

KIT DE MONTAJE OPENAIR PLUS PARA ESCOTILLAS 70X50

OPENAIR PLUS MOUNTING KIT FOR 70X50 HATCHES

KIT DE MONTAGE OPENAIR PLUS POUR ÉCOUTILLES 70X50

MONTAGESATZ OPENAIR PLUS FÜR LUKEN 70X50

KIT DI MONTAGGIO OPENAIR PLUS PER TETTUCCI 70X50

Referencia: 1004130756



Gama Caravaning

INSTRUCCIONES DE MONTAJE

ES

MOUNTING INSTRUCTIONS

EN

INSTRUCTIONS DE MONTAGE

FR

MONTAGEANWEISUNGEN

GE

ISTRUZIONI DI MONTAGGIO

IT

Gracias por su adquisición y por confiar en nuestra gama de productos **Caravaning**. **OPENAIR PLUS** es un equipo de aire acondicionado de altas prestaciones fabricado por **Dirna Bergstrom** para ser utilizado en autocaravanas y otros vehículos de recreo a motor parado o en marcha.

OPENAIR PLUS está diseñado con la más avanzada tecnología para lograr un eficaz y eficiente rendimiento y una reducción en el consumo de energía de la batería auxiliar de su vehículo. Son estas características lo que lo hace único en el mercado de la climatización de los vehículos de recreo.



Lea atentamente este documento antes de instalar el producto. Conserve este documento para futuras consultas. La documentación original ha sido escrita en español, por lo que el resto de idiomas son traducciones.

Tiene a su disposición todos los manuales del producto en sus versiones digitales (PDF) en <https://bergstrominc.com/es/>

Cualquier operación de venta o de garantía está sometida a nuestras condiciones generales de venta en su versión más actualizada, publicada en nuestra página web <https://bergstrominc.com/es/>

Este manual refleja los últimos avances técnicos de esta gama en el momento de la publicación. No obstante, pueden existir diferencias debidas al perfeccionamiento continuo.

Explicación de símbolos



- **Advertencia:** Aviso de seguridad que informa sobre una situación, qué de no evitarse, puede provocar lesiones graves o la muerte.



- **Peligro:** Riesgo de corte. Señala una situación que podría provocar un corte.



- **Peligro:** Riesgo de electrocución. Señala una situación que podría provocar una electrocución.



- **Aviso:** Aviso de seguridad que informa sobre una situación, qué de no evitarse, puede provocar daños al equipo o a otros materiales.



- **Información:** Información adicional sobre la instalación o el manejo del producto.



- **Frágil:** Indica una situación en la que se debe operar con cuidado para no causar daños al equipo y a otros materiales.



Explicación de responsabilidades

- **Dirna Bergstrom** declina toda responsabilidad ante los daños ocasionados en los siguientes casos:

- Daños en el producto debido a influencias mecánicas y sobretensiones.
- Modificaciones realizadas en el equipo sin el consentimiento expreso del fabricante.
- Utilización del equipo para fines no descritos en este documento.
- Una inadecuada manipulación o instalación del equipo de aire acondicionado.

- Al instalar **OPENAIR PLUS** en el techo hay que tener en cuenta que, normalmente, los vehículos que vienen provistos de claraboya, tienen una estructura suficiente para soportar el peso del equipo. Sin embargo, cuando esto no ocurre y es necesario realizar un corte en el techo, o incluso en el caso de llevar claraboya, el material no es lo suficientemente resistente (techos de fibra, plástico, etc.,) **el instalador debe decidir bajo su responsabilidad**, sobre la necesidad de reforzarlo para evitar una posible deformación, rotura, entrada de agua, etc., habilitando los medios necesarios para que esto no ocurra.

OPENAIR PLUS es un equipo versátil cuya instalación puede realizarse cada 180° para adecuarlo al espacio disponible en el techo del vehículo para que no interfiera con el resto de accesorios.

Advertencias durante el montaje



- La instalación, reparación y mantenimiento de este equipo, solo puede ser realizada por aquel personal técnico que posea una formación suficiente en aire acondicionado para vehículos, posibles peligros y normas aplicables.
- Leer detenidamente las instrucciones de montaje antes de iniciar la instalación de **OPENAIR PLUS**. Durante la instalación, seguir al pie de la letra las instrucciones indicadas.
- Desconectar la llave de contacto antes de iniciar la instalación del equipo.
- Desconectar la batería del vehículo antes de iniciar la instalación de **OPENAIR PLUS**.
- Instale **OPENAIR PLUS** de forma segura para evitar caídas.

- Utilizar las herramientas adecuadas para cada operación.
- Durante la instalación, asegurar la conexión de los componentes eléctricos, verificando su encaje correcto.
- Si durante la instalación los cableados atraviesan paredes con bordes afilados, utilice conductos o guías para evitar que los cables se dañen.



- **Aviso importante:** Tenga la precaución al conectar el equipo de no invertir las polaridades. Si esto sucediera, la placa de mandos no se encenderá y el equipo no se pondrá en funcionamiento.



Uso adecuado del producto

- **OPENAIR PLUS** es un equipo de aire acondicionado de techo de altas prestaciones apropiado para ser utilizado en autocaravanas y otros vehículos de recreo. No se recomienda su instalación en cualquier otro tipo de vehículo.
- El uso no conforme al previsto anula la garantía del equipo y excluye de responsabilidad al fabricante.
- Si no está seguro de cómo utilizar **OPENAIR PLUS**, revise el manual de usuario del producto.

De conformidad con la normativa internacional de gestión de calidad ISO 9001, Calidad en Automoción IATF 16949 y Gestión Ambiental ISO 14001, **Dirna Bergstrom** utiliza procesos de aseguramiento de la excelencia para garantizar la máxima calidad de sus productos. Certificado por IQNet Quality System.



ER-0022/1999



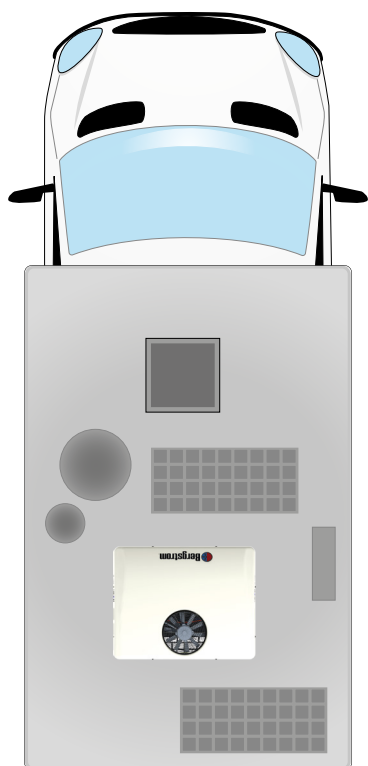
RA02-0027/2012
IATF: 0323311



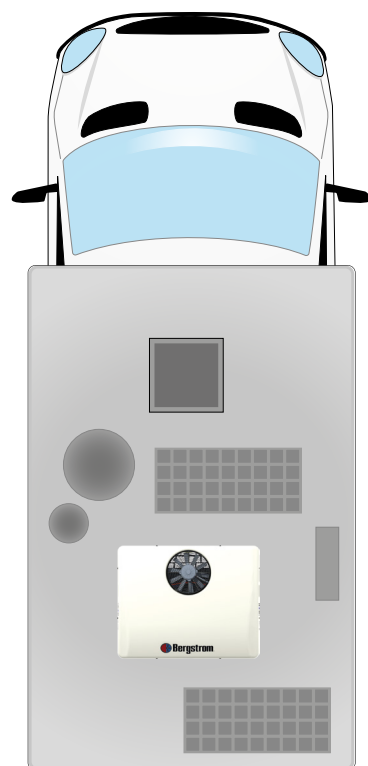
GA-2021/0140



OPCIONES DE MONTAJE



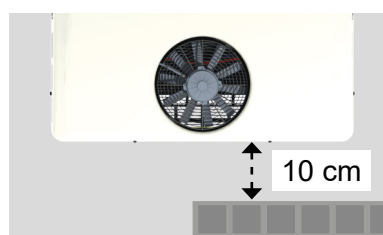
POSICIÓN DEL EQUIPO EN
SENTIDO DE LA MARCHA



POSICIÓN DEL EQUIPO EN
CONTRA DEL SENTIDO
DE LA MARCHA



Atención: Para garantizar una correcta ventilación del equipo y evitar un deficiente funcionamiento del mismo, debe mantenerse libre un espacio de al menos 10 cm a lo largo de la parte trasera de la unidad.





Atención: OPENAIR PLUS solo puede instalarse en vehículos con escotilla 70x50 que dispongan de:

- Espesor de techo desde 30 hasta 60 mm

1

Desmontar la escotilla 70x50 y el marco del vehículo donde va a situarse **OPENAIR PLUS**.



2

Colocar junta EPDM 25x15 de montaje del kit de adaptación alrededor del hueco de la escotilla.



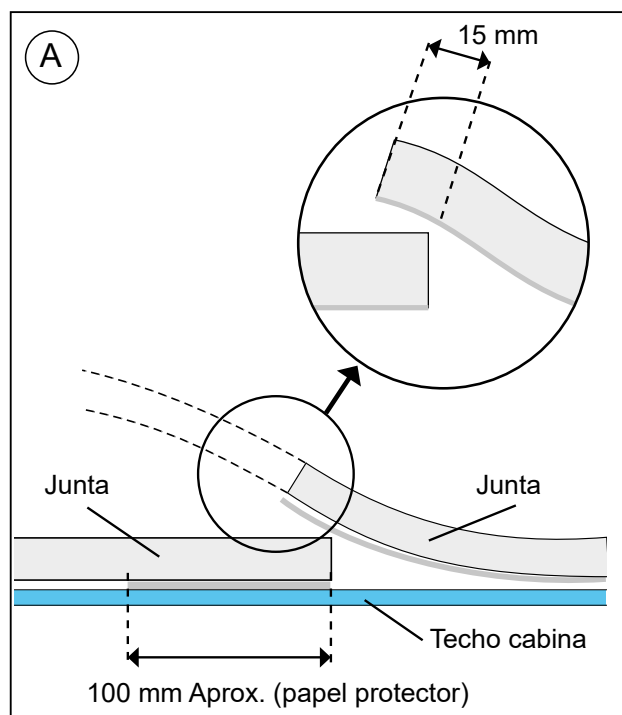
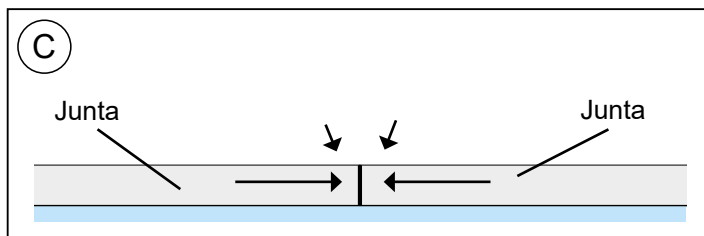
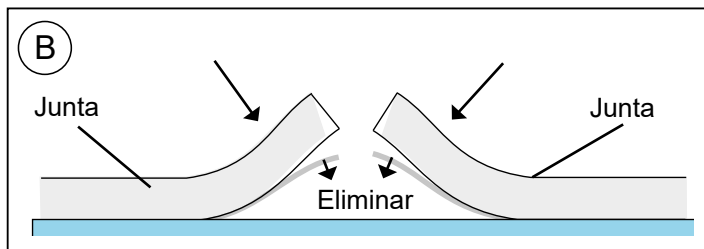


COMO CORTAR LA JUNTA EPDM PARA EVITAR FILTRACIONES DE AGUA EN EL INTERIOR DEL VEHÍCULO

A- Pegar la junta EPDM manteniendo 100 mm de papel protector por cada lado.

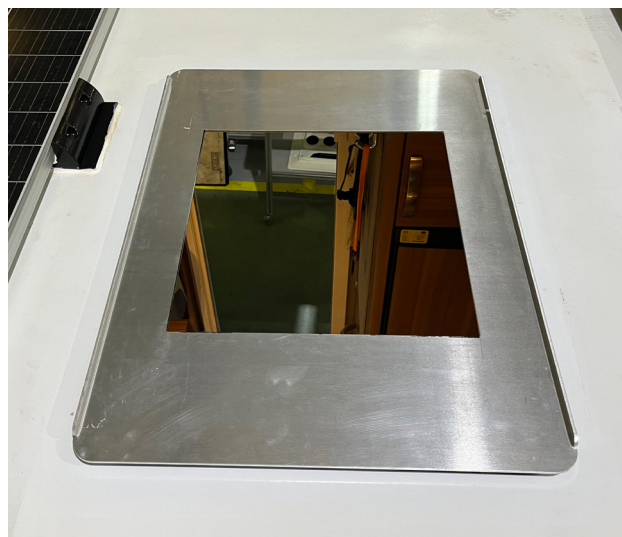
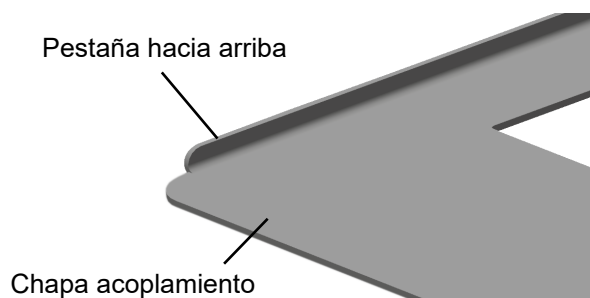
B- Quitar las dos piezas de papel.

C- Pegar extremos de la junta EPDM.



3

Situar la chapa de acoplamiento sobre la junta EPDM centrándola sobre el marco de escotilla en la posición que se indica.



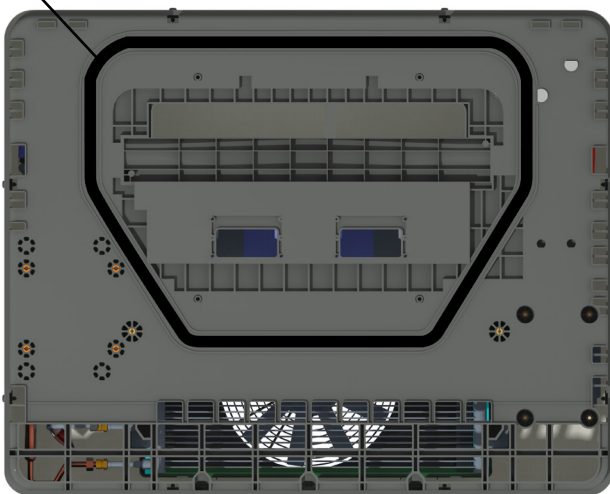
4

Elevar el equipo y pegar la junta EPDM de 25x25 en la base del equipo siguiendo la zona marcada para ello.

Atención: Si se coloca la junta EPDM en cualquier otra ubicación, el equipo no funcionará de forma correcta pudiendo producirse además, entrada de agua y aire en el interior del vehículo.

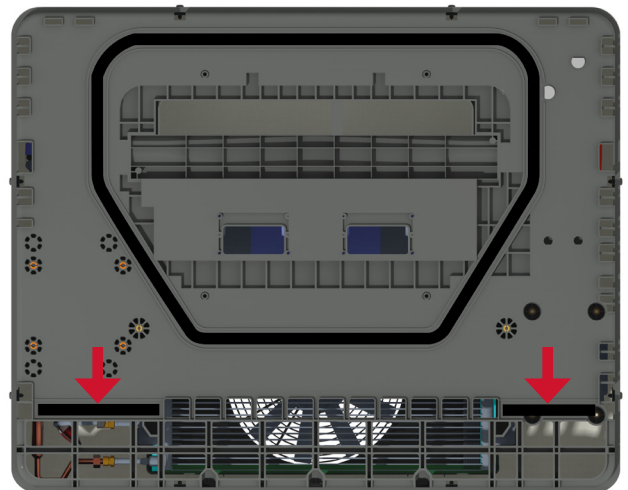
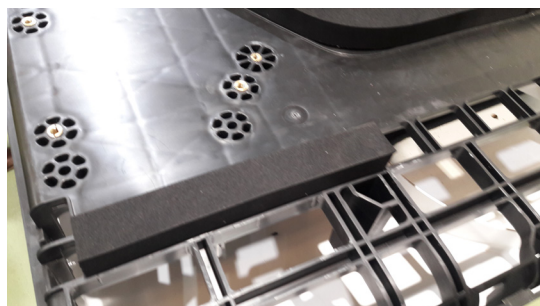


Junta EPDM



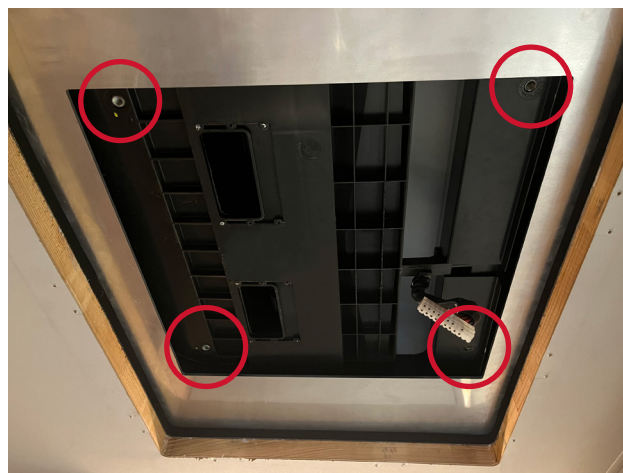
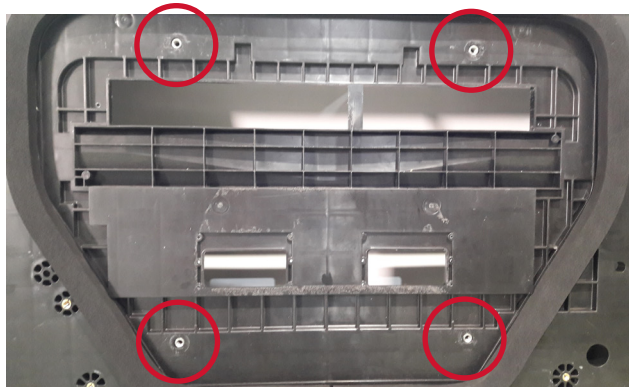
5

Montar en la base del equipo, donde se indica, los (2) tacos traseros de junta EPDM 100x30x20 mm suministrados en la bolsa del equipo.



6

Posicionar el equipo en el techo centrándolo desde el interior asegurando que los (4) puntos de fijación de los soportes de la base del equipo queden centrados en el hueco del techo.



7

Roscar al máximo (4) espárragos M8x70 en los puntos de fijación en la base del equipo.



8

Atención: En función del espesor del techo del vehículo se deberá montar la siguiente cantidad de separadores antes de colocar el soporte de fijación del equipo.

Espesor 30 mm: Sin separador.

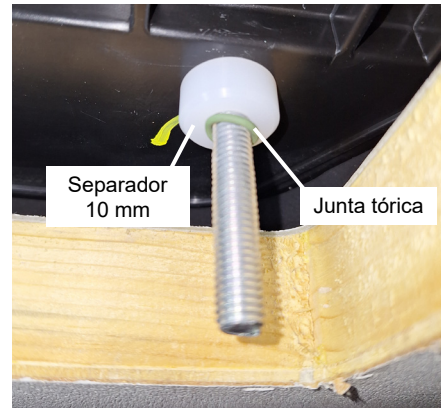
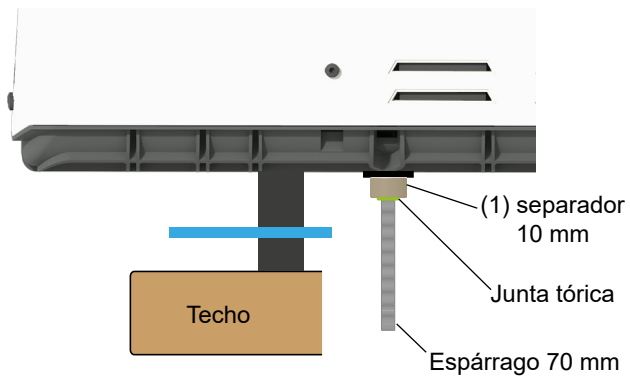
Espesor 40 mm: (1) separador 10 mm

Espesor 50 mm: (2) separadores 10 mm

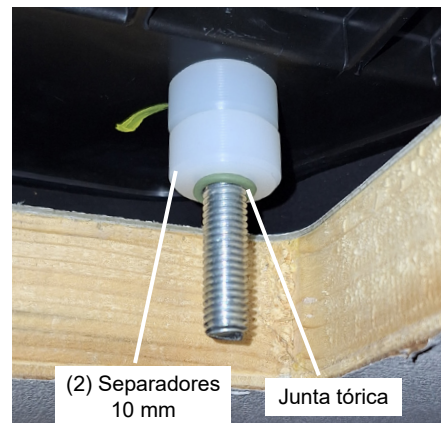
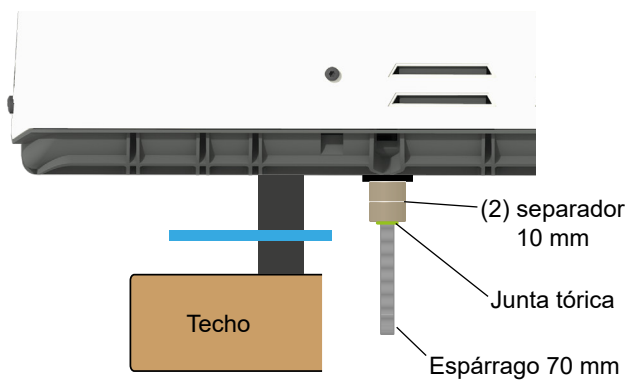
Espesor 60 mm: (3) separadores 10 mm

Colocar junta tórica como se indica para evitar la caída de los separadores.

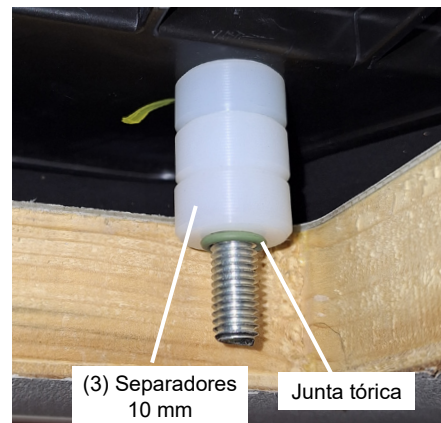
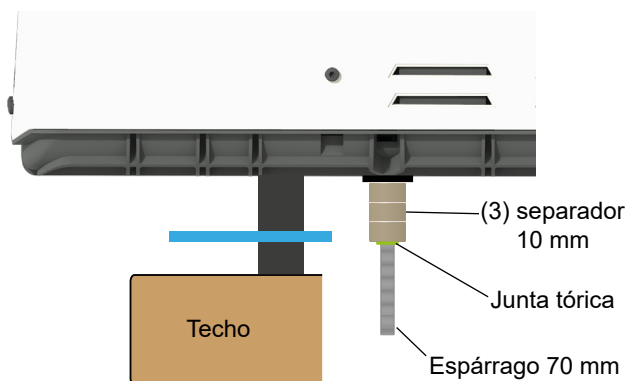
Espesor de techo 40 mm



Espesor de techo 50 mm

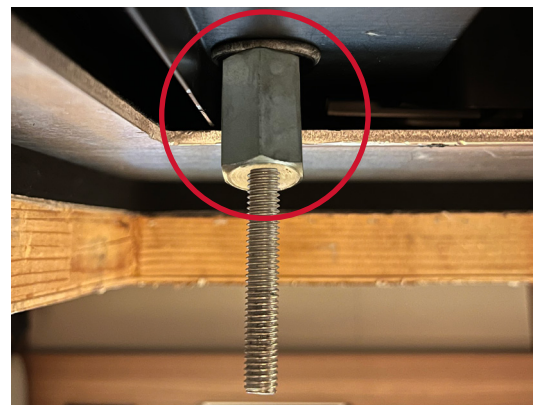


Espesor de techo 60 mm

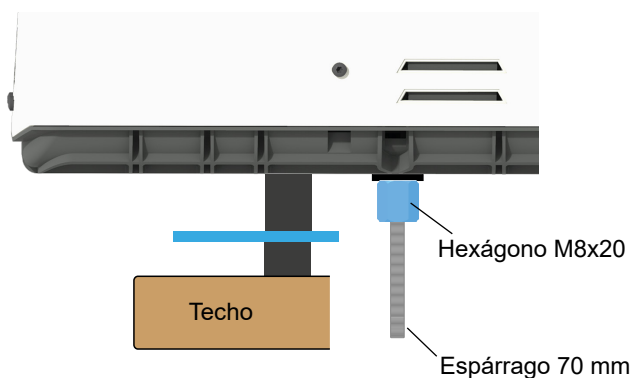


9

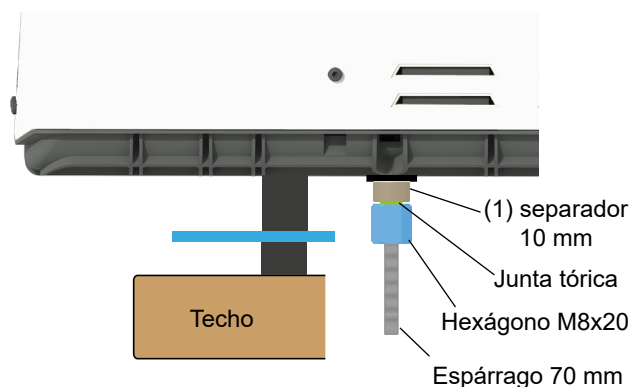
Montar y apretar (4) hexágonos M8x20.



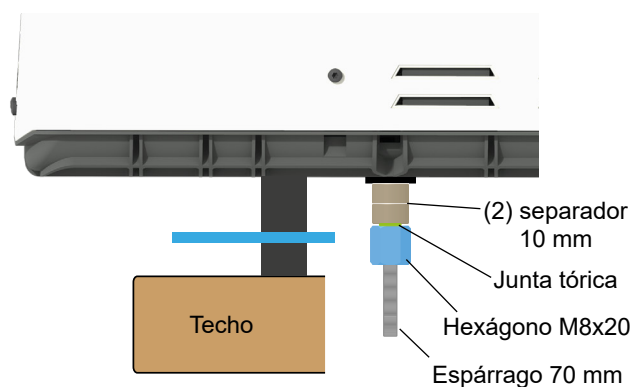
Espesor de techo 30 mm



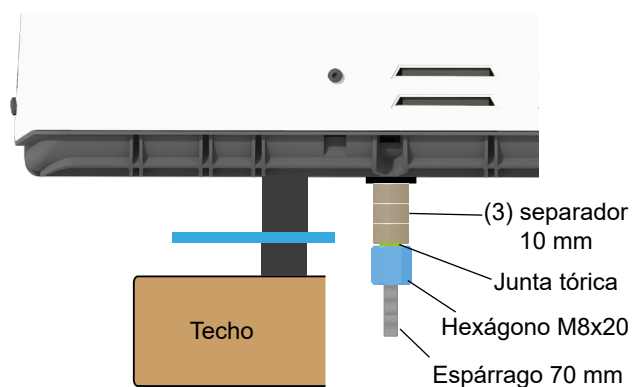
Espesor de techo 40 mm



Espesor de techo 50 mm



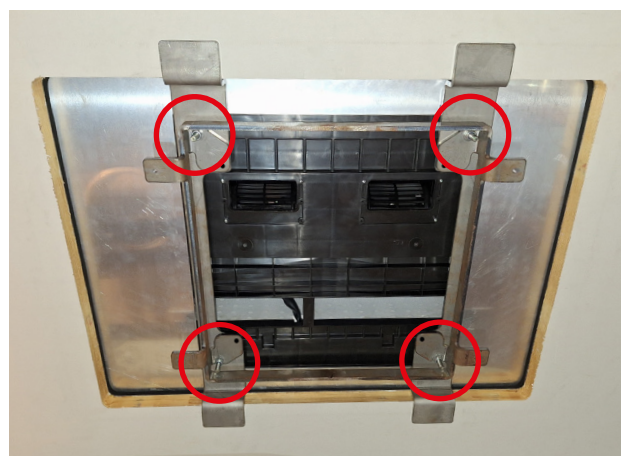
Espesor de techo 60 mm



10

Montar soporte incluido en el equipo junto con los (2) soportes suministrados en el kit en los (4) espárragos M8x70 con (4) arandelas planas de 8 mm y (4) tuercas autoblocantes M8.

Importante: No apretar las tuercas autoblocantes, solo posicionar los soportes.



11

Situar consola introduciéndola primero por un lado del soporte sobre las dos pestañas de fijación de la consola interior y desplazarla hacia el lado contrario para poder introducirla sobre las dos pestañas del otro lado del soporte.



12

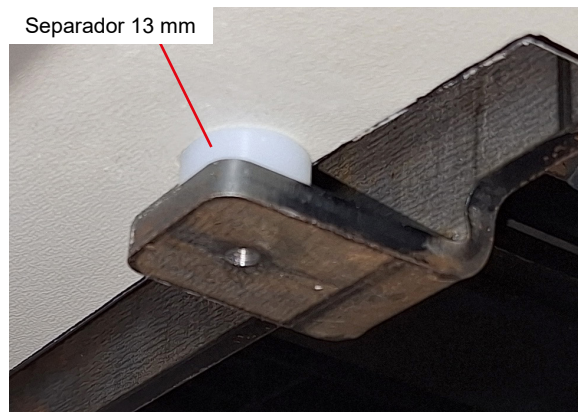
Colocar (4) separadores de 13 mm entre las pestañas del soporte de fijación del equipo y la consola. Apretar tuercas autoblocantes de fijación de los soportes hasta dejar la consola totalmente centrada y pegada al techo.

Comprobar que la junta exterior EPDM del equipo se ha comprimido entre 3 y 6 mm

Importante: Para evitar posibles filtraciones de agua al interior del vehículo se debe asegurar el apriete de la junta EPDM con la base del equipo.



