



# HELILADDER

Focus on your work — not your balance!™

## User Manual for the HeliLadder MX5+ and MXPS (Maintenance Platform System)

Includes:

- General Usage and System Descriptions
- Inspection and Maintenance Information
  - Safety and Training Information
  - Warranty and Liability Terms

For Additional Information, Please Reference the Following:

### Heliladder Repair Manual

- Repair Procedures for Assemblies
- Basic MX5+ and MXPS System Diagrams
- Select Components, Parts, and Hardware Identification

### Heliladder Illustrated Parts Breakdown

- Complete MX5+ & MXPS System Drawings and Diagrams
- Complete Components, Parts, and Hardware Identification

### IMPORTANT NOTES:

A ladder/work stand is a tool – but one with inherent risks. Use with caution! Observe all Industry, Military, ANSI, OSHA, & Regional rules and safety guidelines regarding ladder and work stand usage on the job site. Improper use of this equipment and non-observance of assembly, usage, and safety instructions can lead to equipment and property damage (and/or) injury & death.

OSHA / ANSI DESIGN COMPLIANCE DOES NOT GUARANTEE, OR IMPLY, THAT A LADDER OR WORK STAND IS SUITABLE FOR A SPECIFIC TASK. IT IS THE RESPONSIBILITY OF THE OWNER AND USER TO VERIFY THE EQUIPMENT IS IN GOOD CONDITION, IS PROPERLY ASSEMBLED, AND THAT IT'S THE APPROPRIATE TOOL TO USE FOR THE INTENDED TASK.

Use of this equipment is intended only for qualified & skilled personnel.

Vol. 4 – January 2024



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# Liability and Warranty Information

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## **Limitation of Liability**

HeliLadder of Blue Moon Designs shall not be liable for any damages whatsoever, and in particular shall not be liable for any special, indirect, consequential, or incidental damages, or damages for loss of profits, loss of revenue, or loss of use, injury or death, arising out of, or related to, the use of this special equipment or the information contained on and for it.

HeliLadder of Blue Moon Designs shall accept no liability whatsoever for property damage, or personal injury or death resulting from improper use. Completely read, understand, and observe all safety notes before use.

The sole responsibility and liability of Blue Moon Designs LLC and your exclusive remedy under any claim arising out of, connected with, or resulting from this sale or the performance or breach of any condition of warranty thereunder, or from the manufacture, delivery, or use of the product shall be repair or replacement of the defective parts.

In no event, whether as a result of a breach of contract, warranty, tort (including negligence) or otherwise, shall Blue Moon Designs LLC be liable for any special, consequential, incidental or penal damages or expenses including but not limited to loss of profit, goodwill, revenues, loss of associated equipment, cost of capital, cost of substitute products, facilities or services, down time, or cost or claims of third parties for such damages or expense.

## **Warranty Terms:**

Blue Moon Designs LLC warrants that this product shall be free from defects in material and workmanship under normal use and service for one year from the date of purchase, if, and only if, the product is maintained under general industry practices and as per the inspection guidelines attached to the unit and as per product instructions & guidelines. Products shall not be deemed defective either by reason of normal wear and tear or, buyer's failure to properly store, install, and maintain the products. This warranty does not cover damage or liability for misuse, abuse or improper use.

## **Warranty Limitations and Exclusions:**

This warranty shall not apply to any product repaired or altered by parties other than Blue Moon Designs LLC unless express prior authorization is granted: nor shall this warranty apply to any product subjected to misuse, neglect, normal wear, or accident.

Use exclusively original spare parts from HeliLadder of Blue Moon Designs, otherwise the functional reliability (and safety) of the unit cannot be assured and you lose your entitlement under warranty.

The foregoing warranty is exclusive and in lieu of all other warranties or remedies whether written, oral, implied or statutory. Any and all implied warranties or merchantability, fitness for a particular purpose, course of dealing, or usage of trade are hereby disclaimed and excluded.

Acceptance of the product by you the buyer/user shall constitute your acknowledgement and acceptance of the terms, provisions, limitations, and exclusions set forth herein. Such terms, provisions, limitations, and exclusions shall not be modified, deleted, or supplemented except by the express written acknowledgement of Blue Moon Designs LLC. Warranty is non-transferable and subject to change without notice.

## **Warranty Performance:**

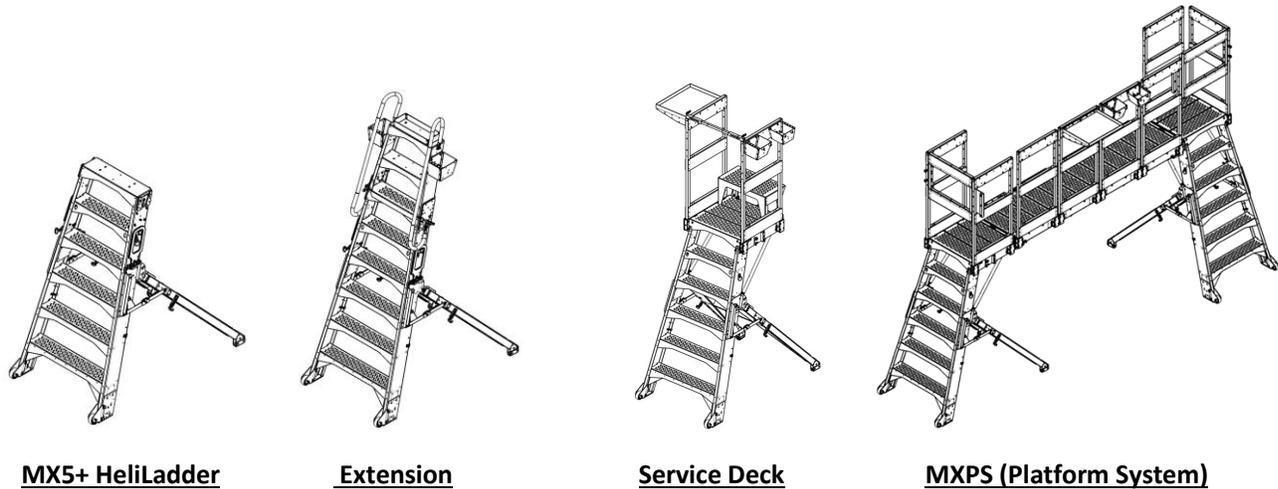
All claims under this warranty shall be made to Blue Moon Designs LLC. All returned parts must be shipped prepaid for evaluation to Blue Moon Designs LLC unless otherwise agreed upon. Full details of the malfunction should be included to assist in the evaluation. Warranty credit or replacement will be extended only after Blue Moon Designs LLC has determined that all conditions of the warranty have been met.

HeliLadder brand ladders & workstands are a product of Blue Moon Designs LLC. Bend, Oregon USA

# Introduction

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The entire MXPS (Maintenance Platform System) is based upon the MX5+ HeliLadder. This 5' cantilevered ladder can be used individually or be reconfigured to best suit the maintenance task to be performed. Extensions of various designs and lengths, Service Decks, and Platforms all interface with the MX5+ (Figure 1).



**Figure 1:** The MX5+, as well as the additional components and systems that can be added to it.

This manual strives to provide the user with the necessary information to assemble, use, and maintain this unique and versatile piece of equipment. If additional information or clarity is needed, contact HeliLadder. Updated manuals will be posted on the HeliLadder web site for review and printing. Hard copies may be provided upon request. It is advised that users be familiar with the procedures outlined in this manual to ensure that the MXPS is being utilized to its full potential, and that users remain safe while performing maintenance tasks.

The manual is divided into the following sections: Positions and Configurations, Transport, General Use and Operation, Accessories, Extensions, Service Deck, Platform, Safety and ANSI/OSHA, Load Capacities, and Inspection and Maintenance.

Scan the following QR codes to view our Military and Civilian units' introduction videos:



## Tools

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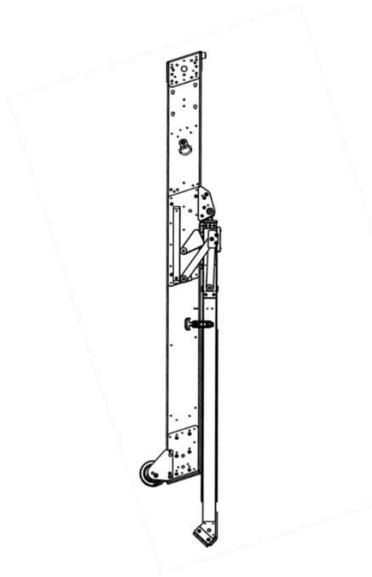
The following will be needed to assemble the unit:

- 2 Philips screwdriver
- 3/8" wrench
- Torque Wrenches
- 2" Extension with 3/8" & 7/16" sockets

# MX5+ HeliLadder Positions and Configuration

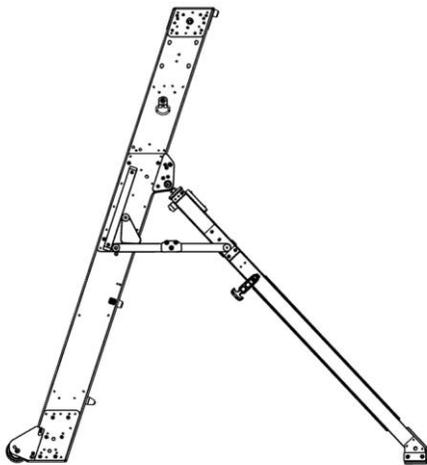
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- 1. Closed Position:** In the closed position (Figure 2), the legs are folded against the frame and secured with the rubber side straps. It may be leaned against a wall, laid flat, or set on its side while in this position. *The unit is not to be used, ascended/descended, or used as a lean-on ladder when in the closed position!*

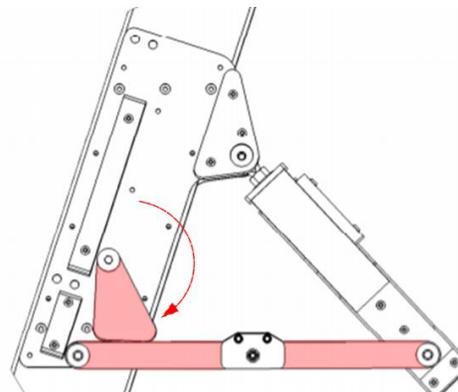


**Figure 2:** The MX5+ in the closed position with the black rubber locking strap engaged.

- 2. Open Position:** The open position is the unit's configuration when it is to be used (Figure 3). To open:
  - a. Face the stepped unit, and while supporting it in the closed and upright position, unhook the black rubber straps on the unit's sides (Figure 2).
  - b. Grasp a rung and a siderail, and carefully step back, allowing the stepped unit to swing down and away from the support legs until both scissor links are fully extended and both yellow scissor locks have rotated down into the locked position (Figure 4).



