

Assembly Instructions

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Production state SERIES					
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Dahl docking stations MK II and power height-adjustable VarioDock can be used with M1, M3 Corpus, M5 Corpus, M Corpus VS, F3 Corpus, F5 Corpus, and F5 Corpus VS. Use Dahl MKII kit 501750 or Dahl VarioDock kit 503600. The lock plate is identical for both docking stations.



IMPORTANT

Installation by a service technician

The installation must be performed by a service technician or a technician qualified for converting wheelchair accessible vehicles. Read all instructions carefully before proceeding with the installation.



WARNING

Install according to instructions

Make sure that you install the locking plate according to this assembly instruction. If the locking plate is not installed according to this assembly instruction, it can lead to bodily injury or death.

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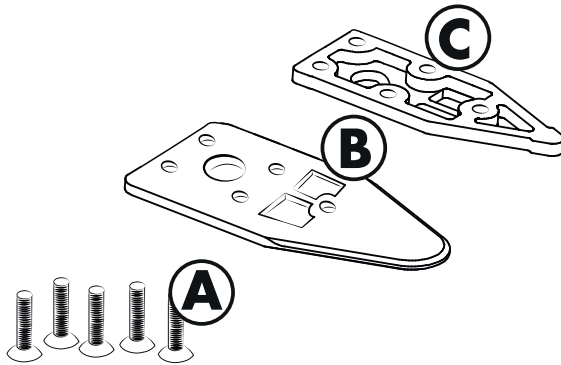
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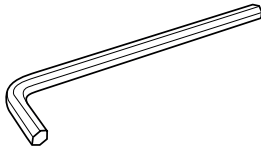
Material

DAHL MKII AND VARIODOCK – LOCK PLATE

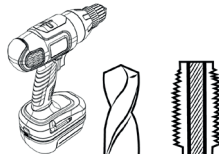


A	Screw art.nr. 502800	5 pcs
B	Lock plate art.nr. 500561	1 pc
C	Spacer 10 mm (optional) art.nr. 500674	
	Spacer 8 mm (optional) art.nr. 500673	
	Spacer 2mm (optional) art.nr. 500671	
	Spacer 1mm (optional) art.nr. 500670	

Tools



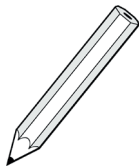
Allen wrench 8 mm,
6 mm, 4 mm.



Drilling machine -
6.8 mm drill and
M8x1.25 tap.



Loctite 222 or an equivalent
low strength product locking
fluid.



Marker.



Folding rule or
measuring tape.

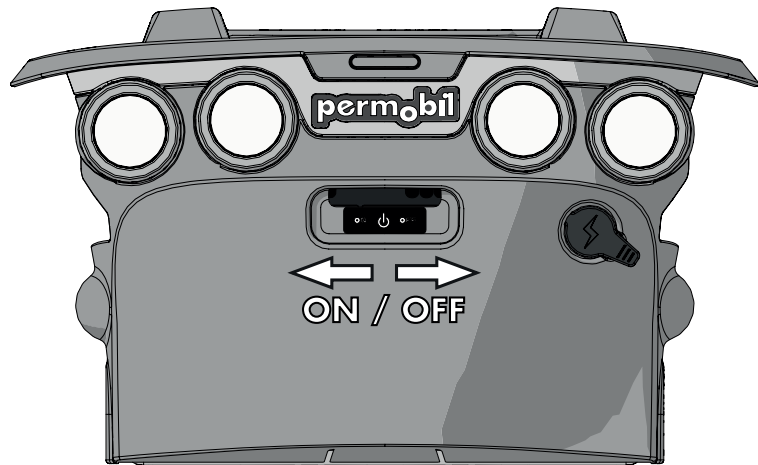


Circular saw.

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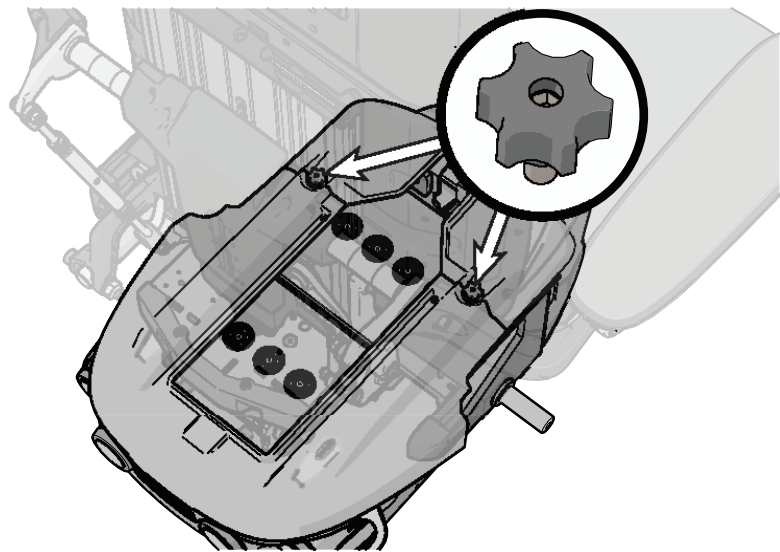
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1 Place the wheel-chair on a level surface. Raise the seat lift to its highest position to facilitate removal of the chassis top cover. Switch off the power supply using the ON/OFF key on the control panel and switch the automatic main fuse to OFF.

