No-Drill Installation for WM System "Light Plus" Series Swivel Ramps

Ford Transit Application

INTRODUCTION:

Thank you for choosing a WM System loading ramp for your Ford Transit cargo van. Please read the following installation instructions completely before beginning your installation. Wear protective gear that's appropriate for the parts and tools being handled for safety.

The hardware included in your mounting kit is our new no-drill hardware for swivel ramps. With this design, no drilling into the vehicle is required.

These instructions apply to all versions of the Ford Transit, encompassing all roof heights and wheelbases. There is one exception: if you happen to have a rear AC on the driver side, you would have received a right-hand swivel ramp and accompanying mounting kit which is the mirror opposite of the images shown, but the install instructions are identical, so please follow along.

In addition to these written instructions, we have a video series walking through each step of the installation process posted on YouTube, accessible via the below QR code. We encourage installation teams and end users to view these videos to aid in the installation, adjustment, and operation of the ramp.

SCAN TO VIEW INSTALLATION VIDEO SERIES ON YOUTUBE:

INSTALL PREP:

1. If your vehicle came with a factory-provided plastic threshold, you'll remove the threshold permanently. It will not be re-used, and our mounting hardware will completely replace it.

2. You'll need to evaluate your cargo flooring/liner situation:

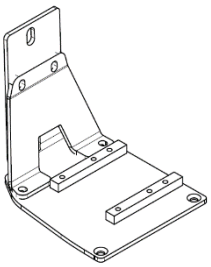
   - If your vehicle has bare metal flooring, no alterations are needed. Proceed with the installation.
   - If you have a factory-provided rubber cargo liner or similar, you can install the mounting plate on top of it for a seamless look. Prior to installation, you'll need to trim back the insulation found on the back side of the rubber mat, so it doesn't raise the height of the ramp mounting plate.
   - If you have a wood floor, follow along through to the mounting plate assembly, and then mark the leading edge of the mounting plate onto the wood floor, and trim back the wood floor to create a seamless transition with the mounting plate.

TOOLS REQUIRED:

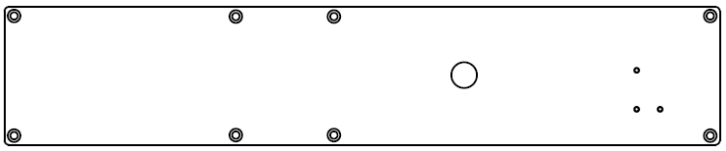
There are only a few tools required to complete the installation, as outlined below. With these tools alone, most ramp installations can be completed from start to finish in under an hour.

- Impact wrench
- (1) 3/16" Allen key on a socket
- (1) 5/8" socket
- (1) 15/16" socket
- (1) 5/8" crescent wrench
- (1) 15/16" crescent wrench
- (2) 13mm crescent wrenches
- (2) 17mm crescent wrenches
- (1) 6mm Allen wrench

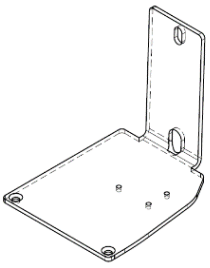
MOUNTING KIT PARTS INCLUDED:



