CE

dirna Bergstrom

bycool

blue line

MOCHILA

Instrucciones de Montaje

Mounting Instructions

Instructions de Montage

Montageanweisungen

Istruzioni di Montaggio

ES	Spanish
EN	English
FR	French
GE	German
IT	Italian

F-4218 rev.01

AENOR ER Calidad en Automoción IATF 16949

AENOR ER Empresa Registrada ISO 9001

CERTIFIED IQNet QUALITY SYSTEM

220AA50006

Recomendaciones Para el montaje

- Antes de iniciar el montaje leer las instrucciones y seguirlas durante el proceso de instalacion.
- Usar las herramientas adecuadas para cada operación.

Electricidad

- Desconectar la llave de contacto.
- Desconectar la batería antes de empezar el montaje.
- Asegurar el conexionado de los componentes eléctricos, verificando su correcto encaje.

Las indicaciones relativas a posición son:

DERECHA: Lado pasajero
IZQUIERDA: Lado conductor

Par de apriete *(N.m)*			
Rosca	Calidad Acero		Llave
	8.8	10.9	
M4/60	2.9	4.2	7
M5/80	5.5	7.5	8
M6/100	10	13	10

⚠ Atención

El acondicionador evaporativo funciona tomando aire del exterior que es introducido en la cabina. Es esencial que este aire no se estanque en el interior, lo que produciría un exceso de humedad. Todas las cabinas de vehículos modernos van dotados de rejillas de renovación de aire, por los que sale el aire necesario, por ejemplo, para la calefacción.

El instalador deberá cerciorarse de la existencia de estas rejillas y, en caso de no existir, deberá instalarlas.

Por su parte, el usuario deberá vigilar periódicamente que éstas rejillas no están obturadas por suciedad.

Herramientas

- Carraca con llave de paso de 10
- Destornillador de estrella TOP 10
- Llave fija de 10
- Llave allen de 6

Documentación incluída

Instrucciones de montaje	220AA50006
Manual del usuario	220AA2E004
Diagnosis de averías	220AA50008
Piezas suministradas	220RE00099
Garantía	220AA10017

⚠ Importante

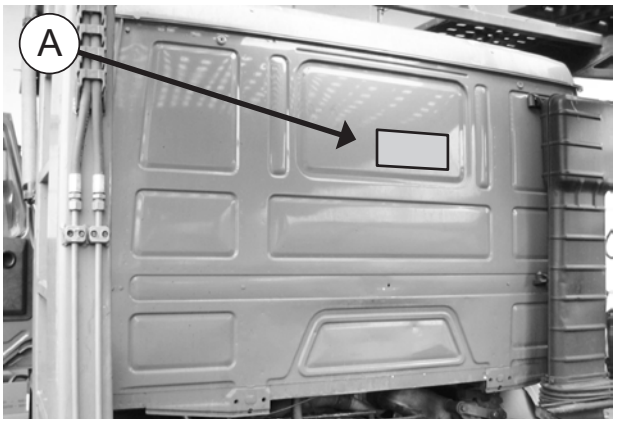
Deberán ser entregados al usuario: Tapa de invierno y el Manual del usuario.

Se recomienda al instalador leer el mencionado manual, antes de entregarlo, para informarse del mantenimiento y recomendaciones sobre el evaporativo instalado.

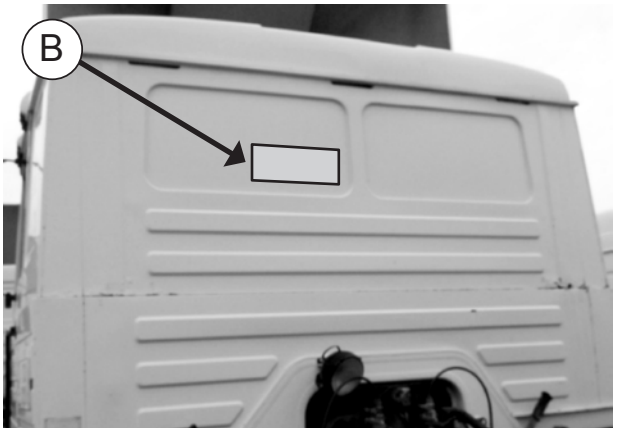
⚠ Advertencias

⚠ **Dirna Bergstrom, s.l.** queda exenta de responsabilidad si se producen averías que procedan de una inadecuada manipulación ó instalación del equipo, o por modificaciones y sustituciones efectuadas sin nuestra expresa autorización por escrito.

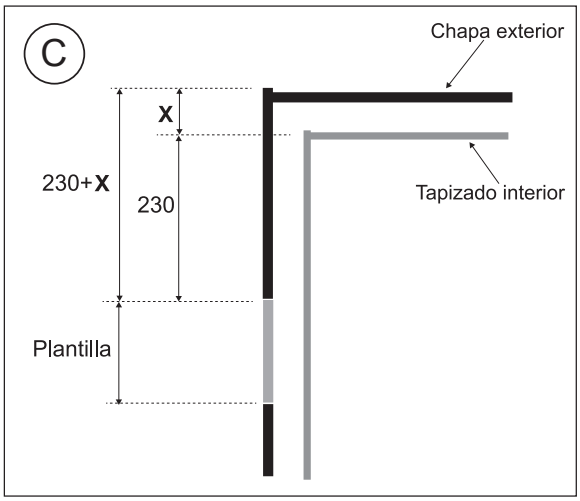
A Modelos en los que el corte de la plantilla se da centrado.



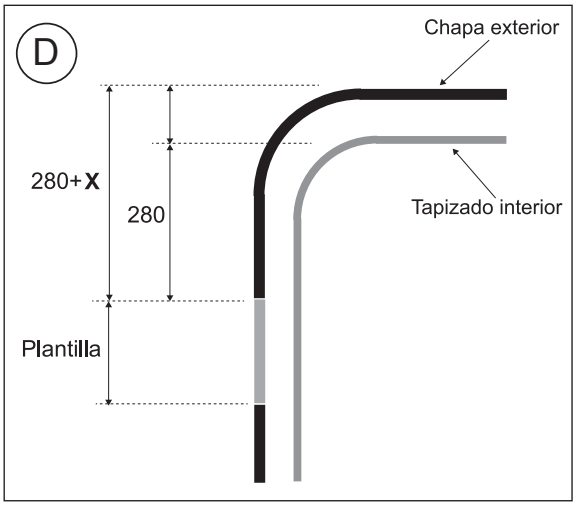
B Modelos en los que el corte de la plantilla se da en lado izquierdo ó derecho. (A elección).



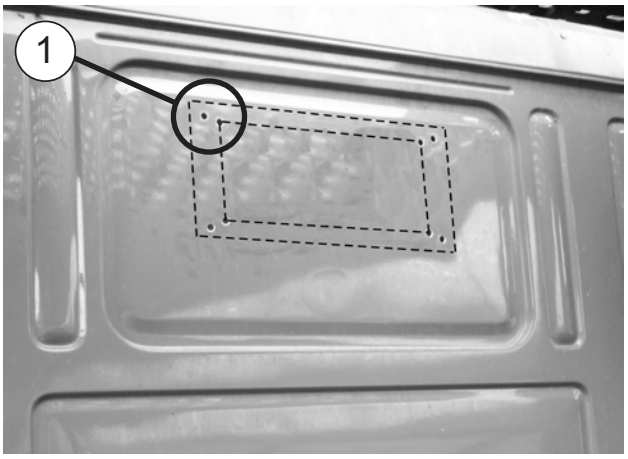
C Para cabinas que acaban en ángulo recto, se sumará 230mm. a x (distancia entre chapa y tapizado interior). A esa medida se posiciona la parte superior de la plantilla suministrada.



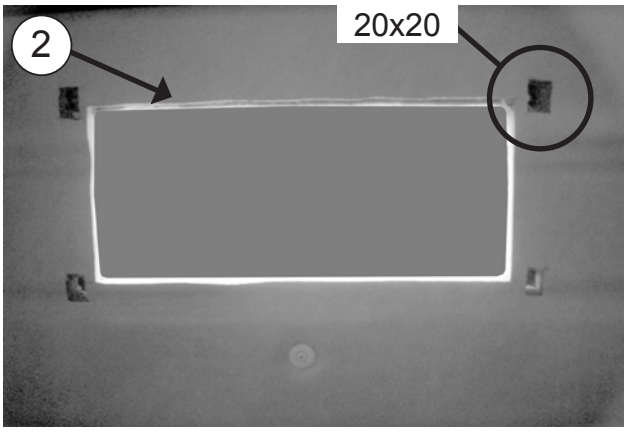
D Para cabinas que tienen radio, la medida de 230 pasa a ser 280mm., El resto de la operación es igual que en el paso anterior.



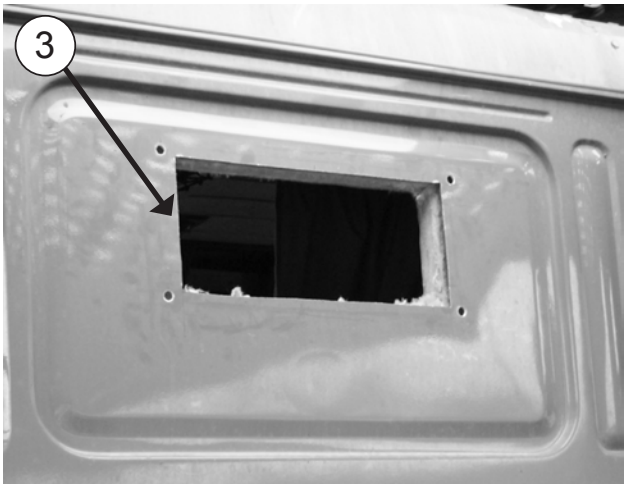
1 Presentar plantilla centrada, según medida (casos C y D), marcar los (4)taladros y (4) esquinas del corte y taladrar a Ø8.



2 Por el interior cabina. Unir los (4) puntos del corte y recortar el tapizado con un cuter, (para que al dar el corte desde el exterior no se rasgue el tapizado), hacer a su vez cortes de 20x20mm. alrededor de los (4)taladros.

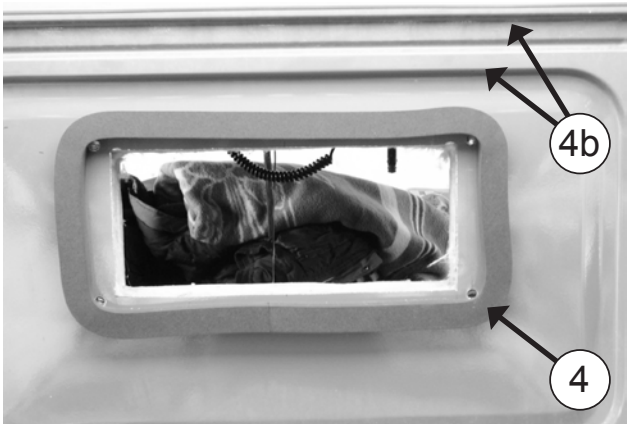


3 Por el exterior cabina. Unir las (4) esquinas y dar corte, con sierra de calar, en la chapa (parte exterior). Proteger corte con minio o pintura.

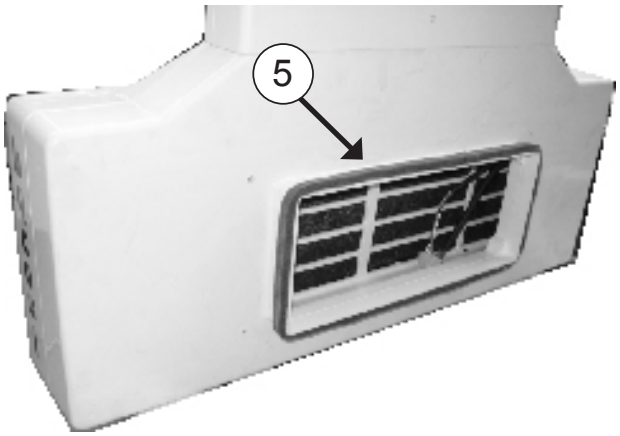


4 Pegar junta alrededor de los (4)taladros como se ve en la foto.

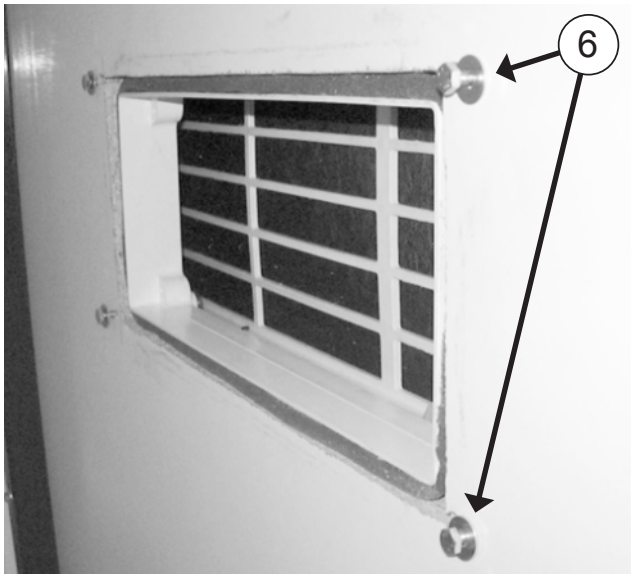
a- dependiendo de los mm.que sobresalga el reborde o nervios originales de la cabina, se optará por junta de 15, 25 ó 30mm., todas ellas suministradas, de forma que quede lo mas pegado a la cabina.

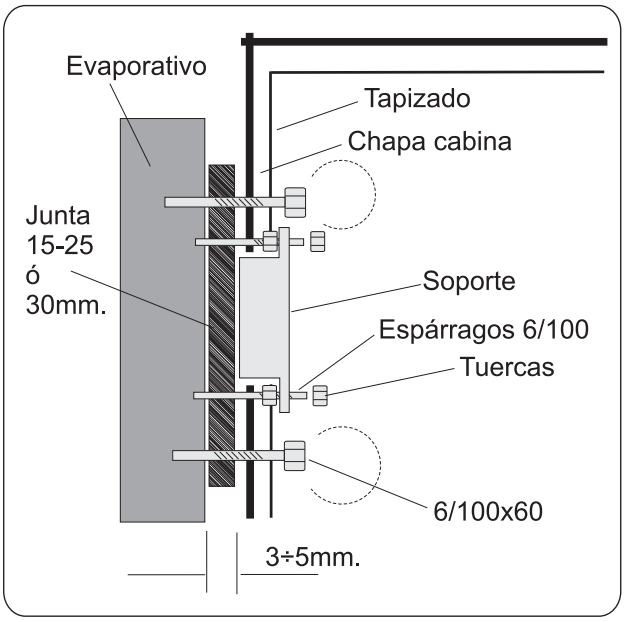


5 Pegar aislante en evaporativo como se muestra.

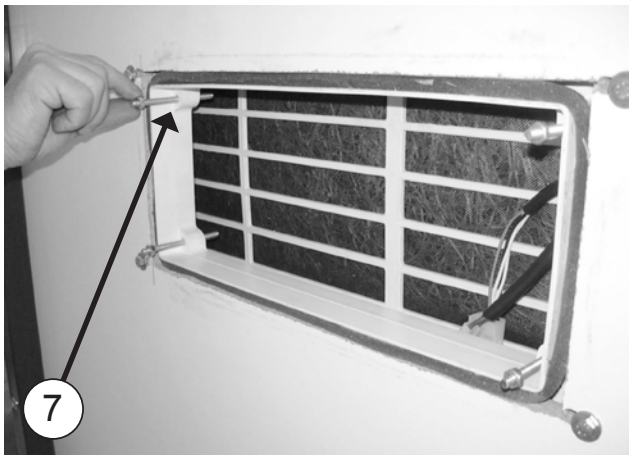


6 Por el interior de la cabina fijar el conjunto evaporador c/(4)tornillos 6/100x60, (4)arandelas planas Ø6 ala ancha y (4)arandelas Ø6 grower. Apretar tornillos hasta que la junta quede oprimida entre 3 y 5 mm. - par de apriete 3.9/4.9 Nw/m - (**VER DETALLE**).



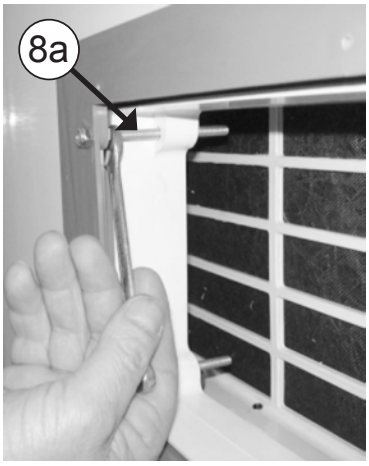


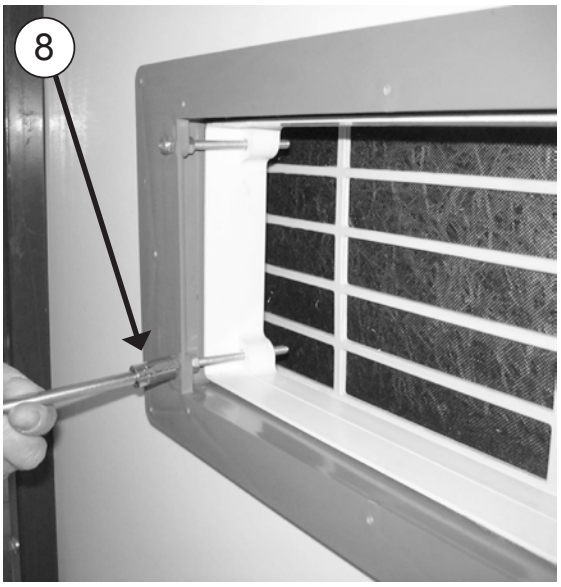
7 Roscar (4)espárragos M6/100x100 ó 160 (dependiendo del mayor o menor grosor del tapizado), con (4) tuercas M6.



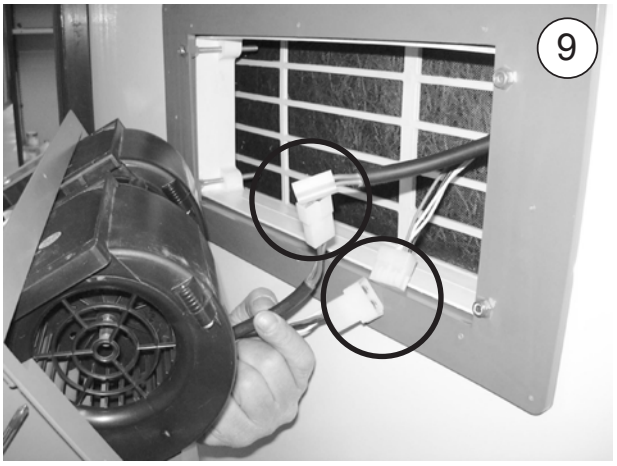
8 Montar sobre los espárragos el soporte, colocar tuerca 6/100 autoblocante y roscar hasta el ajuste final con el soporte y éste con el tapizado.

a- fijar con la contratuerca.

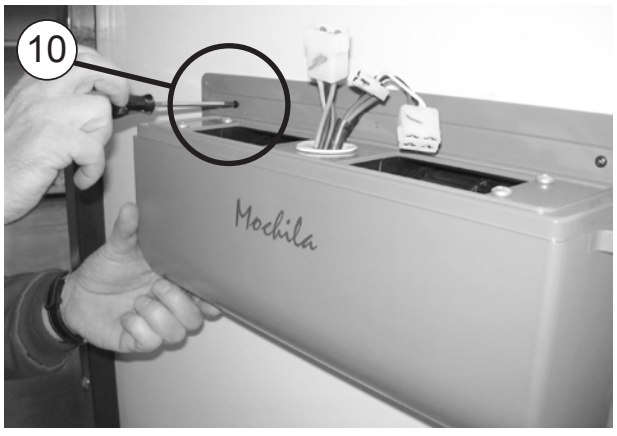




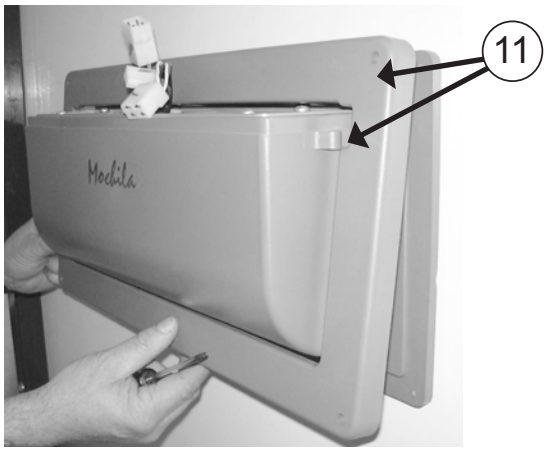
9 Conectar las cajas del cableado del evaporativo exterior, con cajas del cableado del canalizador.



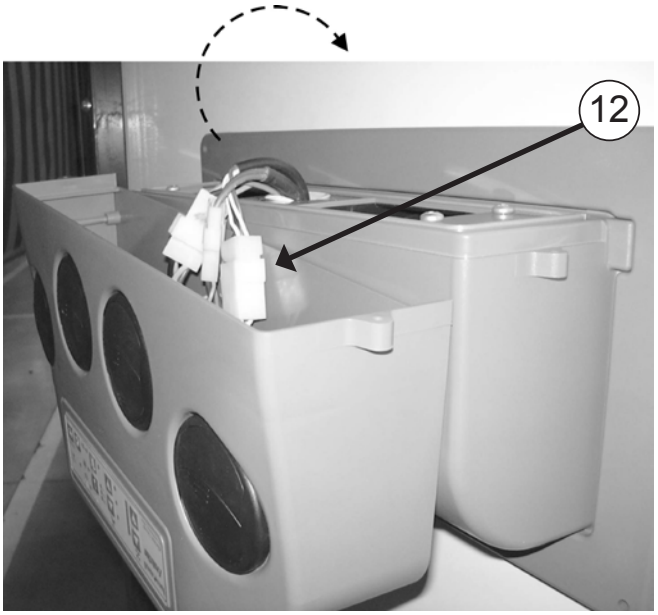
10 Montar canalizador soplador con (8) tornillos rosca chapa 3.5x9.5 mm.



11 Fijar marco al canalizador con (4)tornillos rosca chapa 3.5x9.5 mm., teniendo en cuenta la posición de los rebajes.

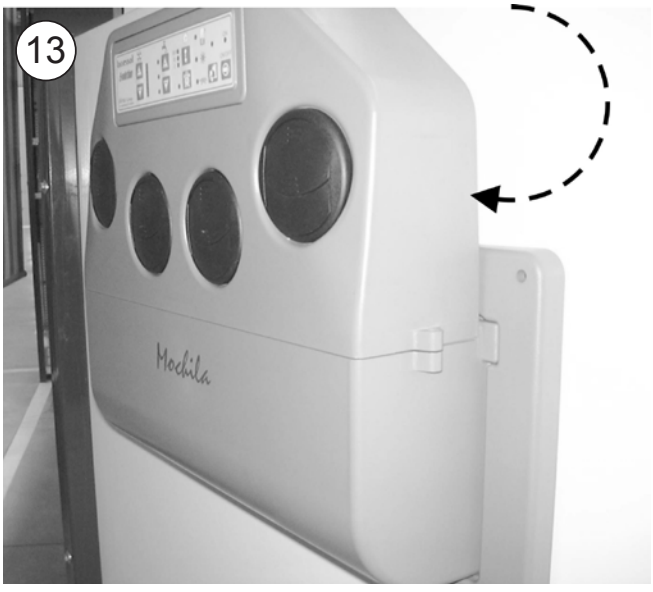


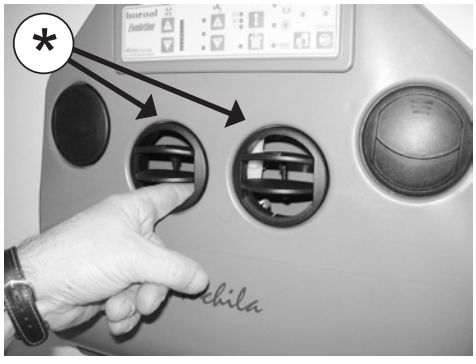
12 Conectar las cajas del cableado del canalizador, con las del frente con ventanillas, en la posición indicada, ir girando como se indica hasta su posición final.



13 Fijar con (2) tornillos rosca chapa 3.5x9.5mm.

(*) A través de las ventanillas centrales, centrar las cajas para que no interfieran en la salida del aire.

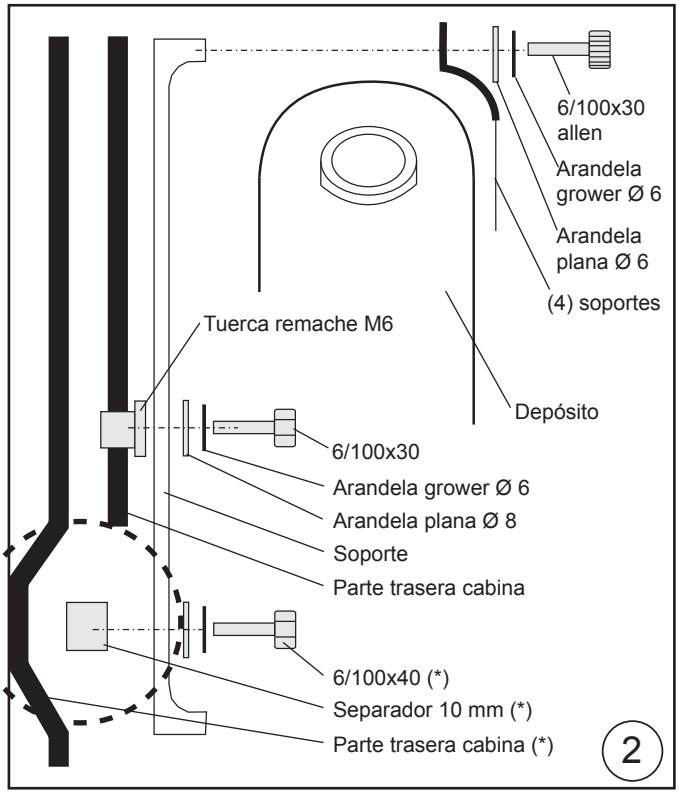




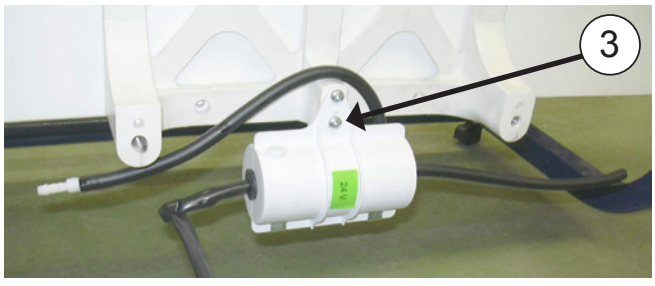
OPERACIONES A REALIZAR PARA MONTAJE DEPÓSITO DE AGUA

1 Posicionar soporte depósito, en la parte baja mas adecuada de la zona trasera de la cabina. Marcar y taladrar a Ø 9 en cabina, teniendo en cuenta la posición vertical del soporte. Mínimo 6 taladros de sujeción.

