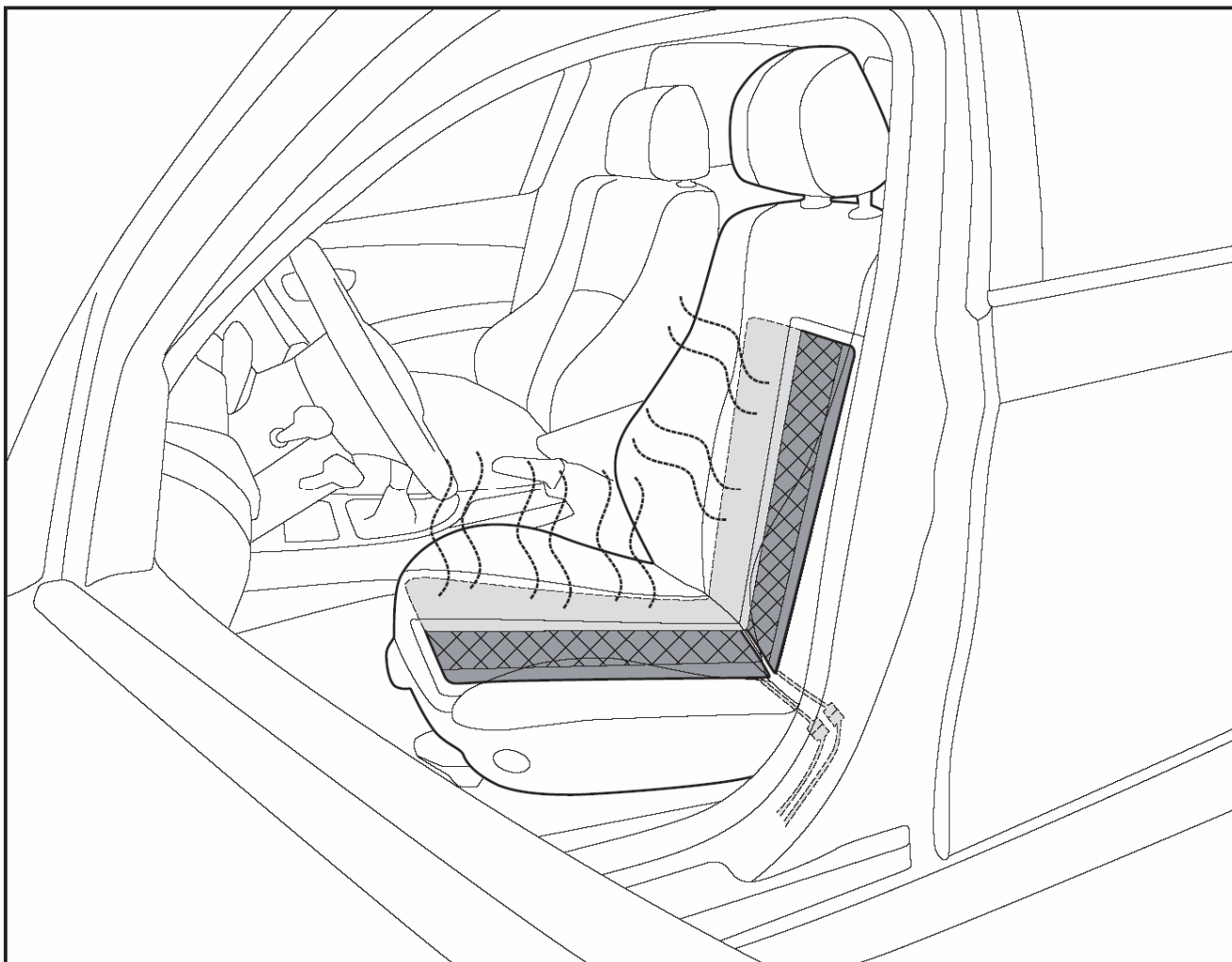
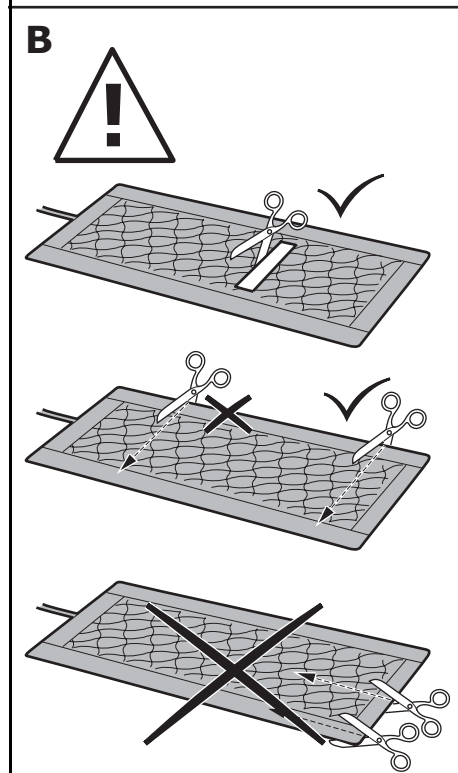
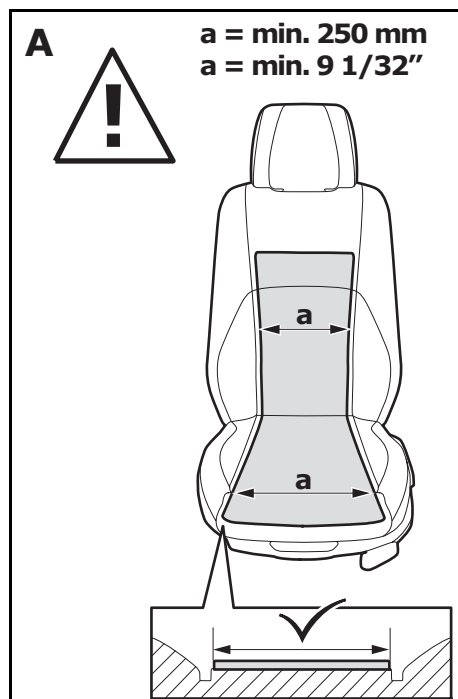


Installation instructions concerning seat heating elements for the front seats
Instruction de montage pour chauffage de sièges avant
Instrucciones de instalación de la calefacción para asientos delanteros



