

# Installation Guide

## Van Lock Models



Protect your tools, cargo, and livelihood.



We appreciate your trust in our company and look forward to significantly improving your van's security.

This booklet is only a guide to installing Thunderbolt® locks and is not a complete or comprehensive manual since every vehicle is different from year to make and model. We recommend consulting a professional installer if you are not comfortable with the installation process at any time.

You can follow this guide to walk you through the installation process; however, we encourage you to watch the videos on our website. Keep in mind we continue to update our website with installation tips, photos, and videos.

Additionally, we are here to help; our goal is for your installation to go smoothly. If you need guidance, feel free to contact our team.

Please note: Thunderbolt® deadbolt locks are intended to protect contents and should NOT be engaged while the vehicle is occupied by persons as a safety precaution. If you are staying inside your van make sure to disengage each Thunderbolt® lock by operating the manual release knob. The Thunderbolt® manual release knob should be installed in a location that is easily seen, easily accessible and identified with the provided label. Thunderbolt® Locks should always be unlocked before opening a door from the interior. Install the pull strap if needed. Be sure to read the entire installation guide prior to installing the locks.

Best regards,  
Team Thunderbolt®



## Van Lock Models



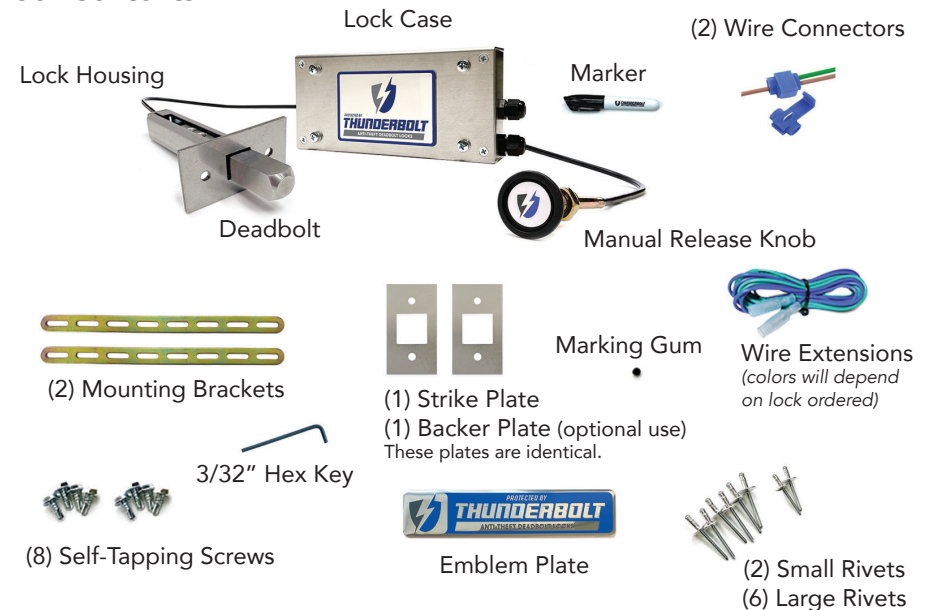
**Van Lock Model 1 (M1)\***  
Factory Key Fob Control



**Van Lock Model 2 (M2)**  
Built-In Remote Control

\*Available with Lock Inhibitor (M1+)

### Lock Contents



### Suggested Tools





Prior to the installation process we suggest watching the general installation video on our website.



Scan QR Code to watch video:



Van applications can vary, but overall, the installation processes are similar. If you plan on installing multiple locks, we suggest starting with the rear door.

### TEMPLATES

Check on our website to see if templates are available for your application. Download the templates and follow the instructions for use.



### WHICH REAR DOOR SHOULD THE LOCK BE INSTALLED IN?

The lock should be installed inside the rear passenger-side door with the exception of the Ram ProMaster City van.

