

New vehicle locking system.



Permobil have tested and approved one third party vehicle locking system to be used with, F3 Corpus, F5 Corpus, F5 Corpus VS, M3 Corpus and M5 Corpus.

Dahl docking system MK II

The list of wheelchairs have been successfully tested according to ISO 7176-19:2008.

The maximum user weight limit for F-/M-Series with Dahl docking system MK II is 136 kg.

Permobil will provide an instruction on how to install the Dahl lock plate to maintain the CE-marking of the product. The instruction with number **332849** is attached to this PNL.

New wheelchairs will not need any customization in order to be fitted with Dahl lock plate. If already produced chairs meet the above mentioned model and user weight requirement, then it is possible to install the Dahl lock plate. This system will also be used on future chairs from Permobil.

Permobil will not handle any sales, support or installation of Dahl docking systems. It is sold by Dahl Engineering and distributed to car adaptation workshops, who will be responsible to install the system according to instructions from Dahl Engineering and Permobil.



Release date BR EMEA: 2017-05-05

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**CAUTION**

Installation by a technician

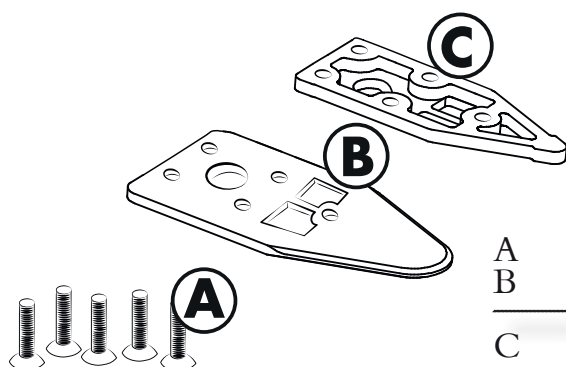
The installation should be performed or supervised by a technician. Read all instructions carefully before proceeding with the installation.

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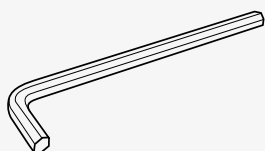
Material

DAHL DOCKING STATION MKII – LOCK PLATE

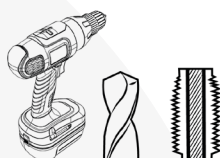


A	Screw art.nr. 501933	5 pcs
B	Lock plate art.nr. 500561	1 pc
C	Spacer 10 mm (optional) art.nr. 500674	
	Spacer 8 mm (optional) art.nr. 500673	
	Spacer 2mm (optional) art.nr. 500671	
	Spacer 1mm (optional) art.nr. 500670	

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.

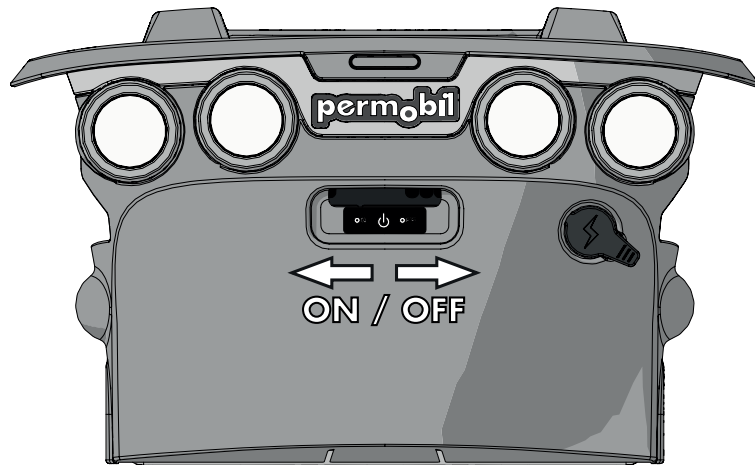


Circular saw.

Assembly Instructions

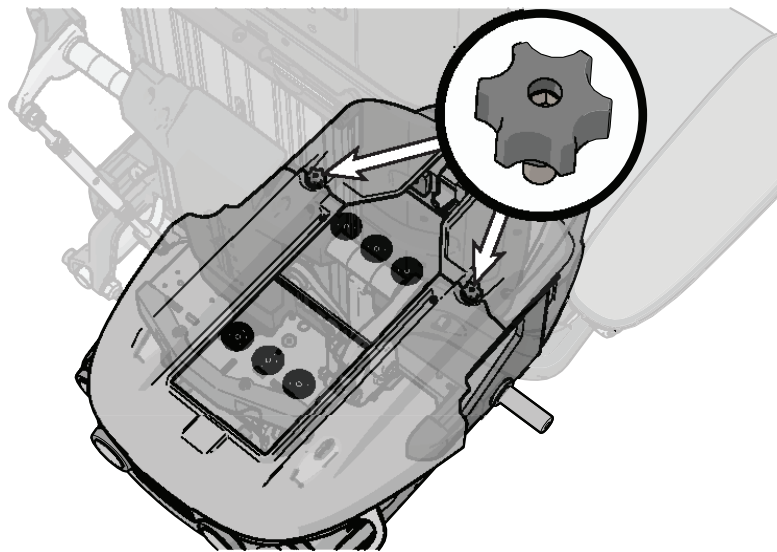
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1 Place the wheel-chair on a level surface. Raise the seat lift to its highest position to facilitate removal of the chassis top cover. Switch off the power supply using the ON/OFF key on the control panel and switch the automatic main fuse to OFF.