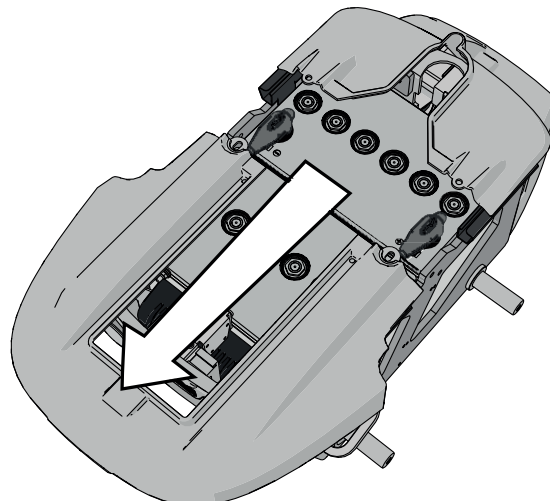


2 Raise the seat lift to its upper position to ease dismantling of the top cover.

Remove the two knobs holding the top- and front cover.

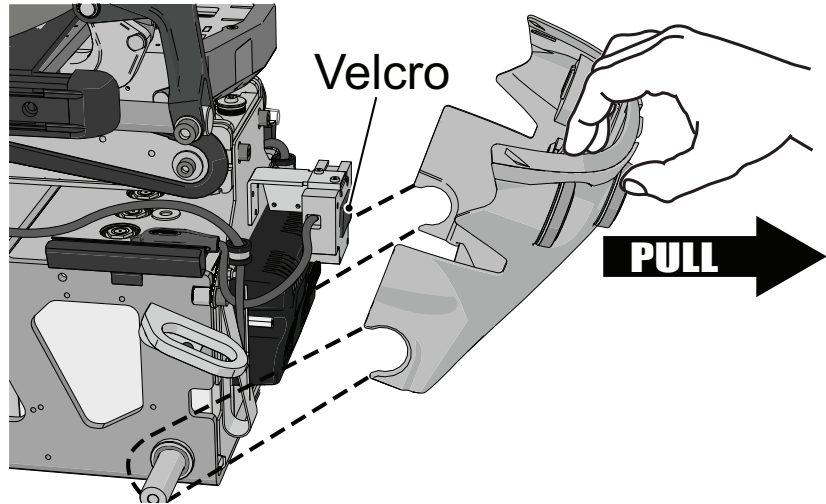


3 Slide the top cover from the chassis.

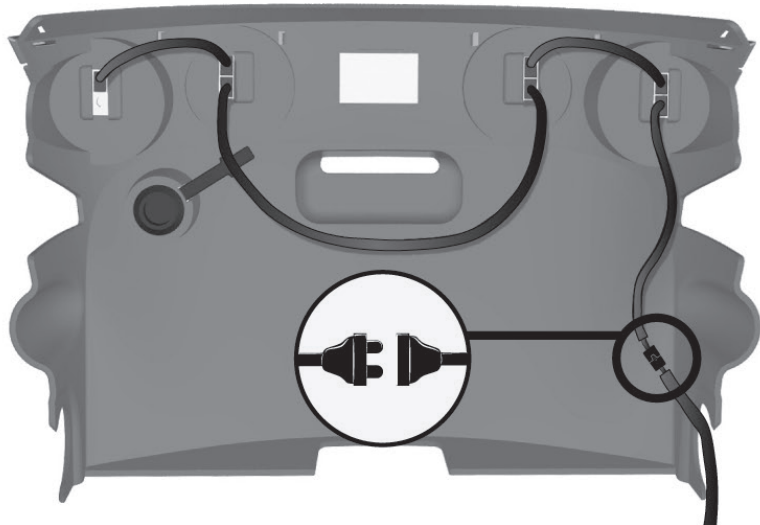


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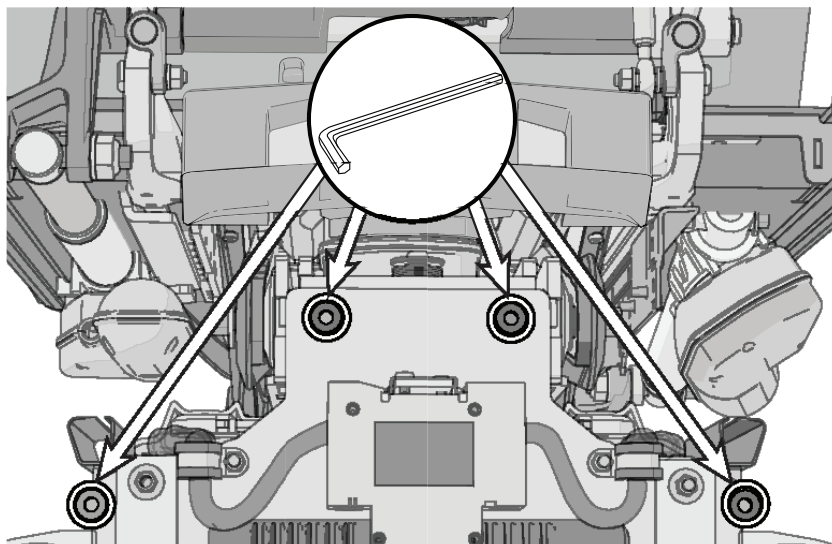
- 4** Pull the rear cover from the chassis. Note that the cover is mounted around the shafts of the link/swing arms.



- 5** On chassis with lights, disconnect the light cable at the back marked "Rear lights and turn signals".

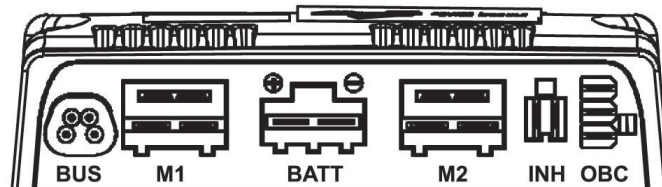


- 6** Remove the four screws holding the battery box.



