



SUN DECK BALCONY
(POWERED OPERATION)
CABLE AND MESH GATE
VARIANTS
OEM INSTALLATION MANUAL

TABLE OF CONTENTS

Introduction	2
Safety	2
Resources Required	4
Installation	4
Balcony Installation	4
Switch Installation and Electrical Connections	6
Operation - Cable Variant	7
Stowed Position to Extended Position	7
Extended Position to Stowed Position	11
Operation - Mesh Gate Variant	14
Stowed Position to Extended Position	14
Extended Position to Stowed Position	19
Troubleshooting	23
Troubleshooting Table	23
Manual Operation	23
Wiring Diagrams	24
Notes	27

Introduction

The Sun Deck Balcony (Powered) provides a spacious balcony on the side or back end of the trailer that conveniently folds up and becomes a part of the wall featuring a glass panel.

Two variants of the product exist: one with cables in the side panels that provide safety and tension to the assembly while extended, and another with swinging mesh gates that lock into place at the feet for added stability. Each of these variants install the same way into the sidewall, but have different procedures for operation due to the additional steps required to open and secure the mesh gates.

For additional support on this product, please visit: <https://support.lci1.com/sun-deck-balconies>

NOTE: Images used in this document are for reference only when assembling, installing and/or operating this product. Actual appearance of provided and/or purchased parts and assemblies may differ.

Safety

Read and understand all instructions before installing or operating this product. Adhere to all safety labels.

This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions. This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system. Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/or property damage, including voiding of the Lippert limited warranty.



The "WARNING" symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.

⚠ WARNING

Failure to follow instructions provided in this manual may result in death, serious personal injury and/or severe product and property damage, including voiding of the component warranty.

⚠ WARNING

The maximum weight for the Sun Deck Balcony (Powered) when extended/deployed is 1,200 lbs. Exceeding the maximum weight rating can cause death, serious injury or damage to the trailer.

⚠ WARNING

Never use balcony while anything is obstructing its operation. Obstructions in the balcony's path can cause serious personal injury, severe product or property damage.

⚠ WARNING

Always check the interior of the trailer for obstructions in and around the mechanism before operating the balcony. Obstructions may include but are not limited to: people, pets, toys, appliances, etc. Failure to observe and remove obstructions may result in property damage and/or serious personal injury.

⚠ WARNING

Never deploy the balcony before checking that there is adequate room for it to be completely and safely extended. This includes making sure the trailer is not too close to any trees, fences, shrubs, other trailers, etc. Failure to observe and remove obstructions or relocate the trailer prior to extending the balcony may result in property damage and/or serious personal injury.

⚠ WARNING

Before extending/deploying or retracting/stowing the balcony, always make sure no persons are standing directly in front of or in the path of the balcony.

⚠ WARNING

Do not leave balcony open/extended during inclement weather including but not limited to: rain, hail, snow, sleet, or periods of excessive winds. Failure to close/retract the balcony during these types of weather could lead to property damage and/or personal injury.

⚠ CAUTION

The "CAUTION" symbol above is a sign that a safety risk is involved and may cause personal injury and/or product or property damage if not safely adhered to and within the parameters set forth in this manual.

⚠ CAUTION

Moving parts can pinch, crush or cut. Keep clear and use caution.

⚠ CAUTION

Always make sure the cables and support joints are pulling out straight and not coming in contact with any obstruction. Uneven and/or interrupted deployment of the balcony can result in damage of the panels and internal mechanisms.

⚠ CAUTION

Do not operate the balcony if any cable is frayed or damaged. Frayed or damaged cables lose their full capacity to function properly. Frayed or damaged cables may break when placed under tension, resulting in possible personal injury or product damage.

CAUTION

Always wear eye protection when performing service, maintenance or installation procedures. Other safety equipment to consider would be hearing protection, gloves and possibly a full face shield, depending on the nature of the task.

Resources Required

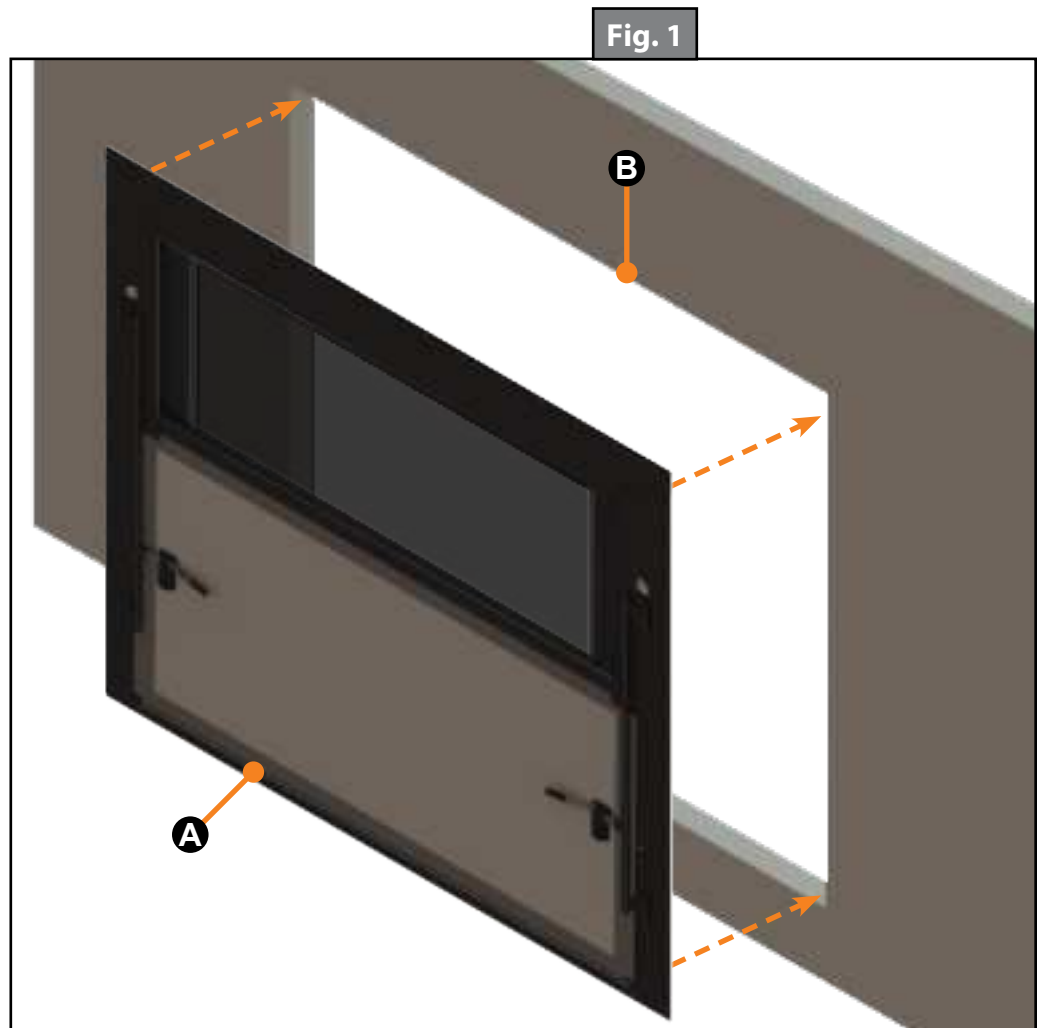
- 1 to 3 helpers depending on task
- Adequate jacks or balcony support(s) capable of hoisting, holding, and maneuvering 800-1,000lbs
- Cordless or electric drill or screw gun
- Appropriate drive bits
- Foam tape
- 70 #10 1 ½" self-drilling screws (if backer tube subframe is utilized in trailer)
- 70 #10 1 ½" wood screws (if wood subframe is utilized in trailer)
- Caulk

Installation

NOTE: For laminated sidewalls, stuffing the aluminum tube hollow/cavity with SPF wood backers is recommended.

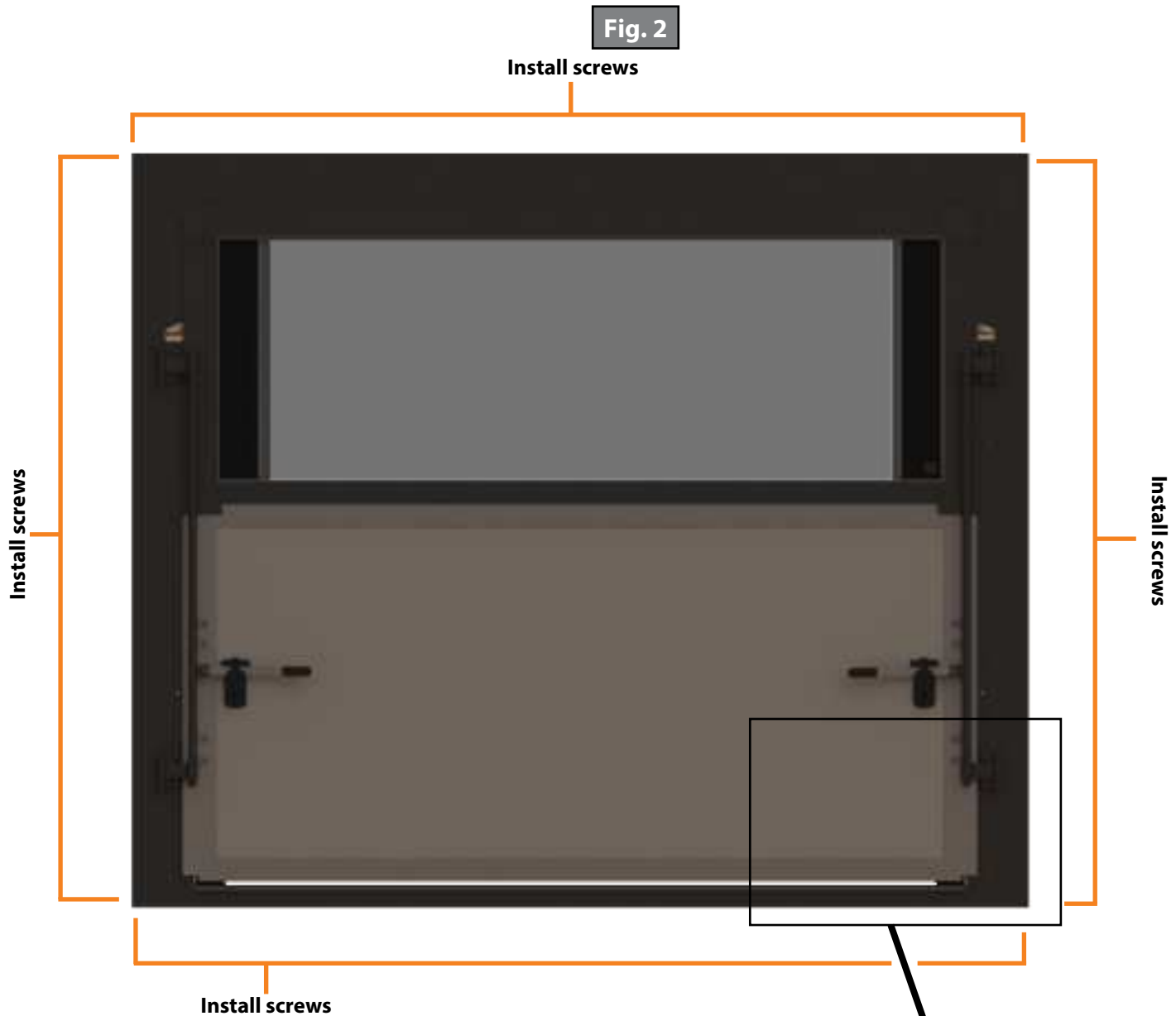
Balcony Installation

1. Apply foam tape around the inside perimeter of the balcony jamb to create a seal between it and the sidewall.
2. With the assistance of 1 to 3 helpers, position the closed balcony assembly on a rig (joist, jack(s), etc.) that can freely move and support its weight (800-1,000lbs). Support from ceiling straps is encouraged to aid in the balcony remaining vertical while being inserted into the prepared cutout on the trailer. The balcony should be oriented with the glass panel on the top half.
3. Carefully insert the balcony (Fig. 1A) into the prepared cutout (Fig. 2B) on the trailer.

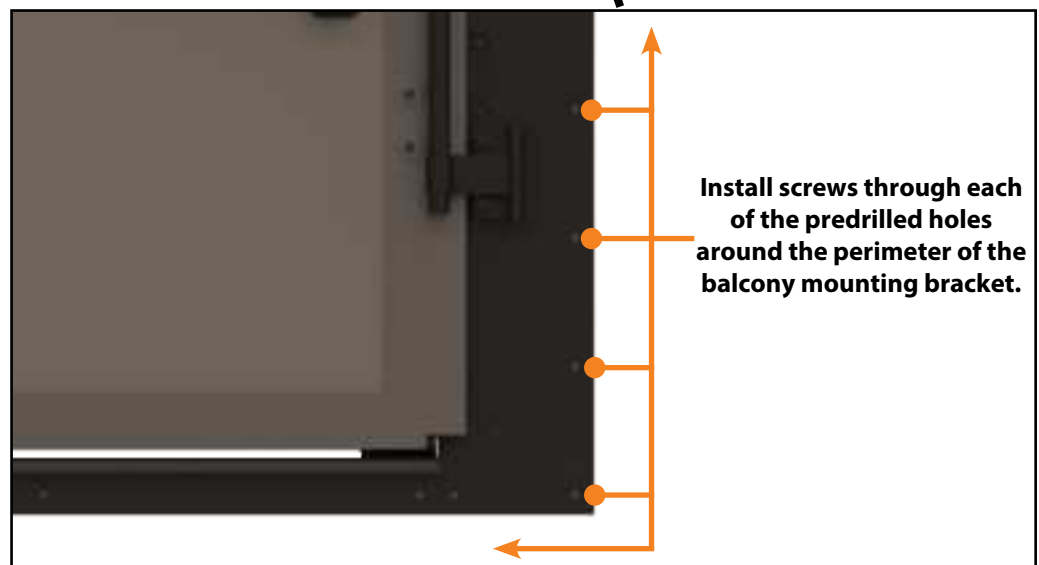


4. Using a cordless or electric drill or screw gun, install the balcony to the sidewall using #10 1 ½" screws through each of the pre-drilled holes around the perimeter of the balcony mounting frame (Fig. 2).

