

Emergency Stop Switch Upgrade

Packaging

1 ea.	P1-040085-000	Package
2 ea.	47-142870-000	Assembly, Emergency Stop Box - Front
1 ea.	47-142871-000	Assembly, Emergency Stop Box - Back
1 ea.	47-142770-000	Assembly, Rear Start Box
1 ea.	47-862867-000	Package - Emergency Stop Interface Box
1 ea.	47-902012-000	Instructions

Tools Needed

Drill Motor
1/4" (6 mm) Drill Bit
7/64" (3 mm) Drill Bit
Safety Glasses

Installation



WARNING! Remove power to the pinsetter by turning of the main circuit breaker and unplugging the main power cord to the electrical box.

GS Pinsetters With Older Version Nexgen Boxes

The Emergency Stop Upgrade Interface Box, package 47-862867-000, will be installed on the pinsetter front frame next to the Nexgen Box.

1. Remove the existing main power to the GS Nexgen Box. Refer to *Figure 1*.

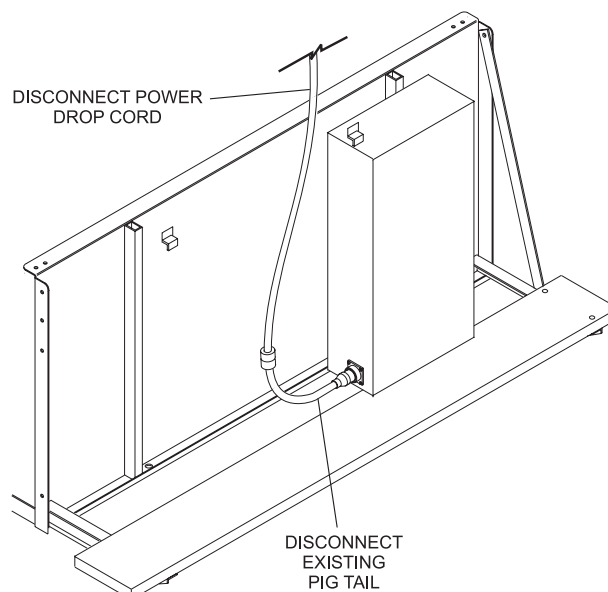


Figure 1

2. Locate and drill the first pilot hole for the Emergency Stop Interface Box. Align the predrilled hole and mark and drill the remaining three holes. Refer to *Figures 2 & 3*.