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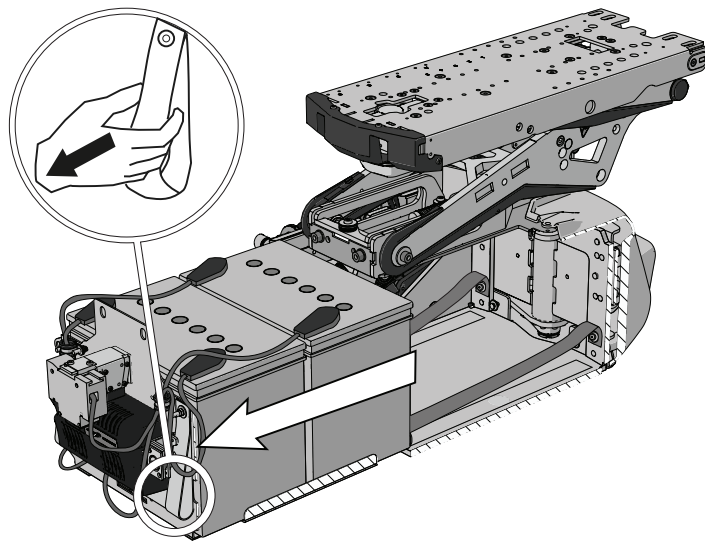
7 Make a note of the cable connections for later reassembling. Disconnect all cables except the battery cable (connection marked "BATT") from the Power Module.



8 Use the straps to pull the battery box out from the chassis.



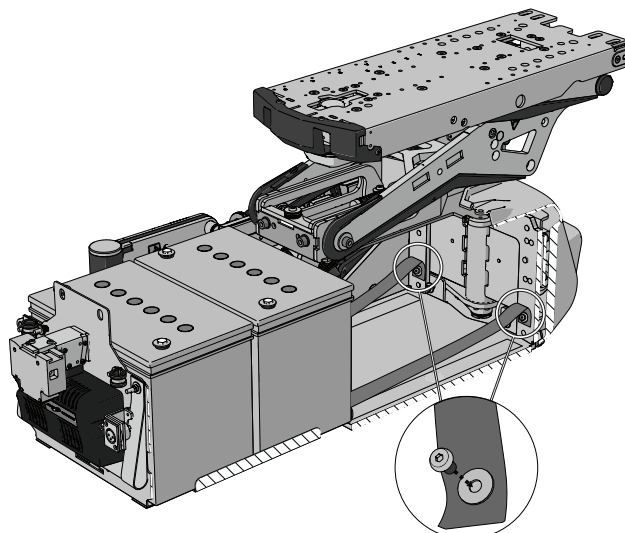
Make sure that the disconnected cables do not catch and become damaged when you pull out the battery box.



9 Loosen the two screws that hold the battery box straps inside the chassis. Carefully remove the heavy battery box out of the chassis.



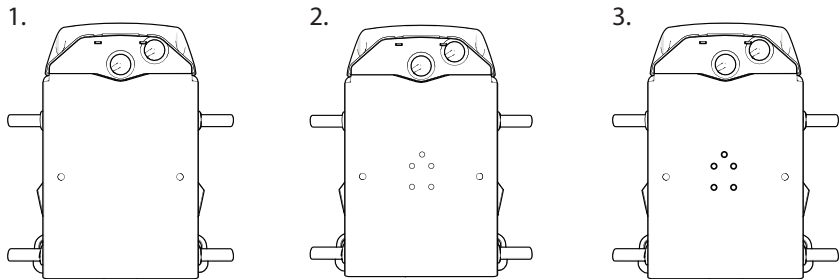
Depending on what kind of batteries, the battery box will weigh approximately 40-50 kg/90-110 lbs.



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10 The bottom plate is available in three different versions:

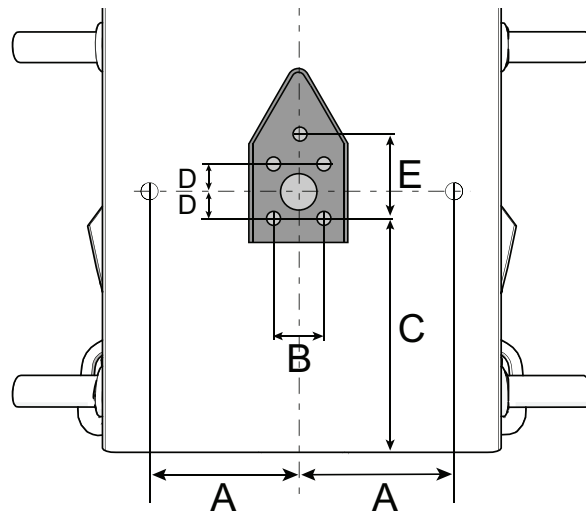
1. No precut holes, go to step 11.
2. Precut holes, go to step 13.
3. Threaded holes with screws and washers. Remove the screws and washers and put them in a recycling bin. Go to step 14.



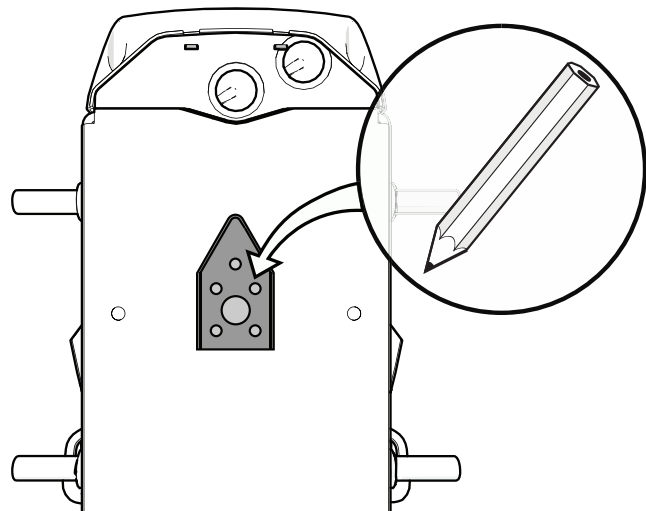
11 Align the center of the hole with the lock plate's locking mechanism.

