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INSTALLATION DOCUMENT – INSTALLING BATEC ON FIXED-FRAME CHAIR

PARTS:

- BATEC
- BATEC DOCKING-BAR
- BRACKETS
- BRACKET CLAMPS
- CLAMPS

LIST OF TOOLS:

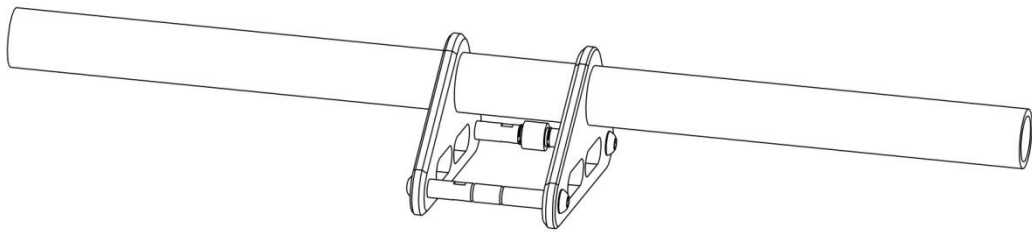
- 8 – 30 Nm TORQUE WRENCH
- 4 mm AND 5 mm ALLEN WRENCHES
- PIPE CUTTER
- BATEC LEVEL
- TAPE MEASURE

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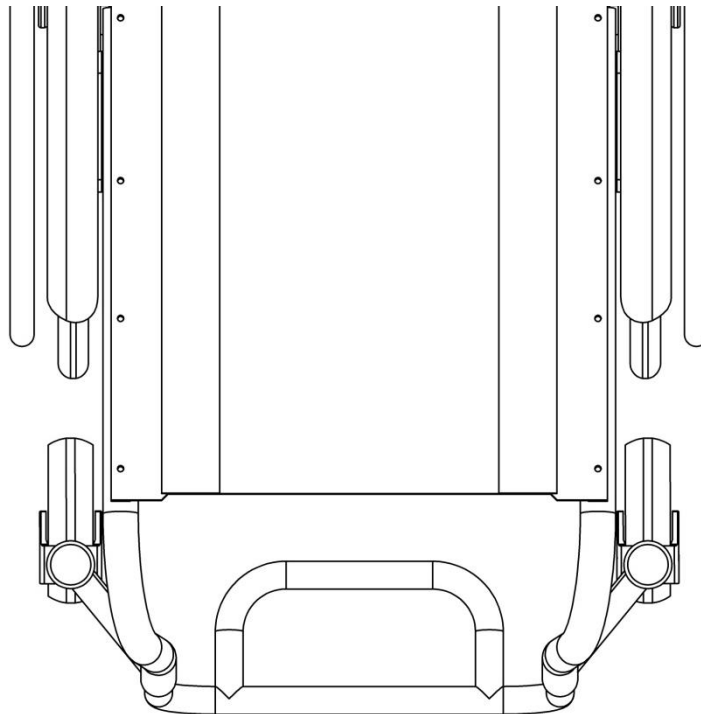
STEP 1 – SELECTING MATERIALS

BATEC DOCKING-BAR - ref. 53.04.01

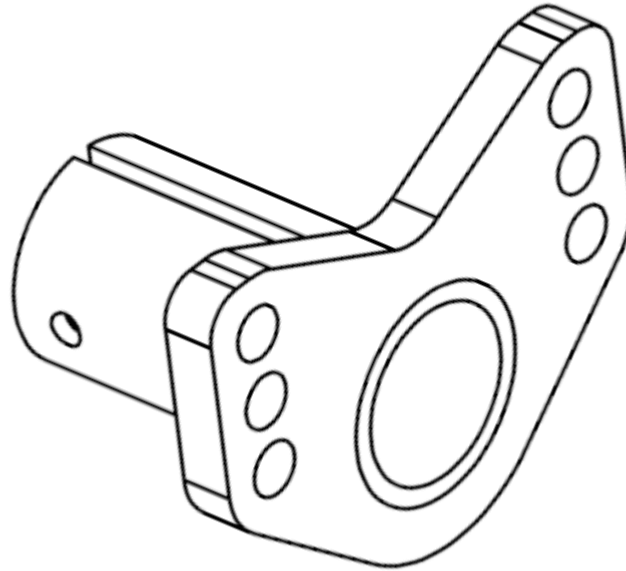


SELECT THE BRACKETS:

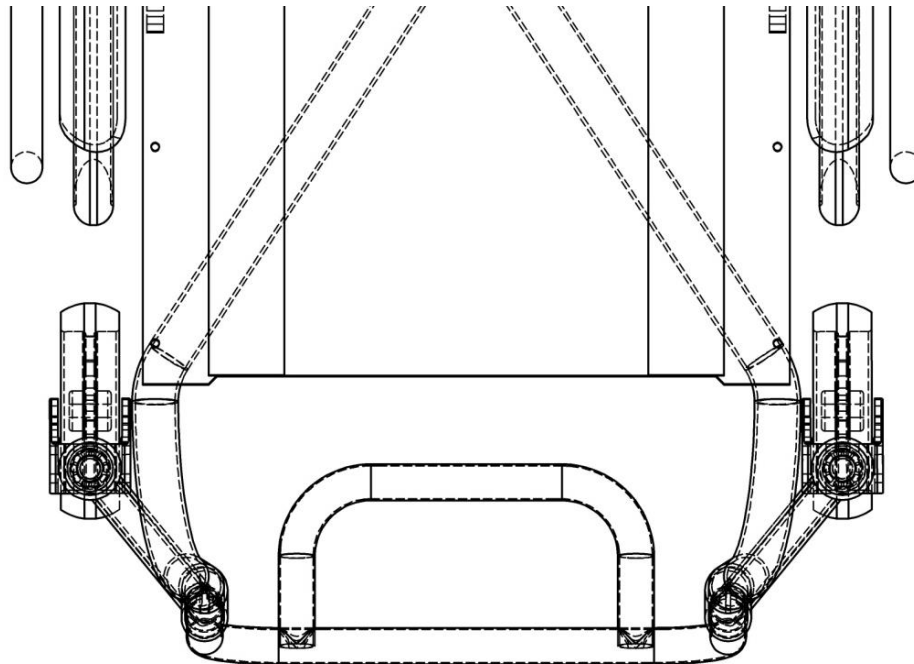
1. FOR SQUARE FIXED-FRAME CHAIRS



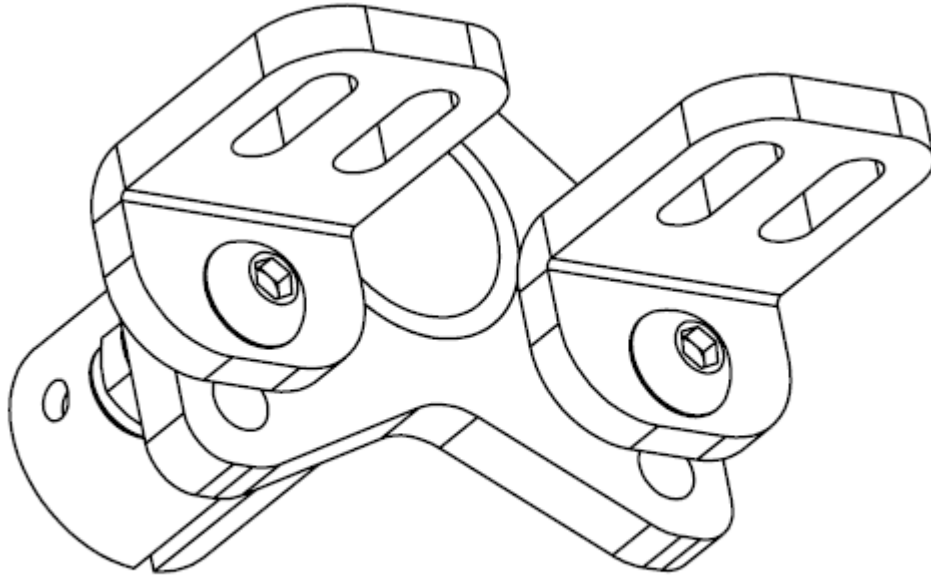
○ **FIXED-FRAME BRACKETS - D1 PV3 - ref. 53.01.10**



2. FOR FIXED-FRAME CHAIR WITH TAPERED SEAT



- **FIXED-FRAME BRACKETS - D1 PV3 - ref. 53.01.10, WITH ADAPTORS
FOR FIXED FRAME WITH TAPERED SEAT - D5 50 - ref. 53.05.04**

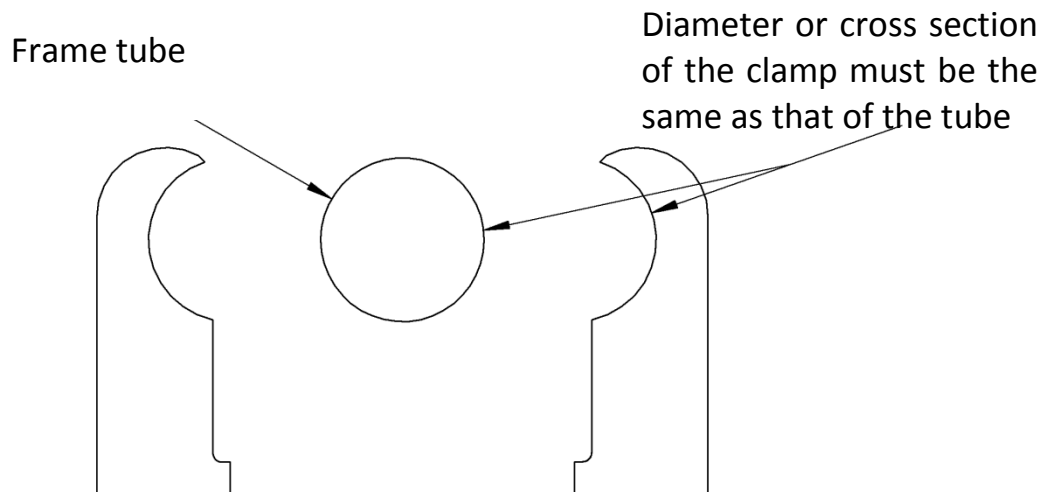


STEP 2 – SELECTING CLAMPS

Select the right **CLAMPS** for the diameter and shape of the wheelchair frame tube.

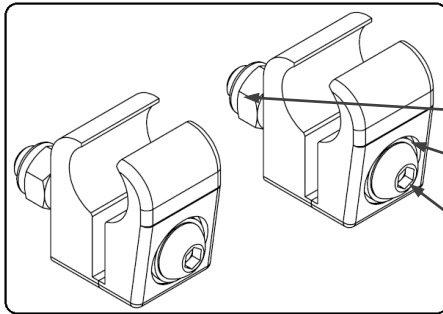
See the **BATEC COMPATIBILITY TABLE**.

Make sure the diameter and shape of the frame tube and the **CLAMPS** are the same.



