



# BOX TRUCK RAMPS

Instructions for Part #MF3-14457-BT & MF4-14476-BT

## GENERAL GUIDELINES & SAFETY

- It is the user's responsibility to read and follow all instructions.
- Keep these instructions with the product at all times and review before each use.
- It is the responsibility of this product's owner to furnish the instructions to any person that borrows or purchases the product.
- Inspect the product before use to ensure it is assembled properly and all parts are in safe working order and free of defects.
- Never modify this product in any way.
- All circumstances cannot be addressed in these instructions.
- Please use common sense and practice general safety measures when using this product.
- Parts and/or instructions are subject to change without notice.
- Prior to every use, check to make sure all bolts/nuts are tight and secure.
- Always load zero-turn mowers backwards. Never go up the ramp facing forward on a zero-turn mower.
- For parts list, see page 6.
- Installation will require two people.



## READ BEFORE STARTING

**HINGE AND FLOOR HOLES and CONNECTING RAMPS TOGETHER will be referenced throughout the installation instructions. Those steps should only be completed when referred to in the instructions that follow.**

### HINGE AND FLOOR HOLES

**NOTE: READ BEFORE STARTING. THIS IS REFERENCED THROUGHOUT INSTALLATION INSTRUCTIONS.**

**If the box truck has pre-drilled floor holes:** While preparing to install each ramp, use the floor holes to mark the upper hinge flaps and drill 7/16" holes accordingly.

**If the box truck does not have pre-drilled floor holes:** While preparing to install each ramp, drill two spaced out 7/16" holes into each upper hinge flap and transfer those marks to the truck floor frame. Drill 7/16" holes into the truck floor frame.

### CONNECTING RAMPS TOGETHER

**NOTE: Each ramp has pre-drilled holes to secure to the adjacent ramps.**

**Step 1.** Use Hardware Bag 2. From the underside of the ramp, insert an M10x80mm bolt and washer through the top pre-drilled holes.

**Step 2.** Insert a nylon spacer onto the bolt between the ramps, then pass the bolt through to the matching pre-drilled hole in the other ramp.

**Step 3.** Insert a washer and secure the bolt with a locking nut.

**Step 4.** Repeat on the lower ramp sections.

# INSTALLATION OVERVIEW

## 1. Install applicable ramp system

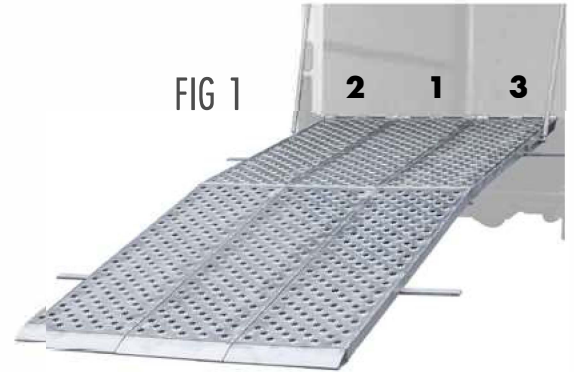
- a. Three ramp system
- b. Four ramp system

## 2. Tighten all bolts and nuts

## 3. Install tension strut brackets

## 4. Attach locking brackets to truck

FIG 1



## 1A. THREE RAMP SYSTEM INSTALLATION

**NOTE: DO NOT TIGHTEN THE BOLTS FULLY UNTIL INSTRUCTED.**

### ATTACH THE CENTER RAMP

**Step 1.** Mark the center of the box truck floor. Place the upper hinge flap of the center ramp (#1 in FIG. 1) on the edge of the steel door frame and line up the center of the hinge with the center mark line on the floor.

**Step 2.** Follow the **Hinge and Floor Holes** instructions to ensure that the holes in the upper hinge flap and box truck floor are aligned.

**Step 3.** Bolt the hinge flap to the floor using M10x45mm bolts, washers and locking nuts (Hardware Bag 1) in each of the two drilled holes. See FIG. 2.

FIG 2



### ATTACH THE LEFT RAMP

**Step 4.** Place the left ramp (#2 in FIG. 1.) next to the center ramp.

**Step 5.** With the upper hinge resting on the box truck floor, ensure the length of open ramp is evenly spaced down the entire ramp when placed next to the previously installed ramp.

**Step 6.** Follow the **Hinge and Floor Holes** instructions to ensure that the holes in the upper hinge flap and box truck floor are aligned.

**Step 7.** Bolt the hinge flap to the floor using M10x45mm bolts, washers and locking nuts (Hardware Bag 1) in each of the two drilled holes.