A = 105 mm / 4.13 inch
 B = 40 mm / 1.57 inch
 C = 156 mm / 6.14 inch
 D = 25 mm / 0.98 inch
 E = 100 mm / 3.94 inch

The lock plate must be centered on the chassis box.

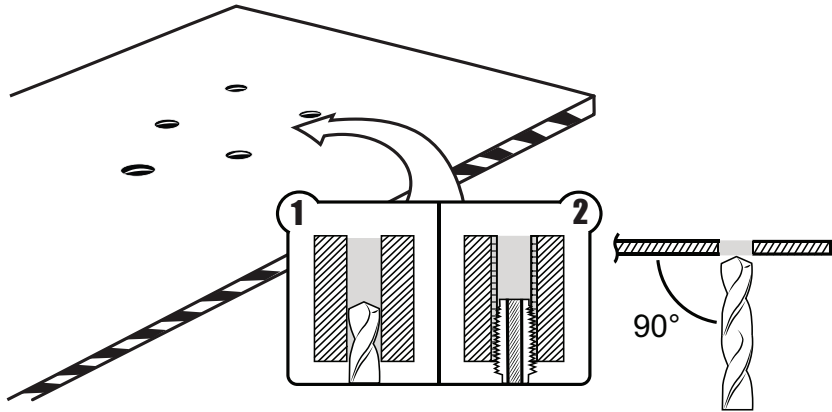


12 Use the lock plate as a template and make marks for the lock plate's five holes in the chassis. Make sure that the lock plate's rear end is parallel with the rear end of the chassis box.

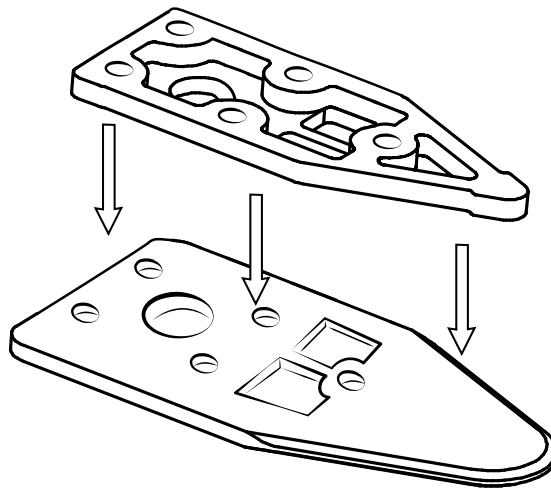


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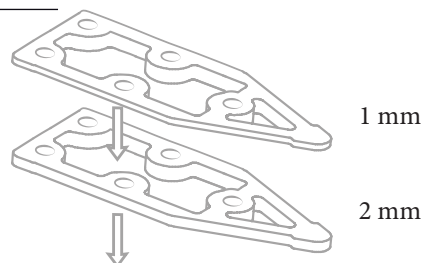
13 Drill the holes with a 6.8 mm drill and thread them with a M8x1.25 tap.



14 Fit the 8 mm spacer onto the lock plate.

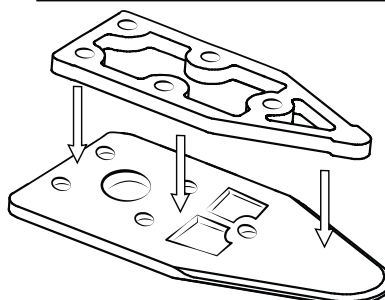


15 Additional spacers can be used to adjust the height of the locking plate to suit the height of the docking station.



Optional, max 3 mm


A minimum of 8 mm spacer is required with the locking plate. Never install more than 11 mm of spacers in total.

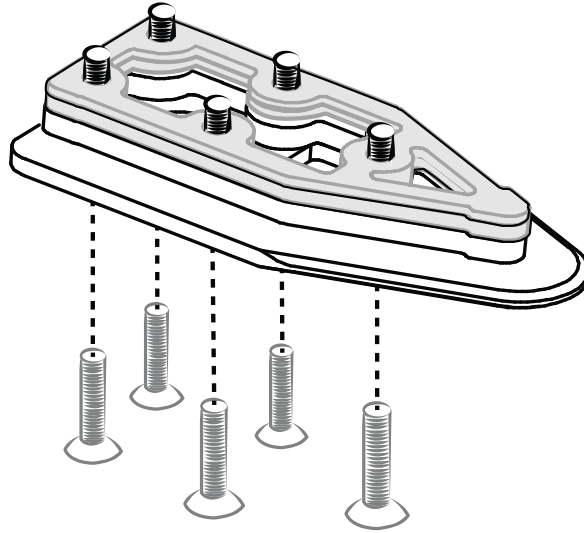


Mandatory, 8 mm

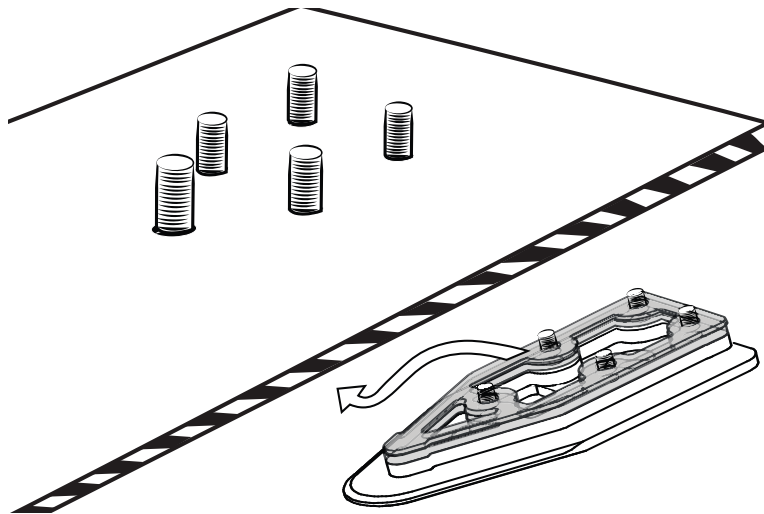
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16 Put the five screws through the lock plate, the mandatory 8 mm spacer and the selected optional spacers (gray in picture).