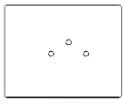
C:
Driver Side Plate



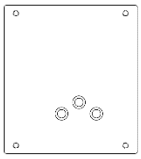
E:
Infill Plate



D:
Passenger Side Plate



A:
Underbody Support Plate



B:
Top Support Plate

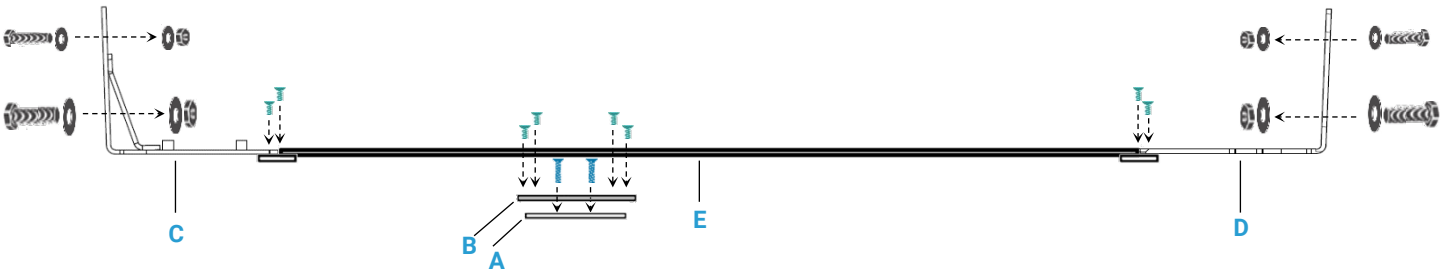
Bolt01 (qty. 3):
$^{5}/_{16}$ x 1" Flathead Countersunk Bolt

Bolt02 (qty. 8):
$^{5}/_{16}$ x $^{1}/_{2}$" Flathead Countersunk Bolt

Bolt03 (qty. 2):
$^{7}/_{16}$" Side Arm Bolt Assembly

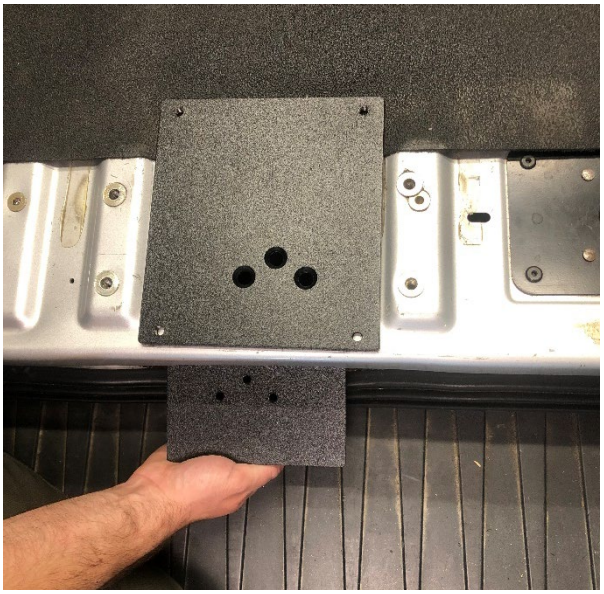
Bolt04 (qty. 2):
5/8" Side Arm Bolt Assembly

MOUNTING KIT ASSEMBLED DIAGRAM (FRONT VIEW):



MOUNTING KIT INSTALLATION:

1. Identify **Plate A** and slide this plate into the small body cavity that's accessible from the rear door area, ensuring the pre-drilled holes are slightly offset to the left side for correct orientation. The pre-drilled holes should be visible from the above access point.



2. Place **Plate B** directly above the access point between the metal floor ridges, lining up its three countersunk holes with Plate A below. Loosely fasten Plate A and Plate B together, using **Bolt01** and your 3/16" Allen on the impact wrench. The plates should be loose enough to slightly adjust their position.

3. Place **Plate C** on the driver's side of the vehicle, hugging the rear door jamb. Place **Plate D** in the same position on the passenger's side.

4. Identify **Plate E**, the largest infill plate, and note its correct orientation allows access to the spare tire key. Place Plate E in between Plates C and D, adjusting their position as needed until the plates press tightly into place, and all 4 pre-drilled corner holes align.

5. Using (qty. 4) of **Bolt02** and your 3/16" Allen on the impact wrench, loosely fasten Plate E to Plates C and D on all 4 corners to ensure proper alignment. <u>Note, these bolts will be removed in the next step, so don't overtighten.</u>

6. Remove the driver and passenger side plastic access panels to access the inside of the door jambs. Using (qty. 2) of **Bolt03**, loosely fasten the top holes on Plates C and D to the door jamb. To do this, fish the bolt and (1) washer into the inside of the body cavity to push through the top hole and fasten the remaining washer and nut to the bolt on the outside. Repeat the same process using (qty. 2) of **Bolt04** to loosely fasten the bottom holes on Plates C and D to the door jambs.