**Figure 3:** The MX5+ in the open position



**Figure 4:** Ensure the scissor links are fully spread and the lock has rotated down.

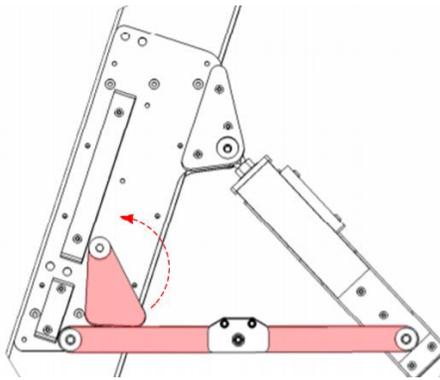
**To close an open ladder:**

Use your thumbs or palms to rotate the two yellow scissor locks forward and up (Figure 5), and pull up on the two scissor links enough to release tension (Figure 6). Then:

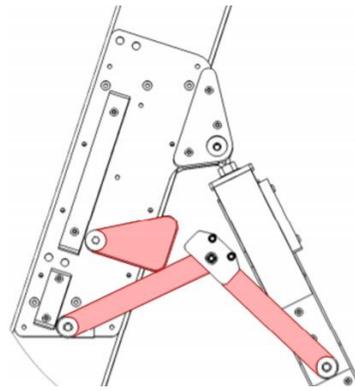
- a. Lift the rung side up, slowly allowing the unit to hinge and rock onto the unit's rear legs until the legs are folded against the frame. Support the unit and secure the rubber latches.

**OR**

- b. Lower the rung side towards you, slowly allowing the unit to hinge closed, as the wheels contact the ground and the rear support legs collapse and rest against the ladder.
- c. If stowing or preparing for long-distance transport, latch the black rubber side straps to secure the rear support legs to the ladder frame.



**Figure 5:** Use thumbs to rotate lock upwards.



**Figure 6:** Pull on scissor links to release tension and fold.

# Transport

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The unit can be moved in both the open and closed positions; the former being limited to *short* distances within the immediate work area, the latter for movement beyond the *immediate* worksite. *The user should bear in mind that the unit weighs approximately 70 Lbs without an Extension, and between 85-120 Lbs with an Extension installed. Caution must be exercised! If there are space limitations (or the weight and length are beyond the user's physical capabilities) Extensions should be removed prior to transport.*

**1. Closed Position, with or without an Extension installed:**

- a. Lift the unit off the ground and carry, or “walk” it on the ends of the rear support legs.

**OR**

- b. Face the stepped unit, and while supporting it in the closed and upright position, grasp the handrails and slowly rock the stepped unit towards you, as you carefully back up until the wheels contact the ground. You can then push, or pull, the unit like a wheelbarrow to the desired location. Initially, it may be awkward to move around, so it is advised that the user practice maneuvering the unit before attempting to position it near an aircraft or equipment.

**CAUTION: DO NOT TOW THE UNIT BEHIND VEHICLES. THIS CAN LEAD TO EQUIPMENT DAMAGE.**

**2. Open Position:**

- a. Grasp the handrails and rock the unit back towards you and onto the wheels- approximately 90 degrees perpendicular to the floor.
- b. Carefully roll the unit to its new position before slowly lowering the rear support legs back onto the ground.

**CAUTION: DO NOT MOVE THE UNIT WHILE IN THE OPEN POSITION BEYOND THE IMMEDIATE WORK AREA, OR OVER BUMPS AND CRACKS. THIS CAN LEAD TO EQUIPMENT DAMAGE.**

# Using the MX5+ HeliLadder

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The cantilevered shape of the MX5+ allows it to conform to the body of the aircraft, providing access to both the lower and upper airframe. Its enhanced stability allows the user to perform a wide range of maintenance tasks while minimizing the risk of falling, losing balance, tipping, or enduring awkward, uncomfortable positions for long periods of time. When used properly, this unit enables the user to perform a multitude of tasks safely and efficiently.

When in the open position, the MX5+ has a vertical working height of 52 ½" between the ground and the top legal rung. The rungs are vertically spaced 11" apart.

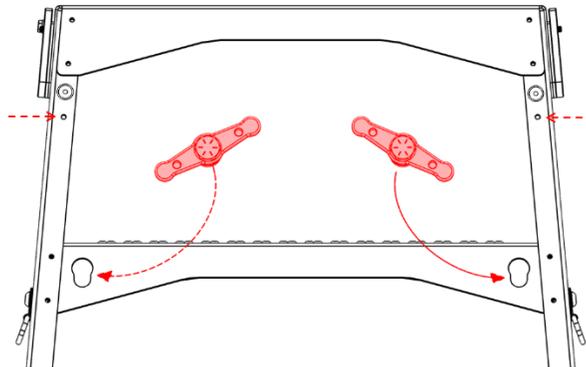
*Before ascending the ladder, verify that the brace links are straight and fully extended, with no bend at the mid-joint, and that the yellow spreader locks have completely rotated down into the locked position.*

Ascend and descend the ladder, grabbing the rungs, siderails, or, if purchased and installed, the short handrail kit. Three points of contact should be maintained while climbing.

The user can reposition the ladder in the open position as needed, clearing cross tubes, steps, landing lights, vent tubes etc. Always reposition the unit slowly, ensuring that it does not rest or lean-on the body of the aircraft. Verify the upper stepped unit and handrails clear the aircraft fuselage, blades, windows, hoists, etc. The unit may be positioned perpendicular or parallel to the aircraft, depending on the aircraft configuration and task to be performed.

# MX5+ Accessories

1. **Handwheel and Lanyard:** The bolted handwheels are integral to the MX5+ and are used to secure modular system components, including short handrails, Extensions and Service Decks. The handwheels come pre-attached to the MX5+, but if they have been removed or need replacing, follow the steps below for the attachment procedure.
  - a. Temporarily stow the bolted handwheels in the rung key-hole slots (Figure 7).
  - b. Position the lanyard attachment hardware in the hole below the black bumper (Figure 7).
  - c. Torque attachment hardware to 30 (+/- 5) in-lbs while ensuring that the lanyard cables are pointed DOWN.



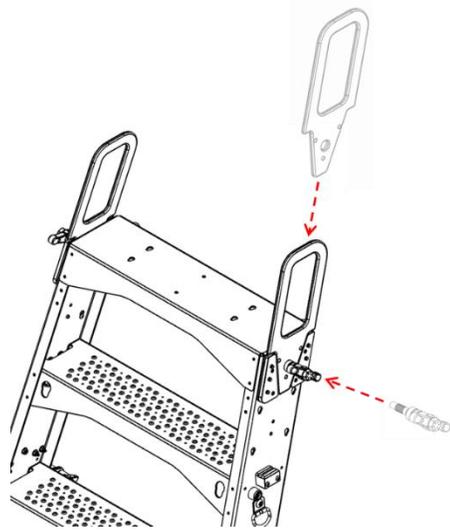
**Figure 7:** Handwheel may be stowed in key-hole slot.  
Lanyard bolts into hole as shown.

*Note: Routinely inspect the composite ‘cone’ of the handwheel for chips, cracks or other damage, and routinely lube the threads of the handwheel with a light grade oil. LPS 2 is suitable, or any lube meeting MIL-PRF-81309, MIL-C-81309D Type III, or MIL-C-23411A.*

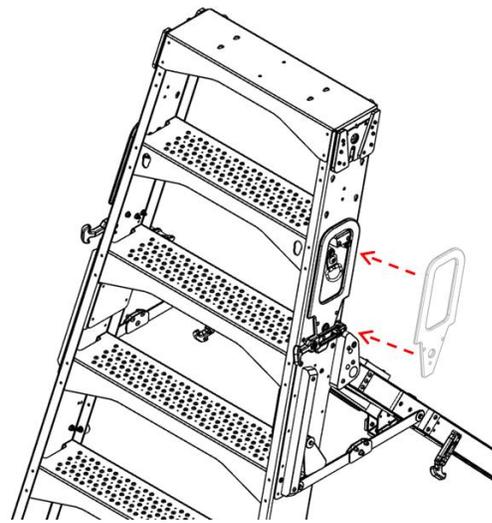
2. **MX5+ Short Handrail Kit:** The Short Handrail Kit P/N MX5-SHK can be attached to the MX5+ base unit and adds security to the user when working on lower-level airframe and engine components.
  - a. Position the tapered tang of the handrail into the V-shaped guide rail (Figure 8).
  - b. Place the handwheel through the large hole in the tapered tang and lightly thread into the nutplate that is mounted on the inside rails of the MX5+ (Figure 8).
  - c. Once engaged, apply a firm hand tightening until no discernable play exists between the tang and the guide rails. If play exists, or for added security, torque each handwheel bolt to 175 (+/- 5) in-lbs.
  - d. Alternatively, secure Handrails using AN4-10A bolts (Pg. 12 and 13 of “Extensions”).
    - i. Remove spare bolts and washers stowed on the inboard side of the MX5+ side rail nutplates.
    - ii. Set tapered tangs of Handrails within the guide rails and install bolts.
    - iii. Torque each to 100 (+/- 5) in-lbs.

**DANGER: FAILURE TO PROPERLY SECURE HANDRAILS CAN LEAD TO INJURY OR DEATH!**

- e. To stow, locate the slotted support blocks along the outboard side rails at rung five. Hang the handrail from the slot and engage the ½” diameter hole with the coned post (Figure 9).
- f. Secure with black rubber strap (Figure 9).



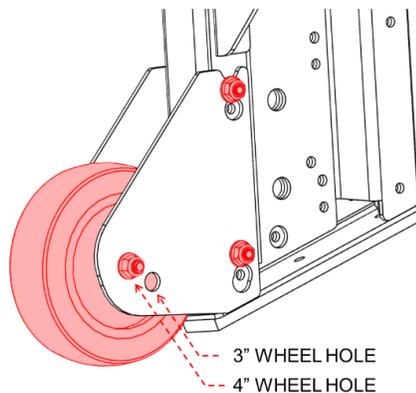
**Figure 8:** Set Handrail into receiver plates and install handwheels.



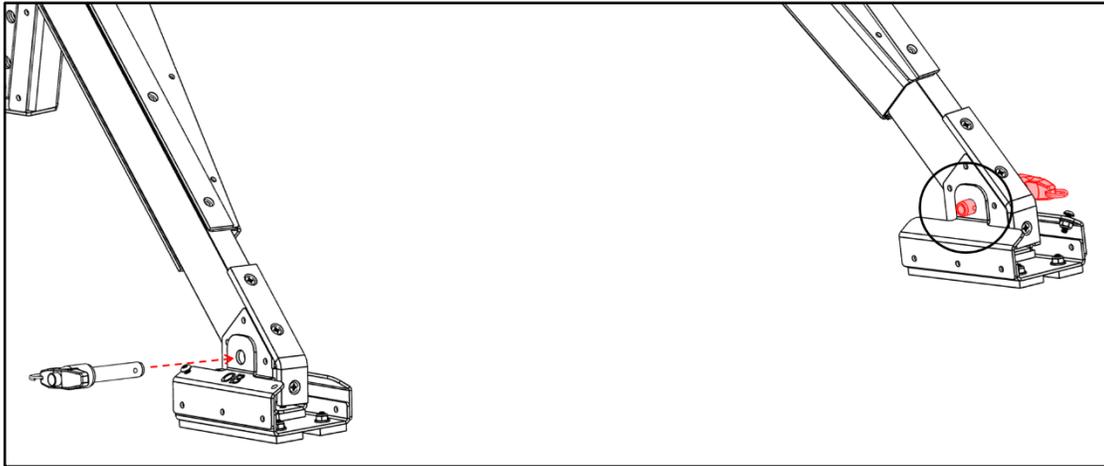
**Figure 9:** To stow, set Handrail onto stowage plate and secure with black rubber strap.