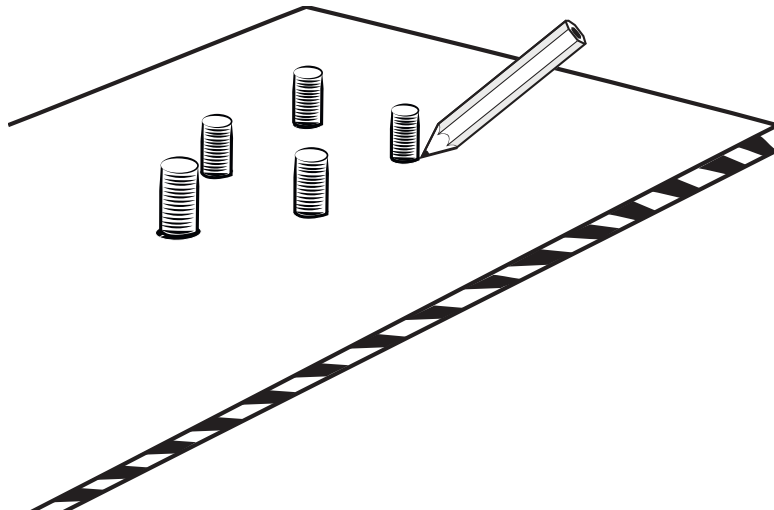
 Do not use any other screws than those supplied from Dahl engineering. Standard screws will not be strong enough in the event of a collision.



17 Mount the five screws together with the spacer/spacers and the lock plate on the underside of the chassis box.



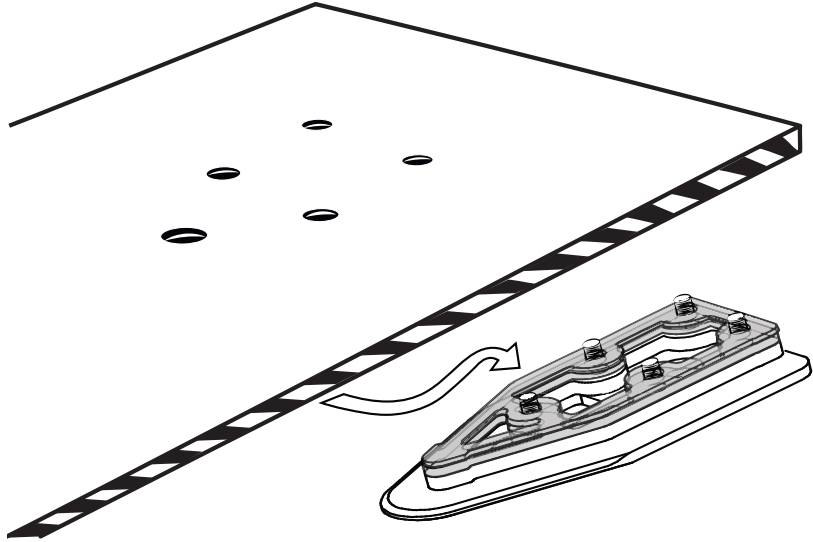
18 Mark where to cut the screws.



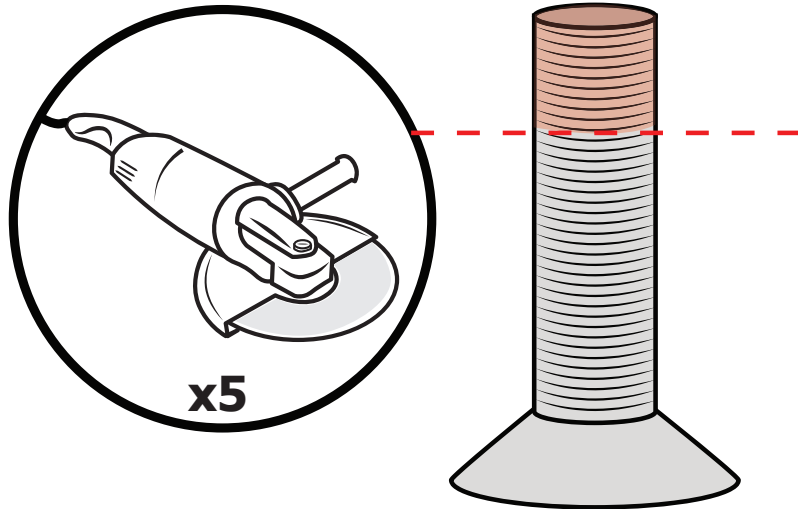
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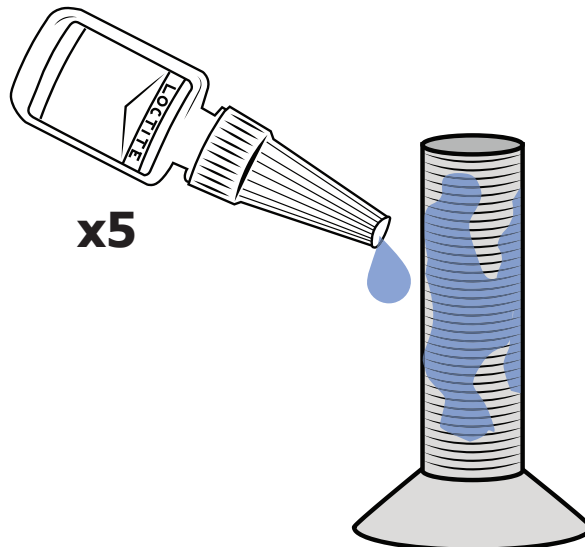
19 Remove the screws together with the spacer/spacers.



