BAWER

MC1143

ISTRUZIONI DI MONTAGGIO
MOUNTING INSTRUCTIONS

ARMO
VANLOCK

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%
- ambient temperature - 20°C + 60°C.

The accessories are made in such a way that they can be assembled on the original ARMO components. If components not authorized by ARMO 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 ARMO, has been checked. If third-party components are used, the manufacturer should be informed if there is any doubt as to their suitability.
To ensure intended use, proceed as follows:

- 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.
- They 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 in the event of injury to persons and damage to property 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.

- When the emergency cable is used improperly
- When the product care and maintenance operations are not observed

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 ARMO components. Using non-ARMO components compromises the characteristics of the padlock.
- The tailgate must be able to be closed mechanically, easily.
- Installing and repairing the lock 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
(rear and side door)

AUTOMATIC VERSION
Basic operation – ON operation of the padlock

OPENING DOOR

- Insert the key into the padlock and rotate clockwise (at the end of rotation the key cannot be removed).
- Open the door after opening the standard lock.
- Return the padlock key to its initial configuration and extract the key (the padlock remains open)

DOOR CLOSING

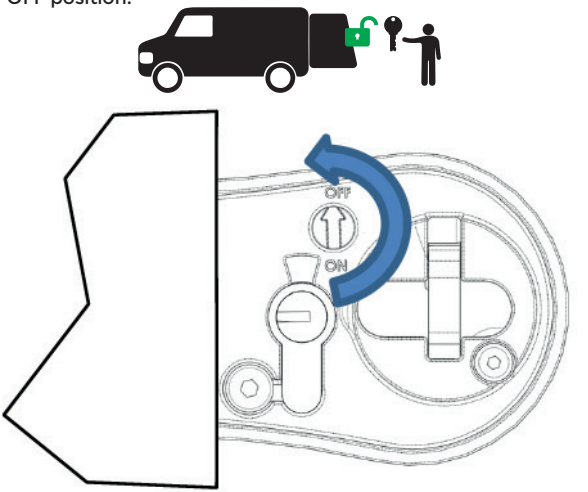
- Close the door
- **The lock will close automatically**

NON-AUTOMATIC mode
Padlock OFF operation

OPENING DOOR

- Insert the key into the padlock and rotate clockwise (at the end of the rotation the key cannot be removed)
- Open the door after opening the standard lock
- Return the padlock key to its initial configuration and extract the key

• Access the inside of the lock and rotate the locking cam to the OFF position.



DOOR CLOSING

• Close the door
• **The padlock will NOT close automatically** when the door is closed and will therefore remain open.
• To close the padlock it is necessary to reopen the door and rotate the locking cam to the ON position.

FEATURES

CENTRAL BODY IN MULTI-CAST STEEL

The padlock, made up of two parts, is supported and reinforced by a central body which is not accessible and visible from the outside and is made of steel using a micro-casting process. It houses the main sealing components of the entire padlock inside and is rigidly fixed to the edge of the tailgate, the most robust and resistant part of the door.

Furthermore, thanks to the sturdy hook and the 8mm thick locking cam, the device is able to resist attacks from burglary tools such as hammers and levers (crowbars) for a long time. Each sealing member is difficult to access and therefore unassailable.
In particular, the cam and the pin that blocks its rotation are completely integrated into the central body and the armor.
In any case, to maximize the effectiveness of the padlock, it is always advisable that the vehicle's standard lock is functional and activated; in this way the seal is maximized thanks to the joint action of the two hooks (the standard one of the vehicle and the one of the padlock).

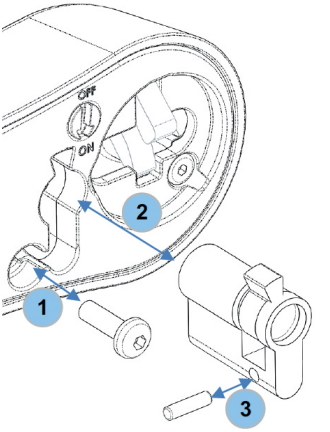
EXTERNAL ARMOR IN DIE-CAST ZAMAK AND PROTECTIVE COATING

The armor has a connected and elongated shape and protects the main body of the padlock. Made of die-cast zamak, it has excellent mechanical resistance properties and natural corrosion protection. The elongated shape also provides good resistance to forcing, limiting the bending of the door sheet metal and allows for simple and functional fixing.

