

SimFab®

DD Modular Racing Sim Cockpit

Assembly Manual



Assembly instruction manuals available at:

V1.4 072925

<https://simfab.com/webmanuals.html>

by **SimFab®**

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WARNINGS:



Proceed with caution and extra attention when warning signs are present during installation instructions manual.



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Parts List With Angled Pedal Plate

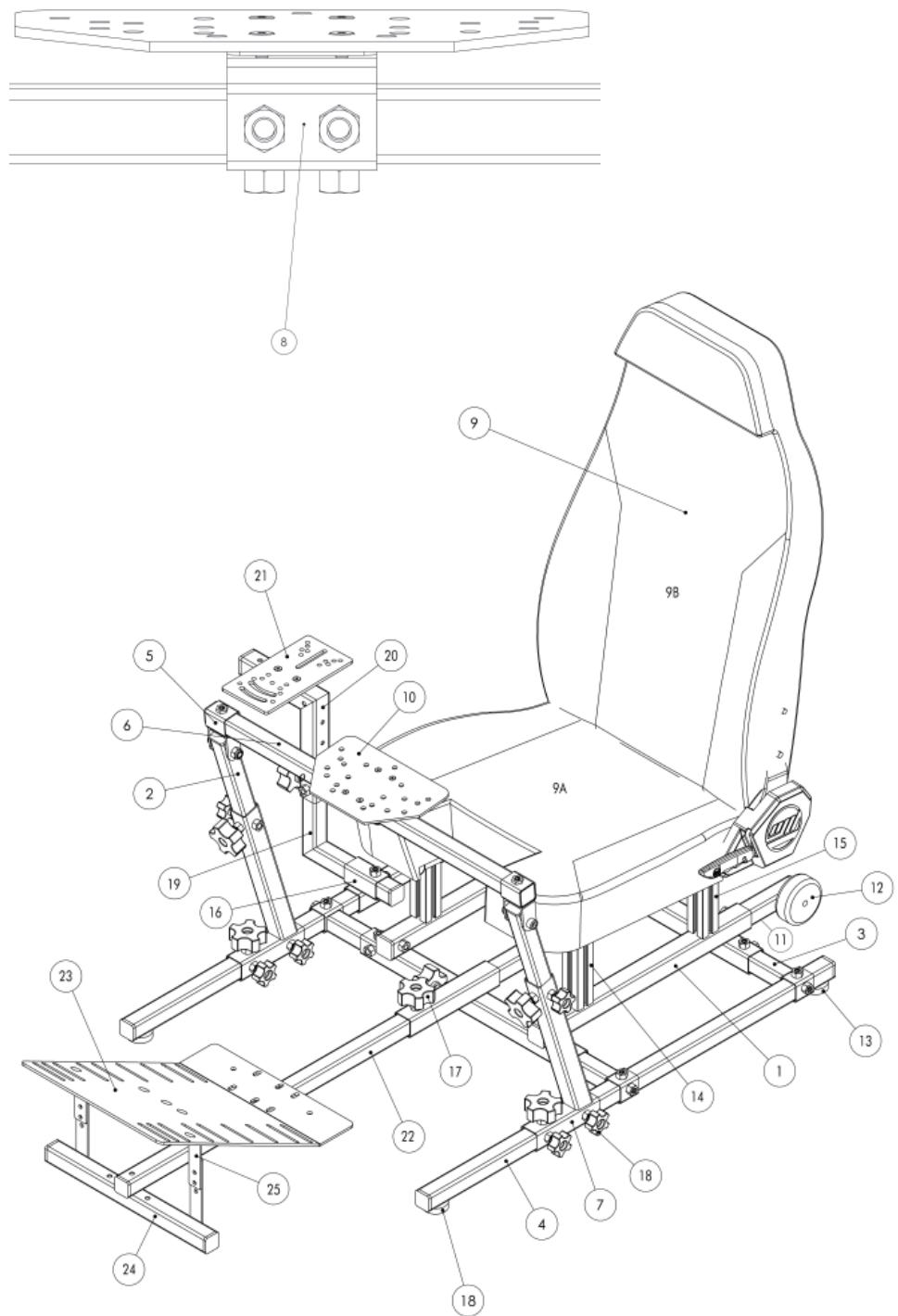
- 1 Seat frame
- 2 Side vertical column (2)
- 3 Short T extension (4)
- 4 Side support tube (2)
- 5 Pivot bracket (pre-installed to side vertical column) (2)
- 6 Cross bar (1)
- 7 Upright post (2)
- 8 Plate adapter bracket (1) (pre-assembled to base plate)
- 9 Seat (1) : 9A: Seat base 9B: Seat backrest
- 10 Race wheel base plate (1)
- 11 EZ rolling wheel tubes with wheels (2)
- 12 Rolling wheels, pre-assembled (2)
- 13 Leveling feet (4)
- 14 Seat lift front (2) with frame hardware
- 15 Seat lift rear (2) with frame hardware
- 16 4-Way Coupling (optional) (2)
- 17 Large knob (6) (One is pre-installed to seat frame, holding part #22)
- 18 Small knob (6)
- 19 Universal side lower L bracket (optional) (1)
- 20 Universal side upper L bracket (optional) (1)
- 21 Sequential shifter and handbrake base plate (optional) (1)

Hardware, tools, accessories:

- M10, 12mm set screw (26) (pre-assembled)
- Felt pad (4)
- Velcro ties for cable management (6)
- Flat wrenches: 17mm, 13mm, 10mm, 7mm
- Hex keys: 8mm, 5mm, 3mm
- Torpedo level

Angled pedal plate parts and hardware

- 22 Main support tube (1)
 - 23 Angled race pedal plate (1)
 - 24 Pedal plate lower support bracket (1)
 - 25 Pedal plate upper support bracket (2)
- Leveling feet (pre-assembled)
- M6, 15mm socket head (4)
 - M6 fender washer (4)
 - M6 tooth washer (4)
 - M6 nut (4)
 - M8 20mm, countersink head bolt (2)
 - M8, 50mm, button head bolt (2)
 - M8, 75mm, button head bolt (1)
 - M8 fender washer (6)
 - M8 lock nut (5)
 - Plastic spacer wedge (1)



Parts List With Flat Pedal Plate

- 1 Seat frame
- 2 Side vertical column (2)
- 3 Short T extension (4)
- 4 Side support tube (2)
- 5 Pivot bracket (pre-installed to side vertical column) (2)
- 6 Cross bar (1)
- 7 Upright post (2)
- 8 Plate adapter bracket (1) (pre-assembled to base plate)
- 9 Seat (1) : 9A: Seat base 9B: Seat backrest
- 10 Race wheel base plate (1)
- 11 EZ rolling wheel tubes with wheels (2)
- 12 Rolling wheels, pre-assembled (2)
- 13 Leveling feet (4)
- 14 Seat lift front (2) with frame hardware
- 15 Seat lift rear (2) with frame hardware
- 16 4-Way Coupling (optional) (1)
- 17 Large knob (6) (One is pre-installed to seat frame, holding part #22)
- 18 Small knob (6)
- 19 Universal side lower L bracket (optional) (1)
- 20 Universal side upper L bracket (optional) (1)
- 21 Sequential shifter and handbrake base plate (optional) (1)

Hardware, tools, accessories:

M10, 12mm set screw (26) (pre-assembled)

Controls hardware:

M6 hardware set of 8

M5 hardware set of 8

Felt pad (4)

Velcro ties for cable management (6)

