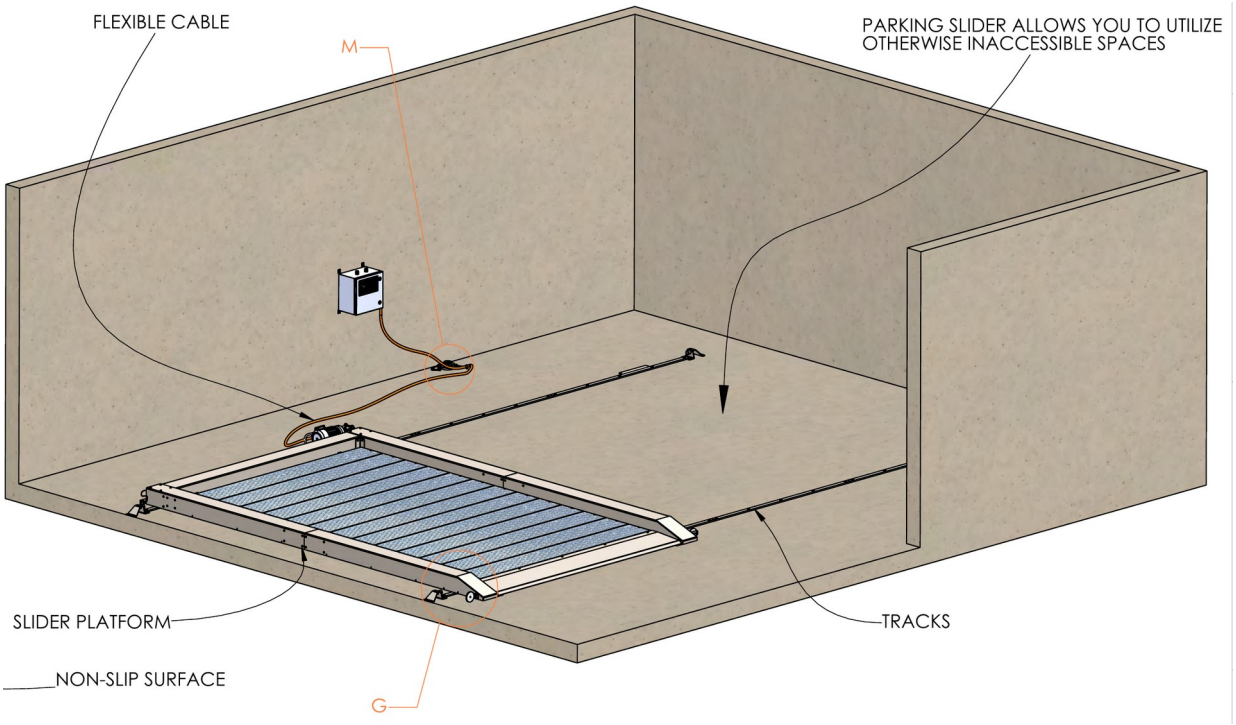
CarouselUSA



Model PS3 Parking Slider – Low Profile

Installation and Maintenance Manual

Revision A

Issued 11/17/2026

Reference Drawings: 10500 Rev A (Top Assembly), GA-10500 Rev B (General Arrangement)

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Revision History

REV	DESCRIPTION	DATE	BY	APPROVED
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1. Scope

This manual provides a technical description, installation and assembly instructions, general safety information, and the maintenance program for the Model PS3 Low-Profile Parking Slider. Item numbers in this manual (e.g., "Item 7") match the balloons and bill of materials on Drawing 10500.

Every installation is site specific. These instructions describe the general process and must be carried out by a person with mechanical installation experience who can adapt the layout to the site.

Usage and proper loading: drive onto the platform so the vehicle is parallel with the platform and centered between the safety edges. Do not drive onto the platform at an angle; an angled approach side-loads the wheels and tracks and can cause the slider to shift or travel unpredictably.

2. Safety

WARNING

Read this entire manual before beginning installation. Failure to follow these instructions can result in serious injury or damage to the equipment.

- Two persons minimum are required. The gearmotor crossmember weighs approximately 100 lb – lift with two people.
- Never allow riders on the platform while it is moving. Never operate the slider with people, pets, or objects in the travel path.
- Do not load a vehicle onto the platform until installation and commissioning are complete.
- Disconnect and lock out power at the control panel before servicing any part of the slider.
- Electrical connection of the control panel to building power must be performed by a qualified electrician in accordance with all applicable local electrical codes.
- The eyebolt supplied with the optional festoon kit is a cable-routing eyebolt only – NOT FOR LIFTING.

3. Introduction

The PS3 is a low-profile parking slider: a platform that rolls along surface-mounted tracks to move a parked vehicle from side to side. The drive-on (parking platform) height is only 2-7/8", with a built-in ramp so most vehicles drive on without additional ramps. Features include:

- 6,000 lb vehicle capacity – fits most full-size SUVs
- 2-7/8" drive-on platform height with built-in ramps
- Dimpled, non-slip galvanized tread planks on a steel platform frame
- Safety edges on both sides to keep vehicle wheels on the platform
- Zinc-plated steel surface-mounted tracks – can be cut to fit the site
- Direct-drive 5" H-groove drive wheel with heavy-duty mounted bearings; (3) H-groove idler wheels
- 1/4 HP inverter-duty commercial-grade gearmotor
- Inductive end-of-travel limit sensors and side-mounted photoelectric collision sensors
- 120 V control panel with (2) remotes; thermally protected electronics
- Cord reel balancer for motor cable management; optional overhead festoon kit

