ENOUGH ROPE FROM THE DRUM TO DO THE FOLLOWING. <u>DO NOT SHORTEN (CUT) ROPES</u>.

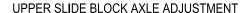
- 5. Thread each rope through a rope socket on the hitch plate. For an 80" cab, extend the ropes about 40" through the socket. For a 96" cab, extend the ropes about 24" through the socket. Route the dead end of the ropes back through the socket, install the wedge and pull the rope on through until the wedge is seated.
- 6. Check for equal tension between the two ropes. Raise the platform off of the blocking to allow access to the wedge socket adjusting nuts (below the springs). Thread the nuts down so there is at least 2" between the bottom of the socket and the top of the hitch block. THIS IS A VERY IMPORTANT STEP, as the safeties will not work if there is not enough space for the socket to move down when rope tension is lost. After adjusting, tighten the double nuts against each other to lock in place.
- 7. Install two retaining clips on each rope as shown below and tighten in place.
- 8. After the ropes are installed and adjusted, install the anti-rotation bracket assembly through the slots in the wedge sockets (below the rope wedge). Lock nuts are provided do not tighten bolts thread the nuts onto the bolts just enough so the locknuts are fully engaged with the bolts.

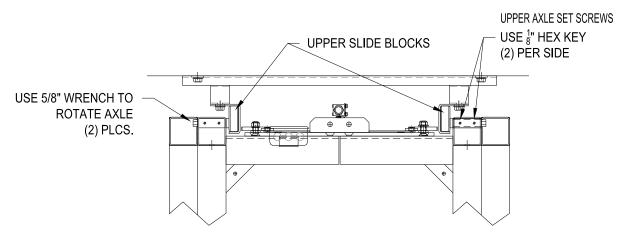


IMPORTANT – THERE SHOULD NEVER BE LESS THAN TWO (2) DEAD WRAPS PER ROPE ON THE DRUM WHEN THE CAB IS SETTING ON THE PIT FLOOR.

UPPER SLIDE BLOCK AXLE ADJUSTMENT

The upper slide block axles on the sling are eccentric to allow adjusting the pitch of the sling. At the top of the sling loosen the two (2) set screws that lock each Upper Slide Block Axle in place. Use a 5/8" wrench to rotate each axle to provide a slight angle (above horizontal) in the plank. The purpose is to have a level floor after the cab is installed. Tighten all four (4) set screws when finished.



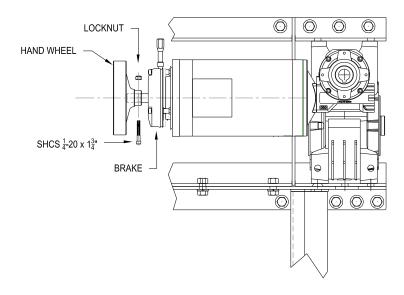


LUBRICATING GUIDE RAILS

Lubricate front, back and side of guide rails where the slide blocks travel with (**NYLUBE**) **Rail Lube**. Wipe rails clean before applying.

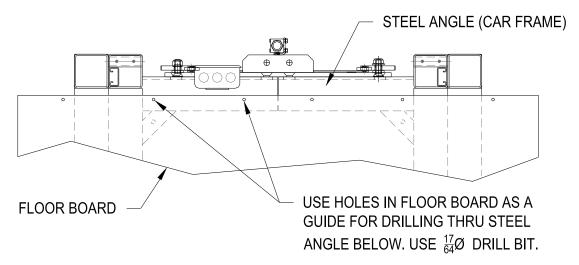
HAND WHEEL INSTALLATION

Install the supplied Hand Wheel to the shaft extending out of the brake/motor. Align the hole in the hand wheel hub with the hole in the shaft. Install the supplied bolt thru the aligned holes along with the lock nut. Tighten securely to remove any play between the hand wheel and shaft.



