PLAYSEAT CHALLENGE LOCK-MOD X

SIDE MOUNT

Assembly Manual



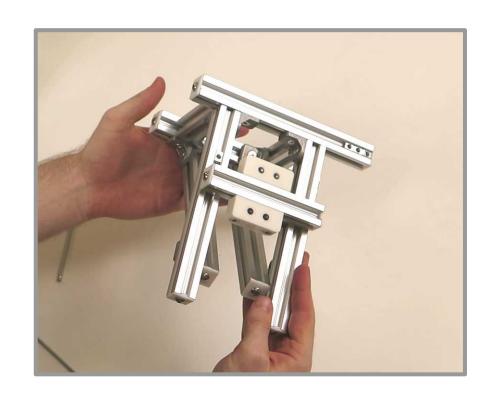
ABOUT

This is the assembly guide for the Lock-Mod X: 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 X available.

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

Note:

This accessory is only compatible with the Playseat Challenge X (Logitech edition). It is not compatible with the original Playseat Challenge or the Playseat Challenge Actifit Models. The design is broadly similar, but key parts are slightly different to match the small changes between the two generations of products.



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Tools



To assemble the Lock-Mod X: Side Mount, you'll need a pair of M3 and M4 hex keys. The full Lock-Mod X 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 this 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.

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 X. This should last the lifetime of the kit, but a few drops of liquid chain wax can be re-applied if necessary.
- All quick release levers should be moved to the open position if storing the assembled Lock-Mod X 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 at: https://psyskip.com/about/

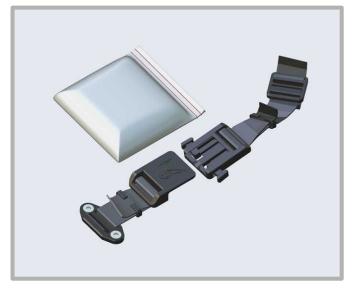
KIT CONTENTS

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



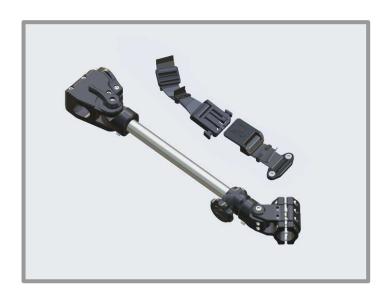
1. Primary Side Mount Assembly

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



2. Buckle Straps and Aluminium Fasteners

Extra long strap and buckle for securing the Side Mount when folded, and bag of fasteners for aluminium structure.



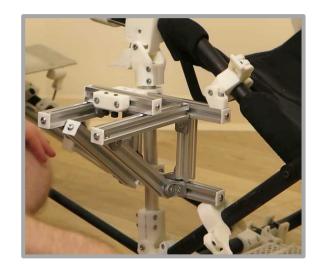
3 (optional). Standalone Side Strut

A side strut assembly (left or right side) which enables the Side Mount assembly to be used without the full Lock-Mod X kit. Includes standard buckle strap to secure the Side Strut.

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.

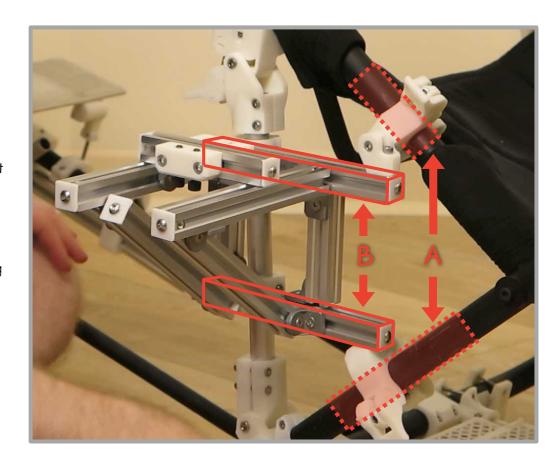
The example base configuration shown here is for the Thrustmaster TH8 shifter and the Heusinkveld handbrake (vertical orientation) mounted on top of the structure. This rough layout will likely work for most gear and layouts, but for bigger gear and/or different ergonomics you may need to deviate from 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 225mm 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 X 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.



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.



