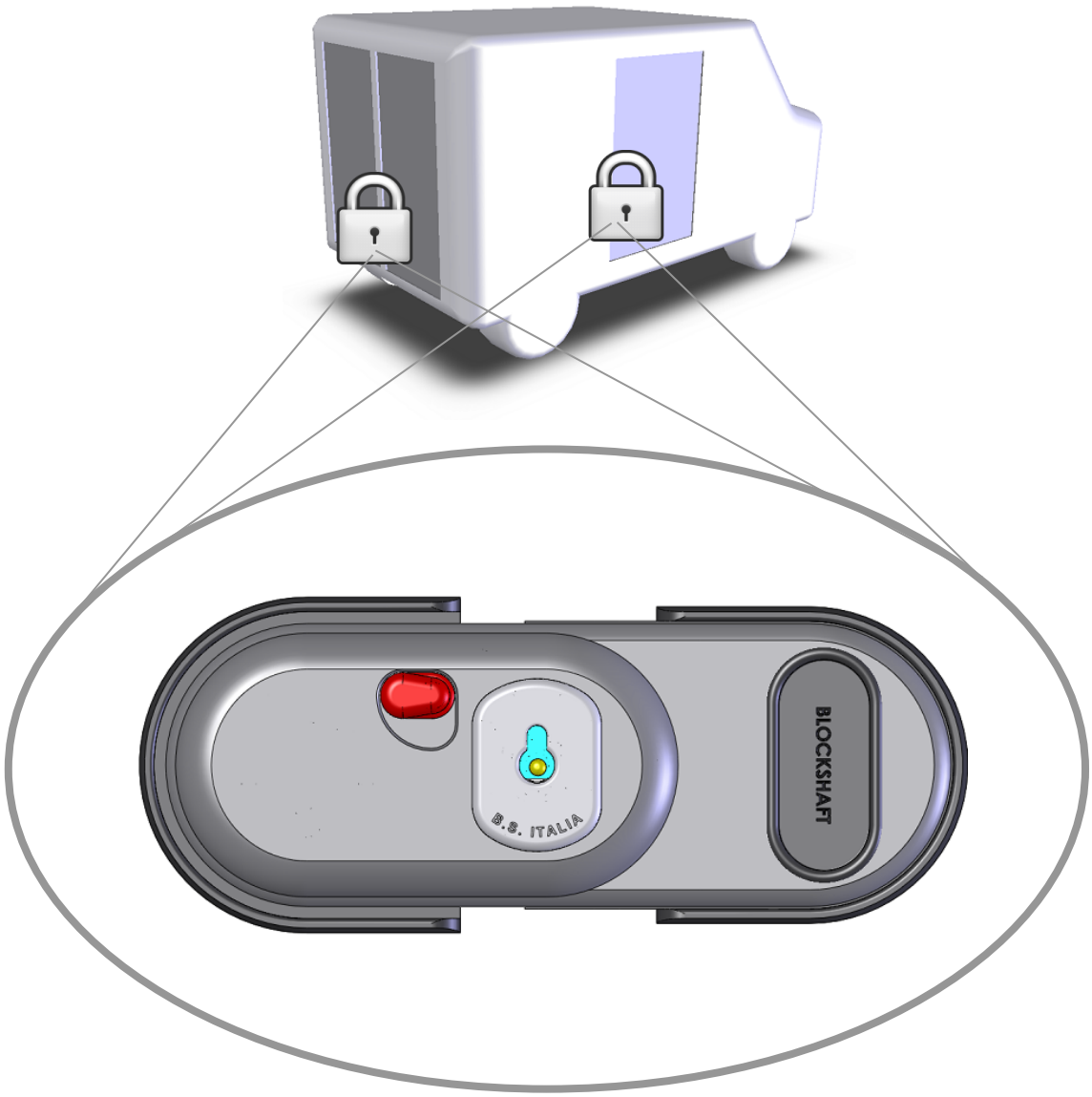


EXTERNAL LOCKING SOLUTION

FOR LIGHT COMMERCIAL VEHICLES

Model:

*GATELOCK VAN MEDIUM SERIES **PRO***

GATELOCK VAN

IMPORTANT INFORMATION

GENERAL

Dear Customer,

Thank you for buying GATELOCK VAN. The most reliable locking solution to protect your commercial vehicle.

Please read carefully the instruction of how to use & install the GATELOCK VAN, and so to avoid any mistake during the process..

PROPER USE OF THE LOCK

The lock actioned with the key and its components are suitable for environments with the following characteristics:

- Maximum relative humidity 95%
- Ambient temperature - 20 ° C + 60 ° C.

The accessories are made in such a way that they can be assembled on original components of the lock. If any unauthorized part is used on the lock, the characteristic of the lock will be compromise. The intended use for this purpose is a requirement for the use of the lock.

The operation of the lock and accessories, supplied by BLOCK SHAFT, has been checked. If third-party components are used, it will be necessary to inform the manufacturer if you are ensure about the suitability of the product.

To ensure the use in accordance with the purpose, proceed as follows:

- Providing people with relevant information and necessary instructions in this regard.
- To be installed by qualified personnel, in accordance with the installation instructions. In this regard, it is necessary to comply with the rules in force.

The intended use for this purpose is given, when the padlock and accessories:

- They are used as contemplated by the definition of specifications and installation data.
- They are not used inappropriately.
- They are treated periodically according t the instructions of maintenance and care.
- They are not used beyond their wear limit.
- They are repaired in case of failure, by qualified personnel.

The Contractor / The manufacturer declines all responsibility in case of injury to persons and damage to property as a result of inappropriate use or command, which is not in accordance with the purpose.

IMPROPER USE OF THE LOCK

Improper use of the device, is:

- When you do not follow the guidelines used for the intended purpose.

• When proper operation is prevented by the contribution of foreign objects and / or non-compliant in the area with the aim of opening in the enclosure or in the feedback / cone.

• When the locking system or feedback / cone is subject to tampering, which shows a change in the structure, operation or function.

• When, to keep open the tailgate or damage is excluded inappropriately latch or other locking elements additional.

• When the closure elements are mounted and subsequently processed in such a way as to prevent the operation, eg. painting over the moving components, such as eg. the latch.

• When to use the key cylinder with normal hand pressure, excessive loads are transferred on the closing system.

• When the crack between the door and the door frame or door and necessary increases or decreases due to, for example, the displacement of the same or lowering the tailgate because of the failure of the hinges or due to deformation caused by shocks.

• When using gears, levers or the like to operate the locking system.

• When you operate the handle and the key at the same time.

• When the lock is locked / unlocked with inappropriate items.

• We use measures other than those listed in the technical data.

The safety instructions are for the installation and use of the lock. They should always be considered!

• The manufacturer declines any damage due to the use does not conform to the purpose.

• For safety reasons, the lock is designed to be combined with the original parts BLOCK SHAFT. Using non- BLOCK SHAFT will affect the characteristics of the padlock.

• The tailgate must be closed mechanical with ease.

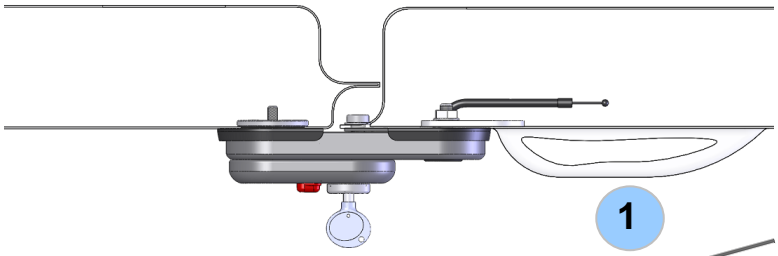
• The installation and repair of lock requires expertise; therefore should only be performed by qualified personnel.

• For safety reasons it is not allowed to transform, modify, or perform temporary repairs. When replacing components, it is acceptable to use only genuine replacement parts.

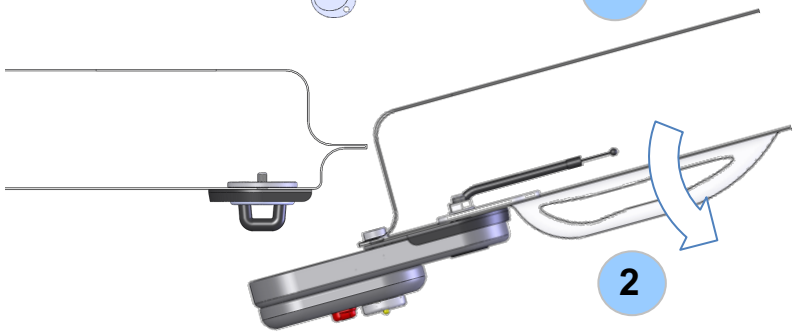
• With regard to the safety features of the lock, the manufacturer is, under the rules in force, responsible only when the maintenance, operation and modifications have been performed by the manufacturer or by his agent, according to the manufacturer's instructions.

• BLOCK SHAFT disclaims all liability for damages of any kind caused by a faulty operation, modification, or maintenance.

FUNCTIONING (REAR & SIDE DOORS)

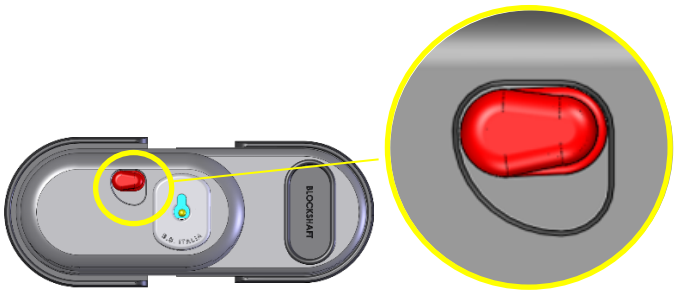


1. Insert the key and turn it about 180 °. At the end of the rotation, the latch locks and the key can be extracted returning it to 0 °.

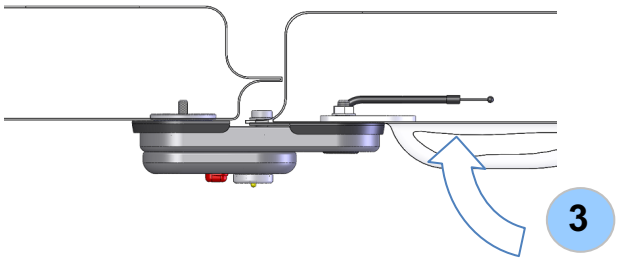


2. Open the door.

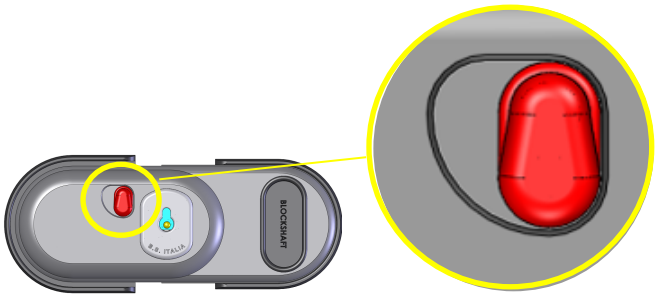
AUTOMATIC CLOSING
Place red lever vertically



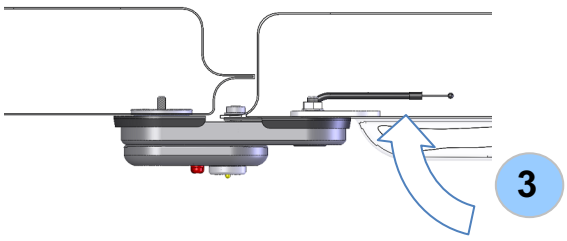
3. Close the door. **THE LOCK ENGAGES AUTOMATICALLY.**



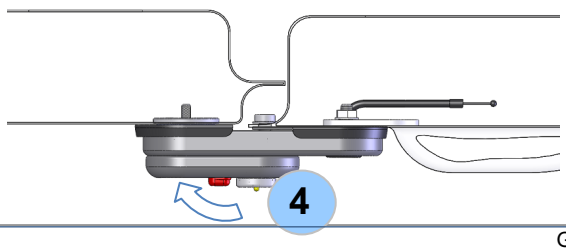
MANUAL CLOSING
Place red lever horizontally



3. Close the door. **THE LOCK REMAINS OPEN**

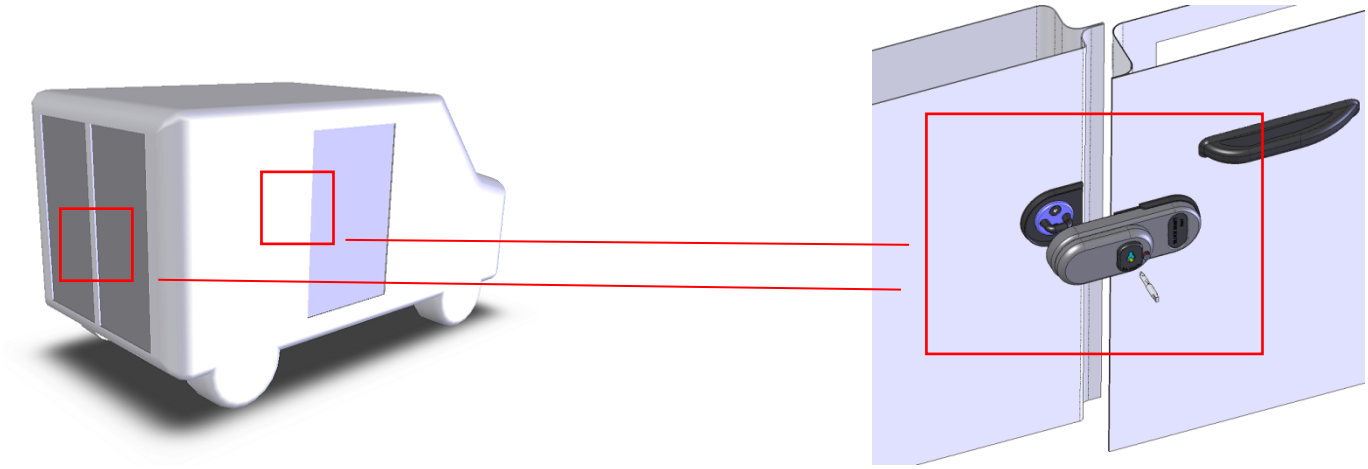


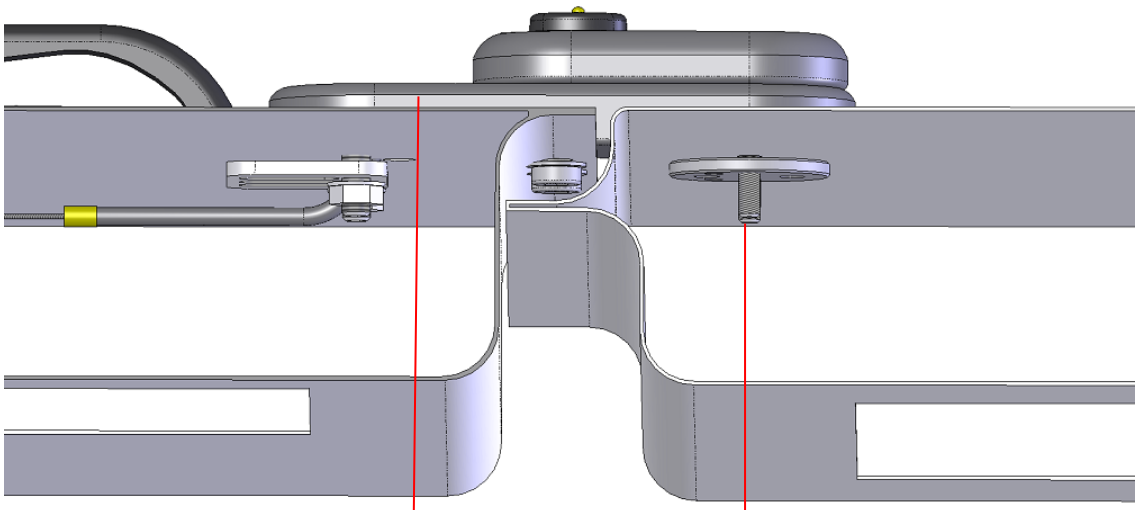
4. Turn the lever. **THE LOCK CLOSES** (The key is not needed)



INSTALLATION

GATELOCKVAN is an external locking solution for commercial vehicles. The lock is directly mounted on the doors, and toinstall it, you need to drill holes through th sheet metal, as outlined below. The lock can be mounted either on rear and/or side doors (right and/or left sides). **The lock remains fitted to the doors**.





ARMOR

The lock is installed on the door that opens and fitted on the edge of the door using **M8 bolts** screwed directly to the armor and two other studs spilling out from the same armor and its special backplate installed from inside the door panel.

These 2 studs can be replaced by using 2 steel rivets (plusnuts) and 2 M6 anti-tampered bolts. This is the fastest installation procedure.