3. **MX5+ Wheel Kit:** The MX5+ comes equipped with 3" plain-bearing wheels. Optional 4" ball-bearing wheels can be installed using the same wheel plate assemblies and hardware. Lube as necessary with Aeroshell 22, Mobilgrease 28, or an equivalent grease that meets MIL-PRF-81322.
  - a. Position wheel and axel assemblies between wheel mounting plates. Secure with provided hardware: bolt heads outboard, nuts inboard. Torque nuts 15 (+/- 5) in-lbs.
  - b. The 3" wheels utilize the lower hole of the wheel plate; the 4" wheels utilize the upper hole of wheel plate (Figure 10).

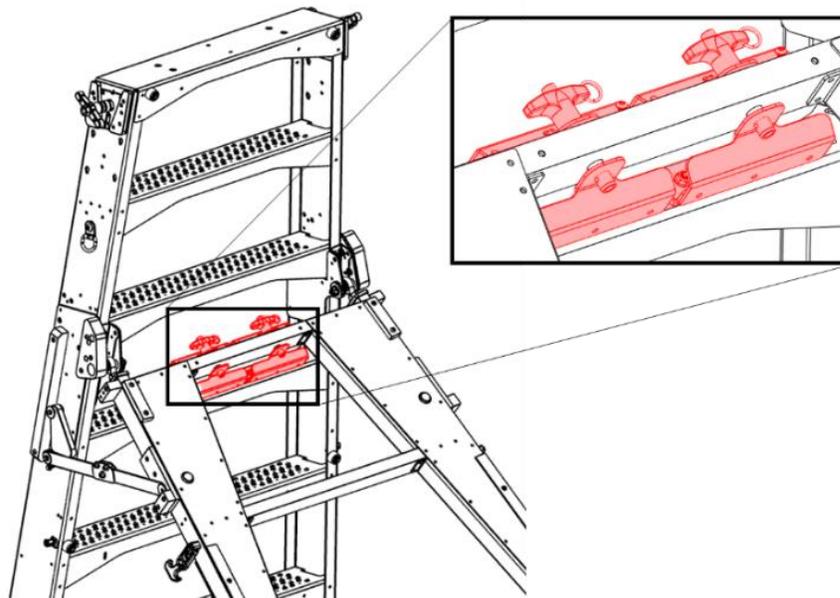
**Figure 10:** Install wheel into appropriate bolt hole according to wheel diameter. Attach wheel plate to MX5+ feet.



4. **Field Deployment Kits:** The Field Deployment Kits are optional add-ons that provide a greater range of protection and durability in adverse conditions and environments. The FDK-1 set incorporates additional protective bumpers, dual sets of support closure latches, heavy duty ball bearing wheels and tie-down rings. The FDK-2 kit consists of a pair of oversized foot pads (Tundra Pads) that pin into the forward support legs. These are ideal when operating on unimproved landing sites. They can be stowed on the upper crossbar of the support leg assembly.
  - a. To install Tundra Pads, slightly lift rear support legs one at a time and slide the Tundra Pads into position, with the "OB" facing outboard, under the feet.
  - b. Install quick-pins through tundra pad and rear support leg holes (Figure 11).
  - c. Tundra Pads may be stowed on the cross tube of the rear support legs. Place pads, foot pads facing inboard, and install quick-pins (Figure 12).

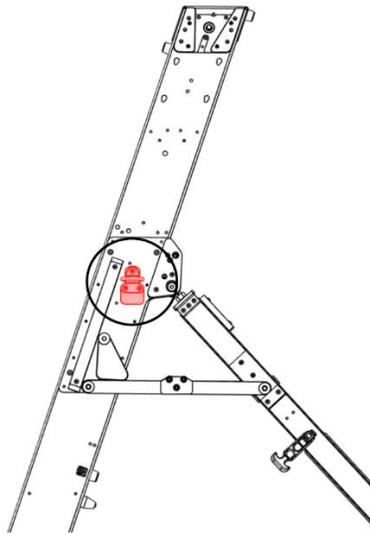


**Figure 11:** Place Tundra Pads under rear support legs, noting outboard (OB) orientation. Install quick-pins through pin holes. Ensure complete engagement of quick-pin locking balls.



**Figure 12:** Stow Tundra Pads on inner side of upper cross-tube of the rear support legs. Secure with quick-pins.

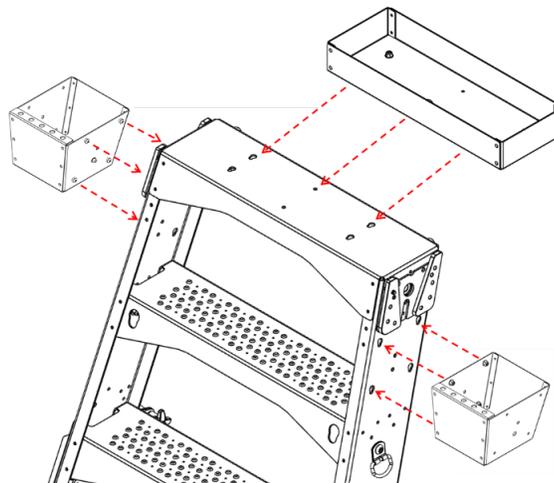
5. **Tie-down Rings:** The optional tie-down rings, if installed, are located on the outboard side of the siderails below the top legal step (Figure 13). The rings may be used as tie down/securing points when in use or when being stored. When securing the unit, cable (or webbing) slack is to be removed, but tension (load) is not to be applied.



**Figure 13:** Tie-down rings, located on side rail, can be used as securing points.

**CAUTION: DO NOT APPLY EXCESSIVE PRE-LOAD TO TIE-DOWN RINGS. TIE-DOWN CHAINS SHALL ONLY BE TIGHTENED TO THE AMOUNT NECESSARY TO PREVENT THE MX5+ FROM MOVING ON FLOOR. FAILURE TO COMPLY MAY RESULT IN EXCEEDING THE RATED LOAD CAPACITY AND DAMAGE TO THE MX5+.**

- 6. Tool Trays:** Tool trays are available to assist in tool and FOD control and can increase efficiency by minimizing trips up and down the unit. They can be added or transferred to the MX5+, all Extensions, and the guard rails of the MXPS Service Decks and Platform.
- a. Installing the side tool trays:
    - i. Locate the key-hole slots on the upper (outboard) side rails.
    - ii. Align and drop the shouldered tray bolts (located on the side of each tray) into the key-hole slots and engage plunger pin into retention hole to lock tray in place (Figure 14).
  - b. Installing the top tool tray:
    - i. Locate key-hole slots on the top rung of the unit.
    - ii. Align, drop and slide the shouldered tray bolts (located on the bottom of the tray) into the key-hole slots and engage plunger pin into the retention hole to lock tray into place (Figure 14).



**Figure 14:** Install tool trays as shown, placing shouldered bolts into key-slot holes and locking with plunger pins into the retention holes.

**CAUTION: FAILURE TO PROPERLY SECURE TOOL TRAYS CAN LEAD TO EQUIPMENT DAMAGE.**

# Extensions

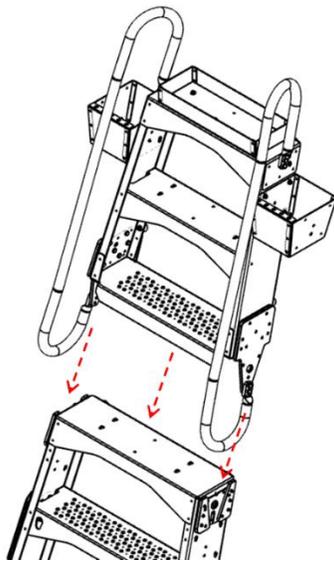
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The MX5+ is a modular ladder that can increase its working height with the addition of Extensions. Optional Extensions of 2', 3', 4', 5' and 6' are available, and secure to the MX5+. Handrails provide the user with increased stability and security.

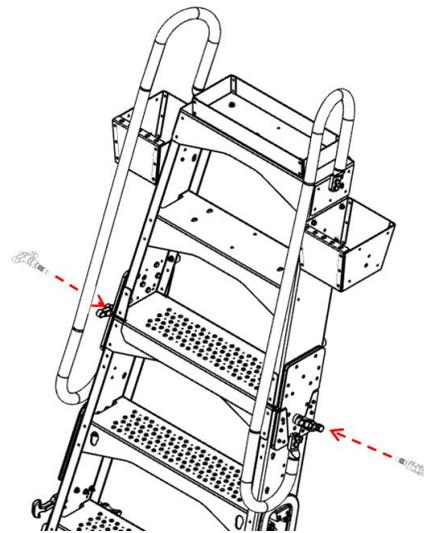
*Note: The Extensions are clearly labeled to identify the uppermost legal standing rung. This is typically the second one down from the top-cap. Some Extensions (Walk-Thru for example) do allow usage of the modified top-cap.*

## 1. Securing an Extension with Handwheels:

- a. Verify that the mating surfaces of the Extension's tapered tangs and the MX5+ guide-rails are clean.
- b. Carefully lift the Extension and position the tapered tangs into the V-shaped guide rails (Figure 15).
- c. Place the two handwheels through the large hole in the tapered tang and lightly thread them into the nutplate that is mounted on the inside rails of the MX5+ (Figure 16).
- d. Once both are engaged, firmly hand tightening until no discernable play exists between the tang and the guide rails. If play exists, or for added security, torque each handwheel bolt to 150-175 (+/- 5) in-lbs.



**Figure 15:** Place tapered tangs of Extension into MX5+ receiver plates.

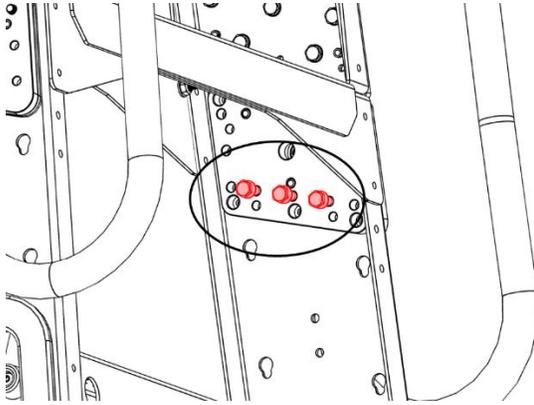


**Figure 16:** Install Handwheels through Extension tangs and into MX5+ receiver plates.

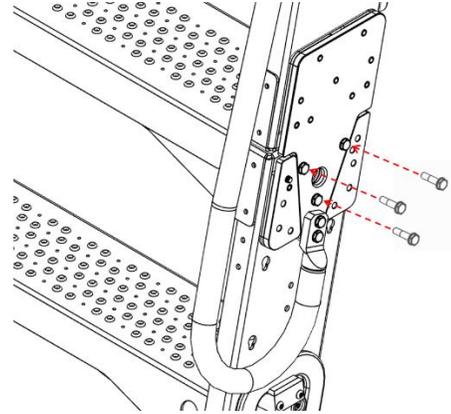
**DANGER: FAILURE TO PROPERLY SECURE EXTENSIONS CAN LEAD TO INJURY OR DEATH!**

## 2. Securing an Extension with AN4-10A bolts:

- Remove spare bolts and washers stowed in the inboard side of the MX5+ side rail nutplates (Figure 17).
- After setting the Extension's tapered tangs within the guide rails, slightly pull down on the Extension while threading the bolts through the tang into the nutplate (Figure 18).
- After all six bolts are lightly engaged, torque each to 100 (+/- 5) in-lbs.



