Welcome to your assembly session! Below is a run-sheet of what to expect.

Your robot crafting buddy KUKA will be assisting you today. It will provide items needed during your session by handing them to you. Instructions on how to tell the KUKA arm that you need or would like to return an assembly piece are given below. In between the stages, please complete the online questionnaire (scan this QR code to go to the questionnaire page).

(Please fill in the pre-study questionnaire)

---------- ----------1 - Preparation Stage

1.1 Setting a handover point

You will need to set a predefined point for the KUKA robotic arm to bring pieces from the jig to the handover. You will go through this together with the researcher.

(Please fill in the evaluative questionnaire based on your experience in stage 1.

You may want to keep your phone horizontal from here.)

---------- -2 - Assembly Stage

Requesting pieces from the KUKA Robotic Arm

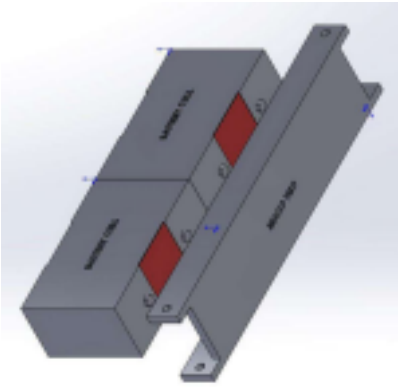
To request a piece from the KUKA Robotic Arm simply press the piece that you would like on the tablet screen. KUKA will then bring the piece to your predefined handover point. Grab the piece and pull, KUKA will let go of the piece when you do this.

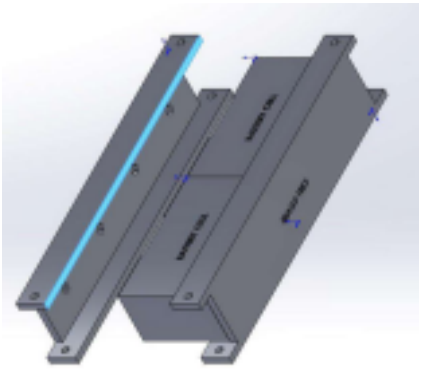
Giving pieces to the KUKA Robotic Arm

To give a piece to the KUKA Robotic Arm simply press the piece that you would like to give on the tablet screen, all pieces that are missing from the robot's jig will be highlighted in red. KUKA will then move to the predefined handover point. Simply put the piece in the correct position in the robot gripper. This can be easily identified by the red highlights on each piece which indicate where the gripper should hold the piece. Slap KUKA's closest joint and it will slowly close its gripper on the piece. It will then take the piece and store it back in the robot's jig.

2.1 Connect Battery Cells to Cell Covers

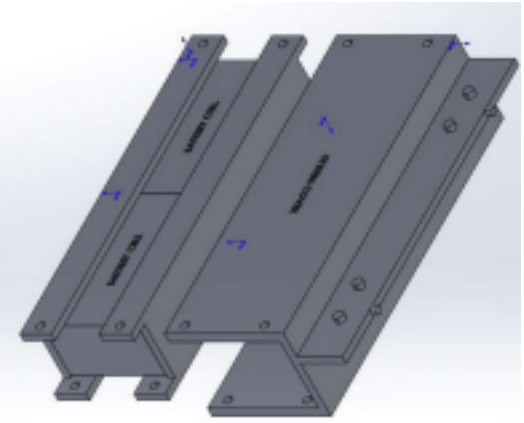
Use the Lego connecting extrusions to join the Battery Cells and Cell Covers. Apply firm pressure to ensure a secure connection.

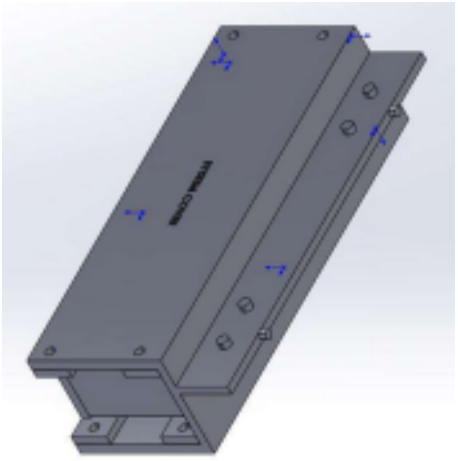




2.2 Slide the System Cover over the assembly

Slide the system cover over the current assembly and line up the four holes on the top and bottom with the screw inserts on the cell covers.



