PLAYSEAT CHALLENGE LOCK-MOD STRAP REPLACEMENT STRUTS



Assembly Manual

ABOUT

This is the assembly guide for the Lock-Mod: Strap Replacement Struts. This modification allows the removal of the side straps for better freedom of movement while driving. No additional setup time for folding/unfolding; set and forget.

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 or needed with the Playseat Challenge X (Logitech edition), as it uses a different seat adjustment system.



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Tools



To assemble the Lock-Mod: Strap Replacement Struts, 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 Tools

To remove the Playseat Challenge seat straps, you'll need a pair of pliers that will be used to bend the metal anchors open. The larger the pliers are the more leverage you'll have, making the strap removal easier.

A ruler/measuring tape will also be used to ensure correct alignment of the struts, but this can be eyeballed as well.



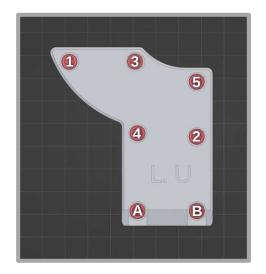


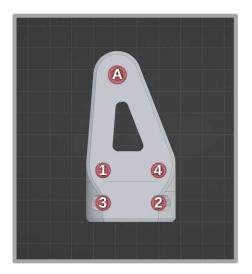
ADDITIONAL ASSEMBLY INFORMATION

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.





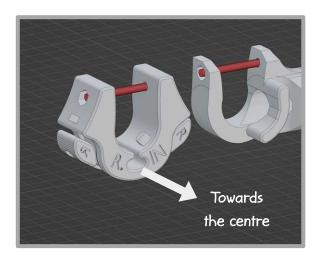
Part Orientation

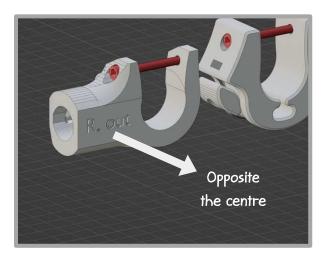
Some parts in the Side Mount Assembly have a code embossed in them. These codes can be broken down with the following legend:

- 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.

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.
- Force applied to the pedals is, at most, 80kg.
- Driver weight is a maximum of 100kg.

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: Strap Replacement Struts kit comes packaged in a single bundle.

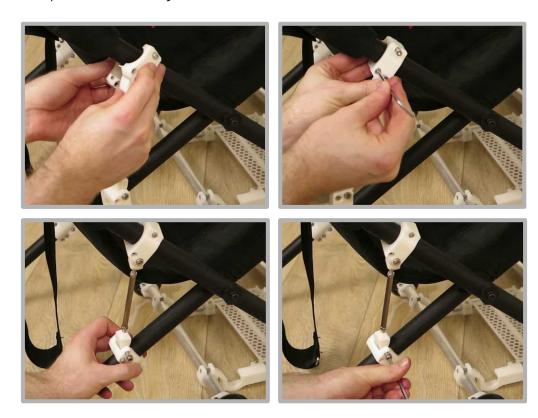


Struts come pre-assembled, with the velcro straps used to tie down the seat fabric holding the backstop clamps in position.

ATTACHING STRUTS

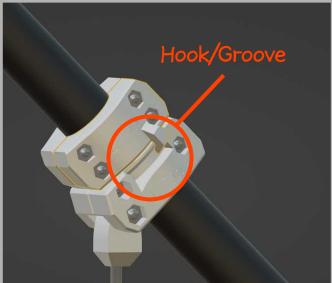
To simplify installation of the struts, first set your preferred seating position with the original Playseat Challenge seat adjustment straps. These will only be removed once the installation of the struts is complete.

Separate the halves of the strut clamps so they can be re-attached over the Playseat Challenge frame. Ensure that the orientation markings on the parts are positioned correctly.



The top backstop has a hook that interfaces with a groove in the top of the strut, which stops the strut from sliding down the PSC frame. This hook needs to fit into the groove before tightening the backstop into place.





Loosely fasten the top and bottom bump stop clamps in place. The top bump stop needs to be aligned with the strut piece below it to prevent the hook slipping/breaking off during folding. The alignment mark should form an unbroken line when the struts are set in their final position (while the seat is in the unfolded position).









When locking the strut position in place, there are a few points to keep in mind:

 The bottom section of the strut should be slightly further away from the PSC hinge than the top section of the strut.

You can eyeball this by making sure the strut leans slightly forwards, or by measuring the distance from the hinge bolt to the 2 strut ends. The bottom strut section to the hinge should be about 1–3mm further away from the hinge

This offset ensures that the struts doesn't bind (and possibly break) when the seat is folded up.

• There should be enough tension in the bump stops that they retain their position when configuring, but can be wriggled up and down the frame tubing.





Once the struts have been locked in position, slowly fold and unfold the chair. The struts should feel somewhat 'loose' and free to move around while folding up. If you notice binding or resistance while folding, double check the angle of the struts (ref. previous page) and the alignment of the bump stops.

REMOVING STRAPS

To remove the PSC straps the metal anchors that attach to the frame tubing will need to be bent. Consider this as a permanent modification of the Playseat Challenge, as there is no easy way to bend the anchor back into position (note: anchor shown in following images has already been removed once).







Start by bending the one side of the anchor wire out of the tubing hole. This is best achieved by grabbing the wire along it's length and rotating the pliers. It will take a reasonably large amount of force as the wire is quite thick.

The wire should be completely clear of the frame.





To allow the anchor to be completely removed, bend the anchor wire upwards. The wire needs to be bent far enough to clear the tubing so that the other half of the anchor can be detached from the frame.





Repeat with all strap anchors and remove the straps from your Playseat Challenge.





SECURING SEAT FABRIC







In addition to setting the seat angle, the straps also keep the seat fabric from sliding down the frame. Once they're removed, the corners of the fabric need to be tied down.

Combined the 4 provided velcro zip ties to make 2 extra long zip ties. These zip ties can now be used to anchor the fabric to the metal tubing that runs underneath the seat. If needing to adjust the leg support of the seat (via the large velcro tabs on the underside of the seat fabric), these velcro zip ties will need to be loosened first.