PLAYSEAT CHALLENGE LOCK-MOD

SIDE MOUNT

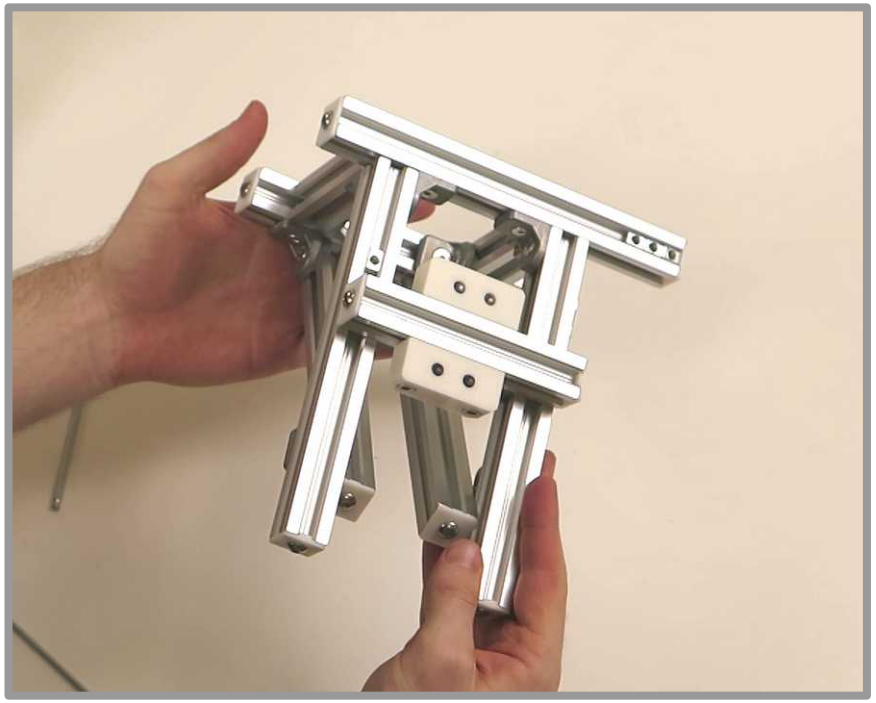
Assembly Manual

About

This is the assembly guide for the Lock-Mod: Side Mount Assembly. It's 2020 aluminium structure and 4 attachment points make it the most rigid and versatile shifter/handbrake solution for the Playseat Challenge available.

Can be configured for use with the Playseat Challenge: Lock-Mod kit, or as a standalone unit with just the Playseat Challenge.

Note:
This Lock-Mod accessory is not compatible with the Playseat Challenge X (Logitech edition). Kits compatible with this latest product will be released as the Lock-Mod X.



Contents

Tools

To assemble the Lock-Mod: Side Mount, you'll need a pair of **M3 and M4 hex keys**. The primary Lock-Mod kit comes with a torque wrench that includes these hex keys, but you'll need to use your own if purchasing this as a standalone upgrade (or purchase the Lock-Mod torque wrench in your order as an extra).

It is recommended to use a torque wrench when assembling your kit to avoid over-torquing the fasteners, which can cause parts to fail. This assembly manual has an accompanying torque guide with the relevant values for each part, which you can find **here**.

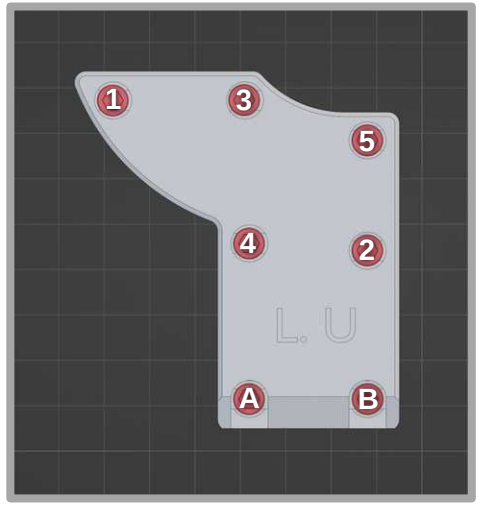
If assembling your kit without a torque wrench, The guide should still be referenced to help contextualise which bolts need more/less tension. To reduce the chance of breaking parts with excessive force start with less tightening force than you feel is needed. This can be further tightened if needed after testing your rig.

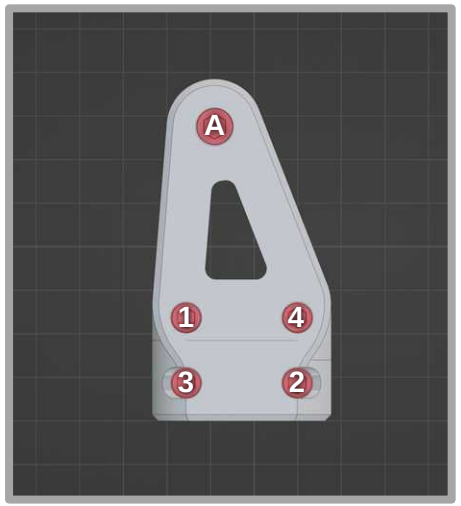
Additional Assembly Information

Cross Pattern Tightening

Where applicable, bolts should be tightened with cross pattern tightening. This applies to parts where multiple bolts are sharing a load, and involves incrementally increasing the torque while jumping between (roughly) opposite sides of the part. Doing this when assembling (or disassembling) a part will ensure a single bolt doesn't become over-strained, which can cause the thread/nut to seize up.

