TS S.r.l.

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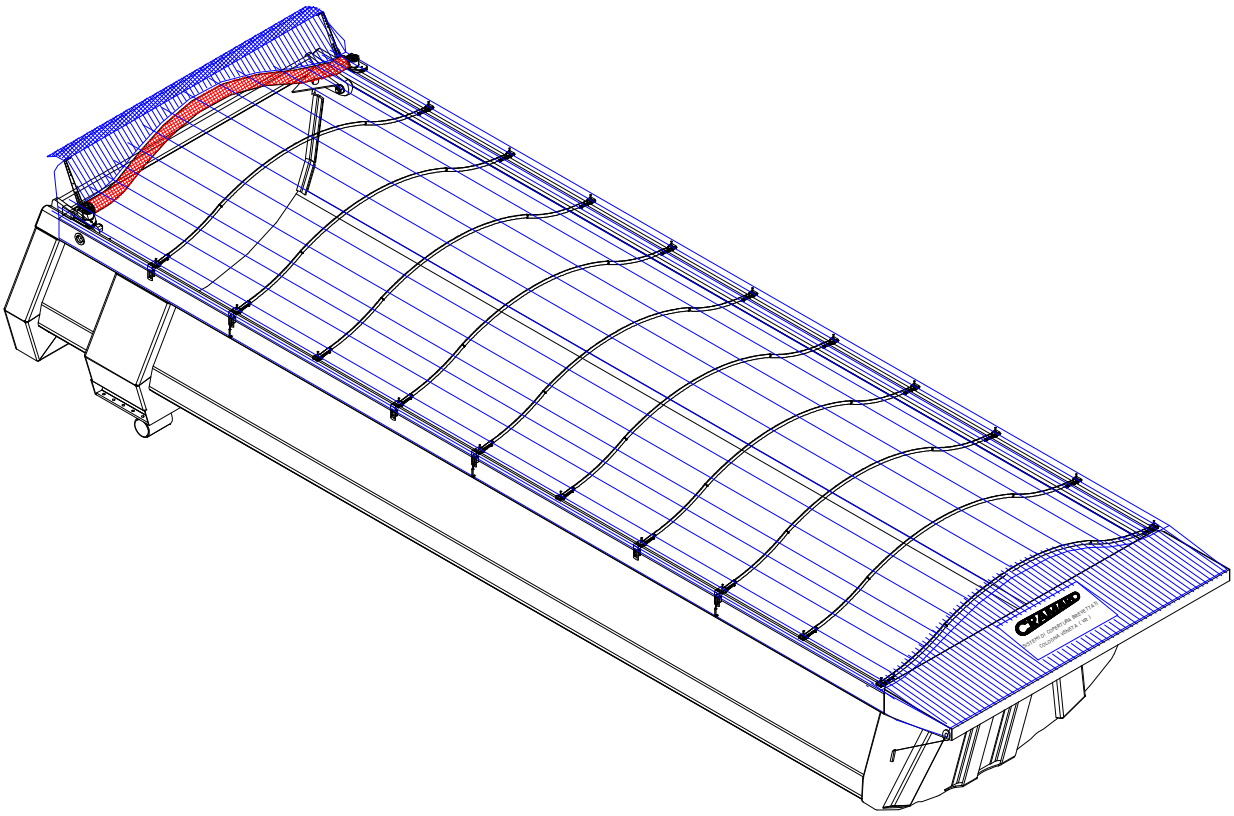
" GALOPPINO "



TECHNICAL SPECIFICATIONS FOR UTILISATATION and ASSEMBLY FOR HANDLING SYSTEM WITH DRIVIING ARC

CERTIFICATION

The abovementioned plant conforms to the "Machine" **2006/42 EC** Directive, as amended, as well as Directive **2006/28** relating to the electro-magnetic compatibility (for its variation to electrical handling) and is subject to EC branding.

STRUCTURE OF THE MANUAL

The customer should read the information shown in this manual very carefully, as the correct utilisation and maintenance constitute the basis of the Customer - Manufacturer relationship.
CRAMARO ITALI S.r.l. shall not consider itself responsible for snags, breakages or accidents due to a lack of compliance or non-application of the indications contained in this manual.

PURPOSE AND CONTENT

The purpose of this manual is to provide the necessary information to the Customer in order that, other than appropriate utilisation of the plant, they are able to operate it in the most autonomous and safe manner possible. The manual includes inherent information, such as the technical aspect, maintenance, spare parts and safety.

	Before conducting any operation on the machine, the operators and Qualified Personnel must read the instructions contained in this manual carefully.

In the case of doubts about the correct interpretation of the instructions, kindly call your nearest assistance centre to obtain the necessary clarifications.

Any operative methodology of the plant not included in this instruction manual is to be considered as incorrect or improper.

RECIPIENTS

The abovementioned manual is directed at: the Operator and Qualified Personnel appointed to maintain the plant.
It is specified that ***"OPERATOR"*** means the personnel assigned to make the plant function and carry out the ongoing maintenance.
"QUALIFIED PERSONNEL *or* ***QUALIFIED OPERATOR"*** means those persons who have attended specialisation and training courses, etc., and have experience in connection with the installation, commissioning, maintenance and repairs of the plant.

CONSERVATION

This instruction booklet and all the publications attached thereto must be kept in an accessible place, known to all the operators and personnel authorised for maintenance.

ASSISTANCE CENTRES

The Customer is kindly requested to refer directly to the manufacturer for any needs relating to the use of the plant, maintenance or to request spare parts, specifying the identifying data of the machine.

CRAMARO TS S.r.l.
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DESCRIPTION OF THE PRODUCT

Officially created in 2007, the **GALOPPINO** handling system does not set out to be a **substitute** but rather as an **ALTERNATIVE** to the innumerable variants of the well-known CABRIOLE' tarpaulin.

The new **CRAMARO** tarpaulin, called "**GALOPPINO**", groups together the best characteristics of the well-known CABRIOLE' tarpaulin from which it inherits both the supporting structure of the canvas, or rather the SLIDING ARCHS that allow simplicity of assembly and maintenance.

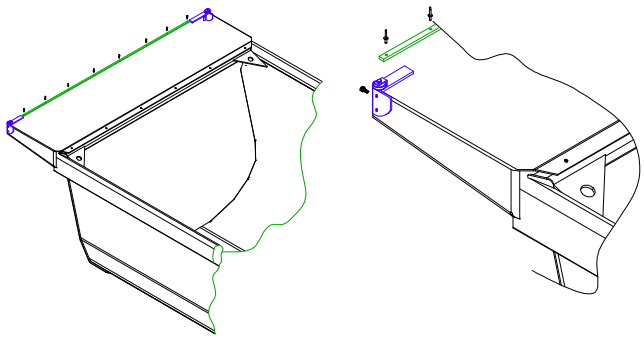
Nevertheless, differing from the CABRIOLE' tarpaulin, it neither has the tarpaulin pulling system, to be fixed in front of the box structure with the consequent bulk problems that are sometimes irresolvable, if not resorting to using complex deviation systems of the pulling cables, and not even the double pulling cables with ring closures, that are classic with a CABRIOLE' tarpaulin.

In fact the last arc of the **GALOPPINO** tarpaulin also incorporates its own motorisation

The great advantages of the **GALOPPINO** tarpaulin are mainly:

- **Easy assembly of the tarpaulin as it does not require laborious transformations of the box on which the tarpaulin must be applied;**
- **Very rapid assembly given the demands of the pieces that make it up;**
- **Very rapid replacement of any pieces damaged during use;**
- **Possibility of removing the tarpaulin completely from the vehicle by only uncoupling the two lateral cables that are anchored to the box by two simple hooks with rear couplings;**
- **No mechanical bulk in the front of the vehicle seeing that the pulling element is integrated in the rear arc of the tarpaulin itself;**
- **extremely adaptable to the various boxes on the market by virtue of the GREAT width adjustability of the various elements that make it up;**
- **Compacted bulk of the tarpaulin, almost equivalent to the other tarpaulins of the same type;**
- **Ease and rapidity of replacement of the main pulling element of the tarpaulin in the event of a fault or damage. (it will be sufficient to keep an assembled arc in stock so as to immediately replace a tarpaulin that is not functioning, meanwhile the non-functioning piece can be serviced at a CRAMARO assistance centre);**
- **Ease and rapidity of replacement of the intermediate elements of the tarpaulin, which usually can be replaced without having to remove the tarpaulin from the vehicle.**

DIAGRAM OF THE FRONT ASSEMBLY



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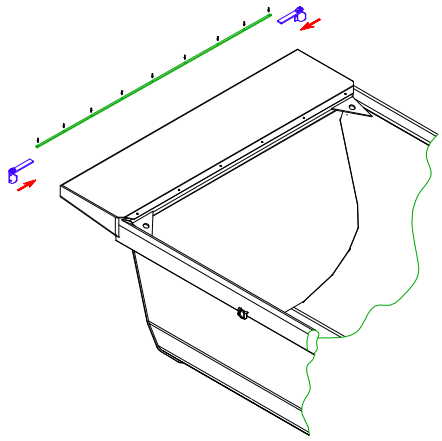
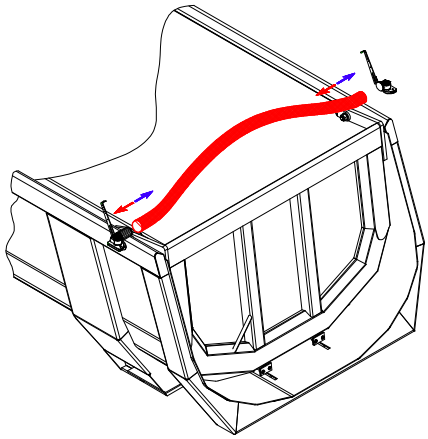
ADJUSTABILITY OF THE CONTROL ELEMENTS OF THE TARPAULIN