20 Cut the screw where the mark is.



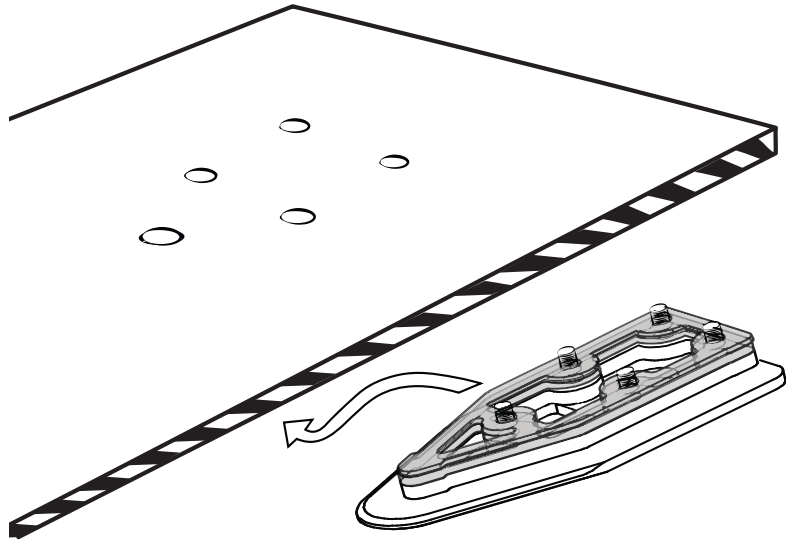
21 Apply Loctite 222 (or an equivalent product) onto the screw.



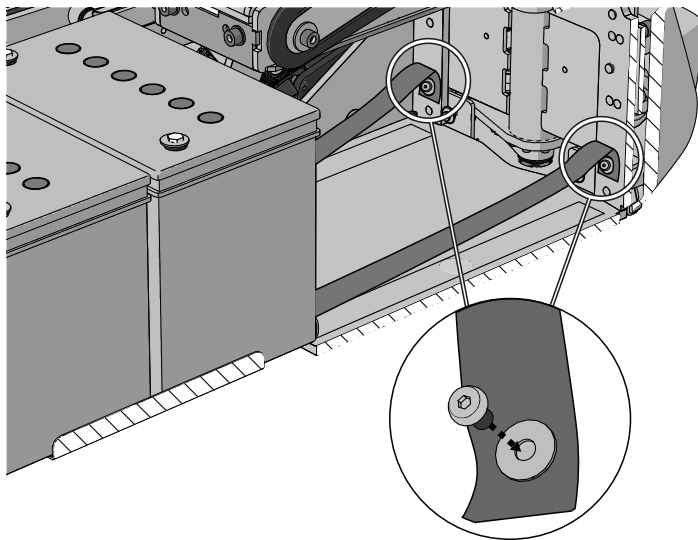
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22 Attach the five screws together with the spacer/spacers and the lock plate on the underside of the chassis box. Tightening torque: 18 Nm/13.3 lb.ft.

Verify that the screws are flush with the surface when tightened to proper torque.



23 Reattach the two battery box straps with the screws and the washers. Tightening torque: 2.9 Nm/2.14 lb.ft.

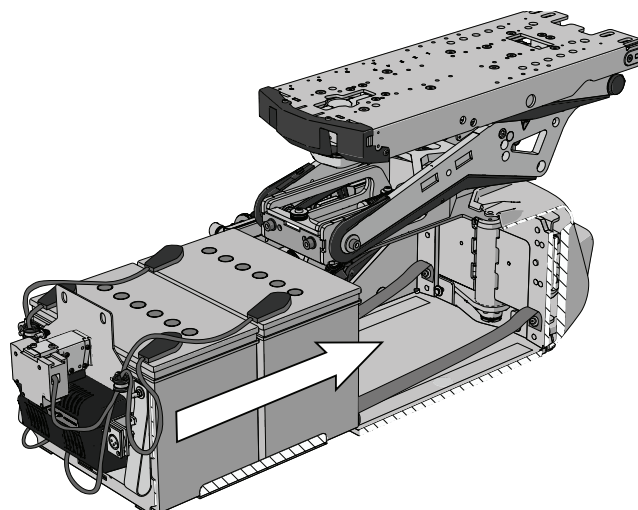


24 Push the battery box into the chassis.



Make sure that the disconnected cables do not catch and become damaged when you push in the battery box.

Be careful, pinching risk.