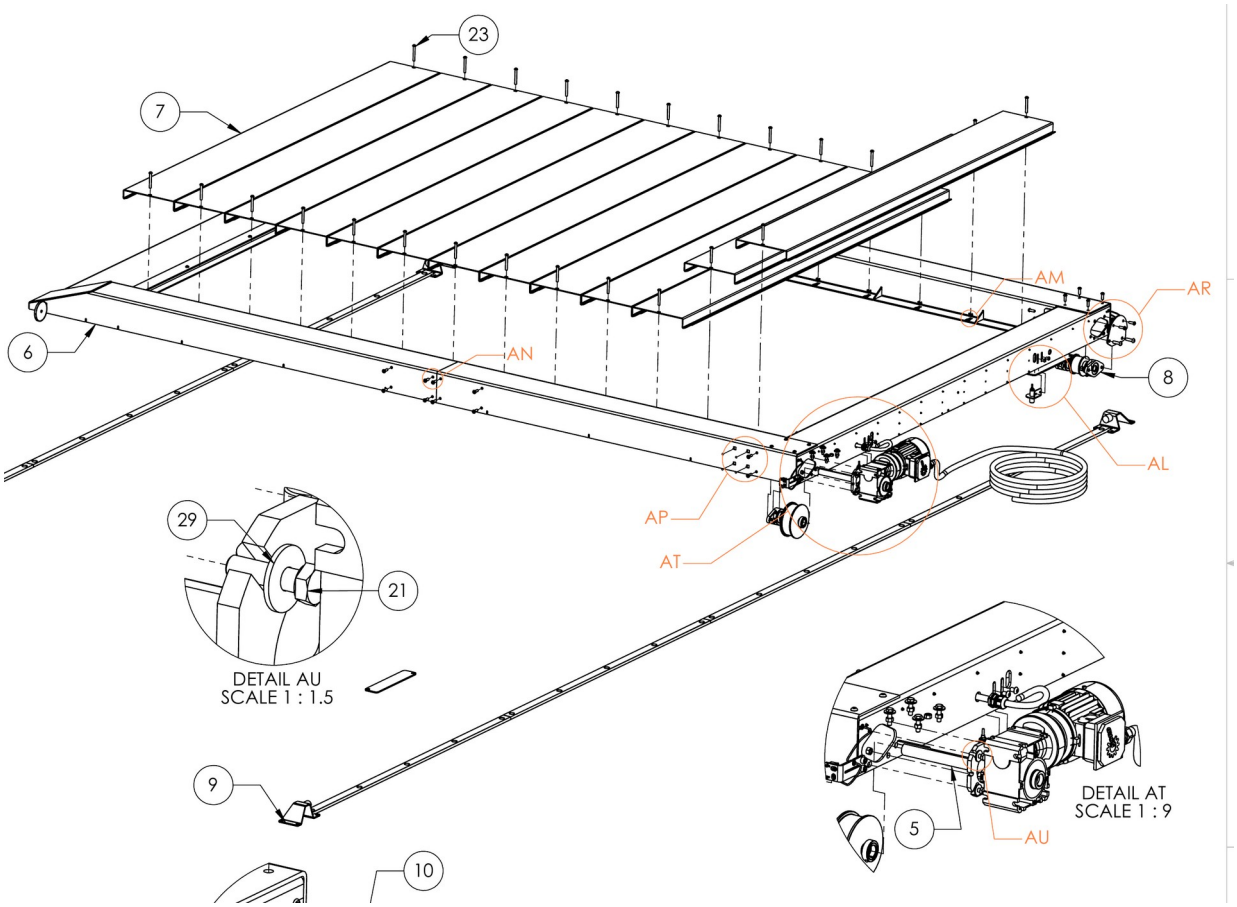


Figure 1 – PS3 exploded view (Dwg 10500, Sheet 2)

4. Technical Description

A. Mechanical Operation

The platform rolls on one powered 5" H-groove drive wheel (Item 3) and three H-groove idler wheel assemblies (Item 8) riding on two parallel rails of flat track (Item 4). The drive wheel is keyed to the motor-drive shaft (Item 5), supported by two flanged ball bearings (Item 28), and driven directly by the gearmotor on the motor crossmember. Inductive proximity sensors on the crossmembers detect proximity flags (Item 2) anchored to the floor at each end of travel and stop the platform. End stop assemblies (Item 9) at both ends of each rail are a physical backup to the limit sensors.

Side-mounted photoelectric sensors on each crossmember aim at reflectors (Item 34) along the edge of the platform. If an object breaks the beam, the slider stops and will not continue moving in that direction.

B. Table of Specifications

Specification	Value
Vehicle capacity	6,000 lb
Drive-on (parking platform) height	2-7/8 in
Overall height / motor height	6-1/2 in / 7-7/8 in
Overall platform width / usable parking width	94-3/8 in / 80-7/8 in
Overall length / usable parking length	156-3/4 in / 131-3/8 in
Track centerline spacing	131 in
Track	1-1/2 in W × 1/2 in H; (8) 60 in sections, (4) per rail; 251-3/8 in overall track length. Can be cut to fit site.
Maximum travel	144 in with full standard track length (less if track is cut to fit)
Linear speed	≈ 5.7 in/s
Drive	1/4 HP inverter-duty gearmotor, direct shaft drive
Required power	120 V, 1Φ, 60 Hz, 5 A
Top surface	Dimpled tread plank, galvanized finish
Shipping weight	Approx. 1,695 lb

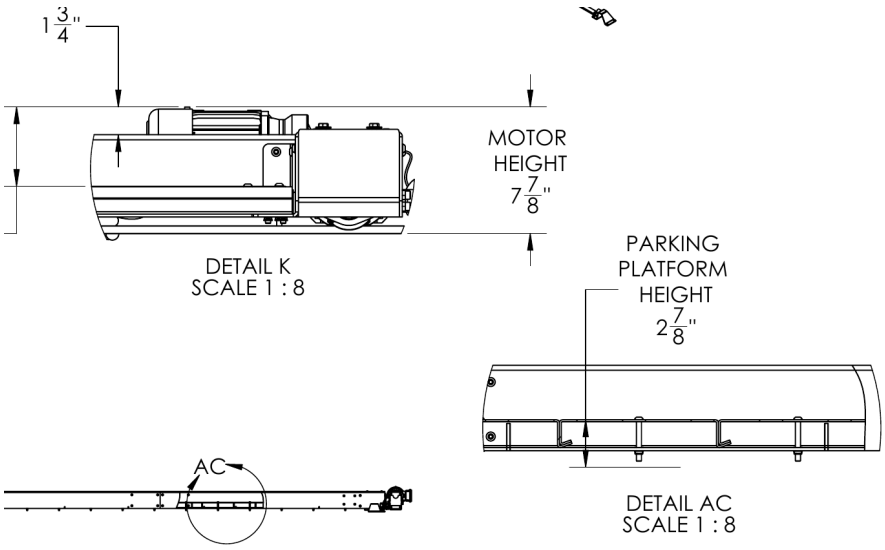


Figure 2 – Platform and motor heights (GA-10500, Sheet 5)

5. General Installation

A. General

Unload the PS3 components from the shipping crate and lay them out in the assembly area. Inspect the crate for external damage and check every item against the parts list below. Contact Carousel USA immediately if any components are damaged or missing.

The platform frame ships in four pieces: two crossmembers and two outer frame sections. The gearmotor, drive and idler wheels, proximity sensors, photoelectric sensors, reflectors, and wiring ship pre-assembled to the crossmembers. In the field, only the frame pieces are bolted together; then the tread planks, tracks, end stops, flags, control panel, and cord reel are installed.