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1. General safety advice

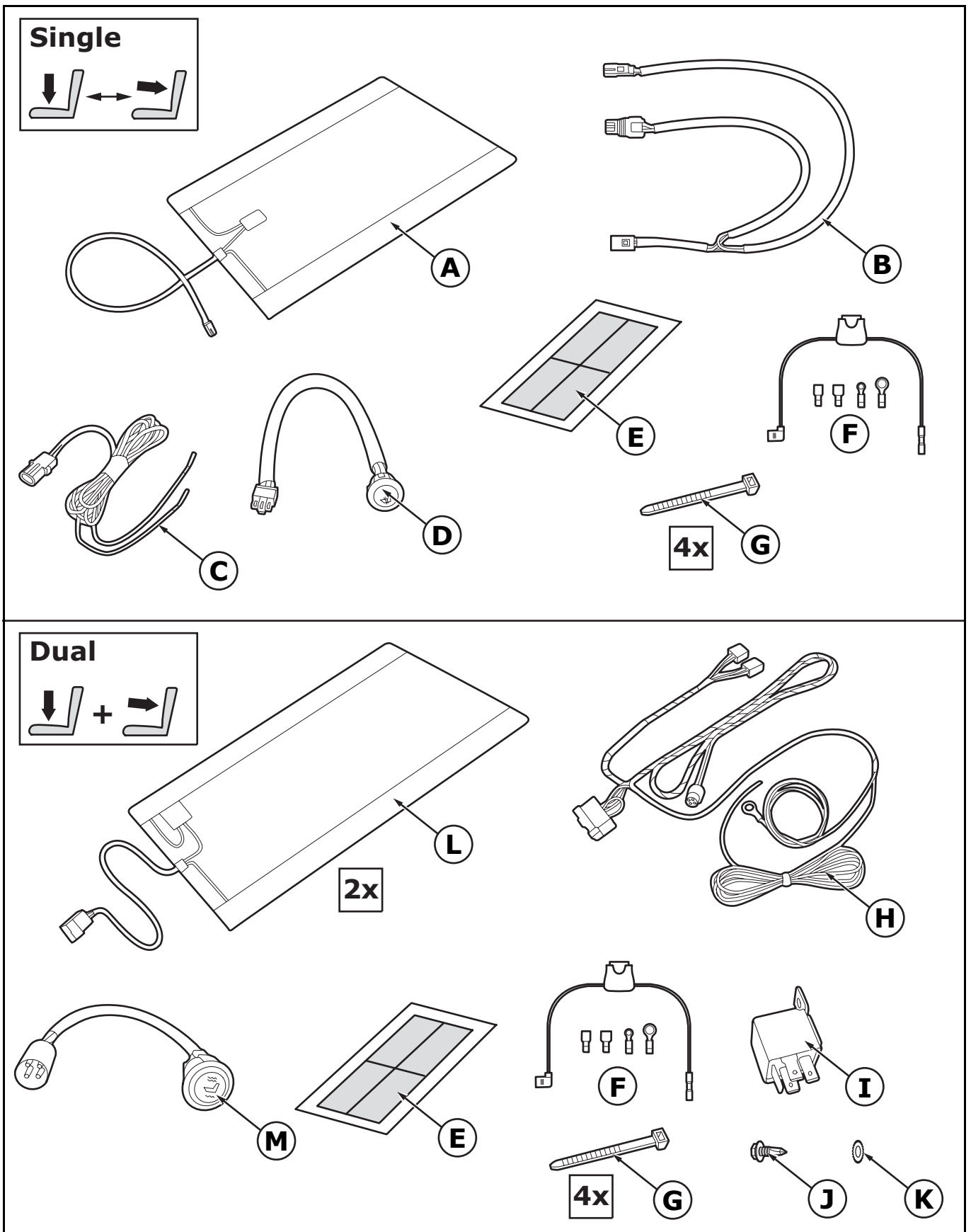
The installation of a 'Seat Kit' set is shown in figures 1 to 21.

A 'Single Element Kit' set can either be installed in the seat according to figures 1 to 7 and figures 14 to 21, or in the backrest according to figure 1 and figures 8 to 21.

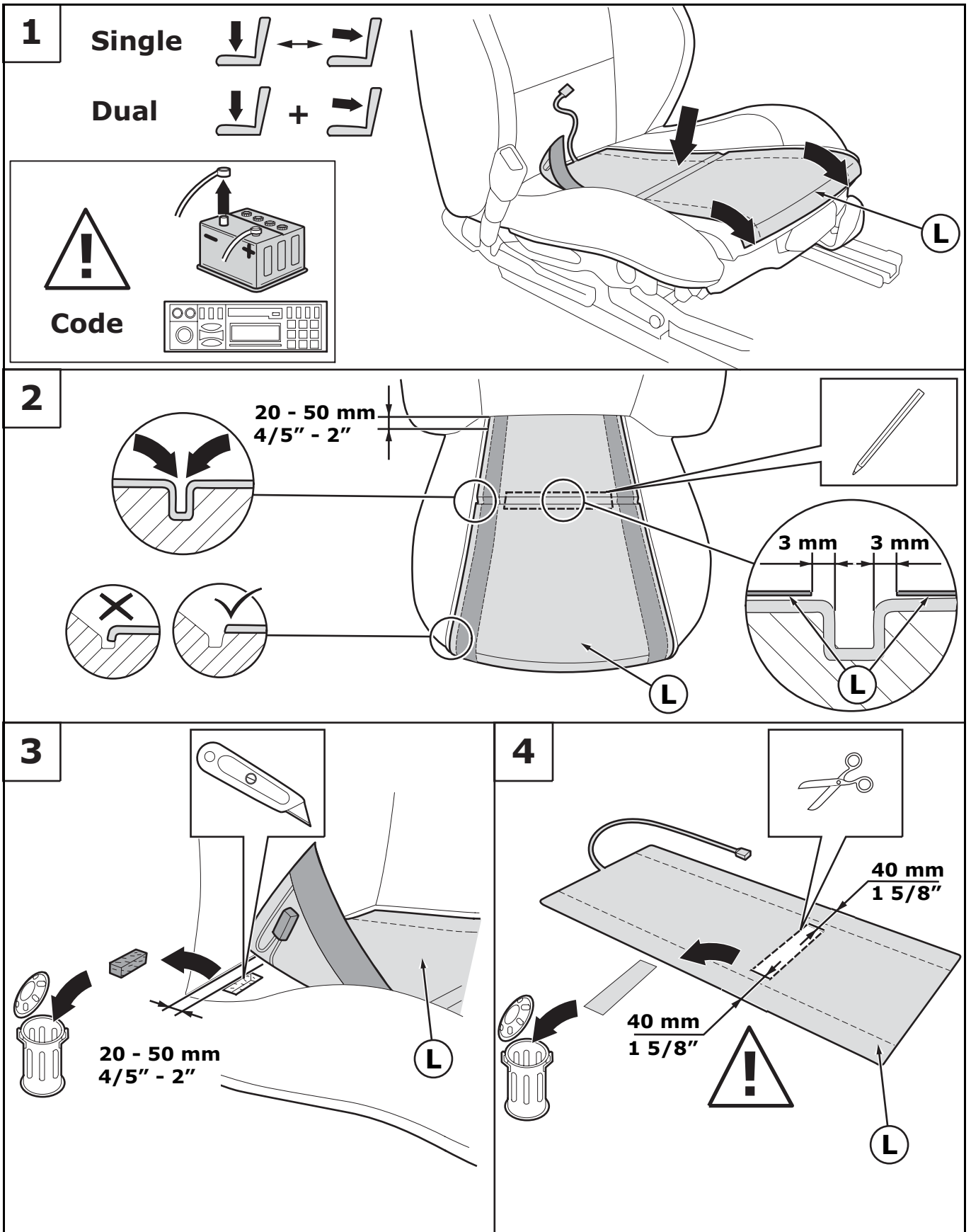
- It is impossible to install the Carbotex® retro-fitted seat heating kits whenever:
 - the seat covers are adhered to the seat's foam padding, or
 - the seat's longitudinal channels are spaced less than 250 mm apart (fig. A).
- The battery terminals should be disconnected in advance, before working on the vehicle's electrical circuits. The security codes (radio, navigation system, etc.) should be noted.
- The seat cover and seams should remain unmodified for seats with side air-bags. The heating elements are only allowed to be fitted in the middle of the seat. Please refer to the manufacturer's vehicle manual.
- Please follow the manufacturer's vehicle manual for seats with seat belt or a seat occupancy-recognition device, or both.
- The seat heating elements are only allowed to be installed by qualified and trained personnel who are knowledgeable about electronic systems and upholstery. Improper installation can adversely affect the system's reliability and risk overheating.
- Use original kit components only.
- The heating elements must be secured and mounted free of folds and creases. Heating elements are not allowed to be damaged during the installation. Avoid exposure to any sharp object that could compromise the integrity of the heating element. It is imperative for durability and the system's reliability that the complete heating element is positioned correctly. Any modifications to the seat's components, which affect the heating elements or come into contact with them, can influence the durability and reliability.
- The heating element is only allowed to be operated at +12 V ±3 V. It should ideally be connected to the onboard power supply via the ignition voltage and the protective fuse should ideally be put in an empty bay in the fuse box. The seat heating unit should be protected by a fuse with a maximum rating of 12 amps.
- The heating elements are only allowed to be modified as described in these installation instructions, except width which is not allowed to be altered in any way.
- The wire harness is not allowed to be modified. Ensure that the wire harness is secured and fastened properly. The wire harness must be routed properly so the seat can move freely without any difficulty. Contact with sharp edges, bending or pulling of wire must be avoided, in order to prevent the wire harness from being damaged. The onboard main supply and the wire harness cross-section must be adapted to the extra current loads if necessary. Refer to the vehicle's wiring diagram for additional information.
- The foam padding must be clean and free from separating agents, grease, silicone, dust and oil before the heating mats are secured to it. The full adhesive strength will only be attained if sufficient pressure is applied during the installation and when an adequate period is allowed for the chemical reaction to take place (48 hours approx.). A heating element is not allowed to be detached and reinstalled after it has been installed completely for the first time.
- The heating elements are not allowed to come into contact with any of the seat's electrical conductive components – such as padding clips or the seat's frame – at all: danger of short-circuiting!
- The heating performance on the cover's surface varies according to the type of seat or cover. Every millimetre of the cover's thickness prolongs the heating time by up to 15 seconds.
- The seat heating unit's function must be explained to the customer and the operating instructions must be provided. The customer must be informed about all safety aspects. The operating instructions must describe how the fuse is positioned.
- The points in the operating instructions must also be followed for the installation.
- The heating output on the cover's surface varies according to the type of seat cover. Every millimetre of the cover's thickness prolongs the heating time by up to 15 seconds.
- The seat heating unit's function must be explained to the customer and the operating instructions must be provided to them. The customer must be informed about the safety aspects. The operating instructions must describe how the fuse is positioned.
- The points in the operating instructions must also be followed for installation.