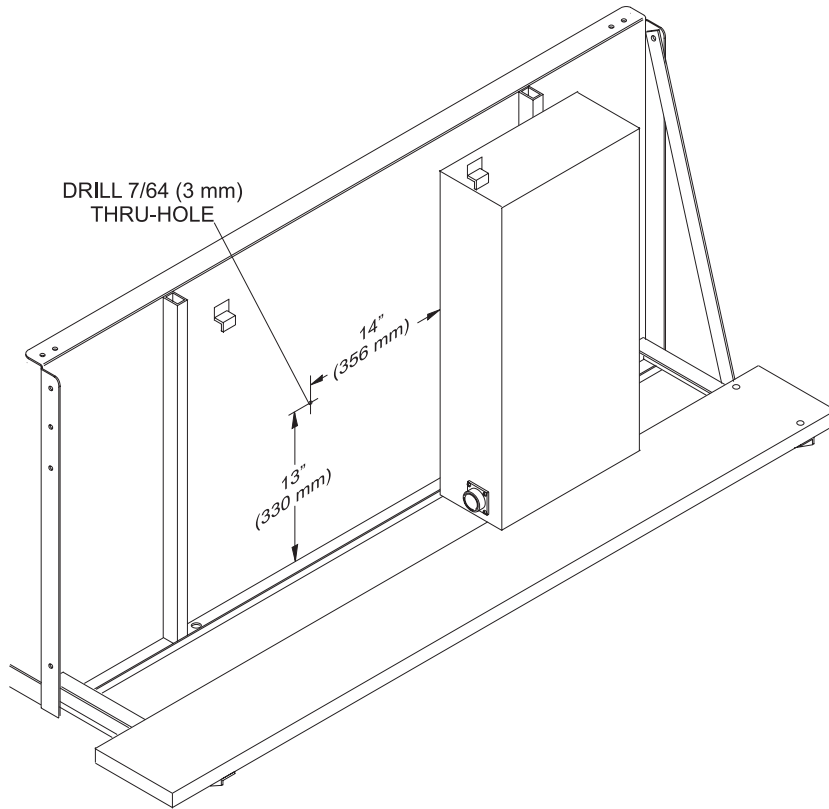


Figure 2

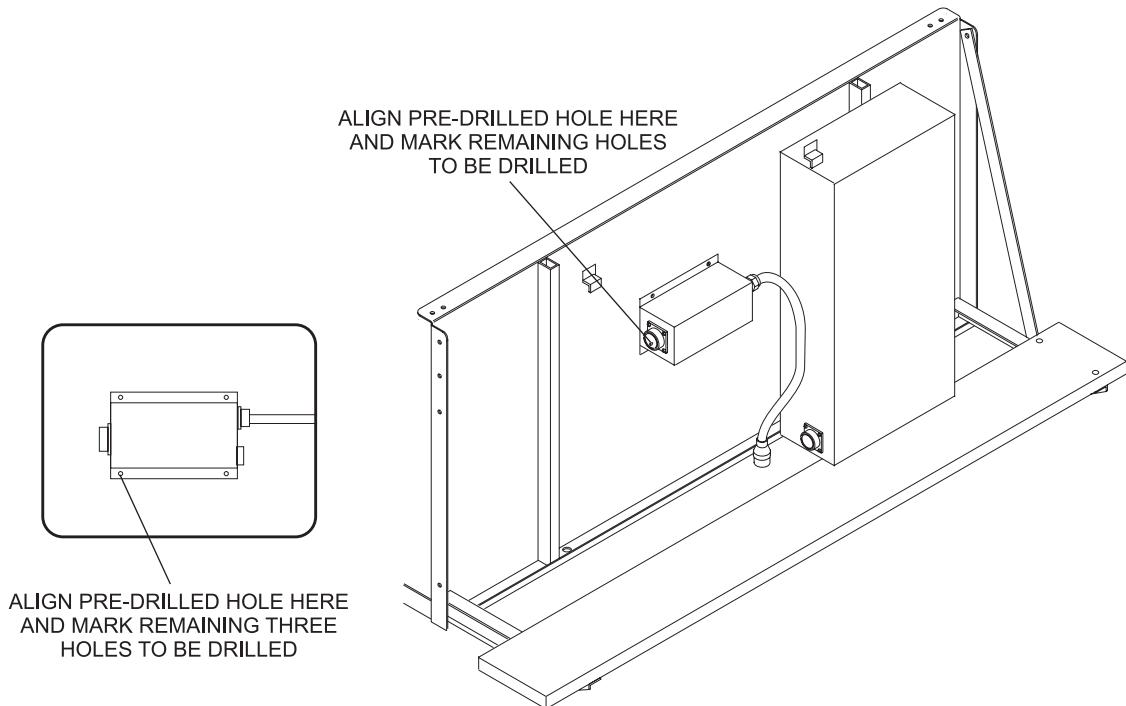


Figure 3

3. Install the Emergency Stop Interface Box assembly to the pinsetter. Refer to *Figures 4 & 5*.

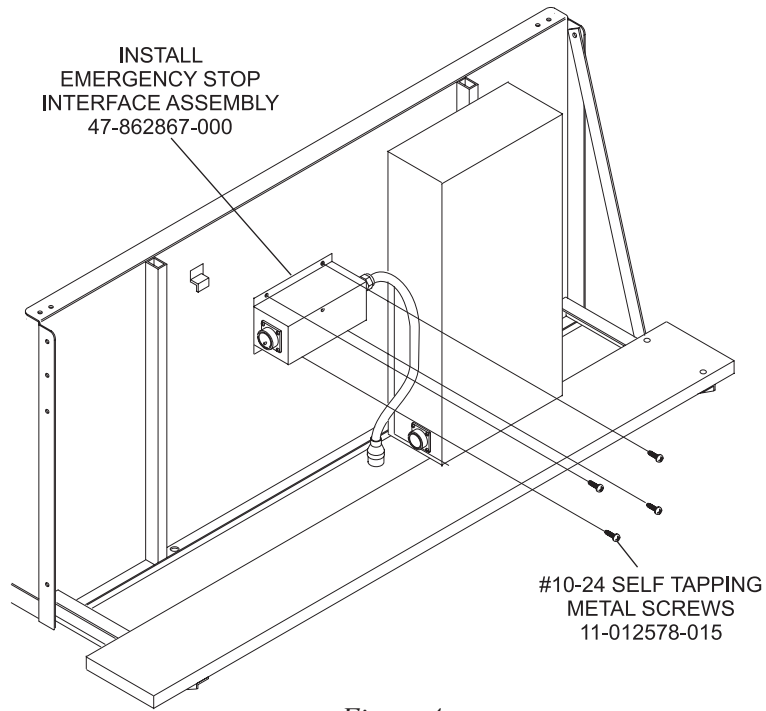


Figure 4

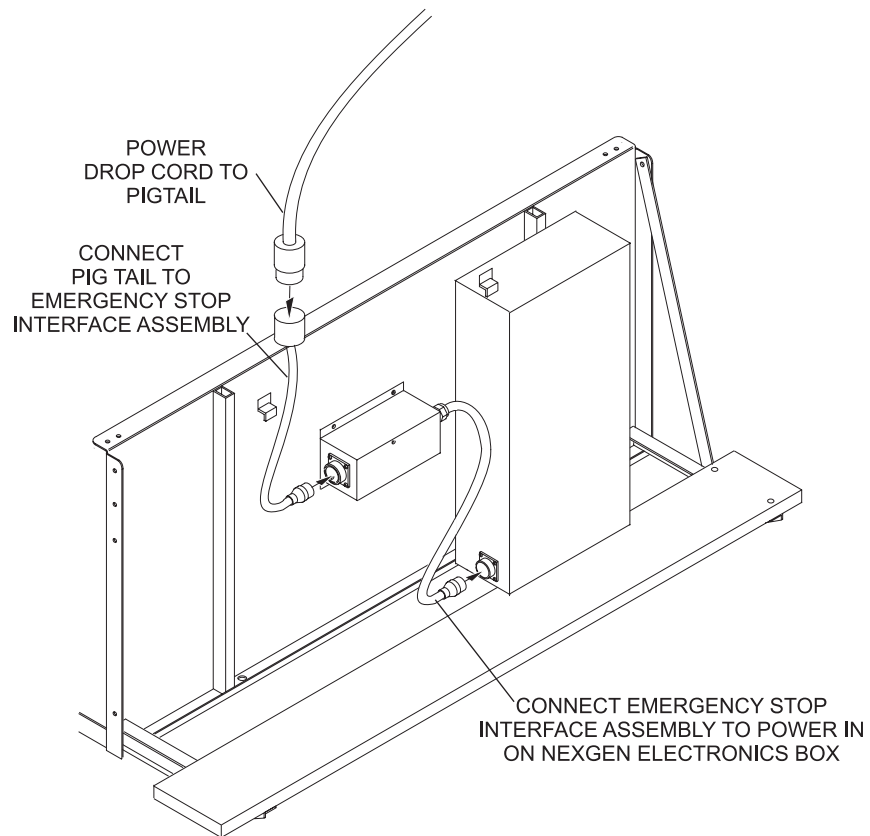


Figure 5

GS Pinsetter With Consolidated Electronics

The Emergency Stop Upgrade Interface Box, package 47-862867-000, will be installed on the pinsetter front frame next to the GS Consolidated Box.

1. Remove the existing main power to the GS Consolidated Box. Refer to *Figure 6*.

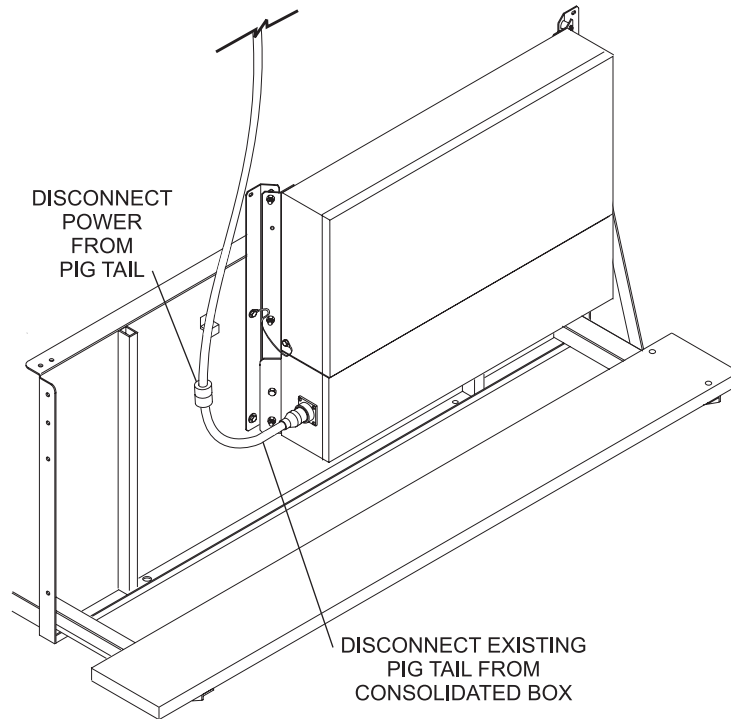


Figure 6

2. Locate and drill the first pilot hole for the Emergency Stop Interface Box. Align the predrilled hole and mark and drill the remaining holes. Refer to *Figures 7 & 8*.