Most applications will require the raised strike bracket. The raised strike bracket gets installed on the rear driver-side door. Some vans do not require a raised strike bracket, such as the Chevy Express, Ford Econoline, GMC Savana and the full size Nissan NV. Check our website for information updates on your specific vehicle.



**The Raised Strike Bracket accessory, gets surfaced mounted on the van's rear driver-side door.**



Ford Transit

*For Example: On the Ford Transit the lock gets installed in the rear passenger-side door (See below)*



**Strike Plate Bracket (accessory) installed on the rear driver-side door with lock installed in the rear passenger-side door.**

### REMOVE THE DOOR PANEL

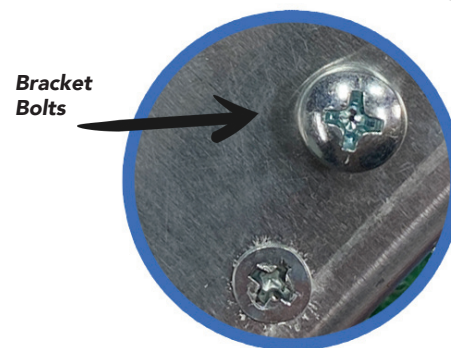
Remove the panel from the door where the lock will be installed.



### MOUNT THE CASE

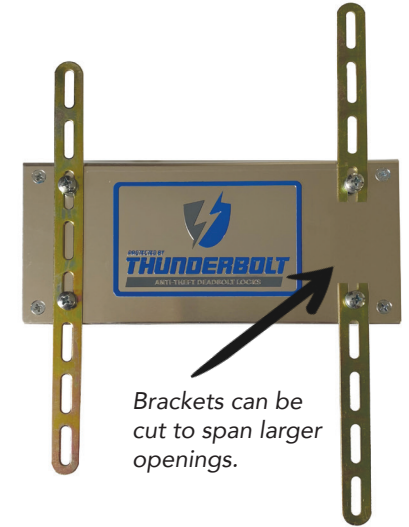
Choose a location that works best to mount the case. Once the location is determined, attach the brackets to the Thunderbolt® case using the four bracket bolts provided. The brackets can be cut or bent for a custom installation.

The cables should reach the mounting locations without tight bends. Ensure the case location and cables will not impede the window from rolling down in front door applications.

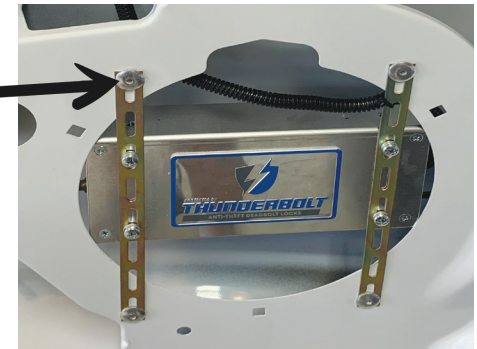


*The round head bolts are used to secure the brackets to the case.*

*Brackets should be attached as shown.*



Mount the case with the brackets inside the door using the four supplied self-tapping screws. The case can get mounted anywhere in the door. We suggest replacing the self-tapping screws with the rivets once the final location is determined. Keep your cables free-flowing; you do NOT want sharp bends as they may bind the cable.