Warning: Seat heaters must not be installed in vehicles that will be used by paraplegic or other occupants that cannot sense heat, and customers have to notify the installer if the vehicle is sold to a third party.

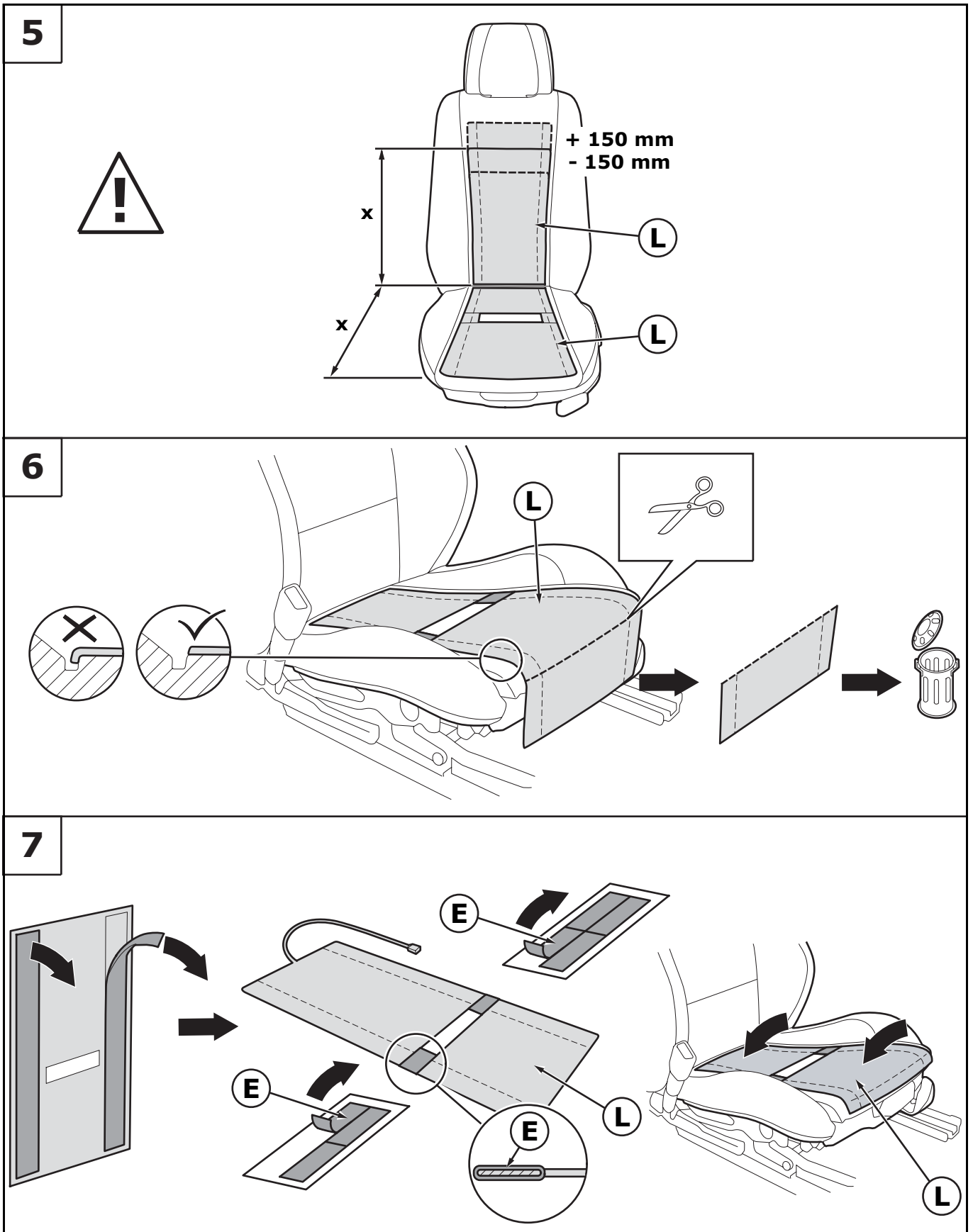
2. Components list/Jeu de



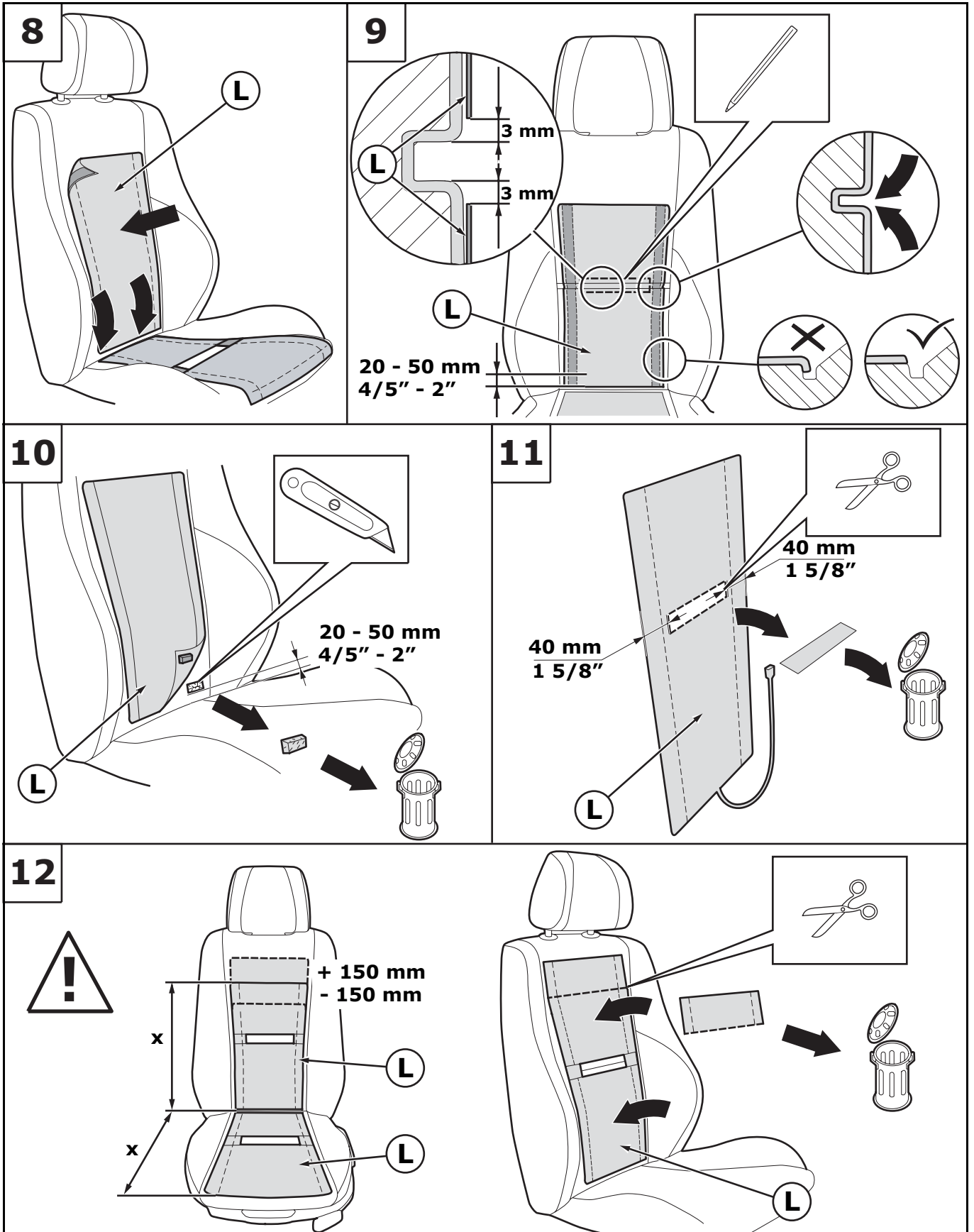
3. Installation/Montage/Instalación



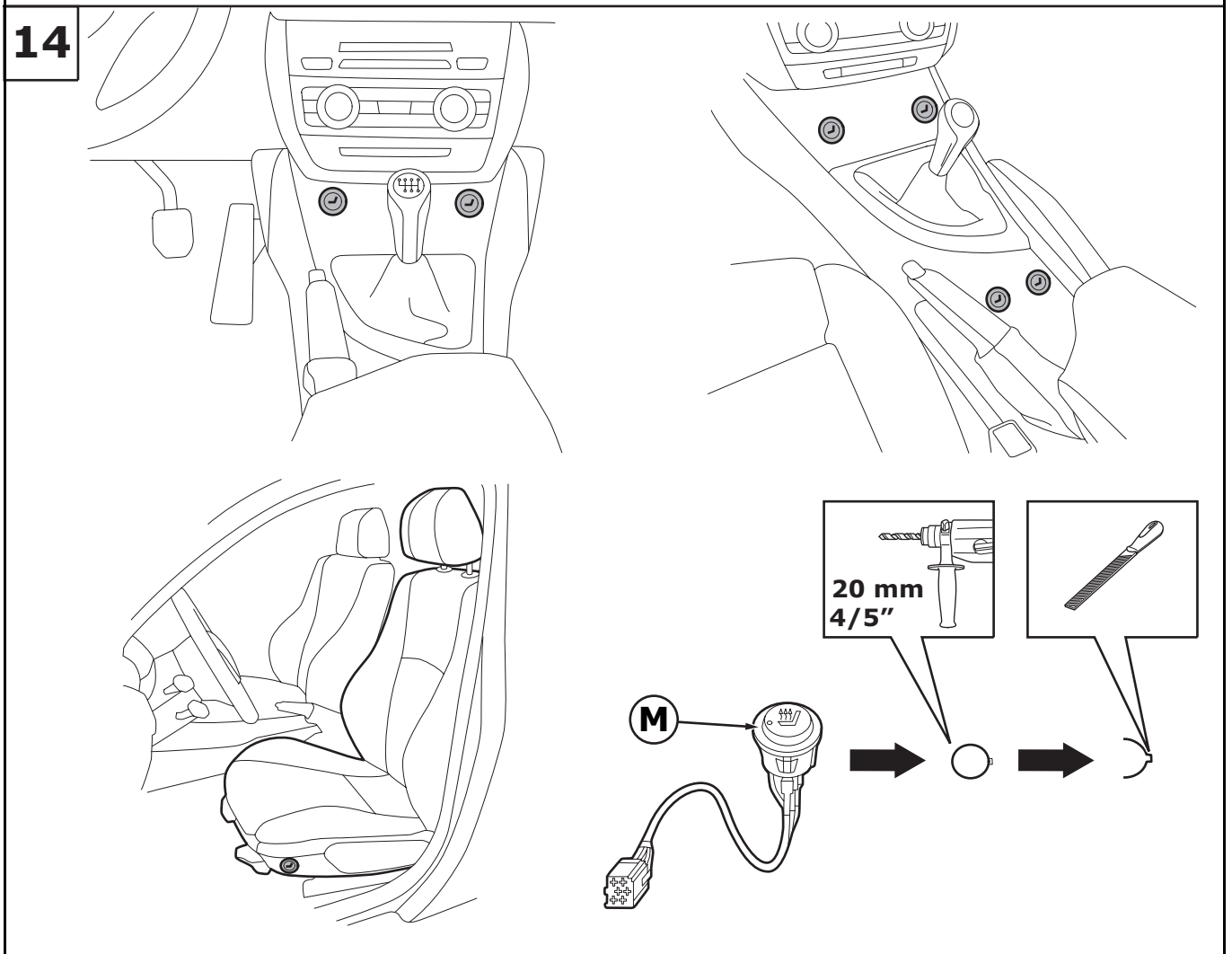
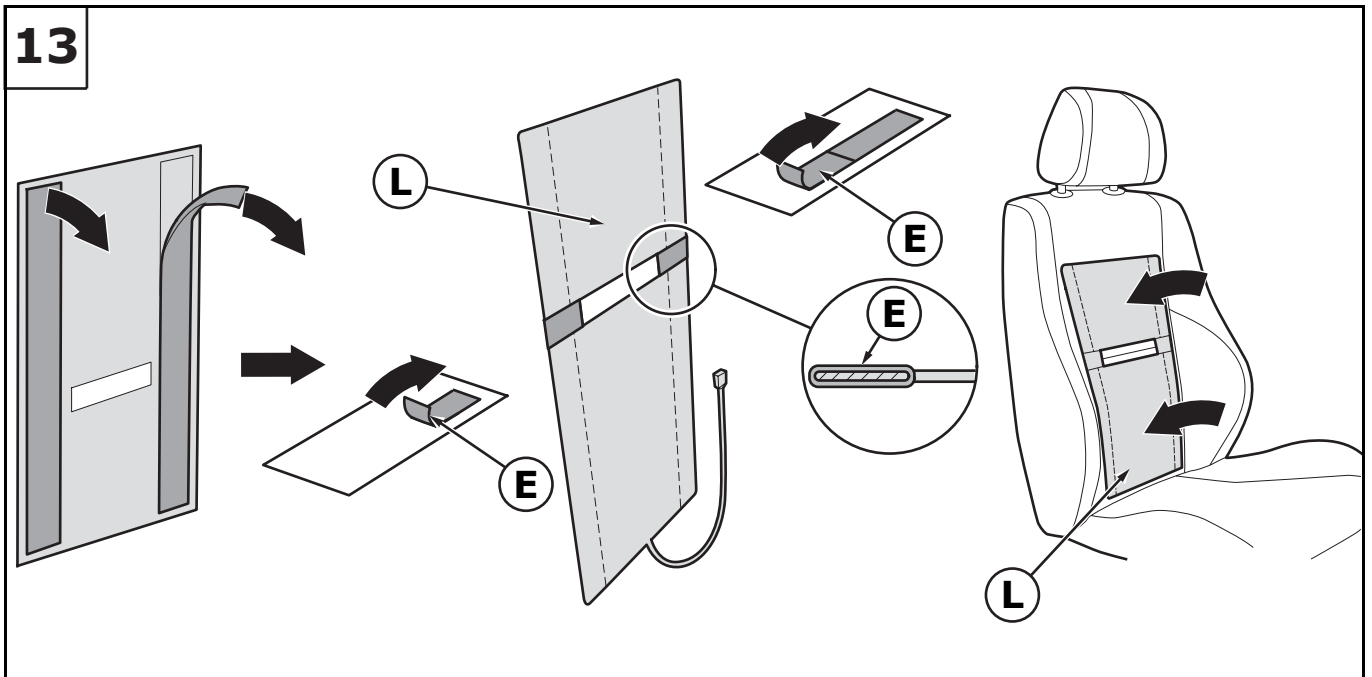
