CE

dirna Bergstrom

bycool green line

DINAMIC 1.1

VOLVO FH Euro 6

Instrucciones de Montaje — ES Spanish

Mounting Instructions — EN English

Instructions de Montage — FR French

Montageanweisungen — GE German

Istruzioni di Montaggio — IT Italian

F-4218 rev.01

AENOR Calidad en Automoción IATF 16949

AENOR Empresa Registrada ISO 9001

IQNet CERTIFIED QUALITY SYSTEM

220AA63110

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.

⚠ Atención

Si durante el montaje el equipo se inclina ó se abate la cabina con el equipo montado, se deberá esperar un mínimo de 60 minutos, desde que el equipo quede horizontal, antes de ponerlo en marcha.

Documentación incluída

Instrucciones de montaje	220AA63110
Manual del usuario	220AA11005
Diagnosis de averías	220AA63111
Garantía	220AA10010

Las indicaciones relativas a posición son:

DERECHA: Lado pasajero
IZQUIERDA: Lado conductor

Par de apriete *(N.m)*			
Rosca	Calidad Acero		Par
	8.8	10.9	
M6/100	10	13	10

Montaje de tuberías		
Par de apriete		
Tubería	Par de apriete	Herramienta
1/4”	13-15	Llave fija 14 mm
3/8”	15-17	Llave fija 19 mm

Herramientas

- Carraca con llave de paso de 10
- Destornillador de estrella TOP 10
- Llave fija de 10, 11, 14, 17, 19
- Llave allen de 6
- Llave de tubo de Ø10
- Broca Ø 4, 6, 9
- Taladradora
- Broca Ø 6
- Sierra circular Ø 19, 22, 35, 48
- Tijeras
- Remachadora M6

Simbología

Frágil

Atención corte!

Riesgo eléctrico

⚠ Advertencias

⚠ El personal instalador debe poseer una formación suficiente en Aire Acondicionado de vehículos.

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

⚠ Véase **procedimiento de garantía** del producto incluido en **Diagnosis de Averías**.

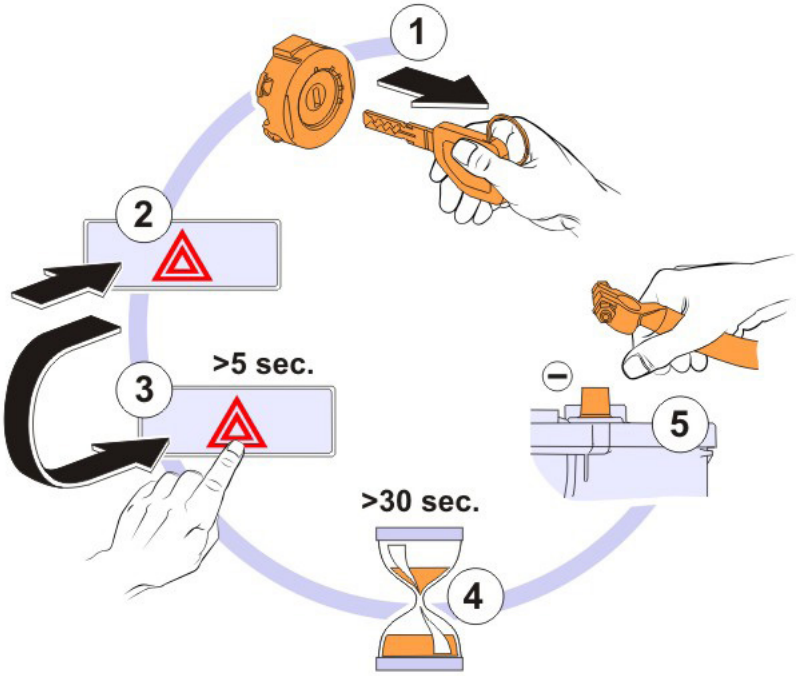
⚠ Véase **Manual de Usuario** del equipo para el correcto funcionamiento del mando a distancia y del panel de control.

⚠ Al finalizar la instalación se debe entregar al usuario: **Manual del Usuario**, **Garantía** y **Diagnosis de averías**.

REALICE ESTE PROCEDIMIENTO CUANDO SE CUMPLA LA CONDICIÓN SIGUIENTE.

• Condiciones:

- Si el vehículo dispone de una alarma
- Ponga la alarma en modo de servicio.



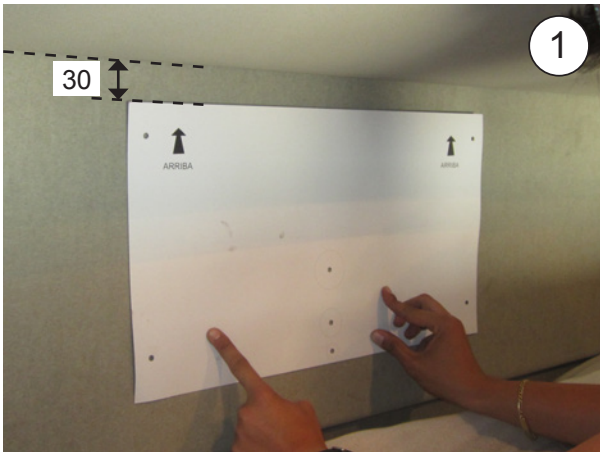
1	Retire la llave de la cerradura de arranque (1).
2	Pulse el botón para las luces intermitentes de advertencia (2).
3	Presione y mantenga pulsado el botón de las luces intermitentes de advertencia (3). • Condiciones: - Mantenga el botón pulsado durante al menos 5 segundos. **Datos técnicos.** Si el proceso se completó con éxito: La iluminación de acceso y la luz interior están apagadas cuando se abre la puerta.
4	Espere como mínimo 30 segundos (4).
5	Retire el cable del terminal negativo (5).

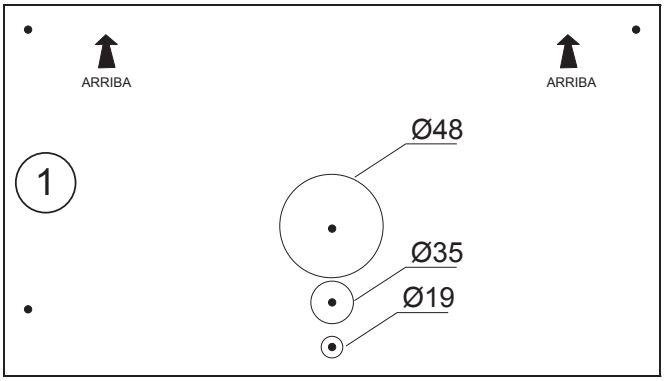
OPERACIONES PREVIAS:

- Desconectar batería.
- Desmontar panel interior de distribución de aire de unidad evaporadora.

1 POR INTERIOR CABINA:

Presentar plantilla suministrada en cama superior, centrada lateralmente y aproximadamente a 30 mm del techo de la cabina y marcar taladros.





2

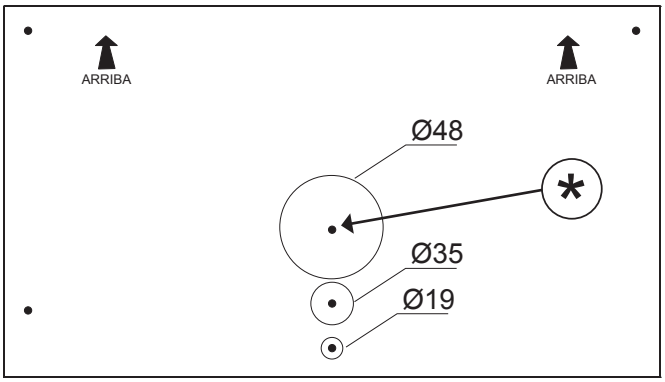
(*) Dar taladro Ø4 pasante con broca larga en posición de taladro Ø48, después efectuar los siguientes taladros.

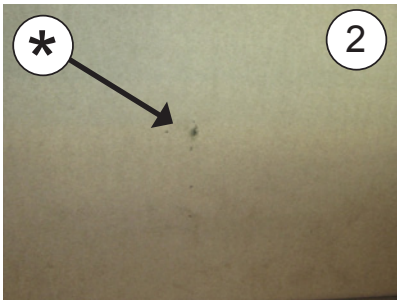
A- dar (1) Ø35 sólo en el tapizado

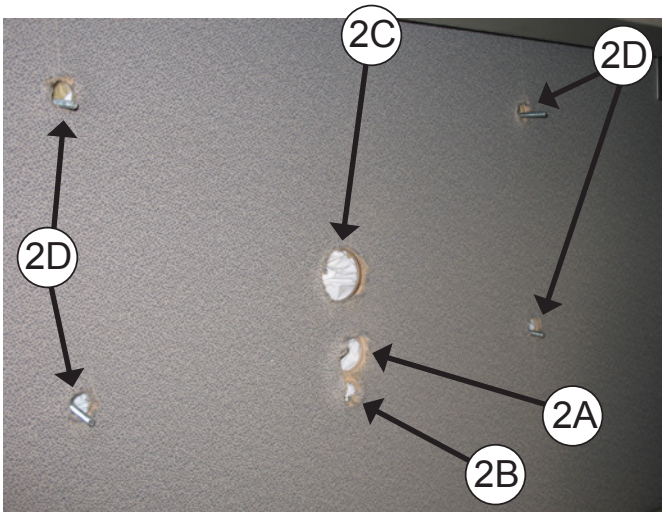
B- dar (1) Ø19 sólo en el tapizado

C- dar (1) Ø48 sólo en el tapizado

D- dar (4) Ø22 sólo en el tapizado



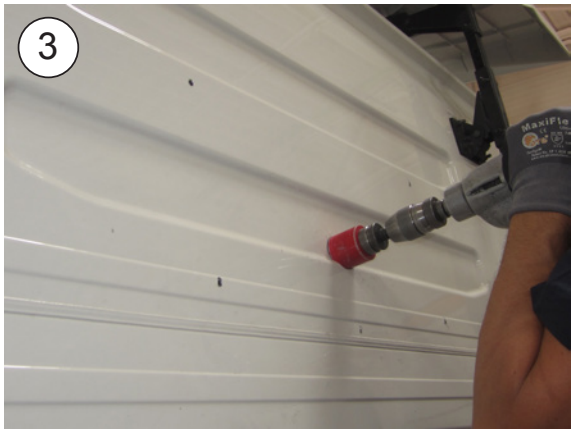


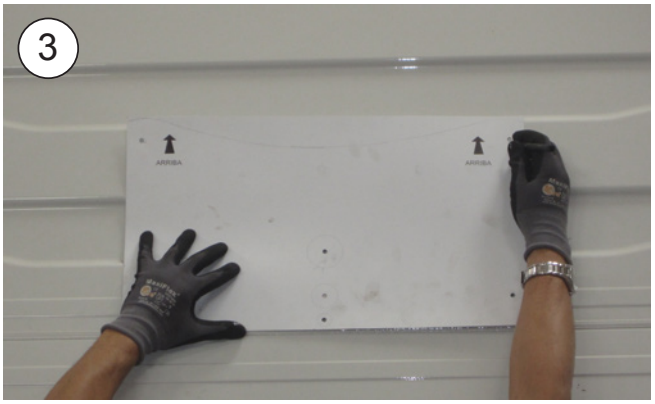


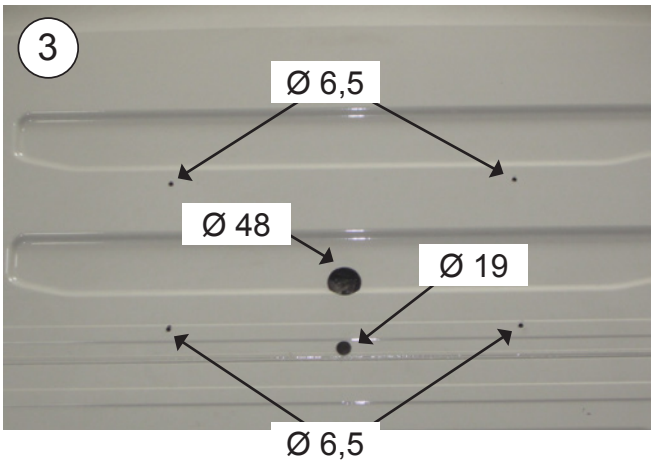
3

POR EXTERIOR CABINA:

Presentar plantilla a nivel por exterior, tomando como referencia el taladro efectuado Ø4 y marcar y dar taladros restantes.





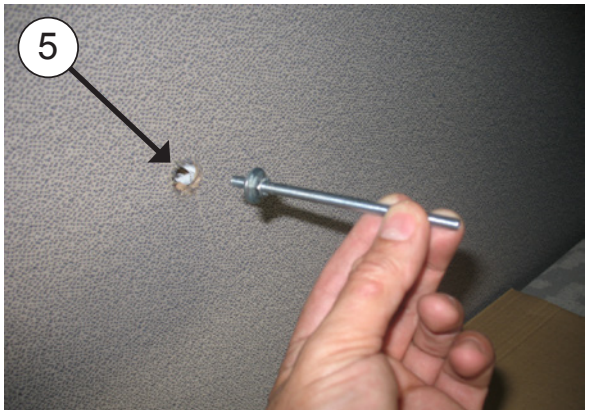


4

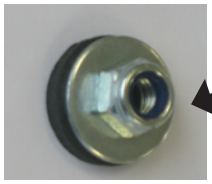
Proteger con pintura anticorrosiva suministrada taladros efectuados.

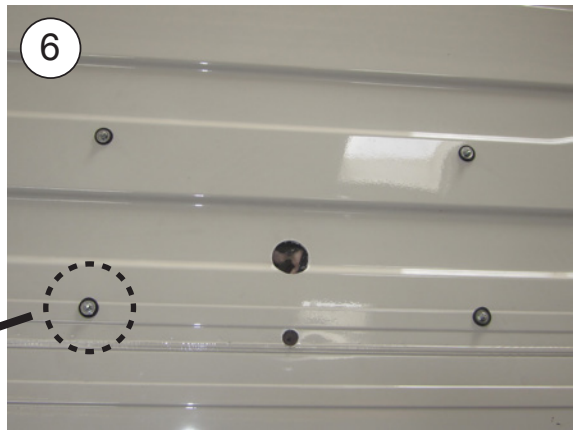
5

Introducir por interior espárragos M6 con tuerca, arandela grower y arandela plana como se indica. En parte superior espárragos de 110 mm y en parte inferior espárragos de 140 mm.



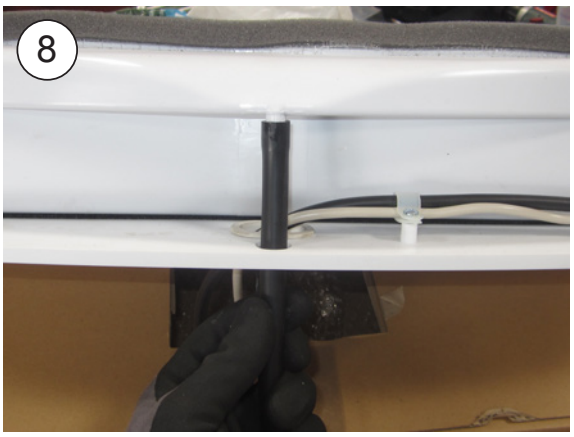
6	Fijar por el exterior con arandela de goma, plana y tuerca autoblocantes sujetando por parte interior con llave de tubo 10.



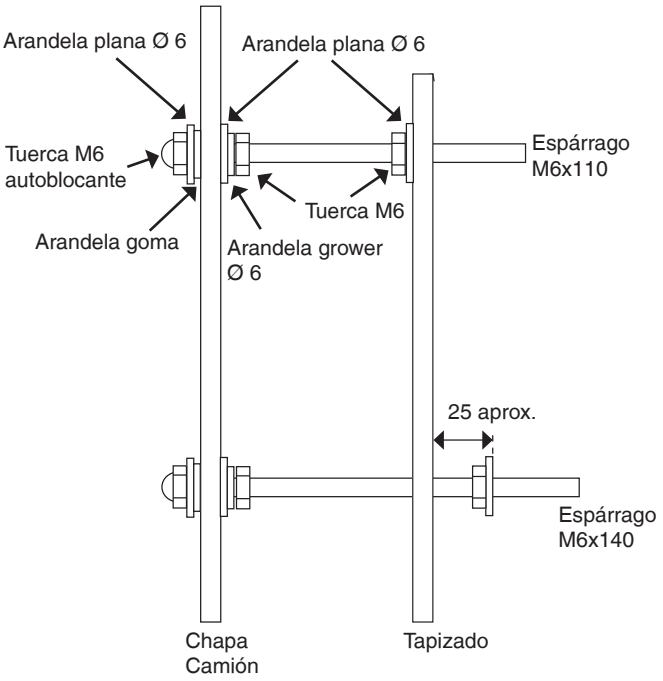


7	Colocar tapones de tuerca y pasamuros.

8	Conectar tubo de desagüe en conjunto evaporador.



9 Por interior cabina, roscar en cada espárrago (1) tuerca M6 y colocar arandela plana. Dejar tuercas y arandelas superiores a ras de tapizado, e inferiores a 25 mm aproximadamente.



10 Pasar tubo desagüe hacia el exterior por taladro Ø 19 efectuado en tapizado.

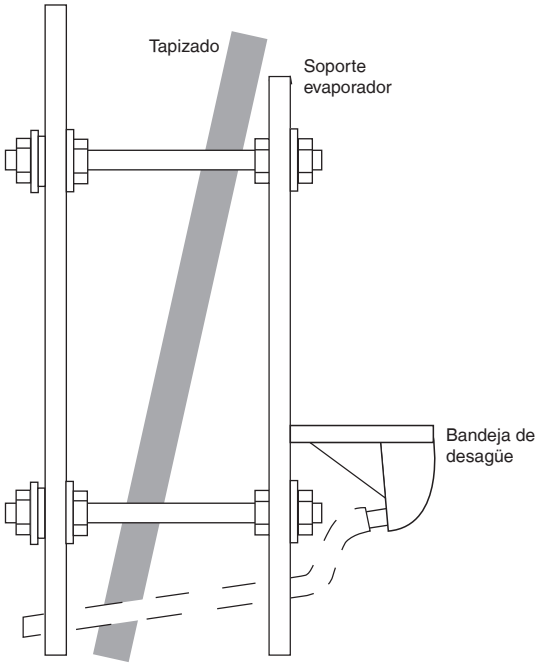
11 Introducir cableados de evaporador hacia el exterior por taladro Ø 35 del tapizado y sacarles por taladro Ø 48 efectuado en la chapa.

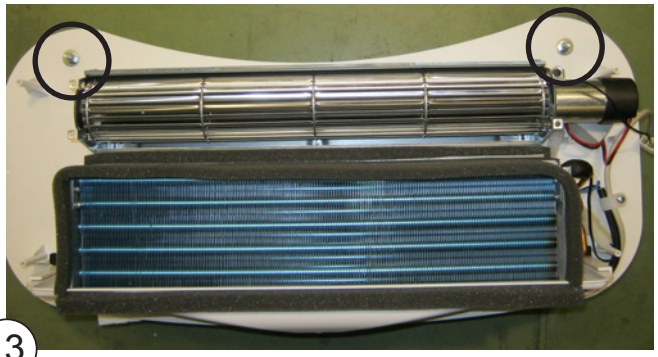
12 Pasar tubos de evaporador hacia el exterior por taladro Ø 48.

13 Posicionar conjunto evaporador en espárragos M6 y fijar con tuercas M6, arandelas grower y planas Ø 6.

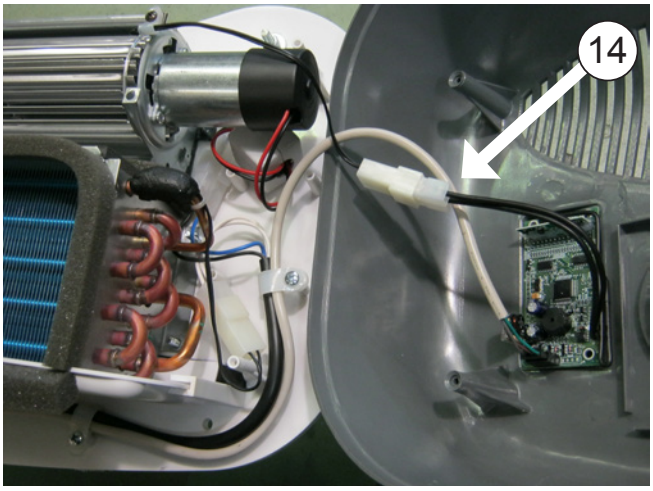
MUY IMPORTANTE

En el caso de tapizados con inclinación el conjunto evaporador tiene que quedar vertical o inclinado de la parte inferior hacia fuera para evitar que el agua de condensación caiga al tapizado. Comprobar antes de fijar el equipo añadiendo agua en la bandeja de desagúe, que ésta no queda retenida en la misma.





14	Conectar sensor de aire de retorno y cable de comunicaciones.



15	Volver a fijar el panel interior de distribución de aire con sus tornillos, usando destornillador imantado y colocar tapones.

16	Por parte exterior colocar pasamuros en salida de racores, e introduciendo pasamuros Ø 22 en desagüe y con ayuda de un destornillador colocar pasamuros.

MONTAJE CONJUNTO CONDENSADOR Y TUBERÍA

1

Posicionar plantilla en el sitio más idoneo del lado derecho de la cabina, teniendo en cuenta que los taladros queden en zonas planas y marcar los dos taladros inferiores.

Es importante marcar sólo estos dos taladros ya que la base puede que no coincida con la plantilla por la contracción del material.

Atención: Tener en cuenta la longitud de la tubería, está conectada con el conjunto evaporador.

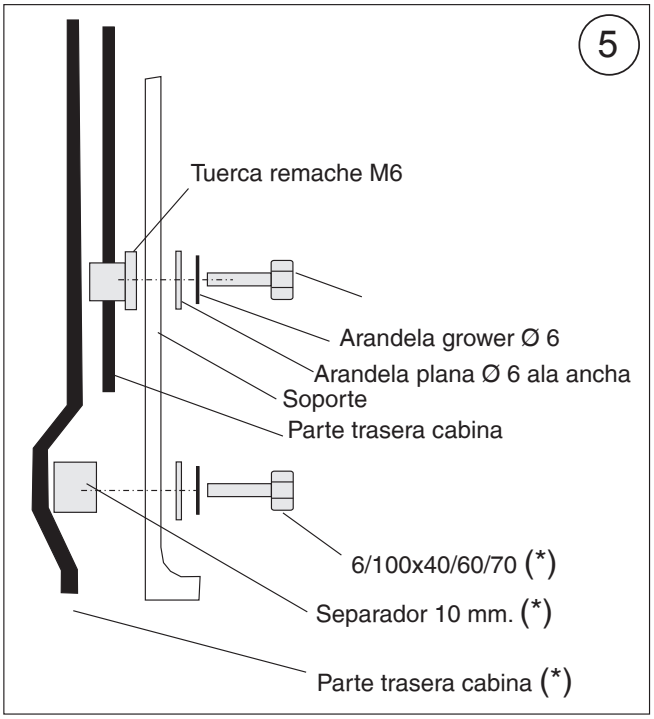
2

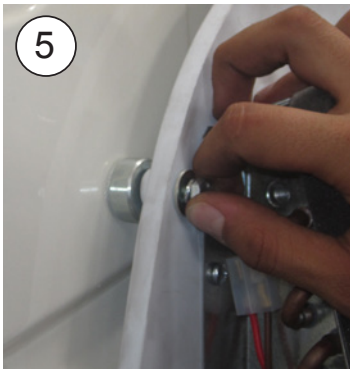
Efectuar (2) taladros Ø 9, proteger con pintura anticorrosiva suministrada y colocar (2) tuercas remache M6.

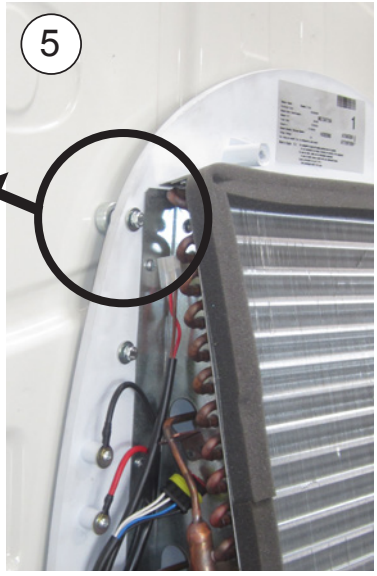
3	Posicionar unidad condensadora con (2) tornillos 6/100x30, roscando en tuercas remachadas y marcar el resto de taladros de la unidad. **Mínimo 6 taladros para fijación de la unidad condensadora.**

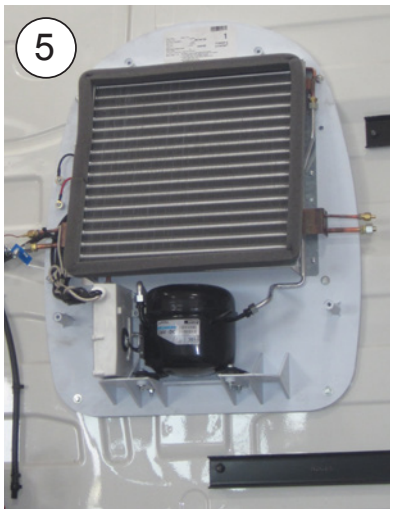
4	Desmontar la tapa de la unidad condensadora y efectuar taladros Ø 9 en las marcas realizadas y proteger éstos con pintura anticorrosiva suministrada y colocar tuercas remache M6.