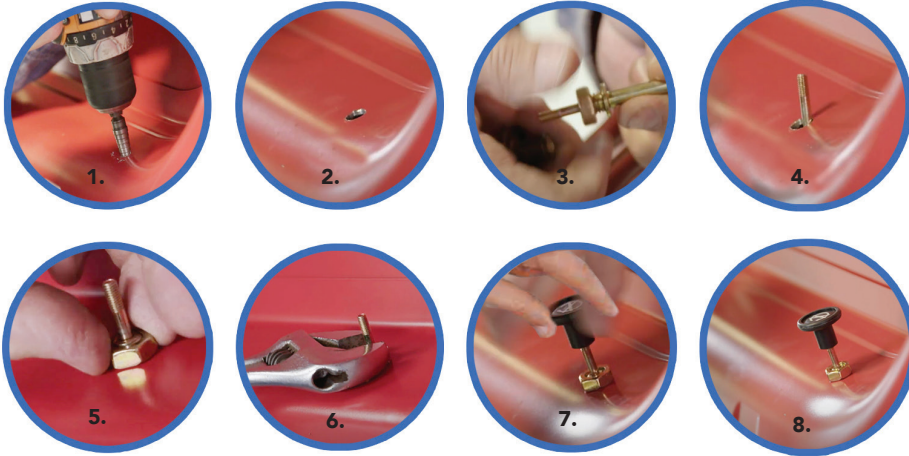
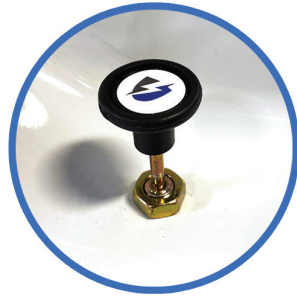
*This photo shows where rivets have been used to replace the self-tapping screws.*

**Always keep your cables free flowing with "J" bends.**

## MANUAL RELEASE KNOB

Select an ideal spot for the manual release knob and drill a 3/8" hole for its installation.

Unscrew the knob and nut from the manual release cable and guide it through the drilled hole. Now secure it with the nut and install the knob. (See below)



The manual release knob can be mounted in almost any position or location as shown in the photos below, but be sure it is visible and easily accessible.



**Position the manual release knob where it is accessible and visible by passengers. Place the provided manual release sticker above the knob for identification.**



## INSTALLING THE HOUSING

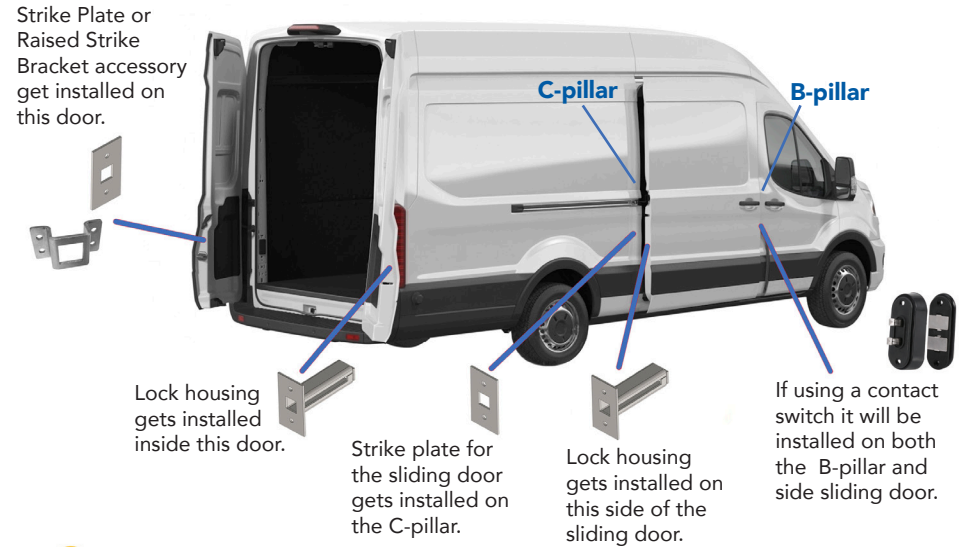
If available, download a template from our website or determine the location for the housing hole.

Prepare to drill a hole for the housing. Make sure there are no obstructions inside the door, and that nothing will impede the strike plate installation on the mating door.

If not using a template keep in mind, that when drilling the housing hole on

the sliding door, you must favor the left inside edge of the door (Left of Center). This will allow for the bolt and strike plate to line up on the C-pillar. (See example photo at bottom of page)

This following diagram shows the locations of housings and strike plates on a Ford Transit. Remember, every van is different and Thunderbolt® locks are universal, allowing for various housing installation locations.