FRONT ANCHORAGE ASSEMBLY OF THE CANVAS





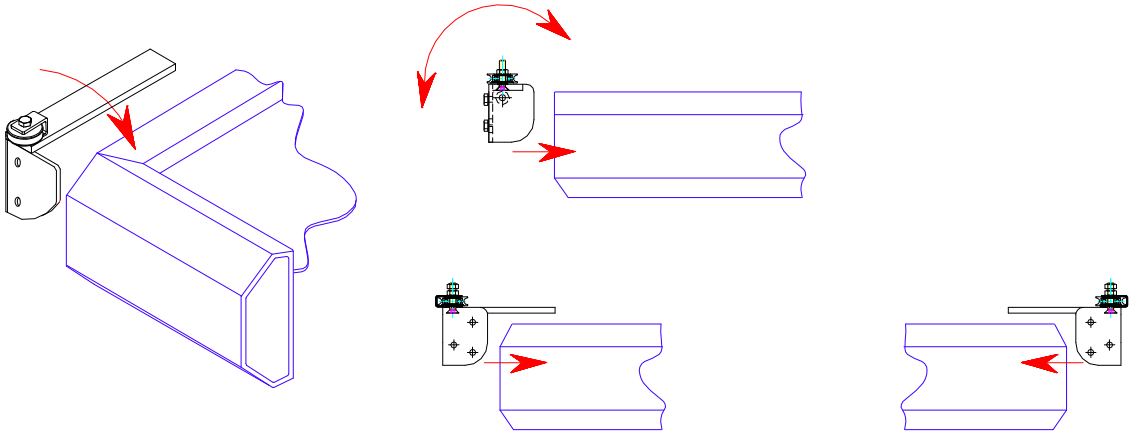
MOTORISED PULLING ARC

INDICATIONS FOR THE ASSEMBLY OF THE SYSTEM

There are few operations to be carried out before application of the system on a common box (which confirms the minimum APPLICABILITY characteristics shown above) but these are essential to ensure that the work is successfully done.

1) Check that the front face of the cab is not sloping or contoured in a manner such as to not permit a flat support and therefore secure mounting of the FRONT RETURN SYSTEM.

N.B. always check before drilling, by placing assembled system close to the point where the hole for the various fixings must be drilled and that there are no electrical wires near the holes or the point of union between the various elements that make up the box.



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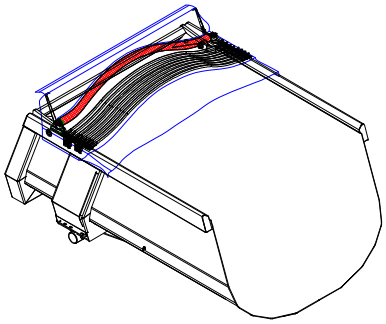
POSITIONING OF THE CANVAS AND ASSEMBLY WITH THE ACCESSORIES

The tarpaulin is normally supplied PRE-ASSEMBLED, or rather with the arcs already inserted in the canvas, electrical connections already incorporated, the power supply cable already inserted in the appropriate pocket within the tarpaulin and with the various lateral anchorage systems already assembled and ready to be fitted on the box.

DIAGRAM OF CANVAS POSITIONING PACKAGED ON THE BOX



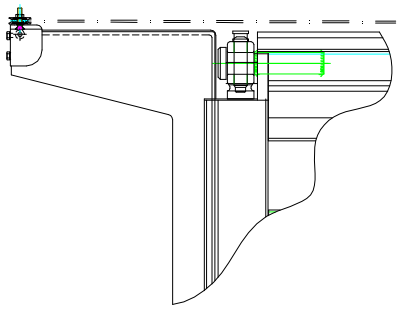
Bind the canvas pack and arcs with a cord at the centre to avoid it coming loose during the subsequent operations.

Turn the canvas pack over and position it on the box placing the FLAP with the springs towards the rear edge.

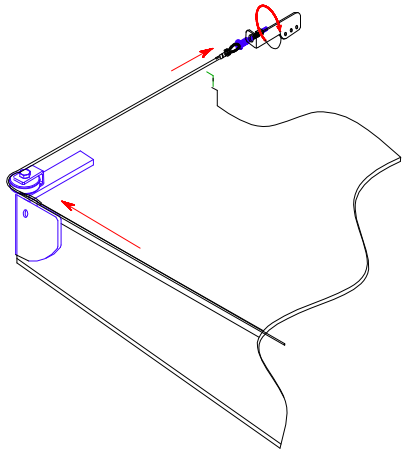
Then proceed with attaching the front return systems and the rear hooking kit.

(see diagrams)

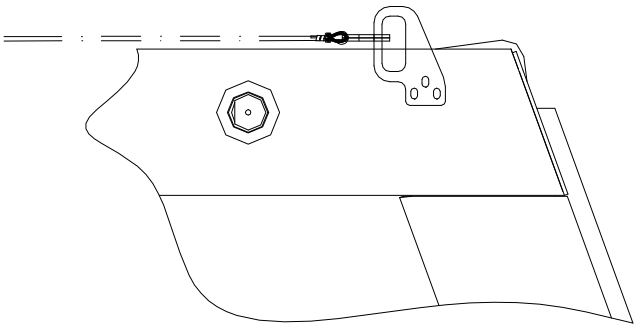
FRONT



TIRANTE



POSTERIORE



TENSION ROD

REAR

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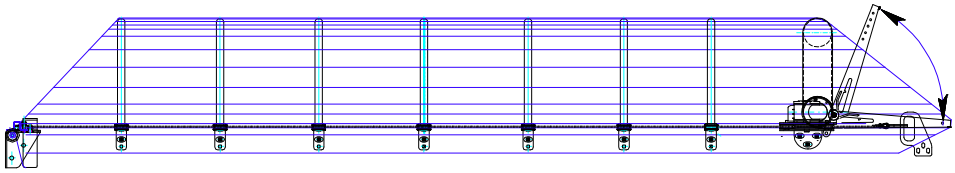
The height of the front cables is automatically determined by the fixed position of the front return pulleys, while in the rear part of the box, the cable supports must be positioned so that the cable remains more or less at the height of the higher wire on the edges.

In this way, when the tarpaulin is completely compacted the cables both remain slightly below the higher profile of the edges, thus becoming less subject to damage during the loading and unloading phases of the vehicle.

After having fixed the cables in the rear hooks unravel the tarpaulin completely by supplying current to the system and taking the motorised arc near to the rear of the box.

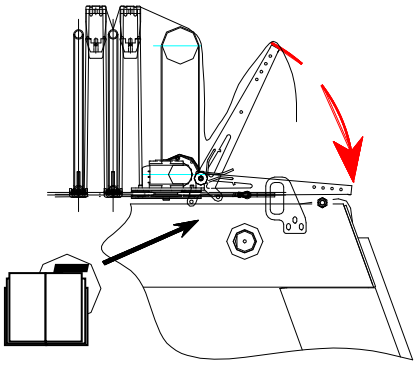


Spread the canvas thus assembled over the box by cautiously activating the (electric) movement until the last arc of the tarpaulin is sent to the rear rebate (**1**) (**2**)

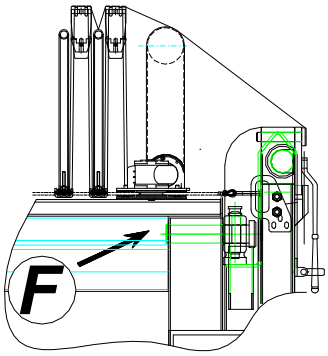
(**1**) Check the rotation of the **FLAP** so that it falls exactly in line with the rear door.

(**2**) If instead the tarpaulin has a "**STANDARD REAR TAIL**" then position the motorised arc in the rearmost position.

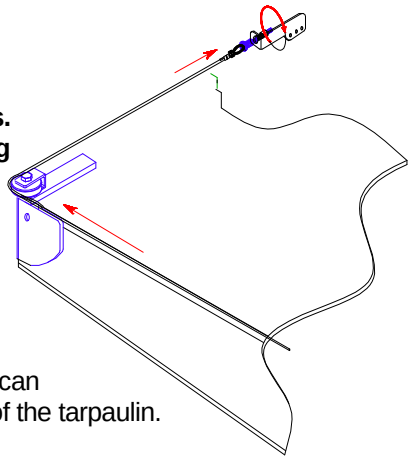
Assembly with FLAP



Assembly without FLAP



TIRANTE



Then tighten the cables by using the system of the front stays.
Check that the tensioning of the lateral cables is equal on both of the cables. The check is conducted operatively by activating the opening and closing movement of the tarpaulin itself; during this first test check that the pulling cables do not slip on the central pulleys of the arc motor and that these move in a uniform manner.

ATTENTION: THE CABLES MUST NOT BE TOO TIGHT AS OTHERWISE MOVEMENT WOULD BE DIFFICULT AND THE CABLES WOULD DETERIORATE QUICKLY.

Once the SLIDING cables of the tarpaulin have been provisionally tightened, one can proceed with the complete assembly of the electrical system and the control unit of the tarpaulin.