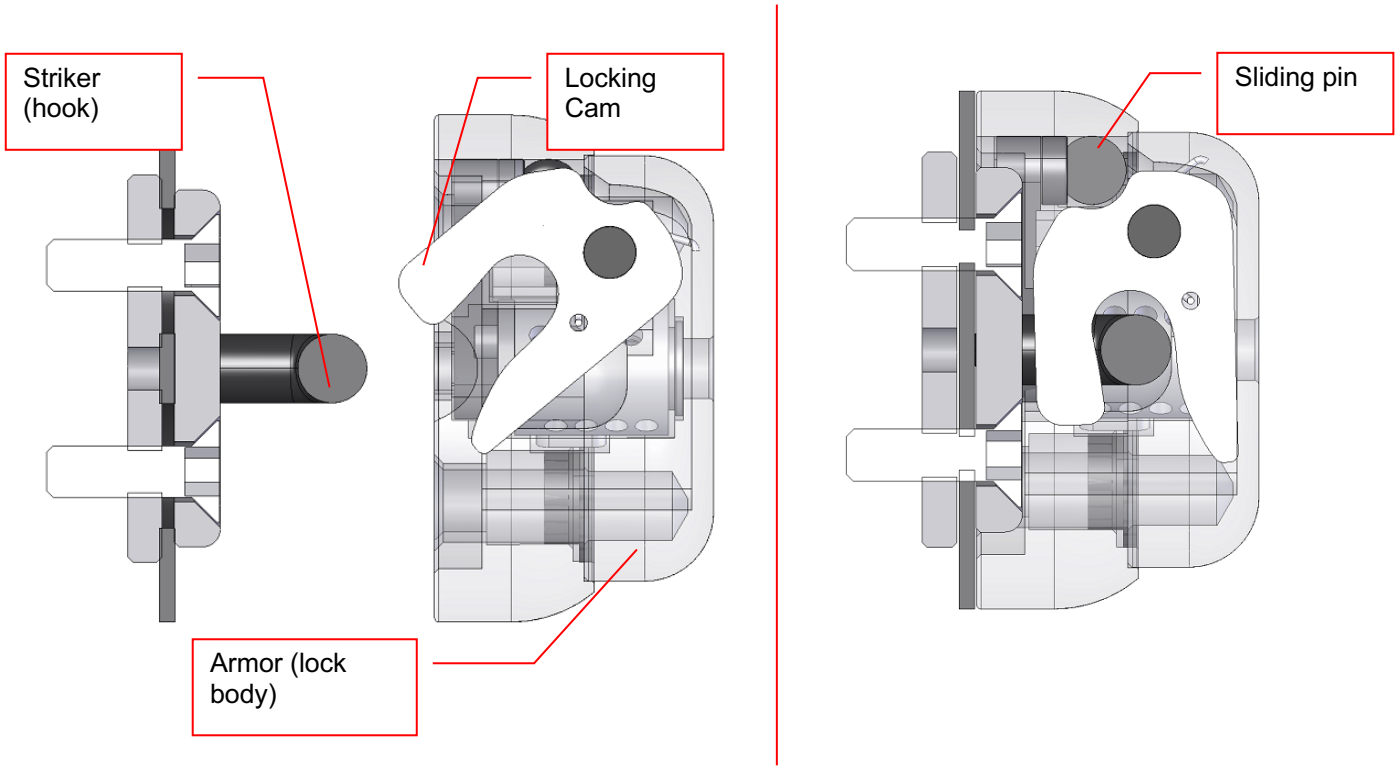
STRIKER

The STRIKER installation is obtained through 2 M6 bolts, screwed on a special backplate from inside the door panel or **using 2 steel rivets. This is the fastest installation procedure.**

SPECIFICATIONS

Cam locking system

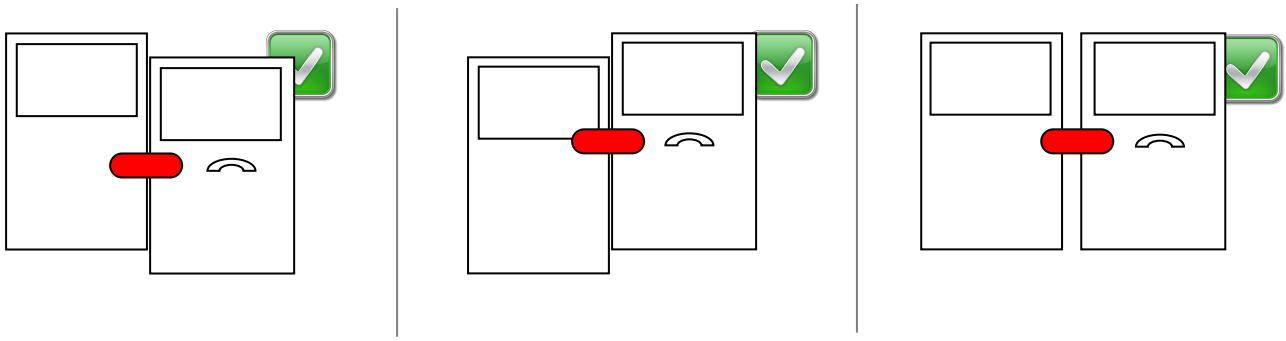
The lock uses a particular shaped cam "C" as locking member. This cam envelops the strike plate applied to the fixedpart of the door in the closing phase. This has several advantages



OPEN CLOSE

In the first place, when the lock is closed, the coupling armor-cam-striker generates a single body able to resistefficiently attacks of various burglary tools (hammer, chisel, crowbar, screwdriver, pliers ..) . In particular, the striker is inserted and almost disappears in the armor, thanks to the cam which joins securely.

Second, this type of coupling between the armor and the striker, ensures a considerable movement of hatches that is especially critical, benefiting the operating conditions of the lock. In this way, you can ensure the proper functioning of the lock even on deteriorated or imperfectly aligned doors



Last, the engagement between the cam & strike plate comes softly thanks to the profile of the same cam, and being nospring or rough coupling, the friction in play during the closing phase are much reduced. This means that the strike plateis no stressed during closing of the lock and thus also the sheet metal (often very thin) on which the same strike plate rests, is minimally stressed avoiding potential deformation or damage of the door.

Geometries

The shape of the lock is fully rounded and connected, and this prevents the most common burglary tools (pliers, wrench,hammer and chisel, ..) to grasp and pluck the lock. In addition, inside the door, the lock can be anchored to the sheetmetal through the use of reinforcing plates which prevent the tear in the event of forcing

Thanks also to the sturdy strike plate and the cam (8mm thick), the device is able to withstand long against the attacksof unconventional burglary tools such as the hammer of 5kg and the crowbar.

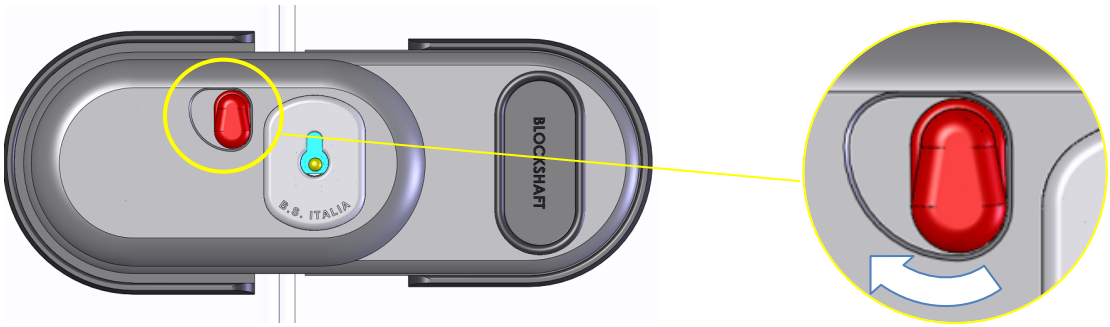
Each sealing member is not easily accessible and therefore unassailable. In particular, the cam that locks the rotation is fully integrated into the shell, fired from the outside by several millimeters of carbo-nitrided steel. The lock body is made up of two components, both made from a steel bar full, and then machined with chip removal on CNC machines.

Finally, the construction material (alloy steel and stainless steel), surface hardening heat treatment (carbo-nitriding)and the thickness of the structure of the device are the natural defense against the use of the drill and hacksaw.

Obviously, attacks lasted for a long time can cause the collapse of one of the organs of the block. That is, however, therule that a padlock appears to be a deterrent and not always the ultimate solution to the problem of theft; the device must be able to withstand as much as possible to tampering, increasing at the same time the risks of interception for whoever tries burglary.

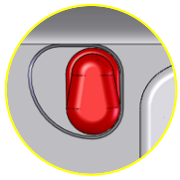
In any case, in order to maximize the effectiveness of the lock is always recommended that the standard lock of the vehicle is running and enabled; in this way, the seal is maximized thanks to the joint action of the twolocks (the original lock of the vehicle and the GATELOCK VAN).

The padlock is equipped with a lever that changes the mode of operation, quickly passing **from automatic to manual**.



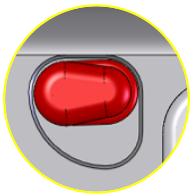
In particular, it is possible to:

1) Leave the padlock open with the door closed having testimony of it (red lever vertically) - MANUAL MODE



2) Close the padlock (with the door closed) by turning the lever without using the key - MANUAL MODE

3) Use the padlock in automatic mode (the padlock also closes each time the door is closed: lever horizontally) - AUTOMATIC MODE



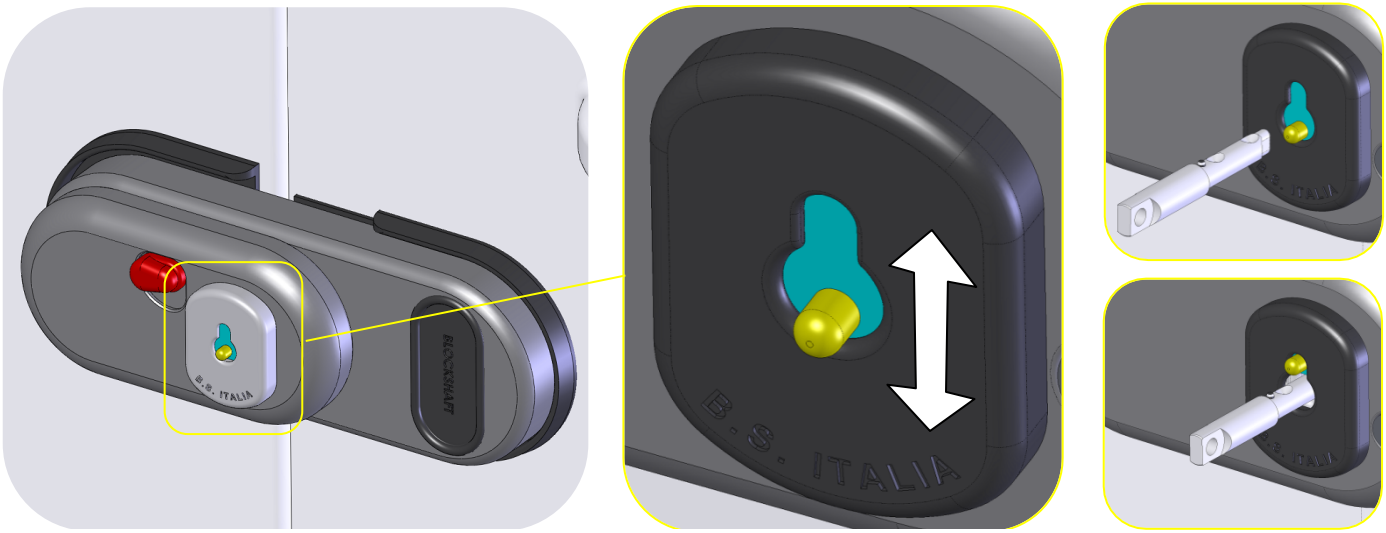
The lever is able to lock and unlock the sliding of the latch and therefore if the lever is positioned vertically, the latch is certainly locked in the open position and therefore the padlock is open.

Similarly, if the lever is horizontal, the latch is free to slide and therefore if the door is closed the padlock is also closed.

This operating condition guarantees maximum versatility of use and helps all those conditions of use of the vehicle when unloading or in safe parking areas. Obviously, this version of the lock is not suitable for the transport of valuable goods since the user could leave the lock open (and therefore the vehicle not in a safe condition) even though this condition is clearly visible (lever vertically).

The padlock is equipped with an innovative, practical and functional vertical sliding dust cap, designed to protect the cylinder from foreign bodies, dust, water and more generally from various automotive fluids that could compromise the correct functioning of the various small internal components of the cylinder. and padlock.

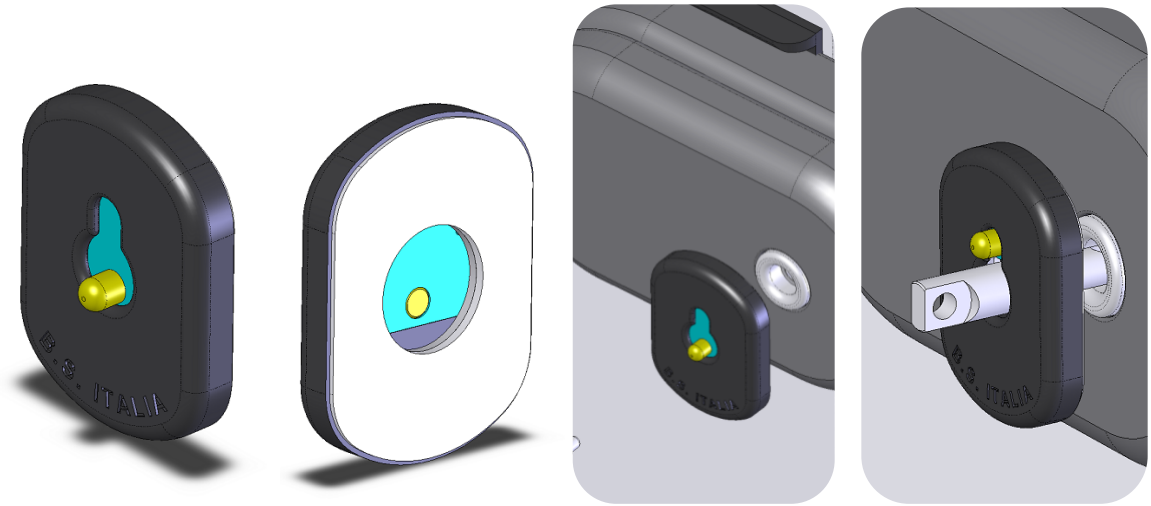
The shape is compact while the materials used are plastic for the outside and stainless steel for the inside.



Operation is very simple and practical. Simply lift the protruding pin applied to the vertical metal slide and insert the key. This can be done using the same key. Once the key is removed, the slide returns to its rest position thanks to the thrust of its own weight. In case of obstructive impurities, it is enough to help the slide with a finger to seal the key hole.

The cap consists of a pre-assembled body which is applied to the upper armor of the padlock at the key hole. The fixing takes place by means of a very resistant double-sided adhesive for automotive use.