TYPES OF CLAMPS FOR FIXED-FRAME WHEELCHAIRS

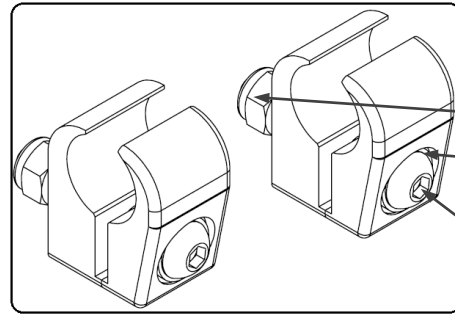
• STANDARD CLAMPS FOR ROUND TUBE



D2 N19

M8 DIN 985
M8 DIN 125
M8x50 DIN 7380

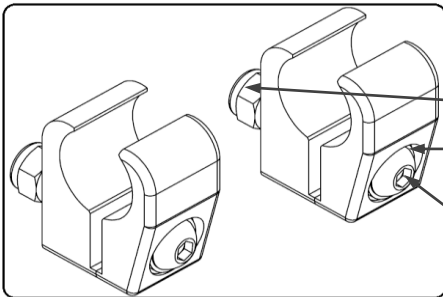
ref 53.02.40



D2 N22

M8 DIN 985
M8 DIN 125
M8x50 DIN 7380

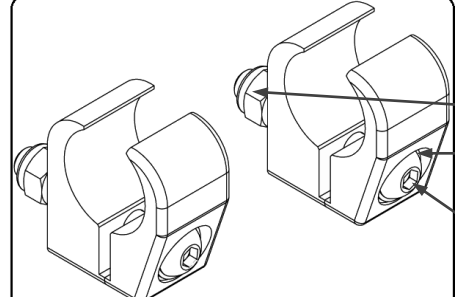
ref 53.02.41



D2 N25

M8 DIN 985
M8 DIN 125
M8x50 DIN 7380

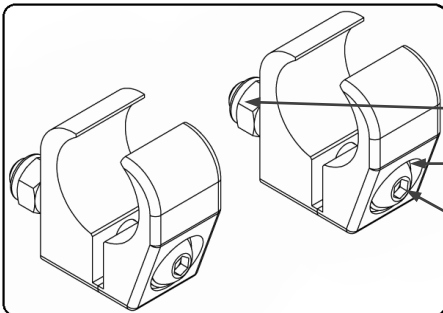
ref 53.02.42



D2 N28.8

M8 DIN 985
M8 DIN 125
M8x55 DIN 7380

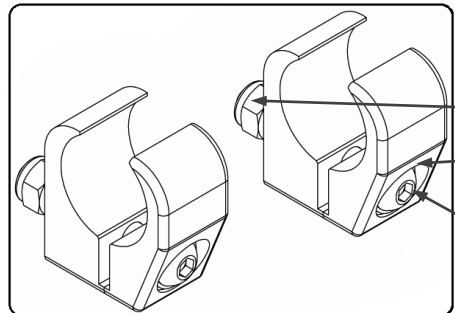
ref 53.02.43



D2 N30

M8 DIN 985
M8 DIN 125
M8x55 DIN 7380

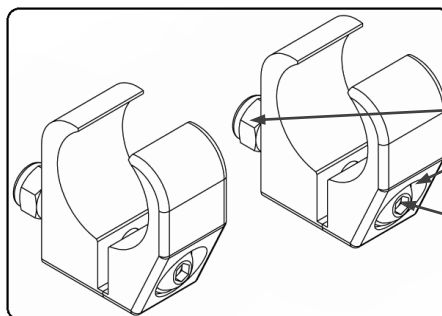
ref 53.02.44



D2 N31.6

M8 DIN 985
M8 DIN 125
M8x55 DIN 7380

ref 53.02.45

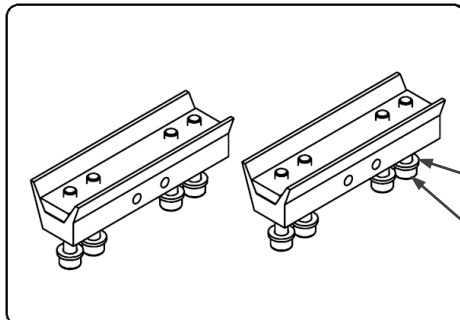


D2 N35

M8 DIN 985
M8 DIN 125
M8x55 DIN 7380

ref 53.02.46

- OTHER CLAMPS FOR TUBES WITH SPECIAL SHAPES

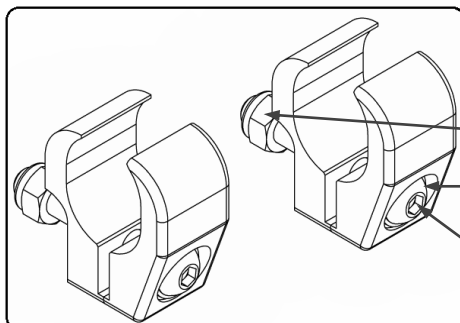


D2 A KUSCHALL ADVANCE

M6 DIN 125

M6x35 DIN 912

ref 53.02.07



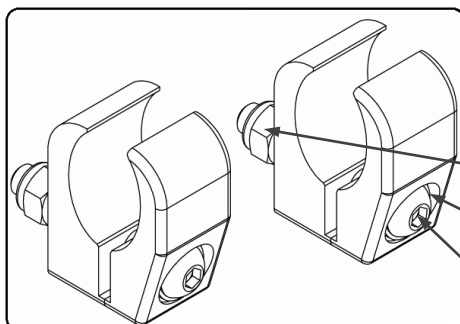
D2 NH QUICKIE

M8 DIN 985

M8 DIN 125

M8x55 DIN 7380

ref 53.02.47



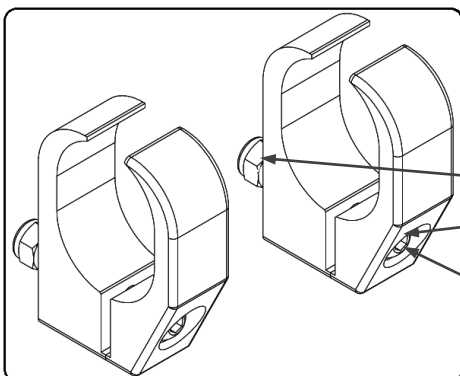
D2 NJ PROGEO JOKER

M8 DIN 985

M8 DIN 125

M8x55 DIN 7380

ref 53.02.48



D2 NC CYCLONE XLR

M8 DIN 985

M8 DIN 125

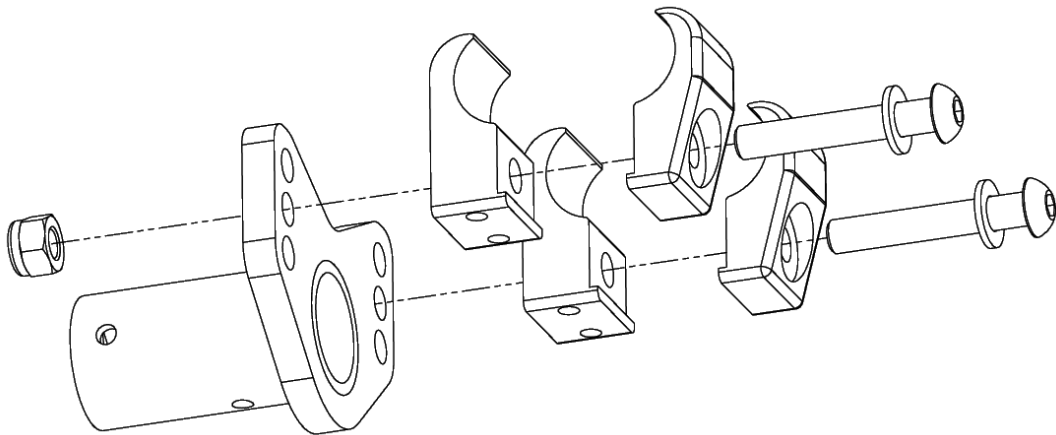
M8x60 DIN 7380

ref 53.02.50

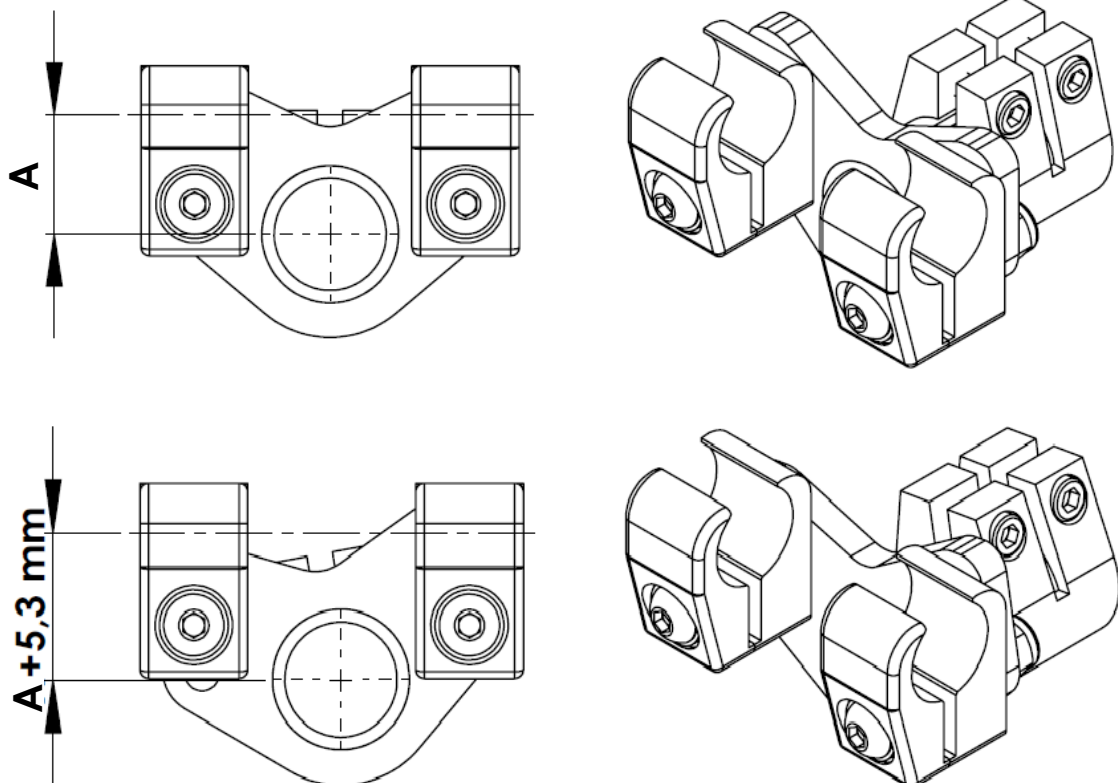
STEP 3 – ATTACHING THE CLAMPS TO THE BRACKETS

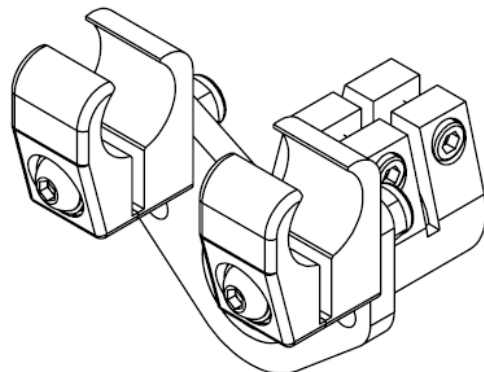
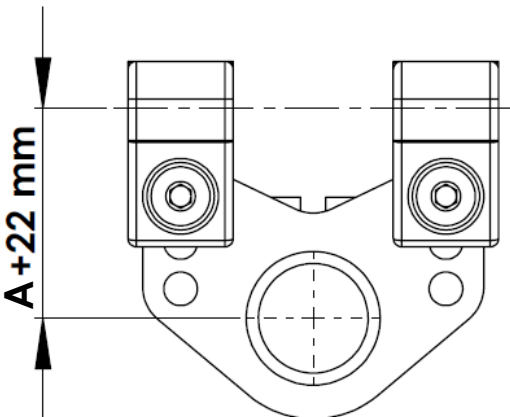
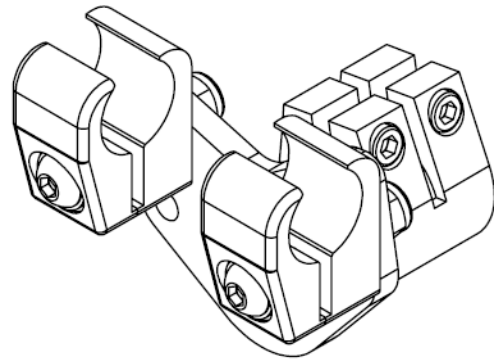
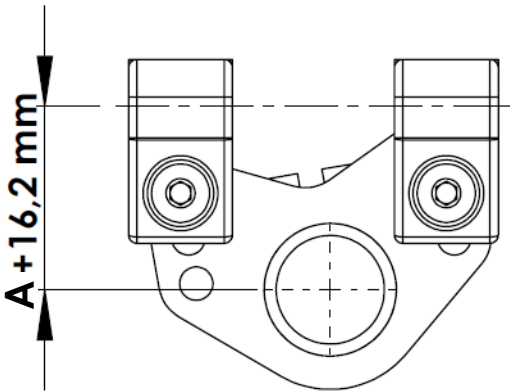
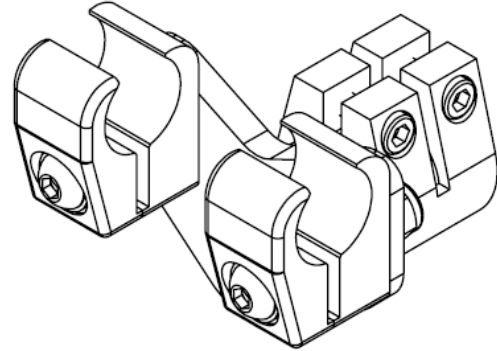
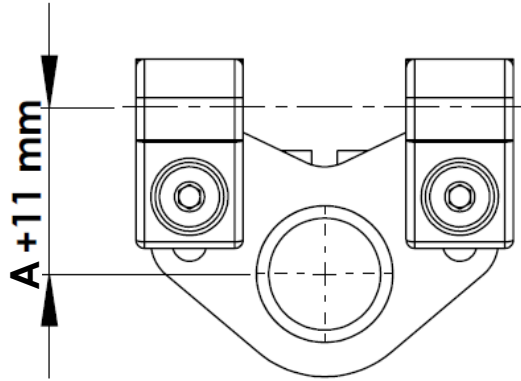
Attach the **CLAMPS** to the **BRACKETS** with the screws provided but don't tighten. The parts should be able to slide.

