

Model PS1 Parking Slider
Operation and Maintenance Manual

Revised 5/21/2021

MANUFACTURER'S LIMITED WARRANTY FOR CAROUSEL USA MODEL PS1

The limited warranty set forth below is given by Carousel USA with respect to new merchandise purchased and used in the United States, its territories and possessions, and Canada.

"Carousel USA" warrants this product (excluding its *Normal Wear Parts* as described below) against defects in material and workmanship for a period of two (2) years commencing on the date of delivery to user and will, at its option, repair or replace, free of charge, any part found to be defective in materials or workmanship. This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of other peril or natural disaster. Damage resulting from the installation or use of any part, accessory or attachment not approved by Carousel USA for use with the product(s) covered by this manual will void your warranty as to any resulting damage.

Normal Wear Parts are warranted to be free from defects in material and workmanship for a period of (1) one year from the date of delivery to user. Normal wear parts include, but are not limited to items including: support wheels, and pinion gears.

HOW TO OBTAIN SERVICE: Warranty service is available, WITH PROOF OF PURCHASE, through Carousel USA.

Carousel USA
15206 Ceres Avenue
Fontana, CA 92335
626-334-7190
www.carousel-usa.com

This limited warranty does not provide coverage in the following cases:

Routine maintenance items such as lubricants, drive adjustments, deck adjustments, running gear cleaning, and normal deterioration of the exterior finish due to use or exposure.

- a. Service completed by someone other than an authorized service dealer.
- b. Carousel USA does not extend any warranty for products sold or exported outside of the United States and/or Canada, and their respective possessions and territories, except those sold through Carousel USA's authorized channels of export distribution.
- c. Replacement parts that are not genuine Carousel USA parts.
- d. Transportation charges and service calls.

No implied warranty, including any implied warranty of merchantability or fitness for a particular purpose, applies after the applicable period of express written warranty above as to the parts as identified. No other express warranty, whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product, shall bind Carousel USA. During the period of the warranty, the exclusive remedy is repair or replacement of the product as set forth above.

The provisions as set forth in this warranty provide the sole and exclusive remedy arising from the sale. Carousel USA shall not be liable for incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement turntable services or for rental expenses to temporarily replace a warranted product.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. **Alteration of safety features of the product shall void this warranty.** You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the misuse or inability to use the product.

This limited warranty shall not extend to anyone other than the original purchaser.

HOW STATE LAW RELATES TO THIS WARRANTY: This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

IMPORTANT: Owner must present Original Proof of Purchase to obtain warranty coverage.

Proprietary Information

Carousel USA has proprietary rights on the information in this document. It is forbidden to copy, duplicate or disclose the information herein, in whole or in part, or make use of the information, unless permission has been previously obtained, in writing, from Carousel USA.

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1. Scope

This manual provides a technical description, installation & assembly, general safety, and maintenance of the PS1 Parking Slider.

2. Introduction

The PS1 Parking Slider is designed with features to fulfill system operation requirements as follows:

- Surface mounted tracks which guide the direction of the platform
- Ridged, steel construction allowing most full-sized SUV's to park on platform
- Textured, non-skid surface
- Pivoting ramps with gas struts
- Direct drive, providing consistent torque
- V-groove wheels with heavy duty mounted roller bearings
- ½ HP commercial quality, Nord motor and helical-worm gearbox
- Control box with Panel & remote controls

3. Technical Description

A. Mechanical Operation

The rigid steel slider platform rolls on four V-groove wheels which are supported by roller bearings. The Slider is powered by a ½ HP Nord gearmotor. The Gearbox output shaft is connected to one of the V-groove wheels. The driven V-groove wheel propels the slider cart along the tracks translating the slider cart from side to side. Limit switches are located on each end of the tracks to provide end travel of the Parking Slider.

B. Table of Specifications

Platform Dimensions (Length x Width	143'' X 80''
Platform Height	6 - 11/16''
Load Capacity	6,000 LB operating capacity
Top Surface	Textured Powder coat
Linear Speed	0.3 to 1.2 FPS
Required power	120V, Single Phase, 5A

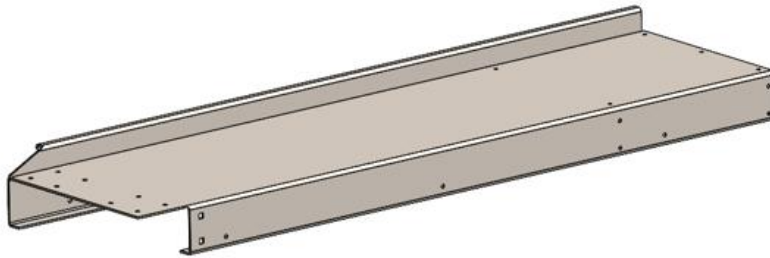
4. General Installation

A. General

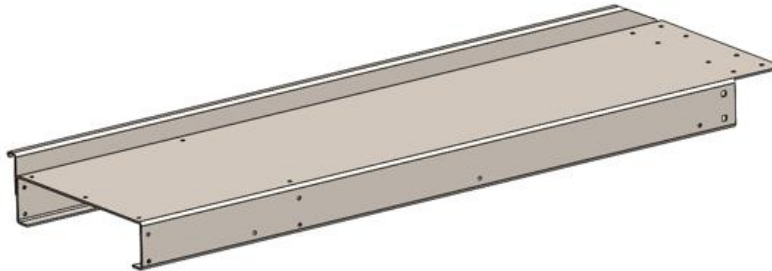
The Parking Slider components should be unloaded from the packing crate and laid out in assembly area. Inspect crate for external damage, Contact Carousel USA immediately if any components within the crate have been damaged or missing. Two persons are required for installation with the aide of lifting equipment, or 3 persons without any lifting equipment.

B. Installation and Assembly

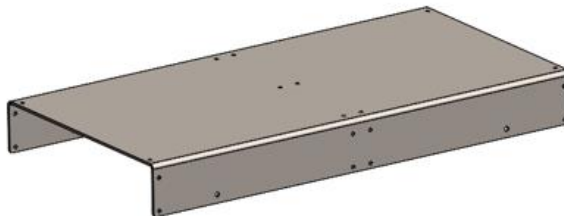
ITEM #	PART/ASSEMBLY NAME	PART NUMBER	QTY PROVIDED
1	PLATFORM A	PS-PA	2
2	PLATFORM B	PS-PB	2
3	PLATFORM CONNECTOR	PS-PC	2
4	RAMP ASSEMBLY	PS-RA	2