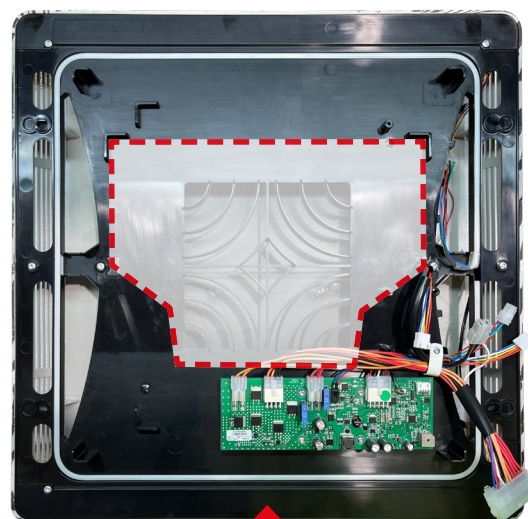
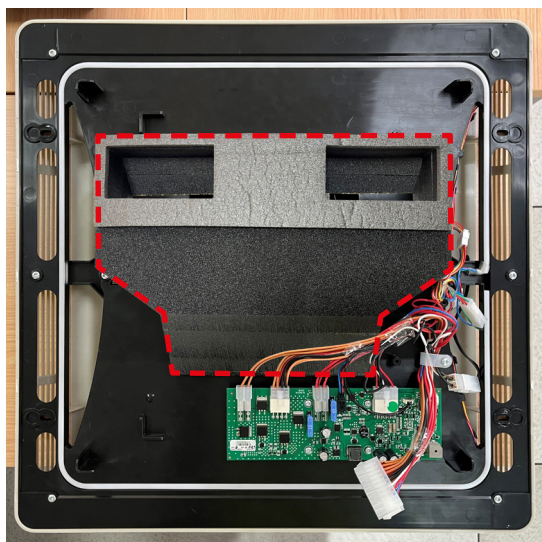
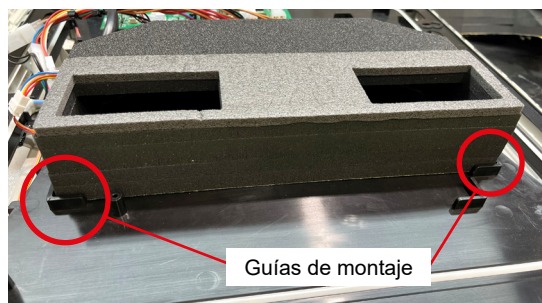
Separador 13 mm



13

Pegar canalizador en la consola interior del equipo en la zona indicada.

Importante: Asegurarse que el canalizador queda ajustado a las guías de montaje.



14

En función del espesor del techo del vehículo, agregar juntas suplemento del canalizador pegándolas centrada sobre el mismo y haciendo coincidir los huecos de salida de aire:

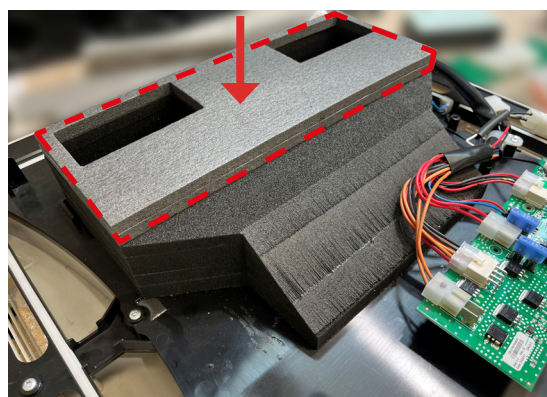
Espesor de:

30 mm: Canalizador + (3) juntas suplemento.

40 mm: Canalizador + (4) juntas suplemento.

50 mm: Canalizador + (5) juntas suplemento.

60 mm: Canalizador + (6) juntas suplemento.



15

Continuar el proceso de instalación de la consola interior siguiendo los pasos indicados en los puntos 11, 12, 13 y 14 de las instrucciones propias del equipo, documento 1003855547 páginas 14 y 15.

Atención: En el punto 13 de las instrucciones del equipo, fijar consola interior con los (4) tornillos M5 x 50 suministrados en el kit.

Para completar el montaje del cableado de alimentación y señal del equipo a batería, seguir los pasos indicados en las páginas 18 y 19 de las instrucciones propias del equipo, documento 1003855547.



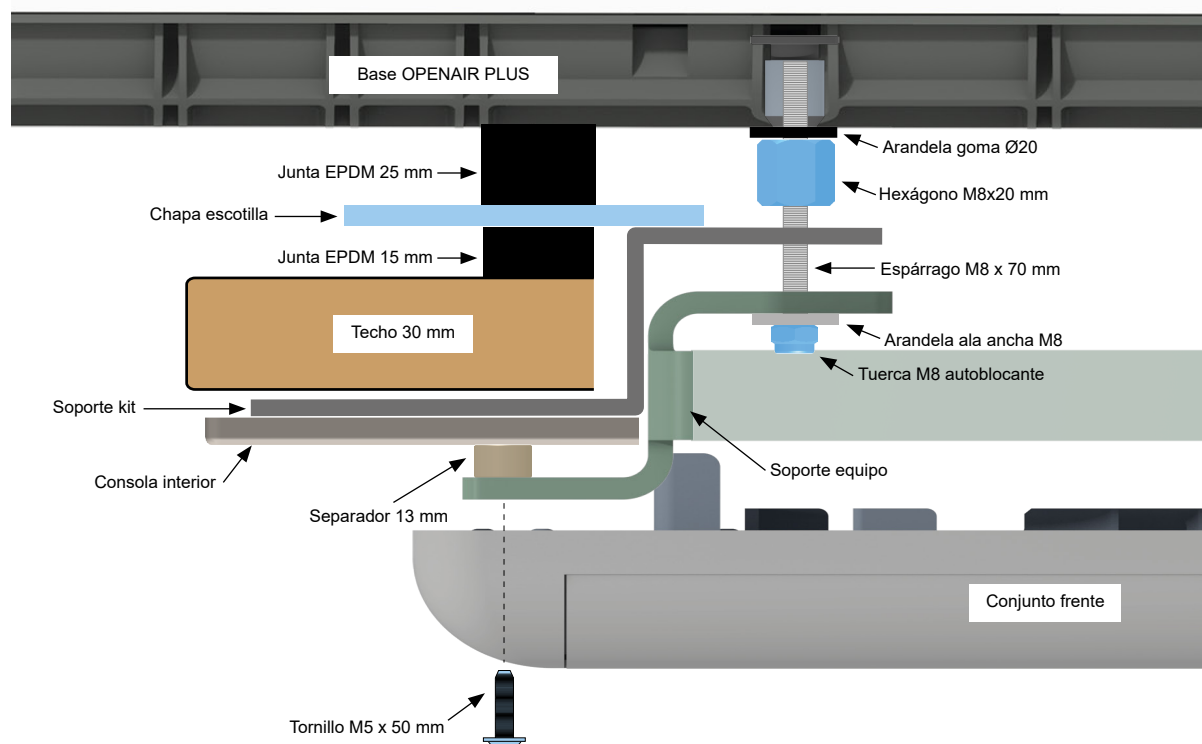
Tiene a su disposición todos los manuales del producto en sus versiones digitales (PDF) en:

<https://bergstrominc.com/es/>

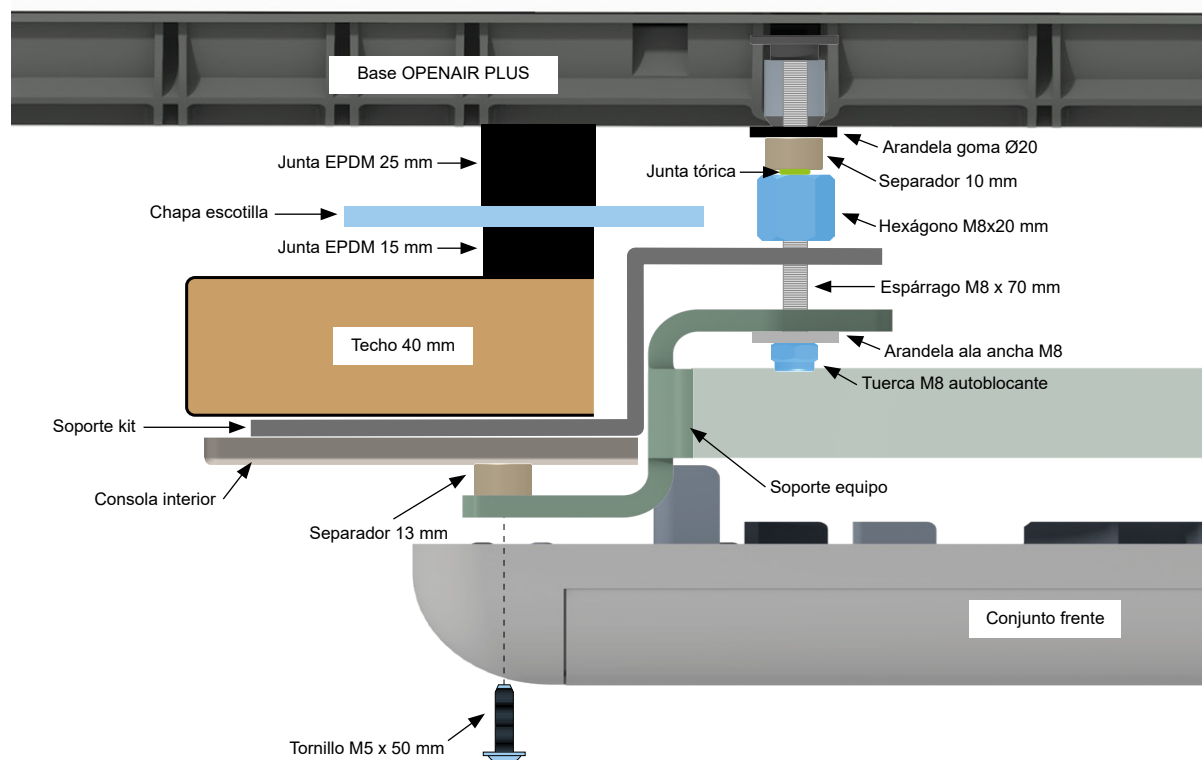
Atención: Las imágenes contenidas en el proceso de instalación de las instrucciones de montaje del equipo **OPENAIR PLUS** pueden no reflejar con exactitud su tipo de vehículo, pero esto, no afectará en ningún caso al proceso de instalación.

ESQUEMAS DE MONTAJE

Espesor de techo 30 mm

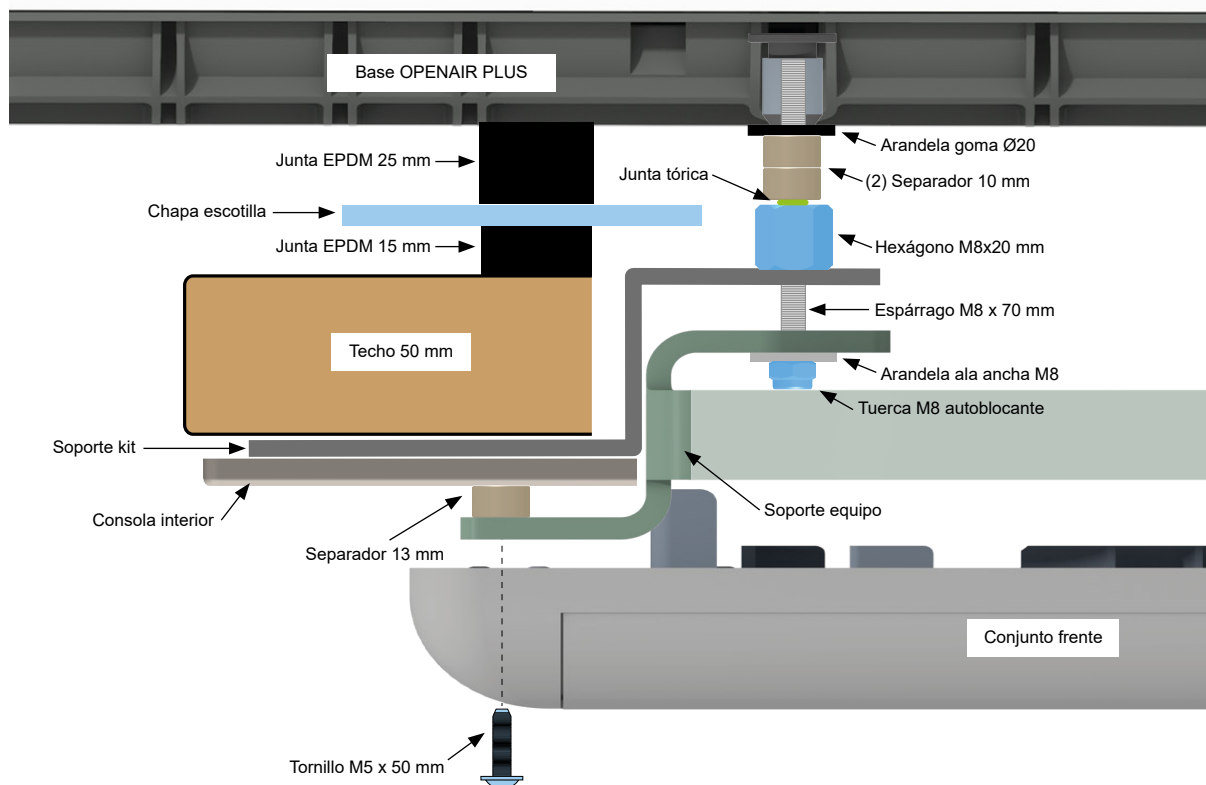


Espesor de techo 40 mm

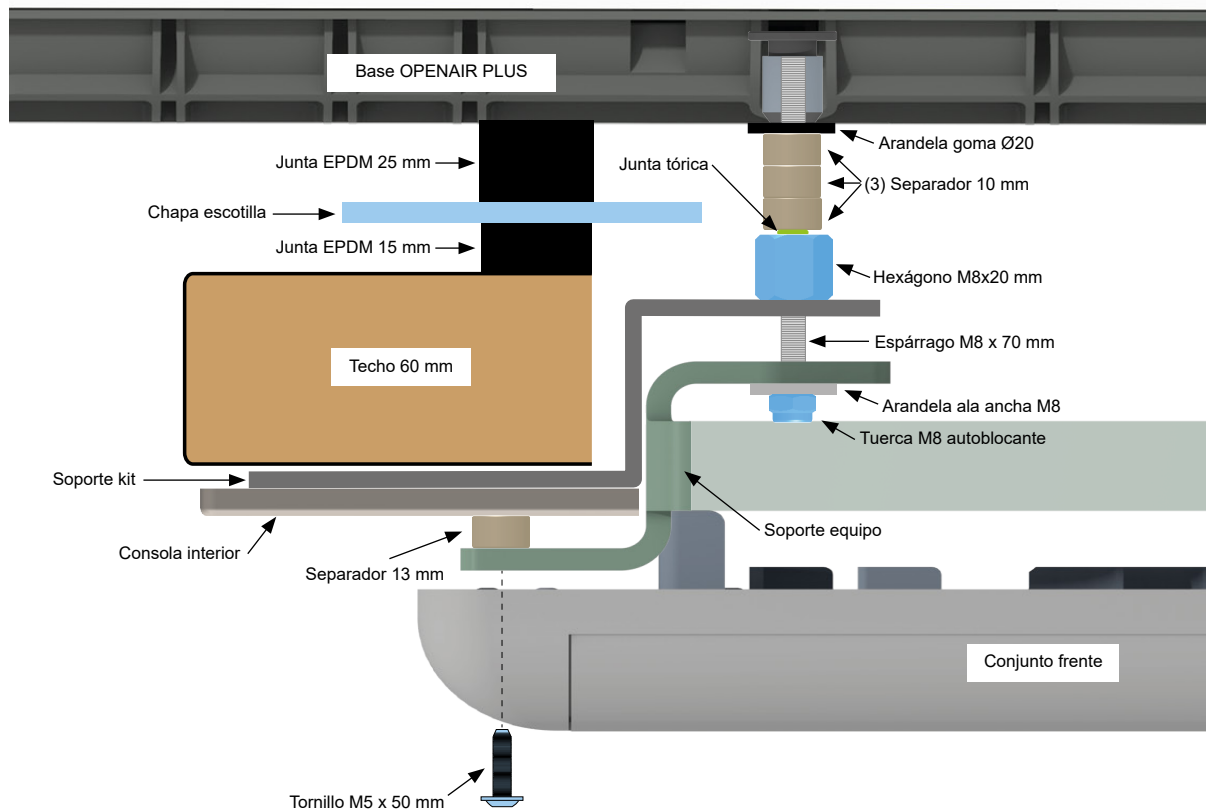


ESQUEMAS DE MONTAJE

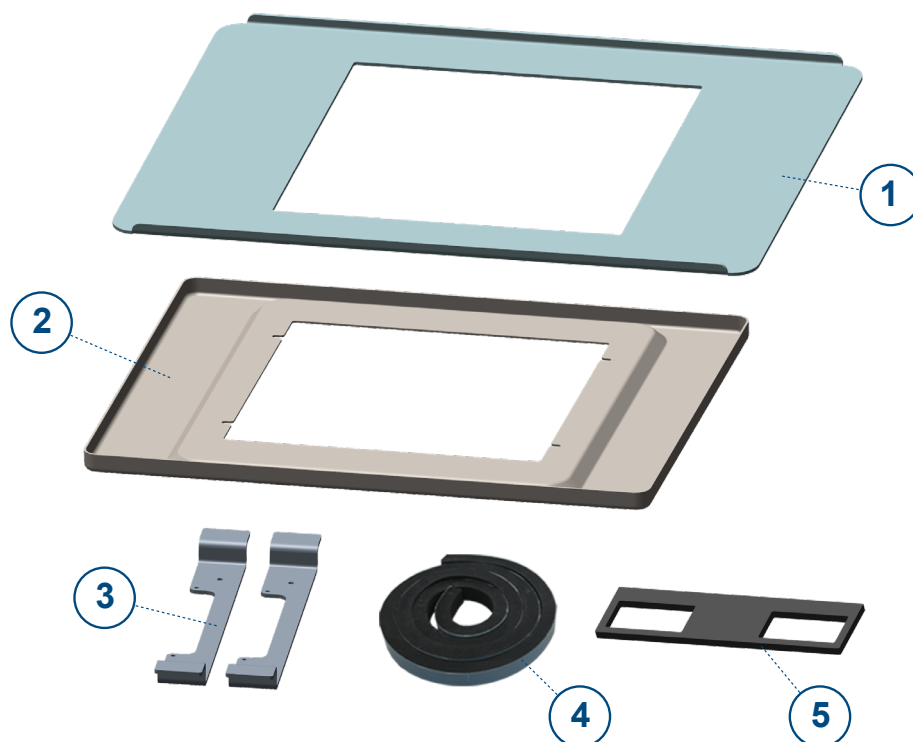
Espesor de techo 50 mm



Espesor de techo 60 mm



Listado de recambios



Id.	Ctd.	Referencia	Descripción
1	1	1003390530	Placa de acoplamiento
2	1	1003780475	Consola interior 786 x 600 mm
3	1	1003812227	Soporte de montaje
4	1	1003910726	Junta EPDM 25x15
5	1	1003855336	Junta suplemento del canalizador

NOTAS

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Firstly, may we congratulate you on your decision to purchase the 12 V **OPENAIR PLUS** air conditioning unit from our **Caravaning** range. You are now the owner of a high-performance air conditioning unit manufactured by **Dirna Bergstrom** for use in mobile homes and other recreational vehicles, with or without the engine running.

OPENAIR PLUS is a technologically advanced solution that optimises performance and reduces energy consumption in your vehicle's auxiliary battery. These are the features that make it unique on the recreational vehicle climate control market.



Read this document carefully before

installing the product. Keep this document for future reference. The original documentation was written in Spanish, all other languages are translations.

All product manuals are available in digital version (PDF) at

<https://bergstrominc.com/es/>

All sales and warranty transactions are subject to the latest version of our general terms and conditions of sale, as published on our website

<https://bergstrominc.com/es/>

The manual includes the latest technological advances in this range at the time of publication. However, continuous improvement means there may be minor differences.

Explanation of symbols



- **Warning:** A safety alert indicating a situation which, if not avoided, could result in death or serious injury.



- **Hazard:** Cutting hazard. Indicates a situation that could lead to cuts.



- **Hazard:** Electrocution hazard. Indicates a situation that could lead to electrocution.



- **Alert:** Safety alert informing about a situation which, if not avoided, could result in damage to the unit or other materials.



- **Information:** Additional information on installing or handling the product.



- **Fragile:** Indicates a situation in which care must be taken to avoid damage to the unit and other materials.



Explanation of liabilities

- **Dirna Bergstrom** accepts no liability for any damage caused in the following cases:

- Damage to the product due to mechanical influences and surges.
- Modifications to the equipment without the manufacturer's express consent.
- Use of the equipment for purposes not described in this document.
- Improper handling or installation of the air conditioning unit.

- When installing **OPENAIR PLUS** on the roof, bear in mind that vehicles with a skylight normally have a structure strong enough for the weight of the unit. However, whenever it is necessary to make a cut in the roof, or when the roof material used with the skylight is not strong enough (fibreglass, plastic, etc.), **the installer must decide, under his/her sole responsibility**, on the need to reinforce the roof in order to avoid any deformation, breakage, water ingress, etc., and must provide the necessary means to prevent this from happening.

OPENAIR PLUS is a versatile unit that can be installed every 180° in order to adapt to the available space on the vehicle's roof, meaning it does not interfere with the rest of the accessories.



Warnings during assembly

- This equipment may only be installed, repaired, and maintained by technical personnel with due training in vehicle air conditioning, potential hazards and applicable standards.
- Read the assembly instructions carefully before installing **OPENAIR PLUS**. Follow the instructions carefully during installation.
- Switch off the ignition key before starting to install the unit.
- Disconnect the vehicle's battery before starting to install **OPENAIR PLUS**.
- Install **OPENAIR PLUS** securely to prevent it from falling.
- Use appropriate tools for each operation.
- During installation, ensure the connection of the electrical components, checking that they are fitted correctly.

- If the cable passes through sharp-edged walls during installation, use ducts or guides to prevent any damage to it.



- **Important alert:** Make sure the polarities are not reversed when connecting the unit. If this happens, the control board will not come on and the unit will not work.



Proper use of the product

- **OPENAIR** is a high-performance roof-mounted air conditioning unit for use in motorhomes and other recreational vehicles. Installation in any other type of vehicle is not recommended.
- Using it in any way other than as envisaged will void the unit's warranty and exempt the manufacturer from any liability.
- See the product's user manual if you are not sure how to use **OPENAIR PLUS**.

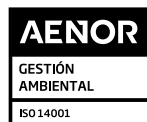
Dirna Bergstrom uses excellence assurance processes in accordance with international quality management standards ISO 9001, Automotive Quality IATF 16949, and Environmental Management ISO 14001 to ensure the highest quality of its products. Certified by IQNet Quality System.



ER-0022/1999



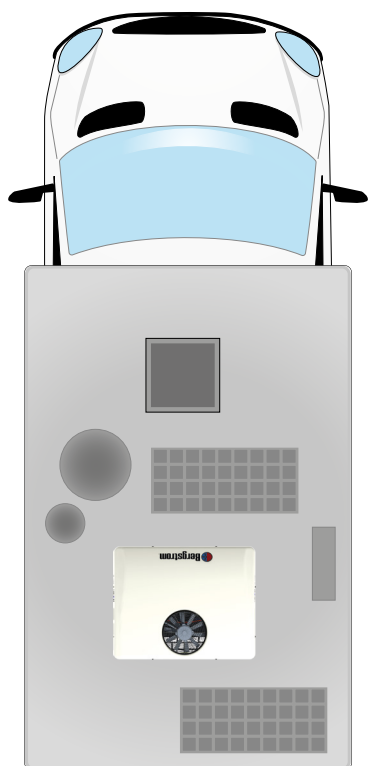
RA02-0027/2012
IATF: 0323311



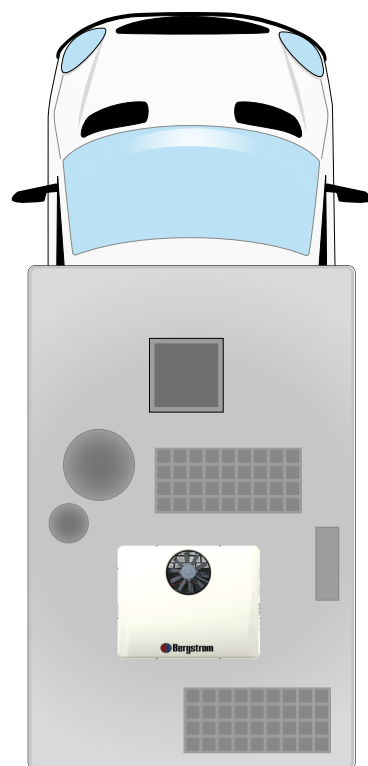
GA-2021/0140



ASSEMBLY OPTIONS



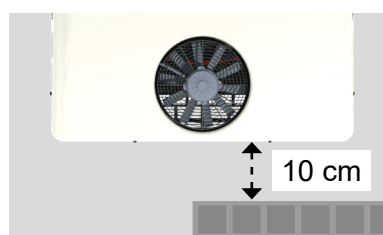
UNIT POSITION IN
DIRECTION OF TRAVEL



UNIT POSITION AGAINST
DIRECTION OF TRAVEL



Attention: To ensure proper ventilation of the equipment and avoid poor operation, a space of at least 10 cm must be kept clear along the back of the unit.





Caution: OPENAIR PLUS can only be installed in vehicles with a 70x50 hatch that are equipped with:

- Roof 30 to 60 mm thick

1

Remove the 70x50 hatch and the frame of the vehicle where the **OPENAIR PLUS** will be installed.



2

Place the EPDM 25x15 mounting seal from the adaptation kit around the hatch opening.



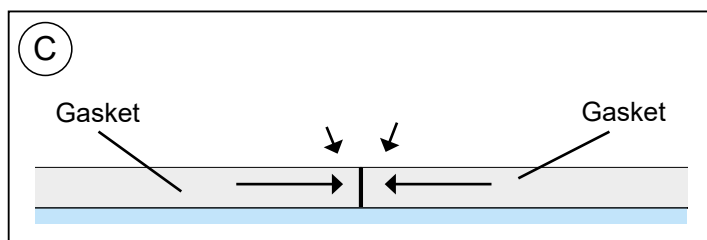
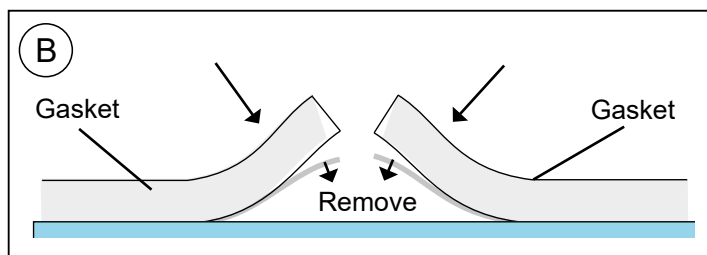
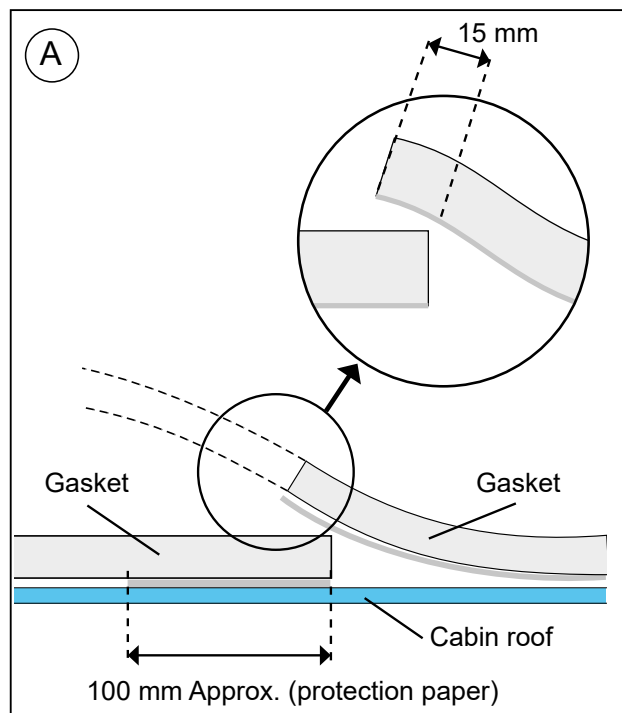


HOW TO CUT EPDM GASKET TO AVOID WATER FILTRATION INTO THE CABIN

A- Glue gasket, keeping 100 mm of protection paper at each side.

B- Remove the two pieces of paper.

C- Glue by pressing both ends.

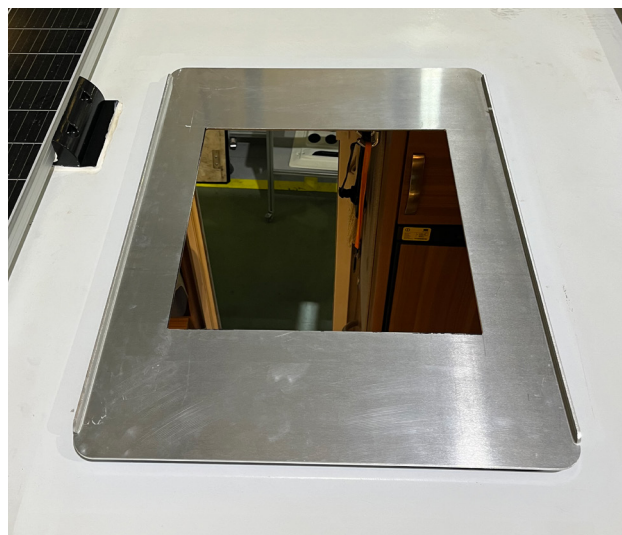
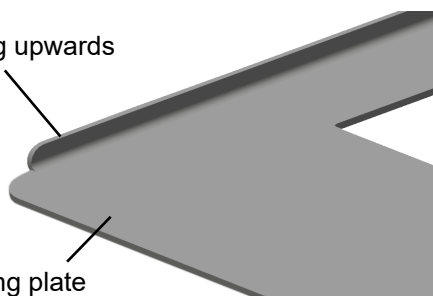


3

Fit the coupling plate on the EPDM seal, aligning it on the hatch frame in the position shown.

Tab facing upwards

Coupling plate



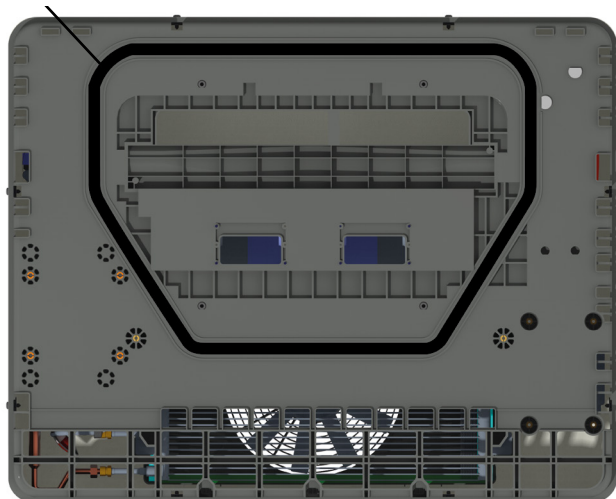
4

Lift the unit and attach the 25x25 EPDM seal on the base of the unit, following the marked area.

