



GATELOCK T-LOCK

Art. XTV01/02

SECURITY PADLOCK FOR THE LOADING AREA OF COMMERCIAL VEHICLES

IMPORTANT INFORMATION

Generality

Dear Customer,

Thank you for the trust you have shown by purchasing one of our products.

Read the operating instructions carefully to familiarize yourself with the assembly and operation of the mechanical key operated padlock, as well as to avoid errors and dangers.

Intended use

The padlock with mechanical key operation and the recommended components are suitable for environments with the following characteristics:

- maximum relative humidity 95%
- environmental temperature - 20°C + 60°C.

The accessories are made in such a way that they can be assembled on the original BBLOCK components. If components not authorized by BBLOCK are used, the characteristics of the device will be altered. Intended use is a prerequisite for using the device.

The functioning of the padlock and accessories, supplied by BBLOCK, has been checked. If third-party components are used, the manufacturer should be informed if there is any doubt as to their suitability

Per garantire l'utilizzo in conformità allo scopo, procedere come segue:

- Provide relevant people with the necessary information and instructions in this regard.
- Have assembly carried out by specialized personnel, according to the assembly instructions. In this regard it is necessary to comply with the regulations in force

Intended use is given when the lock and accessories

- They are used as per the definition of specifications and assembly data.
- They are not used inappropriately
- Are treated periodically according to the maintenance and care instructions
- They are not used beyond their wear limit.
- In case of failure, they are repaired by specialized personnel

The supplier/manufacturer declines all liability for personal injury and material damage as a result of inappropriate use or operation which is not in accordance with the intended purpose.

Use not in accordance with the purpose

Improper use, i.e. not compliant with the intended use of the locking device, results:

- When the instructions for intended use are not followed.
- When correct operation is prevented by the addition of foreign and/or non-compliant objects in the opening area, in the closing system or in the striker
- When the locking system or striker is subject to an attempted tampering, resulting in a change in structure, operation or function
- When, to keep the tailgate open or due to damage, the latch or other additional locking elements are inappropriately excluded
- If locking elements are mounted and subsequently treated in a way that prevents their functioning, e.g. painting over moving components, such as the latch.
- When, when using the key with normal hand strength, excessive loads are transferred to the locking system.
- When the necessary gap between the tailgate and the tailgate or between the tailgate and the frame increases or decreases due, for example, to the movement or lowering of the tailgate itself due to the failure of the hinges or due to deformations caused by impacts.
- When using tools, levers or similar to operate the locking system.

- When you operate the handle and the key at the same time
- When the lock is closed/opened with inappropriate objects
- When using measurements other than those reported in the technical data

Important safety instructions

The safety instructions are aimed at assembling and using the padlock. They must always be respected!

- The manufacturer declines any damage due to non-intended use
- For security reasons, the lock is designed to be combined with original BBLOCK components. Using non-BBLOCK components compromises the characteristics of the padlock.
- The tailgate must be able to be closed mechanically with ease.
- Lock installation and repair requires expertise; therefore it must only be carried out by specialized personnel.
- For safety reasons, it is not permitted to transform, modify or carry out temporary repairs. When replacing components, only original spare parts may be used.
- With regard to the safety features of the padlock, the manufacturer is, within the framework of the regulations in force, responsible only when maintenance, commissioning and modifications have been carried out by the manufacturer himself or by his agent, according to the manufacturer's instructions.

We decline any responsibility for damages of any kind due to faulty commissioning, modification or maintenance.

OPERATION

DOOR OPENING



DOOR CLOSING



Operation	Lock	Operation	Lock
Insert the key into the lock.		Simply close the door for the lock to close.	
Turn the key 90° clockwise			
Open the door. The lock separates from the locking cone.			

Turn the key 90°
counterclockwise.

The lock is now armed and
ready for the next lock.



Remove the key.

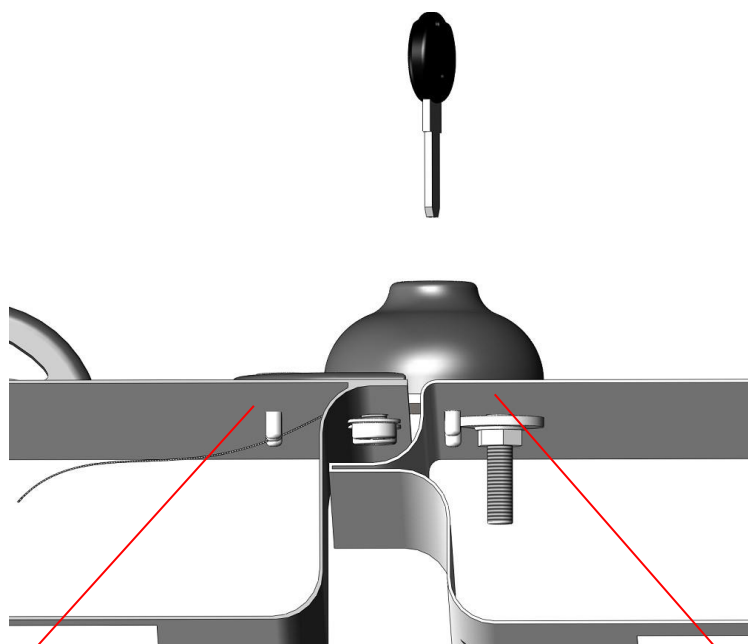
The lock is now armed and
ready to close.



INSTALLATION

Gatelock T-lock is a protection system for access to the car openings of commercial vehicles. The device can be applied directly to the door and to be able to anchor it, it is necessary to use it for the lamiera, as shown below. This device must be applied if it is on the rear door that its side is opened on the left. Il device restane fisso sul portellone





Armor | Opening Door

The device is applied to the opening door and secured along the edge of the door using two M8 pins screwed directly into the armor and two D5 rivets.

Striker | Fixed Door

The striker is secured with one M8 nut, screwed onto a special sealing plate inside the door. Two 5 mm rivets align and secure the external reinforcement plate.

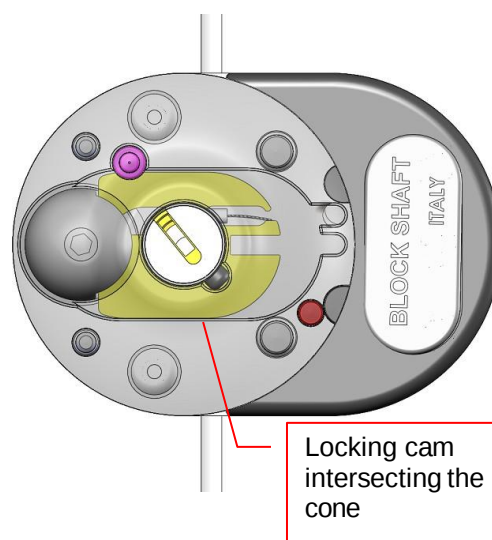
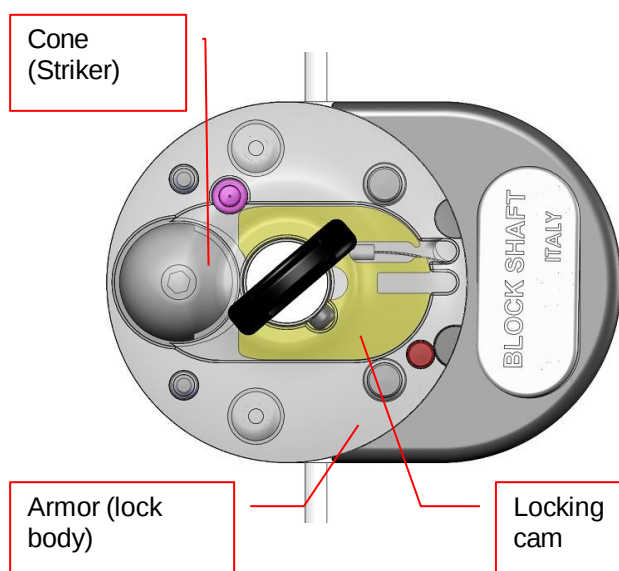
TECHNICAL CHARACTERISTICS

Locking system

The padlock uses a special elliptical cam with a large cross-section (latch) as a locking device. This cam intersects the cone attached to the fixed part of the door during closing. This cam is activated indirectly. This feature has several advantages.