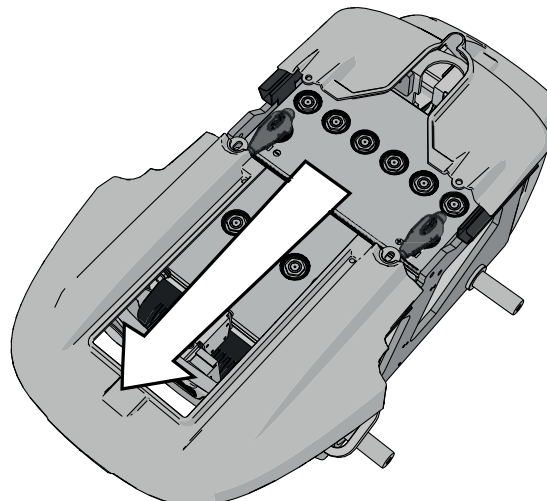


2 Raise the seat lift to its upper position to ease dismantling of the top cover.

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

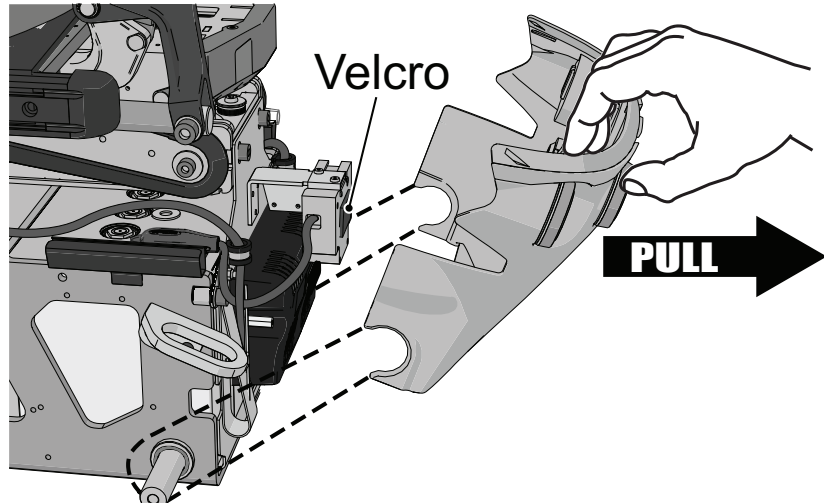


3 Slide the top cover from the chassis.

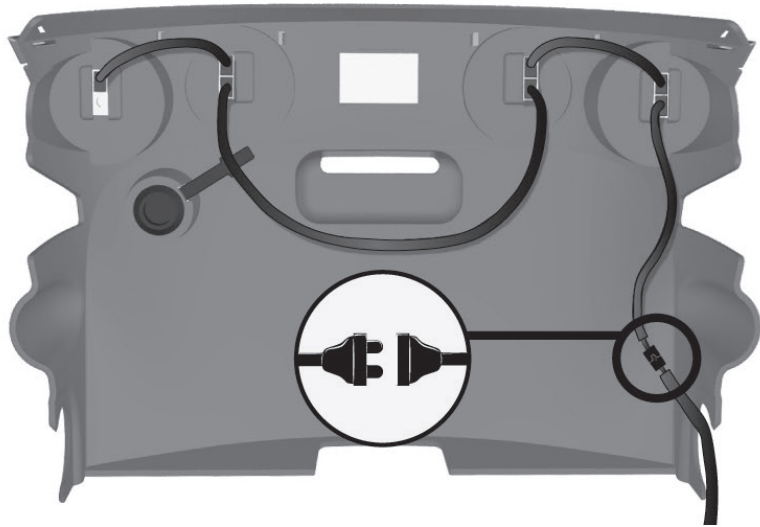


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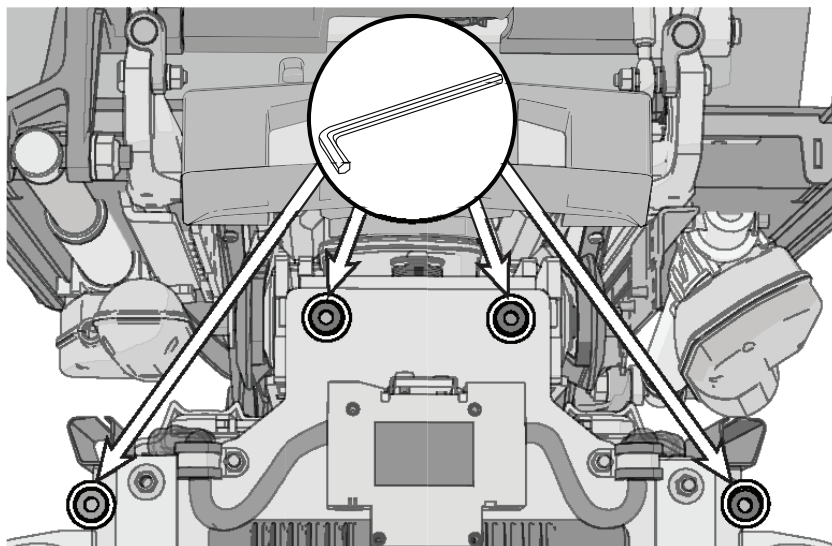
- 4** Pull the rear cover from the chassis. Note that the cover is mounted around the shafts of the link/swing arms.



