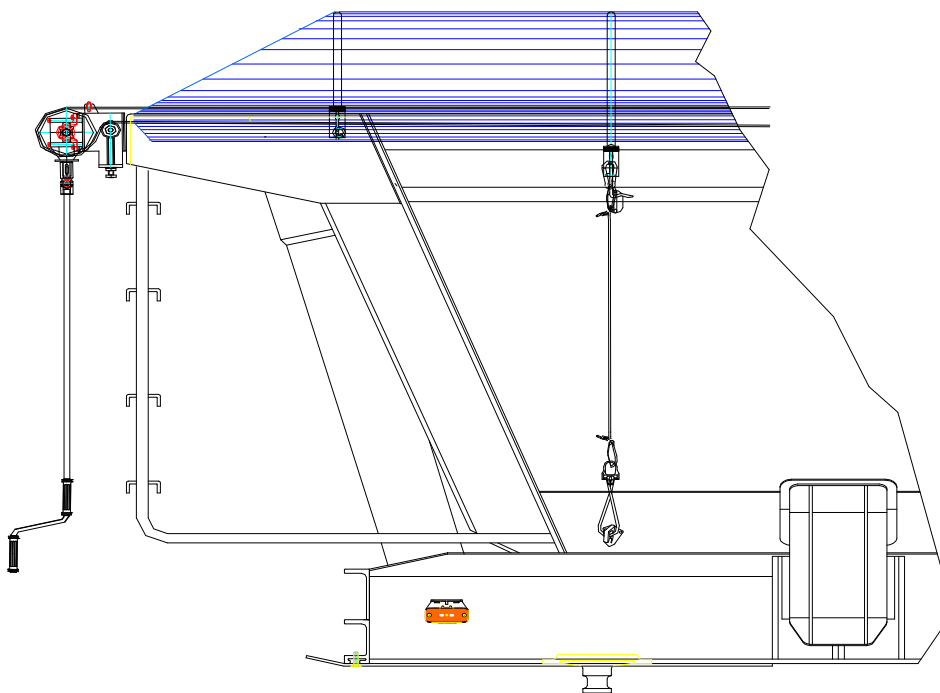


CRAMARO

TS s.r.l.

CABRIOLE' MODEL TARPAULIN

MANUAL OPERATING



USER MANUAL USE-MAINTENANCE-SAFETY

CRAMARO TS S.r.l. / COLOGNA V.TA (VR) VIA QUARI DESTRA 71 TEL.+39- 0442/411688 / FAX +39-0442/411690

E-MAIL info@cramaro.com WEB : <http://www.cramaro.com>

Manual MCA002-EN-ED10 — REV. DATE 15/12/14

>>>>> INSTRUCTIONS FOR USE AND MAINTENANCE <<<<<< READ BEFORE USE

It takes little effort to get the best out of the **CABRIOLE'** model **CRAMARO** tarpaulin, given its user-friendliness and limited number of component parts.

The current system stems from **CRAMARO's** years of experience in the field of tarpaulins for industrial vehicles.






The CRAMARO tarpaulin symbolises the ideal synthesis between technology, safety, environmental compatibility, economy of use and productivity.

It is now up to you to use your **CRAMARO** tarpaulin safely and maintain it in perfect condition.

This manual contains the most important information for the correct use and periodical maintenance of the **CRAMARO** tarpaulin. Although the latter is reduced to a minimum, it is still vital to ensure long product life in perfect working order.

We advise you to read this manual carefully before using the vehicle fitted with the **CABRIOLE'** model **CRAMARO** tarpaulin.

>>>> IMPORTANT <<<<<

-   1. THE SYSTEM MUST ONLY BE USED BY PERSONNEL PROPERLY TRAINED TO WORK IT AND AWARE OF THE POTENTIAL DANGERS LINKED TO ITS USE.
-   2. THE MANUAL FORMS AN INTEGRAL PART OF THE TARPAULIN. IT MUST BE KEPT SAFE AND HANDED OVER TO THE NEW OWNER IF THE TARPAULIN OR THE VEHICLE TO WHICH IT IS FIXED IS SOLD.
-  3. THE WARRANTY IMMEDIATELY BECOMES INVALID IF THE TARPAULIN PARTS ARE MODIFIED, EVEN IN PART, OR REPAIRED WITHOUT USING "ORIGINAL CRAMARO SPARES". "CRAMARO TS S.r.l." IS ABSOLVED OF ALL RESPONSIBILITY.

CRAMARO TS S.r.l. SHALL NOT BE HELD RESPONSIBLE FOR ANY MALFUNCTION OR DAMAGE CAUSED BY FAILURE TO OBSERVE THE MAINTENANCE NORMS LISTED IN THIS MANUAL; NEITHER SHALL IT BE HELD RESPONSIBLE FOR ANY INJURIES CAUSED BY FAILURE TO OBSERVE THE WORK SAFETY STANDARDS IN FORCE.

CRAMARO TS S.r.l. RESERVES THE RIGHT TO CARRY OUT ANY ALTERATIONS HELD NECESSARY AT ANY TIME IN ORDER TO IMPROVE THE RELIABILITY, FUNCTIONING ETC. OF THE PRODUCT.

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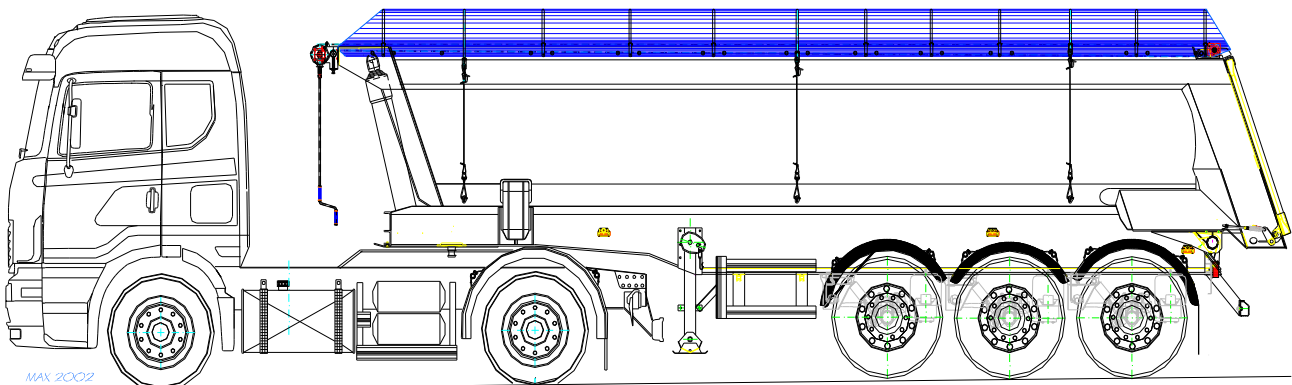
• KEY FOR SYMBOLS	page 3
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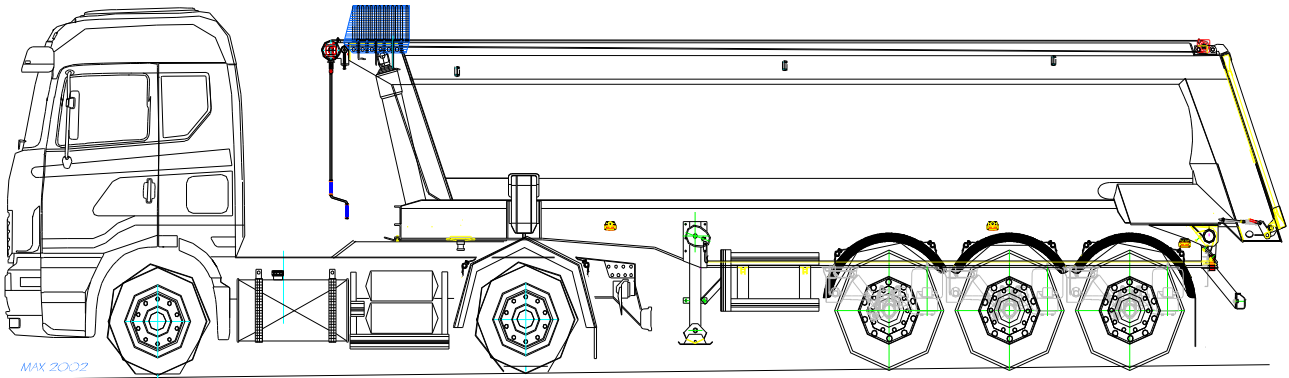
KEY FOR SYMBOLS :