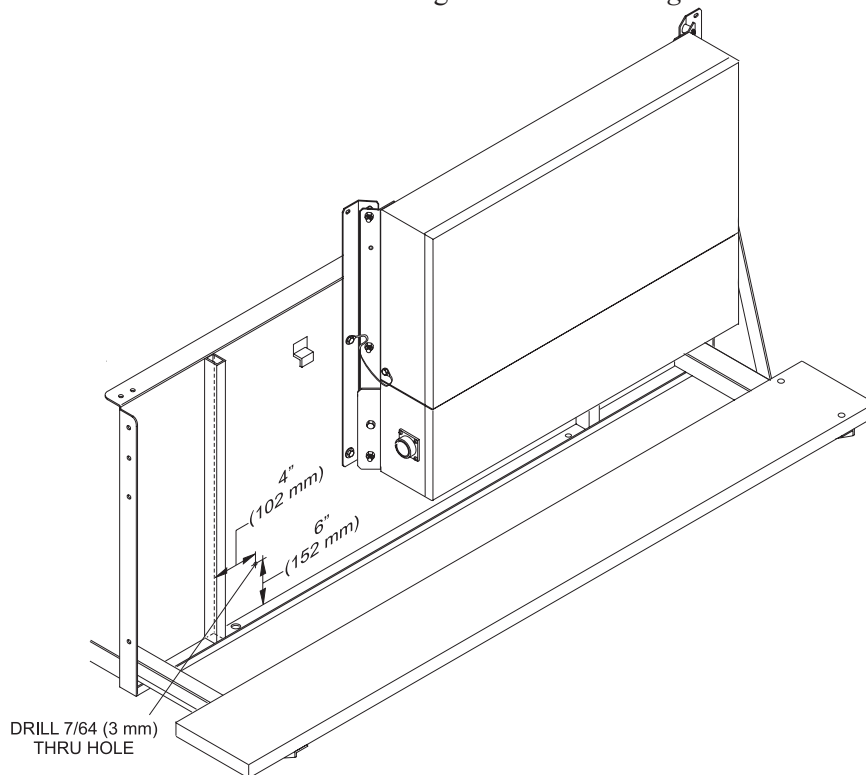


Figure 7

3. Install the Emergency Stop Interface Box assembly to the pinsetter. Refer to Figure 8.

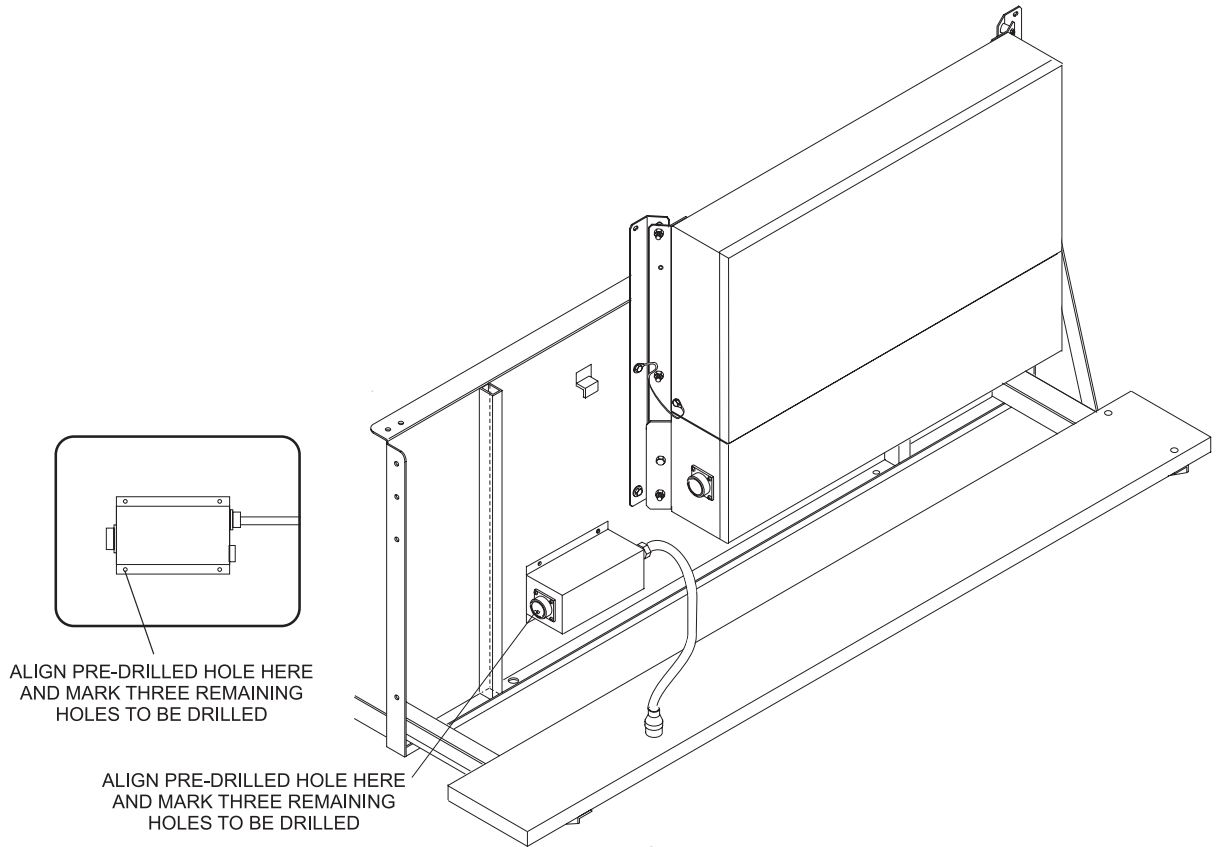


Figure 8

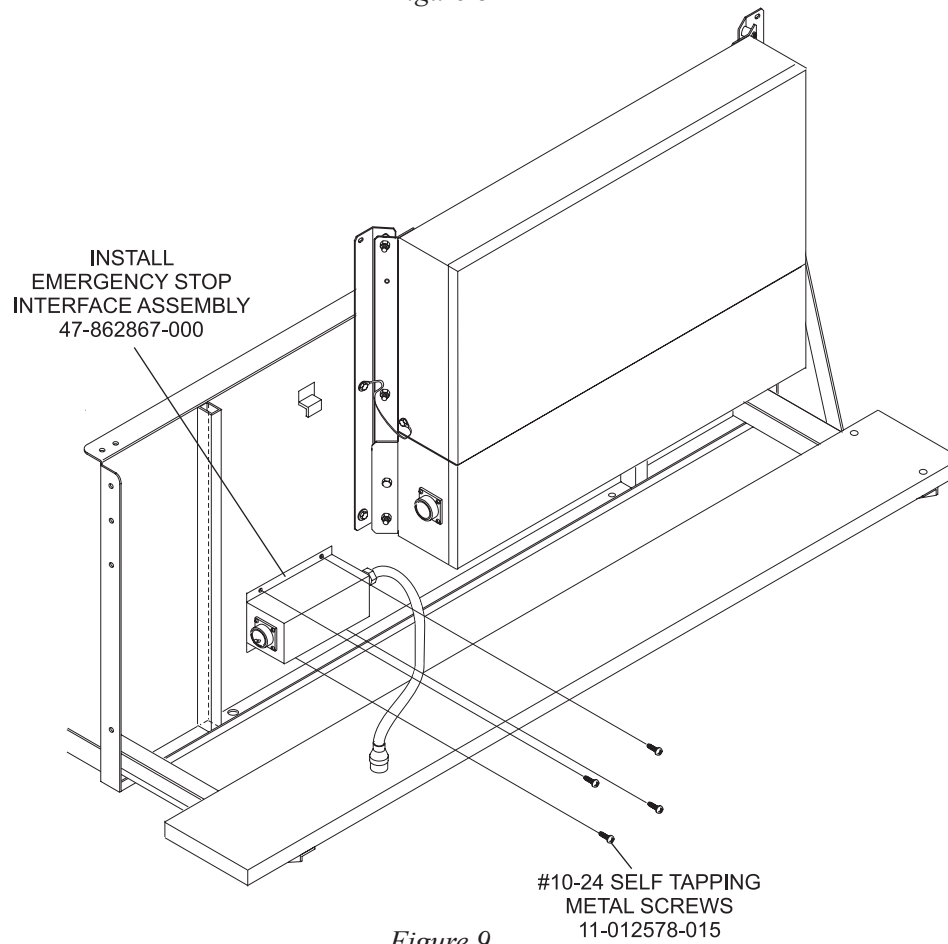


Figure 9