INSTALLING WOOD CAB

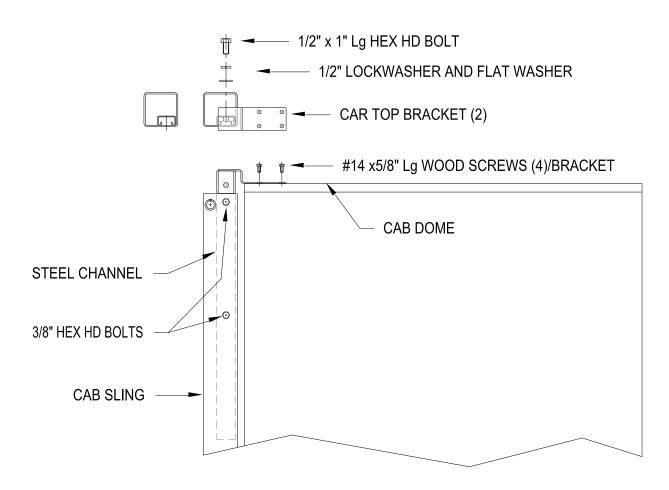
- 1. If the cab was shipped assembled, it must be disassembled then reassembled in the shaft. Do not lose the hardware as it will be needed again.
- 2. Place the floorboard on the sling. Position the support wall side of the floor so there is eight (8) inches between the edge of the floor and the support wall. Position the floor so proper running clearances are maintained at entrances (see shop drawings if supplied).
- 3. With the floor properly located, install (6) 5/16" x 1 lag screws through the cab sling and into the bottom side of the floorboard. See picture on page 18 for hole locations in car frame.
- 4. On the support wall side of the floor, holes must be drilled through the cab sling steel angles below the floorboard (see picture below). Use a 17/64" bit to drill thru the holes in the floorboard that are above the angles.



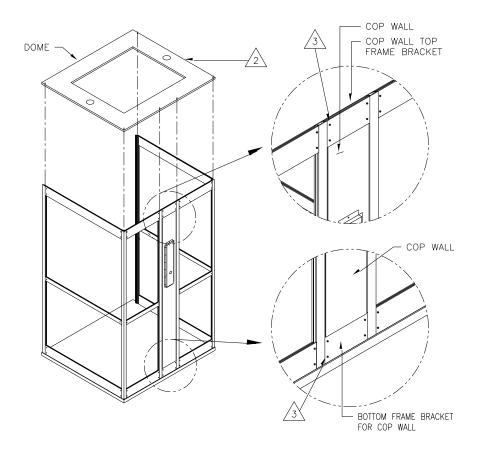
- 5. Begin installing walls starting with the rail side wall. Use an awl to help align the wall with the holes in the floorboard.
- 6. With all the walls fastened to the floor, install the dome and fasten to the walls.
- 7. Install the Car Top Support Brackets per instructions on page 23.
- 8. To install accordion gate, position the car at or slightly below floor level. Set the gate into the lower track and slide the upper track over the gate rollers then reattach the upper track to the cab dome. Fasten the gate jamb panel to the steel return. If removed, install gate switch arm to gate leading post, make sure key aligns properly with the gate switch.
- An aluminum gate header is supplied for mounting above the gate. The header fastens, with hardware supplied, to two (2) steel brackets mounted on the cab dome.

CAR TOP SUPPORT BRACKET INSTALLATION

- 1. With cab installed, assemble the car top support brackets to the sling. Inside the top of each side of the sling, there is a 30" length of steel channel. Hold the end of the channel, then <u>loosen</u> the (2) 3/8" Hex bolts on the outside of the sling, then pull the strut up enough to install the Car Top Bracket. Re-tighten the bolts to keep the channel in place.
- 2. Place the car top bracket into the end of the channel, then install a ½" x 1" bolt with flat washer and lock washer through the channel slot and thread into the tapped hole in bracket. Tighten bolt securely. Do this with both car top brackets.
- 3. Loosen the bolts holding the channel, then slide the channel down until the bracket sets on top of the car dome. With car top positioned, fasten each car top bracket to the dome with (4) #14 x 5/8" hex hd. wood screws. Re-tighten the 3/8" hex bolts holding the steel channel to the sling.