**Step 8.** Follow **Connecting Ramps Together** to secure the left ramp and the center ramp.

### ATTACH THE RIGHT RAMP

**Step 9.** Place the right ramp (#3-in FIG. 1.) next to the center ramp.

**Step 10.** With the upper hinge resting on the box truck floor, ensure the length of open ramp is evenly spaced down the entire ramp when placed next to the previously installed ramp.

**Step 11.** Follow the **Hinge and Floor Holes** instructions to ensure that the holes in the upper hinge flap and box truck floor are aligned.

**Step 12.** Bolt the hinge flap to the floor using M10x45mm bolts, washers and locking nuts (Hardware Bag 1) in each of the two drilled holes.

**Step 13.** Follow **Connecting Ramps Together** to secure the right ramp and the center ramp.

**NOTE: CONTINUE WITH #2 ON PG 4.**

## 1B. FOUR RAMP SYSTEM INSTALLATION

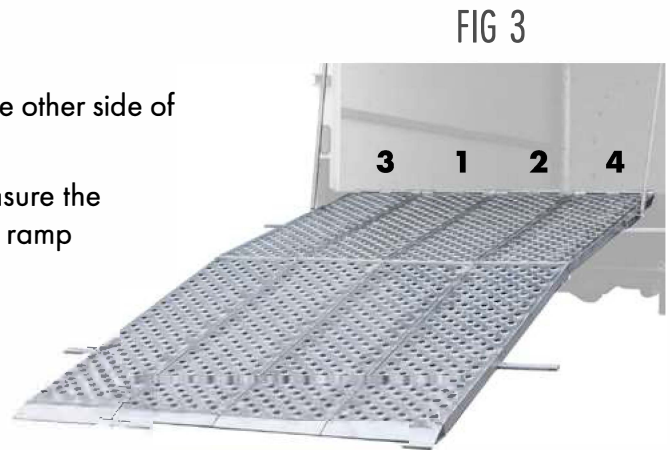
**NOTE: DO NOT TIGHTEN THE BOLTS FULLY UNTIL INSTRUCTED.**

### ATTACH THE FIRST CENTER RAMP

- Step 1.** Mark the center of the box truck floor. Place the upper hinge flap of the center ramp (#1 or #2 in FIG. 3) on the edge of the steel door frame and line up the hinge flap side edge with the center mark line on the floor.
- Step 2.** Follow the **Hinge and Floor Holes** instructions to ensure that the holes in the upper hinge flap and box truck floor are aligned.
- Step 3.** Bolt the hinge flap to the floor using M10x45mm bolts, washers and locking nuts (Hardware Bag 1) in each of the two drilled holes. See FIG. 2.

### ATTACH THE SECOND CENTER RAMP

- Step 4.** Place the center ramp next to the first center ramp on the other side of the marked center line.
- Step 5.** With the upper hinge resting on the box truck floor, ensure the length of open ramp is evenly spaced down the entire ramp when placed next to the previously installed ramp.
- Step 6.** Follow the **Hinge and Floor Holes** instructions to ensure the holes in the upper hinge flap and box truck floor are aligned.
- Step 7.** Bolt the hinge flap to the floor using M10x45mm bolts, washers and locking nuts (Hardware Bag 1) in each of the two drilled holes.
- Step 8.** Follow **Connecting Ramps Together** to secure the two center ramps.



### ATTACH THE LEFT RAMP

- Step 9.** Place the left ramp (#3 in FIG. 3) next to the first center ramp.
- Step 10.** With the upper hinge resting on the box truck floor, ensure the length of open ramp is evenly spaced down the entire ramp when placed next to the previously installed ramp.
- Step 11.** Follow the **Hinge and Floor Holes** instructions to ensure that the holes in the upper hinge flap and box truck floor are aligned.
- Step 12.** Bolt the hinge flap to the floor using M10x45mm bolts, washers and locking nuts (Hardware Bag 1) in each of the two drilled holes.
- Step 13.** Follow **Connecting Ramps Together** to secure the left ramp and the center ramp.

### ATTACH THE RIGHT RAMP

- Step 14.** Place the right ramp (#4 in FIG. 3) next to the second ramp.
- Step 15.** With the upper hinge resting on the box truck floor, ensure the length of open ramp is evenly spaced down the entire ramp when placed next to the previously installed ramp.
- Step 16.** Follow the **Hinge and Floor Holes** instructions to ensure that the holes in the upper hinge flap and box truck floor are aligned.
- Step 17.** Bolt the hinge flap to the floor using M10x45mm bolts, washers and locking nuts (Hardware Bag 1) in each of the two drilled holes.
- Step 18.** Follow **Connecting Ramps Together** to secure the right ramp and the center ramp.