OPEN

CLOSE

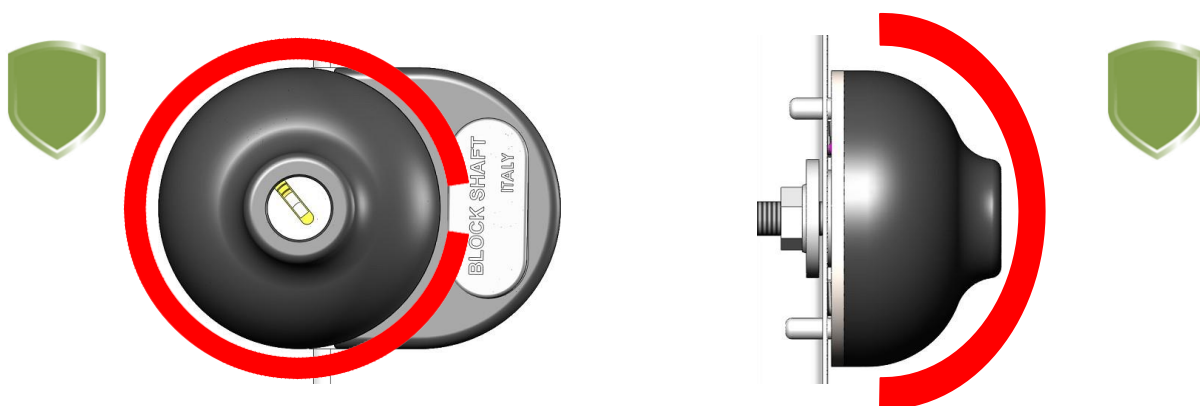


When the tailgate closes, the cam and cone do not impact. This means that the striker (cone) is not stressed when the lock closes, and therefore the (often very thin) sheet metal on which the striker rests is minimally stressed, thus avoiding potential deformation or damage to the tailgate.

The door closes only after the status pin lifts upon contact with the closed door. (SLAMLOCKING OPERATION)

Geometry

The domed shape of the padlock prevents the most common burglary tools (pliers, pipe wrenches, hammers, and chisels, etc.) from grasping and prying the lock open.



Thanks to its robust cone and 4mm thick cam, the device is able to resist attacks from unconventional burglary tools such as a 5kg hammer and a crowbar.

Each locking mechanism is difficult to access and therefore impervious to attack.

The padlock body is made of two components, both crafted from a solid steel bar and then machined using CNC machining.

The construction material (alloy steel and stainless steel), the surface hardening heat treatment (carbon-nitriding), and the thickness of the structure provide the lock's natural defense against drilling and sawing.

Of course, prolonged attacks can cause one of the locking mechanisms to fail. However, the rule of thumb is that a padlock is always a deterrent and not a definitive solution to the problem of theft; it must be as tamper-resistant as possible, while simultaneously increasing the risk of interception for anyone attempting to break in.

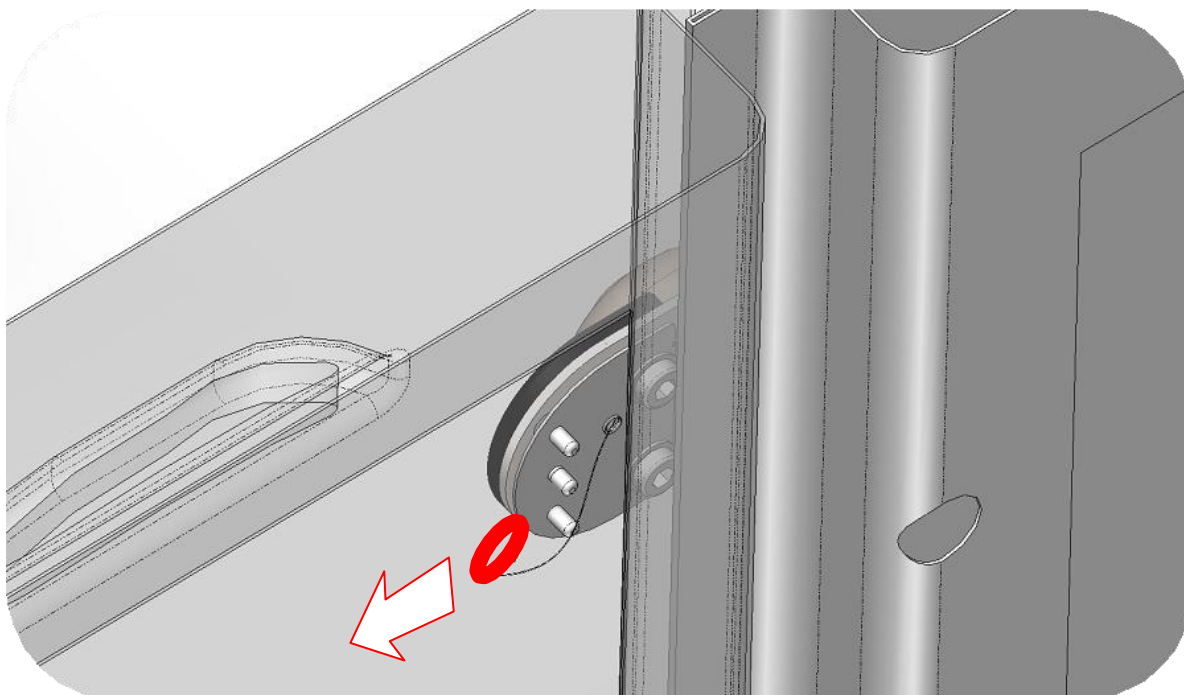
In any case, to maximize the effectiveness of the lock, it is always advisable to have the vehicle's standard lock functioning and activated; in this way, the hold is maximized thanks to the combined action of the two hooks (the vehicle's standard one and the padlock's one).

The padlock has been equipped with a specific stainless steel defender, free to rotate on its own axis, with the function of protecting the cylinder from drill attacks

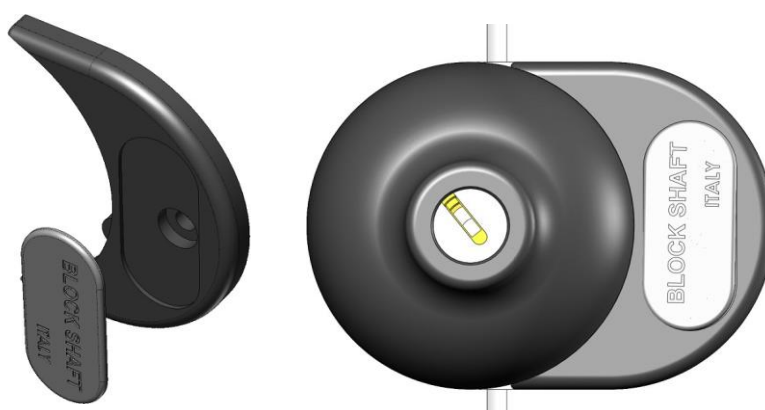


In the event of an inside opening (a person accidentally locked in the cargo area), a high-strength braided steel cable with a plastic eyelet terminal has been provided to perform the opening operations from the inside.