1



2

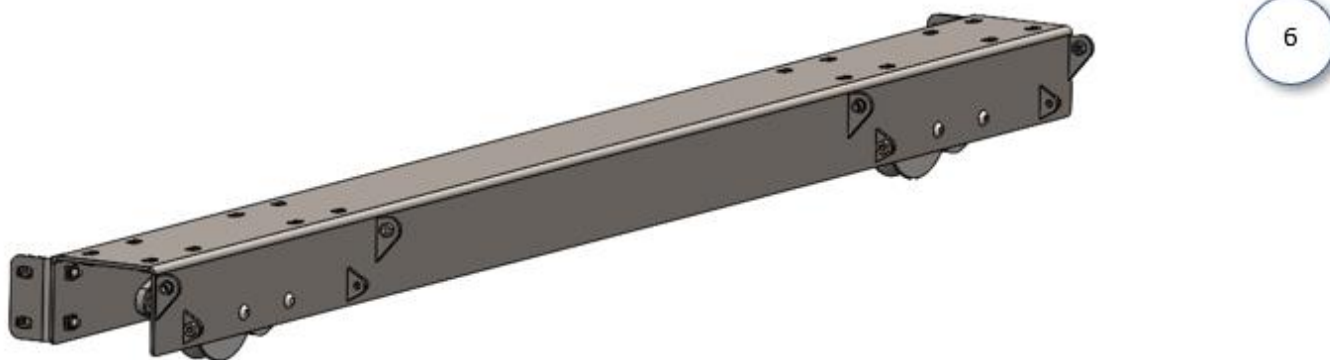
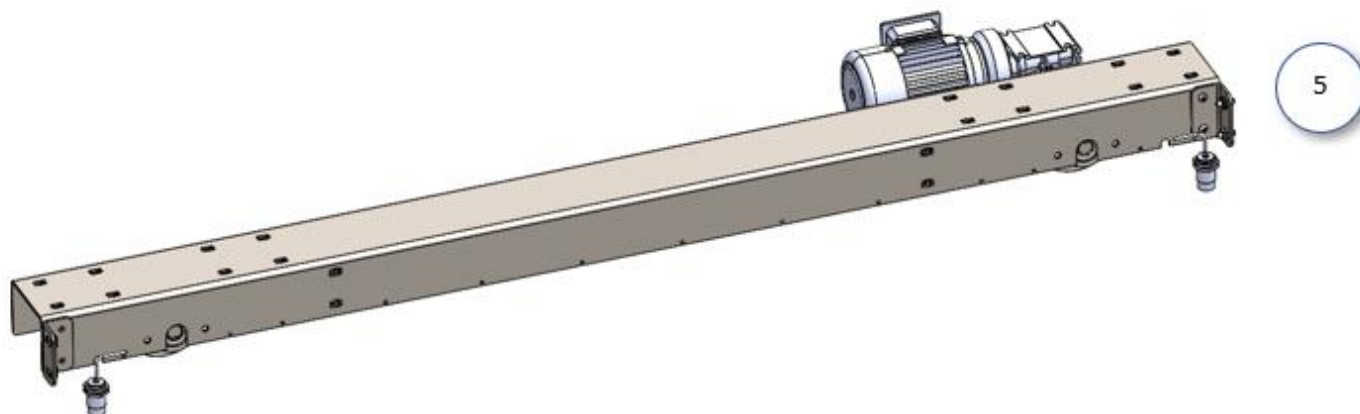


3



4

ITEM #	PART NAME	PART NUMBER	QTY PROVIDED
5	MOTOR CROSS-MEMBER ASSEMBLY	PS-CRA-M	1
6	CROSS-MEMBER ASSEMBLY	PS-CRA	1
7	TRACK	PS-TR	6



ITEM #	PART/ASSEMBLY NAME	PART NUMBER	QTY PROVIDED
8	END STOP	PS-ST	4
9	LIMIT SWITCH FLAG	PS-LS	2
10	M8 X 25MM BUTTON CAP SCREW	M825BHCS	116 + 4 SPARE
11	¼" X 2¼" SELF TAPPING ANCHOR	TCS14214	48
12	CONTROL BOX	SCB-PS	1
13	CONNECTOR BRACKET	PS-CB	4
14	WHEEL STOPS	PS-WS	2



8



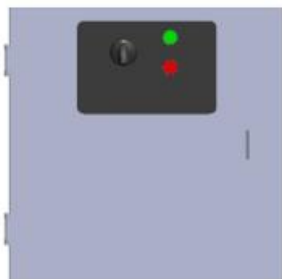
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10



11



12



13



14

TOOLS REQUIRED FOR INSTALLATION



3/8" DRIVE RATCHET



IMPACT DRIVER



3/16" X 4" MASONRY DRILL BIT



METRIC HEX DRIVE SOCKET (5 mm)



HAMMER DRILL



METRIC ALLEN TEE-HANDLE 5mm (OPTIONAL)



SHOP VACUUM

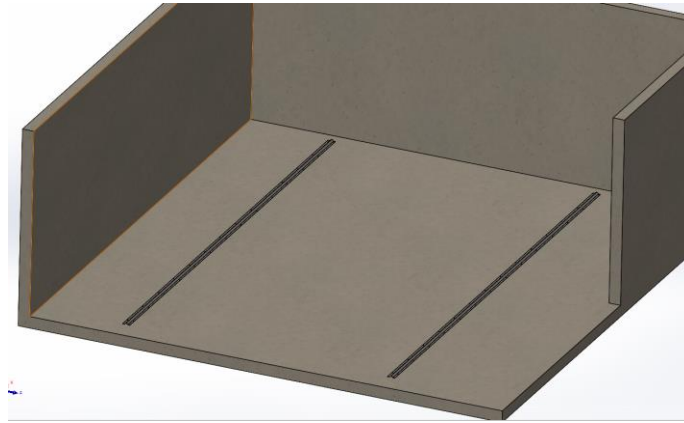


NUT DRIVER BIT 5/16"

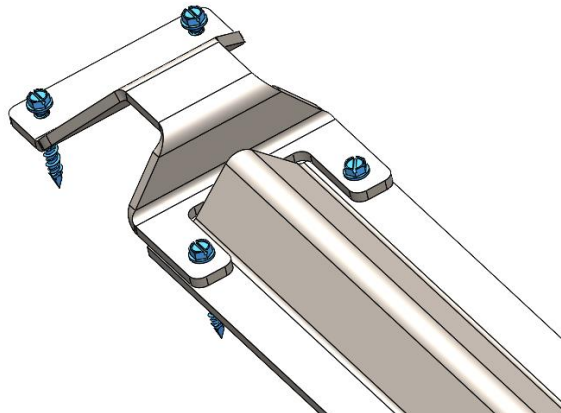
Step 1: Floor Preparation and Track Layout

A. Prepare installation site ensuring the surface is **Smooth, Flat,** and in good condition to support the loads that will be applied to the tracks. **Floor Flatness height deviation shall be no more than 1/8"**. Smooth out uneven cracks and surfaces where the tracks will be placed with dry pack mortar, epoxy resins, etc. **Un-even surfaces will cause the tracks to deflect and bend, causing the Parking slider to collide with the floor.** The Parking slider can be installed on slopes up to 1.2°, in other words, the elevation change along the 20 Ft track can be up to 5". Please contact Carousel-USA if the angle exceeds 1.2° for assistance in determining a solution.