TENSION ROD

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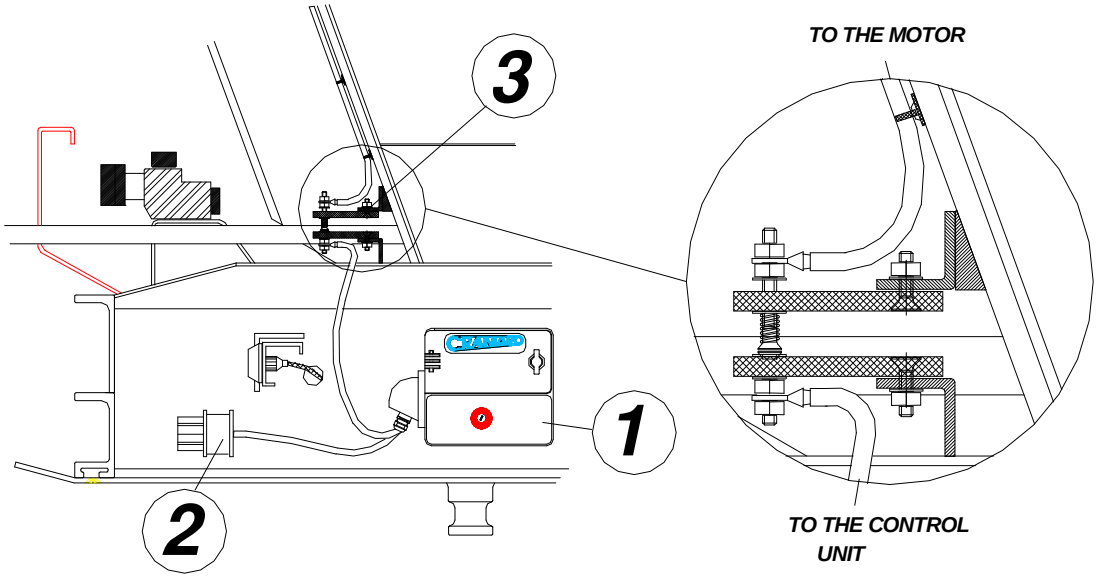
STD. CONTROL UNIT CODE 4WCE4C03031A

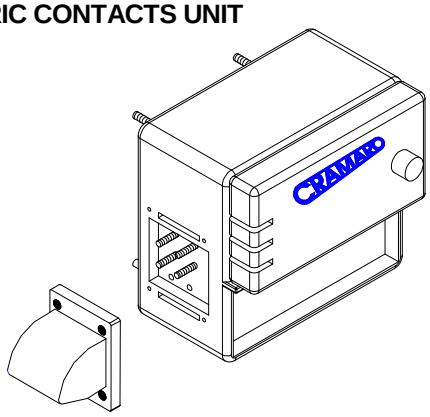
CONNECTION DIAGRAM

TO THE MOTOR



1) CONTROL UNIT
2) BATTERY POWER SUPPLY CONNECTOR

3) ELECTRIC CONTACTS UNIT



CONTROL UNIT ELECTRICAL CONNECTION DIAGRAM

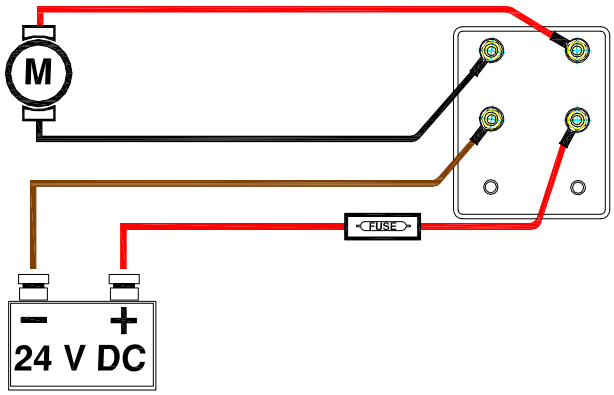
The control unit has 4 connection elements, 2 for the **motor** and 2 for **the battery**. The connection must be carried out with two electric cables, one of which is directed to the tarpaulin's motor, while the other one is to the power supply circuit. Both cables are tightened with cable glands inserted in a plastic boss with a water-repellent gasket.

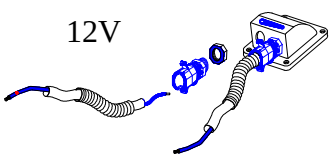
CONNECTION DIAGRAM – CONNECTION:

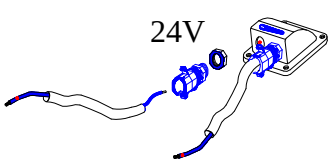
Staple the FASTON cables with eyelet on the cable whose insulation has been removed beforehand.

Insert the FASTON cables as shown in the figure and tighten the nuts.

Attach the plastic boss with the 4 screws supplied and tighten the CABLE-GLANDS.







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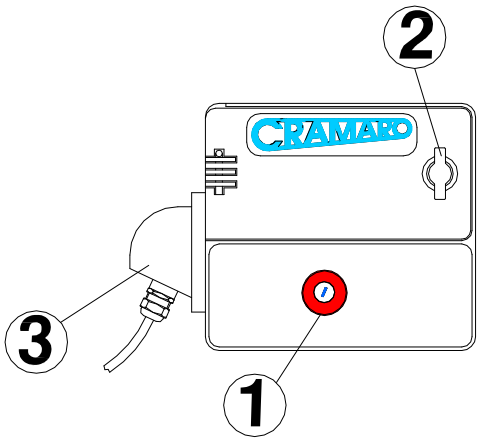
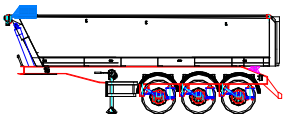
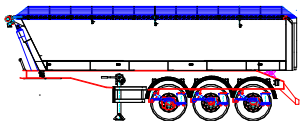
The control unit contains the following:

1 emergency "**MUSHROOM-SHAPED**" button
also used to start the control unit
(**with REMOVABLE keys**)
2 Knob to open the door
that protects the control panel
3 Boss to protect electrical connections

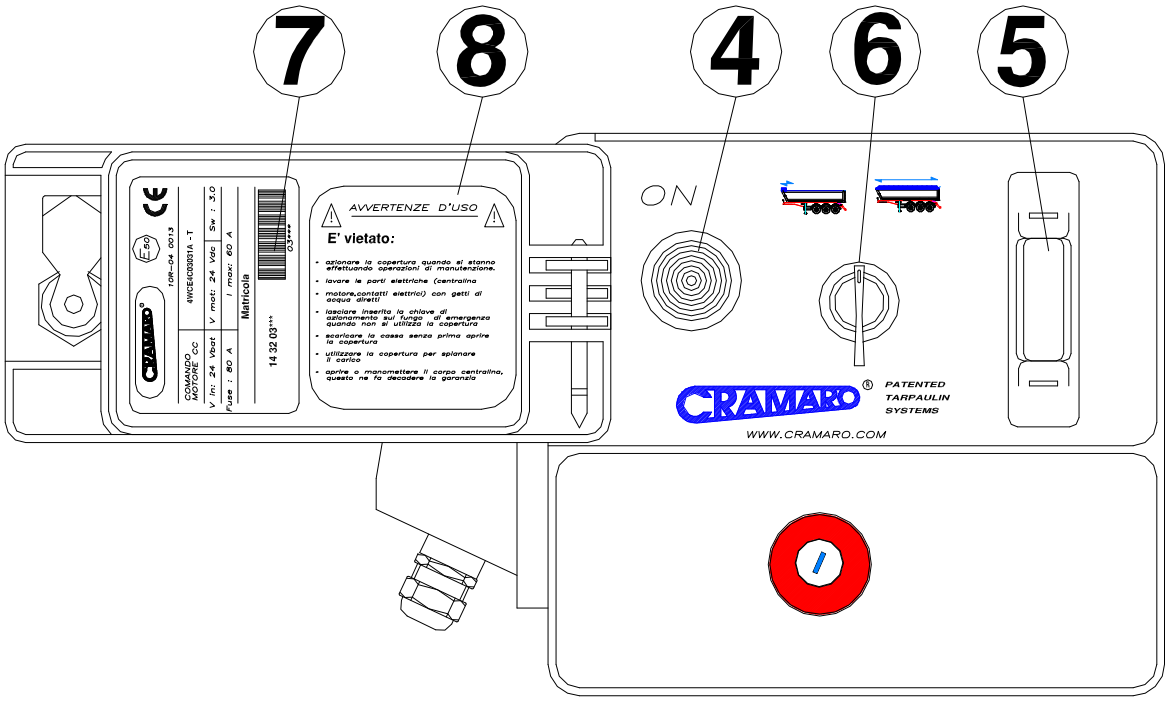


Inside the cover of the control unit, instead, the control panel contains the following :

4 Red warning light, on when the tarpaulin is moving
5 **80 A** fuse
6 Spring-loaded operating switch:

- **OPENING**  - **CLOSING** - 

INTERNAL VIEW OF THE CONTROL PANEL



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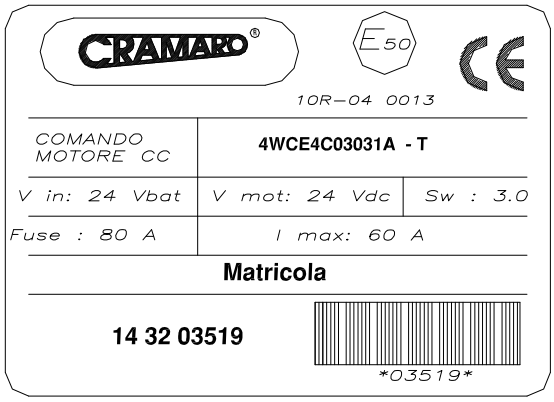
7 Identification plate for the control unit featuring the **SERIAL NUMBER** (to be reported to Customer Service).



⚠ AVVERTENZE D'USO ⚠

E' vietato :

- *azionare la copertura quando si stanno effettuando operazioni di manuntenzione.*
- *lavare le parti elettriche (centralina motore, contatti elettrici) con getti di acqua diretti.*
- *lasciare inserita la chiave di azionamento sul fungo di emergenza quando non si utilizza la copertura.*
- *scaricare la cassa senza prima aprire la copertura.*
- *utilizzare la copertura per spianare il carico.*
- *aprire o manomettere il corpo centralina, questo ne fa decadere la garanzia.*

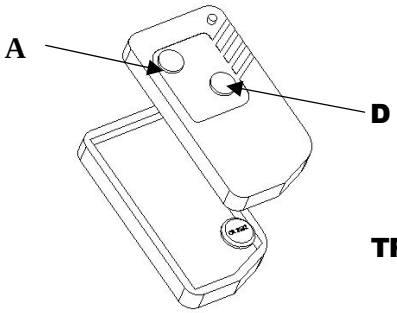
OPERATING WARNINGS
It is forbidden:

- to activate the cover when maintenance is being performed.
- to wash electrical parts (control unit, motor, electrical contacts) with direct jets of water.
- to leave the activation key on the emergency button when the cover is not being used.
- to unload the box without first opening the cover.
- to use the cover to smoothen the load.
- to open or tamper with the control unit body, this renders the warranty null and void.

8 Plate reporting the **WARNINGS.** indicating all of the most important instructions on using the tarpaulin

N.B.

The new control unit code 4WCE4C03031A only works with the new transmitter code 405330211220 .



TRANSMITTER CODE 405330211220

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TEST FUNCTIONS

The test function is useful to verify and diagnose the operation of the control unit and the connection of the wiring during installation, even with the motor disconnected. After having powered the control unit, having implemented the learning process of the remote control and accessed the test function, you can check the operation by selecting the button (or selector) that opens or closes the cover; if the red LED inside the cover is on, the control unit and all the wiring is working correctly.