**Backer plate will remain inside the door on the cable until rivets get installed.**



Mark the spot for the housing and drill a 7/8" hole. We suggest using rust proof paint on any bare metal.

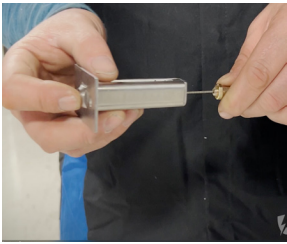


The housing hole on the sliding door will be drilled closer to the left inside edge of the door (left of center).



Unscrew the housing from the cable and push the cable through the hole to reconnect the housing.





### ATTACH THE HOUSING TO THE CABLE

With the cable extending through the hole in the door, re-attach the housing by screwing it back on the cable's end fitting, and then slide the deadbolt back on the cable. Next, it's time to adjust the bolt length inside the housing.

Note: An optional backer plate is provided in case your door metal is thin. This backer plate will help reinforce the housing once installed. It should be installed over the housing on the inside of the door. This is the time to keep it hanging on the cable or remove it. It will be secured later using rivets.



### DETERMINE THE BOLT LENGTH

Decide how far the bolt will extend out of the housing while at rest. Extend the bolt out of the housing until it touches the mating door, then reduce the distance about 1/8". Mark the length on the bolt. From this point the bolt will travel about 5/8" into the strike opening.



Measure the gap between doors (minus a 1/8") and mark the bolt with the marker. This is where the deadbolt should extend outside the housing while at rest.



### SET THE BOLT LENGTH

Once you have decided the required length of where the bolt should be extended out of the housing, insert the deadbolt back onto the flex cable at the marked length and gently tighten the set screws. Ensure the manual release knob is entirely in the "unlock" position before tightening the set screws. This will ensure that the bolt will fully extend.



### TIGHTEN THE SET SCREWS (DO NOT OVER-TIGHTEN!)

The set screws are designed with dog-ear tips to hold the cable without the need to over-tighten. If you over-tighten the set screw, you could damage the cable and hinder the ability to make a second adjustment if needed. If this happens, you may need to order a replacement cable.



**DO NOT OVER-TIGHTEN THE SET SCREWS!** The set screws have a dog-ear end tip that secures the cable without the need for over-tightening.



### INSERT THE HOUSING

Now that you have the deadbolt secured to the cable inside the housing, it is time to fit the housing into the 7/8" hole. Be sure the deadbolt has been appropriately adjusted to clear the door as it will extend out a bit from the housing while at rest, and you do not want the mating door to strike the bolt when closing. Do not secure the backer plate at this time. You must first make sure the bolt is striking its target.



### TEMPORARILY SECURE THE HOUSING IN THE DOOR

Using two of the self-tapping screws, secure the housing into the door. Be sure NOT to shut the door on the bolt while in the extended position. Use the manual release to disengage the bolt and test closing the door slowly to see if it clears the mating door. If it doesn't, remove the housing and make the corrected adjustment on the deadbolt.



### MARKING FOR THE STRIKE PLATE

Place a tiny amount of marking gum on the CENTER of the bolt tip to mark where to drill the strike plate hole. Ensure the deadbolt is retracted by using the manual release to disengage the bolt. **Slowly and fully close the door and GENTLY engage the deadbolt using the manual release knob.** Hold for a few seconds, and then release the knob.

**WARNING: When marking, DO NOT press the knob with any force or damage will occur! Pressing gently will transfer the gum and prevent kinking the internal cable.**



If you feel you may have kinked the cable, open the case cover to inspect. If needed, gently straighten the cable with long nose pliers.

### LOCATE THE MARK

The gum may transfer completely or just leave a very light outlined spot. If needed enhance the spot with the provided marker.