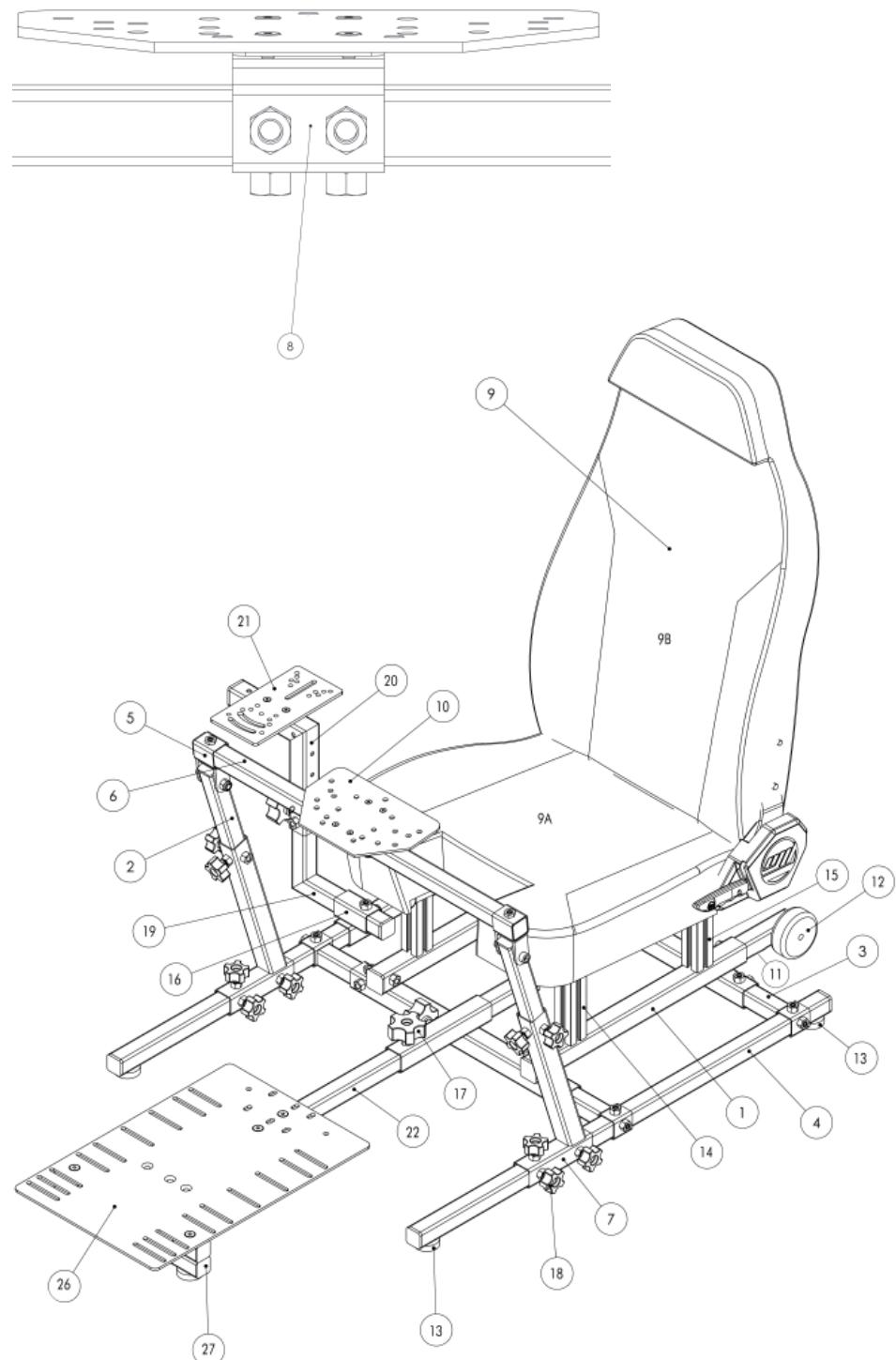
Flat wrenches: 17mm, 13mm, 10mm, 7mm

Hex keys: 8mm, 5mm

Torpedo level

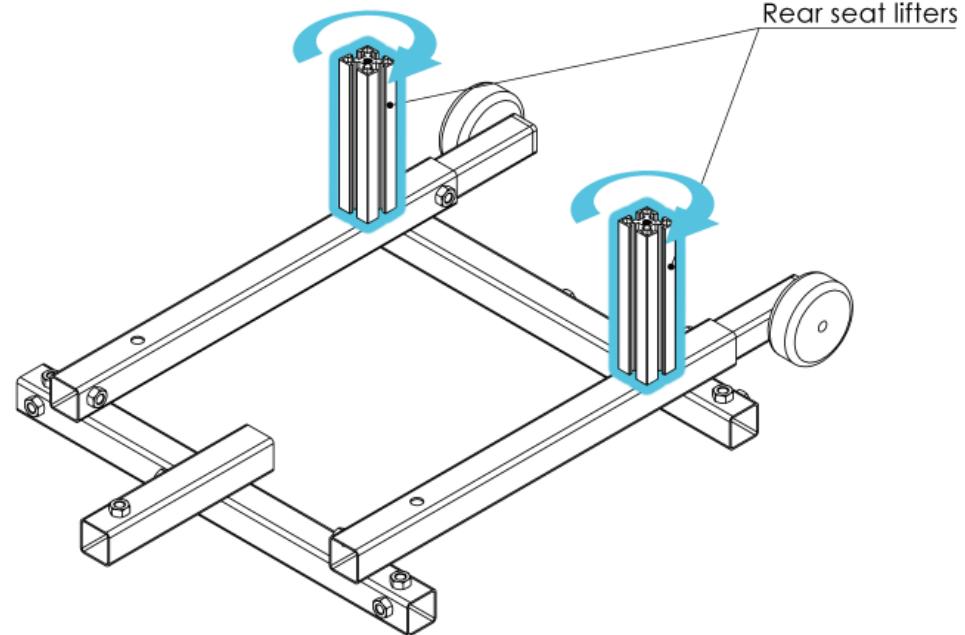
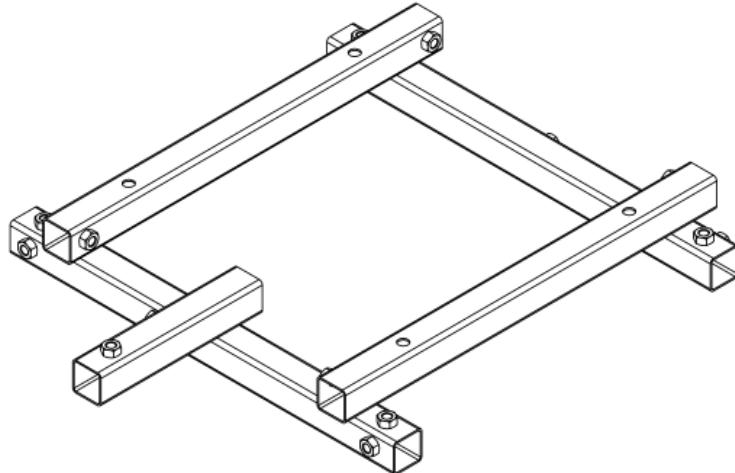
Flat pedal plate parts and hardware

- 22 Main support tube (1)
- 26 Flat race pedal plate (1)
- 27 Pedal plate support bracket (1)
- Leveling feet (pre-assembled)
- M8, 20mm, countersink head bolt (2)
- M8, 50mm, countersink head bolt (2)
- M8, fender washer (2)
- M8, lock nut (2)

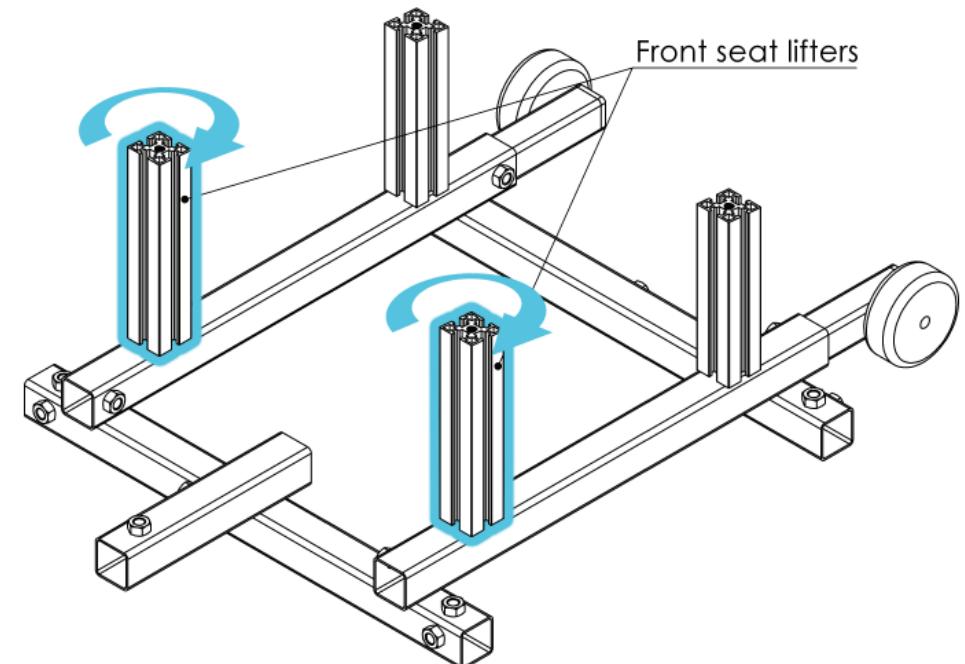
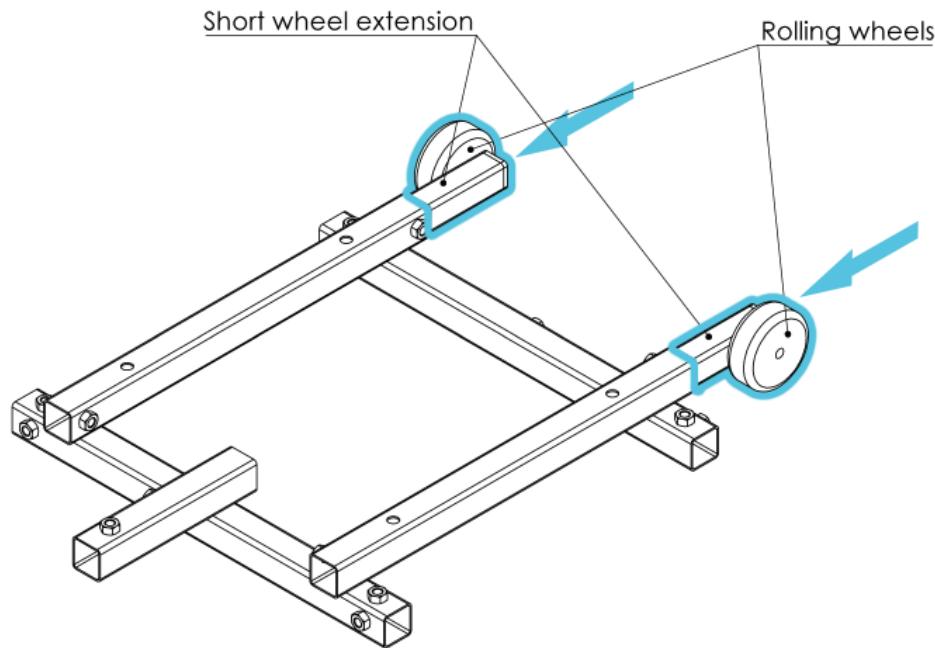


Install seat lift kit to seat base and seat frame to seat lift kit. Follow instructions in seat lift kit assembly manual booklet.

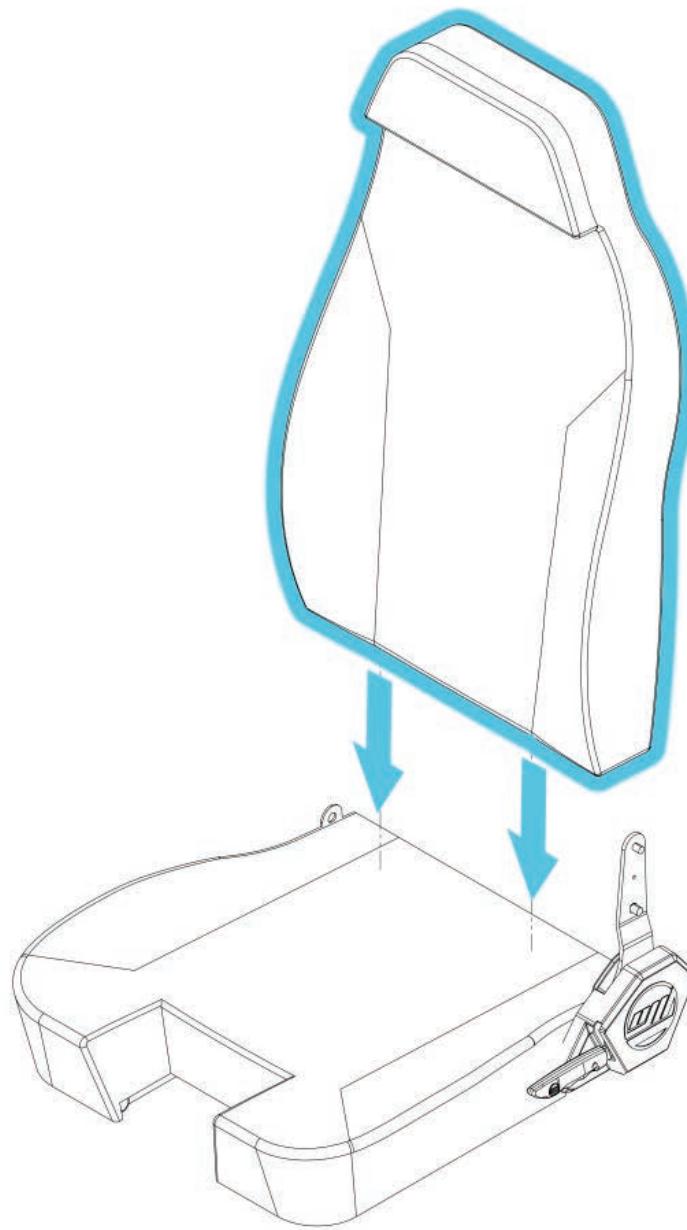
Install Arm Rest kit at the same time. Refer to arm rest assembly manual.