NOTE – FLOOR SLOPE AND FLATNESS

The PS3 is designed for floors with a maximum slope of 1.2% (approx. 9/64" per foot, or 1-7/16" per 10 ft) in any direction. In addition, floor flatness under the tracks shall not exceed 3/16" deviation per 10 linear feet. Slope and flatness are separate requirements and both must be met – a floor can be within the slope limit but still have high or low spots greater than 3/16" that will deflect the low-profile tracks.

Example: over the full 251-3/8" track run, a 1.2% slope gives about 2-1/2" of total fall from one end to the other. That is acceptable, provided no 10 ft section of the track path has a high or low spot greater than 3/16".

If the site floor exceeds either limit, contact Carousel USA before installation to discuss the 2WD (two-wheel drive) PS3 option.

B. Parts Supplied

ITEM	PART / ASSEMBLY NAME	PART NO.	QTY
6	Platform frame, low profile – ships as:	200	1
	• Motor crossmember (gearmotor, drive wheel, idler, sensors, reflector, wiring installed)		1
	• Idler crossmember (idler wheels, sensors, reflector installed)		1
	• Outer frame section		2
7	Tread plank, center, 80"	220	13
4	Flat track, low profile, 60"	214	8
9	End stop assembly	251	4
2	Proximity flag	270	2
33	Control panel, parking slider, 120 V (with (2) remotes)	C13012	1
1	Cord reel balancer	150	1
13	Festoon assembly – PS3 (OPTIONAL)	290	1

C. Field Hardware Supplied

ITEM	DESCRIPTION	PART NO.	QTY	USE
15	Button head cap screw, M8 × 1.25 × 25 mm, pre-applied thread locker	HA2125	63	Frame sections to crossmembers (Step 4)
23	Socket button head cap screw, M8 × 65 mm	SBHCS M8 L-65	26	Tread planks (Step 5)
17	Cage nut, M8 × 1.25 (pre-installed in frame)	HA2135	69	Receives Items 15 & 23
—	Masonry tapping screw (Tapcon type), 5/16" × 2-3/4", hex flange head	90161A385	62	Tracks 40, end stops 16, prox flags 4, cord reel 2
21	Hex cap screw, M8 × 30 (optional festoon)	HCS-M8-L30-FT	—	Festoon holder (Step 8)
29	Oversized washer, M8 (optional festoon)	91100A349	—	With Item 21
18	Nylon hex nut, M8 (optional festoon)	HA2136	—	With Item 21

D. Tools Required for Installation

Tool	Used For
Tape measure (25 ft min.), chalk line or laser line, painter's tape	Track layout and squaring
4 ft level / straightedge	Floor flatness check
Hammer drill with 1/4" masonry bit	Anchor holes
Shop vacuum or blow-out bulb	Cleaning anchor holes
Impact driver or drill with hex socket to fit anchor head	Driving anchors
5 mm hex key / hex bit	M8 button head screws (Items 15, 23)
Torque wrench (ft-lb)	M8 screws – 15 ft-lb
13 mm wrench / socket (optional festoon)	Festoon holder hardware
Side cutters	Removing shipping ties

NOTE

Thread all M8 screws by hand before tightening any. Final-tighten only after the frame is square. M8 torque: 15 ft-lb.

Step 1: Floor Preparation and Track Layout

REMINDER

Before layout, verify floor slope does not exceed 1.2% and flatness does not exceed 3/16" per 10 linear feet along both track paths. Check flatness with a 10 ft straightedge or a laser level. If either limit is exceeded, stop and contact Carousel USA about the 2WD option (see Section 5A).

Use the same layout process as the PS1 Parking Slider, with the PS3 dimensions below (see Figure 3 and Appendix A).

1. Prepare the site so the floor is smooth, flat, level, and in good condition to support the track loads. Floor flatness deviation under the tracks shall not exceed 3/16" per 10 linear feet, and floor slope shall not exceed 1.2%. Fill cracks and low spots in the track path with dry-pack mortar or epoxy. Uneven floors will deflect the low-profile tracks and can cause the platform to contact the floor.
2. Lay the (8) track sections (Item 4) on the floor as two rails of (4) sections each, end-to-end with tight, flush joints. Track may be cut to length to fit the site.
3. Mark the baseline: measure the same distance from the back wall at both ends of the run and connect the marks with a laser, string, or chalk line. This is the centerline of the rear rail.
4. Square the layout with the 3-4-5 method: mark 4 ft along the baseline and 3 ft perpendicular to it; adjust until the diagonal is exactly 5 ft. Repeat at the other end.
5. Measure 131" from the baseline along both perpendicular lines and mark the front-rail centerline.
6. Dry-fit all track sections on the lines and confirm both rails are parallel and square before drilling.
7. Confirm clearances per Figure 3: 3" minimum from the track ends to the walls, 45" minimum to the control panel wall, and enough room for vehicle overhang beyond the platform.

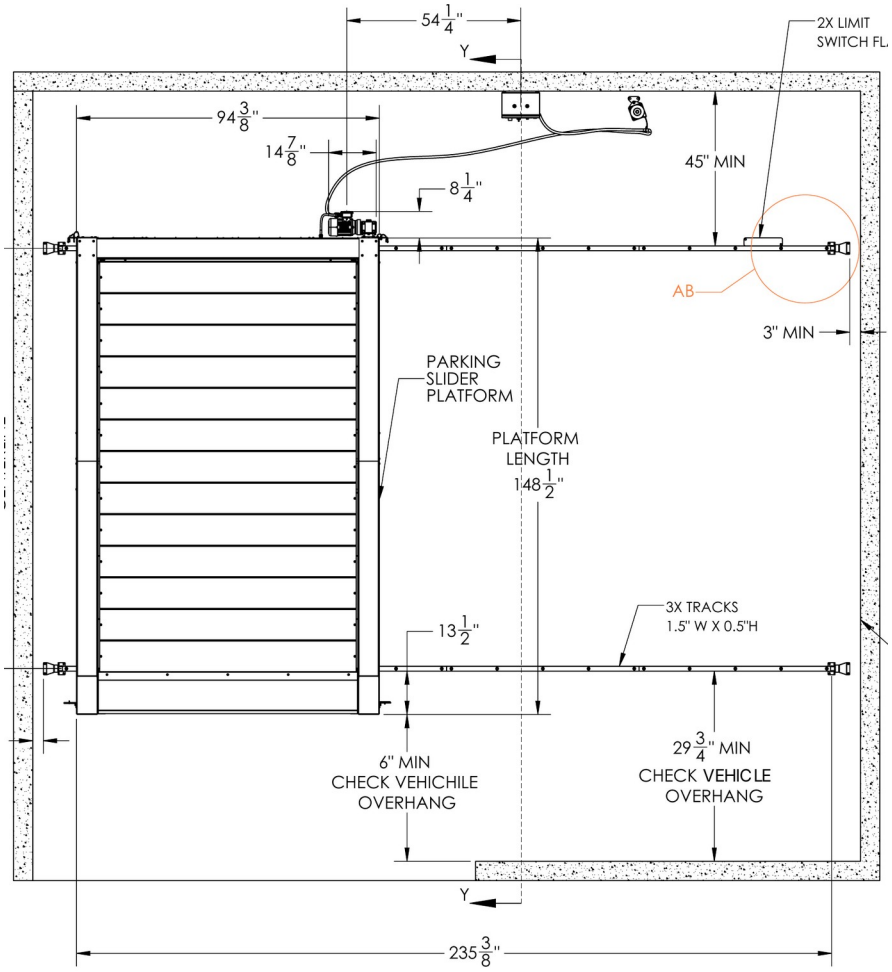


Figure 3 – PS3 installation dimensions (GA-10500, Sheet 6)