	READ THE MANUAL AND FOLLOW THE INSTRUCTIONS		GENERAL HAZARD WARNING
	STRICTLY PROHIBITED		VITAL PRECAUTIONS
	DANGER OF CRUSHING		DO NOT TREAD ON THE TARPAULIN
	TROUBLE-SHOOTING GUIDE TO PROBLEMS		DO NOT USE IN STRONG WINDS

DIAGRAM OF THE FULLY EXTENDED TARPAULIN (CLOSED)

FIG 1



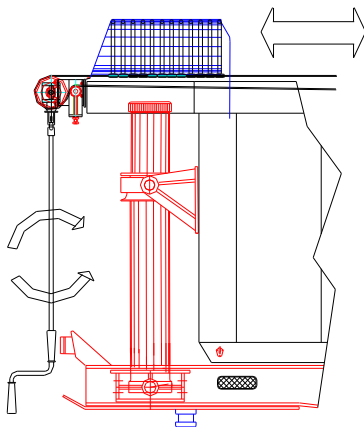


The **CRAMARO CABRIOLE'** model tarpaulin is available with two different ways of moving the fabric manually.

1) MANUAL MOVEMENT

MS) WITH SIMPLE ROTATING ROD (standard)

RAM) WITH TRACK CURVE + (optional)
REMOVABLE HANDLE



WITH SIMPLE ROTATING ROD

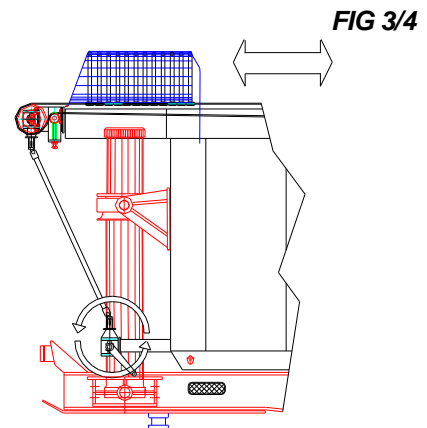


FIG 3/4

WITH TRACK CURVE +
REMOVABLE HANDLE

! **!** **Important** : the operations listed below must be carried out by one operator only, working solely on the ground and respecting the safety norms for self-propelled structures.

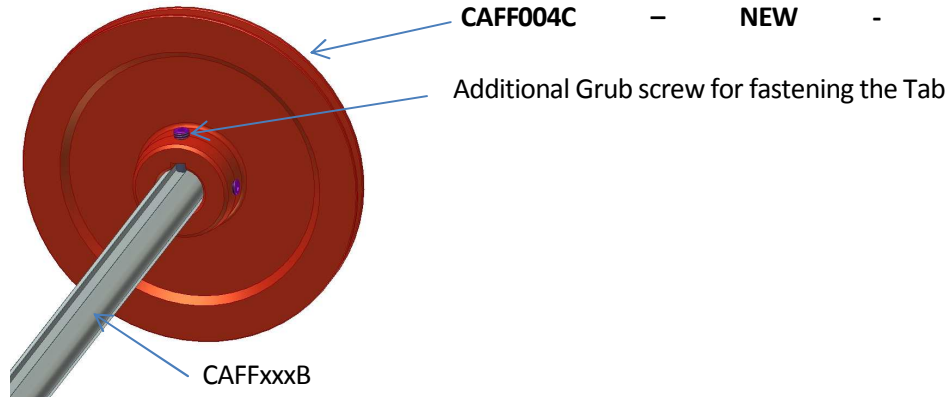
Take the following steps for correct use of the manual version, starting with the tarpaulin fully retracted (open):

! **!** Check that the tarpaulin movement is not impeded (load sticking out from the body, etc.).

! **!** **!** Ensure that no people are working (for maintenance or otherwise) near the tarpaulin.