USING FIXED-FRAME BRACKET - D1 PV3

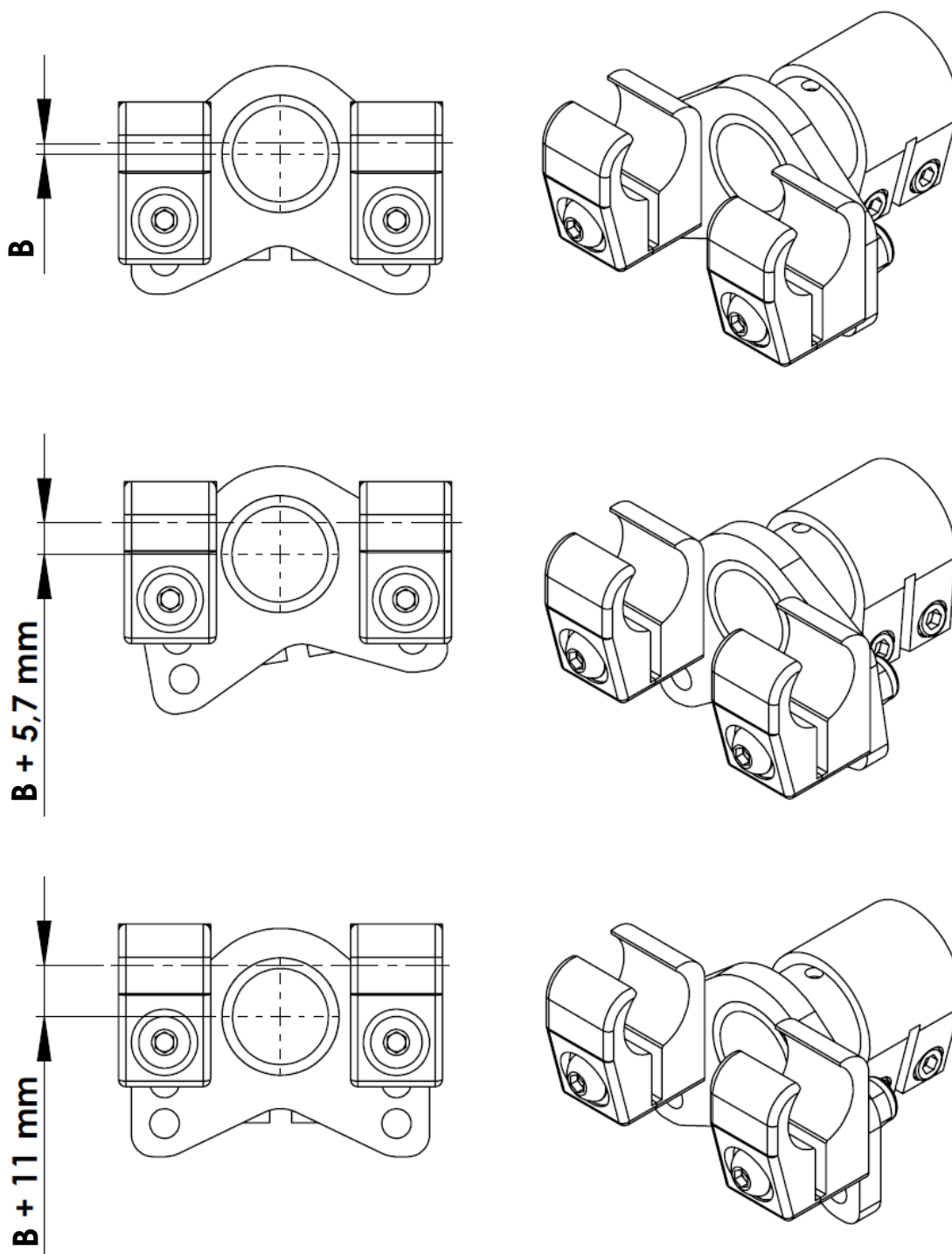


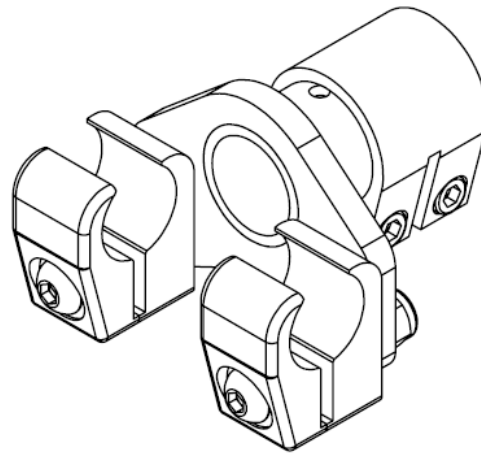
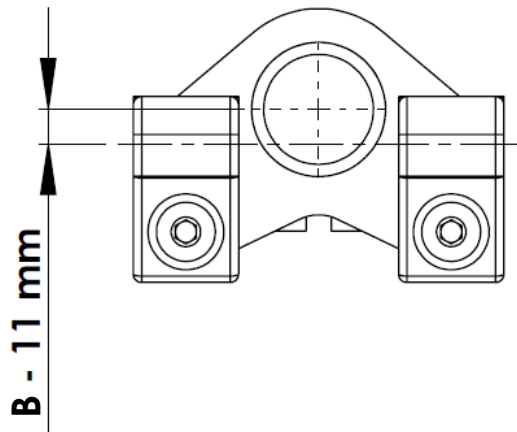
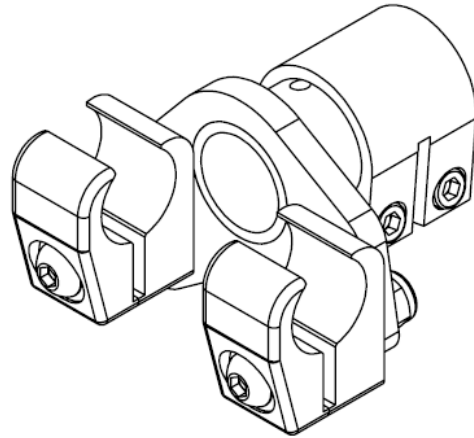
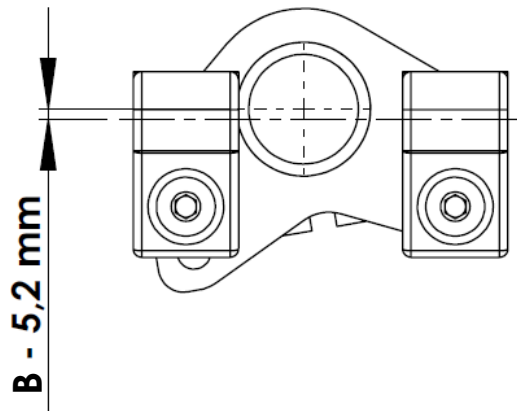
DIFFERENT INSTALLATION OPTIONS USING FIXED-FRAME BRACKET - D1 PV3 – IN STANDARD POSITION



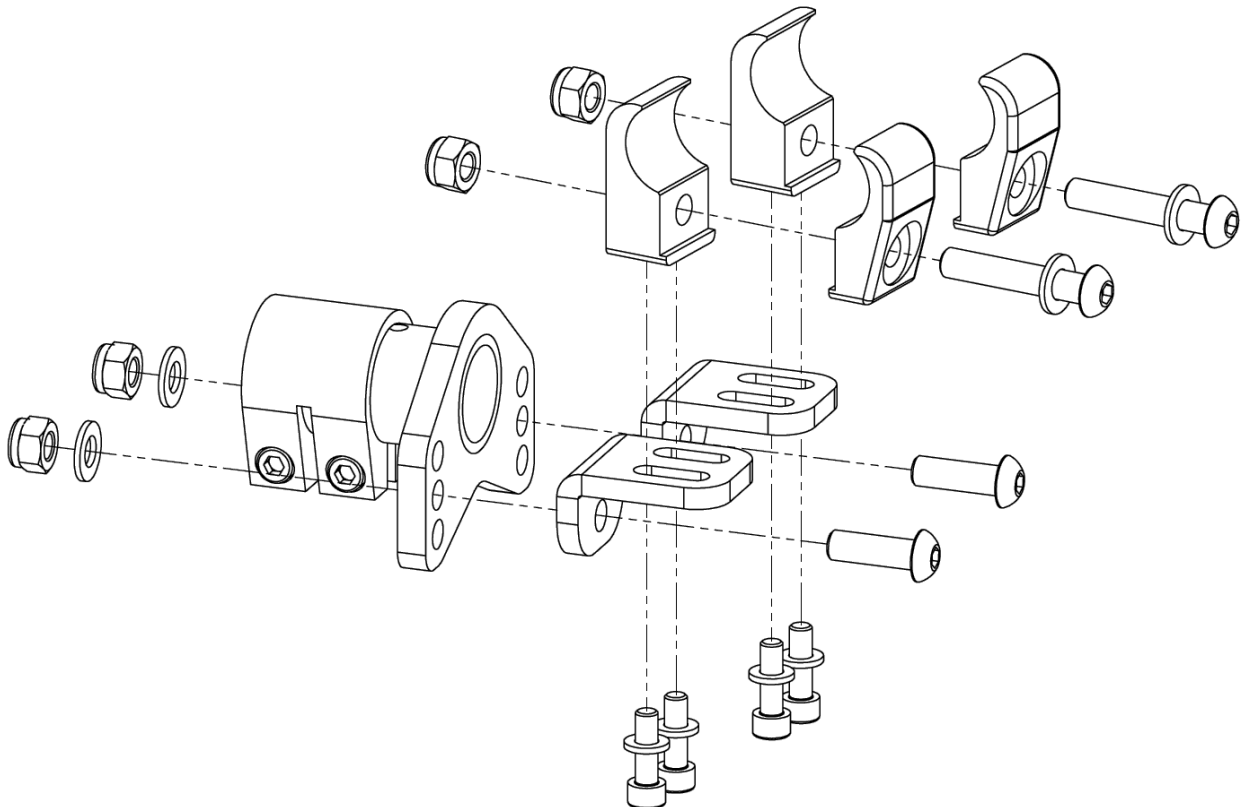


DIFFERENT INSTALLATION OPTIONS USING FIXED-FRAME BRACKET - D1 PV3 – IN INVERSE POSITION

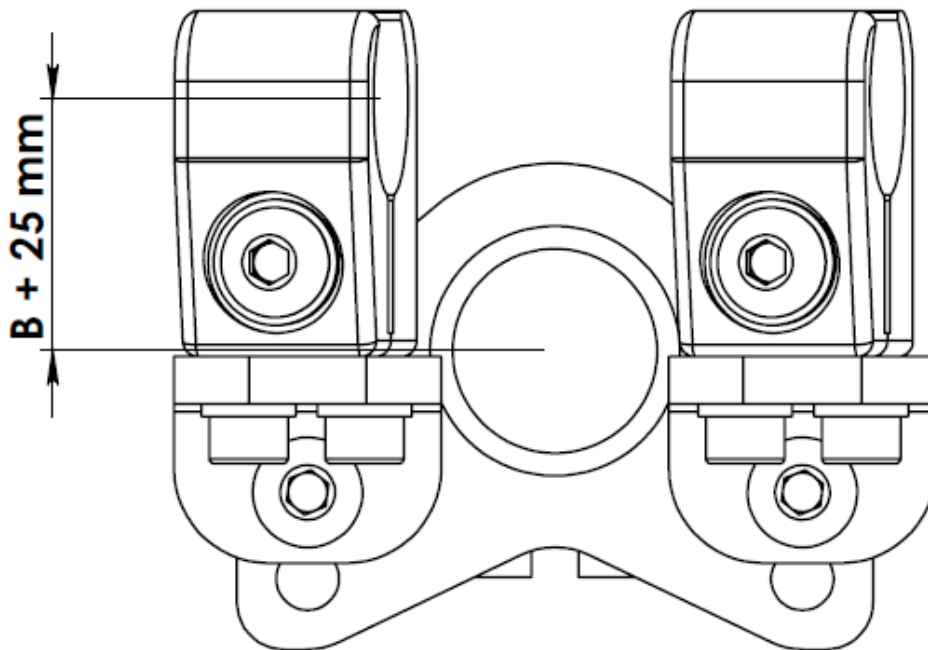




**USING FIXED-FRAME BRACKET - D1 PV3 - WITH ADAPTORS FOR
FIXED FRAME WITH TAPERED SEAT - D5 50.**



DIFFERENT INSTALLATION OPTIONS USING FIXED-FRAME BRACKET
- D1 PV3 – WITH ADAPTORS - D5 50.



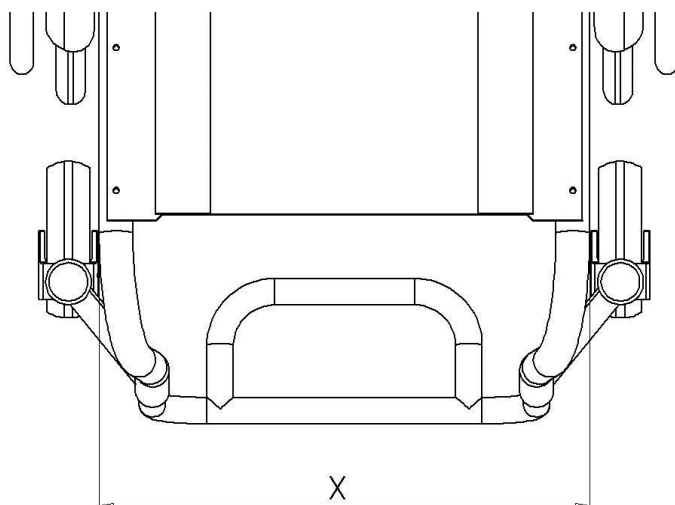
THIS POSITION CAN BE COMBINED WITH THE PREVIOUS TERMINAL
- D1 PV3 - IN STANDARD AND INVERSE POSITION TO ACHIEVE
HIGHER CENTER DISTANCES.

WE ALWAYS RECOMMEND THE SHORTER C DISTANCE IF POSSIBLE.

STEP 4 – CUTTING THE BATEC DOCKING-BAR

USING FIXED-FRAME BRACKET - D1 PV3

Measure the width of the wheelchair on which you want to install the **BATEC**, taking the measurement from the outer edges of the seat tubes.



Cut the **DOCKING-BAR** on both sides, using a band saw or a pipe cutter, according to the following formula:

X = wheelchair seat width in cm.

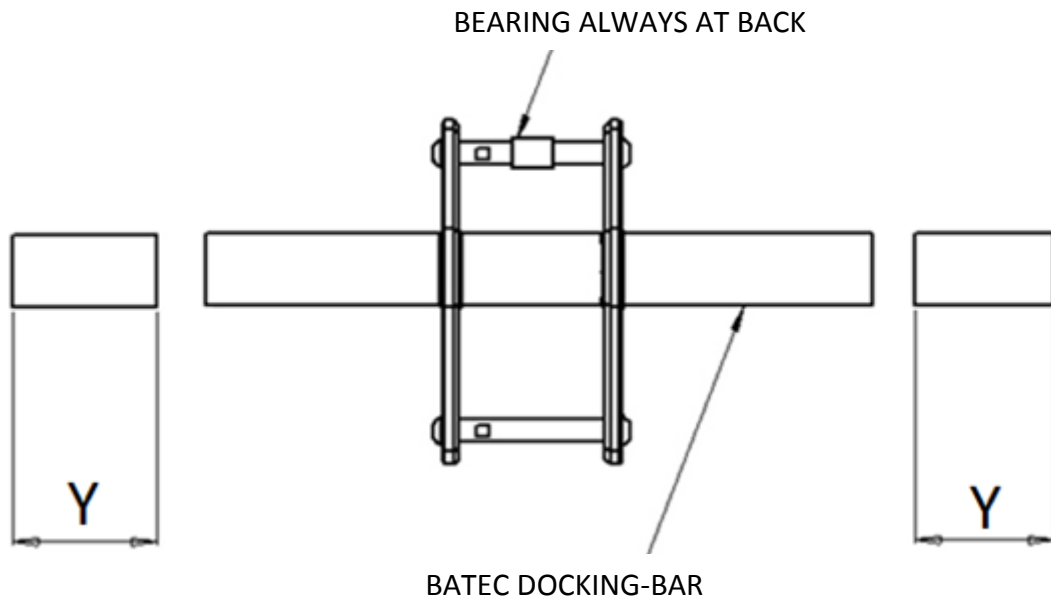
Y = piece of tube to cut from each side of the DOCKING-BAR in cm:

W = value of the **TABLE W** according to the clamps in cm.