INSTALLING 500 STYLE CAB

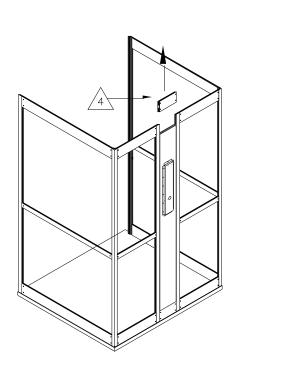


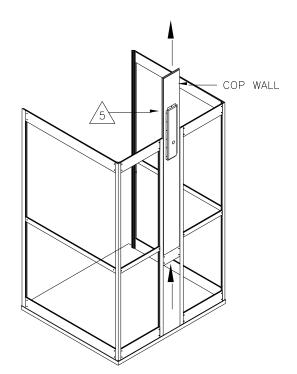
500 CAB DISASSEMBLY INSTRUCTIONS

- 1. If gates are installed, remove them.
- 2. Separate the dome from the cab walls by removing the $\frac{1}{4}$ -20 x 1 $\frac{3}{4}$ " Lg. Hex Hd. bolts and flat washers along the perimeter of the dome.
- 3. Using a 5mm (Allen) wrench, loosen the four (4) set screws in each frame bracket above and below the COP wall of the cab. Turn each set screw 1½ to 2 turns CCW.

(Disassembly instructions continued on next page.)

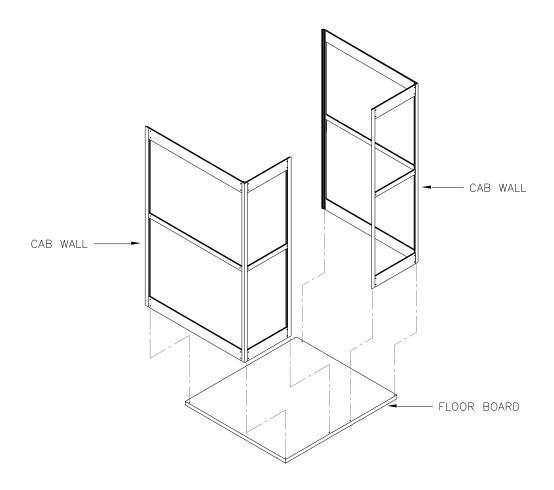
INSTALLING 500 STYLE CAB (CONT.)





- 4. Remove the COP wall top frame bracket. If necessary, place a wood block on the bottom edge of the bracket and tap lightly with a hammer to separate the bracket from the COP wall.
- 5. Remove the COP wall along with the bottom frame bracket from the cab wall by pulling upward on the COP wall and/or pushing up on the bottom frame bracket.
- 6. Separate the remaining cab walls from the floorboard by removing the ¼-20 x 2" Lg. Hex Hd. Bolts and flat washers located along the perimeter of the floor. **DO**NOT ATTEMPT TO DISASSEMBLE THE WALL SECTIONS ANY FURTHER.

INSTALLING 500 STYLE CAB (CONT.)



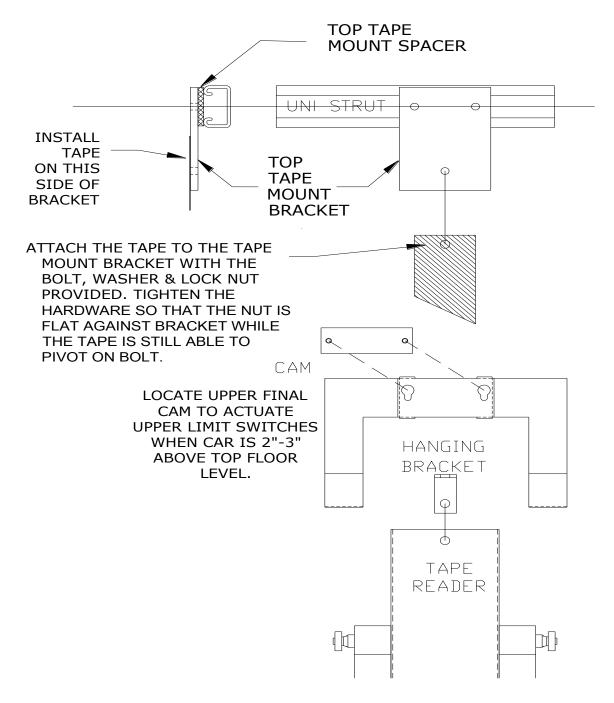
500 CAB ASSEMBLY INISTRUCTIONS:

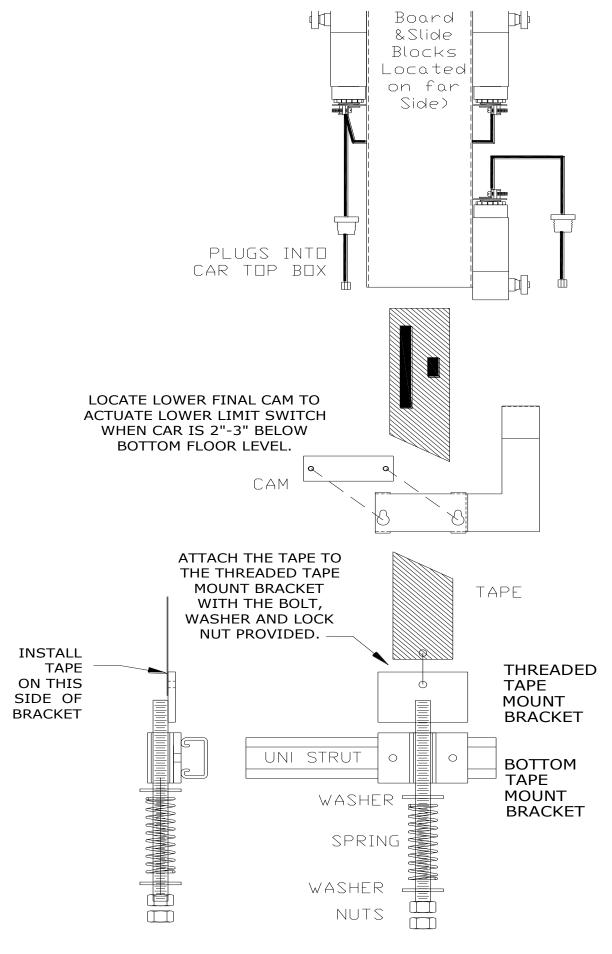
- 7. Note See steps 2 thru 4 on pg. 22 about positioning floorboard and drilling thru the angles on the cab frame before installing walls. With the cab floorboard secured to the cab sling, move the wall assemblies into the shaft and set on the cab floor.
- 8. Position each wall on the cab floor and secure with the ½-20 x 2" lg. bolts and flat washers, but do not tighten at this time.
- 9. Re-install COP wall then tighten all set screws in the bottom and top frame brackets. Be certain the top frame bracket is flush with the walls. Tighten all bolts holding walls to floor.
- 10. Set dome on top of walls and secure with ¼-20 x 1 ¾" Hex Hd. Bolts and flat washers.
- 11. Assemble gate(s) onto cab.

MOUNTING THE STEEL TAPE & THE TAPE READER GEN III

Reference drawing 80211227, Tape Reader Installation.

- 1. Unpack all the Tape Reader System parts and verify against the installation drawing.
- Decide which side of the car the Tape Reader will be mounted on. Insure that the tape reader will not be interfered with by the traveling cable or any other obstructions.
- 3. Refer to the installation drawing listed above for installation details.





INSTALLATION OF ELECTRICAL COMPONENTS

Refer to Inclinator's Electrical installation instructions for electrical component installation including the two controller boxes, top of car box, traveling cable, remote plates, primary disconnects and secondary disconnects. Refer to any national, state and/or local codes required by the local authority having jurisdiction.