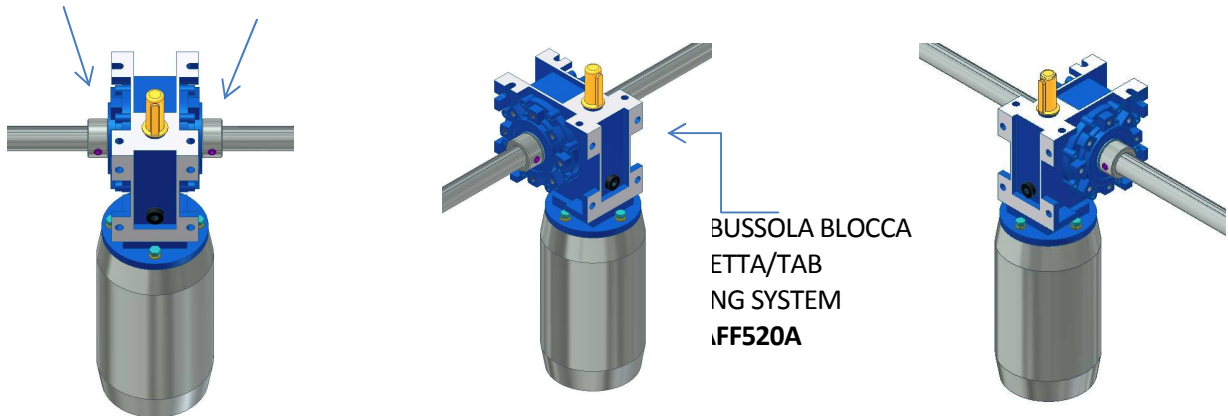
ASSEMBLY WITH SHAFT WITH TOTAL MILLING

- PULLEY ϕ 180 FIXING



ELECTRIC -
GEAR BOX FIXING

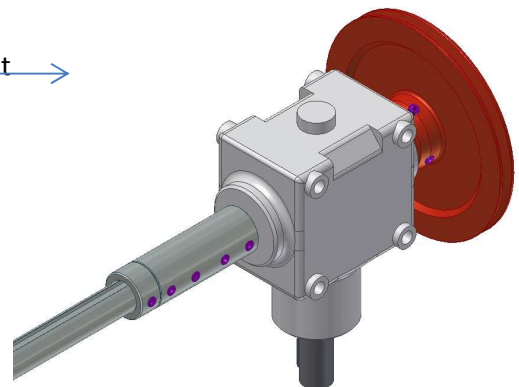
TAB LOCKING SYSTEM – **CAFF520A** -



MANUAL -

- RIGID COUPLING

Guide à boussole pour blocage de l'onglet →
TAB LOCKING SYSTEM
CAFF520A



**CRAMARO TS S.r.l. COLOGNA VENETA (VR) Via QUARI DESTRA 71
MS) SIMPLE HANDLE VERSION**

- Unfasten the rotation bar from its fixed position on the body
- Grasp the two hand-grips firmly
- Rotate the rotation bar clockwise and anti-clockwise until the opening or closing is complete
- Refasten the rotation bar in its fixed position using the snap jack fitting
- Pull out the rear part of the tarpaulin (on the rear unloading door) and anchor the flexible cables to the corresponding (cobra) hooks on the body.

RAM) WITH TRACK CURVE + REMOVABLE HANDLE

- Attach the removable handle to the pivot on the track curve
- Rotate the crank clockwise and anti-clockwise until the opening or closing is complete
- Remove the crank and put it in the cab or tool box (**do not leave it attached**)
- Pull out the rear part of the tarpaulin (on the rear unloading door) and anchor the flexible cables to the corresponding (cobra) hooks on the body.

DIAGRAM OF SIDE FITTINGS WITH FAST HOOKS FOR TYPE A FABRIC

FIG 5

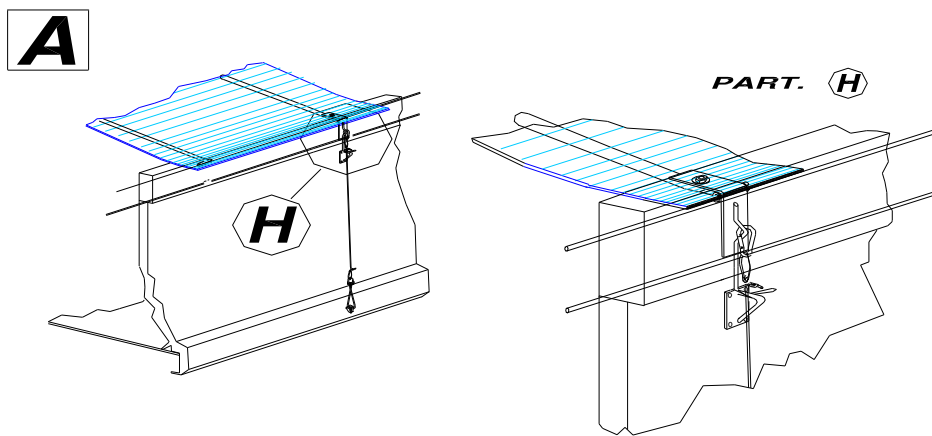
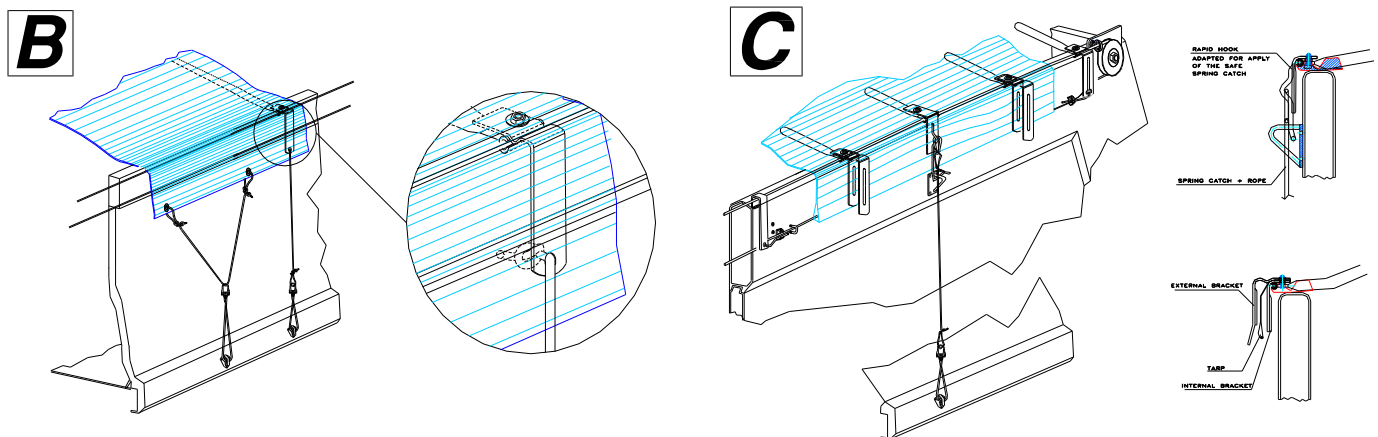


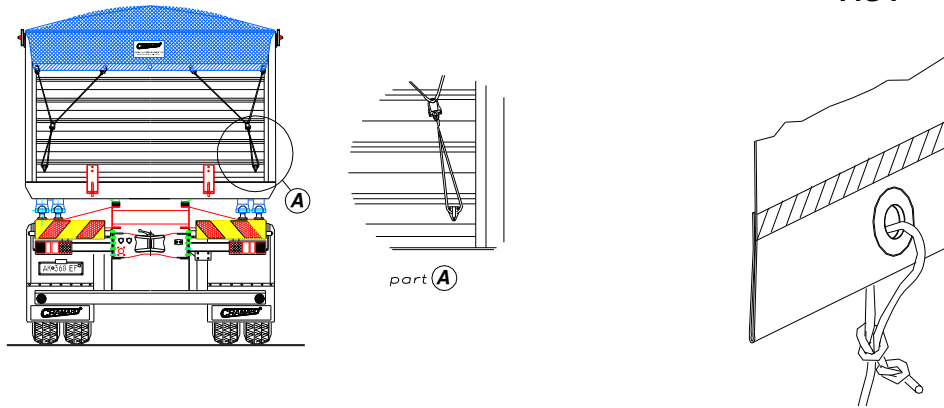
DIAGRAM OF SIDE FITTINGS WITH FAST HOOKS FOR TYPE B AND C FABRIC

FIG 6





There is a PVC-covered metal cable in type "C". It is put in the side flaps of the PVC tarp and it allows the safe anchoring of the tarp at the sides. It replaces the old flexible cables.