For the control unit to be made active and operative, it is MANDATORY to switch off and on by pressing the (red) mushroom-shaped emergency button.

The procedure to perform this kind of test is:

1. Press the (red) mushroom-shaped emergency button to switch the device off and wait at least 1 second
2. Release the (red) mushroom-shaped emergency button to switch the device on again
3. Within 3 seconds after start-up, press buttons A and D on the remote control simultaneously until the LED will light up for about 100 ms (wait for about 3 s). This means that the control unit has is entered the **learning mode.**
4. Release **buttons A and D** on the remote control and wait at least 1 second; **within 10 seconds,** in the **control unit learning mode,** activate **the test function.**
5. **Activate the test function as follows**: press and hold the D button on the remote control until the LED will be activated with two consecutive pulses of about 100 ms to indicate that the control unit has successfully performed the function and exited the learning mode
6. **Select the cover opening or closing button (or selector) to verify operation**. If the red LED inside the cover is on, the control unit is running.
7. **Switch the control unit off and on to make it active and operative by pressing the (red) mushroom-shaped emergency button.**

In the **learning mode**, the control unit can only perform **one function at a time. The test function cannot be enabled** unless the remote control code is first saved.

Once you enter the learning mode, the control unit, will wait 10 seconds for a function to be executed (learning-test-deletion). If no action is launched, once the 10 seconds elapse, the LED will be activated with **two consecutive pulses** of about 100 ms and the control unit **will automatically exit the learning mode.** When the control unit exits the learning mode, it is automatically operational.

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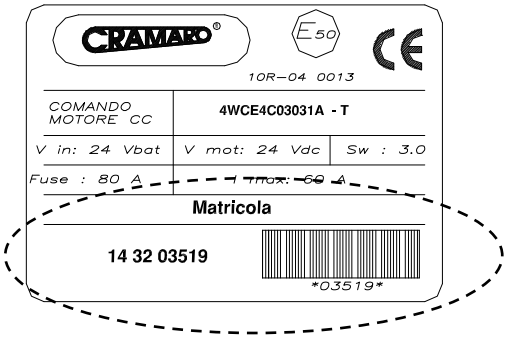
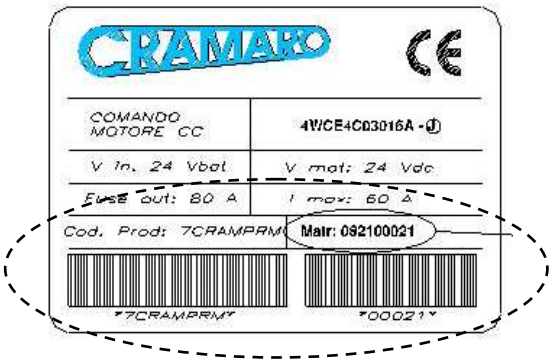
Identify the new control unit CODE 4WCE4C03031A by looking at the label inside the cover. The serial number is written in the lower left part and only a barcode is present compared to the previous version



NEW LABEL



OLD LABEL

The control unit learning procedures are compatible with the 4-button remote control as well as the 2-button remote control.

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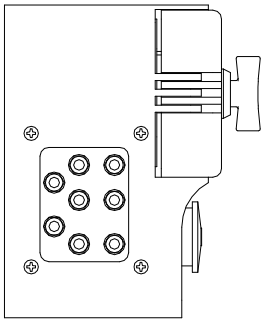
FULL OPTIONAL CONTROL UNIT CODE 4WCE4C03032A

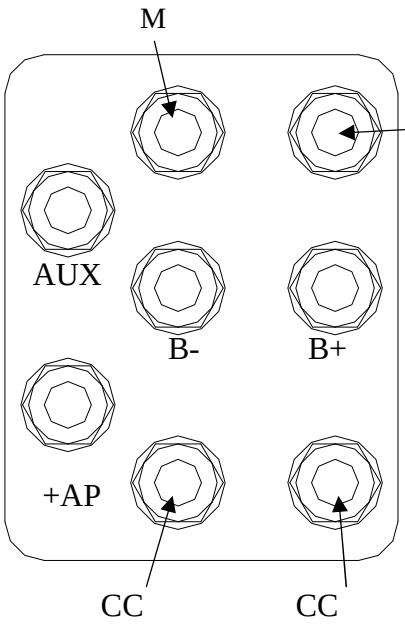
The controller unit called "FULL OPTIONAL" integrates the STD with the following additional commands:

- PARTIAL OPENING (timed)
- CONTROL IN CABIN
- PARTIAL OPENING + CABIN CONTROL
- CONTROL FOR VIBRATOR

The FULL OPTIONAL control unit is only available with the 24V version

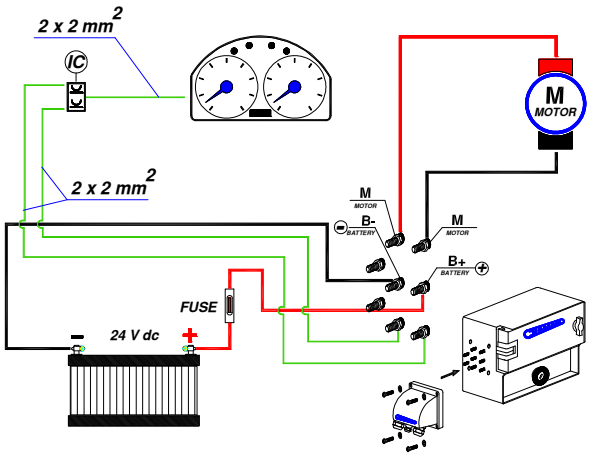
WIRING CONNECTION DIAGRAM





M=motor
B=battery
CC=cabin control
AP=partial opening
AUX=vibrator control

WIRING CONNECTION CONTROL DIAGRAM IN CABIN FOR DRIVING



IC= switch in the cabin, normally open and with the positive connected in power (e.g. on the dashboard)

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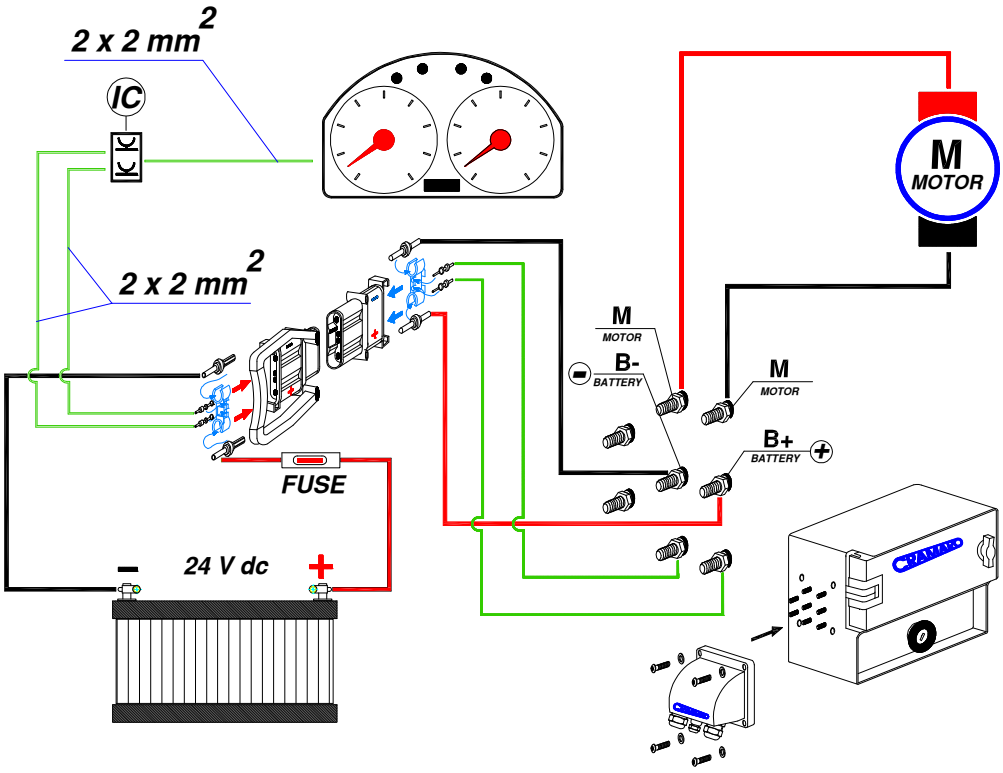
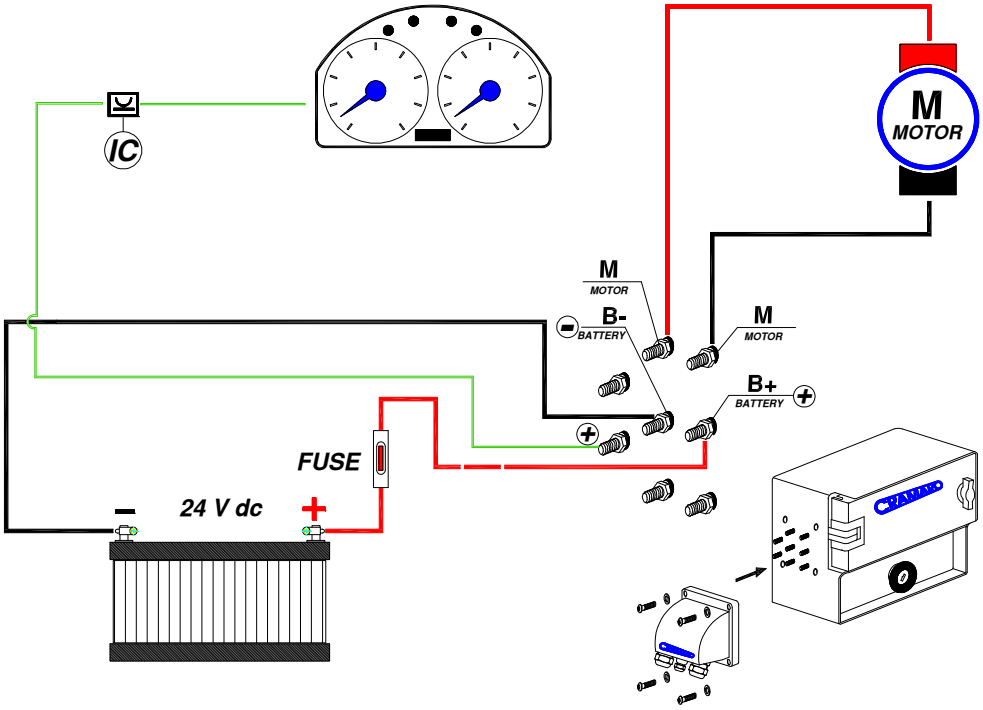
WIRING CONNECTION CONTROL DIAGRAM IN CABIN FOR SEMI-TRAILER