**Figure 17:** Locate AN4-10A bolts in inboard side rail of nut plates.



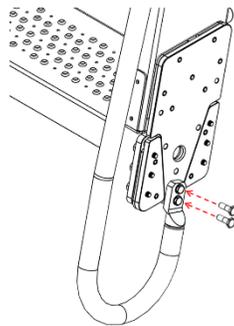
**Figure 18:** Install AN4-10A bolts through Extension tang and into nutplate.

*Note: While removing and installing Extensions, the bolted handwheels can be temporarily stowed in the key-hole slots provided in rung 5.*

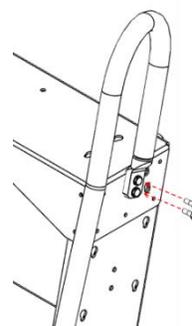
## 3. **Extension Handrails:** The MX5+ Extensions are typically shipped with the Safety Handrails installed. If they have been removed for transport or need replacing, however, reference the following:

- Set Extension down, preferably on a worktable, with bumpers and foam down.
- Attach the lower handrail (the end with the sleeved rubber) to the black tapered tang with 2 AN4-6A bolts, each with an AN960-416 washer under the head (Figure 19). Use a sparing amount of high-strength threadlocker (Loctite 262 or equivalent recommended). Do not tighten.
- Attach the upper end of handrail to the Extension with 2 AN4-11A bolts, each with washers and nuts (Figure 20). Use a sparing amount of high-strength threadlocker (Loctite 262 or equivalent recommended). Do not tighten.
- Torque lower bolts to 80 (+/- 5) in-lbs, then torque upper nuts 80 (+/- 5) in-lbs.

**Figure 19:** Install bolts and washers through Extension handrail into Extension tang.



**Figure 20:** Install bolts and washers through Extension handrails into Extension top rung.

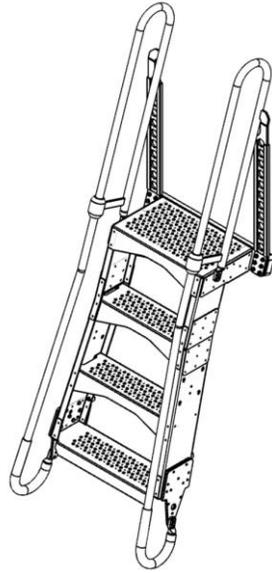


**DANGER: FAILURE TO PROPERLY SECURE HANDRAILS CAN LEAD TO INJURY OR DEATH!**

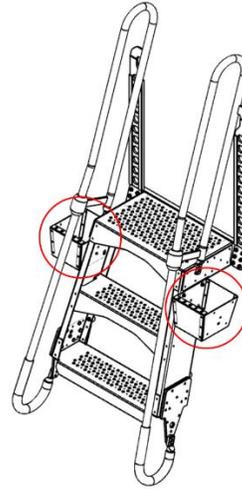
4. **Walk-Thru Extension:** The Walk-Thru Extension comes in two lengths: 2' and 3'. This Extension is designed to allow standing on and walking thru via the enlarged top step, complete with extended handrails that provide the user with additional points of contact and ergonomic stabilization. Additional rubber and foam bumpers provide protection against abrasion and impact with the aircraft.

*Installation of the Walk-Thru Extension is identical to the ones noted above, through the use of the handwheels and/or spare bolts.*

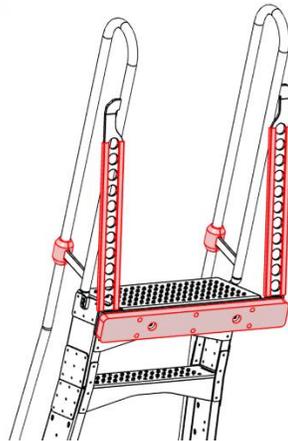
**Figure 19:** The 3' Walk-Thru Extension without the MX5+ ladder



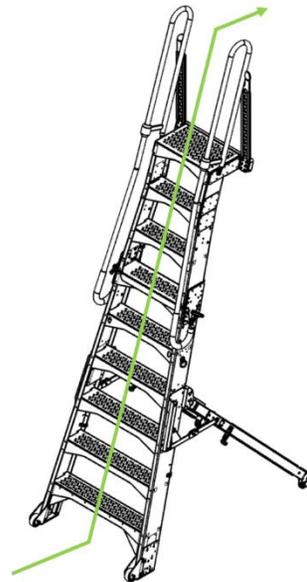
**Figure 20:** The 2' Walk-Thru Extension with the removeable tool trays installed on the side rails.



**Figure 21:** Foam, rubber, and polyurethane bumpers protect the Extension and aircraft from abrasion and impact damage.



**Figure 22:** MX5+ with 3' Walk-Thru Extension. Path of ascent and walk-thru displayed by the green arrow.

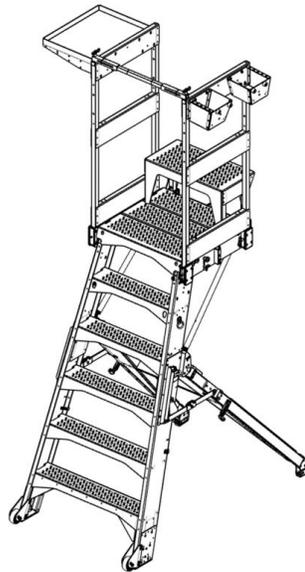


**DANGER: THE 3' WALK-THRU EXTENSION (PN: MX-3WTEXT AND MX-3WTEXT-USN) IS NOT COMPATIBLE WITH THE MXPS PLATFORM SYSTEM. INSTALLATION COULD LEAD TO TIPPING WHICH CAN LEAD TO INJURY OR DEATH!**

# Service Deck

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The Service Deck can be secured to the MX5+ to provide a user with a larger working surface and can be equipped with guardrails, tool and laptop trays, and manually placed safety bars (Figure 21).



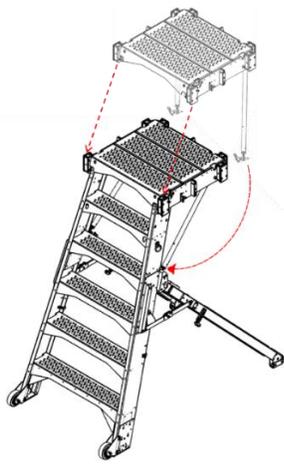
**Figure 21:** MX5+ with Service Deck, including two guardrails, two tool trays, one laptop tray, one single step and one safety bar.

## 1. Prepare the MX5+:

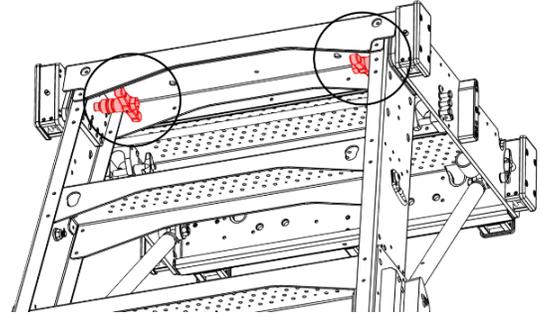
- a. The bolted handwheels are temporarily stowed in the key-hole slots of rung five.
- b. Tool trays have been removed from the top rung and side rails.
- c. Short Hand Rail kit is in stowed position.
- d. Extensions have been removed.

## 2. Install the Service Deck:

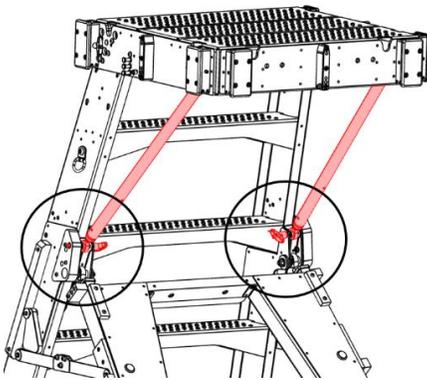
- a. Disengage quick-pins (Qty 2) securing the support tubes to the Service Deck and rotate support tubes away from deck. (Qty 2).
- b. Position and fully engage tapered tangs of the Service Deck within the guide rails of the two receiver assemblies located on the top of the outboard siderails of the MX5+ (Figure 22).
- c. Thread bolted hand wheels (Qty 2) of MX5+ into nutplates located on the upper INBOARD siderails of MX5+. Lightly hand tighten (Figure 23).
- d. Swing support tubes to align rod-ends with MX5+ side rail plates and install quick-pins (Qty 2) handles inboard, to secure with MX5+ (Figure 24).
- e. Thread thumbwheel (Qty 2) through the Service Deck's receiver assembly and into nutplates located on top of the inboard siderails of MX5+ (Figure 25).
- f. IF HANDWHEELS OR THUMBWHEELS ARE LOST, install the AN4-10A bolts (Qty 4) with AN960-416 washers (Qty 4) through the Service Deck's receiver assembly and into nutplates located on top of the inboard siderails of MX5+. Torque 75-100 (+/- 5) in-lbs (Figure 26).



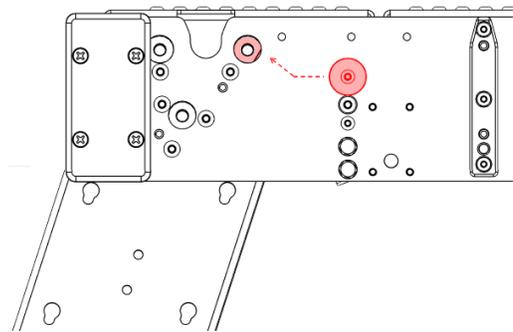
**Figure 22:** Set service deck onto top rung of MX5+.



**Figure 23:** Install handwheels and lightly hand tighten.



**Figure 24:** Swing support tubes into position and install quick-pins, handles in-board.

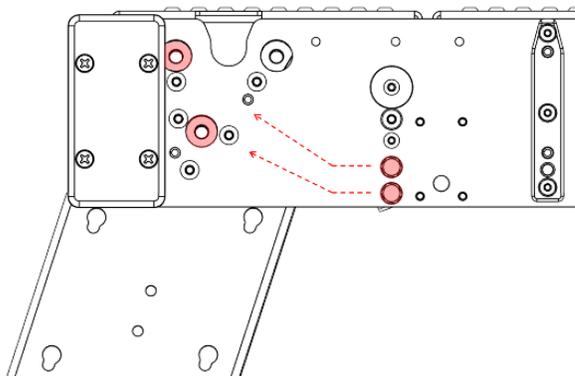


**Figure 25:** Install thumbwheels and lightly hand tighten.

**DANGER: FAILURE TO PROPERLY SECURE THE SERVICE DECK CAN LEAD TO INJURY OR DEATH!**

The Service Deck can be secured with **ONLY** the following combinations (QUANTITIES NOTED AS PER SIDE):

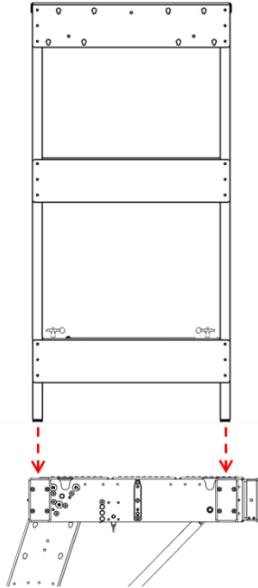
- 1 Handwheel + 1 Thumbwheel OR
- 1 Handwheel + 1 AN4-10A Bolt OR
- 1 Thumbwheel + 2 AN4-10A Bolts OR
- 3 AN4-10A Bolts



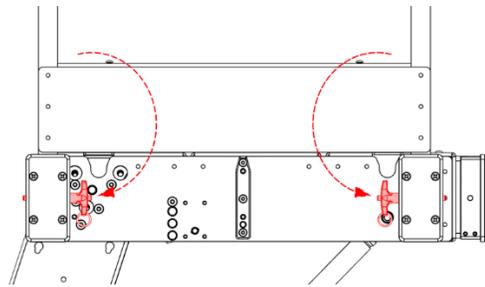
**Figure 26:** If a thumbwheel or a handwheel is missing, use AN4-10A bolts and AN960-416 washers (2 per side) to replace missing component. Torque 75-100 (+/- 5) in-lbs.