FIG 7

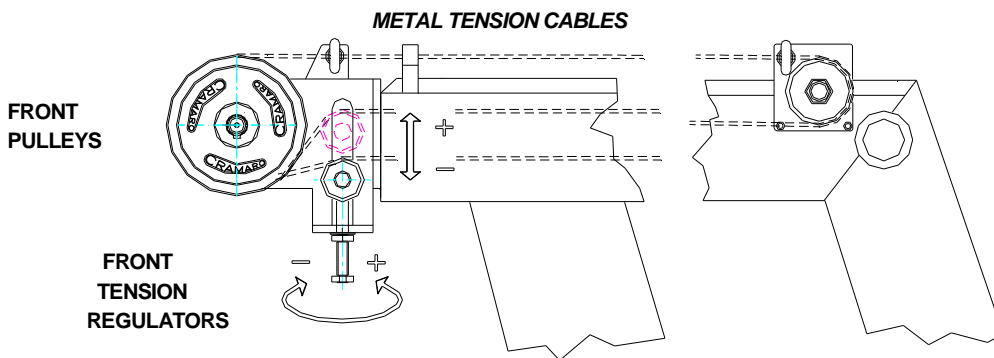


ADJUSTMENT OF METAL TENSION CABLES

  You can adjust the tension of the tarpaulin metal tension cables using the corresponding screws. N.B. the tension must be identical on both sides of the tarpaulin, just enough for the cables to grip the front tension pulleys.

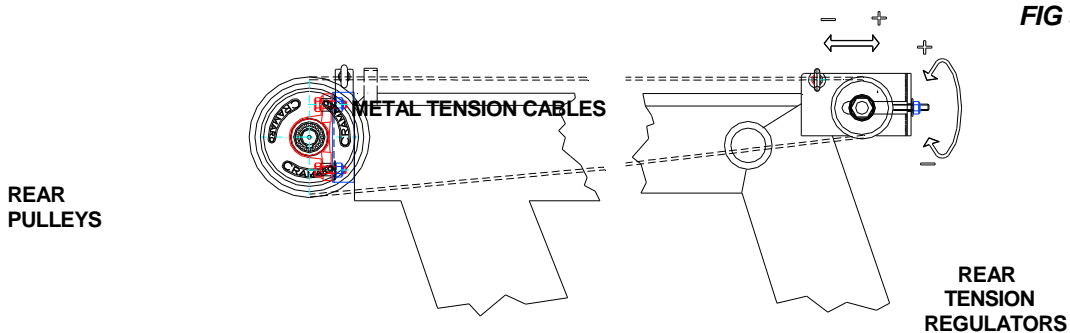
FRONT TENSIONERS DETAIL (PRE-MOUNTED VERSION)

FIG 8



REAR TENSIONERS DETAIL (STANDARD VERSION)

FIG 9



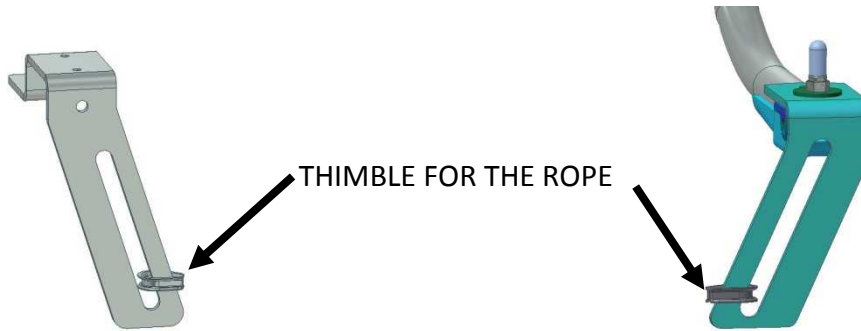
Check the steel cable tensioning: open completely the tarpaulin and close it for about 50cm. By means of a balance or other tool, check the force in the centre of the upper part of the steel cable and make sure that this force is comprised between 8 and 9 Kg approximately.



ADDITIONAL NOTES FOR TYPE B and C FABRIC

**FITTING THE DIAGONAL BRACKET FOR THE PLASTIC ROPE $\phi 3$
ON TARPAULIN SYSTEMS TYPE " C "**

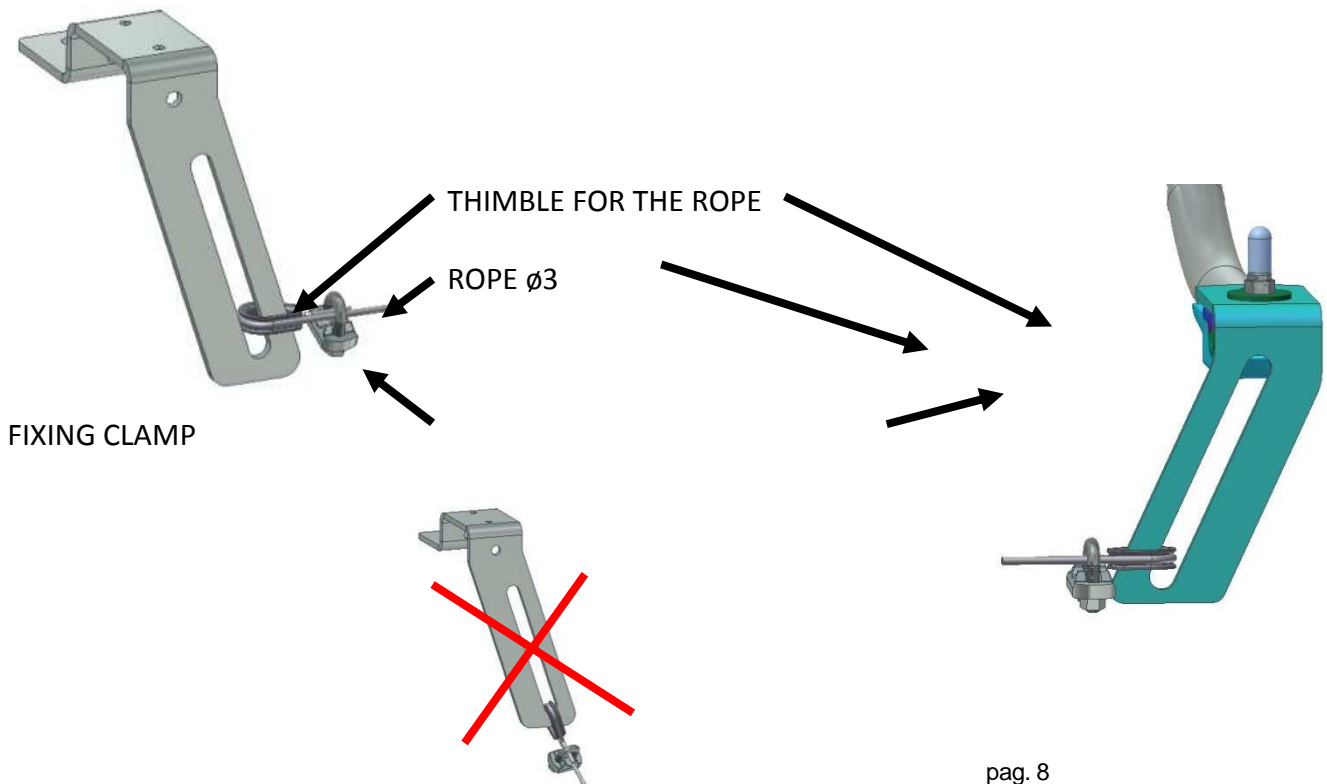
- Insert the thimble in the suitable eyelet on the side bracket