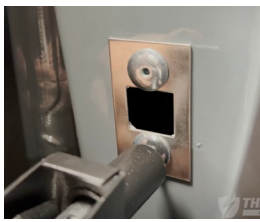


Use a small amount of marking gum and "center" it on the end of the bolt for an accurate mark. Apply "very light pressure" with one finger for a few seconds when marking. Use the provided marker to enhance the spot.



### DRILL A HOLE FOR THE STRIKE PLATE

Drill a small pilot hole first, then use the step drill bit to achieve your 7/8" hole.



### SECURE THE STRIKE PLATE

Before attaching the strike plate, slowly close the door and ensure the hole is in the correct spot so the deadbolt will accurately engage into it. Once you are certain that the deadbolt and strike hole will align, secure the strike plate using two rivets.



### SECURE THE HOUSING WITH RIVETS

If the lock is working properly secure the housing with rivets as well as the backer plate if being used.



### BACKER PLATE LOCATION

If using the backer plate, install it in this location and secure with rivets. The rivets get inserted through the two housing holes, the door metal, and then the backer plate.

## WIRING YOUR THUNDERBOLT® LOCKS

Thunderbolt® locks get connected in one of two ways, depending on which model you choose. Model 1 operates from your factory key fob. Model 2 operates independently from a Thunderbolt® key fob.

### M1 Lock and M1+ Lock (with lock inhibitor) Factory Key-Fob Controlled

*M1+ Lock Shown. M1 Lock will only have Blue & Green wires.*

#### WIRE COLORS:

- White = Ignition
- Black = Ground
- Blue = Lock
- Green = Unlock



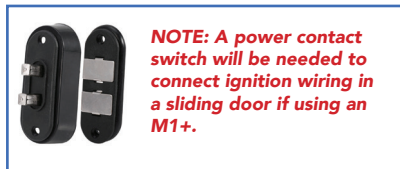
Model 1 locks connect to the existing factory lock motor wires in each door, and your current key fob will operate your deadbolts. Model 1 locks are available in two versions: (M1+), which includes a built-in lock inhibitor to prevent the deadbolts from engaging while the van's ignition is on as a safety precaution, and (M1) without the lock inhibitor.

The M1+ lock's green and blue wires connect to your factory lock motor wires to control the locking operation. The white wire gets connected to a 12-volt ignition source wire, and the black gets connected to common ground this will prevent the lock from engaging while the vehicle's ignition is on. Be sure to test the wires with a multimeter to ensure which wires are the factory lock motor wires and/or ignition wire.

The M1 lock (without the lock inhibitor) only has a blue and green wire. These models are intended for van doors where passengers are never present, such as the cargo doors of work vans.



**Most vans with power windows have a 12-volt ignition wire at the power window switch.**



**NOTE: A power contact switch will be needed to connect ignition wiring in a sliding door if using an M1+.**

## REAR SWING DOOR WIRING

When installing an M1 lock in the rear swing door, the first step is to locate the existing lock motor wires. You will then splice the M1 lock wires into the existing lock motor wires. Once complete, the Thunderbolt® locks will operate with your factory key fob. The lock motors will be located at the door latch, most commonly in the rear passenger-side door. If the Thunderbolt® locks operate in the wrong direction, you need to swap the blue and green wire connections.



**After connecting your wires and before taping or closing the door panel, test the direction of the locks to make sure they operate in the correct direction.**



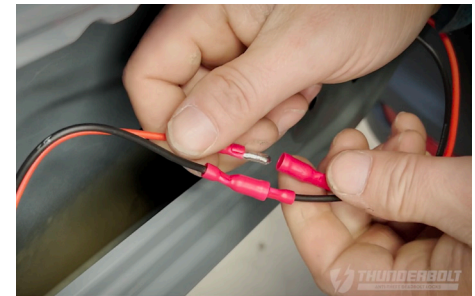
**If you are not familiar with wiring we suggest consulting a professional.**



Connecting M1 Wires

## SIDE SLIDING DOOR WIRING

The factory lock motor wires will be inside the sliding door. Most side sliding door locks only operate when the door is closed. This is because there is a contact switch. If you have a factory contact switch, the Thunderbolt® lock will only activate when the door is closed.