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

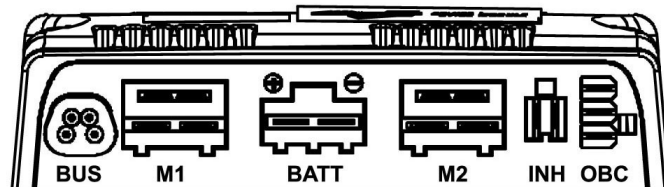


- 6** Remove the four screws holding the battery box.



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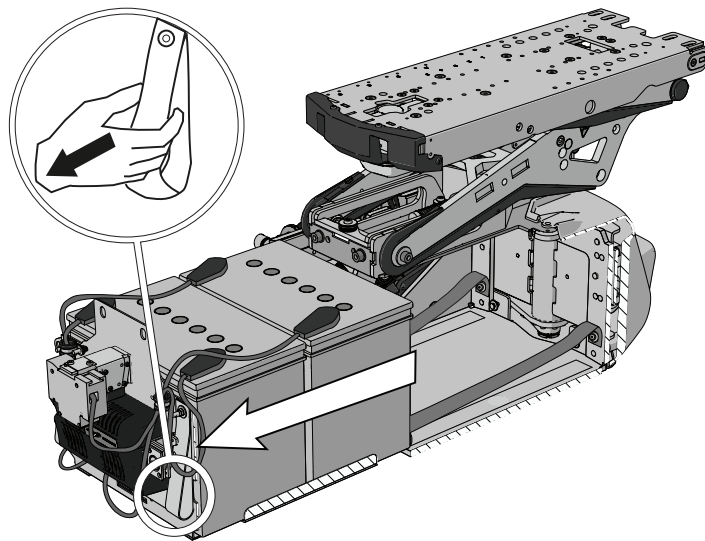
7 Make a note of the cable connections for later reassembling. Disconnect all cables except the battery cable (connection marked “BATT”) from the Power Module.



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



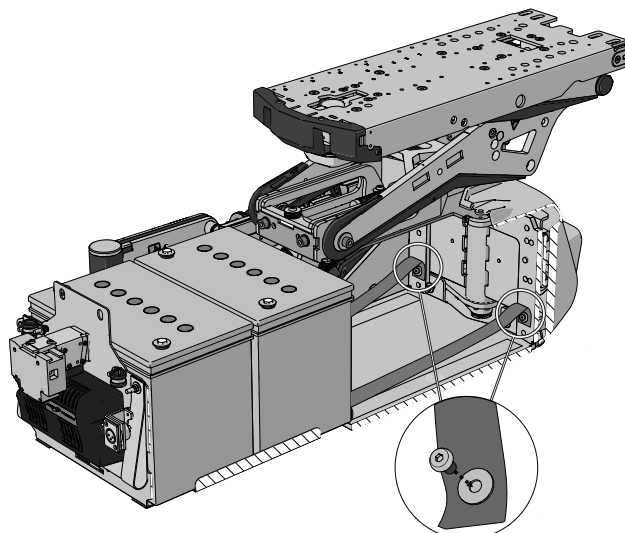
Make sure that the disconnected cables do not catch and become damaged when you pull out the battery box.



9 Loosen the two screws that holds 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.

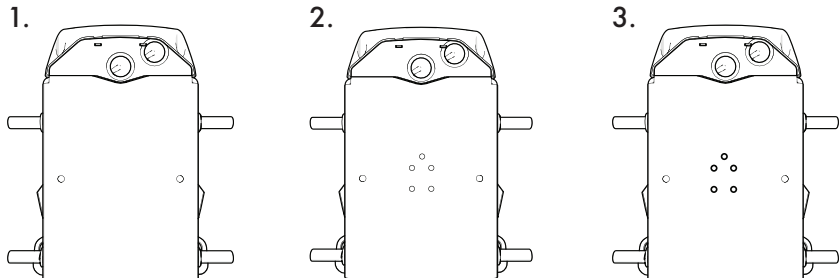


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The bottom plate is available in three different versions:

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.