7. Using a crescent wrench or another shim, adjust the placement of Plate B below Plate E until the 4 center holes align. Use Bolt02 to loosely fasten the plates together through these center holes to ensure alignment.

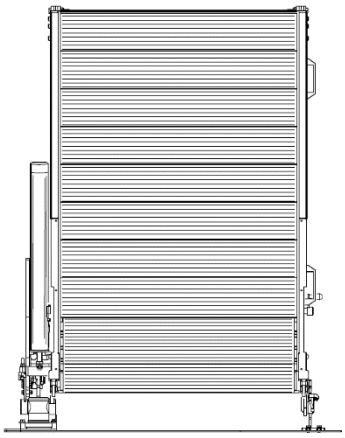
8. Now that all plates are in alignment, securely fasten both Bolt04 assemblies in their door jamb locations using the 15/16” socket on impact and 15/16” wrench. Then, securely fasten both Bolt03 assemblies into their door jamb locations using the 5/8” socket on impact and 5/8” wrench.

9. Carefully remove the 4 center bolts on Plate E from Step #7 above, as well as the 4 corner bolts from step #5 above. Gently lift and set aside the plate, being mindful not to move Plate B below. Firmly grip Plate B, and securely fasten all (3) Bolt01s into their final position.

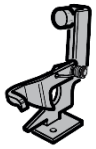
10. Reposition Plate E, and securely fasten all remaining Bolt02s into the 4 outside corner holes, and 4 center holes.

11. As a final step to install the mounting hardware, ensure all bolts are securely fastened.

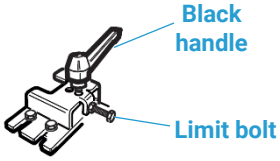
RAMP INSTALLATION PARTS INCLUDED:



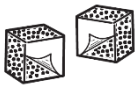
Ramp



Passenger or driver side lock



Mounting shoe



Foam blocks

Outside finger plate

Inside finger plate (with yellow block)

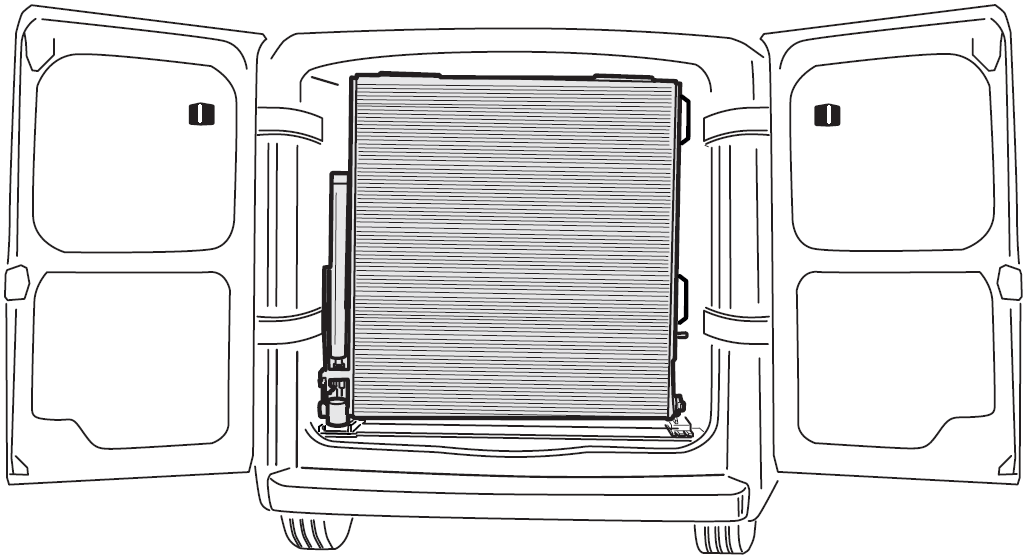
Bolt05 (qty. 3): M8 Mounting shoe bolts

Washer05 (qty. 3): M8 Mounting shoe washers

Bolt06 (qty. 6): M8 Finger plate bolts

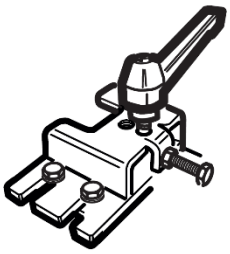
Washer06 (qty. 6): M8 Finger plate washers