5 Fijar unidad condensadora con tornillo 6/100x30, arandela grower Ø y arandela plana Ø 6 ala ancha, en taladros donde la base de la unidad apoya directamente sobre la tuerca remachada, y con tornillos 6/100x40, arandela grower Ø 6, arandela plana Ø 6 ala ancha y separador de 10 mm intercalado entre la base de la unidad y la tuerca remachada, en taladros donde la base no apoya directamente sobre la tuerca remache.









6 Montar racores de la tubería en los racores de evaporador. Apretar haciendo contratuerca y proteger con cinta antigoteo.

7	Conectar cableados de evaporador con los de la unidad condensadora, amarrar con bridas a la tubería y perder sobrante dentro de la unidad.

8	Posicionar protector de tuberías sobre racores, marcar y efectuar (4) taladros a Ø 4 y proteger con pintura anticorrosiva suministrada los mismos. **No realizar taladro superior (*).**

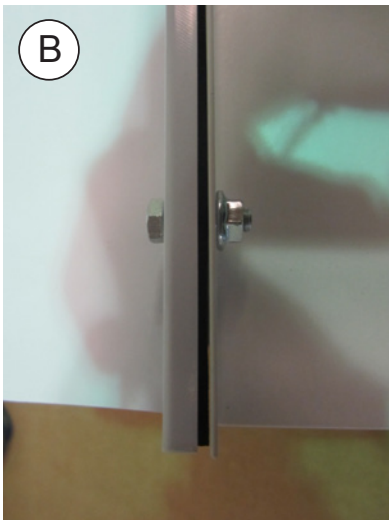
9	Pegar juntas suministradas en protector, adaptándolas de forma que al colocar éste sobre la cabina ajuste sobre la misma protegiendo la entrada de agua de los racores.

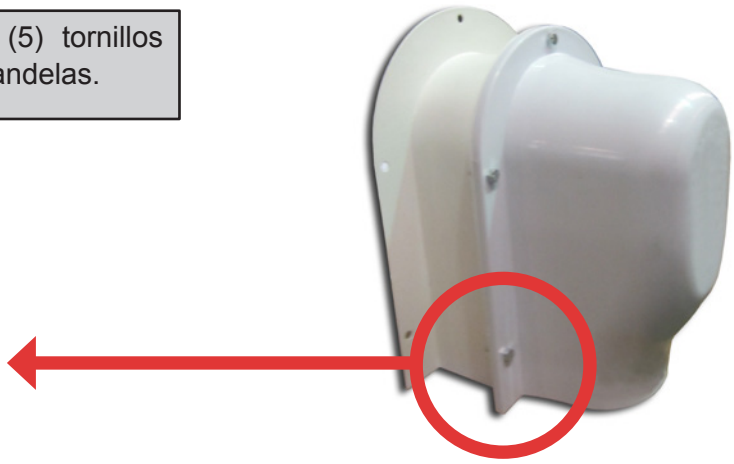
10	Montar protector racores con (4) tornillos roscachapa 4,8x13.

11	Para vehículos en los que el protector de tuberías no ajuste en la cabina por interferencia en los racores de las tuberías, proceder como se indica.

A	Pegar junta EPDM 13x4 en protector racores como se indica.

B	Unir protector con postico con (5) tornillos 5/80x15 y (5) tuercas 5/80 con arandelas.





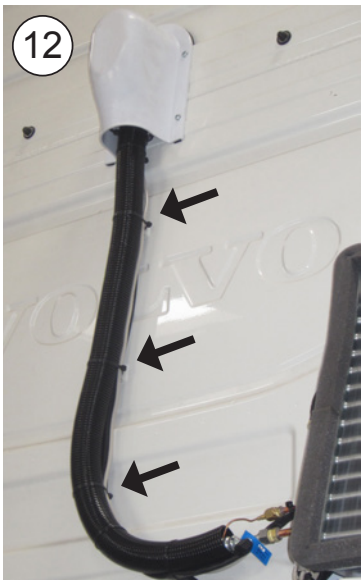
C

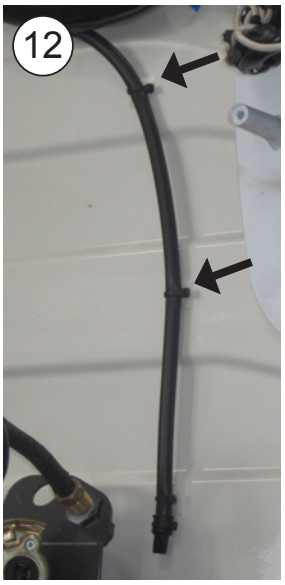
Posicionar conjunto sobre racores, marcar y efectuar (4) taladros a Ø 4 y proteger con pintura anticorrosiva suministrada.
No realizar taladro superior (*).

D

Pegar juntas suministradas en protector adaptándolos de forma que al colocar este sobre la cabina ajuste sobre la misma protegiendo la entrada de agua a los racores y montar con (4) tornillos roscachapa 4,8x13.

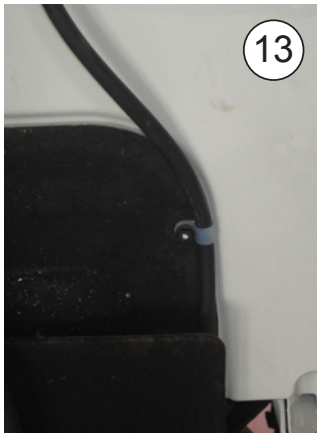
12 Introducir tubo de desagúe en válvula de drenaje y fijar junto con tuberías y cableados a chapa del vehículo con soportes con adhesivo y bridas de plástico. **Atención antes de pegar los soportes limpiar la superficie de la chapa.**



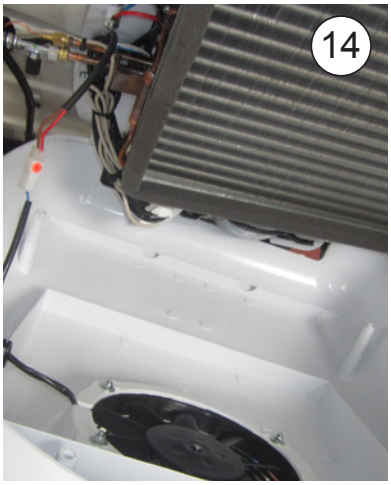


13 Conectar clema del cable de alimentación a clema de unidad y fijar a espárrago original con abrazadera 3/8 nylon y tuerca M6.

Atención limpiar antes de pegar los soportes, la superficie de la chapa.

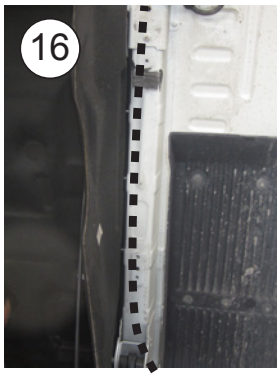


14 Conectar clema del ventilador del condensador de la carcasa protectora con clema de la unidad condensadora.



15	Montar carcasa protectora con los (4) tornillos 6/100x30 allen desmontados con anterioridad.

16	Abatir cabina y desmontar tuercas de sujección de protector lateral derecho del motor. Introducir cable de alimentación por interior del protector, lo más pegado al suelo de la cabina y pasarle por hueco original. Montar de nuevo tuercas originales del protector.

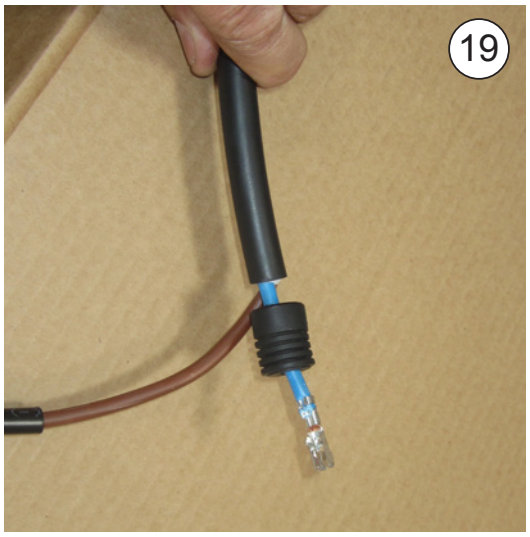


Colocar cubrecantos para proteger cableado

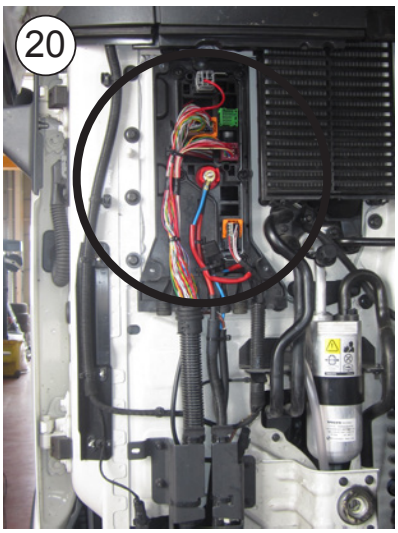
17	Pasar cableado hacia la parte delantera acompañando a cableados originales y fijando a estos con bridas.

18	Dejar cabina en posición marcha y desmontar tapa delantera (*).

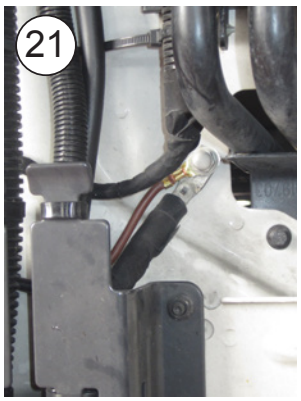
19	Hacer taladro en pasamuros original, introducir cable Az del cableado de alimentación y grapar terminal suministrado.

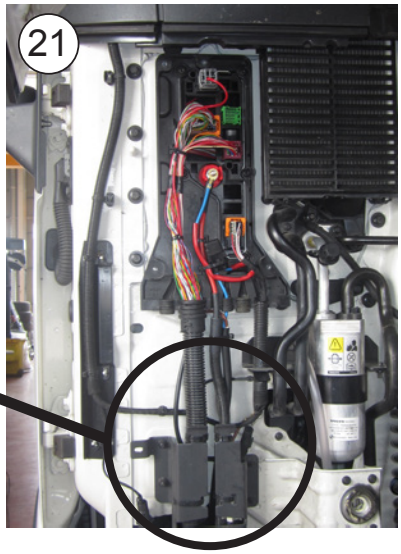


20	Introducir terminal en portafusibles y conectar terminal en toma de (+) indicada. Fijar fusible con brida.



21	Conectar cable M a centro de masas.





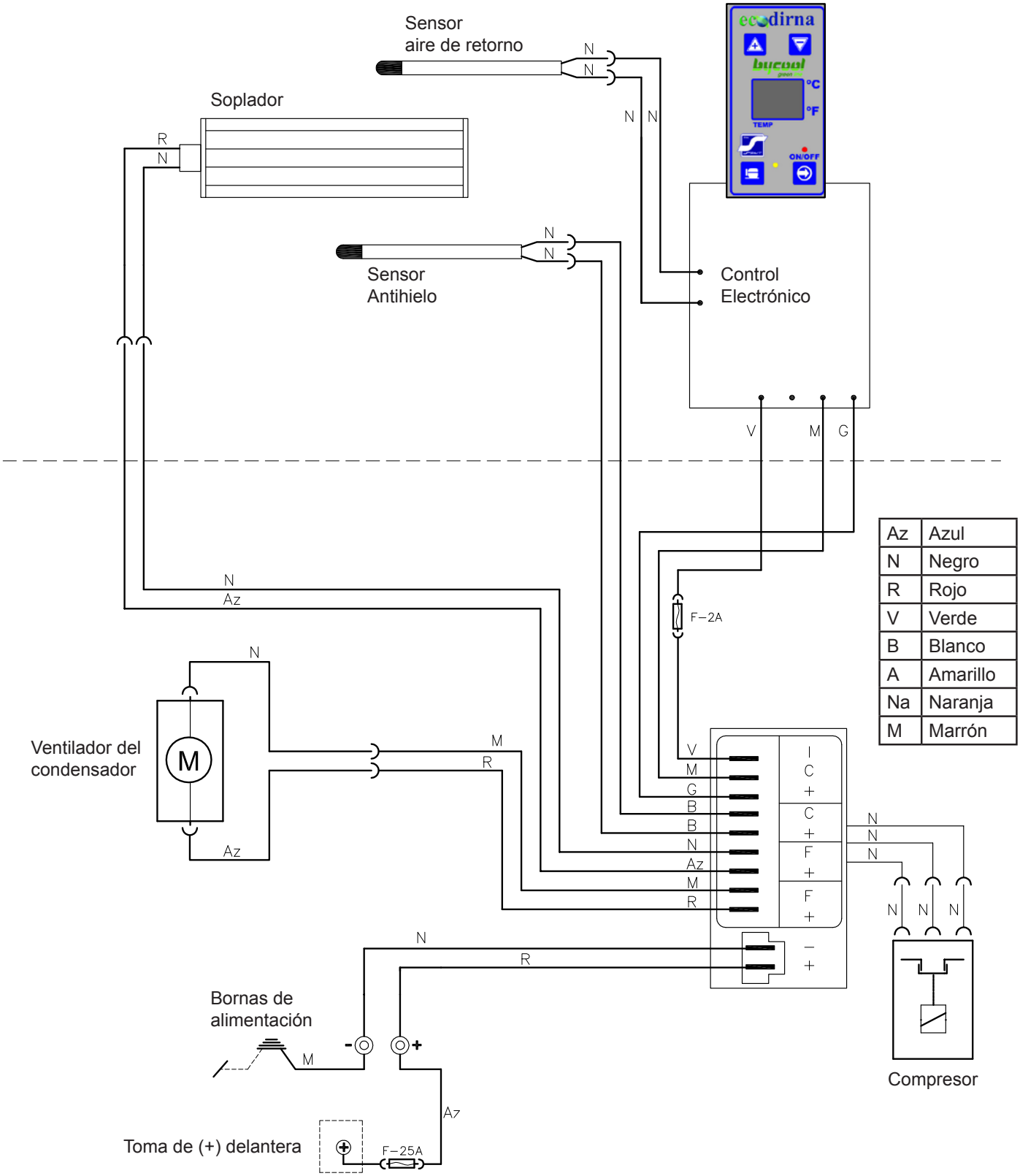
22	Conectar batería y comprobar funcionamiento del equipo según manual de usuario.

23	Vista general unidad evaporadora.

ESQUEMA ELÉCTRICO

¡AVISO IMPORTANTE!

Precaución de no invertir las polaridades al conectar el equipo a la batería. Si esto sucediera el panel de control no se enciende y el equipo no funciona.



Assembly Recommendations

- Before starting assembly, please read instructions and follow them during installation process.
- Use the adequate tools for each operation.

Electricity

- Disconnect ignition key.
- Disconnect battery before starting assembly.
- Make sure electric components are securely connected, checking their correct fitting.

⚠ Warning

If, during assembly, the unit becomes slanted or the cabin drops with the unit mounted, wait for at least 60 minutes from the moment the unit is horizontal before starting up.

Documentation included

Mounting instructions	220AA63110
User's guide	220AA11005
Troubleshooting	220AA63111
Warranty	220AA10010

Indications concerning position are:

RIGHT: Passenger side
LEFT: Driver side

Driving torques *(N.m)*			
Fillet	**Steel Quality**		**Wrench** opening
	8.8	10.9	
M6/100	10	13	10

Hoses assembly		
Driving torques *(N.m)*		
Hose size	**Fitting Driving Torque**	**Tool**
1/4"	13-15	Wrench 14mm.
3/8"	15-17	Wrench 19mm.

Tools

- Ratchet wrench of 10
- Cruciform screwdriver TOP 10
- Wrench of 10, 11, 14, 17, 19
- Allen key of 6
- Socket wrench of Ø10
- Broach Ø 4, 6, 9
- Drill
- Broach Ø 6
- Circular saw Ø 19, Ø 22, Ø 35, Ø 48
- Scissors
- Riveter M6

Symbology

Fragile

Beware of cuts!

Electrical hazard

⚠ Warnings

⚠ The installing personnel must have a sufficient training in vehicles air conditioning.

⚠ **dirna Bergstrom, s.l.** shall not be responsible for breakdowns or damages coming from an inadequate handling or installation of the equipment or from modifications and substitutions carried out without our express and written authorisation.

⚠ Please see product warranty procedure included in **Troubleshooting**.

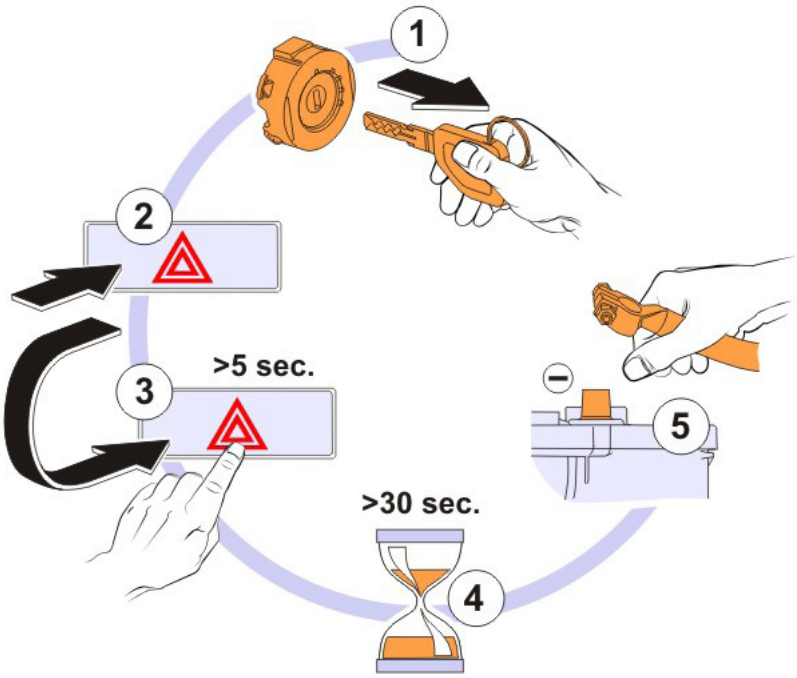
⚠ Please see equipment **User's Guide** for its correct functioning of the remote control and control panel.

⚠ Once installation is finished, the following documents must be handed over to the user: **User's Guide**, **Warranty** and **Troubleshooting**.

CARRY OUT THIS PROCEDURE WHEN THE FOLLOWING CONDITION IS MET.

• Conditions:

- If the vehicle has an alarm
- Place the alarm in service mode.



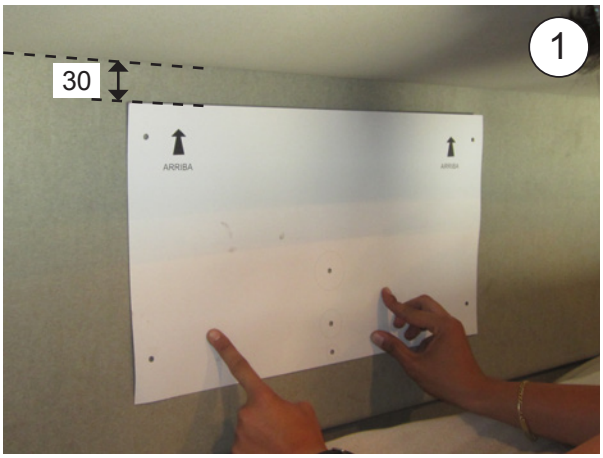
1	Remove the key from the ignition switch (1).
2	Press the emergency lights button (2).
3	Keep the emergency lights button pressed down (3). • Conditions: - Keep the button pressed down for at least 5 seconds. **Technical details.** If the process finished successfully: the access lighting and interior light are off when opening the door.
4	Wait for at least 30 seconds (4).
5	Remove the wire from the negative terminal (5).

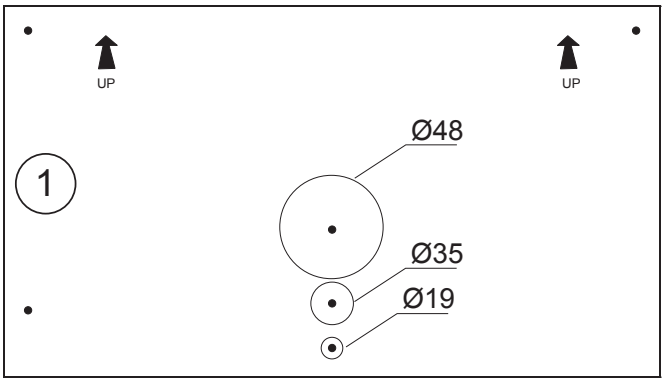
PRIOR OPERATIONS:

- Disconnect the battery.
- Dismantle inner air distribution panel from evaporator unit.

1 **INSIDE THE CABIN:**

Position the supplied template on the top bunk, laterally aligned and approximately 30 mm from the cabin roof, and mark the boreholes.





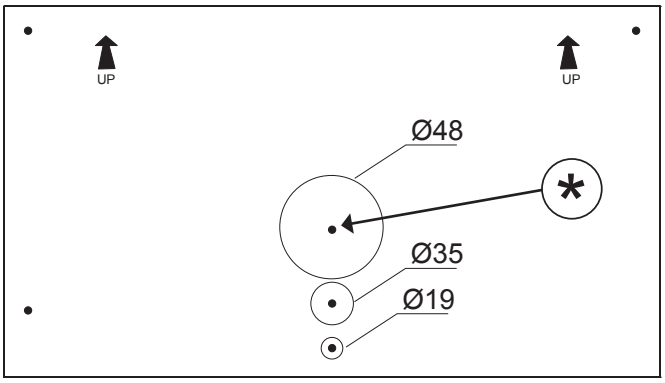
2 (*) Make a Ø4 through bore with long broach in bore position Ø48, and then make the following bores.

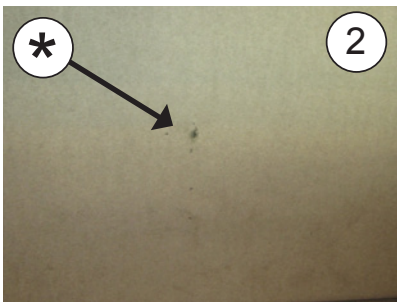
A- Make (1) Ø35 in the upholstery only

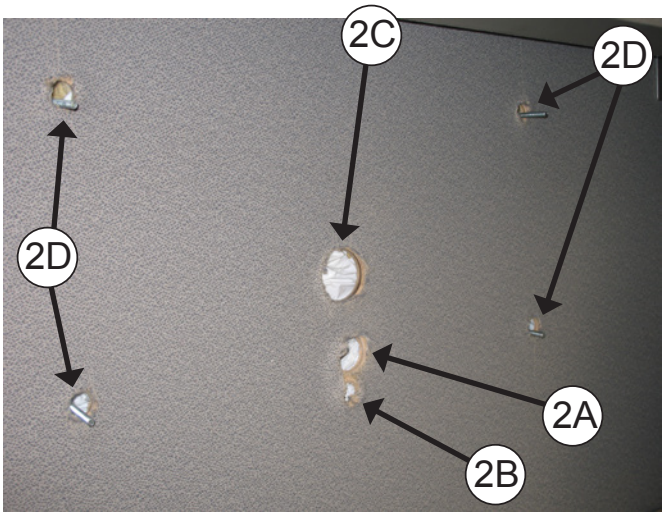
B- Make (1) Ø19 in the upholstery only

C- Make (1) Ø48 in the upholstery only

D- Make (4) Ø22 in the upholstery only



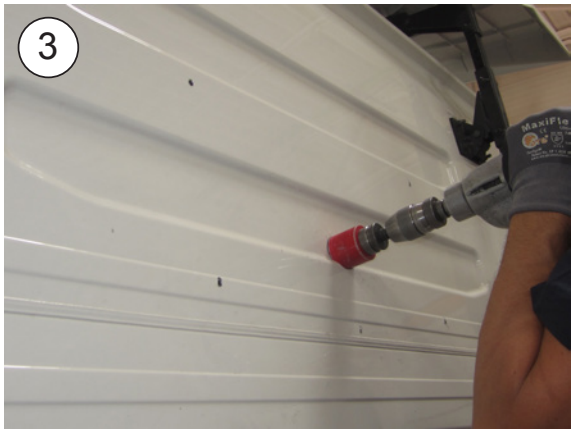


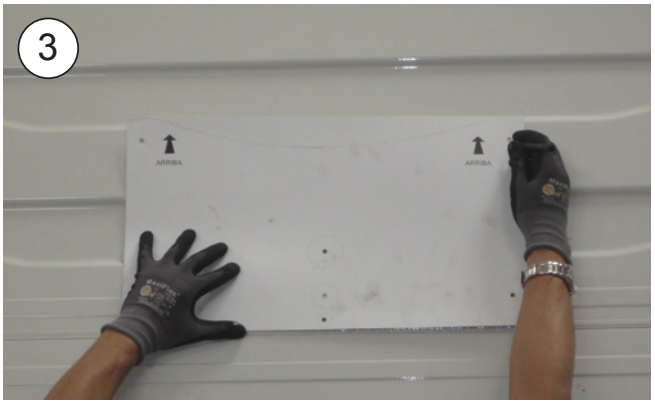


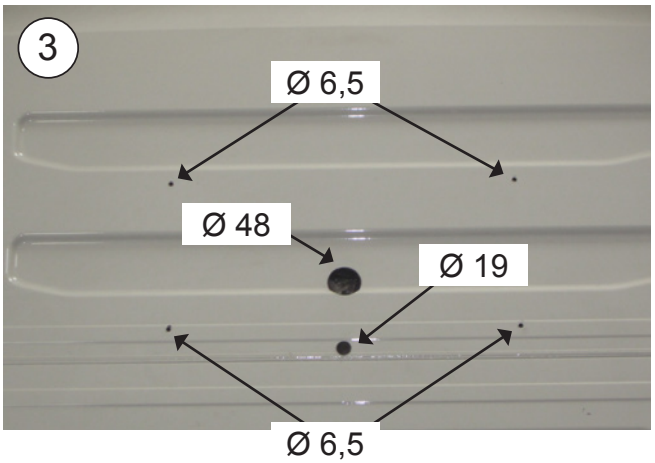
3

OUTSIDE THE CABIN:

Position the template level on the outside, taking as reference the Ø4 bore made, mark and make the remaining bores.