Install EZ rolling wheels.



Install seat backrest to seat base.

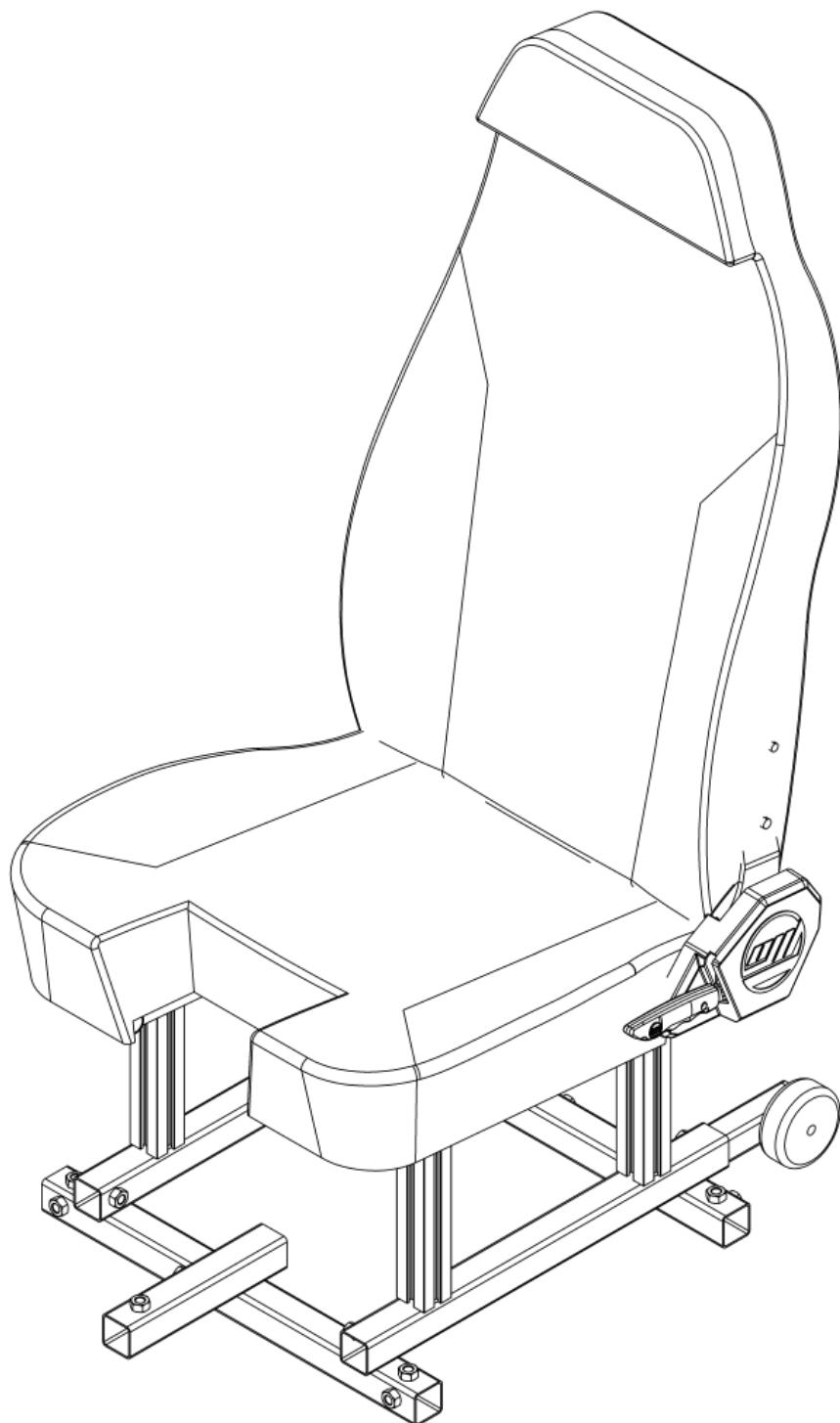


Remove pre-installed pair of recliner mechanism bolts on left side of the backrest and hinge bolt on right side of the seat base.



⚠ Following sequence of assembly steps is crucial for frustration free installation of seat backrest to seat base.

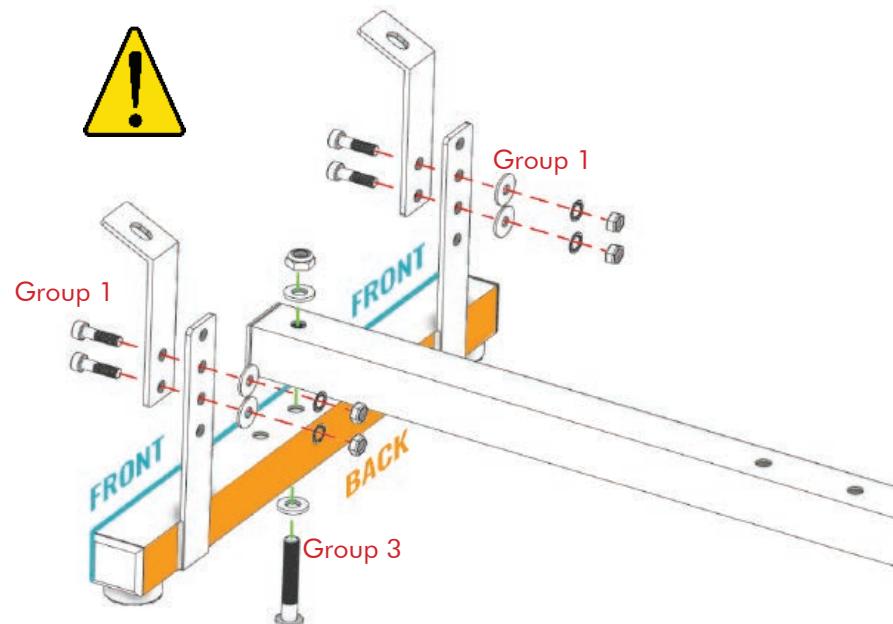
- Align backrest with seat reclining arm on the left side. Hand tight single hinge bolt on right side **first**. Even if left side is not aligned perfectly, focus on aligning right side with single hinge bolt.
- Guide left side of backrest to match either one of the backrest threaded insert with reclining mechanism arm hole and hand tighten bolt.
- Align 2nd threaded insert with recliner arm hole and hand tighten bolt.
- Tighten all 3 bolts by included wrenches.



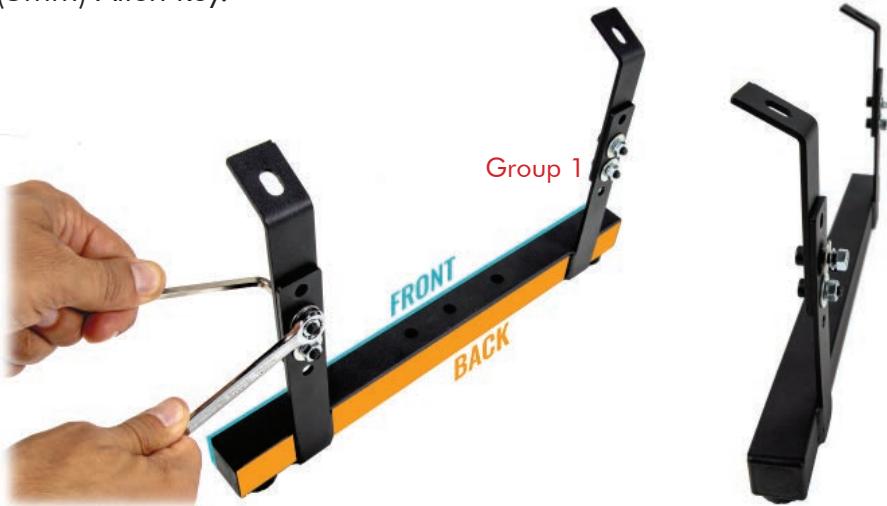
Angled race pedal plate installation.

Pedal Plate Assembly

- Use hardware from **bag A, group 1** to mount upper support brackets to lower support bracket.
- Match pair of holes on upper brackets with center pair of holes on lower support bracket. Upper bracket goes in front of lower bracket. Ensure brackets are straight and square.



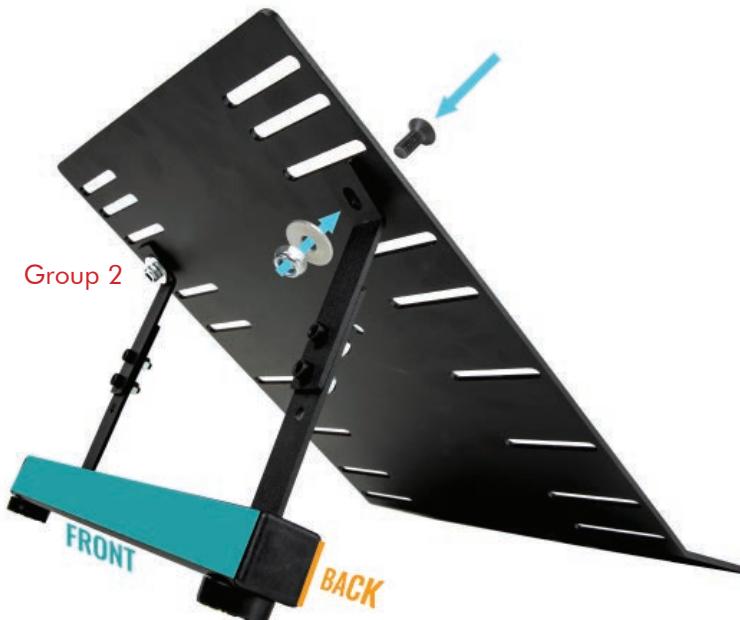
- Tighten down all four bolts with 10mm open wrench and small (5mm) Allen key.



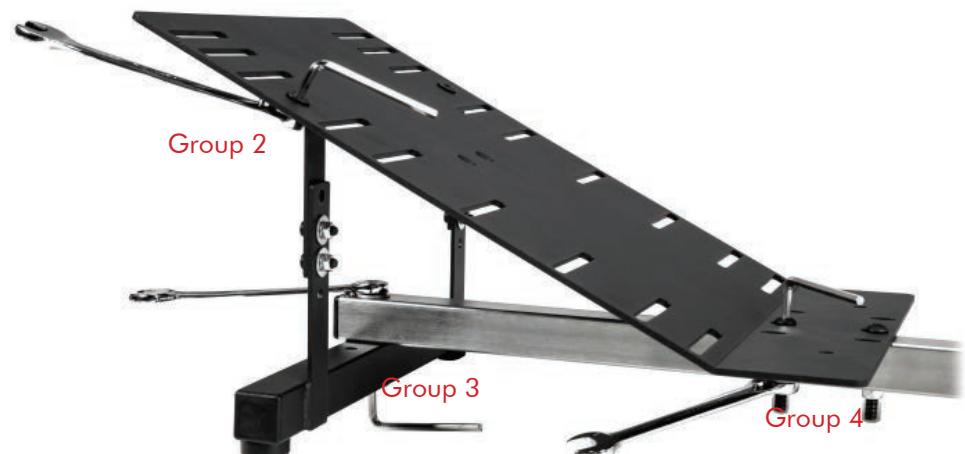
- Use hardware from **Bag A, group 3** to mount main support tube to lower support bracket. Leave bolts hand tight.
- Use hardware from **bag A, group 4** to mount main support tube to pedal plate. Leave bolts hand tight



- Use hardware from **Bag A, group 2** to mount upper support brackets to pedal plate. Leave bolts hand tight.