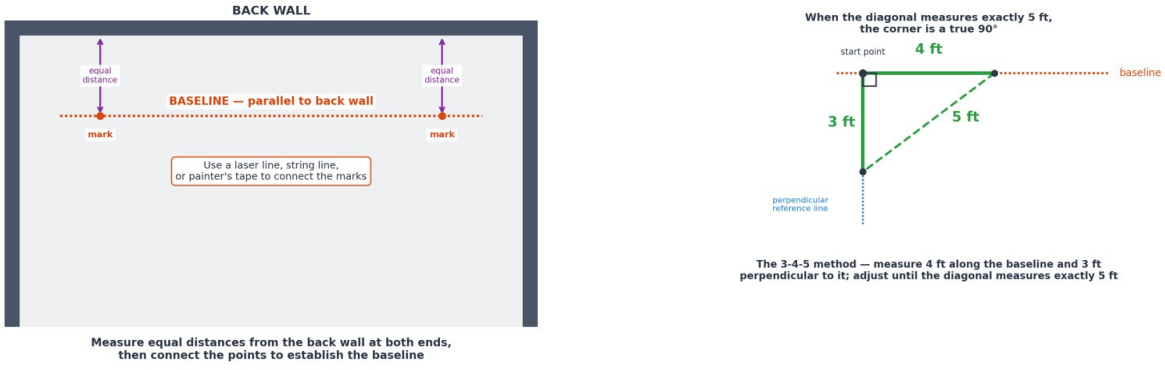


Figure 4 – Mark the baseline parallel to the back wall; square it with the 3-4-5 method

Step 2: Anchor the Tracks

Each track section is anchored with (5) 5/16" × 2-3/4" masonry tapping screws (40 of the 62 supplied).

1. With the tracks on the layout lines, drill through each track hole into the slab with a 1/4" masonry bit and hammer drill. Drill at least 1/2" deeper than the anchor embedment.
2. Vacuum or blow out every hole – dust left in the hole reduces holding strength.
3. Drive each anchor through the track until the flange head is seated firmly on the track. Do not over-drive; an over-torqued tapping screw strips the concrete threads.
4. Recheck the 131" rail spacing, parallelism, and joint alignment before continuing.

Step 3: Install the End Stops

Place an end stop (Item 9) at each end of both rails (4 total), butted against the track end with the bumper facing the platform. Anchor each end stop through its (4) foot holes with the same 5/16" × 2-3/4" masonry tapping screws (16 total).

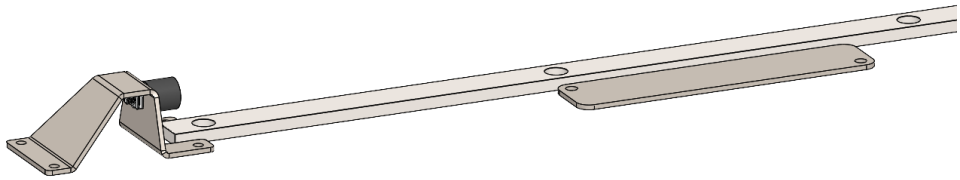


Figure 5 – End stop at the track end and proximity flag beside the track

Step 4: Assemble the Platform Frame on the Tracks

The frame is assembled in place on the tracks. The crossmembers carry the wheels; the outer frame sections bolt across their ends.

1. Place the motor crossmember on the tracks with two people (≈100 lb). Orient the gearmotor toward the wall where the control panel will be mounted (Figure 3).
2. Confirm the track sits between the wheel flanges on both wheels. No rolling is necessary.
3. Place the idler crossmember on the tracks parallel to the motor crossmember and confirm the track sits between its wheel flanges.
4. At each side, set the ramp support channel between the crossmember ends. Align its end holes with the crossmember cage nuts and hand-thread the M8 × 25 button head screws (Item 15) (Figure 7).
5. Place the ramp section over the support channel. Align the top holes with the cage nuts in the channel and hand-thread Item 15 screws through the top of the ramp (Figure 8). Repeat for the other side.
6. Check the frame for square: the diagonals should match, and the frame should measure 94-3/8" × 148-1/2" (Figure 10).
7. Tighten all Item 15 screws to 15 ft-lb.
8. Cut and remove all shipping ties from the motor cable, sensor cables, and sensor brackets.

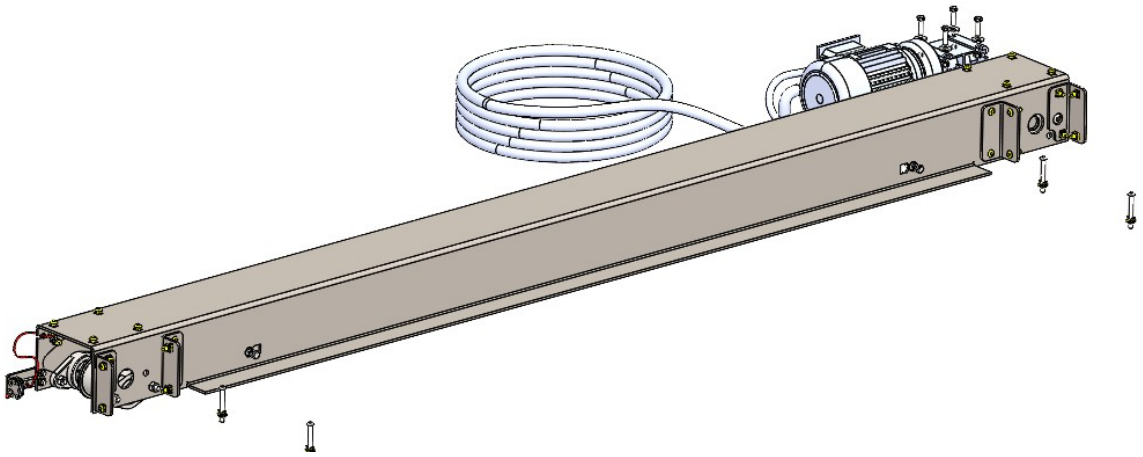


Figure 6 – Motor crossmember as shipped (gearmotor, drive wheel, sensors, and wiring pre-assembled)