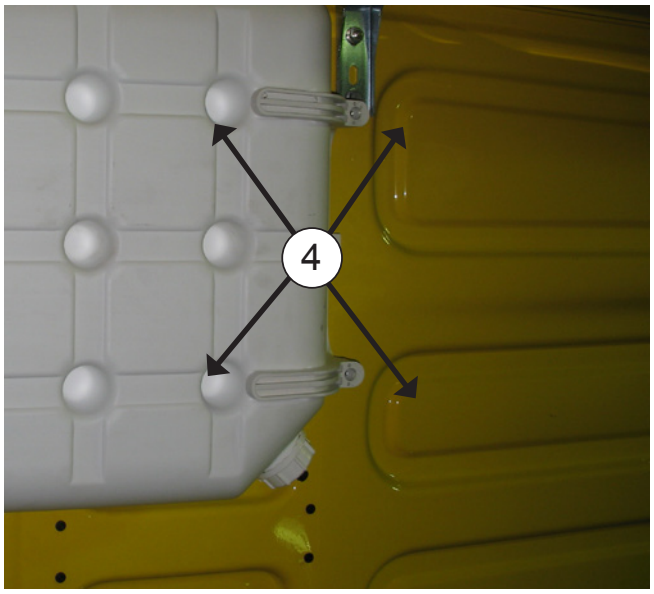
2 Colocar tuercas remache de M6 y fijar el soporte con tornillos 6/100x30.
(*) en los casos que no apoye en parte lisa, colocar separador de 10mm.y tornillo 6/100x40.

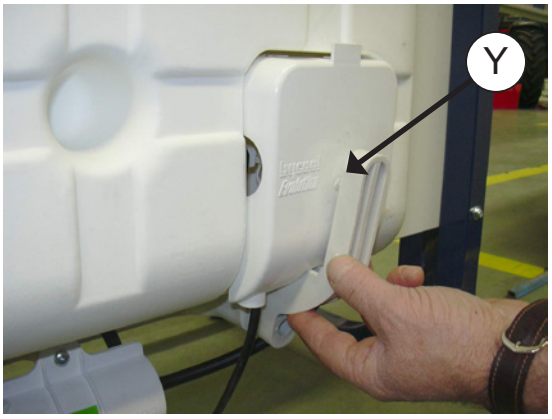


3 Fijar conjunto bomba al depósito con (2) tornillos rosca chapa 5.4x19mm.



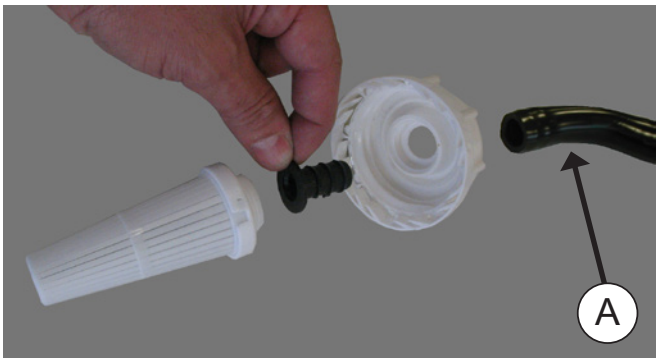
4 A continuación conectar tubo de bomba (X) a depósito y fijar depósito (*eligiendo mejor posición del tapón de llenado, derecha o izquierda, para facilitar el mismo*) con soportes suministrados. El soporte con resalte se coloca en caso de montar el depósito con el tapón de llenado (Y) al lado izquierdo.



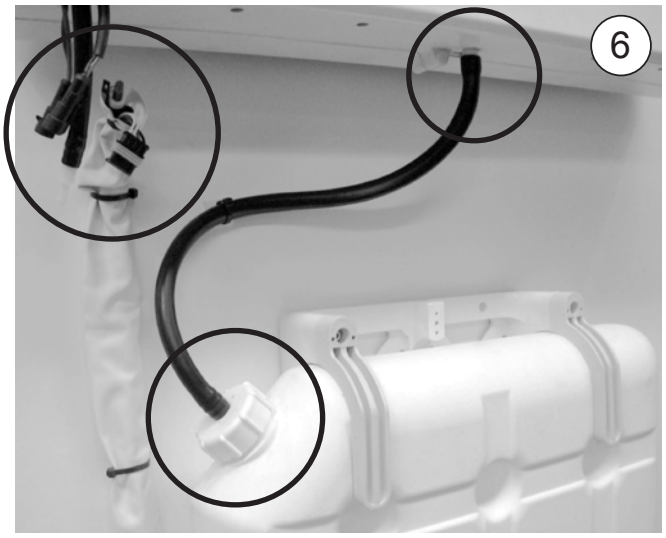


OPERACIONES A REALIZAR PARA MONTAJE DEPÓSITO DE AGUA

5 Montar filtro en tubo con espiga, introducir en el tapón y conectar a tubo de retorno Ø18 x Ø12 (A).



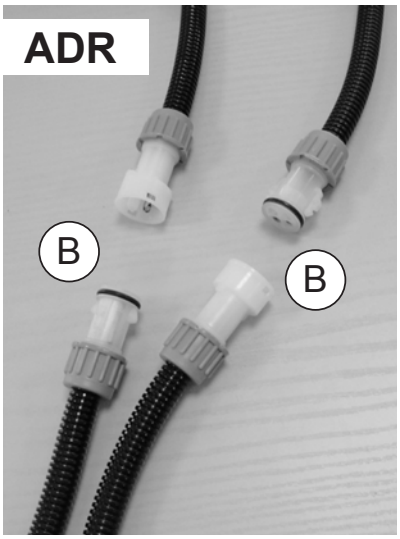
6 Colocar tapón en el depósito. Conectar cableado con funda a las cajas del evaporativo y tubo entrada de agua.

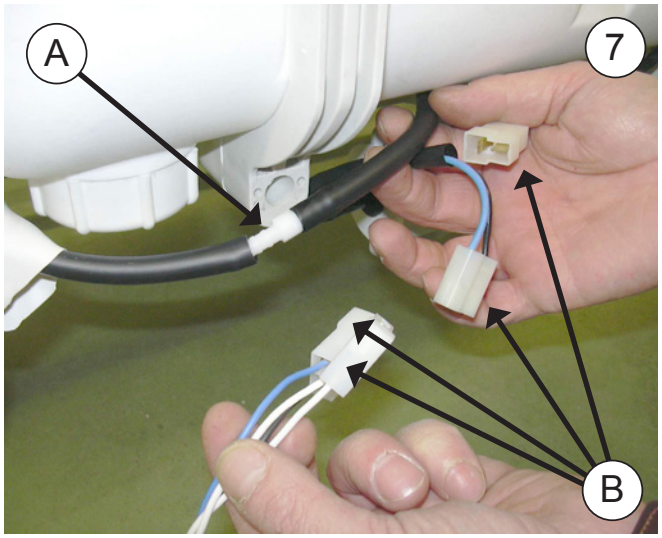


7 Conectar cableado con funda a las cajas del evaporativo y tubo entrada de agua.

A. Conectar a la bomba el tubo de impulsión que viene desde el evaporativo.

B. Conectar cableado bomba y el de nivel.



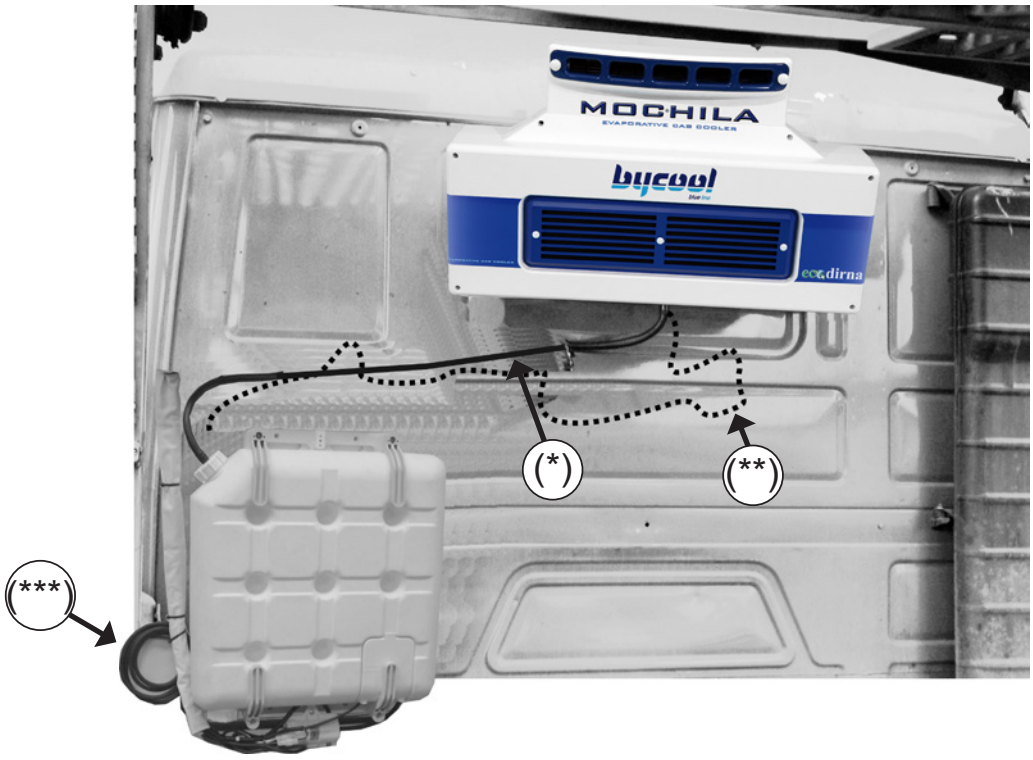


8 Conectar como se indica el cableado de batería.

(*) Manera correcta de colocación, donde el tubo de desagüe tenga caída y no horizontabilidad, bucles ni estrangulamientos, para facilitar la caída de agua al depósito, evitando su acumulación en bandeja, posterior derrame al exterior y al no retornar, posterior vacío de agua del depósito

(**) Manera incorrecta. No realizar.

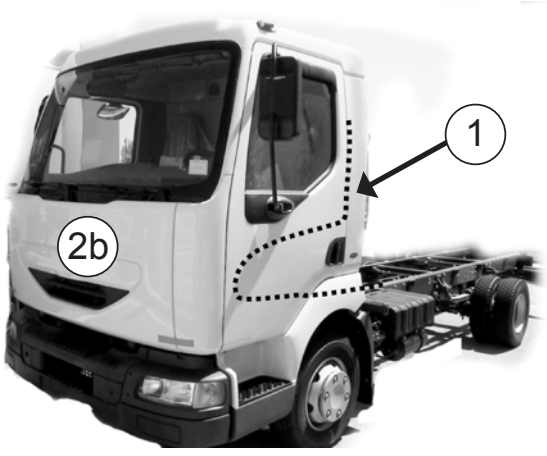
(***) NO CORTAR cableado sobrante y sujetarlo (enrollado), detrás del depósito de agua. En caso de error y cortar, volver a conectar en posición orig.para evitar daños irreversibles en el control electrónico.



1- Llevar cables (0910250011) hasta la batería, utilizando el paso del cableado original.

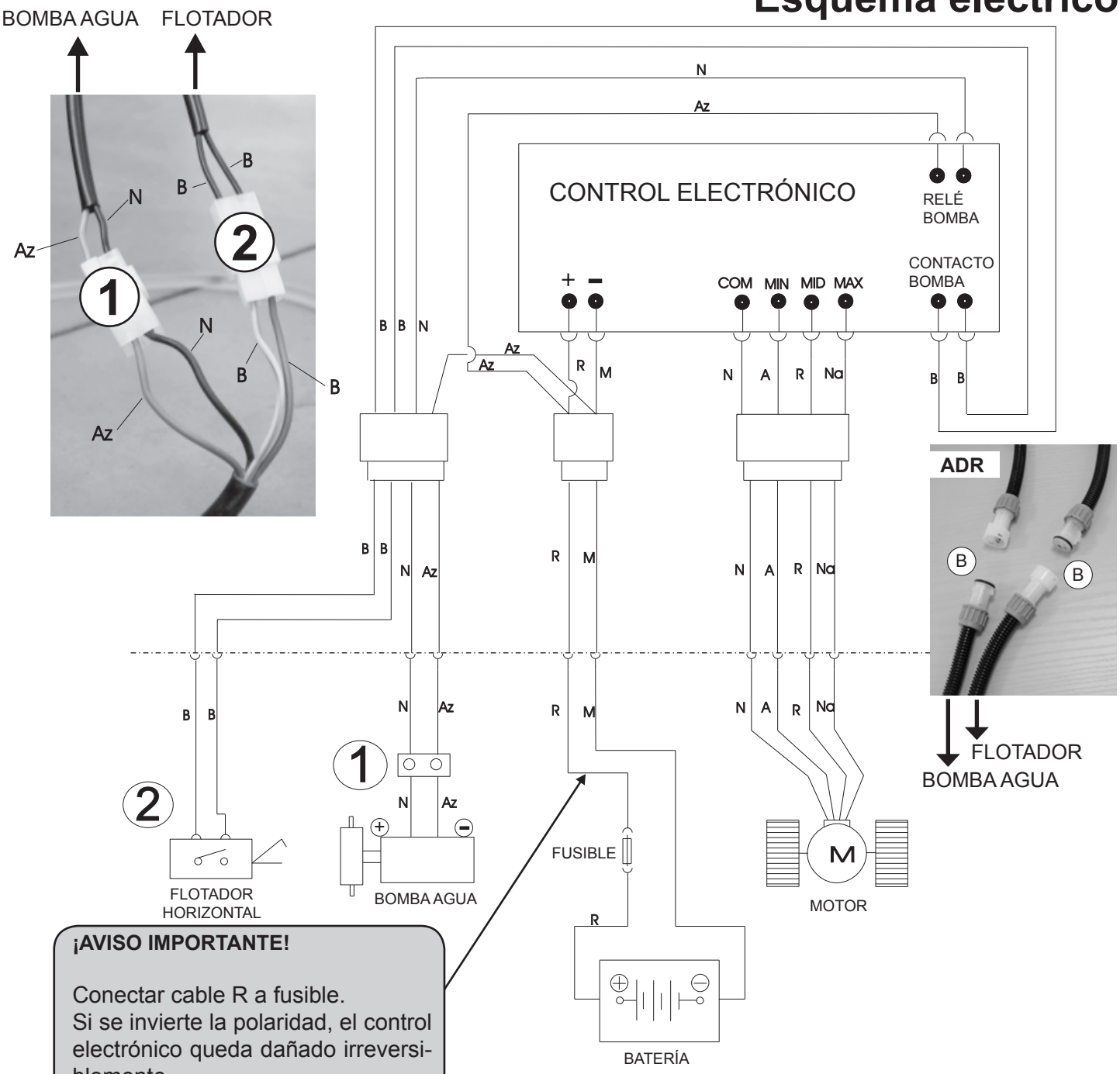
2- Dar taladro Ø3 y fijar fusible junto a batería, con tornillo 5/80x11 auto-taladrante, llevar cable teniendo en cuenta una mayor longitud para cuando se abata la cabina, e ir fijando con bridas suministradas.

a- conectar cable positivo y negativo a batería y volver a conectar los bornes.
b- hacer bucle con el cable, NO CORTAR.



dirna Bergstrom

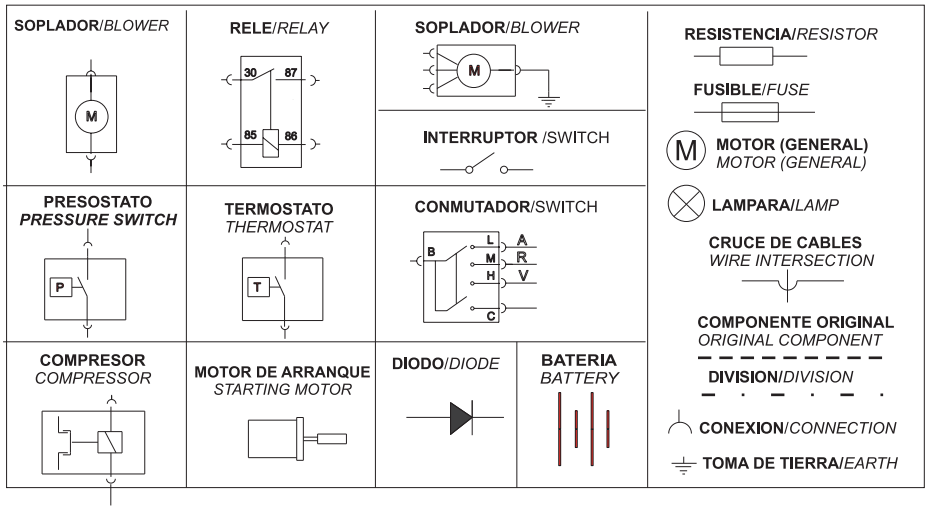
Esquema eléctrico



¡AVISO IMPORTANTE!

Conectar cable R a fusible.
Si se invierte la polaridad, el control electrónico queda dañado irreversiblemente.

SIMBOLOGIA/*CONVENTIONAL SIGNS*



COLORES/*COLOURS*

A	**Amarillo**
Az	**Azul**
B	**Blanco**
G	**Gris**
Na	**Naranja**
N	**Negro**
R	**Rojo**
Ro	**Rosa**
V	**Verde**
Vi	**Violeta**
M	**Marrón**
Mo	**Morado**

Mounting Guidelines

- Prior to assembly, read the instructions and follow these throughout the mounting operations.
- Use the appropiate tools for each operation.

Electricity

- Switch the connector off.
- Disconnect the battery before starting mounting operations.
- Verify that the electrical components have been connected correctly.

References to position:
RIGHT: Driver's right hand
LEFT: Driver's left hand

Driving torques *(N.m)*			
Fillet	Steel Quality		Wrench opening
	8.8	10.9	
M4/60	2.9	4.2	7
M5/80	5.5	7.5	8
M6/100	10	13	10

⚠ Important

Evaporative air conditioner works by taking air from outside and introducing it in cabin. It is essential that air does not stagnate inside, which would produce an excess of humidity. All modern cabins of vehicles are equipped with air inlets, through which required air comes out as, for instance, in the case of heating.

Assembler will have to check that these air inlets do exist and, in case they do not, he will have to mount them.

As for the user, he will have to periodically make sure that these air inlets are not blocked by dirt.

Tools

- Ratchet with 10mm shut-off valve
- TOP 10 star screw-driver
- 10 mm spanner
- 6 mm allen wrench

Documentation included

Mounting instructions	220AA50006
User's guide	220AA2E004
Troubleshooting	220AA50008
Included parts	220RE00099
Warranty	220AA10017

⚠ Important

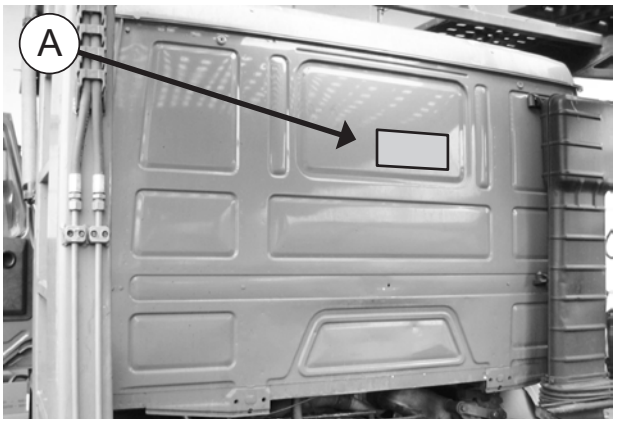
The following parts will have to be delivered to user: **Winter cover and user's handbook.**

The assembler is recommended to read the above mentioned handbook, before giving it to user, in order to inform himself of the maintenance and recommendations on the evaporative equipment being assembled.

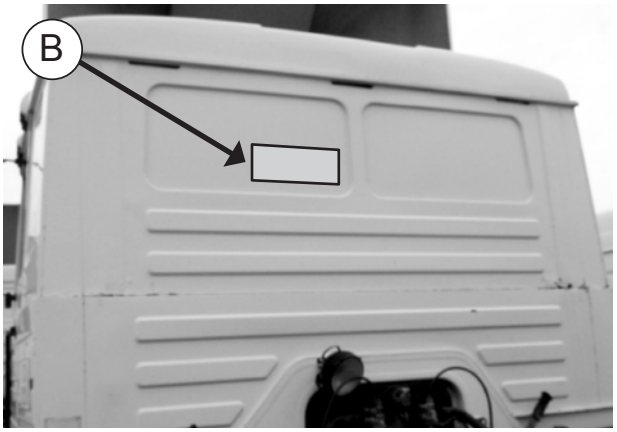
⚠ Warnings

⚠ **Dirna Bergstrom, s.l.** will not be held responsible for any faults arising from inappropriate handling or installation of the equipment, or due to modifications or replacements carried out without our written authorisation.

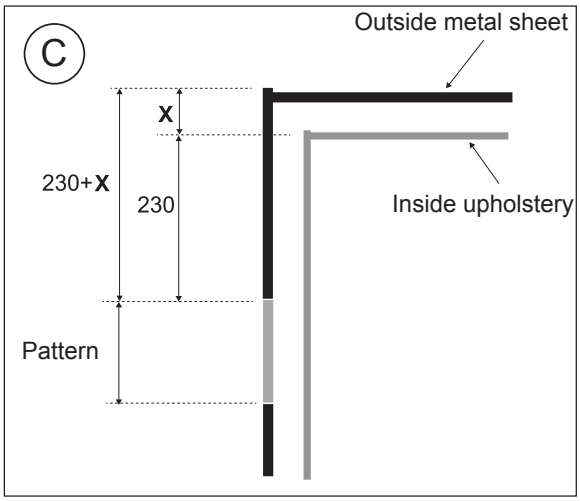
A Models for which pattern cut is centred.



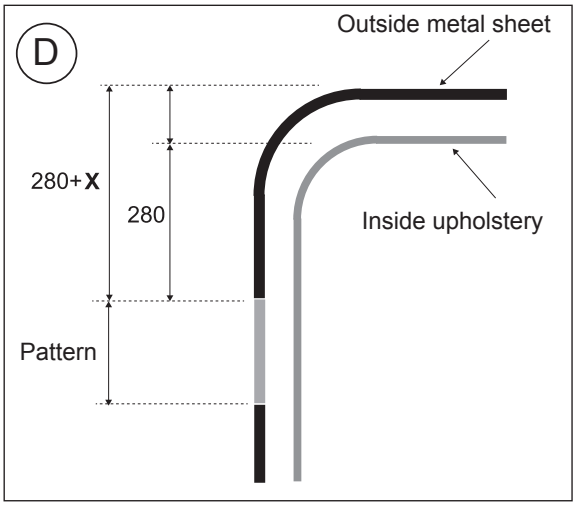
B Models for which pattern cut is situated on left or right hand side (to be chosen).



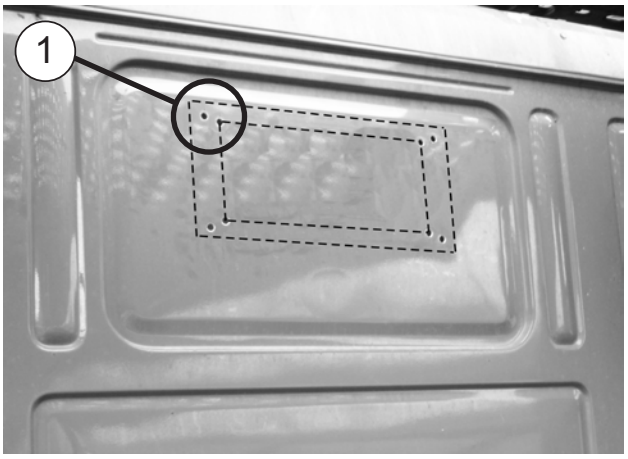
C For cabins ending at a right angle, 230mm will have to be added to x (distance between metal sheet and inside upholstery). Upper part of provided pattern will be positioned according to this measure.



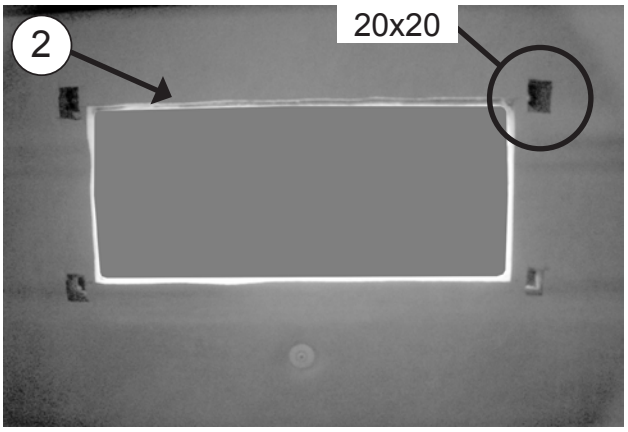
D For cabins with a radius, 280mm will have to be added instead of 230mm as in the previous case. The rest of the operation is the same as in point C.



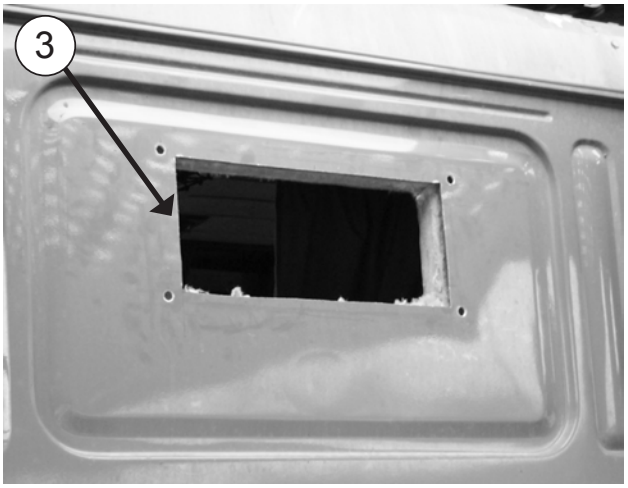
1 Centre pattern according to measure (cases C and D), mark (4) holes and the (4) corners of cut and drill at Ø8.



2 From inside of cabin, join the (4) points of cut and cut upholstery with a cutter (so that when cutting from outside, upholstery is not torn) and make 20x20mm cuts around the (4) holes.

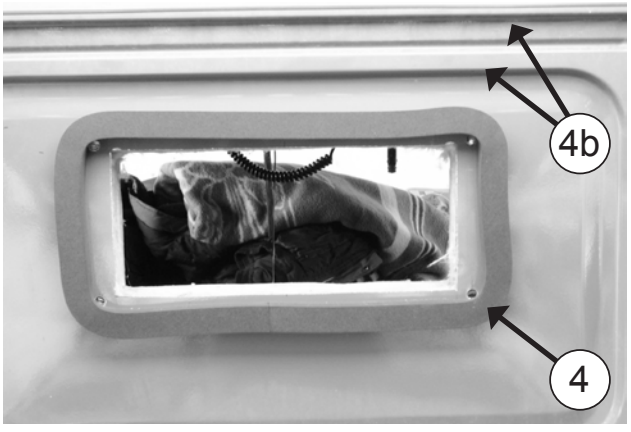


3 From outside of cabin, join the (4) corners and cut sheet (outer part) using a jigsaw. Protect cut with red lead or paint.

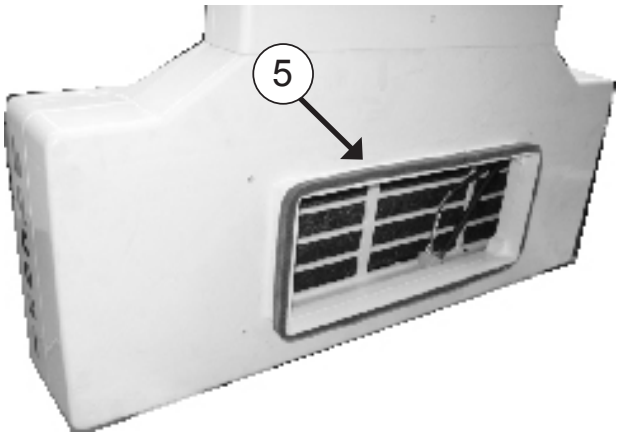


4 Clue joint around the (4) holes as shown on photo.

a- Depending on how many mm the edge or original cabin ribs stick out, use 15, 25 or 30mm. joints, all of them being provided, so that it is as close to the cabin as possible.