Examples of the cross pattern sequence are illustrated below. Note that this sequence will be repeated many times as you bring the bolts up to their final torque rating.



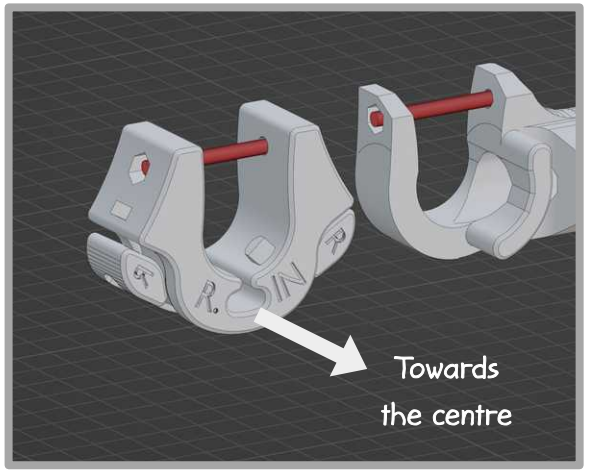


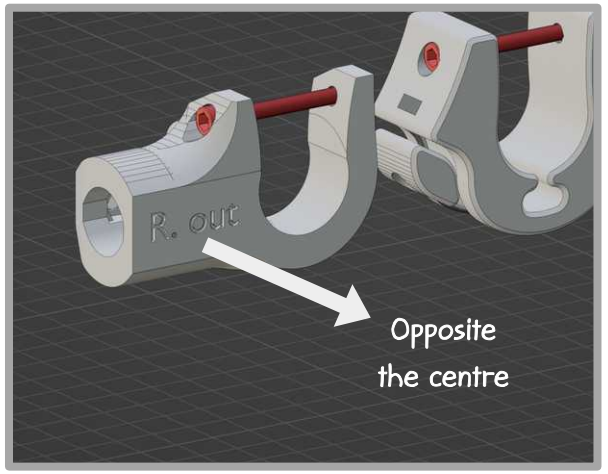
Part Orientation

Some parts in the Side Mount Assembly have a code embossed in them. These codes can be broken down with the following legend:

- L – Left
- R – Right
- In – Towards the centre
- Out – Opposite the centre
- U – Upwards
- D – Downwards
- F – Front
- B – Back
- ^ / < / > / v – Direction modifier (applicable to *In, Out, U, D, F, B*)

These directions are relative to the position of the embossed text, as shown in the examples below.





Note: As this kit has been updated, the orientation of some parts has been changed in comparison to the photos in this build guide. If photo and part code conflict, prioritise the code.

Care Instructions & Warranty

Care Instructions

- Storing the kit in temperatures above 53° C or 127 F should be avoided to avoid parts from warping.
- A PTFE infused emulsified wax solution has been applied to lubricate sliding surfaces in the Lock-Mod. This should last the lifetime of the kit, but a few drops of liquid chain wax can be re-applied if necessary.
- All clamp levers should be moved to the open position if storing the assembled Lock-Mod for an extended period of time.

Warranty

This kit comes with a 2-year warranty from the date of purchase, and it covers any failures resulting from reasonable use. Reasonable in this case assumes:

- All instructions in the assembly manual are followed.
- A maximum hand force of 25kg is applied to a the mounted handbrake and/or shifter when in use.

If these points are not adhered to the longevity of the Lock-Mod cannot be guaranteed.

If any problems are encountered with the kit, use the contact found here:

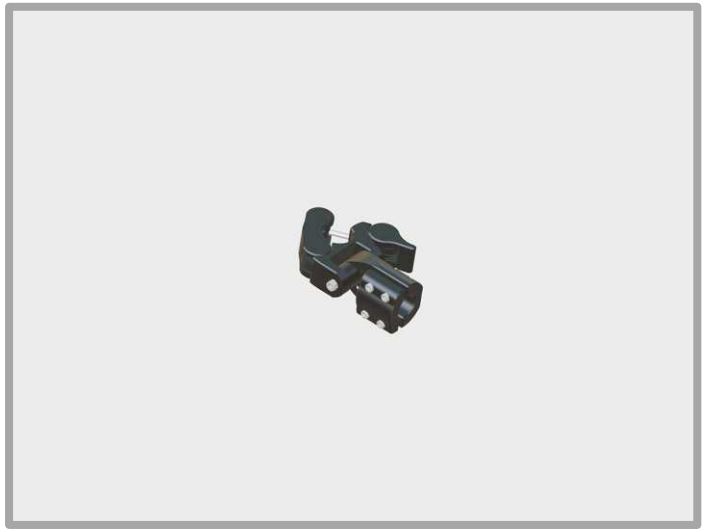
https://psyskip.com/about/

Kit Contents

The Lock-Mod: Side Mount kit comes packaged in a single bundle, with optional inclusions depending on which configuration you have chosen.