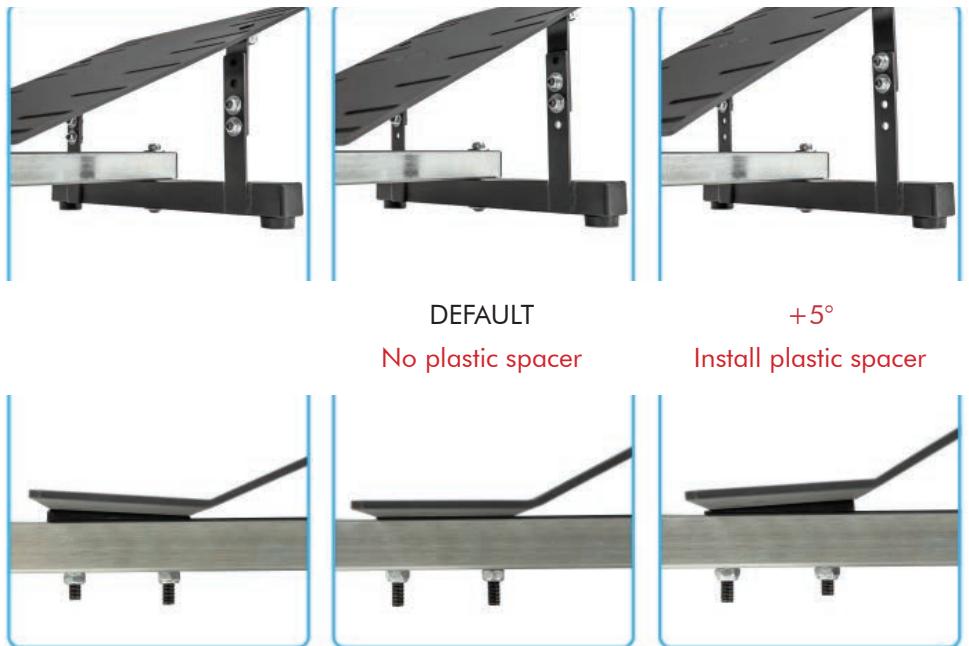


- Tighten down all hardware in the following order: **group2; group 3; group 4** by using 13mm open wrench and small (5mm) Allen key.



Pedal plate angle adjustment.

- Pedal plate angle adjustment. Pedal plate allows three angle positions: default , -5°, +5°.



- Adjusting plate to -5°. Remove Hardware **group 4**; Loosen up hardware **group 2**; remove hardware **group 1**. Adjust upper support brackets to lowest pair of matching holes. Reinstall hardware **group 1**; Tighten down **group 2**; Install plastic spacer with matching angle direction. Re-install hardware **group 4**.
- Adjusting plate to +5°. Follow same procedure as lowering angle. Mount plastic spacer opposite direction, according to matching pedal plate angle.

Race pedal plate mounting patterns

Logitech

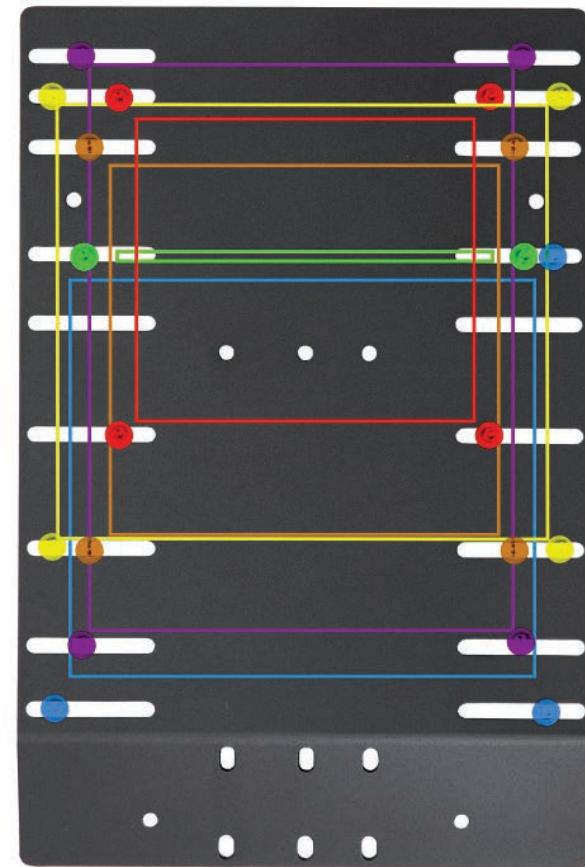
Thrustmaster

Thrustmaster 2

Fanatec
CS/CSL/CSL Elite

Moza CRP

Simagic P1000



Use bolts, washers and small Allen key to hard mount pedals to pedal plate ([bag C](#)).

Pedal Plate mounting pattern.

Flat race pedal plate installation.

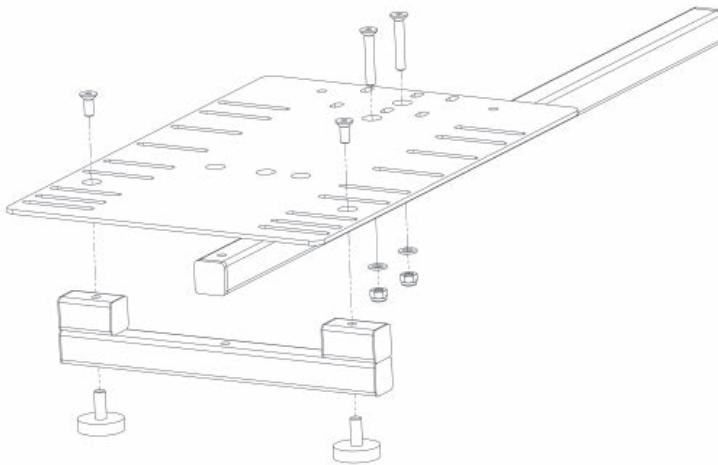
Place flat plate standoff bracket and main support tube, under flat plate, and match pair of countersink holes in front and pair of round holes at seat side. Oblong holes on the plate are not used with this configuration.

Install pair of countersink bolts and pair of bolts main support tube to pedal plate.

Slide the main support tube back to seat frame and tighten pair of quick release knobs.

Adjust leveling feet to touch floor, however ensure they are not lifting plate up.

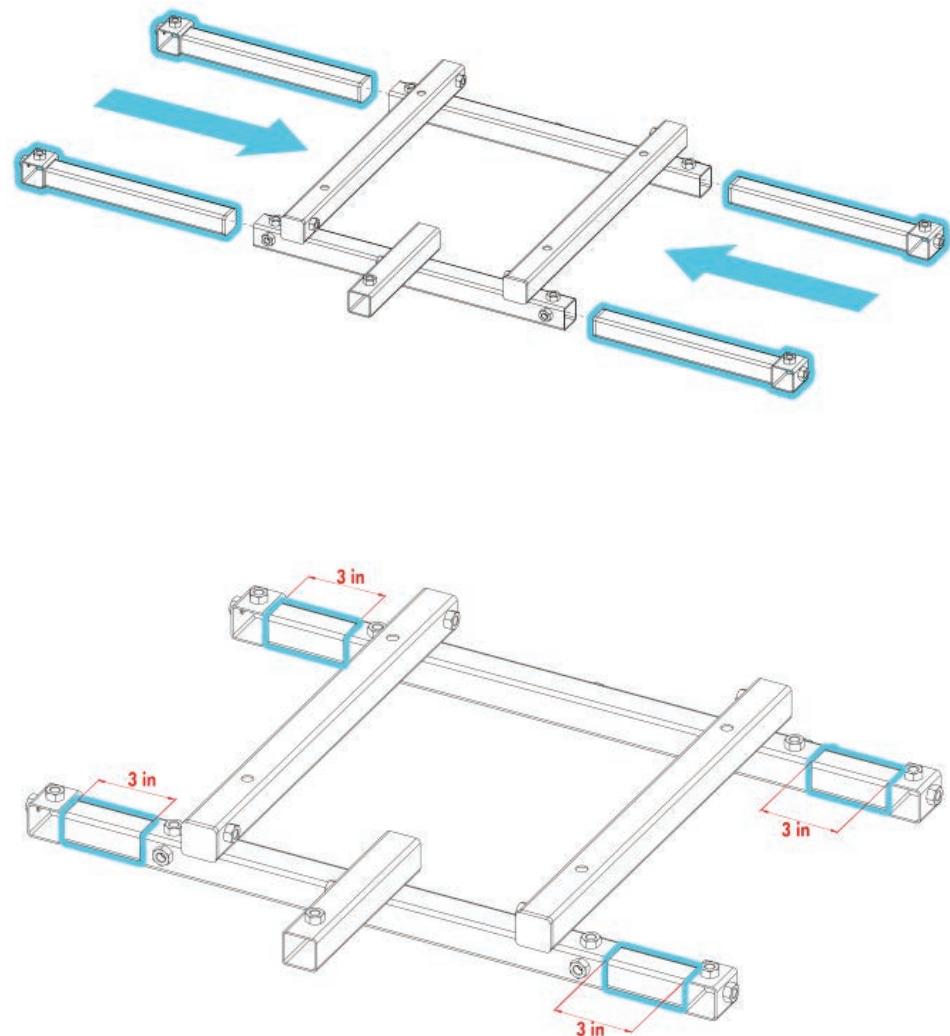
Remove plate and install back race pedals.



Slide in T-extensions into seat frame, approximately 3in as illustrated. Ensure both T-extensions are installed at equal distance from frame. Leave them loose until all rest parts are installed.

Repeat same step on opposite side of seat frame.

Lastly, verify plumbness, square and parallel relation of all parts prior tightening all hardware.