$$Y = \frac{45 - X + W}{2}$$

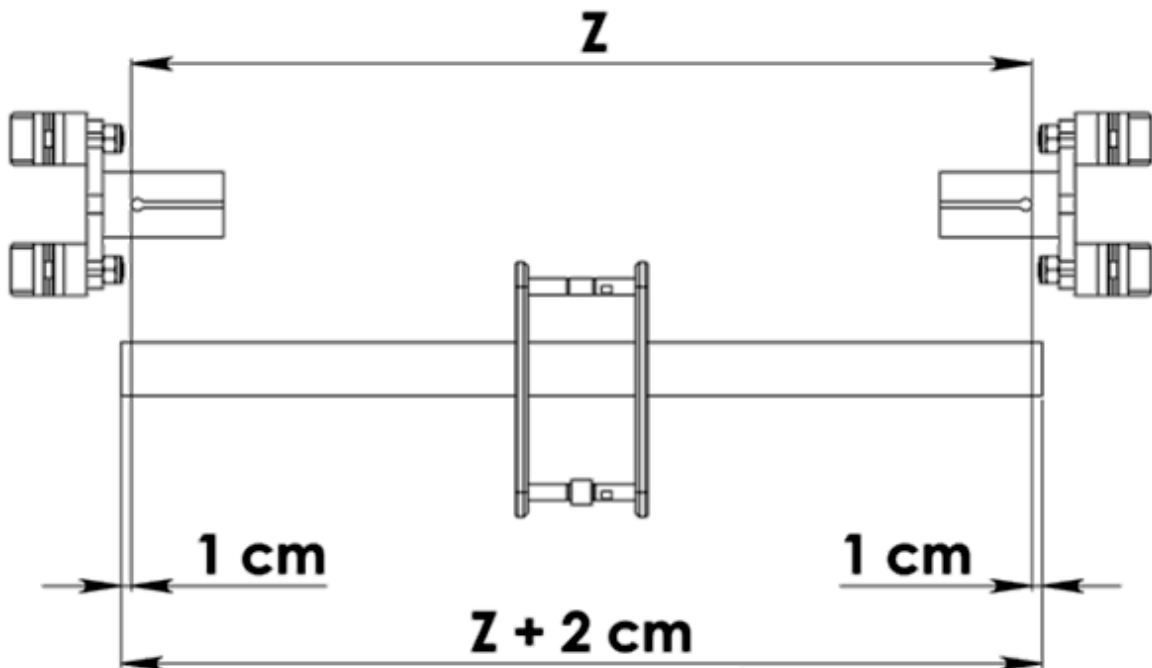
TABLE W

Clamps	Value of W	Clamps	Value of W
D2 N19	6.2 cm	D2 N31.6	8.7 cm
D2 N22	6.8 cm	D2 N35	9.4 cm
D2 N25	7.4 cm	D2 NH QUICKIE	7.7 cm
D2 N28.8	8.2 cm	D2 NJ PROGEO JOKER	7.4 cm
D2 N30	8.4 cm	D2 NC CYCLONE XLR	10.8 cm



USING FIXED-FRAME BRACKET - D1 PV3 - WITH ADAPTORS - D5 50.

Cut the **DOCKING-BAR** on both sides, using a band saw or a pipe cutter, according to the parameters in the following diagram:



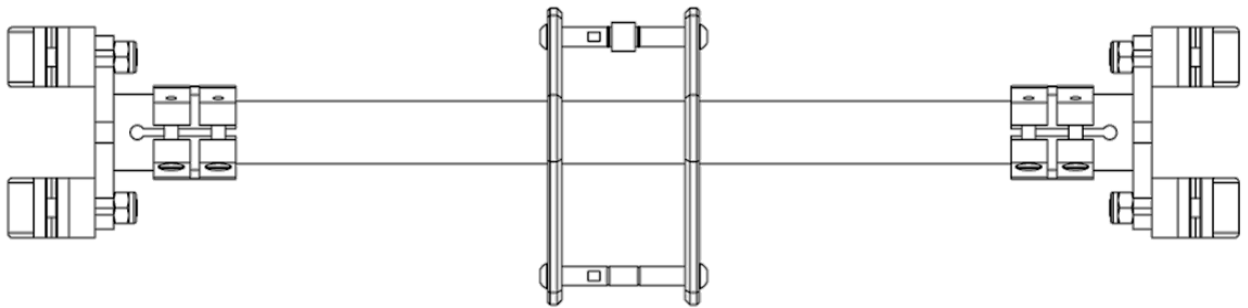
STEP 5 – ATTACHING THE BRACKETS TO THE BATEC DOCKING-BAR

Attach the **BRACKETS** to the **DOCKING-BAR**.

The **DOCKING-BAR** is now complete.

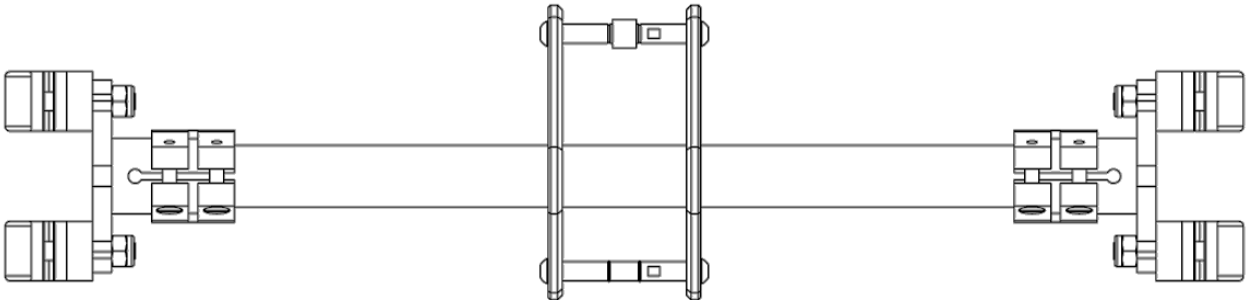
The bar can be installed in two positions:

STANDARD



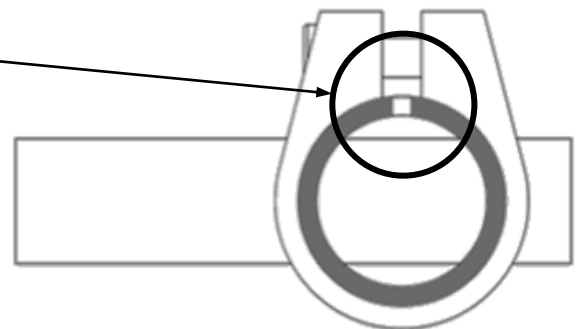
INVERSE

The front axle moves back **2 cm**.



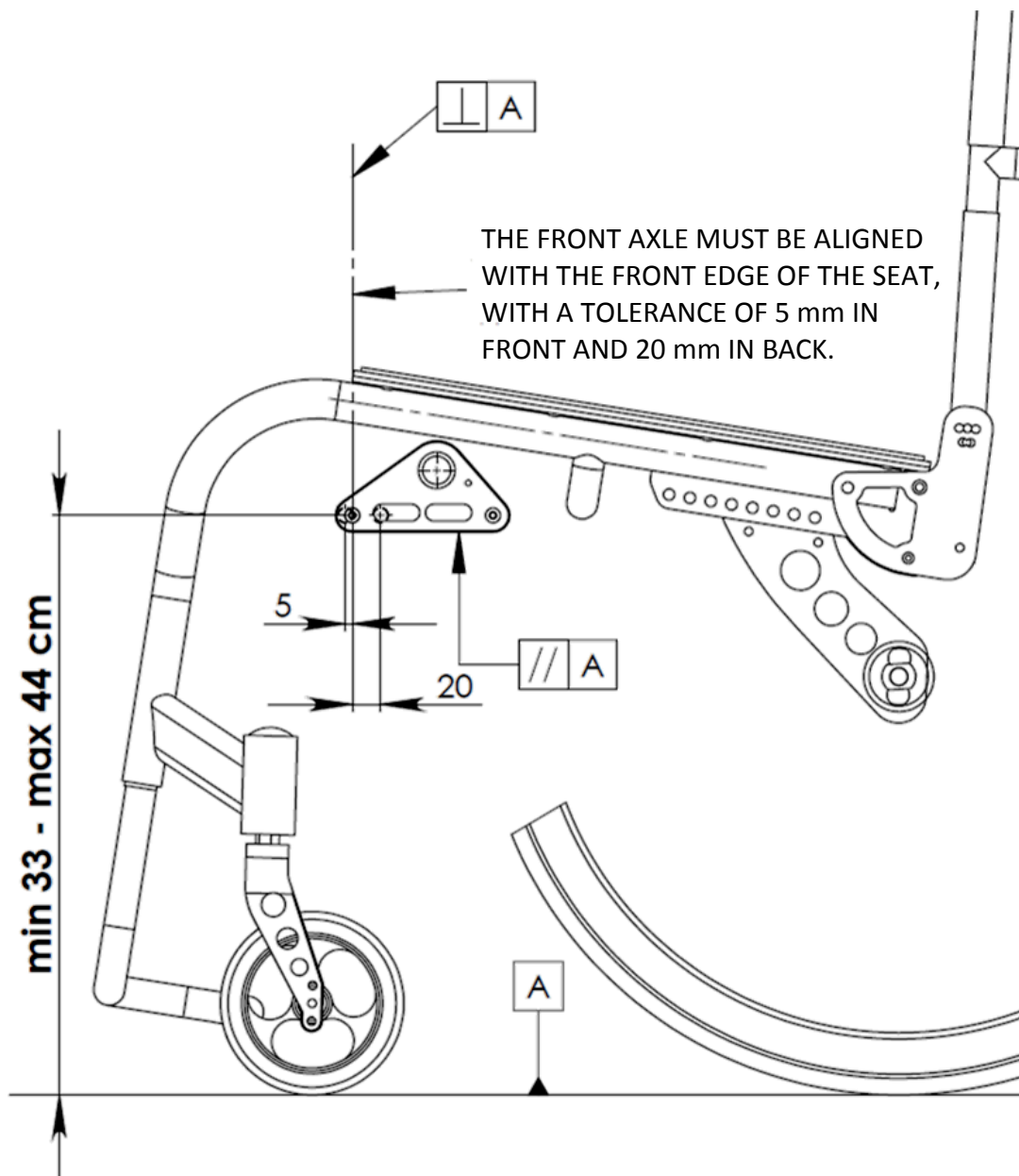
WARNING! – MAKE SURE YOU SWAP THE AXLES BECAUSE THE BEARING MUST ALWAYS BE ON THE REAR AXLE.

WARNING! – CLAMP POSITION.

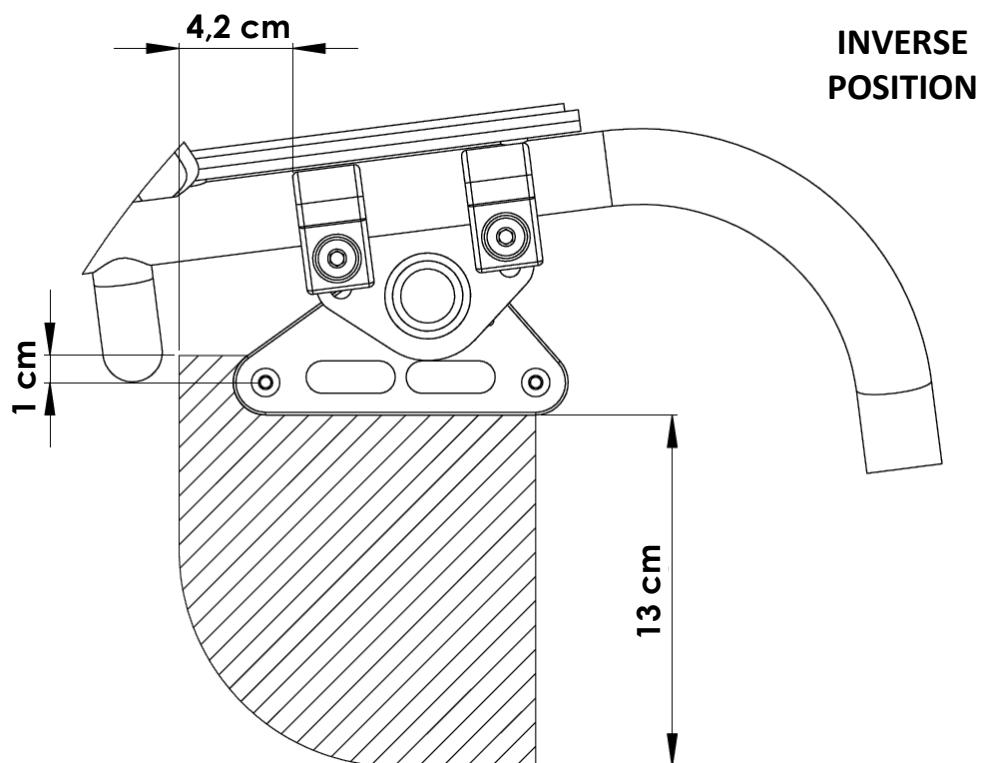
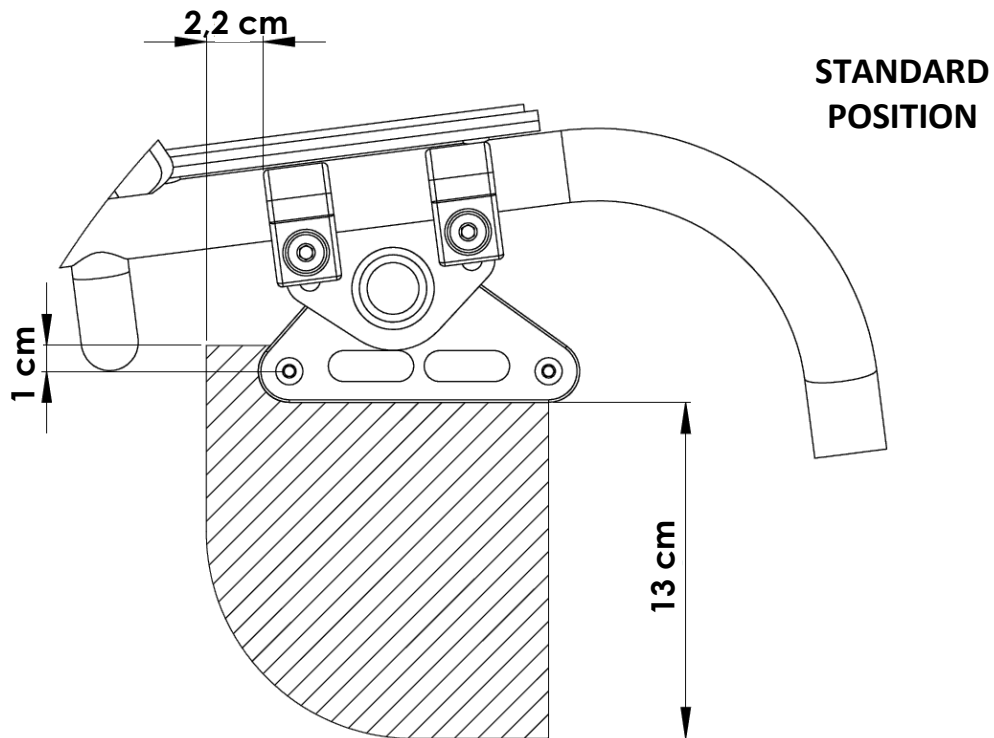


STEP 6 – PUTTING THE BATEC DOCKING-BAR ON THE CHAIR

Clear the area of the wheelchair where you are going to attach the **DOCKING-BAR** and then put it in the position indicated, progressively tightening the 4 **CLAMPS**, allowing the parts to slide.