To exit the cargo area, simply pull the cable and simultaneously open the door with the inside handle.

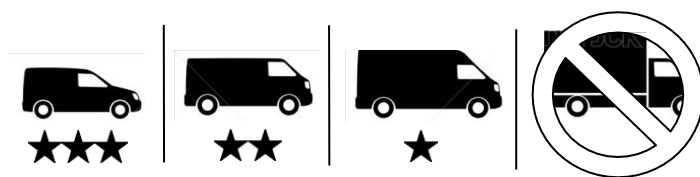


To complete the technical and functional features, a plastic cover has been integrated that allows the rivets to be hidden and at the same time offers the possibility of customizing the product. This cover is attached using two tabs and a rivet.



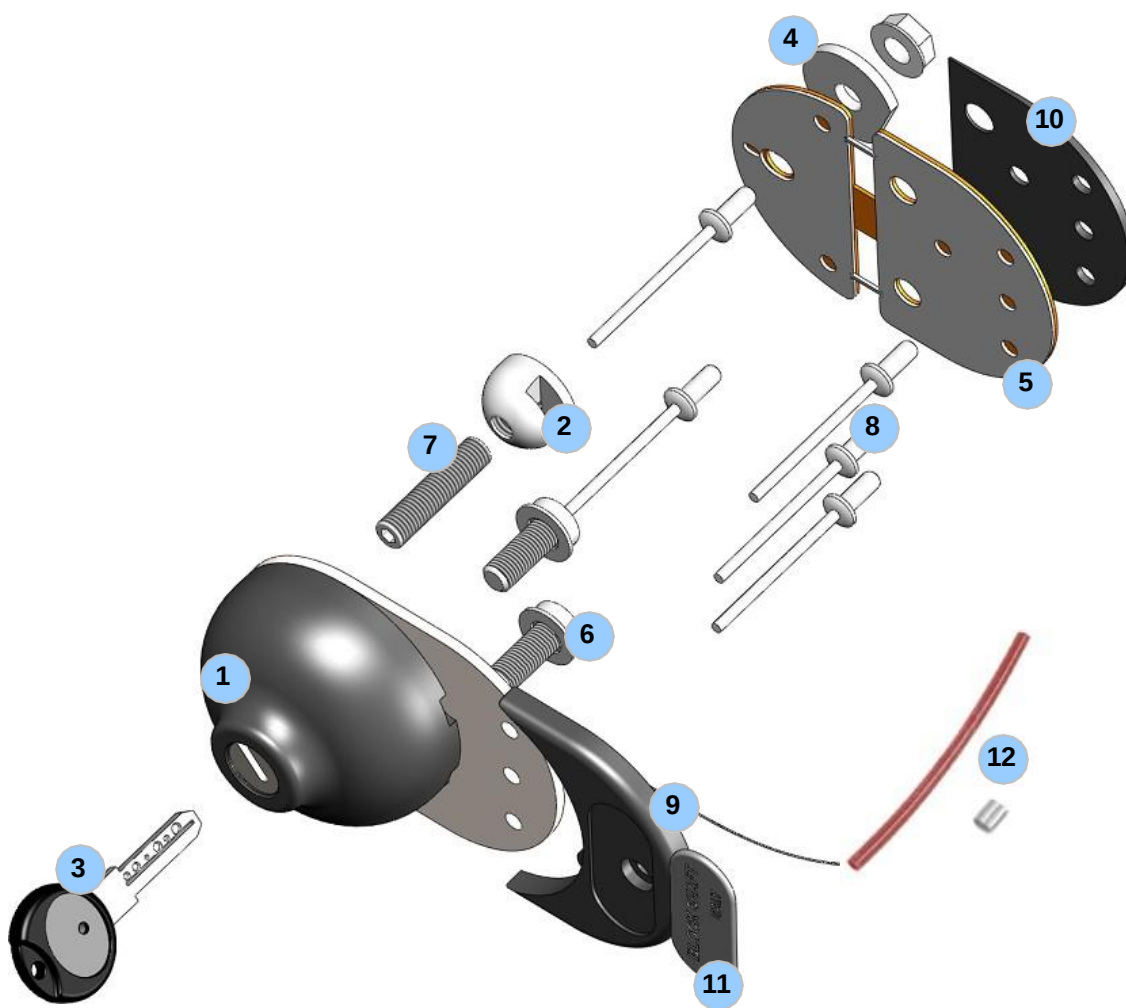
Please note that Gatelock T-lock can be installed on all light commercial vehicles and vans, but its safety/effectiveness and functionality/reliability are inversely proportional to the vehicle's size.

In particular, the product is suitable for minivans and vans, while for maxivans, the large size of the doors and their relative large gaps tend to reduce both safety/effectiveness (high leverage) and functionality/reliability (door decay and the necessary lock adjustments). Box vans are excluded. An indicative diagram is provided below.



The installation kit includes the following parts:

1. 1 x LOCK BODY;
2. 1 x STRIKER (CONE);
3. 2 x KEYS
4. 1 x COUNTER-PLATE FOR STRIKER;
5. 1 x REINFORCEMENT PLATE (DRILL TEMPLATE);
6. 2 x M8 LOWERED CYLINDRICAL HEAD BOLTS WITH WASHERS;
7. 1 x STRIKER FIXING KIT (1x SCREW M8X25, 1 x NUT M8)
8. 5 x RIVETS 5MM;
9. 1 x PLASTIC COVER
10. 1 x PLASTIC SPACER
11. 1 x PERSONALIZED PLASTIC ADHESIVE
12. 1 x INTERNAL OPENING KIT (1 x RED TUBE, 1 x CABLE CLIP)
13. 1 x FITTING INSTRUCTIONS;



GENERIC INSTALLATION PROCEDURE

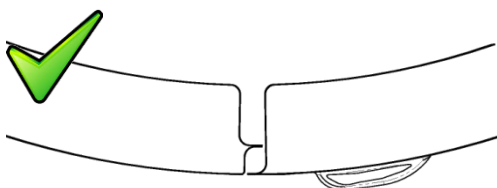
STEP 1

VERIFY



First, check that the doors are correctly aligned. If the door edges are not perfectly aligned (fig. 1, fig. 3), adjust them using the catch/hook (fig. 2) and/or the hinges.

For doors that are out of date, replace the hinges or reinforce them if necessary.