INSTALLED RAMP VISUAL:



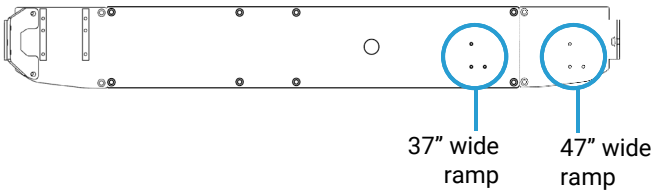
RAMP INSTALLATION:

1. Identify and open the larger bag of parts containing **Mounting Shoe** and **Passenger Side Lock** (or, if installing a right-hand swivel ramp, the Driver Side Lock).

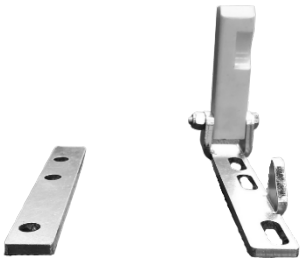


2. If not already attached, identify the **Limit Bolt,** and attach it to the side of the mounting shoe as shown at right. Next, identify the **Black Handle** and attach it to the top of the mounting shoe, turning the handle only so far in so that the screw reaches the underside of the mounting shoe's top face.

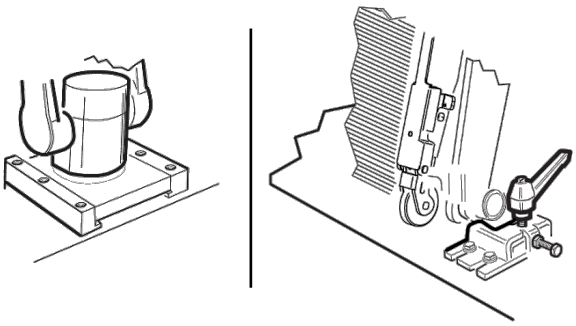
3. Depending on whether you've purchased a 37" wide or 47" wide ramp, there are two different mounting positions for the mounting shoe, as shown at right. Place the mounting shoe in the correct position over the pre-drilled holes and attach using all three of **Bolt05** and **Washer 05** and tighten using your 13mm wrench. Set the passenger side lock aside for now.



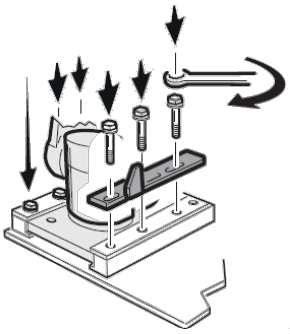
4. Next, identify and open the smaller bag of parts containing the finger plates and foam blocks. The **Outside Finger Plate** and **Inside Finger Plate (with yellow block)** will be used to attach the ramp's pivot foot to the mounting plate. Identify these two steel plates and place them on the bumper of the vehicle for quick access during the next step.



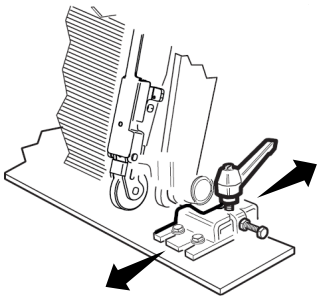
5. Using two or more people, or an appropriate lifting device, pick up the **Ramp** from beneath the lower leaf and stand it up on the installed mounting plate in the vehicle. DO NOT lift the ramp from the upper leaf only as it will swing open. The ramp's rectangle pivot foot should fit between the two welded-on foot guides of the mounting plate, and the round nylon bushing on the other side of the ramp should rest on the installed mounting shoe, as shown at right. The rectangle pivot foot should be flush with the welded-on feet at the back of the vehicle.