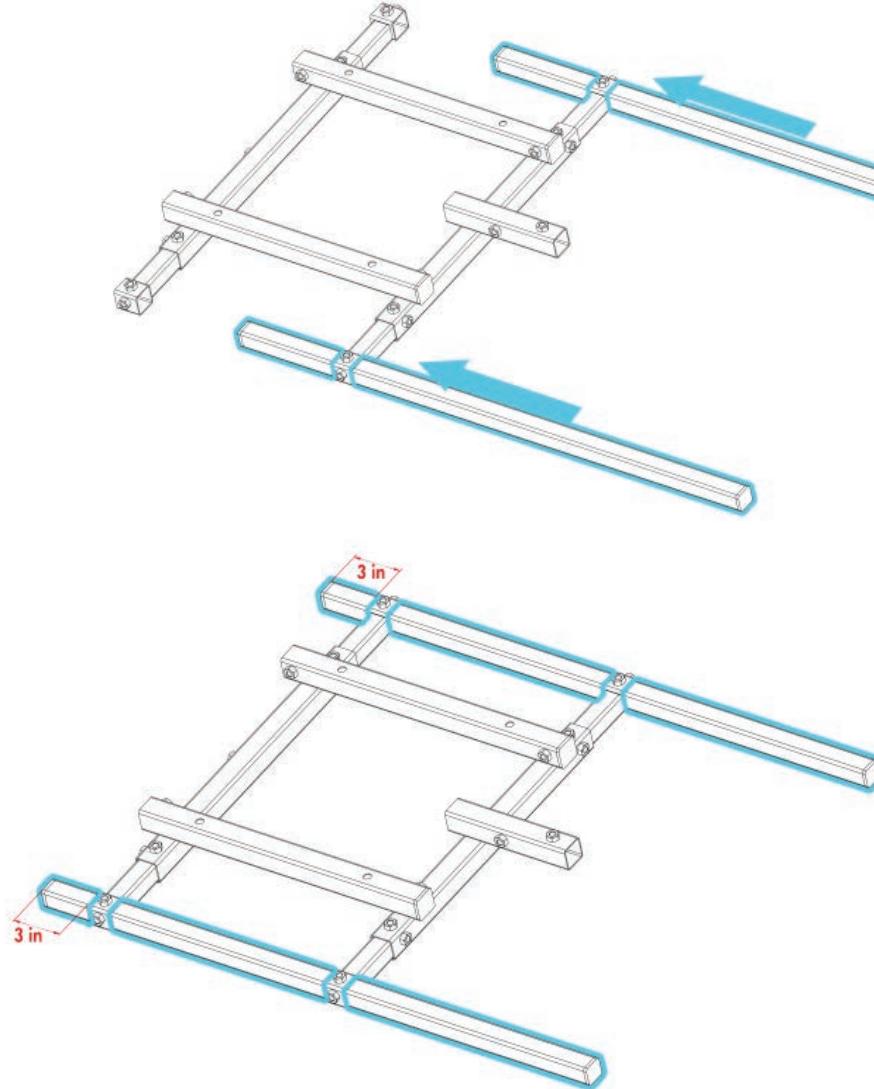


Slide side support tube through T-extension tubes.

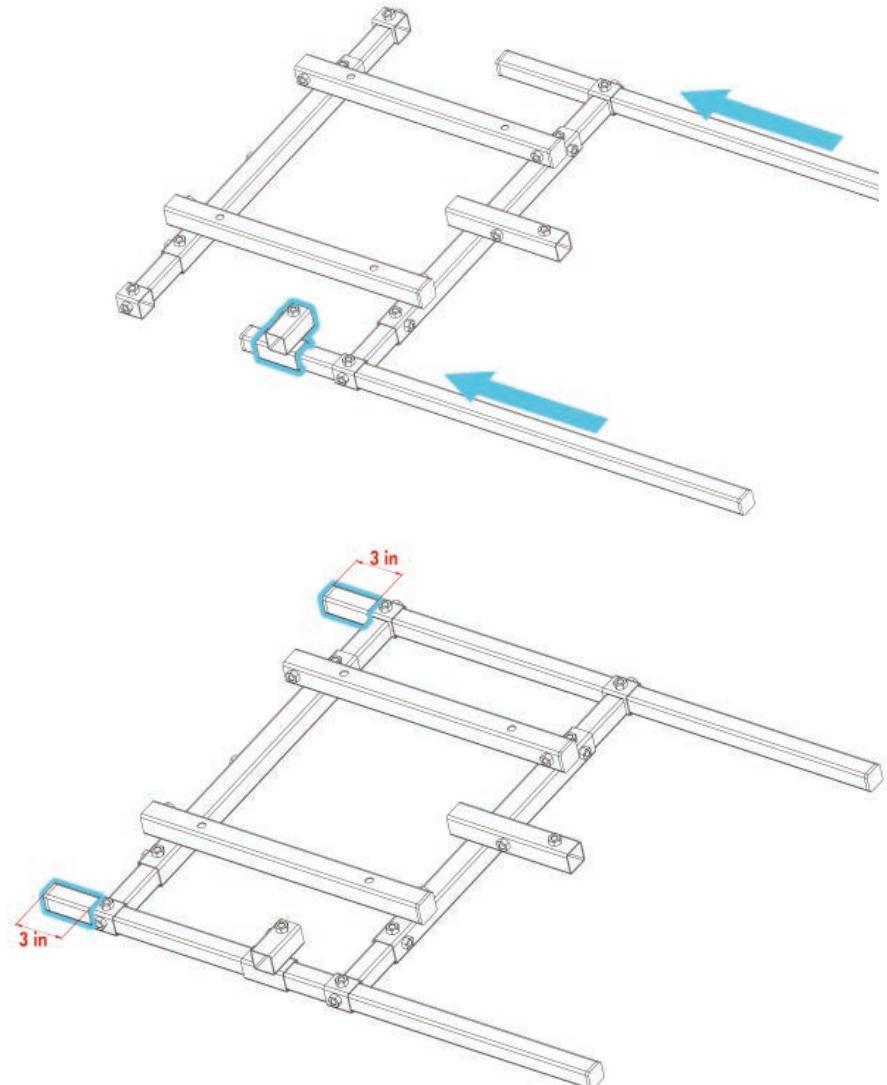
* Remove leveling feet from side support tubes if they are pre-installed.

Repeat same step on opposite side of seat frame.

Leave side support tube approximatlv 3in past rear T-extensions.

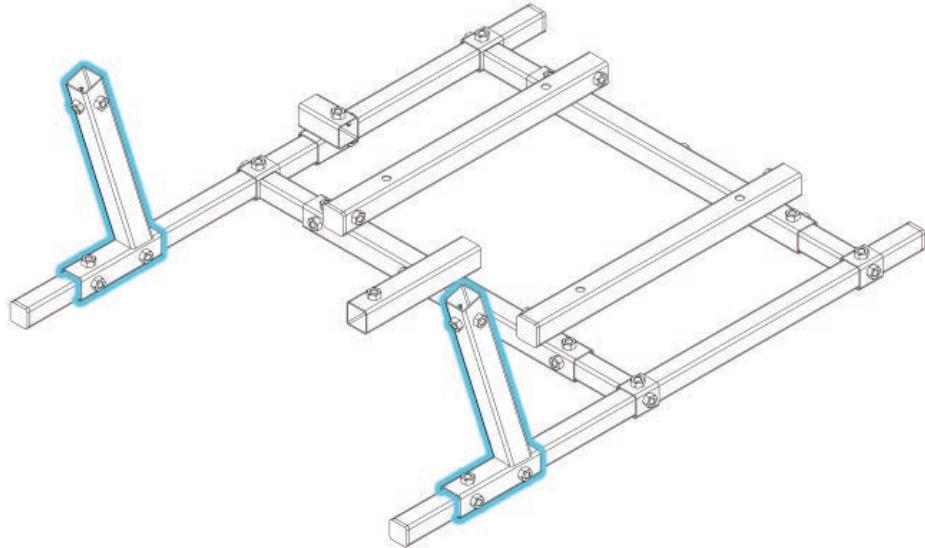
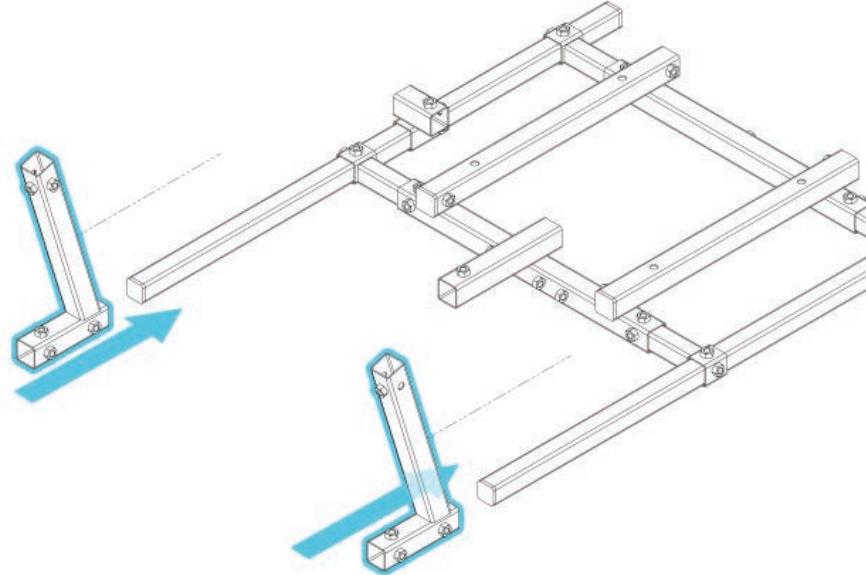


Optional, slide 4-way coupling for gear shift mount to side support tube as illustrated



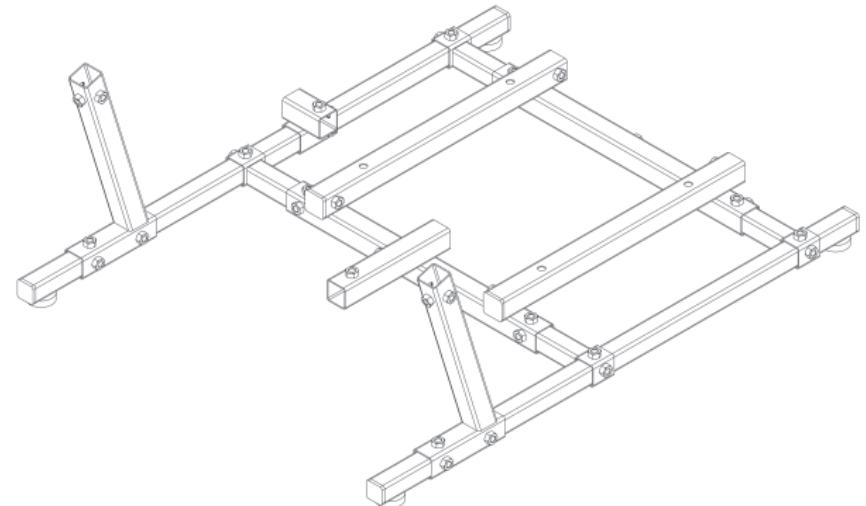
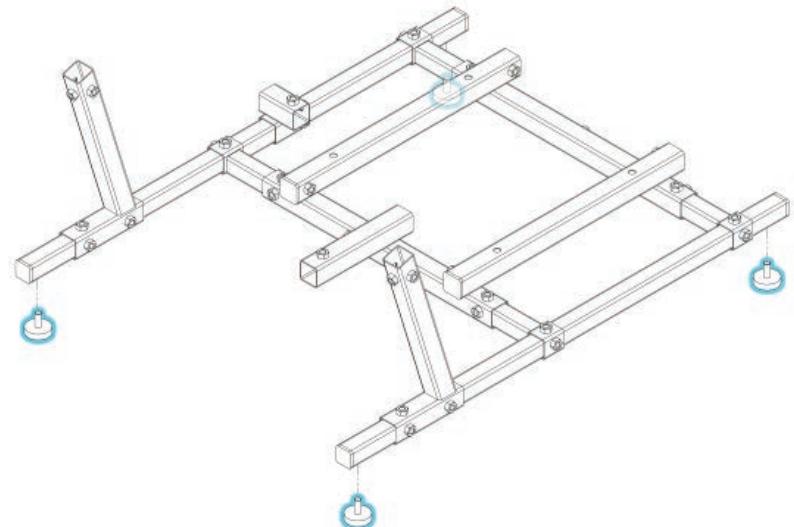
Slide upright post to side support tube.