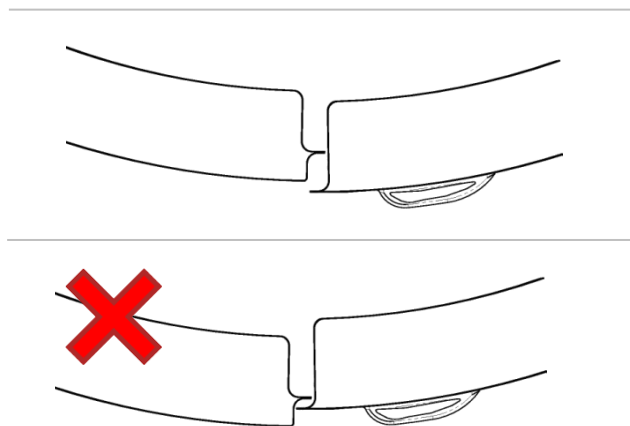


Fig.1

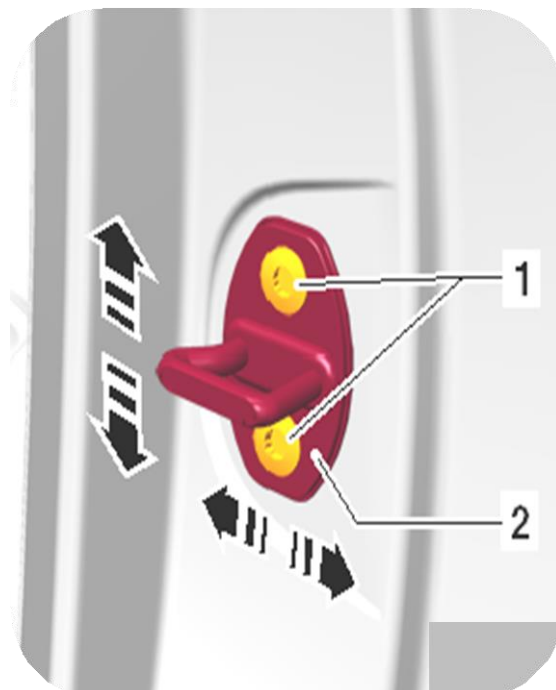


Fig.2

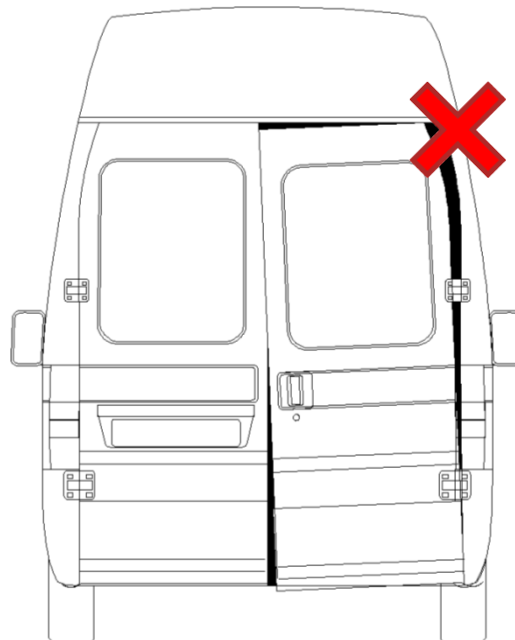
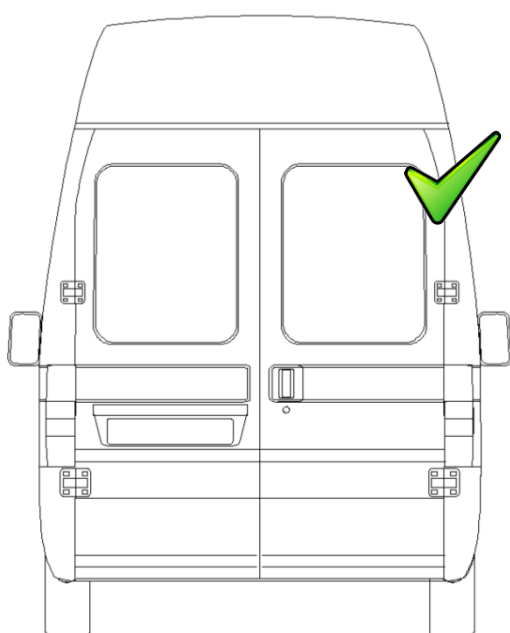


Fig.3

STEP 2

POSITIONING



Evaluate one or more possible positions for the lock. To this end, some generally valid criteria can be defined::

- The positioning of the armor plate relative to the lower edge of the door "H" must be such as to maximize effectiveness, therefore, as close to the center of the door as possible (see fig. 4) to reduce leverage.

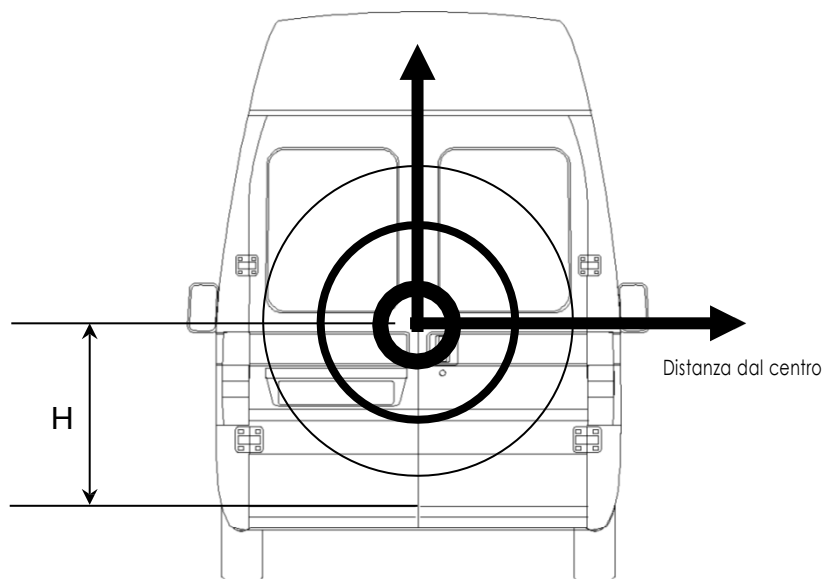


Fig.4

- The position of the first two 8-holes is approximately 9 ± 2 mm from the vertical edge of the opening door (see fig. 5). This is a very resistant tailgate surface. The indicated tolerance is intended to allow the cylindrical head of the M8 pin to be positioned within the edge and never beyond it.

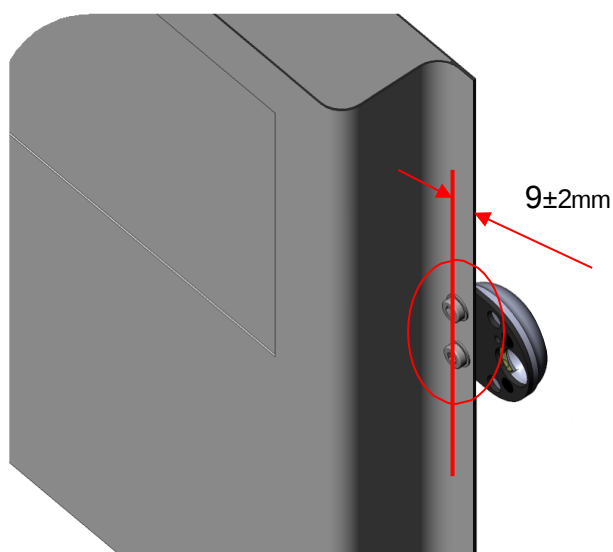


Fig.5

- The position of the cone/striker must ensure the correct positioning of the internal counterplate and the insertion of the fastening nut, as well as ensuring subsequent tightening with tools. It may be necessary to bend/mill interfering sheet metal to prevent the outer sheets from shrinking (see next section).
- In particular, if there is a second sheet metal or box-shaped profile inside the door corresponding to the cone fastening area and this is not drilled, tightening the long nut that secures the cone may cause the outer sheet metal to deform irreversibly, bending inward (Fig. 6). This deformation would invalidate the assembly and operation of the padlock. Any attempt to adjust the padlock will be futile.