INTERCHANGEABLE EUROPEAN HALF-CYLINDER

The padlock is operated by a European semi-cylinder whose security level can be calibrated according to the level requested by the customer. The simple commercial availability and functional fixing allows rapid replacement if necessary. In fact, with the padlock open, it is sufficient to unscrew the fixing screw and extract the entire cylinder for replacement/repair.
Please note that European cylinders can be supplied in versions with the same key (KA) and master key (MK) in case of specific customer request.

CYLINDER CHANGE



Replacing the cylinder is very simple and does not require dismantling the padlock from the tailgate. It is only possible WITH THE
DOOR OPEN and KEY REMOVED. Simply remove the button head screw located under the base of the padlock (1) and push the halfcylinder outwards (2) (pay attention to the defender located at the head of the cylinder, avoiding taking it out of its seat). Once the cylinder has been removed, reuse the fixing screw (3) by passing it from the old to the new cylinder and insert the new cylinder into the appropriate seat, realigning the cam and the defender (in case of misalignment of the defender, use a screwdriver to reposition it in its seat). Tighten the fixing screw again.

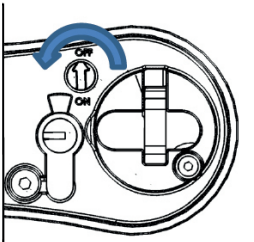
CLOSING AUTOMATIC

Closing the padlock occurs very simply by closing the vehicle door without having to use the key. The opening procedure in fact involves inserting the key, rotating it approximately 90° and opening the door. After which the key can remain inserted in the padlock with the door open or be removed by returning it to zero without the padlock closing. Closing the door, the padlock activates automatically

OPENING LOCK (PADLOCK ALWAYS OPEN))

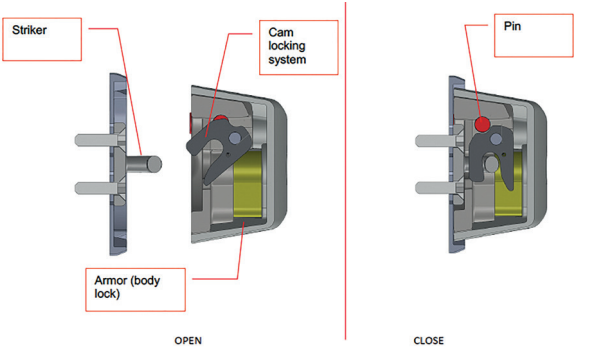
For use needs other than the standard (for example when the load compartment is unloaded or when operating in low-risk areas) it is possible to make the padlock inactive.

In particular, it is possible to block the padlock when opening, leaving it always open by acting on the specific locking cam present on the internal part of the padlock. With the door open and the padlock open, simply turn the cam to the off position with the tip of the key or a screwdriver, and the padlock will always remain open



ROTARY ATTACHMENT SYSTEM

The padlock is attached to its striker on the fixed door using a hook that rotates around the ring striker and remains blocked by the spring latch. Rotary closures are the most suitable and safe in the automotive sector since they avoid impacts on sheet metal and stress during travel. Furthermore, since the latch is internal and hidden, it makes it impossible to tamper with it from the outside using lock picks or burglary tools.
Specifically, the padlock uses a particular C-shaped cam as a locking element which envelops the hook applied to the fixed part of the door during the closing phase. This aspect has several advantages..



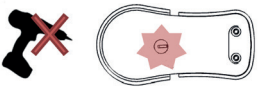
Firstly, when the padlock closes, the armour-cam-hook coupling generates a single body capable of more effectively resisting attacks from the most varied burglary tools (hammer, chisel, crowbar, screwdriver, pliers). In particular, the hook inserts and disappears completely into the armor and is firmly joined to it thanks to the cam.

Secondly, this type of coupling between the locking member and the striker guarantees considerable play which benefits the particularly critical operating conditions of vehicle doors. In this

way it is possible to ensure the correct functioning of the padlock even on doors that are not new or in any case not perfectly aligned.
Finally, the coupling of the cam to the stop occurs very delicately thanks to the well-connected profile of the cam itself and, as there are no thrust springs or sliding couplings, the friction involved in the closing phase is very reduced. This means that the striker (hook) is under little stress when closing the padlock and therefore also the sheet metal of the door (often very thin), on which the striker rests, is minimally stressed, thus avoiding potential deformations or damage to the tailgate