Repeat same step on opposite side of seat frame with posts at approximately same distance from front T-extensions.



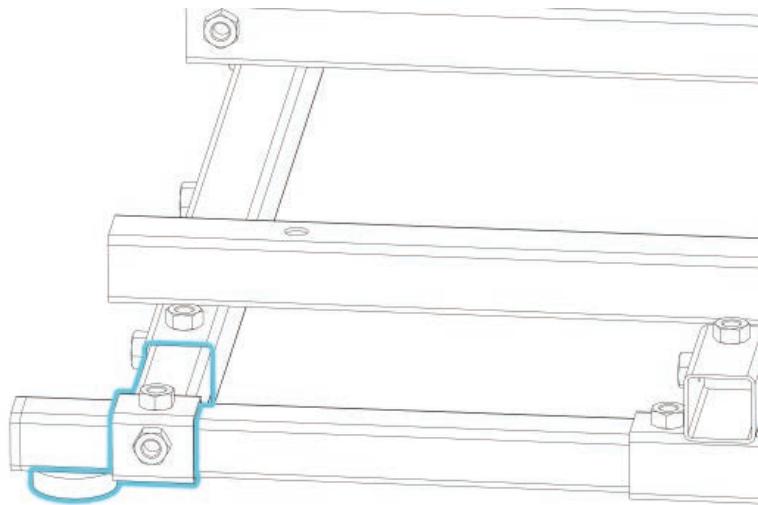
Lift slightly each side and install leveling feet all the way into each end of side support tube.

Repeat same step on opposite side of seat frame.



Adjust side rails all the way forward until rear leveling feet touch rear T-extensions.

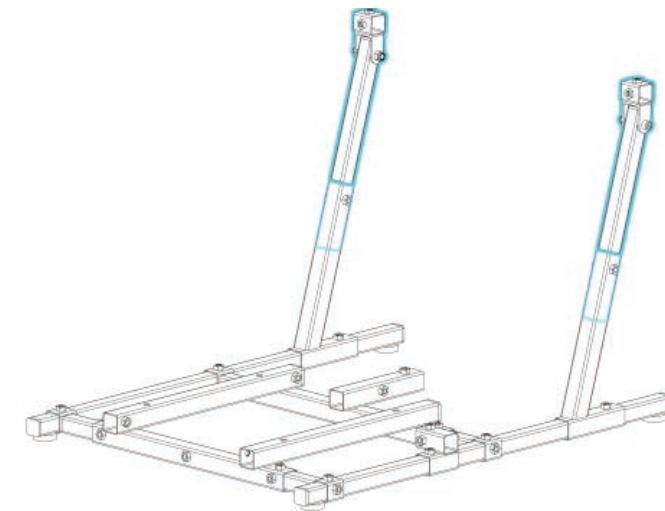
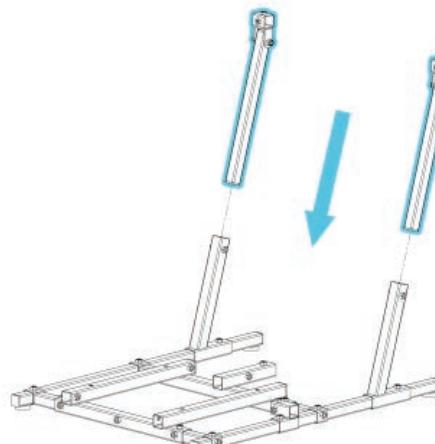
Repeat step to both sides of seat frame.



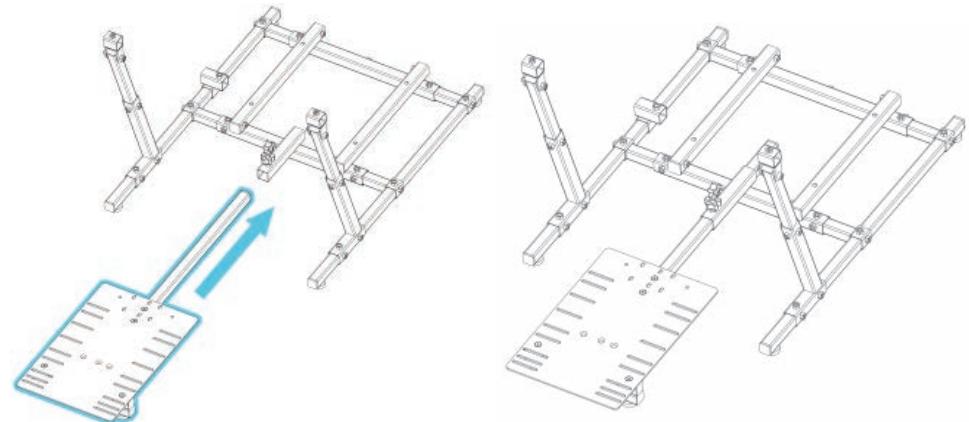
Install vertical column with pre-assembled tilt bracket to upright post.

Slide column all the way down until it bottoms out on the upright post.

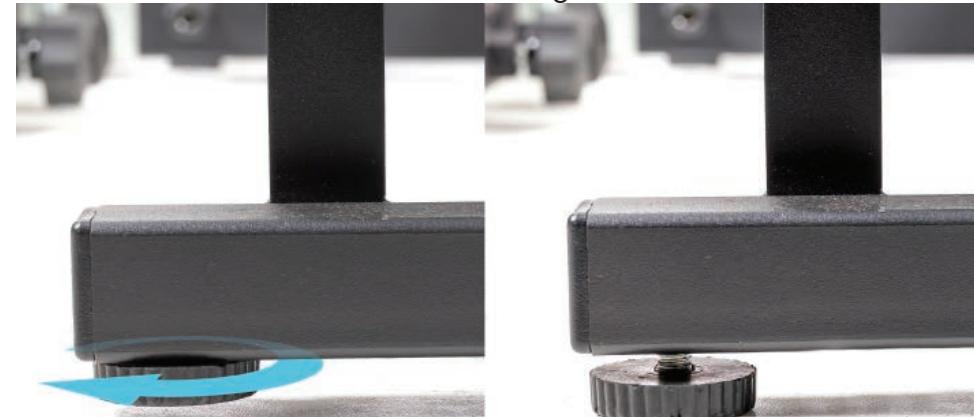
Repeat same step on opposite side of seat frame.



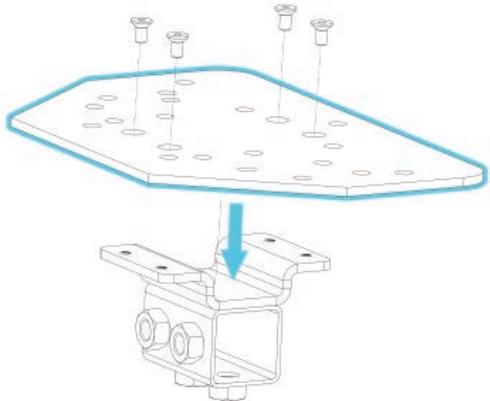
Slide pedal plate assembly to seat frame.



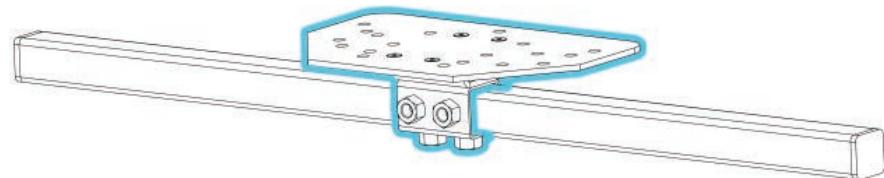
Adjust leveling feet of pedal plate bracket just until they touch floor.
Do not over extend them to avoid lifting entire frame.



Install race wheel base plate to plate adapter bracket.



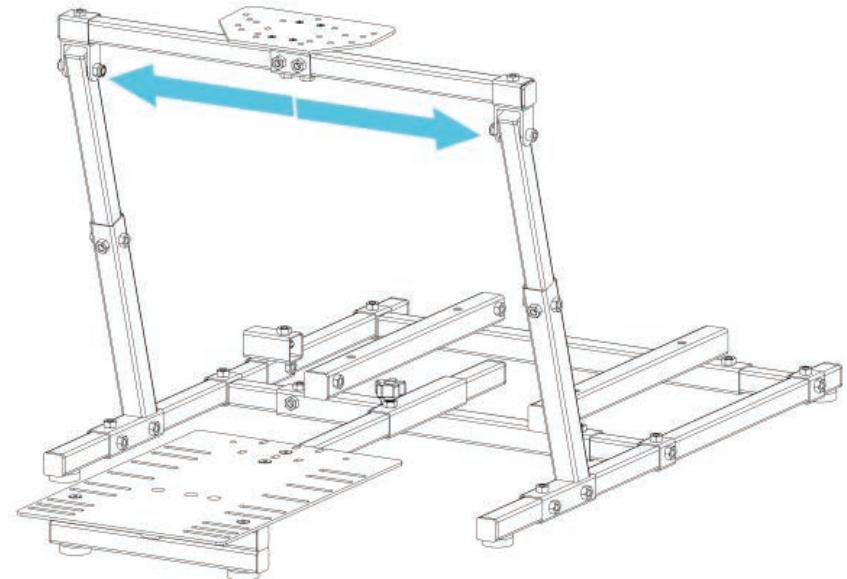
Tighten set screws against cross bar with adapter bracket approximately centered to seat.