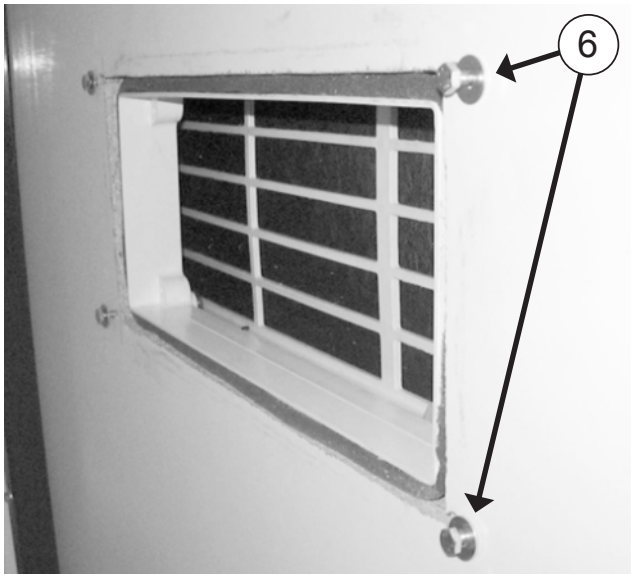


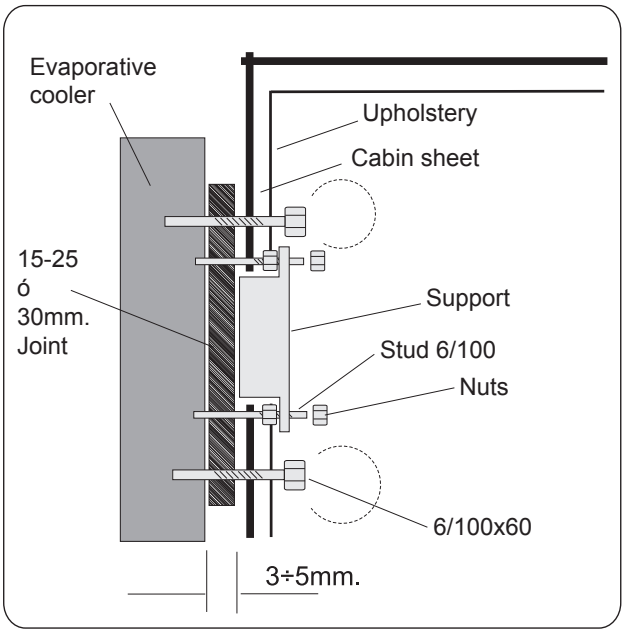
5 Clue insulant on evaporative as shown.



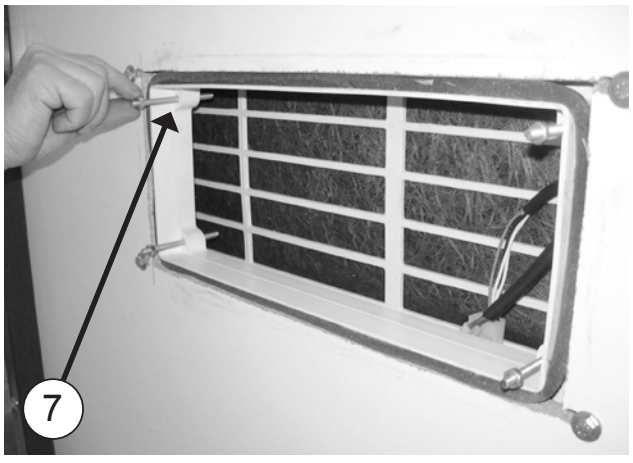
6 From inside of cabin, fasten evaporator set with (4) 6/100x60 screws, (4) Ø6 wide wing flat washers and (4) Ø6 grower washers.

Tighten screws until joint is oppressed down to 3-5 mm. torque: 3.9/4.9 Nw/m - (**SEE DETAIL**).



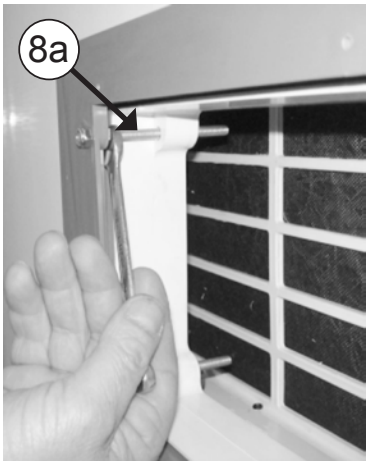


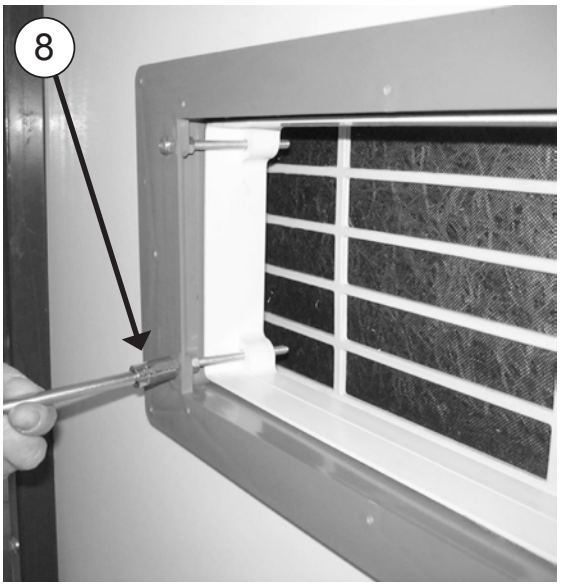
7 Screw (4) M6/100x100 or 160 stud (depending on upholstery thickness) using (4) M6 nuts.



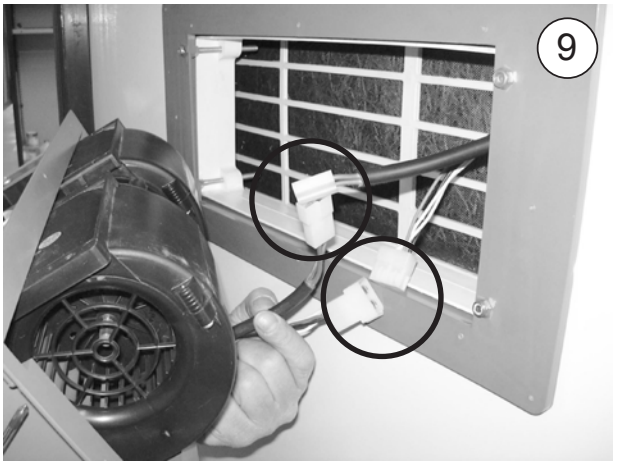
8 Assemble support on bolts, place 6/100 self-blocking nut and tighten until it adjusts with support and the latter with the upholstery.

a- fasten using counter nut.

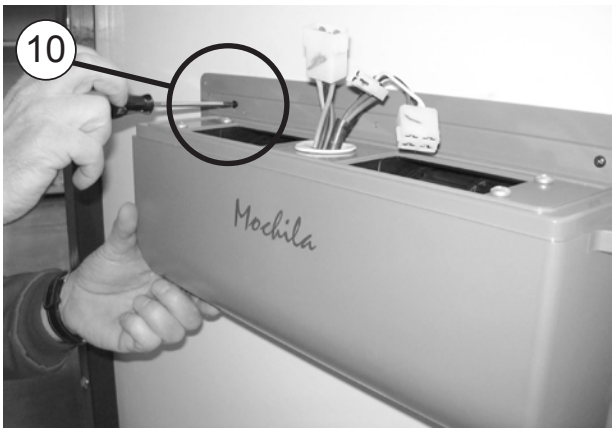




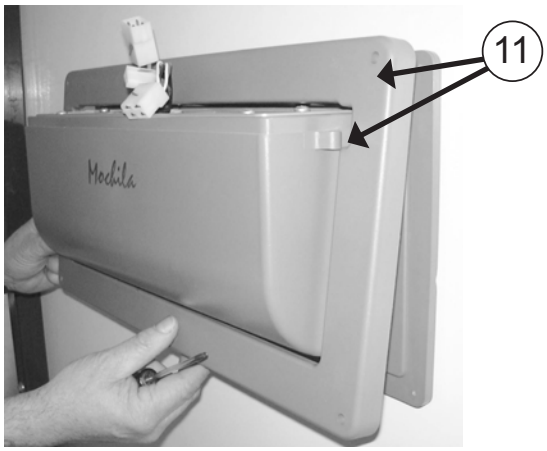
9 Connect wiring boxes of outside evaporative to wiring boxes of canalisation system.



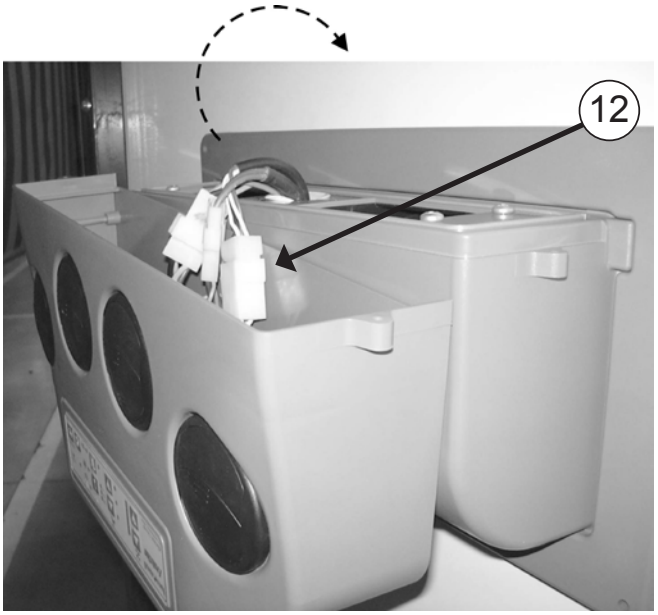
10 Assemble canalisation system of blower with (8) 3.5x9.5 mm sheet thread screws.



11 Fasten frame to canalisation system using (4) 3.5x9.5 mm sheet thread screws and taking into account position of trimmings.

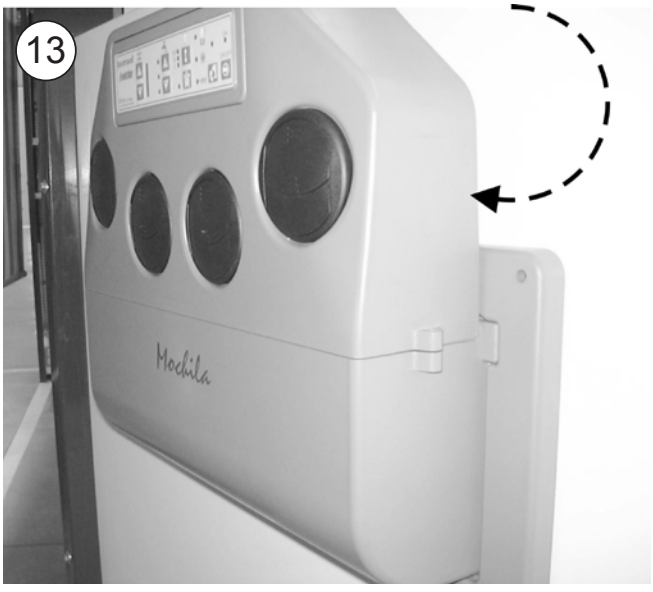


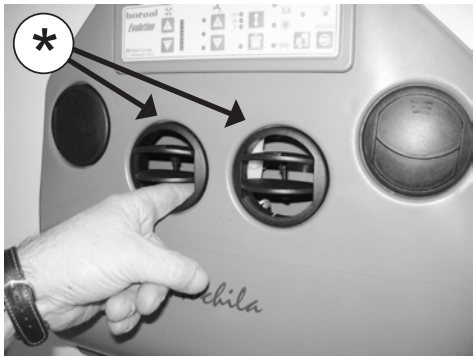
12 Connect wiring boxes of canalisation system to those of the front with air vents in indicated position and turn as shown until they reach their final position.



13 Fasten using (2) 3.5x9.5mm. sheet thread screws.

(*) Through central air vents, centre boxes so that they do not interfere with air outlet.

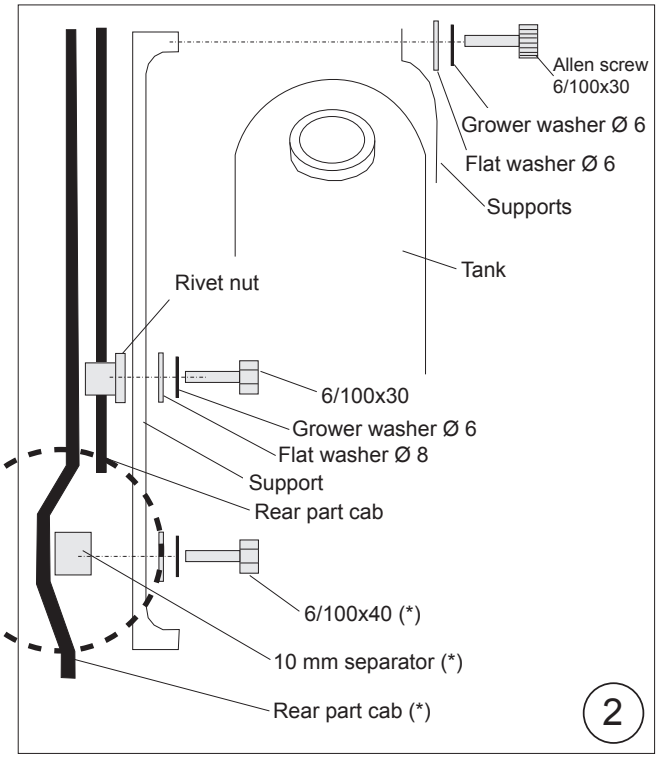




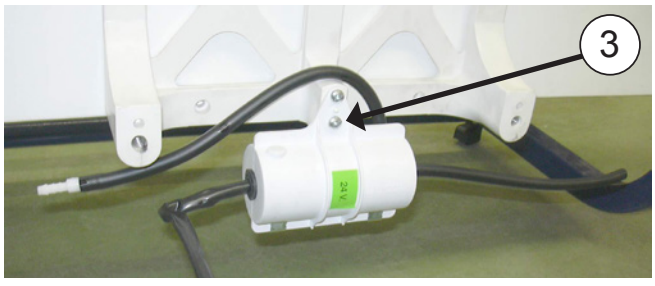
OPERATIONS TO BE CARRIED OUT TO ASSEMBLE WATER TANK

1 Place tank support on the most suitable lower part of the rear area of the cab. Mark and drill Ø 9 on the cab bearing in mind the vertical position of the support. Minimum (6) fastening drill holes.

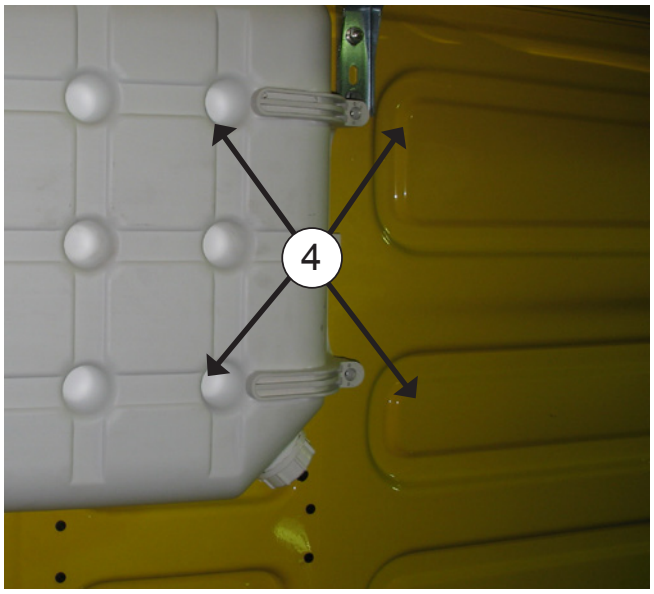
2 Place M6 riveting nuts and fasten support using 6/100x30 screws
(*) in case it does not rest on smooth part, place 10mm.separator and 6/100x40 screw.

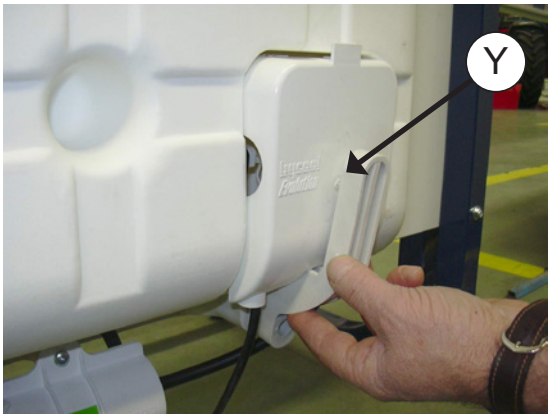


3 Fasten pump set to tank with (2) 5.4x19mm sheet thread screws.



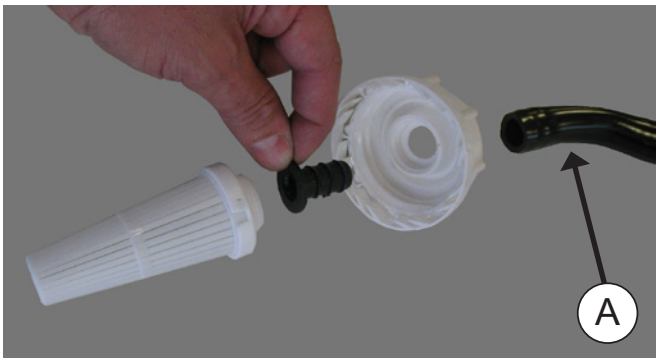
4 Then connect the pump pipe (x) to the tank and fasten tank (choosing the best position for the filling plug, right or left, to enable this) with supports supplied. The support with the projection is placed, if the tank is assembled with the filling plug, (Y) to the left-hand side.



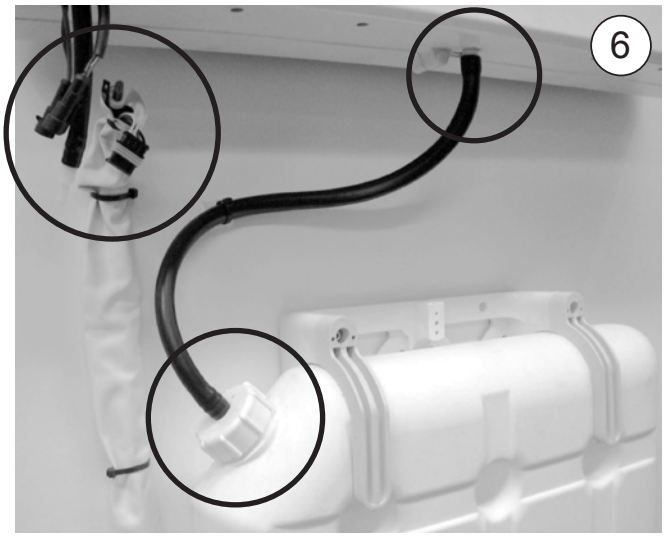


OPERATIONS TO BE CARRIED OUT TO ASSEMBLE WATER TANK

5 Assemble the filter in the pipe with a bolt, insert into the filler plug and connect to the return pipe Ø18 x Ø12 (A).



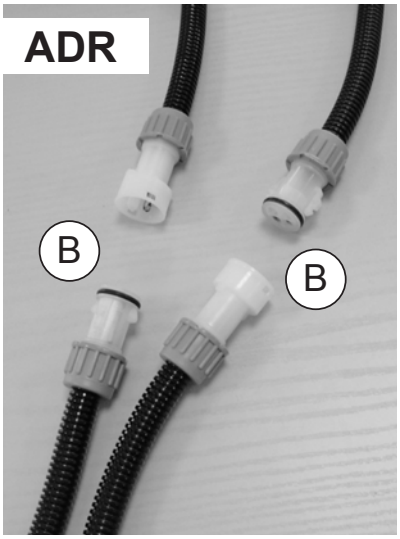
6 Place cap on tank. Connect wiring with sheath to boxes of evaporative and hose of water inlet.

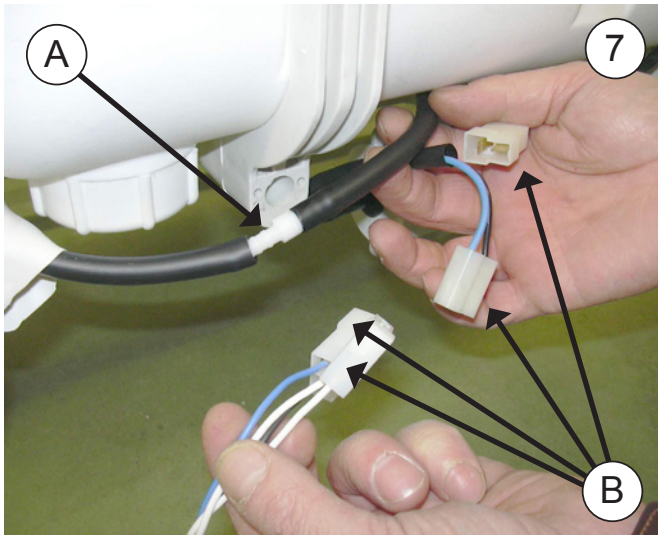


7 Connect sheathed wiring to the evaporative boxes and water inlet pipe.

A. Connect the impulsion pipe to the pump which comes from the evaporative unit.

B. Connect pump wiring and level.



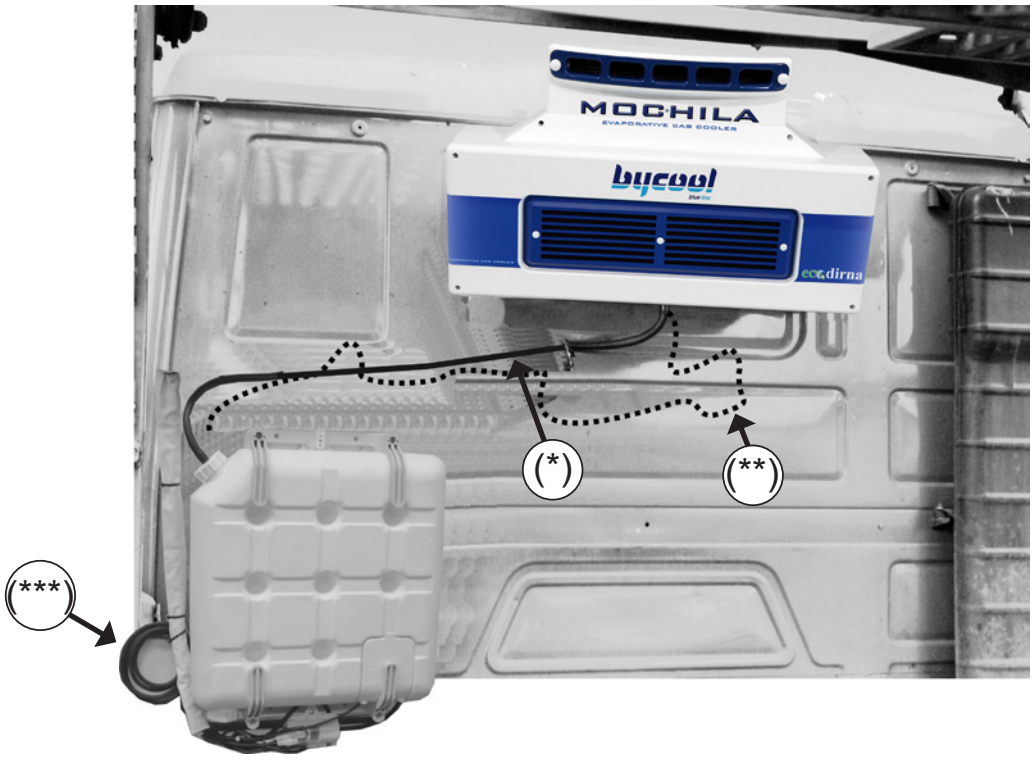


8 Connect the battery wiring as indicated.

(*) Correct assembly, where drainpipe is inclined. It should neither be horizontal nor form loops or strangulations so that water can more easily fall into tank and in order to avoid its accumulation in tray and running outside and also to avoid emptying of water tank, in absence of return.

(**) Wrong assembly. Do not carry out.

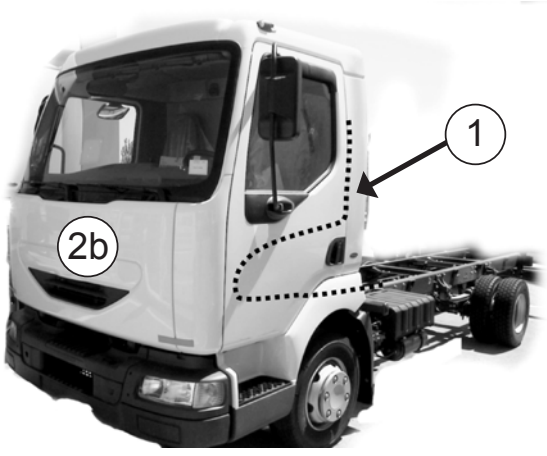
(***) DO NOT CUT remaining wiring but fasten it (in a roll), behind water tank. In case of cutting by mistake, reconnect in original position to avoid irreversible damages to electronic control.



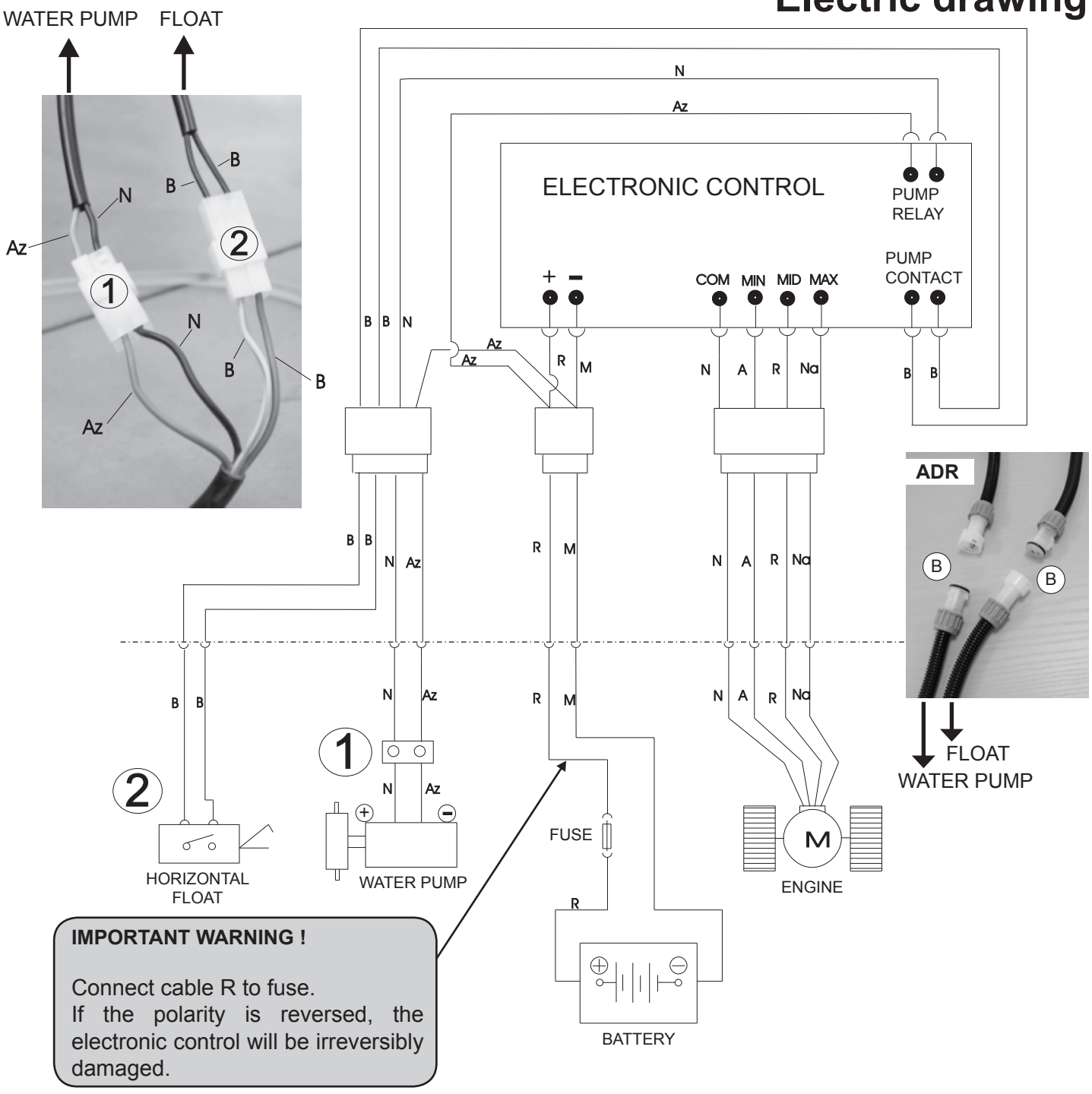
1- Lead cables up to battery, using original wiring passage.