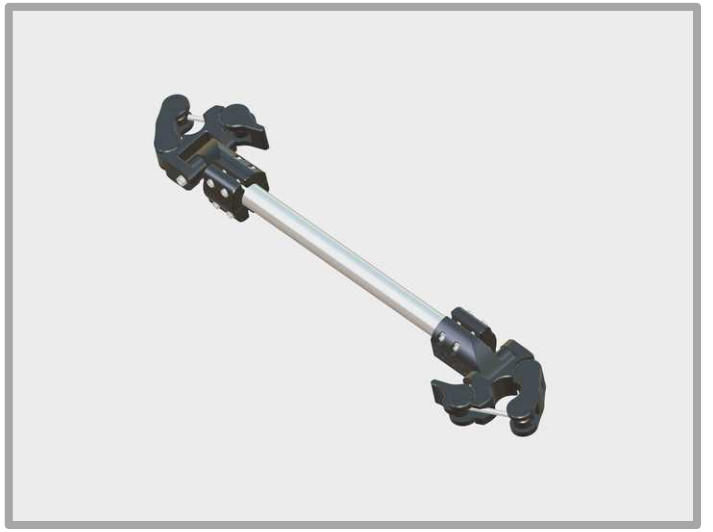
1. Primary Side Mount Assembly

Parts make up the base of the Side Mount assembly. Attaches to Lock-Mod side strut and folds underneath the PSC seat.



1.A. Fully Detachable

Additional clamp to change the rotating hinge at the bottom of the Lock-Mod side strut to a clamp. Enables the Side Mount assembly to be completely removed easily. Potentially useful if mounting oversized gear to your Side Mount assembly that can't fold underneath the PSC seat.



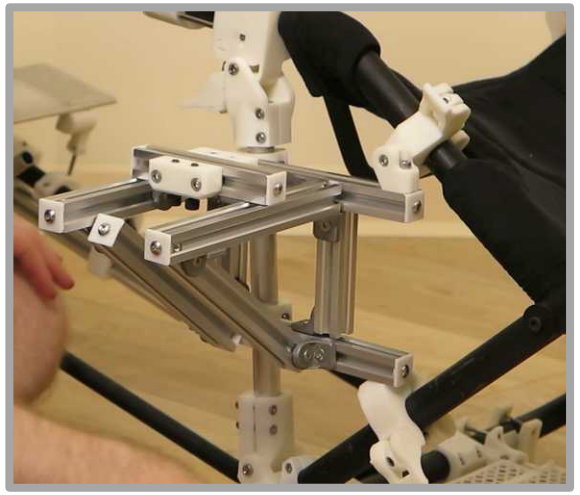
1.B. Standalone

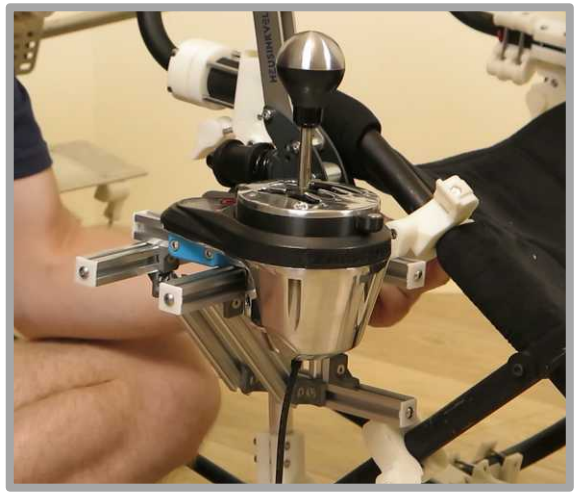
Additional 2 clamps and side strut which enables the Side Mount assembly to be used without the full Lock-Mod kit.

Aluminium Structure Configuration

The Side Mount assembly is primarily made of 9 aluminium profile (2020) pieces, and there is a certain level of flexibility in how this structure is arranged.