Caution: If the EPDM seal is installed in any other location, the equipment will not work properly and may cause the ingress of water.

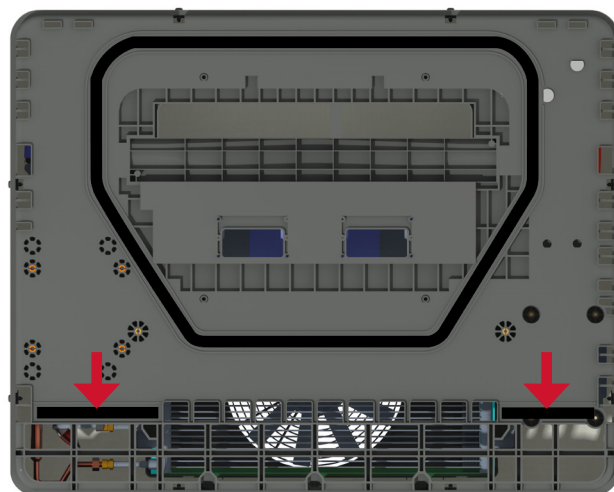
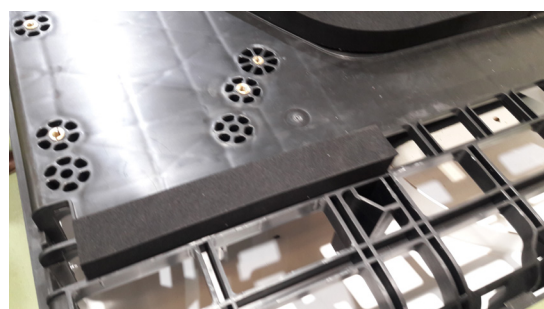


EPDM seal



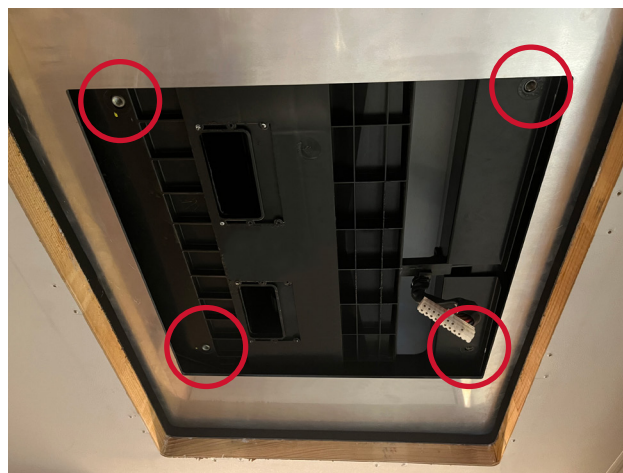
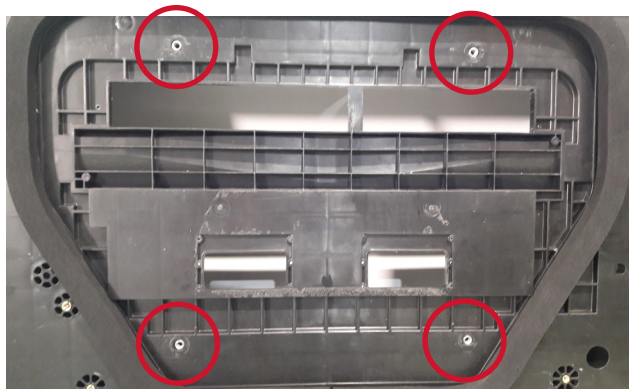
5

Fit the two (2) rear EPDM gasket blocks (100×30×20 mm), supplied in the unit's bag, to the base of the unit at the indicated positions.



6

Place the unit on the roof by aligning it from inside, ensuring that the (4) fastening brackets on the base of the unit are aligned in the space in the roof.



7

Screw into the maximum (4) M8x70 studs at the fixing points on the base of the unit.



8

Caution: Depending on the thickness of the vehicle's roof, the following number of separators should be installed before placing the fixing hexagons on the studs.

Thickness 30 mm: No separator.

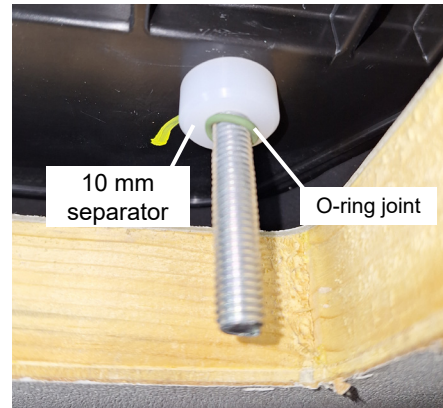
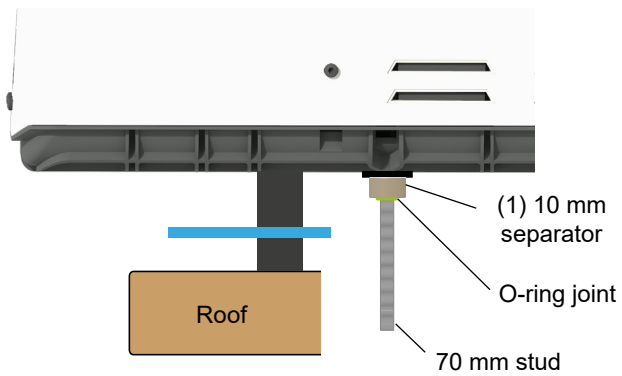
Thickness 40 mm: Fit (1) 10 mm separator

Thickness 50 mm: Fit (2) 10 mm separator

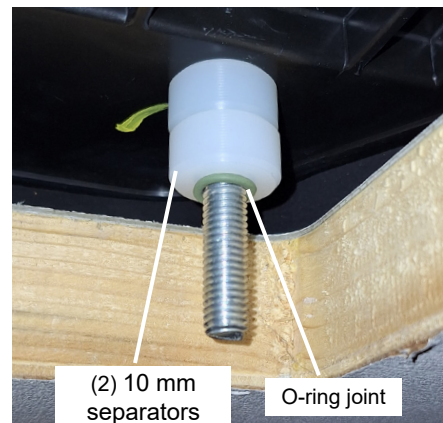
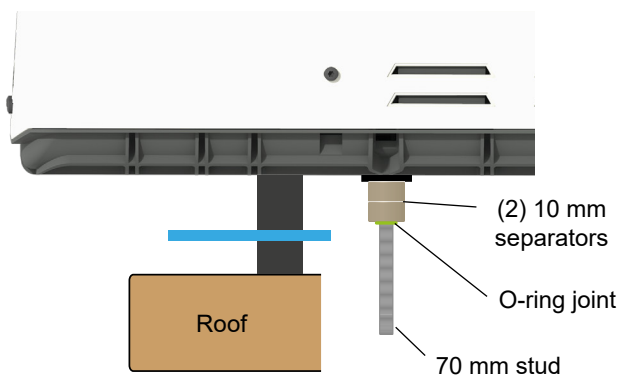
Thickness 60 mm: Fit (3) 10 mm separator

Place the O-ring as indicated to prevent the spacers from falling.

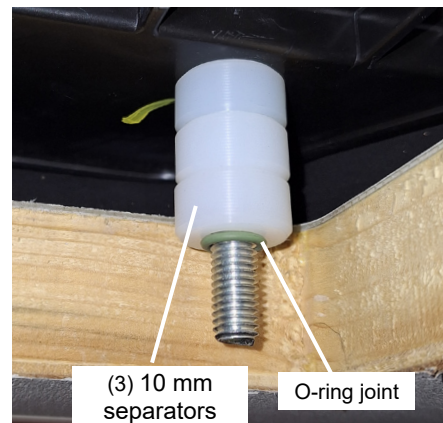
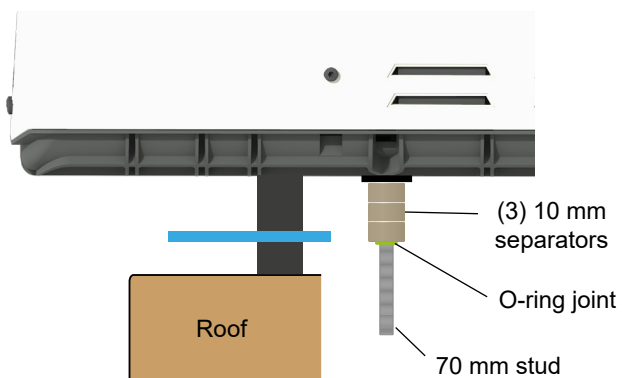
40 mm roof thickness



50 mm roof thickness

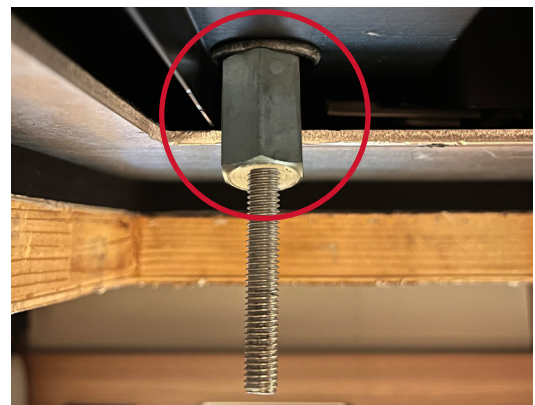


60 mm roof thickness

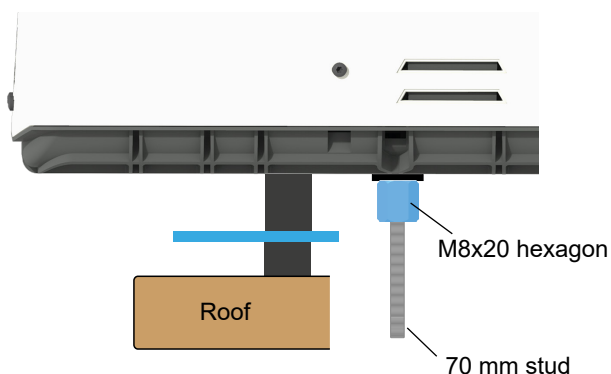


9

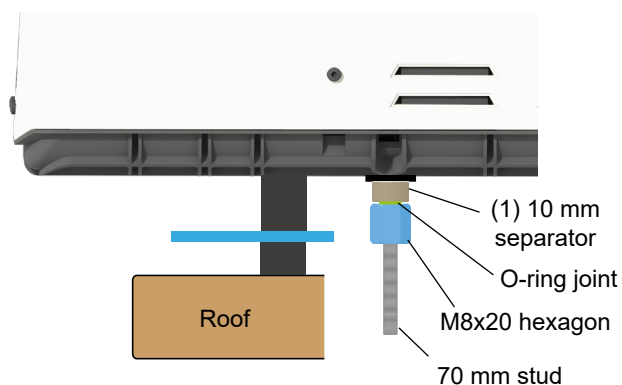
Mount and tighten (4) M8x20 hexagons.



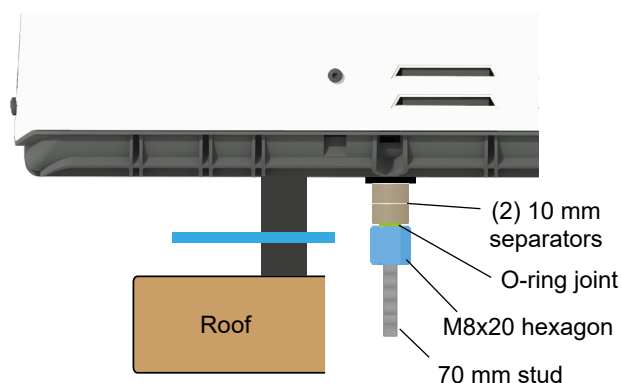
30 mm roof thickness



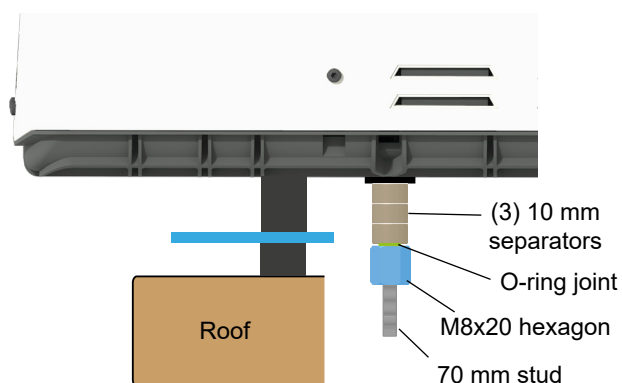
40 mm roof thickness



50 mm roof thickness



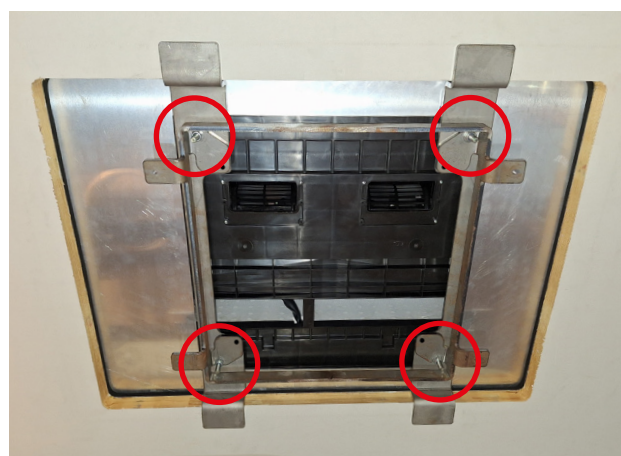
60 mm roof thickness



10

Mount the bracket included with the unit together with the two (2) brackets supplied in the kit onto the four (4) M8×70 studs, using four (4) 8 mm flat washers and four (4) M8 self-locking nuts.

Important: Do not tighten the self-locking nuts, only position the brackets.



11

Position the console by first inserting one side into the bracket, aligning it with the two fixing tabs on the interior console. Then slide it towards the opposite side to engage it with the two tabs on the other side of the bracket.



12

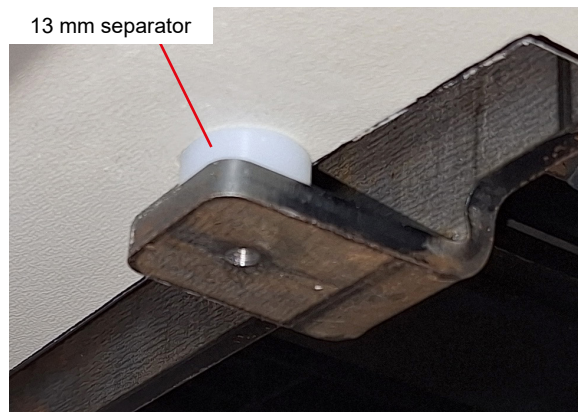
Place (4) 13 mm spacers between the tabs of the unit fixation support and the console. Tighten the self-locking nuts securing the brackets until the console is fully centred and flush with the roof.

Check that the EPDM external seal of the unit has been compressed between 3 and 6 mm

Important: To prevent possible water leaks inside the vehicle, the tightening of the EPDM seal with the unit base must be ensured.



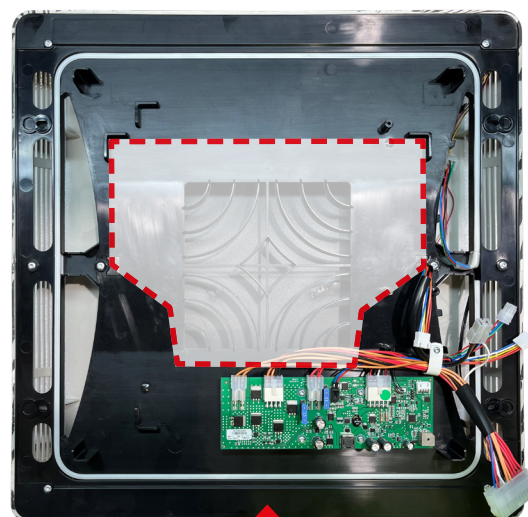
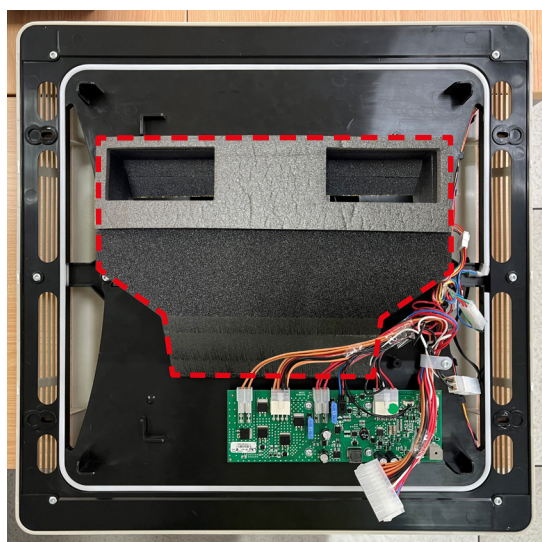
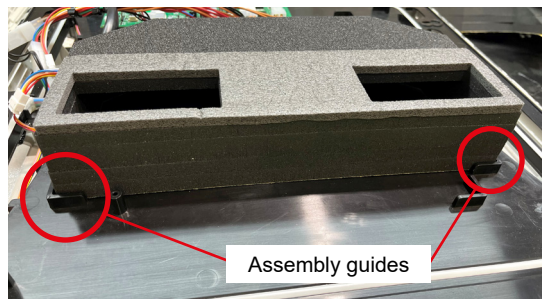
13 mm separator



13

Attach the duct system to the interior console of the unit in the indicated area.

Important: Ensure that the duct system is properly adjusted to the assembly guides.



14

Depending on the thickness of the vehicle's roof, add a supplementary seal to the duct system by centring it over the same, aligning the air outlet openings.

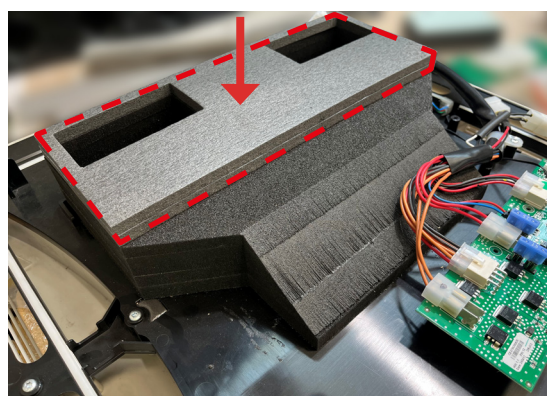
Thickness:

30 mm: Duct system + (3) supplementary seal.

40 mm: Duct system + (4) supplementary seal.

50 mm: Duct system + (5) supplementary seal.

60 mm: Duct system + (6) supplementary seal.



15

Continue the installation of the interior console by following the steps outlined in points 11, 12, 13 and 14 of the unit's specific instructions, document 1003855547, pages 34 and 35.

Caution: In point 13 of the equipment instructions, secure the interior console with the (4) M5 x 50 screws provided in the kit.

To complete the wiring of the power and signal cables from the battery-powered unit, follow the steps provided on pages 38 and 39 of the unit's specific instructions, document 1003855547.



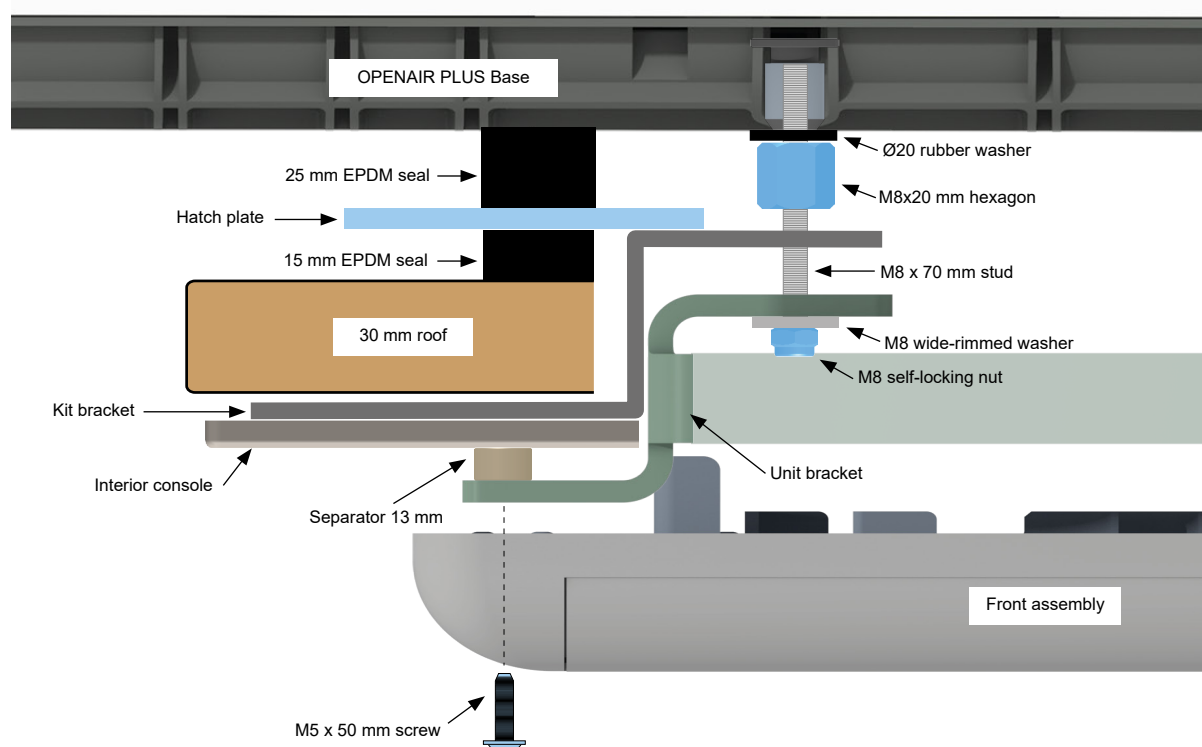
All product manuals are available in their digital versions (PDF) at:

<https://bergstrominc.com/es/>

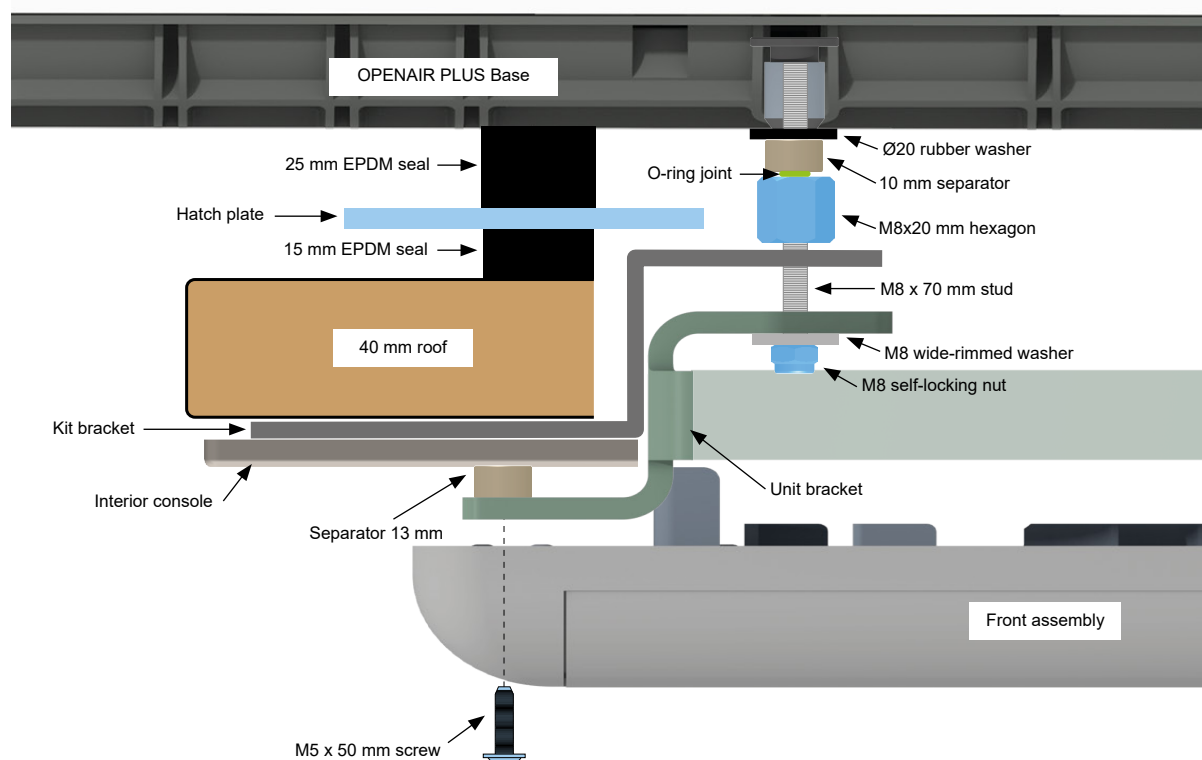
Caution: The images shown in the installation instructions for the **OPENAIR PLUS** equipment may not accurately represent your vehicle type, but this will in no way affect the installation process.

ASSEMBLY DIAGRAMS

30 mm roof thickness

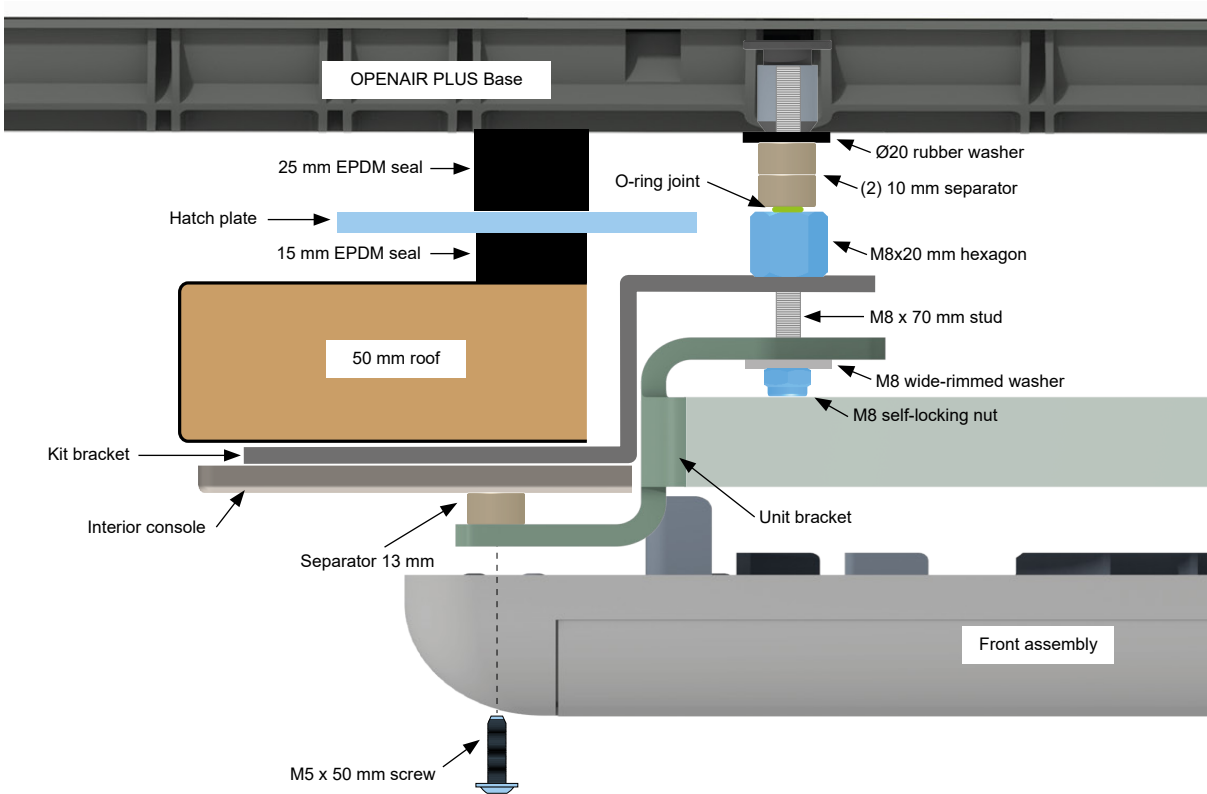


40 mm roof thickness

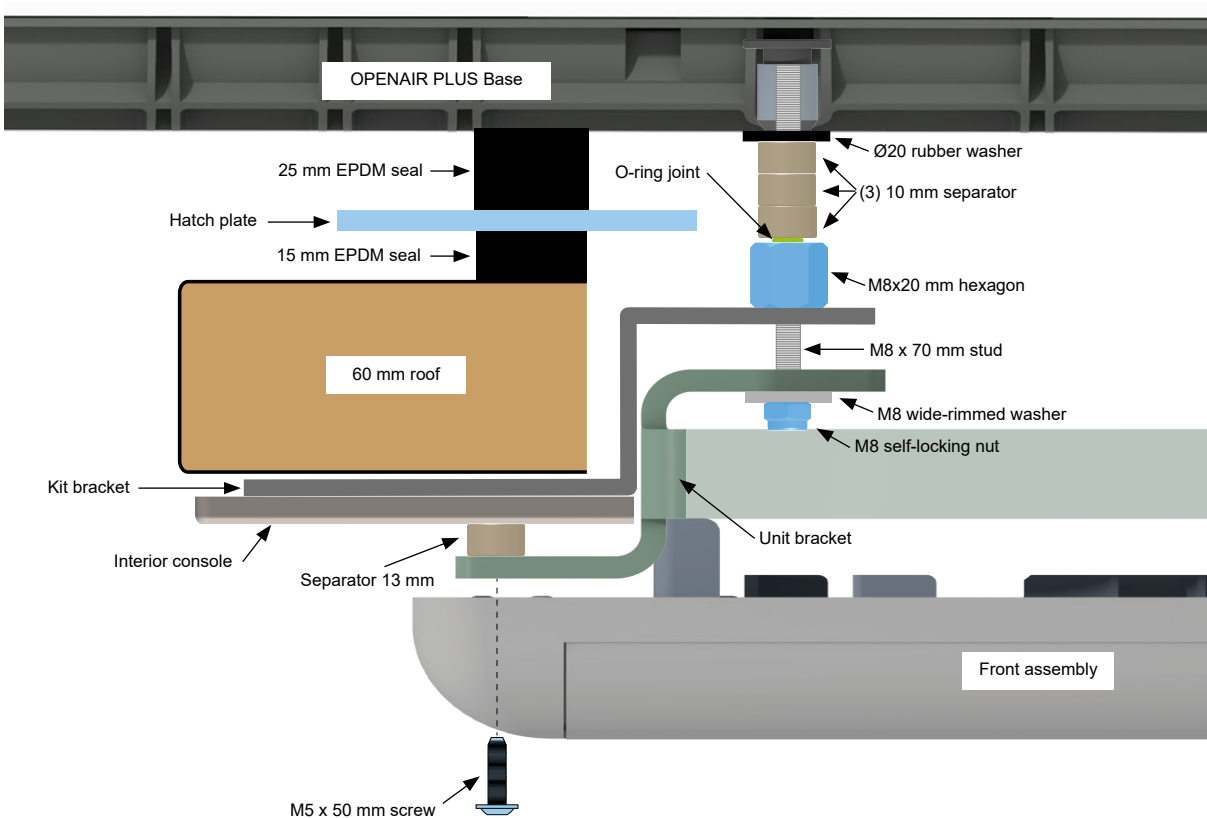


ASSEMBLY DIAGRAMS

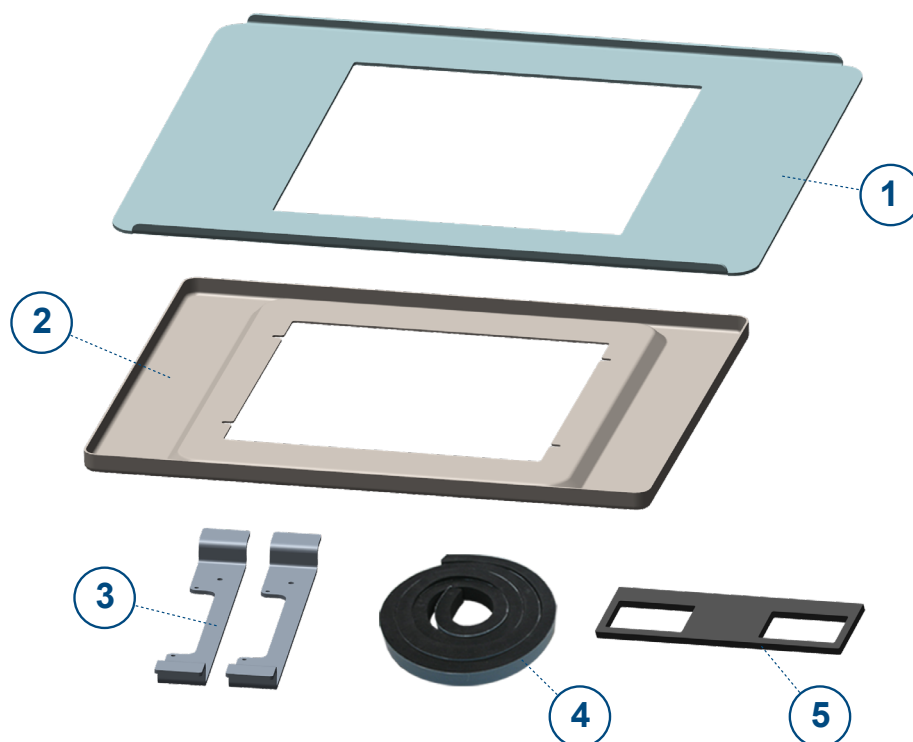
50 mm roof thickness



60 mm roof thickness



List of spare parts



Id.	Qty.	Code nº	Spare parts
1	1	1003390530	Coupling plate
2	1	1003780475	Interior console 786 x 600 mm
3	1	1003812227	Assembly bracket
4	1	1003910726	25x15 EPDM seal
5	1	1003855336	Duct system supplementary seal

NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Nous vous remercions de votre achat et de la confiance témoignée à notre gamme de produits **Caravaning**.