NOTE: Depending on the backers used in the trailer, choose the appropriate screws for installation. For aluminum tube subframes, choose self-drilling screws. For wooden subframes use wood screws.



5. Using silicone sealing caulk, caulk around the perimeter of the balcony sealing the assembly and the wall.



Switch Installation and Electrical Connections

Switch Requirement

NOTE: Switch used in this manual's images is an example. This switch is compatible with the balcony and may be acquired separately. It comes complete with a Deutsch style connector to pair with the motor connector and an alarm to assist in proper operation. It is part number 2024000460.

- An OEM-supplied, waterproof, 30A @12VDC, double pole double throw momentary switch is required.
- Use of any other switch will interfere with system operation. Namely, motors will not be able to assist in manual operation of the balcony, causing the system to be very difficult to extend or retract manually.
- System comes with a female Deutsch-style connector on the end of the motor harness. Connect switch to the harness as per OEM requirements and RVIA standards.

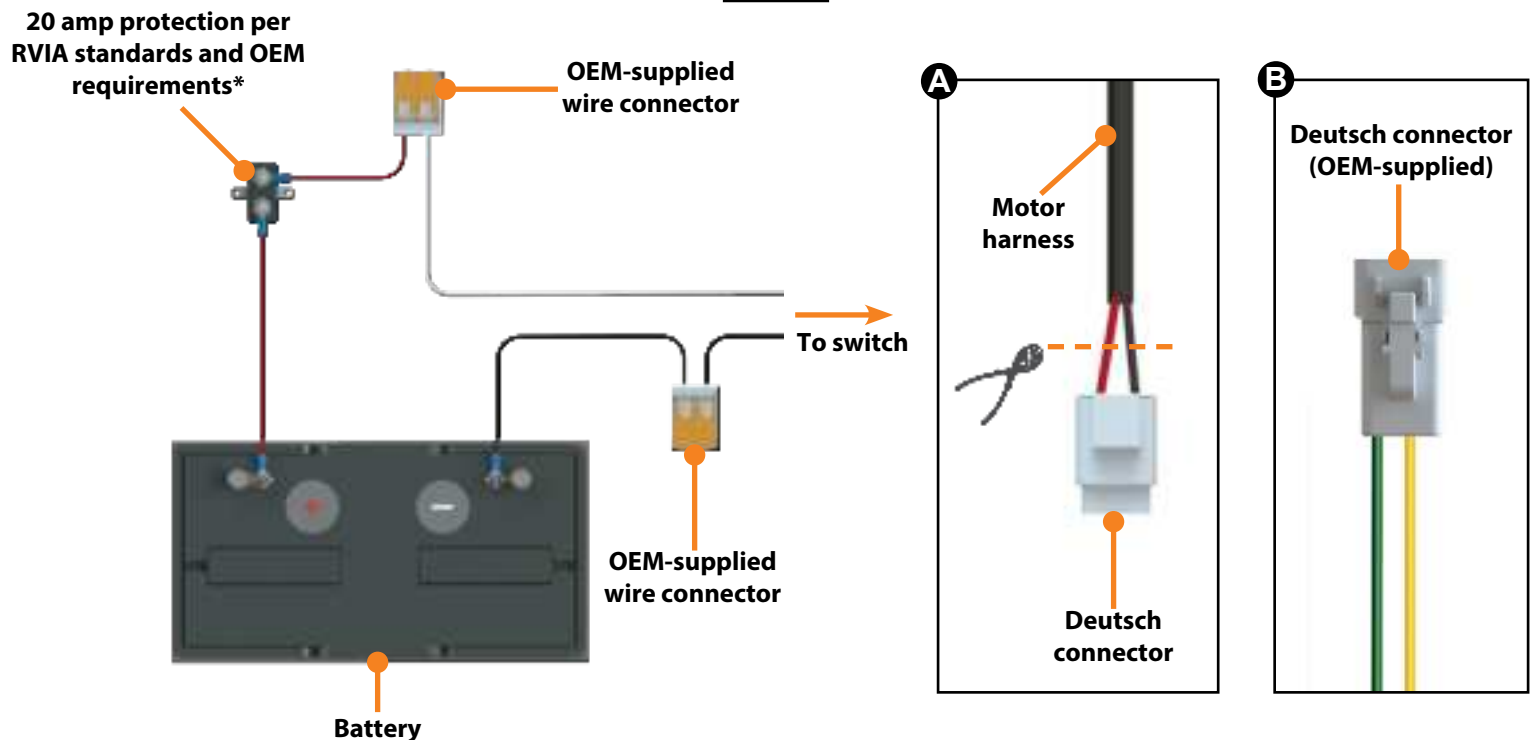
Wiring The System

1. Connect a ground wire and hot wire from the power source to the switch (Fig. 3). See the "Wiring Diagrams" section in this manual for a full wiring diagram of the system based on which switch is being utilized.

NOTE: The system requires circuit protection between 20 amp and 30 amp per RVIA standards and OEM requirements. A 20 amp self-resetting (Type I) breaker is recommended for best performance.

2. Install the switch near the balcony on the inside of the trailer, and wire it according to OEM requirements and RVIA standards. See the
 - A. Based on the switch chosen, it may be needed to remove the Deutsch connector from the motor harness (Fig. 3A).
 - B. Alternatively, a Deutsch style connector (Fig. 3B) may be sourced that pairs with the deutsch connector on the motor harness included with the balcony. This connector will act as a pigtail. Wire it to the back of the switch in accordance with OEM requirements and RVIA standards. See the "Wiring Diagrams" section in this manual.

Fig. 3



*A 20 amp self-resetting (Type I) breaker is recommended for best performance.

Operation - Cable Variant

⚠ WARNING

Always check the interior of the trailer for obstructions in and around the mechanism before operating the balcony. Obstructions may include but are not limited to: people, pets, toys, appliances, etc. Failure to observe and remove obstructions may result in property damage and/or serious personal injury.

⚠ WARNING

Never deploy the balcony before checking that there is adequate room for it to be completely and safely extended with both hard stop arms fully engaged. This includes making sure the trailer is not too close to any trees, fences, shrubs, other trailers, etc. Failure to observe and remove obstructions or relocate the trailer prior to extending the balcony may result in property damage and/or serious personal injury.

⚠ CAUTION

Moving parts can pinch, crush or cut. Keep clear and use caution.

Stowed Position to Extended Position

NOTE: Make sure the trailer is connected to a power source.

1. Read and understand all warnings and cautions in the "Safety" and "Operation - Cable Variant" sections of this manual before proceeding with any operation of the balcony.
2. Press the bottom of the locking latch (Fig. 4A) on one side of the exterior balcony, and move the bar latch handle to 90° upwards (Fig. 5A).

Fig. 4

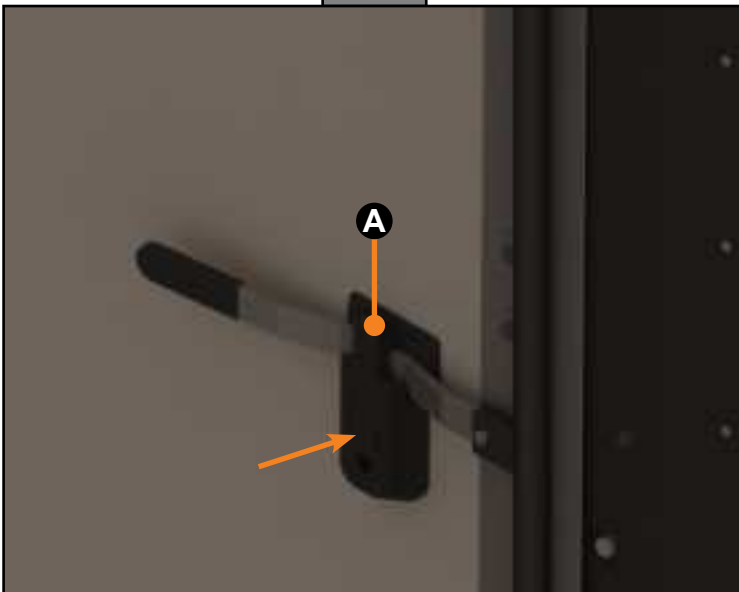
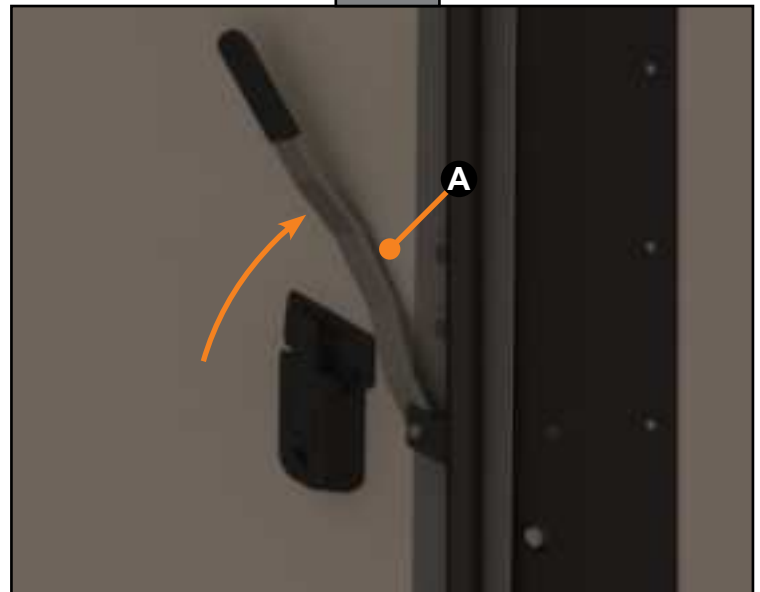


Fig. 5



⚠ WARNING

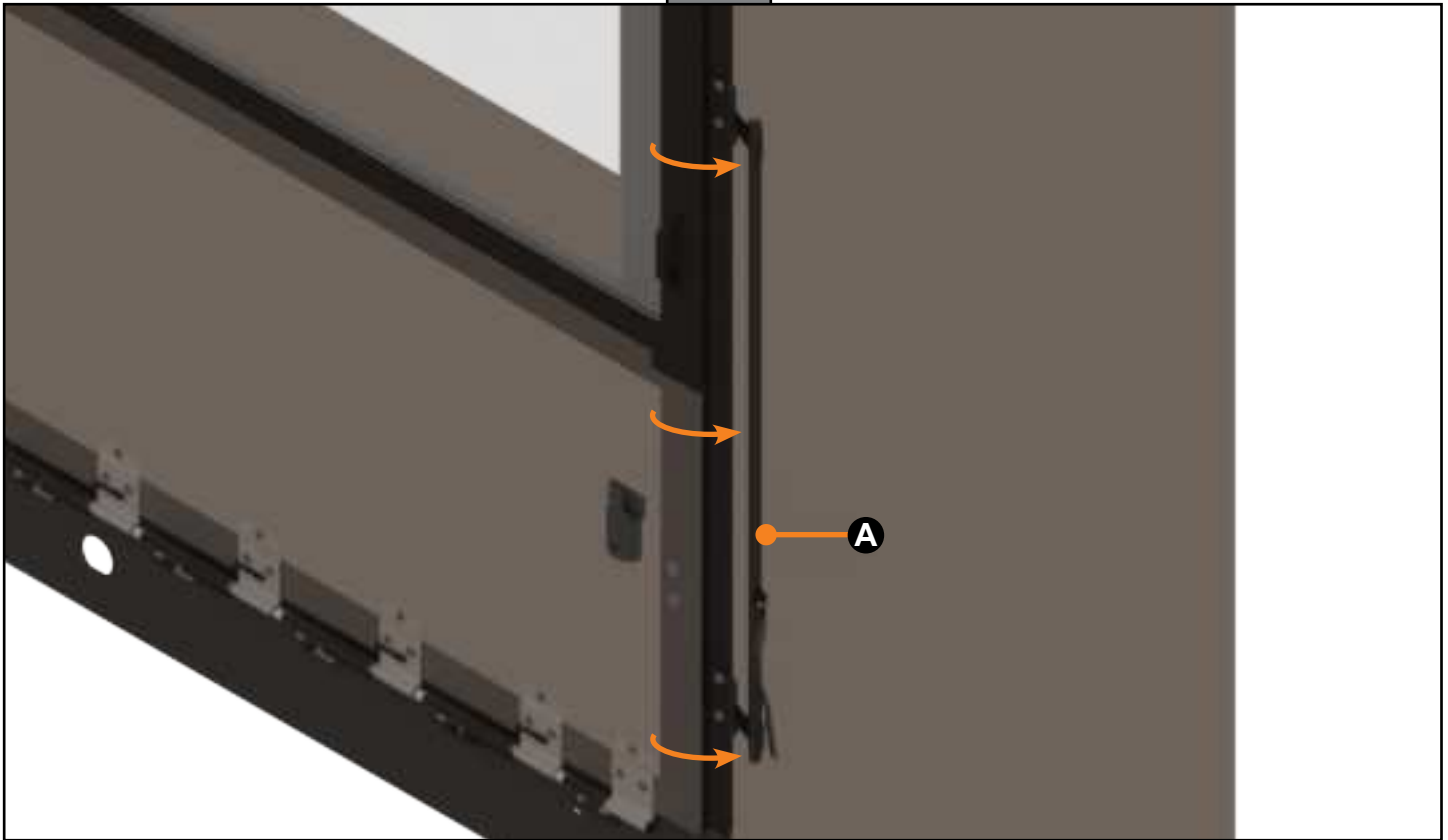
Make sure all persons are clear and away from the balcony when removing the bar locks. No person, animal, property, or natural structure should be in front of or in the path of the balcony as the bar locks are being removed.