B. Place the (6) tracks on the floor of the installation site. The Parking Slider will travel parallel to the tracks. Ensure the tracks are parallel to one another. Refer to drawing **PS-Install** for guidance on locating the Parking Slider tracks.

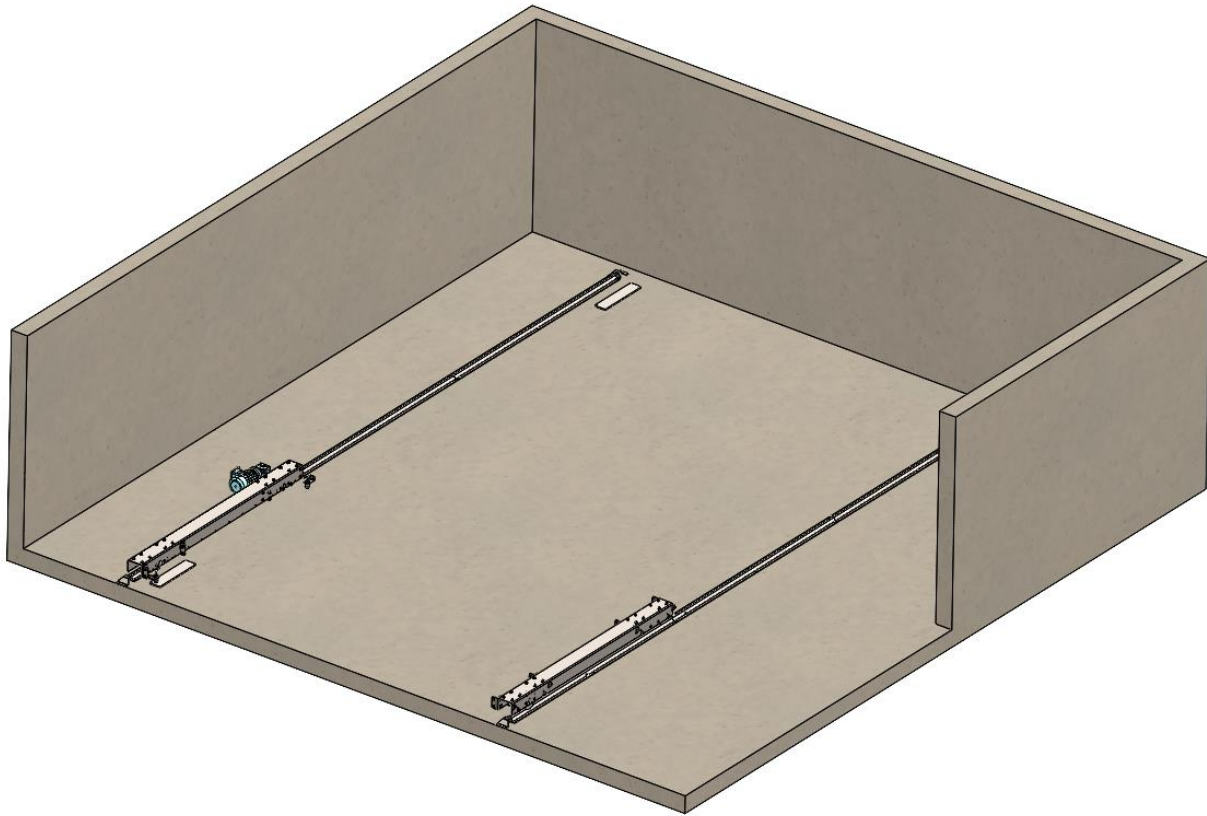


Step 2: Anchoring Tracks to the Floor- Use the 3/16" masonry bit with a hammer drill and bore holes into the floor at the given holes on the tracks. The hole should be ½" deeper than the screw embedment. Use shop vac or compressed air to remove dust and floor particles while drilling. Insert the pointed end of the ¼" anchors into the holes to fasten down the tracks. Drive the screw *slowly*, allowing the threads to tap into the concrete. Be sure to place the end stops on ends of both tracks.



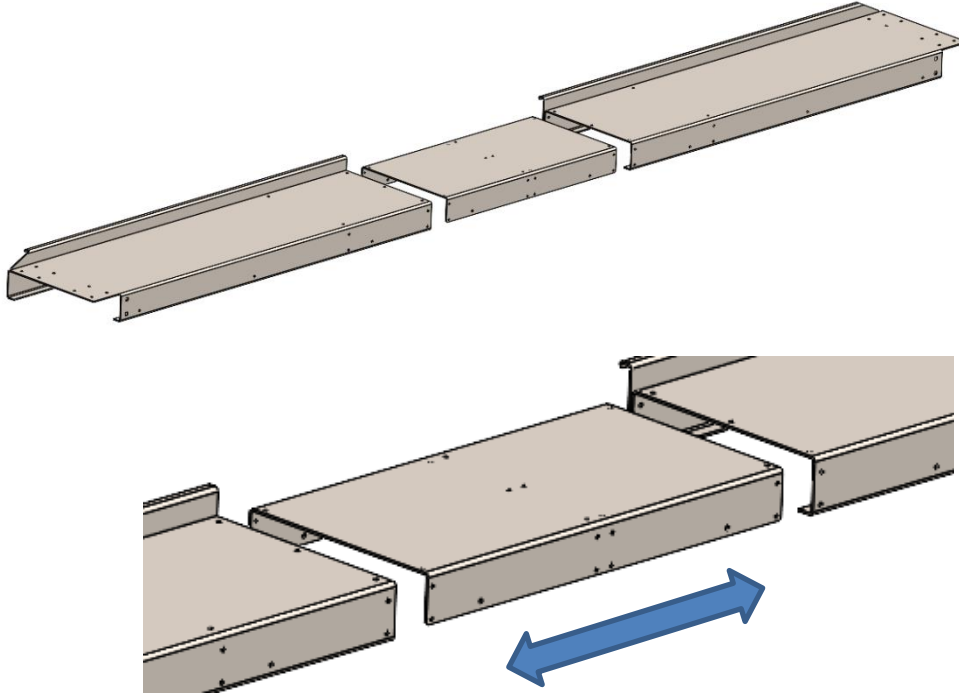
Step 3: Install the limit switch flags- See Drawing **PS-Install** for guidance on locating the limit switch flags. Use (2) ¼" anchors to fasten limit switch flag to the floor.

Step 4: Lay-out center crossmember assemblies onto the tracks. The motor crossmember must be placed on the track that is closest to the wall where the control box will be located, with the motor facing the wall. The ramp crossmember must be positioned such that the four ramp tabs are facing outwards. See images below. Remove/ cut zip ties that hold the limit switch sensor and bracket. The zip ties are only needed during shipping and transporting.