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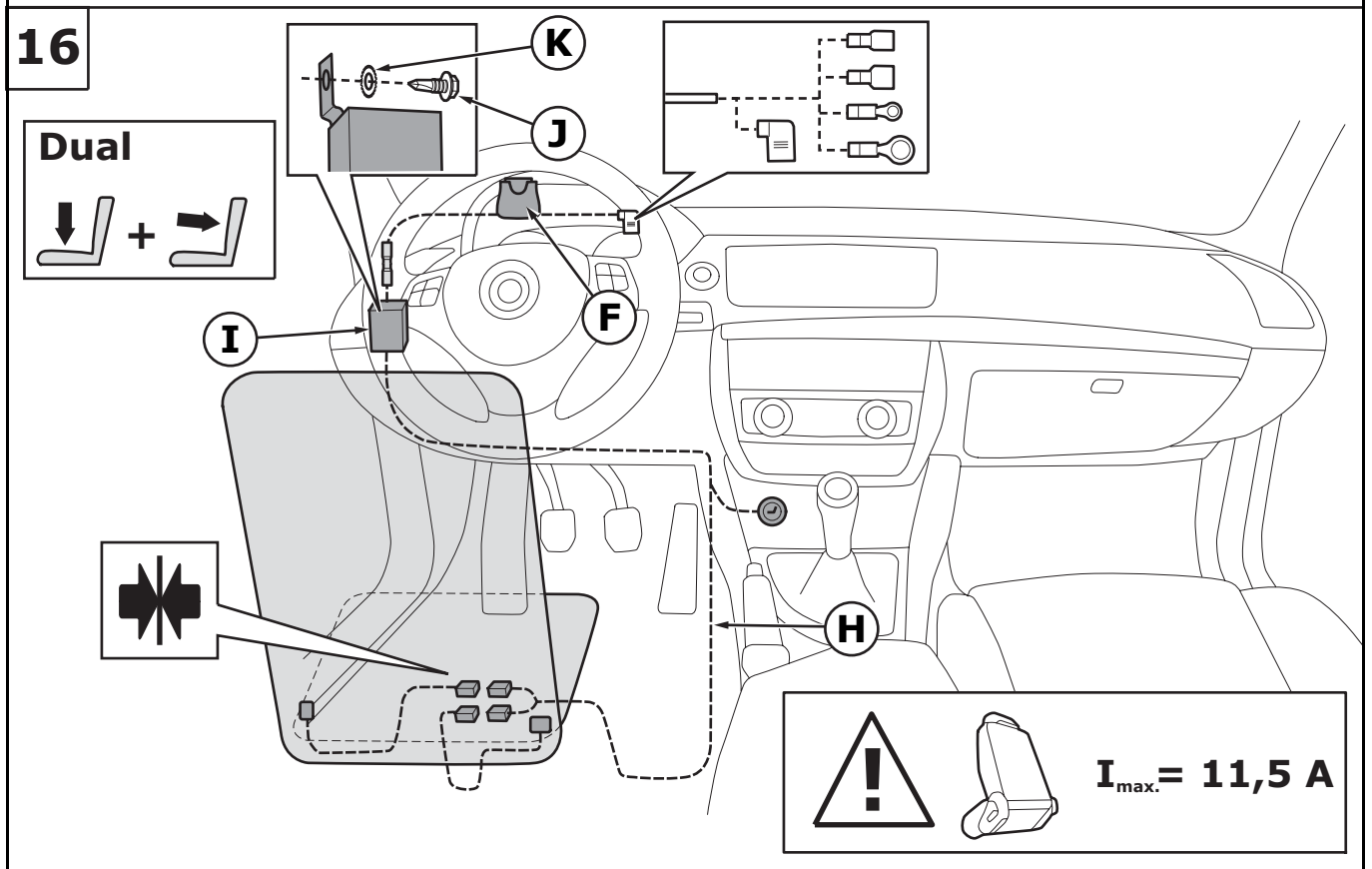
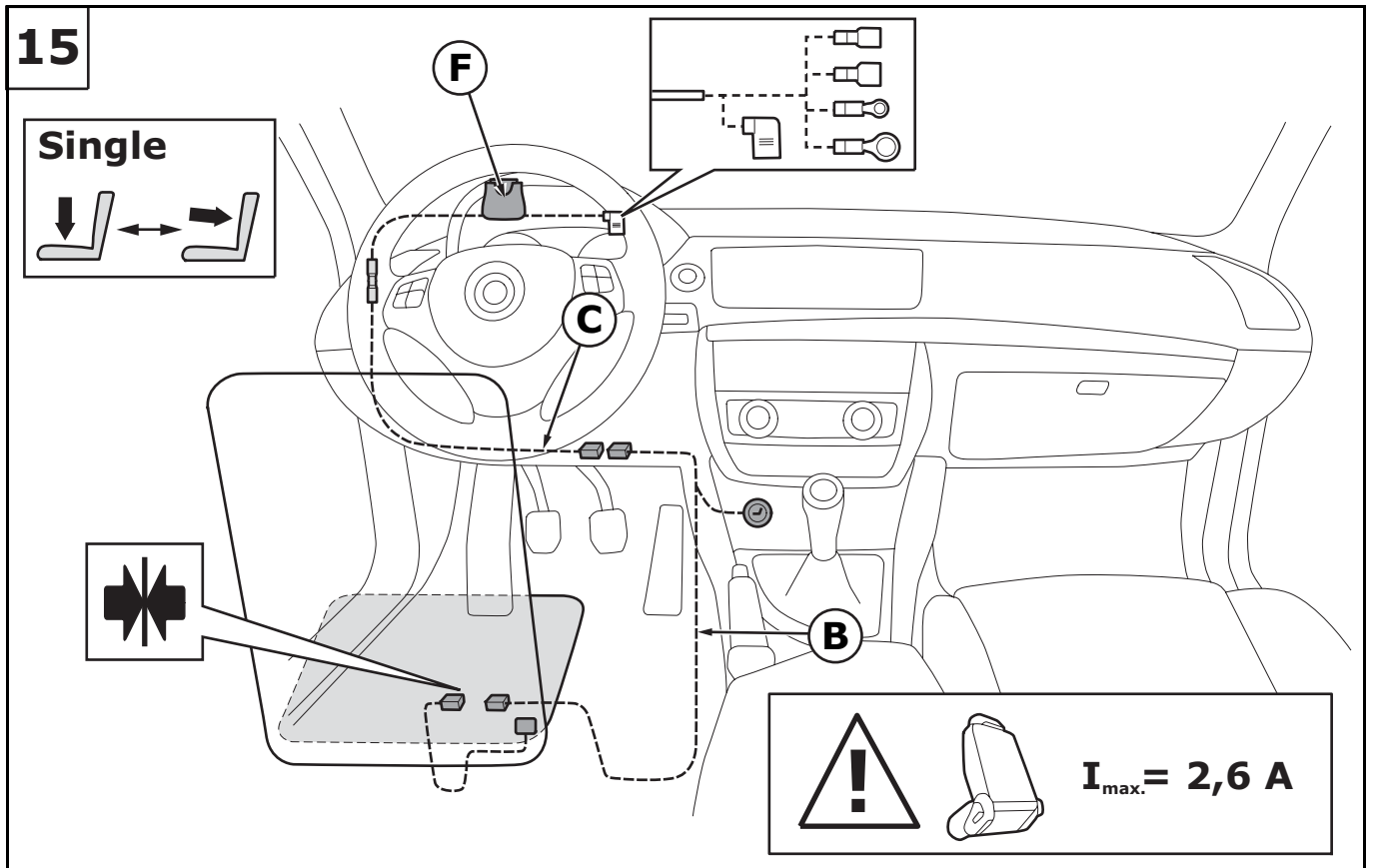
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3. Installation/Montage/Instalación