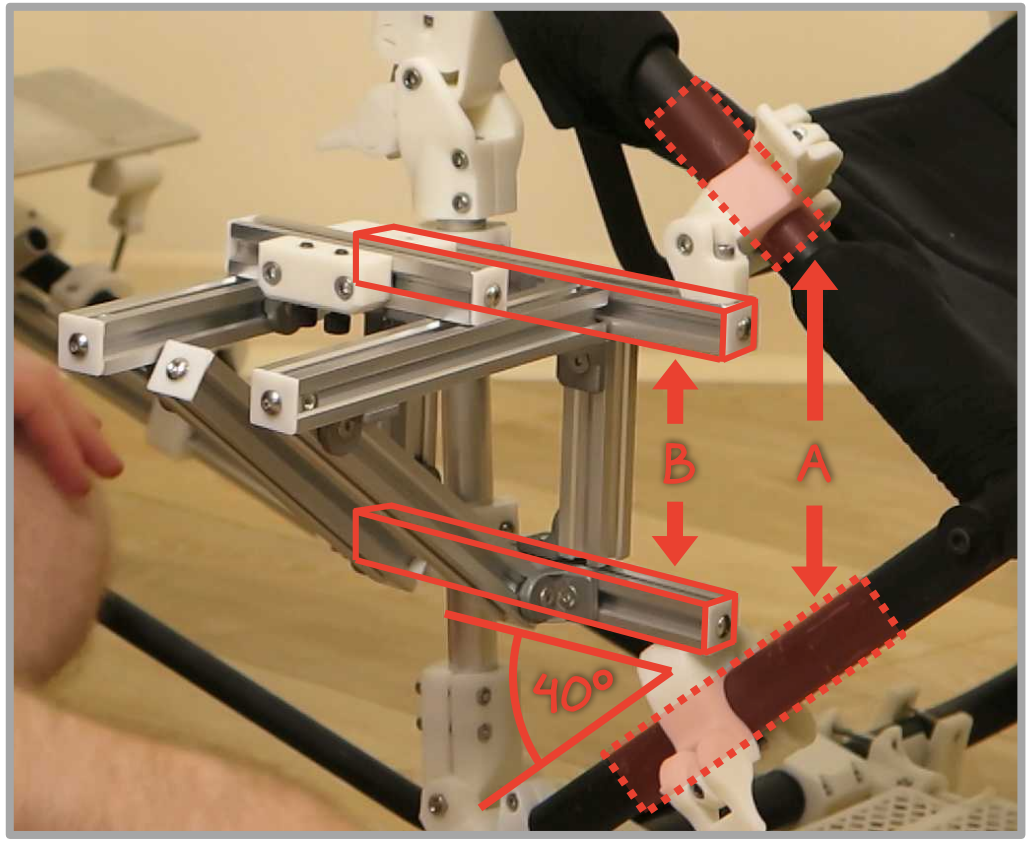
The example base configuration shown here is for the Thrustmaster TH8 shifter and the Heusinkveld handbrake (vertical orientation) mounted on top of the structure. This rough layout will likely work for most gear and layouts, but for bigger gear and/or different ergonomics you may need to deviate from the example structure shown in this manual.





Whether sticking to this specific layout or not, there are a few key points to follow to ensure the Side Mount works as intended.

- The two 200mm pieces (show as 'B') are used as the base of the side mount structure. These two pieces are secured to the PSC frame and side strut at each end, making a total of 4 anchor points. This provides a solid base to build the structure on top of.
- The two QR clamps will attach to the PSC tubing at the points highlighted (shown as 'A'). The point at which the clamp sits on the tubing will depend on the height of the 'B' pieces, and needs to be considered when building the structure. Ensure there is enough clearance around these points for the clamps to be easily attached and removed.
- The lower PSC frame tubing will have an angle relative to the lower 200mm profile of about 40° for the bottom clamp to align correctly.



Aluminium Structure Assembly

There are 2 different methods for assembling the Side Mount. The first, which will be shown in this manual, is to build up the aluminium structure separately from the Playseat Challenge. This method works best if have a good plan for how the structure will go together, and makes assembly a bit easier.

The second is to build the structure up directly on the Playseat Challenge frame. This process allows for more of a trial and error approach to building the side mount assembly and positioning your gear, but can be a bit more cumbersome to build.

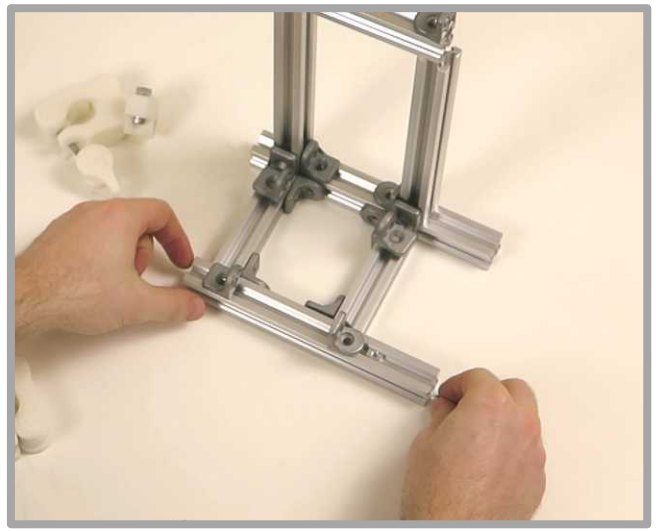
Start by laying the base of the side mount structure out on the table. The two 200mm profile pieces will need to be flat against the table during assembly, for correct alignment. The remaining profile pieces can then be loosely positioned to visualise how you want the structure to be assembled.