ANTI-DRILL DEFENDER

To protect the cylinder, a rotary defender is provided which, in the event of drilling with a drill, rotates freely, preventing the tip from easily piercing the cylinder barrel

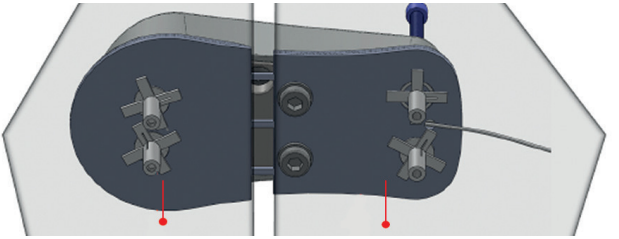


INTERNAL TAMPER PROTECTION (NOT VISIBLE)

Steel and zamak protections are provided inside the padlock to prevent access from the outside following perforation or damage to the external armor of the padlock. Suitably positioned to protect the latch and cams, these elements prevent the action of specific equipment for manipulation and break-in. It consists of a steel sphere, a steel plate and a protective and reinforcing rib, appropriately sized and positioned to prevent manipulation

FIXING

The padlock is applied directly to the tailgate and in order to anchor it it is necessary to drill holes through the sheet metal, as shown below. The same device can be applied both on the rear door and on the right rather than left side door. **The device remains fixed on the tailgate and therefore it is not necessary to store it when it is open.**



Stricker (Hook) **Armor (Lock Body)**

Stricker (Hook)

The fixing of the hook (strike) is obtained through two M6 Bolts, screwed onto plus nuts (special tubular rivets with high locking action) applied directly to the sheet metal of the tailgate.

Armor (Lock Body

The padlock is applied to the door that opens and fixed along the edge of the door using two M8 Bolts screwed directly onto the armor and two M6 bolts screwed onto two plus nuts (special tubular rivets with a high locking action).

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FITTING KIT COMPONENTS:

1. 1 x complete lock with emergency cable (2mm steel cable);
2. 1 x stricker;
3. 2 x keys + warranty card;
4. 2 x m8 bolts with lower cylindrical head;
5. 2 x m6 pins with lower cylindrical head;
6. 2 x m6 bolts with lower head;
7. 4 x plus nut (tubular rivet m6);
8. 1 x plastic spacer for striker & lock body;
9. 1 x emergency opening kit (sheath and cable clip);
10. 1 x plastic cover for studs position;
11. 1 x drilling template and instructions.

GENERIC INSTALLATION

The installation sequence involves some simple operations which vary from vehicle to vehicle only in some details.
In particular, the positioning height of the armor is specific to the vehicle.
Follow the procedure illustrated below.

First check the correct alignment of the doors. If the edges of the doors are not perfectly aligned (fig.1,fig3), adjust them using the striker/hook (fig.2) and/or the hinges. In the case of expired doors, replace the hinges or reinforce them if necessary

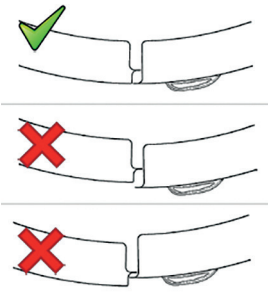

Fig. 1

Fig. 2

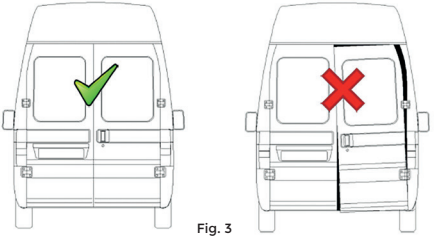

Fig. 3

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Evaluate one or more possible padlock positions. 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 tailgate** (see fig.4).

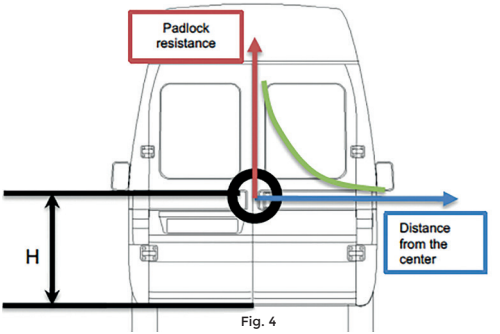

Fig. 4

The position of the M8 pins is approximately 10 ± 2 mm from the vertical edge of the opening door (see fig.5). This is a very durable 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.