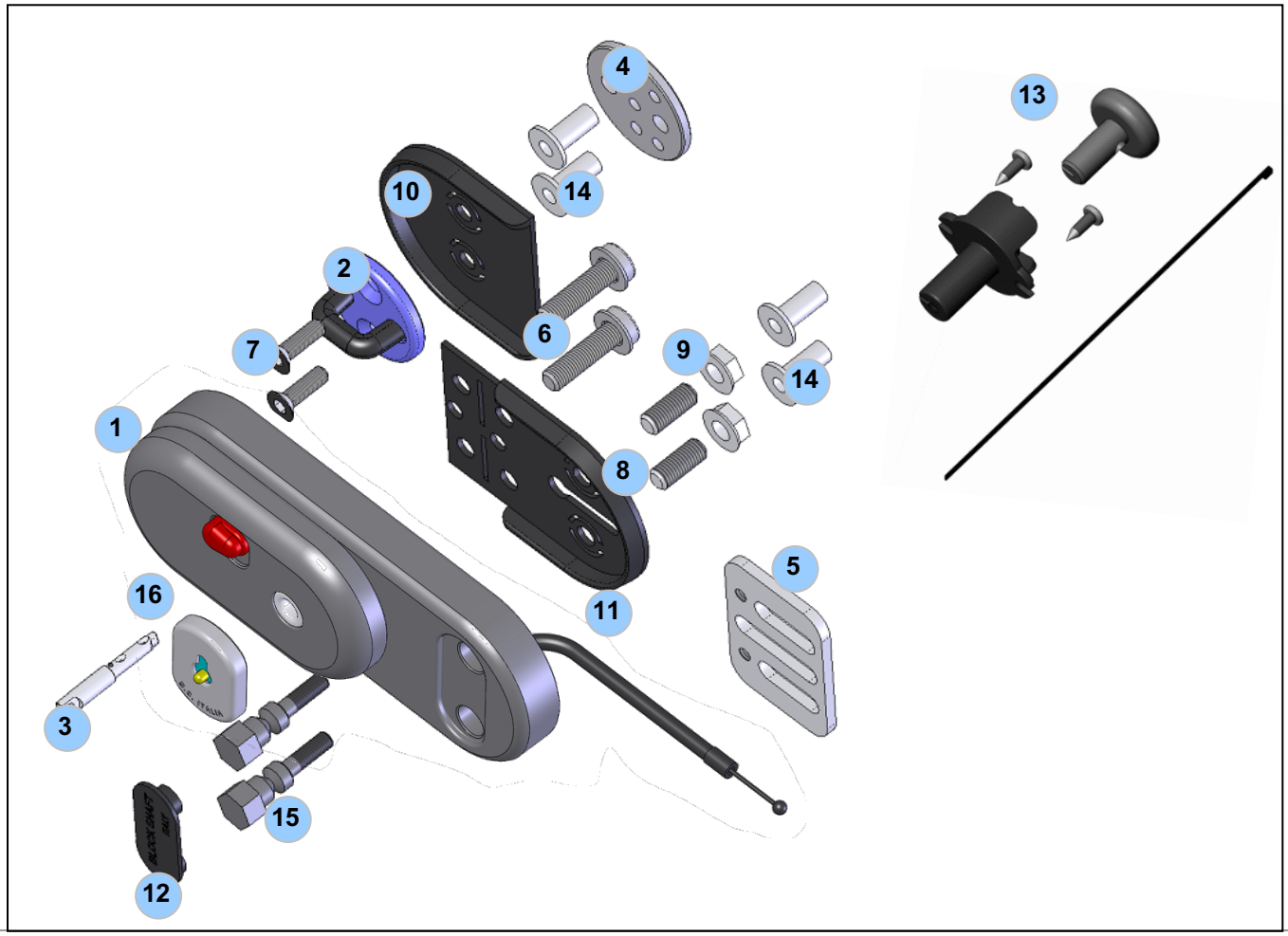
The fixing is suitable for use and allows quick interchangeability. In fact, in case of replacement, it is sufficient to carefully clean the surface of the padlock and, using the key as centering, apply the adhesive paying attention to the orientation (slide in favor of gravity; written in a legible position); after 72h the seal is maximum and complete.



Periodic cleaning and lubrication is recommended, which depends on the conditions of use and environmental conditions.

The installation kit contains the following components:

1. 1 x COMPLETE PADLOCK WITH EMERGENCY RELEASE CABLE;
2. 1 x STRIKER (HOOK);
3. 3 x SECURITY KEYS + 1 x PROPERTY CARD;
4. 1 x BACKPLATE FOR STRIKER;
5. 1 x BACKPLATE FOR PADLOCK BODY;
6. 2 x M8 BOLTS (ROUND FLAT HEAD) AND WASHERS;
7. 2 x M6 BOLTS FLAT HEAD;
8. 2 x M8 PINS;
9. 2 x M8 NUTS;
10. 1 x PLASTIC SPACER FOR STRIKER (SHEET METAL PROTECTION)
11. 2 x PLASTIC SPACER FOR PADLOCK (SHEET METAL PROTECTION)
12. 1 x COVER FOR ANTI-BULGRARY BOLTS
13. 1 x EMERGENCY RELEASE CABLE KIT WITH SEAL
14. 4 x PLUSNUT (STEEL RIVETS)
15. 2 x M6 ANTI-THEFT PINS
16. 1 x ADHESIVE DUST CAP
17. 1 x ADHESIVE BRAND LOGO
18. 1 x FITTING INSTRUCTIONS & DRILLING TEMPLATE



GENERAL FITTING INSTRUCTIONS

The installation sequence involves some simple operations that vary from vehicle to vehicle only for some details.
In particular, *the armor positioning height is specific to the vehicle*..

STEP 1

First check the correct alignment of the doors. If the edges of the doors are not perfectly aligned (fig. 1, fig. 3), adjust them through the striker / hook (fig. 2) and / or the hinges.
In the case of expired doors, replace the hinges or reinforce them if necessary

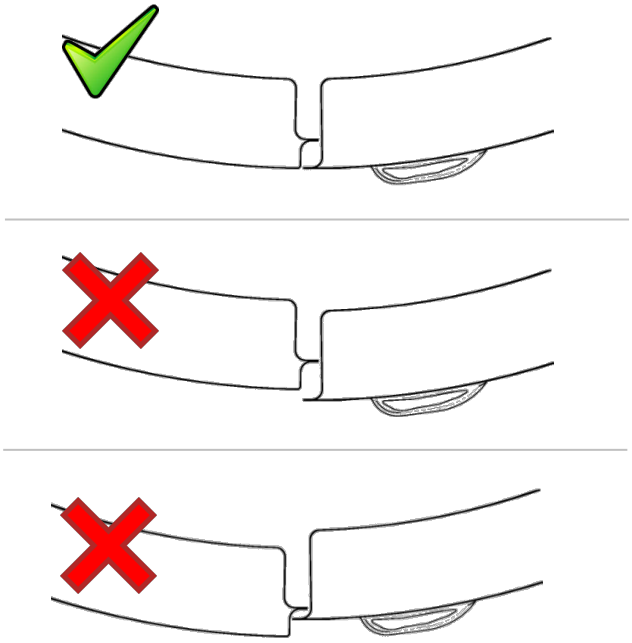


Fig.1

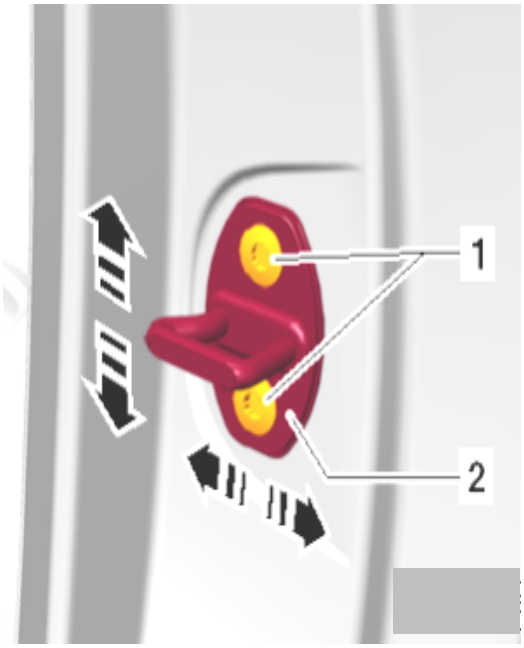


Fig.2

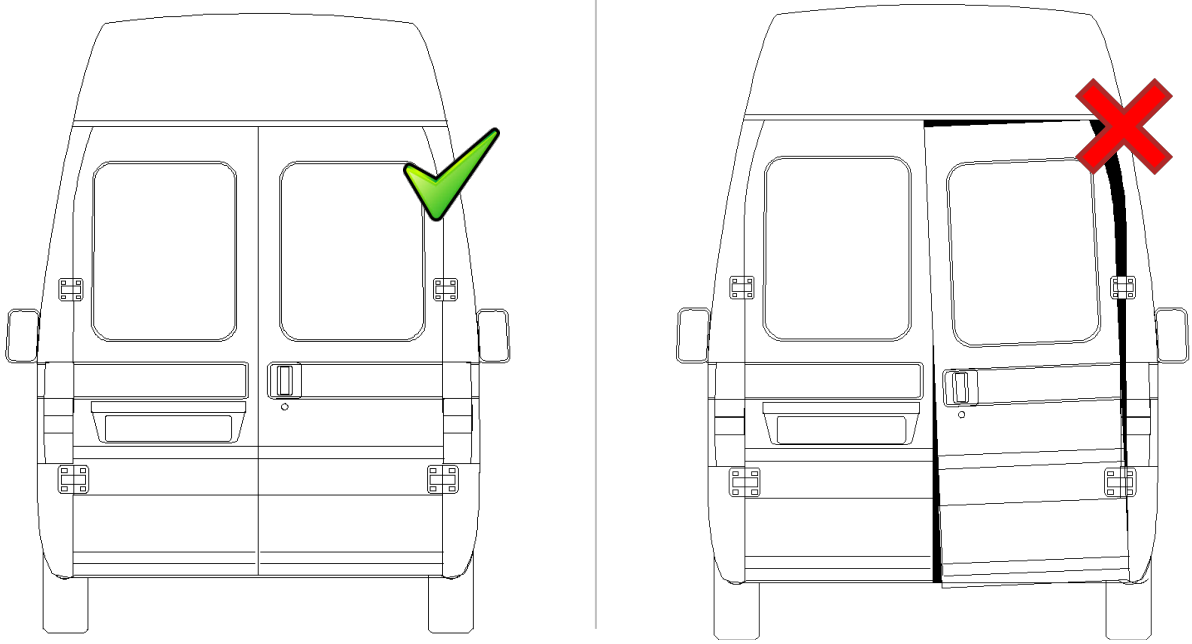


Fig.3

STEP 2

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

- The positioning of the armor with respect to the lower edge of the door "H" must be such as to maximize effectiveness, therefore as much as possible in the center of the door (see fig. 4).

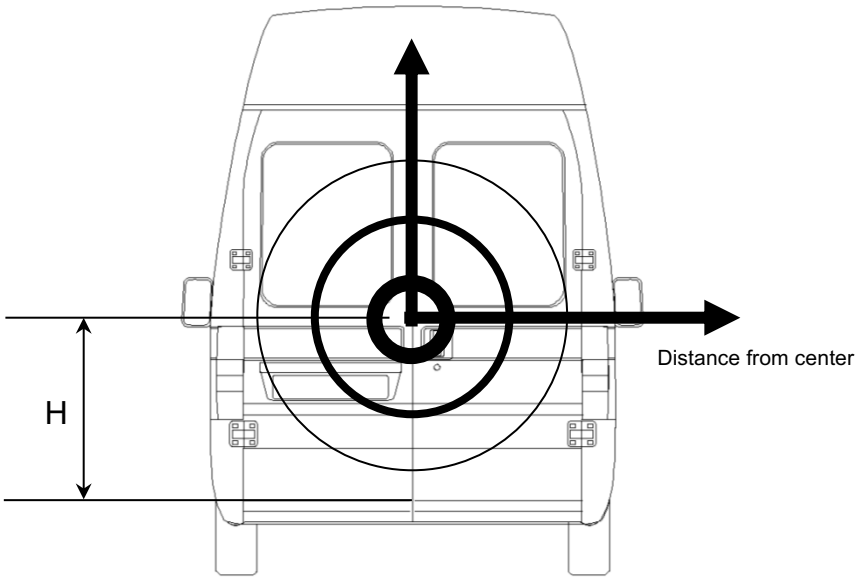


Fig.4

- The position of the first two 9 holes is approximately 10 ± 2 mm from the vertical edge of the door that opens (see fig. 5). This is a very resistant tailgate surface. The tolerance indicated is used to allow the cylindrical head of the M8 pin to be positioned within the edge and never beyond it.

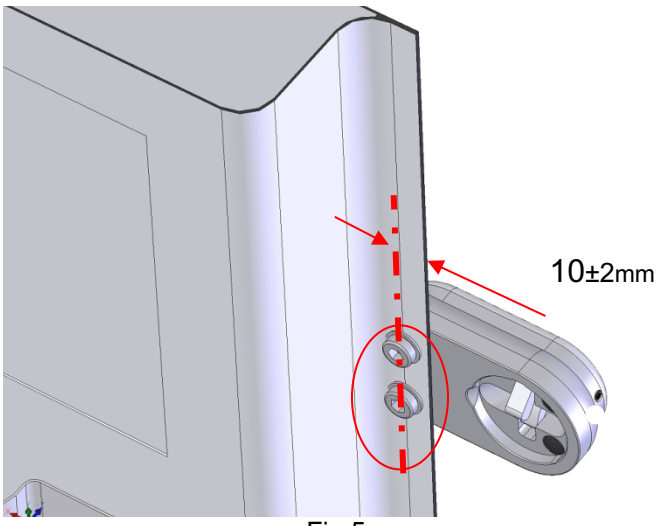


Fig.5

- The position of the striker and armor must ensure the correct positioning of the internal counter-plates and the insertion of the fixing pins as well as must ensure subsequent tightening by accessing with tools. It may be necessary to bend / mill interfering sheets;
- Avoid ribs and particular bends in the outer sheet of the tailgate by applying the armor on a suitably flat and regular surface.
- The final position is also subordinate to the type of fixing to be operated (with counter plates / with plusnut, hybrid). Therefore the above conditions must be integrated with the following ones in order to identify an optimal solution..
- Follow the model-by-model specific instructions as a guideline below.
- The position specified model by model must always be respected. However, if there are conditions where the vehicle does not conform to the specifications, such as in the case of special set-ups, models with a different manufacturing period or other impediments, an alternative solution must be evaluated and validated in advance and formally by agreeing with our technical office.

STEP 3

Establish the type of fastening you intend to operate.

A. Quick (from page 14);
B. High Resistance (from page 21).

Method A: Quick Assembly

The padlock is fixed only from the outside of the door sheet. It is not necessary to remove the internal brushes (possibly only for the passage of the cable for the emergency opening) nor to remove the vehicle lock to access the internal surface of the door sheet.
In this way it is possible to fix the padlock along the entire tailgate in positions that would otherwise not be possible given the inaccessibility of the interior (boxed and / or double / triple sheets).

Method B: High Strength Mounting

The fixing of the padlock involves the use of internal reinforcement plates on the armor and the hook. Having a thickness of 4mm and an extended surface, these plates greatly increase the tear resistance of the door sheet, while ensuring greater overall stiffness of the padlock.
In this case, the assembly is made more complex since it will be necessary to remove the internal paneling of the door and it will be necessary to identify suitable areas for fixing the padlock, free from ribs, boxes, standard lock, tie rods and levers. The need to disassemble the standard lock and / or the need to shape some portions of internal sheet metal cannot be excluded.

The choice of mounting method depends on the customer's needs. You can follow the following scheme as a guideline for a suitable choice.

Method	Installation Timing Average duration of an installation, that is the average time required to apply a padlock on a tailgate of a generic van	Installation Area Percentage of the total closing surface of the tailgate on which the padlock can be applied (extremities are excluded)	Resistance to attack Resistance to the most common attacks on the armor: hammer, drill, cylinder tamper, hacksaw cut, chisel.	Tear resistance from sheet metal Resistance to attack with unconventional tools such as crowbar or 5 kg sledgehammer.
A: **QUICK**	Low	100%	Maximum	Medium
B: **HIGH RESIST.**	Medium	50% (*)	Maximum	Maximum

(*): it refers only to the lower half of the tailgate.

Hybrid installation solutions are also possible that adopt specifics of both methods (see page 33):
1) Quick method + internal reinforcement plate only for the feedback;
2) Quick method + internal reinforcement plate only for the armor;
3) High Resistance Method using M6 anti-burglary pins from the outside.

In case you choose solution A: Quick Method, go to next page.
In case you choose solution B: Highly Resistant Method, go to page.

ATENTION: the quick fixing method allows MINIMAL adjustments of the armor and the striker vertically and partially horizontally. Therefore mis-centered holes cannot be compensated for (plusnuts require precise holes and once fixed they cannot be moved).
In addition, the fixing with plusnut is irreversible (i.e. it is not possible to switch from a quick to a high-strength fixing) if the chosen position is in correspondence with the upper half of the door, not accessible from the inside. In particular, if you wanted to remove the plusnuts to apply the counterplates, it would be necessary to open the scraper with a hole cutter or a jigsaw, creating adequate access to the passage of the counterplate.

STEP 3 | QUICK METHOD

Il fissaggio del lucchetto avviene solo dall'esterno della lamiera del portellone. Non è necessario rimuovere le pennellature interne (eventualmente solo per il passaggio del cavetto per l'apertura d'emergenza) ne smontare la serratura del veicolo per accedere alle superficie interna della lamiera del portellone.
In questo modo è possibile fissare il lucchetto lungo tutto il portellone in posizioni che altrimenti non sarebbero possibili data l'inaccessibilità dell'interno (scatolati e/o doppie/triple lamiere).

Il fissaggio rapido consente MINIME regolazioni della corazza e del riscontro in verticale ed parzialmente in orizzontale. Pertanto fori non ben centrati non possono essere compensati (i plusnut richiedono fori precisi e una volta fissati non possono essere spostati).
Inoltre il fissaggio con plusnut è irreversibile (cioè non è possibile il passaggio da un fissaggio rapido ad uno ad alta tenuta con contropiastre) se la posizione scelta è in corrispondenza della semiparte superiore del portellone non accessibile dall'interno. In particolare se si volesse rimuovere i plusnut per applicare le contropiastre sarebbe necessario aprire lo scotolato con una fresa a tazza o un seghetto alternativo, creando un accesso adeguato al passaggio della contropiastra.