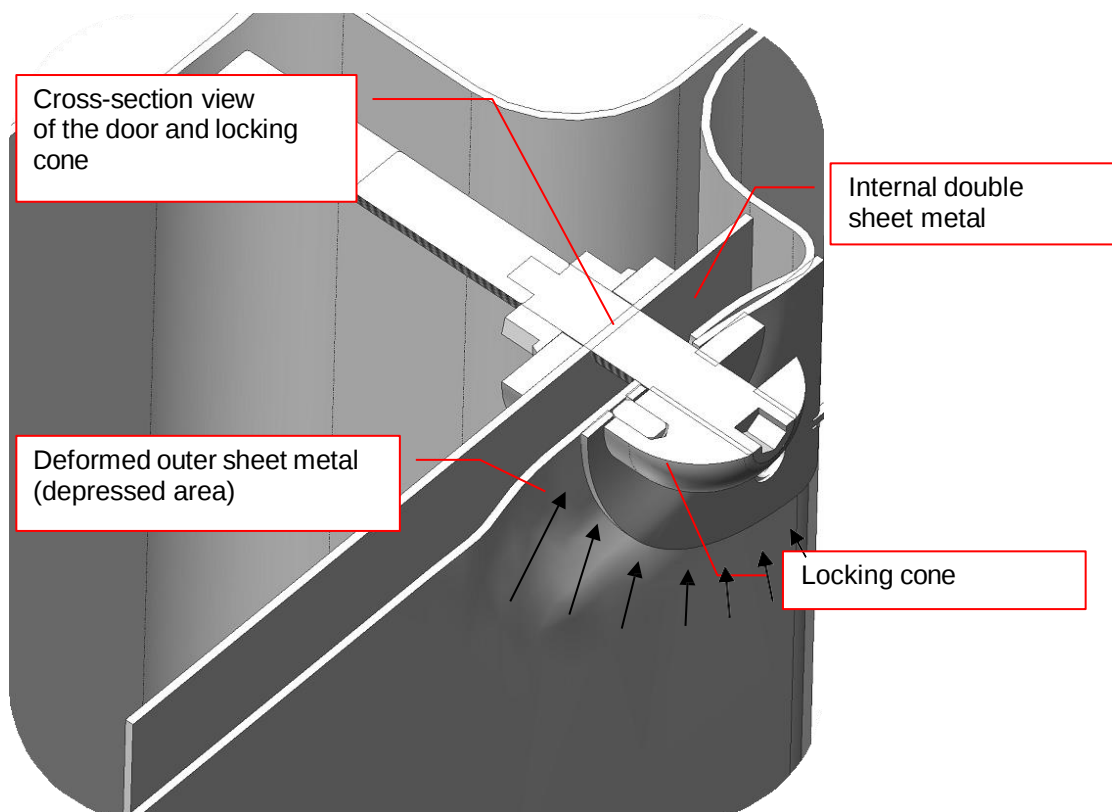


Fig.6

- Avoid ribs and particular folds of the external sheet metal of the tailgate, applying the armour on a suitably flat and regular surface

STEP 3

TEMPLATE FIXING



Installation does not normally require disassembly of the tailgate's interior paneling; it will be necessary to identify suitable areas for the lock's attachment, free from ribs, boxes, the standard lock, tie rods, and levers to avoid internal interference. Only to attach the cone/striker may it be necessary to remove the door paneling.

Il fissaggio avviene con (fig.7):

- 2 x M8 pins on the armor through the hatch edge;
- 2 x 5mm rivets on the outer armor plate;
- 2 x 5mm rivets on the cone/counter reinforcement plate;
- 1 x M8 pin and 1 x M8 nut to fix the cone/counter directly on the internal counterplate.
- 1 x 5mm rivet to secure the plastic cover.

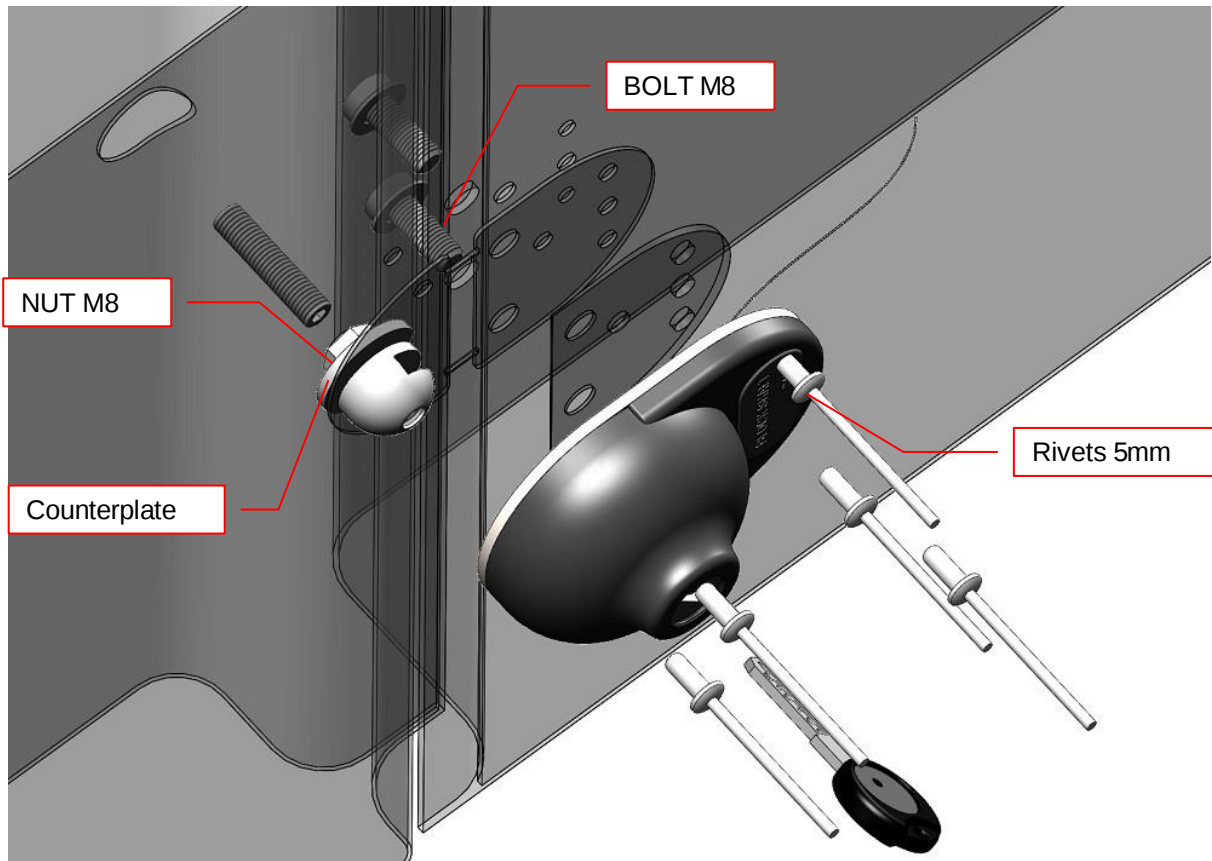


Fig.7

Then, proceed as follows

Place the external stainless steel reinforcement plate, which also serves as a drilling template, on the tailgate (Fig. 8). Specifically, the plate has an adhesive on the inside that allows it to be attached to the vehicle's bodywork. This way, the plate serves a dual purpose: both as a rigid drilling template and as protection for the vehicle's door bodywork (being placed between the padlock and the bodywork and between the cone/hook and the bodywork).

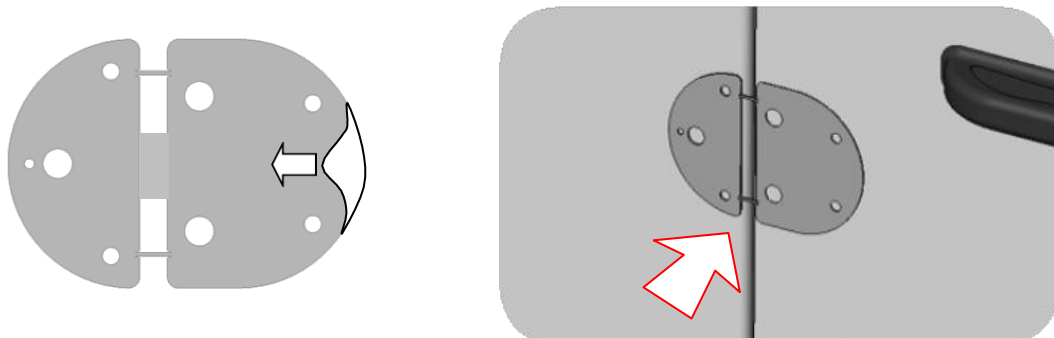


Fig. 8

Align the template by matching the vertical edge of the tailgate (the side that opens) with the vertical edge next to the two 8mm holes on the template (fig.9).