### 3. Install guardrails:

- a. Guardrails can be installed on three sides of Service Deck.
- b. Insert guardrail ends into the black guardrail receivers located on outboard sides of the service deck (Figure 27).
- c. Install quick-pins (Qty 2 per guardrail), handles inboard, through guardrail receivers and guardrail ends (Figure 28).



**Figure 27:** Insert guardrail into guardrail receivers of service deck.

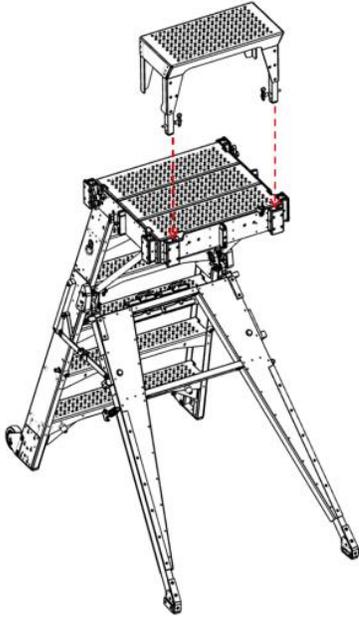


**Figure 28:** Install guardrail quick-pins into guardrail receivers of service deck.

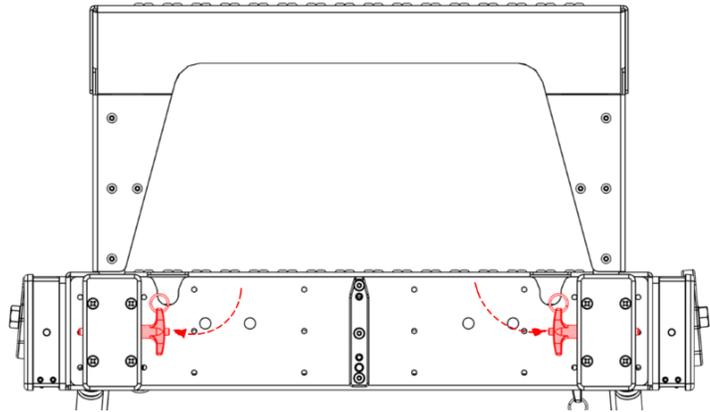
**DANGER: FAILURE TO PROPERLY SECURE THE GUARD RAILS CAN LEAD TO INJURY OR DEATH!**

**DANGER: DO NOT STAND ON GUARDRAIL. DOING SO CAN LEAD TO INJURY OR DEATH!**

4. **Install Single Step:** The Single Step can be installed onto the service deck to gain the user additional height.
  - a. Orient the Single Step and drop it into the guardrail receivers (the side opposite of the stepped unit) until it is flush with the surface of the service deck (Fig. 29). The rear legs must be oriented on the inboard side of the service deck.
  - b. On the outboard side, install the attached pit-pins through the holes of the guardrail receivers and the Single Step's alignment rod (Fig 30).



**Figure 29:** Align and drop Single Step into guardrail receivers (guardrails not shown).



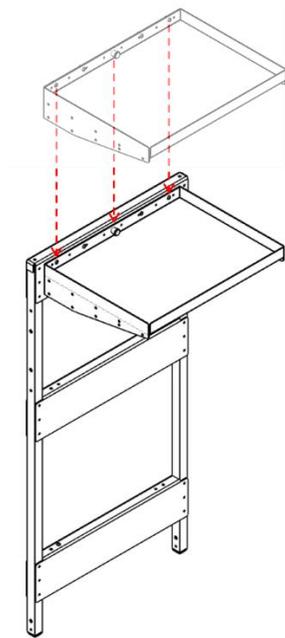
**Figure 30:** Install quick-pins into guardrail receivers of service deck.

**DANGER: FAILURE TO PROPERLY SECURE THE SINGLE STEP CAN LEAD TO INJURY OR DEATH!**

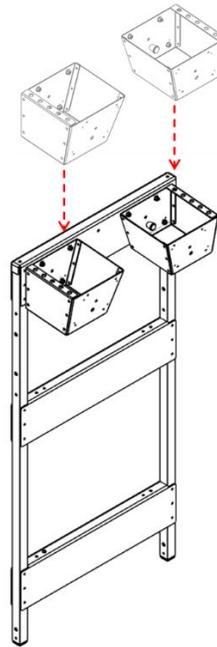
**5. Additional items:**

- a. Laptop Tray
  - i. Align and drop the tray bolts into the top row of key-hole slots located on outboard side of the top rung of guardrail and engage plunger pin into retention hole to lock tray in place (Figure 31).
- b. Tool Tray
  - i. Align and drop the tray bolts, located on the side of each tray, into the key-hole slots located on the outboard side of top rung of guardrail and engage plunger pin into retention hole to lock tray in place (Figure 32).
- c. Safety Bar
  - i. Pin one end of Safety Bar to the top of guardrail on the end nearest to the opening of platform.
  - ii. Swing and extend gate to opposite guardrail and pin to lock (Figure 33).
  - iii. When not in use, the Safety Bar can be stowed on the top of the guardrail.

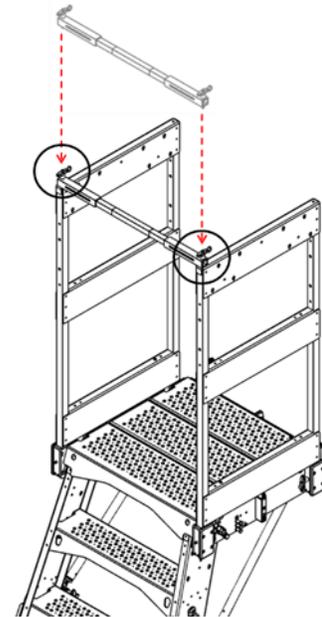
**DANGER: FAILURE TO PROPERLY SECURE THE SAFETY-BAR CAN LEAD TO INJURY OR DEATH!**



**Figure 31:** Place tool tray bolts into key-hole slots and engage plunger pin.



**Figure 32:** Place laptop tray bolts into key-hole slots and engage plunger pin.

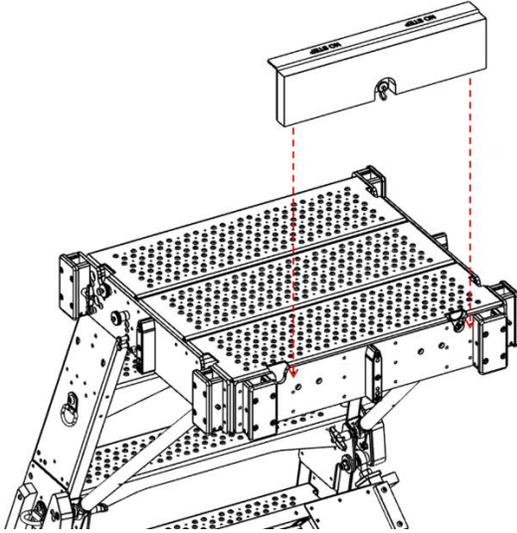


**Figure 33:** Pin one end of Safety Bar to a guardrail. Extend and pin to opposite guardrail.

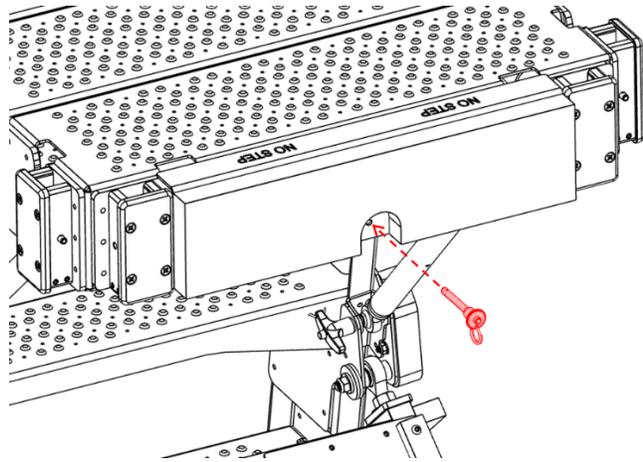
*Note: With the Service Deck and two guardrails installed, the entire unit weighs approximately 120 lbs. For very short-distance relocation, the unit may be moved in the open position as described in “MX5+ HeliLadder Positions and Configuration” section. Extra caution must be exercised! Due to the increased weight and size, the risk of tipping is greatly increased.*

**DANGER: FAILURE TO MAINTAIN CONTROL OF THE MX5 AND SERVICE DECK WHILE RELOCATING CAN LEAD TO EQUIPMENT DAMAGE OR PERSONEL INJURY!**

- 6. Install Bumper Pad:** A Bumper Pad can be installed for added protection between the service deck and the aircraft.
- Orient the Bumper Pad so that the “No Step” cut-out is visible to the user when standing on the service deck (Figure 34).
  - Place the Bumper Pad onto the service deck on the side that will face the aircraft (Figure 35). Install quick-pin (Qty 1) through bumper plate and alignment rail of the service deck to secure (Figure 35).



**Figure 34:** Position and place bumper with “NO STEP” oriented up (guardrails not shown).



**Figure 35:** Secure bumper with one quick-pin.

**CAUTION: FAILURE TO PROPERLY POSITION AND SECURE THE BUMPER CAN LEAD TO EQUIPMENT DAMAGE.**

# Platform

The MXPS is a modular system that consists of two MX5+ HeliLadders, two Service Decks and one Platform Deck. It can be assembled in several different configurations, allowing the user to adjust its position and orientation that the intended task requires (Figure 36).



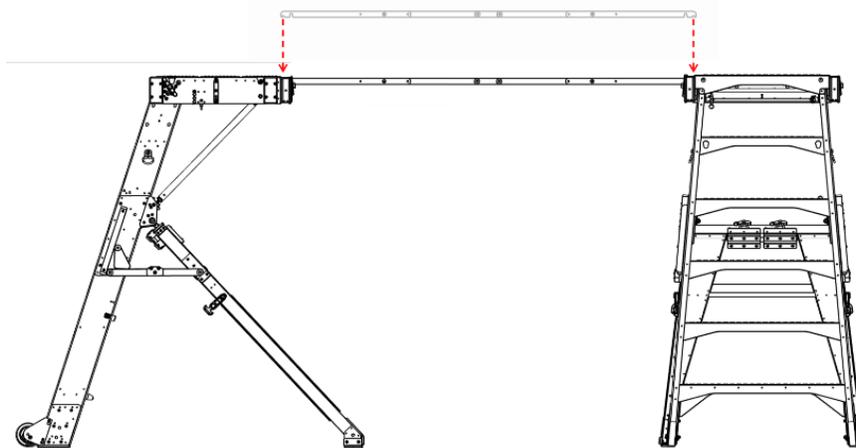
**Figure 36:** The MXPS shown in the three possible configurations: Overhung, Offset and In-line. Images include Guardrails, Self-Closing Gates, Laptop Trays and Tool Trays.