Il fissaggio avviene con (fig.6):

- 2 perni M8 sulla corazza attraverso il bordino del portellone;
- 2 perni M6 con testa fratturabile e 2 PlusNut;
- 2 perni M6 per fissare il gancio/riscontro da avvitare sui PlusNut.

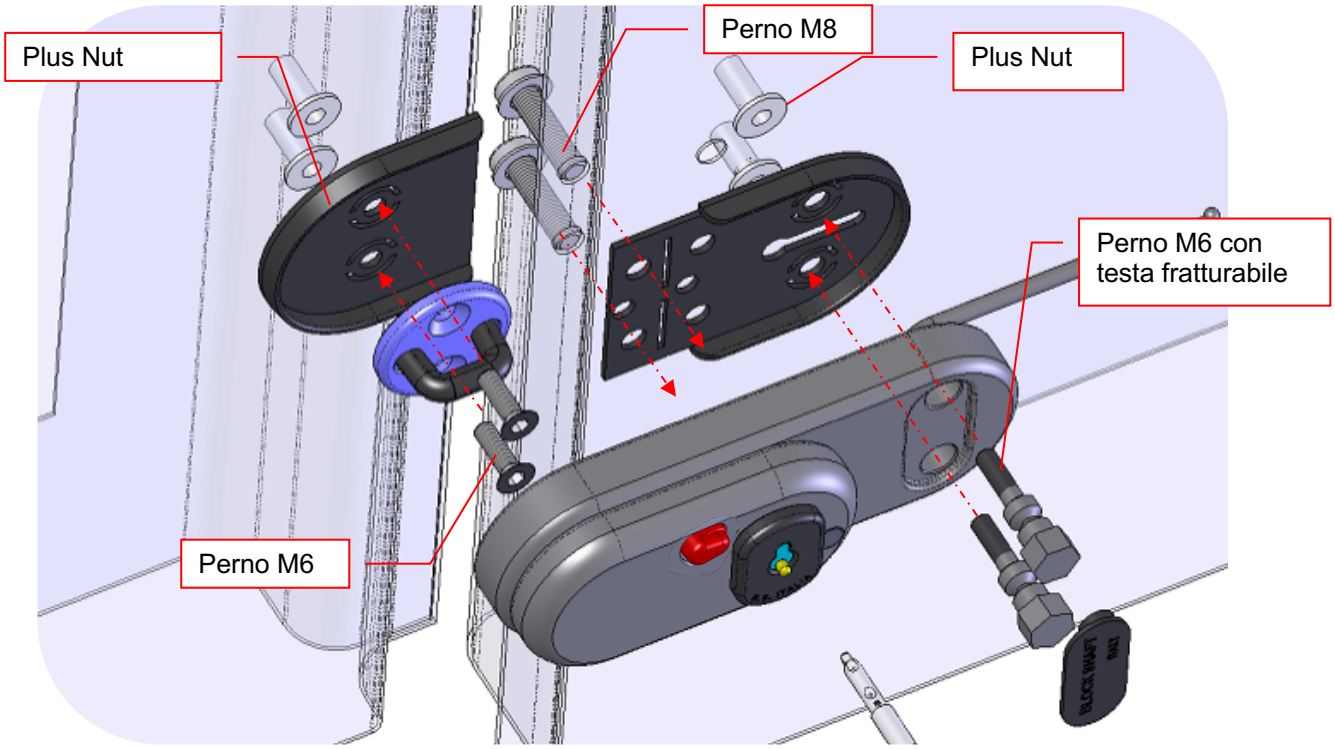


Fig.6

Proceed as indicated below
Place the drilling template on the door (fig. 7), using the specify axes as reference points overall.

BEFORE DRILLING, CAREFULLY CHECK THAT THERE ARE NO INNER INTERFERENCES, ENSURING THE APPLICATION OF THE PLUS NUTS (RIVETS).

EXECUTE:
- 4 Holes of 9mm diameter for the lock body fixing
- 2 Holes of 9mm diameter for fixing the striker
- 1 Hole of 9mm diameter for the emergency release cable passing and fixing.

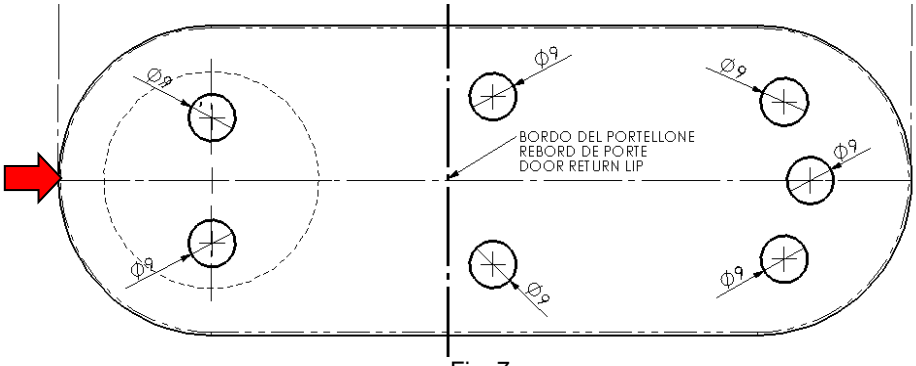


Fig. 7

To place the drilling template is recommended to draw an horizontal line at the height defined and align the drilling template by aligning the centerline with the line just drawn and the vertical edge of the door (the side that opens) with the vertical line drawn on the template (otherwise draw a line about 10 mm from the edge and align with the center of the first two holes of 9mm) (fig. 8).

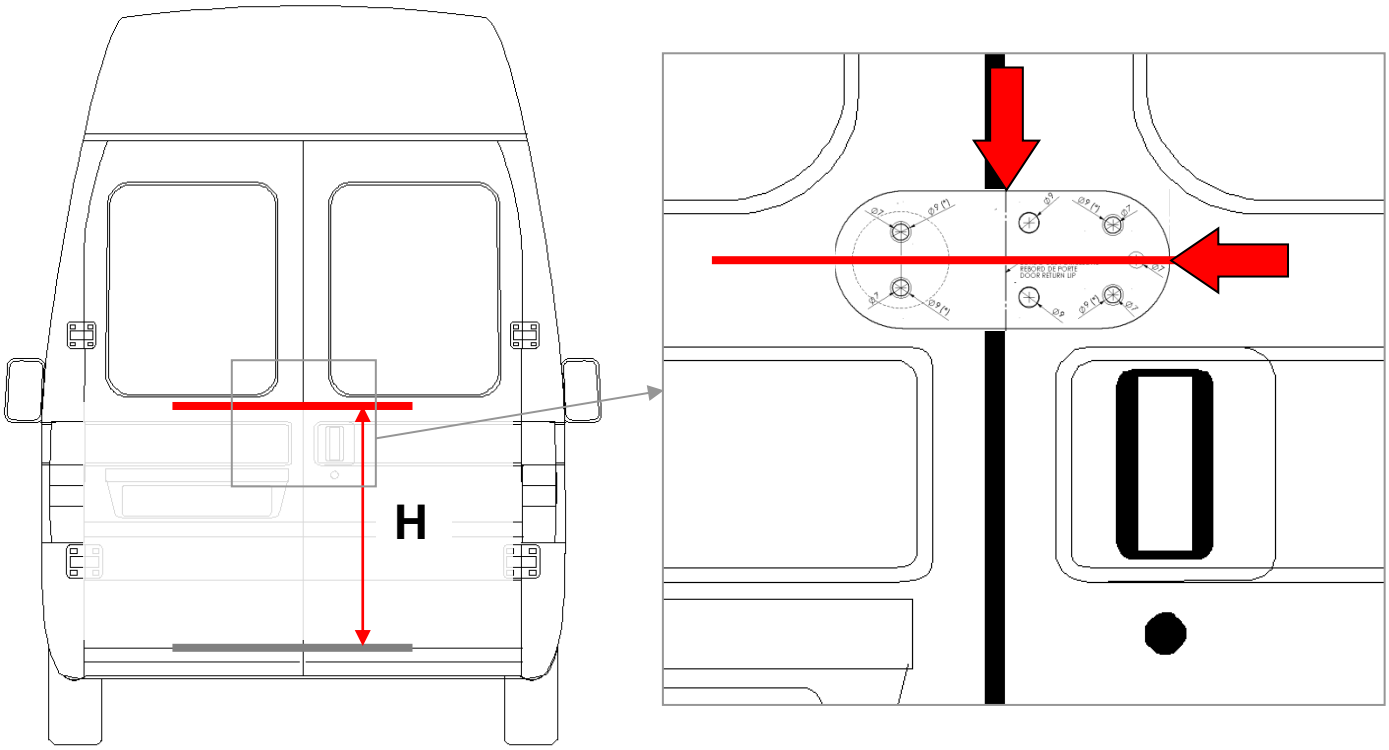


Fig.8

At this level, mark points with a tip where the holes must be performed to have a centered drilling.

STEP 4 | QUICK METHOD

Before drilling, remove or move the original lock of the vehicle or the handle if interferes with the holesin order to avoid future damages of internal components and to facilitate the subsequent assembly stepof the lock.

The fixing of the armor normally involves the holes on the extreme edge of the door using the two M8button head bolts. Before drilling, check that the head of the M8 bolt is contained in the edge (see Figure 5).

In the case where the sheet metal over the holes is not perfectly flat and therefore does not allow a flat accommodationof the M8 bolts head, is recommended to flatten the same sheet metal with a pair of pliers and a piece of plastic

(not to bend or damage the external sheet metal) (fig. 9) or alternatively, apply a plane plastic gusset (fig. 10) the externalsheet metal) with bolts and aluminium /plastic spacers placed between th screwing the bolts, the sheet metal will flat, allowing the place of the bolts (fig. 11). **Then cover the edges of the holes with protective varnish**.

Fig.09

Fig.10

Fig.11

In addition, if at the holes there is a double inner sheet metal with excessive space, in order to avoid the dangerous deformation of the sheet metal with the consequent visible bruise (Fig.12), it is recommended to proceed with one of thefollowing two solutions for the fixing of the bolts (in case it is not possible another locatio n to avoid double inner sheetmetals or you cannot outdistance the internal plate by bending it): (A) filling washer (not supplied) applied inside and positioned between the two plates (fig. 13) or (B) spacer (not supplied) applied externally in a counterbore formed in the sheet metal. The counterbore should be of a diameter that doesn't exceed the maximum dimensions of the housing, so that the same may hide the counterbore hole (fig. 14)..

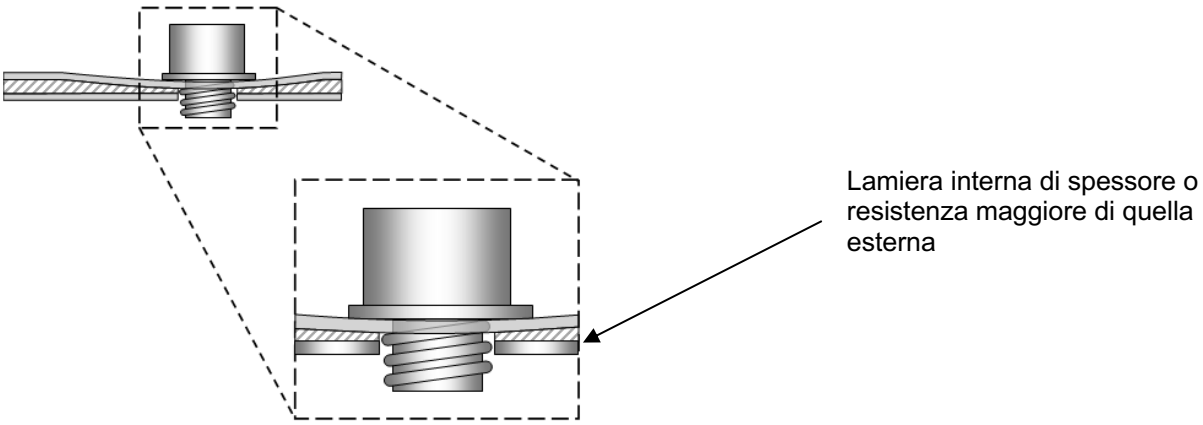


Fig. 12

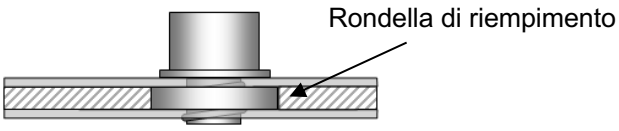


Fig.13

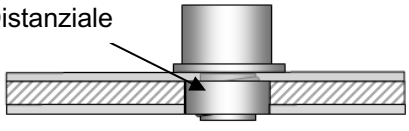
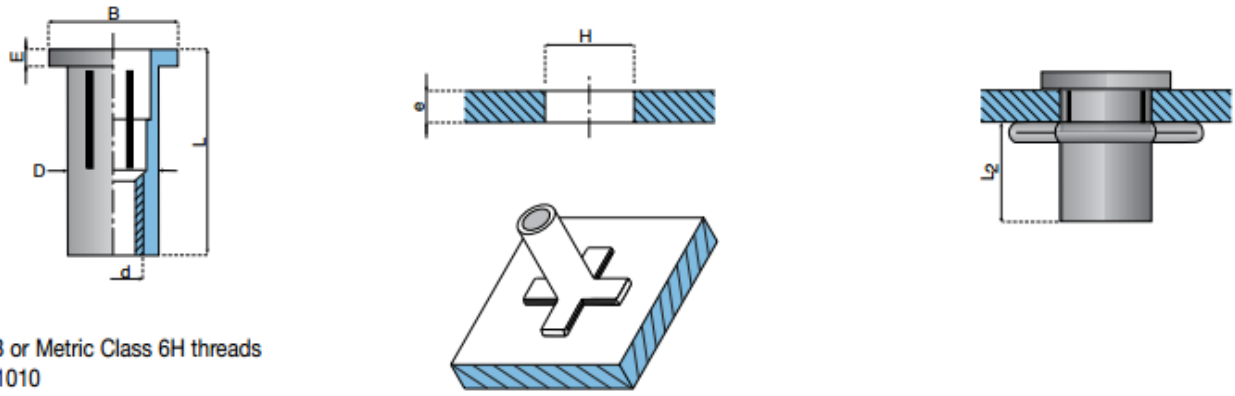


Fig.14

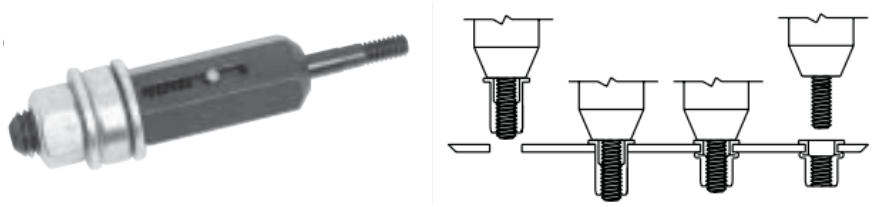
STEP 5 | QUICK METHOD

Fixing takes place using special steel inserts (see below) which are applied directly to the door sheet in correspondence with the fixing holes (two for the STRIKE and two for the PADLOCK BODY - see fig. 6). These inserts have the characteristic of guaranteeing optimal tear resistance on thin sheets. In particular, it is a cylindrical threaded insert with a large head with four notches on the shaft that will form four petals under the effect of traction, creating a large support surface on the side opposite to the introduction of the screw (Fig. 6).



Class 2B or Metric Class 6H threads
Steel: C1010

Apply the PlusNut.
For the application it is necessary to use the specific tool to avoid damage to the sheet metal (See Fig. 15).



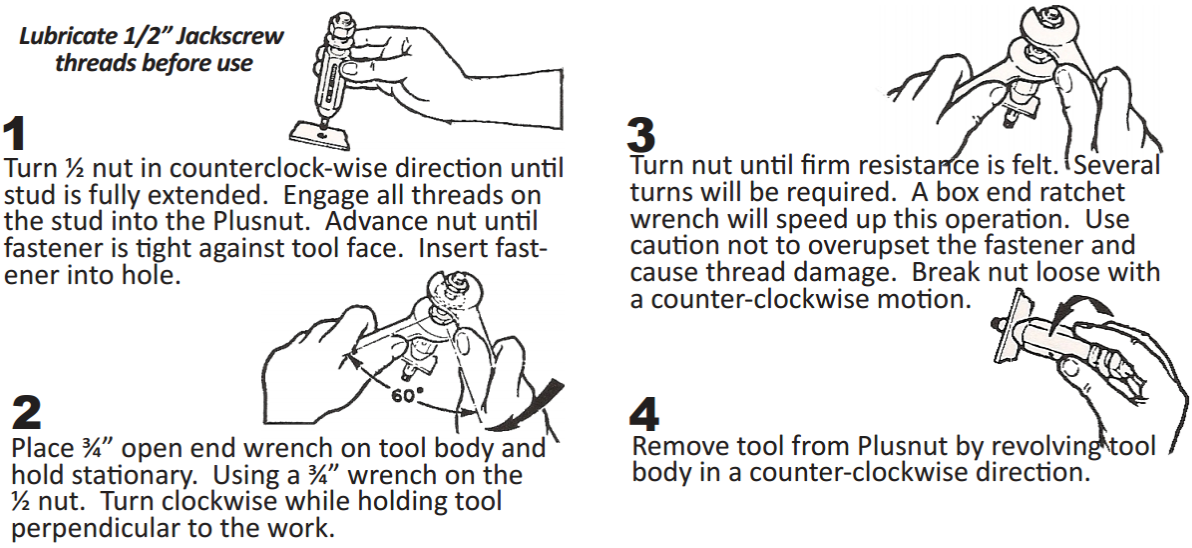


Fig.15

STEP 6 | QUICK METHOD

Interpose the plastic spacer between the sheet metal and the striker, after removing the plastic part for housing the plusnut head (as shown in detail in fig. 16).
Fasten the striker / closing hook using the two M6 countersunk head screws.