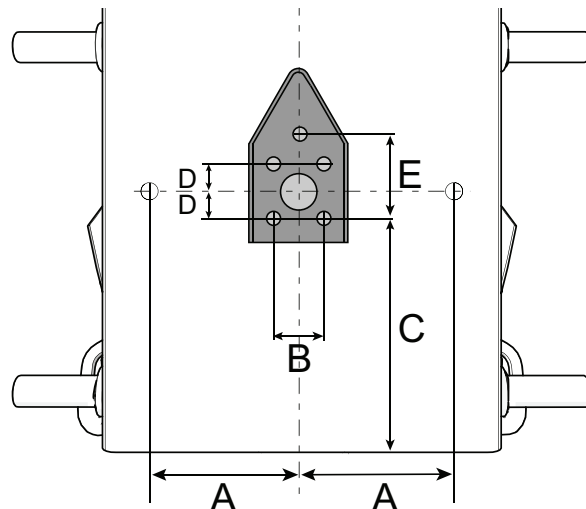


11

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

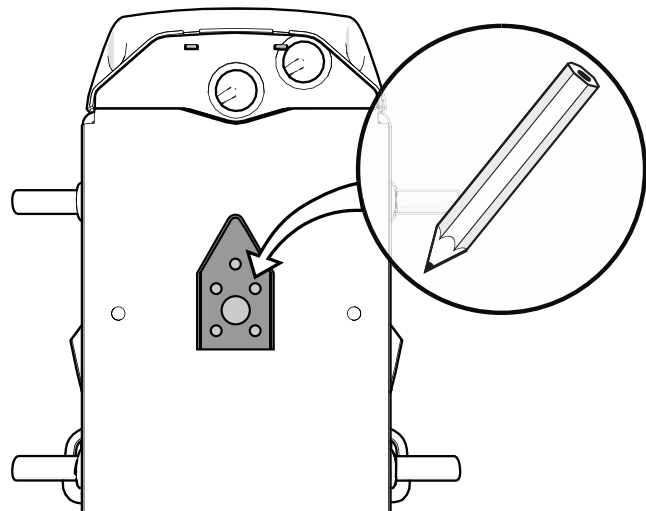
A = 105 mm / 4.13 inch
 B = 40 mm / 1.57 inch
 C = 156 mm / 6.14 inch
 D = 25 mm / 0.98 inch
 E = 100 mm / 3.94 inch

The lock plate must be centered on the chassis box.



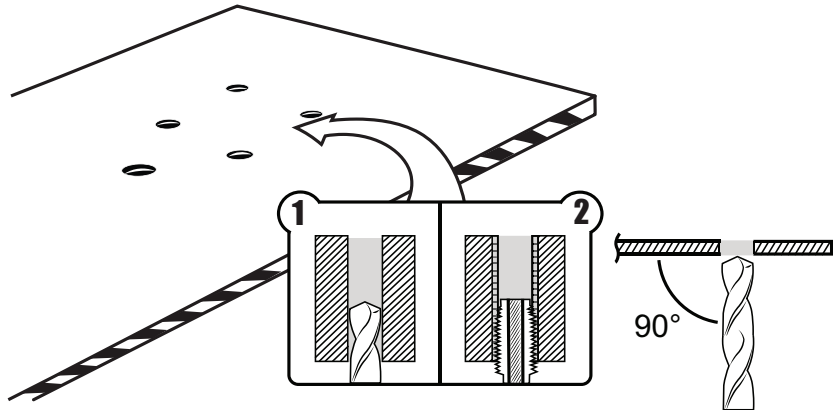
12

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.

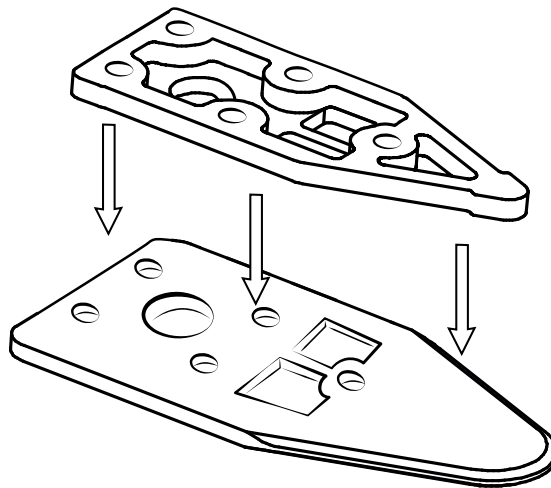


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- 13** Drill the holes with a 6.8 mm drill and thread them with a M8x1.25 tap.

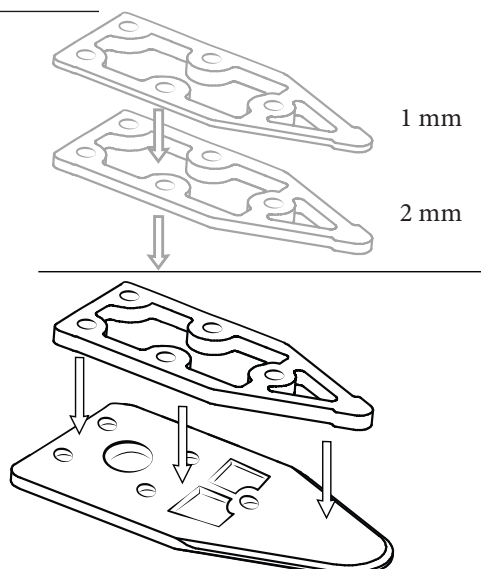


- 14** Fit the 8 mm spacer onto the lock plate.



- 15** Use more spacers to achieve desired thickness with regards to, for instance, user weight and tire pressure.

Additional spacers can be mounted to the locking station.