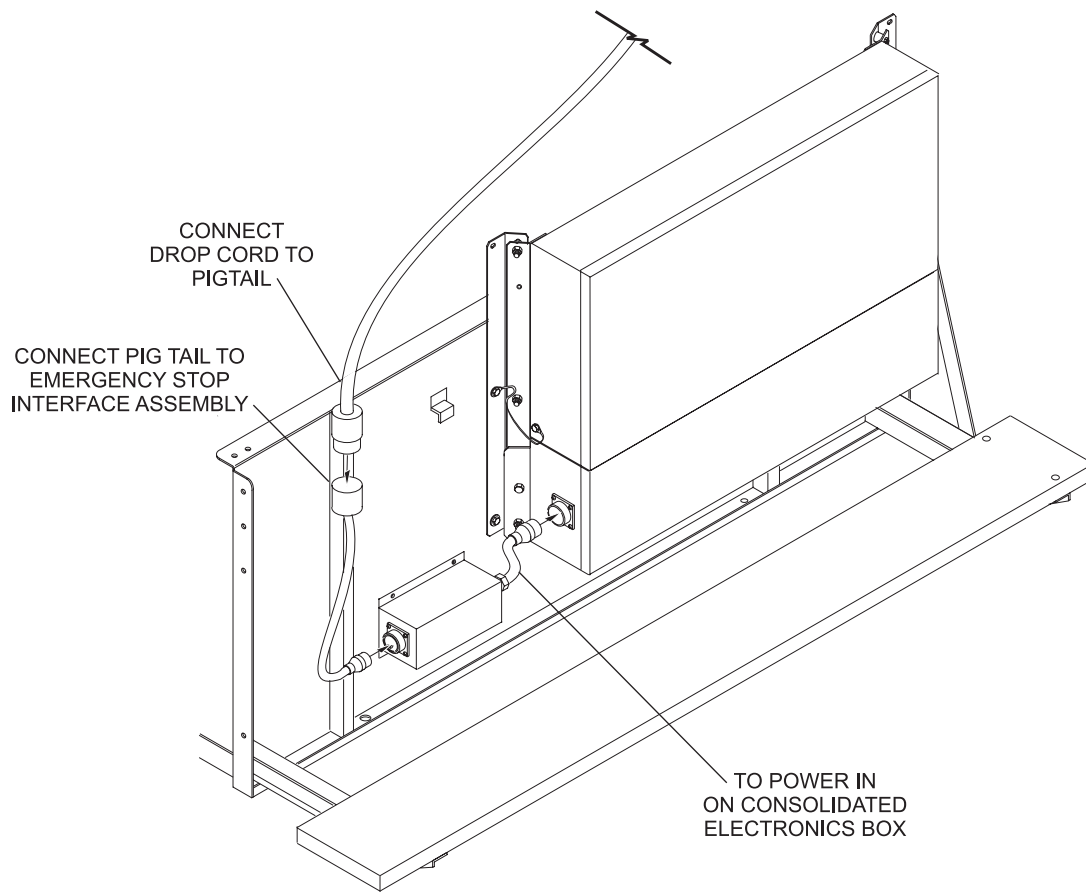


Figure 10

GS Pinsetters With Universal Silver Box Electronics

The Emergency Stop Upgrade Interface Box, package 47-862867-000, will be installed on the pinsetter front frame next to the Common Box.