**CAUTION: THE PLATFORM SYSTEM IS NOT DESIGNED TO BE MOVED ONCE ASSEMBLED !**  
**MOVEMENT OF THE ASSEMBLY CAN LEAD TO EQUIPMENT DAMAGE. PRE-POSITION THE MX5/SERVICE DECKS PRIOR TO INSTALLATION OF THE PLATFORM AND GUARDRAILS.**

## 7. Prepare the Service Decks:

- Install Service Decks (two are necessary for the platform system) to two MX5+ HeliLadders. Refer to “Service Deck” for instructions of Service Deck installation (pg. 14).
- Position and align Service Decks 69 ¼” (88 ¼” if using an 88” Platform) apart using provided spacing jig (Figure 37).

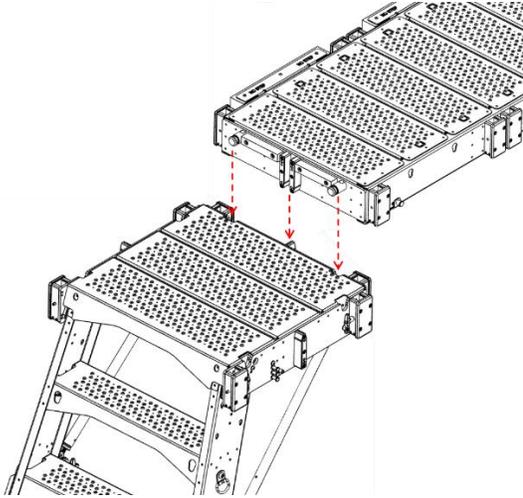
NOTE: The spacing jig is stowed on the under-side of the platform.



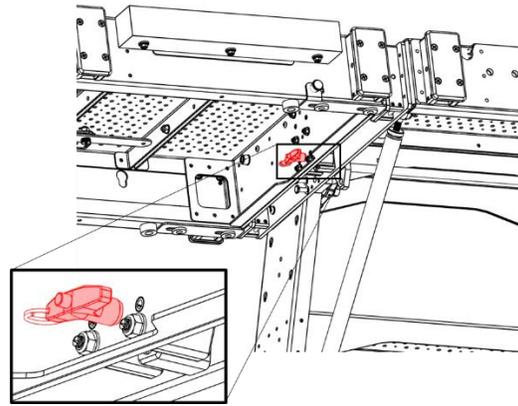
**Figure 37:** Use spacing jig to position and align Service Decks.

## 8. Install the Platform Deck:

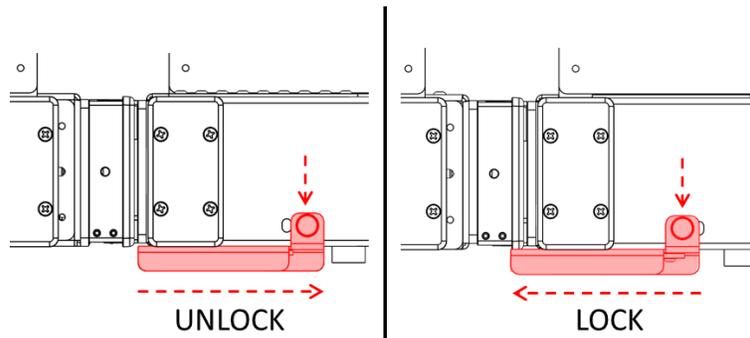
- a. Carefully lift platform. Lower and engage alignment rails and lug bolts into the Service Decks (Figure 38).
- b. Install quick-pins (Qty 2) located on the under-side of the platform through the Platform end plates and Service Deck alignment rails (Figure 39).
- c. Engage anti-tipping slide locks (Qty 4) located on each corner of the Platform. Ensure locking plunger on each latch is fully recessed into the retention hole (Figure 40).



**Figure 38:** Set Platform into service deck, engaging alignment rails and lug bolts.



**Figure 39:** Install quick-pins (Qty 2) through Platform endplates, into Service Decks.



**Figure 40:** Engage slide locks on all four corners of platform.

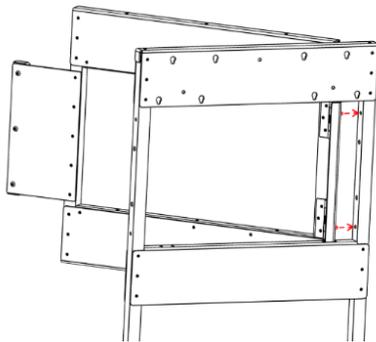
**CAUTION: THE PLATFORMS ARE HEAVY AND CAN BE AWKWARD TO POSITION. FAILURE TO USE ADEQUATE PERSONEL CAN LEAD TO EQUIPMENT DAMAGE OR PERSONAL INJURY.**

**DANGER: FAILURE TO PROPERLY SECURE THE PLATFORM CAN LEAD TO INJURY OR DEATH!**

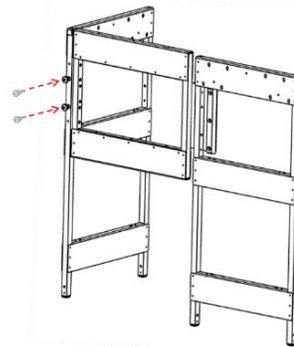
9. **Install Guardrails:** Guardrails may be installed to ensure that the user is protected from falling. The locations of the guardrails will depend on the orientation the system is configured to. Refer to Figure 36 for the appropriate placements of the guardrails.
  - a. Insert guardrail ends into the black guardrail receivers located on the sides of the Service Decks and Platform (See pg. 16, section “Service Deck”).
  - b. Install quick-pins (Qty 2 per guardrail, stowed on bottom rung of guardrail), handles inboard, through guardrail receivers and guardrail ends (See pg. 16, section “Service Deck”).

**DANGER: FAILURE TO PROPERLY SECURE GUARD RAILS CAN LEAD TO INJURY OR DEATH!**

10. **Install Self-Closing Gates (SCG):** SCGs are to be installed where the user ascends the ladder to access the Platform deck. They are multi-directional and can be orientated in the manner dictated by the MXPS’ configuration.
  - a. Identify the location and orientation of the SCG, noting that they are to swing inboard to allow unimpeded access to the platform.
  - b. Align and insert hinge-alignment pins (Qty 2 per gate) into inboard guardrail holes located on vertical side rails above the middle rail (Figure 41).
  - c. Remove stowed, threaded thumb wheels (Qty 2 per gate) from gate and insert (*outboard, opposite of alignment pin side*) through guardrail holes located in-between hinge pin holes. Thread into hinge nut plates and hand-tighten using thumb wheels (Figure 42).
  - d. SCG should freely swing inboard, and then close UN-ADIDED, making contact with the guardrail opposite to the hinged gate (Figure 43).

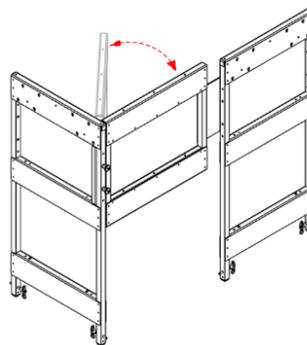


**Figure 41:** Guide the SCG alignment pins located on hinge into the guardrail alignment holes.



**Figure 42:** Install thumb wheel threaded shanks through guardrail and into hinge nut plates and hand-tighten.

**Figure 43:** SCG should be orientated to swing open in the inboard direction, and self-close, making contact with opposite guardrail.

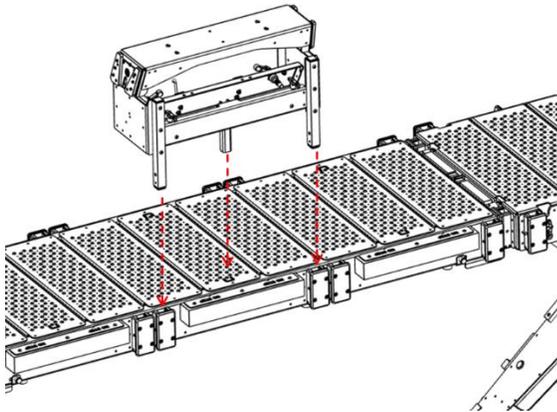


**DANGER: FAILURE TO PROPERLY SECURE THE SELF-CLOSING GATES CAN LEAD TO INJURY OR DEATH!**

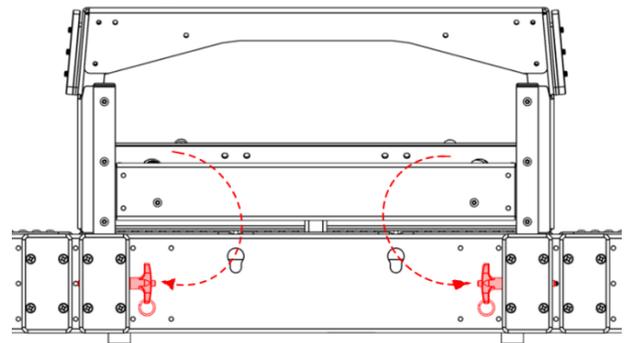
**DANGER: DO NOT STAND ON SELF CLOSING GATE. DOING SO CAN LEAD TO INJURY OR DEATH!**

**11. Install Extension Receiver and Extension:** The Extension Receiver, in conjunction with a +1, +2, +3 and +4 Extension, can be installed onto the platform to increase the working height and enable the user to accomplish tasks that demand a higher reach. Guardrails shall be installed to the platform prior to installation of the Extension Receiver.

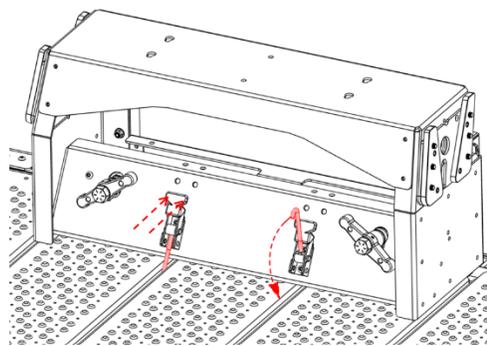
- a. Orient the Extension Receiver so that the yellow latches are facing inboard of the platform. Drop the unit into the chosen guardrail receivers until the unit is sitting flush on the surface of the platform (Figure 44).
- b. On the outboard side, install the attached pit-pins through the holes of the guardrail receivers and the Extension Receiver's alignment rod (Figure 45).
- c. Release the yellow latches and drop the hooked end through the slots of the platform steps. Hook the bolts on the under-side of the platform and snap the latch into its locked position. Check that the hook is properly engaged with the bolt (Figure 46).



**Figure 44:** Align and drop Extension Receiver into guardrail receivers (guardrails not shown).



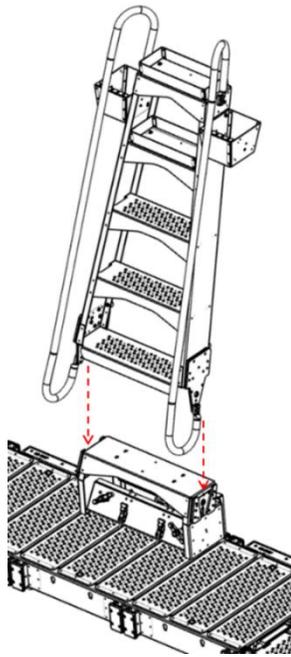
**Figure 45:** Install quick-pins into guardrail receivers of platform.