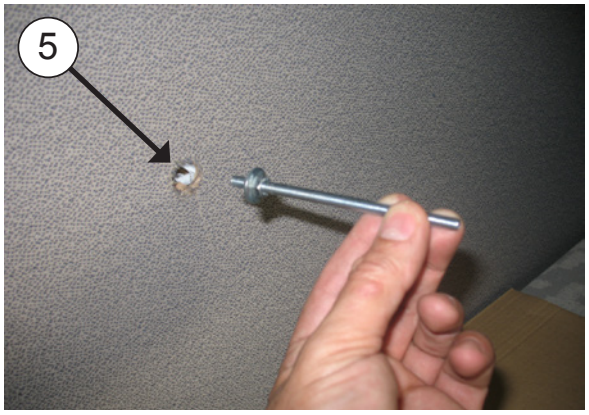


4

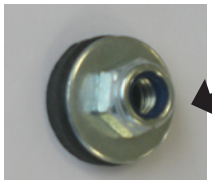
Protect the boreholes made with the rustproof paint supplied.

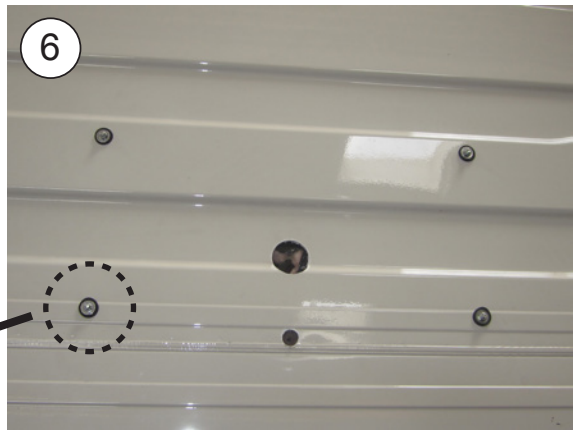
5

On the inside, insert M6 studs with nut, grower washer and flat washer, as indicated. 110 mm studs in the top section, and 140 mm studs in the bottom section.



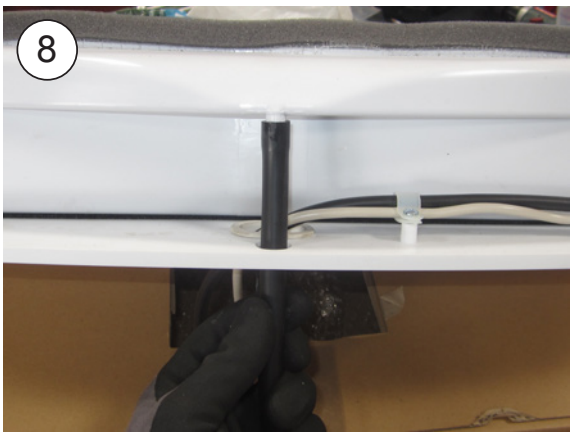
6	Fasten on the outside with a rubber washer, a flat washer and a self-locking nut, securing on the inside with a 10 socket wrench.



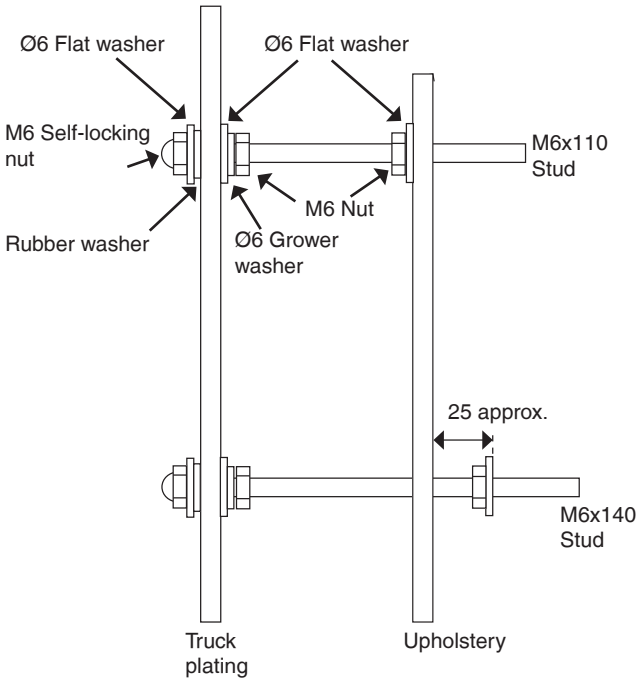


7	Position bushing and nut covers.

8	Connect the runoff pipe to the evaporator unit.



9 Screw (1) M6 nut on each stud on the inside of the cabin and position a flat washer. Leave the upper nuts and washers at upholstery level, and the lower ones at around 25 mm.



10 Pass the run-off pipe to the outside through the Ø19 borehole made in the upholstery.

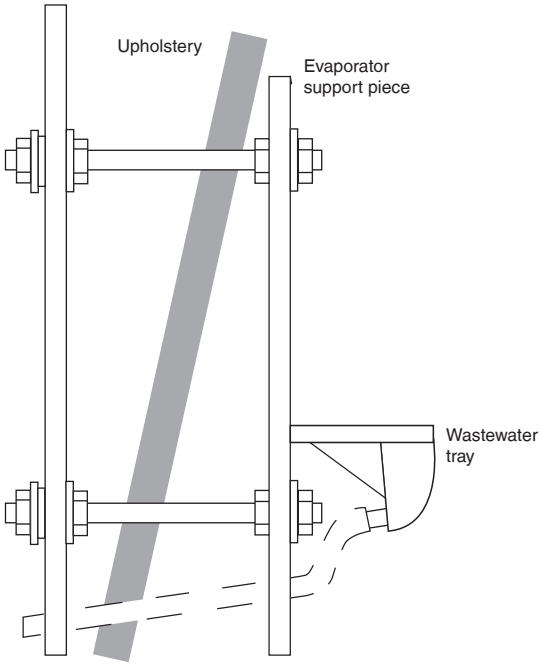
11 Run the evaporator cabling to the outside through the Ø35 borehole of the upholstery and take out through the Ø48 borehole in the plating.

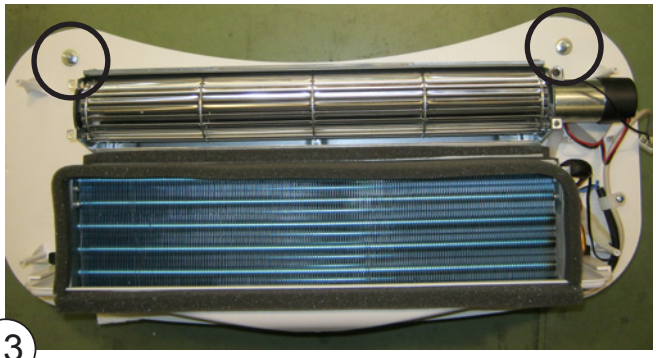
12	Pass the evaporator pipes to the outside through the Ø48 borehole.

13	Position the evaporator on the M6 studs and secure with M6 nuts, Ø6 grower washers and flat washers.

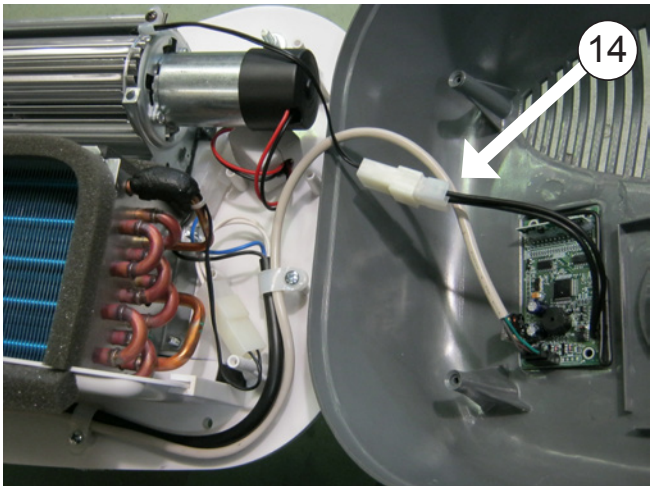
VERY IMPORTANT

In the case of slanting upholstery, the evaporator unit must be vertical or sloping from the lower section to the outside in order to prevent the condensation water from dripping onto the upholstery. Before securing the unit, add water to the run-off tray to check that it drains correctly.





14	Connect return air sensor and communication cable.



15	Reattach the inner air distribution panel with screws, using magnetized screwdriver and place caps.

16	On the outside, position bushing at the adapter output and introduce Ø22 bushing in the run-off; use a screwdriver to position the bushing.

CONDENSER AND PIPING ASSEMBLY

1

Position the template in the most ideal place on the right of the cabin, ensuring the boreholes are in flat areas, and mark the two lower boreholes.

It is important to only mark these two boreholes, since the base may not coincide with the template due to the material contracting.

Caution: Bear in mind the length of the pipe; it is connected to the evaporator unit.

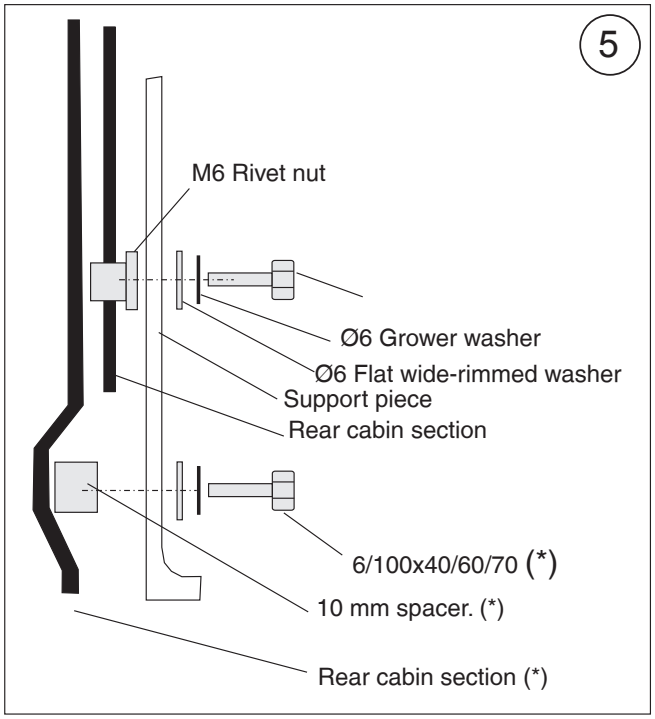
2

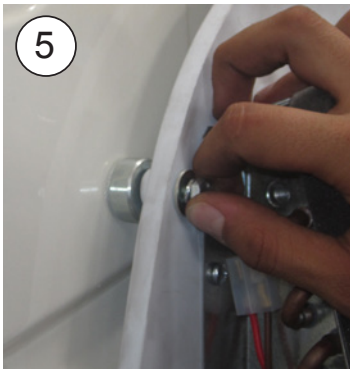
Make (2) Ø9 boreholes, protect with the supplied rustproof paint and position (2) M6 rivet nuts.

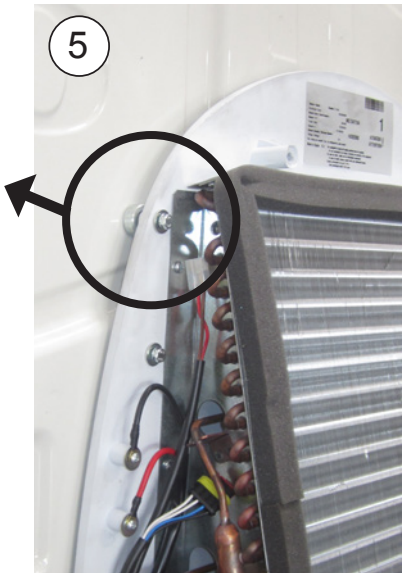
3	Position the condenser unit with (2) 6/100x30 screws, screwing on the riveted nuts and mark the other boreholes of the unit. **Minimum 6 boreholes to secure the condenser unit.**

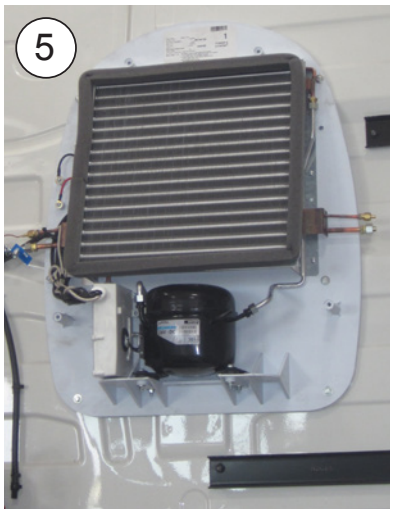
4	Dismantle the cover of the condenser unit and drill Ø9 holes in the marks made and protect them with anti-corrosive paint supplied and place M6 rivet nuts.

5	Secure the condenser unit with 6/100x30 screws, Ø6 grower washer and Ø6 wide rimmed flat washer in boreholes where the base of the unit is supported directly on the riveted nut, and with 6/100x40 screws, Ø6 grower washer, Ø6 wide rimmed flat washer and 10 mm spacer inserted between the base of the unit and the riveted nut in boreholes where the base is not supported directly on the rivet nut.









6	Mount the pipe couplings in the evaporator couplings. Tighten by turning against the nut and protect with drip-proof tape.

7	Connect the evaporator cabling to the condenser unit cabling and secure to the pipe with flanges, leaving any excess inside the unit.

8	Position pipe protector on the couplings, mark and make (4) boreholes at Ø4 and protect them with the supplied rustproof paint. **Do not make the upper borehole (*).**

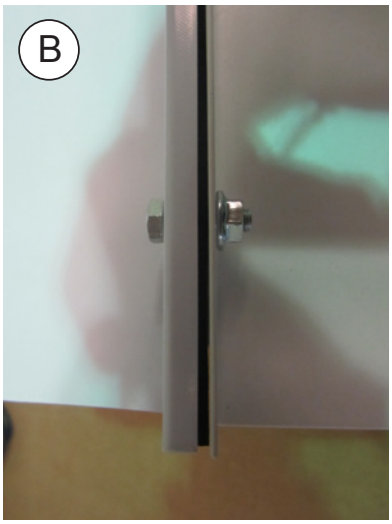
9	Attach the supplied seals in the protector, adapting them to ensure it fits on the cabin, protecting the coupling water input.

10	Mount the protector couplings with (4) 4.8x13 self-tapping screws.

11	For vehicles in which the pipe protector does not fit in the cabin due to interference with the pipe couplings, proceed as indicated.

A	Stick the 13x4 EPDM seal to the coupling protector as shown.

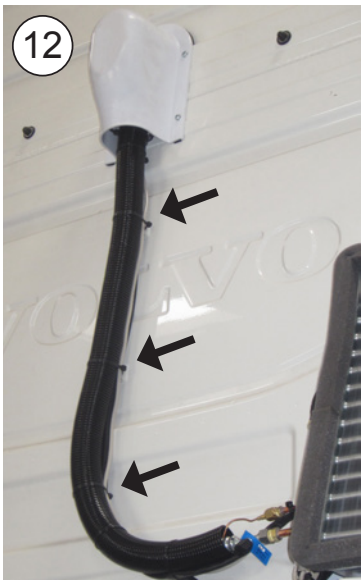
B	Attach protector to extension with (5) 5/80x15 screws and (5) 5/80 nuts with washers.

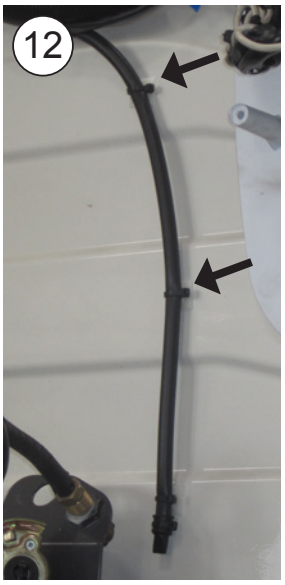


C Position assembly on the couplings, mark and drill (4) Ø4 holes and protect with the rustproof paint supplied. Do not drill the upper hole (*).

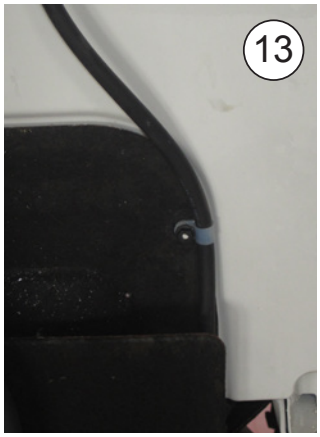
D Stick seals supplied on the protector adjusting them so that when placed on the cab, they fit snugly over it, to protect water from entering the coupling and assemble with (4) 4.8x13 self-tapping screws.

12	Introduce the drainage pipe in the drainage valve and secure to the vehicle plating along with the piping and cabling, using the supports, adhesive and plastic flanges. **Caution: clean the surface of the plating before attaching the supports.**

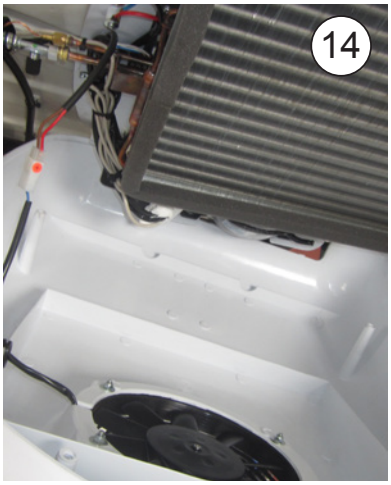




13	Connect the power cable terminal to the unit terminal and secure to the original stud using a 3/8 nylon clamp and M6 nut. **Caution: clean the surface of the plating before attaching the supports.**

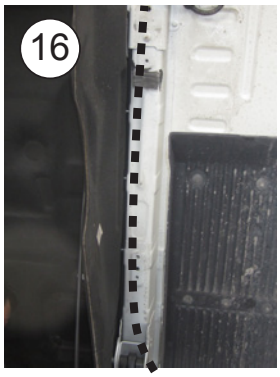


14	Connect condenser fan screw terminals of the protective housing with condensing unit screw terminals.



15	Assemble the protector frame with the previously removed (4) 6/100x30 Allen screws.

16	Tilt the cabin and remove the fastening nuts from the right side protector of the engine. Insert the power cable inside the protector, as close as possible to the floor of the cabin, and pass through the original gap. Reassemble the original protector nuts.

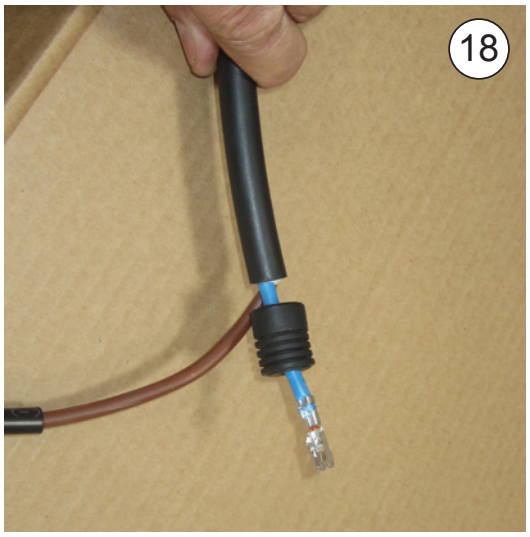


Place corner guards
to protect wiring

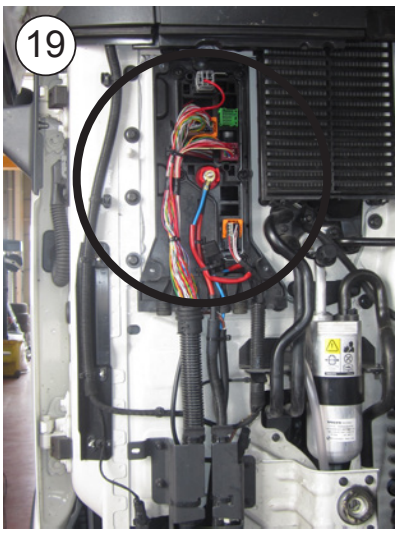
16	Pass the cabling to the front section with the original cables and secure with flanges.

17	Leave the cabin in running position and take down the front cover (*).

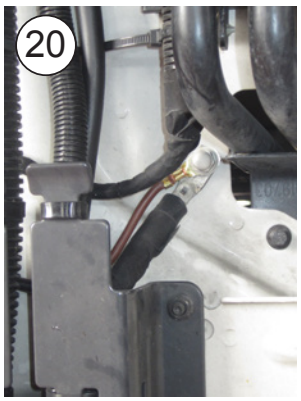
18	Bore the original bushing, insert the Az wire of the power cabling and secure the supplied terminal.

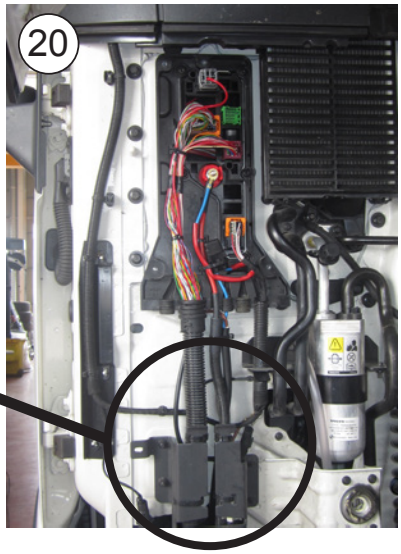


19	Introduce the terminal in the fuse holder and connect to the indicated (+) connection. Secure the fuse with a flange.



20	Connect the M wire to the earth connection.





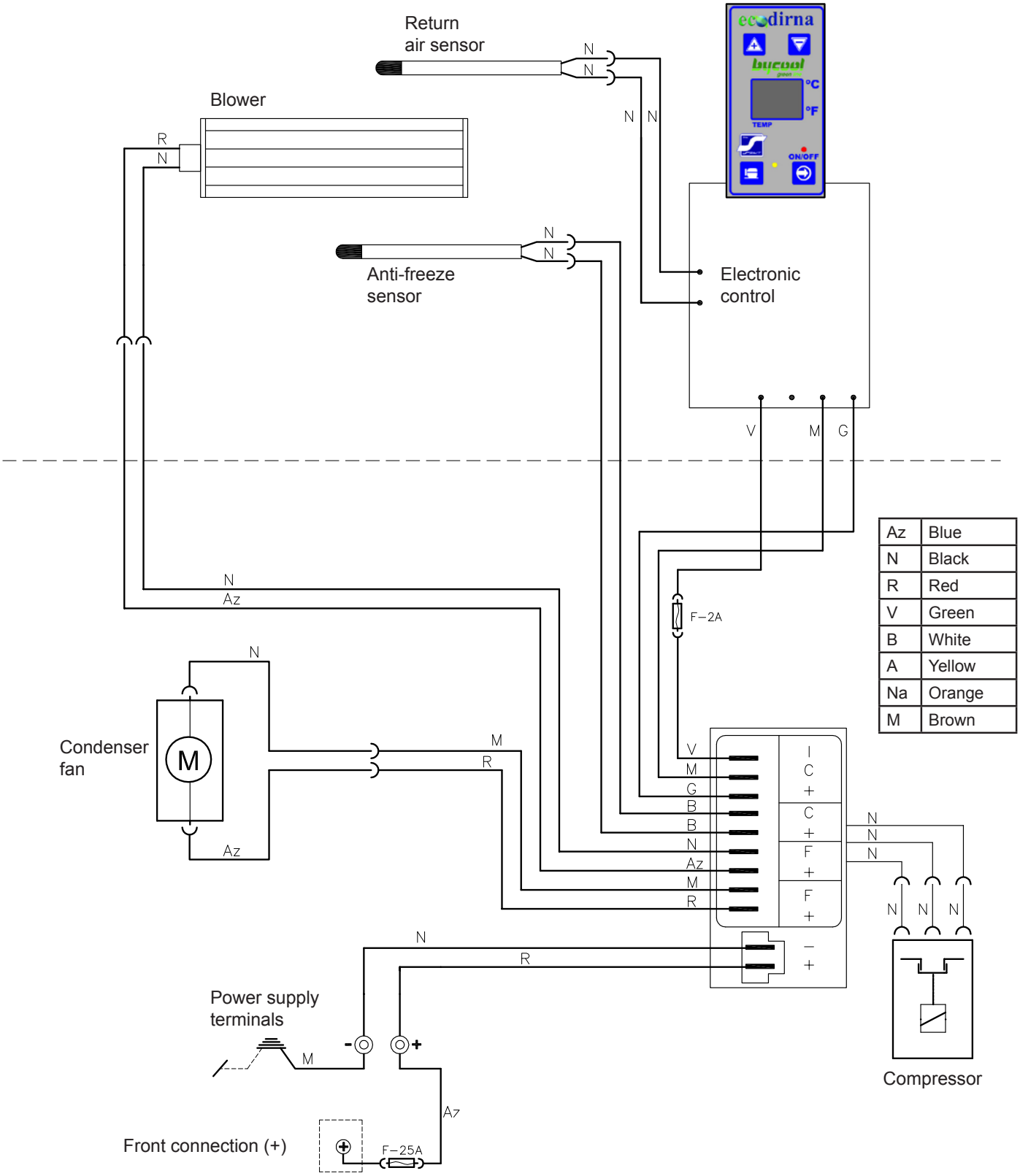
21	Connect the battery and check operation of the unit in accordance with the user manual.