3. Standing to the side of the balcony and not in front of it, swing the bar lock assembly (Fig. 6A) open and away from the balcony as far as possible.
4. Repeat the previous steps with the lock assembly on the other side of the balcony.

⚠ CAUTION

Once bar locks have been swung away from the balcony, it will pop open ~4.5". This is normal operation.

Fig. 6



5. Once bar locks have been removed, springs in the assembly (Fig. 7A) will pop the balcony out of the frame ~4.5" (Fig. 7). Remember to stand to the side of the balcony when removing the bar locks.
6. After the balcony pops out of the frame, press OPEN on the switch (Fig. 8A) to extend/deploy/lower the balcony (Fig. 8).

NOTE: Switch depicted in Figure 8 is an example. Actual installed switch may vary based on OEM preference.

⚠ WARNING

If balcony DOES NOT pop out of the frame ~4.5" after removing the bar locks, DO NOT press and hold the switch to deploy the balcony. Doing so could lead to internal system damage and/or unsafe situations. If balcony does not automatically pop open when bar locks are removed, reinstall locks and latches and contact a local dealer or repair facility.

Fig. 7

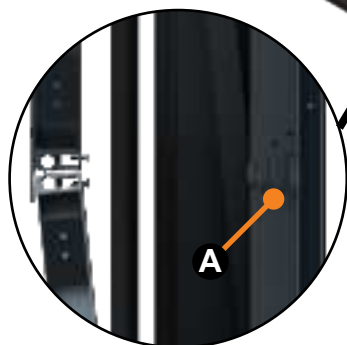
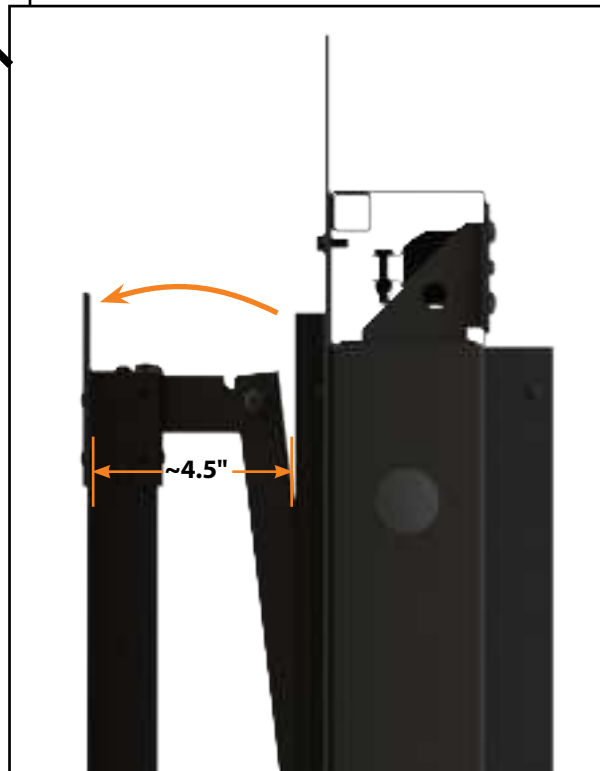
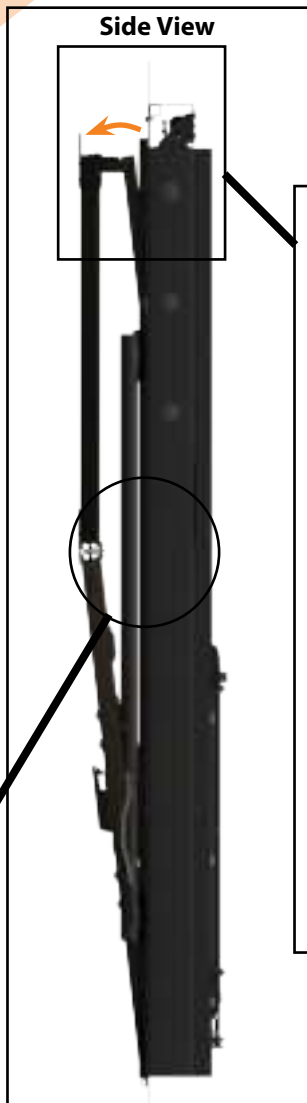
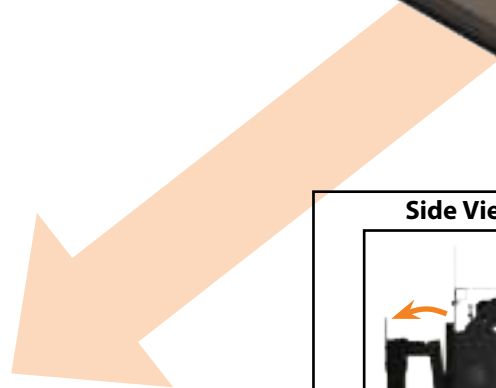
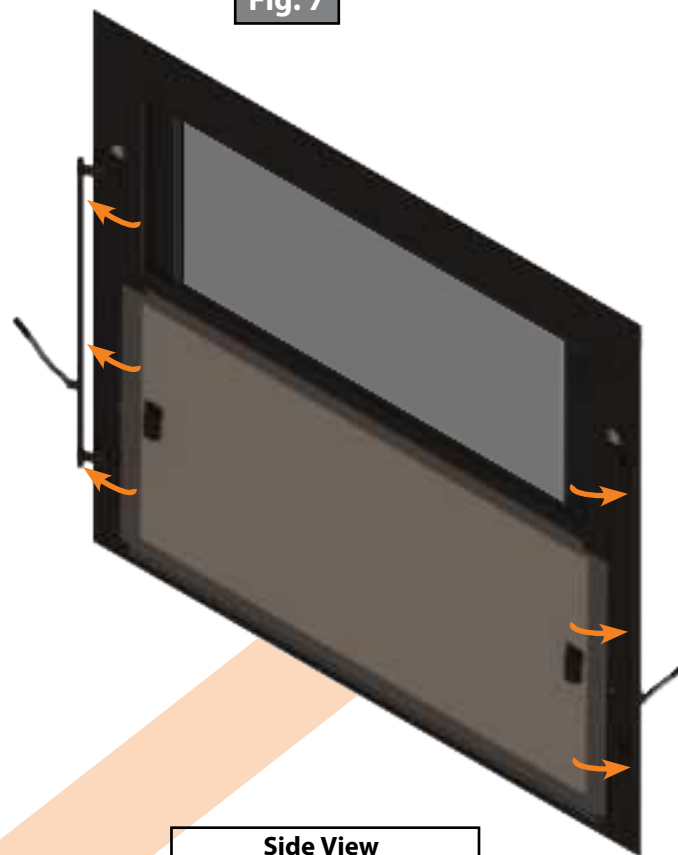
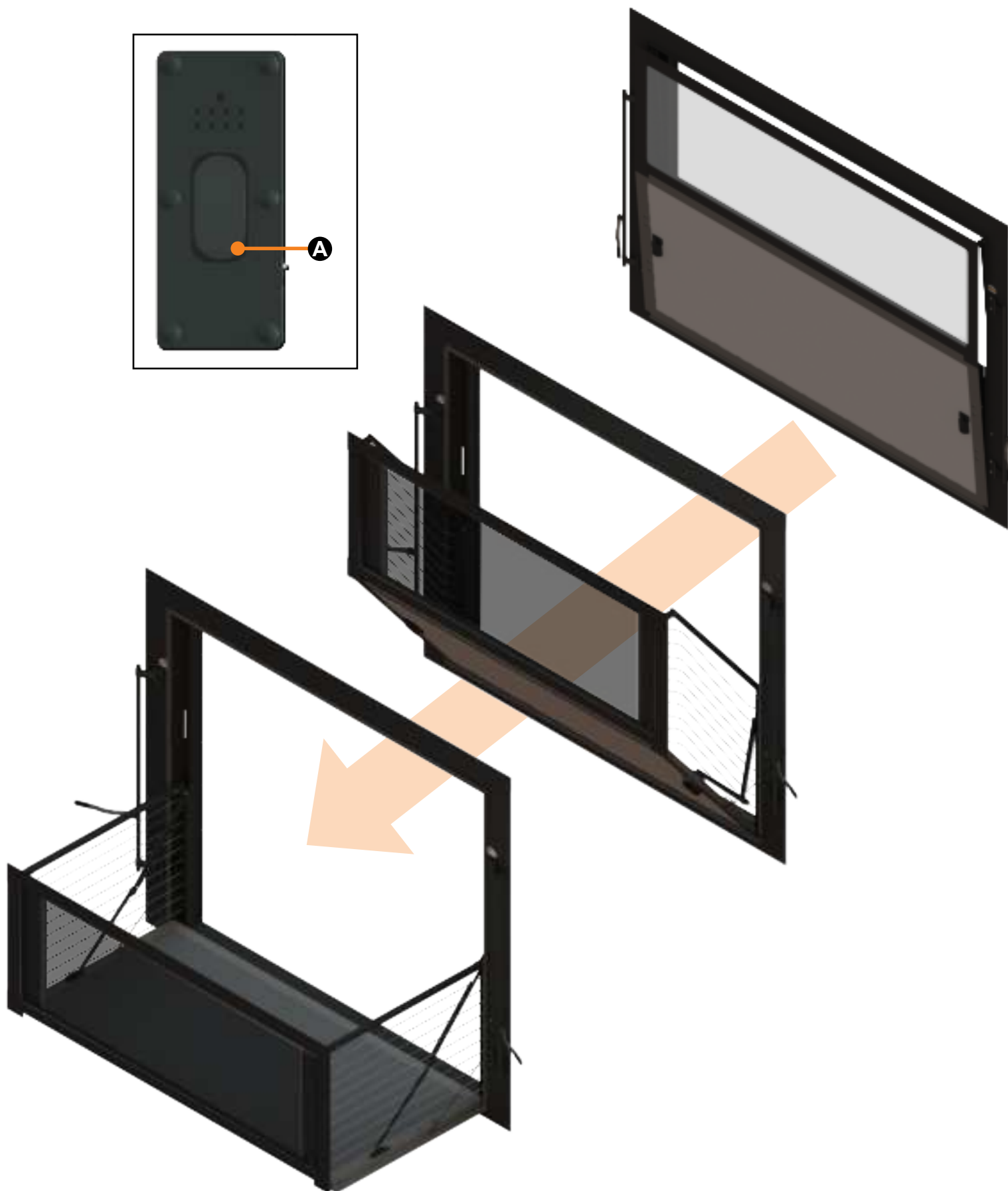


Fig. 8



Extended Position to Stowed Position

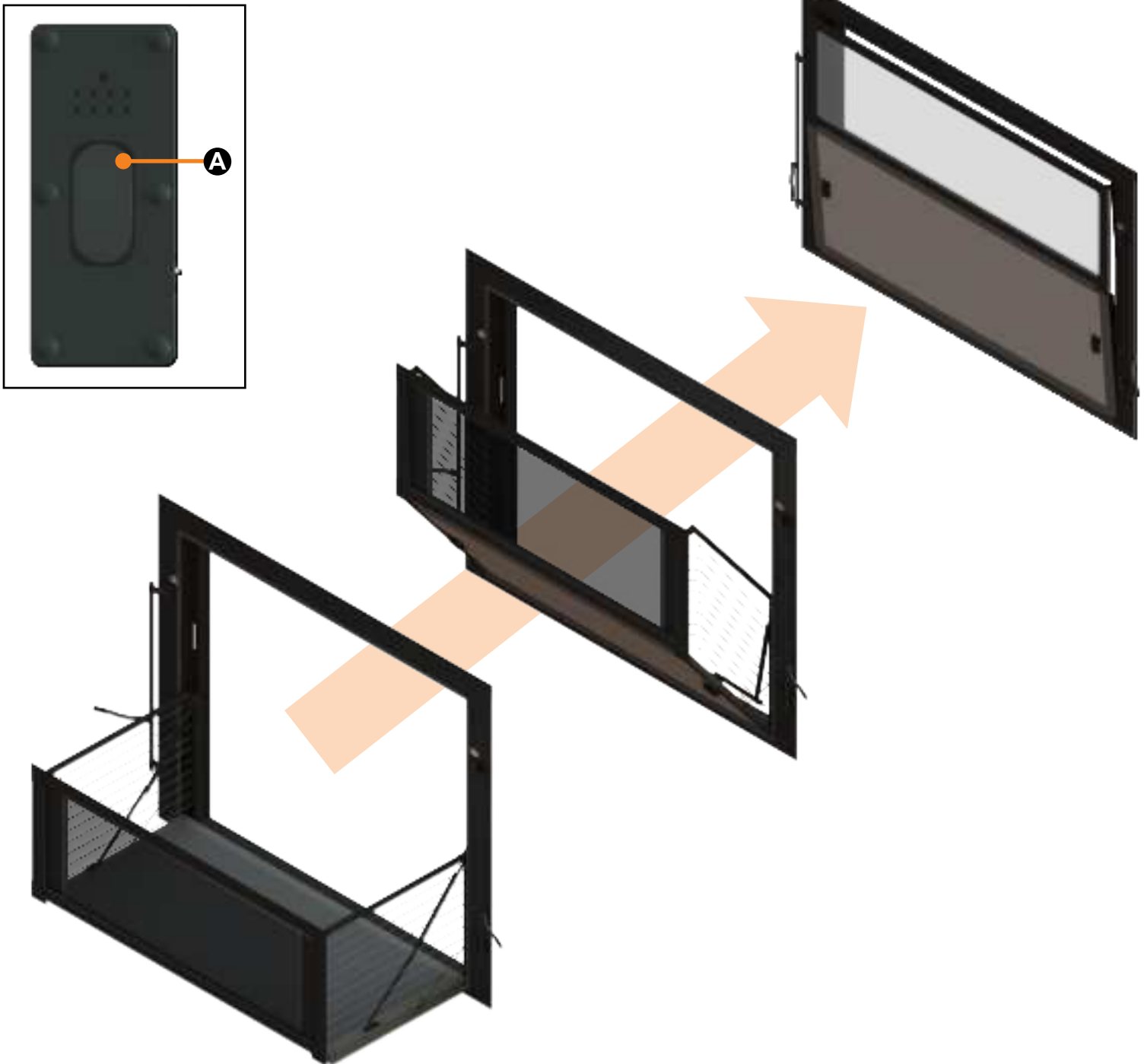
NOTE: Make sure the trailer is connected to a power source.