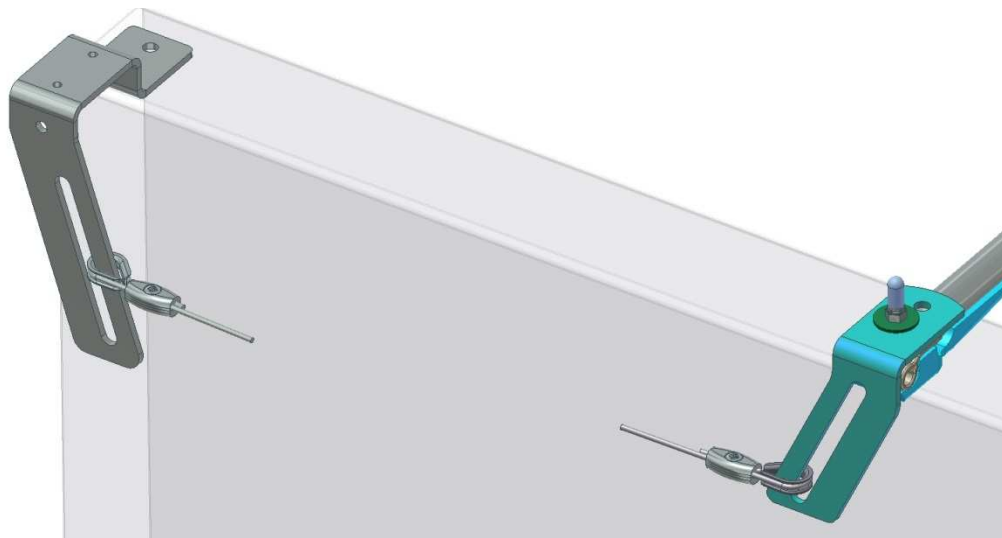
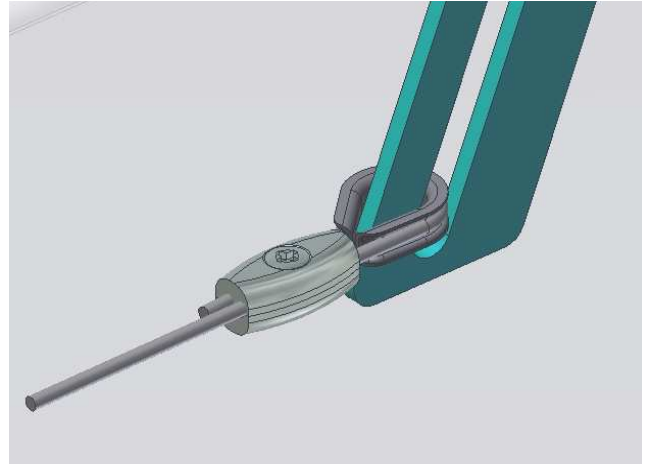
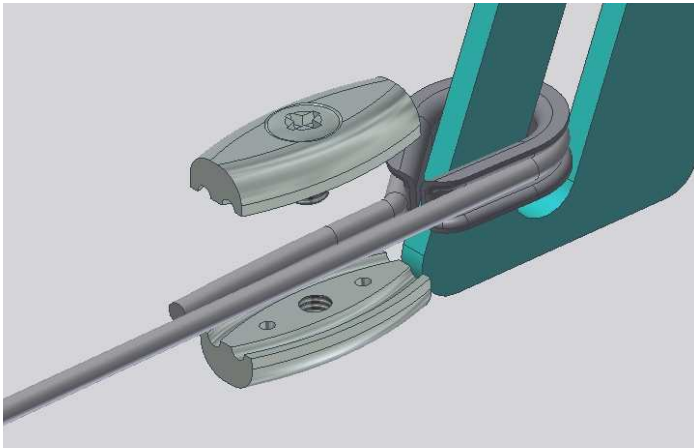
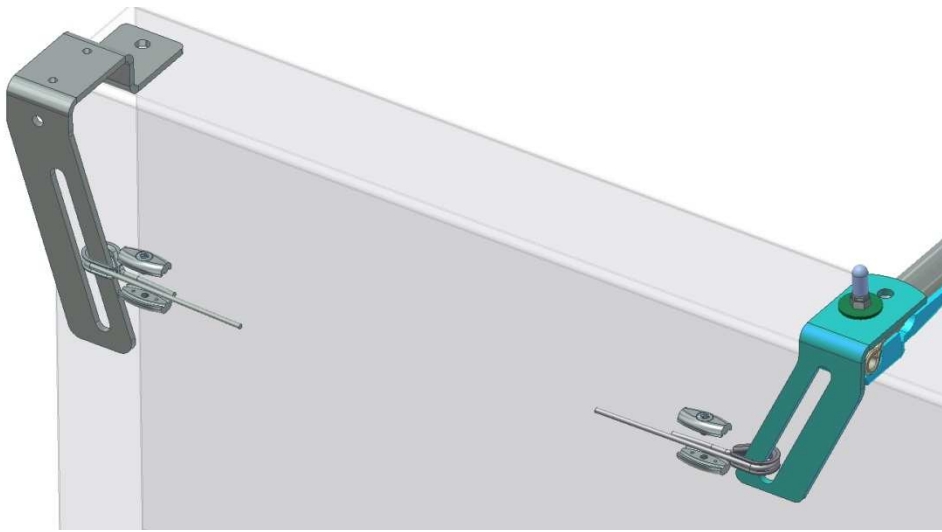