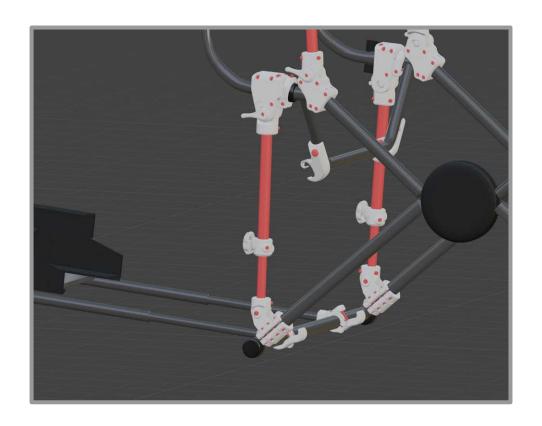






Mounting The Side Assembly

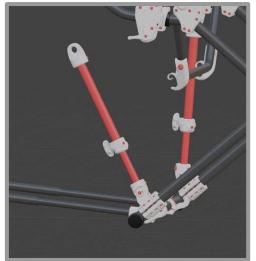
Attaching the aluminium profile structure to the Playseat Challenge X is the same whether using it with the full Lock-Mod X kit or as the standalone option. For instructions on how to attach the side strut/hinge strut connector, refer to the Lock-Mod X assembly manual. Your rig needs to be roughly configured to your driving before proceeding.

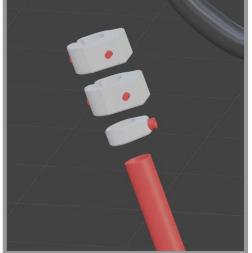


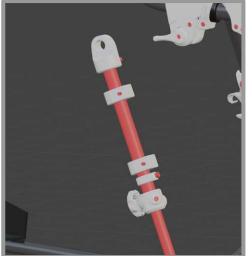
Attach the Side Mount rotating hinges to the side strut tubing, removing the top QR latch/clamp to do so. These hinges are designed to also allow the Side Mount to slide up/down the tubing, making folding easier.

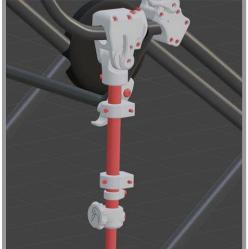
The side of the rotating hinge with the Tnut needs to be facing outwards so that it can interface with the aluminium structure.









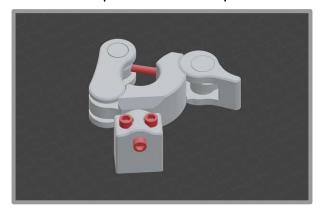


Transfer the T-nuts from the rotating hinges into the aluminium profile, then loosely fasten the two structures together.

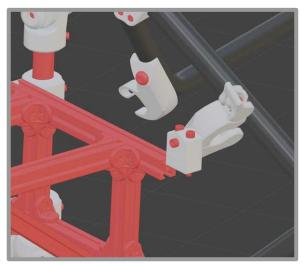


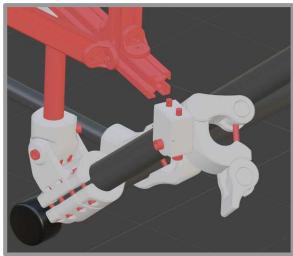


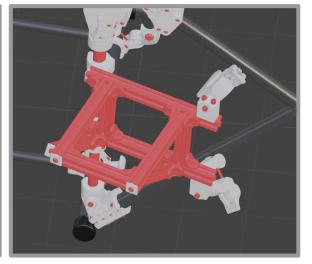
Top/Bottom QR Clamps

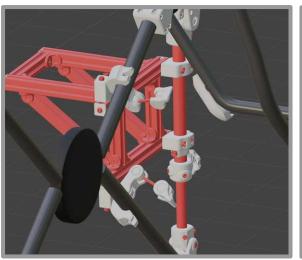


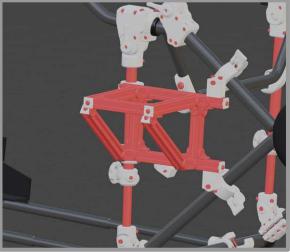
The two rear QR clamps can now be loosely attached to the 225mm profile pieces.