22	General view of evaporator unit.

WIRING DIAGRAM

IMPORTANT WARNING!

Caution, do not to reverse polarity when connecting the equipment to the battery. If this happens the control panel will not light up and the equipment will not work.



Az	Blue
N	Black
R	Red
V	Green
B	White
A	Yellow
Na	Orange
M	Brown

Recommendations Pour Le Montage

- Avant de commencer le montage de l'appareil, prière de lire les instructions et de les suivre attentivement.
- Utiliser les outils convenant à chaque opération.

Electricity

- Déconnecter la clé de contact.
- Déconnecter la batterie avant de commencer le montage.
- Vérifier le câblage des composants électriques et leur correcte installation.

⚠ Attention

Si pendant le montage, l'équipement s'incline ou si la cabine est repliée avec l'équipement monté, une fois que ce dernier récupère sa position horizontale, il faudra attendre au moins 60 minutes avant de le remettre en marche.

Documentation included

Instructions de montage	220AA63110
Guide de l'utilisateur	220AA11005
Solution des problèmes	220AA63111
Garantie	220AA10010

Les indications relatives aux positions sont:

DROITE: Côté passager
GAUCHE: Côté conducteu

Couple de serrage *(N.m)*			
Filet	Qualité d'acier		Clef
	8.8	10.9	
M6/100	10	13	10

Montage de tuyaux		
Couple de serrage *(N.m)*		
Tuyaux	Couple de serrage	Clef
1/4"	13-15	Clef fixe 14mm.
3/8"	15-17	Clef fixe 19mm.

Outils

- Cylindre à cannelures et vanne d'arrêt de 10
- Tournevis en étoile TOP 10
- Clé plate de 10, 11, 14, 17, 19
- Clé allen de 6
- Clé à tube de Ø10
- Broca Ø 4, 6, 9
- Perceuse
- Broche Ø6
- Scie circulaire Ø 19, 22, 35, 48
- Ciseaux
- Riveteuse M6

Symbologie

Fragile

Attention aux coupures !

Risque électrique

⚠ Garantie

⚠ L'installateur devra posséder la formation pertinente en air conditionné sur véhicules.

⚠ **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.

⚠ Voir **la procédure de garantie** du produit au **Diagnostic de problèmes**.

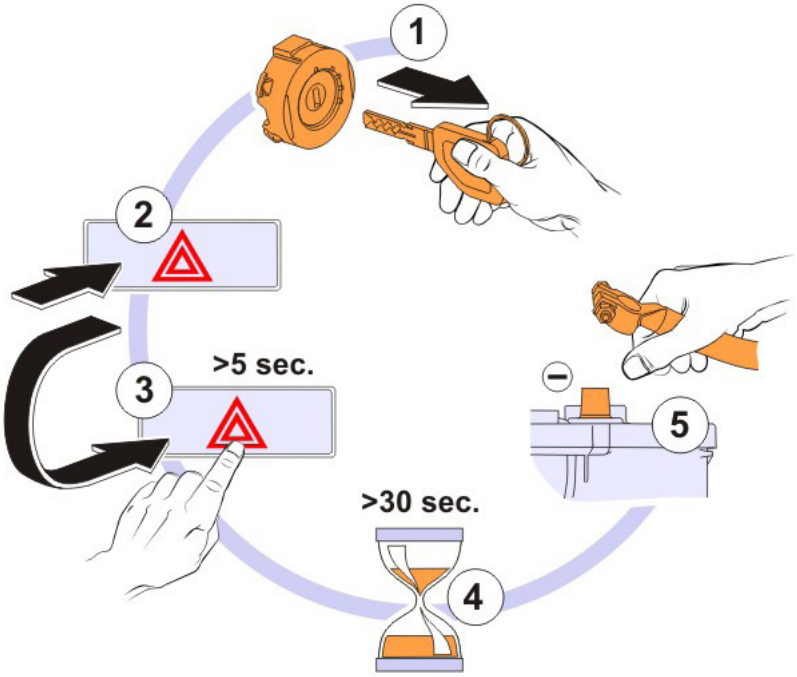
⚠ Voir le **Guide de l'Usager** de l'appareil pour le fonctionnement correcte de la télécommande et du tableau de commande.

⚠ Après l'installation, vous devez fournir à l'utilisateur: Manuel d'utilisation, garantie et diagnostic de pannes.

EFFECTUEZ CE PROCÉDÉ LORSQUE LA CONDITION SUIVANTE EST REMPLIE :

• Conditions :

- Si le véhicule dispose d'une alarme
- Placez l'alarme en mode service



1	Retirez la clé du contact de démarrage (1).
2	Appuyez sur le bouton qui active les feux de détresse (2).
3	Appuyez pendant quelques secondes sur le bouton des feux de détresse (3). • Conditions : - Appuyez sur le bouton pendant au moins 5 secondes. **Données techniques** Si le procédé a été correctement exécuté : l'illumination d'accès et la lumière intérieure seront éteintes au moment d'ouvrir la porte.
4	Attendez au moins 30 secondes (4).
5	Retirez le câble du terminal négatif (5).

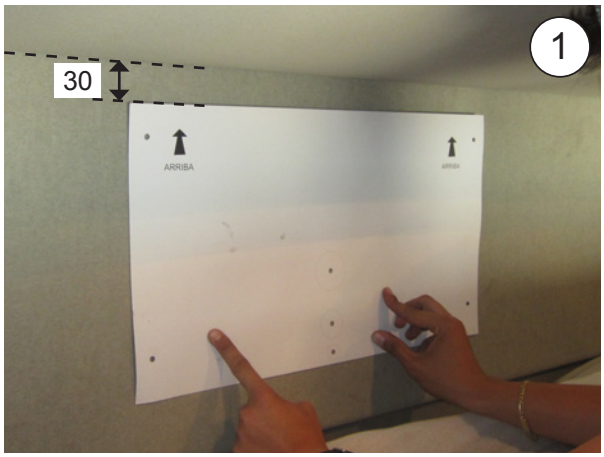
OPÉRATIONS PRÉALABLES :

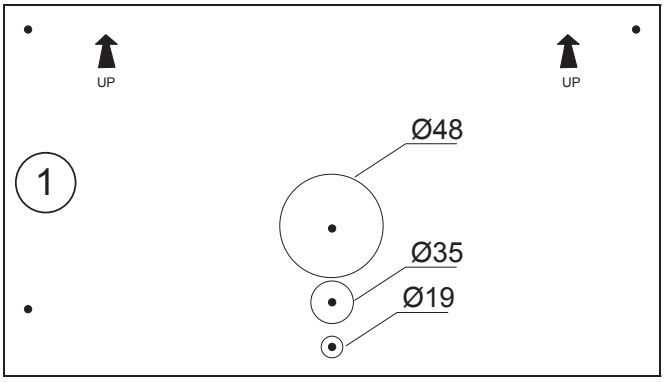
- Déconnecter la batterie.
- Démonter le panneau intérieur de distribution d'air de l'unité d'évaporation.

1

DEPUIS L'INTÉRIEUR DE LA CABINE :

Présenter le modèle fourni sur le lit supérieur, le centrer latéralement et à environ 30 mm du plafond de la cabine, puis marquer les trous.





2

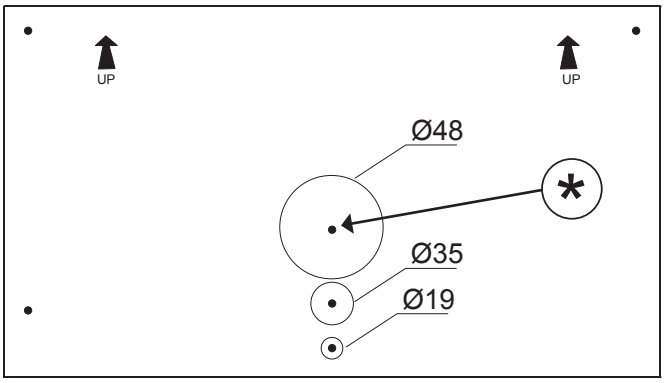
(*) Percer Ø4 traversier avec mèche longue sur la position de perçage Ø48. Effectuer ensuite les trous suivants :

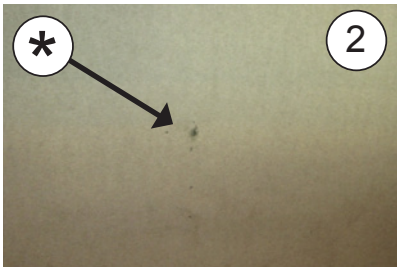
A- percer (1) Ø35 seulement dans la tapisserie

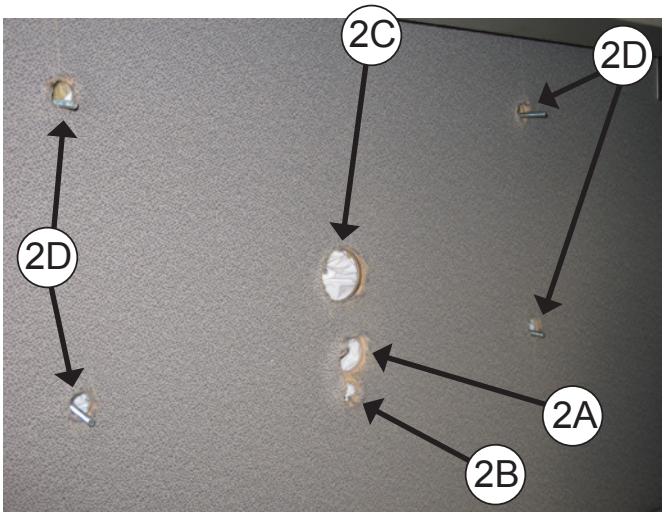
B- percer (1) Ø19 seulement dans la tapisserie

C- percer (1) Ø48 seulement dans la tapisserie

D- percer (4) Ø22 seulement dans la tapisserie

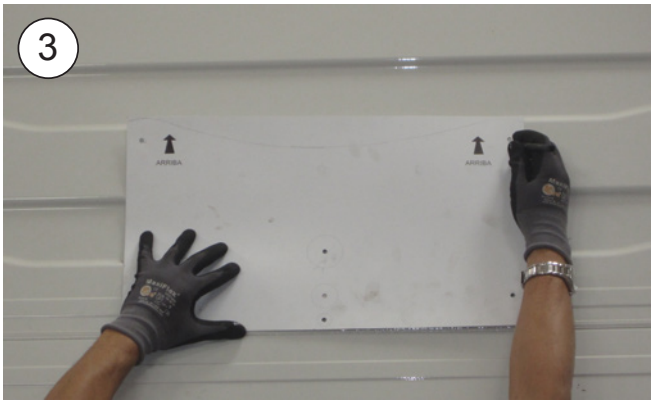


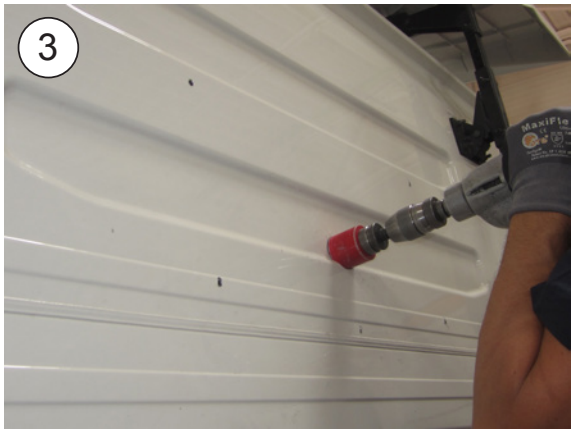


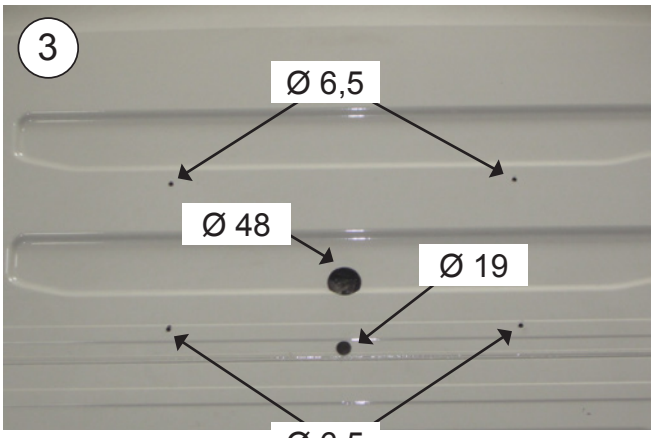


3 **DEPUIS L'EXTÉRIEUR DE LA CABINE :**

Présenter le modèle à niveau depuis l'extérieur en prenant comme référence le trou effectué Ø4, marquer et faire les trous restants.

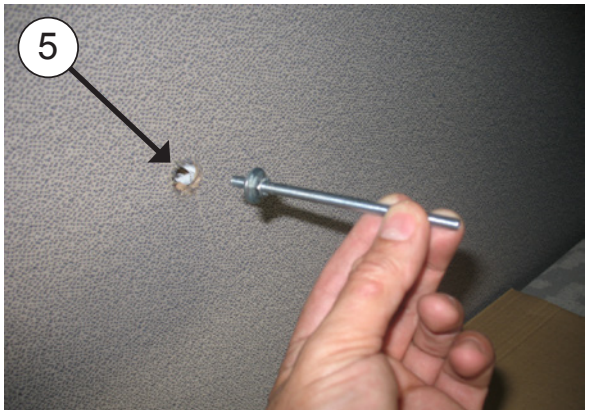




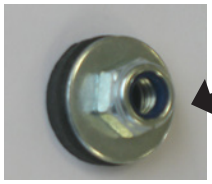


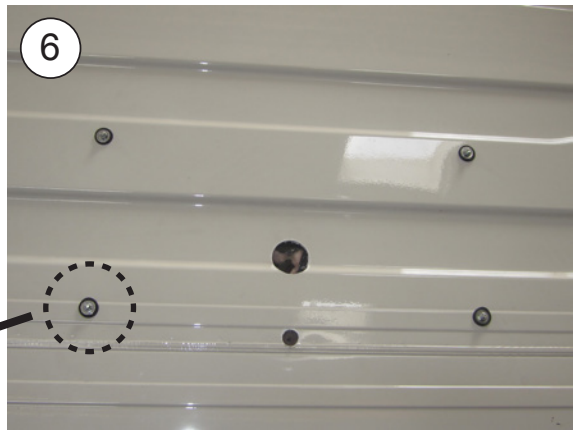
4 Protéger les trous réalisés avec la peinture anticorrosive fournie.

5 Introduire à l'intérieur des goujons M6 avec écrou, rondelle grower et rondelle plate, tel que cela est indiqué. Sur la partie supérieure, des goujons de 110 mm et sur la partie inférieure, des goujons de 140 mm.



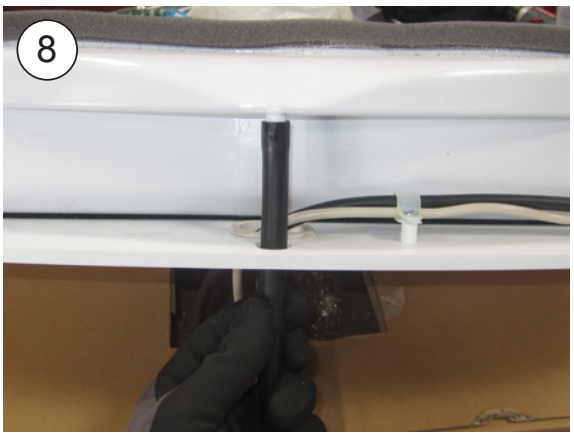
6 Fixer depuis l'extérieur avec une rondelle en caoutchouc, un rondelle plate et un écrou autobloquant, avec une fixation depuis l'intérieur, à l'aide d'une clé à douille 10.



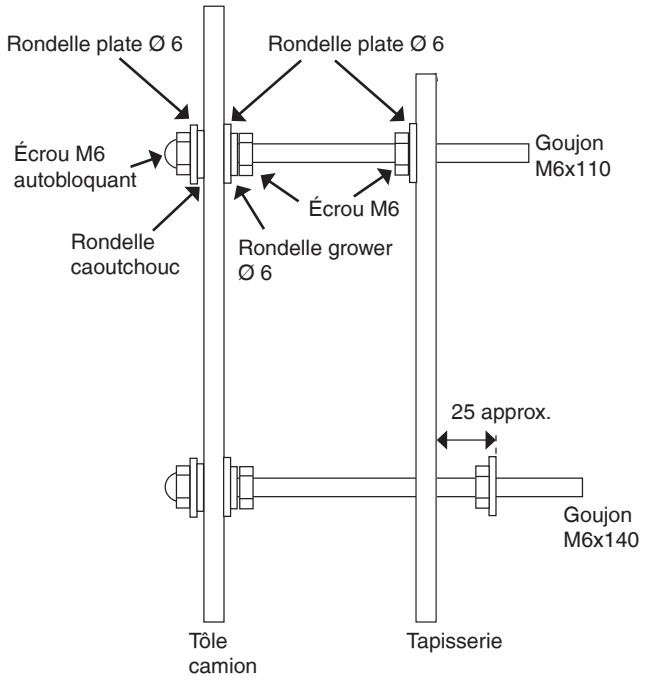


7 Placer des bouchons d'écrou et des traversées.

8 Connecter le tuyau d'écoulement à l'ensemble évaporateur.



9 Depuis l'intérieur de la cabine, visser dans chaque goujon (1) écrou M6 et placer une rondelle plate. Laisser les écrous et les rondelles supérieures au ras de la tapisserie et les rondelles inférieures à environ 25 mm.



10 Passer le tuyau écoulement vers l'extérieur à travers le trou Ø 19 effectué dans la tapisserie.

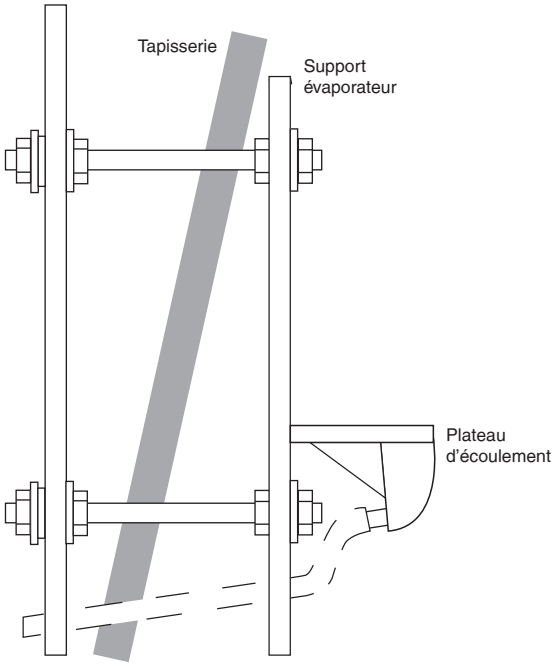
11 Introduire les câblages de l'évaporateur vers l'extérieur à travers le trou Ø 35 de la tapisserie et les retirer par le trou Ø 48 effectué dans la tôle.

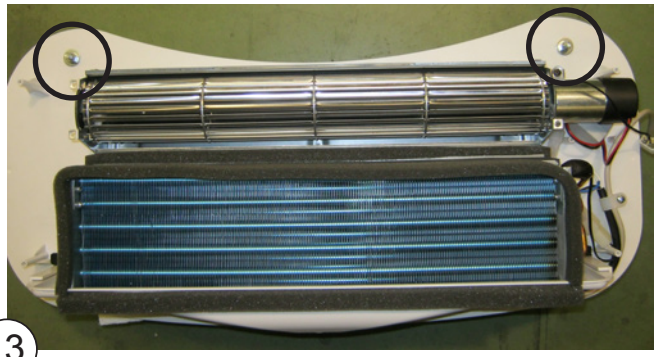
12 Passer les tuyaux de l'évaporateur vers l'extérieur à travers le trou Ø 48.

13 Placer l'ensemble évaporateur dans les goujons M6 et fixer avec les écrous M6, les rondelles grower et plates Ø 6.

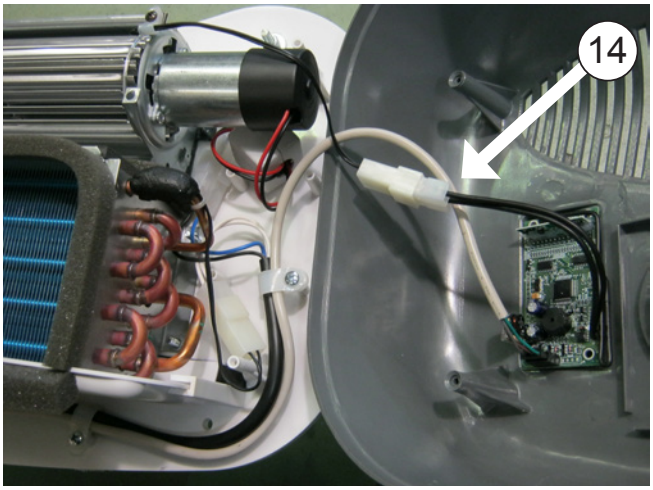
TRÈS IMPORTANT

Dans le cas des tapisseries présentant une inclinaison, l'ensemble évaporateur doit rester vertical ou incliné depuis la partie inférieure vers l'extérieur pour éviter que l'eau de condensation ne coule sur la tapisserie. Avant de fixer l'équipement, il faut ajouter de l'eau dans le plateau d'écoulement pour vérifier que celle-ci ne reste pas dans ce dernier.





14 Connecter le senseur d'air de retour et le câble de communications.



15 Fixer de nouveau le panneau intérieur de distribution d'air avec ses vis, avec un tournevis aimanté et placer les couvercles.

16 Depuis la partie extérieure, placer les traversées à la sortie des raccords. Introduire la traversée Ø 22 dans l'écoulement et à l'aide d'un tournevis, fixer la traversée.

MONTAGE ENSEMBLE CONDENSEUR ET TUYAUTERIE

1

Placer le modèle à l'endroit le mieux adapté du côté droit de la cabine, en veillant à ce que les trous restent dans les zones plates. Marquer les deux trous inférieurs.

Il est important de marquer uniquement ces deux trous, car il est possible que la base ne coïncide pas avec le modèle en raison de la contraction du matériel.

Attention : Tenir compte de la longueur des tuyaux, connectés à l'ensemble de l'évaporateur.

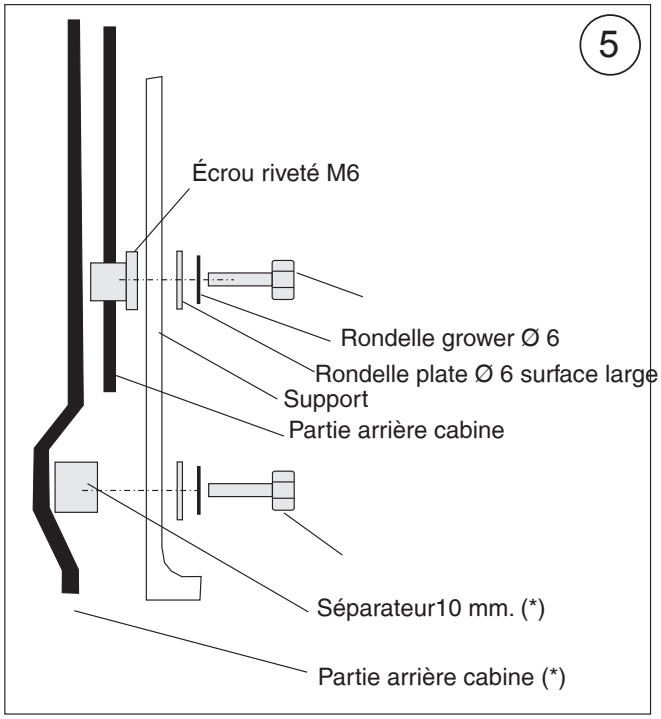
2

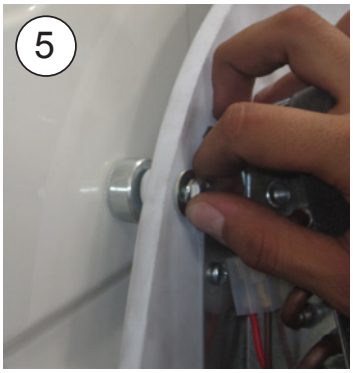
Effectuer (2) trous Ø 9, protéger avec la peinture anticorrosive fournie et placer (2) écrous rivetés M6.