1. Read and understand all warnings and cautions in the "Safety" and "Operation - Cable Variant" sections of this manual before proceeding with any operation of the balcony.
2. Press CLOSE on the switch to raise the balcony (Fig. 9A).

⚠ WARNING

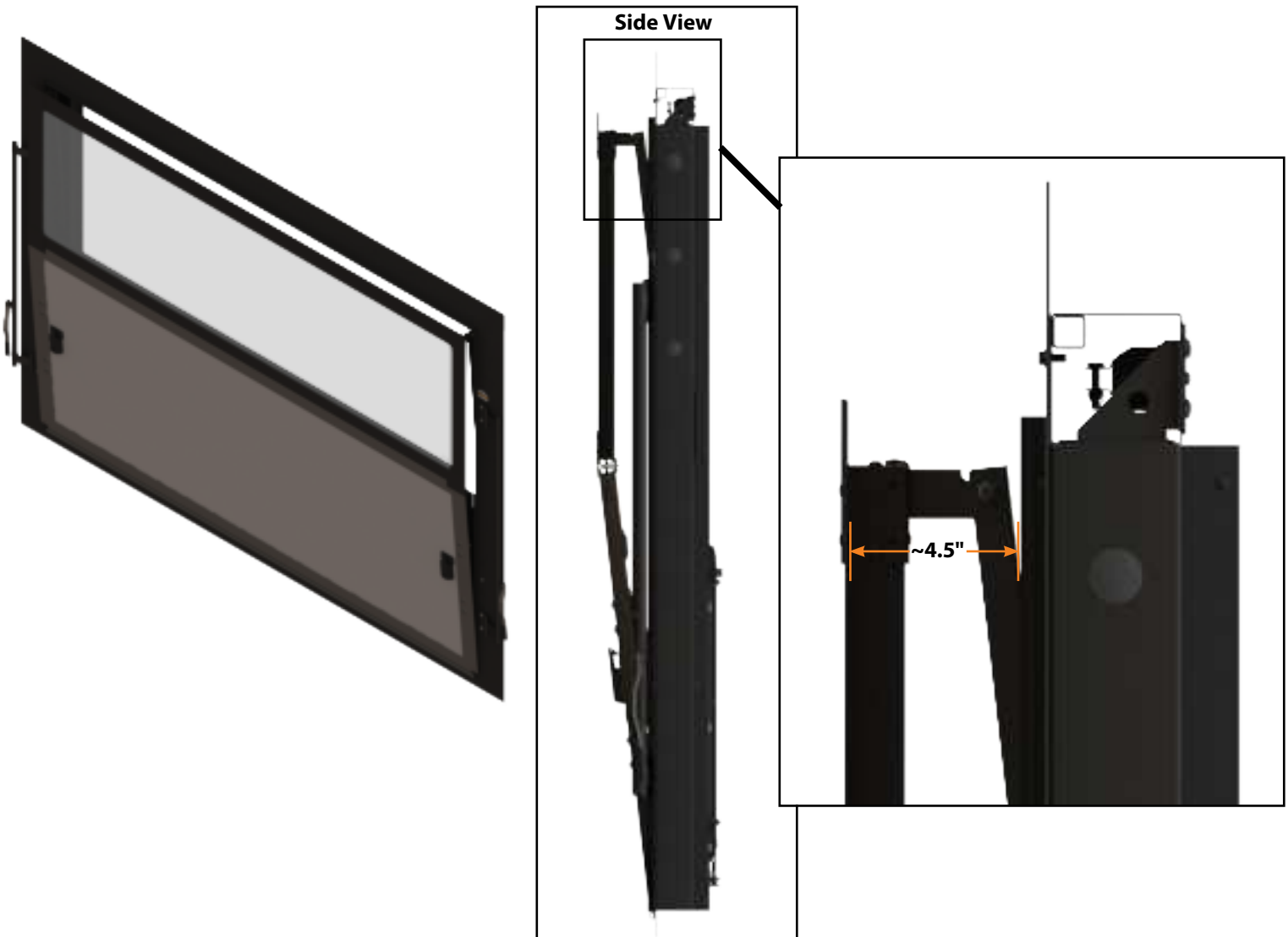
Always check the interior of the trailer for obstructions in and around the mechanism before operating the balcony. Obstructions may include but are not limited to: people, pets, toys, appliances, etc. Failure to observe and remove obstructions may result in property damage and/or serious personal injury.

Fig. 9



3. When the balcony is almost closed, the motors will stop and the system will leave an approximate 4.5" gap at the top between the glass panel frame and the balcony frame (Fig. 10). At this point, immediately stop pressing the switch. The balcony has been successfully retracted. The bar locks will be utilized to close and seal the balcony from this point forward.

Fig. 10



⚠ WARNING

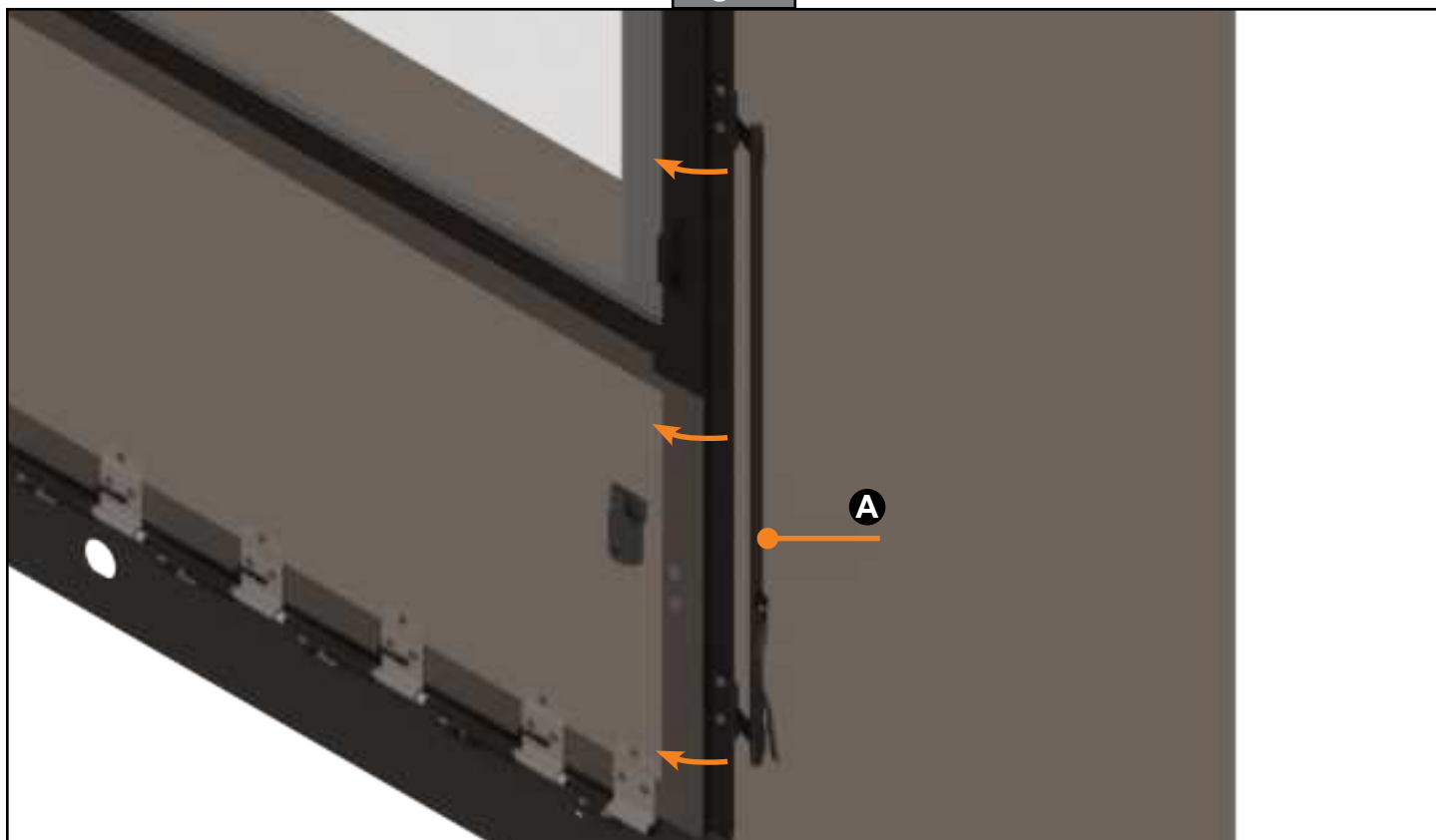
When retracting or stowing the balcony, **IMMEDIATELY** stop pressing the switch when the balcony stops moving. Balcony will stop retracting when there is a ~4.5" gap between the glass panel and the frame, leaving the balcony open slightly. This is normal operation. Continuing to repeatedly press or hold the switch once the balcony has come to a stop could lead to internal system damage and/or unsafe situations. Once the balcony stops moving, stop pressing the switch, and use the bar locks to fully close and secure it.

4. Move to the outside of the trailer.
5. Grab the bar lock assembly (Fig. 11A) on one side of the balcony and swing it into the closed position, pressing the balcony into the compression seal. It will be necessary to gently press the balcony closed while closing the lobar lock. Take care and make sure no fingers or loose clothing becomes caught in the balcony joints.

⚠ CAUTION

Moving parts can pinch, crush or cut. Keep clear and use caution.

Fig. 11



6. Rotate the bar latch handle (Fig. 12A) 90° so that it slides into the locking latch (Fig. 13A) with a click.
7. Repeat with the bar lock assembly on the other side of the balcony.

Fig. 12



Fig. 13



Operation - Mesh Gate Variant

⚠ WARNING

Always check the interior of the trailer for obstructions in and around the mechanism before operating the balcony. Obstructions may include but are not limited to: people, pets, toys, appliances, etc. Failure to observe and remove obstructions may result in property damage and/or serious personal injury.

⚠ WARNING

Never deploy the balcony before checking that there is adequate room for it to be completely and safely extended with both hard stop arms fully engaged. This includes making sure the trailer is not too close to any trees, fences, shrubs, other trailers, etc. Failure to observe and remove obstructions or relocate the trailer prior to extending the balcony may result in property damage and/or serious personal injury.

⚠ CAUTION

Moving parts can pinch, crush or cut. Keep clear and use caution.

Stowed Position to Extended Position

NOTE: Make sure the trailer is connected to a power source.

1. Read and understand all warnings and cautions in the "Safety" and "Operation - Mesh Gate Variant" sections of this manual before proceeding with any operation of the balcony.
2. Press the bottom of the locking latch (Fig. 14A) on one side of the exterior balcony, and move the bar latch handle to 90° upwards (Fig. 15A).