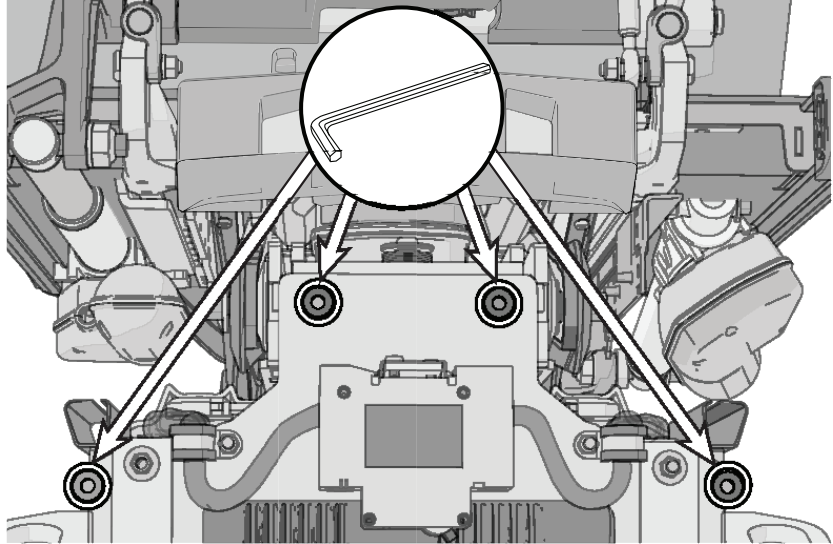


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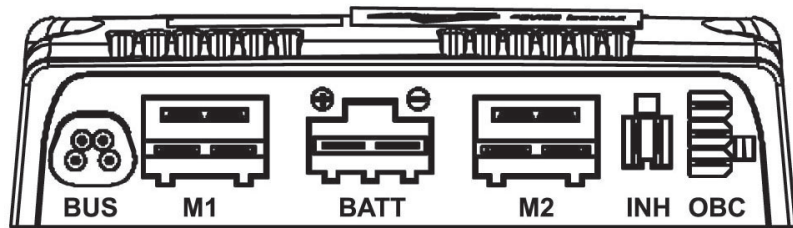
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25 Refit the four screws by holding the battery box.

Tightening torque: 24 Nm/17.7 lb.ft.

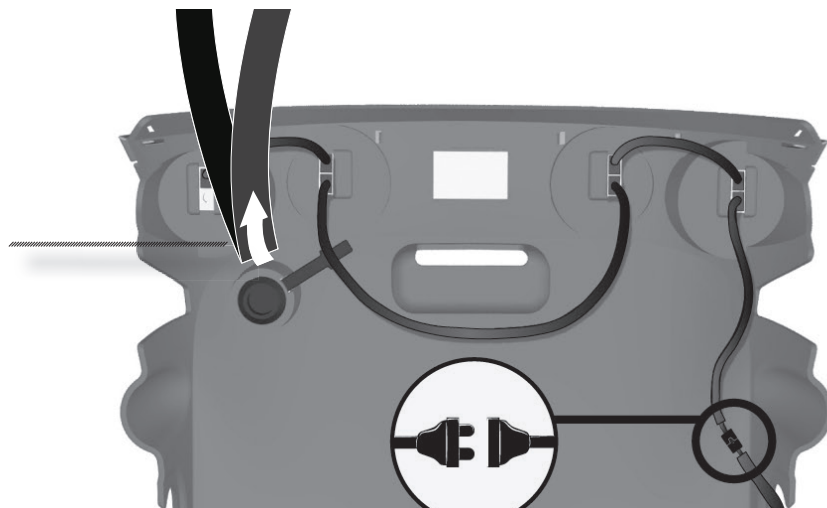


26 Connect the cables to the power module.



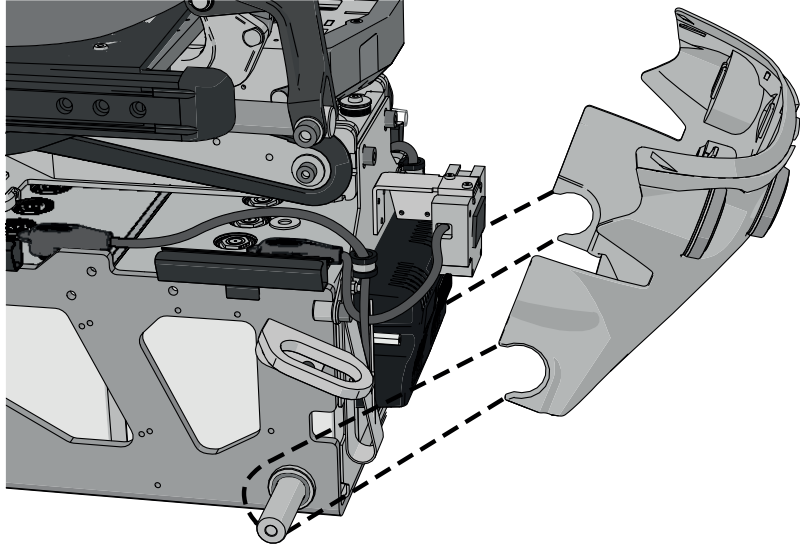
27 If the wheel-chair is equipped with lights, reconnect the light cable.

Make sure that the battery strap does not cover the charger contact.