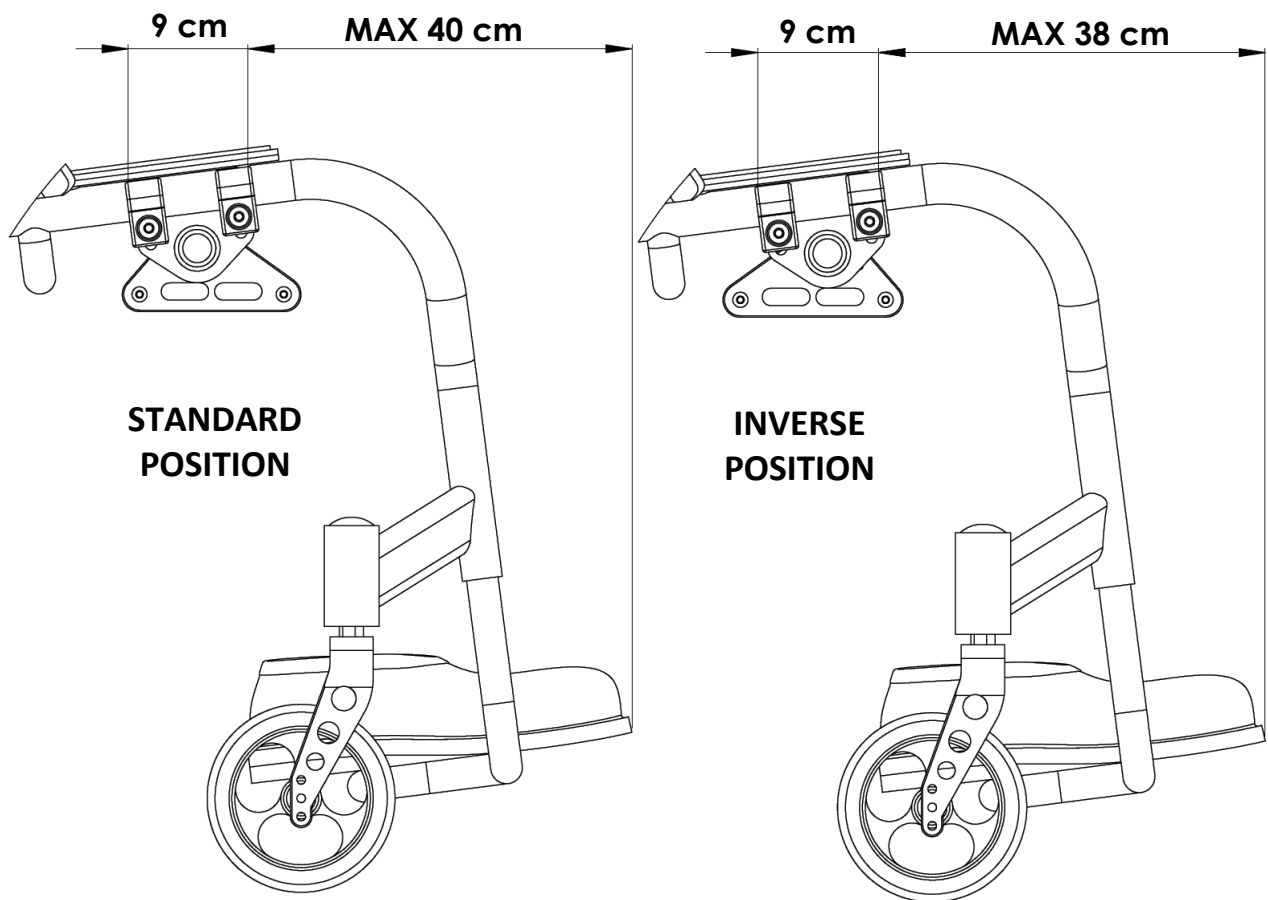


FREE SPACE NEEDED TO ATTACH THE DOCKING-BAR.



Make sure that the **maximum distance** between the front part of the first clamp and the tip of the user's feet is **equal to or less than 40 cm** (See box 17 of the **USER DETAILS** on the **BATEC ORDER FORM**).

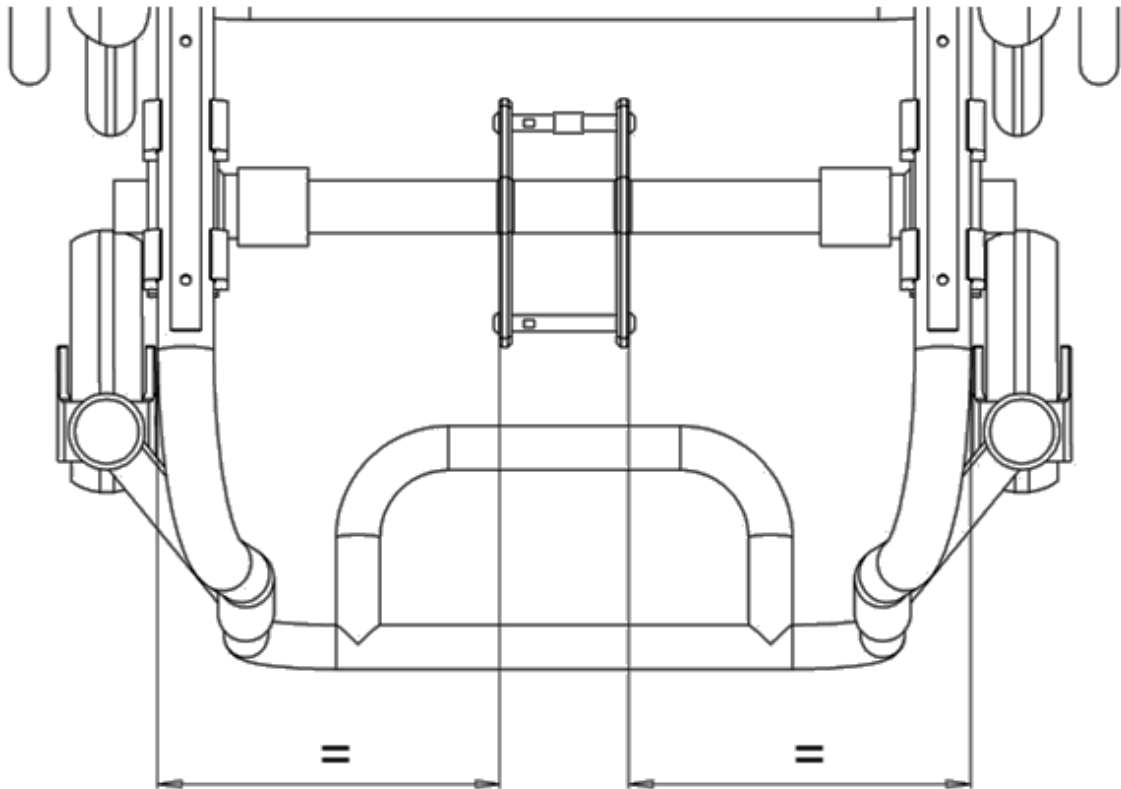
If the distance is greater, you can move the DOCKING-BAR forward as much as the user's legs allow.



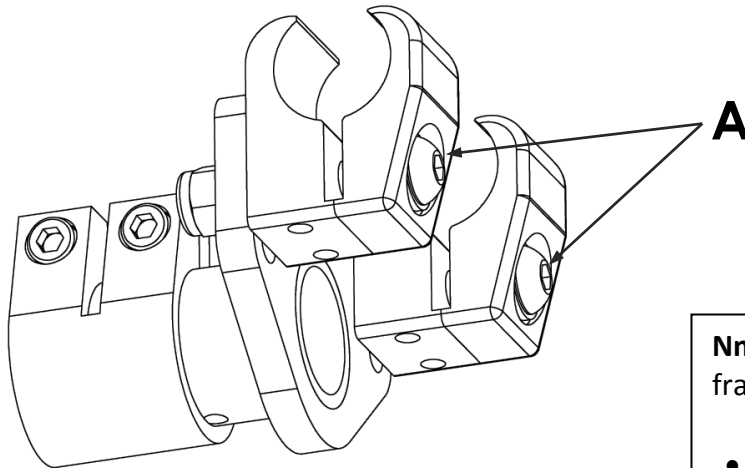
For chairs with short seats, we recommend moving the DOCKING-BAR as far back as possible, within the tolerance, to make the installation more compact.

STEP 7 – CENTRING THE BATEC DOCKING-BAR

Centre the **DOCKING-BAR** between the **BRACKETS** and gently tighten the screws on the **BRACKET CLAMPS**.

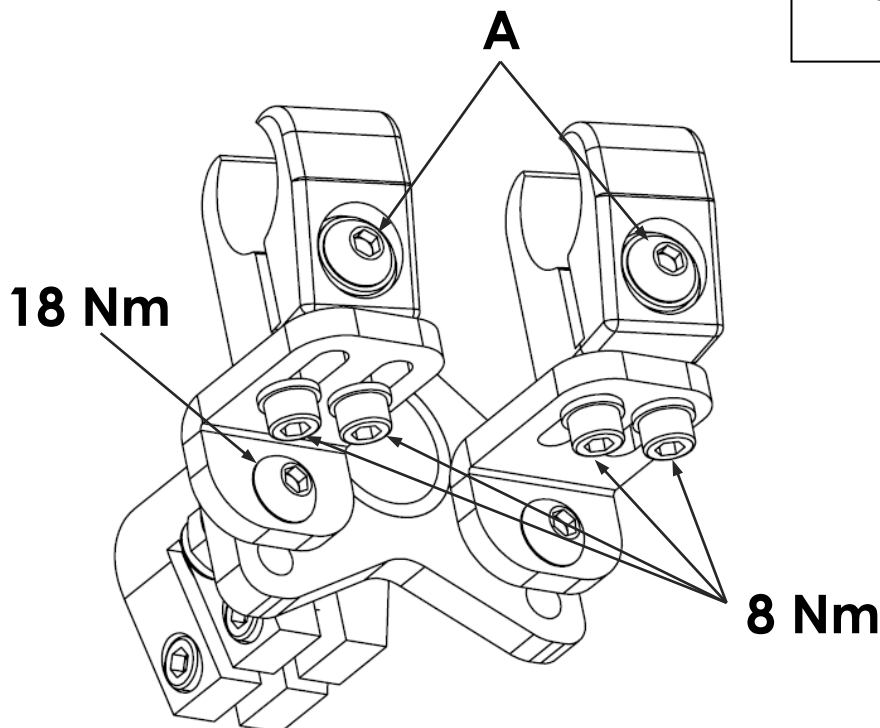


Tighten the screws on the **BRACKETS** and **CLAMPS** according to the table.