1. Remove the existing main power to the GS Common Box. Refer to *Figure 52*.

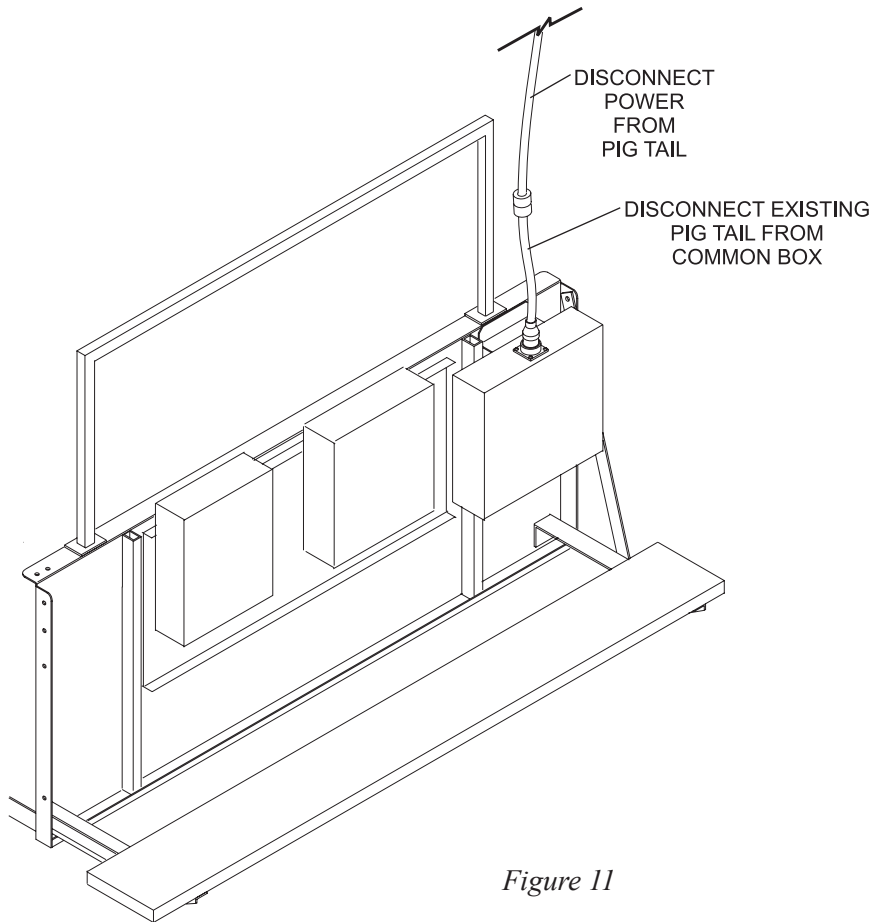


Figure 11

2. Drill two new mounting holes in the Emergency Stop Interface Box bracket. Refer to *Figure 12*.

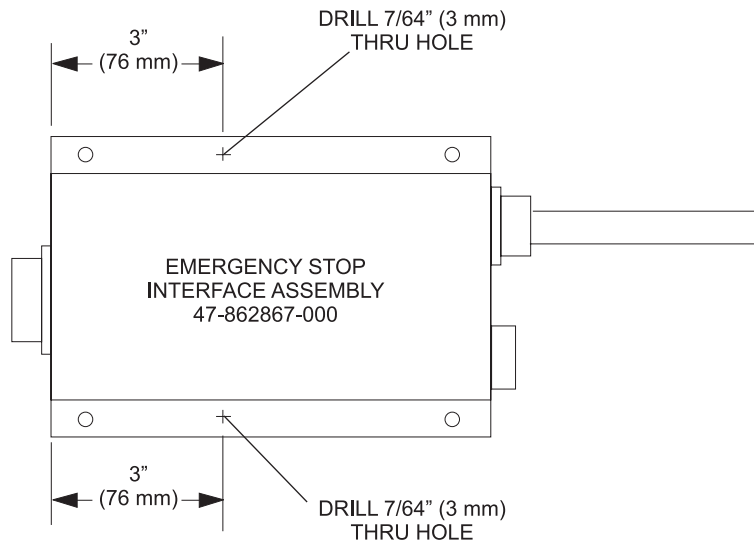


Figure 12

3. Locate and drill the pilot holes for the Emergency Stop Interface Box and install the box to the pinsetter. Refer to *Figure 13*.

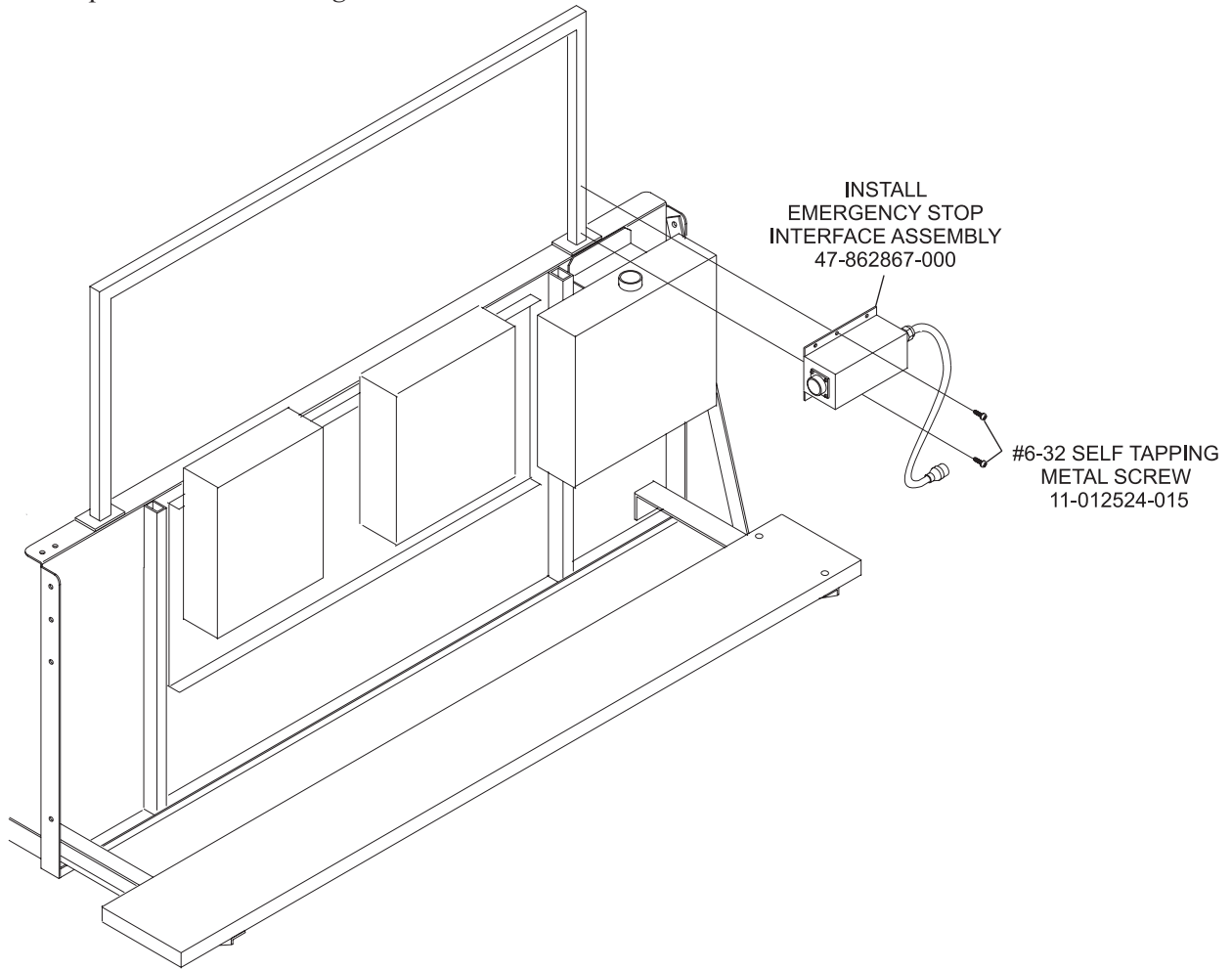


Figure 13

Emergency Stop Box on Front of Pinsetter

Locate and attach the E-stop Switches on the pair of pinsetters.