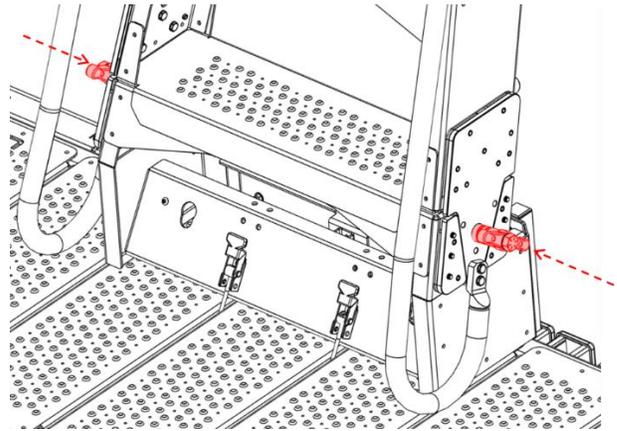
**Figure 46:** Release yellow latches and drop hook into platform slots. Hook bolts on platform's underside and snap latch into locked position.

**DANGER: FAILURE TO PROPERLY SECURE THE EXTENSION RECEIVER CAN LEAD TO INJURY OR DEATH!**

- d. Install the chosen Extension:
  - i. Verify that the mating surfaces of the Extension's tapered tangs and the Extension Receiver guide-rails are clean.
  - ii. Carefully lift the Extension and position the tapered tangs into the V-shaped guide rails (Figure 47).
  - iii. Place the two handwheels through the large hole in the tapered tang and lightly thread them into the nutplate that is mounted on the inside rails of the Extension Receiver (Figure 48).
  - iv. Once both are engaged, firmly hand tightening until no discernable play exists between the tang and the guide rails. If play exists, or for added security, torque each handwheel bolt to 150-175 (+/- 5) in-lbs.



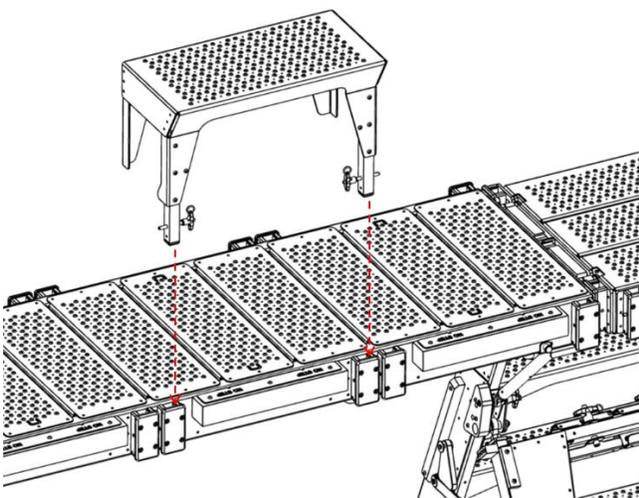
**Figure 47:** Place tapered tangs of Extension into Extension Receiver plates (guardrails not shown).



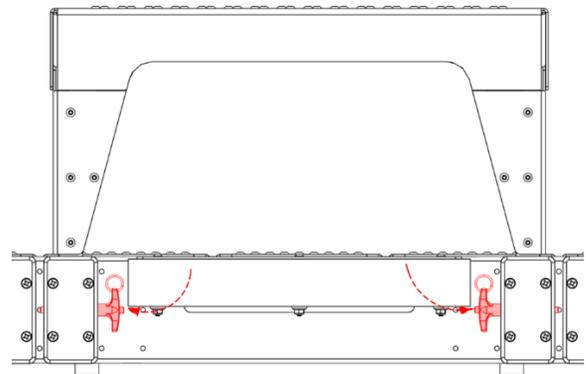
**Figure 48:** Install Handwheels through Extension tangs and into Extension Receiver plates.

**DANGER: FAILURE TO PROPERLY SECURE THE EXTENSION CAN LEAD TO INJURY OR DEATH!**

- 12. Install Single Step:** The Single Step can be installed onto the platform to gain the additional height for the user.
- a. Orient the Single Step and drop it into the guardrail receivers until it is flush with the surface of the platform (Figure 49). The rear legs must be oriented on the inboard side of the platform.
  - b. On the outboard side, install the attached quick-pins through the holes of the guardrail receivers and the Single Step's support post (Figure 50).



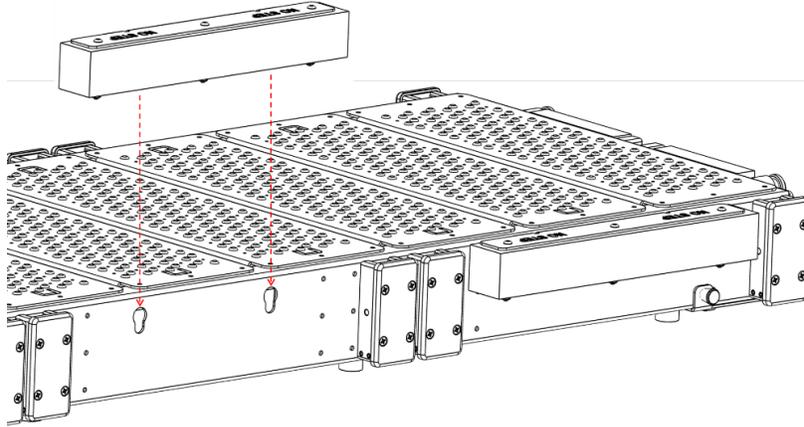
**Figure 49:** Align and drop Single Step into guardrail receivers (guardrails not shown).



**Figure 50:** Install quick-pins into guardrail receivers of platform.

**DANGER: FAILURE TO PROPERLY SECURE THE SINGLE STEP CAN LEAD TO INJURY OR DEATH!**

- 13. Install Bumper Pads:** Bumper Pads, a separately purchased accessory, can be installed for added protection between the platform and the aircraft.
- Orient the Bumper Pad so that the “No Step” cut-out is visible to the user when standing on the Platform (Figure 51).
  - Align and drop the Bumper Pad shoulder-bolts into the key-hole slots located on the outboard side of Platform side rails between the guardrail receivers (Figure 51).



**Figure 51:** Insert Bumper Pads into key-hole slots with “NO STEP” oriented up (guardrails not shown).

**CAUTION: FAILURE TO PROPERLY POSITION AND SECURE THE PLATFORM BUMPERS CAN LEAD TO EQUIPMENT DAMAGE.**

**14. Additional items:**

- Laptop Tray
  - Align and drop the tray bolts into the top row of key-hole slots located on outboard side of the top rung of guardrail and engage plunger pin into retention hole to lock tray in place (See pg. 18 of “Service Deck”).
- Tool Tray
  - Align and drop the tray bolts, located on the side of each tray, into the key-hole slots located on the outboard side of top rung of guardrail and engage plunger pin into retention hole to lock tray in place (See pg. 18 of “Service Deck”).

**CAUTION: FAILURE TO PROPERLY POSITION AND SECURE TOOL TRAYS CAN LEAD TO EQUIPMENT DAMAGE.**

# OSHA, ANSI

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The MX5+, Service Deck, and Platform System are ANSI certified as a Special Purpose Portable Metal Ladder, Special Purpose Mobile Ladder Stand, and Special Purpose Mobile Ladder Stand Platform (OSHA 1910 Subpart D), respectively. Due to the necessity to perform and function within a wide range of work tasks and environmental conditions, as well as meeting the requirements of field deployments, the units conform to the “Special Purpose” designation within the scope of ANSI/OSHA standards. This designation gives additional leeway for design exceptions where specific standards may not be applicable or achievable. As such, the following specific exceptions are outlined both within this user manual as well as labelled on the units. The following are exceptions to the standards applicable to the Service Deck and Platform:

1. OSHA 1910 Subpart D 1910.29(k)(1)(iv): Depending on the chosen configuration of the Platform system, the spacing between the guardrails range from 1.6” to 4”, which exceeds the maximum allowable gap of 1”. Personnel must be aware of the gaps, and use caution in the placement of tools, parts, and equipment.
2. A14.7-2011 4.3.4: Conventional handrails are not incorporated into the unit design. However, utilization of guardrail supports can substitute as grab bars (as defined within OSHA 1910 Subpart D 1910.21(b)).

The Platform system integrates numerous features to provide protection against falling, FOD, dropping of objects etc. through the incorporation of Guardrails, Bumper Pads, Self-Closing-Gates, and Safety Bars. Some of these options are not required per A14.7-2011 4.4.6 (Mobile Ladder Stand Platforms) because the unit height does not reach the minimum of 10 feet. However, these items have been included in the system’s design to maximize the safety of the user and to protect against damage that may occur to aircraft, or injury to others working in the vicinity of the unit.

**It is the responsibility of the user to be familiar with the limitations of the design and use the unit in a manner appropriate for the task.**

# Load Capacities

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**Load Capacities:** The MX5+, Service Deck, and Platform System have varying working load capacities. Being a modular system that can be configured in numerous ways, it is imperative that the user be aware of the load limitations of each configuration. Load capacity is inclusive of the combined weight of personnel, materials, tools, and accessories, including guardrails, tool trays, laptop trays and Extensions. If tie-down straps (or any device) are being used to secure the unit to the ground or a fixed object, the applied force (ft-lbs) reduces the load capacity a corresponding amount. Note the working load capacities of each unit.

## Load Capacities:

MX5+ and Extensions: **375** Lbs

Service Deck (as defined by the combination of one MX5+ and one Service Deck): **375** Lbs

Single Step (when installed with the Service Deck or Platform): **375** Lbs

Extension Receiver with Extension, installed onto the Platform: **250** Lbs

MXPS (as defined by the combination of two MX5+s, two Service Decks and one Platform): **750** Lbs

**CAUTION: FAILURE TO ABIDE BY WEIGHT LIMITATIONS CAN LEAD TO EQUIPMENT DAMAGE**

**DANGER: FAILURE TO ABIDE BY WEIGHT LIMITATIONS CAN LEAD TO INJURY OR DEATH!**

# Inspection and Maintenance: MX5+ Ladder & Extension

*Note: Upon receipt of New or Used units (or after transport to new locations) perform a Monthly Inspection.*

## 1. Before each use inspect ladder assembly as follows:

- a. Verify all rivets, joints, nuts, and bolts are tight.
- b. Verify steps, handrails, tool trays, are secure.
- c. Verify (if attached) Extensions, Service Decks and Handrails, are secure.
- d. Verify spreaders and spreader locks are secure and functioning properly.
- e. Verify ladder and Extensions are clean and free from grease, oil, fuel, mud, snow, wet paint, and foreign materials.
- f. Remove MX5+ from service if damaged.