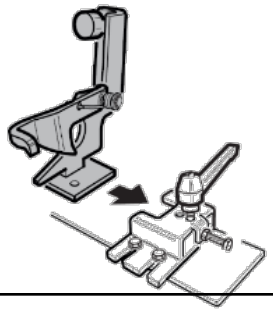
6. Once the ramp is positioned correctly, and while the ramp is still being supported by two people, attach the **Outside Finger Plate** using three of **Bolt06** and **Washer06**, ensuring the plate is oriented to overhang the ramp's rectangle pivot foot. Next, attach the **Inside Finger Plate (with yellow block)** using the remaining three **Bolt06** and **Washer06**, ensuring it overhangs the ramp's rectangle pivot foot. Tighten down both finger plates using a 13mm crescent wrench. The ramp should now stand safely on its own without support.



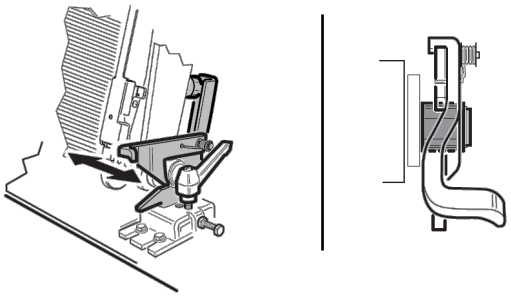
7. To ensure the ramp is evenly flush with the back of the vehicle from left to right, adjust the mounting shoe's location forward or back. The three bolts holding the mounting shoe in place should be loose. If they're too tight to adjust the placement of the shoe, loosen them first. Adjust the position of the shoe as needed, and securely fasten all 3 bolts on the shoe.



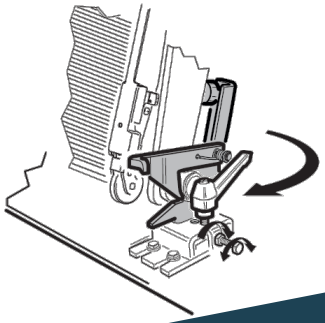
8. Next, install the **Passenger Side Lock**. To access the mounting shoe area, the ramp can now be safely swung outward of the vehicle. Slide the passenger side lock into the base of the mounting shoe.



9. Swivel the ramp back in, lifting the latch on the passenger side lock to lock the ramp's round nylon bushing in place in the lock. To adjust the position of the lock to ensure positive contact with the round nylon bushing, move the lock from left to right as needed.

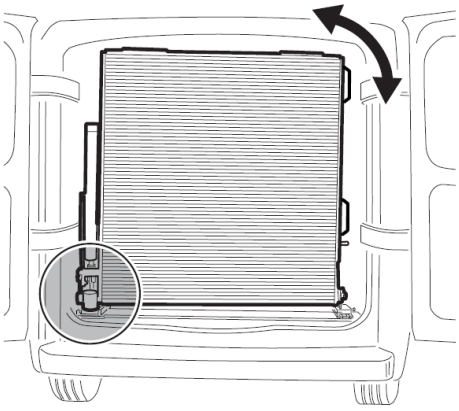


10. Once the lock is in a good position, you'll secure the lock in place by ratcheting the **Black Handle** down until it makes firm contact with the lock inside the shoe. The last step to ensuring the final position of the mounting shoe and passenger side lock is to adjust the **Limit Bolt**. The limit bolt sets the travel of the passenger side lock. To adjust the limit, loosen the nut on the limit bolt so it can be threaded inward until it makes positive contact with the lock. Once contact is made, tighten back down the nut to set the limit position using your 13mm wrench.