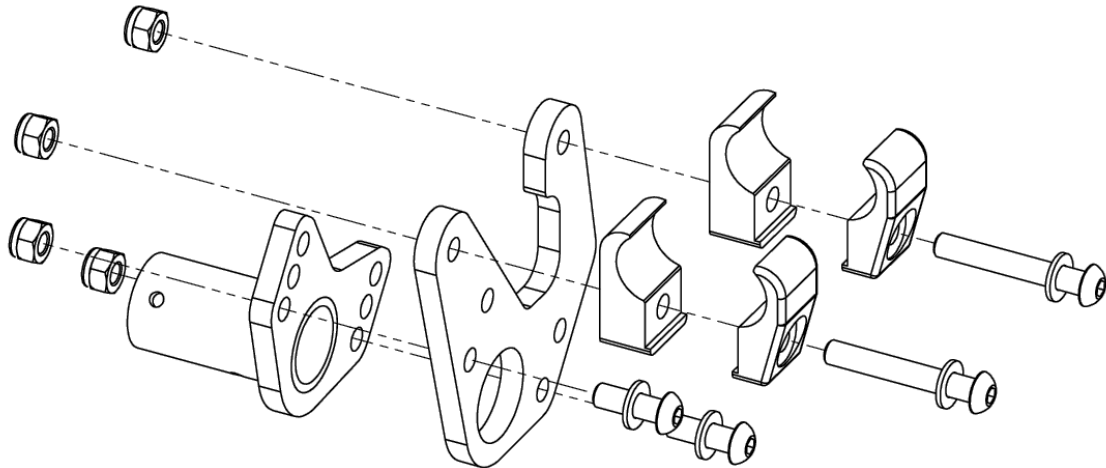


Nm of screws A according to the frame material:

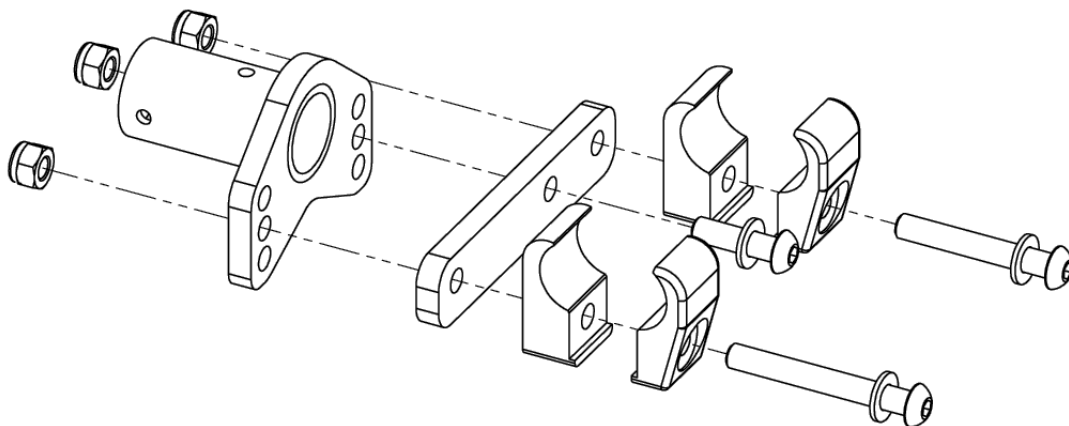
- **Aluminium:** 25 Nm
- **Chrome-Molybdenum:** 18 Nm
- **Titanium:** 18 Nm
- **Carbon:** 20 Nm



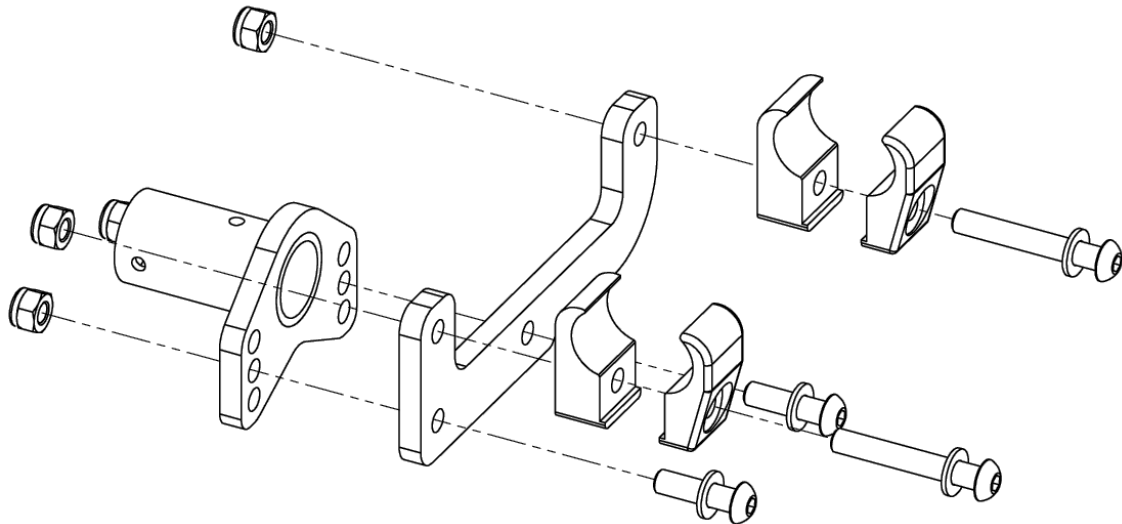
Bracket **D1 PV3** with **adaptor D5 PRO** for Pro Activ wheelchairs.



Bracket **D1 PV3** with **adaptor D5 RE** for moving the rear clamp backwards.



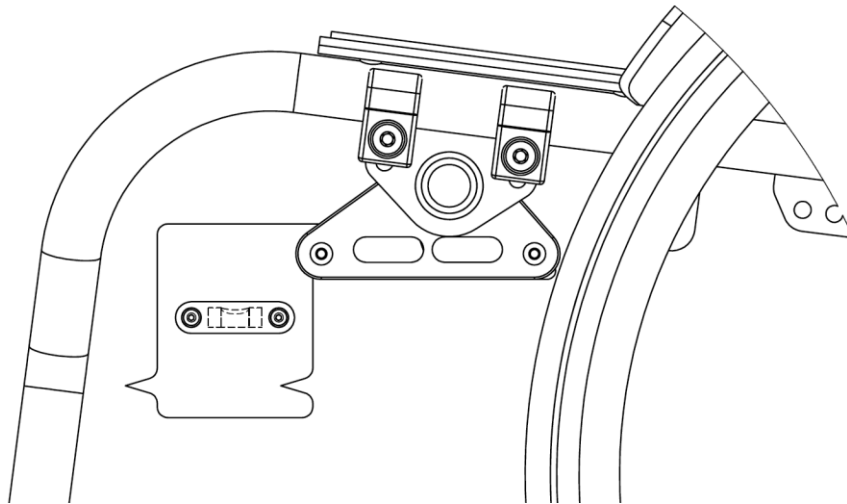
Bracket **D1 PV3** with adaptor **D5 PU** for saving a seat bar.



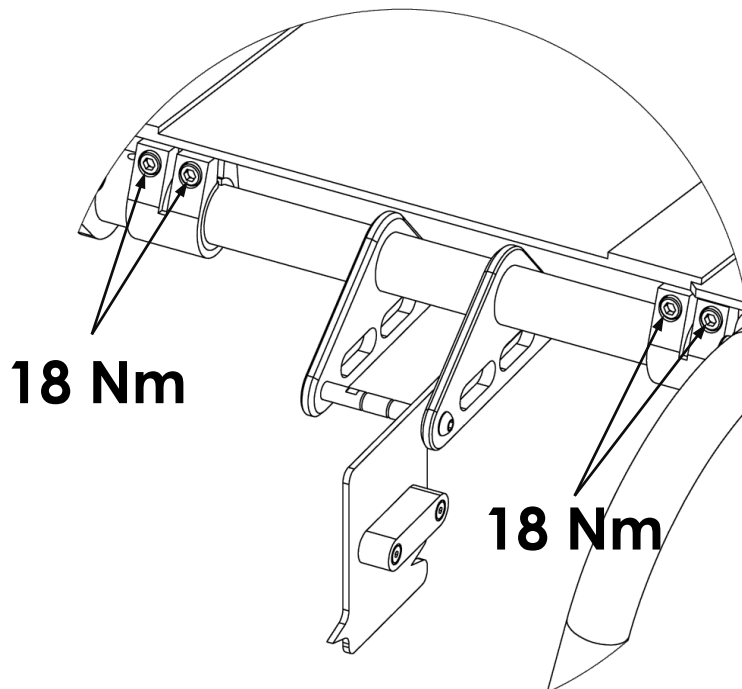
STEP 8 – LEVELLING THE BATEC DOCKING-BAR

Put the **BATEC LEVEL** on the **DOCKING-BAR** using the chosen **POSITION**.

Then, tip the **DOCKING-BAR** until the bubble in the **BATEC LEVEL** is between the two lines.

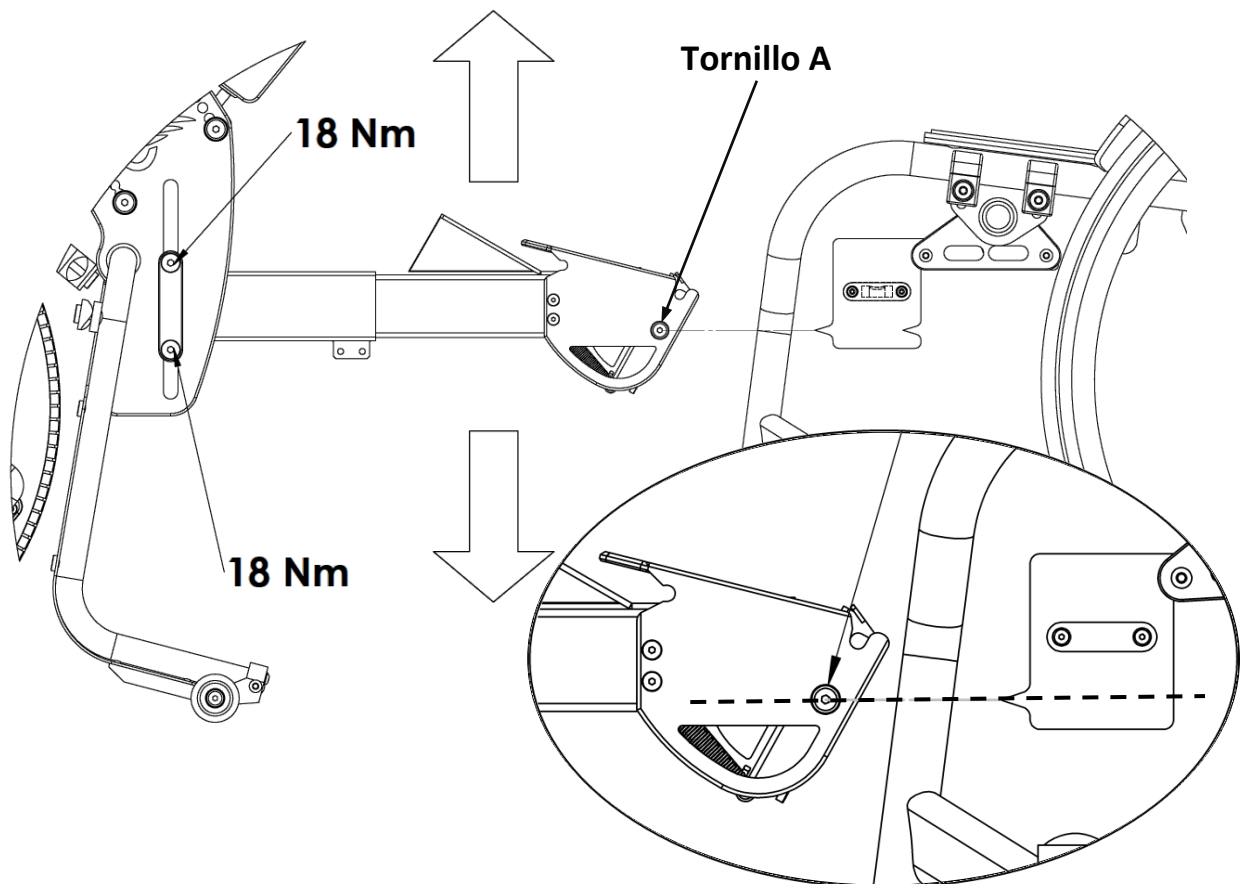


Finally, tighten the **CLAMPS ON THE BRACKETS**.



STEP 9 – ADJUSTING THE HEIGHT OF THE BATEC DOCKING-BAR

Leave the **BATEC LEVEL** on the **DOCKING-BAR** and bring the **BATEC** towards the **BATEC LEVEL** at the anchoring zone. Adjust the height of the **BATEC** anchoring until the centre of **screw A** is exactly at the height of the edge of the **BATEC LEVEL** and tighten the screw indicated to set the height of the **ANCHORING**.



CHECK ATTACHING AND DETACHING

At this point, the **BATEC** is properly installed on the wheelchair. Attach and detach the **BATEC** several times to make sure everything is working properly.

WARNING! – YOU SHOULD HEAR A CLEAR ‘CLICK’ WHEN IT ANCHORS.

STEP 10 – INSTALLING BRAKES ON THE CHAIR

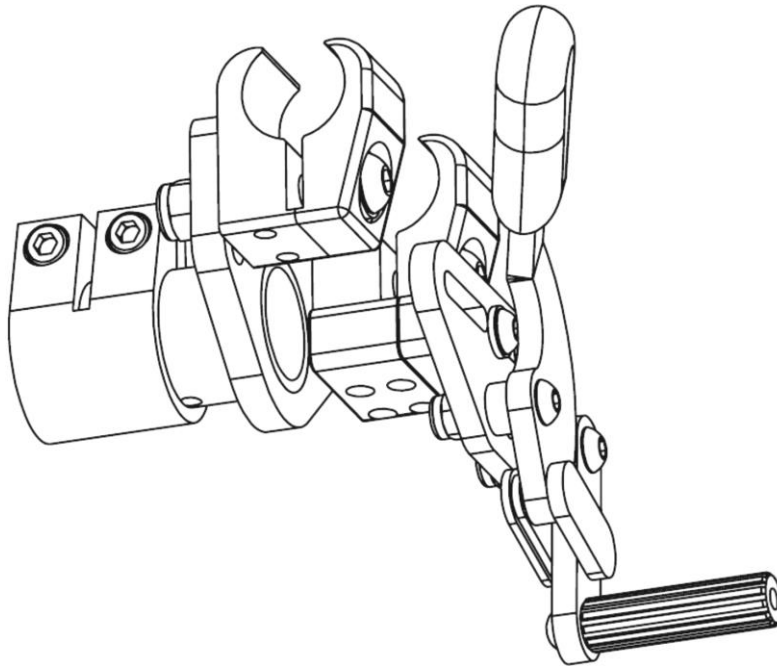
If you can't use the chair's own brakes, Batec provides 3 options:

- **STANDARD PUSH-TO-LOCK BRAKES- D3 NR - ref. 53.03.10**
- **ALUMINIUM SCISSOR BRAKES - D3 NTA - ref. 53.03.11**
- **COMPOSITE SCISSOR BRAKES - D3 NT - ref. 53.03.12**