IC= switch in the cabin, normally open and with the positive connected in power (e.g. on the dashboard)

WIRING CONNECTION DIAGRAM FOR PARTIAL OPENING (TIMED 7 s)



IC = command from PTOs with positive connected in power (e.g. on the dashboard)

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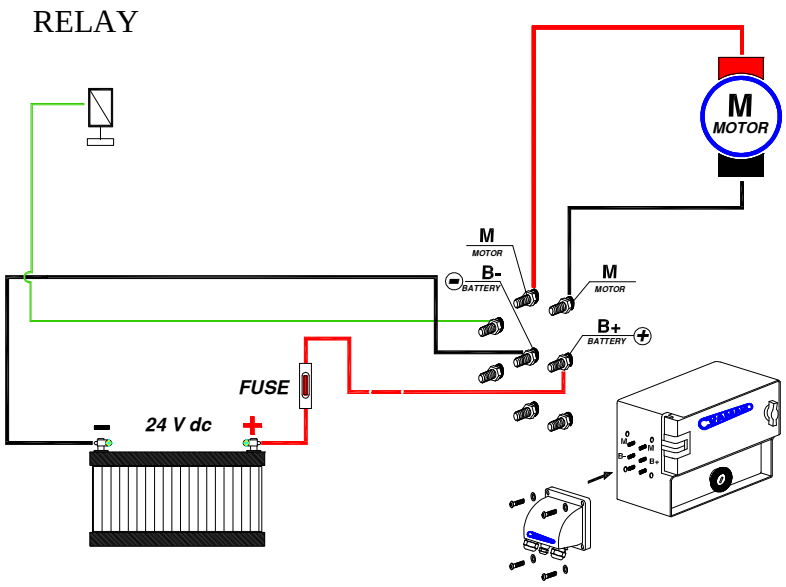
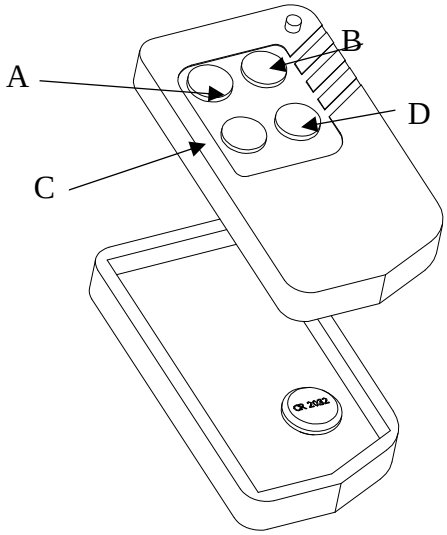
WIRING CONNECTION DIAGRAM FOR VIBRATOR CONTROL



The RELAY to be used to control the vibrator is the E T106A2 model of RAVIOLI

A 4-CHANNEL TRANSMITTER must be used to use the VIBRATOR CONTROL



Button A : cover activation - OPENING function
Button B : cover activation - CLOSING function
Button C : VIBRATOR activation
Button D : cover activation - CLOSING function (same function as button B)

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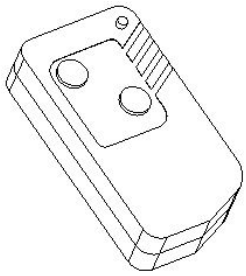
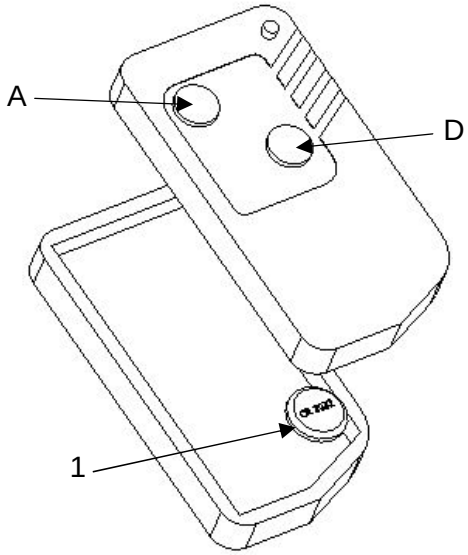
RADIO CONTROL (optional)



The control unit must be configured correctly to be able to use the radio control. Below are the steps to recognise and save one or several radio controls.

Learning how to use the Remote Control

The control unit can **learn,** i.e. **it can recognise and save**, a new remote control. The control unit can **associate up to 5 remote controls**. When an additional remote control is recognised and saved **the oldest one is deleted.**



Button A : cover activation - OPENING function

Button D : cover activation - CLOSING function

1 – battery CR 2032

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Proceed as follows to recognise and save a new remote control:

1. Press the (red) mushroom-shaped emergency button to switch the device off and wait at least 1 second
2. Release the (red) mushroom-shaped emergency button to switch the device on again
3. Within 3 seconds after start-up, press buttons A and D on the remote control simultaneously until the LED will light up for about 100 ms (wait for about 3 s). This means that the control unit has is entered the **learning mode.**
4. Release **buttons A and D** of the remote control and wait at least 1 second; **within 10 seconds,** in the **control unit learning mode,** activate **the save function of the remote control.**
5. **Save the remote control code**: press and hold the A button on the remote control until the LED will be activated with two consecutive pulses of about 100 ms to indicate that the control unit has successfully performed the function and exited the learning mode.

Repeat the steps above to recognise and save a new remote control..

IMPORTANT NOTE : You can only add one remote control at a time.

Deleting from the Control Unit Memory

The control unit's memory, used to recognise the remote controls, can be erased at any time.
Proceed as follows to erase the control unit's memory:

1. Press the (red) mushroom-shaped emergency button to switch the device off and wait at least 1 second
2. Release the (red) mushroom-shaped emergency button to switch the device on again
3. Within 3 seconds after start-up, press buttons A and D on the remote control simultaneously until the LED will light up for about 100 ms (wait for about 3 s). This means that the control unit has is entered the **learning mode.**
4. Release **buttons A and D** of the remote control and wait at least 1 second; **within 10 seconds,** in the **control unit learning mode,** activate **the code delete function.**
5. **Deleting codes from the memory :** press and hold the A and D buttons on the remote control simultaneously until the LED will be activated with two consecutive pulses of about 100 ms to indicate that the control unit has successfully performed the function and exited the learning mode.

Replacing the operating battery

Replace the battery by opening the remote control and removing the fastening screw at the back with a screwdriver. The battery model is CR 2032

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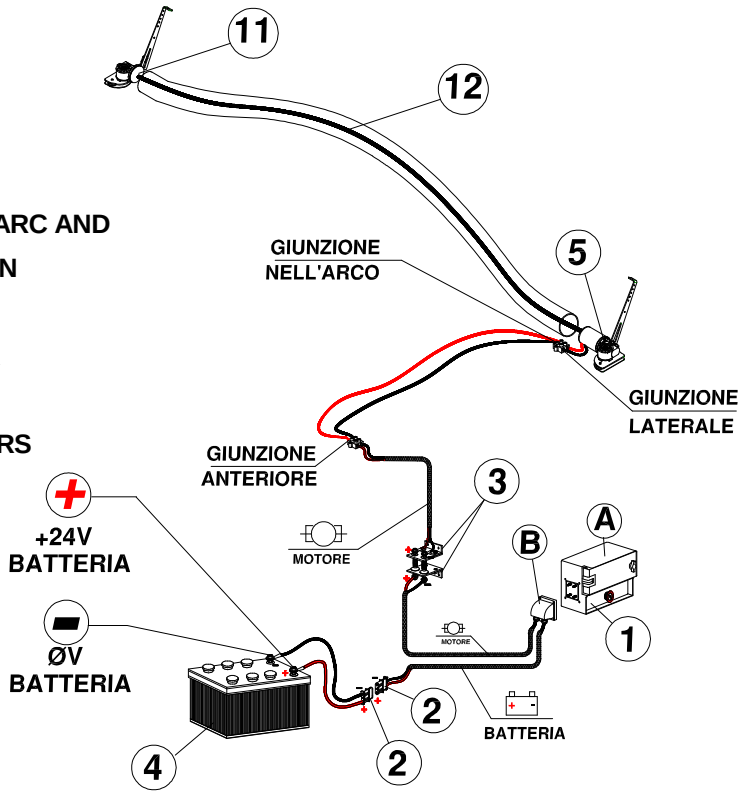
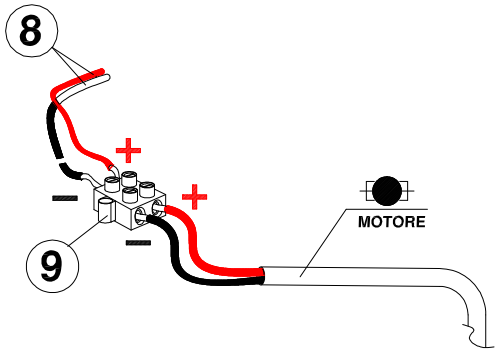
STD ELECTRICAL SYSTEM DIAGRAM

1) CONTROL UNIT
2) CONNECTION SOCKET + PLUG
3) ELECTRICAL CONTACTS
4) VEHICLE BATTERY
5) MOTOR REDUCTOR
6) LATERAL JUNCTION
8) 2 CABLES THAT PASS THROUGH THE ARC AND IN THE LOWER POCKET OF THE TARPAULIN
9) FRONT JUNCTION
10) CONTROL UNIT CONNECTIONS COVER
11) REDUCER
12) ELEMENT OF TRANSMISSION REDUCERS



JUNCTION IN ARC – LATERAL JUNCTION – FRONT JUNCTION – 24 V BATTERY - MOTOR

The electrical cables (8) are inserted in the appropriate internal pocket of the tarpaulin, pas within the rear of the arc and connected with the wires (these also pass within the final arc) that come from the motor placed at the extremity of the same arc. The connection takes place through a multi-point terminal.