RAMP ADJUSTMENTS:

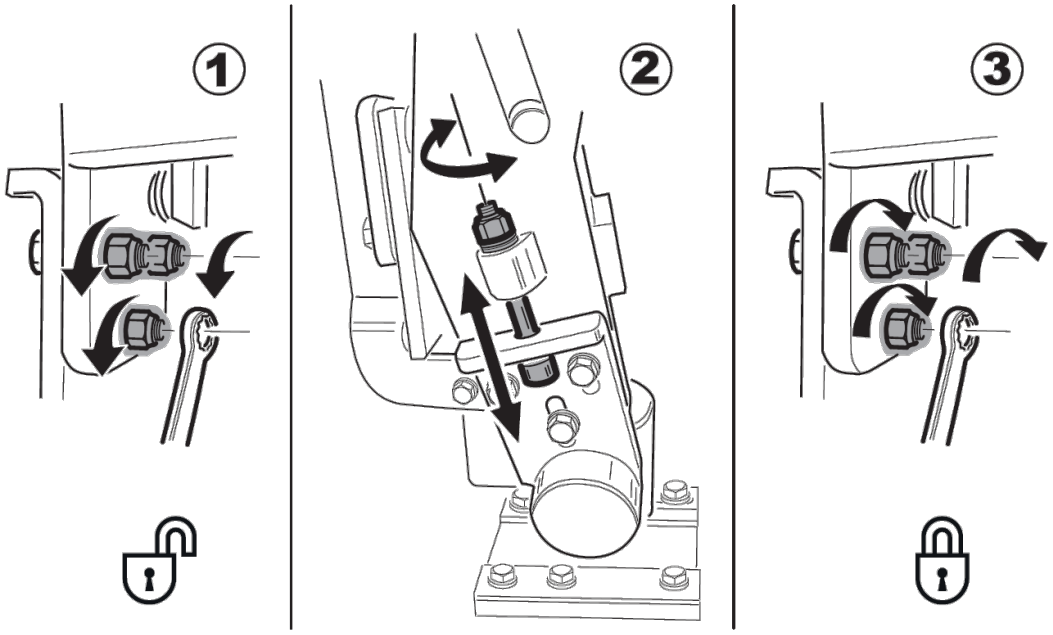
Lateral Drop Adjustment:



1. The lateral inclination of the ramp can be adjusted quickly and easily from the pivot point of the ramp (on the driver side of installing a left-hand swivel ramp, or on the passenger side if installing a right-hand swivel ramp). Begin with the ramp securely stowed. Loosen the 3 nuts on the inside of the pivot point slip plate using a 13mm crescent wrench, as shown in the visual below. Loosen the nuts only 1-2 threads. Next, loosen the bolt heads on the outside of the pivot point slip plate, only about ½ - ¾ of a thread worth, enough to reduce tension on the slip plate.

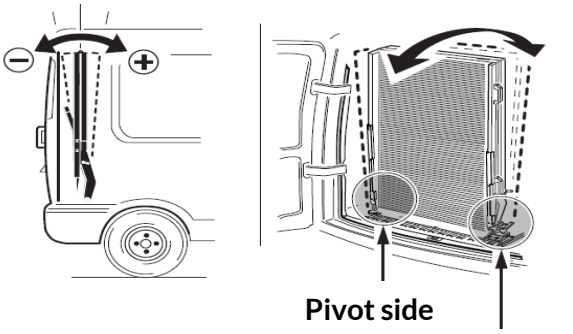
2. Using a 6mm Allen wrench and 13mm crescent wrench, adjust the vertical bolt on the outside of the pivot point to either raise or lower the lateral inclination as needed. To do this, insert the Allen wrench into the head of the bolt, and place the crescent wrench on the nut, to tighten or loosen the vertical bolt. Loosening the bolt will lower the swing side of the ramp, while tightening the bolt will raise the swing side of the ramp. We recommend adjusting the bolt 1-2 threads at a time, checking progress along the way, to ensure the ramp can hold its own weight laterally when moving from the locked position to swiveled outward position. When done correctly, the round nylon bushing should slide effortlessly in and out of the lock housing as you lift the lock handle, without having to apply force.