IMPORTANT! The two front emergency stop box assemblies have the same cable length, 8' (244 mm) The emergency stop box for the elevator has a longer 18' (549 mm)

1. From the left hand side of the pinsetter front frame, measure over 31 inches (787mm) and mark this location on the top of the front frame with a pencil. Refer to Figure 2.
2. From this mark, measure down 1.5 inches (38 mm) and mark this point with a pencil. Refer to Figure 14.

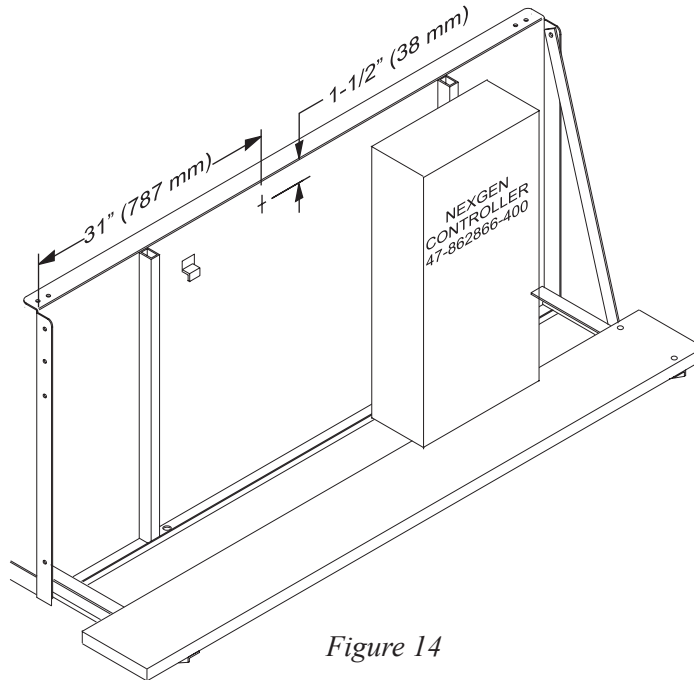


Figure 14

3. Take the cover off the emergency stop switch box (47-142870-000) and using the base, align the upper left hand hole with the pencil mark made in step two. Refer to Figure 15.

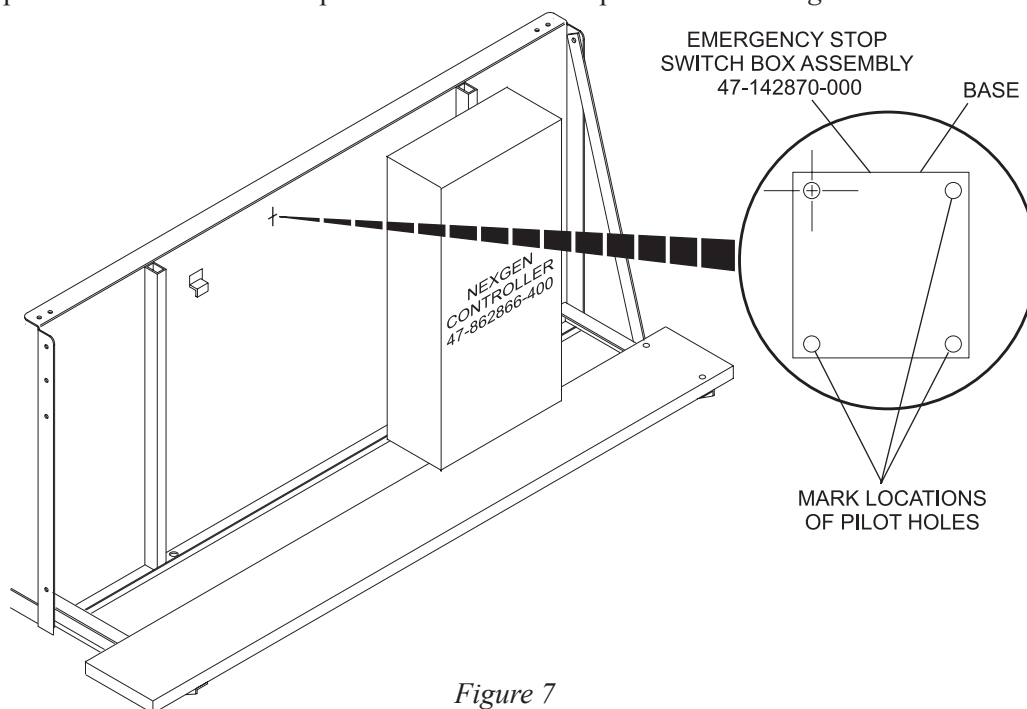


Figure 7

4. Using the base as a template, mark the remaining holes with a pencil. You are now ready to drill out the pilot holes to mount the emergency stop switch box.
5. Drill out the box mounting pilot holes using a 7/64 inch (3 mm) drill bit. Be sure to place a container under the area you are drilling in to catch the drill filings.
6. Use the #6-32 self tapping metal screws, part number 11-012524-015, provided to mount the box to the front frame of the pinsetter. Refer to Figure 4. Replace the outer cover for the box using previously removed screws after the back cover is secured to the pinsetter front frame. Refer to *Figure 16*.