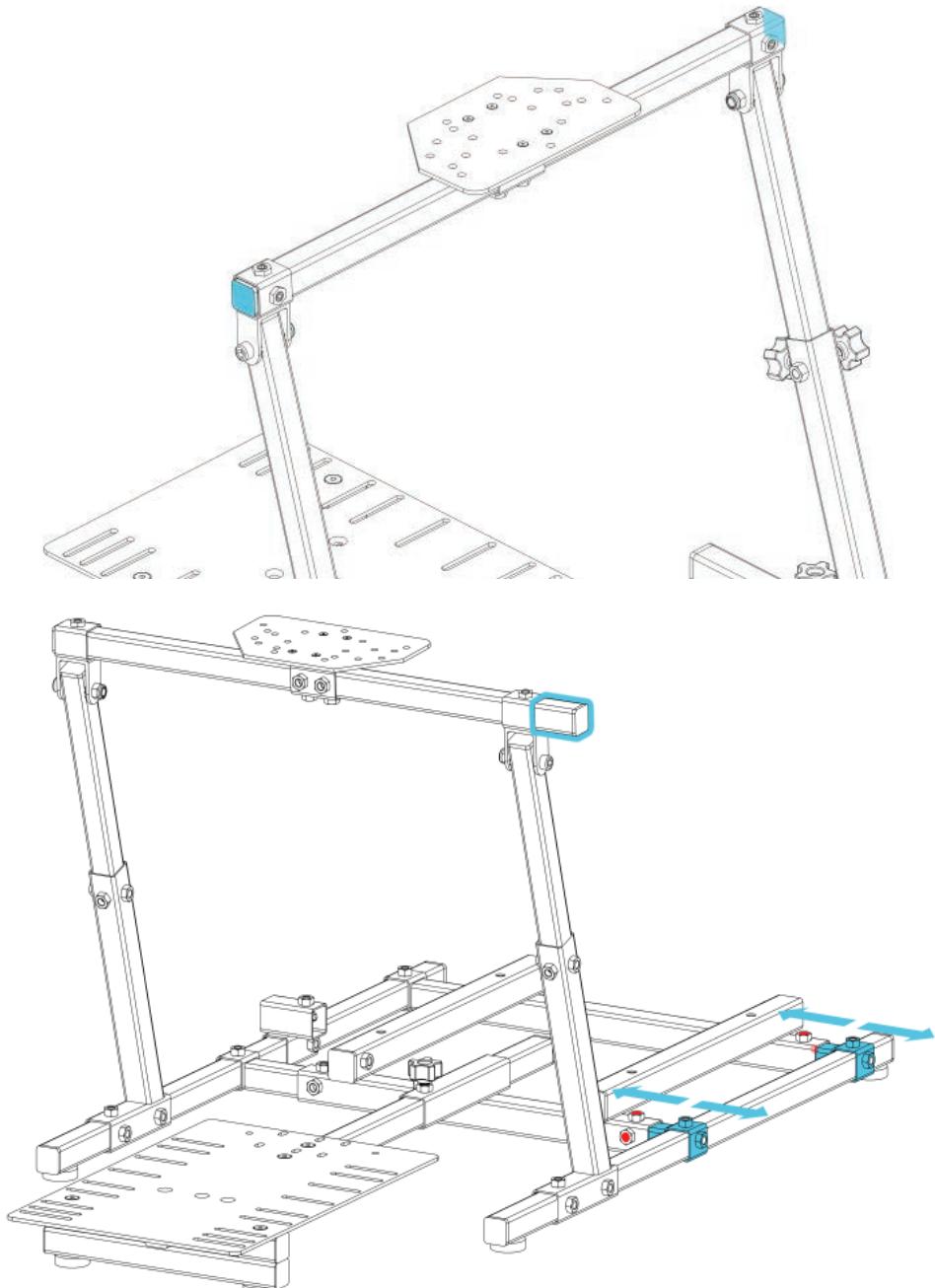
Slide wheel plate adapter bracket to cross bar



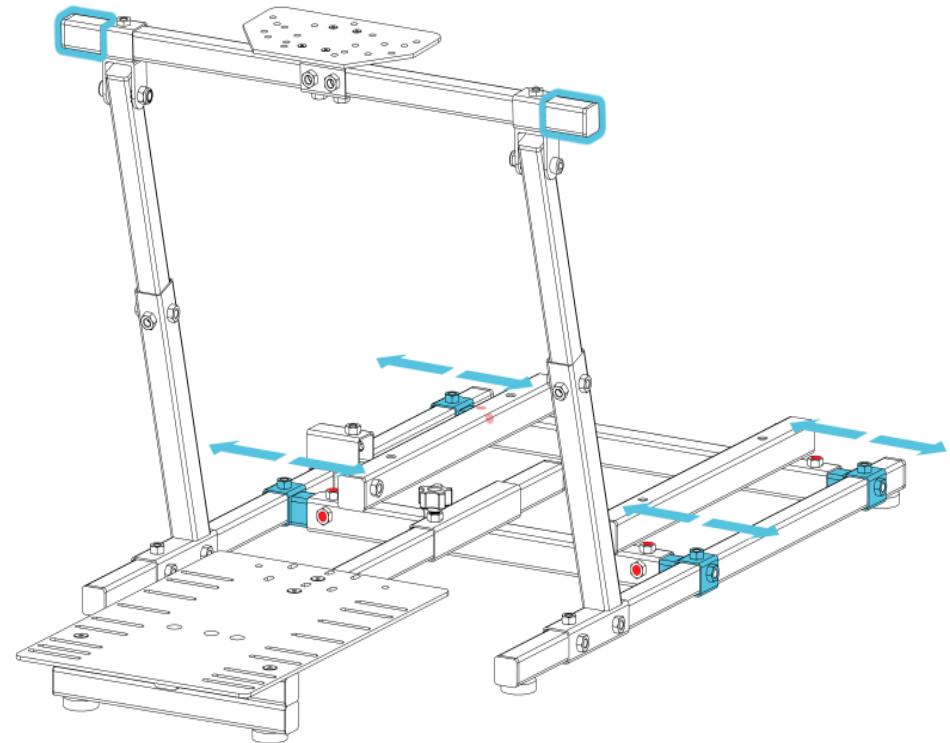
Slide cross bar half way through one tilt bracket, slide race wheel base plate adapter bracket and lastly slide cross bar through opposite side tilt bracket.



Position the crossbar on each side so that end plastic caps extend beyond the tilt bracket. You can adjust the overall width as needed after the frame is fully assembled. The cross bar may be flush with one side and protrude on the other, or it can extend on both ends.



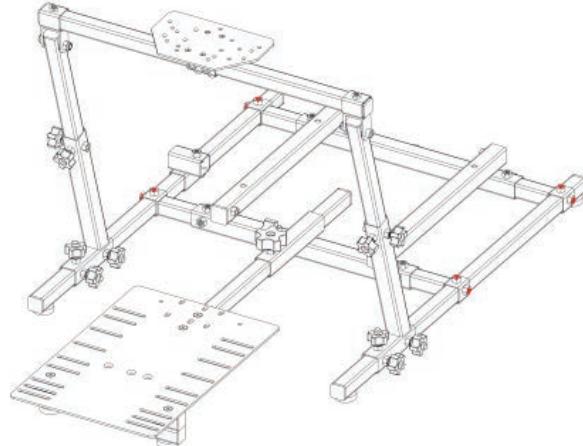
To extend either side, loosen frame side set screws and adjust side frame assembly to desired width.



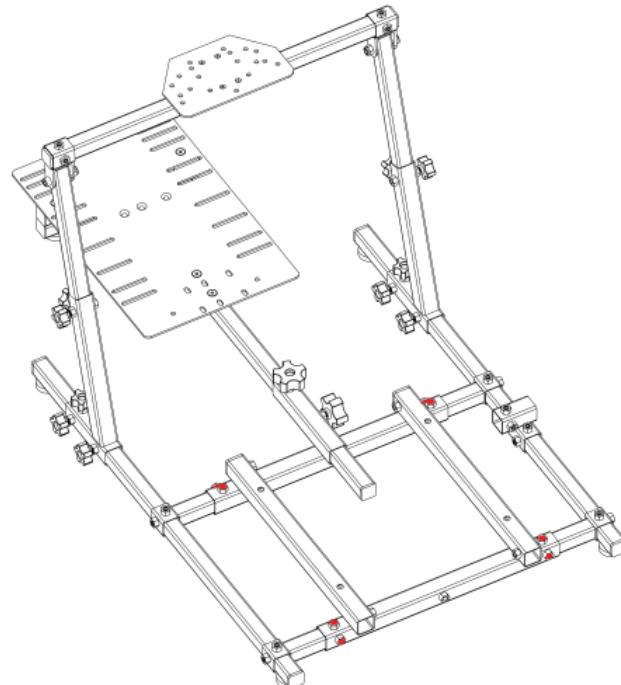
To ensure entire framework is square and plumb, tighten all set screws in the following order:

1. T-extensions to side support tubes, both sides (total of 8 set screws).

* Ensure side support tubes are pushed forward all the way until rear leveling feet make contact to rear T-extensions.

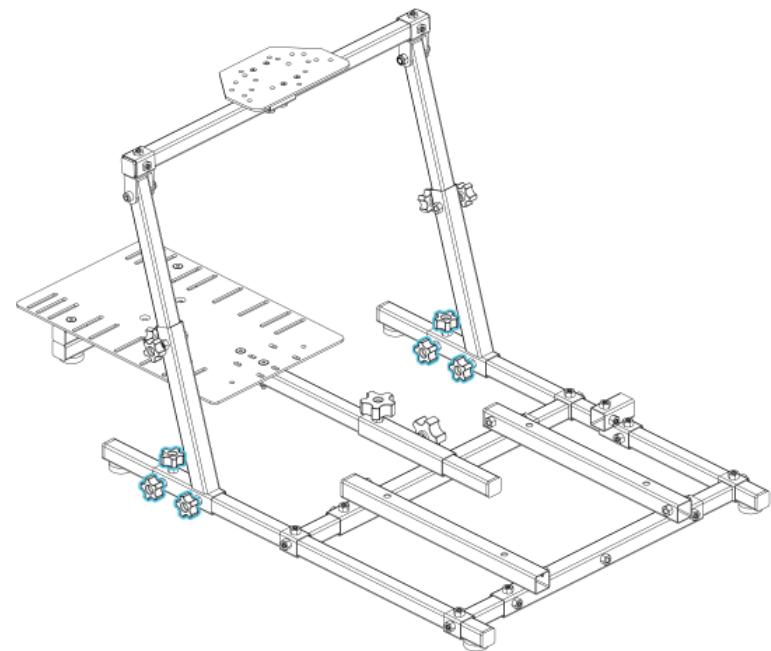


2. T-extensions to seat frame, both sides (total of 8 set screws).

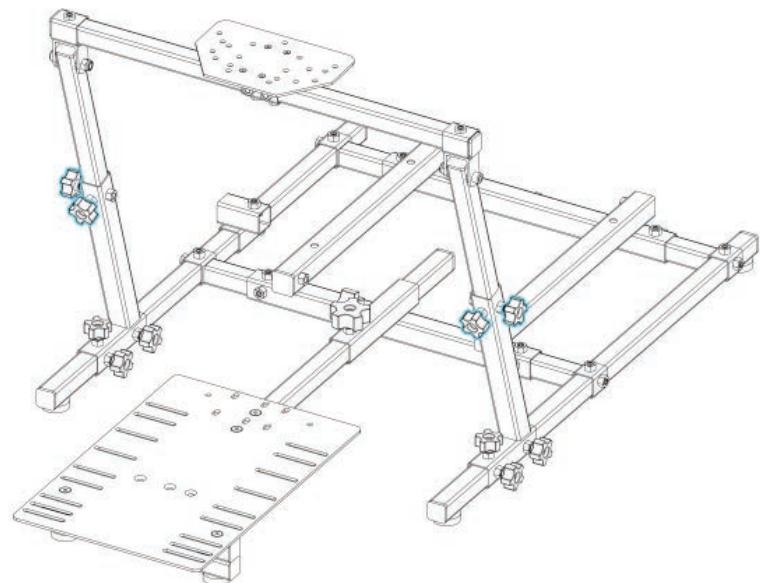


3. Lower knobs on upright posts (total of 6 knobs).

⚠ Ensure to not over tighten knobs to avoid stripping bolt inside knob plastic mold.