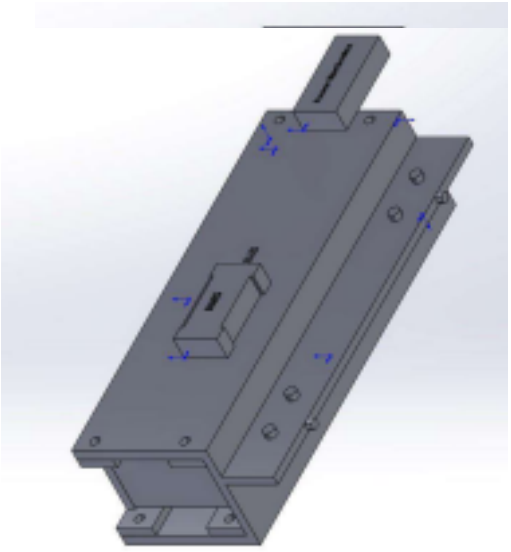


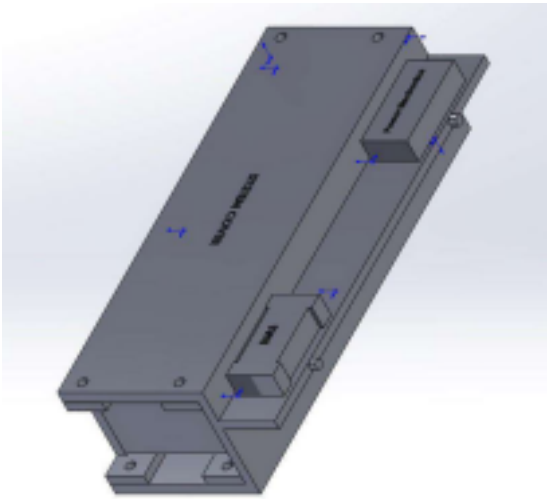
2.3 Screw the system cover to the cell covers

Use the screws provided to screw the system cover to the cell covers

2.4 Connect BMS and Power Electronics to System Cover

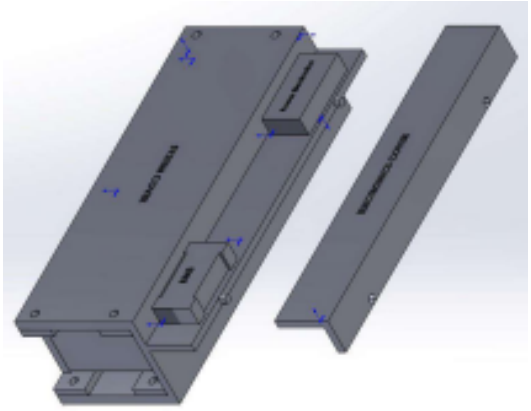
Use the Lego connecting extrusions to join the BMS and Power Electronics to the System Cover. Apply firm pressure to ensure a secure connection.

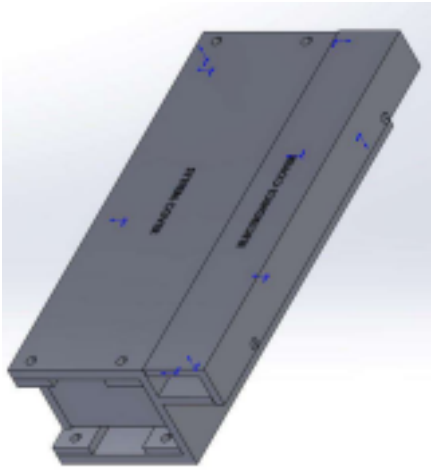




2.5 Connect electronics cover to System Cover

Use the Lego connecting extrusions to join the Electronics Cover and System Cover. Apply firm pressure to ensure a secure connection.



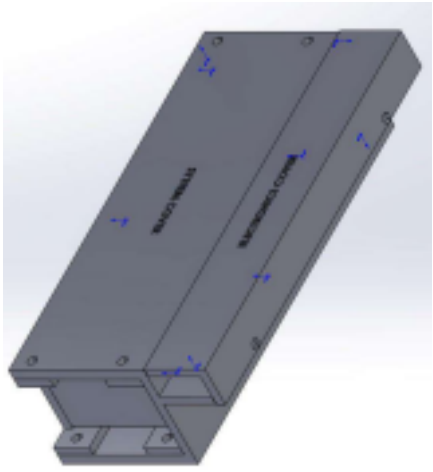


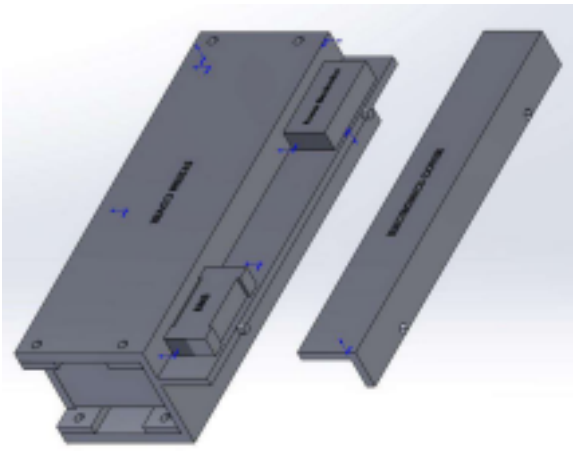
Assembly is now completed! Press the assembly completed button and give the assembly to KUKA.
(Please fill in the evaluative questionnaire based on your experience in stage 2 after completion of assembly.)