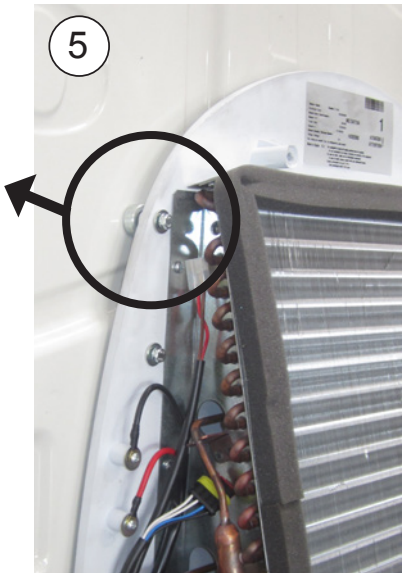
3	Placer l'unité de condensation avec (2) vis 6/100x30, visser sur les écrous rivetés et marquer les autres trous de l'unité. **Minimum 6 trous pour la fixation de l'unité de condensation.**

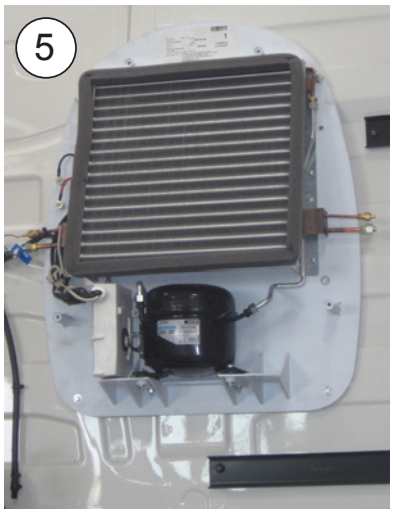
4	Démonter le couvercle de l'unité de condensation et effectuer les trous Ø 9 sur les marques réalisées et les protéger avec une peinture antirouille fournie, et placer les écrous à sertir M6.

5 Fixer l'unité de condensation avec une vis 6/100x30, une rondelle grower Ø et une rondelle plate Ø 6 à surface large dans les trous où la base de l'unité repose directement sur l'écrou riveté, et avec une vis 6/100x40, une rondelle grower Ø 6, une rondelle plate Ø 6 à surface large et un séparateur de 10 mm intercalé entre la base de l'unité et l'écrou riveté, dans les trous où la base ne repose pas directement sur l'écrou riveté.









6 Monter les raccords du tuyau dans les raccords de l'évaporateur. Serrer en exerçant un contre-écrou et protéger avec une bande anti-égouttement.

7	Connecter les câblages de l'évaporateur à ceux de l'unité de condensation. Serrer avec des brides au tuyau et laisser le matériel restant à l'intérieur de l'unité.

8	Placer un protecteur de tuyaux sur les raccords, marquer et effectuer (4) trous de Ø 4 et protéger avec la peinture anticorrosive fournie. **Ne pas réaliser de trou supérieur (*).**

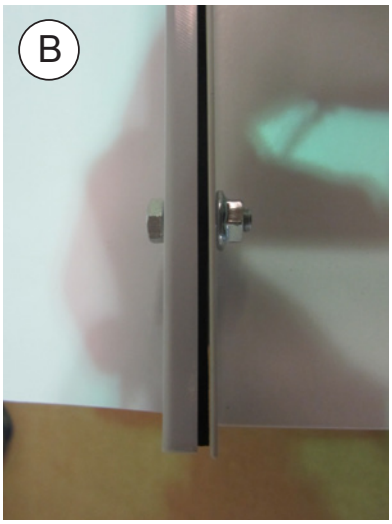
9	Coller les joints fournis sur le protecteur et les adapter de façon à ce qu'en plaçant ce dernier sur la cabine, il puisse s'adapter pour protéger l'entrée d'eau des raccords.

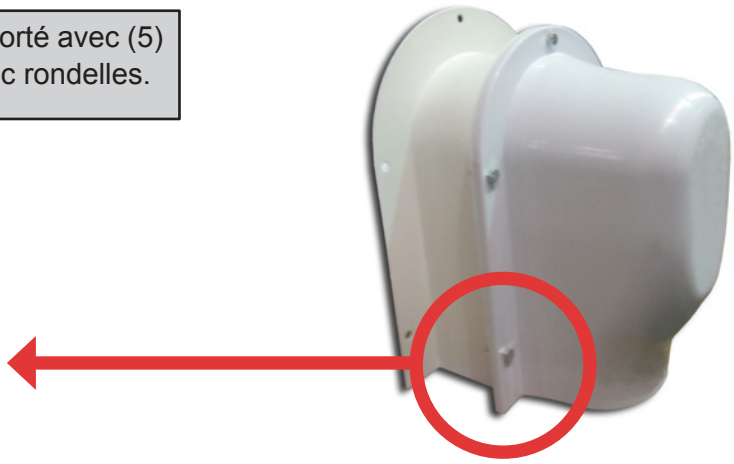
10 Monter le protecteur des raccords avec (4) vis taraudeuses 4,8x13.

11 Pour les véhicules sur lesquels le protecteur de tuyaux ne s'ajuste pas dans la cabine en raison d'interférence dans les raccords des tuyaux, procédez comme indiqué ci-dessous.

A Coller le joint EPDM 13x4 sur le protecteur de raccords comme indiqué.

B Unir le protecteur à l'élément rapporté avec (5) vis 5/80x15 et (5) écrous 5/80 avec rondelles.

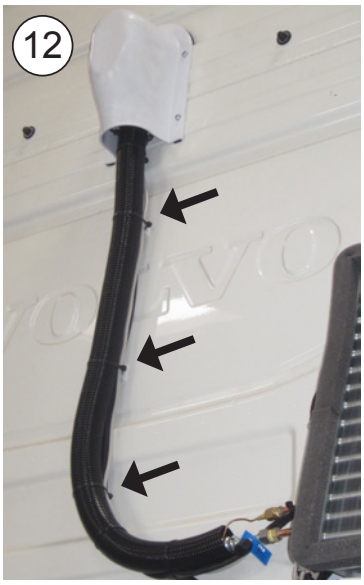


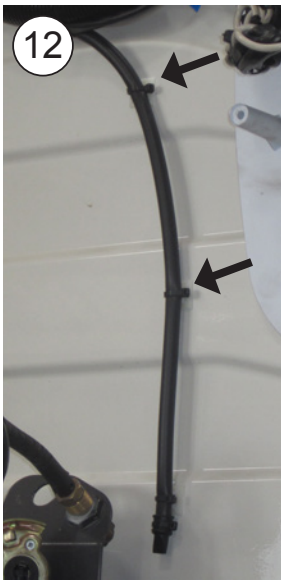


C Positionner l'ensemble sur les raccords, marquer et effectuer des (4) perçages de Ø 4 puis protéger avec la peinture anticorrosion fournie. Ne pas faire de perçage supérieur (*).

D Coller les joints fournis sur le protecteur en les adaptant de telle sorte qu'en plaçant ce dernier sur la cabine, il s'y ajuste protégeant ainsi les raccords de l'entrée d'eau et monter avec (4) vis taraudeuses 4,8x13.

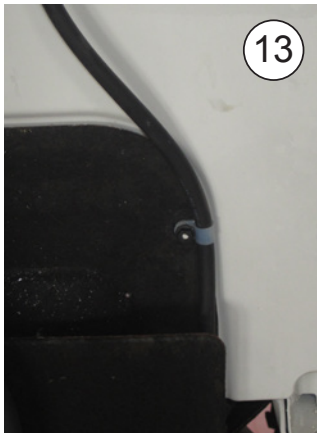
12 Introduire le tuyau d'écoulement dans la vanne de drainage et fixer avec les tuyaux et les câblages à la tôle du véhicule à l'aide de supports avec de l'adhésif et des brides en plastique. **Attention : avant de coller les supports, il faut nettoyer la surface de la tôle.**



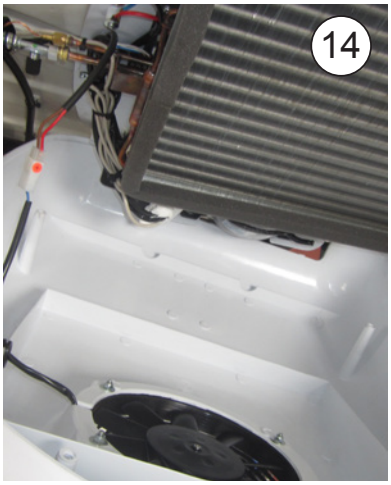


13 Connecter la borne du câble d'alimentation à la borne de l'unité et fixer au goujon d'origine avec l'anneau de serrage 3/8 nylon et l'écrou M6.

Attention : avant de coller les supports, il faut nettoyer la surface de la tôle.

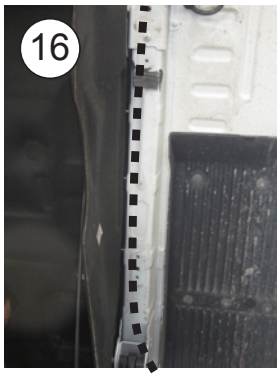


14 Connecter la borne du ventilateur du condensateur de la carcasse protectrice avec la borne de l'unité de condensation.



15	Monter la carcasse protectrice avec les (4) vis 6/100x30 allen précédemment démontées.

16	Rabattre la cabine et démonter les écrous de fixation du protecteur latéral droit du moteur. Introduire le câble d'alimentation depuis l'intérieur du protecteur, le plus collé possible au sol de la cabine, et le passer par le creux d'origine. Monter à nouveau les écrous d'origine du protecteur.

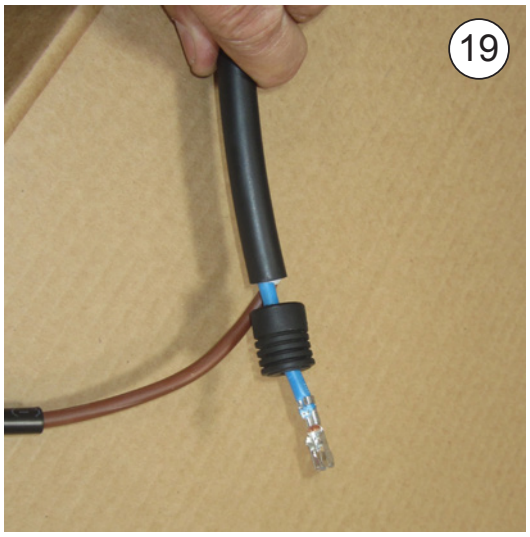


Placer des baguettes d'angle pour protéger le câblage

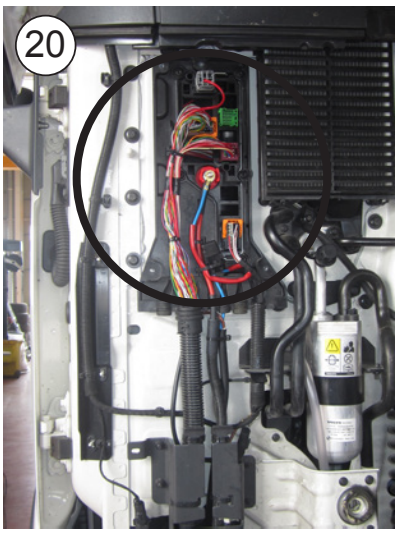
17	Passer le câblage vers la partie avant en accompagnant les câblages d'origine et en le fixant à ces derniers avec des brides.

18	Laisser la cabine en position de marche et démonter le couvercle avant (*).

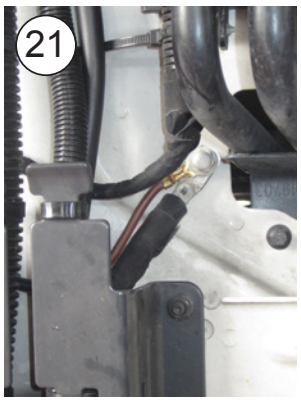
19	Percer dans la traversée d'origine, introduire le câble Az du câblage d'alimentation et agrafer le terminal fourni.

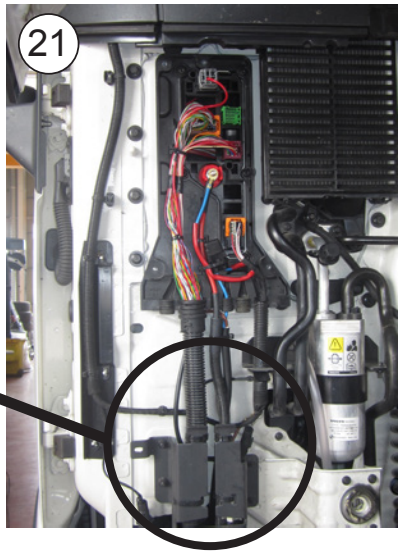


20	Introduire le terminal dans le porte-fusibles et connecter le terminal dans la prise de (+) indiquée. Fixer le fusible avec la bride.



21	Connecter le câble M au centre de masses.





22	Connecter la batterie et vérifier le fonctionnement de l'équipement selon la notice.

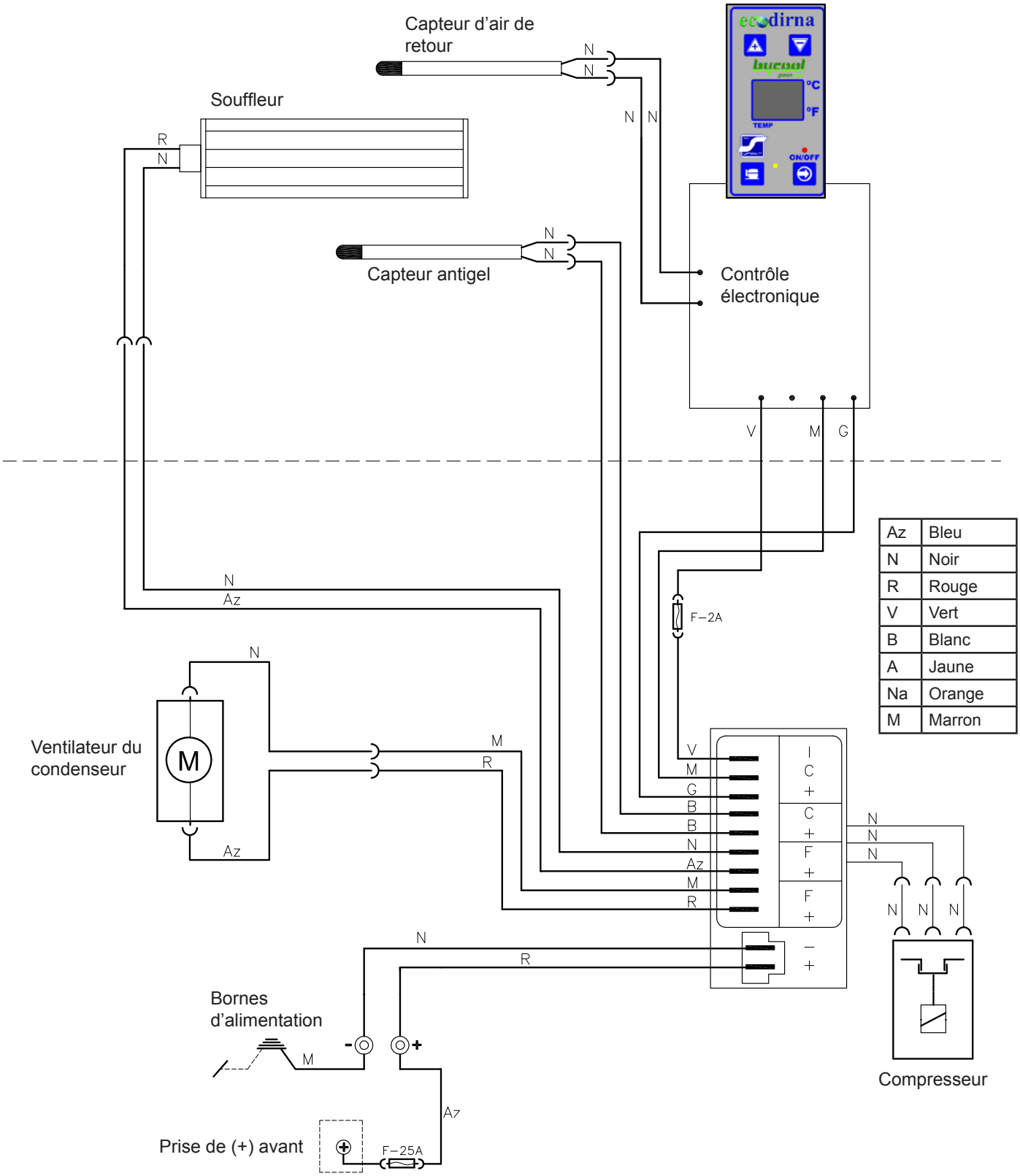
23	Vue générale de l'unité d'évaporation.

dirna Bergstrom

SCHÉMA ÉLECTRIQUE

AVIS IMPORTANT !

Précaution: ne pas inverser les polarités en connectant l'appareil à la batterie. Dans ce cas, le panneau de contrôle ne s'allume pas et l'appareil ne fonctionne pas.



Az	Bleu
N	Noir
R	Rouge
V	Vert
B	Blanc
A	Jaune
Na	Orange
M	Marron

Empfehlungen Zur montage

- Vor und während der Montage bitte diese Anweisungen lesen und beachten.
- Benutzen Sie für jeden Arbeitsschritt die geeigneten Werkzeuge.

Elektrizität

- Zündschlüssel abziehen.
- Vor Montagebeginn die Batterie abklemmen.
- Den ordnungsgemäßen Anschluss und die korrekte Installation der Elektrokomponenten überprüfen.

⚠ Achtung

Sollte das Gerät während des Einbaus ins Schwanken geraten oder die Kabine umkippen, muss man von dem Moment, wo sich das Gerät wieder in waagerechter Stellung befindet, mindestens 60 Minuten abwarten bis es in Betrieb genommen werden kann.

Mitgelieferte unterlagen

Montageanweisungen	220AA63110
Benutzerleitfaden	220AA11005
Fehlerdiagnose	220AA63111
Garantie	220AA10010

Angaben zur Position:
RECHTS: Beifahrerseite
LINKS: Fahrerseite

Anzugsdremoment *(N.m)*			
Gewinde	Stahlqualität		Maulweite
	8.8	10.9	
M6/100	10	13	10

Schläucheanleitung		
Fitting Driving Torque		
Schläuche	Fitting Driving Torque	Werkzeug
1/4”	13-15	14er-Maulschlüssel
3/8”	15-17	19er-Maulschlüssel

Werkzeuge

- Knarre mit Absperrhahn 10
- Kreuzschraubendreher TOP 10
- Schraubenschlüssel 10, 11, 14, 17, 19
- Innensechskantschlüssel 6
- Rohrschlüssel Ø10
- Bohrer Ø 4, 6, 9
- Bohrmaschine
- Bohrer Ø6
- Kreissäge Ø 19, 22, 35, 48
- Schere
- Nietmaschine M6

Symbologie

Fragile

Attention aux coupures !

Risque électrique

⚠ Warnhinweise

⚠ Der Installateur muss im Bereich Fahrzeug-Klimaanlagen ausreichend geschult sein.

⚠ **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.

⚠ Siehe **Garantieverfahren** des Produkts in der **Fehlerdiagnose**.

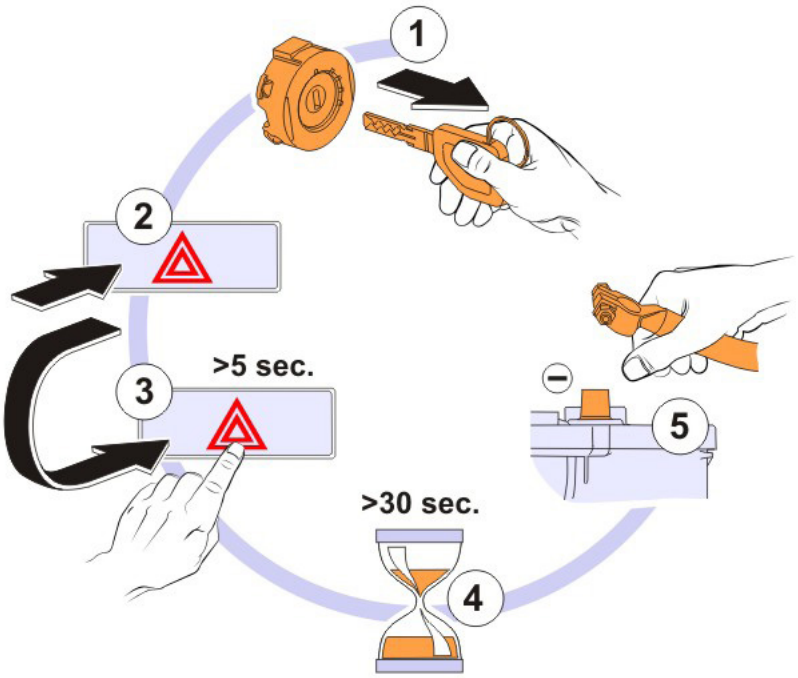
⚠ Siehe **Benutzerleitfaden** des Geräts für den ordnungsgemäßen Betrieb der Fernbedienung und des Bedienfelds.

⚠ Die folgenden Unterlagen müssen dem Benutzer nach der Installation ausgehändigt werden: **Benutzerleitfaden**, **Garantie** und **Fehlerdiagnose.**

FÜHREN SIE DIESE SCHRITTE DURCH, WENN DIE FOLGENDEN BEDINGUNGEN ERFÜLLT SIND.

• Bedingungen:

- Wenn das Fahrzeug mit einem Alarm ausgestattet ist.
- Stellen Sie den Alarm in Betriebsbereitschaft.



1	Ziehen Sie den Schlüssel aus dem Anlasserschloss (1).
2	Drücken Sie die Taste für die Warnblinklichter (2).
3	Halten Sie die Taste der Warnblinklichter (3) gedrückt. • Bedingungen: - Halten Sie die Taste mindesten 5 Sekunden lang gedrückt. **Technische Daten** Wurden die Schritte erfolgreich durchgeführt: Die Zugangsbeleuchtung und das Innenlicht sind ausgeschaltet, wenn sich die Tür öffnet.
4	Warten Sie mindestens 30 Sekunden (4).
5	Entfernen Sie das Kabel von der negativen Kabelklemme 5).

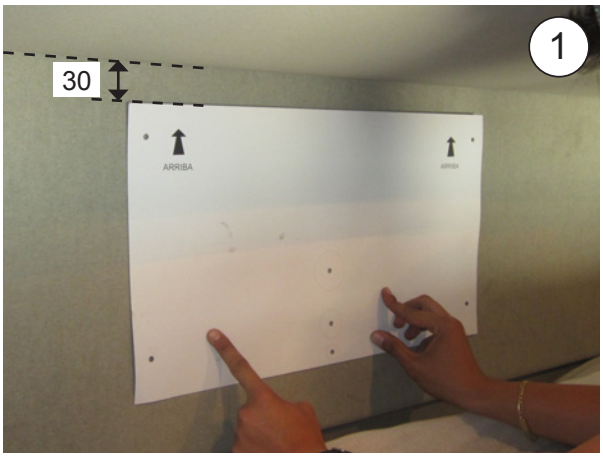
VORBEREITENDE TÄTIGKEITEN:

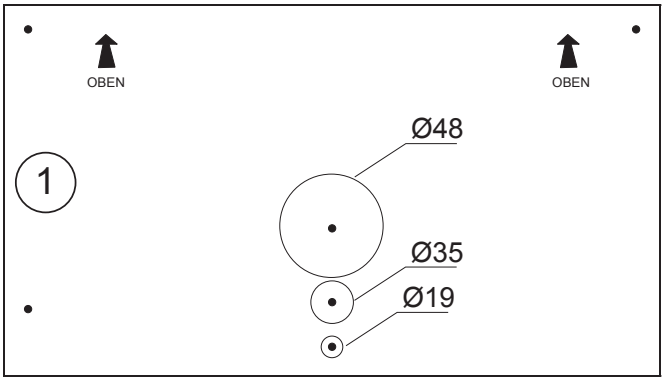
- Batterie abschalten.
- Innere Luftverteilertafel des Verdampfers abnehmen.

1

AUF DER KABINENINNENSEITE:

Mitgelieferte Vorlage am oberen Bett auflegen, seitlich und in ca. 30 mm Abstand von der Kabinendecke zentrieren und Bohrlöcher markieren.





2

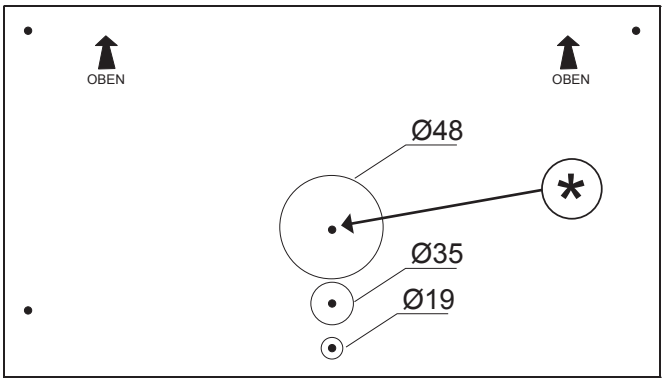
(*) Durchgangsbohrung Ø4 mit langem Bohrer in Position der Bohrung Ø48 durchführen, danach die folgenden Bohrungen durchführen.