ELECTRICAL DANGER

Extreme caution must be taken when working around electrical circuits. There must be a reliable ground and neutral available for the elevator system in compliance with the National Electric Code. Do not use temporary power.

MOUNTING DISCONNECT SWITCH & CONTROLLER

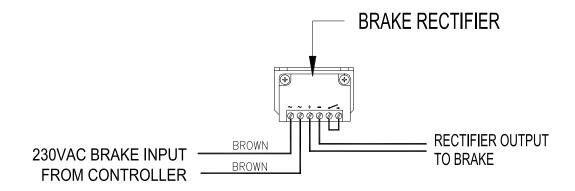
Mount both a 208/240VAC and a 110VAC disconnect in the machine room. Become familiar with N.E.C. and local codes for proper wiring and clearances. Remember to run a separate ground lead.

Install a light and outlet box in the Controller room as well

Become familiar with N.E.C. code procedures. Be <u>sure</u> to run ground lead.

BRAKE WIRING CONNECTIONS

The brake used on the MRL Geared machine requires a DC voltage. Therefore, a rectifier is required between the controller wiring and the brake. The brake rectifier is in the motor electrical box. Refer to electrical installation instructions to make electrical connections from the controller to the rectifier.



TOP OF CAR WIRING

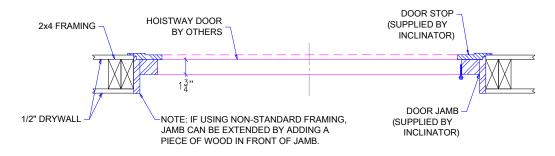
Mount the Top Of Car (TOC) enclosure in a convenient location but in close proximity to the LED light boxes. See UC601 electrical installation instructions for wiring details.



- Check continuity
- Wire carefully and be sure of connections
- Wire neatly and coil or pigtail unused wires
- Label and tag all wires when needed

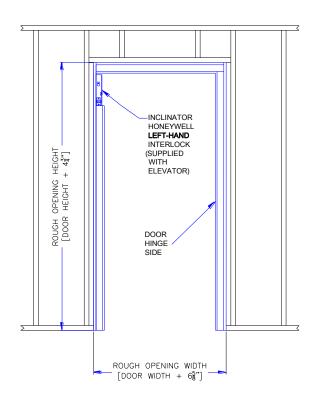
INSTALLATION OF LANDING DOOR FRAME OR PRE-HUNG DOOR KITS.

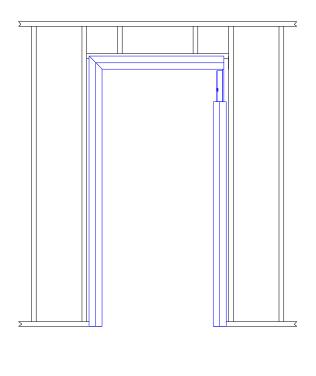
Inclinator manufactures optional ASME 17.1-2016 5.3 code compliant flush door frame kits and pre-hung flush door assembly kits. Installation is relatively straight forward using the information included with these kits as well as the diagram below. Contact Inclinator for more information.



DOOR FRAME DETAIL

STANDARD 2x4 CONSTRUCTION WITH 1/2" DRYWALL (INSIDE & OUTSIDE OF HOISTWAY)





HALLWAY VIEW

HOISTWAY VIEW

INSTALLATION OF DOOR INTERLOCKS

⚠ WARNING

FAILURE TO INSTALL INTERLOCKS CORRECTLY MAY RESULT IN INJURY OR DEATH.

GENERAL INFORMATION

Inclinator-Honeywell residential door interlock switches are electromechanical devices designed for use in residential swing door applications. The interlock holds the door in place and prevents it from being opened in potentially unsafe conditions (e.g. the elevator car is not present at the landing door).

Inclinator-Honeywell interlocks comply with ANSI/ASME A17.1 & A18.1:2010, (the safety code standards for elevator and escalators), CAN/CSAB44, and UL104 standards. The snap-action cam mechanism reduces adjustment set-up time and the key engagement was designed to minimize maintenance costs. The Inclinator-Honeywell interlocks has a robust zinc die cast housing and cover with a powder coat finish (white or bronze). Inclinator-Honeywell interlocks are available in left- and right-hand versions, allowing for simplified installation.