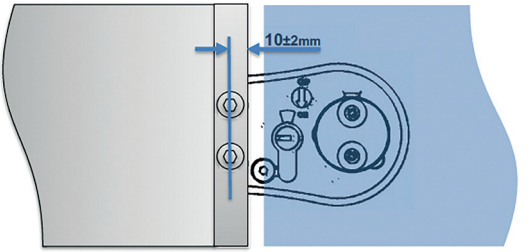

Fig. 5

The position of the striker and the armor must guarantee the correct positioning of the tubular rivets. The possibility of bending/milling sheets that interfere with the inside of the door box is not excluded;
Avoid ribs and particular bends in the external sheet metal of the tailgate, applying the armor on a suitably flat and regular surface.

The final position is also subject to the type of fixing you intend to perform (with plusnuts or internal counterplates). Therefore the aforementioned 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 comply with the specifications, such as in the case of special fittings, models with a different manufacturing period or impediments of another nature, it will be necessary to **evaluate and agree on alternative solutions**.

The padlock is fixed mainly from the outside of the tailgate sheet metal. It is not necessary to remove the internal panels (possibly only for the passage of the emergency opening cable) nor to dismantle the vehicle lock to access the internal surface of the tailgate sheet metal. 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 sheet metal).

Fixing with tubular rivets allows MINIMUM adjustments to the armor and striker. Therefore, holes that are not well centered cannot be compensated for (plusnuts require precise holes and, once fixed, cannot be moved).
Furthermore, the fixing with plusnut is irreversible (i.e. it is not possible to switch from a quick fixing to a high-strength fixing with counterplates) if the chosen position is in correspondence with the upper half of the tailgate, normally 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 box with a hole cutter or a jigsaw, creating adequate access for the passage of the counterplate.

Fixing takes place with (fig. page 41):

- 2 M8 Bolts on the armor through the tailgate lip ;
- 2 M6 Bolts with anti-burglary heads and 2 PlusNuts
- 2 M6 pins to fix the hook/strike to screw onto the PlusNut.

Then proceed in detail as indicated below.

Position the drilling template or plastic base on the tailgate (fig. 6), using the axes indicated below as general reference points.

BEFORE DRILLING, CAREFULLY CHECK THAT THERE ARE NO OBSTACLES AND/OR INTERNAL INTERFERENCES AND THE INSERTION OF THE PLUS NUT INSERTS IS GUARANTEED.

To execute:
- 4 holes of 9mm diameter for fixing the armor
- 2 9mm diameter holes for fixing the striker
- 1 hole with a diameter of 6mm for the passage of the emergency release cable

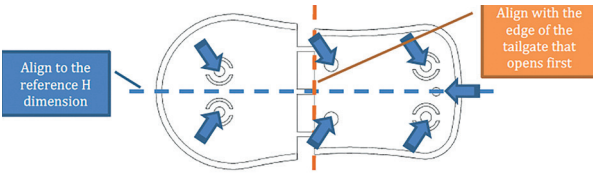

Fig. 6

To position the paper template (or the base/template), we recommend drawing a horizontal line with a marker at the defined height H and aligning the template by matching the center axis with the line just drawn and the vertical edge of the tailgate (opening side) with the vertical line drawn on the template (otherwise draw a line approximately 10 mm from the edge and align it with the center of the first two 9mm holes) (fig.7).

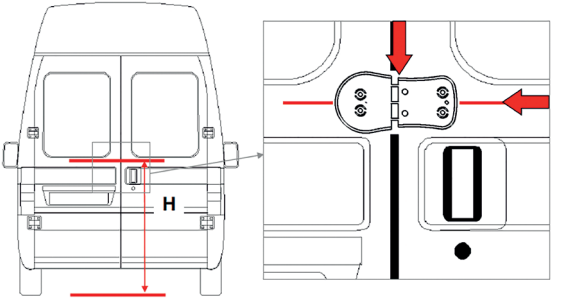

Fig. 7

To define the location, we suggest downloading the specific installation instructions for each van model.

Frame the following QR Code with your smartphone, select the link and open the file containing all the illustrations and suggestions for assembly.

At this point mark with a pin the center of the points on which to make the holes in such a way as to have a well centered drilling.

Before drilling, remove or move the standard lock and/or handle of the vehicle **that may interfere with the holes** in order to avoid damage to internal components and to facilitate the subsequent padlock assembly phase.