3. Once adjusted, first tighten the boltheads on the outside of the slip plate, followed by tightening of the nuts on the inside of the slip plate.



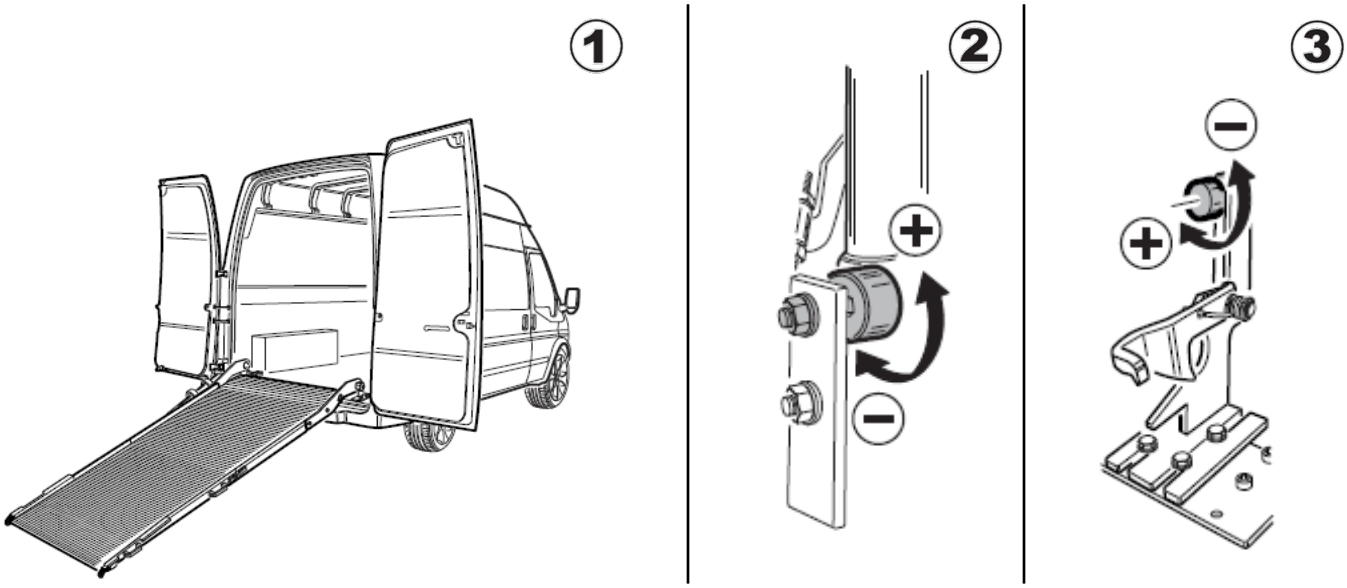
Rubber Bumper Adjustment:

1. The front to back inclination of the ramp can be adjusted using the rubber bumpers found on the left-hand and right-hand sides of the ramp. To perform this adjustment, deploy the ramp by pulling upward on the safety latch (found on the side of the ramp with the black handles) and pulling the outside leaf of the ramp out of the vehicle with one hand on each black handle, easing the ramp to the ground.



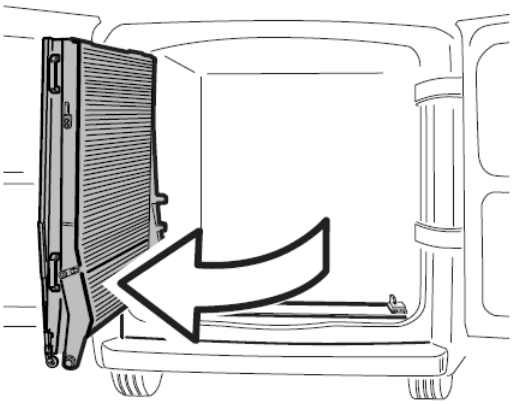
2. First, adjust the rubber bumper on the pivot side of the ramp. Using the 13mm wrench, remove pressure from the nut on the end of the bolt and thread the bolt in or out depending on the adjustment level needed. Threading the bolt in will position the ramp to sit closer to the front of the vehicle, while threading the bolt out will position the ramp closer to the rear doors. Test the position by stowing the ramp and shutting the rear doors to ensure the position is to your liking. Once adjusted, fasten the back nut to secure the rubber bumper position.