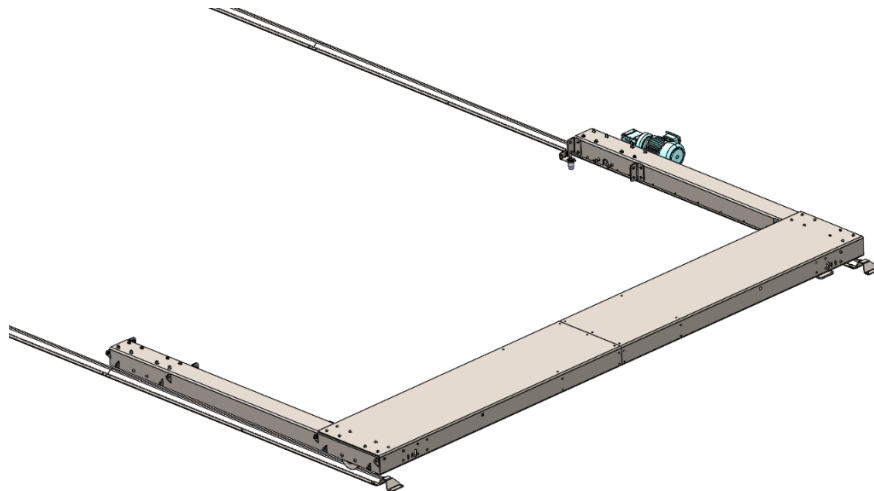


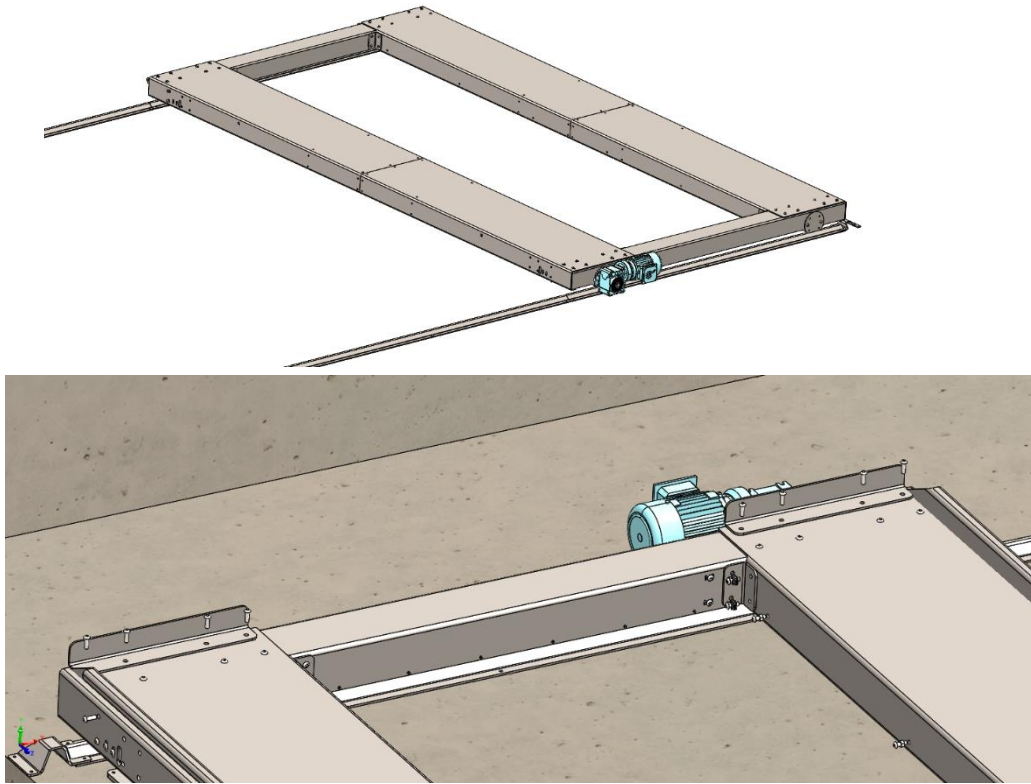
Step 5: Slider Platform Assembly Note: Do not tighten any of the hardware during this step. Tightening the hardware will create difficulties aligning and assembling the platform components!

A. Assemble (2) platforms by sliding Platform Connector into Platforms A & B. Use the M8 x 25 Button head cap screws to fasten the platform assemblies. Thread all the Platform Connector screws, but do not tighten.

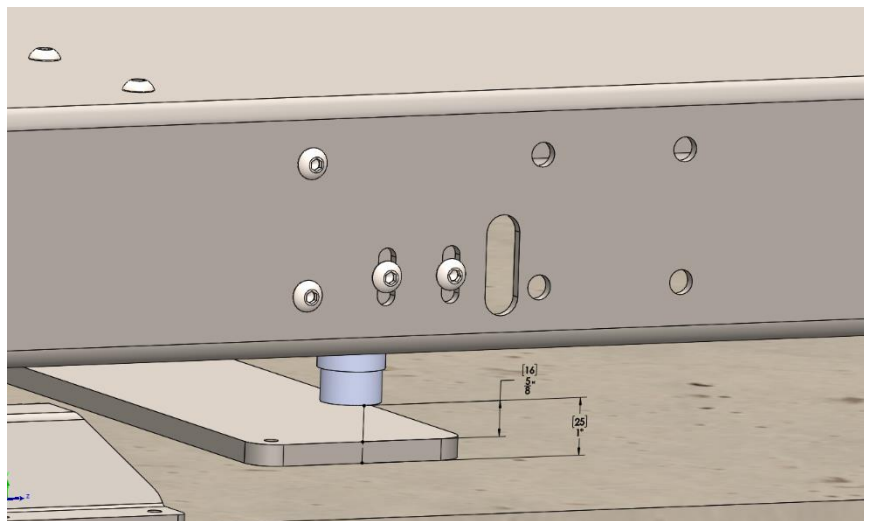
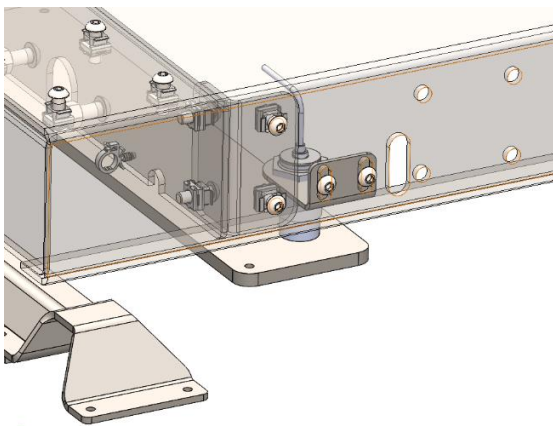


B. **Note: Ensure that the limit switch brackets and sensors are clear and away from the platform mounting surfaces prior to installing the platforms onto the crossmembers.** Place one platform onto the crossmembers and align the top holes with the corresponding snap in nuts located on the top of the crossmembers. Insert, and loosely thread the M8 x 25 button cap screws into the top and outside faces of the platform. Install the connector brackets and again loosely install the M8 x 25 Button head cap screws. Repeat this for the second platform. At the very front of each parking slider platform (motor side), install the (2) wheel stops with the supplied M8 screws. Once all M8 Button head screws are threaded, proceed to tighten them down snug. **Do not over tighten.**