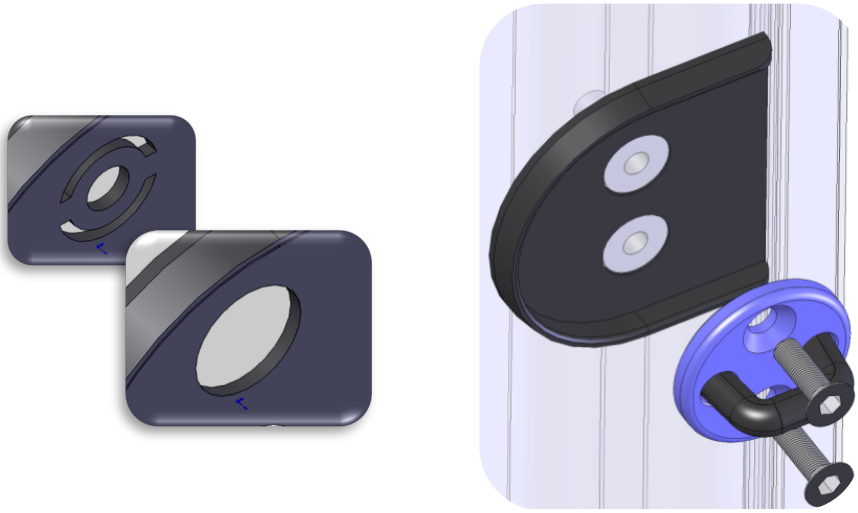


fig. 16

For greater strength when unscrewing, it is advisable to apply thread locker to the pins or alternatively to slightly dent the thread of the pins.

STEP 7 | QUICK METHOD

Similarly, fix the armor using the 2 M8 cylindrical-headed pins on the edge of the door and the 2 M6 anti-burglary pins with front access to be screwed onto the respective Plusnuts (fig. 17).
Place the special plastic spacer to protect the sheet, after removing the plastic part for housing the plusnut head (fig.17).

Do not definitively tighten the M8 pins and the anti-burglary pins (ATTENTION NOT TO BREAK THE HEAD); afterwards it will be necessary to center the armor.
At the same time, insert the sheath of the cable for the emergency opening. The sheath must be inserted in the appropriate hole and must enter the tailgate reaching the inside of the vehicle
Be careful not to crush the emergency cable which must run freely.

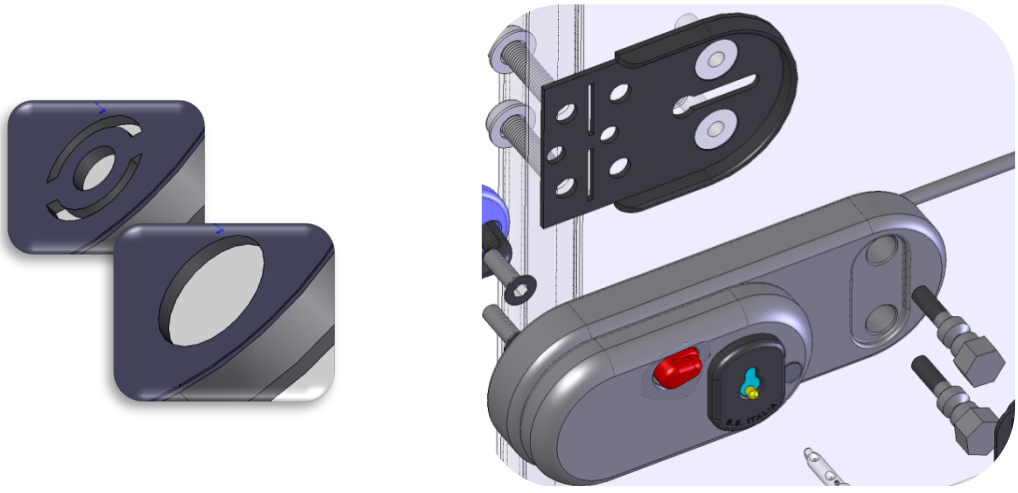


Fig. 17

To compensate for any misalignments or particular curvatures of the doors, a second spacer can be applied under the armor, cut out in correspondence with the prepared cuts. In this way the padlock will curve on itself and allow the striker to align correctly with its seat on the armor (fig. 18).

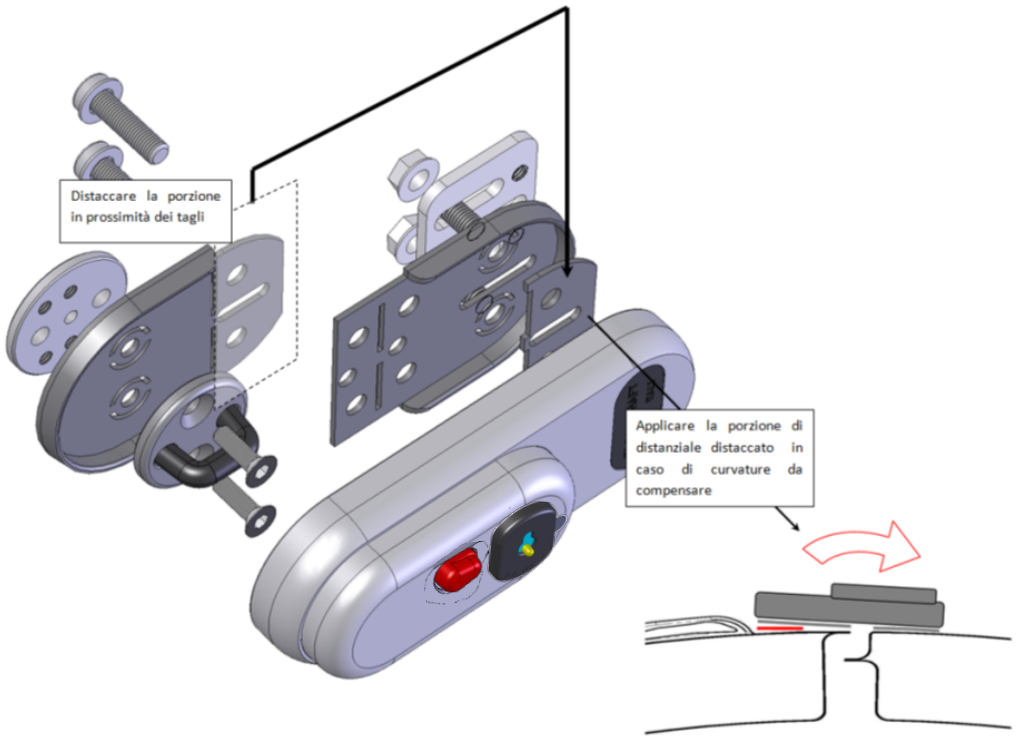


Fig.18

STEP 8 | QUICK METHOD

Close the door a few times to check correct alignment of the striker. If necessary, align the armor using a rubber mallet. Taking advantage of the coupling with considerable play, having already fixed only the striker definitively, the armor can make small movements in order to perfectly align the two parts.
This operation must be carried out with the padlock open (therefore with the key inserted and turned 180 °).

CHECK that the LATCH is open before closing the tailgate (the latch would violently hit the striker) (fig.19).
It it is then closed, the padlock may be closed or the latch return spring may be damaged..

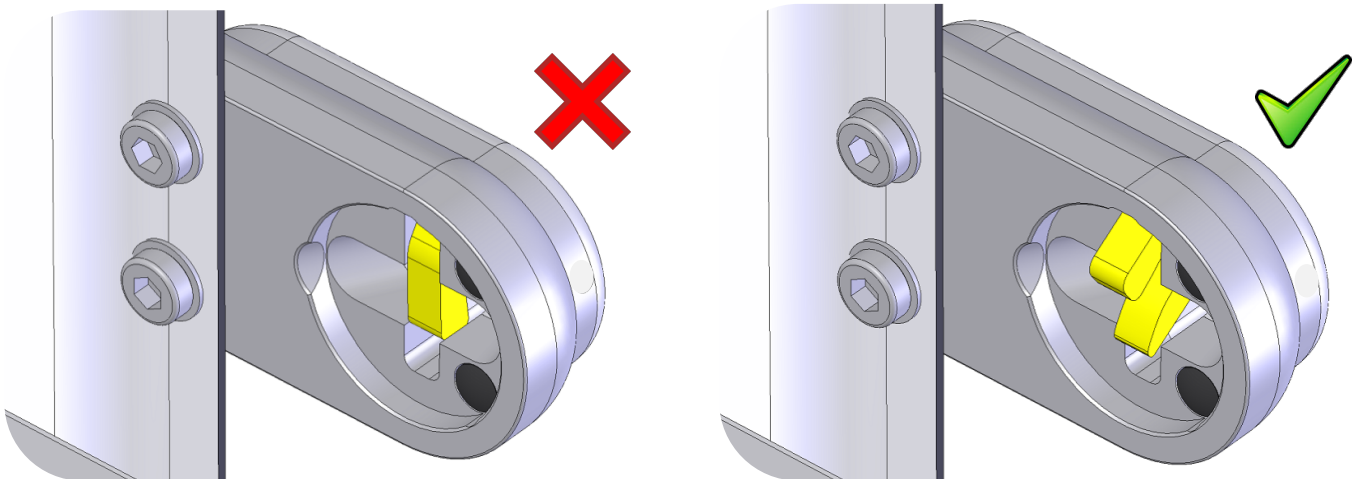


Fig.19

Check the free rotation of the key: **Opening must take place without forcing the key.** Last, tighten the nuts and pins of the armor.

STEP 9 | QUICK METHOD

Having checked that the padlock is working correctly, tighten all the pins and fracture the head of the M6 pins.
Apply the plastic cap on the shell to seal the cavity on the shell (fig. 20). On it, apply custom adhesive resin if provided..

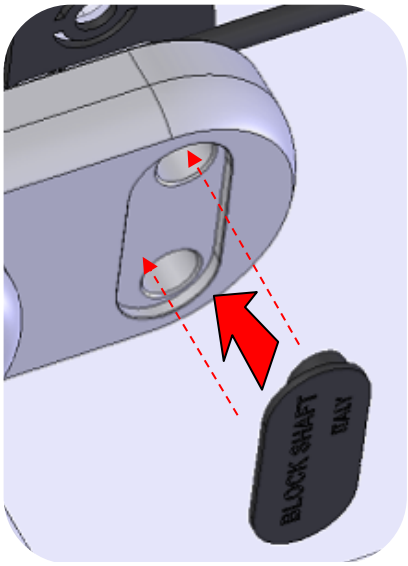


Fig.20

STEP 3 | HIGH RESISTANCE METHOD

The installation involves the removal of the internal panels of the door; it will be necessary to identify suitable areas forplacing the lock, free from ridges, molded, original lock, rods and levers. You may need to disassemble the original lockor shape some portions of the sheet metal.

The fixing is done with (fig.21):

- 2 M8 bolts on the armor through the edge of the door;
- 2 M8 threaded nuts on the armor and two M8 studs to be applied from inside, interposing the backplate between them, on which is arranged a slot for the passage of the two nuts;
- 2 M6 bolts to fix the striker directly on the threaded backplate.

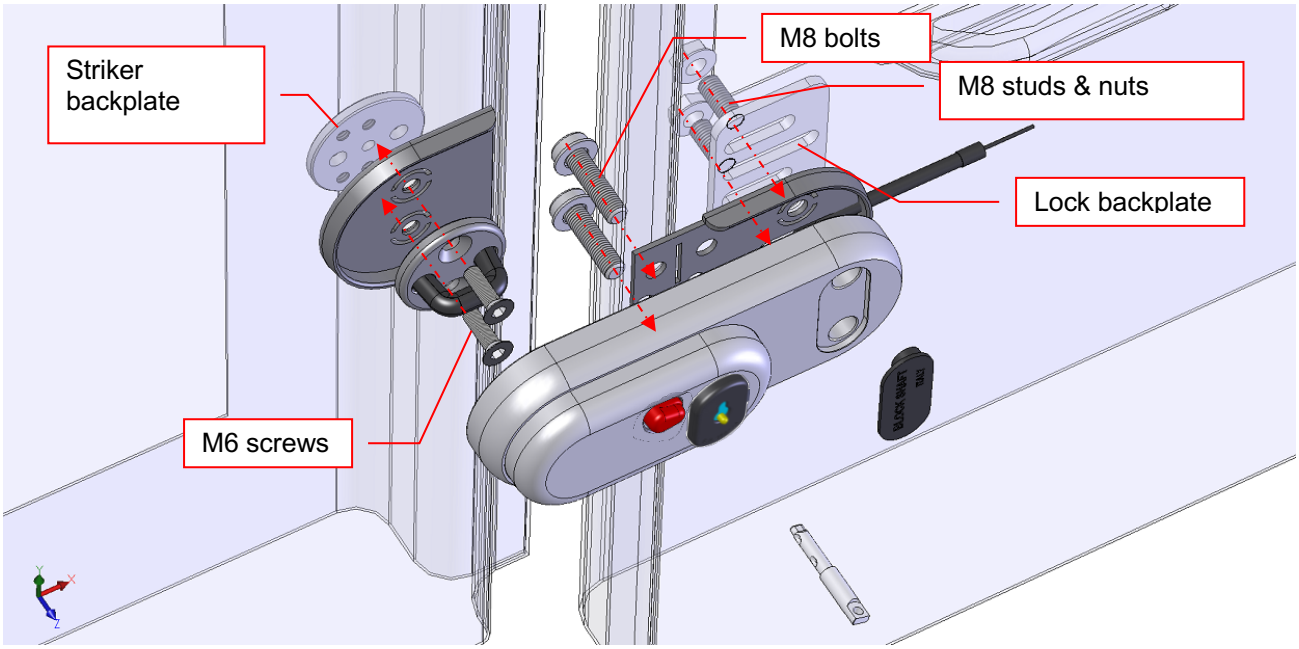


Fig.21

Proceed as indicated below.
Place the drilling template on the door (fig. 7), using the specify axis as reference points overall.

BEFORE DRILLLING, CAREFULLY CHECK THAT THERE ARE NO INTERFERENCE INSIDE, ENSURING THE POSSIBLE APPLICATION OF THE BACKPLATES.

Execute:
- 4 holes of 9mm diameter for the armor installation
- 2 holes of 9mm diameter for the striker installation
- 1 hole of 9mm diameter for the emergency release opening installation.

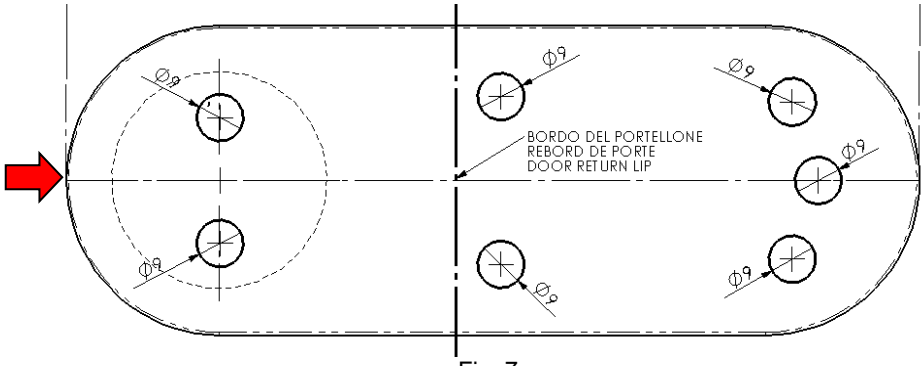


Fig. 7

To place the drilling template is recommended to draw an horizontal line at the height defined and align the drilling template by aligning the centerline with the line just drawn and the vertical edge of the door (the side that opens) with the vertical line drawn on the template (otherwise draw a line about 10 mm from the edge and align with the center of the first two holes of 9mm) (fig. 8).