The fastening of the armor normally involves holes on the extreme edge of the door using the two M8 pins with button heads. Before drilling, check that the head of the M8 pin is contained in the edge (see fig.5).
In the event that the sheet metal in correspondence with the holes is not perfectly flat and therefore does not allow a flat accommodation of the head of the M8 pins, it is advisable to crush the same sheet metal with pliers and a plastic dowel (to avoid bending or damaging the external sheet metal).

Then cover the edges of the holes with protective paint.

The fixing takes place using special steel inserts (see below) which are applied directly to the sheet metal of the tailgate in correspondence with the fixing holes (two for the hook and two for the lock body - see page 9). 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 which will form four petals under the effect of traction, creating a large support surface on the side opposite to the introduction of the screw (see page 9).

Apply PlusNuts.

For the application it is necessary to use the specific tool (manual - see in the photo, pneumatic or electric) to avoid damaging the sheet metal (See Fig.8).
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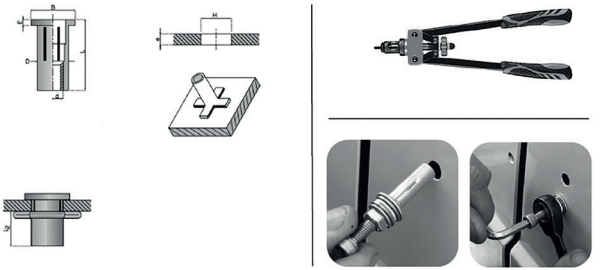

Fig. 8

To apply the plastic base, proceed with the removal of the diameter restrictions to house the head of the tubular rivet and cut the three joining tabs of the two half-parts (strike side - armor side as shown in fig.9).

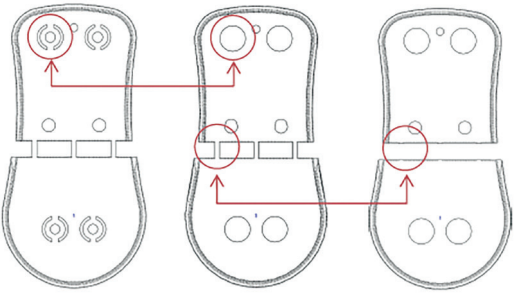

Fig. 9

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Place the plastic spacer between the sheet metal and the striker (as indicated in detail in fig.16).
Fasten the striker/closing hook using the two M6 countersunk head screws.

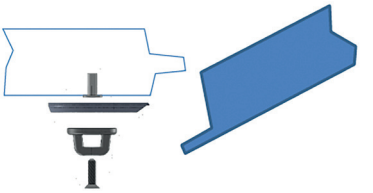

Fig. 10

For greater strength when unscrewing, we recommend applying threadlocker to the pins or alternatively slightly denting the pin thread.

In the same way, fix the armor using the 2 M8 cylindrical head 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.11). Place the appropriate plastic spacer to protect the sheet metal.

⚠ **Do not permanently tighten the M8 pins and anti-burglary pins;** in fact, it will then be necessary to center the armor.
At the same time insert the emergency opening cable which must be inserted into the appropriate hole and must enter the tailgate reaching the inside of the vehicle.

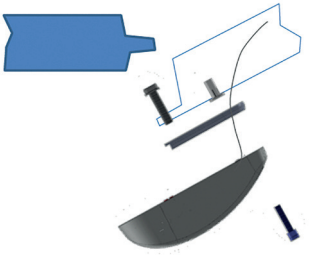

Fig. 11

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

To compensate for any misalignments or particular curvatures of the doors, one or more washers can be applied as spacers under the armor in correspondence with the holes for the M6 pins. In this way the padlock will curve on itself and allow the striker to align correctly with its seat on the armor.

Carry out a few closings of the tailgate to check the correct alignment of the striker. **If necessary, align the armor using a rubber mallet**. Having already definitively fixed only the abutment, the armor can make small movements in order to perfectly align the two parts.t
This operation must be carried out with the padlock open (therefore with the key inserted and rotated 180°)

Check that the cam is open before closing the door (the cam would hit violently against the striker) (fig.12).
If it is then closed, the padlock could be closed or the cam return spring could be damaged.

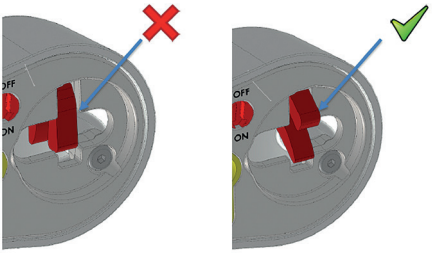

Fig. 12

Finally, check the free rotation of the key: **opening must take place without forcing the key.**

Finally, definitively tighten the armor pins.