---------- -3 - Disassembly Stage

3.1 Remove the electronics cover from System Cover

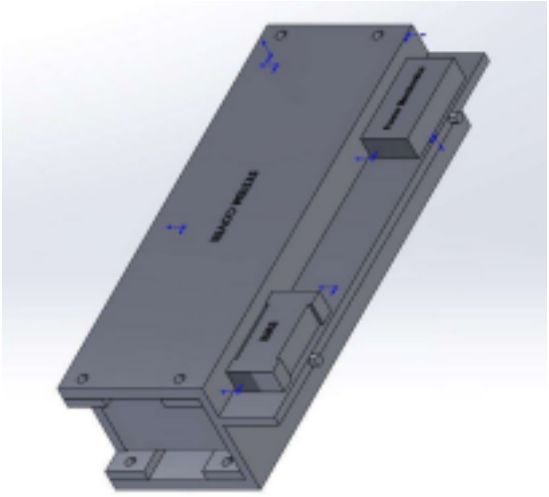
Pull the Electronics Cover from the System Cover. Give the Electronics Cover back to KUKA to place into the jig.

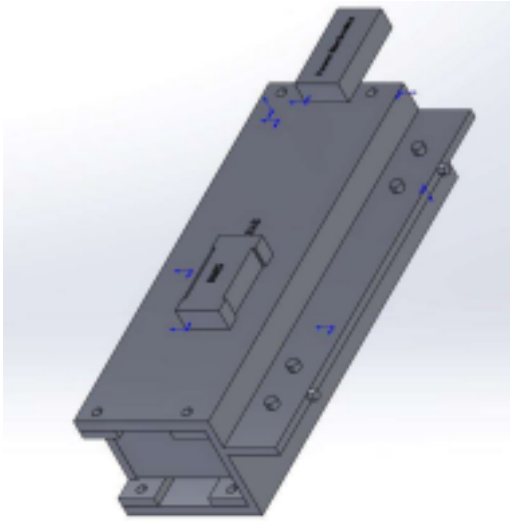




3.2 Remove the BMS and Power Electronics from System Cover

Pull the BMS and Power Electronics from the System Cover. Give the BMS and Power Electronics back to KUKA to place into the jig.

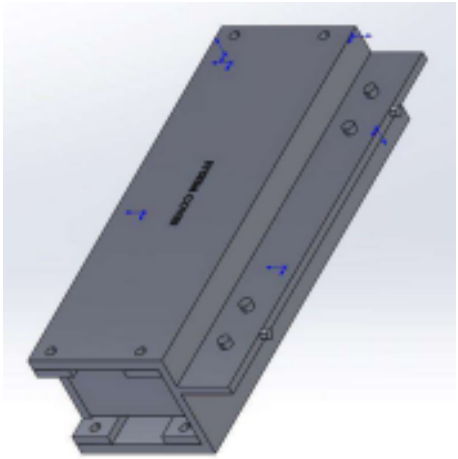


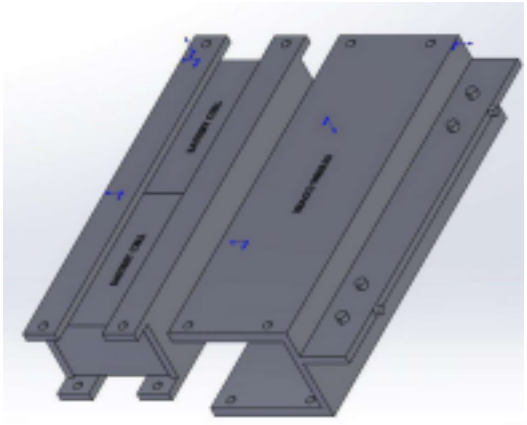


3.3

Unscrew the system cover from the cell covers

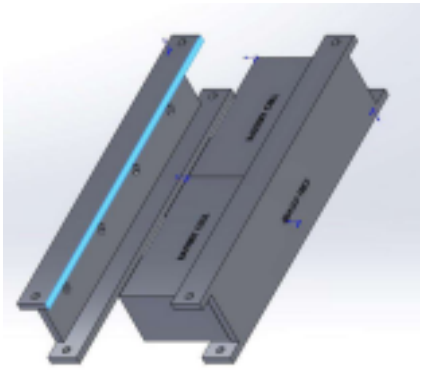
Unscrew the screws from the system cover and place them in the container.

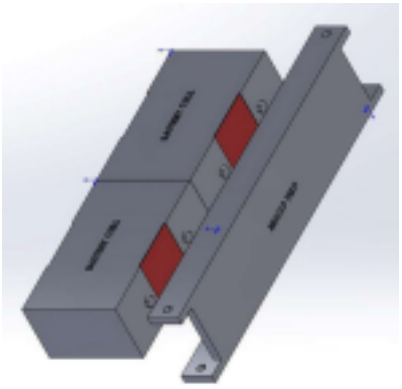




3.4 Slide the System Cover from the assembly

Slide the system cover from the battery cells and cell covers.





3.5 Remove Battery Cells to Cell Covers

Pull the Cell Covers from the Battery Cells.

(Please fill in the evaluative questionnaire based on your experience in stage 3)