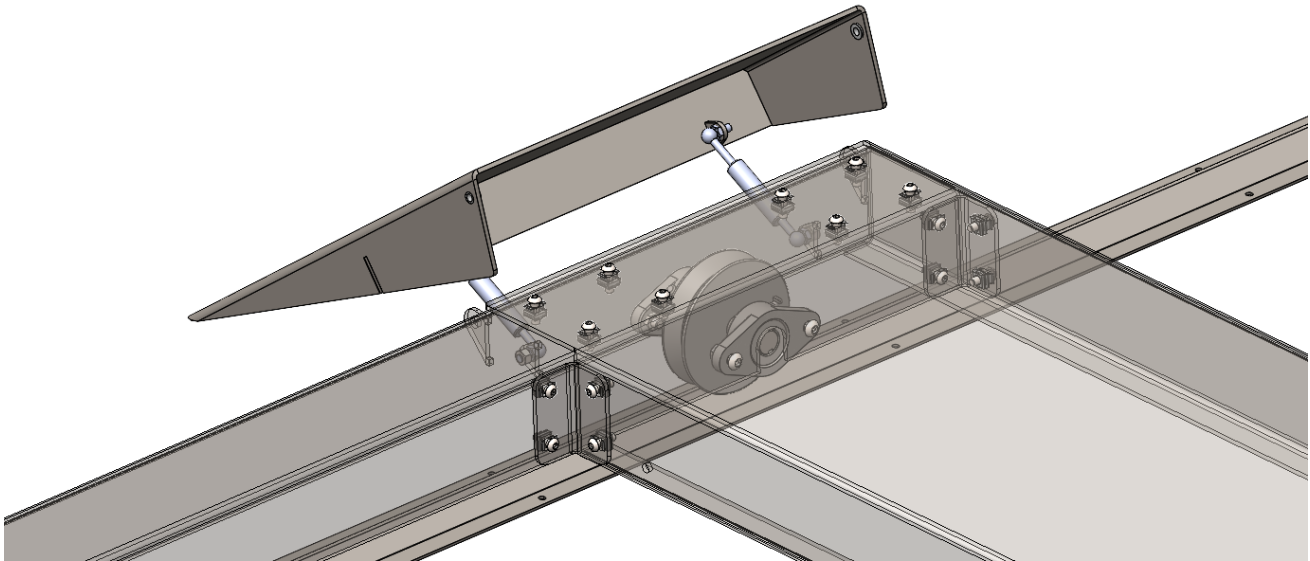




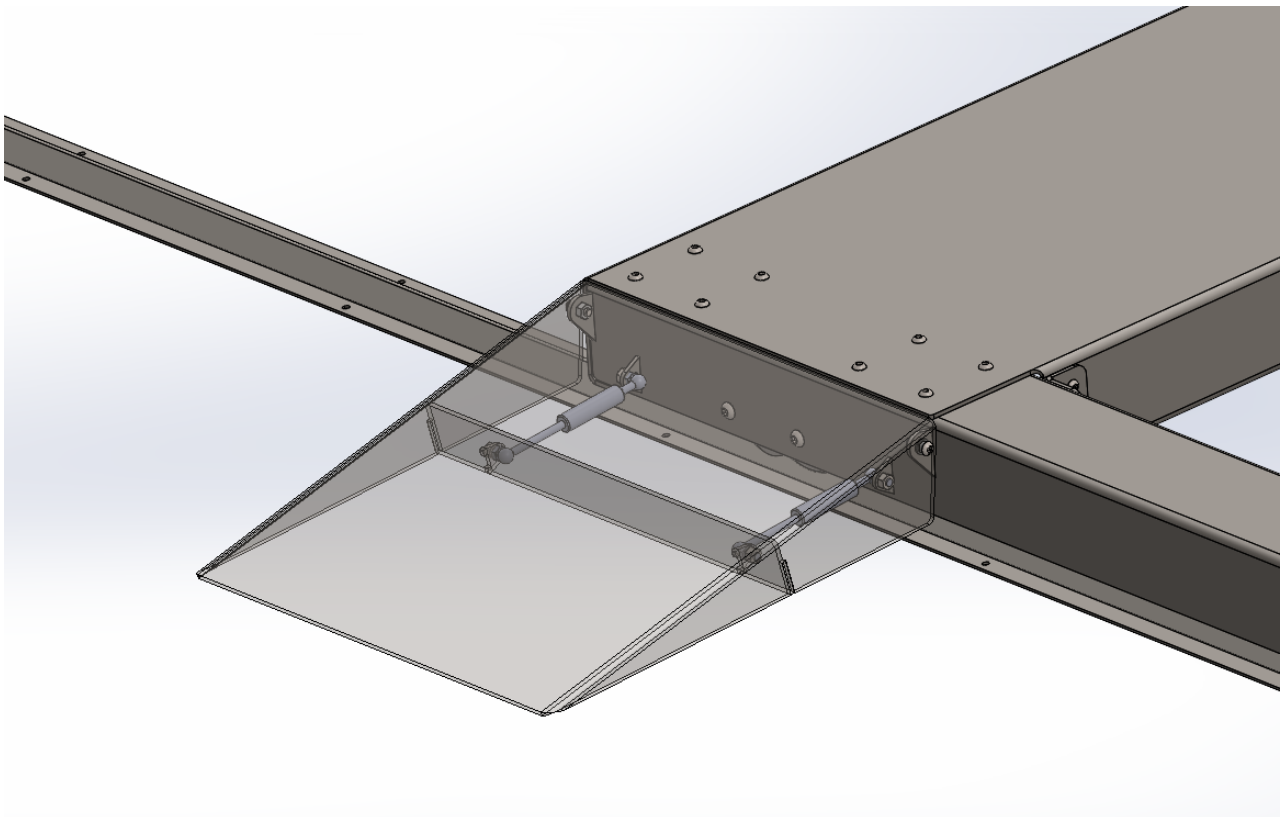
Step 6: Install limit switch sensor and mount -With the platforms and crossmembers securely assembled, reach under the slider assembly at the limit switch location and fasten the limit switch bracket with the (2) M8 x 25 button head cap screws. See image below for correct orientation. The limit switch height is adjustable; adjust the sensor so that the distance from the bottom of the sensor to the top of the limit switch flag is 5/8" [16mm] OR if the limit switch flag is not nearby, that the distance from the bottom of the sensor to the floor surface is 1" [25mm].



Step 7: Installing the Ramps onto the Platforms Remove the locking pins from the free ends of the struts and keep them aside. Position the ramp assembly in line of the crossmember tabs with the top edge slightly lifted above platform surface. Firmly press the socket of each strut into ball until it snaps into place. Install the locking pins that were removed initially.