FRONT BRACKET
BOW

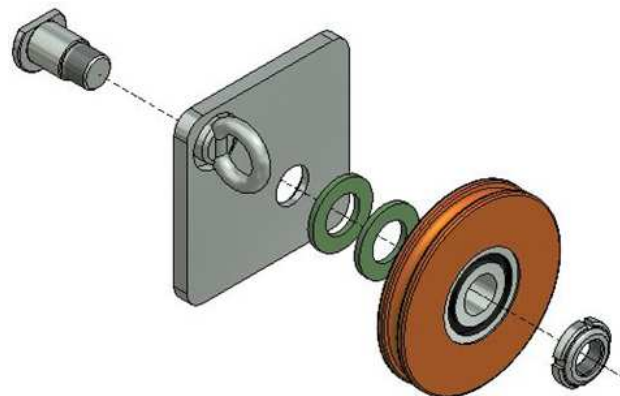
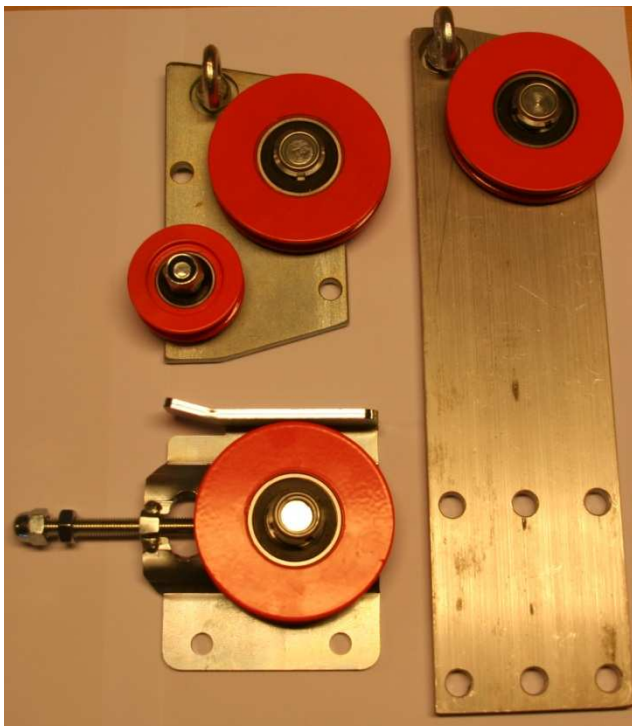
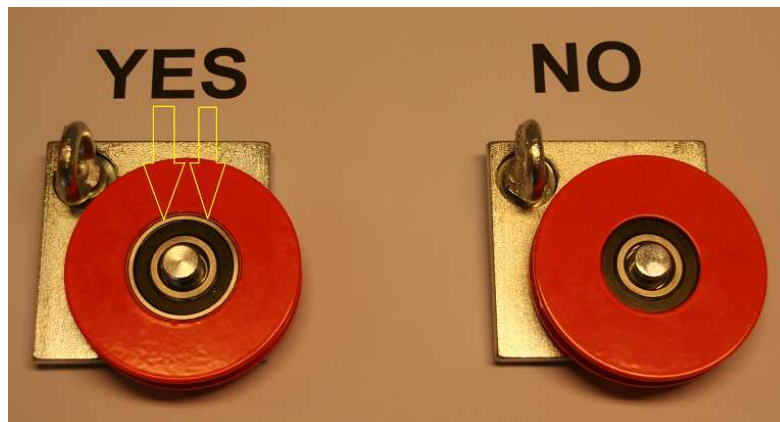
REAR BRACKET ON THE LAST

- After having completely extended the tarpaulin, secure the rope, inserting it inside the thimble, using the provided clamp (see drawing).
The rope must be tensioned a little bit less than the tarp. Please make sure that the thimble does not rotate under the bracket.





**SCHEMA DI MONTAGGIO PULEGGIA RINVIO POSTERIORE Ø100 MM • INSTALLATION INSTRUCTIONS FOR Ø 100MM PULLEY • MONTAGEANWEISUNG UMLENKROLLE Ø 100 MM • NOTICE POUR L'ASSEMBLAGE DE LA POULIE Ø 100MM •
NOTA POR EL MONTAJE DE LA POLEA Ø 100MM**



When assembling the rear support plate with the pulley, check that the position of the pulley is as shown on the above drawing/photo and that the threaded ring is correctly tightened.



Keep the tarpaulin fabric completely compressed before using it for the first time, leaving it pressed for a few hours if necessary, until it corresponds to the shape shown in fig. 10

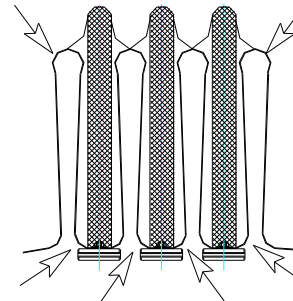
PRESHAPING HDPE TARPAULIN LIFTING PLATE

Whilst tightening the tarpaulin, ensure that the outer part (running downwards along the edges) does not get entangled in the bows.



N.B. : If this happens, pull out the pieces of fabric trapped under the bows by hand using moderate force so that they are on the side of the body

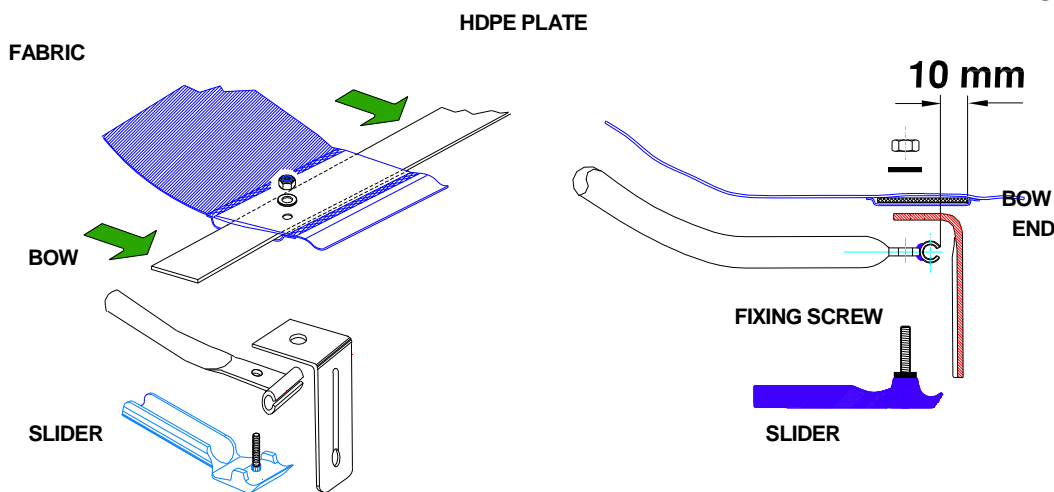
FIG 10



REPLACING "HDPE TARPAULIN LIFTING PLATE"

The HDPE plate in the side pockets of the tarpaulin fabric models the fabric as shown in fig 10. Although the plate material is hard-wearing and long-lasting, its exact life span depends on the working conditions to which it is subjected. If it breaks, it can easily be replaced after freeing it from the screws which fix it to the end of each bow.