The control unit is usually positioned on the side at the front of the chassis (driver's side) but may also be positioned within the cab, in this case an express request must be made in the order and the appropriate supplementary connection plugs will be provided in an additional assembly kit.

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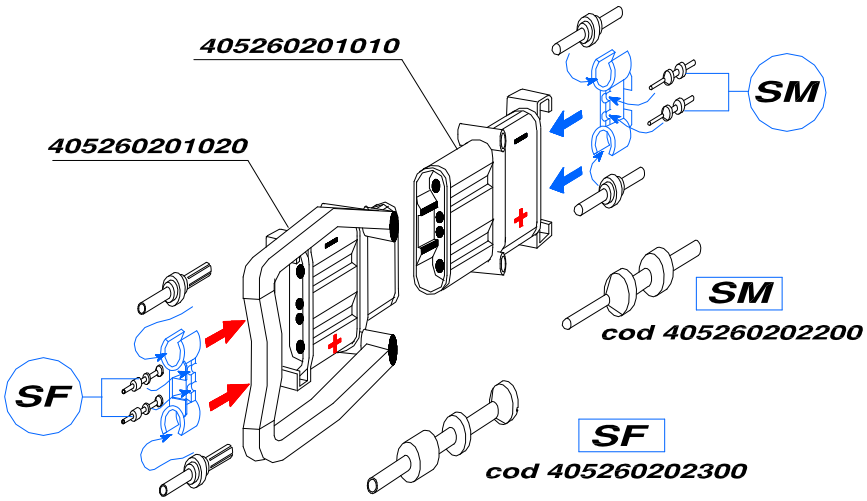
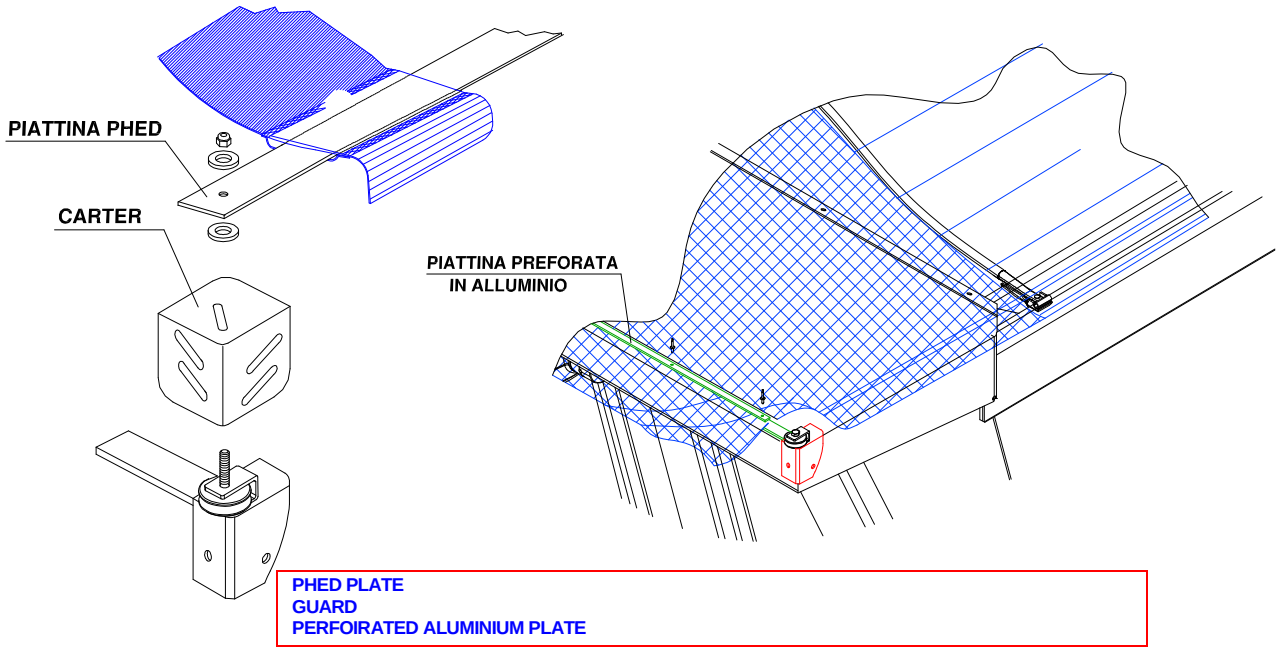


Cod **405260201010** = **PLUG**
Cod **405260201020** = **SOCKET - HANDLE**
Cod **405260202200** = (SM) **MALE PIN** (small)
Cod **405260202300** = (SM) **FEMALE PIN** (small)

CANVAS FIXING FRONT PART

Spread the tarpaulin completely above the box.
Spread, pulling the front part of the canvas gently, until it rests on the front edge of the box corresponding to the furthest forward point possible. Fix the lateral parts of the canvas with the Teflon reinforcement (phed plate) with the screws in the lateral supports of return mechanism; during this operation also position the pulleys protection guard.
Finally rivet the remaining part of the canvas to the appropriate perforated aluminium plate and cut off the excess part of the canvas.

PARTICULARS of the FRONT FIXING of the CANVAS



PHED PLATE
GUARD
PERFOIRATED ALUMINIUM PLATE

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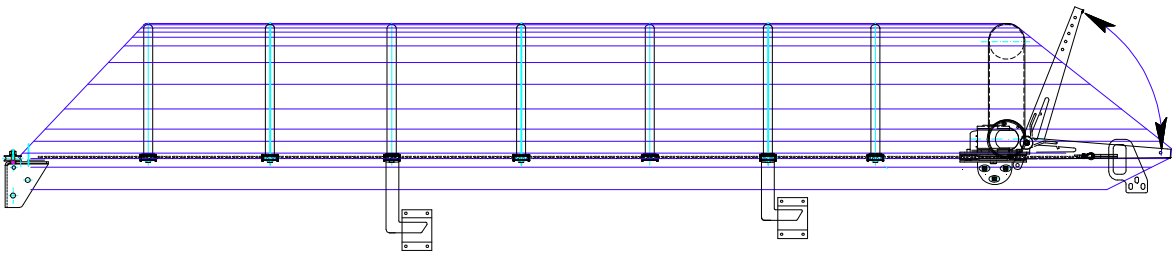
ASSEMBLY OF THE LATERAL RAPID HOOKS

Laterally the "**GALOPPINO**"' tarpaulin in the **– A – C –** versions is anchored to the box by a certain number of automatically activating metallic fixings.

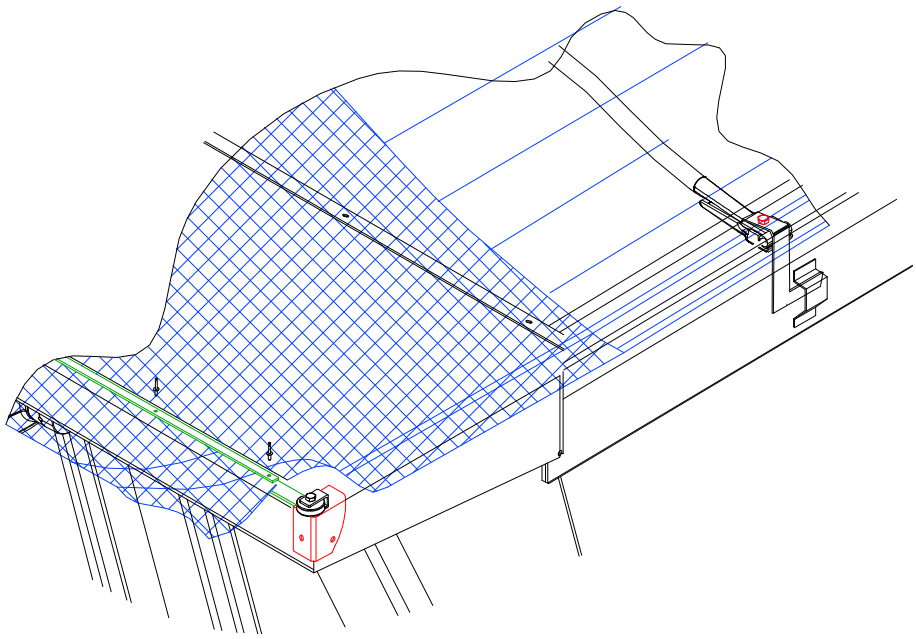


These FIXNGS called "**RAPID HOOKS**" are supplied with a further safety system or else cables and lateral elastics.

RAPID LATERAL ANCHORAGES OF THE BAYONET TYPE

The rapid hooks for the GALOPPINO tarpaulin are of the BAYONET type, and the number provided is:

2 rapid hooks per side: A LONG and a MEDIUM hook



FINISHING OPERATIONS AND PRE-UTILISATION CHECK

When all the operations indicated on the previous pages have been completed check that the entire system is functioning well.

- The tarpaulin must slide when **opening and closing without any particular effort or sticking in its movement.**

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- If the tarpaulin tends to stick and/or place itself transversely on the sides it means that the RH and LH pulling cables do not have the same tension, consequently it is indispensable to adjust the tensioners of the cables themselves.

REPLACEMENT OF THE PULLING MOTOR OF THE TARPAULIN

The replacement of the tarpaulin motor requires a few simple operations and can be done without removing the tarpaulin from the vehicle.

I. Unhook the cable from the side of the motor to be replaced and remove it from the pulleys of the motor.

II. Lock the final arc to the box so that it cannot fall off and cause accidents to the operator.

III. Remove the screws holding the motor fixed to the final arc.

IV. Extract the motor from the final arc.

V. Remove the screws keeping the motor wires connected to the cable that passes within the arc, noting the polarity (colour of the wires)

VI. Replace the motor with a new (or reconditioned) motor

VII. Reconnect the wires to the cable that passes within the arc, paying attention to the polarity (colour of the wires)

VIII. Replace the motor in its housing within the final arc

IX. Check the distance of the lateral mountings of the motor from the lateral sides of the box and adjust it to the original measure (if necessary)

X. Definitively tighten the screws that hold the motor attached to the final arc.

REPLACEMENT OF DAMAGED ARCS

The replacement of damaged arcs can also be carried out without having to remove the tarpaulin from the vehicle.