Fig. 14

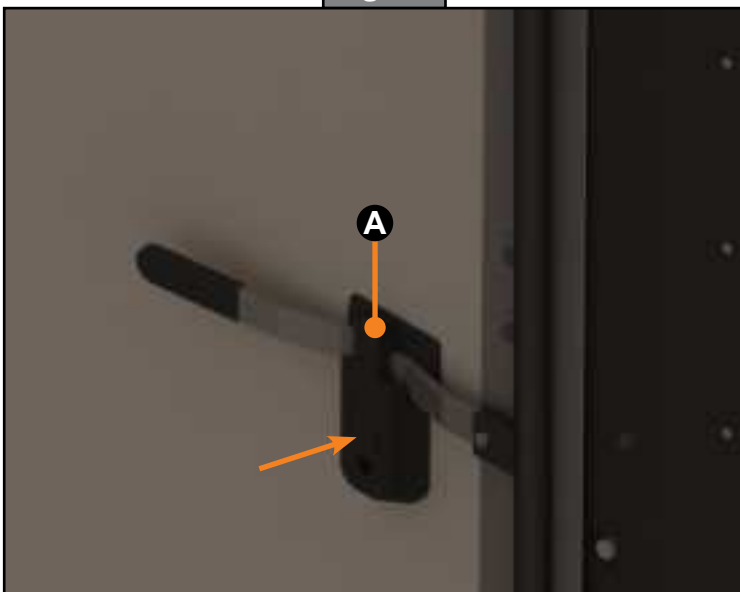


Fig. 15



⚠ WARNING

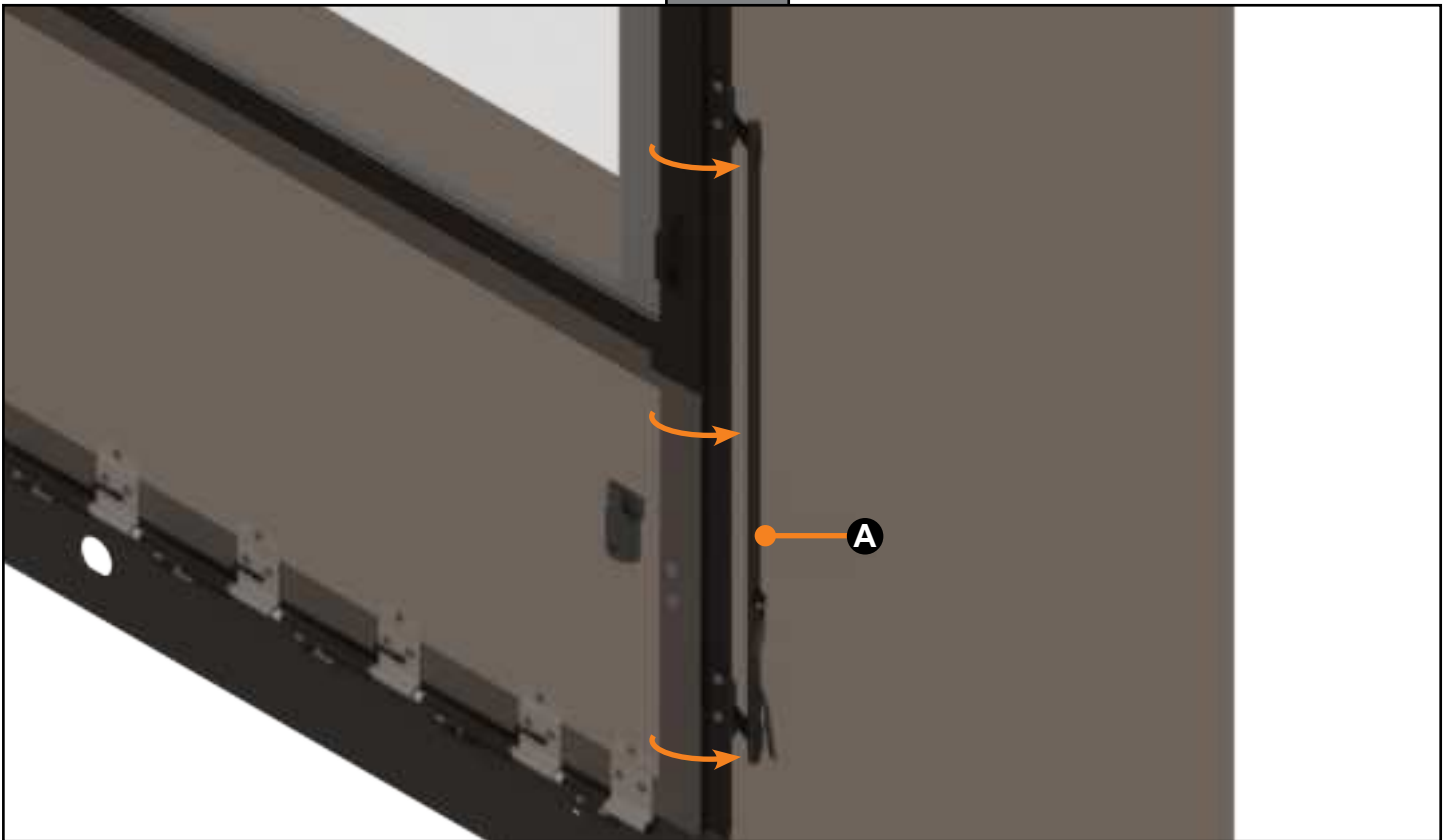
Make sure all persons are clear and away from the balcony when removing the bar locks. No person, animal, property, or natural structure should be in front of or in the path of the balcony as the bar locks are being removed.

3. Standing to the side of the balcony and not in front of it, swing the bar lock assembly (Fig. 16A) open and away from the balcony as far as possible.
4. Repeat the previous steps with the lock assembly on the other side of the balcony.

⚠ CAUTION

Once bar locks have been swung away from the balcony, it will pop open ~4.5". This is normal operation.

Fig. 16



5. Once bar locks have been removed, springs in the assembly (Fig. 17A) will pop the balcony out of the frame ~4.5" (Fig. 17). Remember to stand to the side of the balcony when removing the bar locks.
6. After the balcony pops out of the frame, press OPEN on the switch (Fig. 18A) to extend/deploy/lower the balcony (Fig. 18).

NOTE: Switch depicted in Figure 18 is an example. Actual installed switch may vary based on OEM preference.

⚠ WARNING

If balcony DOES NOT pop out of the frame ~4.5" after removing the bar locks, DO NOT press and hold the switch to deploy the balcony. Doing so could lead to internal system damage and/or unsafe situations. If balcony does not automatically pop open when bar locks are removed, reinstall locks and latches and contact a local dealer or repair facility.

Fig. 17

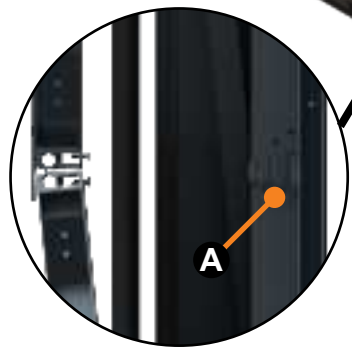
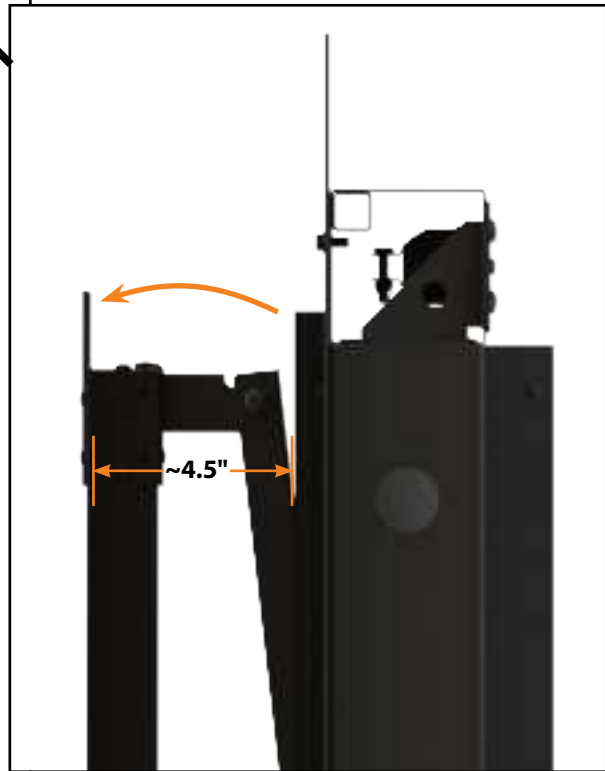
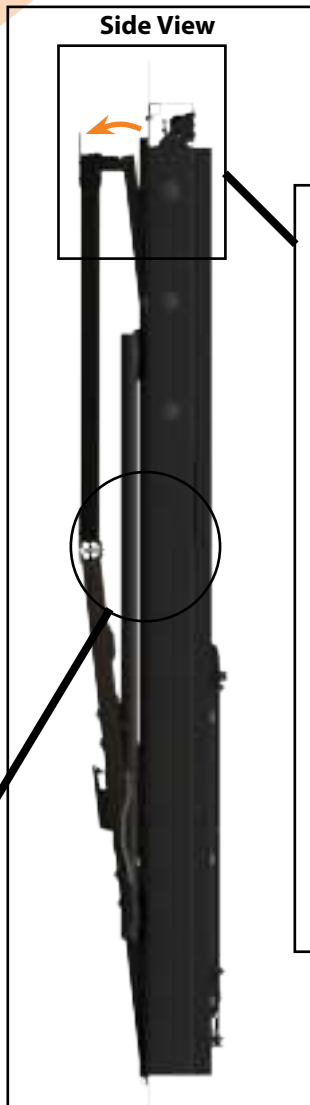
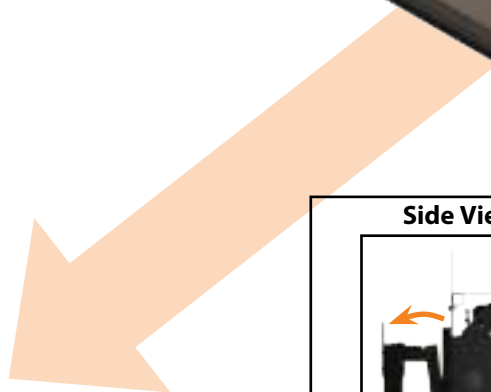
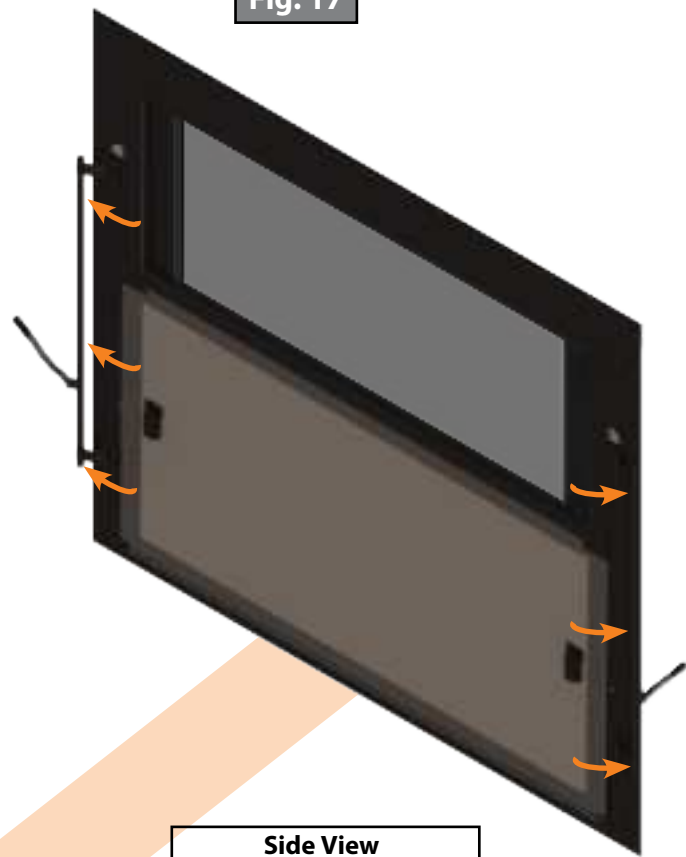


Fig. 18

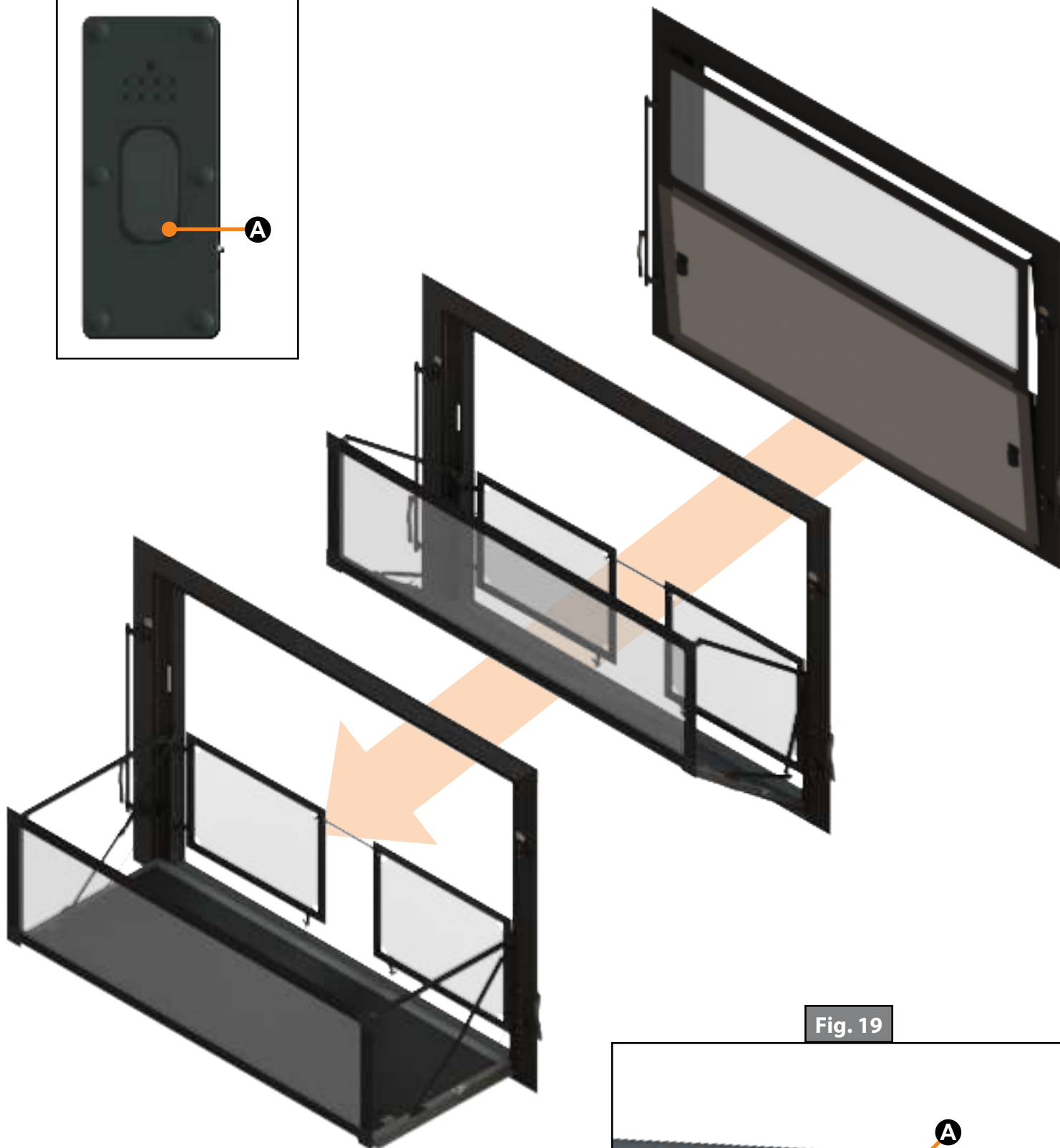
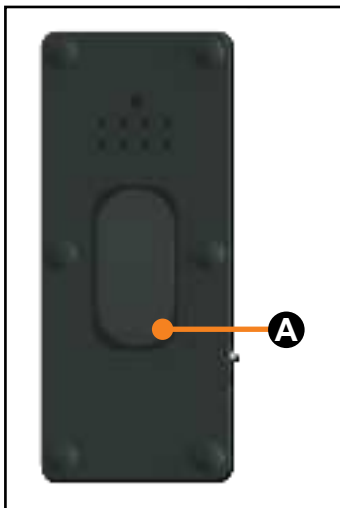
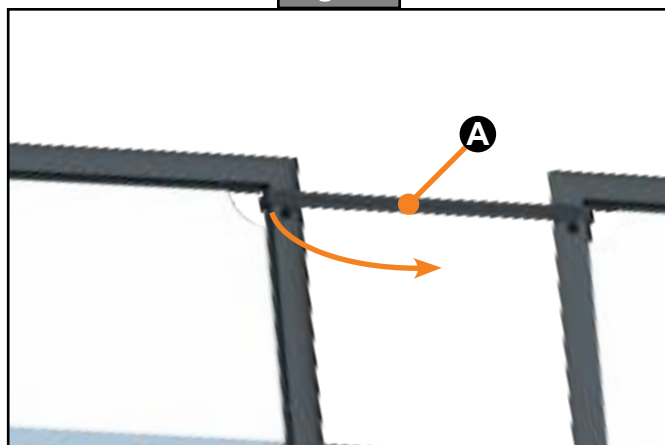