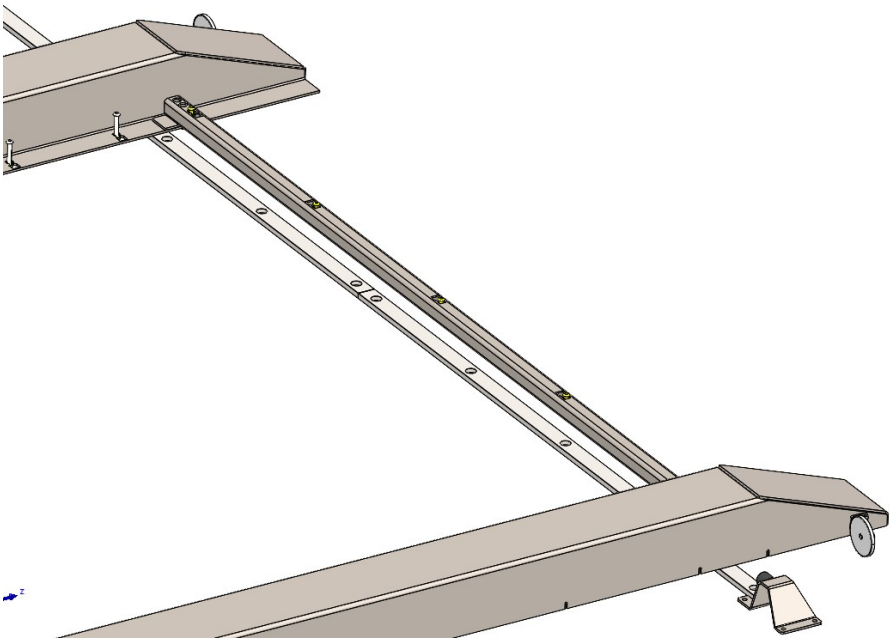


Figure 7 – Ramp support channel bolted between the crossmember ends (Item 15 into cage nuts)

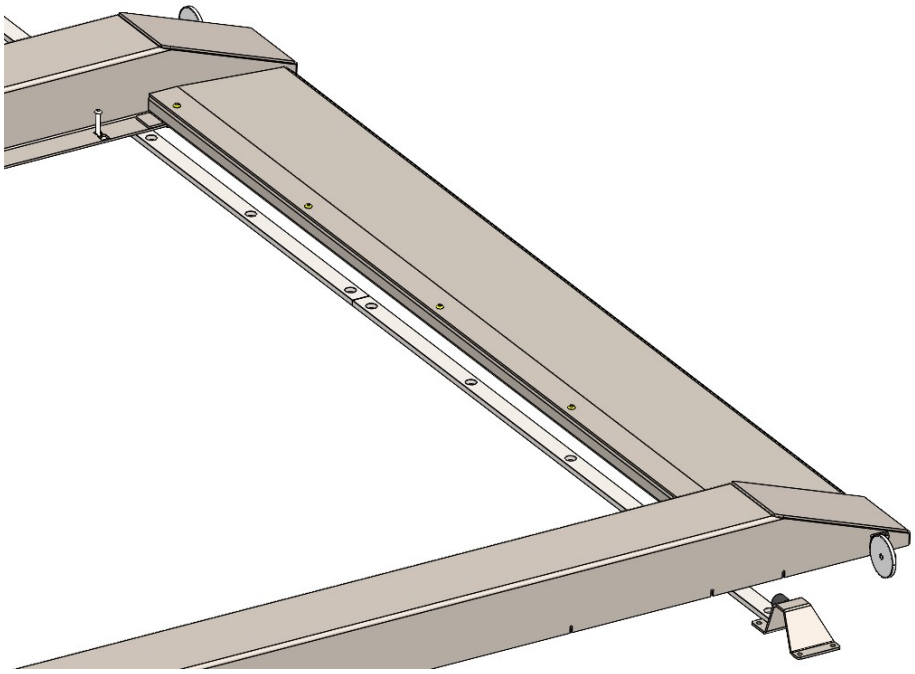


Figure 8 – Ramp section installed over the support channel, fastened with Item 15

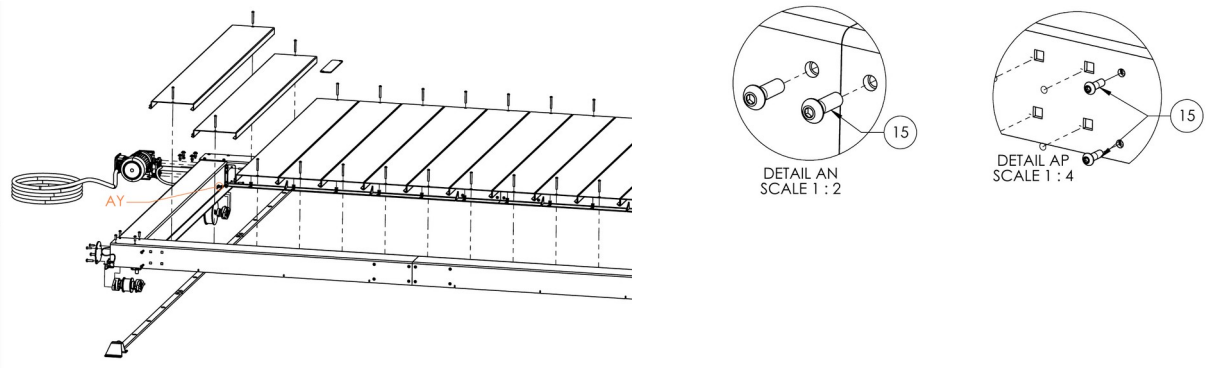


Figure 9 – Frame and tread plank arrangement (Dwg 10500, Sh 4); Item 15 screws into cage nuts (Details AN/AP)