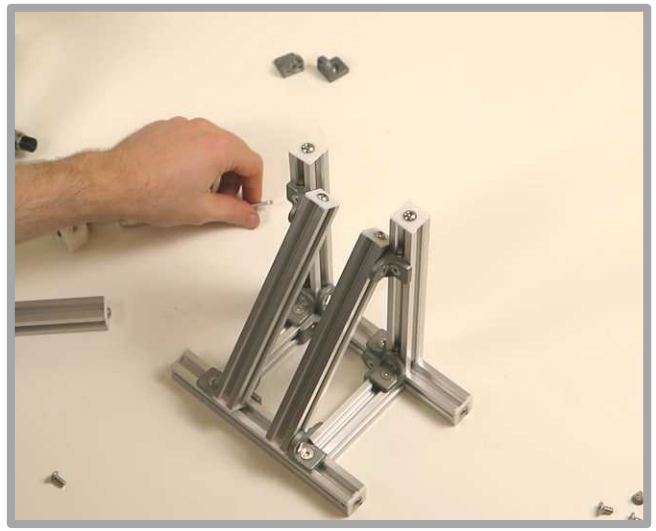
Aim to triangulate the structure when building the side assembly; as much as is possible, each corner of the structure should have 3 profile pieces connected together (or as close to the corner you can get). This provides maximum rigidity and avoids applying excessive bending loads to the right angle joints when loads are applied to the structure.

Lay out the right angle brackets roughly in position. The assembly can now be loosely fastened into place with the rest of the included hardware. Only tighten it enough so that it doesn't fall apart to allow for later adjustment.

Your peripherals (shifter, handbrake, etc) can now be attached. The 2020 ball spring T-nuts included in the optional mounting hardware can be pushed into the profile directly. If using standard T-nuts, you will need to slide them in from the ends of the profile before fastening the brackets into place.

With your peripherals attached, finish the structure assembly by fitting the profile end caps.





Mounting The Side Assembly

Attaching the aluminium profile structure to the Playseat Challenge is broadly the same for all configuration options. The side strut tubing needs to be attached and the seat set at your preferred driving position before proceeding. Remember to pay attention to the orientation markings on the parts, as the correct orientation of the parts will ensure the side strut tubing is vertically aligned with the PSC.

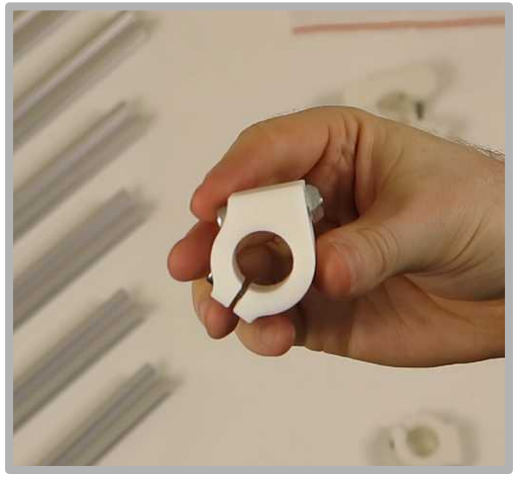
1. Configuration of the side strut for the standard add-on side mount configuration. Requires full Lock-Mod kit.

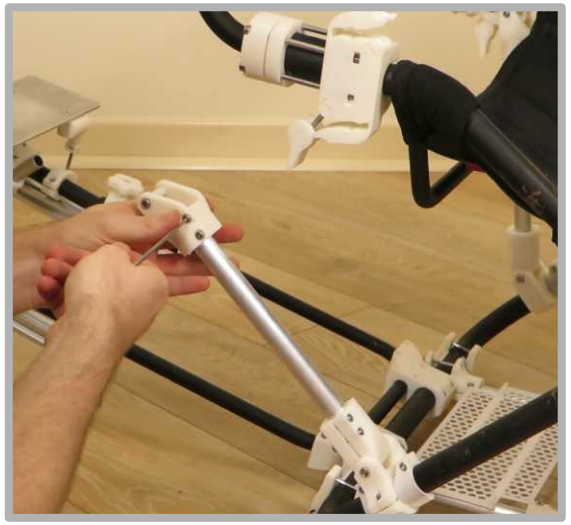
2. Replaces the bottom rotating hinge for a QR clamp to make side strut fully removable. Requires full Lock-Mod kit.

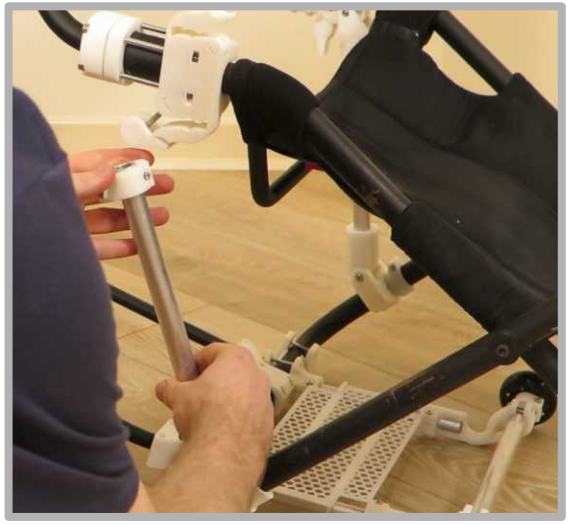
3. Uses QR clamps on both ends of the side strut. Is fully removable and can be used with/without the full Lock-Mod kit.