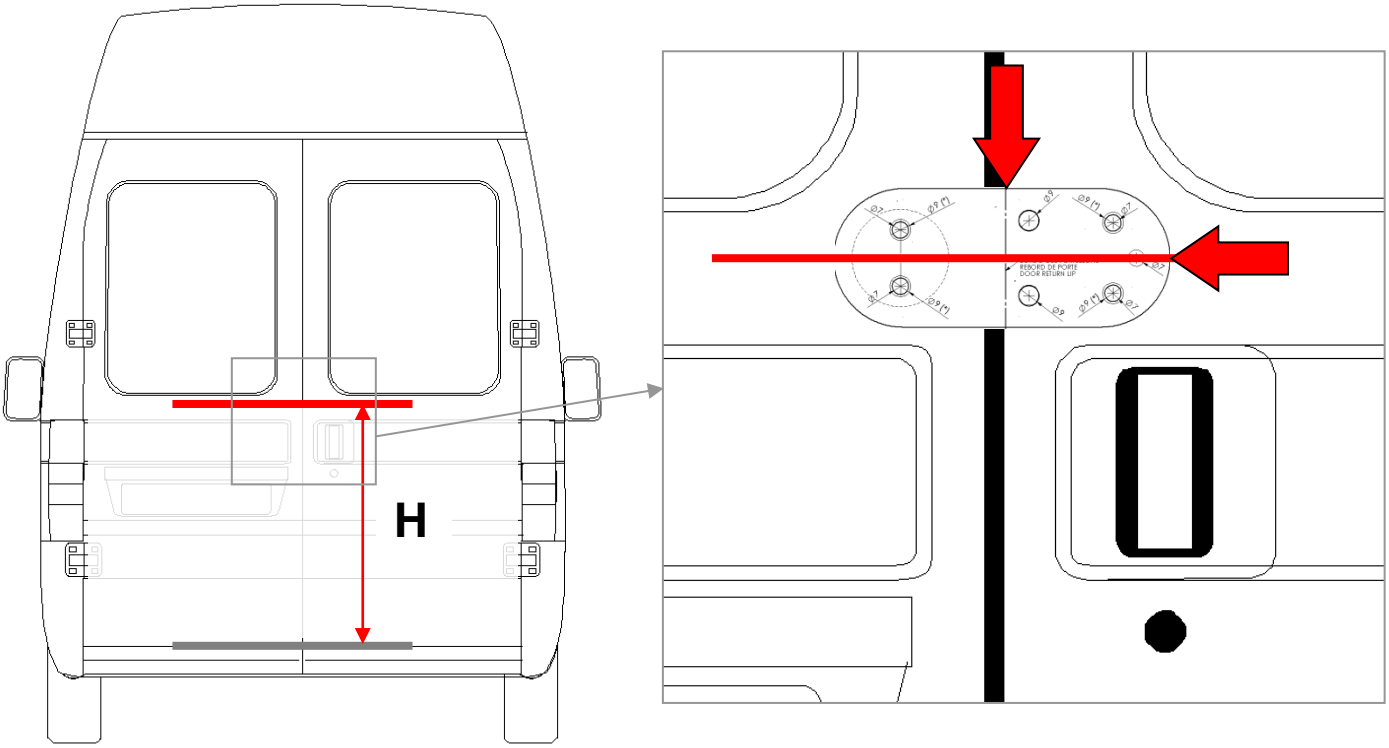


Fig.8

At this level, mark points with a tip where the holes must be performed in order to have a centered drilling.

STEP 4 | HIGH RESISTANCE METHOD

Before drilling, remove or move the original lock of the vehicle or the handle if interferes with the holesin order to avoid future damages of internal components and to facilitate the subsequent assembly stepof the lock using the backplates.

The fixing of the armor normally involves the holes on the extreme edge of the door using the two M8button head bolts. Before drilling, check that the head of the M8 bolt is contained in the edge (see Figure 5)

In the case where the sheet metal over the holes is not perfectly flat and therefore does not allow a flat accommodationof the M8 bolts head, is recommended to flatten the same sheet metal with a pair of pliers and a piece of plastic (not to bend or damage the external sheet metal) (fig. 9) or alternatively, apply a plane plastic gusset (fig. 10) the externalsheet metal) with bolts and aluminium /plastic spacers placed between th screwing the bolts, the sheet metal will flat, allowing the place of the bolts (fig. 11). **Then cover the edges of the holes with protective varnish**

Fig.09

Fig.10

Fig.11

In addition, if at the holes there is a double inner sheet metal with excessive space, in order to avoid the dangerous deformation of the sheet metal with the consequent visible bruise (Fig.12), it is recommended to proceed with one of thefollowing two solutions for the fixing of the bolts (in case it is not possible another locati n to avoid double inner sheetmetals or you cannot outdistance the internal plate by bending it): (A) filling washer (not supplied) applied inside and positioned between the two plates (fig. 13) or (B) spacer (not supplied) applied externally in a counterbore formed in the sheet metal. The counterbore should be of a diameter that doesn't exceed the maximum dimensions of the housing, so that the same may hide the counterbore hole (fig. 14).

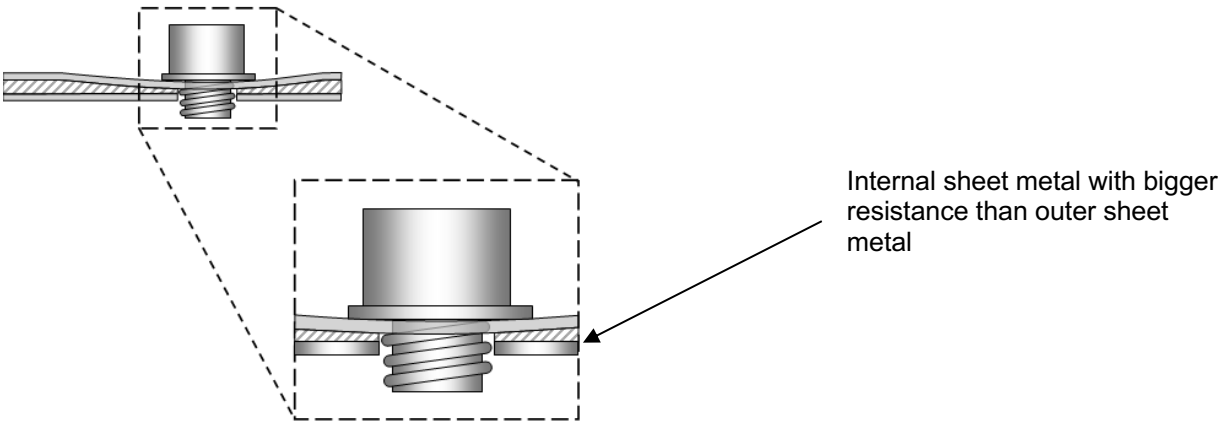


Fig. 12

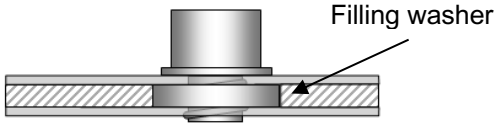


Fig.13

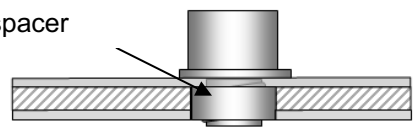


Fig.14

STEP 5 | HIGH RESISTANCE METHOD

Place backplates from inside.

In the event of unavoidable interference between counterplates and internal sheets or boxed or ribs, it is possible to modify (cut, shorten, rotate, fold) the counterplate according to any needs.

In this phase, it may be necessary to use a second operator to support the counterplate from inside the vehicle, or alternatively, M6 studs (not supplied) could be used to allow the application and support of the counterplate from the inside and then be removed from the outside one at a time, starting from the lower one, to screw the corresponding pin (fig. 22).

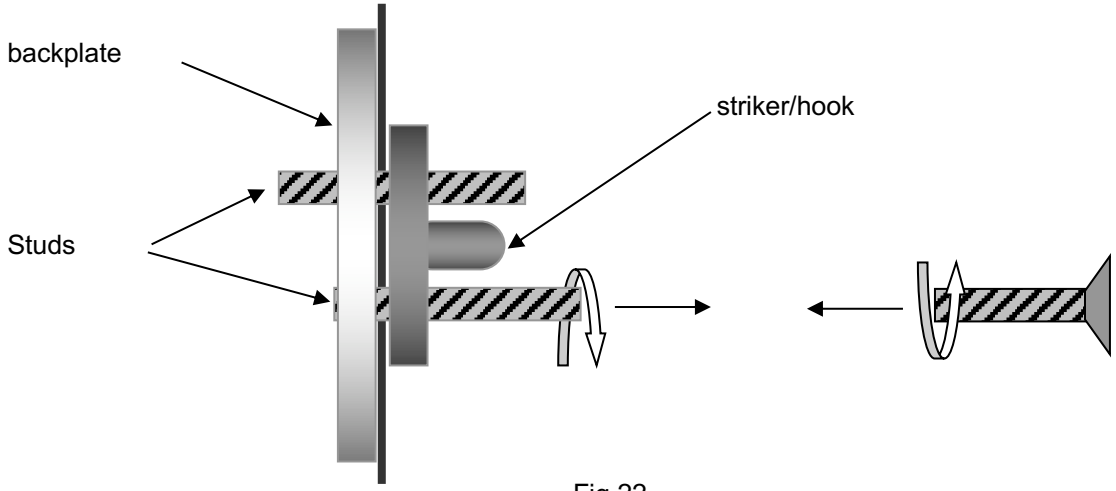


Fig.22

STEP 6 | HIGH RESISTANCE METHOD

Place the plastic spacer between the sheet metal and the striker (as shown in detail in fig. 23).

Fasten the closing striker using the two M6 countersunk screws (fig. 23).

For greater strength when unscrewing, it is advisable to apply thread locker to the pins or alternatively to slightly dent the thread of the pins.

The striking plate has 2 different fixing positions for the striker. Establish the most suitable one based on the available spaces (fig. 23).

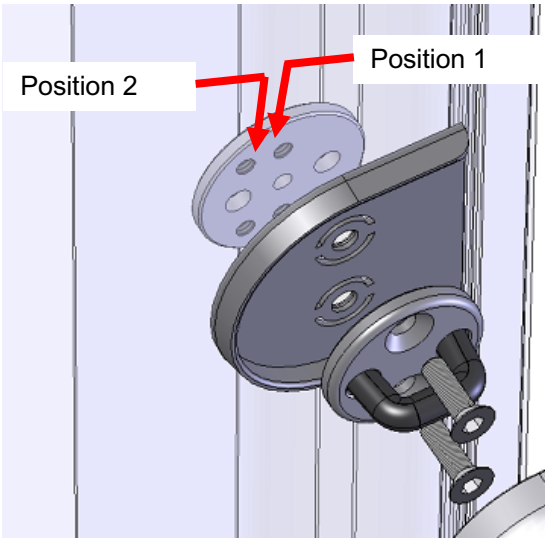


fig. 23

The striker can be fixed in two different configurations. In fact, in addition to the aforementioned fixing, it is possible to rotate the counter plate by 90 ° and lock the two M6 pins with two nuts (not supplied) from inside the door. In this way it is possible to open the padlock in case of damage simply by removing the two nuts from the inside.

STEP 7 | HIGH RESISTANCE METHOD

In the same way, fix the armor using the 2 M8 cylindrical-headed pins on the edge of the door and the 2 M8 threaded studs on the armor and two M8 nuts to be applied directly from the inside, interposing the counter-plate, on which a slot is prepared for the passage of the two studs (fig. 24a).

For this fixing it may be necessary to disassemble the standard lock or simply move it away from its seat.

Furthermore, where the door sheet is thick or has double sheet metal (therefore it is sufficiently resistant to tearing) the striking plate can be omitted. Furthermore, the counterplate can be used for shimming the internal sheet.

In the event of unavoidable interference, it is possible to modify (cut, shorten) the strike plate according to any needs

Interpose the special plastic spacer to protect the sheet.

Do not definitively tighten the M8 nuts; afterwards it will be necessary to center the armor.

Simultaneously insert the sheath of the cable for emergency opening. The sheath must be inserted in the appropriate hole and must enter the tailgate reaching the inside of the vehicle

Be careful not to crush the emergency cable which must run freely.

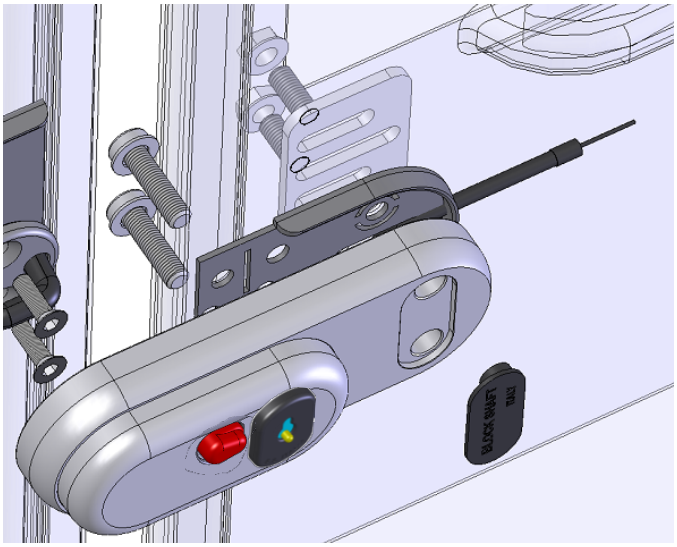


Fig. 24a

An alternative to this type of assembly is the fixing with the anti-burglary M6 pins and the internal counter plate with the M6 threaded holes (Fig. 24b). This solution simplifies assembly and guarantees excellent resistance.

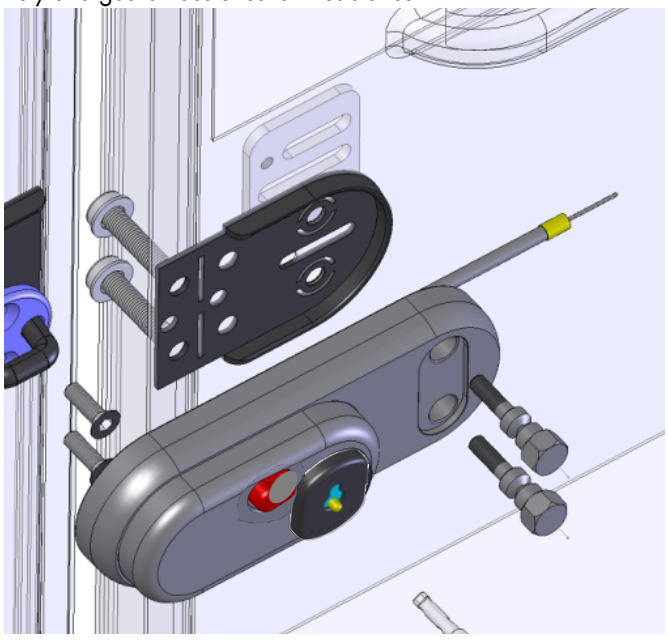


Fig. 24b

To compensate for any misalignments or particular curvatures of the doors, a second spacer can be applied under the armor, cut out in correspondence with the prepared cuts. In this way the padlock will curve on itself and allow the striker to align correctly with its seat on the armor (fig. 25).

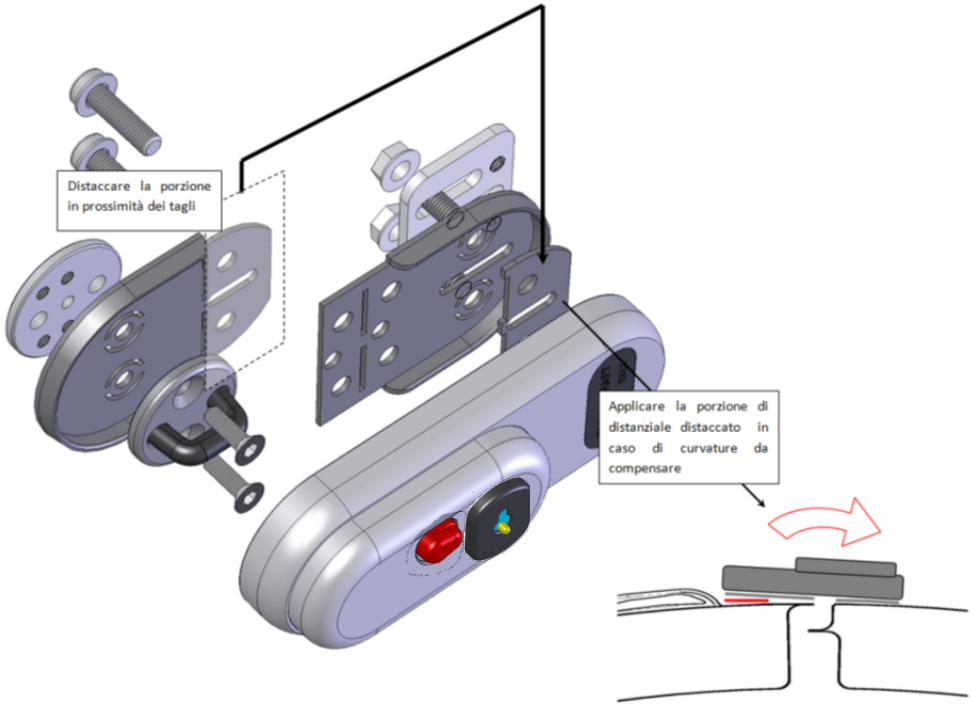


Fig.25

FASE 8 | HIGH RESISTANCE MODE

Close the door a few times to check correct alignment of the striker. If necessary, **align the shell using a rubber mallet**. Taking advantage of the coupling with considerable play, having already fixed only the striker definitively, the armor can make small movements in order to perfectly align the two parts.