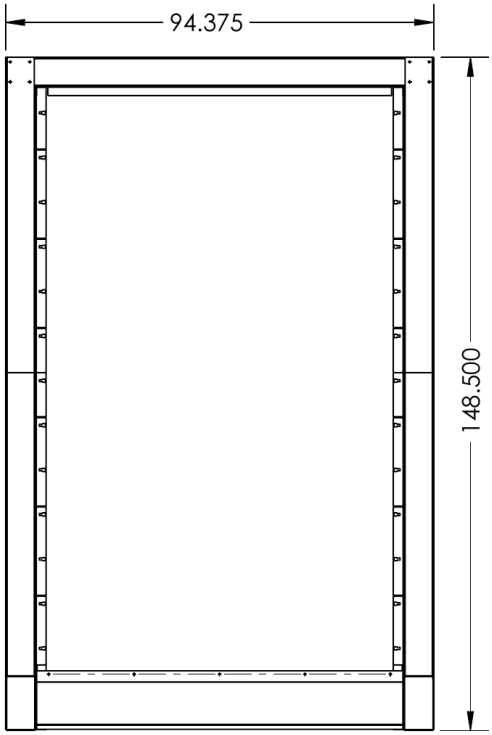


Figure 10 – Assembled platform frame, 94-3/8" × 148-1/2" (Dwg 200)

Step 5: Install the Tread Planks

1. Confirm the cage nuts (Item 17) are snapped into the square holes in the frame plank flanges. Replace any that are missing or loose.
2. Lay the (13) tread planks (Item 7) across the frame, aligning the holes at each end with the cage nuts.
3. Install (2) M8 × 65 mm button head screws (Item 23) per plank (26 total). Thread all by hand first.
4. Once all planks are seated and evenly spaced, tighten to 15 ft-lb.

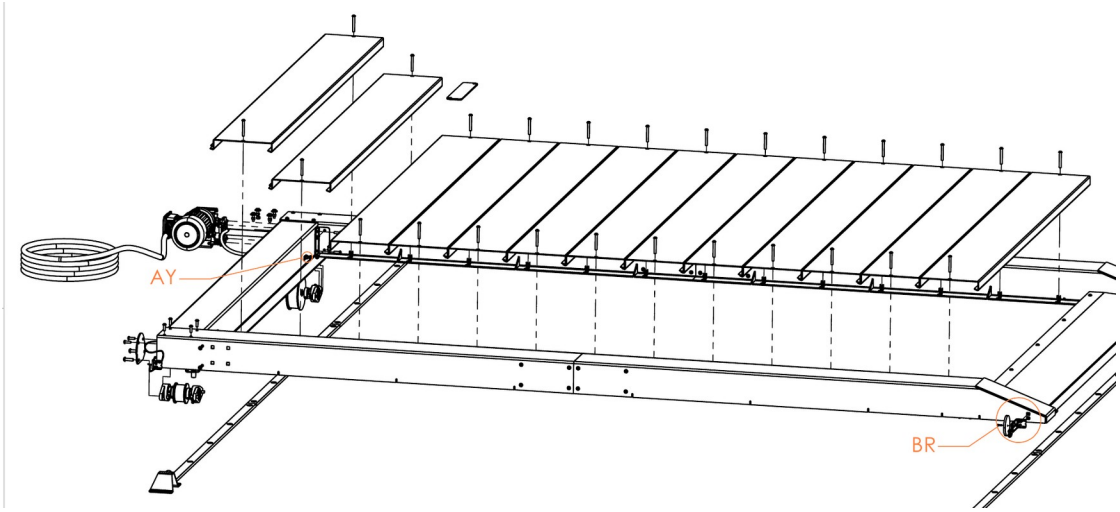


Figure 11 – Tread plank installation (Dwg 10500, Sheet 4)

Step 6: Install the End-of-Travel Proximity Flags

The slider stops at each end of travel when the inductive proximity sensor on the crossmember passes over a steel proximity flag (Item 2). Flag location depends on the site and the desired stop position.

1. Nominal location: 21" from the end stop, butted against the side of the track (Figure 5).
2. Anchor each flag with (2) 5/16" × 2-3/4" masonry tapping screws. Repeat at the other end of travel; the flag-to-end-stop distance should be identical on both sides.
3. Check the gap between the sensor face and the top of the flag: 8–12 mm (5/16"–1/2"). Adjust sensor height on its bracket if required.
4. Final stop position is adjusted during commissioning (Step 9).

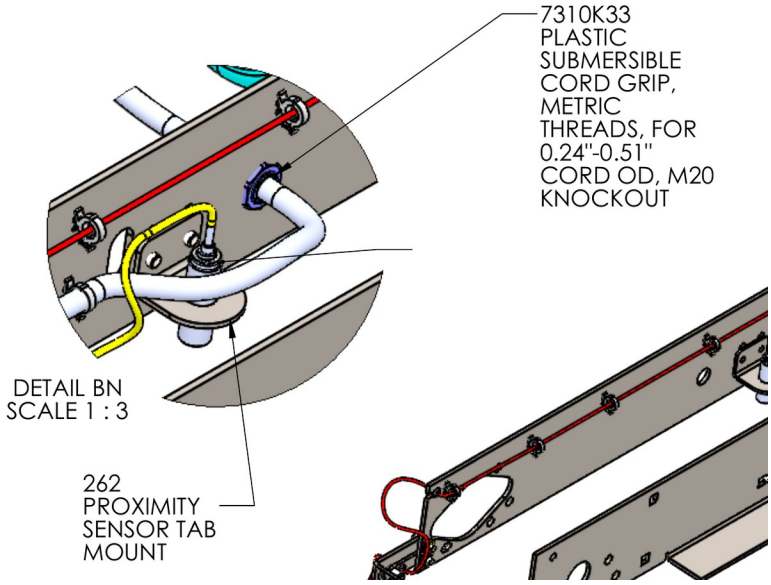


Figure 12 – Proximity sensor on its mount (Detail BN)

Step 7: Mount and Connect the Control Panel

1. Mount the control panel (Item 33) on the wall at the motor end of the slider, roughly 54" along the wall from the gearmotor and about 46" above the floor (Figures 3 and 13). Exact location is site specific – keep it near the center of travel so motor-cable slack is similar at each end.
2. Fasten the panel with fasteners suited to the wall material.
3. Route the motor-sensor cable to the panel (Step 8) and connect it at the panel terminal blocks per the C13012 schematic supplied with the panel, matching wire colors.
4. Have a qualified electrician connect the panel to a 120 V, 1Φ, 60 Hz supply in accordance with local electrical codes.