FIG 11



The bow sliders at the end of each bow can easily be replaced even when the tarpaulin is attached (**it is not necessary to remove the fabric from the body**)

N.B. After replacement, PRESHAPE THE HDPE TARPAULIN LIFTING PLATE following the procedure on page 7 - fig. 10



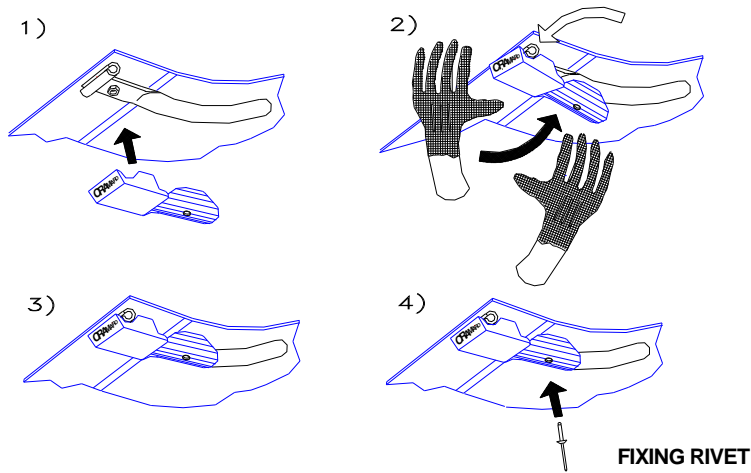
REPLACEMENT OF BOW SLIDERS

The bow sliders at the end of each bow can easily be replaced even when the tarpaulin is attached (**it is not necessary to remove the fabric from the body**)









Fig. 12 shows the order to use to mount the bow sliders on the bow ends

REPLACING THE SLIDERS

FIG 12

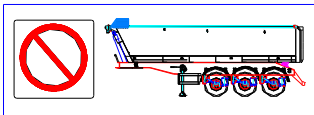


STRICTLY PROHIBITED

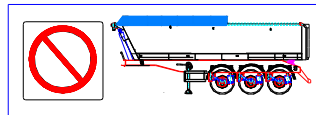
-  **It is strictly prohibited** to work the tarpaulin whilst carrying out maintenance work.
-  **It is strictly forbidden** to drive, if the system **is not fixed to the body with the elements suggested from CRAMARO.**
-  **It is strictly prohibited** to use the tarpaulin to level the load.
-  **It is strictly prohibited** to unload goods without fully uncovering the body.
-  **It is strictly prohibited** to grease or lubricate the traction pulleys and metal tension cables on the tarpaulin (fig. 8-9).
-  **It is strictly prohibited** to climb or tread on the tarpaulin.
-  **It is strictly prohibited** to travel with strong winds.
-  **It is strictly forbidden** to open the panel control. Every alteration causes an immediate loss of the warranty.

VITAL PRECAUTIONS

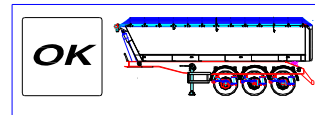
-  **While driving It is mandatory to have the tarpaulin completely extended**









NO



NO




YES

-  **Periodically check** the tension of the metal tension cables on the tarpaulin (making sure they are not too tight) to prevent them sliding on the front pulleys. Also check their superficial state of wear for any wire damage and replace if necessary. (fig. 8-9).
-  **Periodically check** there is no serious damage to the upper part of the body (where the tarpaulin runs) as this could impede its regular movement and prematurely wear the fabric, the HDPE tarpaulin lifting plate and the bow sliders (fig. 11-12).
-  **Periodically check** the automatic side hooks for the tarpaulin are intact.
-  **Periodically check** the state of wear of the fabric especially at stress points such as front anchorage and side attachments at the bows (fig. 11).
-  **Periodically check** the bow sliders at the end of the bows, which enable the tarpaulin to move more easily, and check their state of wear (fig. 11-12).
-  **Periodically check** the HDPE tarpaulin lifting plate in the side of the fabric is intact; if it breaks, the fabric is damaged, complicating the tarpaulin tightening process – replace! (fig. 10-11). **Periodically check** the electric contacts between frame and body are working correctly and keep them clean (fig. 13).

Periodically check the electric connection cables are not damaged.

 **Periodically wash** the tarpaulin fabric to remove any dirt, which can cause damage if left.

 **If the system is working in hard climatic conditions**, it is necessary, before use, to clean up from ice and snow the roof to avoid problems in the functionality of the system.

 Check please periodically the **TIGHTENING OF THE CLAMPS** of the steel cables



TRUBLE-SHOOTING GUIDE TO COMMON PROBLEMS

PROBLEM	CAUSE	SOLUTION
<i>Tarpaulin movement is sluggish.</i>	Physical obstacles.	Check there are no obstacles (protruding load etc.) impeding tarpaulin movement.
<i>Tarpaulin movement is sluggish.</i>	Mechanical fault.	Check the rear bearings or pulleys are not blocked (otherwise seek help from the nearest service centre). (REPLACE REAR BEARINGS AND/OR PULLEYS)
<i>Tarpaulin movement is sluggish.</i>	Distorted tarpaulin bows.	Check the bows are not “bent” and re-shape them if necessary, aligning them all to the same width (otherwise seek help from the nearest service centre). (REPLACE DAMAGED BOWS)
<i>Tarpaulin movement is sluggish.</i>	Metal tension cables too tense.	Loosen the tension using the adjustment screws (fig. 8-9).
<i>Tarpaulin movement is sluggish.</i>	Metal tension cables sliding on the front pulleys.	Check the metal tension cables and pulleys are not greased or lubricated and clean if necessary.

INTEGRATION TO THE ASSEMBLING AND USE INSTRUCTIONS - ALL VERSIONS

ADHESIVE LABELS WITH INSTRUCTIONS FOR USE OF TARPAULIN SYSTEM CABRIOLE'

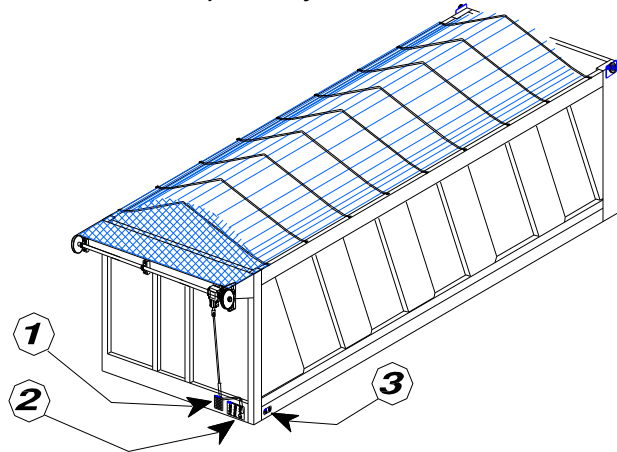
*Every tarpaulin system “ CABRIOLE’ “ that is assembled by a service partner or by the final user (and in this case the CABRIOLE is delivered by the company CRAMARO TS S.r.l. as assembling kit) is equipped with ADHESIVE LABELS that resume the most important **INSTRUCTIONS FOR USE** of the system.*

EVERY TARPAULIN SYSTEM is delivered with the above-mentioned **ADHESIVE LABELS** that are integral parts of the kit like the **INSTRUCTIONS FOR USE**
So from the moment of the assembling on **"EVERY TARPAULIN SYSTEM"**

MUST CLEARLY SHOW

All the adhesive labels with the instructions for use of the tarpaulin system.