OPENAIR PLUS est une unité de climatisation à haute performance fabriquée par **Dirna Bergstrom** à utiliser dans les camping-cars et autres véhicules de loisirs en ayant coupé le moteur ou avec ce dernier en marche.

OPENAIR PLUS est conçu avec la technologie la plus avancée pour obtenir une performance efficace et efficiente et une réduction de la consommation d'énergie de la batterie auxiliaire de votre véhicule. Ce sont ces caractéristiques qui le rendent unique sur le marché de la climatisation pour véhicules de loisir.



Veuillez lire attentivement ce document avant d'installer le produit. Conservez ce document pour toute référence ultérieure. La documentation d'origine a été rédigée en espagnol, les autres langues sont donc des traductions.

Vous avez à votre disposition tous les manuels des produits dans leurs versions numériques (PDF) sur <https://bergstrominc.com/es/>

Toute opération de vente ou de garantie est soumise à nos conditions générales de vente dans leur version la plus à jour, publiée sur notre site Web <https://bergstrominc.com/es/>

Ce manuel reflète les derniers progrès techniques de cette gamme au moment de la publication. Toutefois il peut exister quelques différences en raison du perfectionnement continu.

Explication des symboles



- **Avertissement** : Avis de sécurité informant d'une situation qui, si elle n'est pas évitée, pourrait conduire à des blessures graves ou la mort.



- **Danger** : Risque de coupure. Signale une situation qui pourrait conduire à une coupure.



- **Danger** : Risque d'électrocution. Signale une situation qui pourrait conduire à une électrocution.



- **Avertissement** : Avis de sécurité informant d'une situation qui, si elle n'est pas évitée, pourrait entraîner des dommages matériels (appareil ou autre).



- **Information** : Information complémentaire sur l'installation ou la manipulation du produit.



- **Fragile** : Indique une situation dans laquelle il faut procéder avec précaution afin de ne pas endommager l'unité ou d'autre matériel.



Explication des responsabilités

- **Dirna Bergstrom** décline toute responsabilité en termes de dommages causés dans les cas suivants :

- Dommages au produit dus à des influences mécaniques et à des surtensions.
- Modifications apportées à l'unité sans le consentement exprès du fabricant.
- Utilisation de l'unité à des fins non décrites dans ce document.
- Manipulation ou installation inappropriée de l'unité de climatisation.

- Lors de l'installation de l'**OPENAIR PLUS** sur le toit, tenez compte du fait que généralement les véhicules, qui sont dotés d'une trappe, possèdent la structure suffisante pour supporter le poids de l'unité. Toutefois, lorsqu'il en est autrement et qu'une découpe du toit est nécessaire, ou si le matériel n'est pas assez résistant (toits en fibre, plastique, etc.) malgré la présence d'une trappe, **l'installateur doit décider, sous sa responsabilité**, si un renfort est nécessaire, afin d'éviter une éventuelle déformation, rupture, entrée d'eau, etc., en habilitant les moyens requis pour que cela ne se produise pas.

OPENAIR PLUS est une unité polyvalent dont l'installation peut se faire tous les 180° pour l'adapter à l'espace disponible sur le toit du véhicule afin qu'il n'interfère pas avec le reste des accessoires.



Mises en garde au cours du montage

- L'installation, la réparation et l'entretien de cette unité, ne peuvent être réalisés que par un personnel technique suffisamment formé sur la climatisation des véhicules, les dangers éventuels et les normes applicables.
- Lire attentivement les consignes de montage avant de commencer l'installation de l'**OPENAIR PLUS**. Pendant l'installation, suivre au pied de la lettre les consignes indiquées.
- Débrancher la clé de contact avant de commencer l'installation de l'unité.
- Débrancher la batterie du véhicule avant de commencer l'installation de l'**OPENAIR PLUS**.

- Installez l'**OPENAIR PLUS** en toute sécurité afin d'éviter les chutes.
- Utiliser les outils appropriés à chaque opération.
- Pendant l'installation, s'assurer du raccordement des composants électriques en vérifiant leur bon ajustement.
- Si lors de l'installation des câbles traversent des murs à arêtes vives, utilisez des conduits ou des dispositifs de guidage, afin d'éviter l'endommagement des câbles.



- **Avertissement important** : Faites attention lors du raccordement de l'unité à ne pas inverser les polarités. Si cela se produit, la carte de commande ne s'allumera pas et l'unité ne se mettra pas en marche.



Utilisation appropriée du produit

- **OPENAIR PLUS** est une unité de climatisation de toit à haute performance, apte pour être utilisée dans les camping-cars et autres véhicules de loisirs. Son installation sur tout autre type de véhicule n'est pas recommandée.
- L'utilisation non conforme à l'usage prévu annule la garantie de l'unité et exclut la responsabilité du fabricant.
- Si vous n'êtes pas sûr de comment utiliser **OPENAIR PLUS**, consultez la notice du produit.

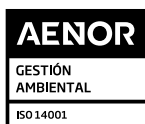
Conformément aux normes internationales de gestion de la qualité ISO 9001, de qualité automobile IATF 16949 et de gestion de l'environnement ISO 14001, **Dirna Bergstrom** utilise des processus d'assurance de l'excellence pour garantir la plus haute qualité de ses produits. Certifiée par IQNet Quality System.



ER-0022/1999



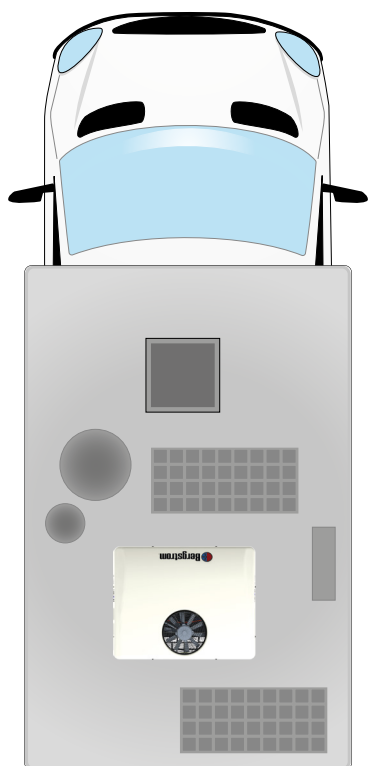
RA02-0027/2012
IATF: 03233 11



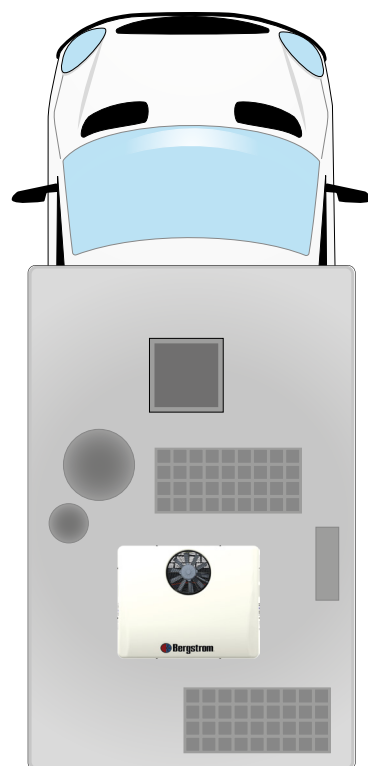
GA-2021/0140



OPTIONS DE MONTAGE



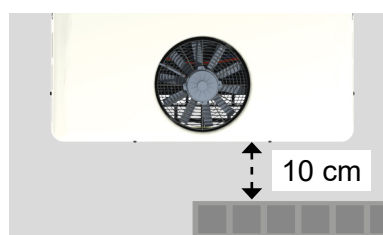
**POSITION DE L'APPAREIL DANS
LE SENS DE LA MARCHÉ**



**POSITION DE L'APPAREIL CONTRE
LE SENS DE LA MARCHÉ**



Attention: Pour garantir une correcte ventilation de l'appareil et éviter tout dysfonctionnement de celui-ci, un espace d'au moins 10 cm doit être maintenu libre tout au long de la partie arrière de l'appareil.





Attention : OPENAIR PLUS ne peut être monté que sur des véhicules équipés d'une écoutille 70x50 et munis de :

- Une épaisseur de toit de 30 à 60 mm

1

Démontez l'écoutille 70x50 et le cadre du véhicule où l'**OPENAIR PLUS** doit être placé.



2

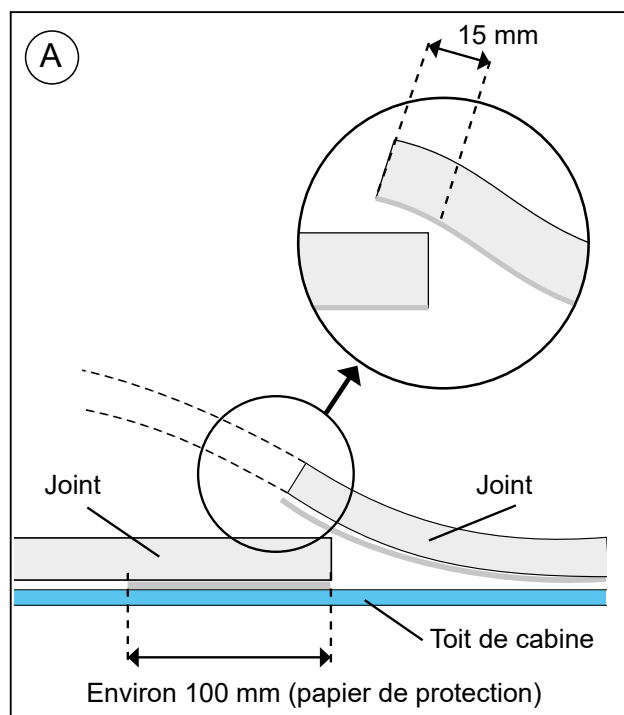
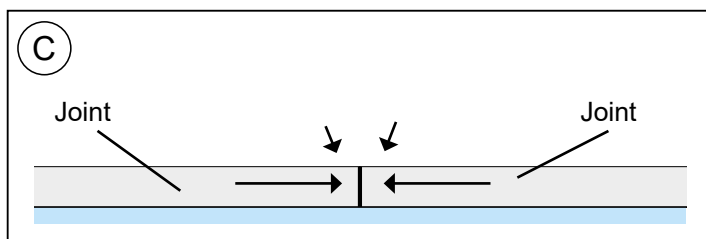
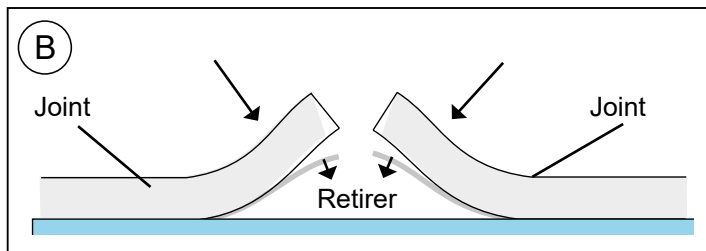
Placez le joint de montage EPDM 25x15 du kit d'adaptation autour de l'ouverture de l'écoutille.





COMMENT COUPER LE JOINT EPDM POUR A EVITER LES FILTRATIONS DANS LA CABINE

- A-** Coller le joint en maintenant une protection en papier de 100 mm de chaque côté.
- B-** Retirer les deux morceaux de papier.
- C-** Coller en faisant pression sur les deux extrémités.

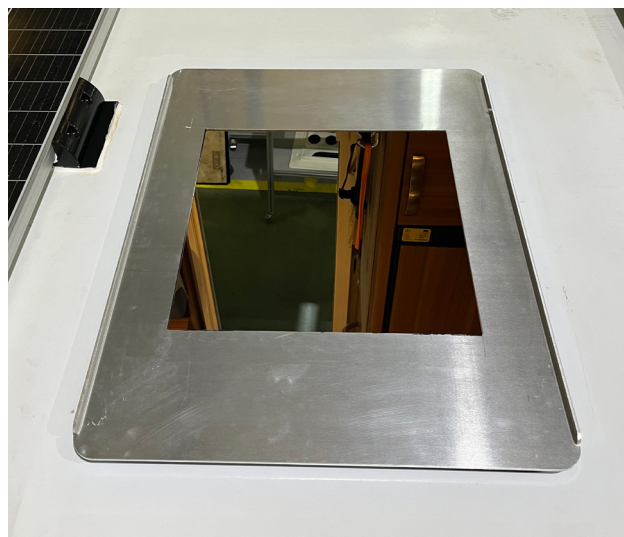
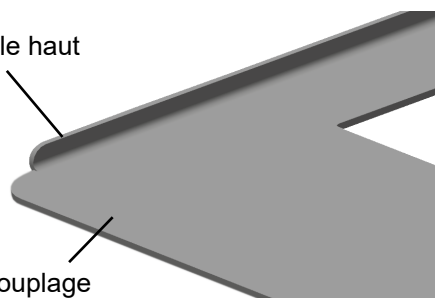


3

Placez la plaque de couplage sur le joint EPDM en la centrant sur le cadre de l'écouille dans la position indiquée.

Onglet vers le haut

Plaque de couplage



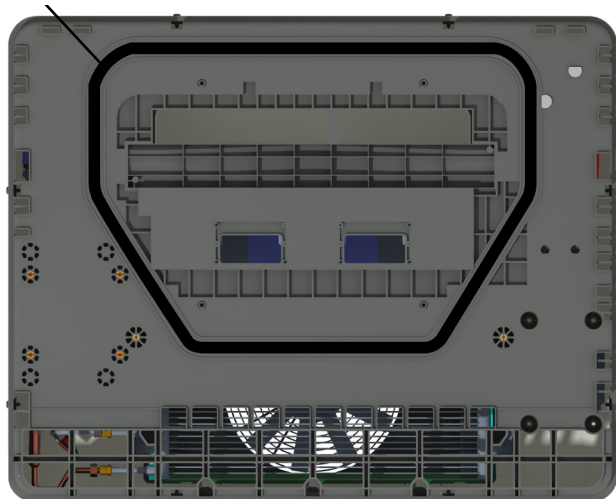
4

Soulevez l'unité et collez le joint EPDM 25x25 sur la base de l'unité en suivant la zone marquée à cet effet.

Attention : Si le joint EPDM est placé à un autre endroit, l'unité ne fonctionnera pas correctement et de l'eau et de l'air risqueraient de pénétrer à l'intérieur du véhicule.

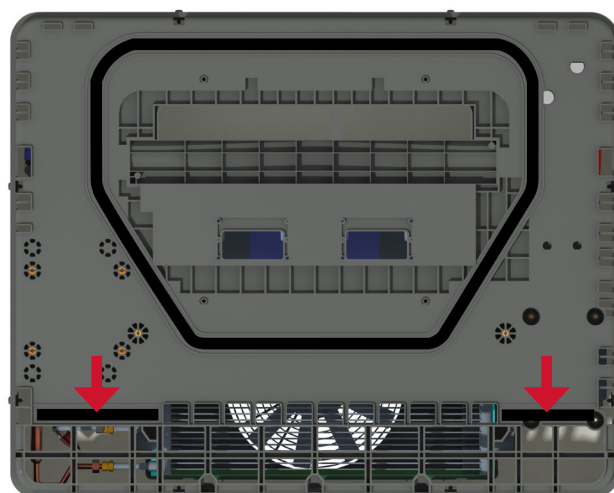
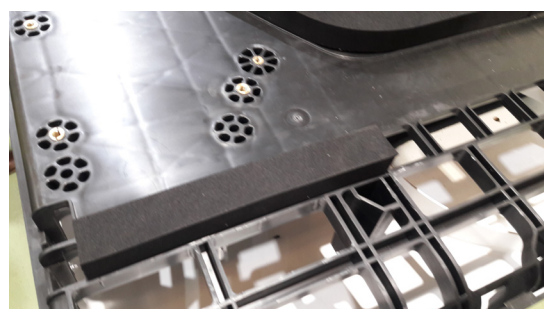


Joint EPDM



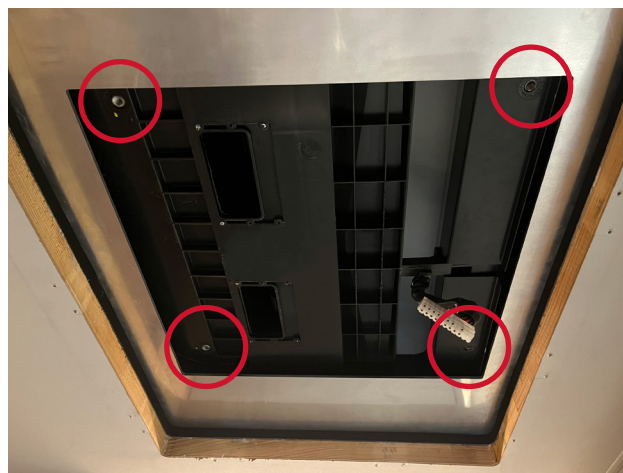
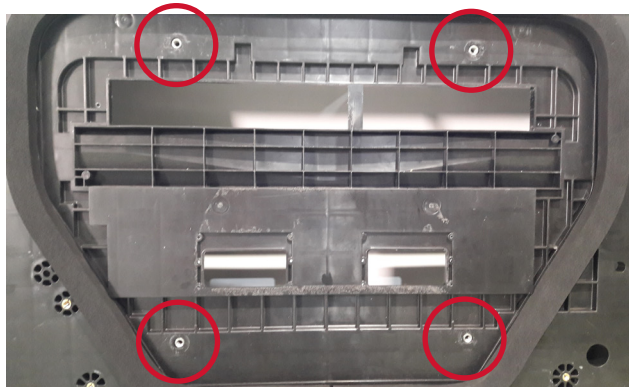
5

Monter sur la base de l'appareil, à l'endroit indiqué, les deux cales arrière en EPDM 100x30x20 mm fournies dans le sac de l'appareil.



6

Positionnez l'unité sur le toit en la centrant de l'intérieur, en veillant à ce que les (4) points de fixation des supports de la base de l'unité soient centrés dans l'ouverture du toit.



7

Visser au maximum (4) goujons M8x70 aux points de fixation sur la base de l'appareil.



8

Attention : En fonction de l'épaisseur du toit du véhicule, le nombre suivant de séparateurs doit être mis en place avant de placer les hexagones de fixation sur les goujons.

Épaisseur 30 mm: Sans séparateur.

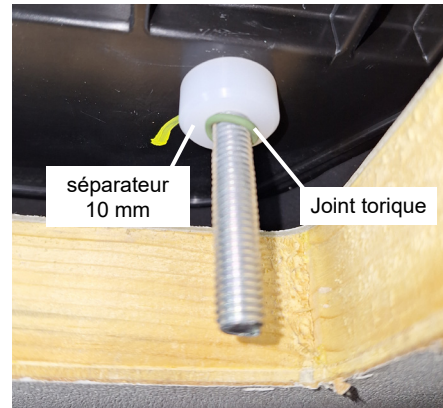
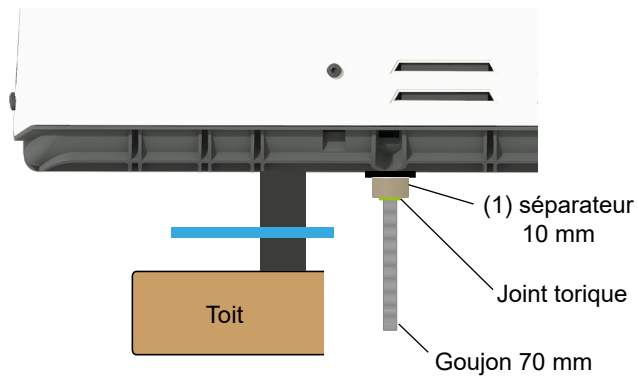
Épaisseur 40 mm: (1) séparateur 10 mm

Épaisseur 50 mm: (2) séparateurs 10 mm

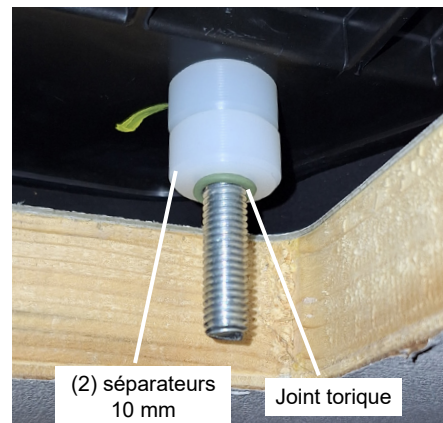
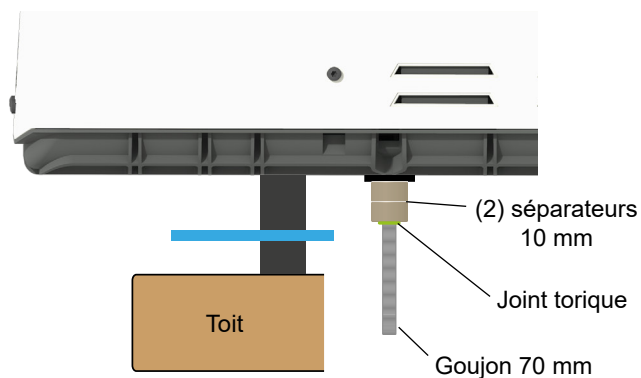
Épaisseur 60 mm: (3) séparateurs 10 mm

Placer le joint torique comme indiqué pour éviter la chute des séparateurs.

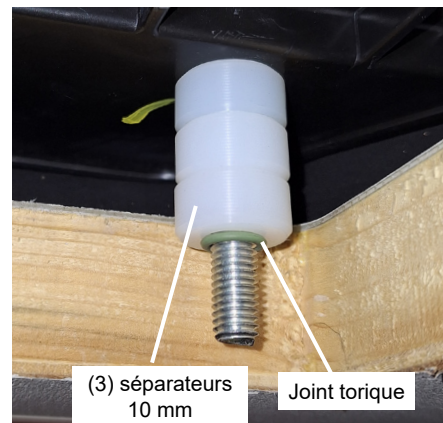
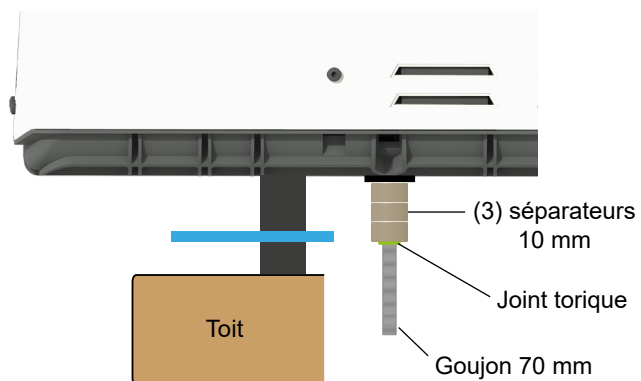
Épaisseur du toit 40 mm



Épaisseur du toit 50 mm

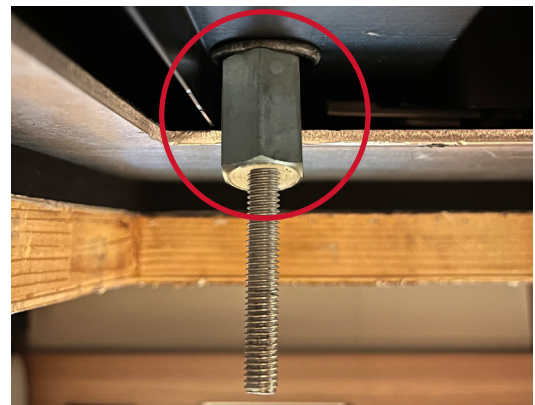


Épaisseur du toit 60 mm

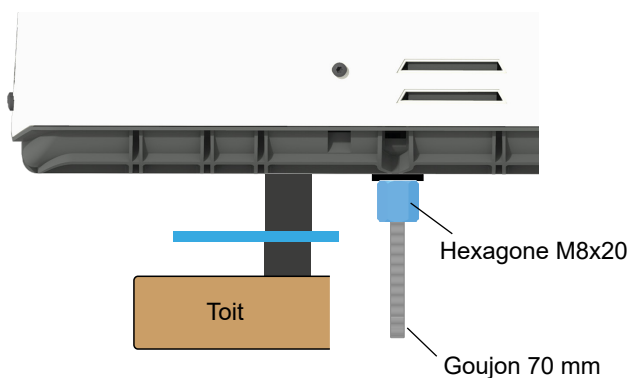


9

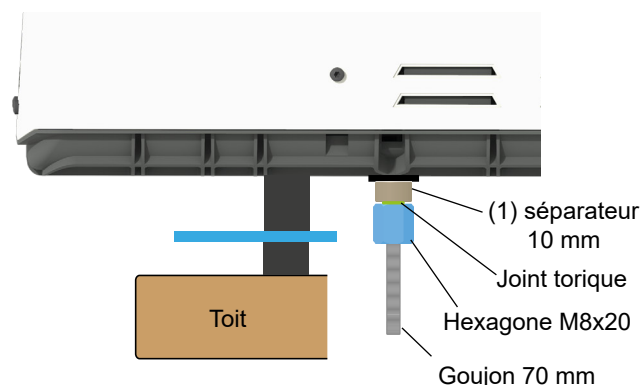
Montez et serrez (4) hexagones M8x20.



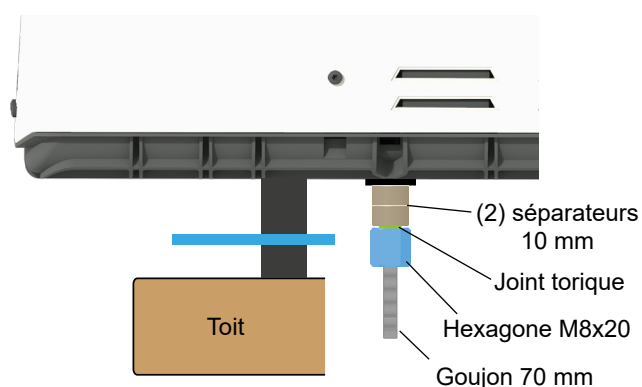
Épaisseur du toit 30 mm



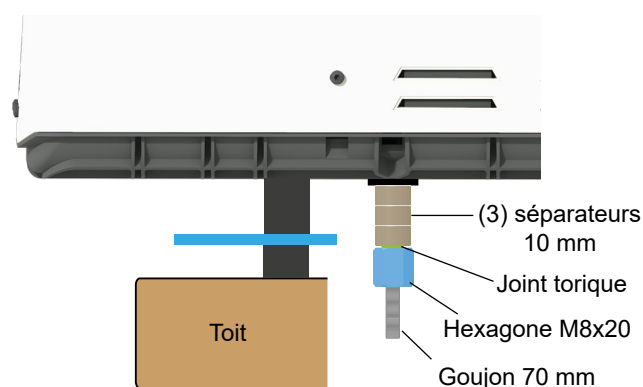
Épaisseur du toit 40 mm



Épaisseur du toit 50 mm



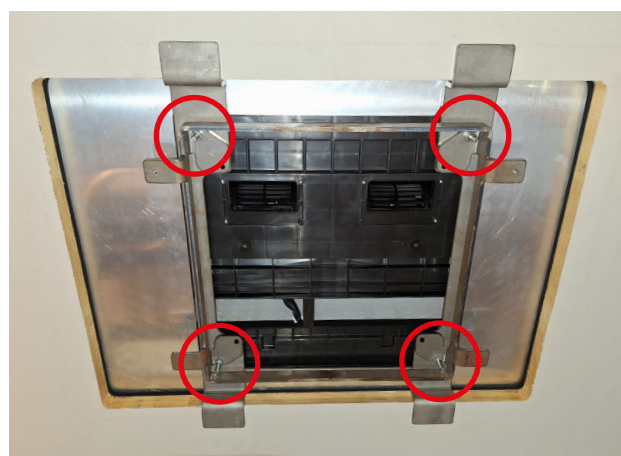
Épaisseur du toit 60 mm



10

Monter le support inclus dans l'appareil avec les (2) supports fournis dans le kit sur les (4) goujons M8x70 avec (4) rondelles plates de 8 mm et (4) écrous autobloquants M8.