This operation must be carried out with the padlock open (therefore with the key inserted and turned 180 °).

Check that the LATCH is open before closing the tailgate (the LATCH would violently hit the striker) (fig. 19).
If it is then closed, the padlock may be closed or the LATCH RETURN SPRING may be damaged.

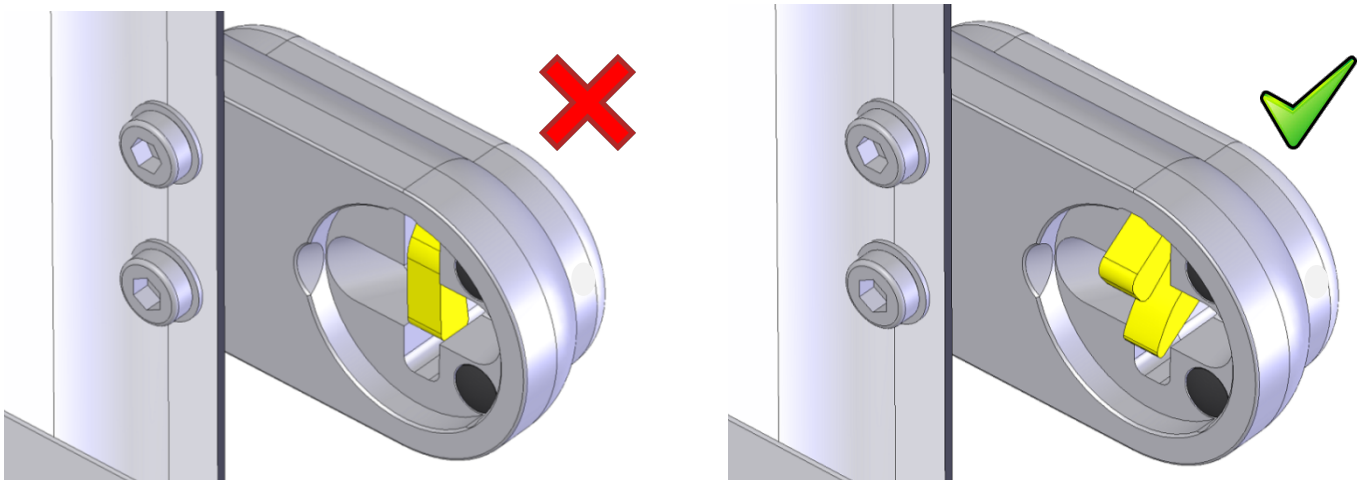


Fig.19

In addition, for models that require disassembly of the standard lock, it will be necessary to open the tailgate by accessing from inside the load compartment through the side door and directly pulling the release levers.

Finally, check the free rotation of the key: **opening must take place without forcing the key**.
Finally tighten the nuts and pins of the lock body definitively.

STEP 9 | HIGH RESISTANCE MODE

Having verified the correct functioning of the padlock, including the functioning of the status peg that signals opening, tighten all the pins.
Apply the plastic cap on the shell to seal the cavity on the shell (fig. 20).
Apply the custom adhesive resin if supplied.

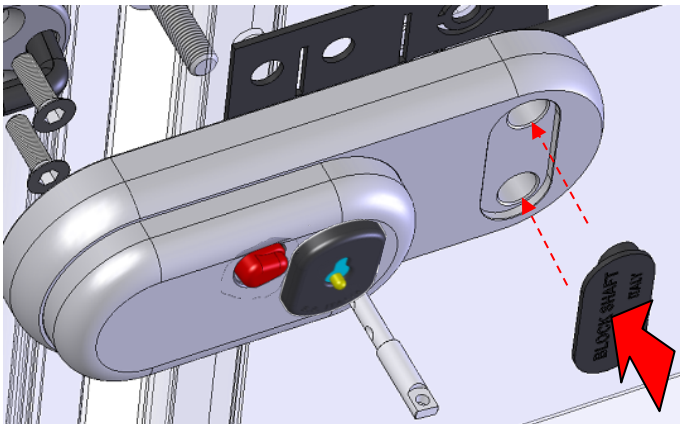


Fig.20

STEP 10: EMERGENCY RELEASE CABLE - INSTALLATION

Unfold the emergency cable by placing it in a suitable location (it is preferable to apply it externally with respect to the paneling, thus avoiding holes and giving the possibility to disassemble the panels without having to remove the emergency opening) and apply the appropriate emergency knob supplied.
The system is characterized by a pull knob encapsulated within a support integral with the tailgate and blocked by a seal (fig. 21).
In this way, access from the inside foresees the breaking of the seal (which must be restored after opening in order to avoid improper use of the padlock - for example. fingers to be placed in the appropriate seat. By accessing from above or below it is not possible to extract the knob which remains protected by a sector of the support. Therefore, in the event of a break-in, if an opening were to be created from the outside of the door sheet, pulling the knob would not be possible by hand.
In addition, for anti-tampering purposes, the emergency cable, which slides back when opening, is completely hidden by the knob, equipped with a special internal seat that is not accessible

The preferable position is close to the lock body, leaving the cable as extended as possible, without bending at the elbow (> 90 °).
On the side sliding door, pay attention to avoid interference between the knob and the bodywork. In case of interference, position the knob in the upper cavity of the tailgate.

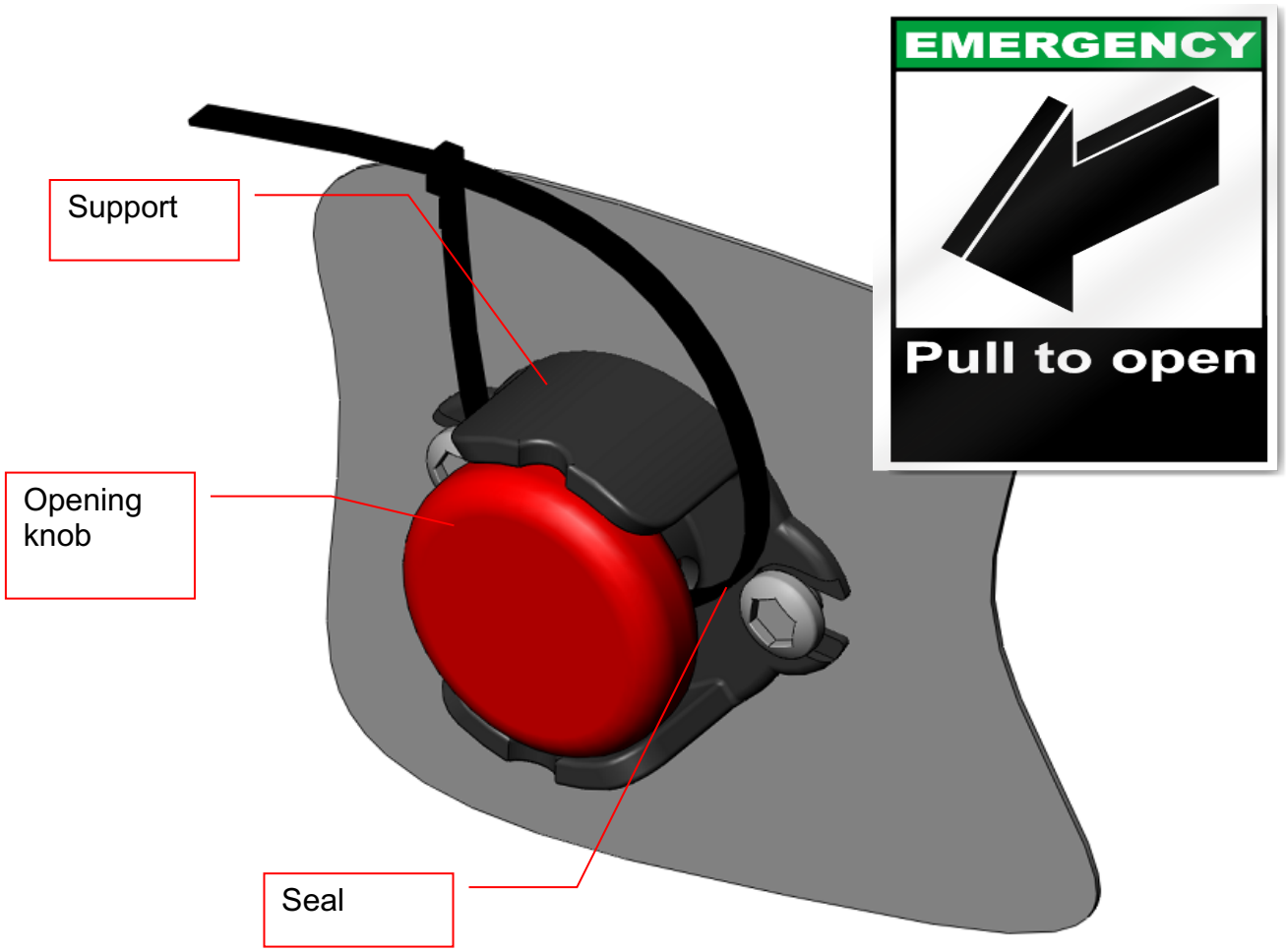
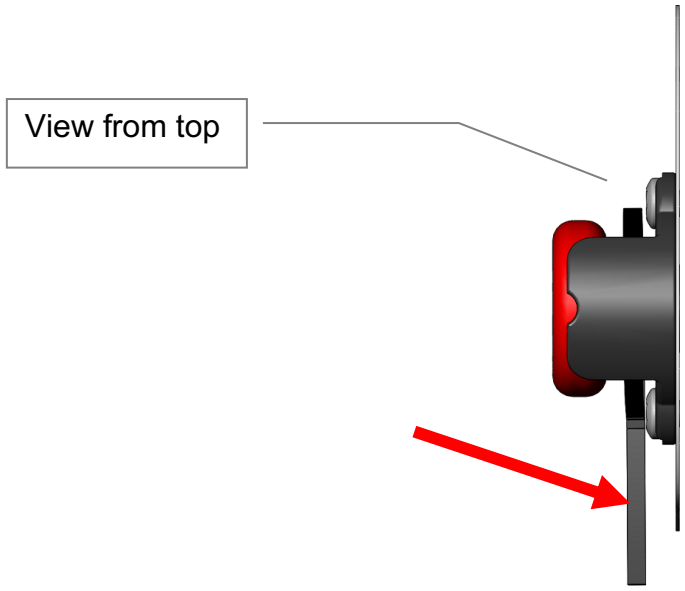
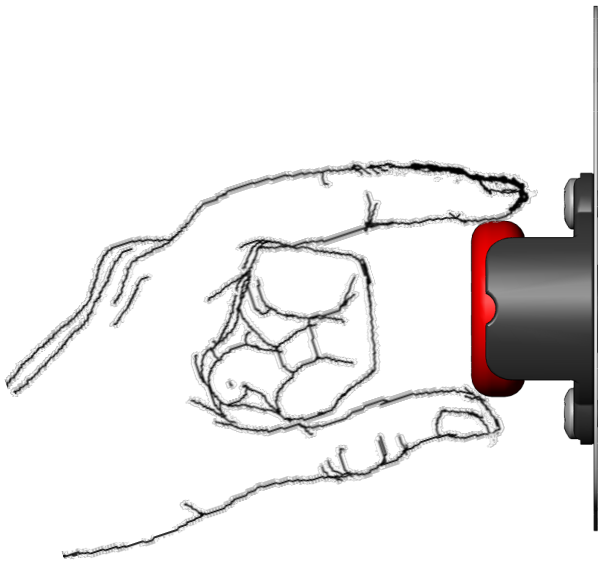


Fig.21

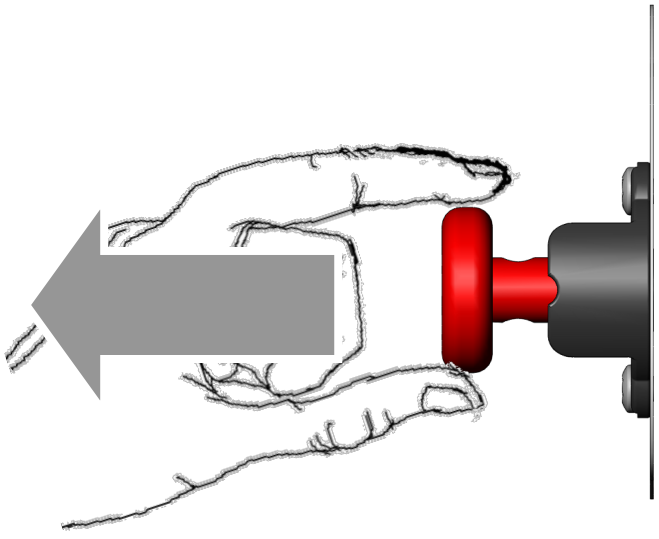
OPENING SEQUENCE



Removing security seal



Grasp the knob by applying your fingers in the appropriate seat



Pull as far as it will go

Before intallation, with the door opened, close the padlock (fig. 22). The cable during the emergency opening runs along the length of the locking pin (about 1cm) and therefore also the spherical terminal which must be free to slide.

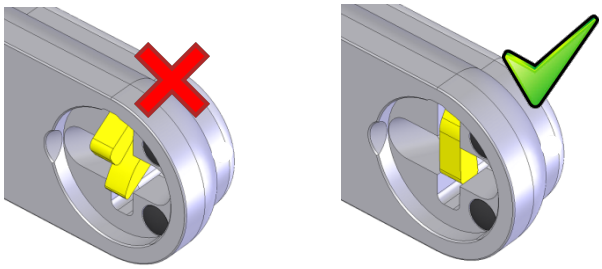
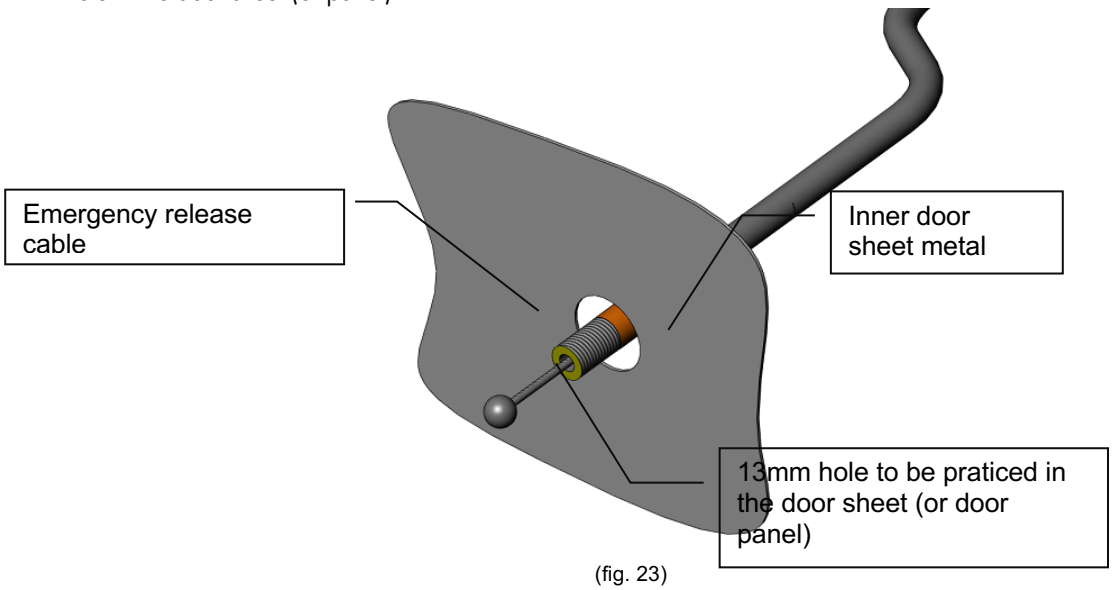


fig. 22

The installation involves the following phases.

Step 1: 13mm hole in the door sheet (or panel)



(fig. 23)

Step 2: Insert the red knob in its support, taking care to align the holes as indicated below (fig. 24).