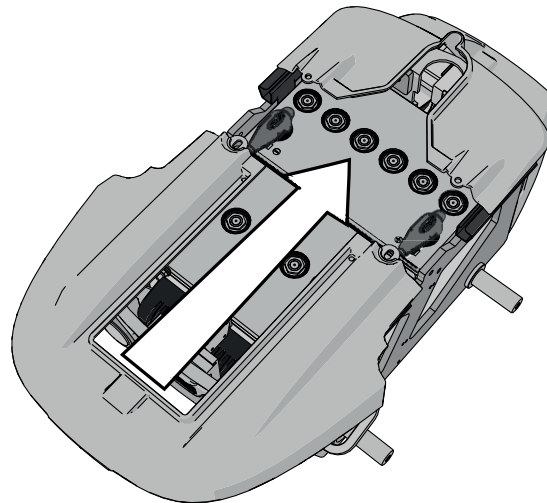


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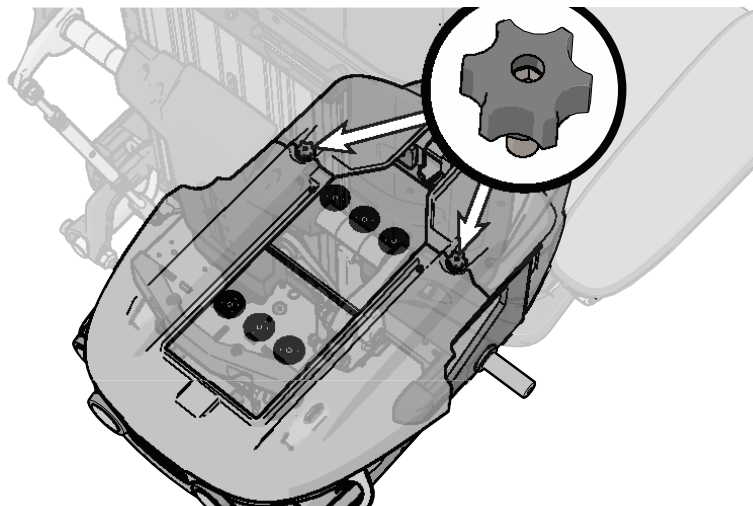
28 Refit the rear cover onto the chassis by positioning the covers on the shaft of the link arms.



29 Slide the top cover onto the chassis and at the same time push the rear edge of the cover downwards. Make sure it hooks onto the rear cover.



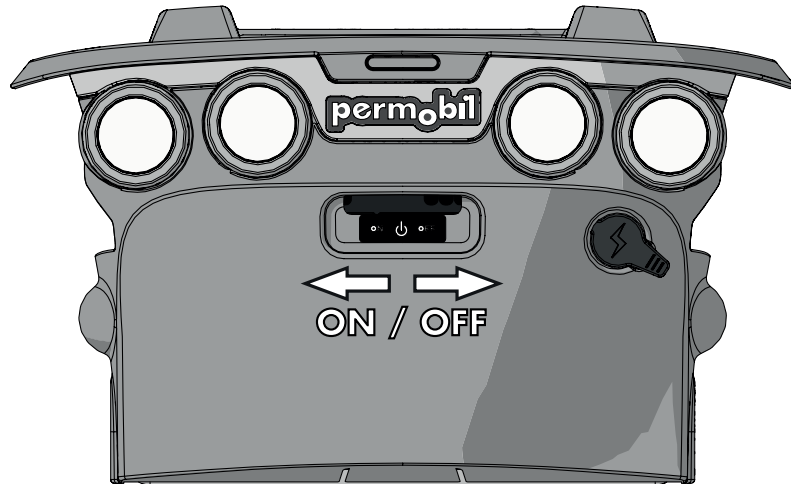
30 Turn the cover knobs without tightening them. Press the top cover and the front chassis cover against each other until any space between them is eliminated. Tighten the knobs by hand.



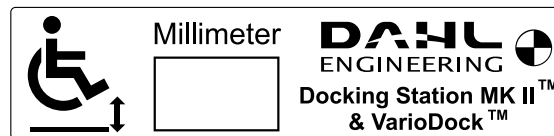
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31 Set the main fuse to ON and push the ON/OFF button on the control panel.

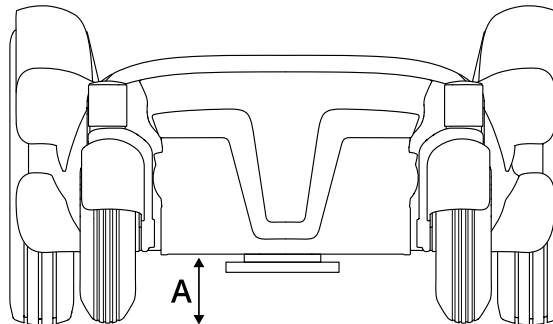


32 Attach the Dahl docking station label on the wheelchair. The label is included in the kit.



Add the wheelchair's ground clearance (A) in millimeter (minus 2 mm) on the label.

If any additional spacers other than the standard 8 mm have been installed, the thickness of these must also be subtracted in addition to the 2 mm.

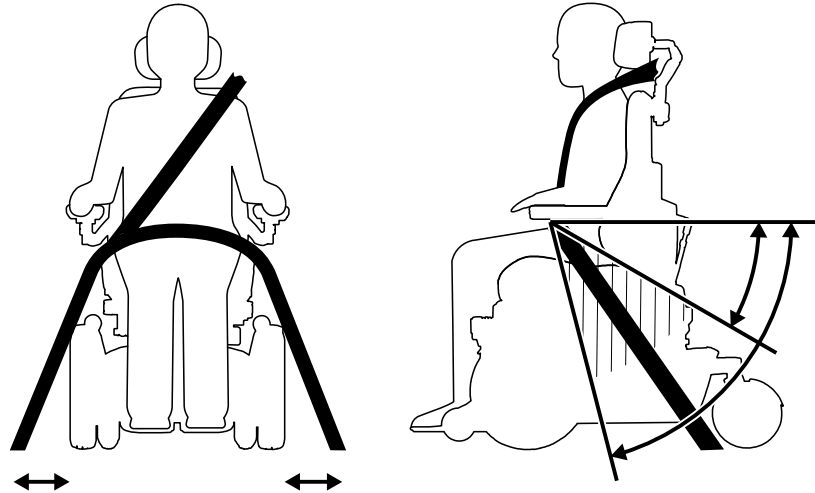


The wheelchair must have correct tire pressure and the user must be sitting in the wheelchair when the measurement is made.

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33 When the wheelchair is used with Dahl docking stations MK II or VarioDock, the floor anchorage points of the vehicle's restraint system shall be located 10–60 mm outside the wheels on both sides.

For the user, the shoulder-belt restraint should be worn over the middle of the shoulder. The pelvic-belt restraint should be in contact with and worn low across the pelvis and within the preferred zone of 30° to 75°. A steeper pelvic-belt angle between 45° to 75° to the horizontal is preferred.



34 For further information about how to use the Dahl docking station, see the instructions of the relevant docking station.

For further information about user safety when in a vehicle, see the user manual of the relevant Permobil power wheelchair.