Optional,
max 3 mm

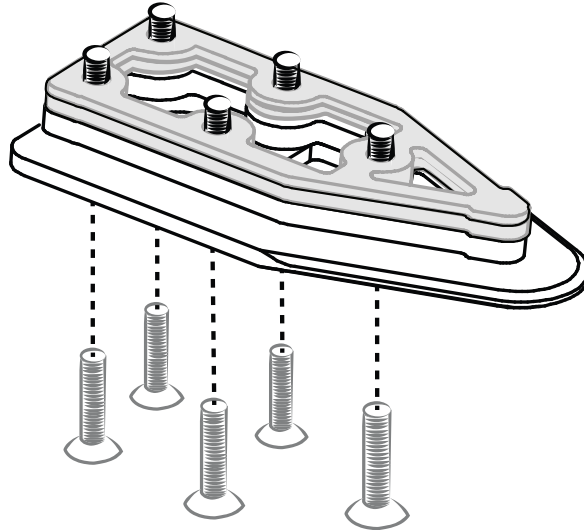
Mandatory

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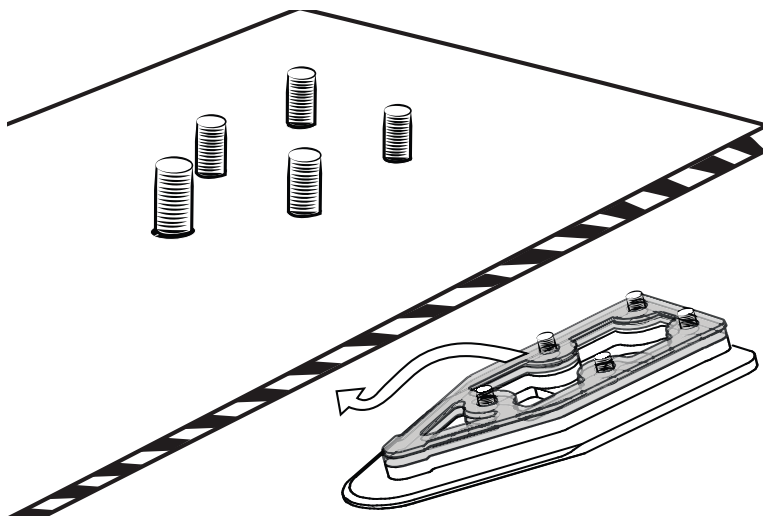
16 Put the five screws through the lock plate, the mandatory 8 mm spacer and the selected optional spacers (gray in picture).



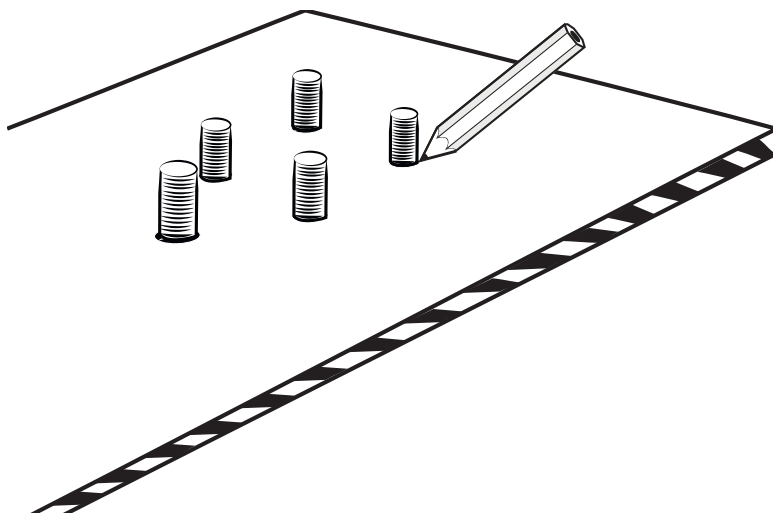
Do not use any other screws than those supplied from Dahl engineering. Standard screws will not be strong enough in the event of a collision.