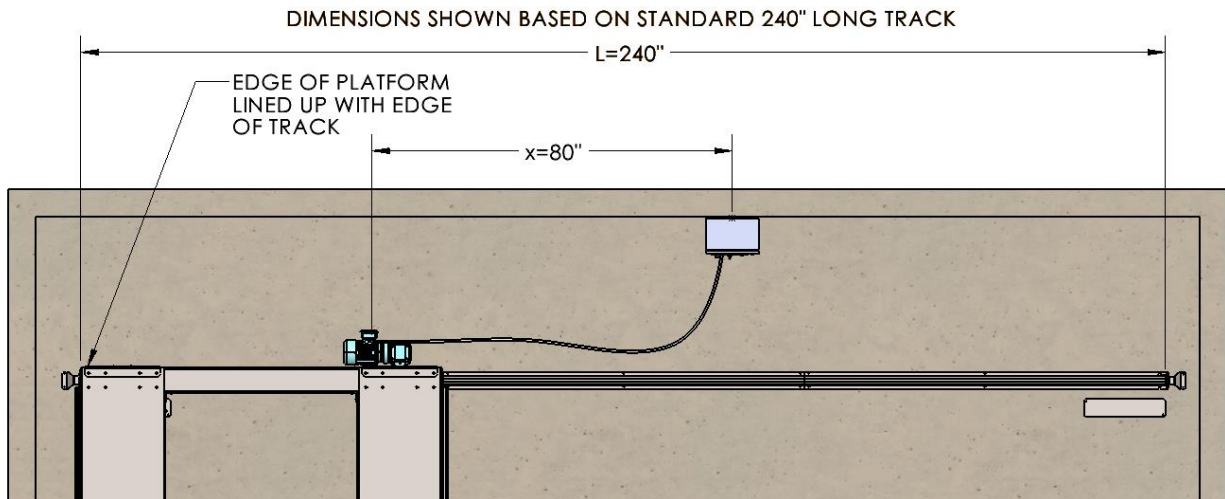
Lower and align the ramp pivots with the tab holes. Insert and thread the M8 x 25 Button cap screws on both sides of the ramp. Once all M8 Button head screws are threaded, proceed to tighten them down snug. Do not over tighten. Repeat for both ramps.



Step 8: Installing and Powering the Control Box- Locate and install the control box onto the adjacent wall to the motor. It is important to position the control box near the center of travel in relation to the Parking Slider to optimize the amount of cable slack in each direction of movement. Ideally, this amount of slack is equal when platforms is at each end of the track. This may vary depending on the final length of track used due to different parking area layouts, use formula below to determine dimension “x” if standard track length, “L” is modified. Refer to drawing PS-Install for full detail dimensions of layout and Controls Installation Manual for control box mounting dimensions. Secure the control box to the wall and connect motor cord to the control box with the connector. Keep the excess cord away from the tracks, potentially tangling and or running over the travel cord. Plug the power cord into a 120V outlet. Open the control box using a coin or flat screwdriver. Flip the circuit breaker to power up the control box.

Motor junction box to control box center formula:

$$x = \left(\frac{L}{2}\right) - 40$$



Step 9: Check Parking Slider Travel and End Limits- Ensure the travel path of the Parking slider is clear and free from people, pets, and objects in both directions! Twist the “Move Left/Right” switch on the control panel and move the parking slider carefully to each end of the tracks. **Do not Load any vehicles at this time! Do not allow riders on the Parking slider at any time! Serious Injury may occur!**

Adjust/take up additional slack from the cord by moving the parking slider to the extreme ends of the track and pulling excess inside of the control box. Neatly loop the excess cable with cable ties. Tighten the cord grip on the control box.

Carefully and slowly move the parking slider over the limit switch flags. Test that parking slider will stop motion and only allow motion on other direction. Adjust stop motion location by loosening the anchors and sliding the trigger. Tighten trigger after adjustments are made. Repeat for both limit switch triggers.

5. Maintenance

WARNING

TO PREVENT INJURY OR DAMAGE TO EQUIPMENT, ALWAYS VERIFY THAT NO EXTERNAL VOLTAGE IS SUPPLIED TO THE CONTROLS AND THAT THE CONTROLS ARE POWERED OFF PRIOR TO PERFORMING ANY MAINTENANCE WORK.

Summary of Maintenance Schedule

	<i>Type of Maintenance</i>	<i>Recommended Time Period</i>
A	Visual/Audible Inspection	Weekly
B	Cleaning Program	As required
C	Inspect Track	12 months
D	Mounted Wheel Bearing Lubrication	12 months or 100 cycles
E	Inspect ramp function	3 months
F	Inspect motor cord	6 months

A. Visual/Audible Inspection

Inspect the motor, electrical components, wiring and wire connections for signs of damage or wear. Continued monitoring of equipment appearance, noise, roughness, and vibration during operation can assist in early detection of poor or unsafe components, structural failure, or poor bearing performance. The operator should be very familiar with the typical operating conditions generated by the equipment. Investigate and resolve any noted changes.

B. Cleaning Program

The Parking Slider should be cleaned as often as operating conditions require. Clear objects and debris that may obstruct the Parking slider from traveling smoothly, such as dirt, pebbles, and typical garage objects.

C. Inspect Track

The Parking slider has rollers that rides along angled steel known as the track. Inspect the anchors that hold the tracks to the floor and ensure the concrete floor and fastening hardware are in good condition and secure. Inspect the track and ensure that there are no signs of scraping or gouging of the metal, or any excessive wear.

D. Mounted Wheel Bearing Lubrication

Lubrication of the (7) bearings is recommended every 12 months or 100 cycles. Idle equipment should not be neglected. Grease dries out and "breathing," due to temperature changes, can cause condensation within the bearing. Whether used or not, the bearing should have grease introduced every 12 months. The bearing should then be rotated a few times to coat all surfaces with fresh grease. The bearing is filled with Red Lithium Complex type EP2 grease. Lift the corners of the parking slider and slide a 4x4 piece of lumber on each corner. Once securely raised, reach under the platform, and apply grease to the zerk fittings of each bearing.