POSITION OF THE ADHESIVE LABELS



1) IT IS STRICTLY FORBIDDEN

2) INSTRUCTIONS FOR USE OF THE
TARPAULIN SYSTEM (6 notes)

3) ANCHORAGE OF THE AUTOMATIC
SIDE HOOKS (2 notes)

IMPORTANT: The **NON – APPLICATION** of the adhesive labels involves automatically the loss of the **WARRANTY** of the company **CRAMARO TS S.r.l.** that will not be responsible for possible damages to persons or things, due to the non – observance of the described instructions for use.

INTEGRATION TO THE ASSEMBLING AND USE INSTRUCTIONS - ALL VERSIONS

ADHESIVES

ADHESIVE N°1



ADHESIVE N° 2

  <p>WWW.CRAMARO.COM</p>		<p>LEGGERE ATTENTAMENTE LE SEGUENTI ISTRUZIONI PRIMA DELL'UTILIZZO DEL SISTEMA DI COPERTURA. READ THE FOLLOWING INSTRUCTIONS CAREFULLY PRIOR TO USE THE TARPULIN. LIRE CET AVERTISSEMENT AVANT D'UTILISER LE SYSTEME DE BACHAGE. DIE FOLGENDEN BETRIEBUNGSHINWEISEN BEVOR DIE VERDECKSBETÄTIGUNG DURCHGELESEN ADVERTENCIA PARA EL USO DEL SISTEMA ADVERTENCIA PARA USO DO SISTEMA DE COBERTURA.</p>	
 <p>NON AZIONARE LA COPERTURA DURANTE LE OPERAZIONI DI MANUTENZIONE DO NOT RUN THE SYSTEM DURING MAINTENANCE OPERATIONS NE PAS ACTIONNER LE SYSTEME PENDANT LES OPERATIONS D'ENTRETIEN VERDECKSSYSTEM NICHT WÄHREND DER WARTUNGSARBEITEN BETÄTIGEN NO PONER EN MARCHA LA COBERTURA DURANTE EL MANTENIMIENTO NÃO UTILIZE O SISTEMA DE COBERTURA DURANTE MANUTENÇÃO</p>	 <p>VERIFICARE SEMPRE CHE I GANCIO SIANO CORRETTAMENTE ANCORATI ALWAYS CHECK THE HOOKS ARE CORRECTLY ANCHORED TOUJOURS CONTRÔLER QUE LES CROCHETS SOIENT BIEN POSITIONNÉS DIE HÖRNERE RICHTIG POSITIONIERT UND VERFESTIGUNGSSCHNITTEN FÜRLEGEN CONTROLAR SIEMPRE LA POSICIÓN CORRECTA DE LOS GANCHOS SEMPRE VERIFIQUE O POSICIONAMENTO CORRETO DOS GANCHOS</p>		
 <p>NON INGRASSARE O LUBRIFICARE PULIGNE E PUNTI DO NOT GREASE OR LUBRICATE PULLEYS AND CABLES NE PAS GRASSER OU LUBRIFIER POULEES ET CABLES ANTREIBSPULLE UND ANTRIEBSSEILE NICHT FETTEN ODER SCHMIEREN NO ENGRASAR O LUBRIFICAR POLEAS Y CABLES NÃO ENGRASAR OU LUBRIFICAR AS POLEAS E OS CABOS</p>	 <p>APRIRE COMPLETAMENTE LA COPERTURA PRIMA DELLE OPERAZIONI DI CARICO / SCARICO FULLY OPEN THE SYSTEM BEFORE LOADING / UNLOADING OPERATIONS OUVRIR COMPLÈTEMENT LE BÂCHAGE AVANT DE CHARGER ET DÉCHARGER BEI BEL- UND ENTLADUNG MUSS DAS VERDECK VORHER KOMPLETT ZUSAMMENGESCHOBEN SEIN SIEMPRE ABRIR COMPLETAMENTE LA COBERTURA ANTES DE CARGAR Y DESCARGAR SEMPRE ABRIR COMPLETAMENTE A COBERTURANTES DA CARGA E DESCARGA</p>		
 <p>NON CAMMINARE SULLA COPERTURA E NON UTILIZZARLA PER LIVELLARE IL CARICO DO NOT WALK ON THE SYSTEM AND DON'T USE IT TO LEVEL THE LOAD NE PAS MARCHER SUR LA BÂCHE ET NE PAS L'UTILISER POUR NIVELLER LE CHARGEMENT NICHT AUF DEM VERDECKSYSTEM LAUFEN UND NICHT PLANIEREN NO CAMINHAR SOBRE LA COBERTURA. Y NO USAR PARA NIVELAR LA CARGA NÃO CAMINHAR SOBRE A COBERTURAS NÃO UTILIZÁ-LA PARA NIVEL DA CARGA</p>	 <p>ATTENZIONE: NON VIAGGIARE IN CASO DI FORTE PANNICHE DI VENTO ATTENTION : EN CAS DE FORT VENT: NE PAS UTILISER ACHTUNG: NICHT BEI STARKEM WIND GÖREN STURM FAHREN ATENCIÓN: NO VIAJAR EN CASO DE FUERTES PAFAJAS DE VIENTO ATENÇÃO: NÃO VIAJAR EM CASO DE PORTES PAJADAS DE VENTO</p>		
<p><small>LEGGERE ATTENTAMENTE IL MANUALE D'USO PRIMA DELL'UTILIZZO DELLA COPERTURA CAREFULLY READ INSTRUCTIONS MANUAL BEFORE USING THE TARPULIN</small></p>		<p><small>VEUILLEZ LIRE LE MANUEL D'UTILISATION AVANT D'UTILISER LE BÂCHAGE DE BETRIEBUNGSHINWEISEN VOR DEM BETRIEBUNG DES VERDECKSSYSTEMS DURCHLESEN</small></p>	
<p><small>addebi: cabinele de puzbucare sa rastarele cabinele o marja de revanngment addebi: la "cabine" lo locate on the body after on panel control or on the handle for manual version</small></p>		<p><small>cabinele cabinele ead a place sa la cabine de cabine de la cabine de la marja: addebi: la "cabine" de auf dem chassis, auf der seite der elektrocabine oder der feststatten antriebsgeratung</small></p>	
<p><small>sigilla (addebi) del sistema cabinele para cabinele sa la capo al lato de la cabinele e de la marja: addebi: la cabinele "cabine" para ser colocado no lado do cabo do painel de controle ou do manivela</small></p>		<p><small>sigilla (addebi) del sistema cabinele para cabinele sa la capo al lato de la cabinele e de la marja: addebi: la cabinele "cabine" para ser colocado no lado do cabo do painel de controle ou do manivela</small></p>	