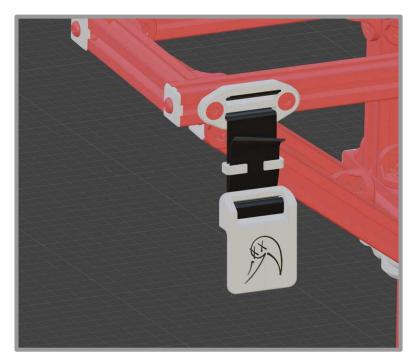
The end caps of the profile can now be attached to prevent the clamps from sliding off. At this point all the pieces of the structure are in position, and it's a matter of getting everything positioned correctly. It can take a bit of tinkering to get the stucture positioned in a way that the 2 front hinges and 2 back clamps are secured well.

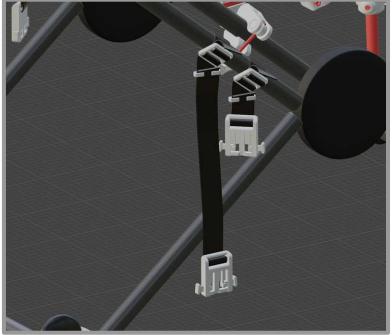
With a rough position set, clock the rear clamps in place and tighten all fasteners to spec and check that there are no misalignments and adjust as necessary. Futher adjustments may be made in the next step.





Peripherals can now be added to the structure. It may be easier seperate the side mount structure from the PSC X rig, attach your peripherals, then reattach the structure to the rig. Once your gear has been mounted, try sitting in the rig and testing out the ergonomics of your gear. Make adjustments as necessary, then go through all fasteners for the side mount and tighten to spec. Remember to double check that everything interfaces correctly (rear clamps engage properly with the PSC X tube, all mounting surfaces sit flush, etc).





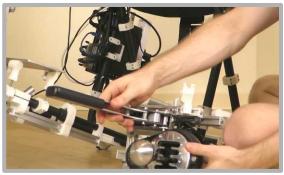
The **Side Mount Assembly** comes with an additional set of buckles/straps that can be used to further secure the structure when the PSC X is folded. One side is mounted to the aluminium structure, and the other attached to the PSC X frame. The frame side has an extra long strap to allow it to be mounted on the opposite side to the shifter, which can help better secure it when folded.

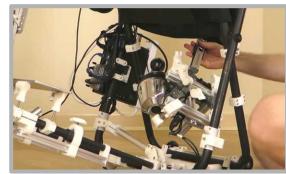
FOLDING CONFIGURATION

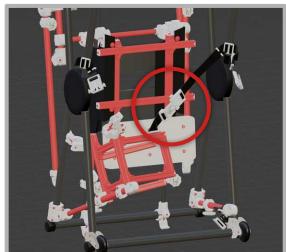
Instructions for folding/unfolding the entire PSC X: Lock-Mod X can be found in the full assembly manual, but here are a few additional points to consider:

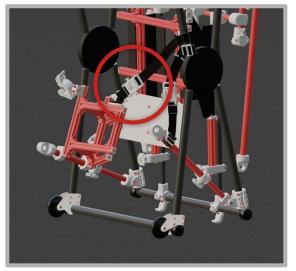
- Depending on the size of the gear, it may be a tight
 fit when folding the rig up. The side strut
 telescoping thumbscrew can be loosened to make
 this easier, and the whole assembly can also be
 removed for separate storage by seperating the top
 telescoping tubing as well. Competely removing the
 structure may be necessary if using a Side Mount
 system on both sides of your rig.
- When folding the rig, leave tightening the straps of the side struts/side mount assembly for last, as the pedals will take up space inside the PSC X legs when folded.
- Position the strap anchor points in whatever position allows the easiest, most secure positioning of your side mount. The aim is that when moving the rig there is minimal movement of the structure, and no risk of your gear scraping along the ground.











CABLE ROUTING





Here are some specific cable routing tips for gear attached to the side mount:

- Cables 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.
- If intended to separate the side mount assembly from the rig when storing it there is more
 freedom in how the cables are routed. In this case however, it can be usful to have a usb hub
 specifically for the side mount so that the peripherals can quickly and easily be
 connected/disconnected.

For a comprehensive overview of cable routing for the entire Playseat Challenge X: Lock-Mod X, refer to the full assembly manual which can be found here.

Happy racing~