Attach the Side Mount rotating hinges to the side strut tubing if they aren't already in place, removing the top QR latch/clamp to do so. These hinges are designed to also allow the Side Mount to slide up/down the tubing, making folding easier.

The side of the rotating hinge with the T-nut needs to be facing outwards so that it can interface with the aluminium structure.

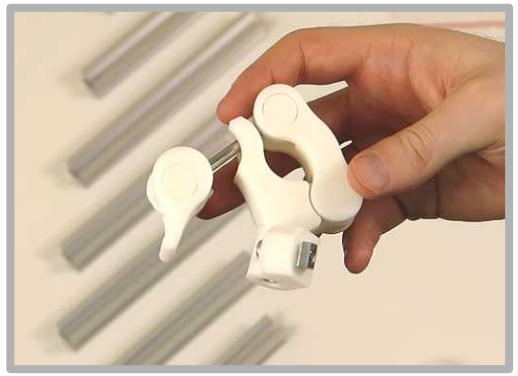




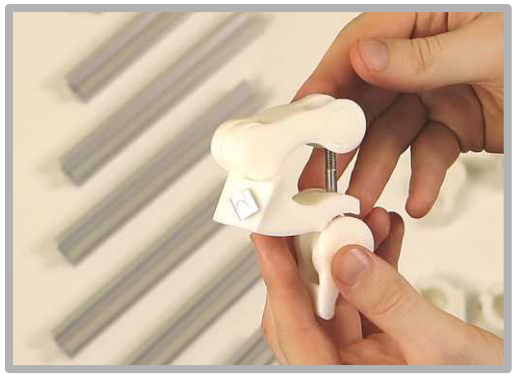


Transfer the T-nuts from the rotating hinges into the aluminium profile, then loosely fasten the two structures together.