E. Inspect Ramp Function

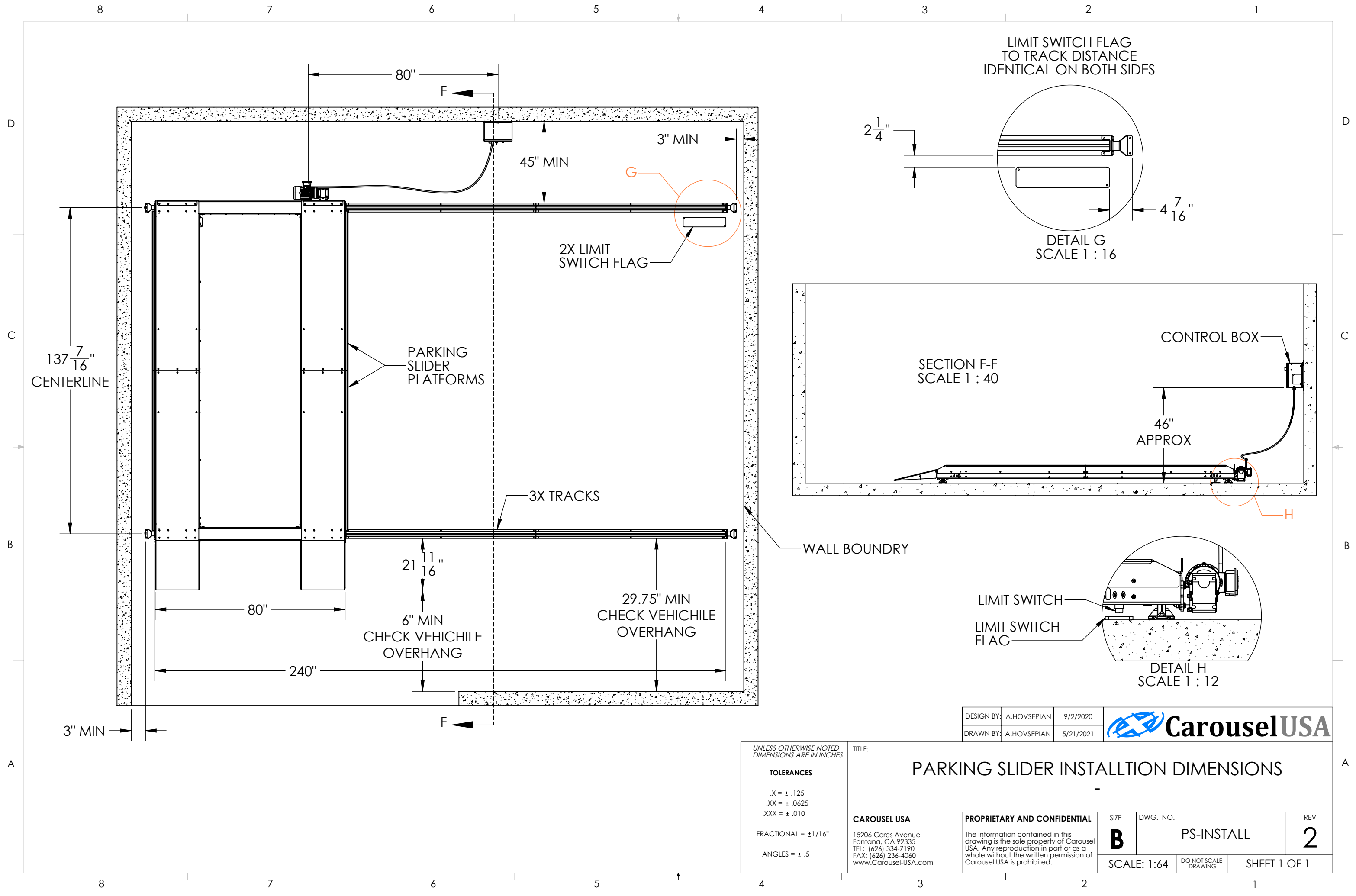
The ramp should raise slightly above the floor surface when there is no force applied at the edge of the ramp. The ramp should lower easily by foot, then the pneumatic struts should raise the ramp upward. If the ramps drag and do not lift inspect that the hinge moves freely. If the ramps drag/interfere with the floor, the struts may need replacement.

F. Inspect Motor Cord

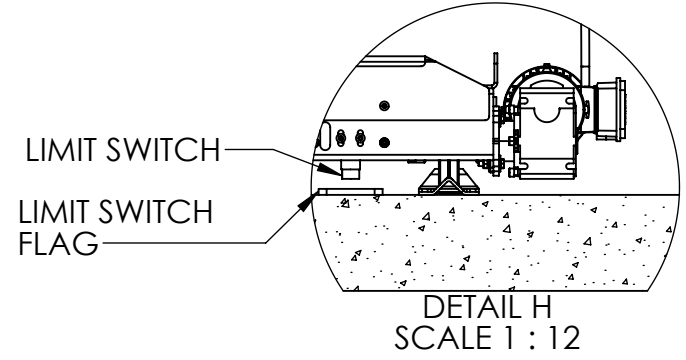
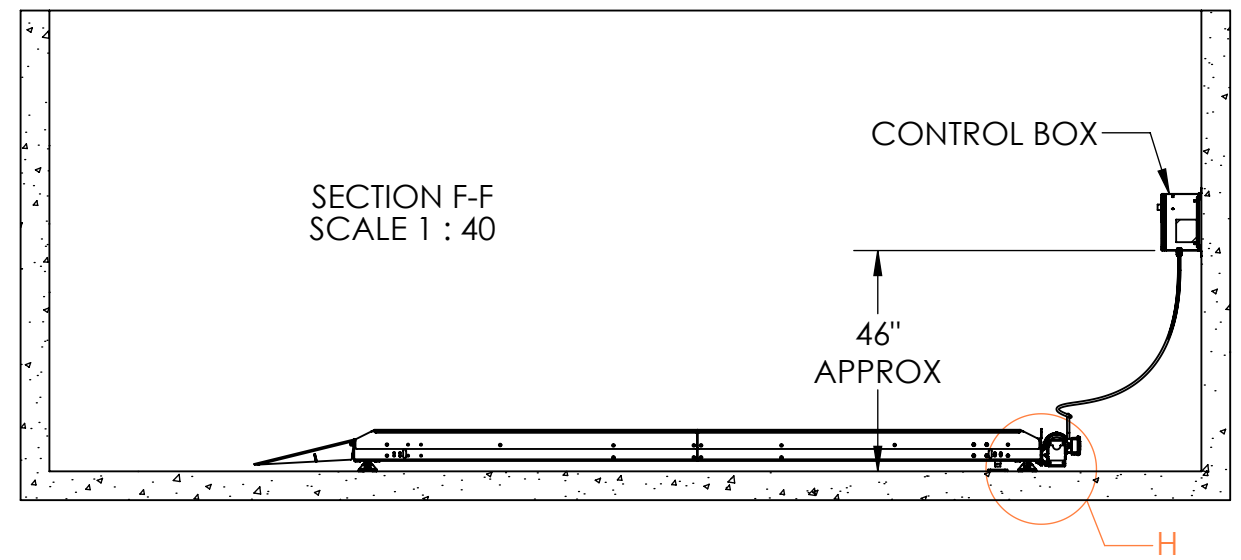
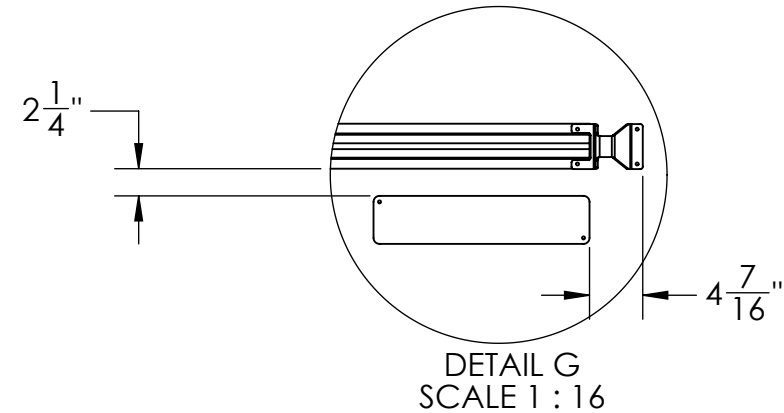
The motor cord is designed to glide across the floor as the Parking Slider moves from side to side. The cord jacket or covering may wear over time and the wires can become exposed. Unplug the power at the control box and inspect the motor cord for cuts, excessive wear, and any damage. Replace the cord if there are any signs of damage.