**DANGER: USING A DAMAGED LADDER (OR EXTENSION) MAY CAUSE INJURY OR DEATH!**

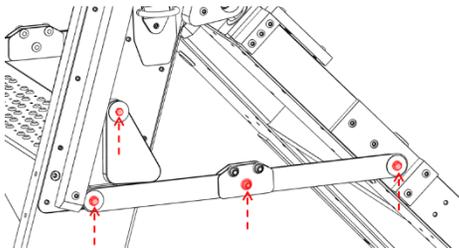
## 2. Monthly Inspection:

- a. Perform DETAILED inspection of above items 1a-1f.
- b. Inspect all caution and safety labels for legibility.
- c. Inspect entire assembly for corrosion, cracks, dents, and distortions.
- d. Inspect 4 foot pads for wear and security.
- e. Remove MX5+ from service if damaged

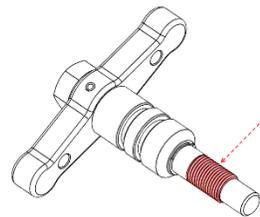
*Note: All parts must be in good working order. Never make unauthorized or temporary repairs of damaged or missing parts. Destroy ladder if broken, bent, worn, cracked, corroded, or if exposed to fire, excessive heat, or chemical/salt corrosion.*

## 3. Proper Care, Storage & General Maintenance:

- a. Store ladder and Extensions in a safe and dry place.
- b. Properly secure and support ladder and Extensions while in transit.
- c. Never store materials on ladder or Extensions.
- d. Keep ladder and Extensions clean and free of all foreign materials.
- e. Wash and rinse ladder and Extensions frequently if used in salt-laden or corrosive environments.
- f. Lube 6 spreader link pivot points, 2 spreader lock pivot points (Figure 52), and two Handwheel threads (Figure 53) with light grade oil monthly, or more frequently if needed. LPS 2 is suitable, or any lube meeting MIL-PRF-81309, MIL-C-81309D Type III, or MIL-C-23411A.



**Figure 52:** Apply lube to spreader links and lock joints.



**Figure 53:** Apply lube to Handwheel threads.

*Note: Refer to HeliLadder Repair Manual or contact manufacturer for additional maintenance or repair procedures. Unauthorized repair of damage, or replacement of missing parts, is not permitted and voids warranty.*

# Inspection and Maintenance: Service Deck Assembly

*Note: Upon receipt of New or Used units (or after transport to new locations) perform a Monthly Inspection.*

## 1. Before each use inspect MX5+ and Service Deck assembly as follows:

- a. Verify all rivets, joints, nuts, and bolts are tight.
- b. Verify MX5+ spreaders and spreader locks are secure and functioning properly.
- c. Verify the Service Decks is properly secured to the MX5+.
- d. Verify Guard Rails and tool trays are secure.
- e. Verify MX5+, Service Deck, and guardrail receivers are clean and free from grease, oil, fuel, mud, snow, wet paint, and foreign materials.
- f. Remove MX5+ and/or Service Deck from service if damaged.

**DANGER: USING A DAMAGED LADDER OR SERVICE DECK CAN LEAD TO INJURY OR DEATH!**

## 2. Monthly Inspection:

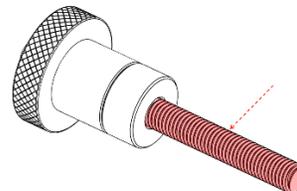
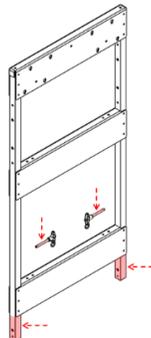
- a. Perform DETAILED inspection of above items 1a-1f.
- b. Inspect all caution and safety labels for legibility.
- c. Inspect entire assembly for corrosion, cracks, dents, and distortions.
- d. Remove Service Deck and/or Guardrails from service if damaged.

*Note: All parts must be in good working order. Never make unauthorized or temporary repairs of damaged or missing parts. Destroy Service Deck if broken, bent, worn, cracked, corroded, or if exposed to fire, excessive heat, or chemical/salt corrosion.*

## 3. Proper Care, Storage, & Maintenance:

- a. Store Service Deck in a safe and dry place.
- b. Properly secure and protect Service Deck and support tubes while in transit.
- c. Never store materials on Service Deck.
- d. Keep Service Deck assembly (including lug bolts, key-hole slots and guardrail receivers) clean and free of all foreign materials.
- e. Wash and rinse Service Deck frequently if used in salt-laden or corrosive environments.
- f. Lube quick-pins (Fig. 42) with light grade oil monthly, or more frequently if needed. LPS 2 is suitable, or any lube meeting MIL-PRF-81309, MIL-C-81309D Type III, or MIL-C-23411A.
- g. For smoother operation, it's recommended to the lube lower 4" of the guardrail support tubes with PTFE Teflon spray (MIL-L-60326) or equivalent (Figure 56).
- h. Lube threads of thumbwheels with light grade oil monthly, or more frequently if needed. LPS 2 is suitable, or any lube meeting MIL-PRF-81309, MIL-C-81309D Type III, or MIL-C-23411A (Figure 55).

**Figure 54:** Apply lube to quick-pins and lower 4" of guardrail support tubes.



**Figure 55:** Apply lube to Thumbwheel threads.

# Inspection and Maintenance: Platform System (MXPS)

*Note: Upon receipt of New or Used units (or after transport to new locations) perform a Monthly Inspection.*

## 1. Before each use inspect MX5+ and Platform assembly as follows:

- a. Verify all rivets, joints, nuts, and bolts are tight.
- b. Verify MX5+ spreaders and spreader locks are secure and functioning properly.
- c. Verify the Service Decks are properly secured to the MX5+.
- d. Verify the Platform is properly secured to the Service Decks.
- e. Verify Guard Rails and tool trays are secure.
- f. Verify MX5+, Service Decks, and Platform are clean and free from grease, oil, fuel, mud, snow, wet paint, and foreign materials.
- g. Remove MX5+, Service Decks, Platform, Guardrails from service if damaged.

**DANGER: USING A DAMAGED PLATFORM MAY CAN LEAD TO INJURY OR DEATH!**

## 2. Monthly Inspection:

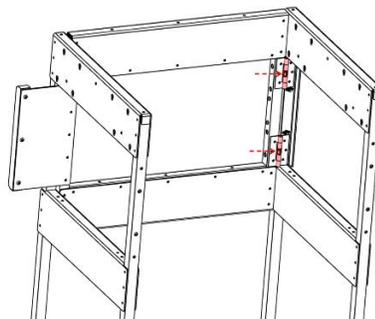
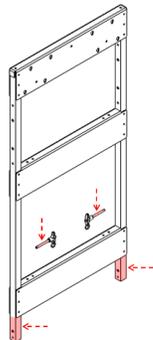
- a. Perform DETAILED inspection of above items 1a-1g.
- b. Inspect all caution and safety labels for legibility.
- c. Inspect entire assembly for corrosion, cracks, dents, and distortions.
- d. Remove Platform Deck and/or Guardrails from service if damaged.

*Note: All parts must be in good working order. Never make unauthorized or temporary repairs of damaged or missing parts. Destroy Platform if broken, bent, worn, cracked, corroded, or if exposed to fire, excessive heat, or chemical/salt corrosion.*

## 3. Proper Care, Storage, & Maintenance:

- a. Store Platform in a safe and dry place.
- b. Properly secure and support Platform while in transit.
- c. Never store materials on Platform.
- d. Keep Platform assembly (including lug bolts, key-hole slots and guardrail receivers) clean and free of all foreign materials.
- e. Wash and rinse platform frequently if used in salt-laden or corrosive environments.
- f. Lube guardrail quick-pins (Figure 56) and self-closing gate hinges (Figure 57) and thumbwheels (Figure 55) with light grade oil monthly, or more frequently if needed. LPS 2 is suitable, or any lube meeting MIL-PRF-81309, MIL-C-81309D Type III, or MIL-C-23411A.
- g. For smoother operation, it's recommended to lube the lower 4" of the guardrail support tubes with PTFE Teflon spray (MIL-L-60326) or equivalent (Figure 56).

**Figure 56:** Apply lube to quick-pins and lower 4" of guardrail support tubes.



**Figure 57:** Apply lube to self-closing gate hinges.

# General Selection, Setup, and Use of the MX5+ and MXPS

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## 1. Proper Selection:

- a. Select equipment of proper length to reach working height.
- b. The MX5+, Extensions, and Service Decks are designed to support one person plus materials and tools not more than the rated working load. Reference LOAD CAPACITIES, page 27.
- c. Reference LOAD CAPACITIES, page 27, for Platform limitations.

## 2. Proper (General) Set-up:

- a. Verify the worksite is free of hazards.
- b. Place MX5+ on a firm level surface with a secure footing. Do not use on slippery surfaces.
- c. Do not place on boxes, unstable bases, scaffolds, or vehicles to gain additional height.
- d. Do not place in front of door opening toward ladder.
- e. If securing the MX5+ with tiedowns, reference *Tie-down Rings: page 10 & 11*.

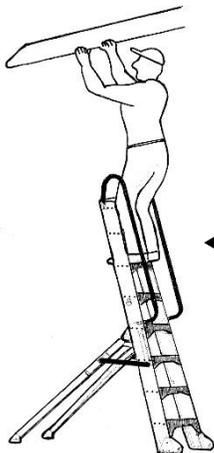
**DANGER: METAL CONDUCTS ELECTRICITY! DO NOT LET LADDER, DECKS, PLATFORMS, HANDRAILS, OR GUARDRAILS COME IN CONTACT WITH LIVE ELECTRICAL WIRES. INJURY OR DEATH CAN OCCUR!**

**DANGER: KEEP LADDER, DECKS, PLATFORMS, HANDRAILS, AND GUARDRAILS CLEAR OF ROTOR BLADES, PROPELLERS, ENGINE EXHAUST, AND OTHER AIRCRAFT AND WORKSITE HAZARDS. DAMAGE TO EQUIPMENT AND/OR INJURY OR DEATH TO CAN OCCUR!**

**DANGER: NEVER MANEUVER THIS EQUIPMENT NEAR AN AIRCRAFT WITH ENGINES RUNNING AND ROTORS, BLADES, OR PROPELLERS TURNING! DAMAGE TO EQUIPMENT AND/OR INJURY OR DEATH CAN OCCUR!**

**DANGER: CEASE MOVEMENT OF MX5+ IF THE OPERATOR LACKS THE STRENGTH OR COORDINATION TO SAFELY MANEUVER THE UNIT. DAMAGE TO EQUIPMENT AND/OR INJURY OR DEATH CAN OCCUR!**

## 3. General Ladder Usage:



1. Set all four feet on firm level surface
2. Verify spreaders are fully extended, and locked into position
3. Keep body centered between side rails, do not over-reach
4. Do not climb above second rung down from top cap
5. Do not stand on, or lean over, safety handrails
6. Do not stand or sit on top cap
7. Wear slip-resistant shoes

#### 4. Proper Climbing and Use:

- a. Do not use ladder or if you tire easily, are subject to fainting spells, are using medicine or alcohol, or are physically impaired.
- b. Face ladder when climbing up or down; keep body centered between side rails.
- c. Maintain a firm grip. Use both hands in climbing.
- d. Do not stand on, lean on, or lean over handrails and guardrails.
- e. Never climb ladder from the side.
- f. Do not overreach; always relocate ladder when needed.
- g. Do not "walk" or "jog" ladder when standing on it.
- h. Do not stand, climb, or sit on braces, spreaders, or back section support.
- i. Avoid wheels when stepping on or off first rung.
- j. Do not overload.
- k. Keep ladder close to work; avoid pushing or pulling off to the side of ladder.
- l. Do not move or reposition a ladder with items in the optional tool trays.
- m. Do not leave ladder set up and unattended.
- n. Wear slip-resistant shoes.

**A ladder/work stand is a tool – but one with inherent risks. Use with caution!  
Observe all Industry, Military, ANSI, OSHA, and regional rules and guidelines regarding ladder safety.**