2- Drill Ø3 hole and fasten fuse together with battery with 5/80x11 self-perforating screw. Lead cable as indicated (see next page) and fasten along with provided flanges.

a- Connect positive and negative cable to battery and reconnect terminals.
b- Make a loop with cable, DO NOT CUT.



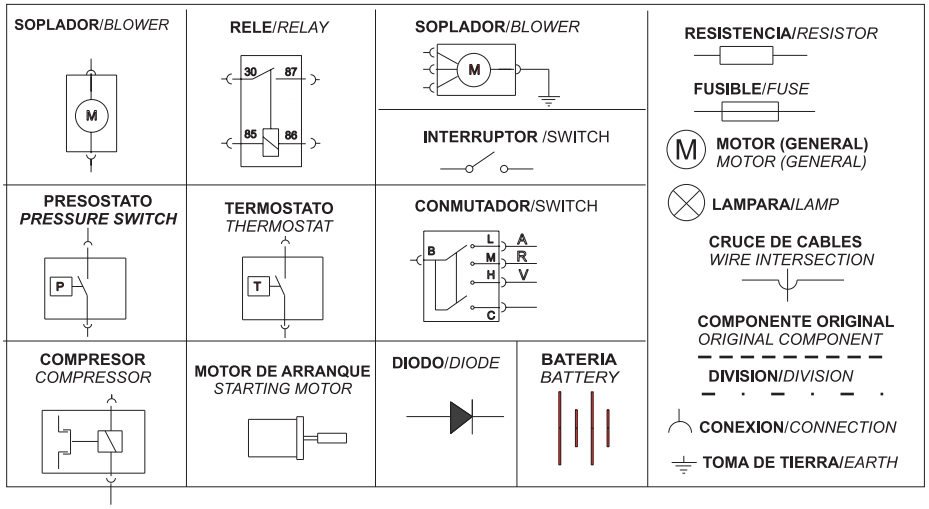
Electric drawing



IMPORTANT WARNING !

Connect cable R to fuse.
If the polarity is reversed, the electronic control will be irreversibly damaged.

SIMBOLOGIA/*CONVENTIONAL SIGNS*



COLORES/*COLOURS*

A	Yellow
Az	Blue
B	White
G	Grey
Na	Orange
N	Black
R	Red
Ro	Pink
V	Green
Vi	Violet
M	Brown
Mo	Purple

Recommandations pour le montage

- Avant de commencer le montage, lire les instructions et les suivre au cours de celui-ci.
- Utiliser les outils adequats pour chaque operation.

Electricité

- Déconnecter la clef de contact.
- Déconnecter la batterie avant de commencer le montage.
- S'assurer que les composantes électriques sont correctement connectées.

Les indications relatives aux positions sont:
DROITE: Côté passager
GAUCHE: Côté conducteur

Couple de serrage *(N.m)*			
Filet	Qualité d'acier		Clef
	8.8	10.9	
M4/60	2.9	4.2	7
M5/80	5.5	7.5	8
M6/100	10	13	10

⚠ Attention

Le climatiseur evaporatif fonctionne en prenant de l'air de l'exterieur qui est ensuite introduit dans la cabine. Il est essentiel que cet air ne stagne pas a l'interieur provoquant ainsi un exces d'humidite. Toutes les cabines des vehicules modernes sont equipees de grilles de renovation d'air, a travers lesquelles l'air necessaire sort, comme par exemple dans le cas du chauffage.

L'installateur devra s'assurer que ces grilles existent et, dans le cas ou elles n'existeraient pas, il devra les installer.

Quant a l'utilisateur, celui-ci devra verifier periodiquement que les grilles ne sont pas obturees par

Outils

- Cliquet avec robinet d'arrêt de 10
- Tournevis à étoile TOP 10
- Clé plate de 10
- Clé hexagonale de 6

Documentation included

Instructions de montage	220AA50006
Guide de l'utilisateur	220AA2E004
Solution des problèmes	220AA50008
Pieces fournies	220RE00099
Garantie	220AA10017

⚠ Important

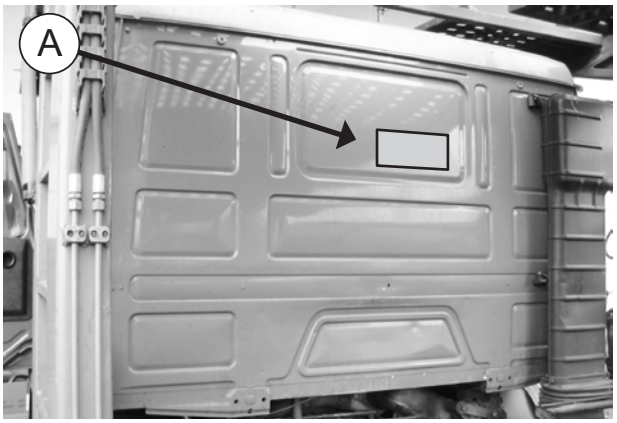
Le couvercle d'hiver et le manuel de l'utilisateur Devront etre remis a l'utilisateur.

Il est conseille a l'installateur de lire le manuel, Avant de le remettre, afin de s'informer de L'entretien et des recommandations concernant L'equipement installe.

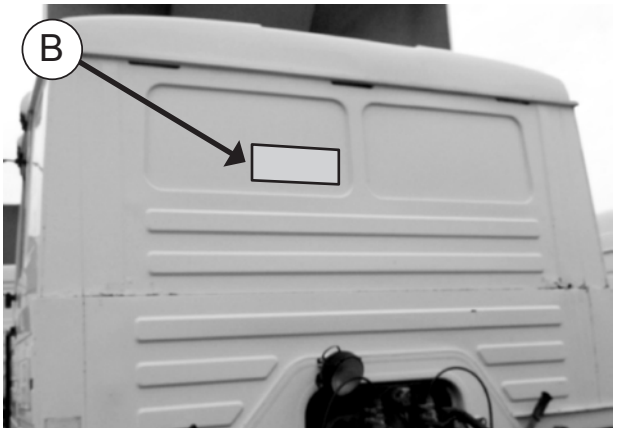
⚠ Garantie

⚠ **Dirna Bergstrom, s.l.**, ne sera pas responsable des dommages ou des bris dérivés d'une installation ou d'une manipulation incorrecte ni des modifications réalisées sans autorisation expresse par écrit.

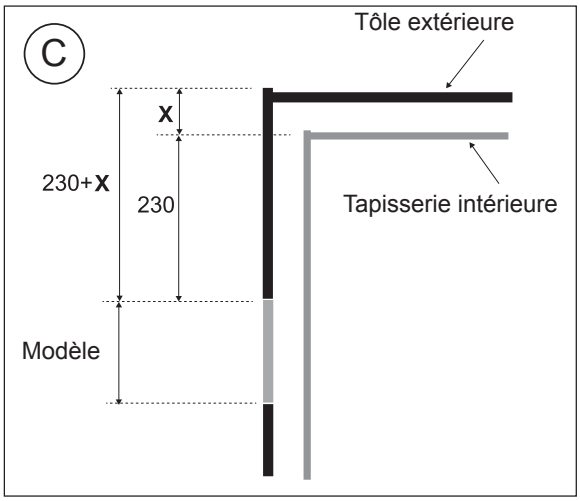
A Cas pour lesquels la découpe du modèle est centrée.



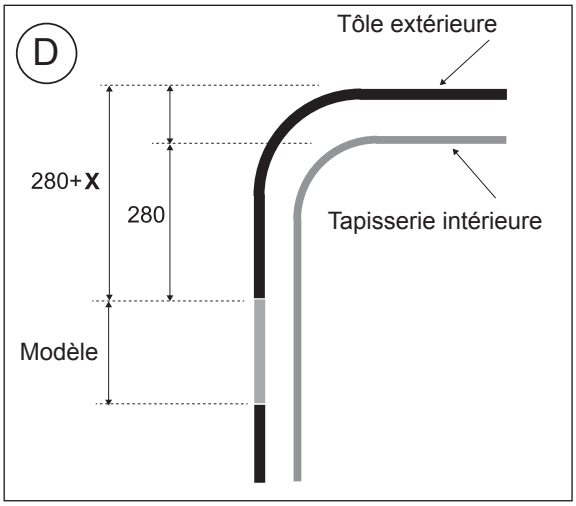
B Cas pour lesquels la découpe du modèle est à gauche ou à droite (au choix).



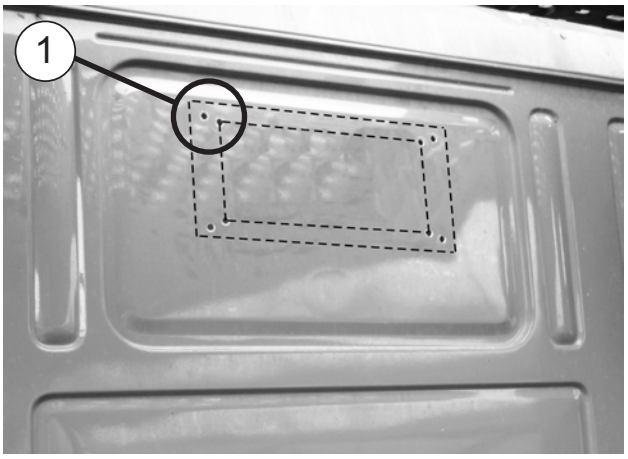
C Pour les cabines finissant en angle droit, il faudra ajouter 230mm à x (distance entre la tôle et la tapisserie intérieure).
La partie supérieure du modèle fourni est positionnée à cette distance.



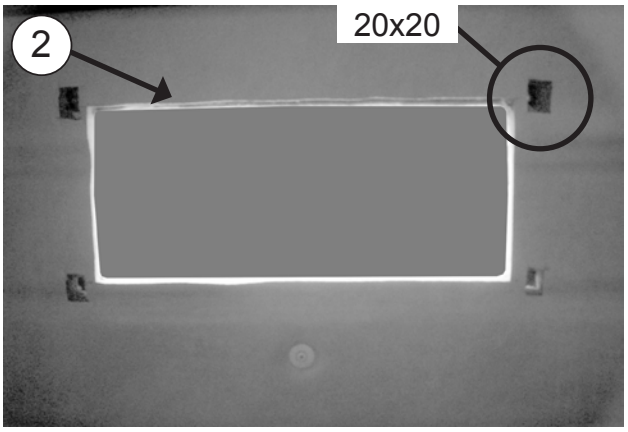
D Pour les cabines ayant un rayon, la mesure de 230 passe à 280mm. Le reste de l'opération est le même que dans le cas précédent.



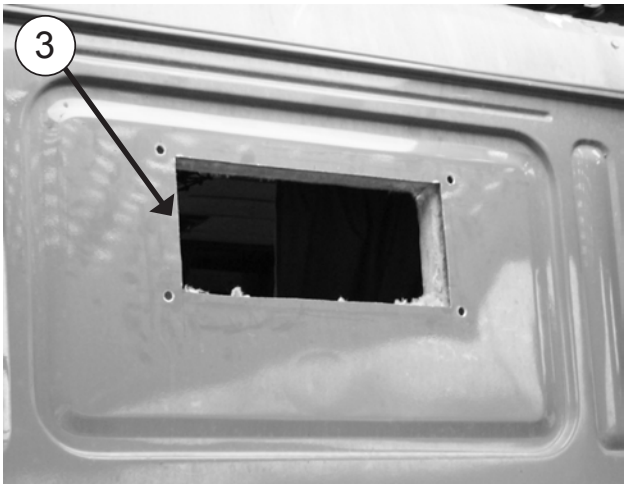
1 Présenter le modèle centré, selon la mesure (cas C et D), marquer les (4) trous et les (4) coins de la découpe et perforer à Ø8.



2 De l'intérieur de la cabine, unir les (4) points de la découpe et découper la tapisserie à l'aide d'un cutter (afin que la découpe de l'extérieur ne déchire pas la tapisserie) et réaliser des découpes de 20x20mm autour des (4) trous.

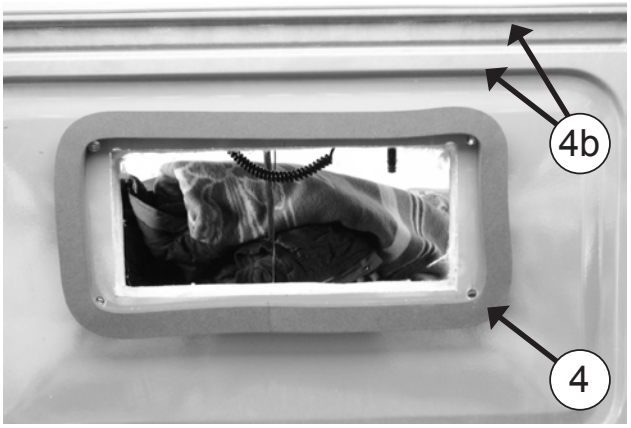


3 De l'extérieur de la cabine, unir les (4) coins et découper, à l'aide d'une scie sauteuse, la tôle (partie extérieure). Protéger la découpe avec du minium ou de la peinture.

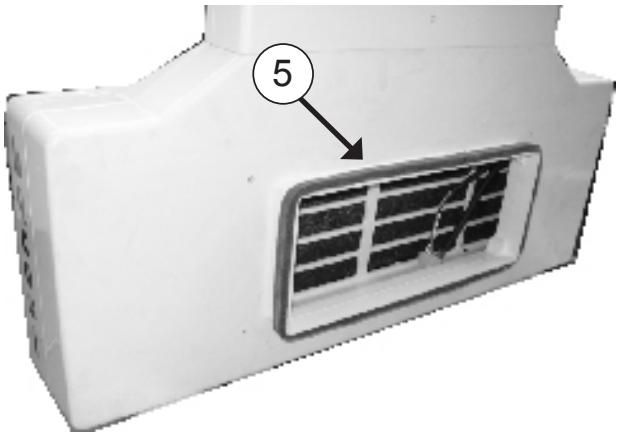


4 Coller le joint autour des (4) trous tel que cela est indiqué sur la photo.

a- En fonction du nombre de mm que le bord ou les nerfs d'origine de la cabine dépassent, utilisez le joint de 15, 25 ou 30mm, tous étant fournis, de façon à ce que celui-ci soit le plus près possible de la cabine.

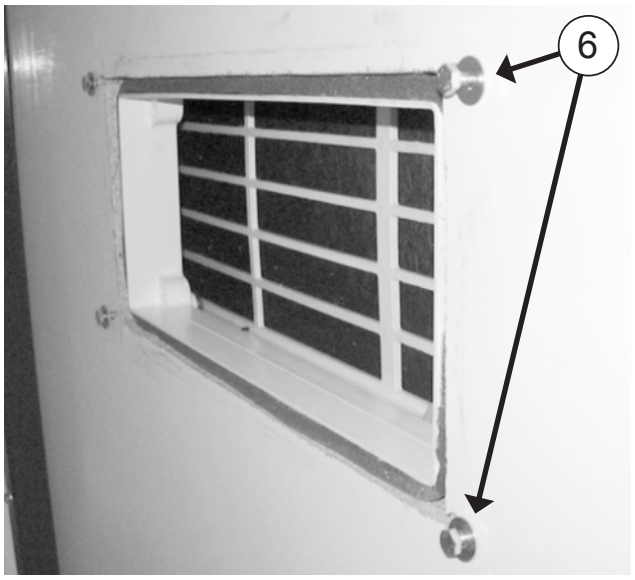


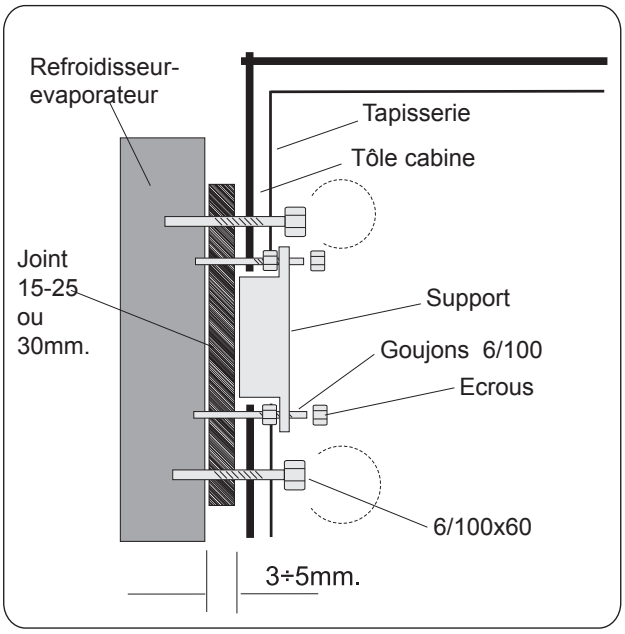
5 Coller l'isolant sur l'évaporateur tel que cela est indiqué.



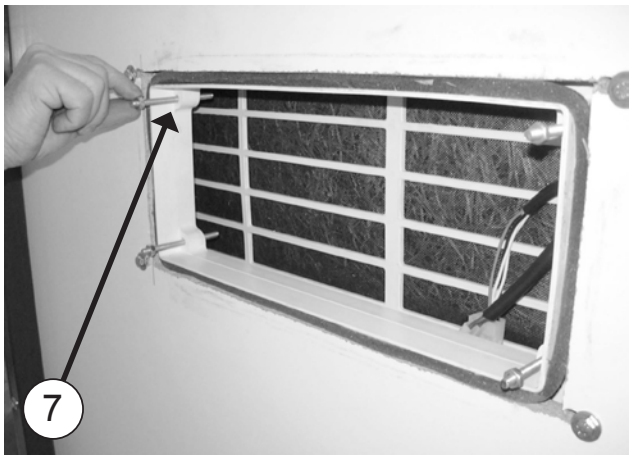
6 De l'intérieur de la cabine, fixer l'ensemble de l'évaporateur avec (4) vis 6/100x60, (4) rondelles plates Ø6 à large papillon et (4) rondelles Ø6 grower.

Serrer les vis jusqu'à ce que le joint soit opprimé entre 3 et 5 mm. couple: 3.9/4.9 Nw/m - (VOIR DETAIL).



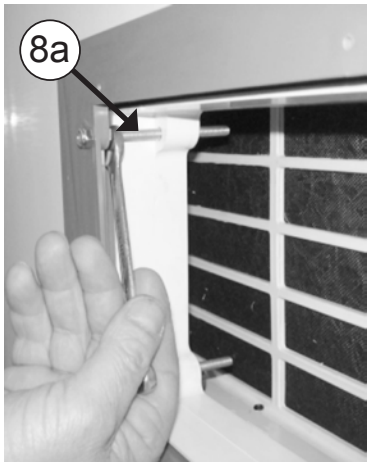


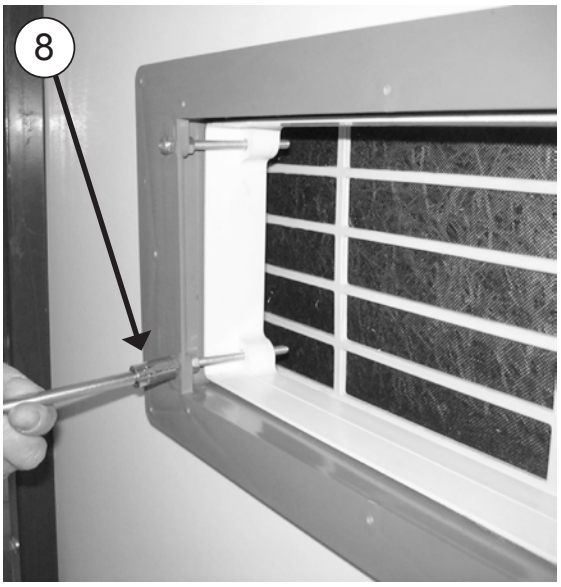
7 Serrer (4) goujons M6/100x100 ou 160 (en fonction de l'épaisseur de la tapisserie) avec (4) écrous M6.



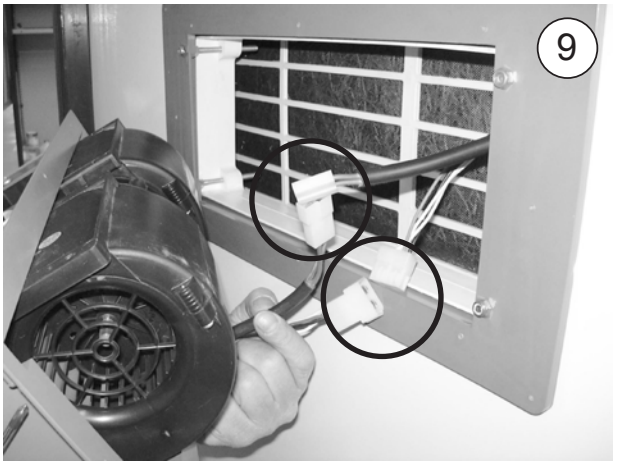
8 Assembler le support sur les goujons, placer l'écrou 6/100 autobloquant et serrer jusqu'à l'ajustement final avec le support et celui-ci avec la tapisserie.

a- Fixer avec le contre-écrou.

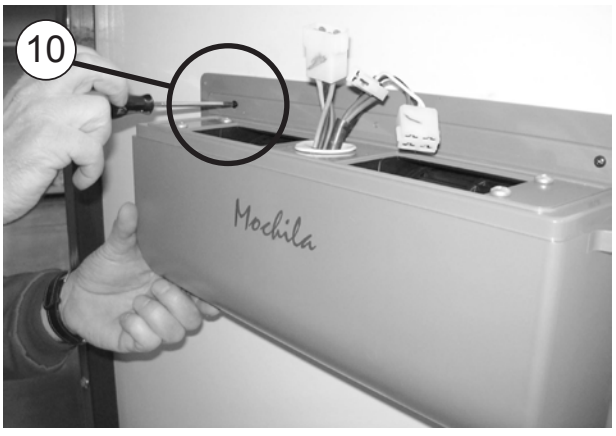




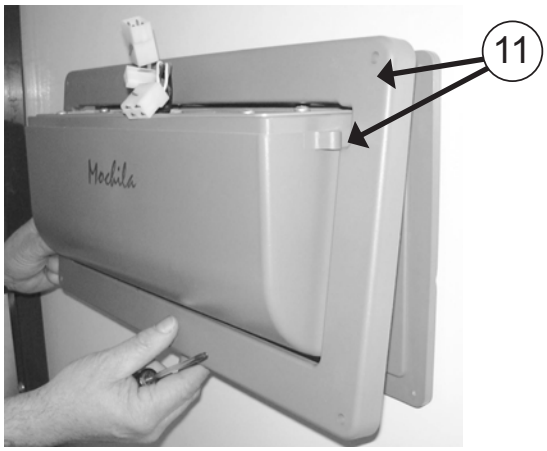
9 Connecter les boîtes du câblage de l'évaporateur extérieur avec celles du câblage du système de canalisation.



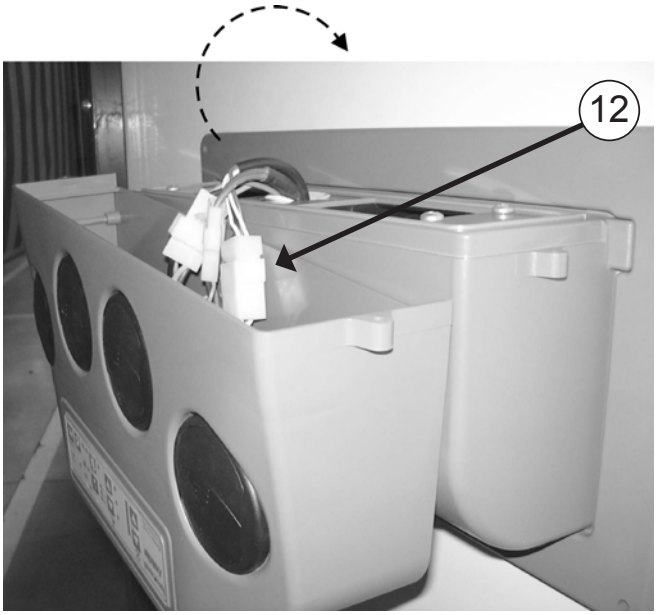
10 Monter le système de canalisation de la soufflante avec (8) vis à filet en tôle 3.5x9.5 mm.



11 Fixer le cadre au système de canalisation avec (4) vis à filet en tôle 3.5x9.5 mm, en tenant compte de la position des feuillures.

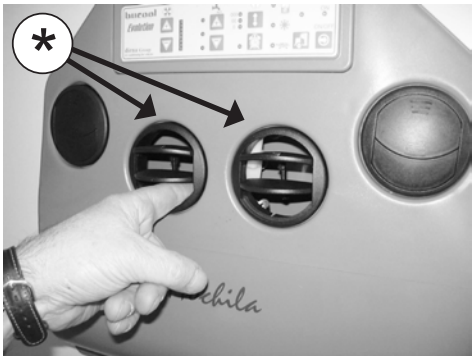


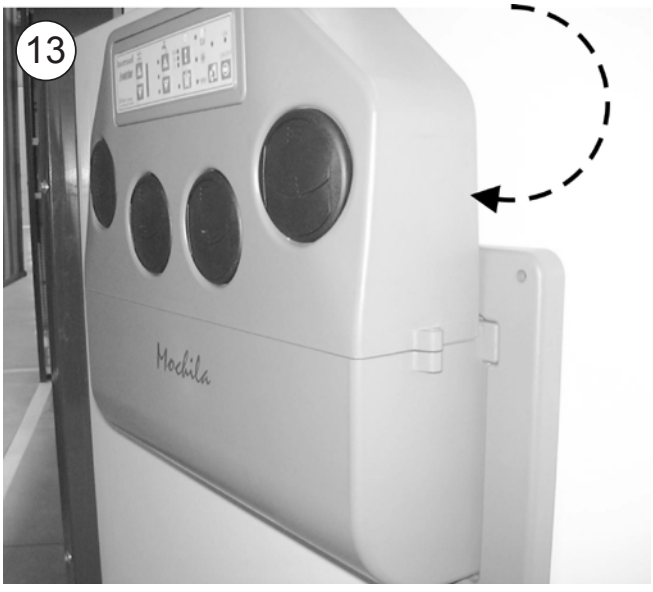
12 Connecter les boîtes du câblage du système de canalisation avec celles du devant avec les bouches d'air, dans la position indiquée, faire tourner tel que cela est indiqué jusqu'à leur position finale.



13 Fixer avec (2) vis à filet en tôle 3.5x9.5mm.

(*) A travers les bouches d'air centrales, centrer les boîtes afin qu'elles n'interfèrent pas avec la sortie d'air.