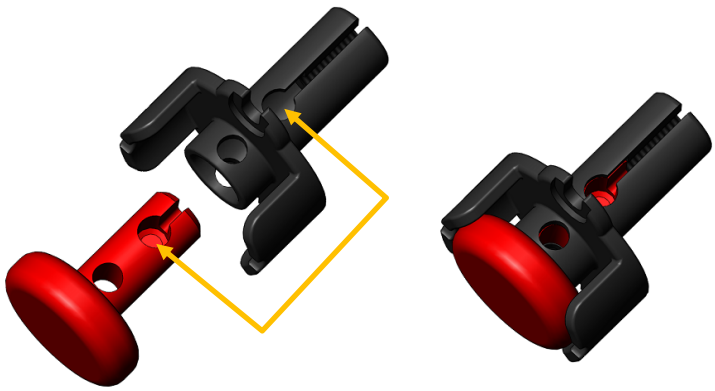
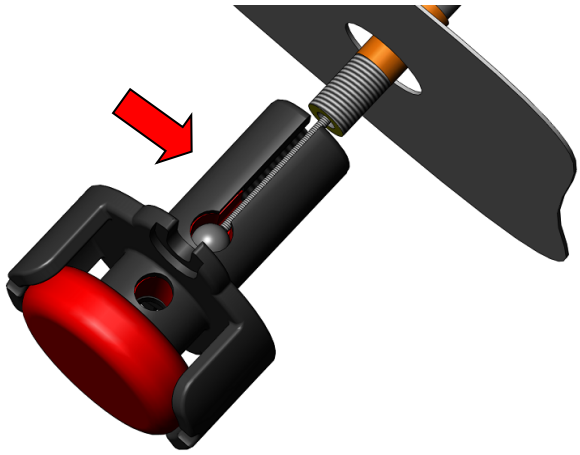


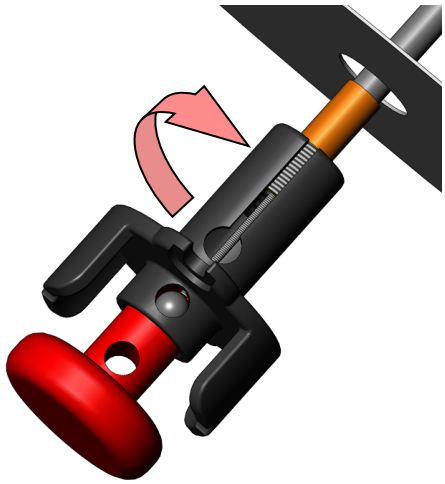
Fig. 24

Step 3: Insert the spherical terminal in the appropriate seat (fig.25).



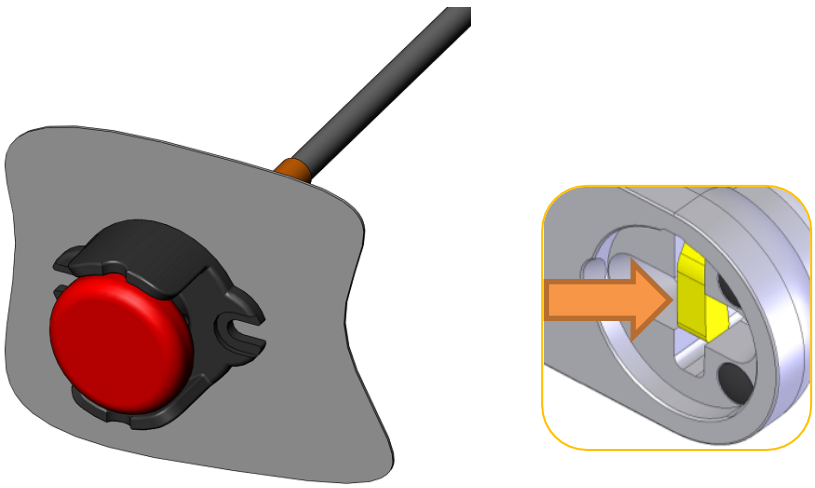
(fig.25)

Step 4: Screw the support until the spherical end of the cable aligns with the upper hole of the support (fig. 26).



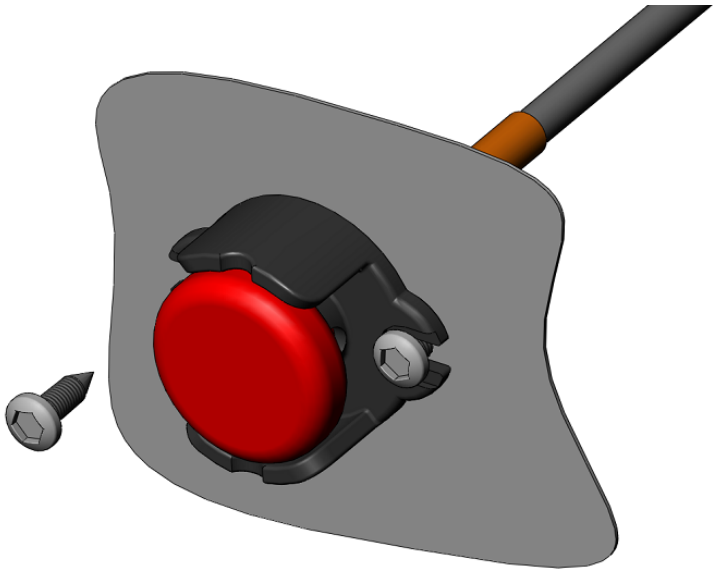
(fig.26)

Step 5: insert the support into the sheet and close the padlock by rotating the harpoon (the red knob will return) (fig. 27). **Carry out some functional tests before fixing the support. If necessary, screw or unscrew the support to adjust the stroke.**



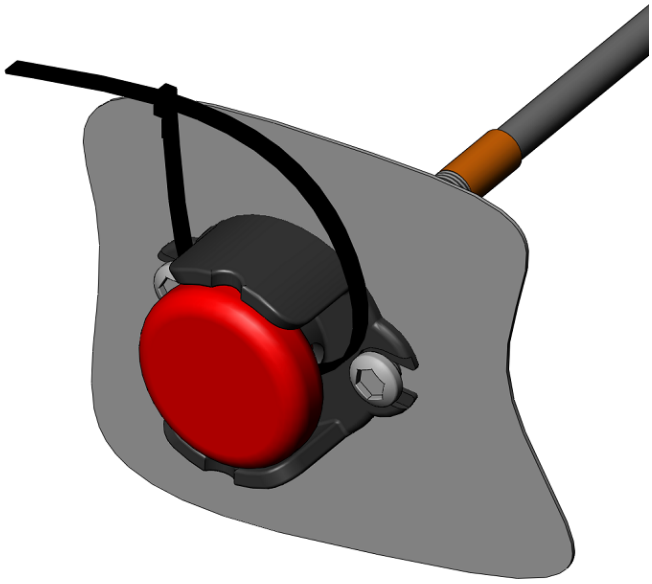
(fig.27)

Step 6: fix the support to the door sheet or to the panel using the self-tapping screws (fig. 28). Check that the through hole of the knob and that of the support are aligned in order to guarantee the passage of the safety seal.



(fig. 28)

Step 7: With the padlock closed and the knob aligned, apply the safety seal (fig. 29)



(fig. 29)

SLIDING SIDE DOOR

It is necessary to follow the same steps indicated for the rear door.
In particular, the position of the padlock is normally below the horizontal sliding guide of the tailgate.
In particular, check that the striker does not interfere with the tailgate during opening (fig. 35).
Also check that the emergency opening knob does not interfere with the tailgate during opening.
Position the drilling template with the longitudinal axis parallel to the sliding guide and the vertical axis aligned with the edge of the door. Should this position generate interference, the template can be moved a few millimeters to the right or left with respect to the vertical axis
.

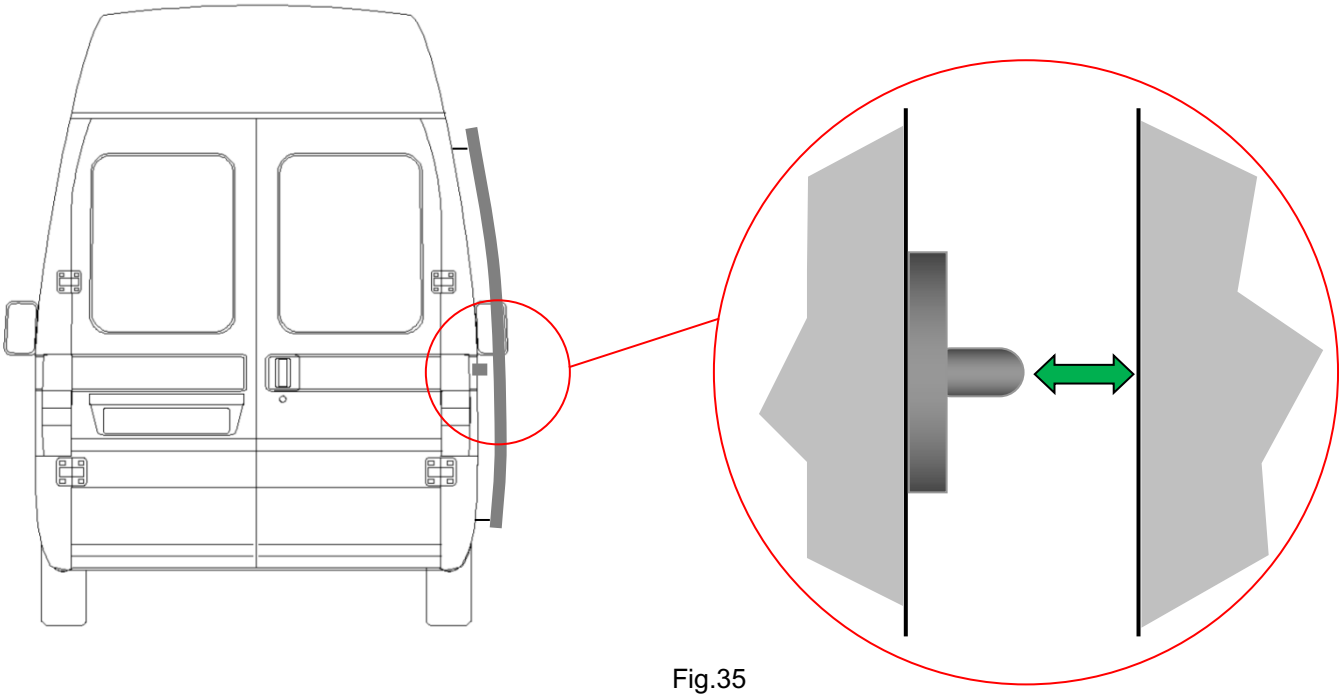


Fig.35

The side sliding doors have different opening kinematics. The door could in fact come out perpendicular to the vehicle and slide backwards or slide angularly and then linearly towards the back. In the second case, it may be necessary (only for those vehicles with excessive opening angle) to move the striker by 1-2mm in the direction of the sliding of the door, away from the position marked with the template (fig. 36). In this case, if necessary, the holes of the striker must be slotted.

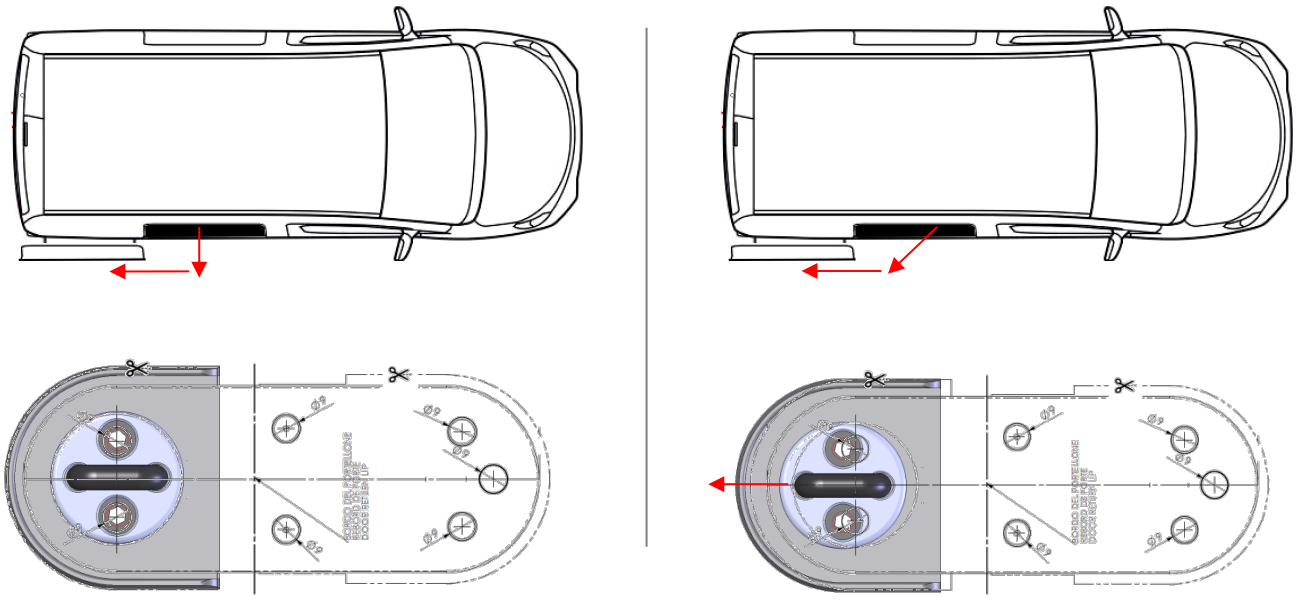
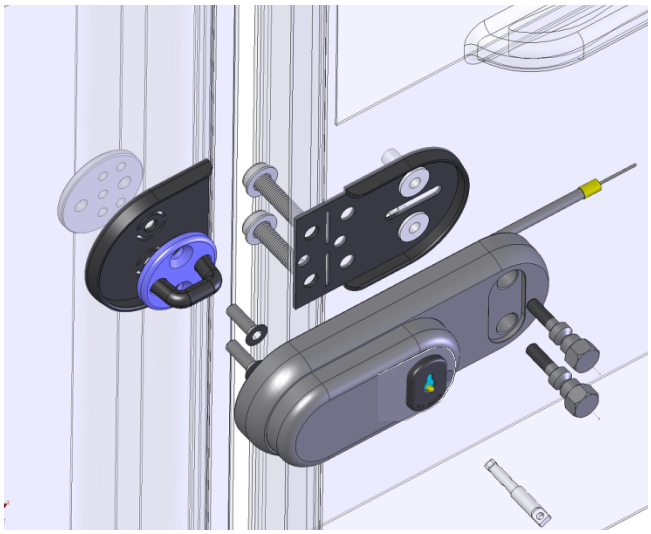
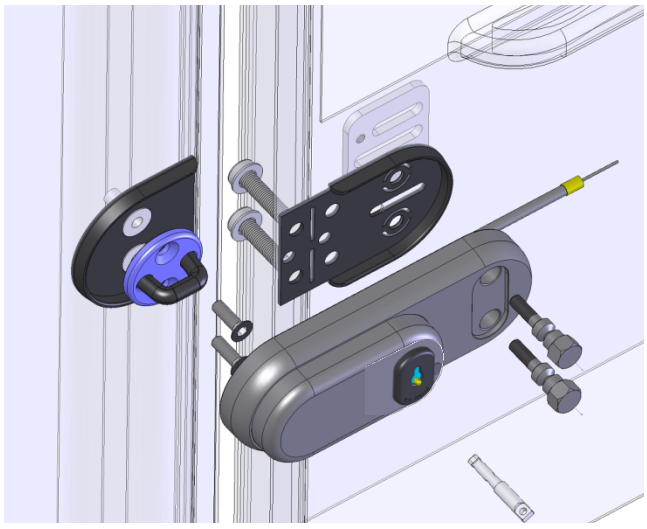


Fig.36

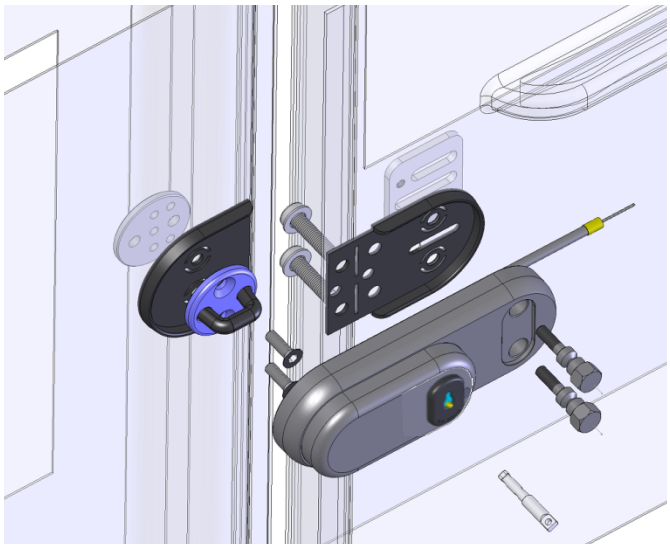
HYBRID INSTALLATION SOLUTIONS



Quick method + internal reinforcement plate only for the striker (Simplifies assembly and guarantees good resistance)



Quick method + internal reinforcement plate only for the armor (Not recommended if high tear resistance is required);



High Resistance Method using M6 anti-burglary pins from the outside (Simplifies assembly and guarantees excellent resistance).