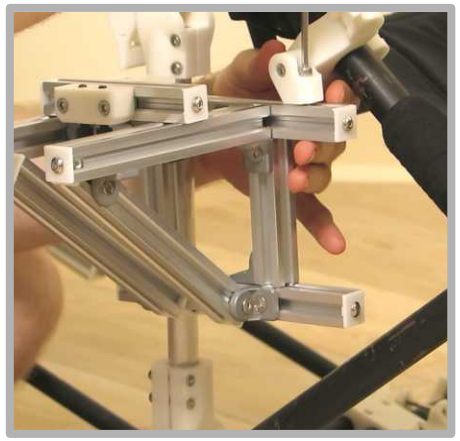
Top QR Clamp

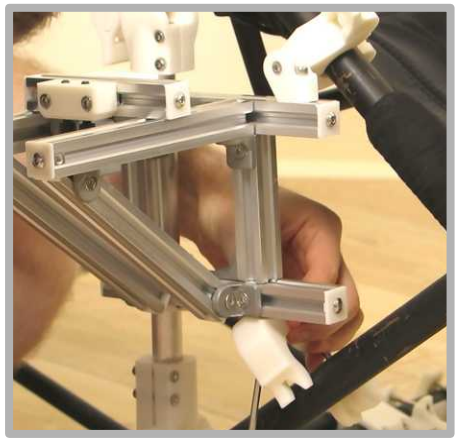


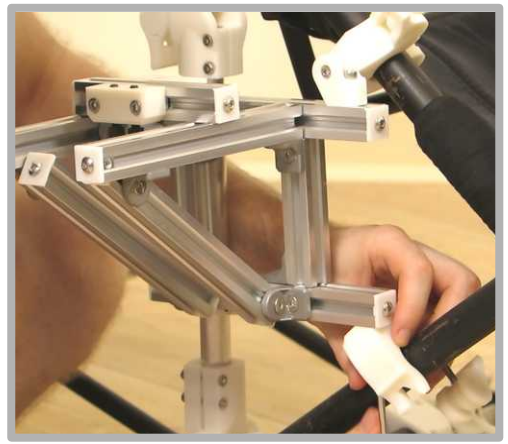
Bottom QR Clamp

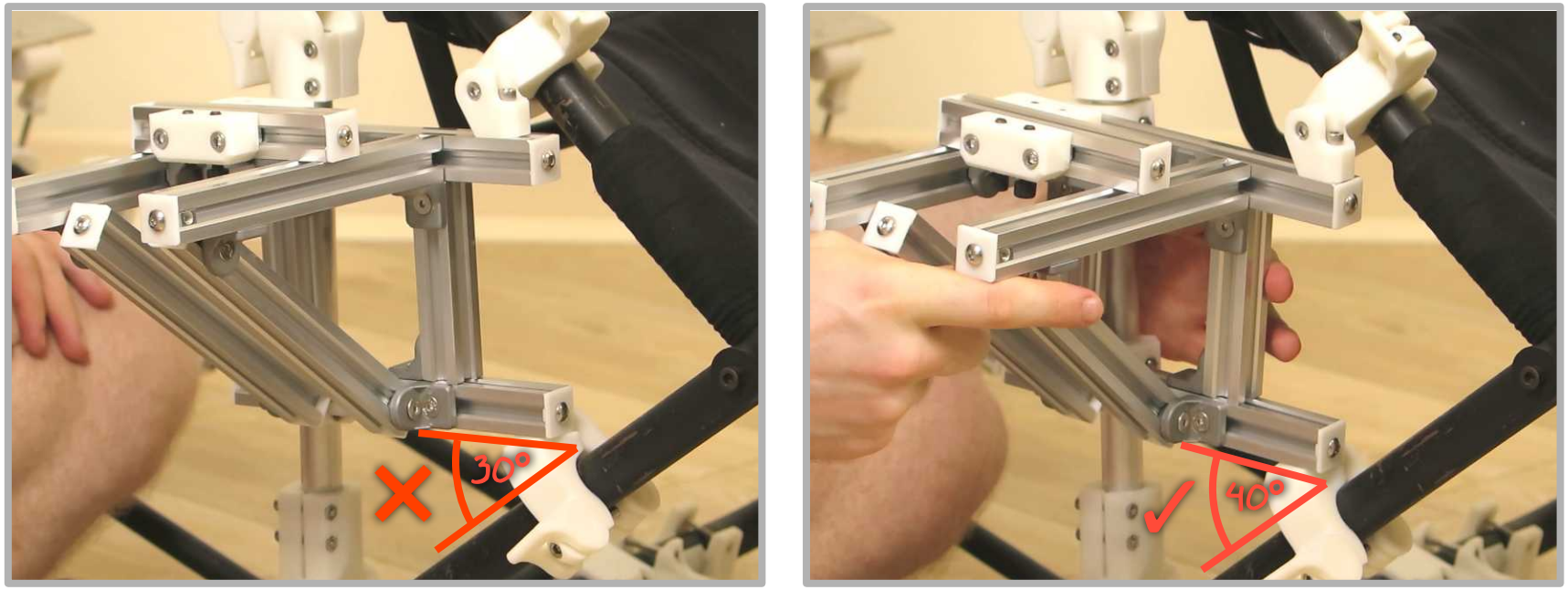


The two rear QR clamps can now be loosely attached to the 200mm profile pieces, ensuring the markings are set in the correct orientation. Do not force the bottom clamp shut, as it may not completely latch until the assembly is aligned.

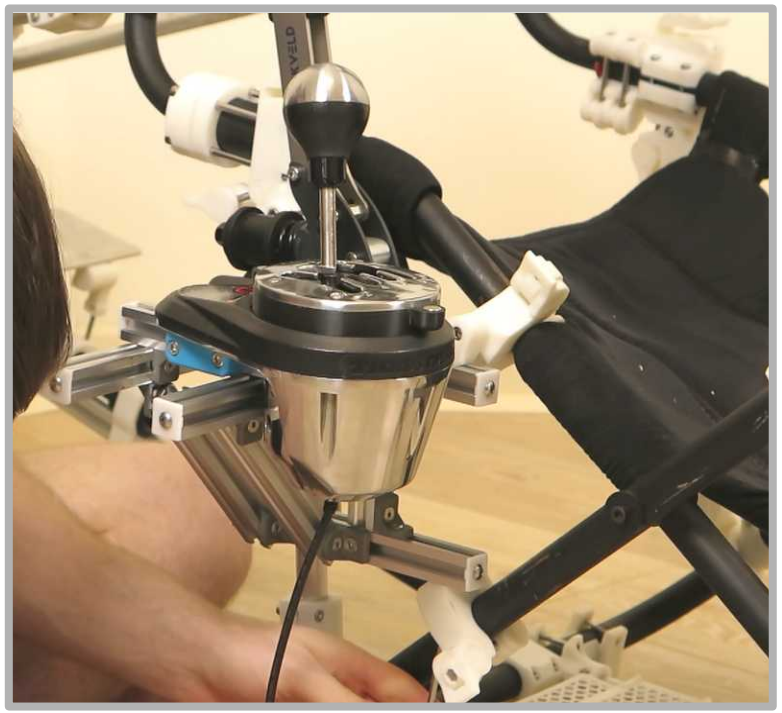








The assembly now needs to be set at the correct angle for the bottom rear clamp to align with the PSC tubing.