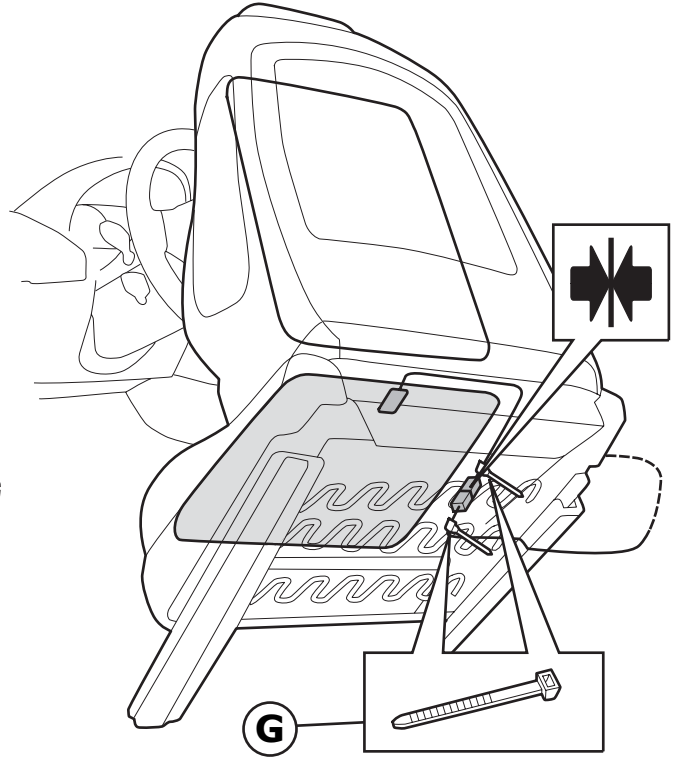
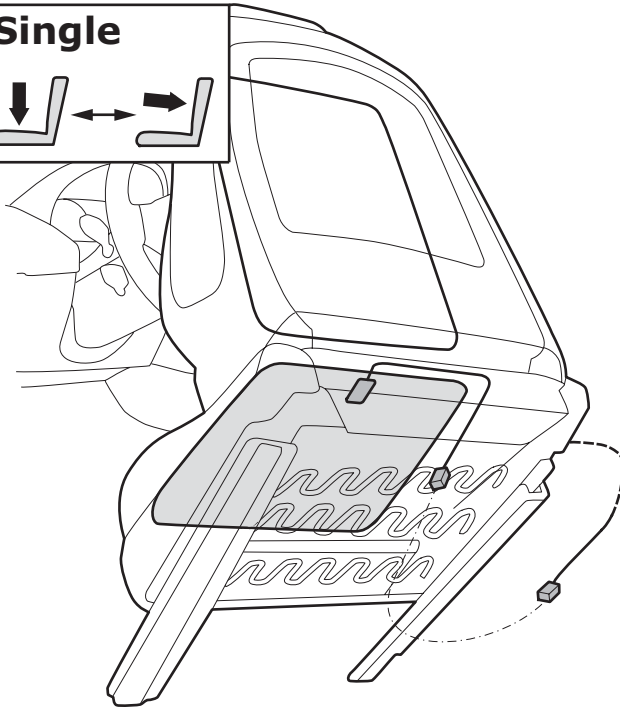
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3. Installation/Montage/Instalación

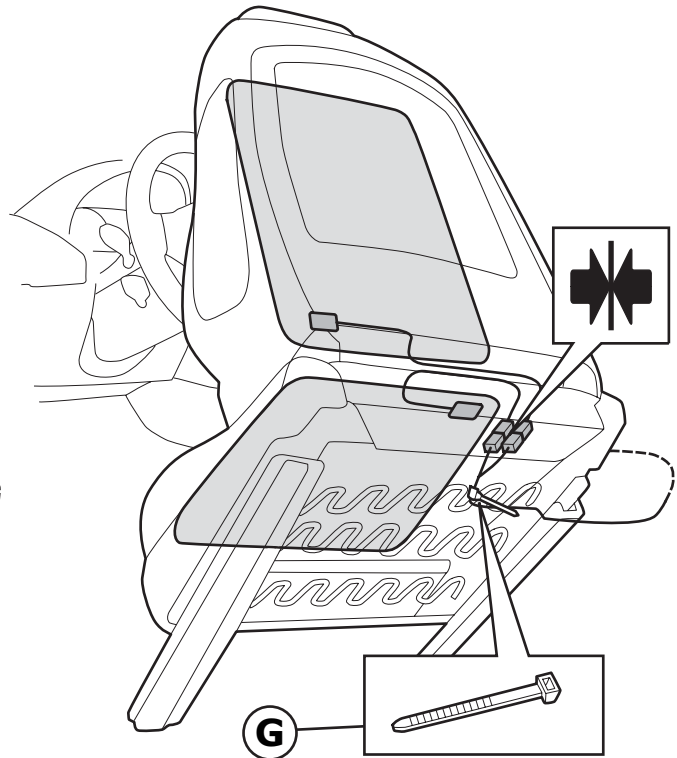
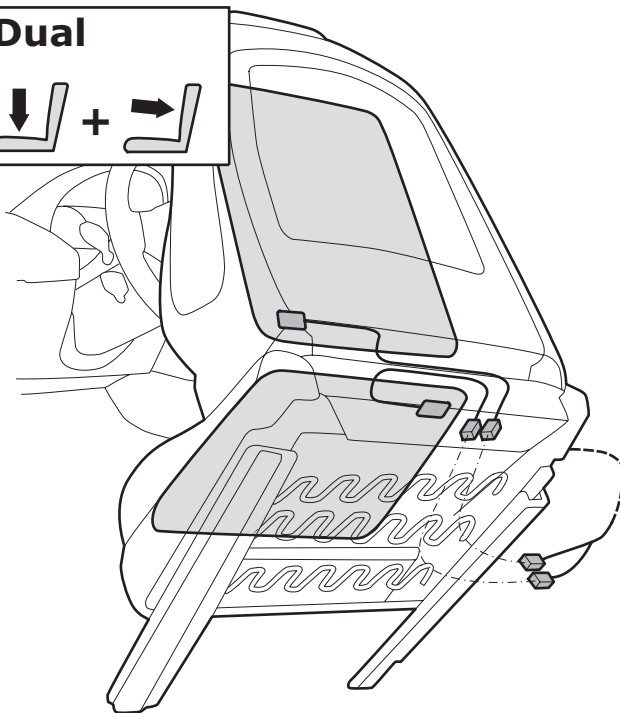
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Single