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

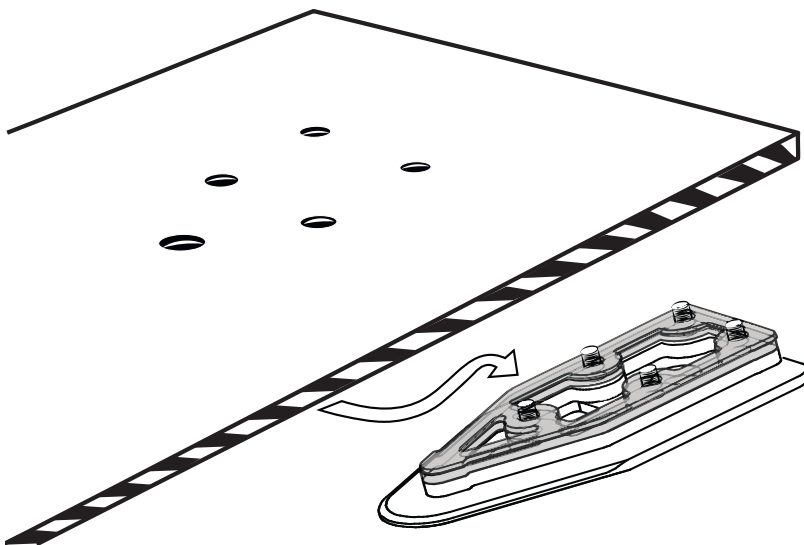


18 Mark where to cut the screws.

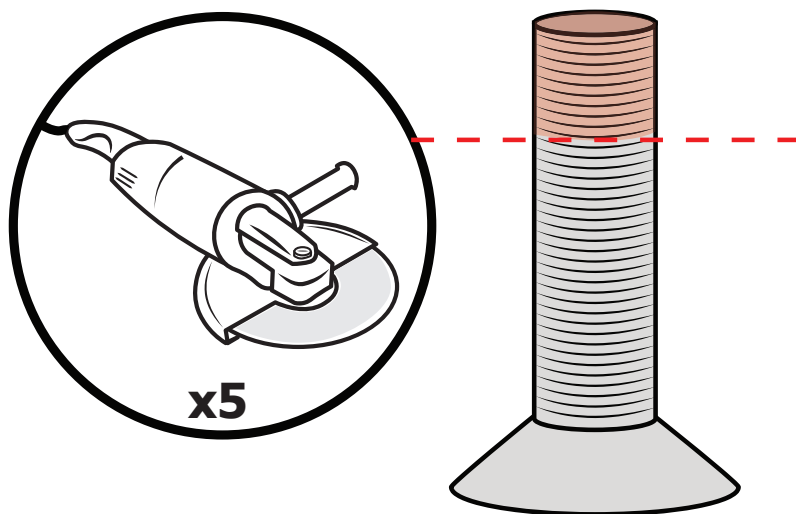


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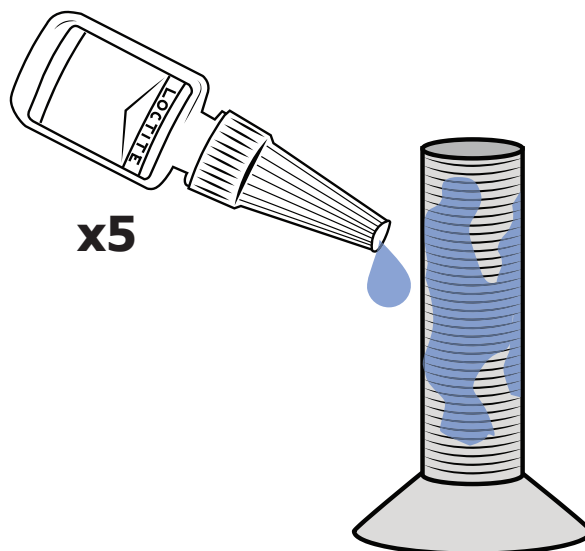
- 19** Remove the screws together with the spacer/spacers.



- 20** Cut the screw where the mark is.

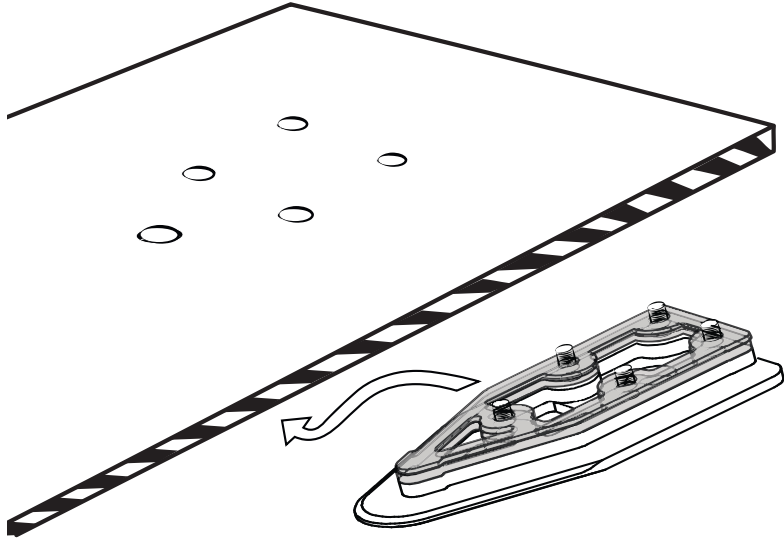


- 21** Apply Loctite 222 (or an equivalent product) onto the screw..

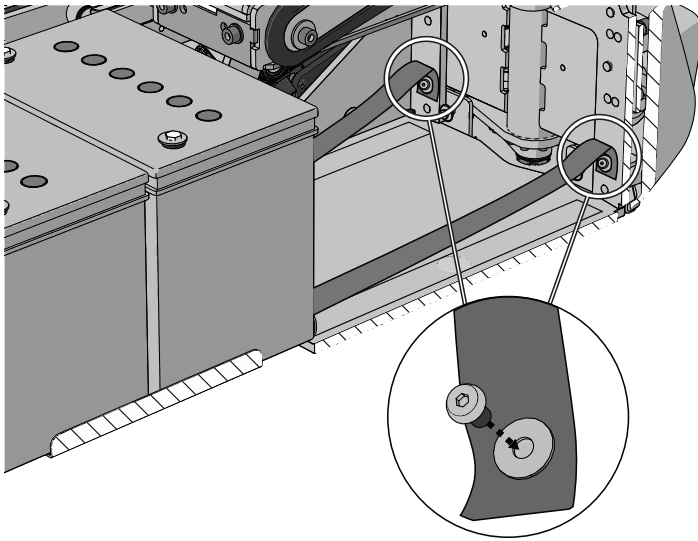


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22 Attach the five screws together with the spacer/spacers and the lock plate on the underside of the chassis box. Tightening torque: 18 Nm/13.3 lb.ft.