3. Next, adjust the rubber bumper on the swing side of the ramp. Using the same 13mm wrench, follow the same steps on the rubber bumper at the top of the lock. As with the pivot side, Threading the bolt in will position the ramp to sit closer to the front of the vehicle, while threading the bolt out will position the ramp closer to the rear doors. Test the position by stowing the ramp and shutting the rear doors to ensure the position is to your liking. Once adjusted, fasten the back nut to secure the rubber bumper position. Move on to the J-Hook Adjustment.



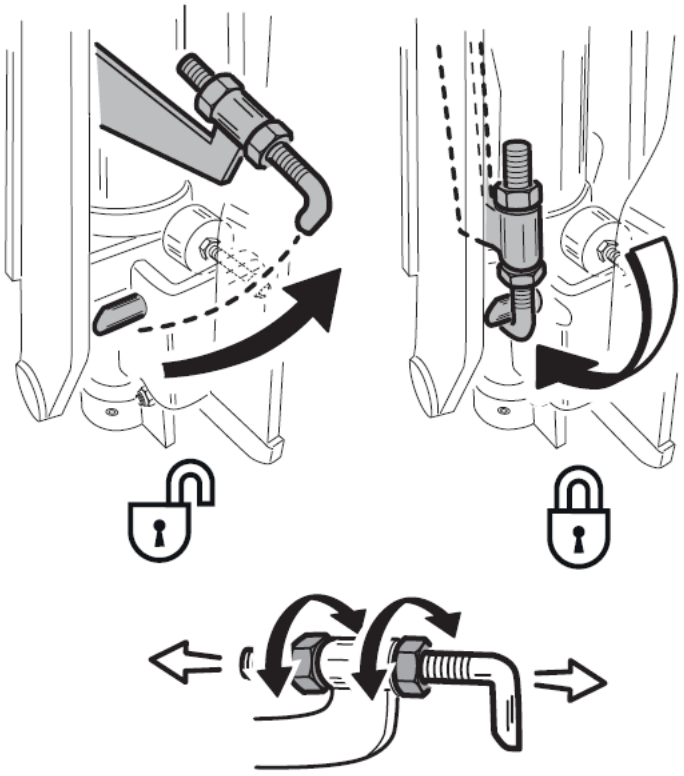
J-Hook Adjustment:

1. Once the rubber bumper positioning has been adjusted on the pivot side of the ramp, you must also adjust the J-Hook (found directly above it) to control the amount of forward-to-back travel the ramp will have when stowed. If the rubber bumpers were adjusted inward to allow for positioning away from the rear doors, there would now be excess space between the J-Hook and metal stud. Begin this adjustment with the ramp folded and swiveled outside of the vehicle to access the J-Hook on the interior pivot side of the ramp.



2. Using two 17mm crescent wrenches, loosen both nuts on the J-hook arm to allow for adjustment of the J-Hook up or down as needed. The proper placement of the J-Hook is just below the metal stud, not making direct contact but having a small visible separation from the stud to allow for free travel while restricting movement when the ramp is stowed.

3. Once proper J-Hook placement is achieved, tighten both nuts while ensuring the J-hook doesn't spin from side to side. Test stowing and deploying the ramp to ensure the J-hook isn't impeding the ramp from properly locking into the stowed position.



Foam Block Placement:

1. As a final and optional step, install the provided foam blocks on the rear doors to inhibit the side rails of the ramp from making direct contact with the rear doors.