If the terminal part of the arc is not damaged it is not even necessary to remove the cables from the tarpaulin, it will suffice once the arc to be substituted is identified to:

I. Remove the screws holding the arc fixed to the extremities equipped with a sliding shoe.

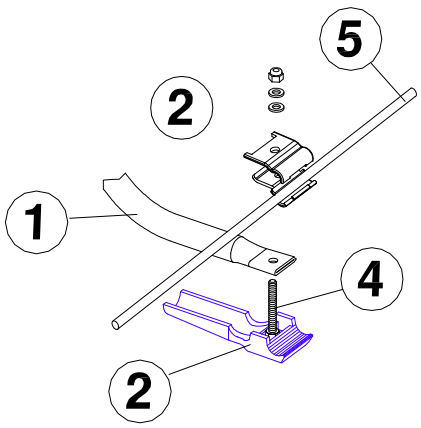
II. Undo the shoe and extract the arc from the lower pocket of the tarpaulin that normally holds it.

III. Insert the new arc in the pocket of the tarpaulin paying attention not to tear the tarpaulin.

IV. Refit the cables between the two elements of the dismountable plug, fitting together the elements thereof, and reassemble the shoe, plug and arc.

V. Check the distance of the lateral mountings of the arc from the lateral sides of the box and adjust it to the original measure (if necessary)

VI. Definitively tighten the screws that hold the shoe and dismountable plug attached to the arc



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ELEMENTS

1) SLIDING ARC
2) ARC EXTREMITY
4) ARC HOLDING SREWS
5) SLIDING ARCS CABLE

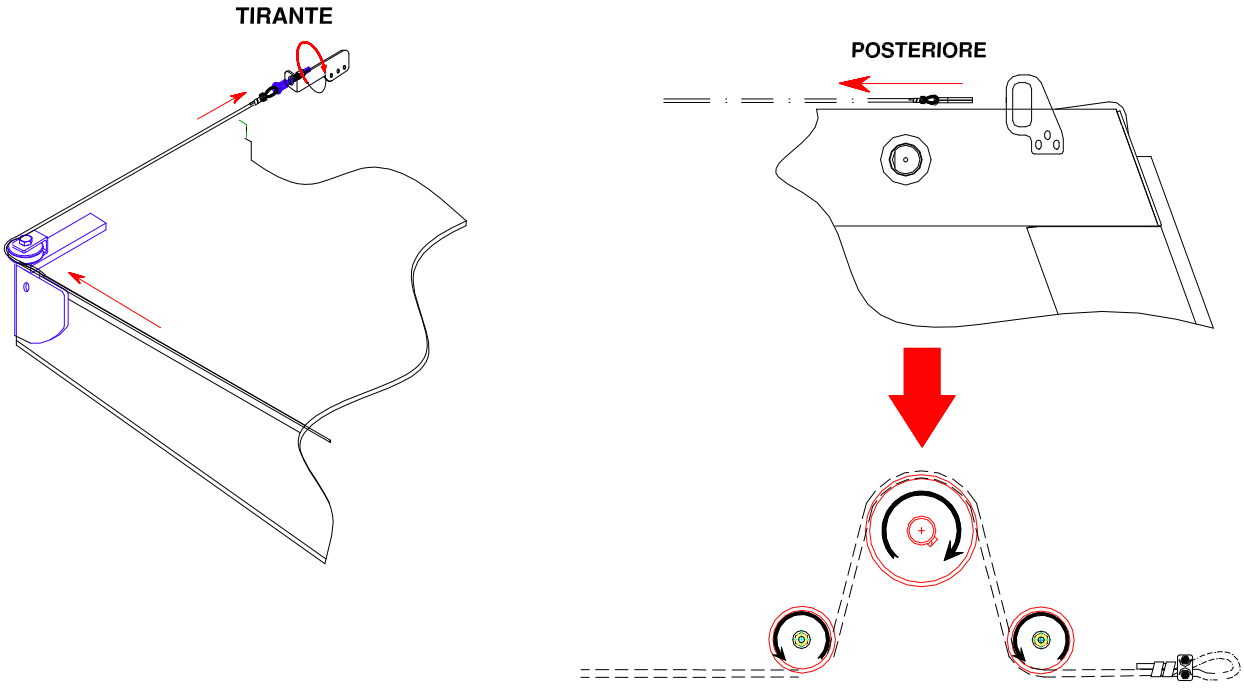
REPLACEMENT OF THE SLIDING CABLES OF THE TARPAULIN

The replacement of the sliding cables of the GALOPPINO tarpaulin is quite easy to do.
First and foremost it is indispensable to bind the tarpaulin so that it cannot cause injury to whoever is doing the replacement work.

LIST OF ELEMENTS

1) **REAR ANCHORAGE**
2) FRONT CLAMP FOR TENSIONING THE CABLE
3) FRONT PULLEY FOR DEFLECTION OF THE CABLE

Free the cable by unhooking it from the front and rear tensioners and then remove it from the arcs and proceed with the contrary operation with the new cable; in this case also it is as well to keep a hand on the two cables before proceeding with their final mounting and tensioning.



TENSION ROD REAR

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PAY ATTENTION TO THE CORRECT PASSAGE OF THE CABLE IN THE PULLING SYSTEM.

NOTE: IT IS VERY IMPORTANT THAT THE TWO CABLES ARE PULLED EQUALLY ON THE TWO SIDES OF THE BOX, OTHERWISE THE TARPAULIN COULD SLIDE TRANSVERELY AND NOT FUNCTION AS IT SHOULD.

WARNINGS ON USAGE AND MAINTENANCE

IT IS ABSOLUTELY PROHIBITED

It is absolutely prohibited *to activate the tarpaulin when maintenance is being carried out.*

It is absolutely prohibited to travel **with the tarpaulin not adequately anchored to the box with the appropriate mounting mechanism provided by CRAMARO TS for this purpose. It is permitted to travel with the tarpaulin completely compacted on the front of the box on the indispensable condition that it is adequately anchored to the structure of the box itself.**

It is absolutely prohibited to *utilize the tarpaulin as a means of levelling the material transported.*

It is absolutely prohibited *to unload material without having first completely uncovered the box.*

It is absolutely prohibited *to wash the electrical parts (control unit, motor, electrical contacts) with direct jets of water*

It is absolutely prohibited *to leave the operating key in the control unit when the tarpaulin is not being used.*

It is absolutely prohibited *to leave the emergency button in the "button released" position on the control unit when the tarpaulin is not being used (the "on" led must be off).*

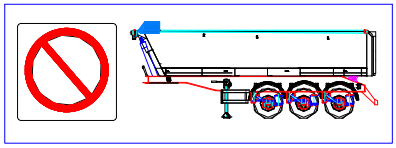
It is absolutely prohibited *to climb and walk on the tarpaulin.*

It is absolutely prohibited *to travel when there are strong gusts of wind.*

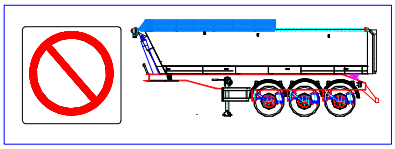
It is absolutely prohibited *to tamper with the body of the control unit in any manner any tampering will* ***immediately invalidate the warrantee.***

IT IS ABSOLUTELY OBLIGATORY

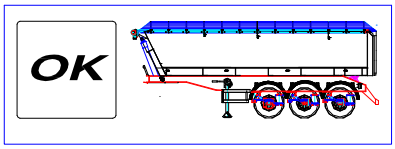
To *travel* *with the* ***box completely covered***



NO



NO



YES

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Periodically check *the degree of tensioning of the metal cables for pulling the tarpaulin (ensure they are not too tight)so as not to impede them sliding on the pulley and the state of surface wear of the latter to evidence any breakage of the wires that make them up (in this case immediately substitute them).*

Periodically check *that there are no excessive breakages and/or deformations on the upper profiles of the box (on which the tarpaulin slides) because this could impede the normal movement of the tarpaulin and prematurely wear the canvas.*

.

Periodically check that all the automatic lateral anchorage hooks of the tarpaulin are there.

Periodically check the state of wear of the canvas, above all in the points of greater stress, such as the front anchorage and lateral mountings on the arcs.

Periodically check *the presence on the extremity of all the arcs and state of wear of the* ***sliding shoes*** *that ensure a better movement of the tarpaulin.*

Periodically check *the integrity of the self-releasing system so as not to compromise the correct functioning of the tarpaulin*

Periodically check *the cleanliness and the correct functioning of the electrical contacts placed between the chassis and box.*

Periodically check *that the electrical connection cables are not damaged.*

Periodically wash *the canvas to remove any dirt deposited and that could damage it over time*

.

In the case of utilisation of the tarpaulin in particularly cold climates, it is absolutely necessary to clean ice or snow of the canvas before using the tarpaulin, as these may prejudice the correct functioning of the tarpaulin itself.

Periodically check the TIGHTNESS OF THE TERMINALS of the sliding cables of the tarpaulin.

GUIDE TO THE SOLUTION OF THE COMMONER PROBLEMS

PROBLEM	*CAUSE*	*SOLUTION*
operating the tarpaulin is not easy (difficult)	Physical impediments	Check that there are no physical impediments (load sticking out, etc.) prevents the tarpaulin advancement
operating the tarpaulin is not easy (difficult)	Arcs of the tarpaulin deformed	Check that the arcs are not bent, in the event that they are return them to the original curvature and align all to the same width (otherwise refer to the closest assistance centre) **(REPLACEMENT OF THE RUINED ARCS)**
		Check that the metal sliding cables

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operating the tarpaulin is not easy (difficult)	Metal sliding cables too tight	are not too tight, in this case release the tension by adjusting the appropriate screws
operating the tarpaulin is not easy (difficult)	Pulleys sliding on the cables	Check the wear of the metal sliding cables and traction pulleys.