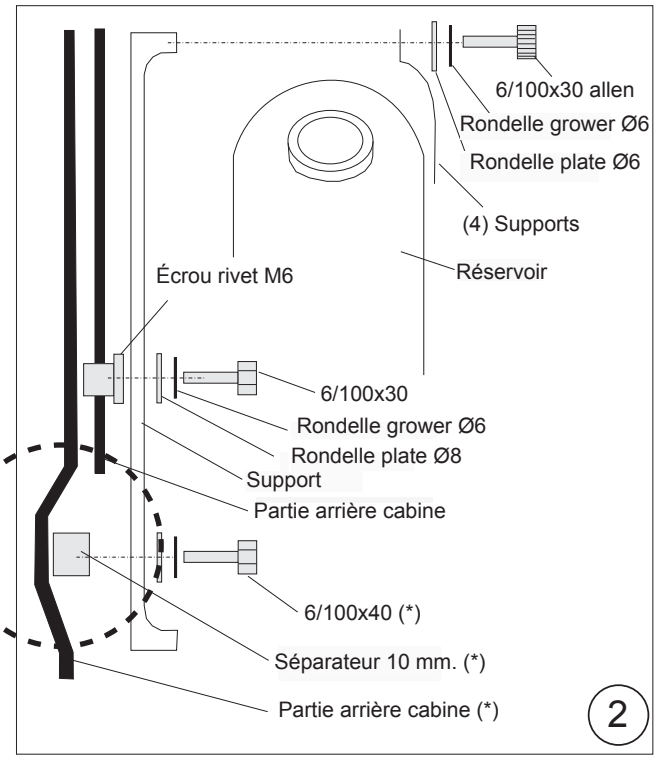




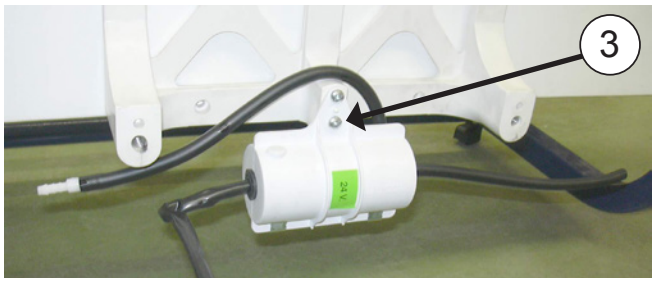
OPERATIONS A REALISER POUR LE MONTAGE DU RESERVOIR D'EAU

1 Placer le support réservoir dans la partie basse la plus convenable de la zone arrière de la cabine. Marquer et percer Ø 9 dans la cabine en tenant compte de la position verticale du support. Minimum (6) perçages de fixation.

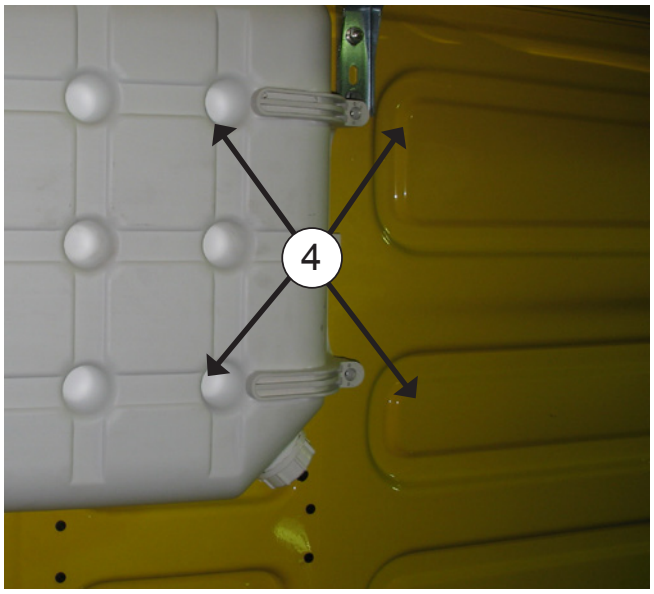
2 Placer des écrous rivet de M6 et fixer le support avec des vis 6/100x30.
(*) S´il n´y a pas d´appui sur la partie lisse, placer le séparateur de 10mm et la vis 6/100 x 40.

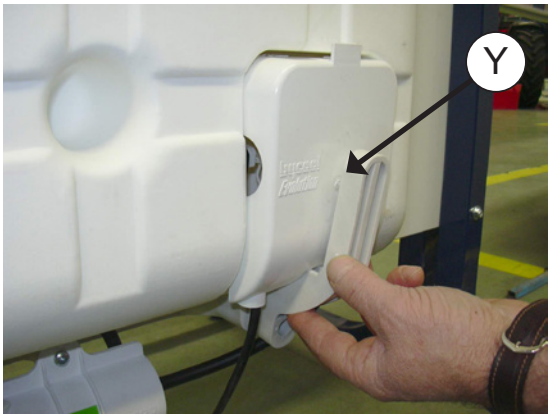


3 Fixer l'ensemble de la pompe au réservoir avec (2) vis à filet en tôle 5.4x19mm.



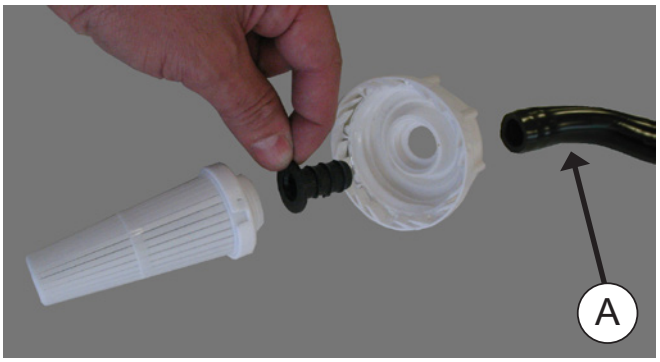
4 Connecter ensuite le tuyau de pompe (X) au réservoir et fixer le dépôt (en choisissant la meilleure position du bouchon de remplissage, droite ou gauche, pour le faciliter) avec des supports fournis. Le support avec ressortant se place en cas de montage du réservoir avec le bouchon de remplissage (Y) sur le côté gauche.



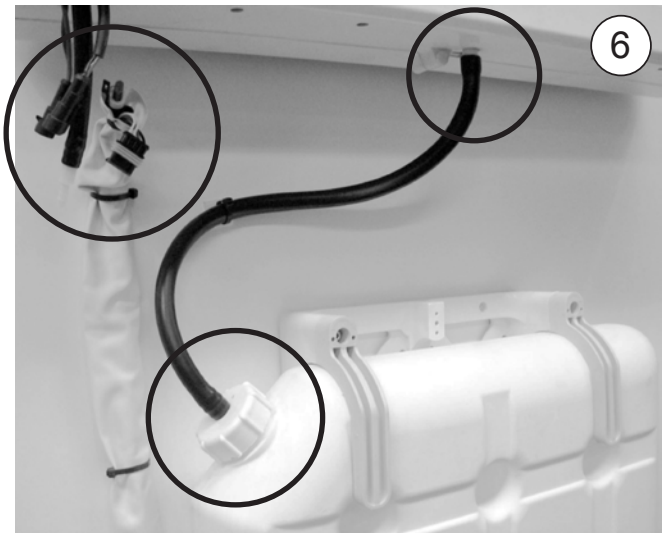


OPERATIONS A REALISER POUR LE MONTAGE DU RESERVOIR D'EAU

5 Monter filtre sur tuyau avec cheville, introduire dans le bouchon et connecter au tuyau de retour Ø18 x Ø12 (A).



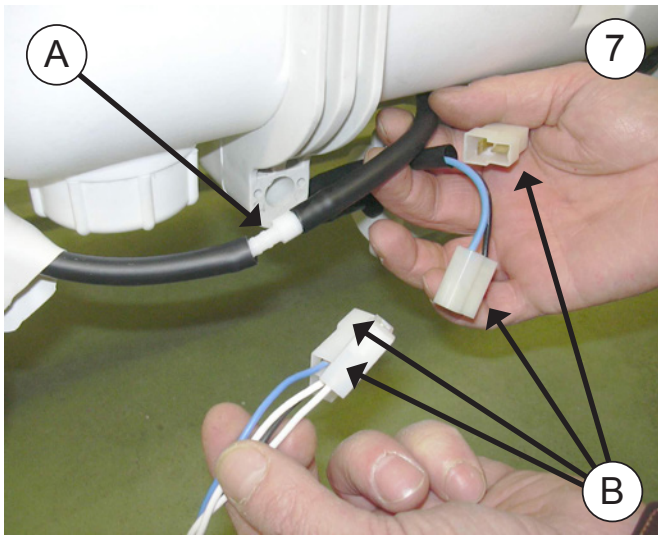
6 Placer le bouchon sur le réservoir. Connecter le câblage avec la gaine aux boîtes de l'évaporateur et le tuyau d'entrée d'eau.

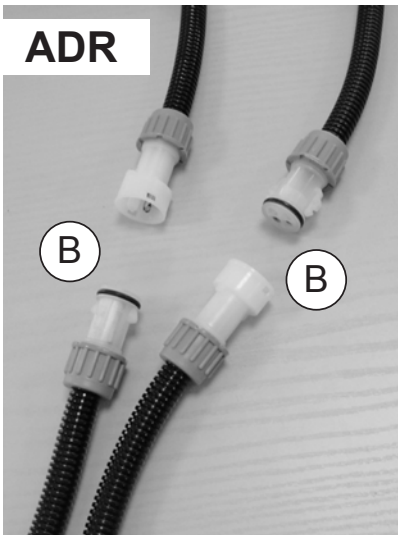


7 Connecter le câblage avec l´étui aux boîtes de l´évaporateur et au tuyau d´eau.

A. Connecter le tuyau d´impulsion qui vient de l´évaporateur à la pompe.

B. Connecter le câblage de la pompe et du niveau.



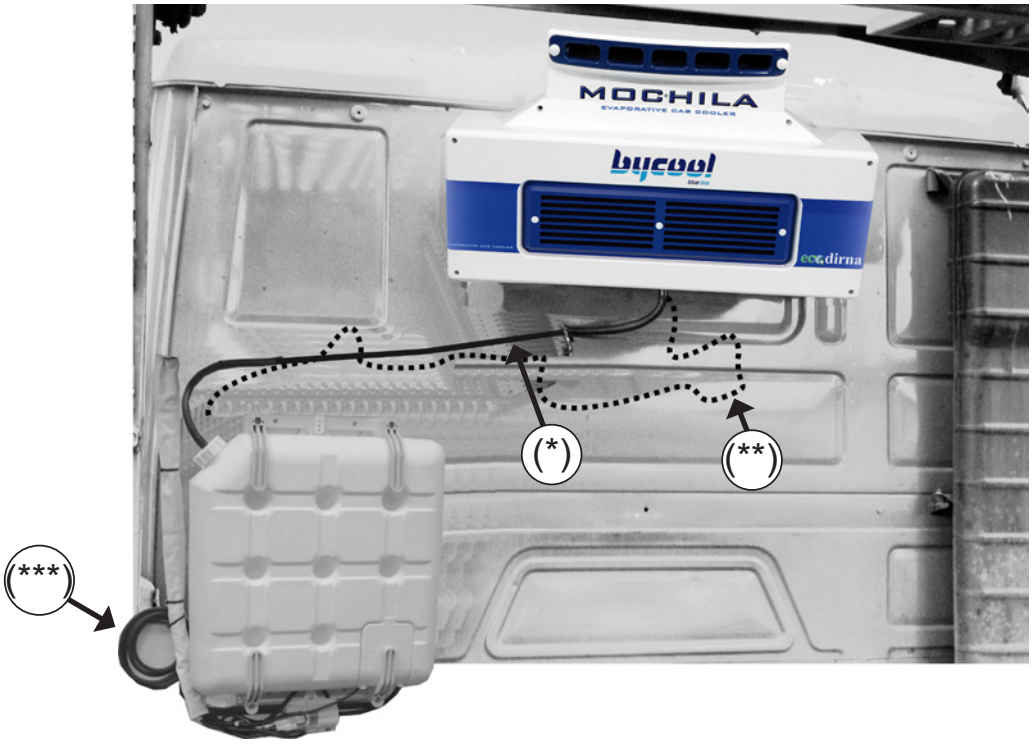


8 Connecter le câblage de batterie en suivant les indications.

(*) Positionnement correct, où le tuyau d'écoulement a une inclinaison mais pas d'horizontalité ni de boucles, ni d'étranglements, afin de rendre la chute de l'eau dans le réservoir plus facile et d'éviter ainsi son accumulation progressive dans le plateau et son déversement à l'extérieur et d'éviter également que le réservoir se vide d'eau en l'absence de retour.

(**) Positionnement incorrect. Ne pas réaliser.

(***) NE PAS COUPER le câblage en trop mais l'enrouler et le fixer derrière le réservoir d'eau. Dans le cas où par erreur il serait coupé, reconnecter dans la position d'origine afin d'éviter que le contrôle électronique ne soit irréversiblement abîmé.

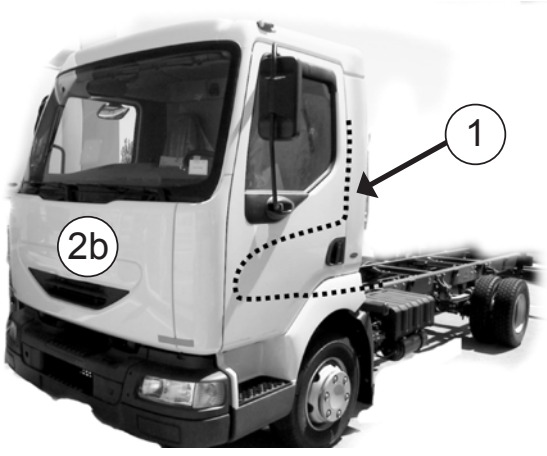


1- Conduire les câbles jusqu'à la batterie, en utilisant le passage du câblage d'origine.

2- Perforer à Ø3 et fixer le fusible à côté de la batterie à l'aide d'une vis 5/80x11 auto-perforatrice, conduire le câble suivant les indications (voir page suivante) et fixer tout le long avec les brides fournies.

a- Connecter le câble positif et négatif à la batterie et reconnecter les bornes.

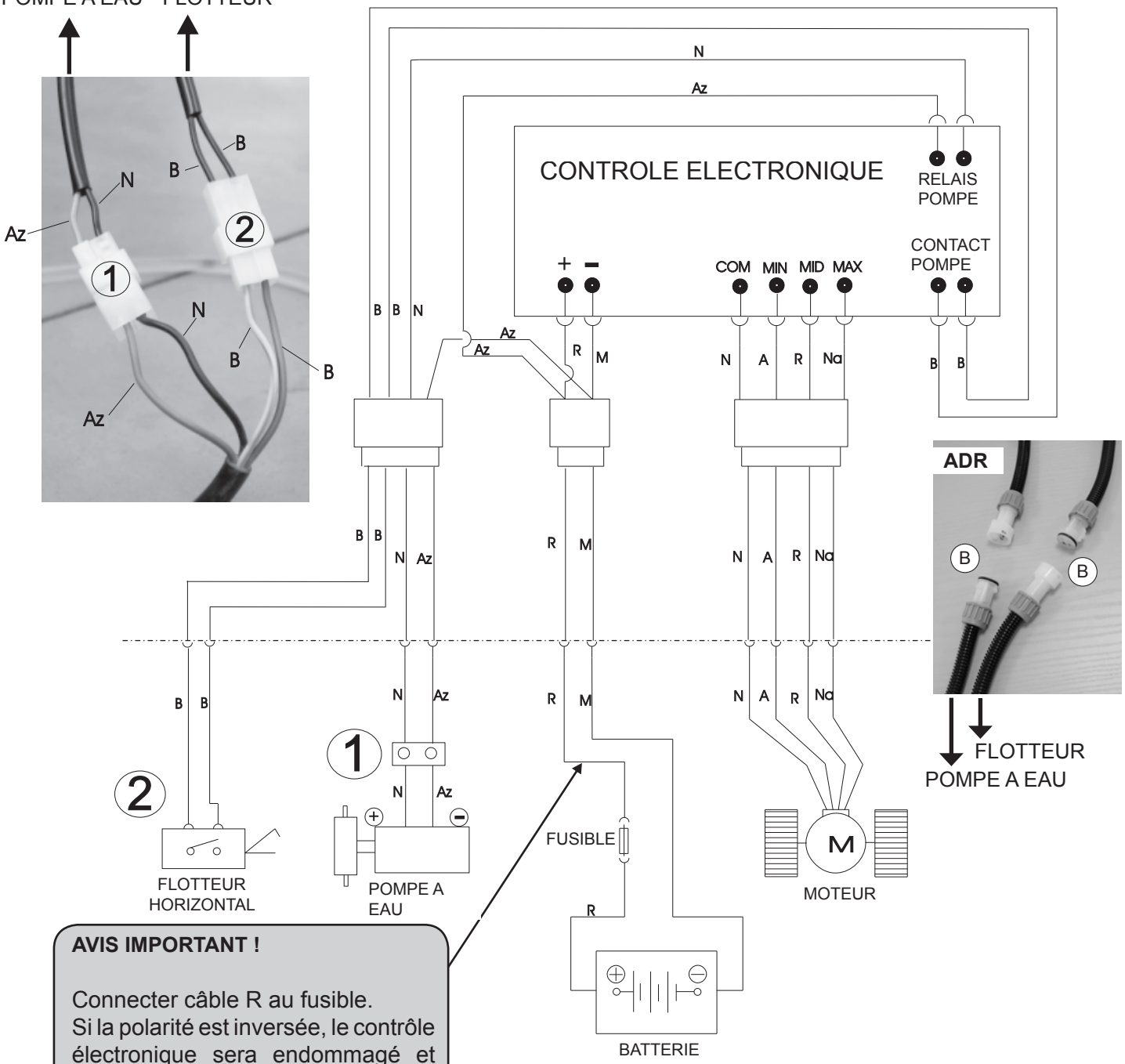
b- Former une boucle avec le câble, NE PAS COUPER.



dirna Bergstrom

Schéma électrique

POMPE A EAU FLOTTEUR

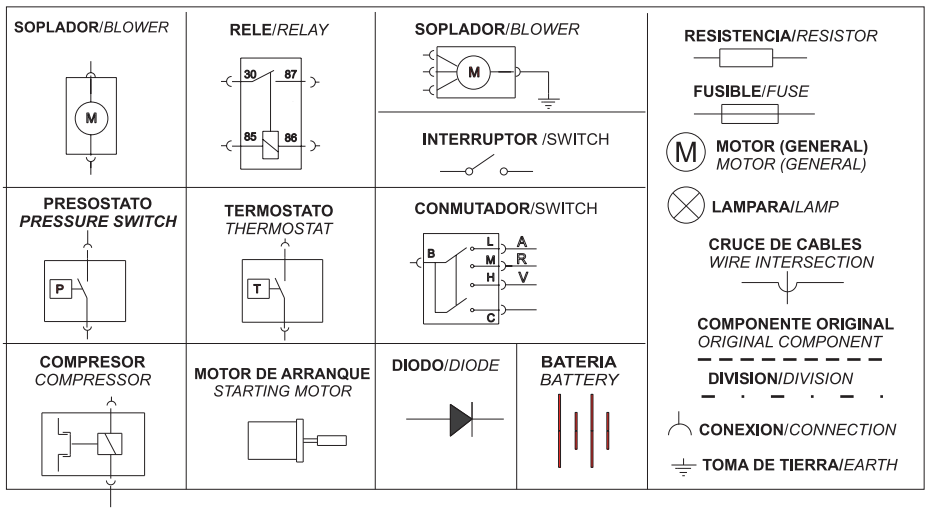


FLOTTEUR
POMPE A EAU

AVIS IMPORTANT !

Connecter câble R au fusible.
Si la polarité est inversée, le contrôle électronique sera endommagé et irréparable.

SIMBOLOGIA/*CONVENTIONAL SIGNS*



COLORES/*COLOURS*

A	Jaune
Az	Bleu
B	Blanc
G	Gris
Na	Orange
N	Noir
R	Rouge
Ro	Rose
V	Vert
Vi	Violet
M	Marron
Mo	Violet

Hinweise zum einbau

- Lesen sie sich vorab die anleitungen Durch und beachten sie diese während Des einbaus
- Verwenden sie die jeweils geeigneten Werkzeuge.

Elektrische Anschlüsse

- Zündschlüssel abziehen.
- Batterie vor Einbaubeginn abklemmen.
- Anschlüsse der elektrischen Bestandteile überprüfen.

Angaben zur Position:
RECHTS: Beifahrerseite
LINKS : Fahrerseite

Anzugsdrehmoment *(N.m)*			
Gewinde	**Stahlqualität**		**Maulweite**
	8.8	10.9	
M4/60	2.9	4.2	7
M5/80	5.5	7.5	8
M6/100	10	13	10

⚠ Achtung:

Der Verdampferkühler funktionniert nach folgendem Prinzip: Luft strömt von aussen in die Kabine des Fahrers. Voraussetzung für eine erfolgreiche Nutzung ist, dass sich diese eingehende Luft nicht im inneren der Kabine aufstaut. Folge wäre nämlich ein Überhang an Feuchtigkeit.
Alle modernen LKW- Fahrerkabinen sind heutzutage mit Lüftungsgitter ausgestattet, damit neue Luft in die Kabine strömt, und der Luftausgang gewährleistet ist, was z.B. notwendig bei Heizungen ist.
Der Installateur muss prüfen, ob das Lüftungsgitter in der Fahrerkabine vorhanden ist, wenn dies nicht der Fall sein sollte, muss der Installateur dieses Lüftungsgitter UNBEDINGT einbauen.
Der Verbraucher sollte seinerseits regelmässig prüfen, ob dieses Lüftungsgitter nicht verstopft ist aufgrund anfallendem Dreck und Staub.

Erforderliches werkzeug:

- 10er-Ratschenschlüssel
- TOP-10er-Kreuzschlitzschraubendreher
- 10er-Maulschlüssel
- 6er Innensechskantschlüssel

Mitgelieferte unterlagen

Montageanweisungen	220AA50006
Benutzerleitfaden	220AA2E004
Fehlerdiagnose	220AA50008
Lieferteile	220RE00099
Garantie	220AA10017

⚠ Wichtig

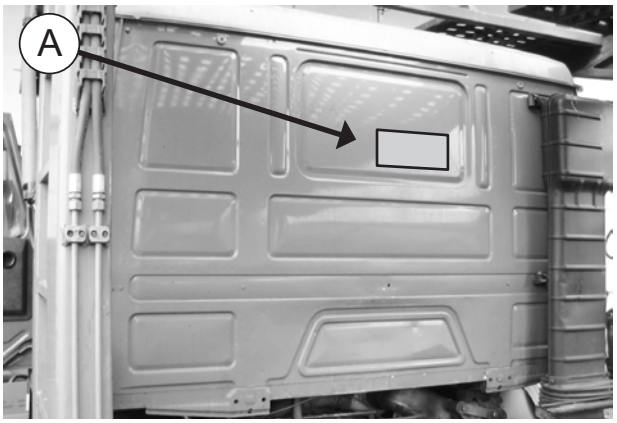
Dem Benutzer muss folgendes übergeben werden: Winterdeckel und Bedienungsanleitung.

Dem Installateur wird empfohlen, die angeführte Bedienungsanleitung vor der Übergabe zu lesen, um sich über die Wartung und Empfehlungen zum eingebauten Verdampfer zu informieren.

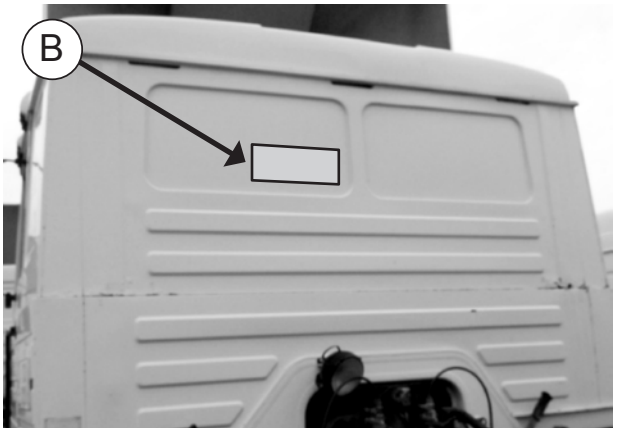
⚠ Warnhinweise

⚠ **Dirna Bergstrom, s.l.** übernimmt keine Verantwortung für Schäden oder Brüche aufgrund einer nicht ordnungsgemäßen Installation oder Bedienung des Geräts oder den Austausch von Teilen bzw. Umbauten, die ohne die erforderliche schriftliche Genehmigung durchgeführt wurden.

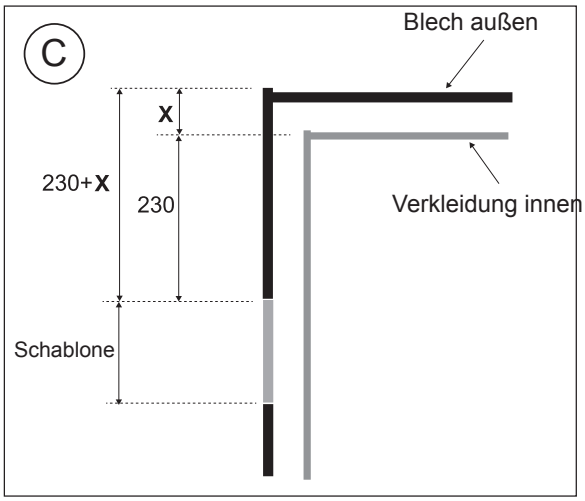
A Modelle, bei denen der Ausschnitt der Schablone zentriert wird.



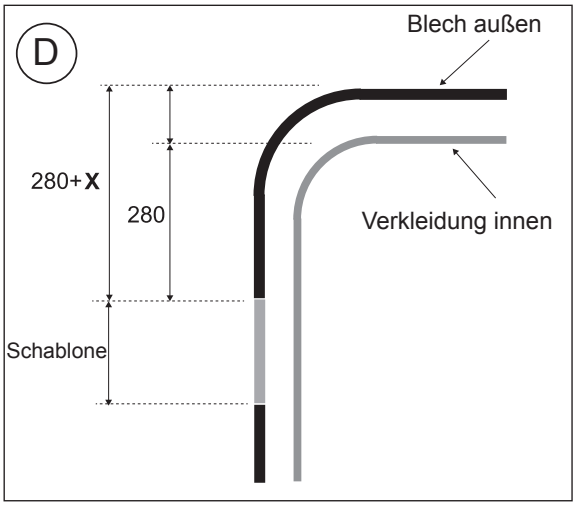
B Modelle, bei denen der Ausschnitt der Schablone links oder rechts (je nach Wahl) erfolgt.



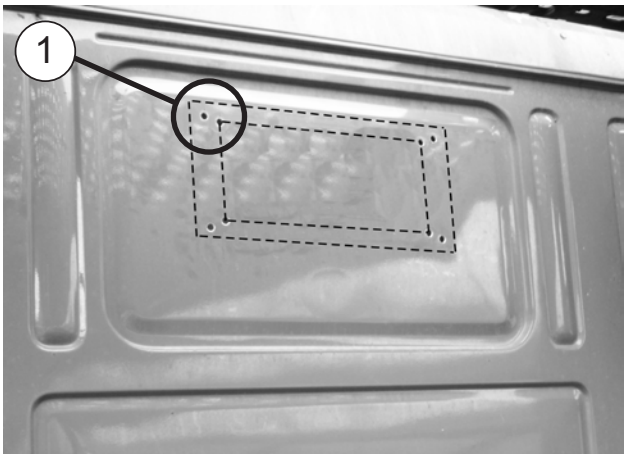
C Bei Kabinen mit rechtwinkligen Abschluss werden zu x 230 mm hinzugerechnet (Abstand zwischen Blech und Innenverkleidung).
Auf dieses Maß wird die Oberseite der gelieferten Schablone ausgerichtet.