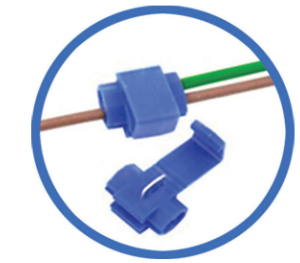
Connecting M2 Wires

## SIDE SWING DOOR WIRING

If you have swing doors on the side of your van you can install the lock in the door on the right. The factory lock motor wires will likely be in that same door.

## CAB DOOR WIRING

When installing locks in the cab doors, the factory lock motor wires will be located at the door latch. We require installing our M1+ locks with lock inhibitors for safety. These locks require a 12v ignition source which can often be found at the power window switch.



*Note: The included Quick Wire Connectors may be different than shown.*



**Quick wire connectors are provided to make connections easier, or you can traditionally connect the wires; "tap and wrap" which is a more secure method. We suggest soldering wires if possible.**



## M2 Lock Built-in Remote Control



Model 2 Locks (M2) have a built-in remote control module and will operate the deadbolt locks from the provided Thunderbolt® key fob. To install the M2 lock, connect the red and black wires to constant power and ground, such as the battery.

You should only engage the M2 locks while the vehicle's ignition is off and the vehicle is not occupied.

Each M2 lock has a red and black wire that connects directly to the red power and black ground on the battery or a constant power source and common ground.

If you have a sliding door, you will need to install a contact switch to bring power to the lock.

Wires connected to your battery should always be fused at the battery or use a Thunderbolt® Distribution Block.