## **2. TIGHTEN ALL BOLTS AND NUTS**

**Step 1.** With the help of another person, raise and lower the ramp system.

**Step 2.** After lowering the ramp, tighten all the nuts/bolts.

## **3. INSTALL STRUT BRACKETS\_**

**NOTE: REQUIRES TWO PEOPLE**

### **FIND TENSION STRUT BRACKET LOCATIONS**

**Step 1.** Both people raise the ramp system to the upright position and one person holds it in place.

**Step 2.** With the ramp system folded up, pick a side and use the other person's assistance to position the bottom tension strut end in the ramp slot. The end of the tension strut should be positioned at the lowest position of the ramp slot and the top of the tension strut should be against the upper side of the door frame. Mark the location of the upper strut end where it rests against the box truck door frame.

**Step 3.** Remove the tension strut and lower the ramp system.

**Step 4.** Measure the distance from the truck floor to the mark and place an additional mark on the other side of the door frame to identify the second bracket location.

### **ATTACH STRUT BRACKETS TO TRUCK**

**Step 1.** Position the first strut bracket with the mark at the lowest point of the slot in the bracket.

**Step 2.** Mark the four pre-drilled holes on the truck.

**Step 3.** Repeat on the other side.

**Step 4.** Inspect the inside of the truck to ensure that the area is accessible for all holes. Drill 7/16" holes on every mark that is accessible. For marks that are not accessible, drill 9/16" holes into the exterior part of the truck, without fully penetrating through to the inside, as you will use rivet nuts in those locations.

**Step 5.** For any location where a 9/16" hole was drilled, install M10 rivet-nuts with the rivet-nut tool.

**Step 6.** Secure the strut brackets to the truck. For 7/16" holes in accessible areas, use M10x70MM bolts, M10 washers and M10 lock nuts (Hardware Bag 3). The washers should be used in the interior of the truck. For the locations where rivet-nuts were installed, use M10-25L bolts and M10 washers to secure the strut brackets (Hardware Bag 4). See FIG. 4.



### **ATTACH TENSION STRUT TO RAMP-TRUCK**

**Step 1.** With a second person, fold the ramps into their upright position.

**Step 2.** Attach the skinny end of the strut to the ramp using a T-slot nut and washer. Fully thread the strut end into the T-slot nut and tighten. Start at the lowest point of the ramp slot. The location at which the T-slot nut is secured in the ramp slot determines how easily the ramps fold down or how easy it is to lift them in place. Adjustments are explained on page 5.

**Step 3.** Once the tension strut is secured to the ramp, use a ladder or step stool to attach the top of the tension strut to the tension strut bracket with another t-slot nut and washer.

**Step 4.** Repeat this step on the other side of the ramp system.

**Step 5.** The overall location where the T-slots are connected to the ramp and bracket should be the same on both sides.

**At this time, you should be able to open and close the ramp system.**

**NOTE: The maximum distance a tension strut can be extended is 75" from bolt end to bolt end of the strut**

### **ADJUST STRUTS AS NEEDED**

You can adjust the struts to balance how much effort is required to raise or lower the ramp system. You may have to adjust the struts seasonally to accommodate for variances in temperature, particularly if using the ramp system year-round.

**Adjust the struts high for less effort** to close the ramp system and more effort to open it.

**Adjust the struts low for more effort** to close the ramp system and less effort to open it.

To adjust, place the ramp in the secured, vertical and stored position. Slightly loosen both the bottom and top T-slot nuts. Once they're loose enough that the tension strut can be moved, raise the location of the tension strut. Very little movement up and down where the tension strut is secured will alter how easy it is to unfold the ramp. Repeat the adjustment to the other tension strut.

## **4. ATTACH LOCKING BRACKETS TO TRUCK**

**Step 1.** Fold the ramp system into the upright position.

**Step 2.** Place the locking brackets into place so the left and right latch bars are inside the locking brackets.

**Step 3.** Once in position, hold the bracket in place and lower the ramps. Mark the mounting holes onto the truck and secure the brackets to the truck.

**Step 4.** Inspect the inside of the truck to ensure that the area is accessible for all holes. Drill 7/16" holes on every mark that is accessible. For marks that are not accessible, drill 9/16" holes into the exterior part of the truck, without fully penetrating through to the inside, as you will use rivet nuts in those locations.