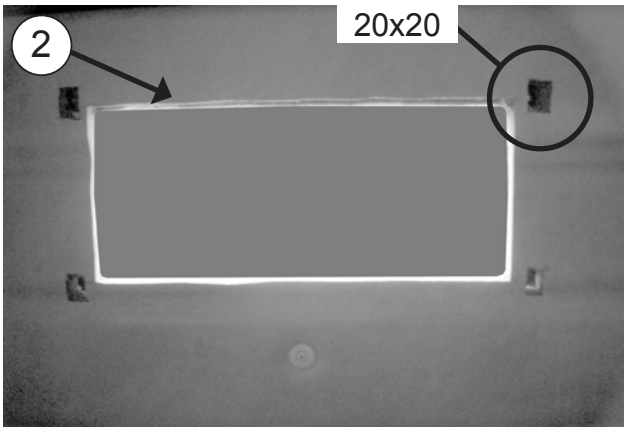
D Bei abgerundeten Kabinen wird aus dem Maß 230 mm das Maß 280 mm. Der restliche Ablauf ist gleich wie im vorherigen Abschnitt.



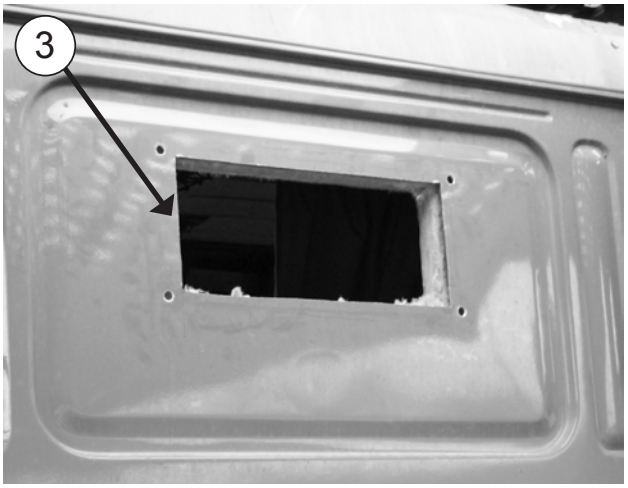
1 Die Schablone zentriert je nach Maß (Fall C und D) ansetzen, die (4) Bohrungen und (4) Ecken des Ausschnitts markieren und auf Ø 8 aufbohren.



2 Von der Kabineninnenseite aus. Die (4) Schnittpunkte verbinden und die Verkleidung mit einem Cutter auftrennen (damit beim Schnitt von außen nicht die Verkleidung beschädigt wird), um die (4) Bohrung 20 x 20 mm lange Schnitte anfertigen.

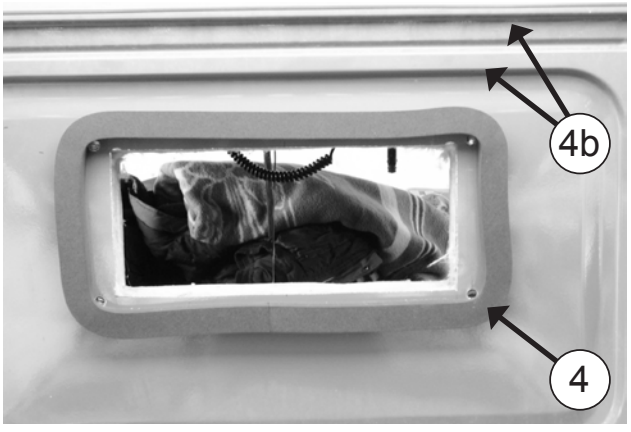


3 Aussen an der Kabine, die (4) Ecken verbinden und mit der Laubsäge Blechaußenseite aussägen. Mit Mennige oder Anstrichfarbe vor Verrostung schützen.

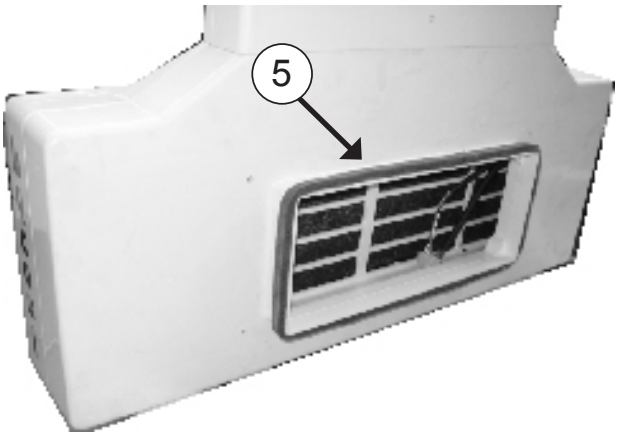


4 Wie bildlich veranschaulicht, Dichtung um die (4) Bohrungen herum ankleben.

a- Je nach Überstand der Originalkante oder Originalrippen der Kabine, 15-, 25- oder 30 mm Dichtung aus den mitgelieferten Dichtungen auswählen , damit zwischen dem verbohrten Blech und der Kabine möglichst kein Spalt verbleibt.

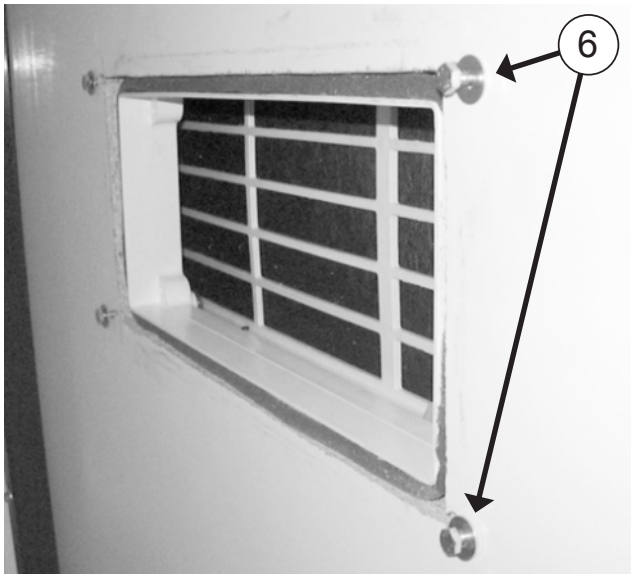


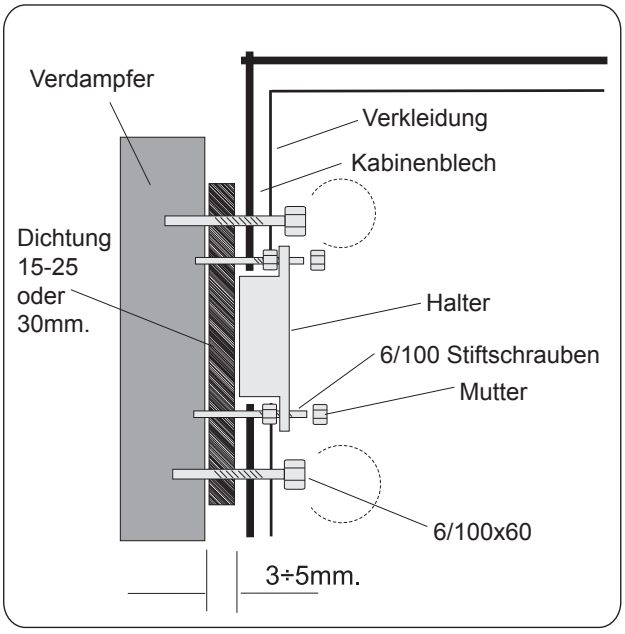
5 Isolierstreifen an Verdampfer wie gezeigt ankleben.



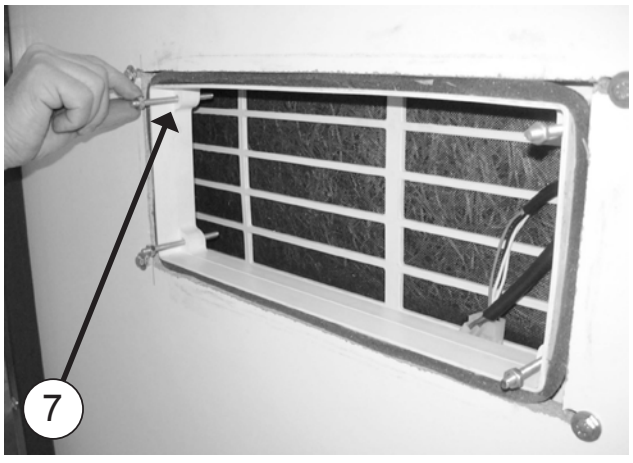
6 Innen an der Kabine Verdampfer-Zsb. mit 4 Stück 6x1x60-Schrauben , 4 Breitflansch-Unterlegscheiben Durchm. 6 und 4 Federscheiben Durchm. 6 befestigen.

Schrauben so weit anziehen, bis die Dichtung bis auf 3-5 mm zusammengepresst wird (Anzugsmoment 3.9/4.9 Nw/m (SIEHE EINZELHEIT).



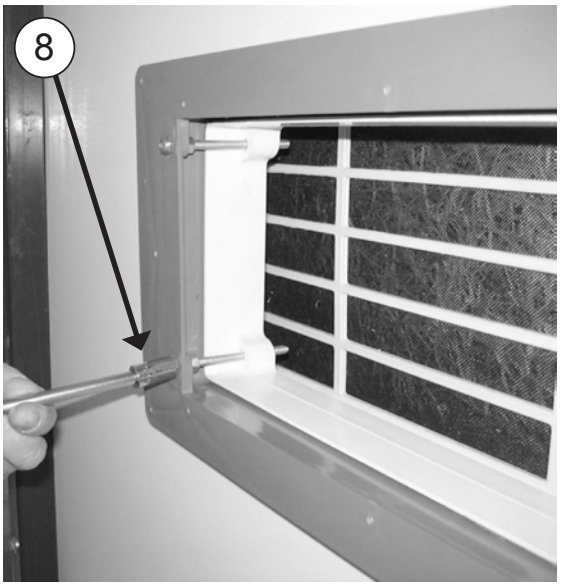


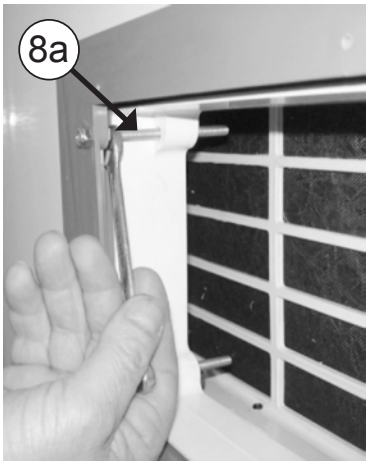
7 (4) Stiftschrauben M6x1 x100 oder 160 (je nach größerer oder kleinerer Bezugsstärke) mit (4) M6 Schraubenmuttern einschrauben.



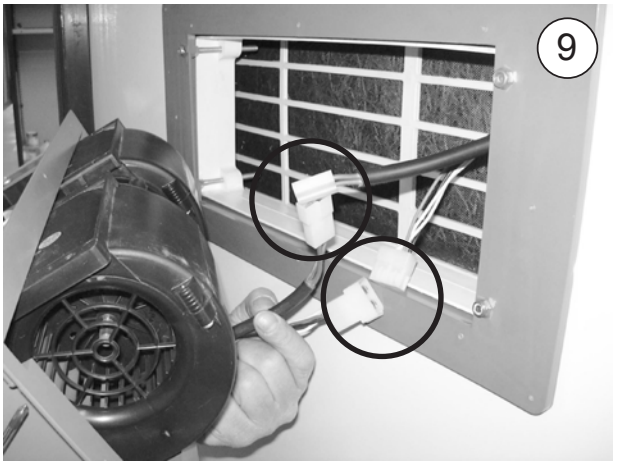
8 Gestell auf die Stiftschrauben aufsetzen, selbstsichernde 6x1-Mutter aufsetzen und bis Aufsitzen derselben auf dem Gestell und des letzteren auf dem Bezug festschrauben.

a- Mit der Gegenmutter sichern.

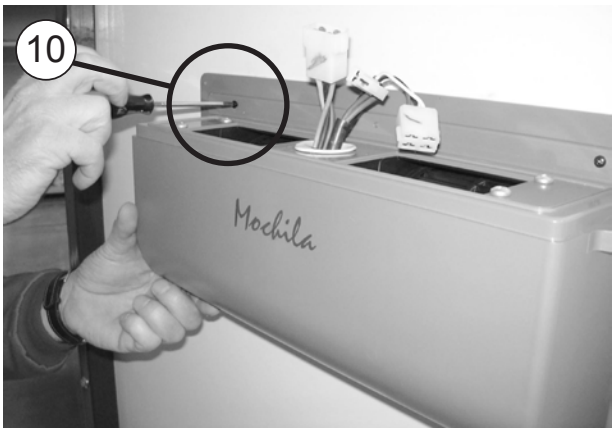




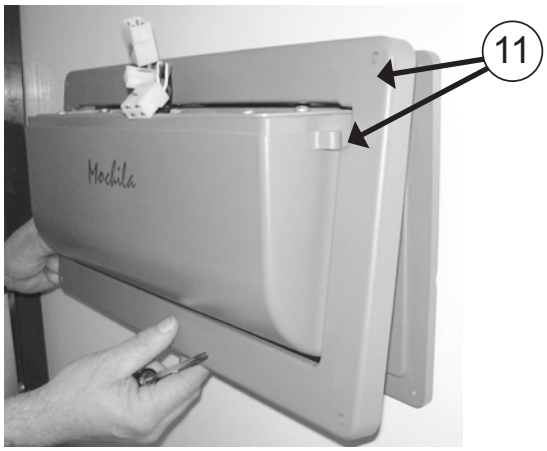
9 Die Anschlußkästen der Verdrahtung des äußeren Verdampfers an die Anschlußkästen der Luftführungsverdrahtung anschließen.



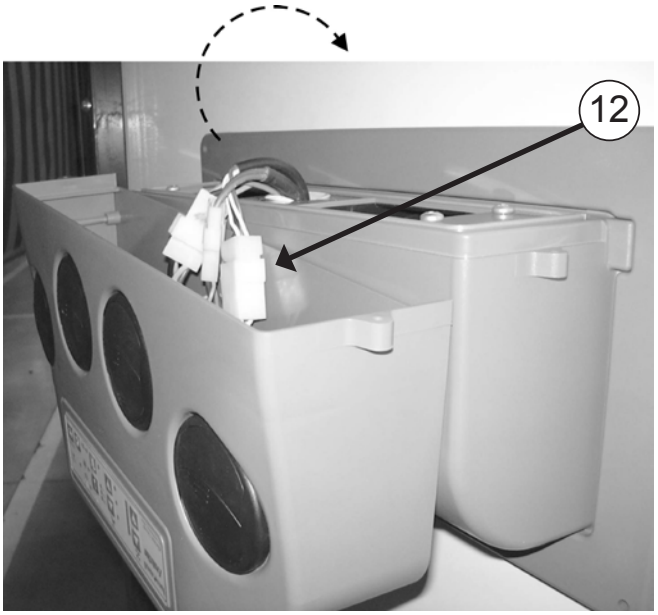
10 Luftführung des Gebläses mit (8) 3,5x9,5 mm Blechschrauben aufbauen.



11 Luftführungsrahmen mit (4) 3,5x9,5 mm-Blechschrauben unter Beachtung der Lage der Falze befestigen.

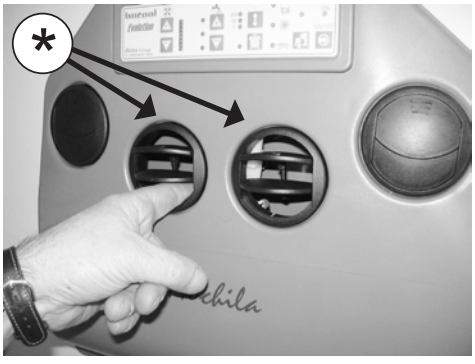


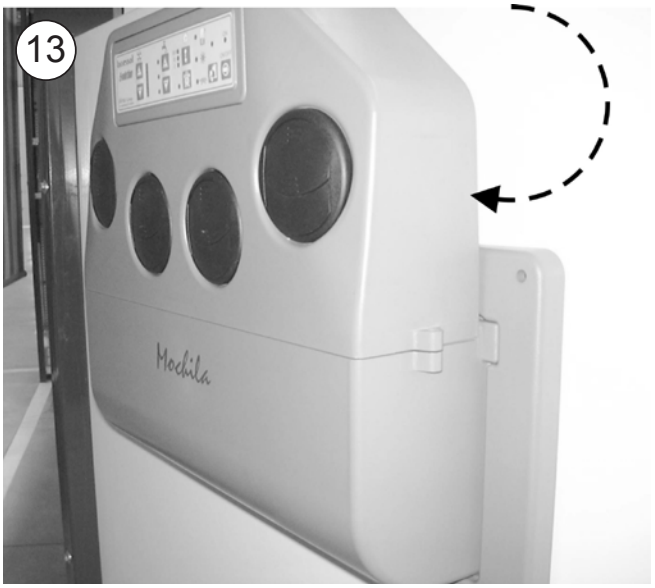
12 Luftführungsverdrahtungsanschlußkästen an die befensterten Frontkästen in der angegebenen Lage anschließen und wie angegeben bis in deren Endlage drehen.



13 Mit (2) 3,5 x 9,5 mm Blechschrauben befestigen.

(*) Durch die Mittelfenster Anschlußkästen zentrieren, um zu vermeiden, daß letztere das Ausströmen der Luft behindern könnten.

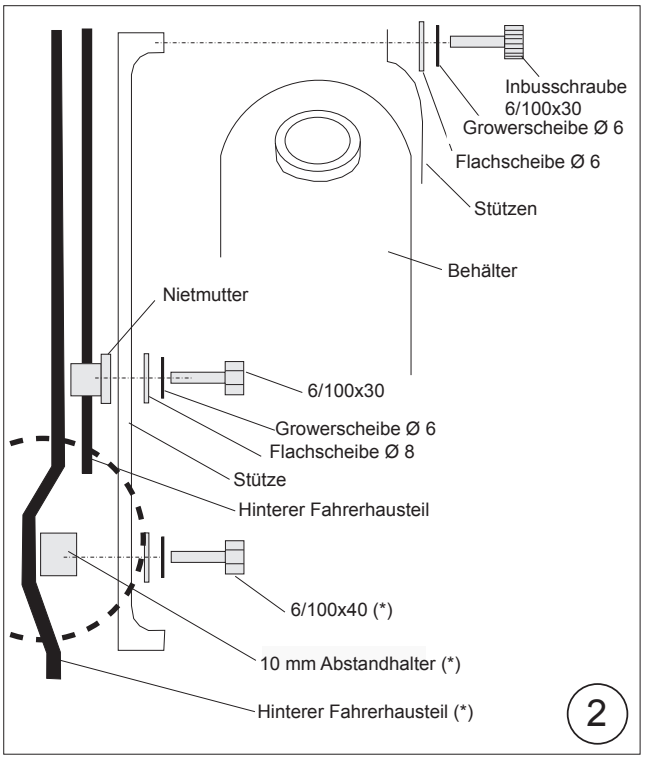




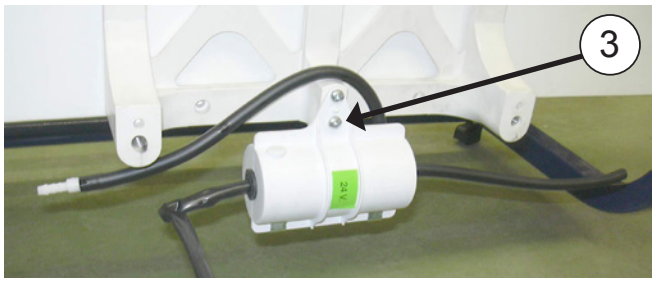
EINBAU DES WASSERBEHÄLTERS

1 Behälterstütze an einem geeigneten, ziemlich weit unten liegenden Punkt im hinteren Bereich des Fahrerhauses positionieren.
Ø 9 im Fahrerhaus markieren und bohren. Beachten Sie dabei die senkrechte Position der Stütze. Mindestens (6) Befestigungsbohrungen.

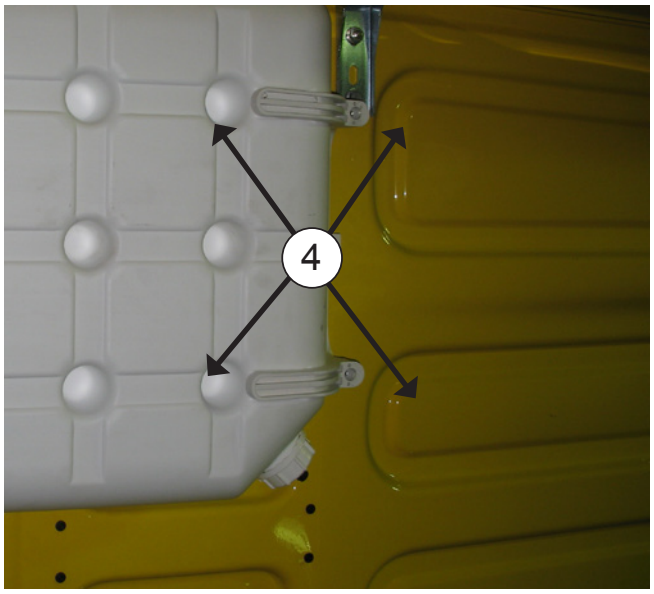
2 Nietmuttern M6 anbringen und Stütze mit Schrauben 6/100x30 befestigen.
In Fällen, in denen die Stütze nicht auf einem glatten Teil aufliegt, 10 mm Abstandhalter und Schraube 6/100 x 40 einsetzen.

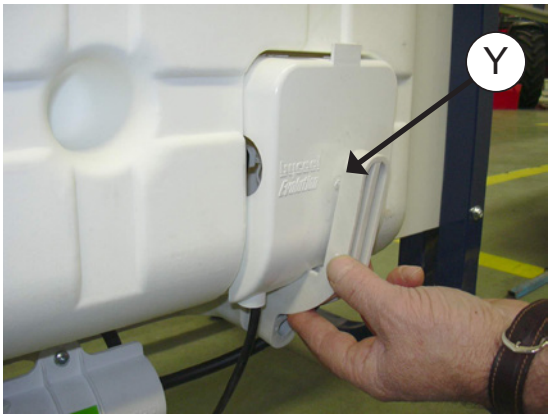


3 Pumpenanordnung am Behälter mit (2) Blechgewindeschrauben 5.4x19 mm befestigen.



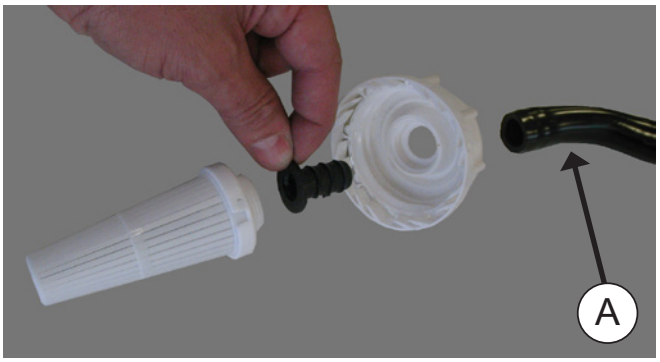
4 Anschließend Pumpenrohr (X) an Behälter anschließen und Behälter (wählen Sie dazu die optimale Position des Füllstopfens, rechts oder links, um die Füllung zu erleichtern) mit den mitgelieferten Stützen befestigen. Die Stütze mit Absatz wird verwendet, wenn der Behälter mit dem Füllstopfen (Y) auf der linken Seite eingebaut wird.



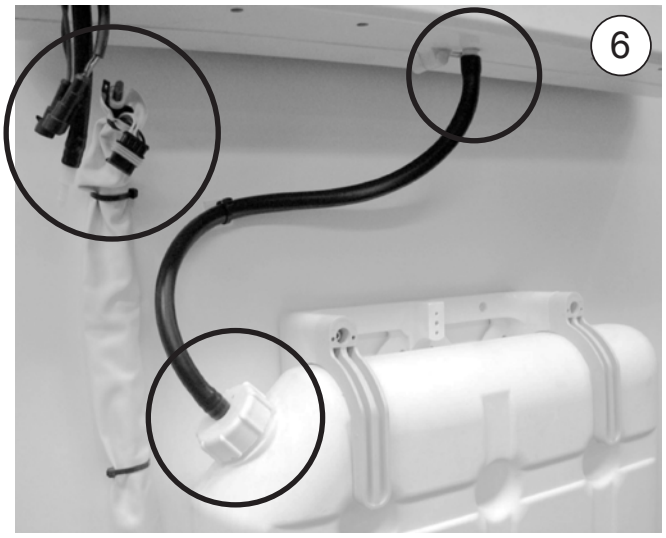


EINBAU DES WASSERBEHÄLTERS

5 Filter in das Zapfenrohr einbauen, in den Stopfen einführen und an das Rücklaufrohr Ø18 x Ø12 (A).anschließen.



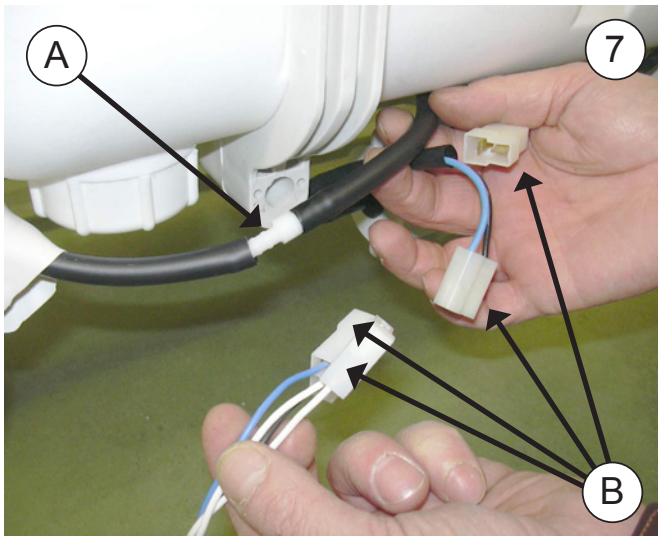
6 Stopfen in Behälter einbauen. Ummantelte Verdrahtung an die Anschlußkästen des Verdampfers und des Wassereinlaufrohres anschließen.

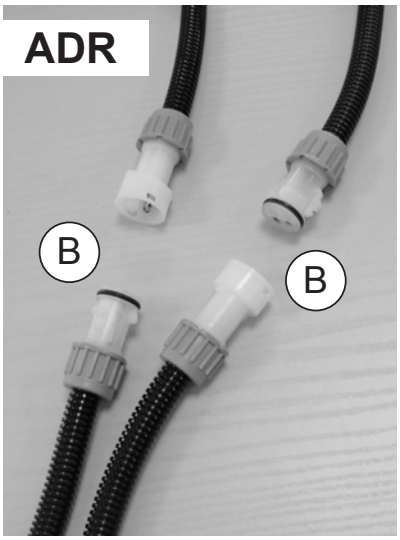


7 Verkabelung mit Hülle an die Kästen der Verdampferanlage und das Wasserzulaufrohr anschließen.

A. Das von der Verdampferanlage kommende Druckrohr an die Pumpe anschließen.

B. Pumpen- und Niveauverkabelung anschließen.



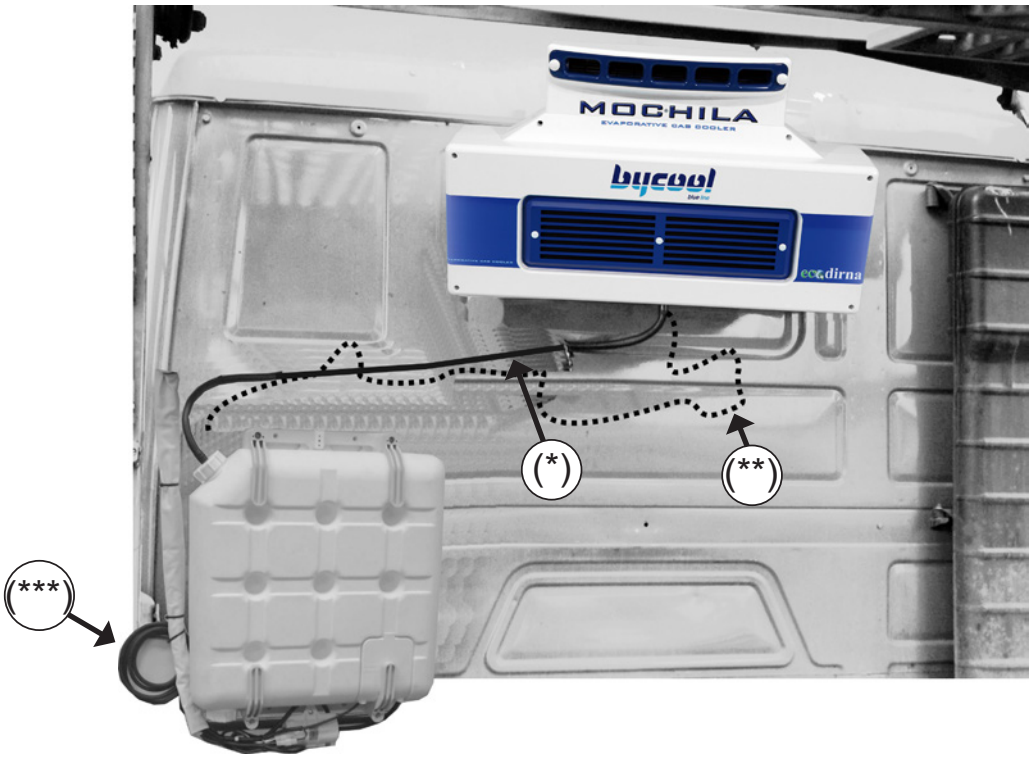


8 Batterieverkabelung wie dargestellt anschließen.

(*) Korrekter Einbau, wo die beiden Abwasserleitungen den Wasserablauf erlauben und weder waagrechte Abschnitte noch Schleifen aufweisen, damit das Wasser in den Behälter ablaufen kann und sich kein Wasser ansammelt, wodurch Wasser in die Kabine eindringen könnte.