## Distribution Block 12 Volt Power Terminals

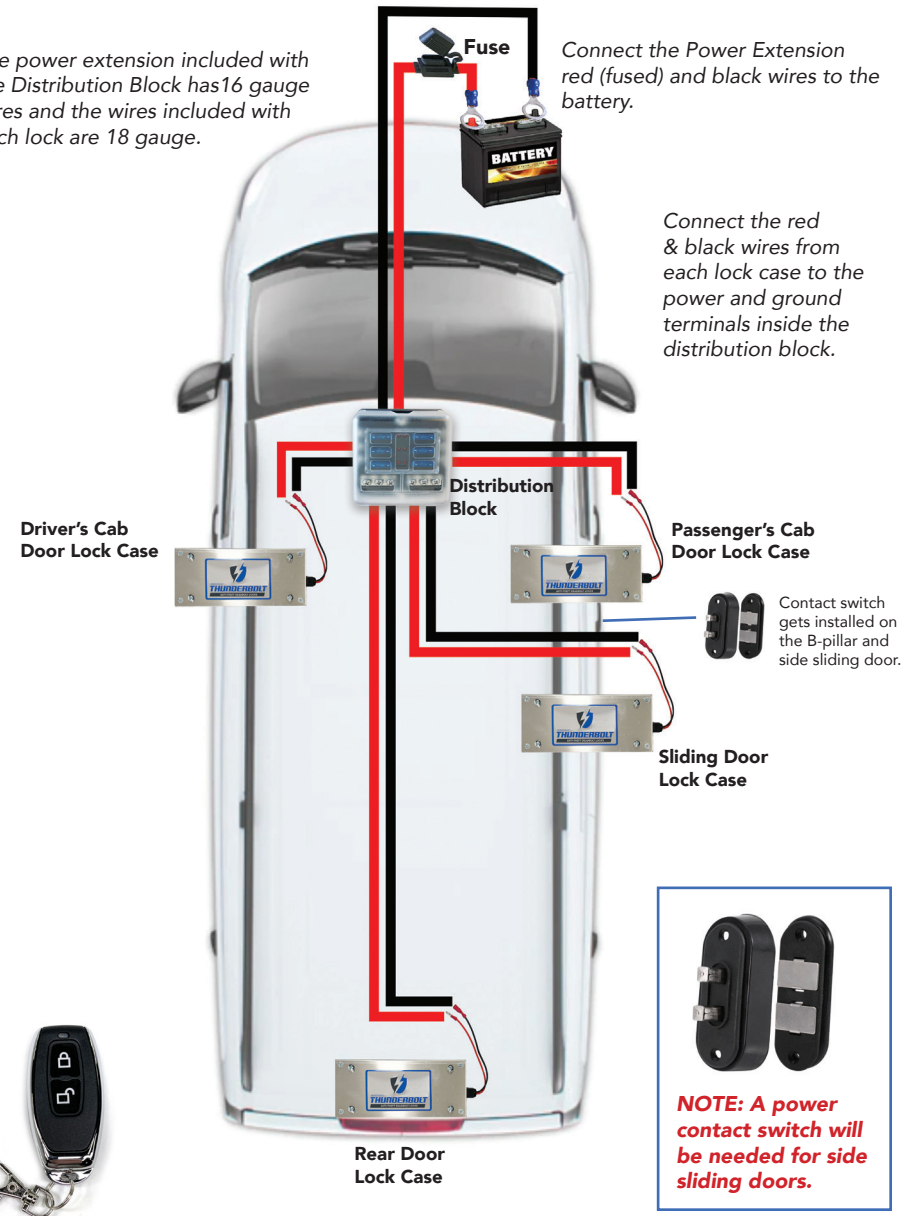
*Optional, but highly recommended.*

To make the installation of multiple M2 locks easier, we offer a distribution block accessory that connects directly to your battery, and each lock connects to the block. After connecting the primary red fused wire and black wire to the battery, run the remaining wire to a central location where you plan on installing the block. The M2 lock wires will connect into the terminals on the block. The block provides 6 fused terminals to power multiple locks and/or 12-volt accessories.

## Distribution Block Installation Diagram

The "optional" distribution block accessory can be installed anywhere inside the van that makes sense in your application. Each M2 Lock connects to the distribution block with the provided wires. Additional 12-volt accessories such as a phone charger or LED light can also be wired into the distribution block.

The power extension included with the Distribution Block has 16 gauge wires and the wires included with each lock are 18 gauge.



Once the wiring is complete, all of the locks will operate from one of the provided Thunderbolt® key fobs.

## TEST YOUR THUNDERBOLT® LOCKS

Test the locks to see if they are working correctly. Start by making sure the locks are disengaged using the manual release knobs, then slowly shut the doors to ensure the deadbolts will clear the mating door. Press your key fob to lock the doors and try to open them manually with the key. The doors should now be locked with the Thunderbolt® locks.

When testing the locks, one vital thing to remember is to never slam the door with the Thunderbolt® extended out of the housing, as this could damage the bolt. We always recommend shutting the doors slowly until the locks are correctly adjusted.

If a Thunderbolt® is engaged and the door is attempted to be opened, it will remain slightly ajar, and the deadbolt will not allow entry. To disengage the deadbolt, apply pressure on the door by pushing against it and clicking your key fob to disengage the lock. This procedure will take the pressure off the deadbolt and allow for unlocking.

The same applies to the inside, we always recommend using the key fob to unlock your doors or disengage the deadbolt first by pulling the release knob and then opening the door. If you find the door is ajar and not opening because you did not release the deadbolt, try pulling the knob to disengage the bolt. If there is too much tension because the door is ajar, it means the door needs to be pulled shut to allow the deadbolt to disengage. Thunderbolt® provides pull straps to attach to the doors that require tension relief in order to open the door. Test ALL of your doors to see if pull straps should be installed. Contact us with any questions.