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

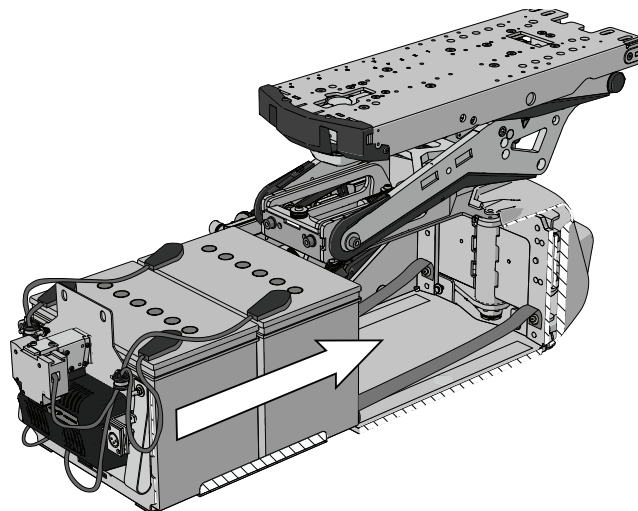


24 Push the battery box into the chassis.



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

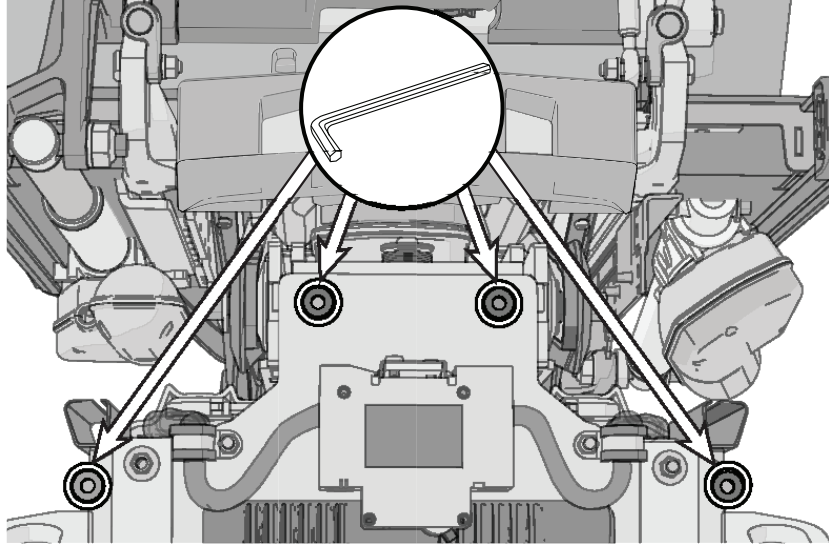
Be careful, pinching risk.



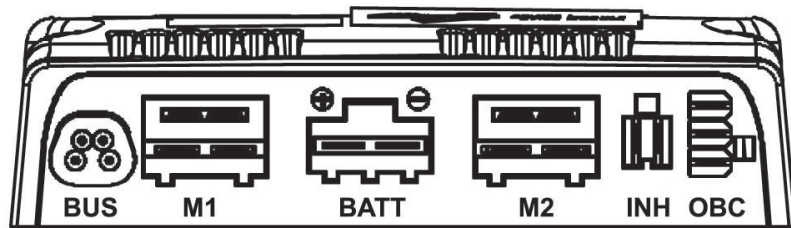
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25 Refit the four screws by holding the battery box.

Tightening torque: 24 Nm/17.7 lb.ft.

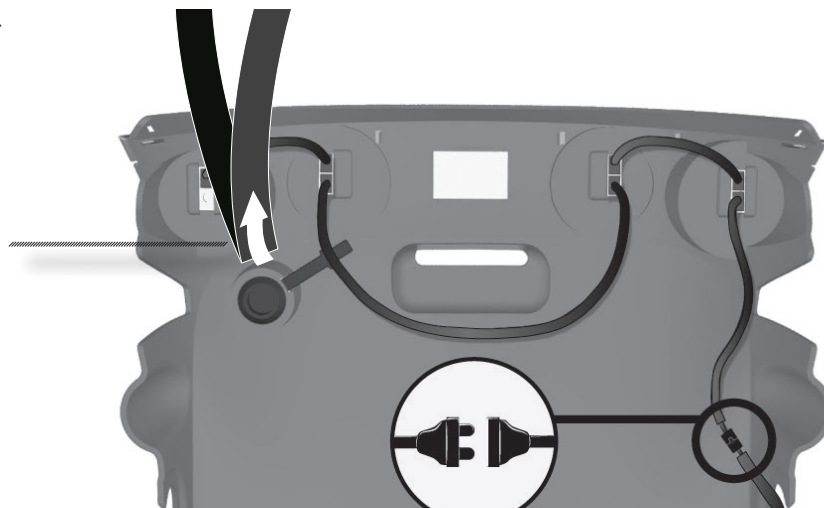


26 Connect the cables to the power module.



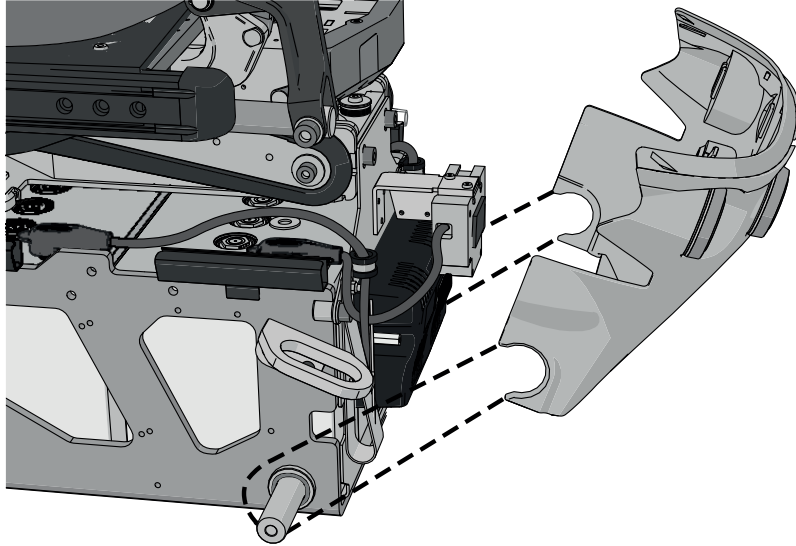
27 If the wheelchair is equipped with lights, reconnect the light cable.