Important : Ne pas serrer les écrous autobloquants, seulement positionner les supports.



11

Positionnez la console en l'introduisant d'abord par un côté du support sur les deux languettes de fixation de la console intérieure et déplacez-la vers le côté opposé pour pouvoir l'introduire sur les deux languettes de l'autre côté du support.



12

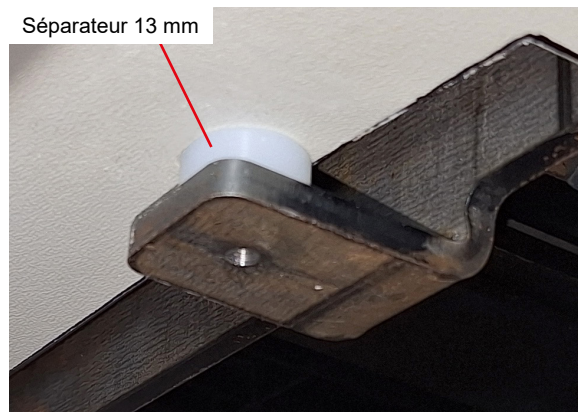
Placer (4) séparateurs de 13 mm entre les pattes du support de fixation de l'appareil et la console. Serrer les écrous autobloquants de fixation des supports jusqu'à ce que la console soit totalement centrée et collée au toit.

Vérifiez que le joint extérieur EPDM de l'appareil a été comprimé entre 3 et 6 mm.

Important : Pour éviter d'éventuelles infiltrations d'eau à l'intérieur du véhicule, il faut assurer le serrage du joint EPDM avec la base de l'appareil.



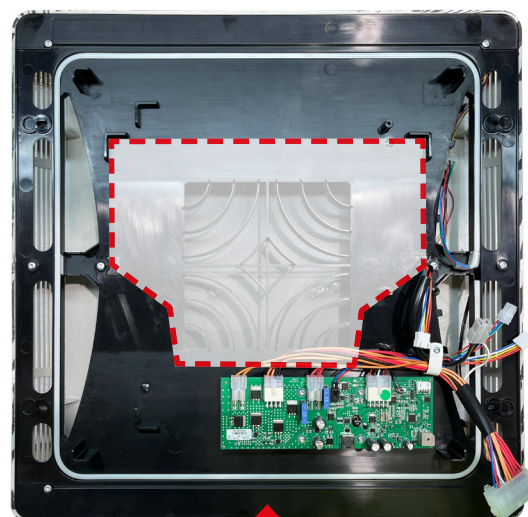
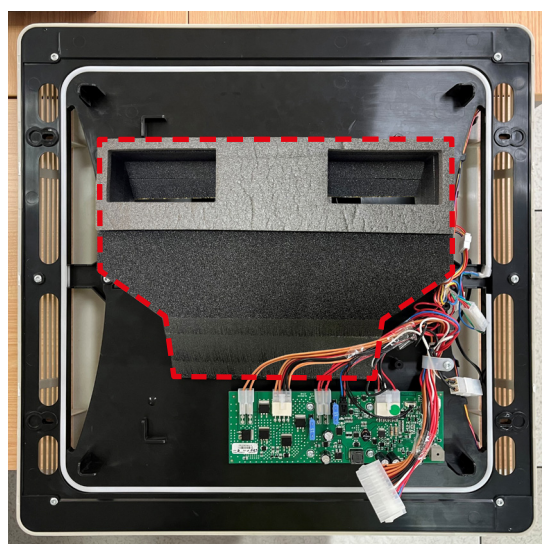
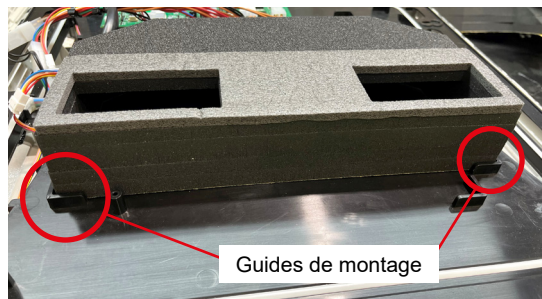
Séparateur 13 mm



13

Collez le canaliseur sur la console intérieure de l'appareil dans la zone indiquée.

Important : Assurez-vous que le canaliseur est ajusté aux guides de montage.



14

En fonction de l'épaisseur du toit du véhicule, ajoutez un joint supplémentaire au canaliseur en le collant au centre de ce dernier :

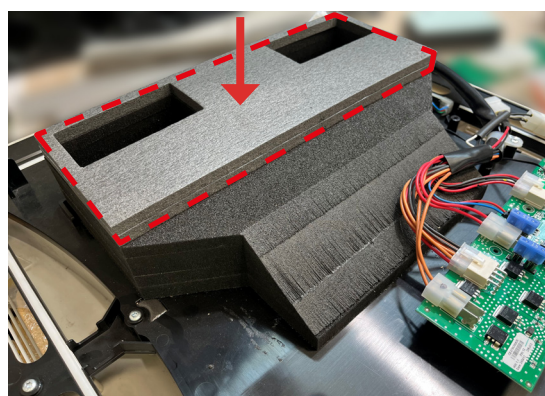
Épaisseur de :

30 mm: Canaliseur + (3) joint supplément.

40 mm: Canaliseur + (4) joint supplément.

50 mm: Canaliseur + (5) joint supplément.

50 mm: Canaliseur + (6) joint supplément.



15

Poursuivez le processus d'installation de la console intérieure en suivant les étapes indiquées aux points 11, 12, 13 et 14 des instructions propres à l'appareil, document 1003855547 pages 54 et 55.

Attention : Au point 13 des instructions de l'appareil, fixez la console intérieure avec les (4) vis M5 x 50 fournies dans le kit.

Pour terminer l'installation du câblage d'alimentation et de signal de l'appareil sur la batterie, suivez les étapes indiquées aux pages 58 et 59 des instructions spécifiques de l'appareil, document 1003855547.



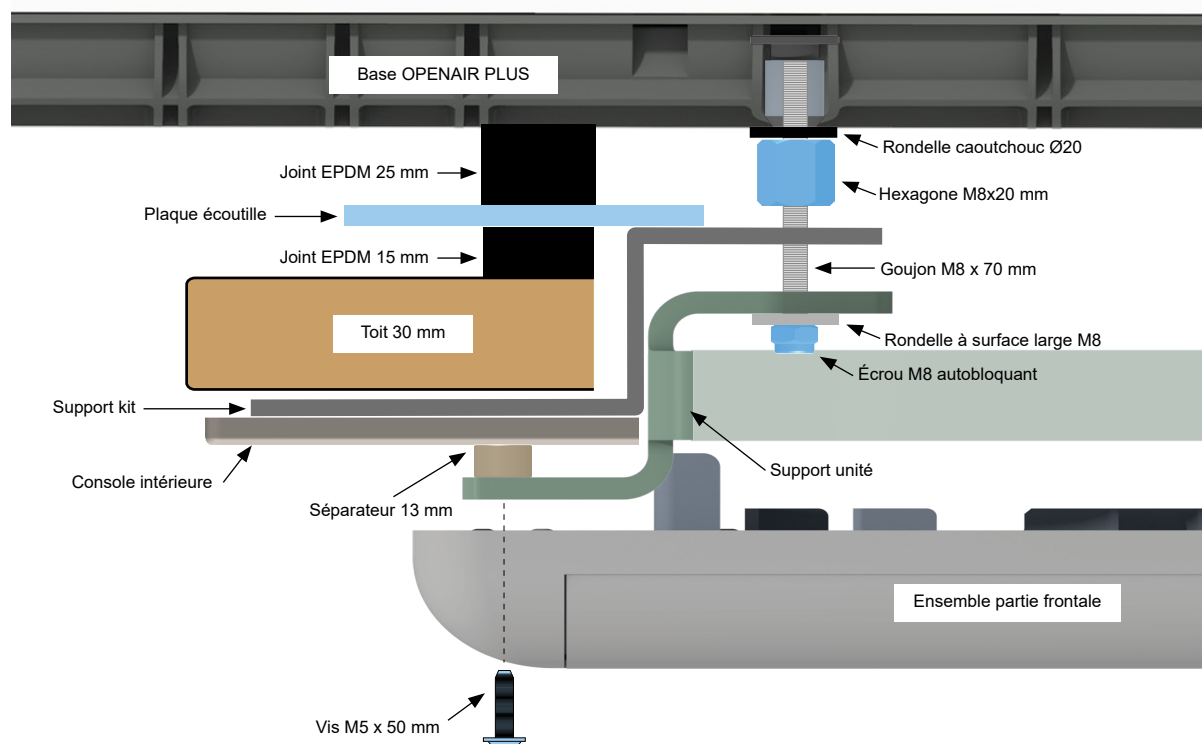
Vous avez à votre disposition tous les manuels des produits dans leurs versions numériques (PDF) sur :

<https://bergstrominc.com/es/>

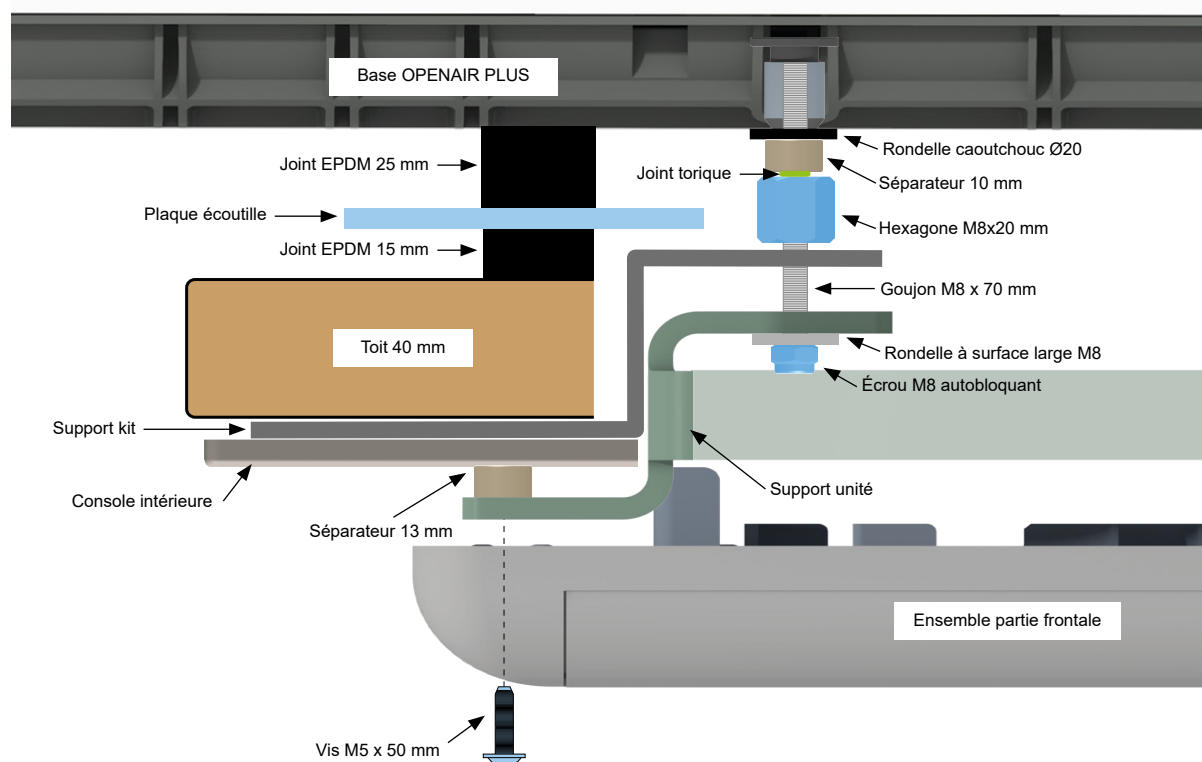
Attention : Les images contenues dans le processus d'installation des instructions de montage de l'unité **OPENAIR PLUS** peuvent ne pas refléter fidèlement votre type de véhicule, mais cela n'affectera en rien le processus d'installation.

SCHÉMAS DE MONTAGE

Épaisseur du toit 30 mm

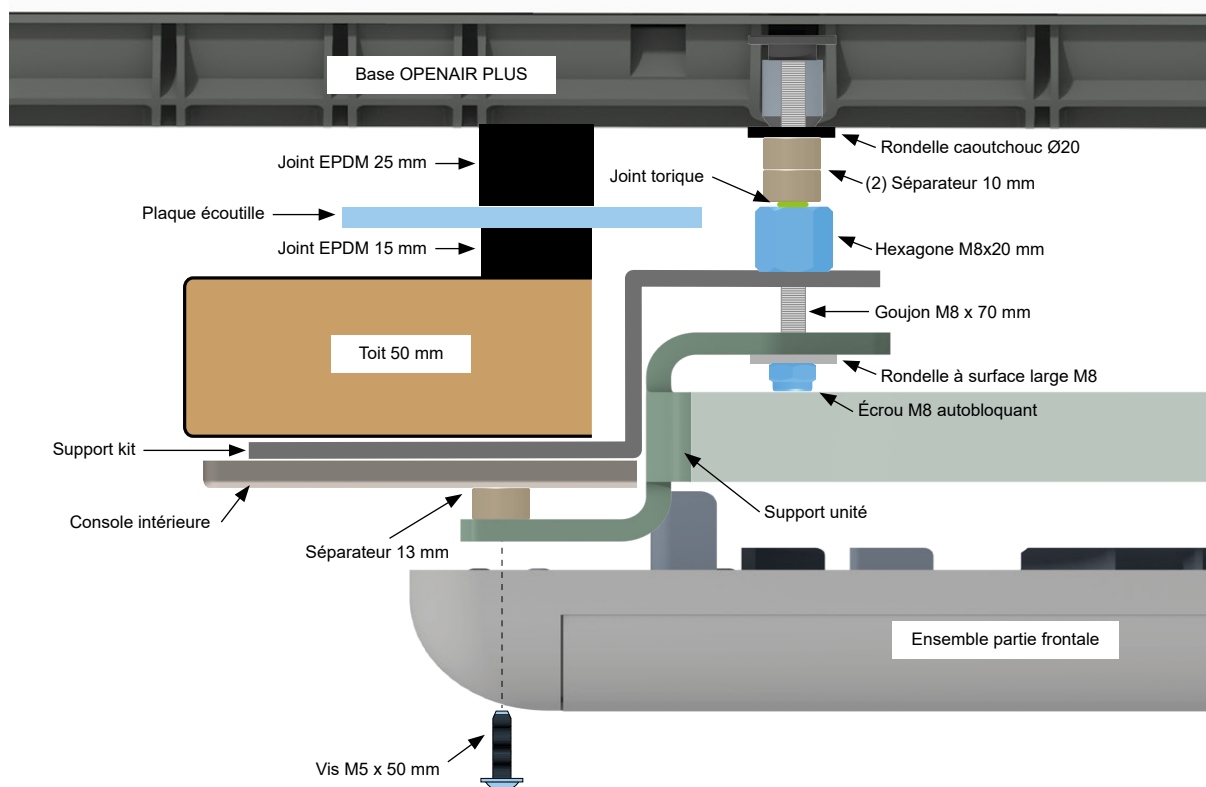


Épaisseur du toit 40 mm

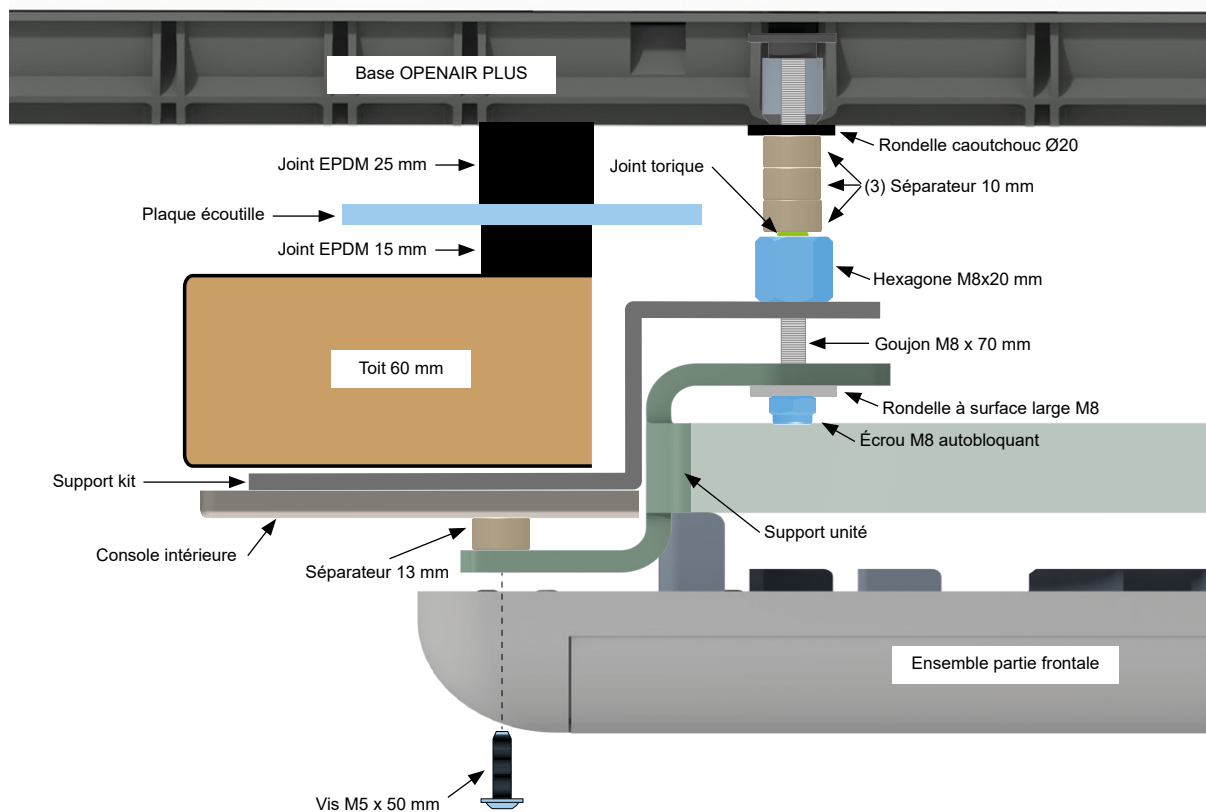


SCHÉMAS DE MONTAGE

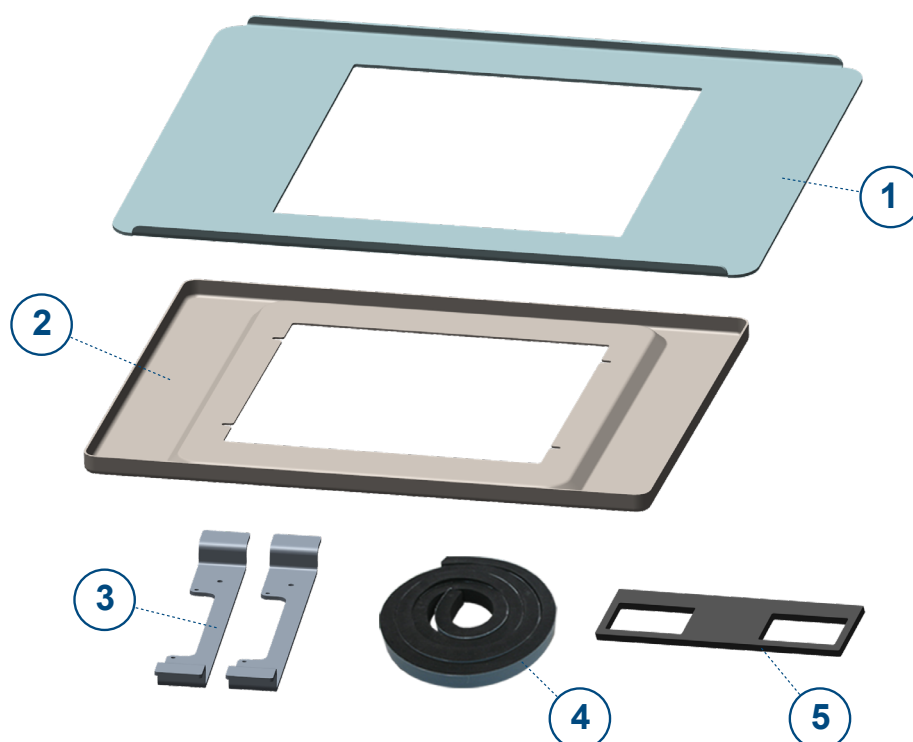
Épaisseur du toit 50 mm



Épaisseur du toit 60 mm



Liste de pièces de rechange



Id.	Qté.	Référence	Description
1	1	1003390530	Plaque de couplage
2	1	1003780475	Console intérieure 786 x 600 mm
3	1	1003812227	Support de montage
4	1	1003910726	Joint EPDM 25x15
5	1	1003855336	Joint supplément du canaliseur

NOTES

[illegible]

Wir danken Ihnen für Ihren Einkauf und Ihr Vertrauen in die Produkte unserer **Caravaning-Reihe**. **OPENAIR PLUS** ist eine leistungsstarke Klimaanlage von **Dirna Bergstrom** für den Einsatz in Wohnmobilen und anderen Freizeitfahrzeugen bei stehendem oder laufendem Motor.

OPENAIR PLUS wurde mit der fortschrittlichsten Technologie entwickelt, um eine effektive und effiziente Leistung und eine Reduzierung des Energieverbrauchs der Zusatzbatterie Ihres Fahrzeugs zu erreichen. Durch diese Eigenschaften ist dieses Gerät einzigartig auf dem Markt für Klimaanlage für Freizeitfahrzeuge.



Bitte lesen Sie dieses Dokument vor der Installation des Produkts sorgfältig durch und bewahren Sie es für den späteren Gebrauch auf. Die Originaldokumentation wurde in spanischer Sprache verfasst; bei allen anderen Sprachen handelt es sich um Übersetzungen.

Alle Produktanleitungen sind in digitaler Form (PDF) unter

<https://bergstrominc.com/es/> abrufbar.

Für alle Verkäufe und Garantievorgänge gelten unsere allgemeinen Geschäftsbedingungen in ihrer jeweils aktuellen Fassung, die auf unserer Website **<https://bergstrominc.com/es/>** veröffentlicht sind.

Diese Bedienungsanleitung entspricht den neuesten technischen Entwicklungen in diesem Bereich zum Zeitpunkt der Veröffentlichung. Aufgrund der kontinuierlichen Verbesserung kann es jedoch Abweichungen geben.

Verwendete Symbole



- **Achtung:** Sicherheitshinweis, der auf eine Situation hinweist, die, wenn sie nicht vermieden wird, zum Tod oder zu schweren Verletzungen führen kann.



- **Gefahr:** Schnittgefahr. Weist auf eine Situation hin, die zu Schnittverletzungen führen kann.



- **Gefahr:** Stromschlaggefahr. Weist auf eine Situation hin, die zu einem Stromschlag führen kann.



- **Hinweis:** Sicherheitshinweis, der auf eine Situation hinweist, die, wenn sie nicht vermieden wird, zu Schäden am Gerät oder anderen Gegenständen führen kann.



- **Information:** Zusatzinformationen zu Installation oder Handhabung des Produkts.



- **Zerbrechlich:** Weist auf eine Situation hin, in der Vorsicht geboten ist, um Schäden am Gerät und anderen Gegenständen zu vermeiden.



Haftung

- **Dirna Bergstrom** lehnt in den folgenden Fällen jede Haftung für Schäden ab:

- Beschädigung des Produkts durch mechanische Einflüsse und Überspannung.
 - Änderungen am Gerät, die ohne ausdrückliche Genehmigung des Herstellers vorgenommen wurden.
 - Verwendung des Geräts für Zwecke, die nicht in diesem Dokument beschrieben sind.
 - Unsachgemäße Handhabung oder Installation der Klimaanlage.
- Bei der Installation von **OPENAIR PLUS** an der Decke ist zu berücksichtigen, dass die Konstruktion von mit einer Luke ausgestatteten Fahrzeugen normalerweise ausreicht, um das Gewicht des Geräts zu tragen. Ist jedoch kein Dachfenster vorhanden und das Dach muss aufgeschnitten werden oder ist das Material trotz vorhandenem Dachfenster nicht ausreichend tragfest (Faser-, Kunststoffdächer usw.), **muss der Installateur unter seiner Verantwortung entscheiden**, ob das Dach verstärkt werden muss, um mögliche Verformungen, Brüche, Eindringen von Wasser usw. zu vermeiden, und die hierfür erforderlichen Mittel bereitstellen.

OPENAIR PLUS ist ein vielseitiges Gerät, das in einem Winkel von 180° installiert werden kann, um es an den verfügbaren Platz auf dem Fahrzeugdach anzupassen, sodass es das übrige Zubehör nicht beeinträchtigt.



Warnhinweise hinsichtlich der Montage

- Einbau, Reparatur und Wartung dieses Geräts dürfen nur von Fachpersonal durchgeführt werden, das in Bezug auf Fahrzeugklimatisierung, mögliche Gefahren und geltende Normen ausreichend geschult ist.
- Bitte lesen Sie die Installationsanleitung sorgfältig durch, bevor Sie mit der Installation von **OPENAIR PLUS** beginnen. Befolgen Sie bei der Installation genau die hier gegebenen Anweisungen.

- Vor der Installation des Geräts den Zündschlüssel abziehen.
- Vor der Installation von **OPENAIR PLUS** die Fahrzeugbatterie abklemmen.
- **OPENAIR PLUS** sicher anbringen, damit das Gerät nicht herunterfallen kann.
- Für jeden Arbeitsschritt geeignete Werkzeuge benutzen.
- Bei der Installation auf den Anschluss der elektrischen Komponenten achten und prüfen, ob diese richtig sitzen.
- Wenn die Kabel bei der Installation entlang scharfkantiger Wände verlaufen, Leerrohre oder Führungen benutzen, um eine Beschädigung der Kabel zu vermeiden.



- **Wichtiger Hinweis:** Beim Anschluss des Geräts darauf achten, dass die Polarität nicht vertauscht wird. Ist dies der Fall, schaltet sich die Steuerung nicht ein und das Gerät geht nicht in Betrieb.



Bestimmungsgemäße Verwendung

- **OPENAIR PLUS** ist eine leistungsstarke Dachklimaanlage für den Einsatz in Wohnmobilen und anderen Freizeitfahrzeugen. Der Einbau in andere Fahrzeugtypen wird nicht empfohlen.
- Bei nicht bestimmungsgemäßer Verwendung erlischt die Garantie für das Gerät und die Haftung des Herstellers ist ausgeschlossen.
- Wenn Sie hinsichtlich der Verwendung von **OPENAIR PLUS** unsicher sind, schlagen Sie bitte in der Bedienungsanleitung des Produkts nach.

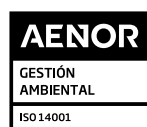
In Übereinstimmung mit der internationalen Qualitätsmanagementnorm ISO 9001, Qualitätsmanagement in der Automobilindustrie IATF 16949 und Umweltmanagementnorm ISO 14001 wendet Dirna Bergstrom Qualitätssicherungsprozesse an, um die höchste Qualität seiner Produkte zu gewährleisten. Zertifiziert durch das IQNet Quality System.



ER-0022/1999



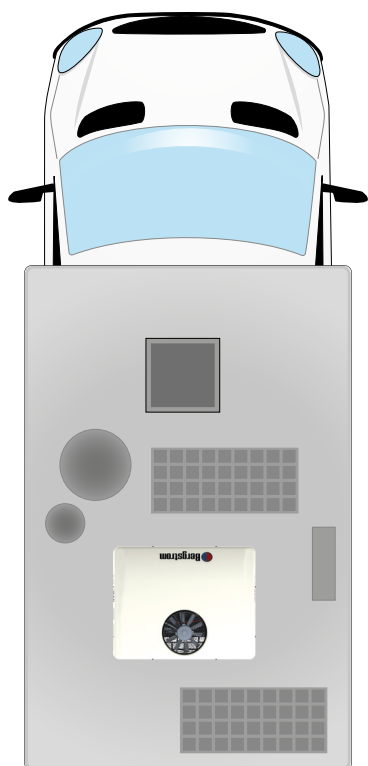
RA02-0027/2012
IATF: 0323311



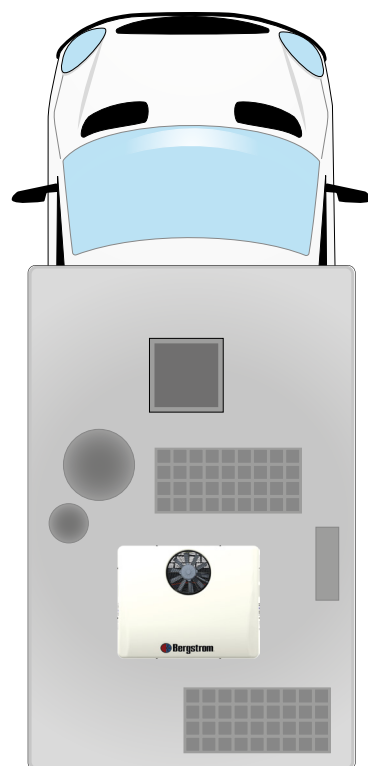
GA-2021/0140



MONTAGEMÖGLICHKEITEN



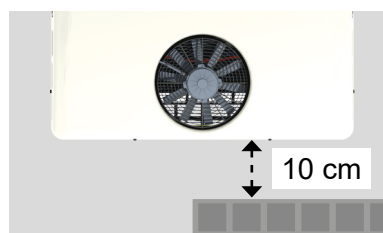
POSITION DES GERÄTS IN
FAHRTRICHTUNG



POSITION DES GERÄTS
GEGEN DIE FAHRTRICHTUNG



Achtung: Um eine ordnungsgemäße Be- und Entlüftung des Geräts zu gewährleisten und Fehlfunktionen zu vermeiden, muss an der Rückseite des Geräts ein Freiraum von mindestens 10 cm eingehalten werden.