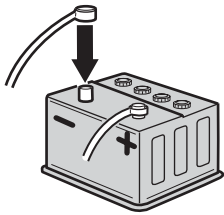
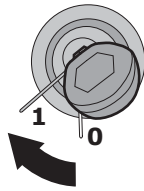

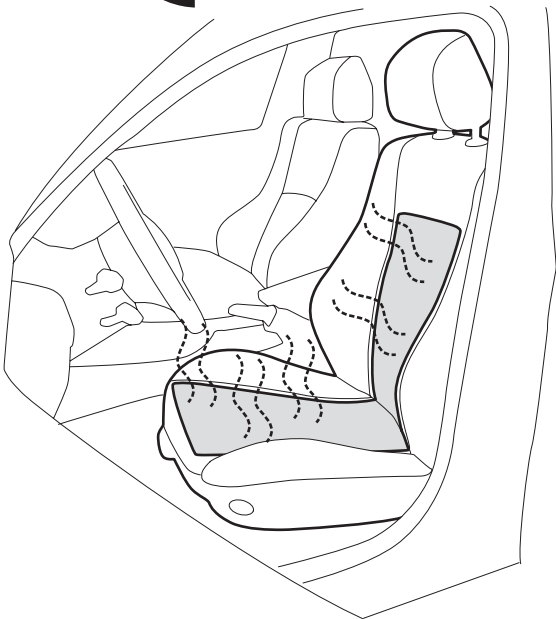


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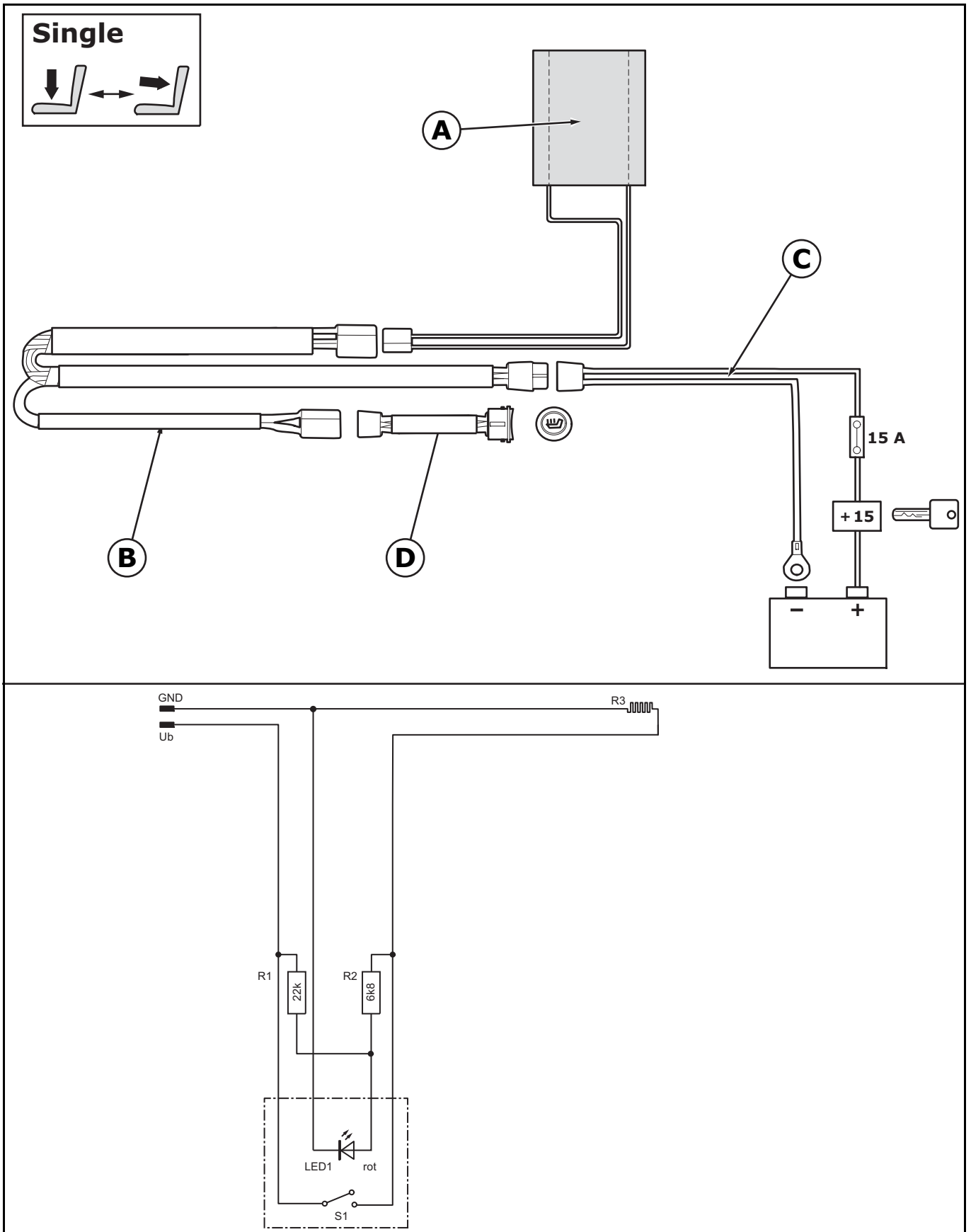
Dual