Fig. 19



7. Unhook the safety strap (Fig. 19A) from the mesh gates so they can freely swing.

8. Swing the mesh gates to the open position (Fig. 20)(Fig. 21) by sliding the compression feet (Fig. 22A) at the bottom of each gate into their respective keeper bases (Fig. 22B).
9. Lock the gates into place by turning the compression latches (Fig. 23A) clockwise to the position indicated in Figure 24.

NOTE: Always lift the mesh gates upwards while moving or positioning them to avoid scratching the balcony floor with the compression latch feet.

⚠ WARNING

Failure to secure both of the compression feet completely in the locked position in their respective keeper bases could lead personal injury property damage.

Fig. 20

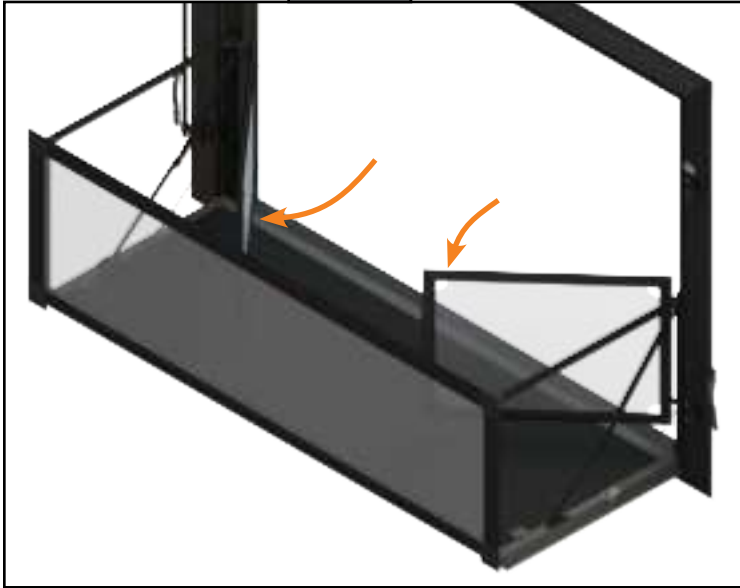


Fig. 21



Fig. 22



Fig. 23

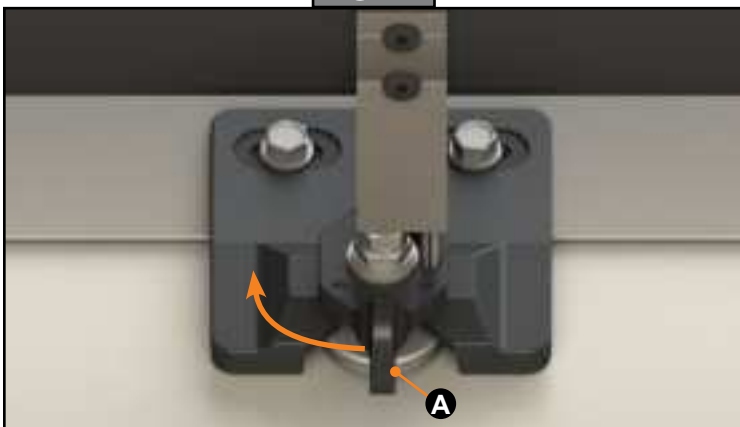


Fig. 24



Extended Position to Stowed Position

NOTE: Make sure the trailer is connected to a power source.

1. Read and understand all warnings and cautions in the "Safety" and "Operation - Mesh Gate Variant" sections of this manual before proceeding with any operation of the balcony.
2. Release the compression latch on the feet on the bottom of each mesh gate. (Fig. 25A) by turning them counterclockwise to the open position (Fig. 26).

Fig. 25

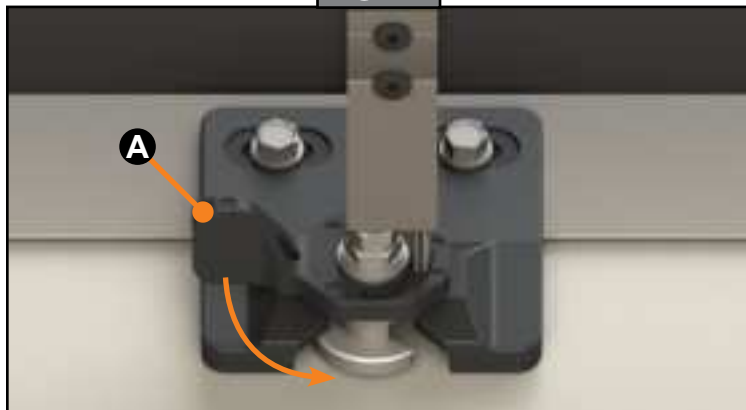


Fig. 26



3. Swing the mesh gates to the closed position (Fig. 27)(Fig. 28), and secure them in place with the safety strap (Fig. 29A).

NOTE: Always lift the mesh gates upwards while moving or positioning them to avoid scratching the balcony floor with the compression latch feet.

Fig. 27

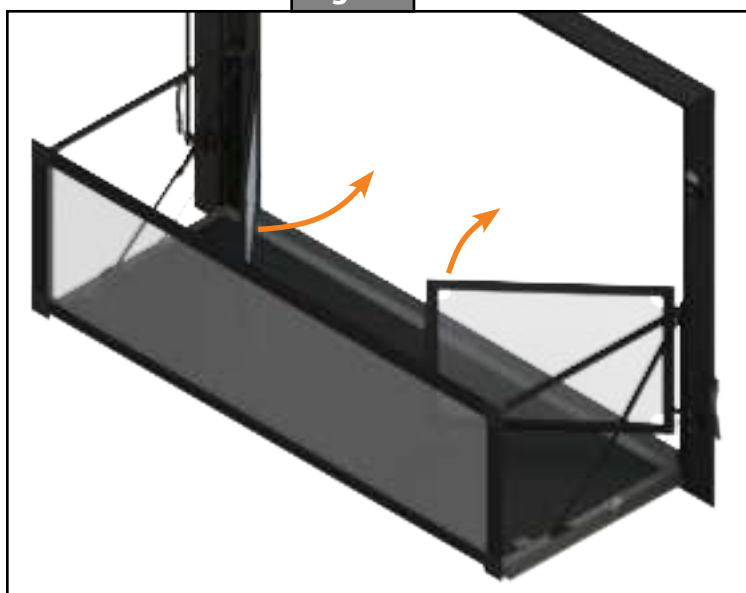


Fig. 28

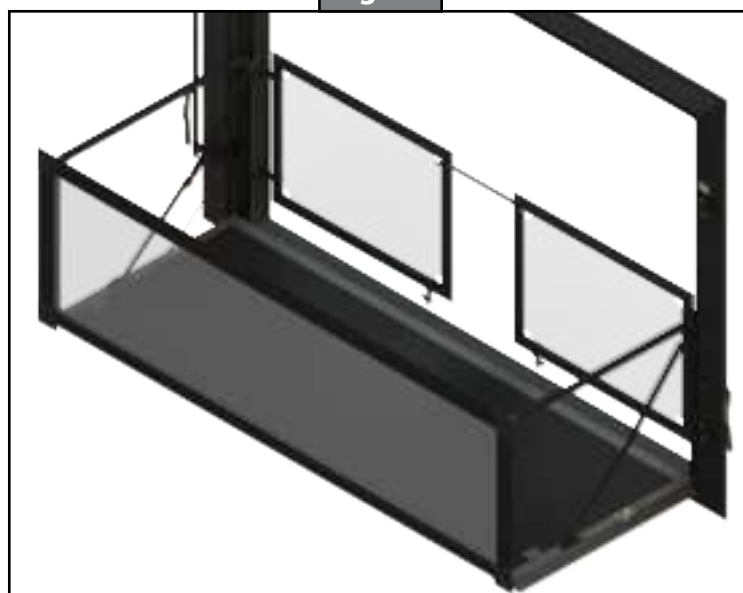
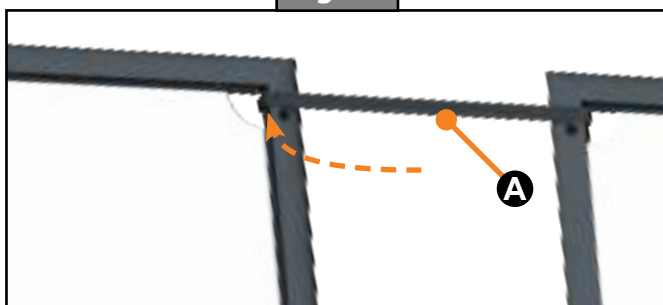


Fig. 29



⚠ WARNING

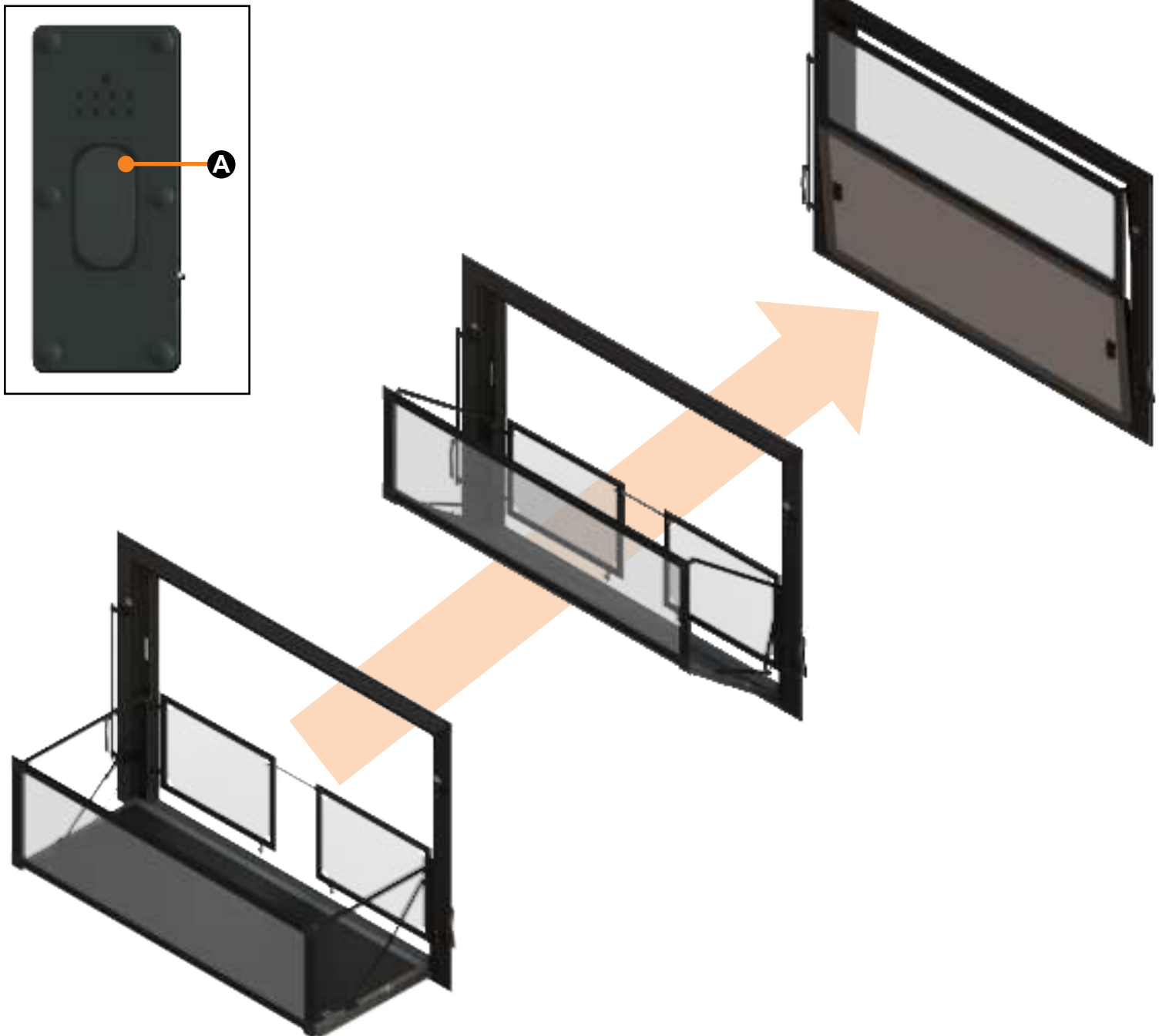
Failure to close the mesh gates and stow them securely with the safety strap prior to operating the power switch of the balcony will result in serious property damage and/or potential injury.