Achtung: OPENAIR PLUS kann nur in Fahrzeuge mit Dachluke 70x50 eingebaut werden, die folgende Voraussetzung erfüllen:

- Deckenstärke 30 bis 60 mm

1

Luke 70x50 und Rahmen aus dem Fahrzeug ausbauen, in das die **OPENAIR PLUS** eingebaut werden soll.



2

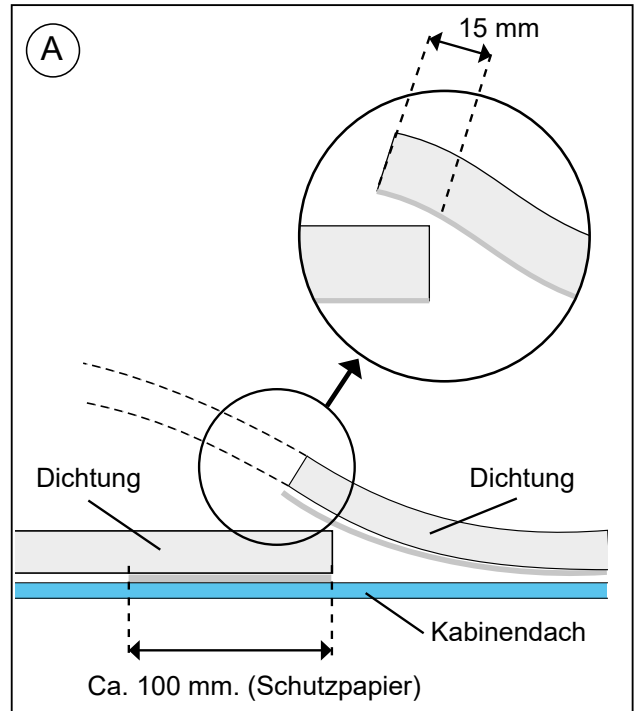
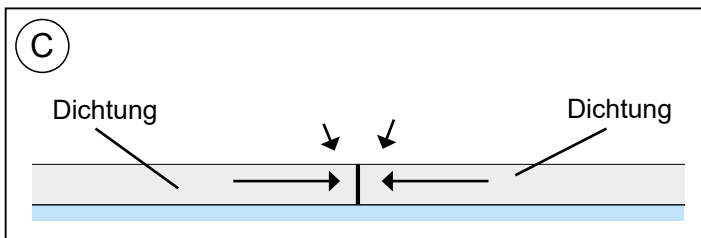
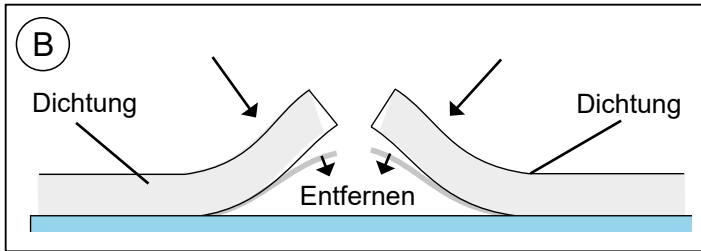
Die EPDM-Einbaudichtung 25x15 aus dem Nachrüstsatz um die Lukenöffnung herum anbringen.





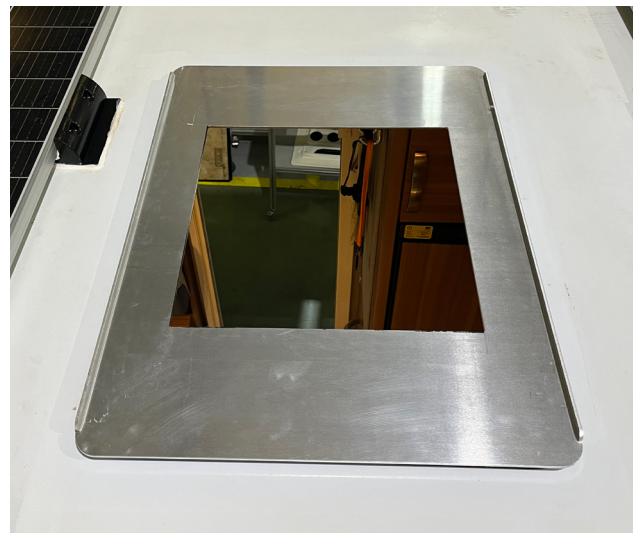
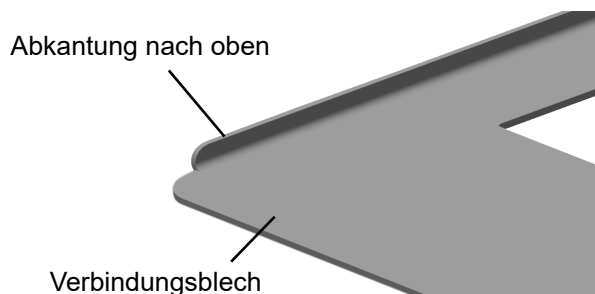
WIE DIE EPDM-DICHTUNG GESCHNITTEN A WIRD, UM WASSERUNDICHTIGKEITEN IN DIE KABINE ZU VERMEIDEN

- A- Dichtung aufkleben und dabei einen Papierschutz von 100 mm auf jeder Seite beibehalten.
- B- Die zwei Papierstücke entfernen.
- C- Unter Anpressen beider Enden aufkleben.



3

Das Verbindungsblech auf die EPDM-Dichtung legen, sodass es wie gezeigt auf dem Lukenrahmen zentriert ist.



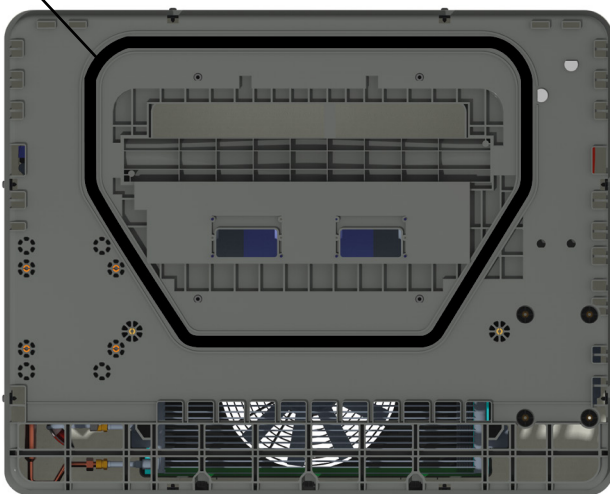
4

Gerät anheben und die 25x25 EPDM-Dichtung entlang der markierten Stelle an der Unterseite des Geräts ankleben.

Achtung: Wenn die EPDM-Dichtung an einer anderen Stelle angebracht wird, funktioniert das Gerät nicht ordnungsgemäß und es kann Wasser und Luft in das Fahrzeuginnere eindringen.

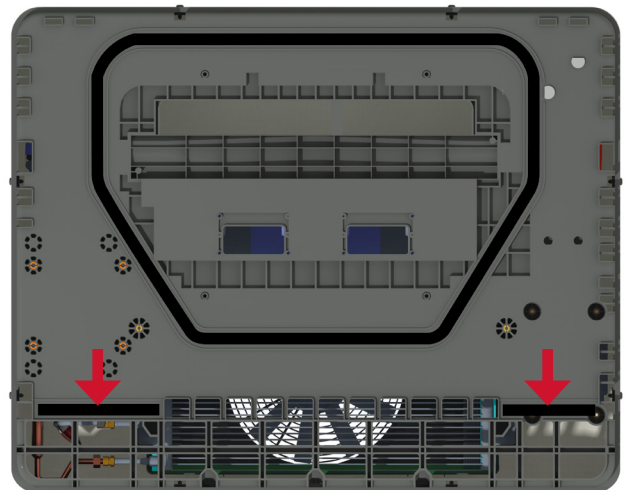
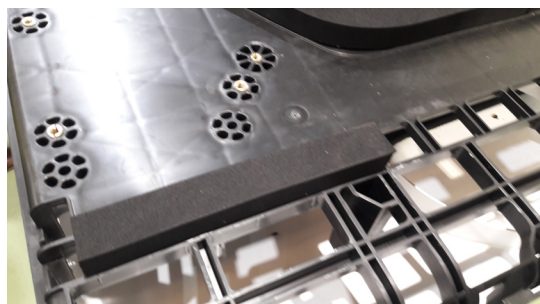


EPDM-Dichtung



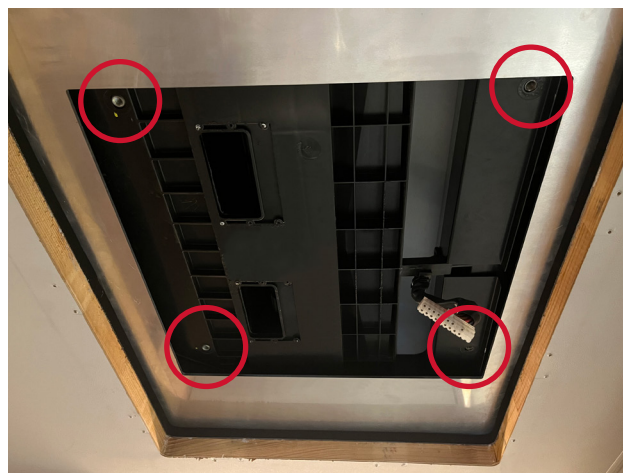
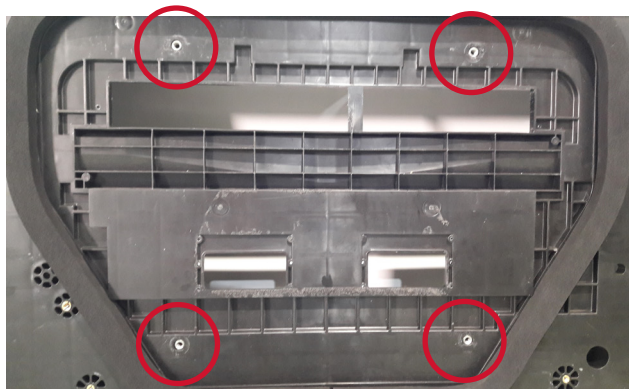
5

Die (2) hinteren Dichtungsblöcke aus EPDM 100×30×20 mm an der am Geräteboden angegebenen Position montieren. Die Dichtungen befinden sich im zum Gerät gehörenden Beutel.



6

Das Gerät auf dem Dach positionieren und von innen zentrieren. Dabei darauf achten, dass die (4) Befestigungspunkte der Sockelhalterungen in der Deckenöffnung zentriert sind.



7

Schrauben Sie die (4) M8x70 Stiftschrauben in die Befestigungspunkte an der Basis des Geräts bis zum Anschlag ein.



8

Achtung: Je nach Stärke der Fahrzeugdecke muss vor der Montage der Sechskant-Verbindungs-muttern auf den Stiftschrauben die folgende Anzahl von Abstandshaltern angebracht werden.

30 mm dick kein Abstandshalter

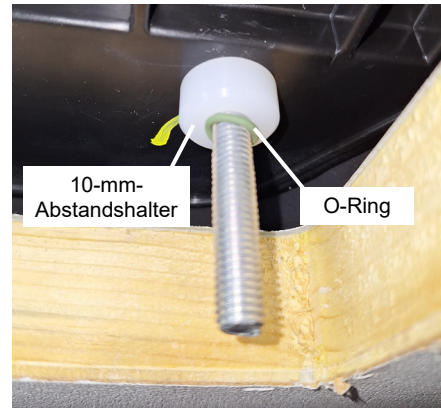
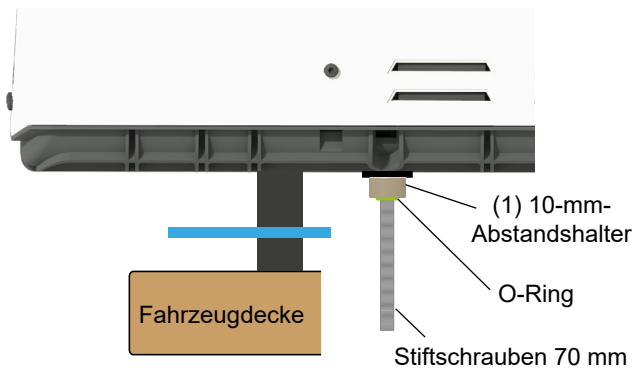
40 mm dick (1) 10-mm-Abstandshalter

50 mm dick (2) 10-mm-Abstandshalter

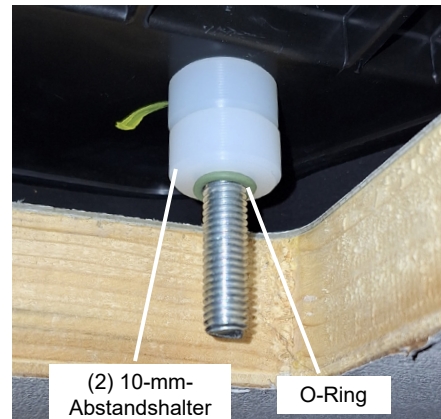
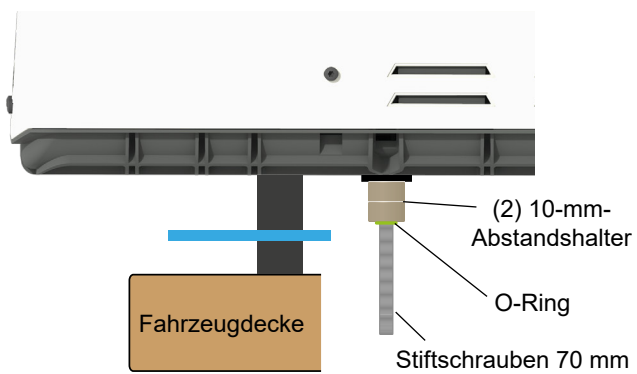
60 mm dick (3) 10-mm-Abstandshalter

Legen Sie den O-Ring wie angegeben ein, um ein Herunterfallen der Distanzstücke zu verhindern.

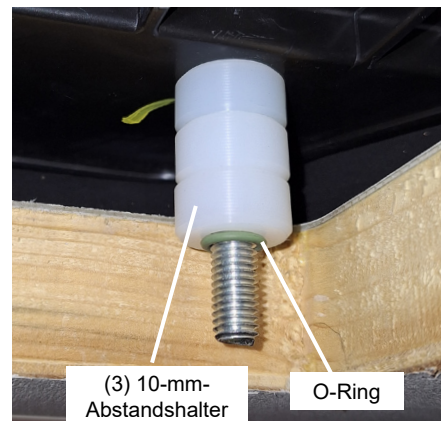
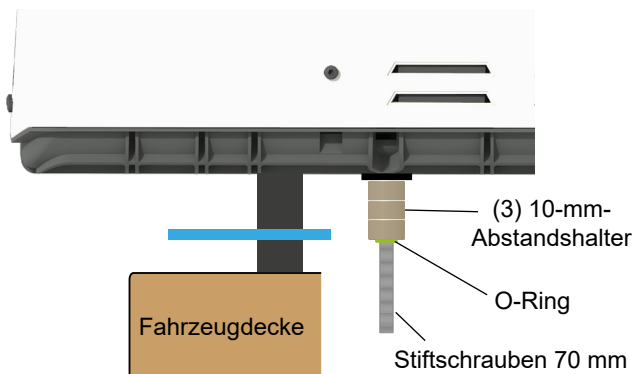
Deckenstärke 40 mm



Deckenstärke 50 mm

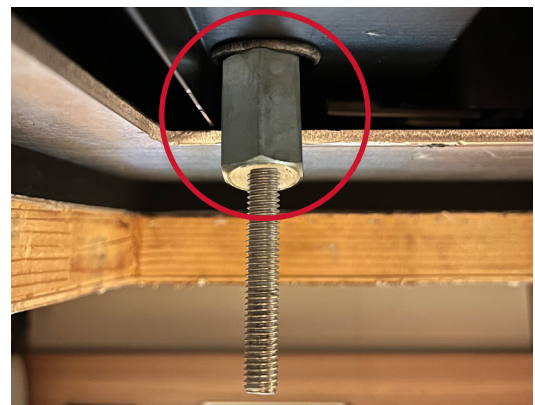


Deckenstärke 60 mm

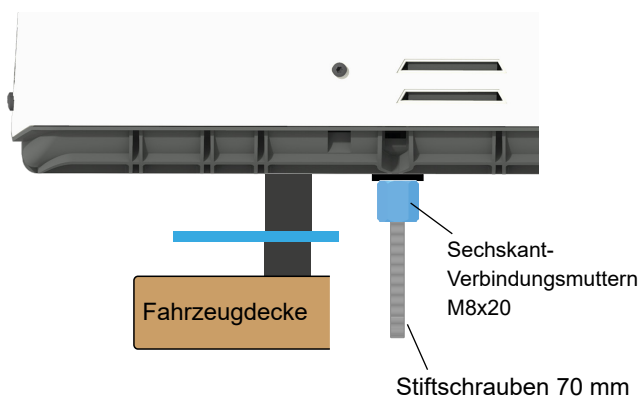


9

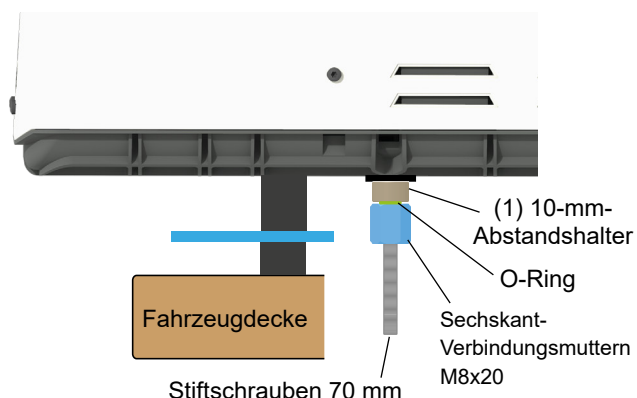
(4) Sechskant-Verbindungs-muttern M8x20 anbringen und festziehen.



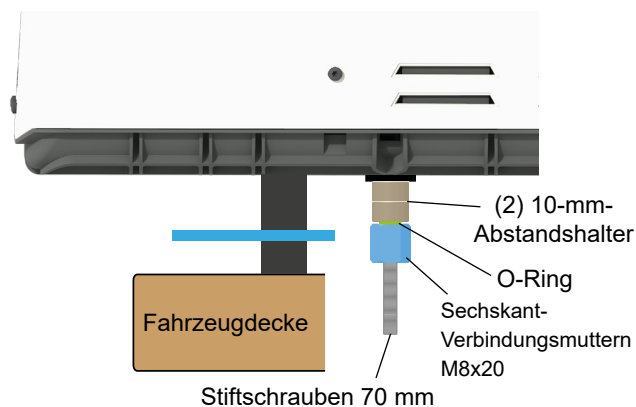
Deckenstärke 30 mm



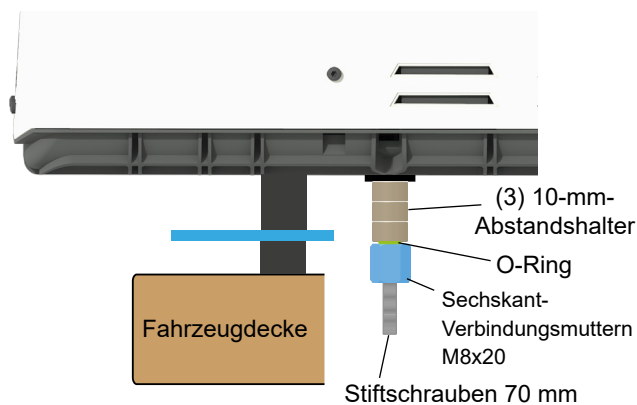
Deckenstärke 40 mm



Deckenstärke 50 mm



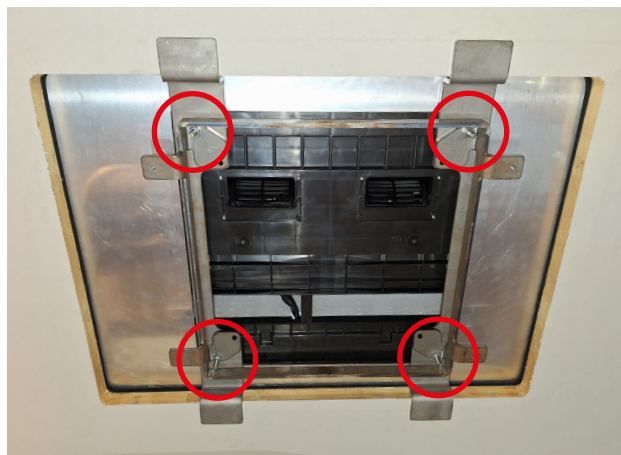
Deckenstärke 60 mm



10

Den mit dem Gerät gelieferten Halter zusammen mit den (2) im Montagesatz enthaltenen Haltern auf die (4) Stehbolzen M8×70 montieren, unter Verwendung von (4) Unterlegscheiben 8 mm und (4) selbstsichernden Muttern M8.

Wichtiger Hinweis: Die Selbstsicherungsmuttern nicht festziehen, sondern nur die Halterungen positionieren.



11

Die Konsole so positionieren, dass sie zunächst auf einer Seite des Halters über die beiden Befestigungslaschen der Innenkonsole eingeführt wird, und anschließend zur gegenüberliegenden Seite verschieben, um sie dort ebenfalls über die beiden Laschen des Halters einzusetzen.



12

(4) Distanzstücke à 13 mm zwischen die Laschen des Gerätehalters und die Konsole einsetzen. Die selbstsichernden Befestigungsmuttern der Halter so anziehen, dass die Konsole vollständig zentriert ist und bündig an der Decke anliegt.

Überprüfen Sie, ob die EPDM-Außendichtung des Geräts zwischen 3 und 6 mm komprimiert wurde.

Wichtiger Hinweis: Um mögliche Wassereindringungen in das Innere des Fahrzeugs zu vermeiden, muss sichergestellt werden, dass die EPDM-Dichtung fest mit der Basis des Geräts verbunden ist.



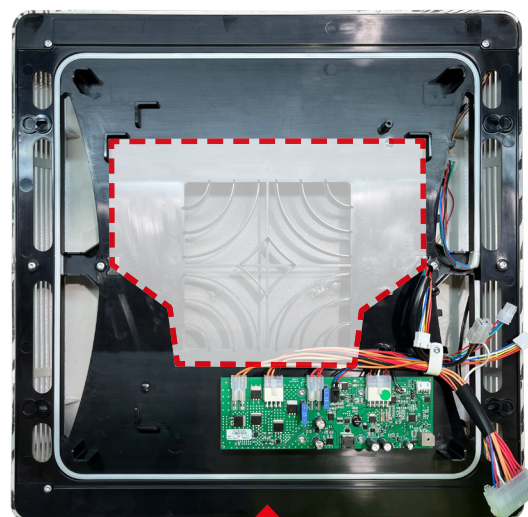
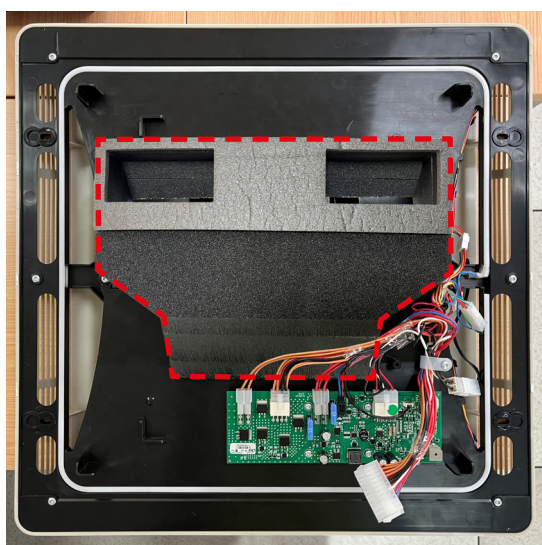
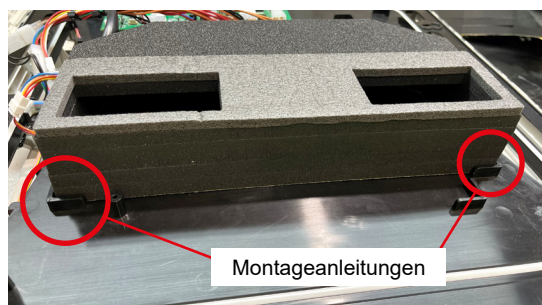
13-mm-Abstandshalter



13

Kleben Sie die Luftführung am Innengerät der Anlage in dem angegebenen Bereich.

Wichtiger Hinweis: Stellen Sie sicher, dass die Luftführung an den Montageführungen angepasst ist.



16

Je nach Dicke des Fahrzeugdachs muss eine zusätzliche Dichtung an der Führung angebracht werden, die mittig auf die Führung geklebt wird:

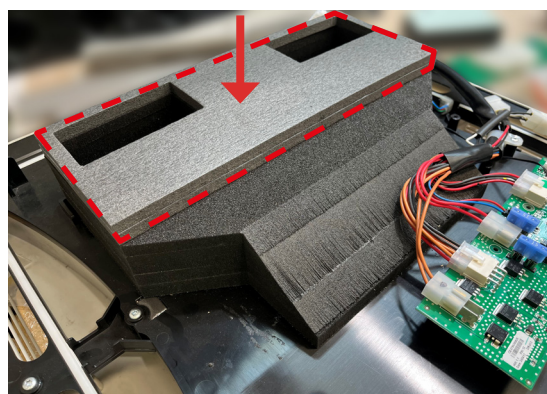
Dachstärke:

30 mm: Führung + (3) Zusatzdichtung

40 mm: Führung + (4) Zusatzdichtung

50 mm: Führung + (5) Zusatzdichtung

60 mm: Führung + (6) Zusatzdichtung



15

Den Einbau der Innenkonsole gemäß den Schritten in den Punkten 11, 12, 13 und 14 der geräteeigenen Anleitung (Dokument 1003855547, Seiten 74 und 75) fortsetzen.

Achtung: Im Schritt 13 der Geräteanleitung die Innenkonsole mit den (4) mitgelieferten Schrauben M5 × 50 befestigen.

Um die Montage des Versorgungskabels und des Signalgeräts an der Batterie abzuschließen, befolgen Sie die Schritte auf den Seiten 78 und 79 der Geräteanweisungen, Dokument 1003855547.

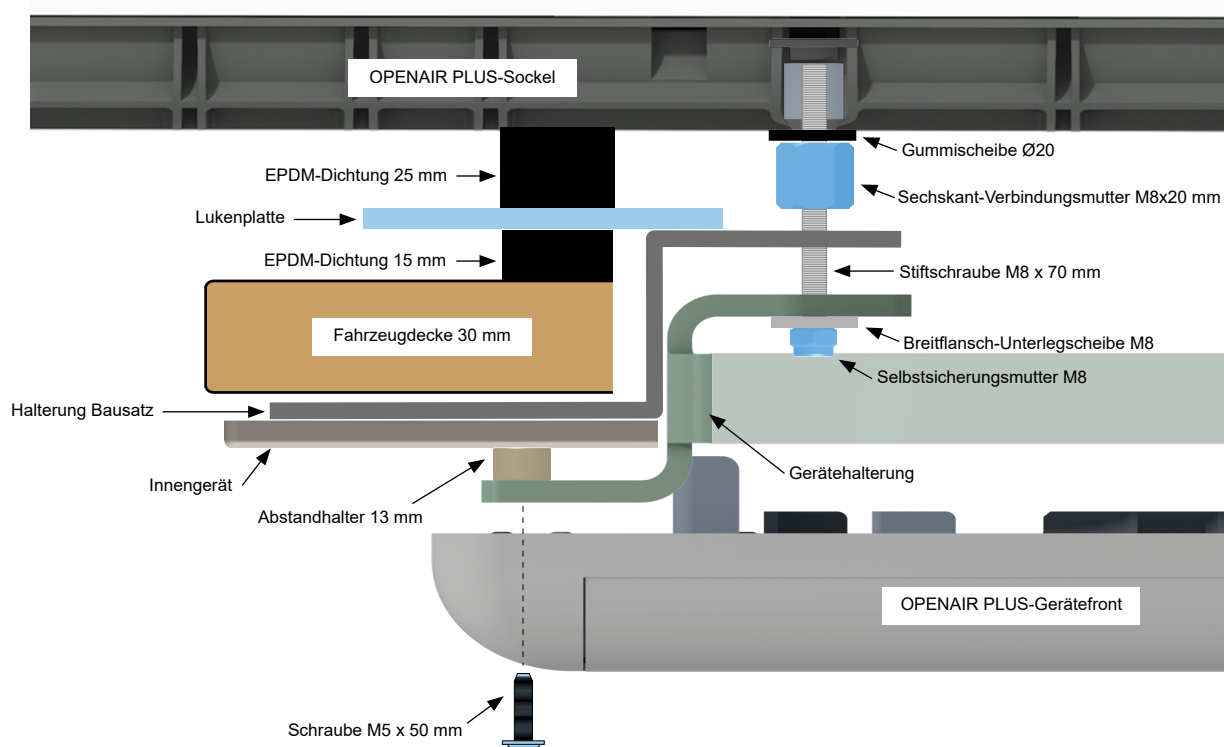


Alle Produktanleitungen sind in digitaler Form (PDF) unter <https://bergstrominc.com/es/> abrufbar.