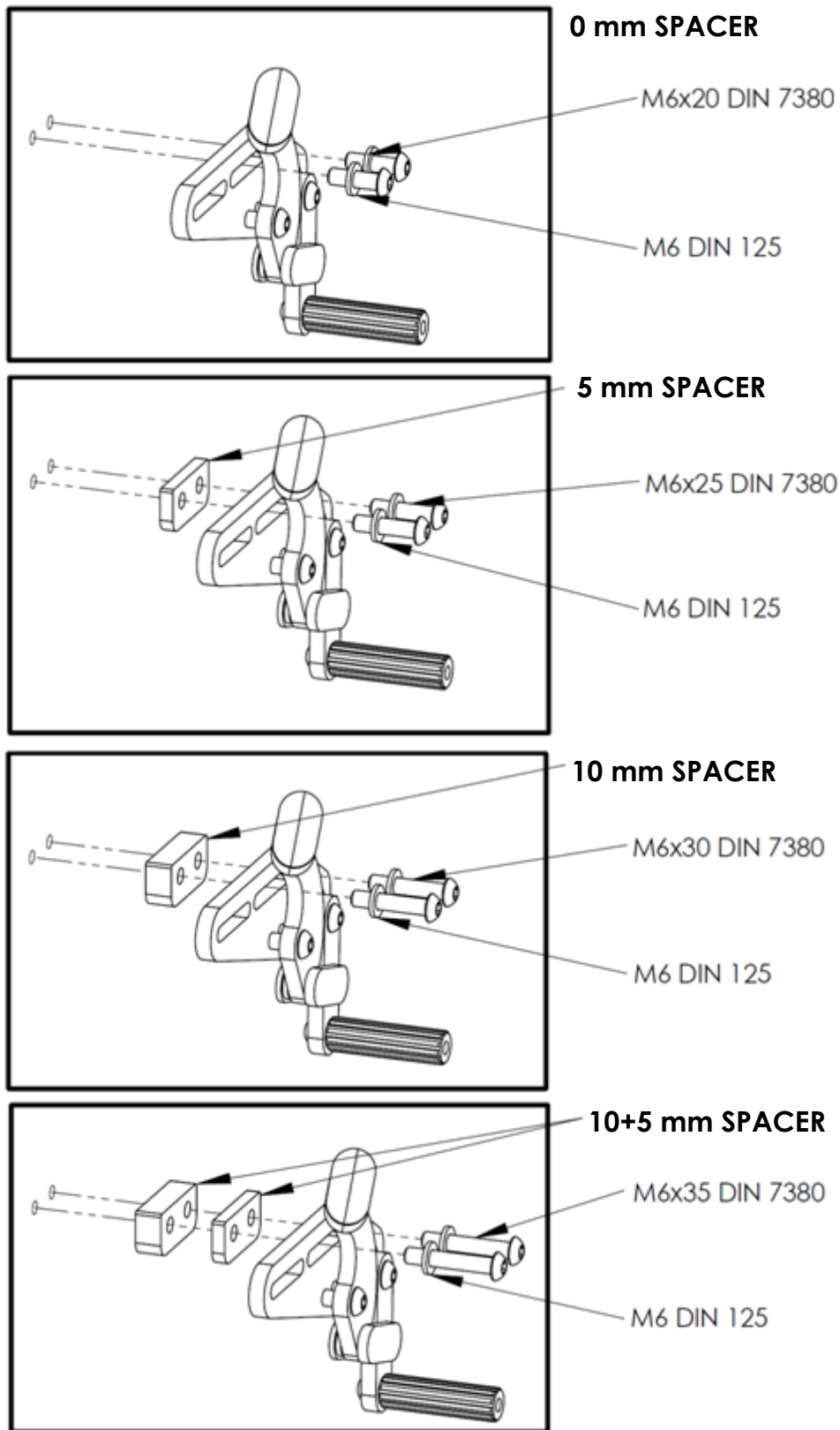
All brakes come with the all the parts needed to install them on the brackets.

INSTALLING STANDARD PUSH-TO-LOCK BRAKES - D3 NR

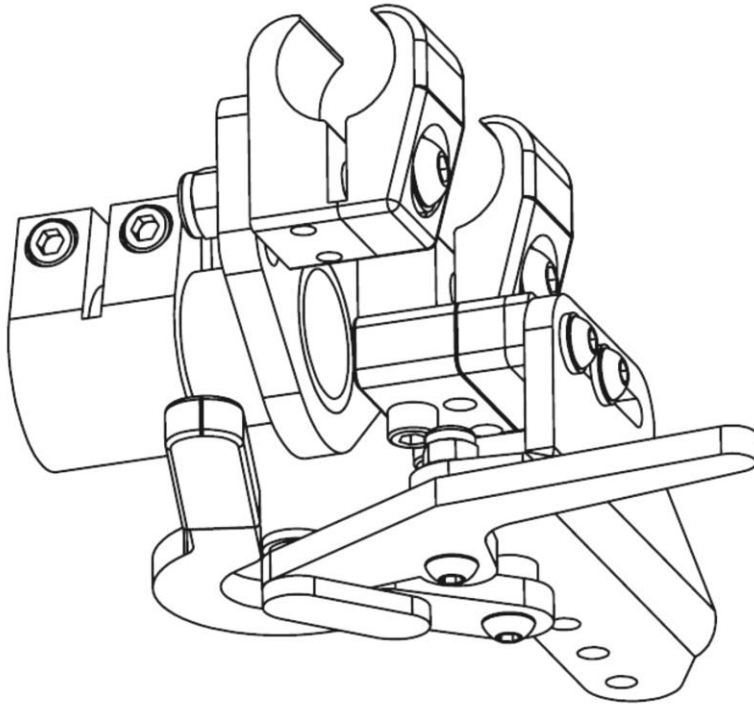
Attach the standard brakes using the **BRAKE INSTALLATION TOOL**
– ref. 55.03.01



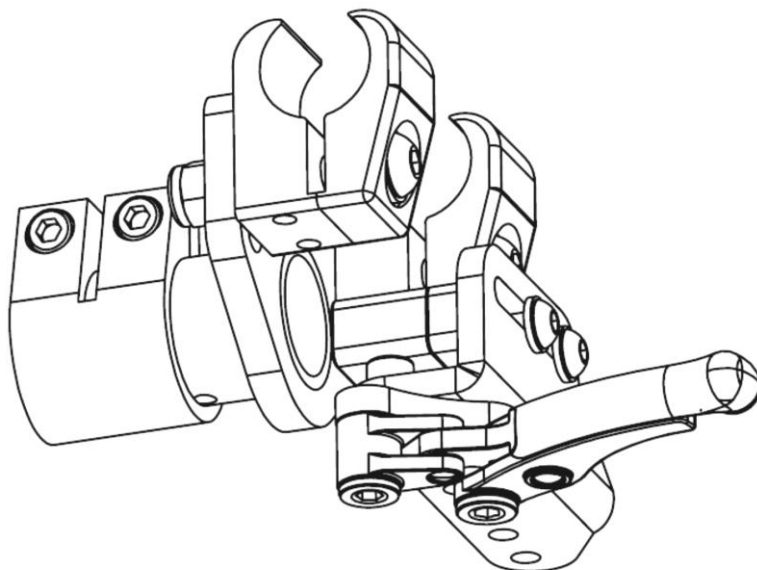
Install the **BRAKES** with the corresponding **SPACERS** according to the table.



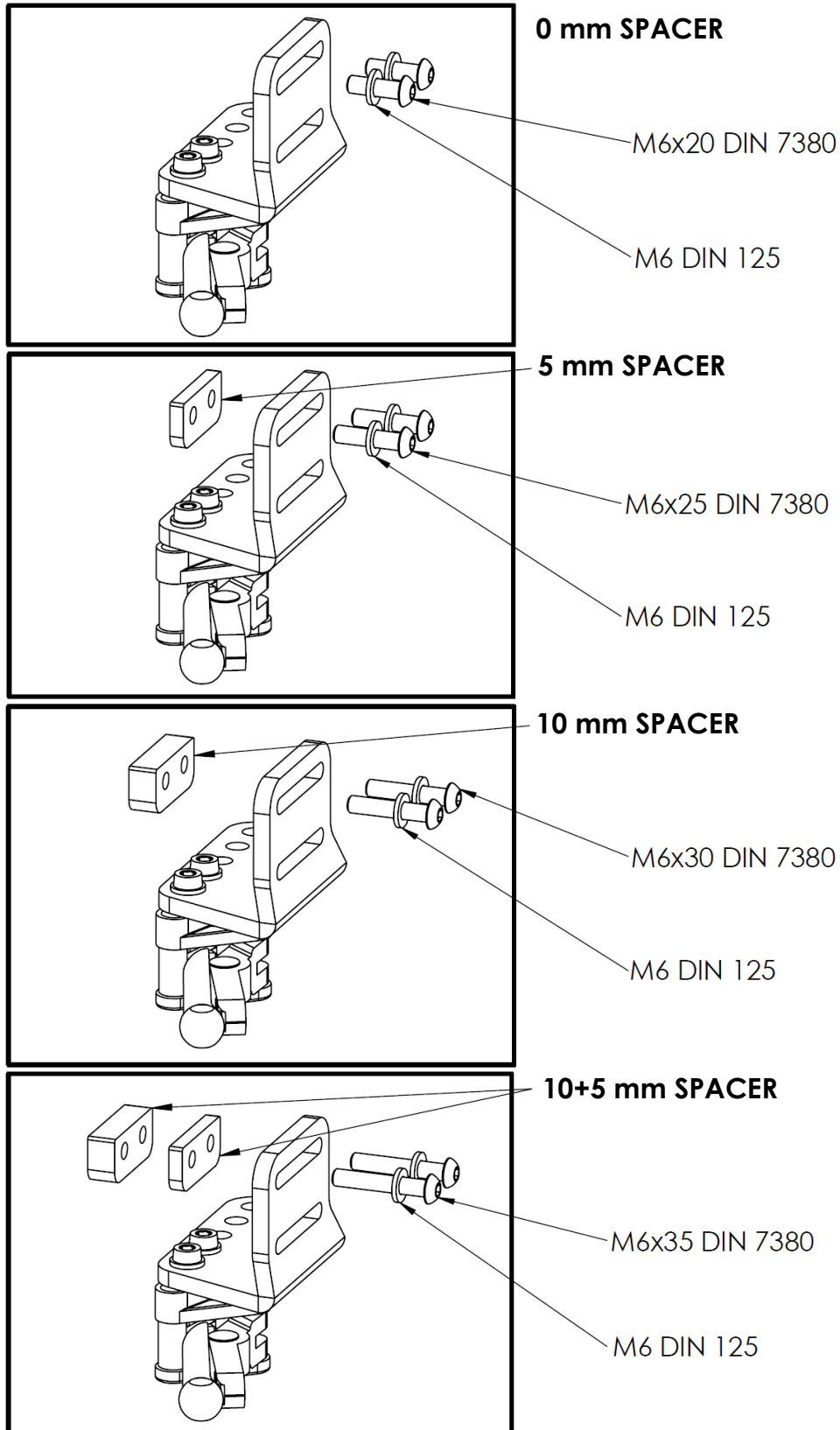
INSTALLING ALUMINIUM SCISSOR BRAKES - D3 NTA



INSTALLING COMPOSITE SCISSOR BRAKES - D3 NT



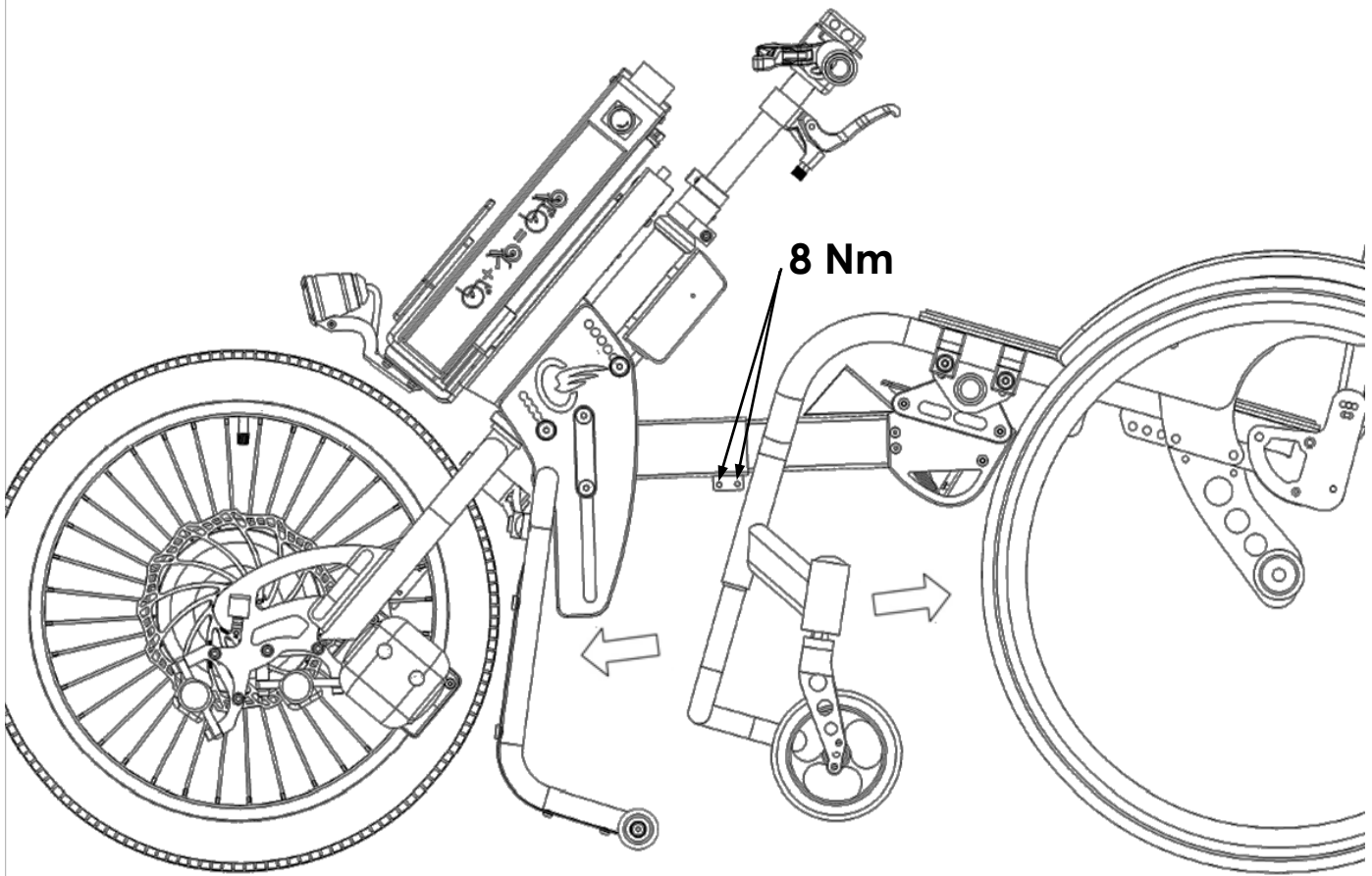
Install the **BRAKES** with the corresponding **SPACERS** according to the table.