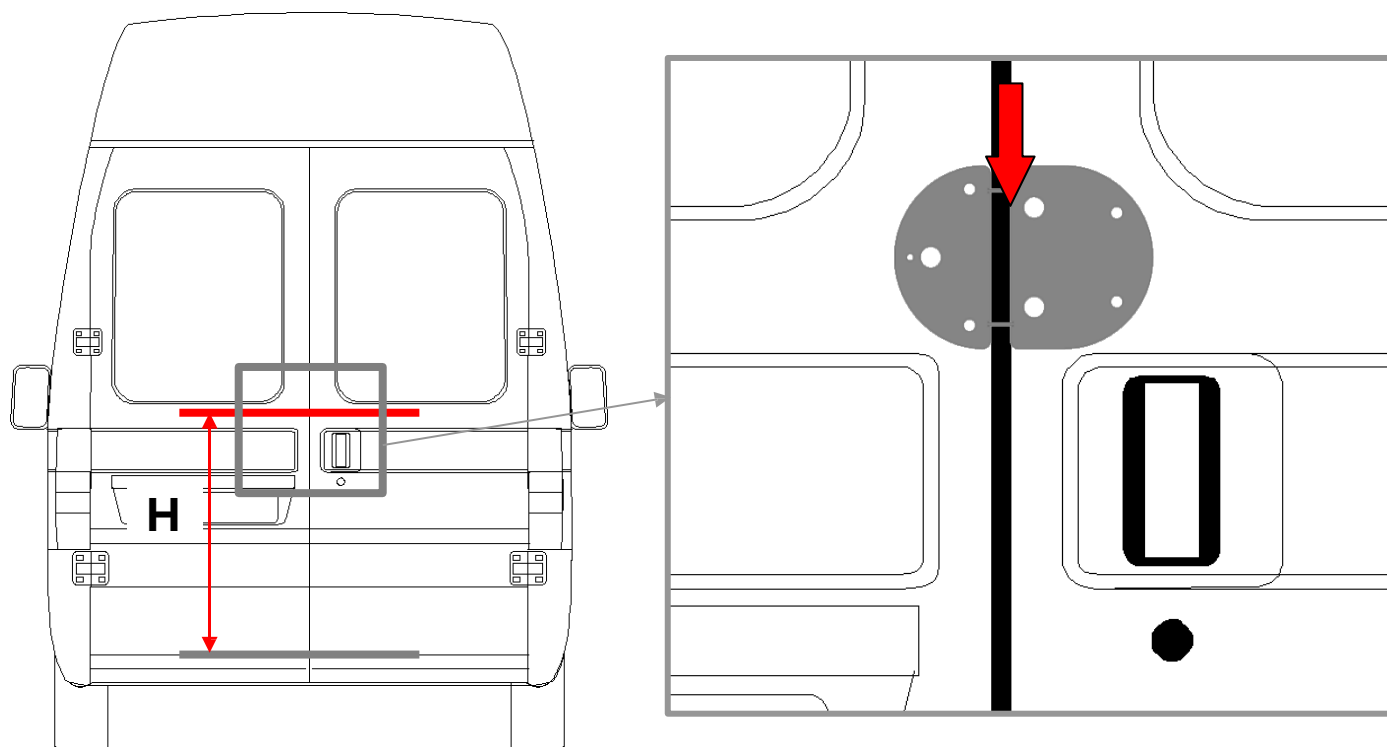


Fig.9

Once the template has been applied and the position of the holes marked, remove the two metal tabs connecting the two parts of the template (fig. 10). Check that no sharp protruding parts remain.

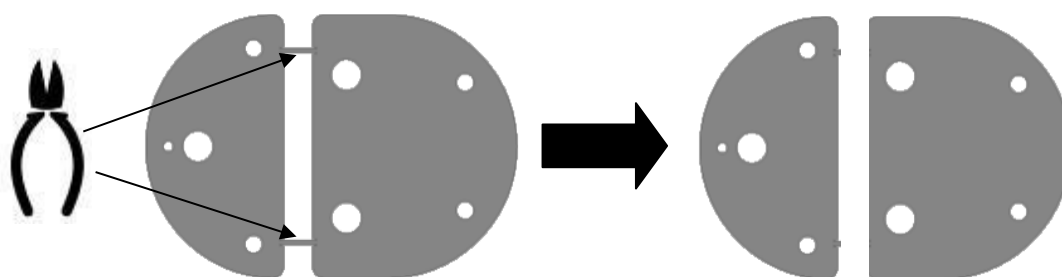


Fig.10

STEP 4

EXTERNAL DRILLING



At this point, mark the points where you want to drill the holes with a pencil so that you have a well-centered hole.



Before drilling, carefully check that there are no internal obstacles and/or interferences and that accessibility is guaranteed since it will be necessary to apply the internal counterplate for the cone/stop.

Drill the existing holes on the metal template (except for the 3mm hole adjacent to the cone/strike hole) (fig. 11):

- 4 holes with a diameter of 5mm for attaching the cone/strike plates and the armor.
- 3 holes with a diameter of 8-8.5mm for attaching the armor and the cone/strike.

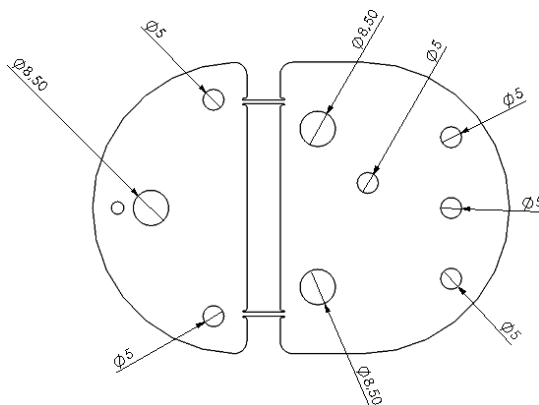


Fig.11

The armor plate is typically attached by drilling holes on the outer edge of the door using two M8 button-head pins.

Before drilling, check that the head of the M8 pin is contained within the edge (see fig. 5).

If the sheet metal at the holes is not perfectly flat and therefore does not allow the head of the M8 pins to fit flat, we recommend finding a different position. If no alternatives are available, we recommend pressing the sheet metal with pliers and a plastic dowel (to avoid bending or damaging the outer sheet metal).



Before drilling, open the tailgate to avoid damaging the sheet metal of the fixed door with the drill bit. In particular, the bit could go beyond the hole and reach the other door.

Then cover the edges of the holes with protective paint.