## INSTALLING PULL STRAPS

If a pull strap is needed, test where the door should be pulled and attach the pull strap using the provided hardware. Once the door is ajar and the deadbolt is still engaged, pull on the strap to release tension and disengage the deadbolt by pulling on the manual release knob. Be sure to attach provided sticker near the manual release to inform passengers. Watch our website's "Installing Pull Strap" video for detailed information.

Note: Do not block the manual release knob. The should be installed in a location that is easily seen and reached.

## REPLACE THE SCREWS WITH RIVETS

Once the locks are tested and working properly, we highly recommend replacing all self-tapping screws on the mounting brackets, strike plates, and housings with the provided rivets. Rivets will give a more permanent long-term hold as self-tapping screws can become loose over time. It is important not to use the rivets until the locks are tested as they must be able to be removed during the installation process for adjustments to the deadbolt.



**Replace all self-tapping screws with rivets for a more secure hold.**

(8) Rivets included in each kit  
Rivet Gun (not included).



(6) Large head rivets for brackets and housings.

(2) Small head rivets for strike plates.

## ATTACH THE EMBLEM PLATE

The final procedure is to attach the Thunderbolt® emblem plates to the outside of the doors if you desire. We recommend placing the emblem plate near the door handle of the secured door.



## IMPORTANT WARNINGS • TERMS AND CONDITIONS

Read the entire guide before installing the product. Deadbolts are intended to protect contents and should NOT be engaged while the vehicle is occupied or running as a safety precaution. The Thunderbolt® manual release should be installed in a location that is easily visible and accessible. The manual release knob should be disengaged before manually operating the internal factory door handle. You must test the manual release to see if a pull strap is needed. If the door is ajar and there is too much pressure on the bolt to release, you must install the pull strap. Attach the appropriate safety stickers provided, near the manual release knob.

Thunderbolt® Locks are an aftermarket locking device. Thunderbolt® Locks, Inc. does not cover or extend any warranty on any vehicle. Your vehicle's warranty may be voided by adding any aftermarket products. It is your responsibility to check before ordering or installing the product, and Thunderbolt® Locks, Inc. takes no responsibility for any loss or voided warranty of any kind. Thunderbolt® Locks, Inc. does not take any responsibility for installations done by any independent installer or customer. Each Thunderbolt® lock gets lubricated with silicone spray before it leaves the assembly line. We suggest lubricating each bolt with silicone spray periodically.

The Thunderbolt® lock products are intended to be used to secure your vehicle; however, Thunderbolt® Locks, Inc. does not guarantee that a break-in is not inevitable or the possibility of failure of the product for any reason. Thunderbolt® Locks, Inc. takes no responsibility for any theft, damage to the vehicle, or loss of any property whatsoever.

Test your Thunderbolt® locks each time you use your vehicle to ensure they are in proper working order. Instruct any persons in the vehicle exactly how the locks work and how to manually release the locks if needed. Instruct them that the locks should not be engaged when any persons are inside the vehicle or while it is running.

Thunderbolt® Locks, Inc. does not take any responsibility for persons being locked out or locked in a vehicle for any reason, including battery failure or product failure. The Thunderbolt® locks are NOT intended to be engaged while the vehicle is running or ignition is on. The manual release should be installed in an easily accessible and visible location. The M1+ lock with lock inhibitor is recommended on doors where a passenger may be riding to prevent the locks from engaging while the vehicle is running or ignition is on. The M2 locks should not be engaged while the vehicle is running or while persons are inside. For safety, Thunderbolt® locks should be disengaged while driving or while persons are inside by operating the manual release. Thunderbolt® Locks, Inc. or any of its owners, shareholders, or employees take no responsibility for any injuries or death or for any damages resulting from using or installing our products. Do not install any Thunderbolt® products if you do not agree to these terms and conditions. Contact us if you have any questions on how to operate or test your locks.





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