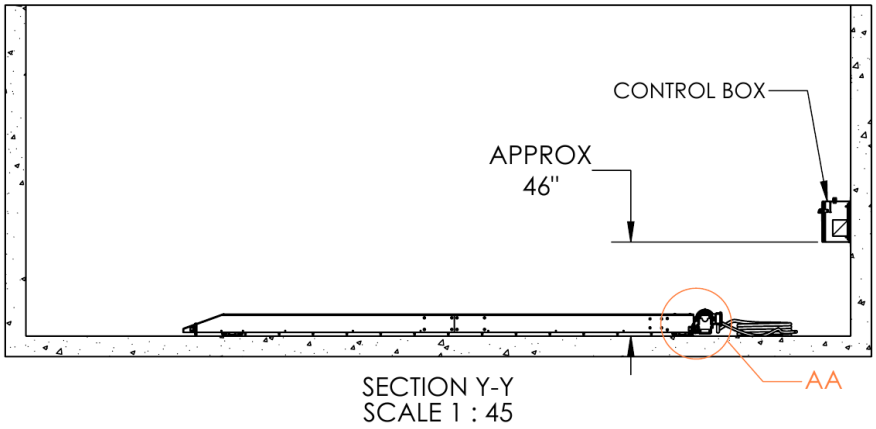


Figure 13 – Control panel height (GA-10500, Sheet 6, Section Y-Y)

Step 8: Motor Cable Management

Standard – Cord Reel Balancer (Item 1)

The cord reel pulls on the motor cable to keep it off the tracks as the platform travels. Mount the reel to the floor beside the travel path, between the platform and the control panel (Figure 14), in a location that keeps the cable under tension through the full travel in both directions. Anchor the reel with (2) 5/16" × 2-3/4" masonry tapping screws. Route the cable from the platform through the reel to the control panel.

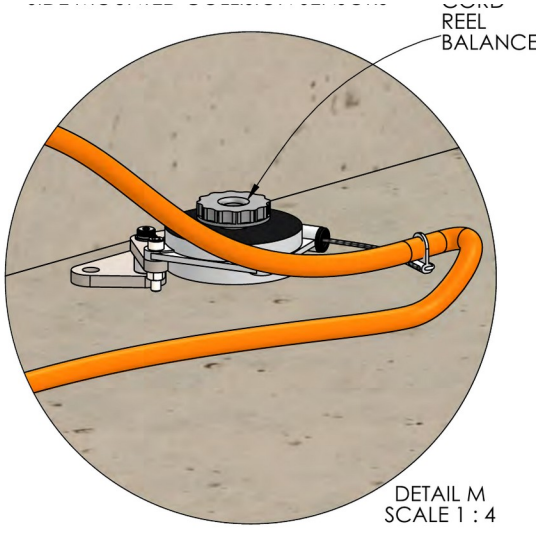


Figure 14 – Cord reel balancer (GA-10500, Sheet 1, Detail M)

Optional – Overhead Festoon (Item 13)

1. Mount the two cable ceiling brackets (P/N 131) to the ceiling structure above the travel path, one beyond each end of travel. Anchor into structural members only.
2. Install the routing eyebolt (P/N 9494T53) and tension the 20 ft, 1/4" wire rope between the brackets. The eyebolt is NOT FOR LIFTING.
3. Hang the cable trolleys (P/N 3298T42) on the wire rope and clamp the motor cable to each trolley with even loops between trolleys.
4. Bolt the festoon cable holder (P/N 280) to the motor end of the platform with M8 × 30 hex cap screws (Item 21), washers (Item 29), and nylon nuts (Item 18).
5. Pass the cable through the locking grommet (P/N 5269T81) in the holder and down to the motor.

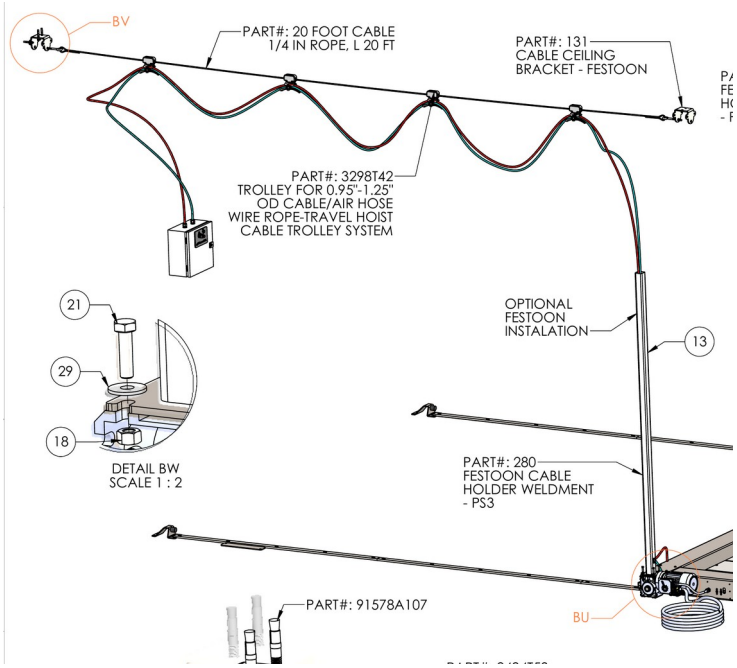


Figure 15 – Optional festoon arrangement (Dwg 10500, Sheet 8)

Step 9: Commissioning and Travel Check

WARNING

Ensure the travel path is clear of people, pets, and objects in both directions. Do not load a vehicle and do not allow riders during this check. Serious injury may occur.

1. Power up the control panel. Jog the empty platform slowly toward one end of travel.
2. Check the gap between each proximity sensor face and its flag: 8–12 mm (5/16"–1/2"). Adjust the sensor height on its bracket if needed.
3. Confirm the platform stops when the proximity sensor reaches the flag and will then move only in the opposite direction. Repeat at the other end. Relocate a flag if the stop position needs adjustment.
4. Confirm the platform stops before contacting the end stops at both ends.
5. Photo-eye test: while the platform is moving, break each photoelectric beam (hand or object at the platform edge). The slider must stop and not continue in that direction. If a sensor faults with nothing in the beam, clean the lens/reflector and check alignment.
6. Run the platform end to end several times. Confirm the wheels track cleanly and the motor cable stays off the tracks with tension maintained at both ends of travel.
7. Re-check all anchors and M8 screws after the first 10 cycles.
8. Load a vehicle and run one full cycle in each direction while observing from outside the travel path.

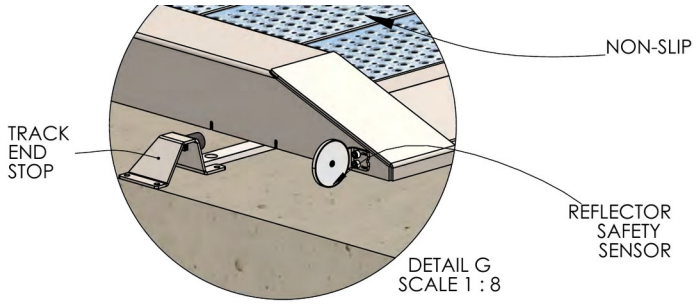


Figure 16 – Track end stop and reflector safety sensor (GA-10500, Sheet 1, Detail G)

6. Maintenance

WARNING
To prevent injury or damage to equipment, always verify that power to the controls is OFF and locked out before performing any maintenance work.