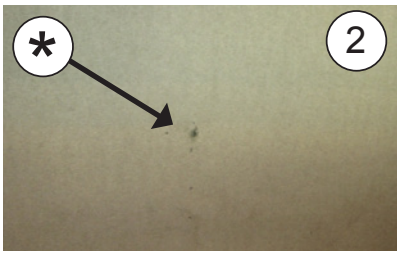
A. (1) Ø35 nur in der Verkleidung durchführen

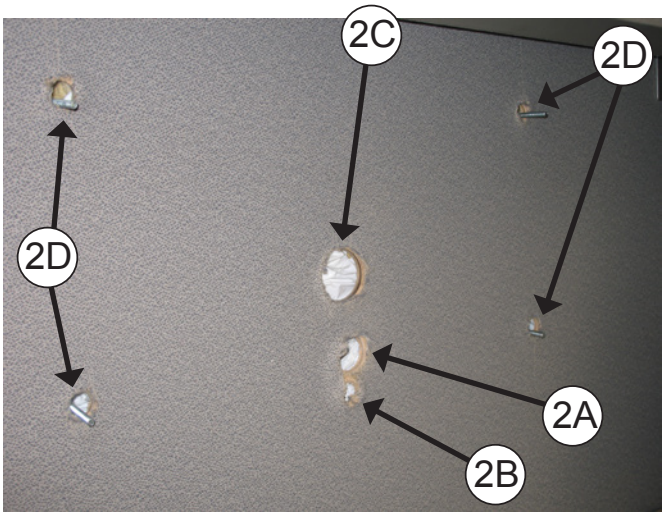
B- (1) Ø19 nur in der Verkleidung durchführen

C- (1) Ø48 nur in der Verkleidung durchführen

D- (4) Ø22 nur in der Verkleidung durchführen



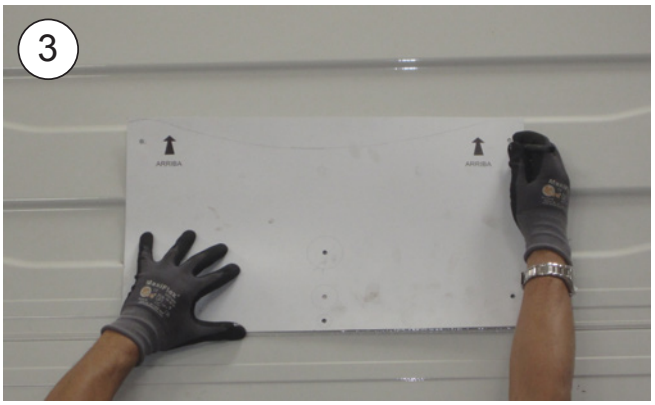


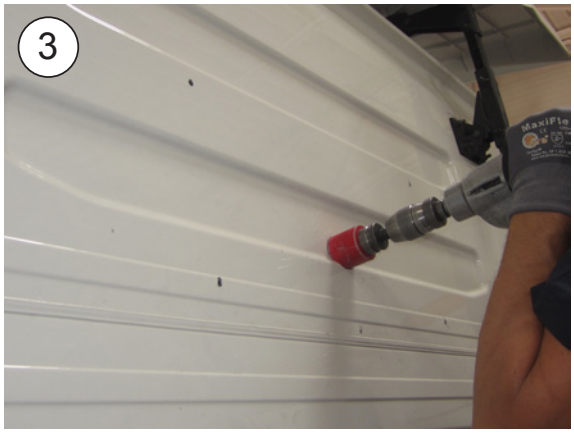


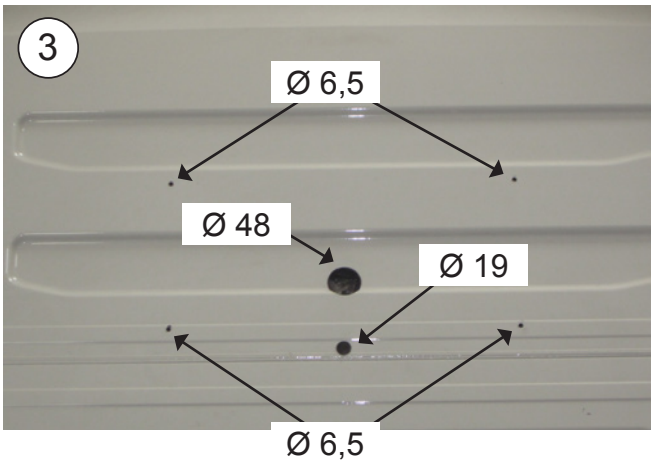
3

AUF DER KABINENAUSSENSEITE:

Vorlage auf gleicher Höhe von der Außenseite auflegen, dabei als Referenz die durchgeführte Bohrung Ø4 nehmen, markieren und die restlichen Bohrungen durchführen.





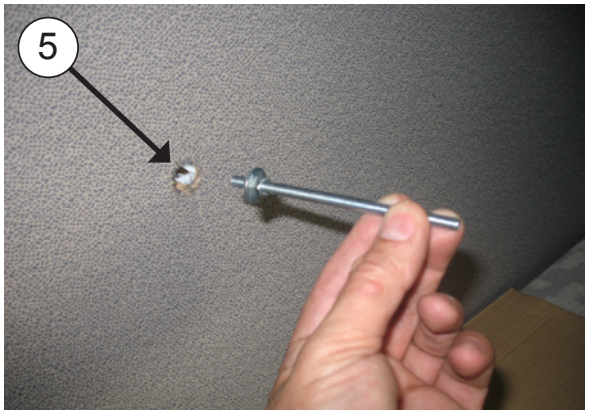


4

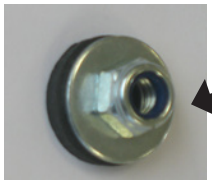
Die durchgeführten Bohrungen mit Rostschutzfarbe schützen.

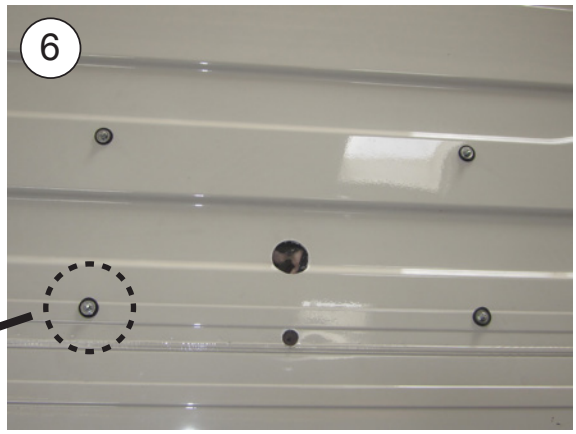
5

Von innen her Stiftschrauben M6 mit Mutter, Grower-Scheibe und Flachscheibe wie angegeben einführen. Auf der Oberseite 110 mm Stiftschrauben und auf der Unterseite 140 mm Stiftschrauben.



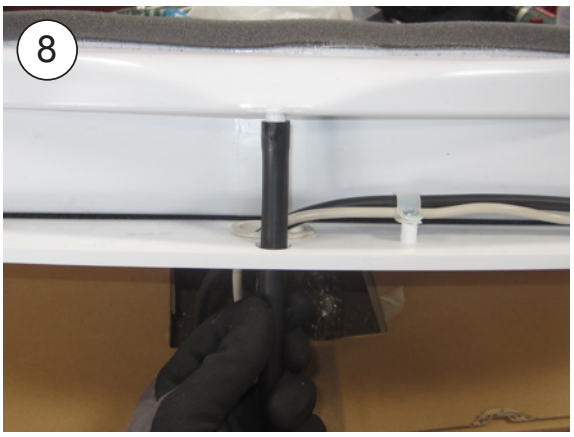
6	Von außen her mit Gummiunterlegscheibe, Flachscheibe und selbstsichernder Spannmutter befestigen, dabei von innen her mit 10er Rohrschlüssel halten.



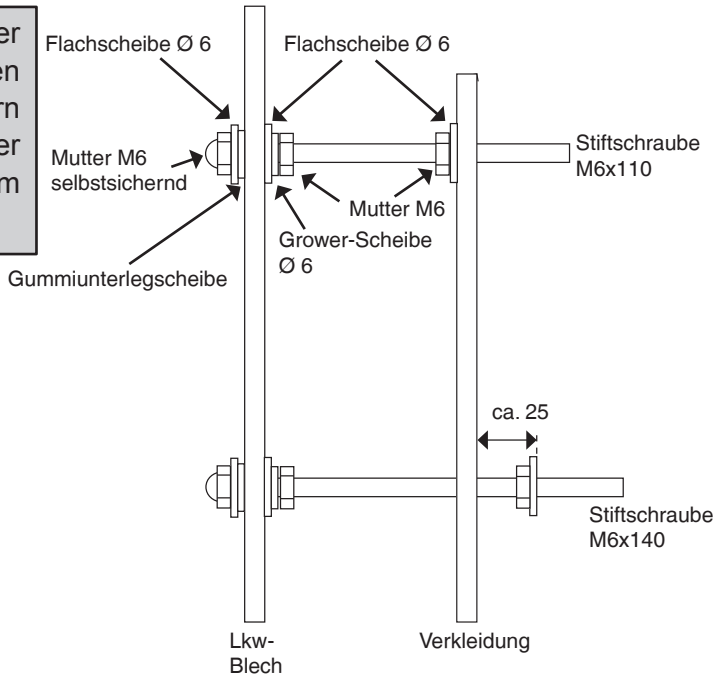


7	Mutterkappen und Wanddurchführung anbringen.

8	Entwässerungsschlauch am Verdampfer anschließen.



9 Von der Kabineninnenseite her an jeder Stiftschraube (1) Mutter M6 anschrauben und eine Flachscheibe anbringen. Muttern und obere Unterlegscheiben auf Höhe der Verkleidung bringen; die unteren in ca. 25 mm Höhe.



10 Entwässerungsschlauch durch das in die Verkleidung gebohrte Loch Ø 19 nach außen führen.

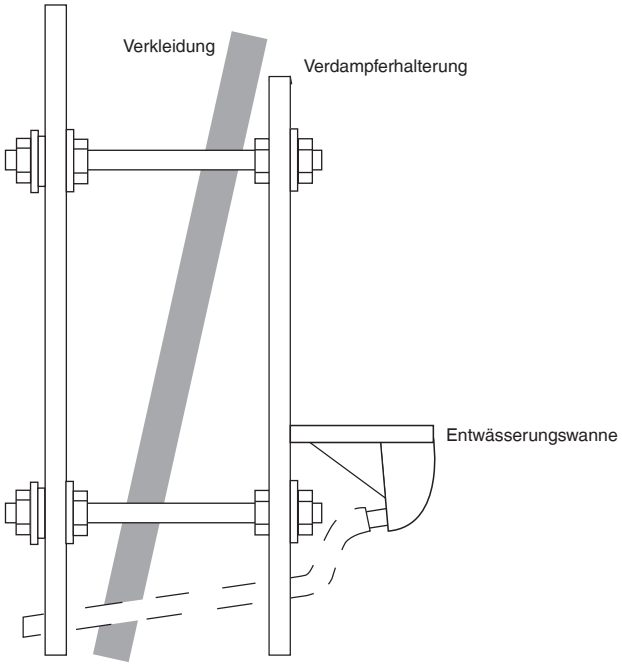
11 Verdampferkabel durch das Bohrloch Ø 35 der Verkleidung stecken und durch das Bohrloch Ø 48 des Fahrzeugblechs herausholen.

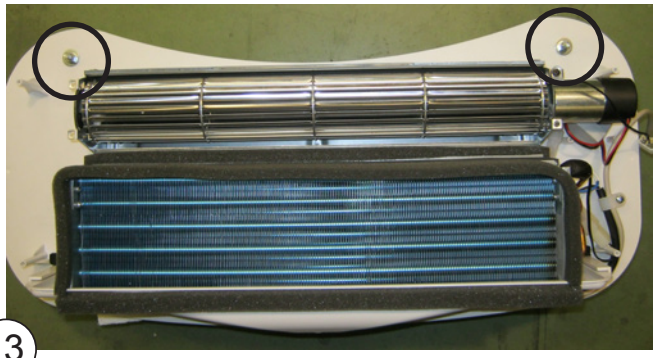
12 Verdampferschläuche durch das Bohrloch Ø 48 nach außen führen.

13 Verdampfer an Stiftschrauben M6 positionieren und mit Muttern M6, Grower- und Flachscheiben Ø 6 befestigen.

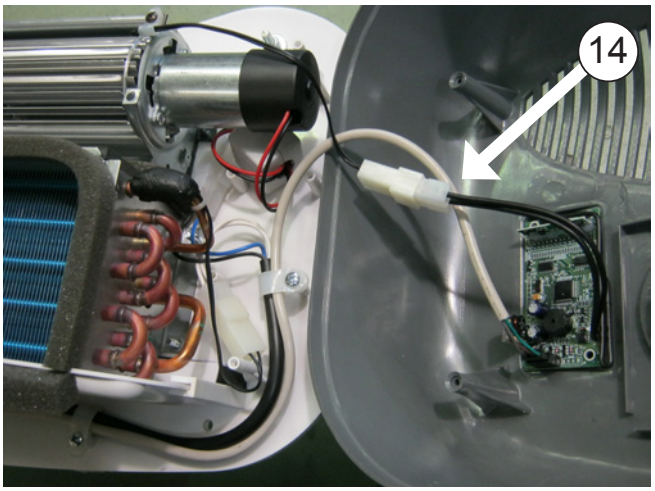
WICHTIGER HINWEIS

Bei geneigten Verkleidungen muss der Verdampfer senkrecht oder mit einer Neigung von unten nach außen hin liegen, um zu vermeiden, dass das Kondenswasser auf die Verkleidung läuft. Vor dem Befestigen der Anlage durch Hinzufügen von Wasser in die Entwässerungswanne prüfen, ob dieses auch abläuft.





14 Rückführsonde und Kommunikationskabel anschließen.



15 Innere Luftverteilertafel anhand eines Magnetschraubendrehers mit ihren Schrauben wieder anbringen und Kappen aufsetzen.

16 Auf der Außenseite Durchführungen am Stutzenausgang anbringen; Durchführung Ø 22 in die Entwässerung einführen und mithilfe eines Schraubendrehers anbringen.

MONTAGE KONDENSATOR UND SCHLÄUCHE

1

Vorlage am geeignetsten Ort auf der rechten Kabinenseite auflegen. Dabei berücksichtigen, dass die Bohrlöcher sich auf ebenen Bereichen befinden müssen. Die beiden unteren Bohrlöcher markieren.

Es ist wichtig, nur diese beiden Bohrlöcher zu markieren, da es möglich ist, dass der Sockel durch die Kontraktion des Materials nicht mit der Vorlage übereinstimmt.

Achtung: Die Länge der Leitung berücksichtigen, die an die Verdampfergruppe angeschlossen ist.

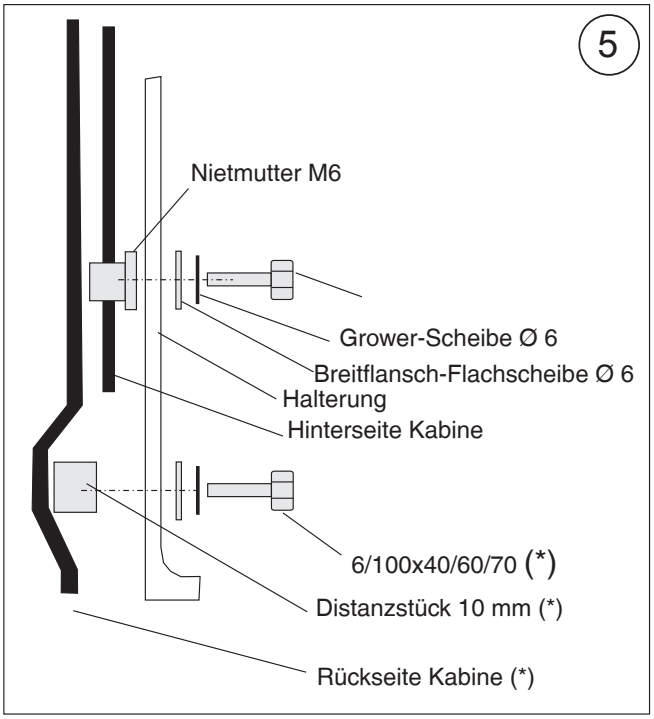
2

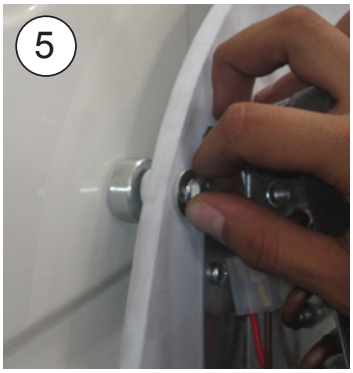
(2) Löcher Ø 9 bohren, diese mit der mitgelieferten Rostschutzfarbe schützen und (2) Nietmuttern M6 anbringen.

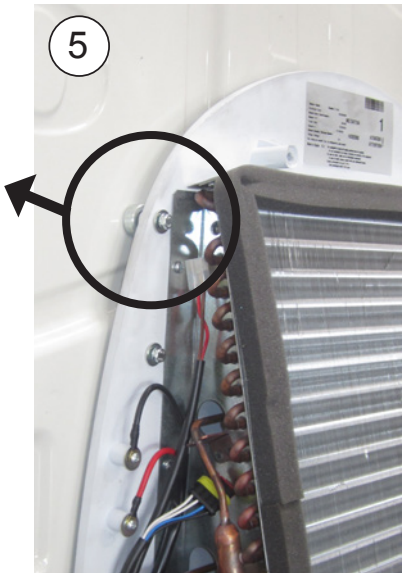
3	Kondensator mit (2) Schrauben 6/100x30 positionieren, an die Nietmuttern anschrauben und die restlichen Bohrlöcher der Baugruppe markieren. **Mindestens 6 Bohrlöcher für die Befestigung des Kondensators.**

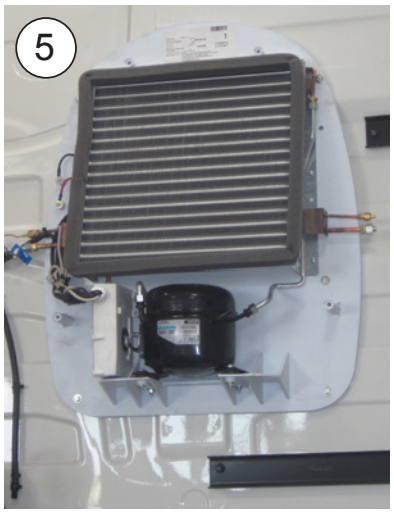
4	Deckel der Kondensatoreinheit abnehmen und Bohrlöcher Ø 9 an den angefertigten Markierungen durchführen. Diese mit der mitgelieferten Rostschutzfarbe schützen und Nietmuttern M6 anbringen.

5 Kondensator mit Schraube 6/100x30, Grower-Scheibe Ø 6 und Breitflansch-Flanschscheibe Ø 6 an denjenigen Bohrlöchern, wo der Sockel direkt auf der Nietmutter aufliegt, und mit Schrauben 6/100x40, Grower-Scheibe Ø 6, Breitflansch-Flachscheibe Ø 6 und Distanzstück 10 mm zwischen Sockel und Nietmutter an denjenigen Bohrlöchern, wo der Sockel nicht direkt auf der Nietmutter aufliegt, befestigen.









6 Schlauchstutzen an den Verdampferstutzen montieren. Anziehen und mit Tropfschutzband schützen.

7	Verdampferkabel an Kondensatorkabel anschließen, mit Kabelbindern an der Schlauchleitung befestigen und überschüssiges Kabel in der Baugruppe unterbringen.

8	Schlauchschutz auf Stutzen positionieren, markieren und (4) Bohrlöcher Ø 4 markieren und bohren. Diese mit der mitgelieferten Rostschutzfarbe schützen. **Oberes Bohrloch nicht durchführen (*).**

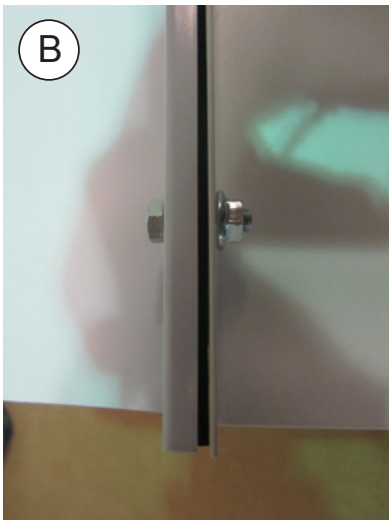
9	Mitgelieferte Dichtungen an den Schlauchschutz kleben und so anpassen, dass beim Anbringen des Schlauchschutzes auf der Kabine dieser das Eindringen von Wasser verhindert.

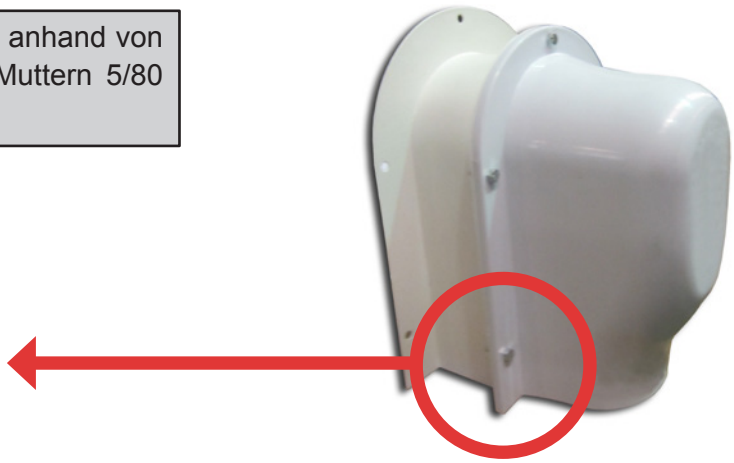
10	Stutzenschutz mit (4) Blechschrauben 4,8x13 anbringen.

11	Für Fahrzeuge , bei denen der Schlauchschutz bedingt durch die Schlauchstutzen nicht in die Kabine passt, wie folgt vorgehen.

A	EPDM-Dichtung 13x4 wie angegeben auf den Schlauchschutz kleben.

B	Schlauchschutz mit dem Innenteil anhand von (5) Schrauben 5/80x15 und (5) Muttern 5/80 mit Unterlegscheibe verbinden.





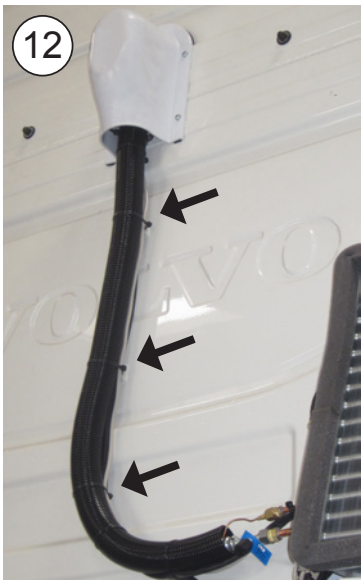
C

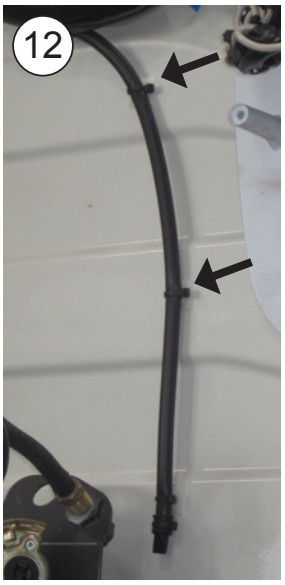
Baugruppe auf den Stutzen positionieren und (4) Bohrlöcher Ø 4 markieren und bohren. Diese mit der mitgelieferten Rostschutzfarbe schützen. Oberes Bohrloch nicht ausführen (*).

D

Mitgelieferte Dichtungen an den Schlauchschutz kleben und so anpassen, dass beim Anbringen des Schlauchschutzes an der Kabine dieser das Eindringen von Wasser in die Stutzen verhindert. Dann mit (4) Blechschrauben 4,8x13 montieren.