(**) Falscher Einbau. So nicht ausführen.

(***) Zu lange Leitungen NICHT KÜRZEN und hinter dem Wasserbehälter befestigen (aufrollen). Wenn die Leitungen unbeabsichtigt durchtrennt werden, diese wieder an die Originalanschlüsse anschließen, damit die elektronische Steuerung nicht dauerhaft beschädigt wird.

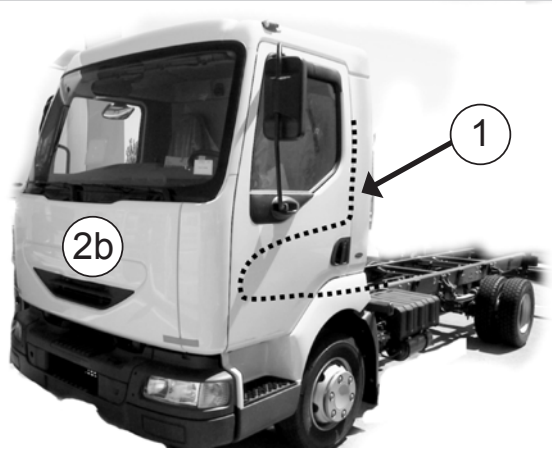


1- Die Leitungen zur Batterie führen, dazu die Original-Kabeldurchgänge benutzen.

2- Eine Bohrung Ø 3 anfertigen und die Sicherung bei der Batterie mit gewindeschneidender Schraube 5/80x11 befestigen, die Leitung wie gezeigt verlegen (siehe folgende Seite), und mit den gelieferten Kabelbindern befestigen.

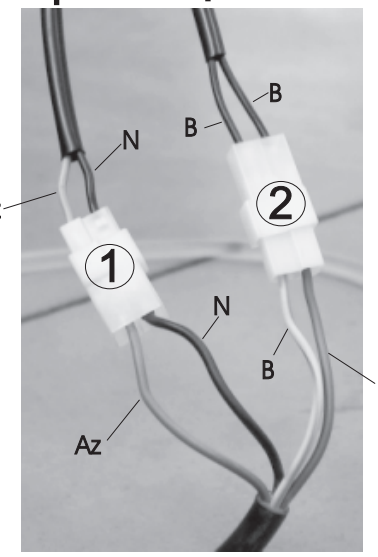
a- Plus- und Masseleitung an der Batterie anschließen und die Klemmen wieder anschließen.

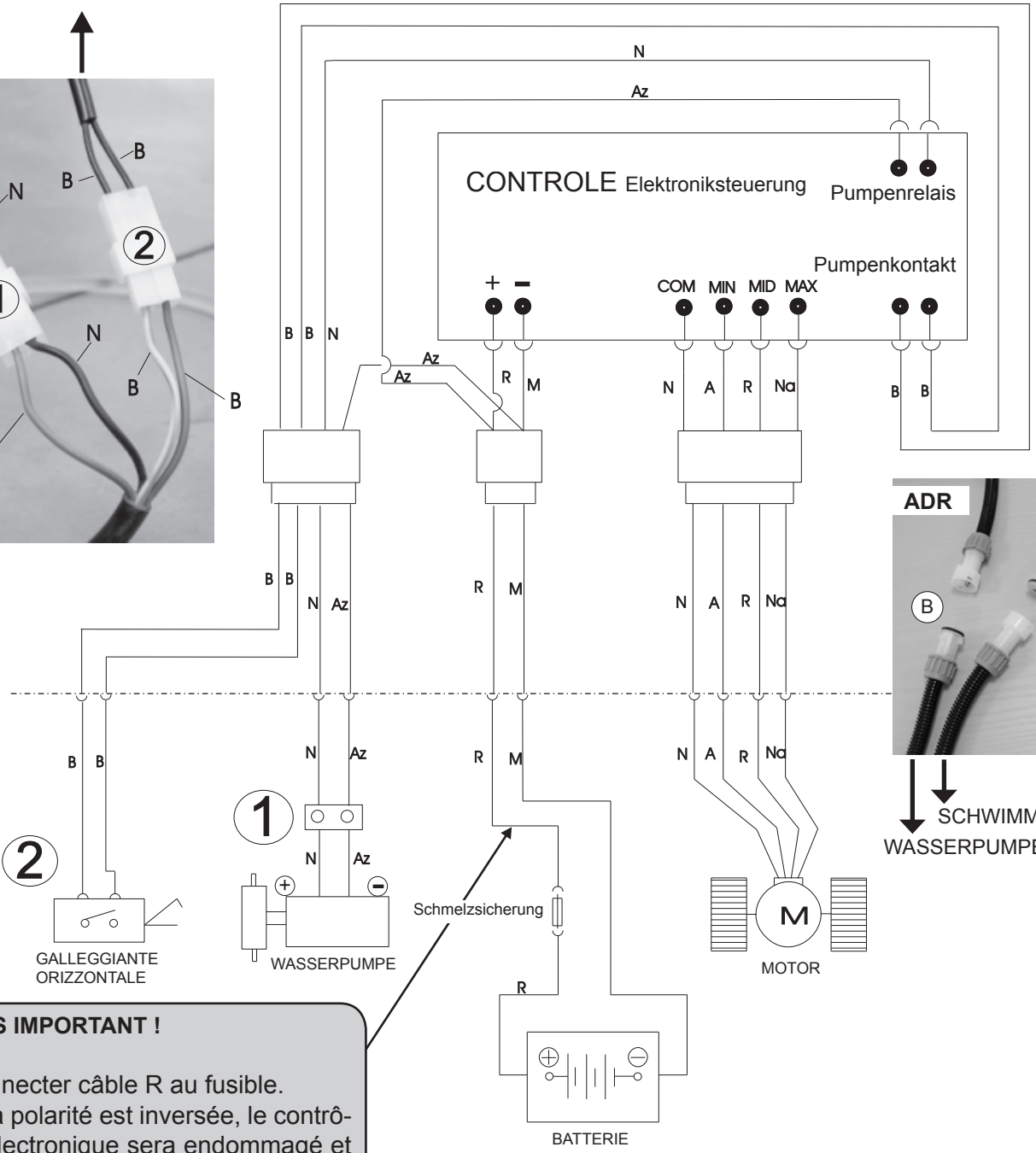
b- Die Leitung zusammenrollen, NICHT KÜRZEN.

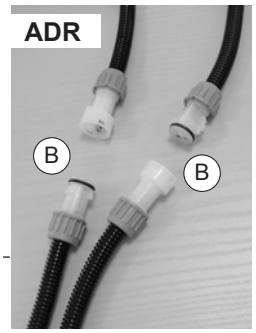


dirna Bergstrom

Elektrisches schaltschema





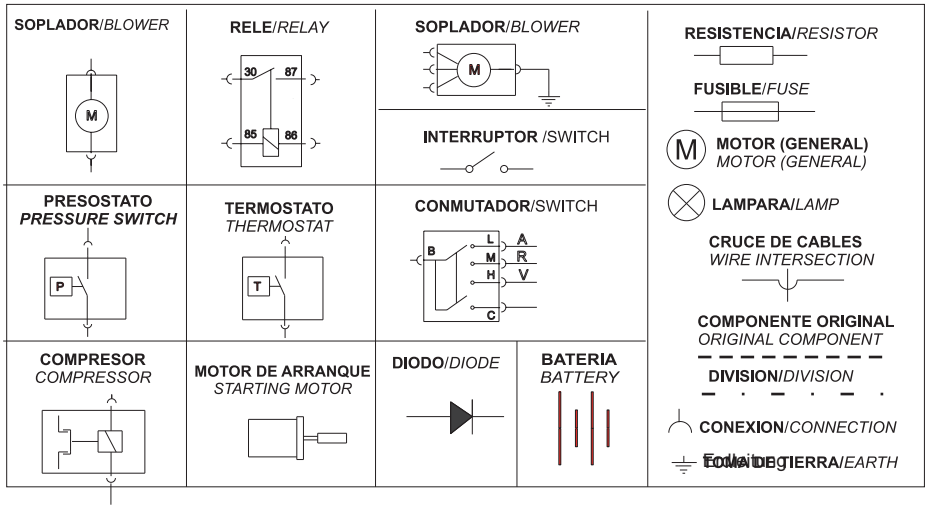


SCHWIMMER
WASSERPUMPE

AVIS IMPORTANT !

Connecter câble R au fusible.
Si la polarité est inversée, le contrôle électronique sera endommagé et irréparable.

SIMBOLOGIA/*CONVENTIONAL SIGNS*



COLORES/*COLOURS*

A	GELB
Az	BLAU
B	WEIß
G	GRAU
Na	ORANGE
N	SCHWARZ
R	ROT
Ro	ROSA
V	GRÜN
Vi	LILA
M	BRAUN
Mo	DUNKELVIOLETT

Raccomandazioni per Il montaggio

- Prima di iniziare il montaggio leggere le istruzioni e seguirle durante il processo di installazione.
- Usare gli strumenti adeguati per ogni operazione.

Elettricità

- Scollegare la chiave di contatto.
- Scollegare la batteria prima di iniziare il montaggio.
- Garantire il collegamento dei componenti elettrici, verificandone il corretto inserimento.

Le indicazioni relative alla posizione sono:
DESTRA: lato del passeggero
SINSITRA: lato dell'autista

Coppia di serraggio *(N.m)*			
Filettatura	**Qualità Acciaio**		**Chiave**
	8.8	10.9	
M4/60	2.9	4.2	7
M5/80	5.5	7.5	8
M6/100	10	13	10

⚠ Important

Il condizionatore d'evaporazione Funziona prendendo aria Dall' esterno per introdurla Nella cabina. E' importante che La medesima non rimanga ferma All'interno, la quale Provocherebbe un' eccesso D'umidità. Tutte le cabine dei Veicoli moderni sono dotati di Reticole di rinnovo dell'aria, Creando l'aria necessaria, per Esempio, per il riscaldamento.

L'installatore dovrà assicurarsi Dell'esistenza delle suddette Reticole e, in caso Che non esistano, dovranno Essere installate.

D'altra parte l'utente dovràAssicurarsi periodicamente Che queste reticole non Siano ostruite dalla sporcizia.

Strumenti

- Nottolino con valvola da 10
- Giravite a stella TOP 10
- Chiave fissa da 10
- Chiave a brucola da 10

Documentazione allegata

Istruzioni di montaggio	220AA50006
Guida dell'utente	220AA2E004
Soluzione dei problemi	220AA50008
Parti fornite	220RE00099
Garanzia	220AA10017

⚠ Importante

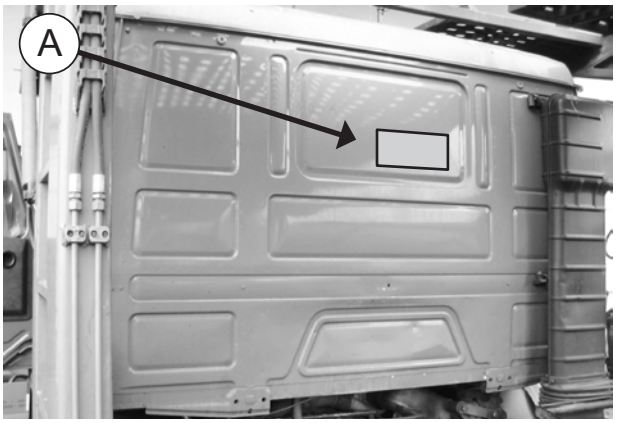
Dovranno essere consegnati all'utente: chiusure d'inverno e manuale dell'utente.

Si raccomanda all'installatore di leggere il menzionato manuale, prima di consegnarlo, per informarsi della manutenzione e raccomandazioni sul sistema d'evaporazione installato.

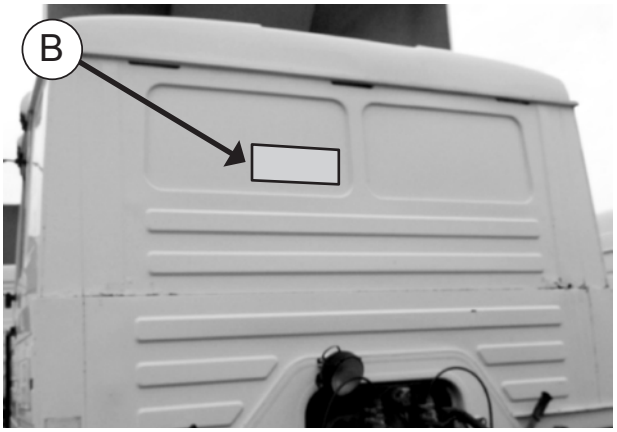
⚠ Avvertenze

⚠ **Dirna Bergstrom, s.l.** declina ogni responsabilità per danni o rotture derivanti dall'errata installazione o dall'errato uso dell'impianto o da sostituzioni o modifiche effettuate senza la necessaria autorizzazione per iscritto.

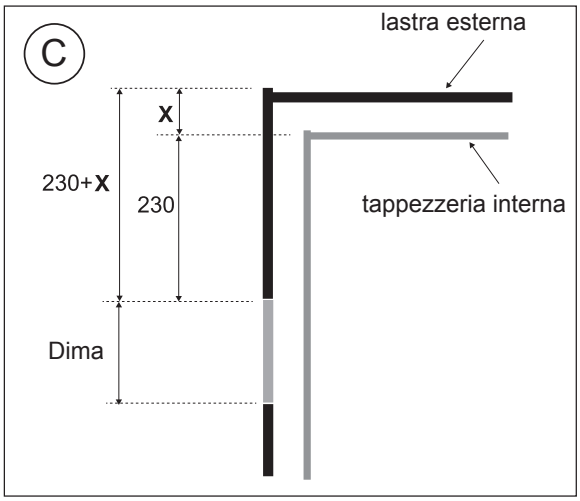
A Modelli nei quali il taglio della dima é centrato



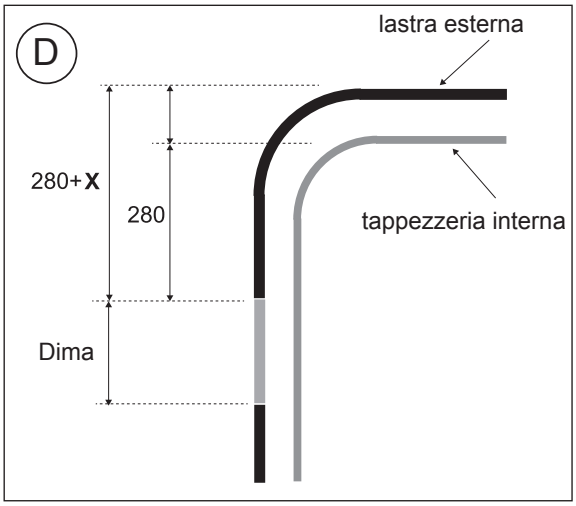
B Modelli nei quali il taglio della dima é nel lato sin. o des. (A scelta).



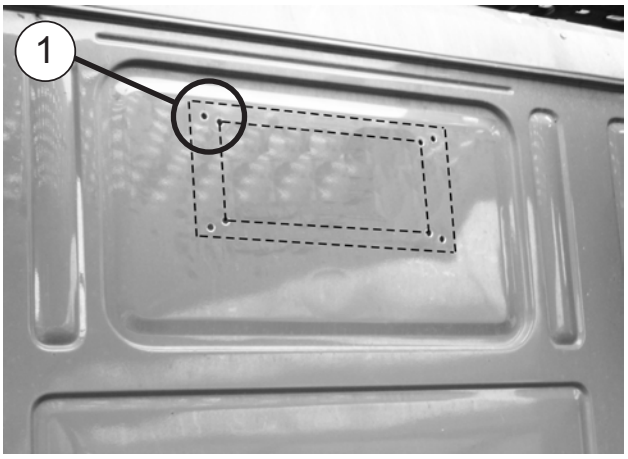
C Per cabine che finiscono ad angolo retto, si sommerà 230mm a x (distanza tra piastra e tappezzeria interna).
A questa misura si posiziona la parte superiore della dima fornita.



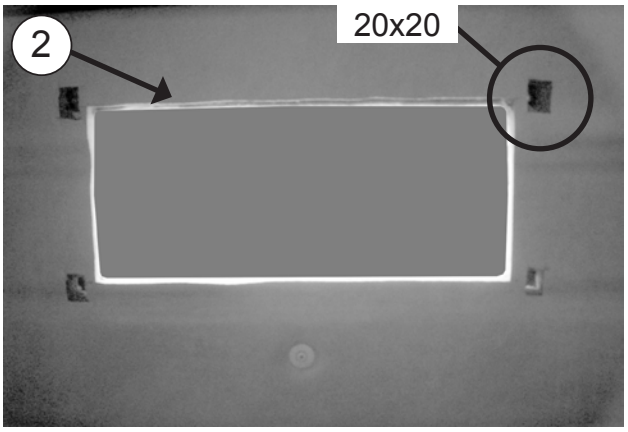
D Per cabine che hanno un raggio, la misura di 230 sarà di 280mm, Il resto dell' operazione é uguale a quella pecedente.



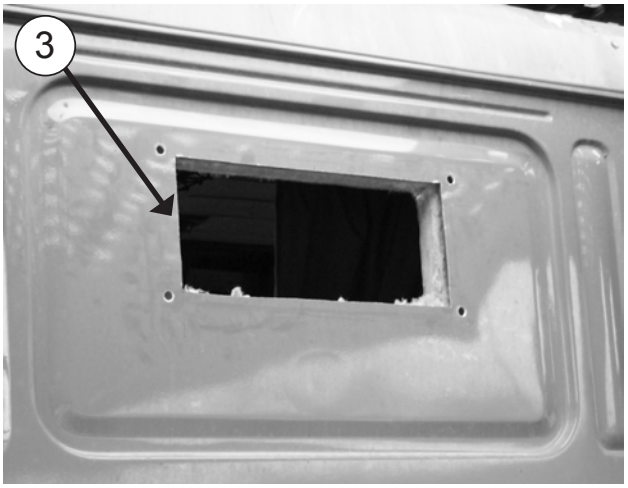
1 Presentare la dima centrata, secondo la misura (casi C e D), evidenziare i (4)fori ed (4)angoli del taglio e forare da Ø8.



2 Per l'interno cabina. Unire i (4)punti del taglio e ritagliare la tappezzeria con un taglierino, (affinché il taglio dall'esterno non incida la tappezzeria), effettuare i tagli da 20x20mm vicino ai (4) fori.

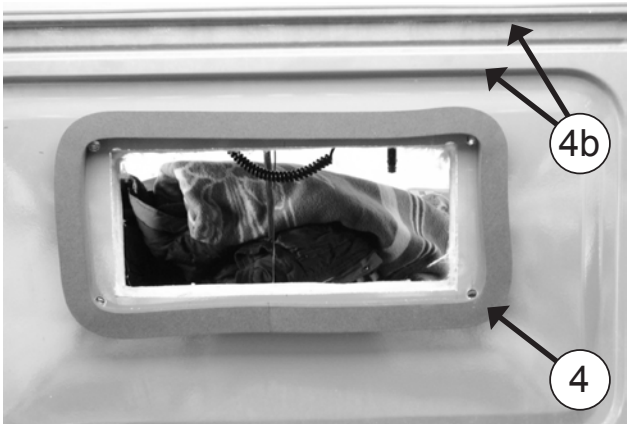


3 Dall'esterno della cabina. Unire i (4) angoli e tagliare, con seghetto alternativo, nella lamiera (parte esterna). Proteggere il taglio con minio o vernice.

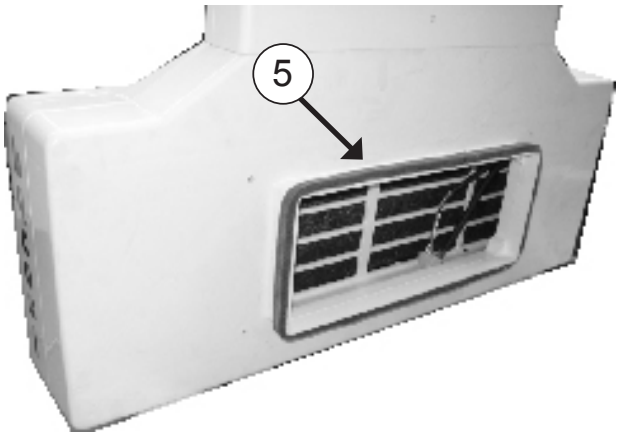


4 Incollare la giunta vicino ai (4)fori come indicato nella foto.

a- Dipendendo dai mm. che sporgono i bordi o nervi originali della cabina, si deciderà la giunta da 15, 25 o 30mm., tutte fornite, in modo tale che rimanga aderito il più possibile alla cabina.

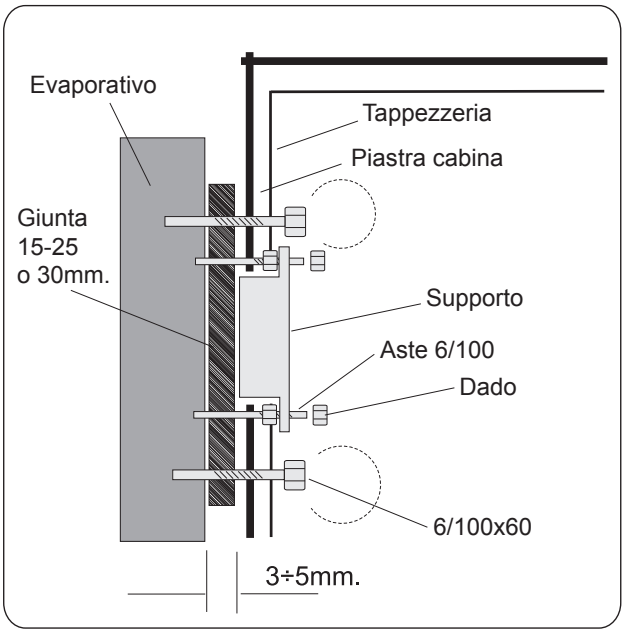


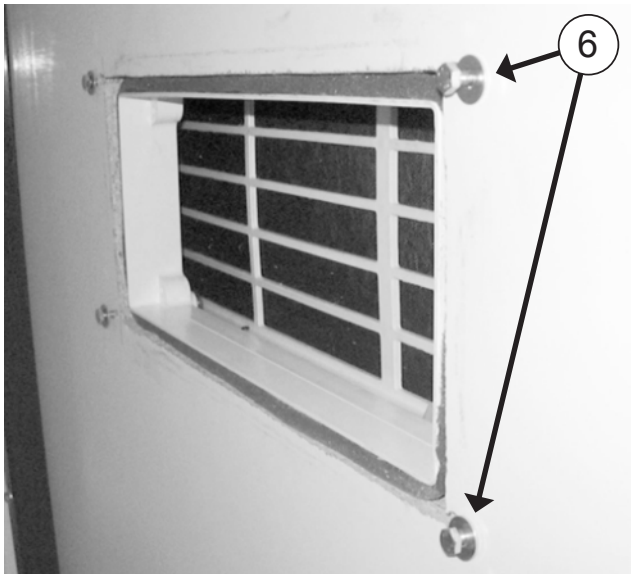
5 Incollare l'isolante evaporativo come indicato.



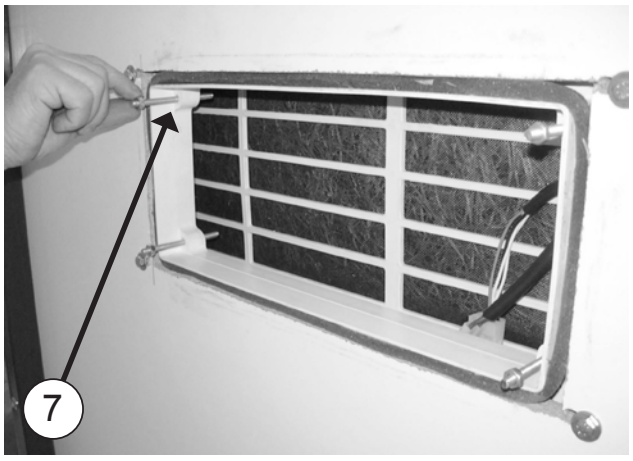
6 All'interno della cabina fissare il gruppo d'evaporazione c/(4)viti 6/100x60, (4)rondelle piane Ø6 aletta larga e (4)rondelle Ø6 grower.

Serrarre le viti fino a quando la giunta rimane stretta tra 3 e 5 mm. coppia di serraggio 3.9/4.9 Nw/m - (VEDERE DETTAGLIO).



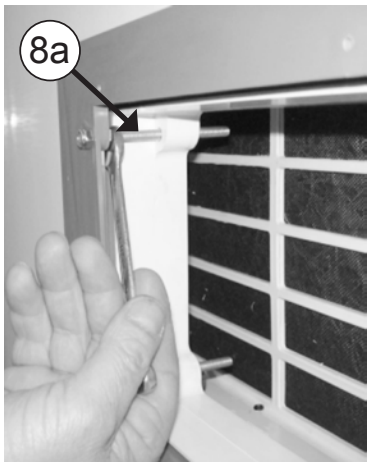


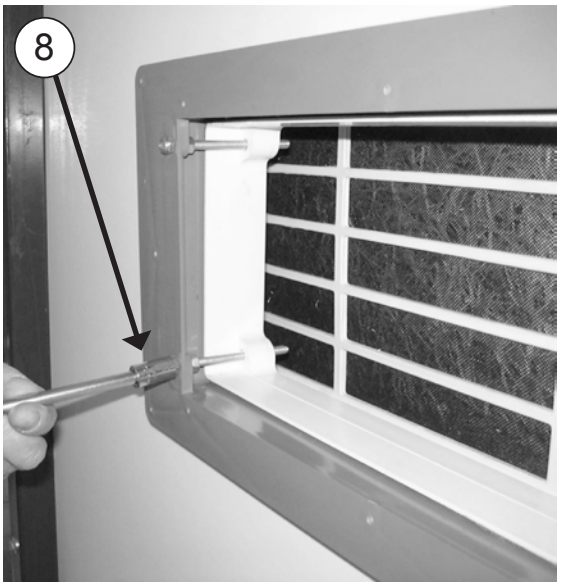
7 Avvitare (4) aste M6/100x100 o 160 (dipendendo dal maggiore o minor spessore della tappezzeria), con (4)dadi M6.