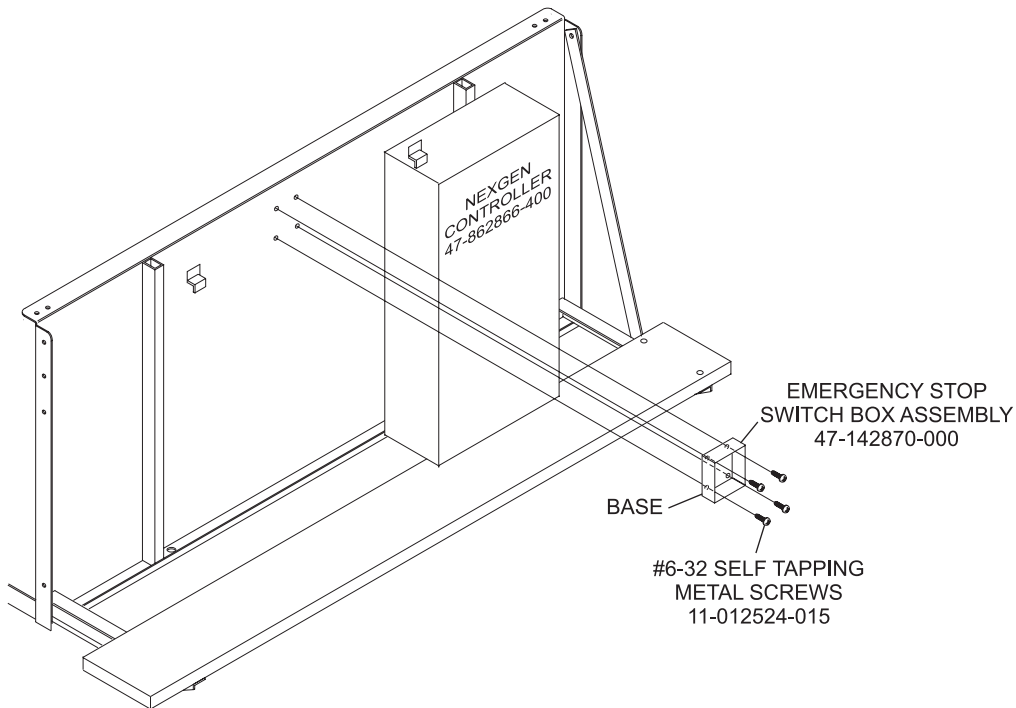


Figure 16

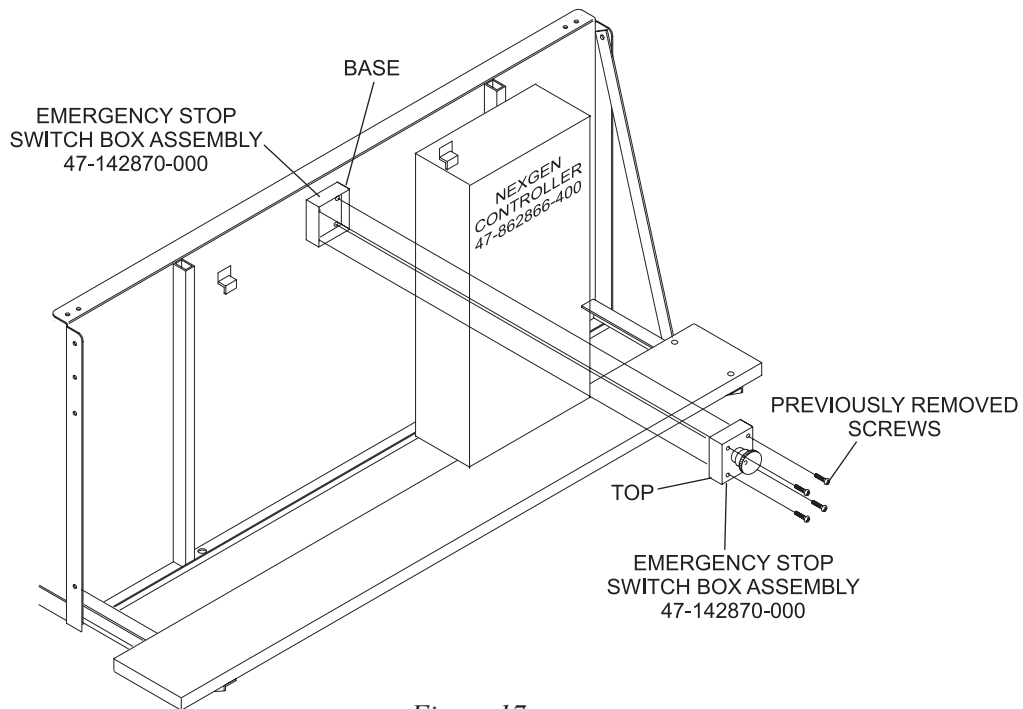


Figure 17

Emergency Stop Box on Odd Lane Pinsetter

For each lane pair of pinsetters there is one emergency stop switch located on the odd lane elevator.

1. Install the Emergency Stop Box w/Bracket Assembly (47-142871-000) to the left-hand side of the odd lane pinsetter elevator.