When the tarpaulin selector is activated the **ON** lamp does not flash and the tarpaulin selector does not work.	Emergency button pressed	Release the emergency button by using the key.
When the tarpaulin selector is activated the ON lamp does not flash and the tarpaulin selector does not work.	**80 Amp** fuse broken (burnt).	Check and substitute the broken (burnt).fuse located in the front of the control unit.
When the tarpaulin selector is activated the ON lamp does not flash and the tarpaulin selector does not work.	No current	Check the entire electrical system for interruptions or disconnected cables.
When the tarpaulin selector is activated the ON lamp does not flash and the tarpaulin selector does not work.	Electrical contacts not in position or motor disconnected.	Check the correct position of the electrical contacts between the chassis and the box and the connection to the motor..
When the tarpaulin movement selectors is used the tarpaulin does not move at all	Motor not functioning	Refer to a Cramaro assistance centre for the replacement of the motor.

ADHESIVE PLATES WITH NOTICES FOR THE UTILISATION OF THE GALOPPINO TARPAULIN

*Every " **GALOPPINO"** tarpaulin, whether installed at an authorised workshop or self-installed by the final user (and therefore delivered by "CRAMARO TS S:r.l." as an assembly KIT) is equipped with A SERIES OF ADHESIVES that summarise the most **IMPORTANT NOTICES FOR THE UTILISATION** of the tarpaulin itself.*
The aforesaid **KIT** of adhesives is supplied with **ALL THE TARPAULINS SOLD** and, as with the **USERS' MANUAL**, should be considered as an integral part of the tarpaulin itself.
*Consequently, from the time of the assembly onwards "every **TARPAULIN MUST HAVE SHOWING** the complete series of adhesive plates with the notices for the utilisation of the tarpaulin.*

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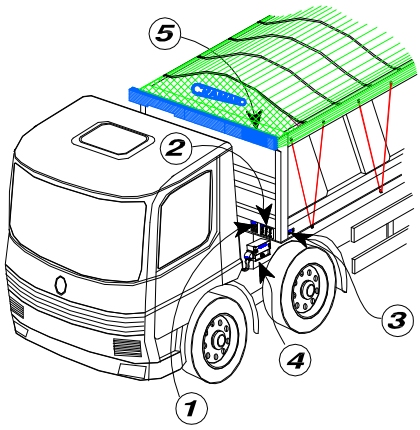
APPLICATION AREAS OF THE ADHESIVE PLATES

1 ***) IT IS ABSOLUTELY PROHIBITED TO***
2) ***REMOVE THE NOTICES FOR THE UTILISATION OF THE TARPAULIN***
3) ***REMOVE THE RAPID ANCHORAGE HOOOKS***
4-5) ***TO WASH WITH A WATER JET***



N.B. The **FAILURE TO APPLY th**e above-described adhesive plates will result in the **automatic invalidation of the warrantee by CRAMARO TS S.r.l.,** which shall not be liable in any manner for any damages suffered by persons or things due to the inobservance of the utilisation rules described.

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Register of periodic checks and tarpaulin maintenance

VALID for all VERSIONS of the "CABRIOLE'" TARPAULIN

You will find the useful information to always keep your tarpaulin efficient in this **REGISTER** of the specific period checks for the tarpaulin purchased; the appropriate tables show, from time to time, the ordinary or extraordinary maintenance conducted monthly, quarterly or annually.
This checks register is expected by the current Machines Directive EEC 98/37, consequently the manufacturer's obligation to supply it and the user's obligation to comply with the regulations.

The CHECKS REGISTER constitutes an irreplaceable tool for complying with the obligations dictated by the prevailing legislation on the matter of the employer's accountability on the use and maintenance of the equipment for work (**LEGISLATIVE DECREE no. 626 of 19-09-1994** and **LEGISLATIVE DECREE no. 547 of 27-04-1955**).

ATTENTION: THE TARPAULIN IS SUBJECT TO MECHANICAL ATTRITION AND IN ORDER THAT IT HAS A LONG LIFE AND FUNCTIONS WITHOUT PROBLEMS IT NEEDS CORRECT AND REGULAR MAINTENANCE. MODIFICATIONS TO THE COMPONENTS OF THE TARPAULIN ARE NOT PERMITTED.
MODIFICATION OF A TARPAULIN, OR EVEN OF ONLY SOME COMPONENTS THEREOF, IMPLIES THE AUTOMATIC ASSUMPTION OF CIVIL LIABILITY AND THE PENALTY AND OBLIGATION TOGTHER WITH WHOM HAS EFFECTED THE MODIFICATION TO A NEW EC MARK ON THE MODIFIED TARPAULIN.

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ORDINARY MAINTENANCE (PREVENTIVE)

OBJECT OF THE CHECK	FREQUENCY	INTERVENTION EXPECTED	ESTIMATED TIME
SLIDING DEVICES, PLANARITY OF THE UPPER PROFILES OF THE BOX	**DAILY**	VISUAL CHECK OF THE CONDITIONS AND POSSIBLE ABSENCE OF SOME PIECES	**5 MINUTES**
PRESENCE OF ALL THE ACTIVE SAFETY EQUIPMENT OF THE TARPAULIN	**DAILY**	VISUAL CHECK OF THE PRESENCE AND STATE OF CONSERVATION OF LATERAL CABLES, HOOKS AND ANCHORAGE SNAP HOOKS	**5 MINUTES**
SAFETY EQUIPMENT AND LOCKING THE OPERATING ROD, ETC.	**DAILY**	VISUAL CHECK OF THE PRESENCE AND STATE OF CONSERVATION OF THE ELEMENTS	**2 MINUTES**
STATE OF THE PULLEYS	**DAILY**	VISUAL CHECK OF THE INTEGRITY	**1 MINUTE**
STATE OF THE FRONT RETURN PULLEYS	**DAILY**	VISUAL CHECK OF THE INTEGRITY'	**1 MINUTE**
TERMINALS OF THE PULLING CABLES	**WEEKLY**	CHECK AND TIGHTEN THE SCREWS WITH A MANUAL KEY (NOT ELECTRIC SCREWDRIVERS)	**5 MINUTES**
ELECTRICAL CONTACTS	**WEEKLY**	REINSTATE THE CONTACT BY CLEANING IT AND CHECK CORRECT CLEARANCE	**15 MINUTES**
ELECTRIC CABLES	**WEEKLY**	INSULATE WITH ADHESIVE TAPE OR REPLACE THE CABLES WITH DEFECTS OR LACERATIONS	**15 MINUTES**
SELF-RELEASING TARPAULIN SYSTEM	**WEEKLY**	CH ECK FOR ANY DEFORMATIONS OF THE RODS OF THE PLASTIC PARTICULARS	**15-20 MINUTES**
INTEGRITY OF THE METAL PULLING CABLES	**WEEKLY**	REPLACE THE CABLES WITH WIRES STICKIING OUT IMMEDIATELY	**40 MINUTES**
GENERAL NUTS AND BOLTS	**WEEKLY**	CHECK TIGHTNESS AND PRESENCE OF THE TIGHTENING BOLTS OF THE TARPAULIN ELEMENTS	**15-20 MINUTES**
METAL WORK IN GENERAL	**WEEKLY**	CHECK OF THE STATE OF CONSERVATION OF THE SURFACES INTEGRITY OF THE ELEMENTS	**5 MINUTES**
PULLING CABLES	**WEEKLY**	DETAILED VISUAL CHECK OF THE SLIDING CABLES AND POSSIBLY CLEANING OF THE PINS BY A SQUIRT OF DEOXIDISING DETERGENT OF THE" **SVITOL** TYPE"	**15-20 MINUTES**
SLIDING SHOES	**WEEKLY**	VISUAL CHECK OF THE PRESENCE OF ALL THE SHOES	**2 MINUTES**
TARPAULIN CANVAS	**WEEKLY**	DETAILED VISUAL CHECK OF THE SURFACES OF THE CANVAS AND ABOVE ALL OF THE ANCHORAGE POINTS TO THE BOX	**5 MINUTES**
REMOTE CONTROL BATTERIES	**WEEKLY**	REPLACE THE FLAT BATTERIES WITH NEW ONES	**2 MINUTES**

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PROTECTION ELEMENTS OF THE ELECTRICAL DEVICES	**MONTHLY**	CHECK THE FUNCTIONALITY OF THE FUSES, POSSIBLY CHANGING THEM ONLY WITH OTHERS OF THE SAME AMPERAGE (DO NOT INTERVENE WITH BY-PASS BRIDGES)	**10 MINUTES**
SLIDING SHOES	**HALF-YEARLY IF NORMAL MATERIALS ARE TRANSPORTED**	CAREFUL VISUAL CHECK OF THE STATE OF WEAR OF THE SUPPORT SURFACES AND POSSIBLE REPLACEMENT OF THE BROKEN OR WORN SHOES	**1 HOUR**
SLIDING SHOES	**BI-MONTHLY IF VERY ABRASIVE MATERIALS ARE TRANSPORTED**	CAREFUL VISUAL CHECK OF THE STATE OF WEAR OF THE SUPPORT SURFACES AND POSSIBLE REPLACEMENT OF THE BROKEN OR WORN SHOES	**1 HOUR**
SWITCHES, OPERATING DEVICES, CONTACT DEVICES, EMERGENCY DEVICES	**MONTHLY**	CHECK INTEGRITY AND POSSIBLY SUBSTITUTE THE DAMAGED COMPONENTS AT AN AUTHORISED ASSISTANCE POINT	

ATTENTION: THE TABLE RELATING TO THE FREQUENCY OF THE CHECKS TO BE MADE IS INDICATIVE ONLY AND REFERS TO A TARPAULIN SYSTEM UTILISED IN COMPLIANCE WITH THE DIRECTIVES OF THE ANTICIPATED CHECKS AND THE CONTENTS OF THIS USER AND **MAINTENANCE MANUAL.**

CHECKS SCHEDULE

MONTHLY CHECKS

OPERATIONS CARRIED OUT	PARTICULARS OF REPLACEMENTS
DATE OF INTERVENTION	**SIGNATURE OF THE MAINTANENCE OPERATOR**

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