The Inclinator-Honeywell interlock must be specified as either "left" or "right" hand since it cannot be changed in the field. When standing on the landing floor, looking into the elevator cab, if the lock mounts on the RIGHT side of the doorjamb it is a "RIGHT HAND LOCK". If it mounts on the LEFT side it is a "LEFT HAND LOCK."

⚠ WARNING

INCLINATOR-HONEYWELL RESIDENTIAL DOOR INTERLOCKS ARE NOT A SEALED ASSEMBLIES. IT IS NOT RECOMMENDED TO BE USED IN THE AREAS WHERE LIQUID OR OIL MAY SPLASH.

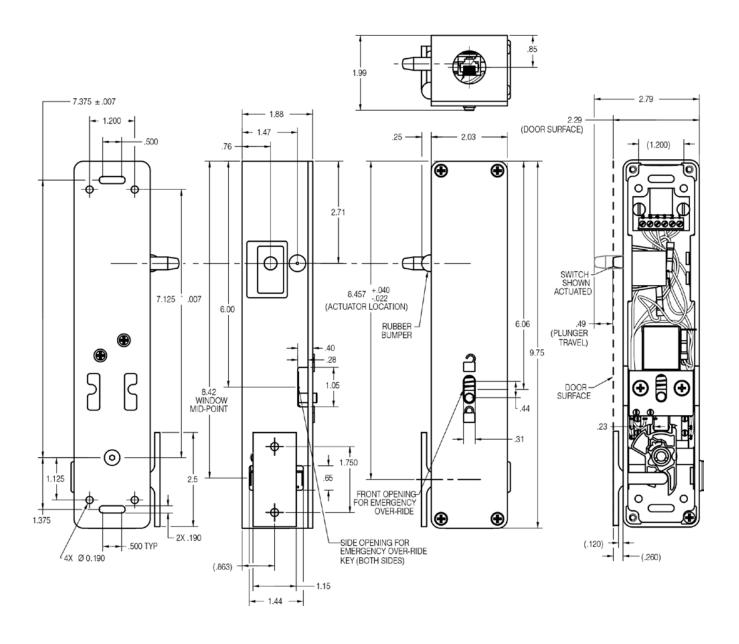
↑ CAUTION

The Inclinator-Honeywell residential door interlock is not to be used for non-residential applications where interlocking of swing type doors is required.