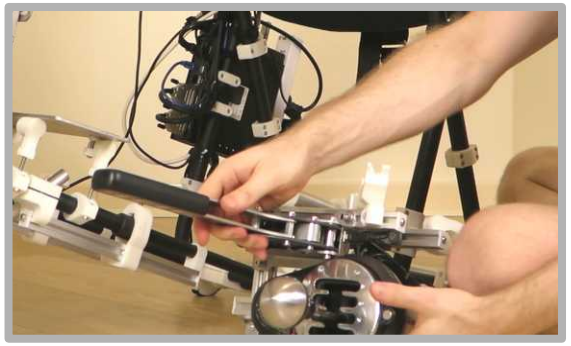
With the angle of the bottom clamp aligned correctly, the final position of your peripherals can be set. All fasteners can now be tightened to their final torque value while the QR clamps are locked in position. The bolt that attaches the bottom clamp to the aluminium profile is somewhat hidden, but can be accessed through a small opening underneath; it is also important that the clamp is locked shut while tightening this bolt, for correct alignment.

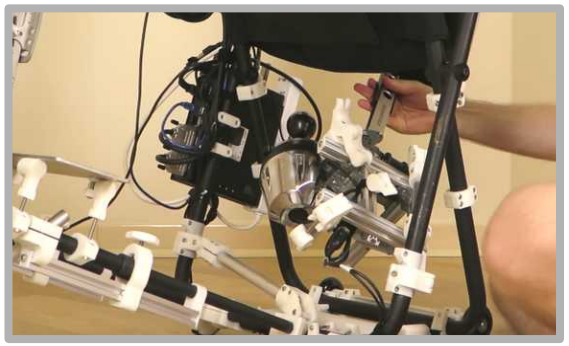
Folding Configuration

In the standard configuration, the Side Mount is designed to fold underneath the Playseat Challenge seat. This keeps the footprint of the rig close to the original while keeping it relatively easy to set up.

With the side mount added, there is an order the needs to be followed when folding it with the Lock-Mod.

1. Unlatch the Side Mount rear QR clamps first, swing the assembly out, then lay it by the side of the rig.
2. Lock the Playseat Challenge legs into the folded position.
3. Swing the Side Mount through the legs to the back.
4. Fold the pedals up.
5. Use the velcro strap (originally used to keep the Playseat Challenge folded, made redundant by the Roller Lock) to secure the Side Mount, keeping it from potentially dragging on the ground whilst moving the rig.



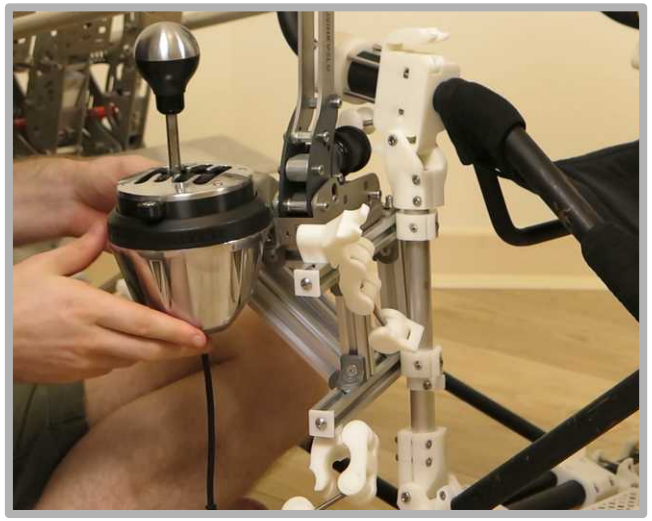


Attaching/Detaching Configurations

For both the 'Fully Detachable' and 'Standalone' configurations, the process of attaching/detaching the Side Mount is simple.

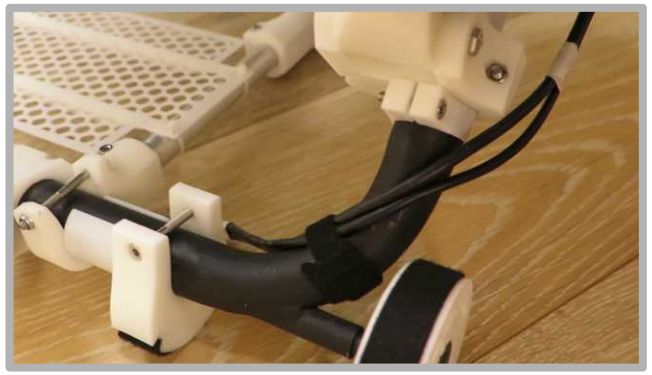
1. Unlatch the Side Mount two rear QR clamp
2. Swing the assembly away from the rig.
3. Unlatch remaining QR clamps and remove Side Mount from Playseat Challenge frame.

Swinging the Side Mount out before fully detaching is necessary due to the design of the rear QR clamps.



Cable Routing

For a comprehensive overview of cable routing for the full Playseat Challenge: Lock-Mod, see the manual **here**.



For the standard folding configuration, cables going to the side mount assembly should be routed over the front of the front leg tubing. If routed behind the tubing the cable can be over-extended when the assembly rotates and folds inside of the Playseat Challenge legs.

The standalone/fully detachable configurations don't need to adhere to this rule. The cables leading to your peripherals will need to be disconnected for storage, so strict cable management along the PSC frame isn't needed (unless the cable stays on the PSC frame and not with the peripheral). USB cable extenders and hubs can still be useful depending on your gear, which is explored in the full Lock-Mod.