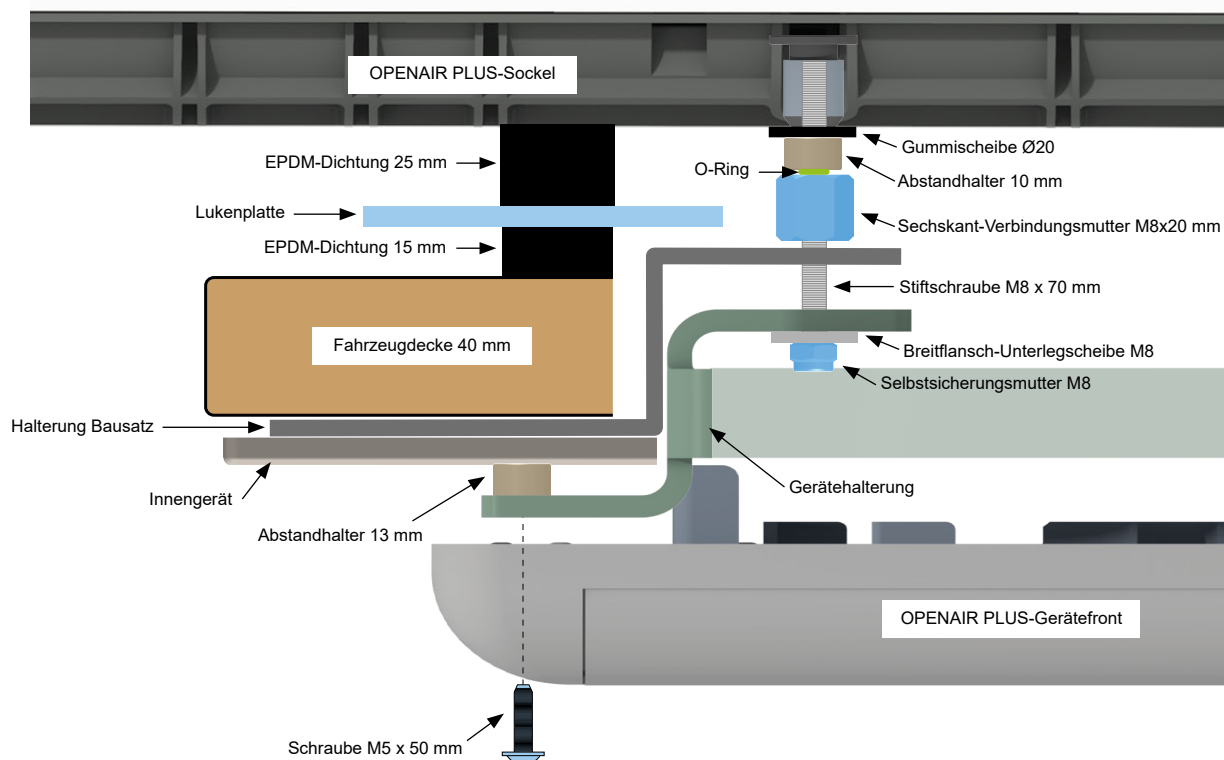
Achtung: Die in der Einbauanleitung der **OPENAIR PLUS** enthaltenen Abbildungen geben möglicherweise nicht genau Ihren Fahrzeugtyp wieder, was sich jedoch in keiner Weise auf den Einbau auswirkt.

MONTAGE PLANS

Deckenstärke 30 mm

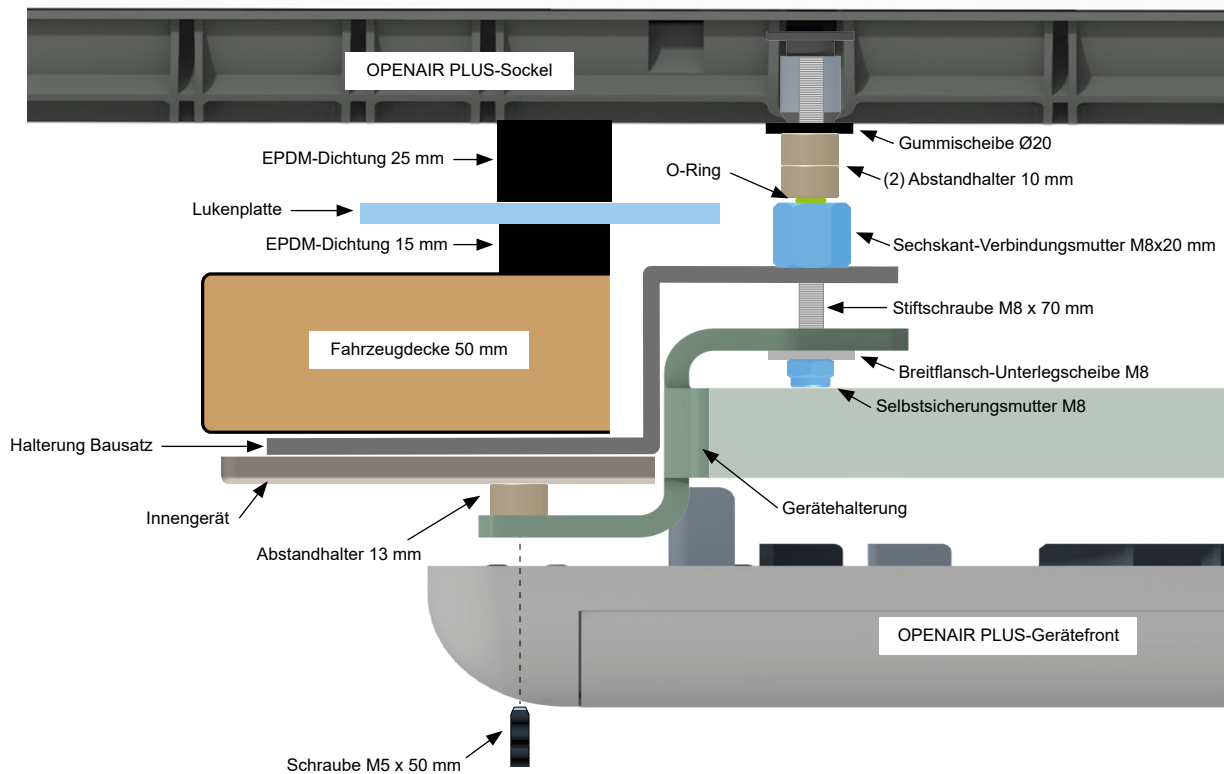


Deckenstärke 40 mm

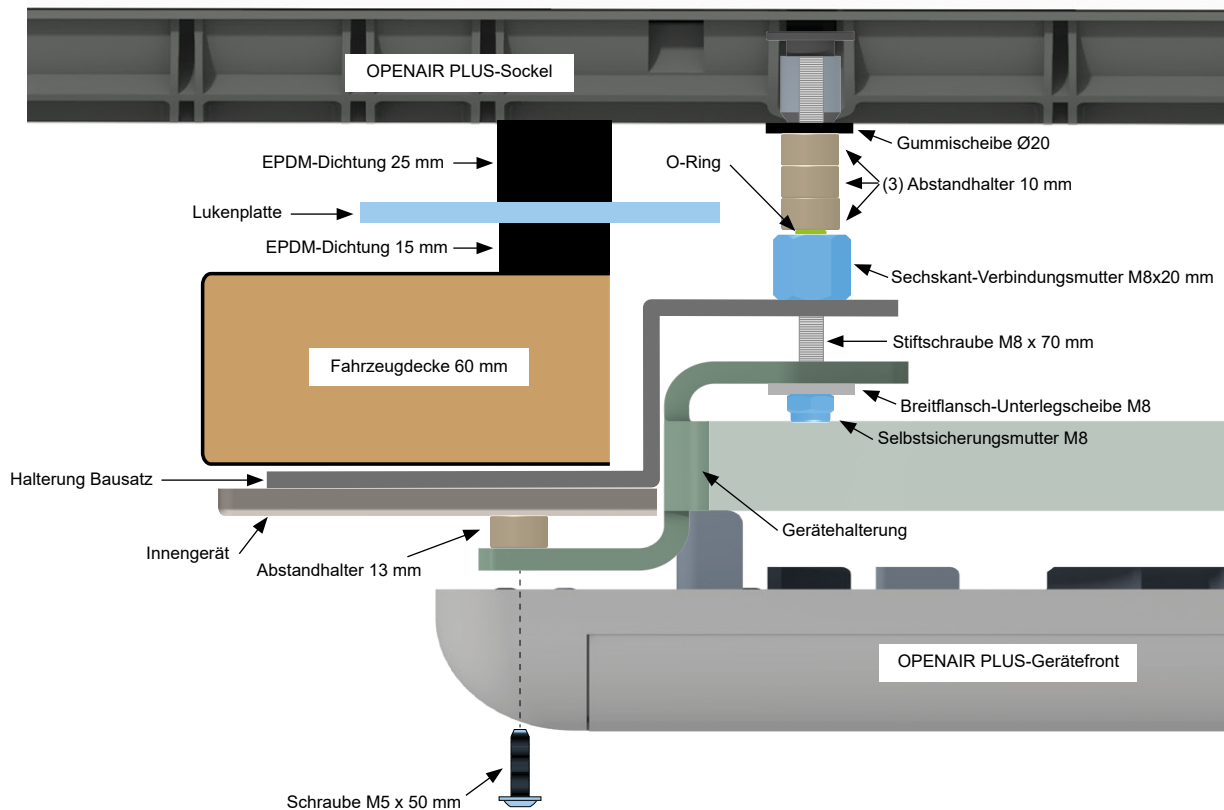


MONTAGE PLANS

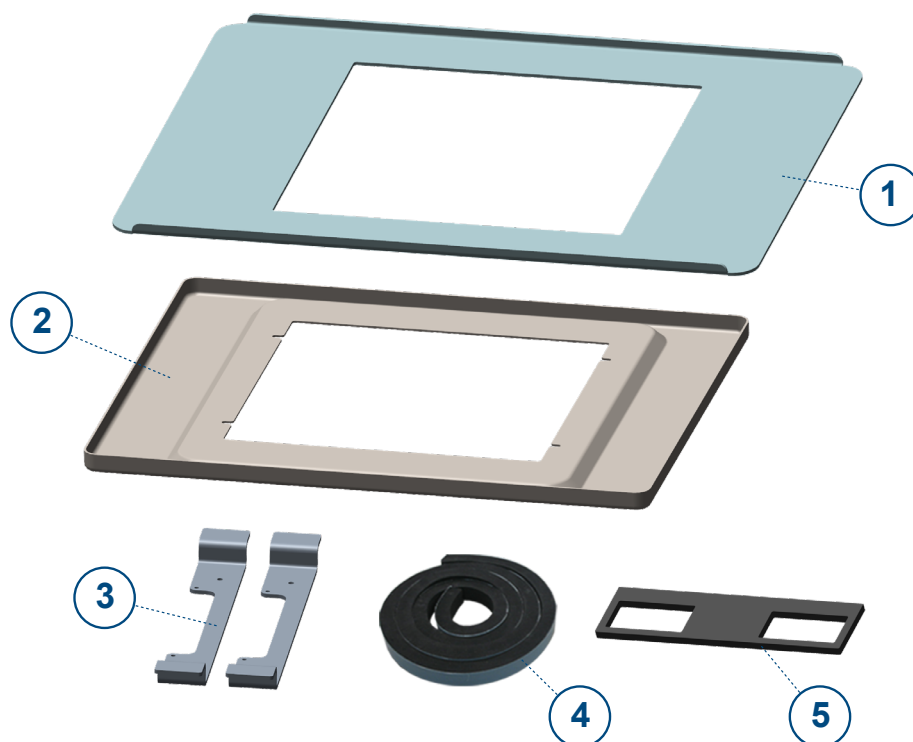
Deckenstärke 50 mm



Deckenstärke 60 mm



Ersatzteilliste



Nr.	Stckzahl	Art. Nr.	Beschreibung
1	1	1003390530	Verbindungsblech
2	1	1003780475	Innengerät 786 x 600 mm
3	1	1003812227	Montagehalterung
4	1	1003910726	EPDM-Dichtung 25x15
5	1	1003855336	Zusatzdichtung Führung

NOTEN

This image shows a single page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, leaving small margins at the top and bottom. There is no handwriting or other markings on the page.

Grazie per l'acquisto e per la fiducia riposta nella nostra gamma di prodotti **Caravaning**. **OPENAIR PLUS** è un impianto di aria condizionata ad alte prestazioni prodotto da **Dirna Bergstrom** per camper e altri veicoli ricreazionali, da usare con il motore fermo o in moto.

OPENAIR PLUS è stato progettato con la tecnologia più avanzata per renderlo altamente performante e per ridurre il consumo energetico della batteria ausiliaria del veicolo. Proprio grazie a queste caratteristiche, è unico nel mercato della climatizzazione dei veicoli ricreazionali.



Leggere attentamente questo documento prima di installare il prodotto. Conservare questo documento con cura per poterlo consultare in futuro. La documentazione originale è stata stilata in spagnolo, perciò le altre lingue sono traduzioni.

Tutti i manuali del prodotto sono disponibili in versione digitale (PDF) su

<https://bergstrominc.com/es/>

La vendita e la garanzia sono disciplinate dalla versione più aggiornata delle nostre condizioni generali di vendita, pubblicata sul nostro sito web <https://bergstrominc.com/es/>

Questo manuale è aggiornato riguardo agli sviluppi tecnici più avanzati di questa gamma al momento della pubblicazione. Tuttavia, potrebbero riscontrarsi differenze dovute al continuo miglioramento.

Spiegazione dei simboli



- **Avvertenza:** Avvertenza di sicurezza riguardo a una situazione che, se non venisse evitata, potrebbe provocare gravi lesioni anche mortali.



- **Pericolo:** Rischio di taglio. Segnala una situazione che potrebbe provocare una lesione da taglio.



- **Pericolo:** Rischio di folgorazione. Segnala una situazione che potrebbe provocare una lesione da folgorazione.



- **Avviso:** Avviso di sicurezza riguardo a una situazione che, se non venisse evitata, potrebbe provocare danni all'impianto o ad altri materiali.



- **Informazioni:** Ulteriori informazioni sull'installazione o sulla gestione del prodotto.



- **Fragile:** Indica una situazione in cui si deve procedere con attenzione per non causare danni all'impianto e ad altri materiali.



Esclusione di responsabilità

- **Dirna Bergstrom** declina ogni responsabilità per eventuali danni causati dai casi seguenti:

- Danni al prodotto provocati da sollecitazioni meccaniche e sovratensioni.
 - Modifiche effettuate sull'impianto senza esplicita autorizzazione del costruttore.
 - Uso dell'impianto per fini diversi da quelli riportati in questo documento.
 - Movimentazione o installazione errata dell'impianto di aria condizionata.
- Quando si installa **OPENAIR PLUS** sul tettuccio, si deve tenere conto del fatto che, normalmente, i veicoli dotati di oblò hanno una struttura sufficiente a sostenere il peso dell'impianto. Tuttavia, quando ciò non avviene ed è necessario praticare un taglio nel tettuccio, oppure anche in presenza di un oblò, se il materiale non è sufficientemente resistente (tettuccio in fibra, plastica, ecc.), **l'installatore deve decidere, sotto la propria responsabilità** riguardo alla necessità di rinforzarlo per evitare deformazioni, rotture, infiltrazioni d'acqua ecc.

OPENAIR PLUS è un'apparecchiatura versatile la cui installazione può essere effettuata ogni 90° per adattarla allo spazio disponibile sul tettuccio del veicolo in modo tale da non interferire con altri accessori.



Avvertenze durante il montaggio

- L'installazione, la riparazione e la manutenzione di questo impianto possono essere eseguite esclusivamente da personale tecnico in possesso della formazione necessaria nel campo dell'aria condizionata per veicoli, eventuali pericoli e norme applicabili.
- Leggere attentamente le istruzioni di montaggio prima di iniziare l'installazione dell'impianto **OPENAIR PLUS**. Durante l'installazione, seguire alla lettera le istruzioni indicate.
- Disinserire la chiave di avviamento prima di iniziare l'installazione dell'impianto.
- Disinserire la batteria del veicolo prima di cominciare l'installazione dell'impianto **OPENAIR PLUS**.

- Installare **OPENAIR PLUS** in modo sicuro per evitare cadute.
- Usare gli attrezzi più adatti per ogni operazione.
- Durante l'installazione, assicurare la connessione dei componenti elettrici, verificandone il corretto inserimento.
- Se nell'installazione i cablaggi devono attraversare pareti con bordi affilati, proteggere adeguatamente i cavi con guaine o passacavi per evitarne il danneggiamento.



- **Avvertenza importante:** quando si collega l'impianto, fare attenzione a non invertire le polarità. Se ciò dovesse succedere, il quadro comandi non si accende e l'impianto non si avvia.



Corretto uso del prodotto

- **OPENAIR PLUS** è un impianto di aria condizionata altamente performante, da installare sul tettuccio di camper e altri veicoli ricreazionali. Se ne sconsiglia l'installazione su qualsiasi altro tipo di veicolo.
- L'uso non conforme a quello previsto comporta l'annullamento della garanzia dell'impianto e l'esclusione di responsabilità da parte del costruttore.
- In caso di incertezze riguardo all'uso di **OPENAIR, PLUS** consultare il manuale dell'utente del prodotto.

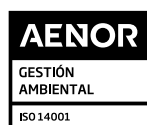
In conformità con gli standard internazionali di gestione della qualità ISO 9001, di qualità automobilistica IATF 16949 e di gestione ambientale ISO 14001, **Dirna Bergstrom** applica processi volti ad assicurare l'eccellenza e garantire la massima qualità dei propri prodotti. Certificato dall'IQNet Quality System.



ER-0022/1999



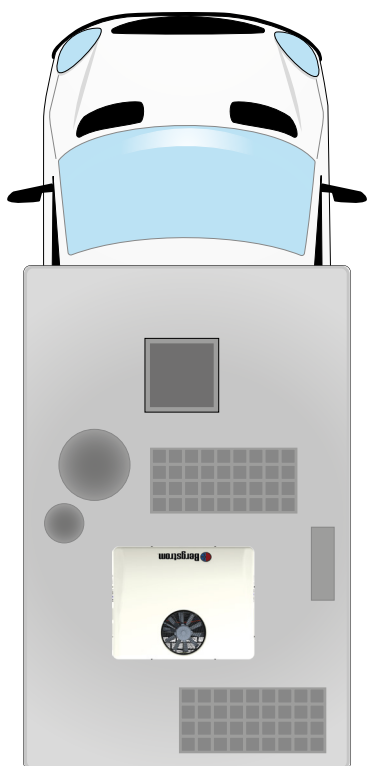
RA02-0027/2012
IATF: 0323311



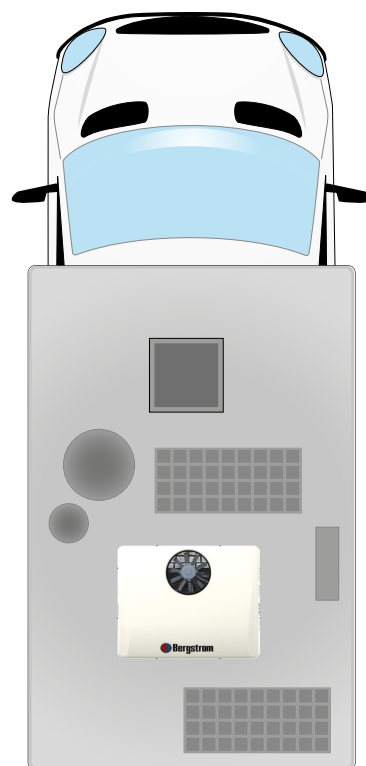
GA-2021/0140



OPZIONI DI MONTAGGIO



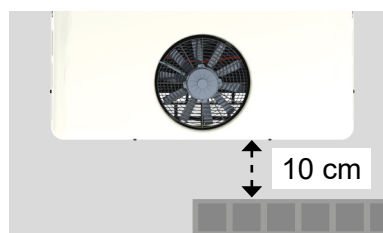
POSIZIONE DELL'IMPIANTO
NEL SENSO DI MARCIA



POSIZIONE DELL'IMPIANTO
IN CONTRARIO
AL SENSO DI MARCIA



Attenzione: Per garantire una corretta ventilazione dell'impianto ed evitare malfunzionamenti, è necessario mantenere uno spazio libero di almeno 10 cm lungo la parte posteriore dell'unità.





Attenzione: OPENAIR PLUS può essere installato solo su veicoli con botola 70x50 aventi:

- Spessore del tettuccio da 30 a 60 mm

1

Smontare la botola 70x50 e il telaio del veicolo in cui deve essere installato **OPENAIR PLUS**.



2

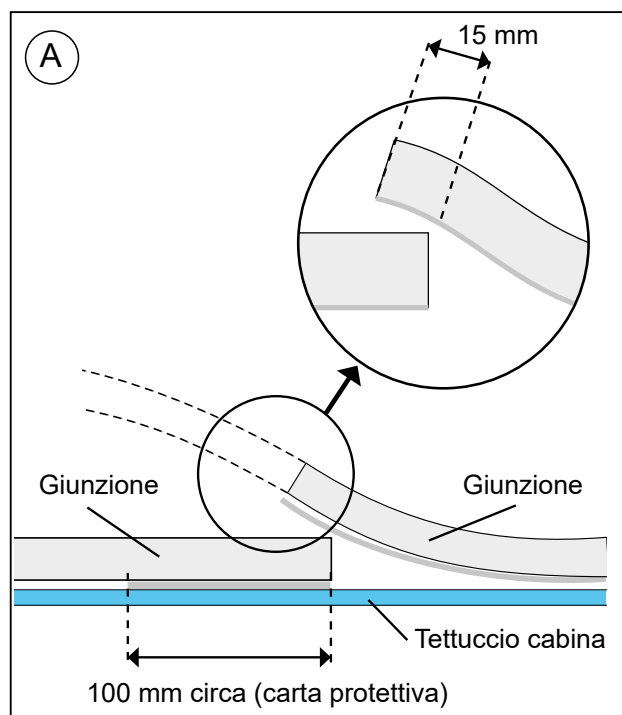
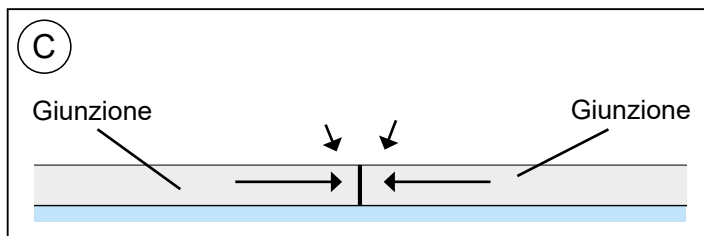
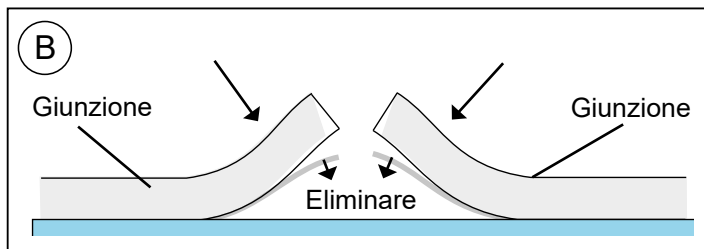
Collocare guarnizione di montaggio EPDM 25x15 del kit di adattamento intorno al vano della botola.





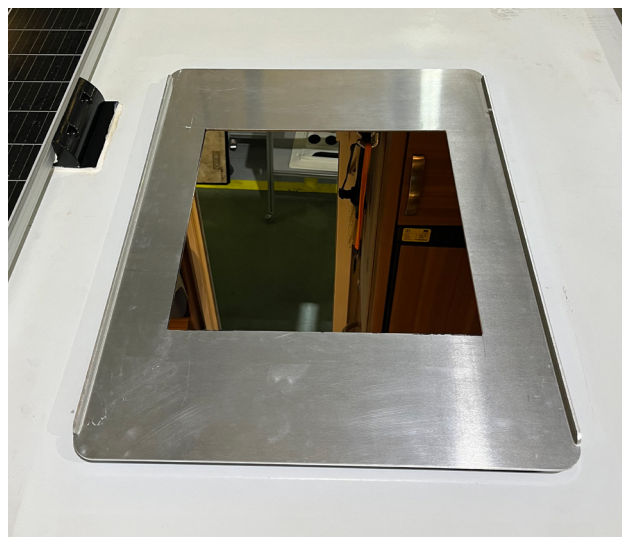
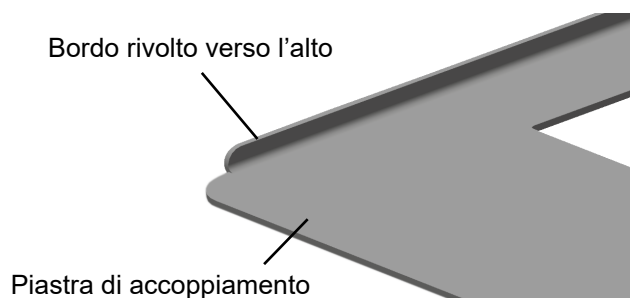
COME TAGLIARE LA GUARNIZIONE EPDM A PER EVITARE L'INFILTRAZIONE DELL'ACQUA NELLA CABINA

- A-** Incollare la guarnizione, lasciando 100 mm di carta protettiva su ogni lato.
- B-** Rimuovere i due pezzi di carta.
- C-** Incollare premendo entrambe le estremità.



3

Collocare la piastra di accoppiamento sulla guarnizione EPDM centrandola sulla cornice del tettuccio nella posizione indicata.



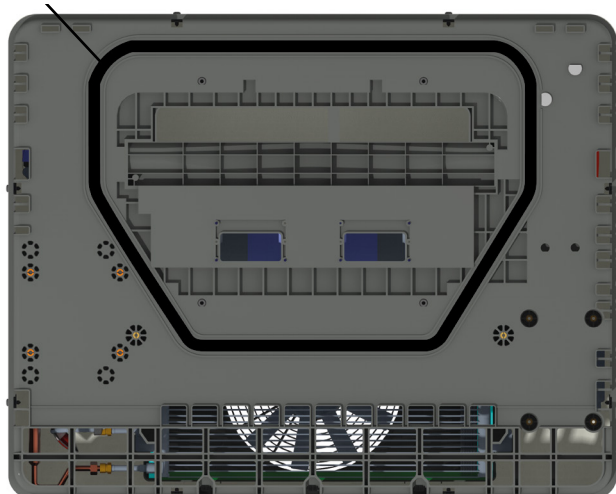
4

Sollevare l'apparecchiatura e incollare la guarnizione EPDM 25x25 sulla base della stessa lungo l'area contrassegnata.

Attenzione: Se la guarnizione EPDM viene collocata in un'altra posizione, l'impianto non funziona correttamente e l'acqua e l'aria potrebbero penetrare all'interno del veicolo.

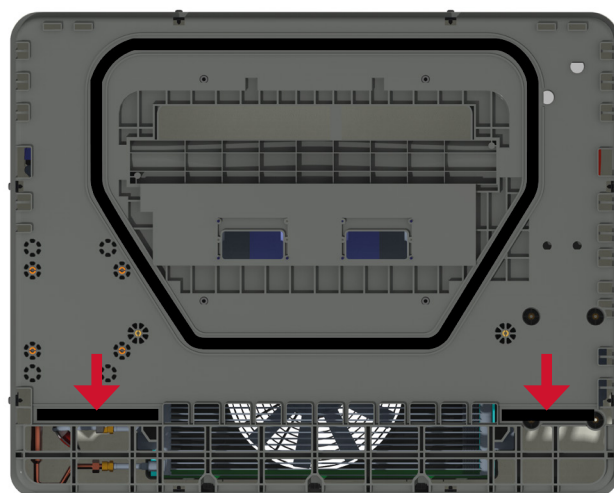
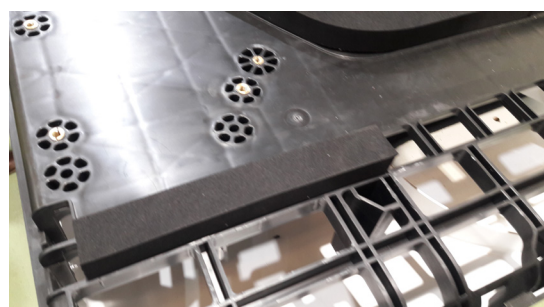


Guarnizione EPDM



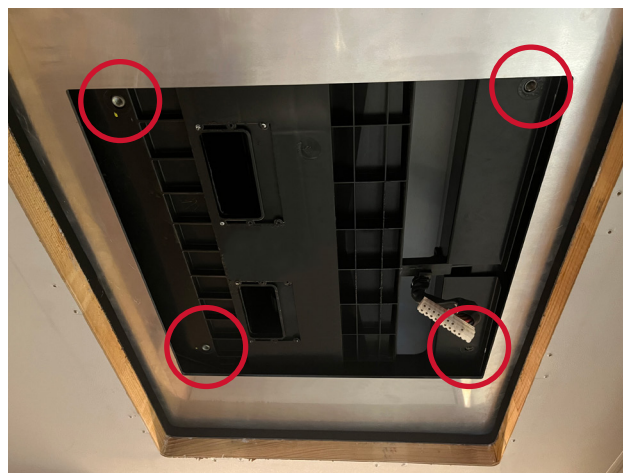
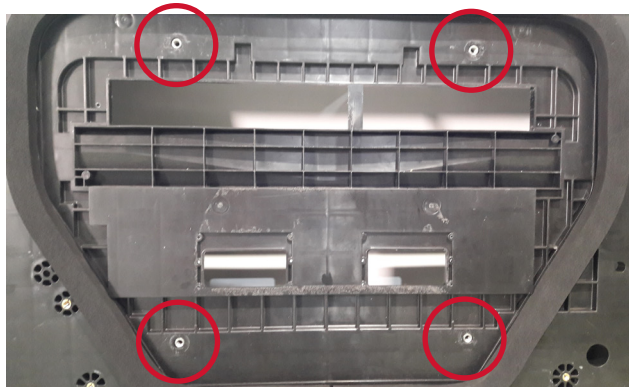
5

Montare sulla base dell'impianto, dove indicato, i (2) tamponi posteriori in EPDM 100x30x20 mm forniti nella borsa dell'impianto.



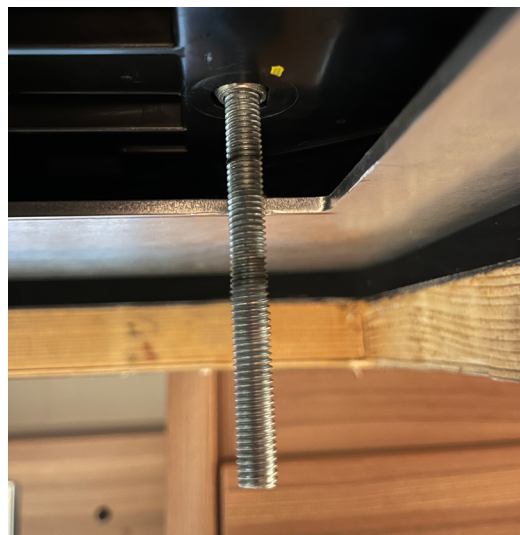
6

Posizionare l'apparecchiatura sul tettuccio, centrandola dall'interno, assicurandosi che i (4) punti di fissaggio delle staffe della base siano centrati nell'apertura del tettuccio.



7

Avvitare al massimo (4) prigionieri M8x70 nei punti di fissaggio sulla base dell'impianto.



8

Attenzione: A seconda dello spessore del tettuccio del veicolo bisognerà montare la seguente quantità di distanziatori prima di collocare gli esagoni di fissaggio nelle viti prigioniere.