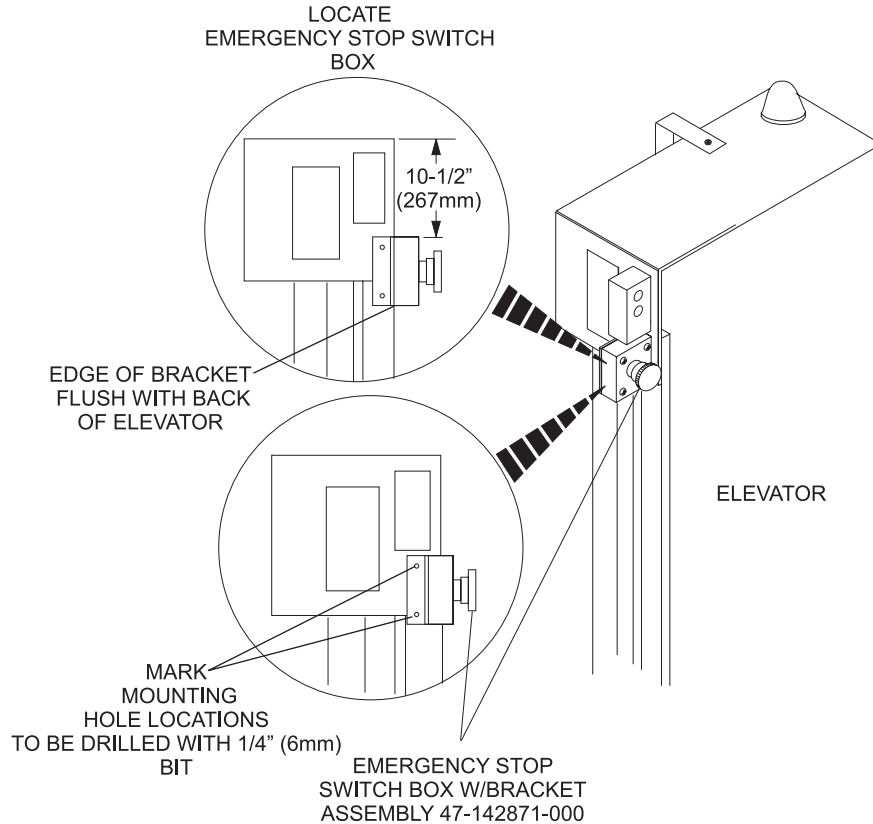


Figure 18

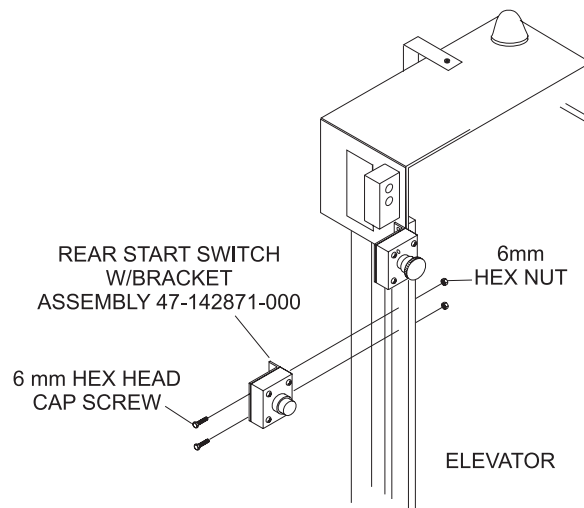


Figure 19

2. Route the cable from the emergency stop switch on the elevator up to the front of the pinsetter by going up the right hand cable channel on the left hand pinsetter.

Rear Start Switch

1. Locate and install the Rear Start Switch (47-142770-000) on the odd lane pinsetter elevator frame. Follow the same procedure as the Emergency Stop Box installed on the elevator.

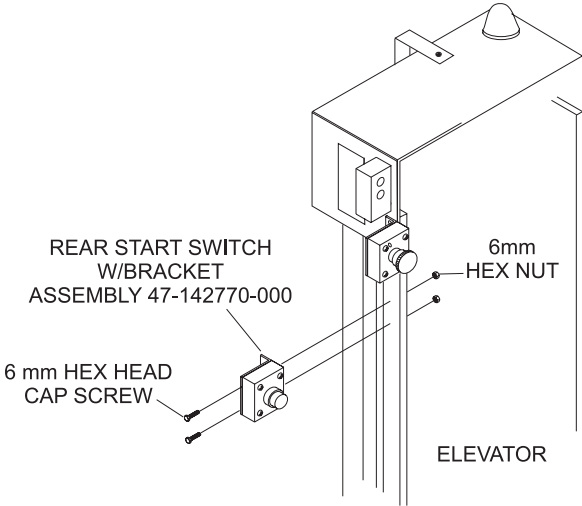


Figure 20

Emergency Stop Box Installation

1. Route all E-stop Switch cables and the Rear Start Switch cable back to the Interface Box and connect the cables. Refer to *Figure 21*.

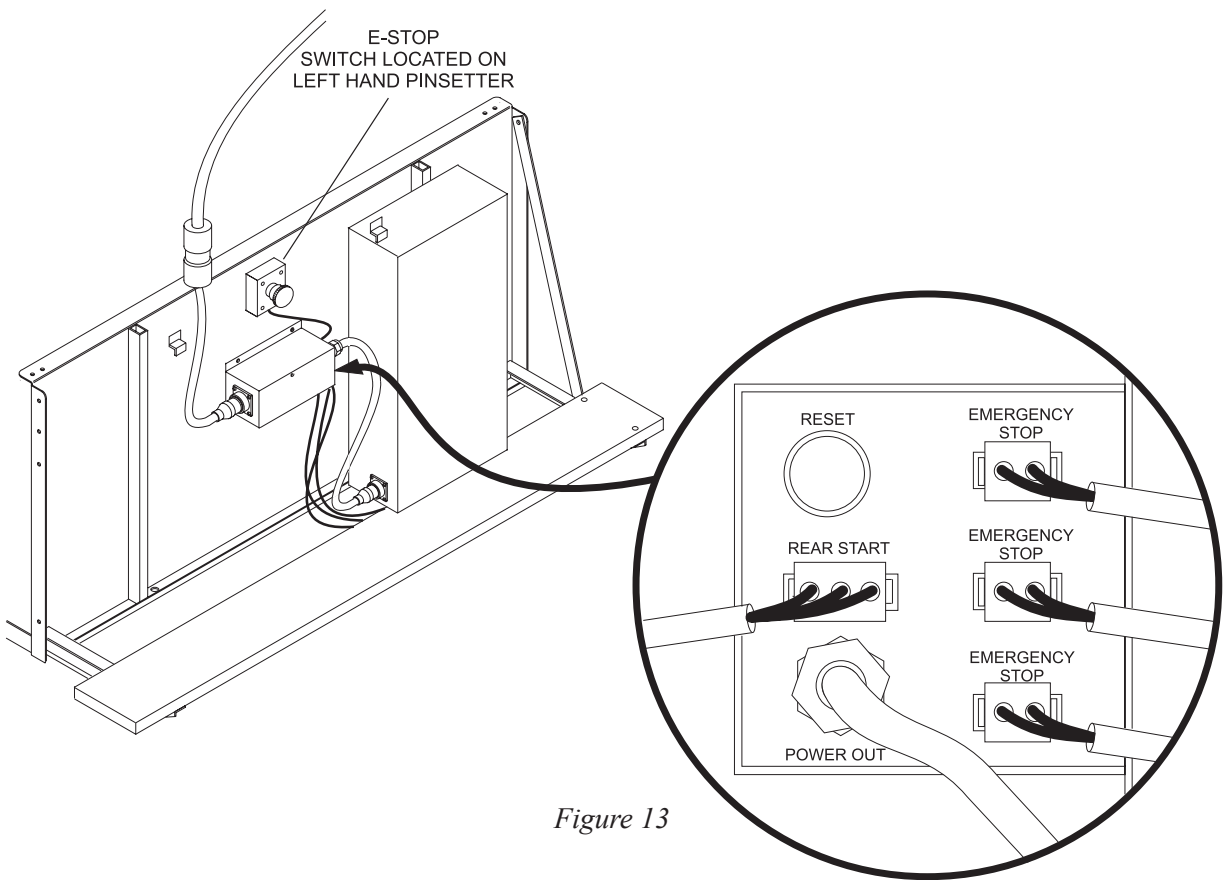


Figure 13

i **NOTE:** The three E-Stop Switches are all electrically wired in series. The position of the cable connection is not important as long as ALL three E-stop switches are connected to the Emergency Stop Upgrade Interface Box.

Either the Rear Start Switch or the Reset Button on the Interface Box will need to be pressed for the initial first start of the pinsetter or any time one of the three E-stop Switches are pressed.

i **NOTE:** All E-stop Switches will need to be disengaged or reset before the Rear Start Switch or the Reset Switch on the Interface Box can be pressed.