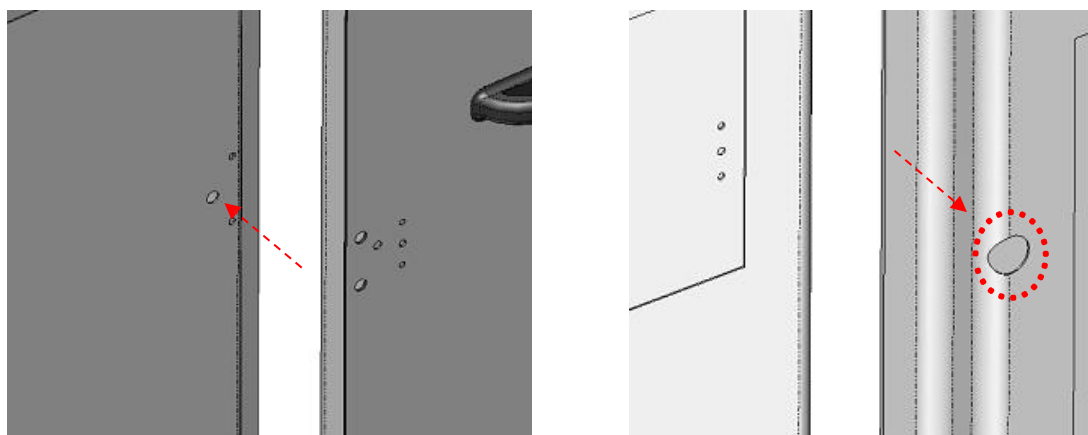
STEP 5

INTERNAL DRILLING



If it's not possible to install the counterplate directly through an existing opening, extend the cone/strike mounting hole beyond the outer sheet metal and into the vehicle interior (fig. 12).

To make this hole, mark the inner sheet metal with a pin, accessing the newly drilled hole from the outside. Use a hole saw or an umbrella drill bit to enlarge the internal hole to a diameter of at least 28 mm to allow the cone's counterplate, which has a maximum diameter of 28 mm, to pass through.



INTERNAL VIEW

EXTERNAL VIEW

Fig.12



In the event that there is a third/fourth sheet metal (for example ribs, reinforcements, boxes) between the external sheet metal and the internal sheet metal, it is necessary to drill holes in it (fig.13) in order to avoid shrinkage of the external sheet metal and to ensure correct support of the counterplate on the external sheet metal from the internal side (see Fig.6).

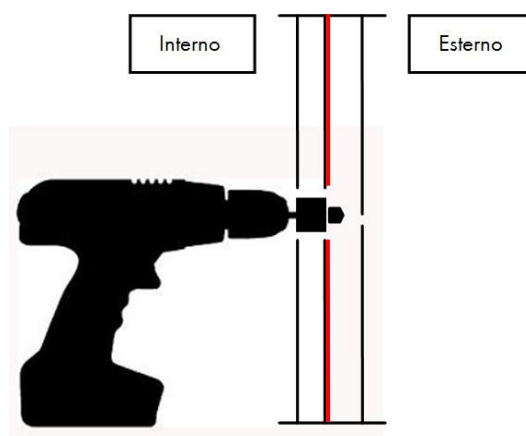


Fig.13

Then cover the edges of the holes with protective paint.

STEP 6

FIXING CONE/STRIKER



Apply two supplied rivets to secure the external cone support plate. The rivets prevent the plate from moving.

Secure the cone/locking stop using the M8 grub screw (of the appropriate length and screwed flush with the cone head) and the supplied M8 nut, placing the retaining plate between them (which has a flat side for alignment purposes or to prevent protrusions) (fig. 14). To align the cone, use the pin attached to the cone itself and the hole in the plate.

For greater resistance to unscrewing, we recommend applying threadlock to the nut or, alternatively, slightly dent the pin thread.

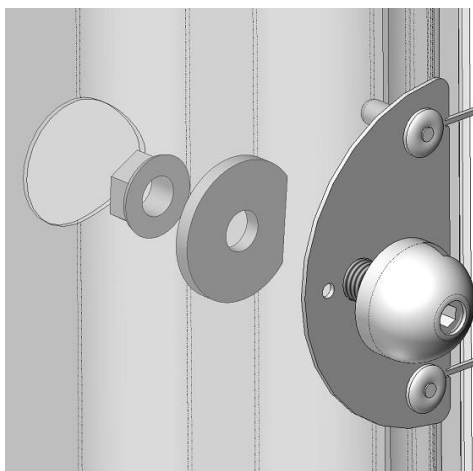


Fig.14

STEP 7

FIXING ARMOR



Apply the two supplied rivets to secure the base plate of the armor. These rivets primarily support the weight of the lock and also provide resistance to forced entry (fig. 15). Do not use the center hole (it will be used later).

Apply the two M8 pins to the edge of the hatch. These pins primarily secure the lock (fig. 15).



Fig.15



Only for those vehicles with highly curved doors (which could compromise alignment for proper closing) we recommend using the spacer supplied (fig.16).

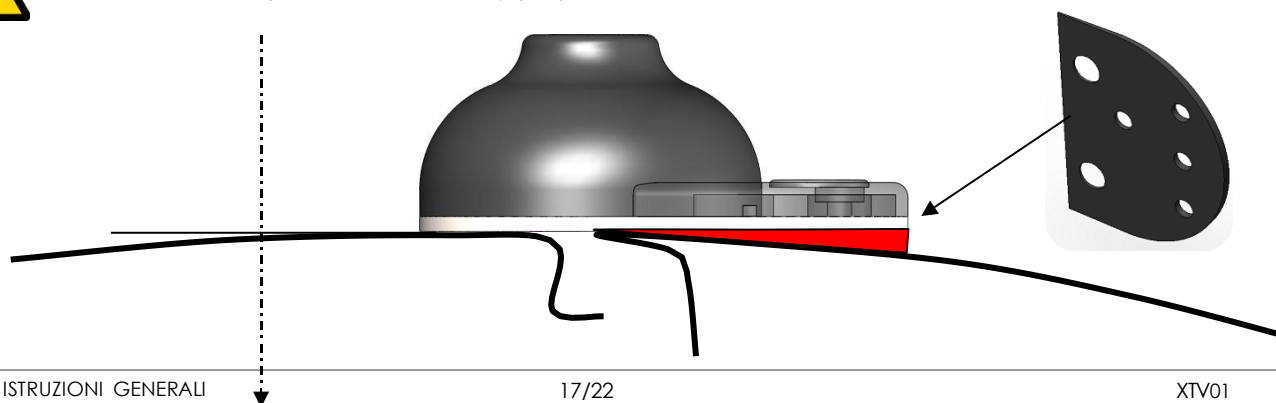


Fig.16

STEP 8

TEST



Perform a few locks on the door to check the correct alignment of the cone/stop. If necessary, align the armor using a rubber mallet. This operation must be performed with the lock open.



Check that the cam is open before closing the tailgate in order to avoid collisions between the cam and the cone (fig.17) and to better perceive the absence of friction and rubbing.

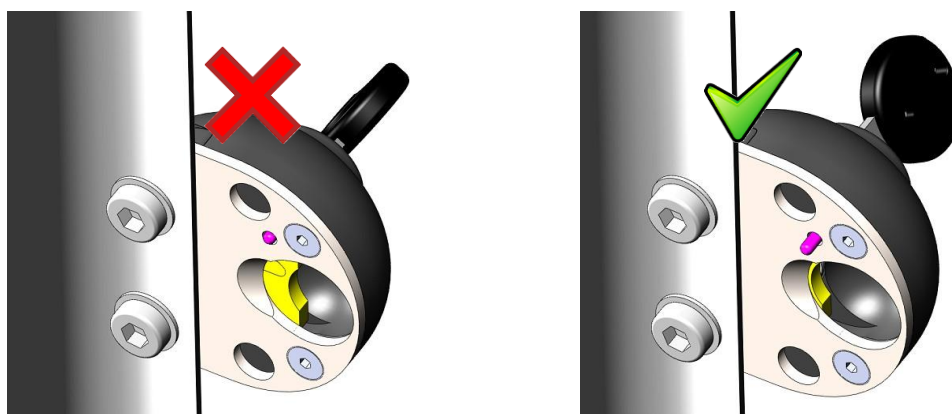


Fig.17

Then, check that the key rotates freely: opening should occur without excessive force on the key. Finally, tighten the nut and the armor pins firmly.