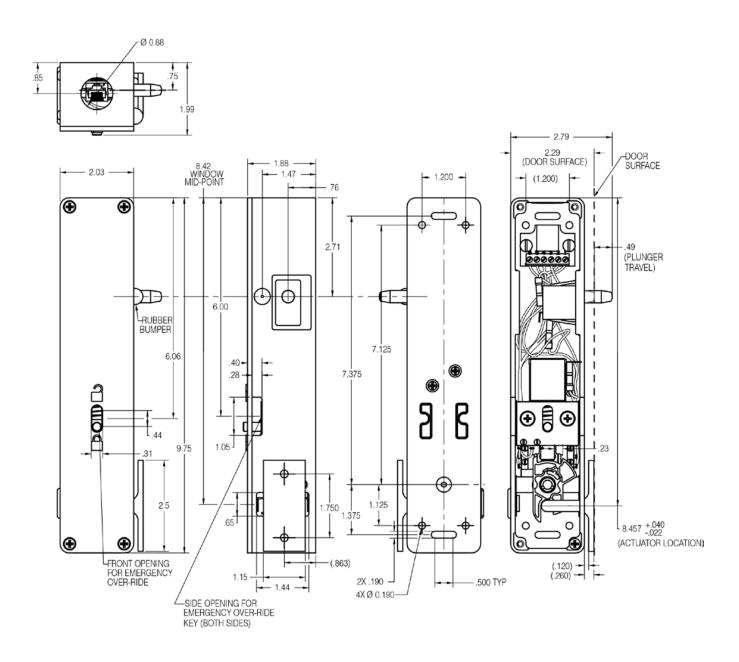
MOUNTING

Refer to the following mounting dimension drawings for the installation locations. A separate mounting template is provided in the product packaging which will guide the installer on how to prepare for the installation of the interlock. The interlock shall be mounted only in vertical orientation with the conduit opening at the top. Remove the terminal block assembly inside the housing to reach the mounting holes. Ensure that the terminal block is assembled back onto the housing securely using the screws, once the interlock is mounted.

LEFT-HAND MOUNTING DIMENSIONS (For reference only)



RIGHT-HAND MOUNTING DIMENSIONS (For reference only)



ADJUSTMENT

The mounting template aligns the key to the center of the opening in the interlock housing allowing for door sag over time without any adjustment.

IMPORTANT NOTICE

Strict compliance with installation instructions / mounting template is essential for safety. It is the customer's responsibility to ensure they are followed. It is imperative any wear on the actuator key or on the switch itself are identified at an early stage and the necessary corrective actions implemented (replacement), thus ensuring safety.

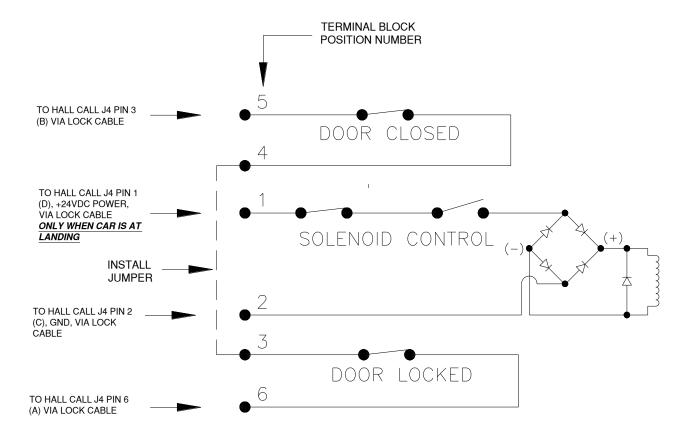
GENERAL DIRECTIONS

- A. The actuator key for the switch MUST move freely without jamming during operation.
- B. The alignment of the key to the switch MUST be checked as per the mounting template.
- C. Visually ensure that no mechanical damage has occurred to the switch body or key. If damage is found the complete switch assembly MUST be replaced.
- D. Test the switch for correct electrical operation while installed and operated normally.

INTERLOCK WIRING INSTRUCTIONS

The Inclinator-Honeywell interlock will be assembled with a wire harness designed to plug directly into the lock cable. If you need to disconnect the wire harness, use the following instruction and diagram to reconnect the harness.

- 1. Remove the cover by unscrewing the cover screw(s).
- 2. Unscrew the terminal screws. Connect wires per the schematic provided below. Torque all terminal screws with a tightening torque of 0.5 Nm to 0.7 Nm.
- 3. Reinstall the cover and securely tighten the screw(s). Recommended tightening torque for the cover screw(s) is 1.5 Nm max.



DOOR INTERLOCK EMERGENCY ACCESS

The Inclinator-Honeywell interlock has a lock lift pin for manually unlocking the hoistway door.

If the interlock is being used with an Inclinator-Honeywell Keeper Mounting Bracket Kit or a Pre-hung Flush Door Assembly Kit, a special key is required to unlock the door. Insert the key through the hole and push down (outside of door) to lift the lock pin and unlock the door. This key, Inclinator part number 21301116 Door Interlock Escutcheon key, must be ordered separately.

If mounting the interlock without the Keeper Mounting Bracket, a hole must be drilled in the door to access the lock lift pin. Use the mounting template included in the packaging of the lock for details on the location and size of this hole. To unlock the door, place a long slender screwdriver or 1/4" diameter pin through the hole and push down (outside of door) to lift the lock pin and unlock the door.

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