6. Maintenance Log

<i>Date</i>	<i>Maintenance Description</i>	<i>Notes</i>	<i>Initials</i>



LIMIT SWITCH FLAG
TO TRACK DISTANCE
IDENTICAL ON BOTH SIDES

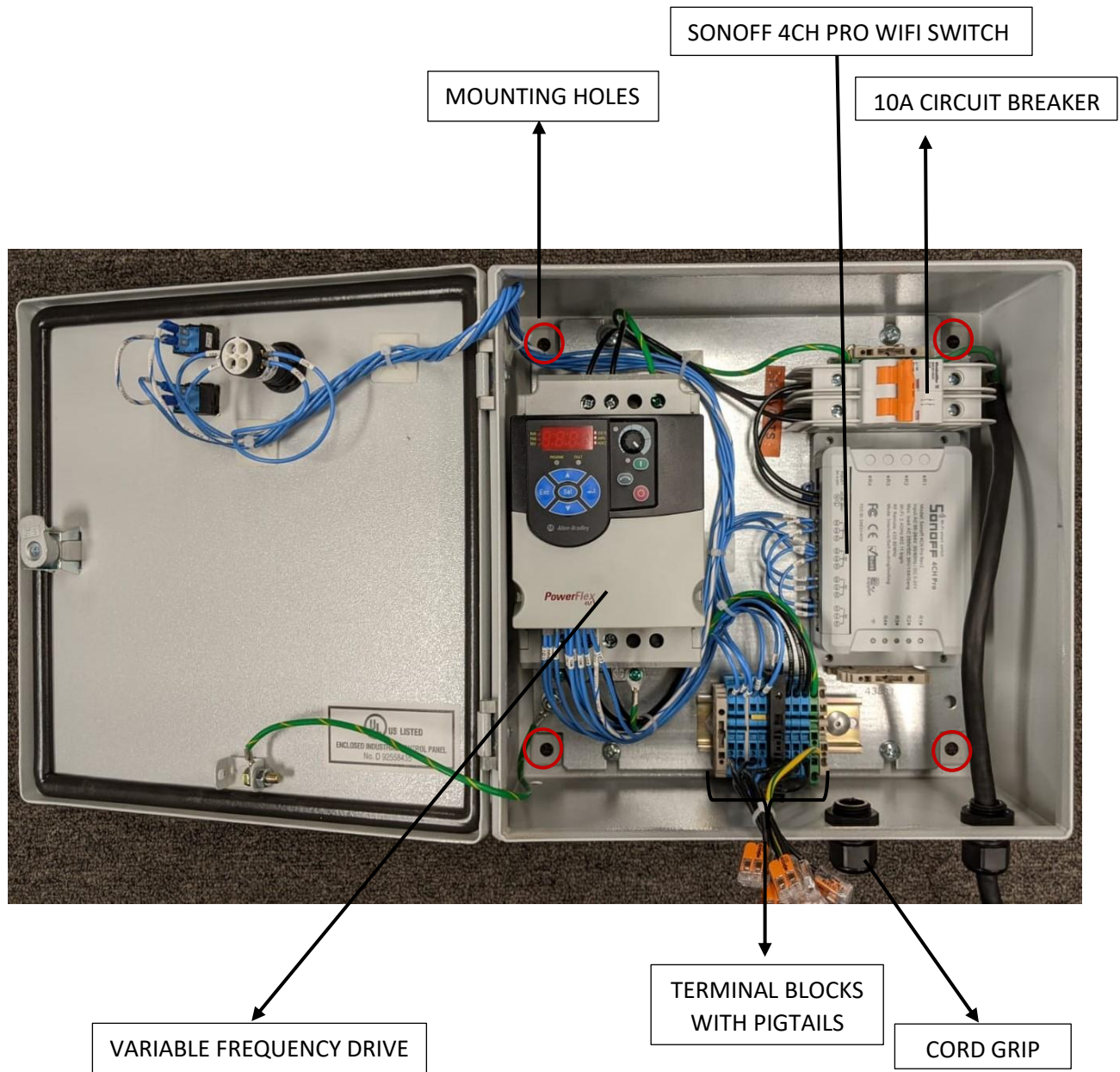


DESIGN BY:	A.HOVSEPIAN	9/2/2020	
DRAWN BY:	A.HOVSEPIAN	5/21/2021	

UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES		TITLE: PARKING SLIDER INSTALLTION DIMENSIONS							
TOLERANCES .X = ± .125 .XX = ± .0625 .XXX = ± .010 FRACTIONAL = ± 1/16" ANGLES = ± .5		CAROUSEL USA 15206 Ceres Avenue Fontana, CA 92335 TEL: (626) 334-7190 FAX: (626) 236-4060 www.Carousel-USA.com		PROPRIETARY AND CONFIDENTIAL The information contained in this drawing is the sole property of Carousel USA. Any reproduction in part or as a whole without the written permission of Carousel USA is prohibited.		SIZE B	DWG. NO. PS-INSTALL		REV 2
				SCALE: 1:64		DO NOT SCALE DRAWING		SHEET 1 OF 1	

CONTROLS INSTALLATION MANUAL

INSTALLATION GUIDE FOR MOUNTING AND WIRING OF PARKING SLIDER CONTROLS



MOUNTING INSTRUCTIONS

1. Mounting the control box should be done before wiring.
2. The image on page 2 of the document displays four mounting holes circled in red. Carefully mark these holes onto a wall. Refer to the PS-INSTALL drawing and Step 8 on the Installation Manual for control box mounting location.
3. Once the marks are on the wall, move the control box aside and use 3/16" masonry (for concrete wall) or 3/16" regular drill bit (for wood) to bore screw holes.
4. Use four ¼" self-tapping, or other appropriate screws to mount the control box to wall.

WIRING INSTRUCTIONS

1. Pass the cable from the slider into the box through the cord grip. Observe the wire colors on motor cable and terminal blocks. Connect these 8 wires with matching colors. i.e. Black with black, white with white, pink with pink etc.
2. Tighten the grip when the required cable length is achieved.
3. Use the provided power cord and add any extensions as needed to power on the control box.