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Once you have verified the correct functioning of the padlock, tighten all the pins and proceed as indicated below for the two M6 pins securing the armour.
If you have M6 anti-burglary pins, fracture the head

If you have tamper-proof M6 penises, use the specific wrench to tighten.
If you have standard M6 pins, after tightening wear out the seat of the hexagonal key with a drill bit of the appropriate size to prevent unscrewing

Apply custom adhesive resin if supplied to the armor to seal the cavity on the armor (fig.13).

Fig. 13

Lay out the emergency cable by positioning it in an appropriate location (it is preferable to apply it externally to the paneling, thus avoiding holes and giving the possibility of dismantling the panels without having to dismantle the emergency opening) and using the red tube and the supplied cable holder to create an eyelet for gripping (fig. 14).
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CARRY OUT THE OPERATION WITH THE PADLOCK CLOSED AND THE KEY REMOVED. During opening, the cable slides along the length of the locking pin (about 12mm) and therefore also the terminal which must be free to slide.

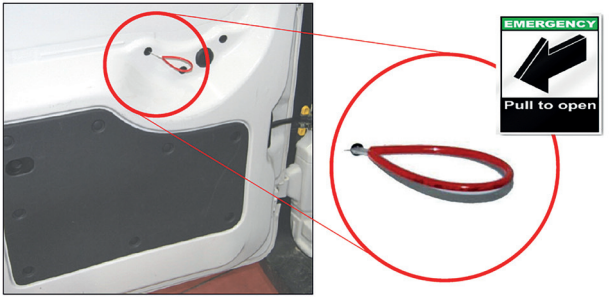

Fig. 14

Some suggestions:

- There is no standard position for applying the emergency eyelet. This means that each installer can apply the emergency where he deems most appropriate: above, below the padlock, across the panel, near the handle.
- The cable which is folded almost 90° at the exit from the padlock and comes out near the box (tailgate post) is naturally more protected.
- The lower half of the tailgate (where the padlock must normally be positioned) has several original structural reinforcements inside (other additional ones could be applied) which can prevent access to the cable from the outside.
- If the cable cannot be positioned elsewhere, the possibility of protecting the handle with any barrier (plastic or metal) cannot be ruled out in such a way as to prevent it from being gripped from above but always guarantee access from the inside.
- The emergency cable is designed to unlock the padlock in the event of the operator accidentally locking himself in the cargo area. Uses other than this specified compromises its functionality and durability. In case of use of the emergency cable, a visual check of the cable is required to assess its integrity. Any signs of wear must be reported promptly for immediate replacement.

SIDE SLIDING 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.
Check in particular that the striker does not interfere with the tailgate as it slides open (fig.15).

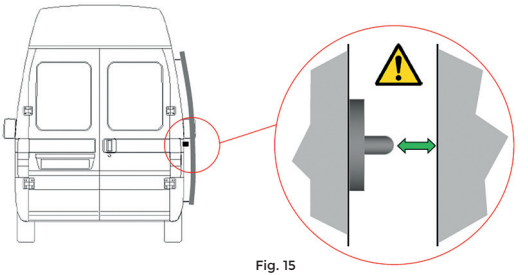

Fig. 15

Position the drilling template with the longitudinal axis parallel to the sliding guide and the vertical axis aligned with the edge of the tailgate. If this position generates interference, it is possible to move the template a few millimeters to the right or left with respect to the vertical axis.

Do not tilt the padlock beyond parallel to the sliding axis of the door (see fig16).

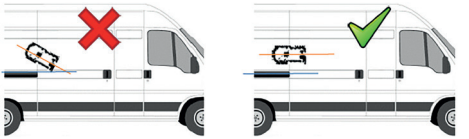

Fig. 16

INSTALLATION PRECAUTIONS AND INDICATIONS FOR CORRECT USE

- Drill holes of the size indicated in the work instructions;
- Always check the striker/armor alignment vertically and horizontally..
- Check the free movement of the locking piston that activates the cam using the emergency cable;

- During and after installation, never leave the padlock keys inside the load compartment;
- Lubricate the cylinder every six months (depending on the intensity of use, more often) using a water-repellent, anti-corrosive, lubricant, detergent, unblocking spray (e.g. WD40) that does not contain additives that can attract dust or dirt. Do not use corrosive unlocking sprays..
- Grease the striker and the cam;
- When washing the vehicle, avoid jets of water directly at the cylinder;
- Correct use of the padlock, which avoids useless and wearing operation, requires that the padlock be opened before opening the tailgate handle

MAINTENANCE AND CARE

Periodically check that the safety components are correctly assembled and check their wear. If necessary, retighten the fixing bolts and replace the defective components.