4. Press CLOSE on the switch to raise the balcony (Fig. 30A).

⚠ WARNING

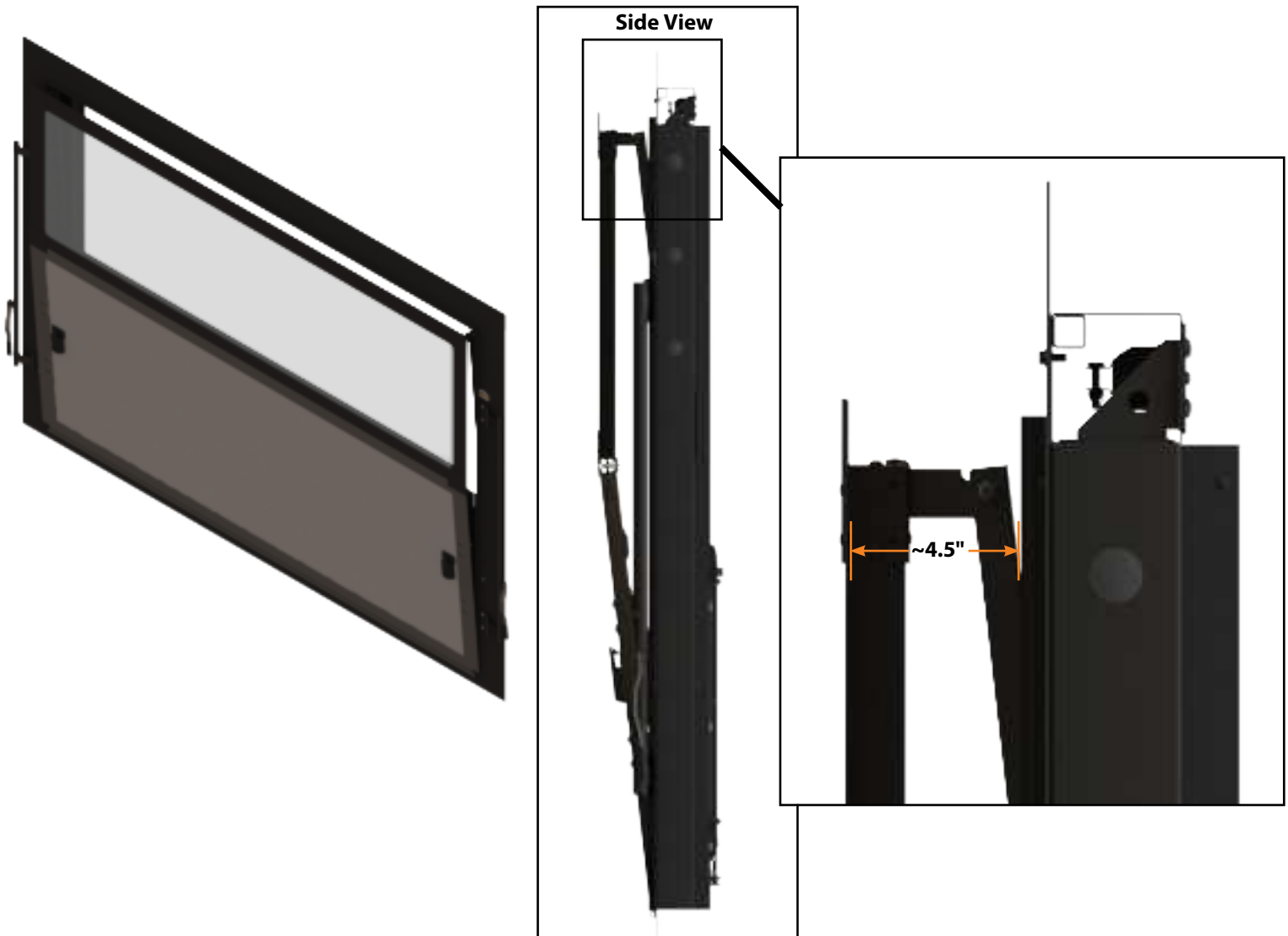
Always check the interior of the trailer for obstructions in and around the mechanism before operating the balcony. Obstructions may include but are not limited to: people, pets, toys, appliances, etc. Failure to observe and remove obstructions may result in property damage and/or serious personal injury.

Fig. 30



5. When the balcony is almost closed, the motors will stop and the system will leave an approximate 4.5" gap at the top between the glass panel frame and the balcony frame (Fig. 31). At this point, immediately stop pressing the switch. The balcony has been successfully retracted. The bar locks will be utilized to close and seal the balcony from this point forward.

Fig. 31



⚠ WARNING

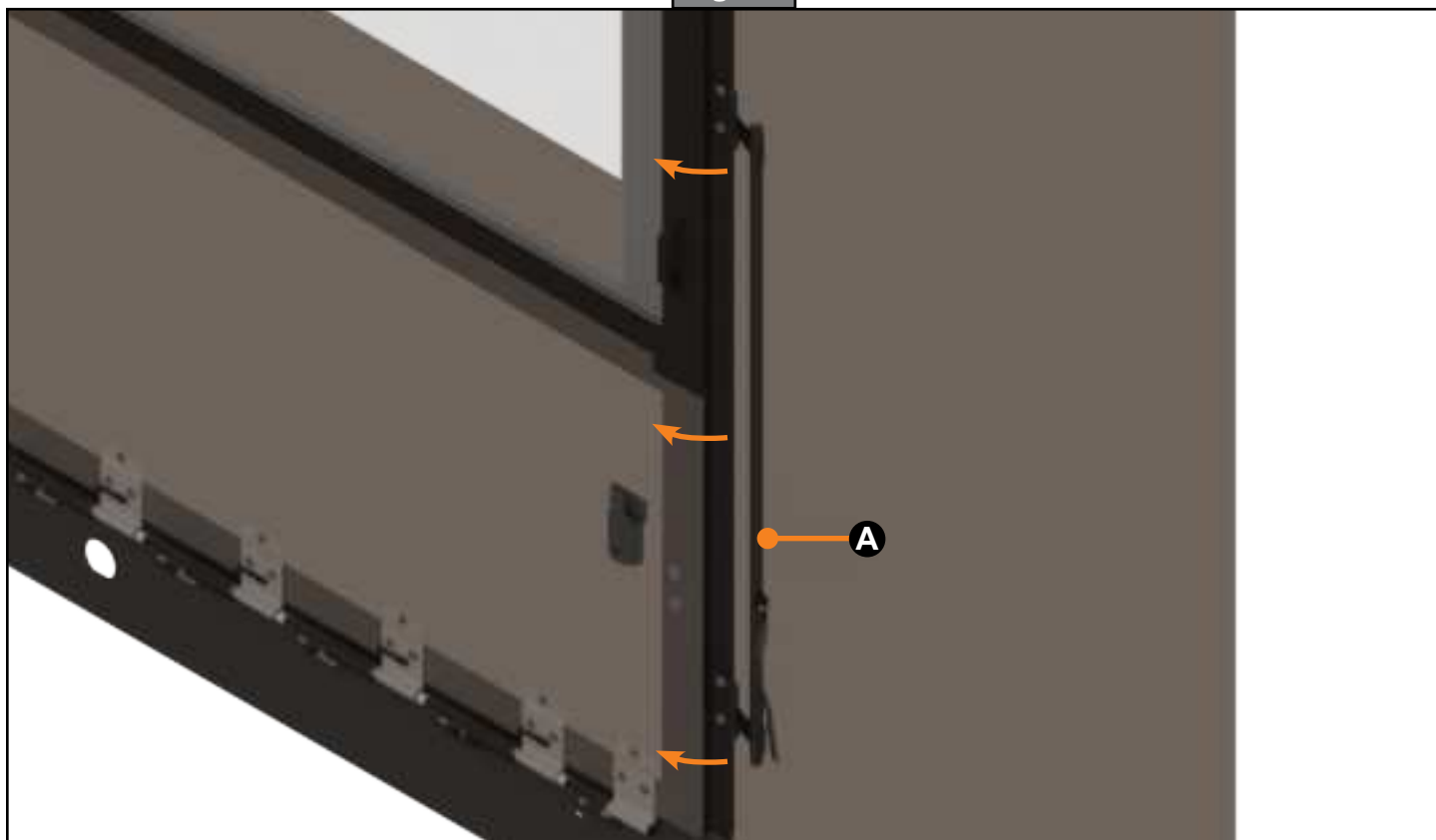
When retracting or stowing the balcony, **IMMEDIATELY** stop pressing the switch when the balcony stops moving. Balcony will stop retracting when there is a ~4.5" gap between the glass panel and the frame, leaving the balcony open slightly. This is normal operation. Continuing to repeatedly press or hold the switch once the balcony has come to a stop could lead to internal system damage and/or unsafe situations. Once the balcony stops moving, stop pressing the switch, and use the bar locks to fully close and secure it.

6. Move to the outside of the trailer.
7. Grab the bar lock assembly (Fig. 32A) on one side of the balcony and swing it into the closed position, pressing the balcony into the compression seal. It will be necessary to gently press the balcony closed while closing the lobar lock. Take care and make sure no fingers or loose clothing becomes caught in the balcony joints.

⚠ CAUTION

Moving parts can pinch, crush or cut. Keep clear and use caution.

Fig. 32



8. Rotate the bar latch handle (Fig. 33A) 90° so that it slides into the locking latch (Fig. 34A) with a click.
9. Repeat with the bar lock assembly on the other side of the balcony.

Fig. 33

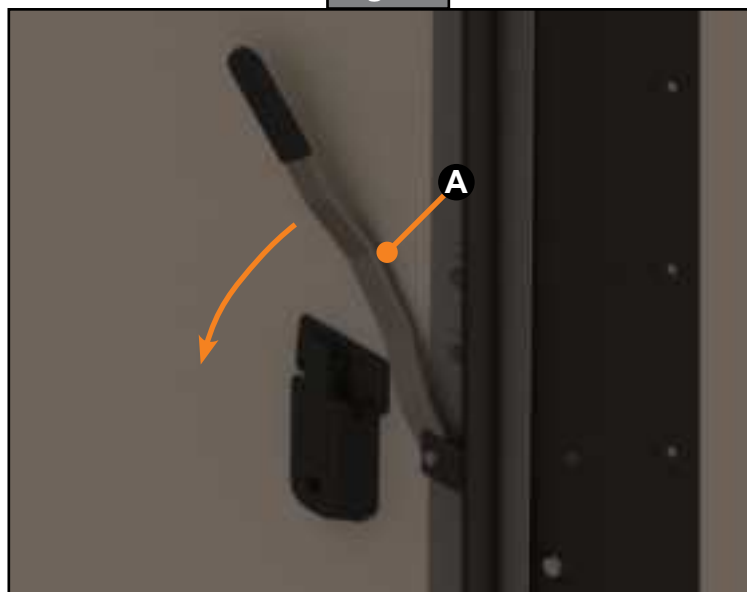
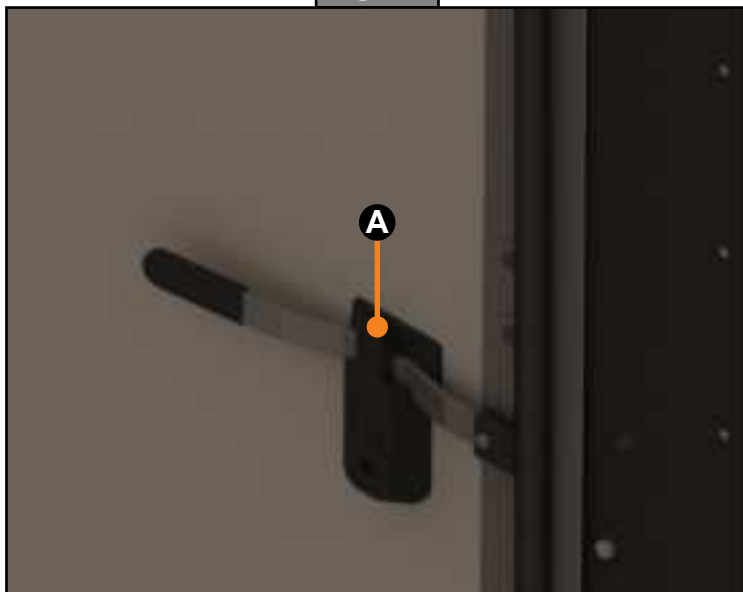


Fig. 34



Troubleshooting

Troubleshooting Table

What is Happening	Why?	What Should Be Done?
Loud, clanging sound coming from balcony	Switch was pressed longer than needed to extend or retract the balcony	Wait until clanging has come to a complete stop. Wait until motors have completely stopped operating. <ul style="list-style-type: none">• If balcony is deployed, manually retract it and secure it with bar locks.• If balcony is retracted, carefully close the bar locks and secure the balcony. Do not stand in front of balcony until at least one bar lock as been latched and secured in place. Contact a local dealer or repair facility for further assistance.
Difficulty raising the balcony manually	Varies - Switch wiring issue	Disconnect the switch from the assembly, and manually close the balcony. Close the bar locks and secure the balcony. Contact a local dealer or repair facility for further assistance.
Balcony does not pop out of frame ~4.5" when bar locks are fully disengaged	Spring bumpers damaged or missing	Re-engage bar locks, and contact a local dealer or repair facility for further assistance. Do not attempt to open the balcony with either the switch or by pushing the balcony with fingers, hands, or digits.
Balcony closes completely when switch is pressed, and does not stop ~4.5" before completely closing.	Stop bolt is disengaged or damaged.	Completely close balcony and lock in place with bar locks. Contact a local dealer or repair facility for further assistance.