STEP 11 – ADJUSTING THE DISTANCE BETWEEN THE BATEC AND THE CHAIR (FEET)

With the **BATEC** attached, adjust the distance between the **BATEC** and the **CHAIR (FEET)** leaving as little space as possible between the **BATEC SAFE-FEET stand frame** and the tips of the user's feet, using the telescopic **ANCHORING**.

Attach with the indicated screws.

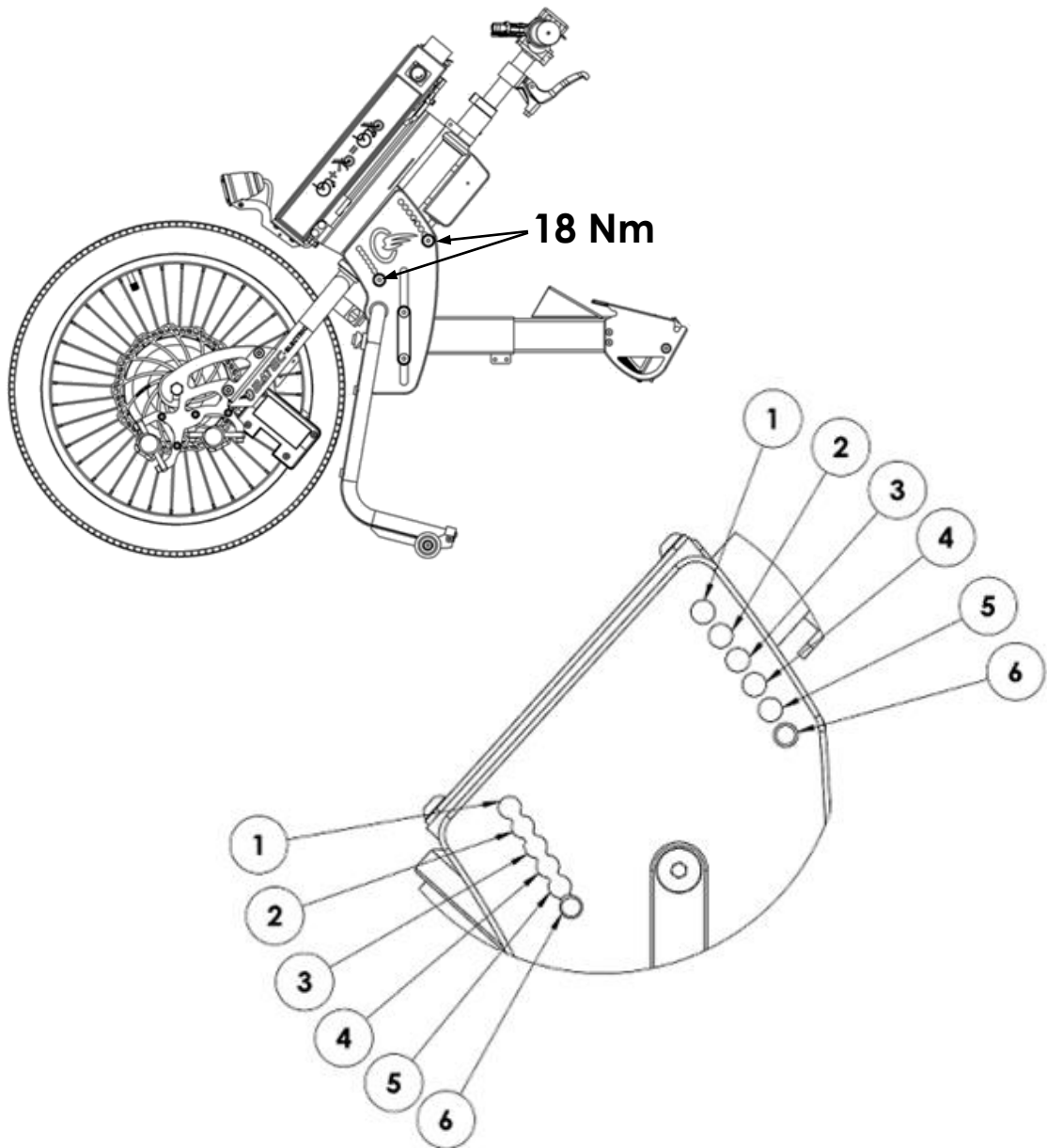


WARNING! – THE MAXIMUM DISTANCE IS LIMITED BY A SAFETY CABLE.

STEP 12 – ADJUSTING THE DISTANCE BETWEEN THE BATEC AND THE CHAIR (ARMS)

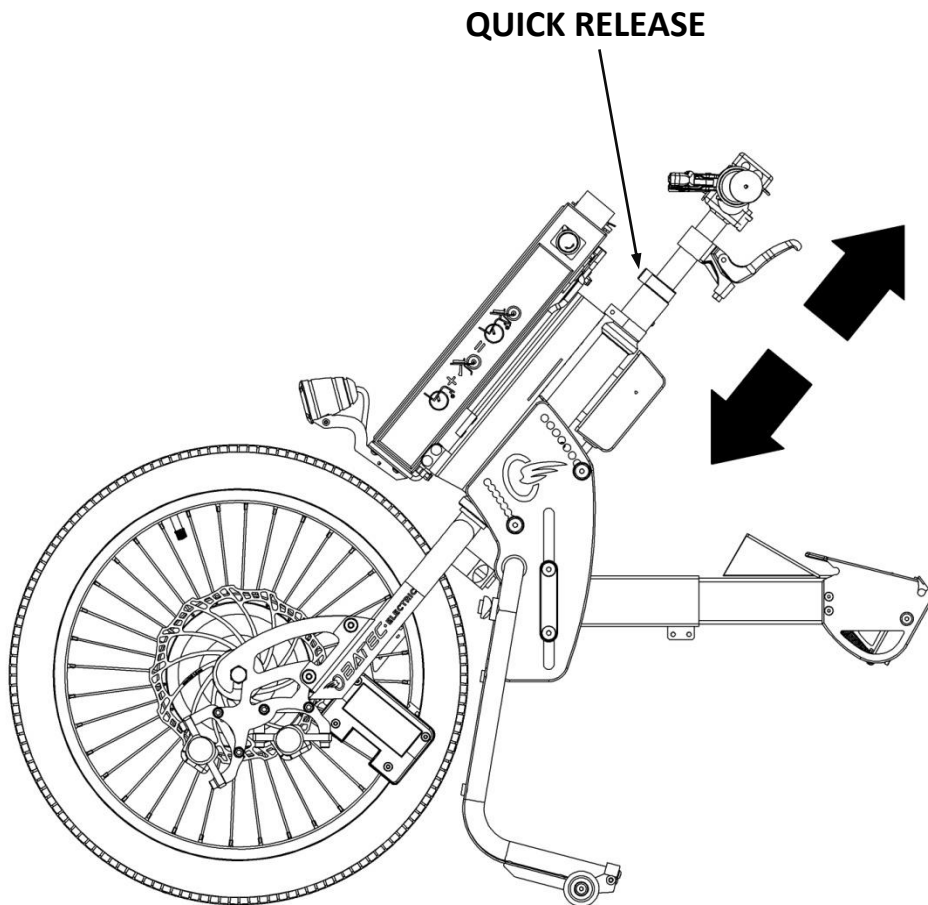
With the **BATEC** attached, adjust to the optimal distance for the user's arms. This can be done by regulating the angle of the stem.

Detach the **BATEC** and adjust the angle of the stem of the **BATEC** with the screws indicated. It is important that the upper and lower screws always be in the same number position.



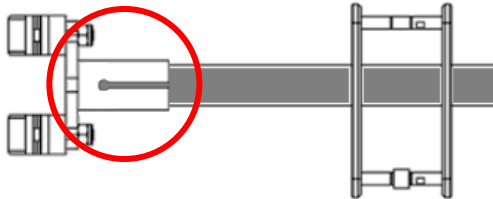
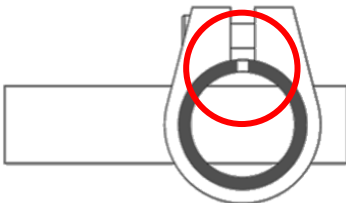
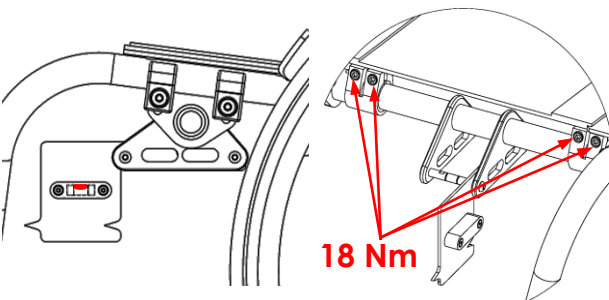
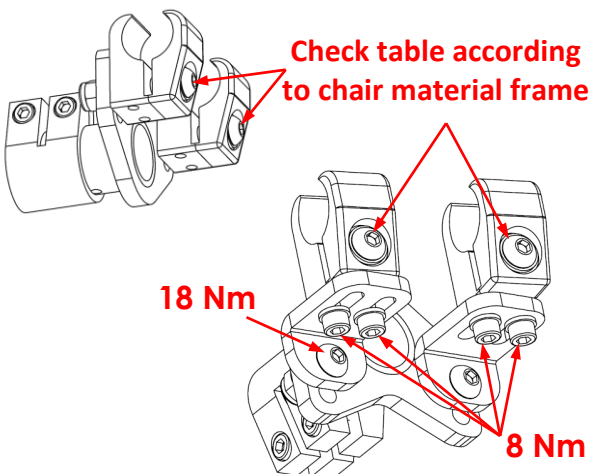
STEP 13 – ADJUSTING THE STEM HEIGHT

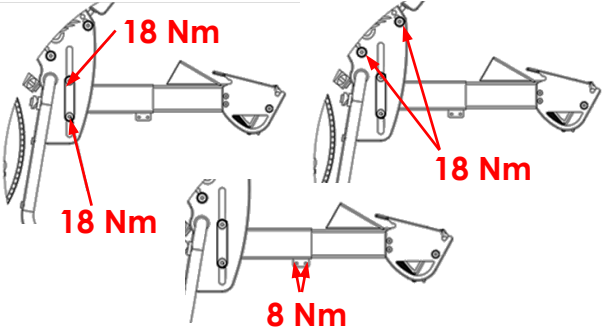
With the **BATEC** attached, adjust the height of the stem of the **BATEC** using the **QUICK RELEASE** lever.

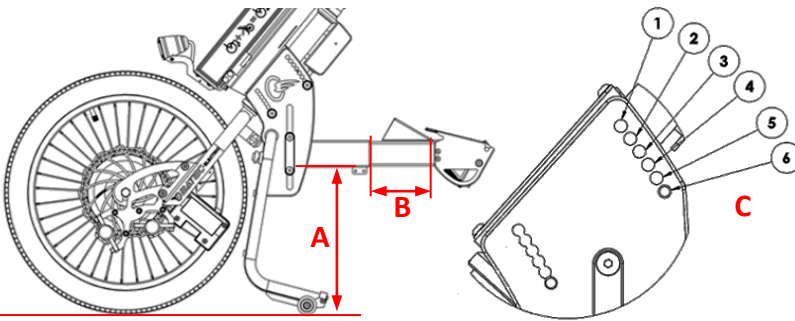


STEP 14 – VERIFICATION OF BATEC INSTALLATION

DISTRIBUTOR:	
BATEC SERIAL NUMBER:	

1. Checking the width of the BATEC DOCKING-BAR		OK ☐												
Check that the terminal holes are masked by the end of the BATEC DOCKING-BAR.														
2. Checking the position of the brackets to the BATEC DOCKING-BAR		OK ☐												
Check the correct position of the clamps														
3. Checking the level of the BATEC DOCKING-BAR		OK ☐												
Check that the BATEC DOCKING-BAR is centered and leveled to the ground using the BATEC LEVEL. Check that the clamp screws are at the correct pressure of 18 Nm .														
4. Checking the terminal screws pressure		OK ☐												
Check the correct pressure screw clamps and terminals according to the following table:														
<table border="1"> <thead> <tr> <th>CHAIR FRAME MATERIAL</th> <th>Nm</th> </tr> </thead> <tbody> <tr> <td>Aluminium</td> <td>25</td> </tr> <tr> <td>Chrome-Mb</td> <td>18</td> </tr> <tr> <td>Titanium</td> <td>18</td> </tr> <tr> <td>Carbon</td> <td>20</td> </tr> <tr> <td>M6 DIN 912</td> <td>8</td> </tr> </tbody> </table>	CHAIR FRAME MATERIAL	Nm	Aluminium	25	Chrome-Mb	18	Titanium	18	Carbon	20	M6 DIN 912	8		
CHAIR FRAME MATERIAL	Nm													
Aluminium	25													
Chrome-Mb	18													
Titanium	18													
Carbon	20													
M6 DIN 912	8													

5. Checking the fixation and frame screws pressure		OK ☐
Check that the screws of the fixation are at the correct pressure 8 Nm. Check that the screws of the Batec frame are at the correct pressure 18 Nm.		
6. Dynamic tests • Attach and detach 5 times the Batec hearing clearly the “CLACK” sound of the attaching system. • Check that there are no strange noises when testing the brakes and steering wheel and check if all the Batec components are working properly.		OK ☐

BRAND		
MODEL		
CHAIR WIDTH	cm	
Distance A	cm	
Distance B	cm	
Position C		

NAME OF THE INSTALLER	SIGNATURE / SEAL	DATE



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After you finish these steps, you will have completed installation of your Batec.

Now just print and save your registration certificate, STEP 14 of this document, for 5 years.

If you have any questions, contact us by email at: info@batec-mobility.com