STEP 9

INTERNAL OPENING



Install the opening system from the inside. Simply drill a small hole through the plastic panel or sheet metal of the door and pass the cable protruding from the padlock's armor through. Unfold the emergency cable, positioning it in a suitable location (it is preferable to install it externally with respect to the paneling, thus avoiding holes and allowing the panels to be removed without having to disassemble the emergency opening). At the end of the cable, insert the red tube for the socket and the cable clamp and make a suitable eyelet for the socket. With the padlock closed (cam forward), crimp the cable clamp to ensure the correct seal when opening (fig. 18).



PERFORM THE OPERATION WITH THE PADLOCK CLOSED. During opening, the cable slides along the length of the cam travel and therefore the terminal must also be free to slide.



Fig.18

STEP 10

PLASTIC COVER APPLICATION



Once assembly is complete, apply the plastic cover. Insert the two tabs under the armor and finally insert the 5mm rivet into the appropriate central hole (fig. 19). The rivet will be masked by the adhesive gem inserted into the appropriate seat.

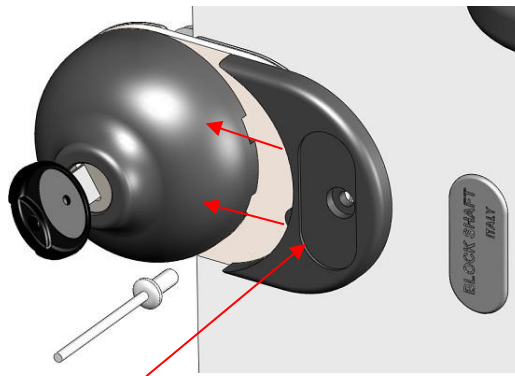


Fig.19

STEP 11

SLIDING DOOR SIDE



Follow the same steps as for the rear hatch. Specifically, the lock is normally positioned near the horizontal sliding guide of the hatch.

Check that the cone/stop does not interfere with the hatch when it slides open (fig. 19).

Position the drilling template with its longitudinal axis parallel to the sliding guide and its vertical axis aligned with the edge of the hatch..

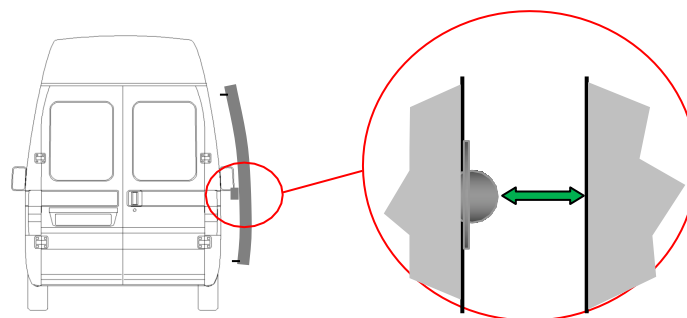


Fig.20

INSTALLATION PRECAUTIONS AND INSTRUCTIONS FOR CORRECT USE



-
1. Drill holes of the size indicated in the work instructions;
-
2. Always check the cone/armour alignment vertically and horizontally.
-
3. Check that the key turns without excessive effort
-
4. During and after installation, never leave the lock keys inside the cargo area.;
-
5. Lubricate the cylinder every six months (more often depending on the intensity of use) using a water-repellent, anti-corrosive, lubricating, cleaning, or loosening spray that does not contain additives that can attract dust or dirt. Do not use corrosive loosening sprays.
-
6. Grease the cone/counter and the cam
-
7. When washing the vehicle, avoid jets of water directly at the cylinder;;
-
8. Correct use of the lock, which avoids unnecessary and wear-and-tear, requires that the lock is opened before opening the tailgate handle.
-

MAINTENANCE AND CARE

- Periodically check that the security components are correctly assembled and inspect them for wear. If necessary, retighten the fixing pins and replace any defective components.
- At regular intervals (at least once every three months), check the lock's operation and ease of use with the key.
- Grease all moving parts and sliding surfaces with technical Vaseline at least once a year (more often depending on the intensity of use) and check their operation.
- Lubricate the cylinder every six months (more often depending on the intensity of use) using a water-repellent, anti-corrosive, lubricating, cleaning, or unlocking spray that does not contain additives that can attract dust or dirt (specific for locks) and is non-corrosive.
- To avoid compromising the corrosion protection of the components, use only neutral, abrasive-free cleaning products and detergents..

WARRANTY CONDITIONS

Block Shaft Srl Unip. subjects all its products to stringent quality tests. If, despite these checks, the Gatelock T-lock/ TenderLock® cargo compartment lock malfunctions, we recommend contacting us immediately.

DURATION AND CONTENTS

Block Shaft Srl Unip. guarantees, according to the terms indicated below, the proper functioning of the Gatelock T-lock/ TenderLock® cargo compartment lock and that it is free from manufacturing defects and faults.

If the cargo compartment lock proves defective during the warranty period, Block Shaft Srl Unip., at its sole discretion, will repair or replace the cargo compartment lock or part thereof.

Defective parts will be replaced or repaired ex-works to Block Shaft Srl Unip. Therefore, shipping or transport costs for the cargo compartment anti-theft device are the responsibility of the Customer, as are any costs for on-site inspections by authorized dealers and/or Block Shaft Srl Unip. technicians.

Any delays in restoring the vehicle to working order do not entitle the Customer to compensation for any damages, nor do they extend the warranty period.

Warranty claims will only be considered if notified to Block Shaft Srl Unip. within eight days of discovering the alleged defect.

This warranty is the only one provided by Block Shaft Srl Unip., and any other warranty is therefore excluded.

For components not manufactured by Block Shaft Srl Unip., only the warranties recognized by third-party manufacturers apply.

WHAT IS GUARANTEED?

Block Shaft Srl Unip. guarantees that all parts of the Gatelock T-lock/ TenderLock® cargo compartment anti-theft device, manufactured and assembled at the manufacturing facility, are free from defects in workmanship or materials when used properly.

The warranty is valid for a period of 24 (twenty-four) months from the date of purchase shown on the receipt or invoice.

WHAT IS NOT WARRANTED

The warranty does not cover:

- Repairs for which it is impossible to determine the date of purchase of the cargo compartment anti-theft device.
- Any defect due to damage resulting from improper use or use not in accordance with the technical instructions, accident, theft, attempted theft, or fire;
- Since the warranty covers exclusively technical repairs, it does not cover any compensation for damages of a monetary nature that may be due for any reason. To this end, it is specified, by way of example and not limited to, that compensation will not be provided for damages resulting from the technical downtime of the vehicle, incidental and consequential damages such as loss of use, even temporary, of the vehicle, inconvenience, or commercial losses.
- Periodic checks, maintenance, repairs, or replacement of parts due to normal wear and tear.
- Block Shaft Srl Unip. shall not be liable for damage to persons or property resulting from improper use of the cargo compartment alarm or from malfunctions.

FORFEITURE

The right to the warranty of proper functioning is forfeited:

-
- if the device is damaged due to incorrect installation;
 - if the cargo compartment alarm has been used for purposes and uses other than those for which it was intended and for which it was designed and manufactured;
 - if the defects complained of are the result of accidents, carelessness, or negligence;
 - if the cargo compartment alarm has been modified or repaired by unauthorized third parties;

WHAT THE CUSTOMER MUST DO

Report any faults, defects, or malfunctions within the time limits mentioned above to the retailer from whom the device was purchased, or by contacting Block Shaft S.r.l. directly.

To benefit from the warranty, the Customer must:

- use the device correctly;
- retain the purchase documents (invoice or receipt and this brochure), which are necessary to obtain warranty service at a Block Shaft S.r.l. authorized repair shop;

The court of Bari shall have exclusive jurisdiction over any disputes regarding the interpretation and execution of this warranty.