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

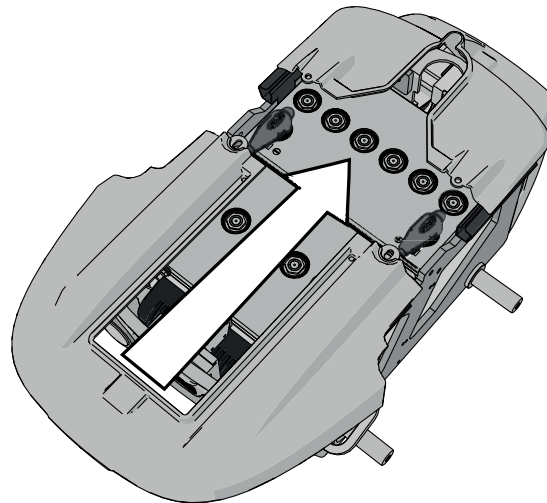


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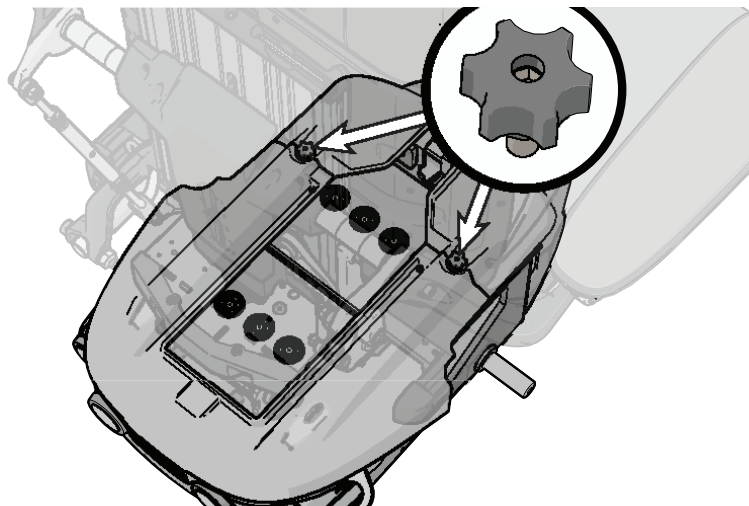
28 Refit the rear cover onto the chassis by positioning the covers on the shaft of the link arms.



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.



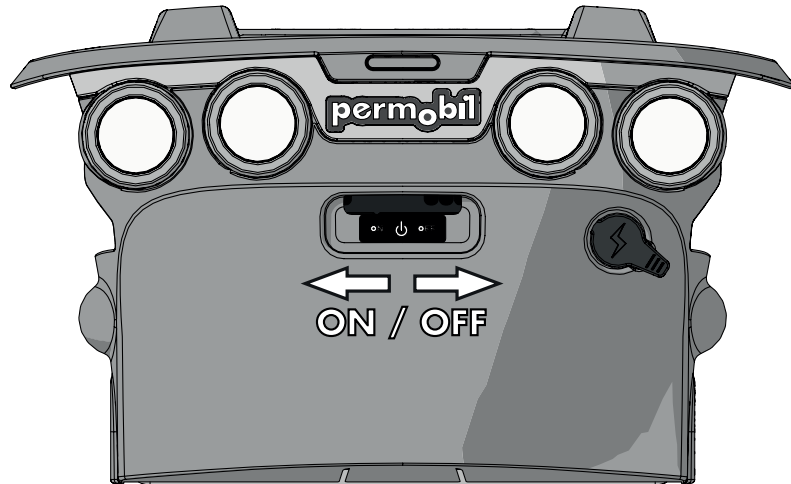
30 Turn the cover knobs without tightening them. Press the top cover and the front chassis cover against each other until any space between them is eliminated. Tighten the knobs by hand.



Assembly Instructions

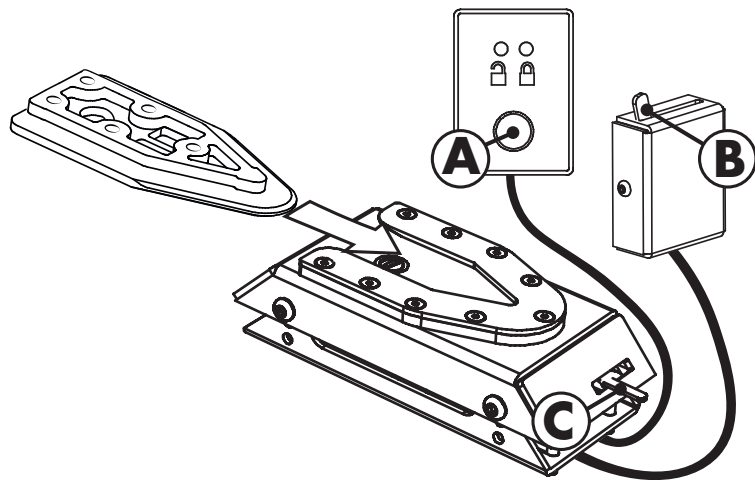
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31 Set the main fuse to ON and push the ON/OFF button on the control panel.



32 Perform final check by connecting the wheelchair to the docking station. Check that it is securely locked and make sure that all release methods work as intended.

A warning tone will sound if the lock plate is not properly engaged.



- (A) Release button.
- (B) Manual operating lever.
- (C) Emergency release.