At periodic intervals (at least once every three months), check the functioning and ease of handling of the lock with the key.

Grease, at least once a year (depending on the intensity of use, more often), all the moving components and all the sliding surfaces with technical Vaseline and check the functioning.

Lubricate the cylinder every six months (depending on the intensity of use, more often) using a water-repellent, anti-corrosive, lubricant, detergent, unlocking spray that does not contain additives that can attract dust or dirt (e.g. WD40 or specific for locks) and that it is not corrosive.

To avoid compromising the anti-corrosion protection of the components, only use neutral cleaning products and detergents, free of abrasives.

WARRANTY CONDITIONS

Bawer S.p.A. subjects all its products to strict quality tests and in any case if, despite the checks, the load compartment lock presents malfunctions, we recommend that you contact us immediately.

DURATION AND CONTENTS

Bawer S.p.A. guarantees, according to the methods indicated below, the good functioning of the load compartment lock and that it is free from defects and construction defects.
If the load compartment lock is found to be defective during the warranty period, Bawer S.p.A., at its sole discretion, will repair or replace the load compartment lock or a part of it.
The replacement of defective parts or their repair will take place ex works Bawer S.p.A. and, therefore, the shipping or transport costs of the cargo compartment lock are borne by the Customer, just as, in any case, the costs of any requests for inspections by authorized resellers are borne by the Customer

himself. and/or technicians from Bawer S.p.A.
Any delays in returning the vehicle to working order do not give the Customer any right to compensation for any damage, nor does it involve any extension of the duration of the guarantee.
Requests for intervention under warranty are taken into consideration only if communicated to Bawer S.p.A. within eight days of discovery of the alleged defect.
This guarantee is the only one provided by Bawer S.p.A., therefore any other guarantee is excluded.
For components not built by Bawer S.p.A., only the guarantees recognized by third-party manufacturers apply.

WHAT IS GUARANTEED
Bawer S.p.A. guarantees that all the parts that make up the load compartment lock, made and assembled at the production plant, are free from manufacturing or material defects, if used correctly.
The guarantee will be recognized for a period of **24 (twenty-four) months** from the purchase date shown on the receipt or purchase invoice.
WHAT IS NOT GUARANTEED
The warranty does not cover:
Interventions for which it is impossible to establish the date of purchase of the load compartment lock.
Any defect due to damage resulting from improper use and non-compliance with the technical instructions given, accident, theft, attempted theft, fire;
Since the guarantee consists exclusively of interventions of a technical nature, compensation for damages of a pecuniary nature for any reason which may be due are excluded from it. To this end, it is specified, by way of example and not exhaustively, that damages resulting from the technical downtime of the vehicle, incidental and consequential damages such as failure to use, even temporarily, the vehicle, inconveniences or losses of a commercial nature will not be compensated.
Periodic checks, maintenance, repairs or replacement of parts due to normal deterioration.
No liability can be borne by Bawer S.p.A. for damage to people or things resulting from improper use of the load compartment lock or resulting from malfunctions.
DECAY

EN

The right to guarantee good functioning is forfeited:
if the padlock is damaged due to incorrect installation;
if the padlock has been used for purposes and uses other than those for which it is intended and for which it was designed and built;
if the defects complained of depend on accidents, carelessness and negligence;
if the loadspace lock has been modified or repaired by an unauthorized third party;

WHAT THE CUSTOMER MUST DO

Report faults, defects or malfunctions, within the time limits mentioned above, to the retailer from whom the padlock was purchased, or by contacting Block Shaft Srl Unip directly.
In order to take advantage of the guarantee, the Customer must take care of:
use the padlock correctly;
keep the documents relating to the purchase (invoice or tax receipt and this brochure), which are necessary to obtain warranty interventions at a workshop authorized by Bawer S.p.A.;

The competent court for any disputes regarding the interpretation and execution of this guarantee is solely that of Bari.

BAWER

ARMO

VANLOCK

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