Summary of Maintenance Schedule

	Type of Maintenance	Recommended Interval
A	Visual / audible inspection	Weekly
B	Cleaning program	As required
C	Inspect track, anchors and end stops	12 months
D	Drive bearing lubrication	12 months or 100 cycles
E	Inspect wheels and shaft collars	12 months
F	Inspect sensors, reflectors and flags	6 months
G	Inspect motor cable and cord reel / festoon	6 months
H	Check frame and tread plank fasteners	12 months

A. Visual / Audible Inspection

Inspect the motor, electrical components, wiring, and connections for damage or wear. Watch for changes in noise, roughness, or vibration during operation; these can indicate bearing wear, loose hardware, or structural problems. Correct any change before continued use.

B. Cleaning Program

Keep the tracks and travel path free of dirt, pebbles, and garage items. Because the PS3 is low profile, debris under the platform can contact the frame.

C. Inspect Track, Anchors and End Stops

Check that all anchors are tight and the concrete around them is not cracking or spalling. Inspect the track for gouging or excessive wear and confirm joints remain flush. Confirm end stops are secure.

D. Drive Bearing Lubrication

Grease the two flanged drive-shaft bearings (Item 28) every 12 months or 100 cycles, whether or not the slider has been used; grease dries out and temperature cycling can draw condensation into an idle bearing. Rotate the bearing after greasing to distribute fresh grease. Use lithium EP2 grease.

E. Inspect Wheels and Shaft Collars

Check the drive and idler wheels for flat spots, cracking, or groove wear. Verify shaft collars (Item 27) and bearing set screws are tight.

F. Inspect Sensors, Reflectors and Flags

Clean the photoelectric sensor lenses and reflectors. Confirm the proximity sensor gap is still 8–12 mm and the flags are secure. Test the end-of-travel stops and photo-eye stops.

G. Inspect Motor Cable and Cord Reel / Festoon

With power locked out, inspect the motor cable for cuts, abrasion, and exposed conductors. Verify the cord reel retracts and keeps tension on the cable, or that festoon trolleys roll freely. Replace damaged cable before returning to service.

H. Check Frame and Tread Plank Fasteners

Check the M8 frame screws (Item 15) and tread plank screws (Item 23); re-tighten any loose screws to 15 ft-lb.

7. Maintenance Log

Date	Maintenance Description	Notes	Initials

Appendix A: Installation Dimensions

All dimensions in inches. Refer to GA-10500 Rev B for full detail. Do not scale.

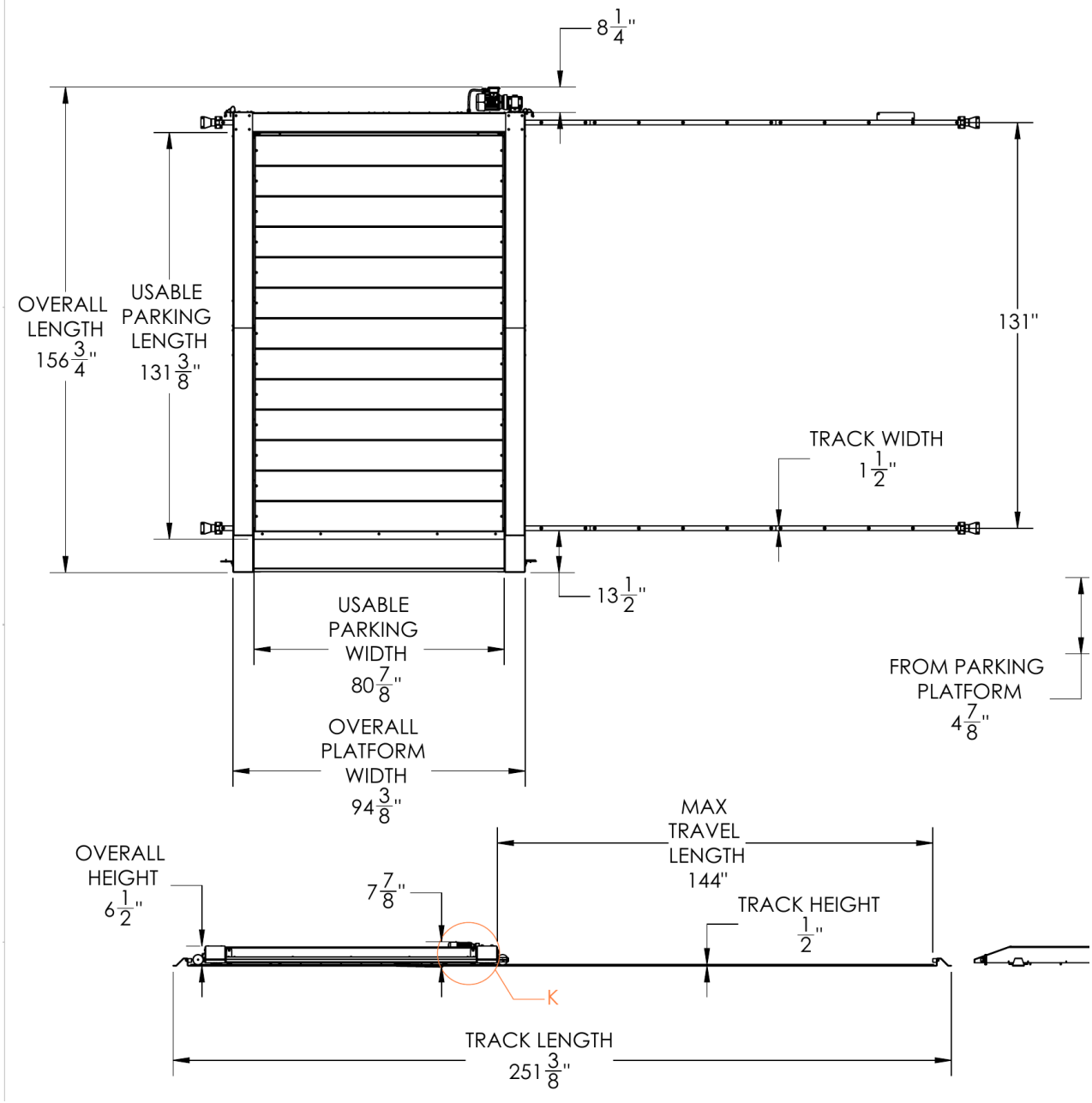


Figure A1 – PS3 general arrangement dimensions (GA-10500, Sheet 5)