Manual Operation

In the event of a power failure or other extenuating circumstance where the balcony needs to be retracted but the switch is not operational, follow these steps to operate it.

1. Grab the balcony on the side of the glass panel where any fingers or digits will not be pinched in the hinge of the balcony as it closes.
2. Push the balcony up into the stowed position. The motors should kick in and assist, making it easier to retract the balcony.
3. Secure the balcony with the bar locks.
4. Contact a local dealer or repair facility for further assistance.

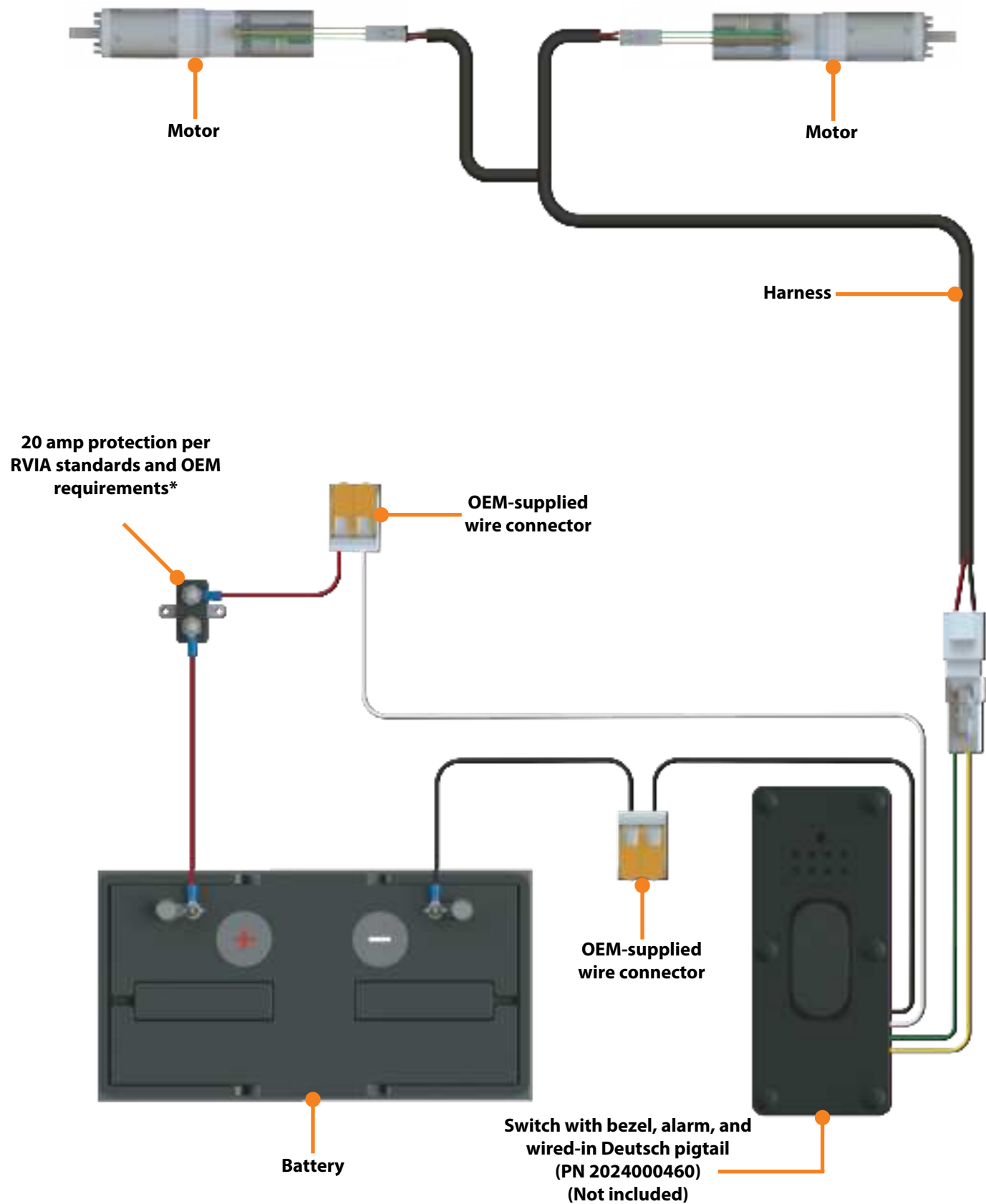


Moving parts can pinch, crush or cut. Keep clear and use caution.

Wiring Diagrams

⚠ NOTICE

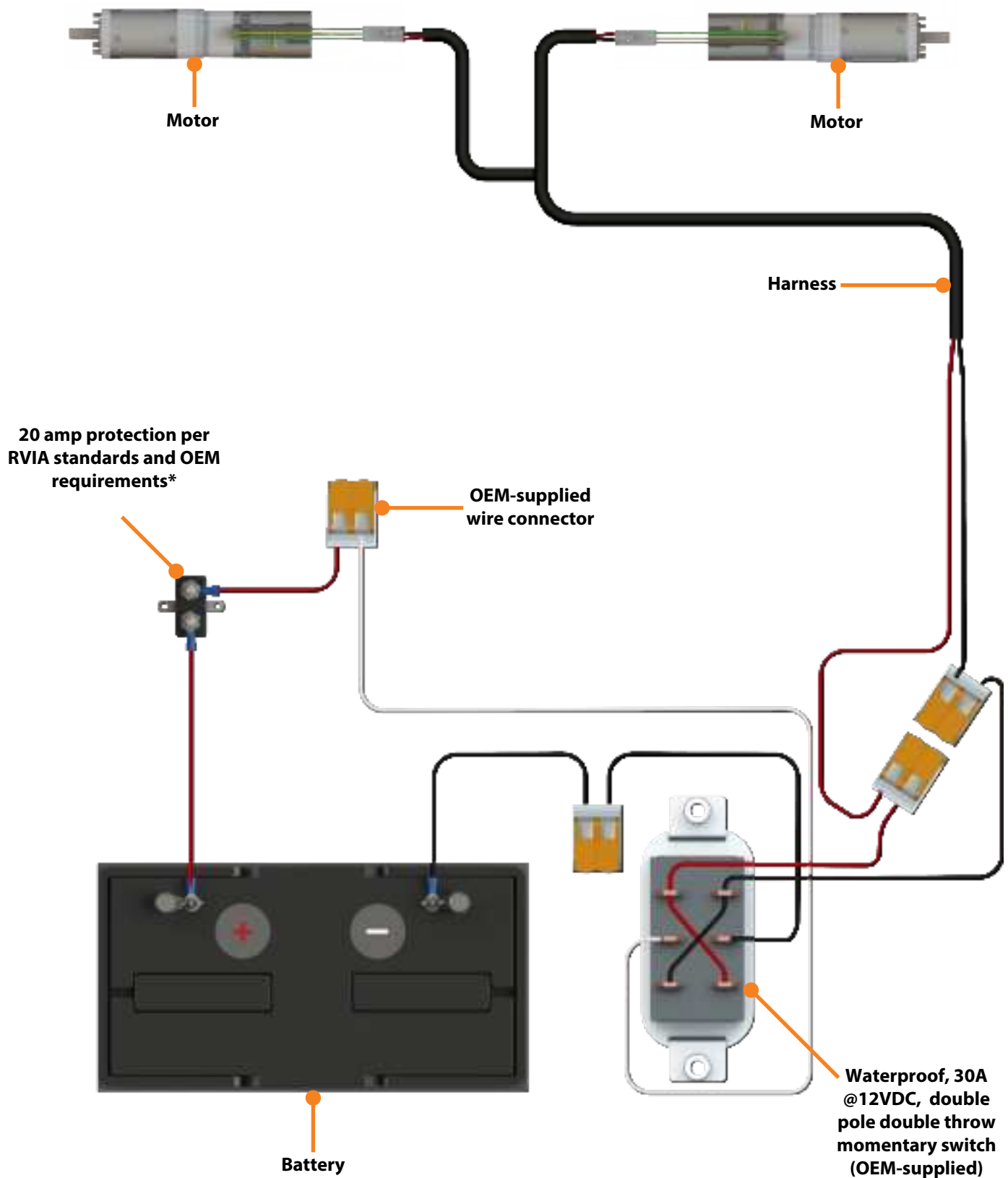
All electrical wiring harnesses shall be loomed and secured to prevent possible damage and installed in accordance with RVIA electrical standards.



*A 20 amp self-resetting (Type I) breaker is recommended for best performance.

NOTICE

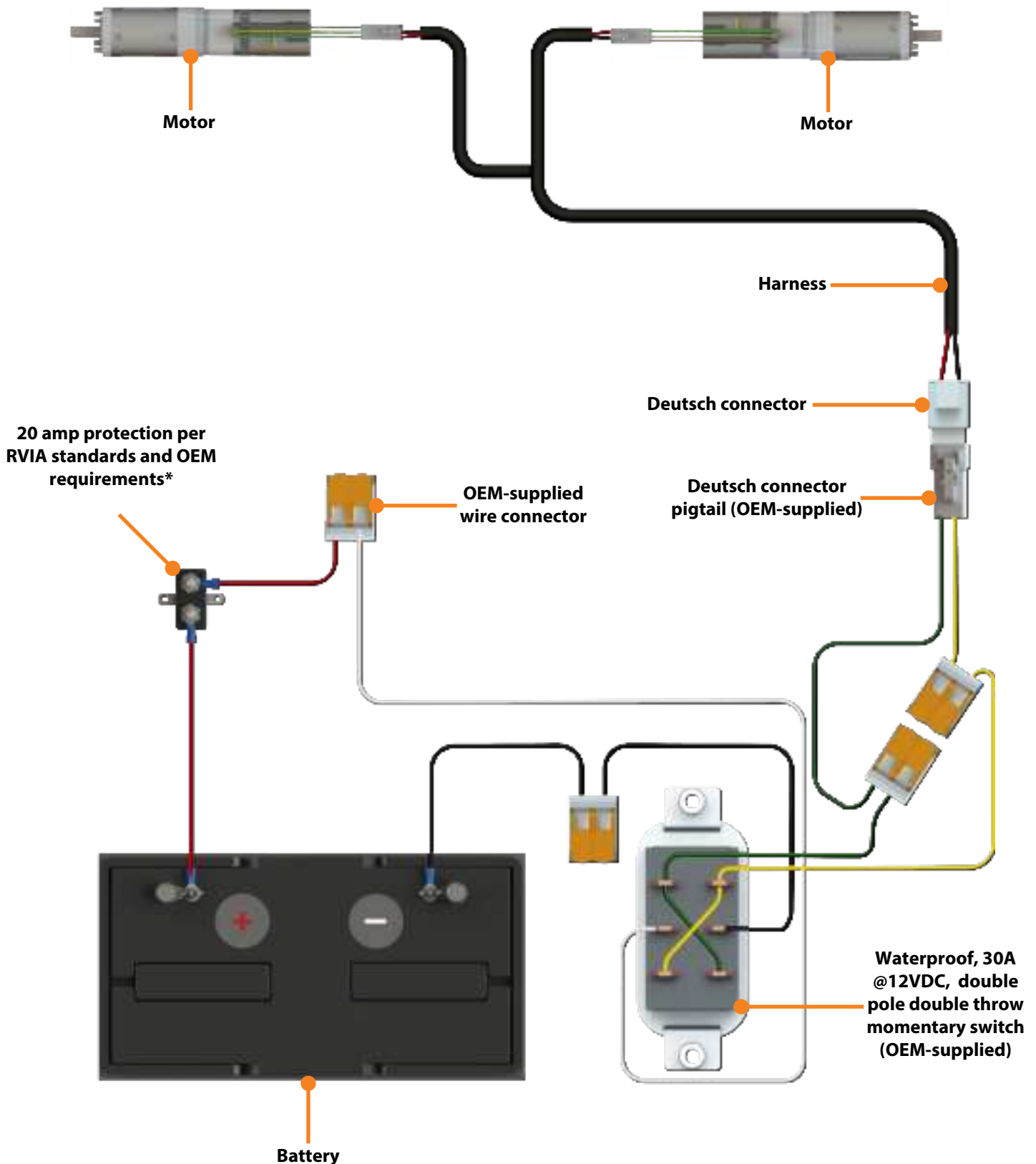
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*A 20 amp self-resetting (Type I) breaker is recommended for best performance.

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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