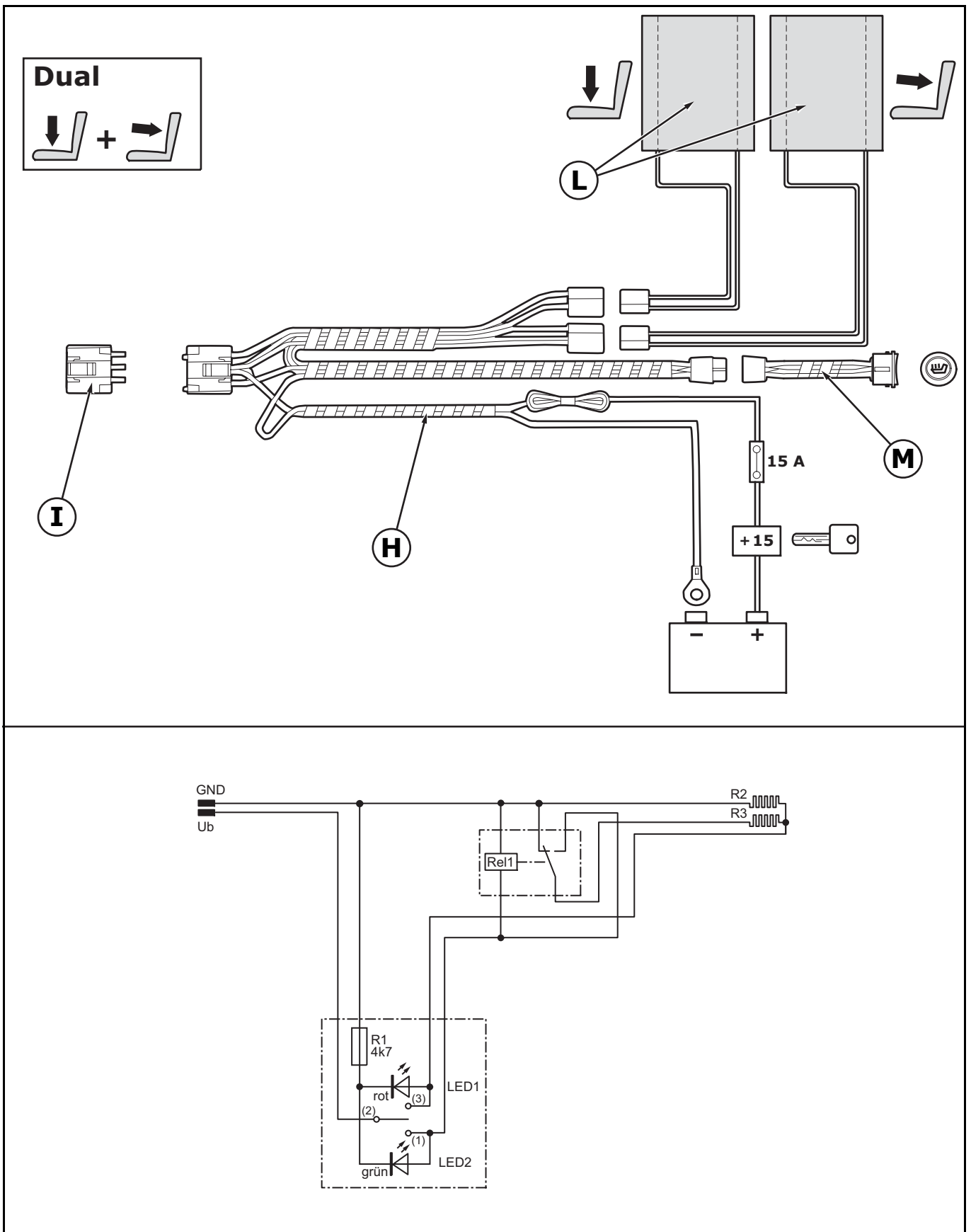
3. Installation/Montage/Instalación

<p>19</p> 	<p>20</p> <p>1. </p> <p>2. </p> 
<p>21</p>	<p>GB/US FR E</p> <p>Complete the operating instructions and provide to the customer. Compléter la notice d'utilisation et la remettre au client. Rellenar las instrucciones de manejo y entregárselas al cliente.</p>

4. Wiring diagram/Schéma/Diagrama de circuitos

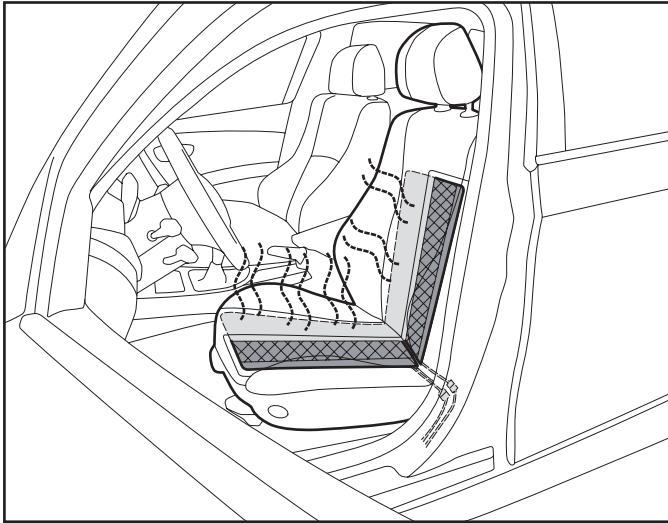


4. Wiring diagram/Schéma/Diagrama de circuitos



5. Operating instructions for seat heating units

Safety advice



- **Warning** The seat heating unit is only allowed to be operated when a person is sitting on it. This person must feel temperatures and be able to react to them. Persons who experience difficulty with feeling temperatures – such as all paraplegic persons, children and old people – are not allowed to use the seat heating unit because there is a risk that they will suffer injury from burns. The seat heating unit, like any other heating appliance, should not be switched on and left unsupervised. Unintentional activation of the seat heating unit should be avoided.
- If the seat occupant feels an excessive temperature after the seat heating unit has been switched on, change to lower settings to reduce heat or switch off completely.
- The seat heating element is not allowed to come into contact with knives, nails, needles or tools, which could penetrate and pierce the seat's surface or the heating elements.

- The 'high' setting (Seat kit) is unsuitable for continuous operation.

The seat heater element will be or / will not be deactivated when vehicle ignition is off (to be checked off by installer).

The position of the seat heater fuse is: _____
(to be filled out by installer).

- The seat heating unit must be switched off after the engine has been switched off if the installation is powered via the continuous duty plus circuit, in order to avoid discharging the battery.
- Sharp objects are not allowed to be transported or put down on the seat. Excessive weights or heavy objects that are put down on the seat can cause damage to the seat heating unit and affect its operation adversely. It is therefore recommended not to put objects on the seat.
- If it is noticed that an unusual smell develops when the seat heating unit is switched on or if there is an uneven distribution of heat on the seat or backrest – or between the seat and backrest as the case may be – then the seat heating unit must be switched off immediately and the specialized workshop must be contacted. The seat heating unit is only allowed to be modified or decommissioned by a specialized workshop.
- The seat is not allowed to be covered with insulating materials (including blankets or rugs, jackets, cushions, bags, handbags, retro-fitted seat mats, children's seats, seat reinforcement, protective covers, etc.) whenever the seat heating unit has been switched on. The seat heating unit's function could be affected if it is operated when these materials are present: this could risk damage to the seat or burning injuries to seat occupant.
- The seat heating unit is not allowed to be exposed to excessive moisture. Small amounts of the following liquids do not adversely affect the seat heating unit from being operated safely and continuously after it has dried out: perspiration, beverages (e.g., coffee, cola, mineral water, etc.), brine (5 % in solution), cleaning agents containing ammonia (10 % by volume), cleaning agents containing alcohol (10 % by volume), cleaning agents for plastic or vinyl, as well as soapy water.
Warning Excessive contact with the any liquids can adversely affect the performance of the seat heating unit and cause its service life to be reduced. The seat heating element must not be turned on at any time when excessive moisture has dampened the seat surface or internal components, or both. The seat heating element must not be operated, when articles of clothing is wet or moist. The seat heating element is unsuitable for drying clothing or objects.

5. Operating instructions for seat heating units

Operation

The Single Element kit (On/Off control)

- The seat heating unit is switched on by moving the switch upwards.



- **'ON'**
Switch to the 'ON'. The LED will shine yellow. The heat will be noticeable within 3 to 4 minutes. The heating must be switched off in order to avoid overheating, whenever the temperature is too high.

The Seat Kit (High/Low/Off control)

- The seat heating element is switched on by moving the switch upwards or downwards.



- **'High'**
Switch on the 'High' setting. The LED will turn red. The heat will be noticeable within 2 minutes. The heating time can vary according to the type of seat cover material and kind of clothing/coat that is being worn. The heating must be switched to the 'Low' setting in order to avoid overheating, when the desired temperature has been reached.



- **'Low'**
Switch on the 'Low' setting. The LED will turn green. The heating time can vary according to the type of cover and the kind of clothing that is being worn.

Troubleshooting

The heating does not function although it is switched on. The LED is not luminated.	Check the fuse and change it if necessary. Consult a specialized workshop if the fuse is in order.
The LED is not luminated although the heating is functioning and switched on.	The LED in the switch is defective.
The heating does not function although it is switched on. The LED is on.	The temperature of the seat cover could be too high due to high interior temperature on the vehicle interior. The thermostat in the seat heating unit is connected. Wait until the seat cover's temperature has fallen and try again.
The distribution of heat in the seat or back is uneven.	Switch off the seat heating unit and consult a specialized workshop.
The fuse burns out repeatedly.	Check the fuse rating. Consult a specialized workshop if the fuse rating is correct.