Spessore 30 mm: Senza distanziatore.

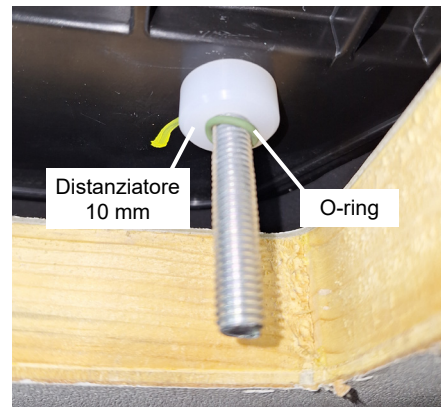
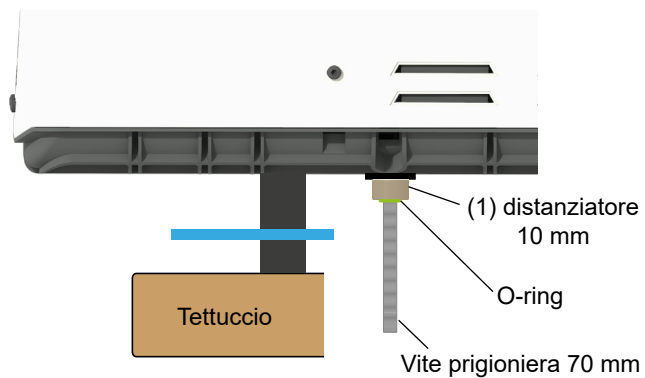
Spessore 40 mm: (1) distanziatore 10 mm

Spessore 50 mm: (2) distanziatore 10 mm

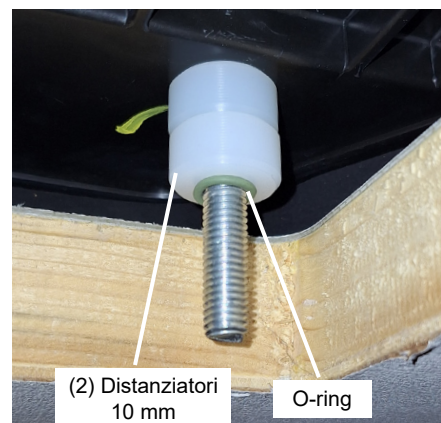
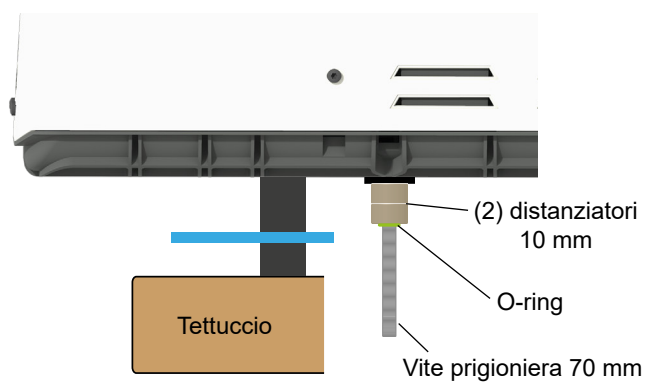
Spessore 60 mm: (3) distanziatore 10 mm

Posizionare l'O-ring come indicato per evitare la caduta dei separatori.

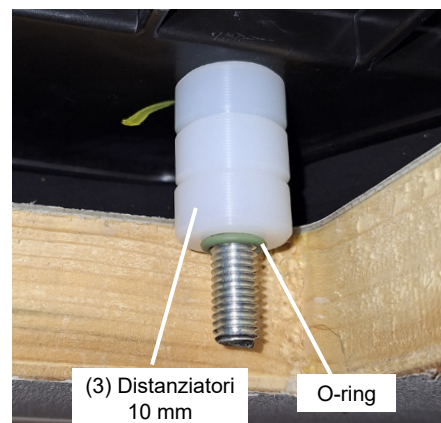
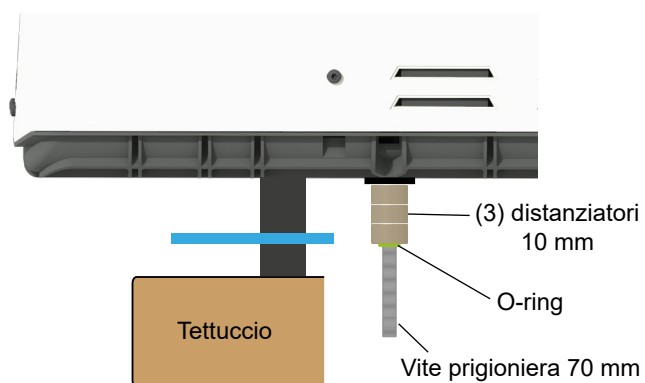
Spessore del tettuccio 40 mm



Spessore del tettuccio 50 mm

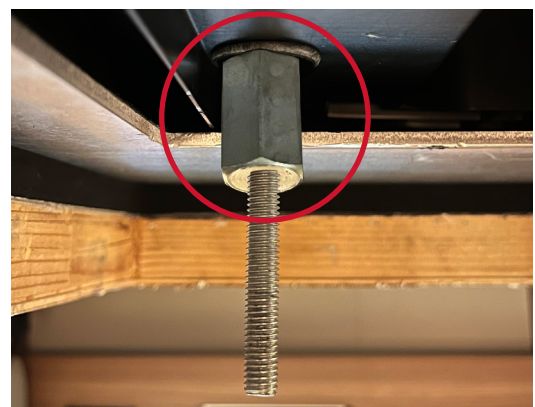


Spessore del tettuccio 60 mm

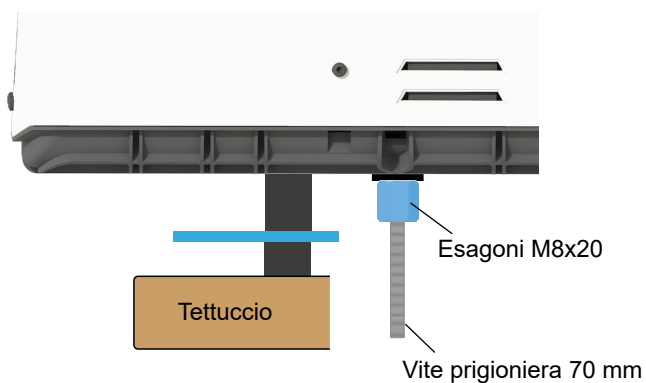


9

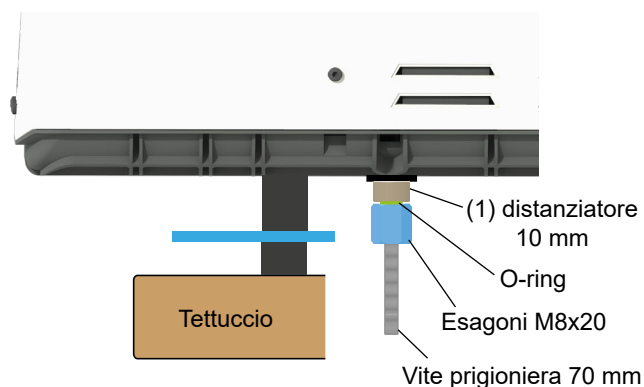
Montare e stringere (4) esagoni M6x20.



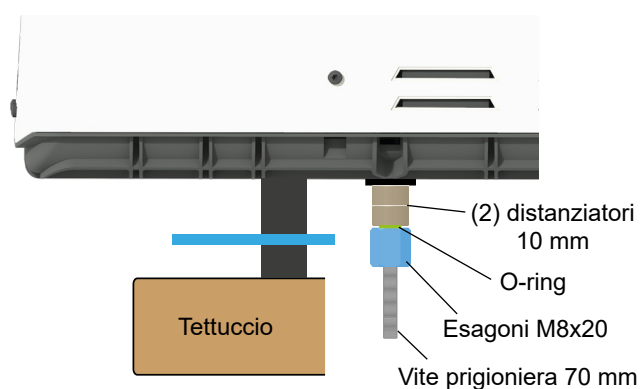
Spessore del tettuccio 30 mm



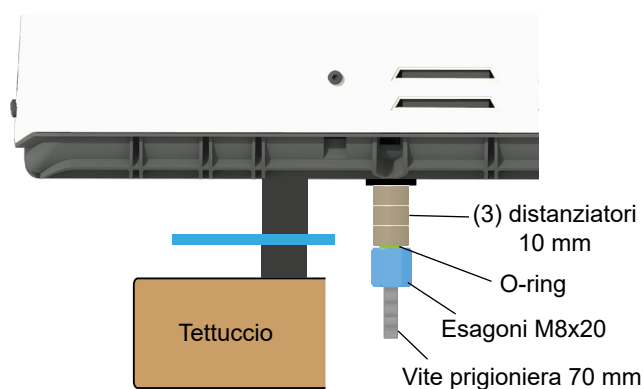
Spessore del tettuccio 40 mm



Spessore del tettuccio 50 mm



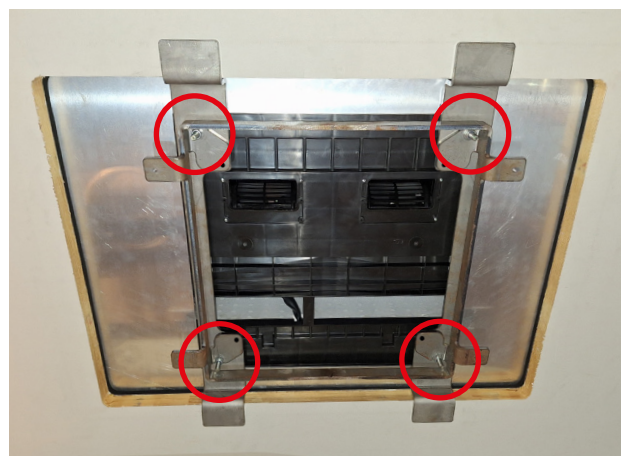
Spessore del tettuccio 60 mm



10

Montare il supporto incluso nell'impianto insieme ai (2) supporti forniti nel kit sui (4) prigionieri M8x70 con (4) rondelle piane da 8 mm e (4) dadi autobloccanti M8.

Nota bene: Non stringere i dadi autobloccanti, collocare solo i supporti.



11

Posizionare la console inserendola prima da un lato del supporto, sopra le due linguette di fissaggio della console interna, quindi spostarla verso il lato opposto per inserirla sopra le due linguette dell'altro lato del supporto.



12

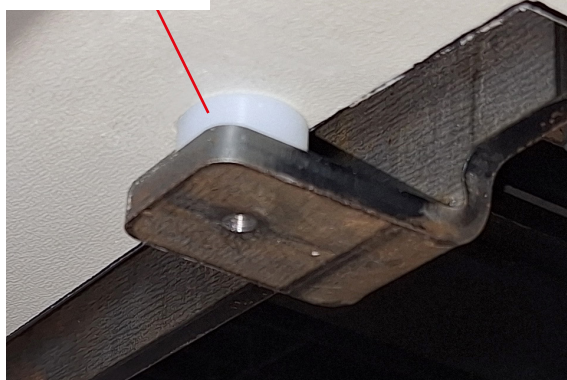
Posizionare (4) distanziatori da 13 mm tra le linguette della staffa di fissaggio dell'impianto e la console. Stringere i dadi autobloccanti di fissaggio delle staffe fino a centrare completamente la console e aderirla al tettuccio.

Controllare che la guarnizione esterna EPDM dell'impianto sia stata compressa tra 3 e 6 mm

Nota bene: Per evitare possibili infiltrazioni d'acqua all'interno del veicolo, è necessario assicurare il serraggio della guarnizione EPDM con la base dell'impianto.



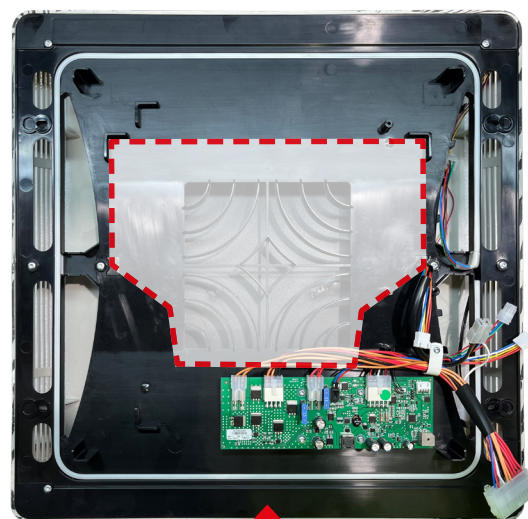
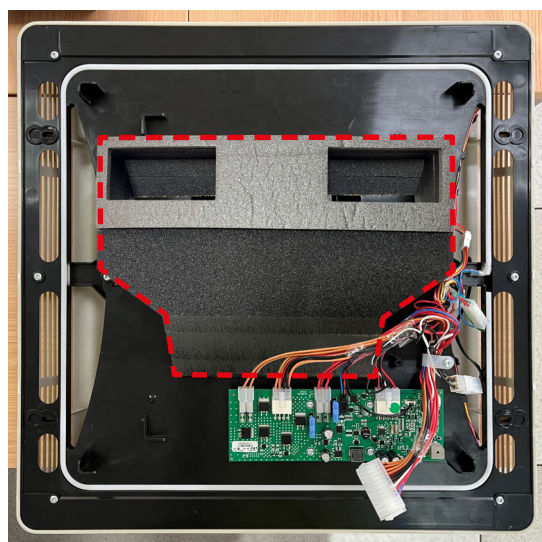
Distanziatore 13 mm



15

Incollare il canalizzatore nella console interna dell'impianto nella zona indicata.

Nota bene: Assicurarsi che il canalizzatore sia regolato secondo le guide di montaggio.



16

A seconda dello spessore del tettuccio del veicolo, aggiungere la guarnizione supplementare del canalizzatore incollandola centrata sul medesimo:

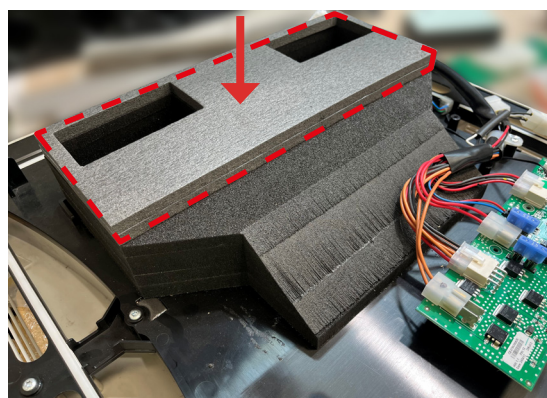
Spessore di:

30 mm: canalizzatore + (3) guarnizione supplementare.

40 mm: canalizzatore + (4) guarnizione supplementare.

50 mm: canalizzatore + (5) guarnizione supplementare.

60 mm: canalizzatore + (6) guarnizione supplementare.



15

Continuare il processo di installazione della console interna seguendo i passaggi indicati nei punti 11, 12, 13 e 14 delle istruzioni specifiche dell'impianto, documento 1003855547 pagine 94 e 95.

Attenzione: Al punto 13 delle istruzioni dell'impianto, fissare la console interna con le (4) viti M5 x 50 fornite nel kit.

Per completare il montaggio del cablaggio di alimentazione e segnale dell'impianto alla batteria, seguire i passi indicati nelle pagine 98 e 99 delle istruzioni specifiche dell'impianto, documento 1003855547.



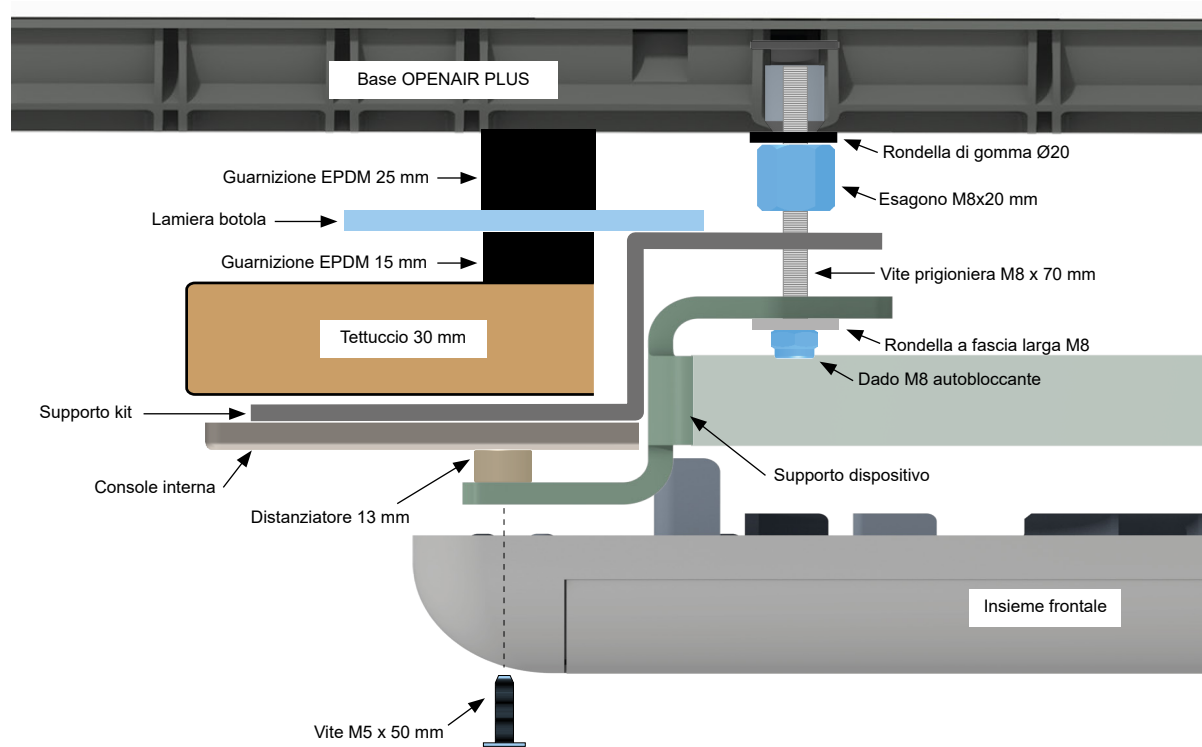
Tutti i manuali del prodotto sono disponibili in versione digitale (PDF) su:

<https://bergstrominc.com/es/>

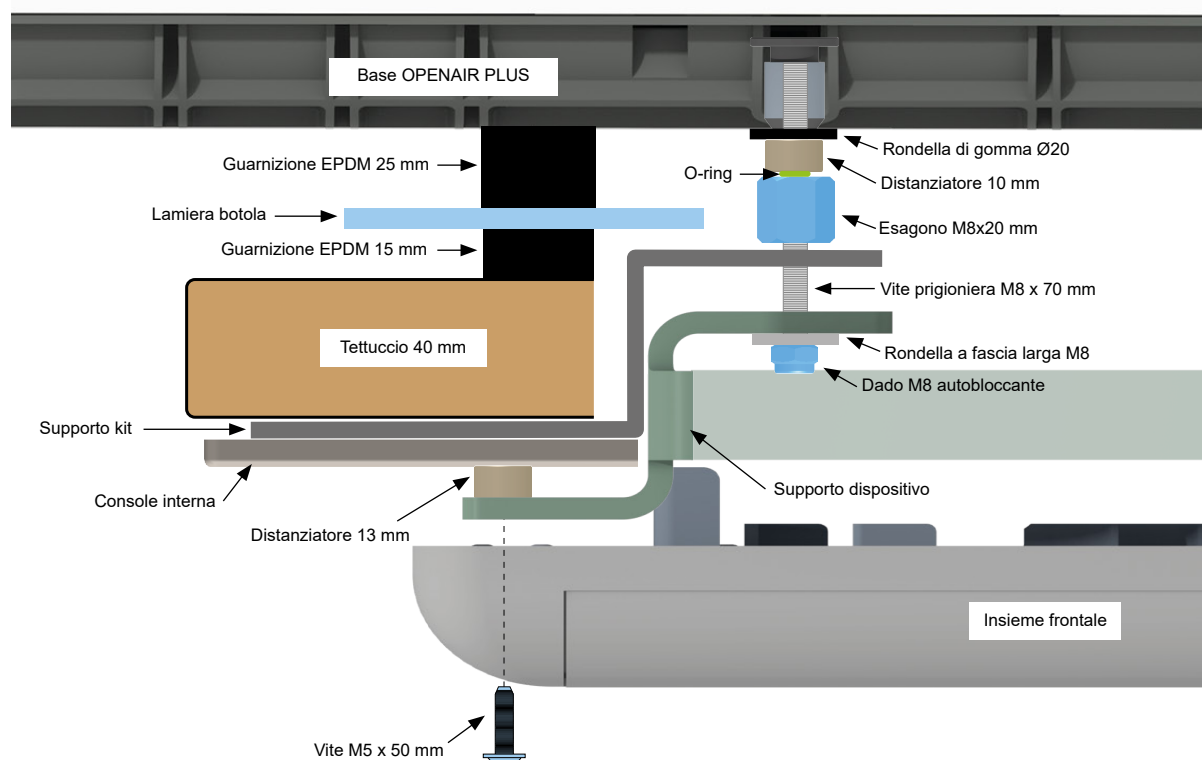
Attenzione: Le immagini contenute nel processo di installazione delle istruzioni di montaggio del dispositivo **OPENAIR PLUS** possono non rispecchiare esattamente il vostro tipo di veicolo, tuttavia questo non influenzerà in nessun caso il processo di installazione.

SCHEMAS DI MONTAGGIO

Spessore del tettuccio 30 mm

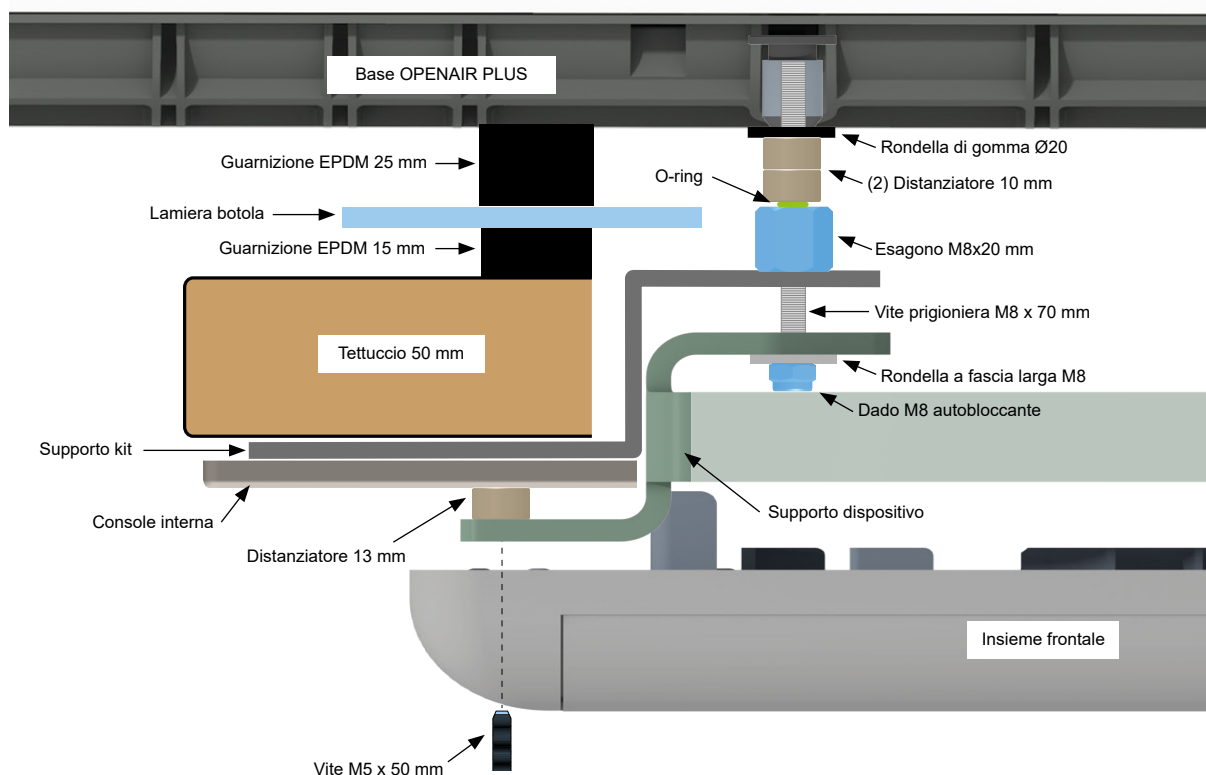


Spessore del tettuccio 40 mm

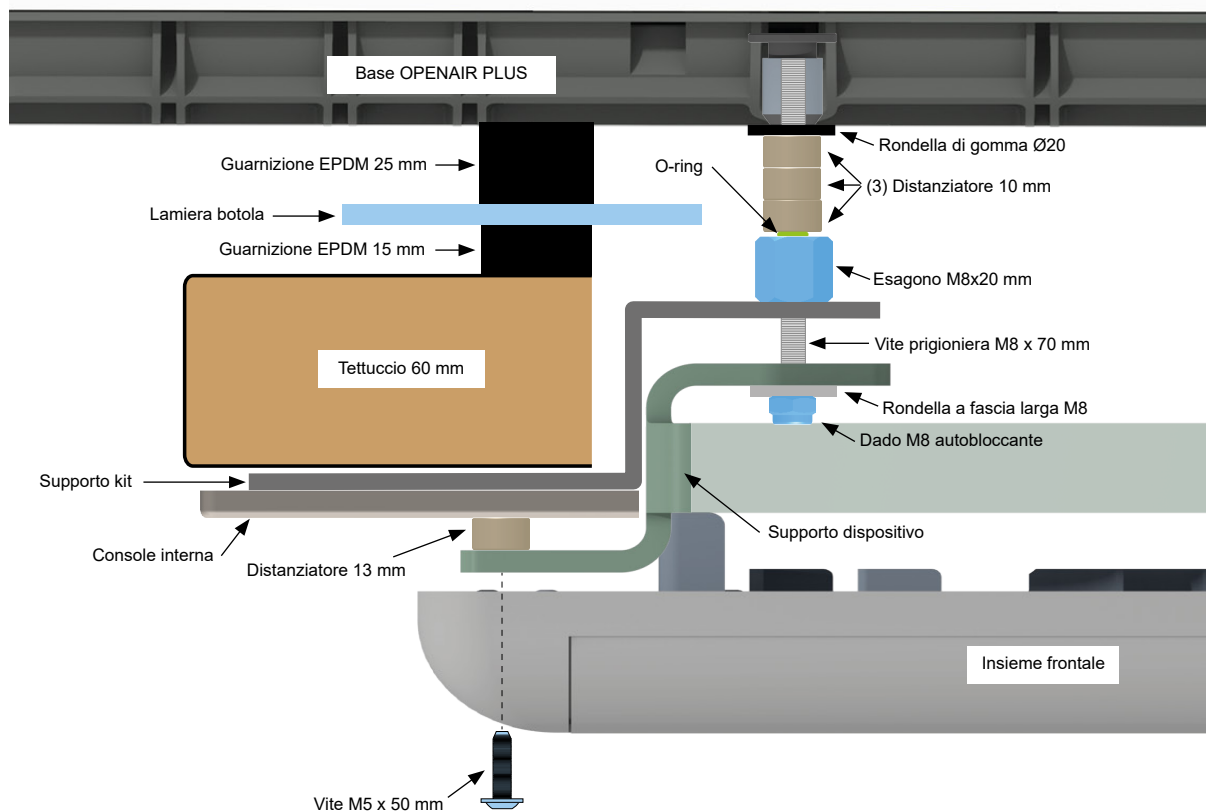


SCHEMAS DI MONTAGGIO

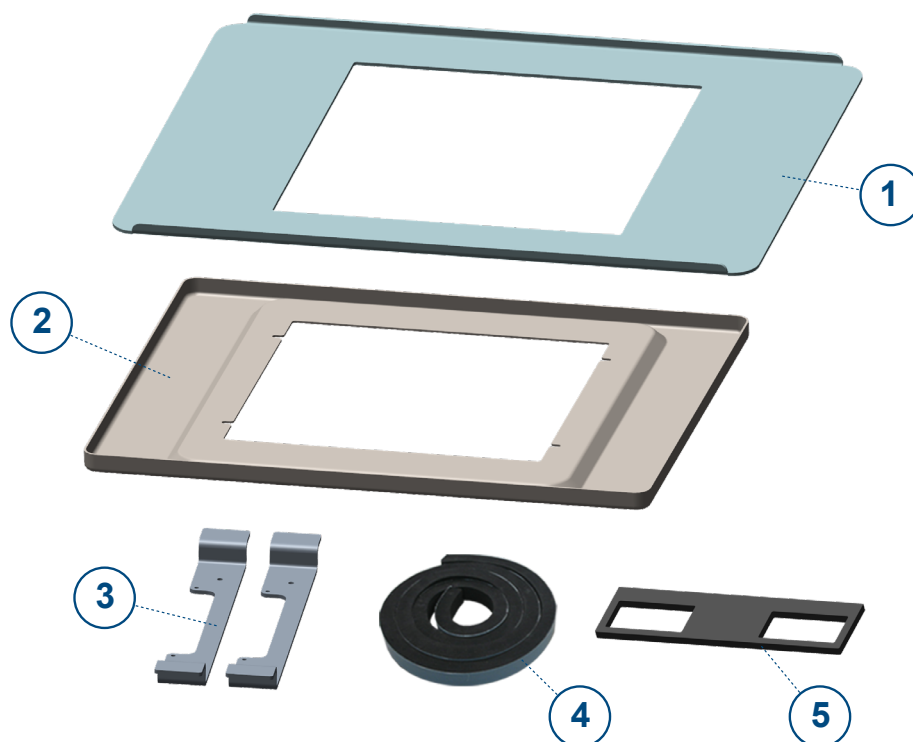
Spessore del tettuccio 50 mm



Spessore del tettuccio 60 mm



Elenco dei pezzi di ricambio



Id.	Qtà.	Riferimento	Descrizione
1	1	1003390530	Piastra di accoppiamento
2	1	1003780475	Console interna 786 x 600 mm
3	1	1003812227	Staffa di montaggio
4	1	1003910726	Guarnizione EPDM 25x15
5	1	1003855336	Guarnizione supplemento del canalizzatore

[illegible]

This image shows a single page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

NOTE

[illegible]



TU ESPACIO DE VIDA CONFORTABLE



Madrid, España

T. + 34 - 918-775-840

E. ventas@dirna.bergstrominc.com

W. <https://bergstrominternational.com/>