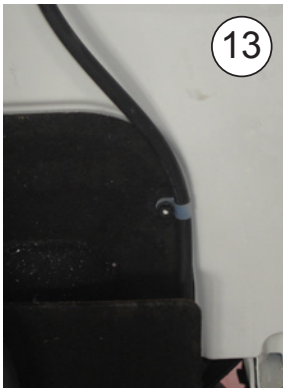
12 Entwässerungsschlauch in Drainageventil stecken und zusammen mit Schläuchen und Kabeln des Fahrzeugs anhand von klebenden Halterungen und Plastikkabelbindern an der Karosserie befestigen. **Darauf achten, dass vor dem Ankleben der Halterungen die Karosseriefläche gereinigt wird.**



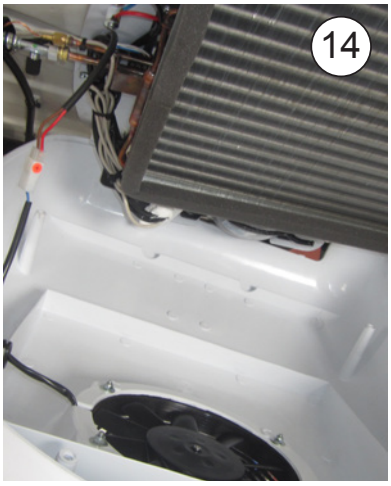


13 Netzkabelklemme an Kabelklemme der Baugruppe anschließen und an Original-Stiftschraube mit Nylon-Schelle 3/8 und Mutter M6 befestigen.

Darauf achten, dass vor dem Ankleben der Halterungen die Karosseriefläche gereinigt wird.

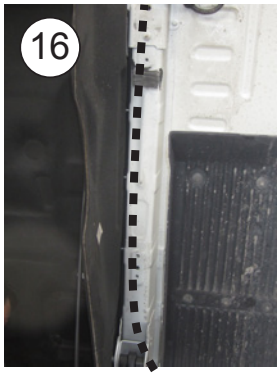


14 Klemme des Kondensatorlüfters des Schutzgehäuses an Kondensatorklemme anschließen.



15	Schutzgehäuse mit den (4) zuvor abgenommenen Innensechskantschrauben 6/100x30 anbringen.

16	Kabine abklappen und Befestigungsmuttern des rechten Seitenschutzes des Motors abnehmen. Netzkabel von der Innenseite des Seitenschutzes einführen. Dabei so nah wie möglich am Kabinenboden bleiben und durch die Originalaussparung führen. Originalmuttern des Seitenschutzes wieder anbringen.

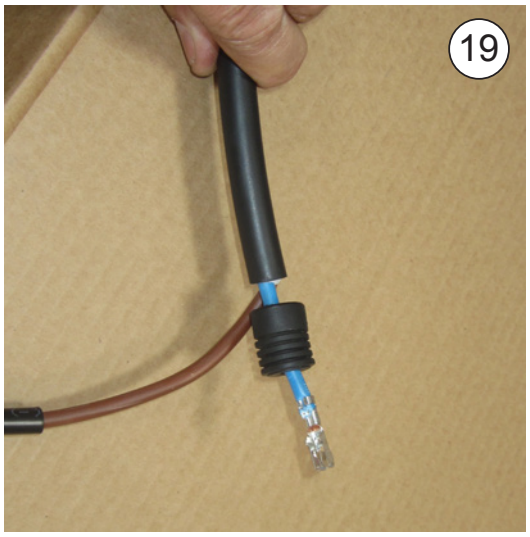


Zeigen Ecke Wachen
Verdrahtung schützen

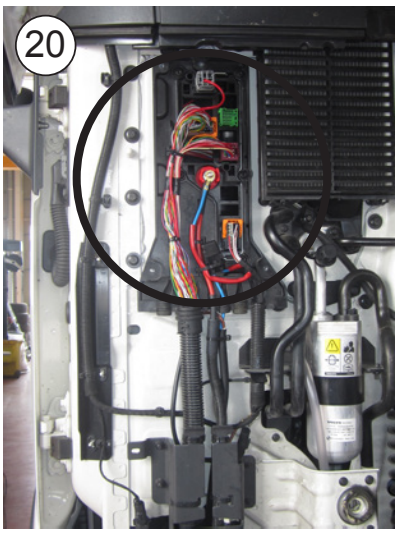
17 Kabel zusammen mit den Originalkabeln zur Vorderseite führen und an diesen mit Kabelbindern befestigen.

18 Kabine in Fahrtposition bringen und Vorderabdeckung abnehmen (*).

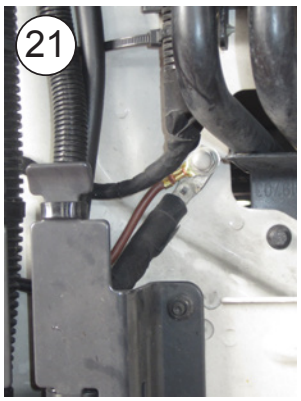
19 Originaldurchführung durchbohren, Kabel Az der Netzverkabelung hindurch stecken und mitgelieferte Klemme befestigen.

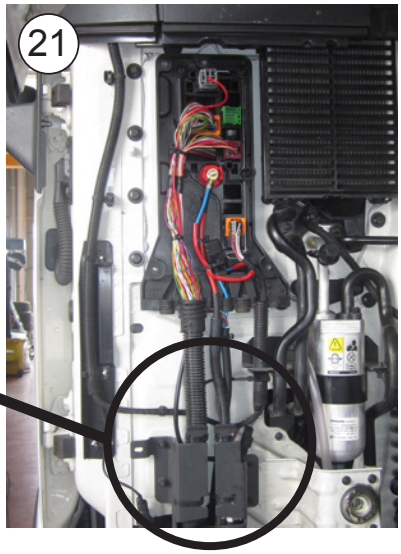


20	Klemme in Sicherungsträger stecken und an angegebenen (+) Anschluss anschließen. Sicherung mit Kabelbinder befestigen.



21	Kabel M an Masse anschließen.





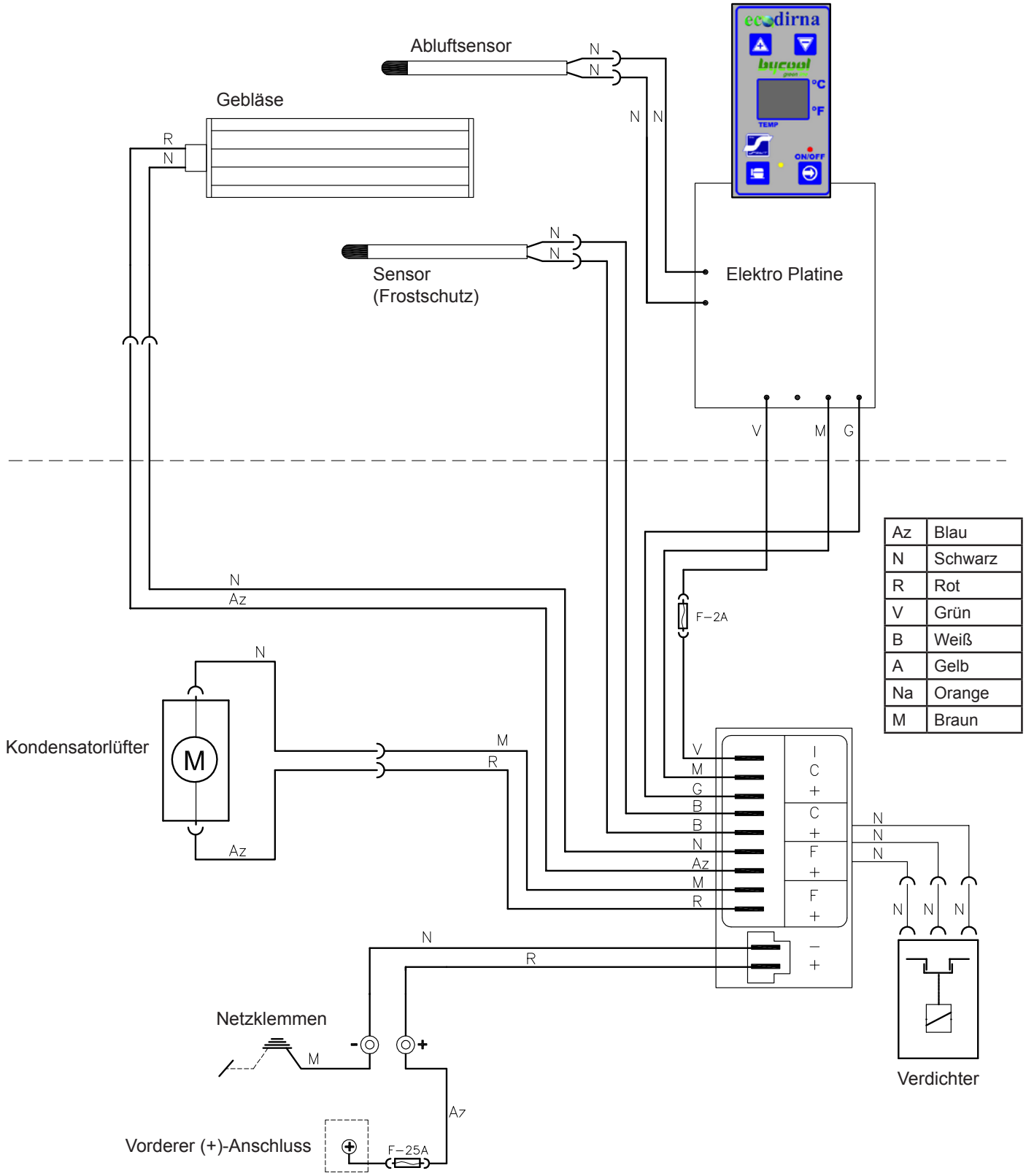
22	Batterie anschließen und Betrieb der Anlage entsprechend der Betriebsanleitung prüfen.

23	Gesamtansicht Verdampfer.

SCHALTPLAN

WICHTIGER HINWEIS!

Darauf achten, dass die Polaritäten beim Anschluss des Geräts an die Batterie nicht vertauscht werden. Ist dies der Fall, schaltet sich das Bedienfeld nicht an und die Anlage funktioniert nicht.



Az	Blau
N	Schwarz
R	Rot
V	Grün
B	Weiß
A	Gelb
Na	Orange
M	Braun

Suggerimenti per il montaggio

- Prima di cominciare il montaggio, leggere attentamente le istruzioni e rispettarle nel corso dello stesso.
- Usare gli attrezzi più adatti ad ogni operazione.

Elettricitá

- Scollegare la chiave di contatto.
- Scollegare la batteria prima di cominciare il montaggio.
- Assicurarsi di aver effettuato correttamente l'installazione e il collegamento dei componenti elettrici.

⚠ Attenzione

Se durante il montaggio si inclina l'impianto o si ribalta la cabina con l'impianto montato, prima di rimettere in funzione l'impianto occorre attendere almeno 60 minuti dal momento in cui è di nuovo in posizione orizzontale.

Documentazione allegata

Istruzioni di montaggio	220AA63110
Guida dell'utente	220AA11005
Soluzione dei problemi	220AA63111
Garanzia	220AA10010

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	
M6/100	10	13	10

Montaggio da tubi		
Coppia di serraggio		
Tubi	Coppia di serraggio	Strumenti
1/4"	13-15	Chiave fissa da 14 mm
3/8"	15-17	Chiave fissa da 19 mm

Attrezzi

- Chiave a cricchetto con rubinetto di intercettazione da 10
- Cacciavite a stella TOP 10
- Chiave fissa da 10, 11, 14, 17, 19
- Chiave a brugola da 6
- Chiave a tubo da Ø 10
- Punta Ø 4
- Trapano
- Punta Ø 4, 6, 9
- Sega circolare Ø 19, 22, 35, 48
- Forbici
- Rivettarice M6

Simbologia

Fragile

Attenzione alle mani

Tensione elettrica pericolosa

⚠ Avvertenze

⚠ L'installatore deve essere in possesso della formazione necessaria in materia di aria condizionata per veicoli.

⚠ **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.

⚠ Vedi la **procedura di garanzia** del prodotto in **Diagnosi dei problemi**.

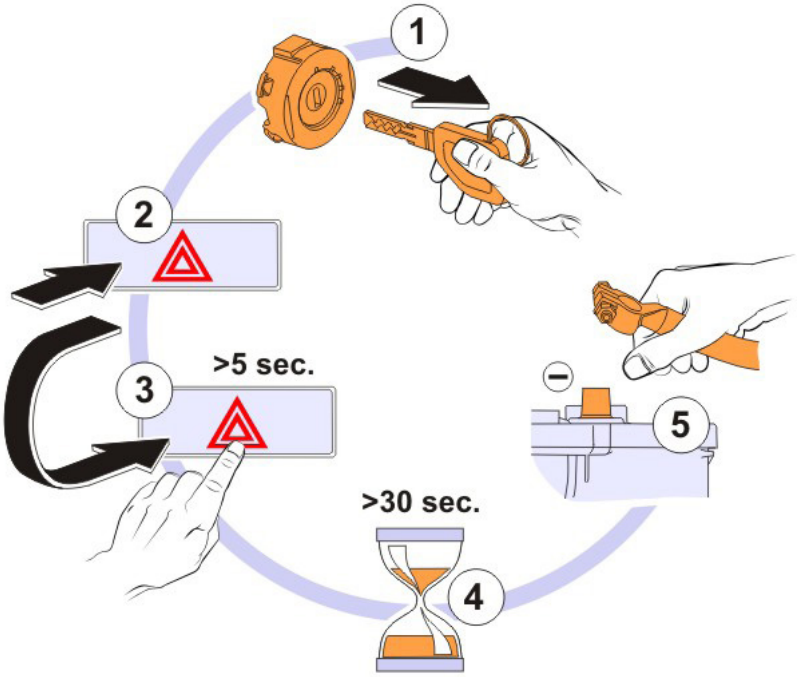
⚠ Vedi la **Guida dell'utente** dell'impianto per il corretto funzionamento del telecomando e del pannello di controllo.

⚠ I seguenti documenti devono essere consegnati all'utente una volta conclusa l'installazione: **Guida dell'utente, Garanzia e Diagnosi dei problemi.**

ESEGUIRE QUESTA PROCEDURA DOPO AVER SODDISFATTO LE SEGUENTI CONDIZIONI.

• Condizioni:

- Se il veicolo dispone di un allarme
- Mettere l'allarme nella modalità di funzionamento



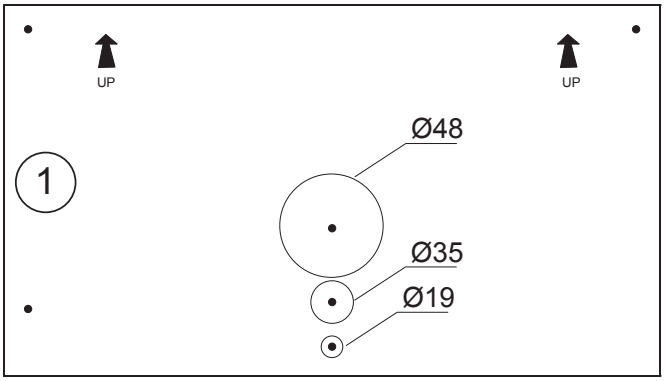
1	Rimuovere la chiave dall'avviamento (1).
2	Premere il tasto per azionare le doppie frecce (2).
3	Premere e mantenere premuto il tasto per azionare le doppie frecce (3). • Condizioni: - Mantenere premuto il tasto per almeno 5 secondi. **Dati tecnici.** Se la procedura si è completato con successo: L'illuminazione d'accesso e la luce interna sono spente quando si apre lo sportello.
4	Attendere almeno 30 secondi (4).
5	Rimuovere il cavo del terminale negativo (5).

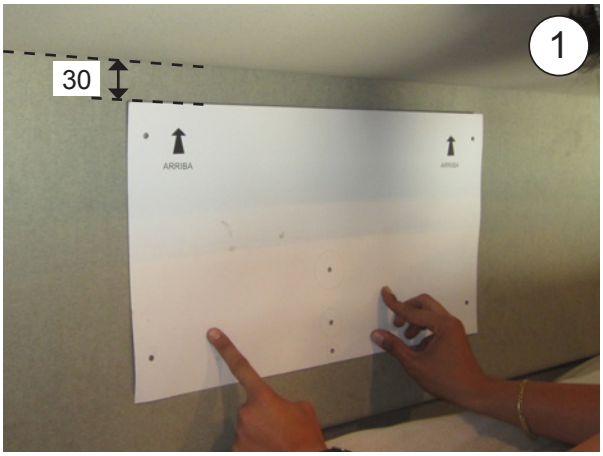
OPERAZIONI PRELIMINARI:

- Disinserire la batteria.
- Smontare il pannello interno di distribuzione dell'aria dell'unità evaporante.

1 **DALL'INTERNO DELLA CABINA:**

Appoggiare la dima in dotazione sulla cuccetta superiore, centrata lateralmente e a circa 30 mm dal soffitto della cabina, e segnare i fori.





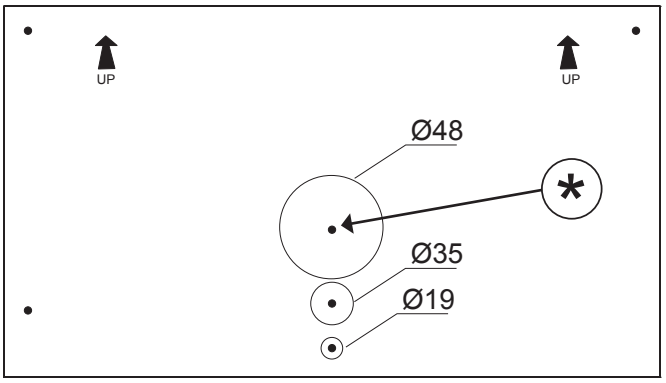
2 (*) Praticare un foro passante Ø 4 con una punta lunga nella posizione di foratura Ø 48, quindi eseguire i seguenti fori.

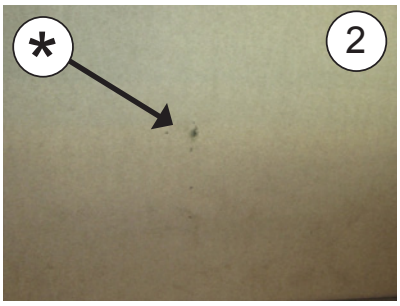
A- (1) Ø 35 solo nella tappezzeria

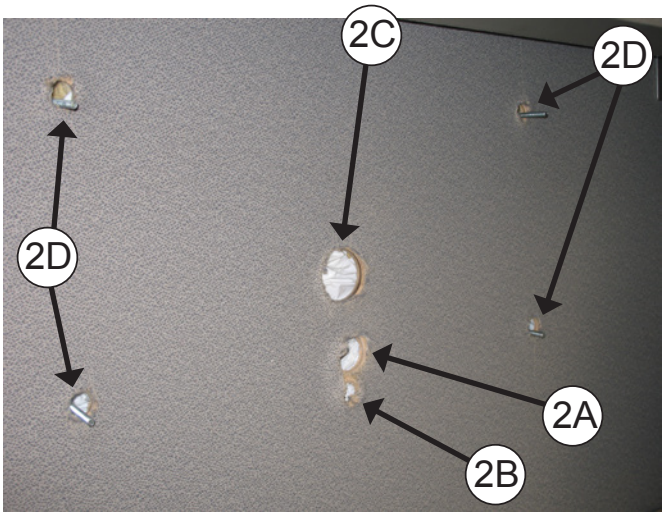
B- (1) Ø 19 solo nella tappezzeria

C- (1) Ø 48 solo nella tappezzeria

D- (4) Ø 22 solo nella tappezzeria



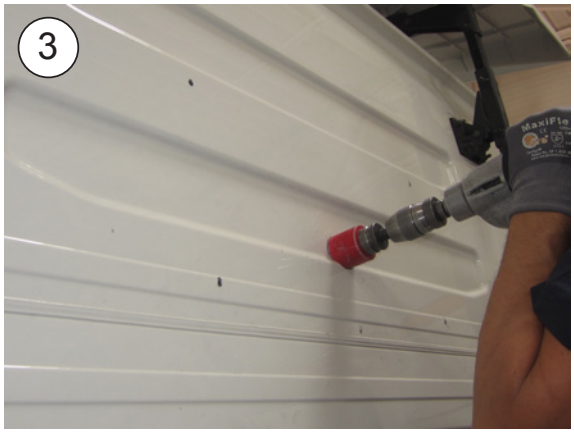


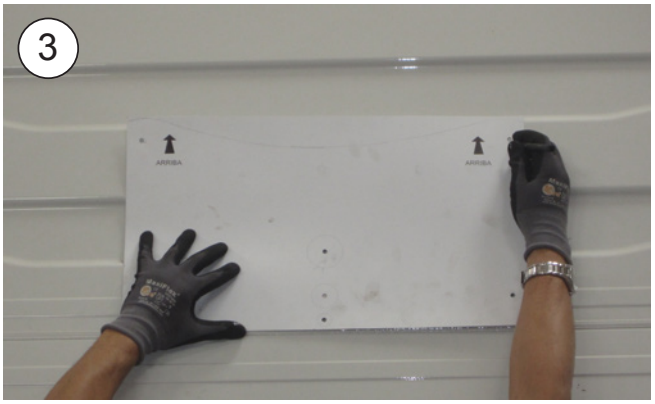


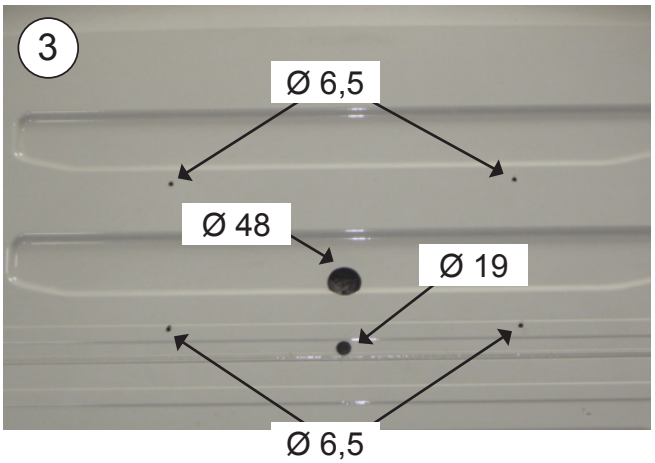
3

DALL'ESTERNO DELLA CABINA:

Appoggiare la dima livellata sull'esterno, prendendo come riferimento il foro eseguito con Ø 4, segnare e praticare i fori rimanenti.





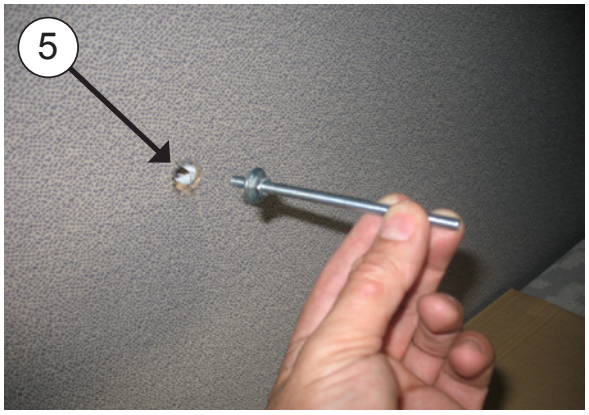


4

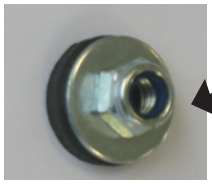
Proteggere i fori eseguiti con l'antiruggine in dotazione.

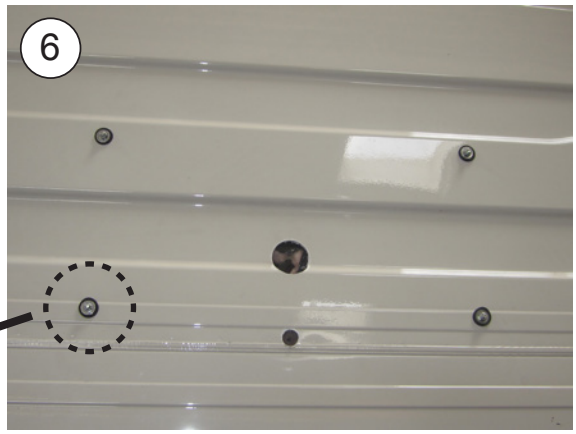
5

Inserire dall'interno le viti prigioniere M6 con dado, rondella grower e rondella piana come indicato. Usare le viti prigioniere da 110 mm nella parte superiore e le viti prigioniere da 140 mm in quella inferiore.



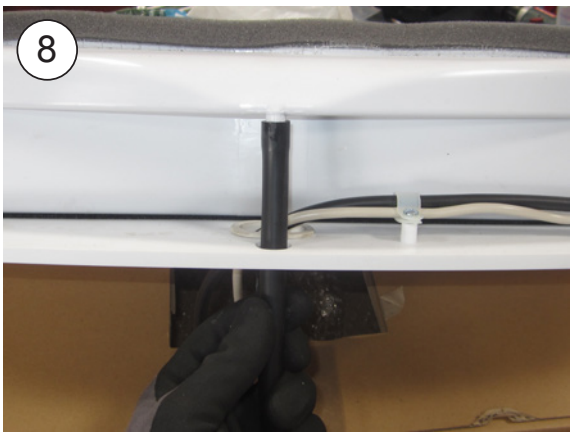
6 Fissare dall'esterno con rondella di gomma, rondella piana e dado autobloccante, bloccando dall'interno con la chiave a tubo 10.