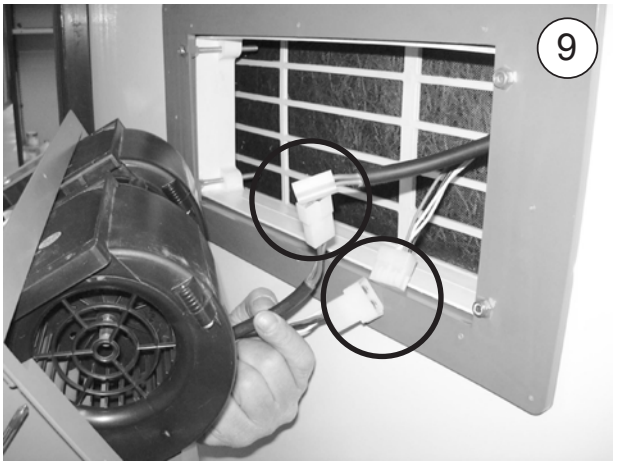
8 Montare sulle aste il supporto, collocare il dado 6/100 autobloccante ed avvitare fino ad aggiustarlo con il supporto e quest'ultimo con la tappezzeria.

a- fissare con il controdado.

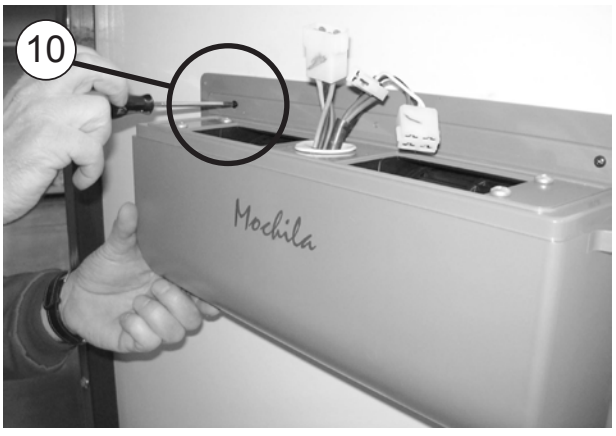




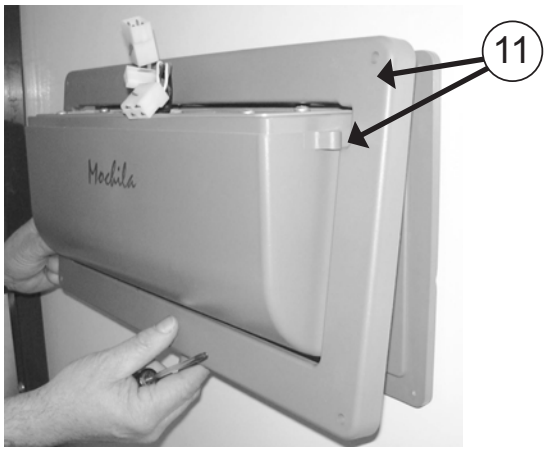
9 Collegare le scatole dei collegamenti dell'evaporativo esterno, con le scatole del cablaggio del canalizzatore.



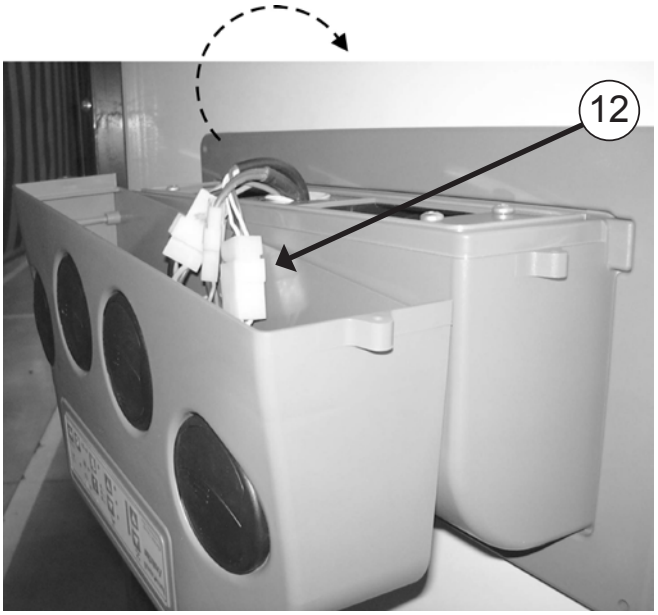
10 Montare il. canalizzatore a soffio con (8) viti autofilettanti 3.5x9.5 mm.



11 Fissare la cornice al canalizzatore con (4)viti autofilettanti 3.5x9.5 mm., considerando la posizione dei ribassamenti.

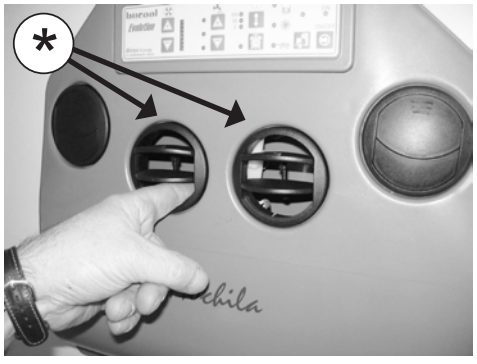


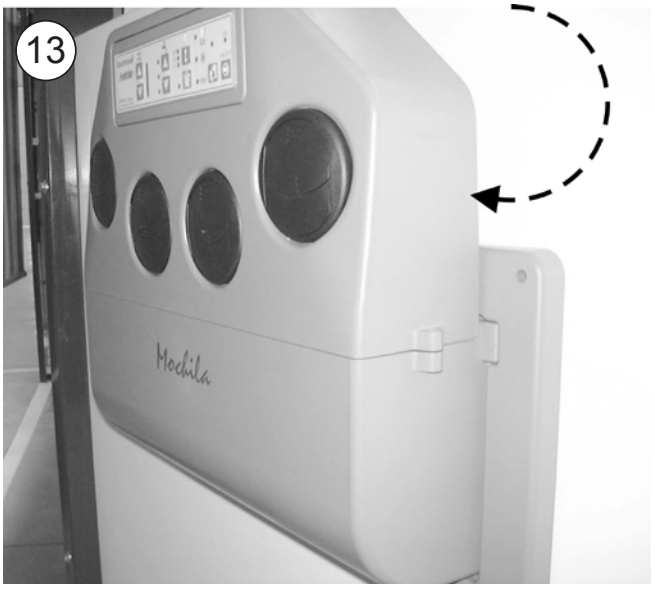
12 Collegare le scatole del cablaggio del canalizzatore, con quelle del frontale con i finestrini, nella posizione indicata, ruotando come indicato fino alla sua posizione finale.



13 Fissare con (2) viti autofilettanti 3.5x9.5mm.

(*) Attraverso i finestrini centrali, centrare le scatole affinché non interferiscano nell'uscita d'aria.

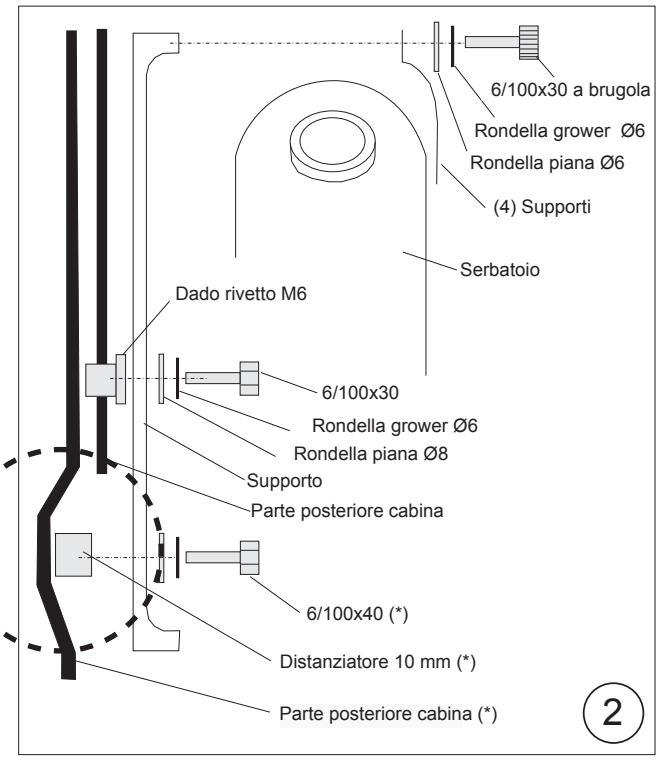




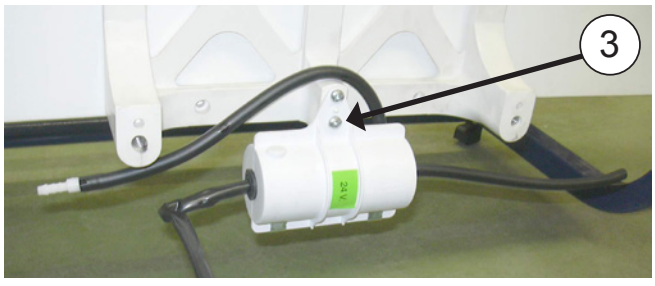
OPERAZIONI DA REALIZZARE PER IL MONTAGGIO DEPOSITO D'ACQUA

1 Collocare il supporto del serbatoio nella parte bassa più adeguata della zona posteriore della cabina. Segnare e forare Ø 9 in cabina considerando la posizione verticale del supporto. Minimo (6) fori di fissaggio.

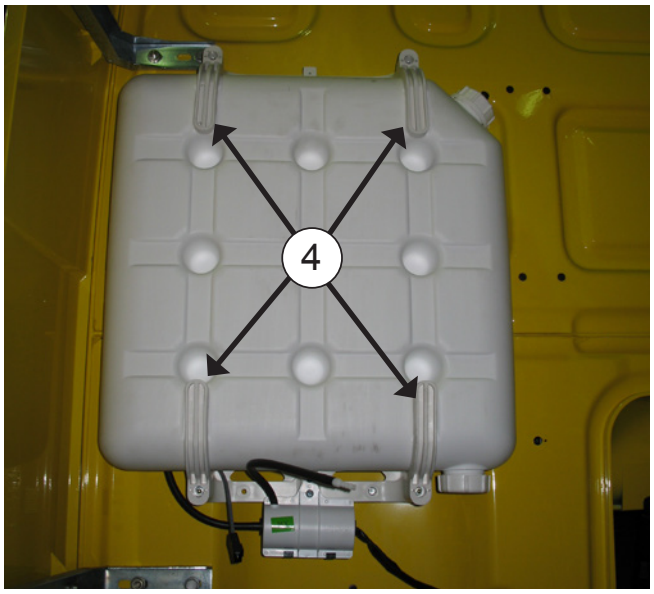
2 Collocare dadi rivetto M6 e fissare il supporto con viti 6/100x30.
(*) nei casi in cui non poggi su una parte liscia, collocare un separatore di 10 mm e una vite 6/100 x 40.

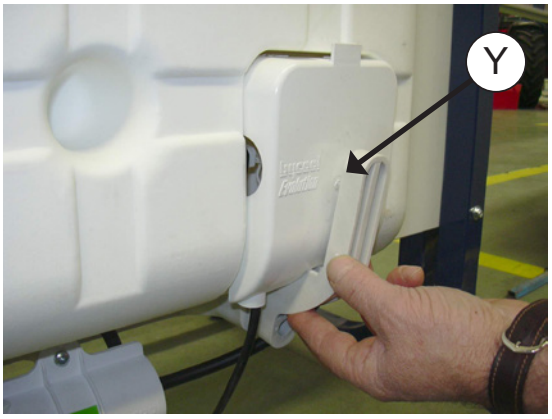


3 Fissare l'insieme della pompa al serbatoio con (2) viti da lamiera 5.4x19 mm.



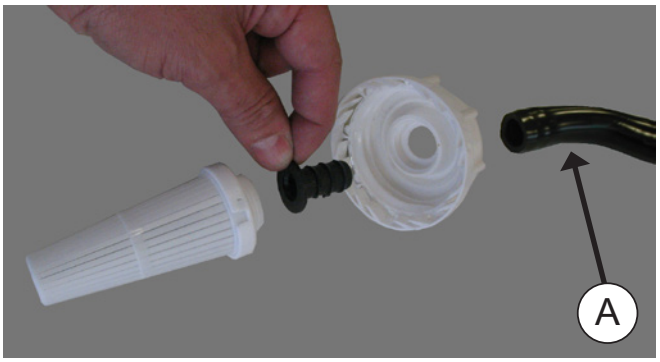
4 Quindi collegare il tubo della pompa (X) al serbatoio e fissarlo (scegliendo la posizione migliore per il tappo di riempimento, destra o sinistra, per agevolare lo stesso) con i supporti forniti. Il supporto con aggetto viene collocato nel caso in cui si monti il deposito con il tappo di riempimento (Y) sul lato sinistro.



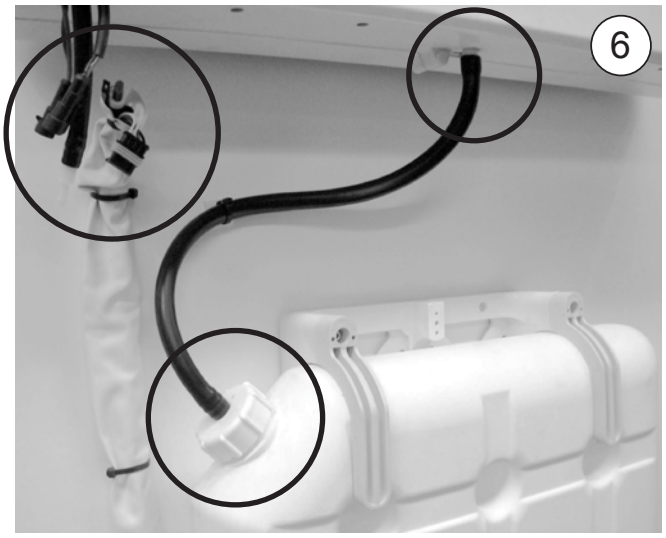


OPERAZIONI DA REALIZZARE PER IL MONTAGGIO DEPOSITO D'ACQUA

5 Montare filtro nel tubo con perno, inserire nel tappo e collegare al tubo di ritorno Ø18 x Ø12 (A).



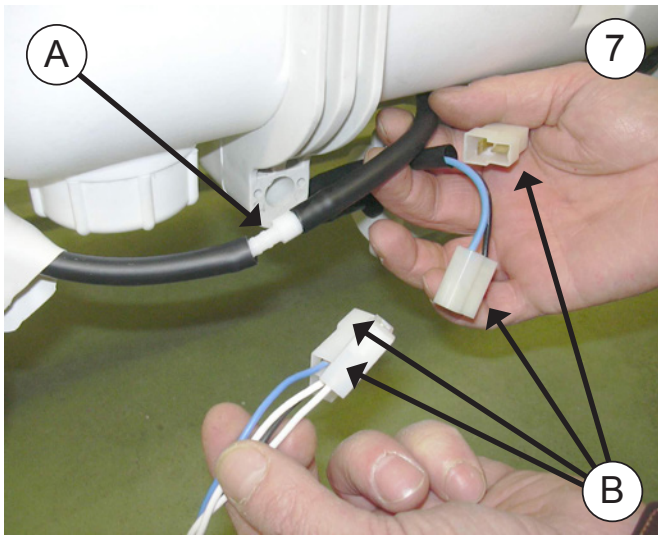
6 Collocare il tappo nel deposito. Collegare il cablaggio con una copertura alle scatole del gruppo d'evaporazione ed il tubo d'entrata dell'acqua.

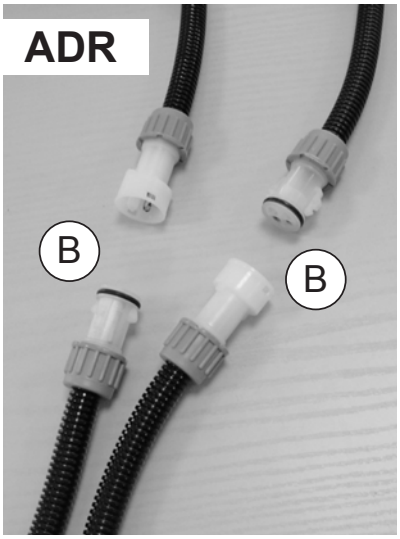


7 Connettere il cablaggio con guaina alle scatole dell'evaporativo e tubo entrata acqua.

A. Collegare alla pompa il tubo di mandata che proviene dall'evaporativo.

B. Collegare cablaggio pompa e quello di livello.



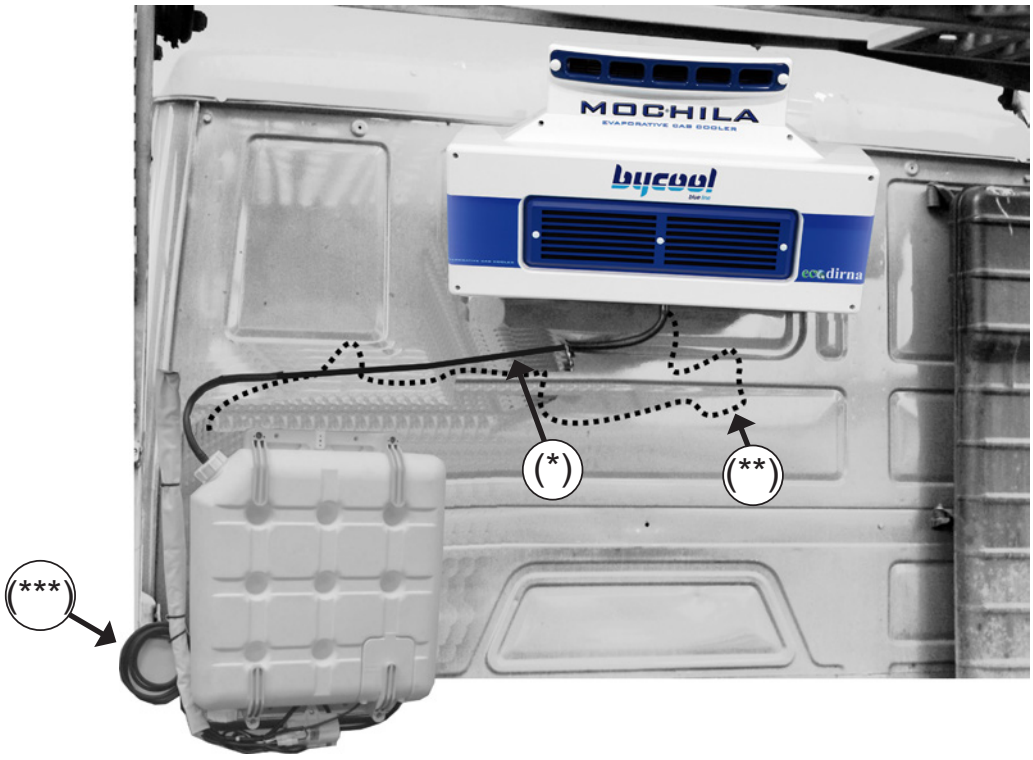


8 Collegare come indicato il cablaggio della batteria.

(*) Modo corretto per il collocamento, dove i 2 tubi di scarico abbiano la caduta e non l'orizzontabilità e perdite, per facilitare la caduta d'acqua al deposito, evitando l'accumulo progressivo e conseguentemente l'entrata d'acqua alla cabina.

(**) Modo incorretto. Non realizzare.

(***) NON TAGLIARE la ricchezza dei cavi (effetuare una roccia), dietro il deposito d'acqua. In caso d'errore , collegarli in posizione orig.per evitare danni irreparabili nel controllo elettronico.

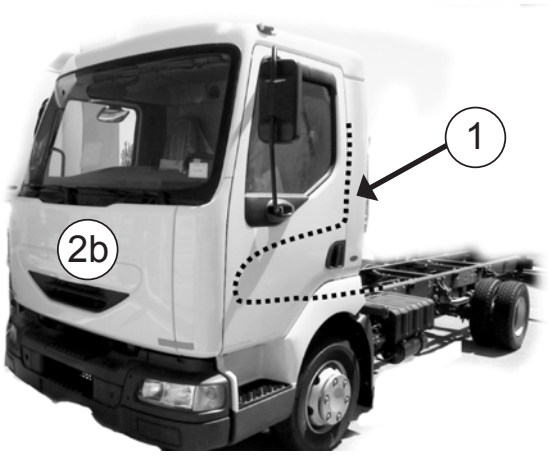


1- Dirigere i cavi fino alla batteria, usando il passaggio del cablaggio originale.

2- Effettuare un foro da Ø3 fissando il fusibile insieme alla batteria, c/vite 5/80x11 autofilettante, dirigere i cavi come indicato (vedere pagina seguiente), fissandoli con fascette fornite.

a- Collegare il cavo positivo e negativo alla batteria e collegare nuovamente i morsetti.

b- Fare una roccia con il cavo, **NON TAGLIARE**.



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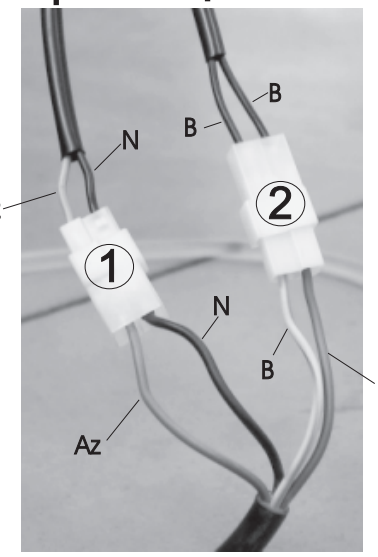
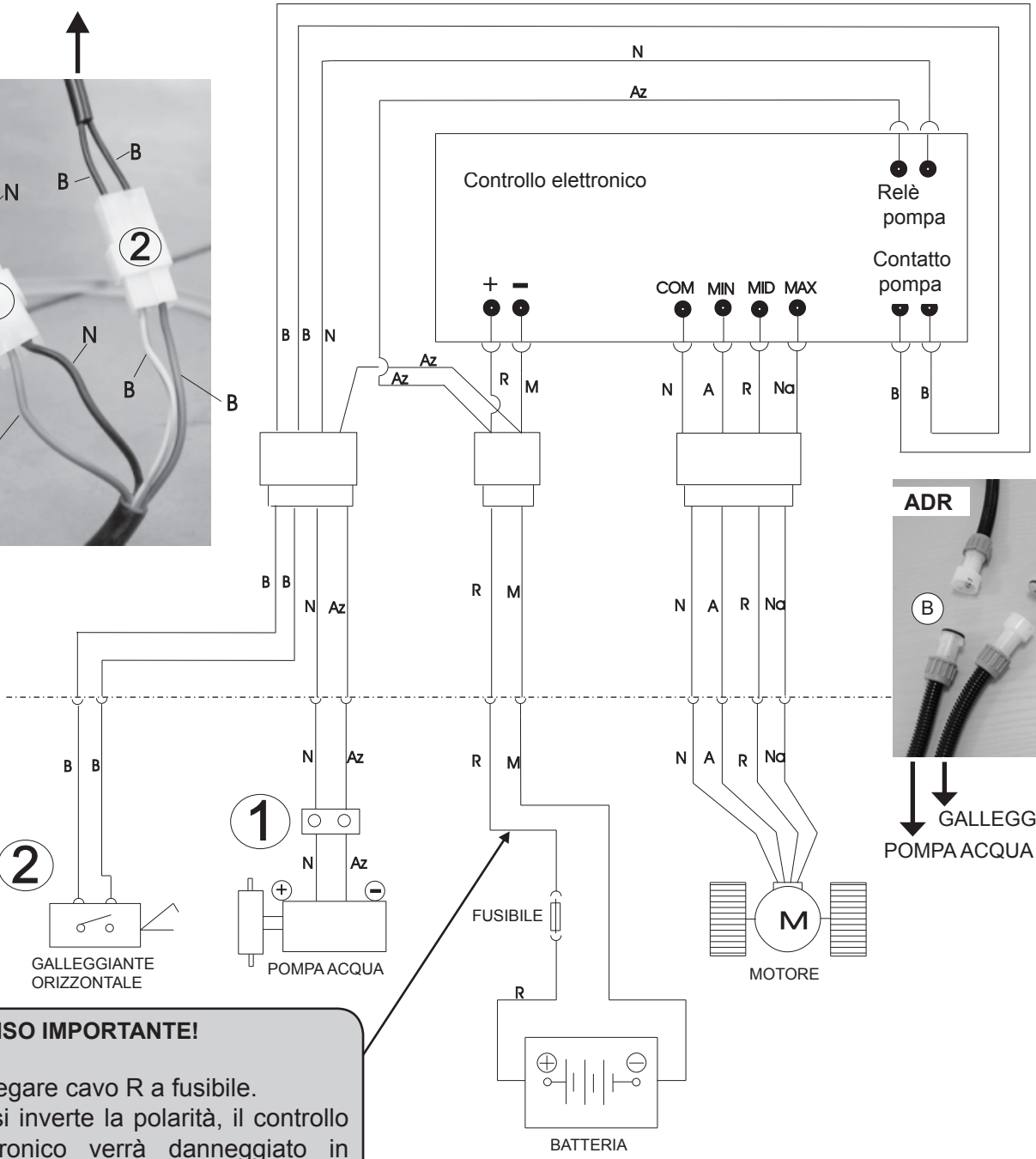
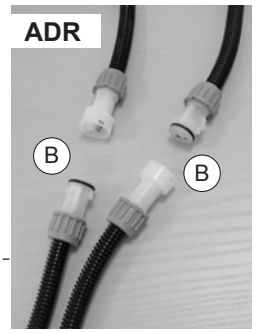
Schema elettrico





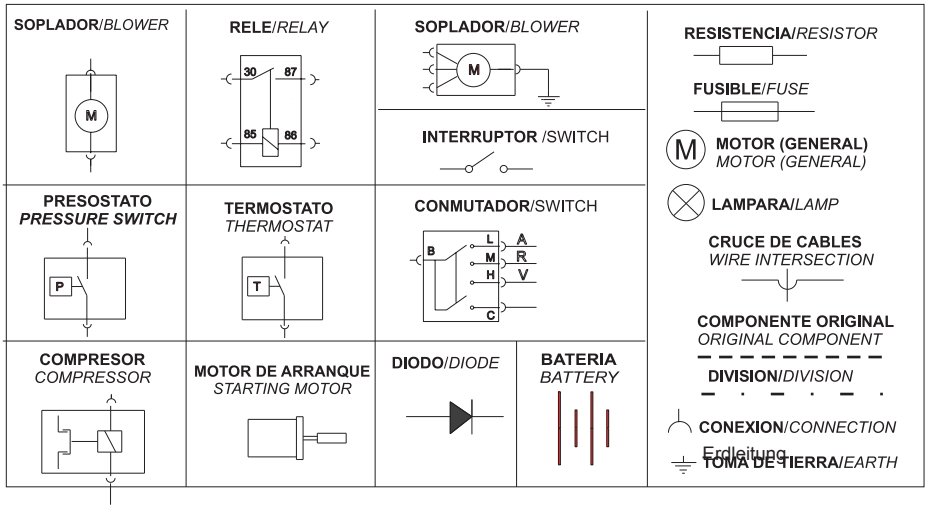


GALLEGGIANTE
POMPA ACQUA

AVVISO IMPORTANTE!

Collegare cavo R a fusibile.
Se si inverte la polarità, il controllo elettronico verrà danneggiato in modo irreversibile.

SIMBOLOGIA/*CONVENTIONAL SIGNS*



COLORES/*COLOURS*

A	GIALLO
Az	BLU
B	BIANCO
G	GRIGIO
Na	ARANCIONE
N	NERO
R	ROSSO
Ro	ROSA
V	VERDE
Vi	VIOLETTO
M	MARRONE
Mo	VIOLA

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C

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