**Step 5.** For any location where a 9/16" hole was drilled, install M10 rivet-nuts with the rivet-nut tool.

**Step 6.** Secure the strut brackets to the truck. For 7/16" holes in accessible areas, use M10x70MM bolts, M10 washers and M10 lock nuts (Hardware Bag 3). The washers should be used in the interior of the truck. For the locations where rivet-nuts were installed, use M10-25L bolts and M10 washers to secure the strut brackets (Hardware Bag 4). FIG. 4.

**Step 7.** Use the L-shaped keeper to secure the latch bars in place and use the lynch pin to secure the L-shaped keeper. FIG. 5. For added security, replace the lynch pins with a lock (not included).

**Verify all bolts/nuts are tightened prior to first use.**



# **PARTS**

**NOTE: INSTALLATION REQUIRES TWO PEOPLE**

PARTS	QTY
Right Ramp	1
Left Ramp	1
Center Ramp	1 or 2
Strut Bracket	2
Tension Strut	2

PARTS	QTY
Right Ramp	1
Latch Bracket	2
Lynch Pin	2
L Keeper	2

## **HARDWARE BAGS**

### **Bag 1. Ramp Hinge Hardware**

M10x1.5x45mm Hex Bolts	8
M10 Washers	8
M10 Lock Nuts	8



### **Bag 2. Ramp Connection Hardware**

Nylon Spacer	6
M10x1.5x80mm Hex Bolts	6
M10 Washers	12
M10 Lock Nuts	6



### **Bag 3. 7/16" Bracket Hardware**

T-Slot Nut	4
M10 Flat Washers	16
M10x1.5x70mm Hex Bolts	16
M10 Lock Nut	16



### **Bag 4. 9/16" Rivet-Nut Bracket Hardware**

M10-1.5 Rivet-Nut	16
M10x1.5-25L Bolt	16
M10 Lock Nut	16
Rivet-Nut Installation Tool	1





# **PRODUCT WARRANTY & LIABILITY**

**GENERAL PRODUCT WARRANTY:** Products purchased from the Authorized Dealer (original place of purchase) or Merchant ("Dealer") will be free of defects in material and workmanship at the time of receipt, and will meet the specifications stated at the place of purchase transaction or online at the Dealer's website, under normal use and service when correctly installed, operated and maintained. This product warranty is effective for the period of time stated below, unless otherwise stated in the product instructions or depicted in the product advertisement. All Authorized Dealer warranties are NON-TRANSFERABLE and cover only the original end purchaser. This limited warranty does not cover products purchased through non-authorized dealers. Non-authorized dealer receipts are not accepted for warranty verification.

**\*\*\*WARRANTY CLAIMS MUST BE MADE DIRECTLY TO THE ORIGINAL PLACE OF PURCHASE.\*\*\***

**WARRANTY PERIOD:** This warranty remains in force for five years from the date of the product's accepted delivery. The Authorized Dealer offers a one year manufacturer's warranty for most products unless otherwise specified on the product advertisement.

**WARRANTY SERVICE:** The Authorized Dealer will replace any defective or malfunctioning part at no charge, including payment of the shipping costs of parts or replacement product to and from the manufacturer. The purchaser is responsible for labor charges. If the product does not meet specifications as depicted in the advertisement, the Authorized Dealer will refund the full purchase price of the product. Questions regarding the warranty on a specific product and warranty claims should be directed to the Authorized Dealer with whom the purchase transaction was made.

**WARRANTY LIMITATIONS:** The above warranty does not apply to products that are repaired, modified or altered by any party other than the Authorized Dealer; are subjected to unusual physical stress or conditions (such as overloaded ramps or corrosion), natural disaster, governmental actions, wars, strikes, labor disputes, riots, theft, vandalism, terrorism or any reason beyond reasonable control; are damaged due to improper installation, misuse, abuse, accident or negligence in use, storage, transportation or handling, or tampering; or to products that are considered consumable items or items requiring repair or replacement due to normal wear and tear. Product should be inspected prior to signing for delivery. Product damage incurred during shipping, unless noted on the Bill of Lading at the time of delivery, renders this warranty void.

**LIMITED LIABILITY:** In no event shall **THE AUTHORIZED DEALER** be liable to the purchaser or any third party for any indirect, incidental, consequential, special, exemplary or punitive damages arising out of the use of the product, including, without limitation, property damage, loss of value of the product or any third party products that are used in or with the product, or loss of use of the product or any third party products that are used in or with the product.