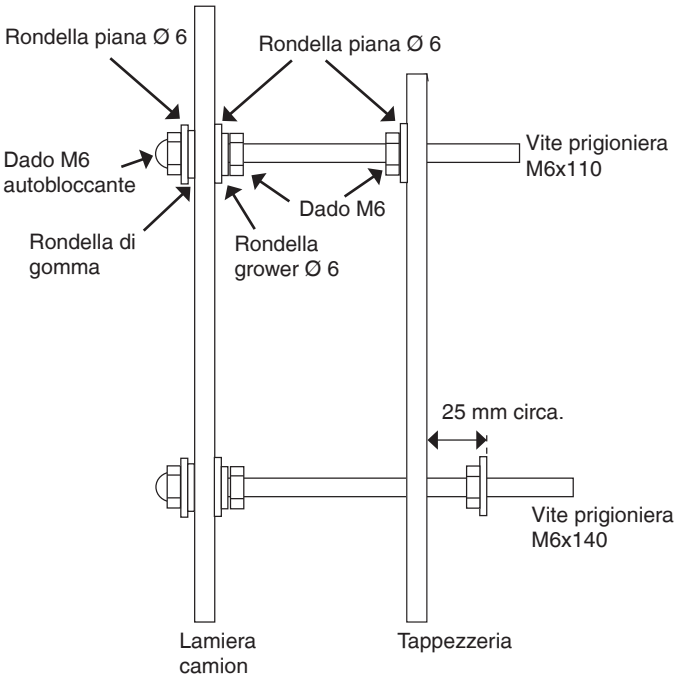


7 Inserire i tappi del dado e l'isolatore passante.

8 Collegare il tubo di scarico all'insieme evaporatore.



9 Dall'interno della cabina, avvitare su ciascuna vite prigioniera (1) dado M6 e inserire la rondella piana. I dadi e le rondelle superiori devono essere a filo della tappezzeria e quelli inferiori a circa 25 mm.



10 Far passare il tubo di scarico verso l'esterno dal foro Ø 19 eseguito sulla tappezzeria.

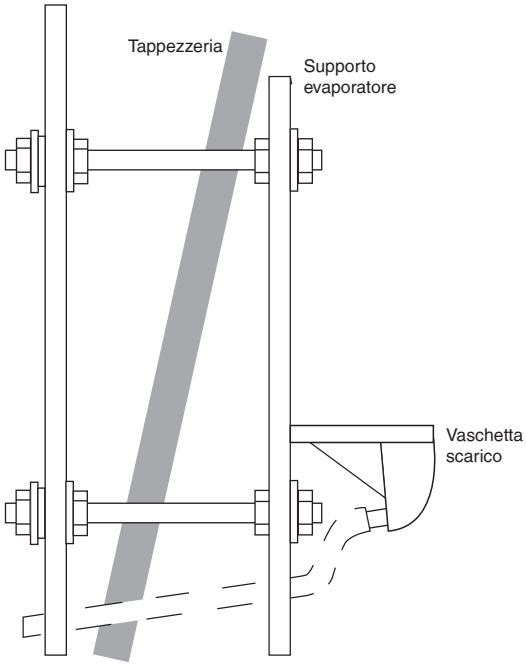
11 Far passare i cablaggi dell'evaporatore verso l'esterno dal foro Ø 35 della tappezzeria ed estrarli dal foro Ø 48 eseguito sulla lamiera.

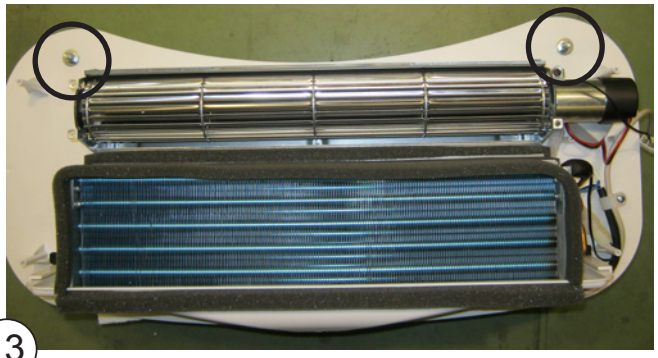
12 Far passare i tubi dell'evaporatore verso l'esterno dal foro Ø 48.

13 Inserire l'insieme dell'evaporatore sulle viti prigioniere M6 e fissare con dadi M6, rondelle grower e piane Ø 6.

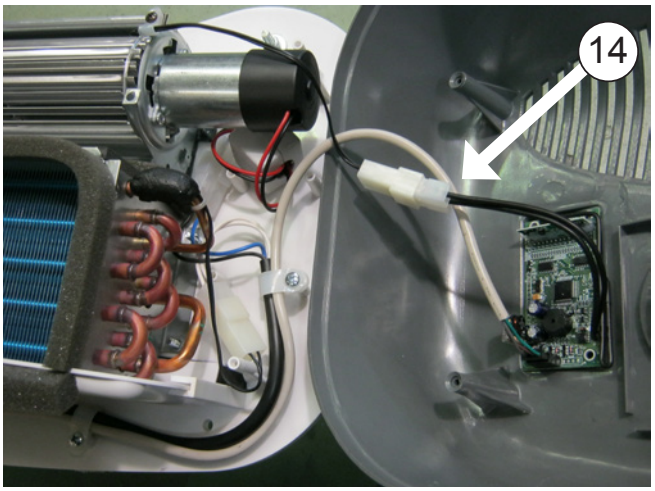
NOTA BENE

In caso d'inclinazione della tappezzeria, l'insieme dell'evaporatore deve essere sistemato in verticale o inclinato con la parte inferiore all'infuori per evitare che l'acqua di condensa cada sulla tappezzeria. Prima di fissare l'impianto, versare un po' d'acqua nella vaschetta di scarico e verificare che non vi ristagni.





14	Collegare il sensore dell'aria di ritorno e il cavo per comunicazioni.



15	Fissare il pannello interno di distribuzione dell'aria con le relative viti, usando un cacciavite calamitato e inserire i tappi.

16	Dalla parte esterna inserire l'isolatore passante sull'uscita dei raccordi e l'isolatore passante Ø 22 sullo scarico servendosi di un cacciavite.

MONTAGGIO DELL'INSIEME CONDENSATORE E DELLA TUBAZIONE

1

Appoggiare la dima sul sito più idoneo del lato destro della cabina, tenendo conto che i fori devono essere eseguite in zone in piano, e segnare i due fori inferiori.

È importante segnare solo questi due fori poiché può darsi che la base non coincida con la dima per la contrazione del materiale.

Attenzione: Tenere conto della lunghezza della tubazione, è collegata all'insieme evaporatore.

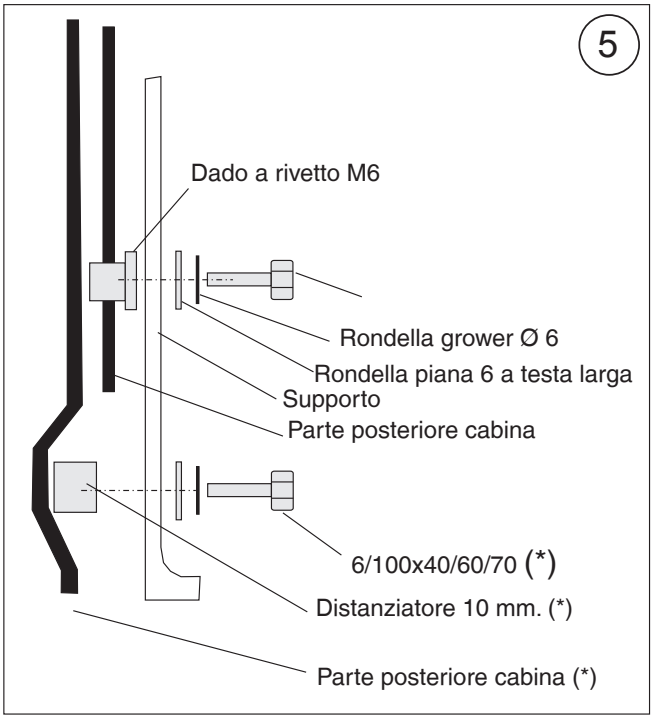
2

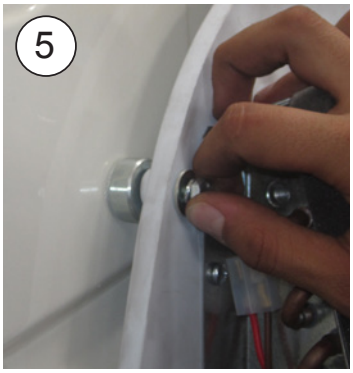
Eseguire (2) fori Ø 9, proteggere con l'antiruggine in dotazione e inserire (2) dadi a rivetto M6.

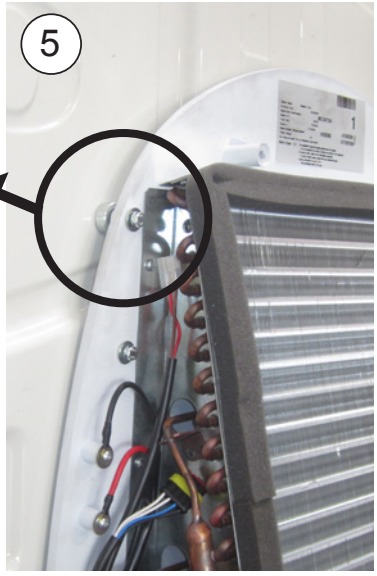
3	Fissare l'unità condensante con (2) viti 6/100x30, avvitando sui dadi a rivetto e segnare gli altri fori dell'unità. **Come minimo 6 fori per il fissaggio dell'unità condensante.**

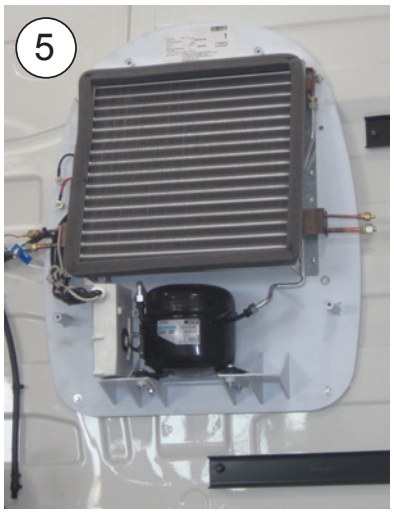
4	Smontare il coperchio dell'unità condensante, praticare i fori Ø 9 sui punti segnati, proteggerli con l'antiruggine in dotazione e inserire i dadi a rivetto M6.

5 Fissare l'unità condensante con viti 6/100x30, rondella grower Ø 6 e rondella piana Ø 6 a testa larga nei fori in cui la base dell'unità appoggia direttamente sul dado a rivetto, e con viti 6/100x40, rondella grower Ø 6, rondella piana Ø 6 a testa larga e distanziatore di 10 mm intercalato tra la base dell'unità e il dado a rivetto nei fori in cui la base dell'unità non appoggia direttamente sul dado a rivetto.









6 Montare i raccordi dei tubi sui raccordi dell'evaporatore. Stringere il controdado e proteggere con nastro salvagoccia.

7	Collegare i cablaggi dell'evaporatore a quelli dell'unità condensante, fissare con fascette alla tubazione e inserire la parte che avanza nell'unità.

8	Inserire la protezione dei tubi sui raccordi, segnare ed eseguire (4) fori Ø 4, quindi proteggerli con l'antiruggine in dotazione. **Non eseguire fori più grandi (*).**

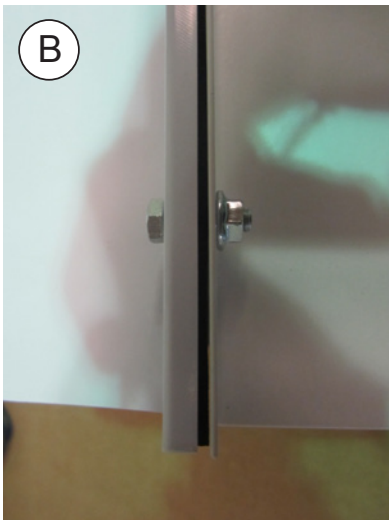
9	Incollare le guarnizioni in dotazione sulla protezione, adattandole in modo che posizionando quest'ultima sulla cabina combaci perfettamente proteggendo i raccordi dalla penetrazione dell'acqua.

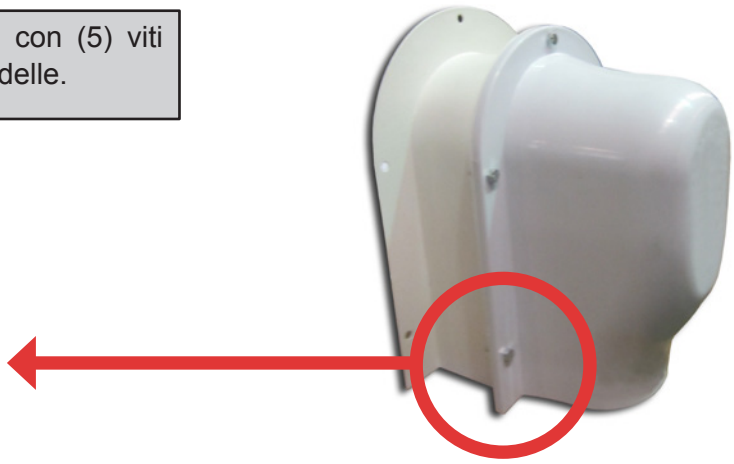
10	Montare la protezione dei raccordi con (4) viti per lamiera 4,8x13.

11	Per veicoli in cui la protezione dei tubi non combacia con la cabina per l'interferenza dei raccordi dei tubi, procedere come indicato.

A	Incollare la guarnizione EPDM 13x4 sulla protezione dei raccordi come indicato.

B	Unire la protezione all'adattatore con (5) viti 5/80x15 e (5) dadi 5/80 con le rondelle.

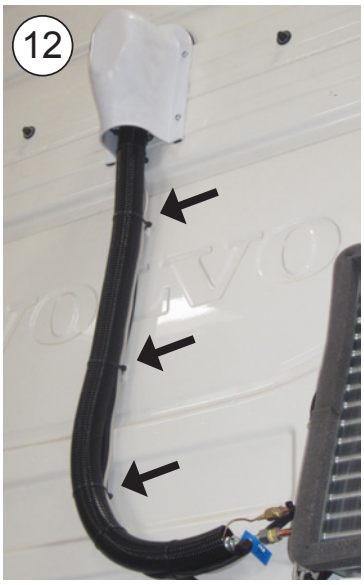


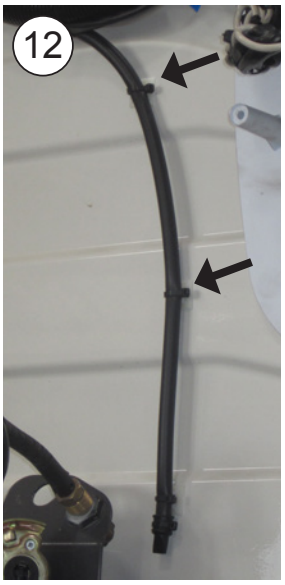


C Inserire l'insieme sui raccordi, segnare ed eseguire (4) fori Ø 4, poi proteggerli con l'antiruggine in dotazione. Non eseguire fori più grandi (*).

D Incollare le guarnizioni in dotazione sulla protezione, adattandole in modo che posizionando quest'ultima sulla cabina combaci perfettamente proteggendo i raccordi dalla penetrazione dell'acqua e montare con (4) viti per lamiera 4,8x13.

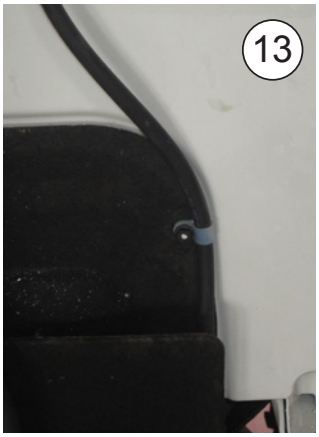
12 Inserire il tubo di scarico sulla valvola di drenaggio e fissare insieme ai tubi e ai cablaggi alla lamiera del veicolo con i supporti adesivi e le fascette di plastica. **Attenzione: prima di incollare i supporti, pulire la superficie della lamiera.**



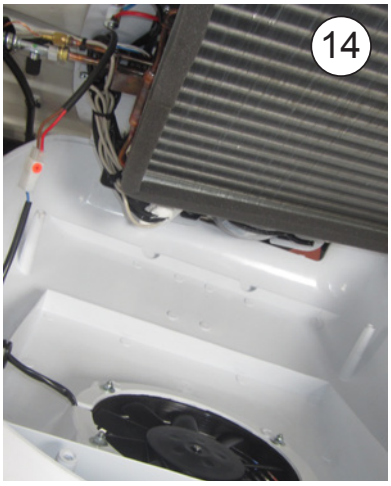


13 Collegare il morsetto del cavo di alimentazione al morsetto dell'unità e fissare alla vite prigioniera originale con il serracavo 3/8 di nylon e il dado M6.

Attenzione: prima di incollare i supporti, pulire la superficie della lamiera.

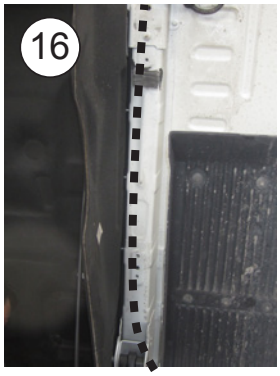


14 Collegare il morsetto del ventilatore del condensatore dell'involucro protettivo con il morsetto dell'unità condensante.



15 Montare l'involucro protettivo con (4) viti 6/100x30 a brugola rimosse in precedenza.

16 Ribaltare la cabina e smontare i dadi di fissaggio della protezione laterale destra del motore. Inserire il cavo di alimentazione dall'interno della protezione, il più vicino possibile al pavimento della cabina e farlo passare dal foro originale. Rimontare i dadi originali della protezione.

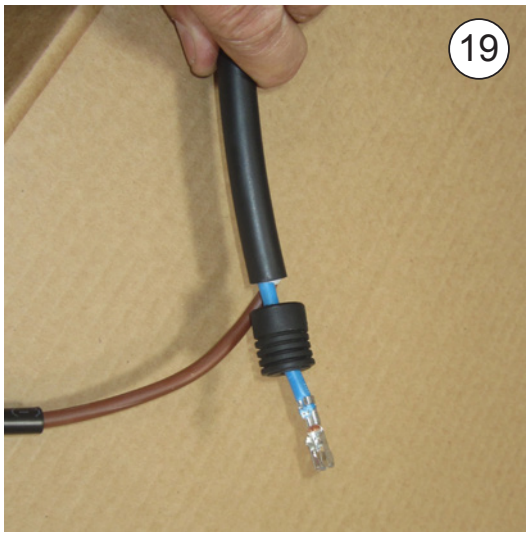


Posizionare paraspigoli per proteggere il cablaggio

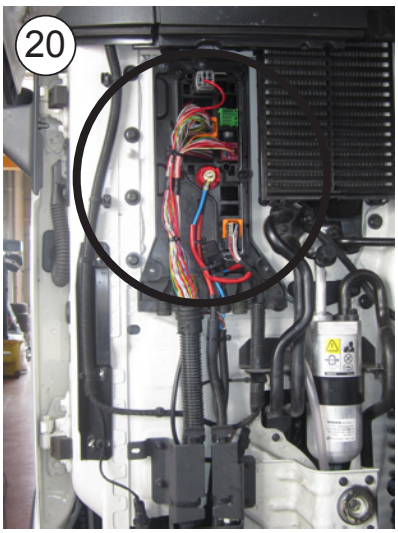
17	Far passare il cablaggio verso la parte anteriore insieme ai cablaggi originali fissandoli a questi ultimi con le fascette.

18	Rimettere la cabina in posizione di marcia e smontare il coperchio anteriore (*).

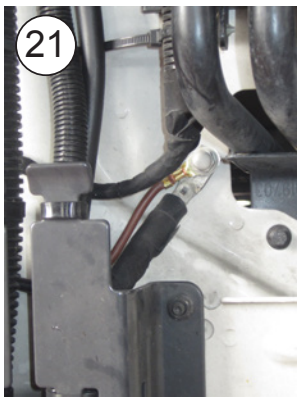
19	Forare l'isolatore passante originale, inserire il cavo Az del cablaggio di alimentazione e aggraffare il terminale in dotazione.

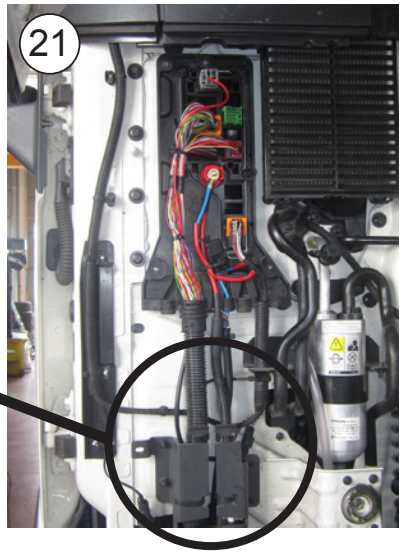


20 Inserire il terminale nel portafusibili e collegarlo alla presa (+) indicata. Fissare il fusibile con una fascetta.



21 Collegare il cavo M al centro delle masse.





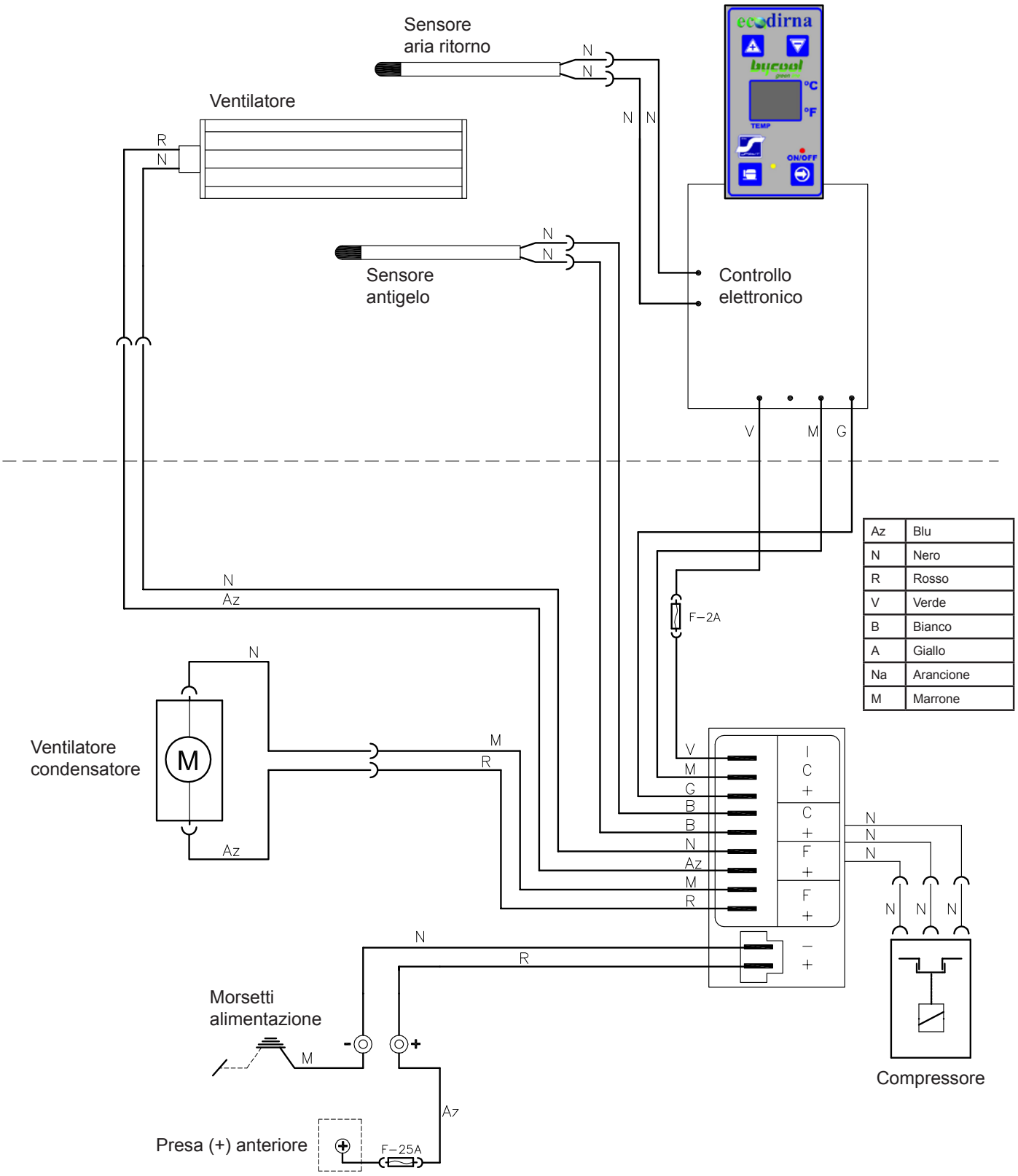
22 Collegare la batteria e verificare il funzionamento dell'impianto come indicato nel manuale dell'utente.

23 Vista generale unità evaporante.

SCHEMA ELETTRICO

AVVERTENZA IMPORTANTE!

Fare attenzione a non invertire le polarità quando si esegue il collegamento dell'impianto alla batteria. Infatti, in tal caso il quadro comandi non si accende e l'impianto non funziona.



Az	Blu
N	Nero
R	Rosso
V	Verde
B	Bianco
A	Giallo
Na	Arancione
M	Marrone

Ed:	26/05/2014
Md:	16/11/2018

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