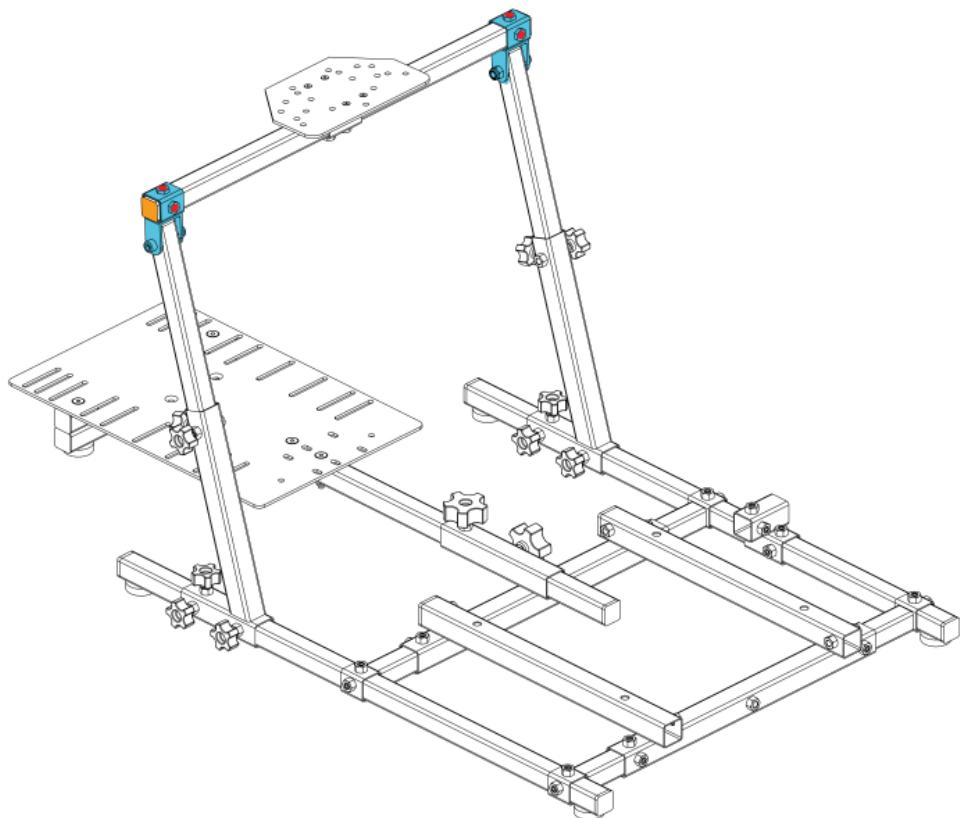
4. Upper knobs on upright posts (total of 4 knobs).



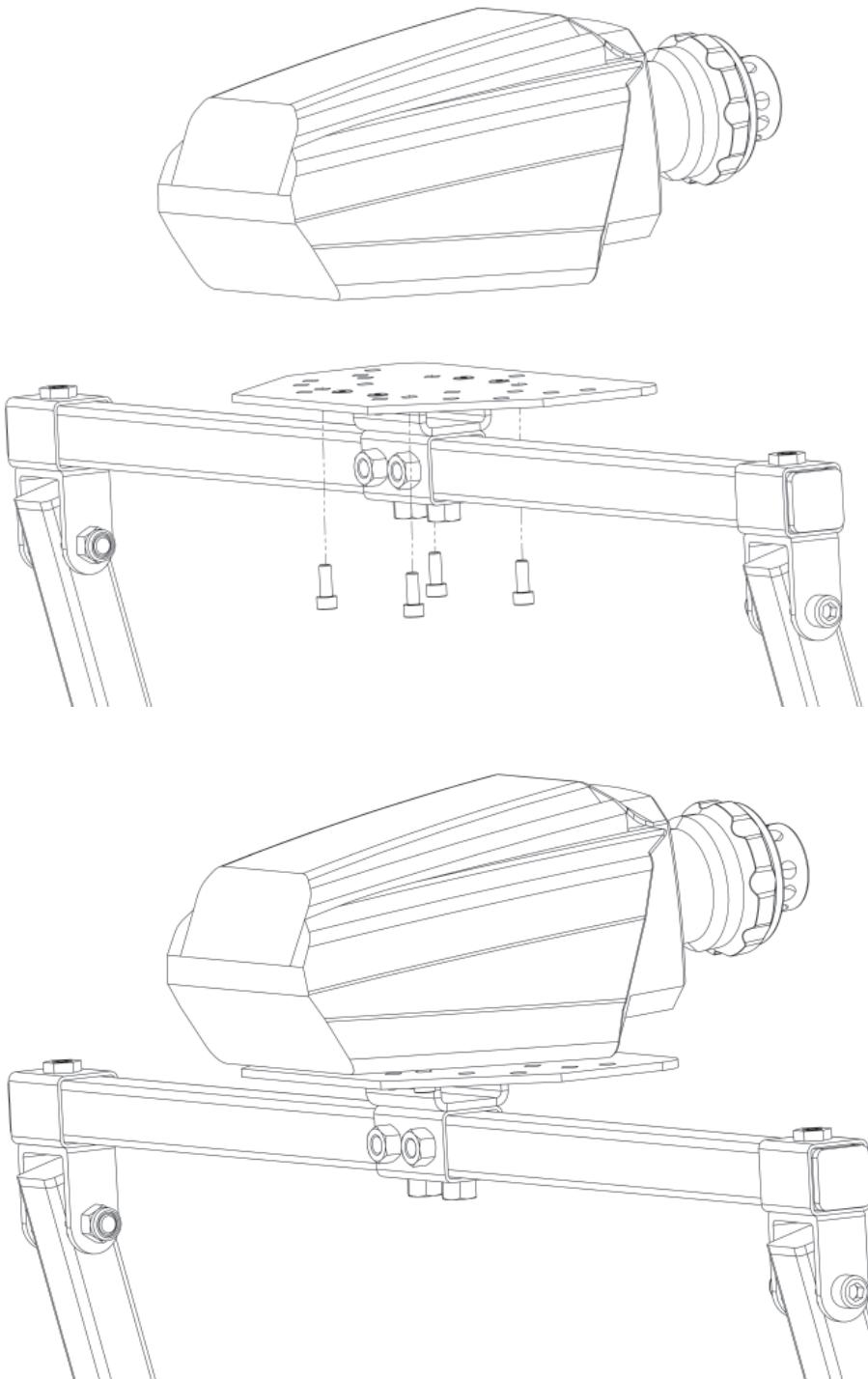
5. Tilt brackets set screws to cross bar (total of 4 set screws).

* Ensure cross bar goes past the outer sides of both tilt brackets.

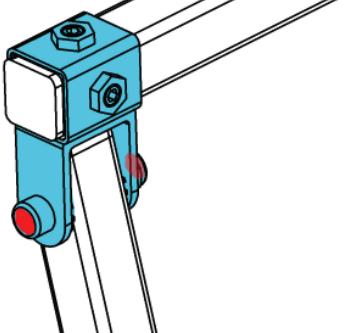
Adjust each side T-extensions towards the seat frame to make frame width narrower if necessary.



Install wheel base to plate with appropriate mounting hardware.



6. Tighten tilt brackets pivoting bolts with cross bar in approximate horizontal position and tighten pivoting bolts/nut on each side. Re-adjust wheel tilt if necessary after cockpit assembly is completed.



Steering wheel mounting pattern

Logitech

Logitech Pro

Thrustmaster

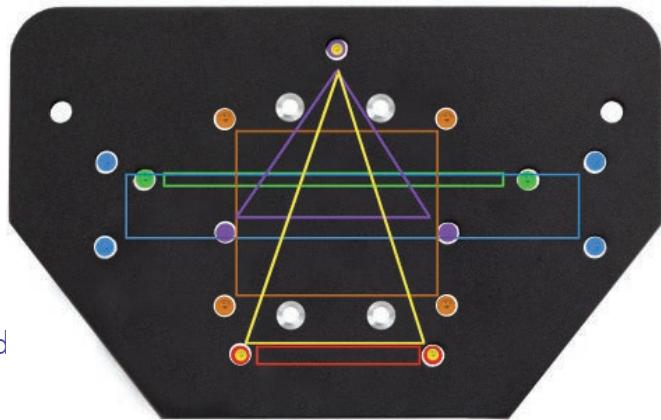
Fanatec 1

Fanatec 2

(highly recommended)

Simagic and Moza

Fanatec CSL wheel



⚠️ For Thrustmaster wheels not supplied with mounting inserts such as: **TMX, T150, Ferrari 458**, use Thrustmaster factory clamp as shown above.

For **Fanatec CSL** wheel, remove plastic legs and mount wheel base with three threaded inserts.

Tighten steering wheel plate pivot bolt using large (8mm) Allen key and 17mm combo wrench. Sit comfortably on the seat and make final adjustments before tightening all handle knobs. Wrap cables around none moving tubes with provided Velcro ties.

10. Use bolts, washers and small Allen key to mount steering wheel to steering plate. Use two (2) bolts from (**bag C**) and two (2) short bolts from (**bag D**) to mount Fanatec wheel with wheel base plate (**Fanatec 1**).

⚠️ Highly recommended for Fanatec ClubSport wheel: remove factory base plate and mount wheel directly to OpenWheeler wheel plate with three (3) mount pattern (**Fanatec 2**).

Fanatec CSL DD wheel base installation.

Use hardware from bag **D**, labeled as “**bag DD**” and 3 T-slot inserts included in Fanatec CSL DD wheel base package to mount wheel base to wheel plate. Pre-install inserts to bolts by couple turns, using Fanatec 3 hole mounting pattern. Slide inserts to wheel base T-slots. Tighten down all three bolts and proceed with rest of installation.



1.

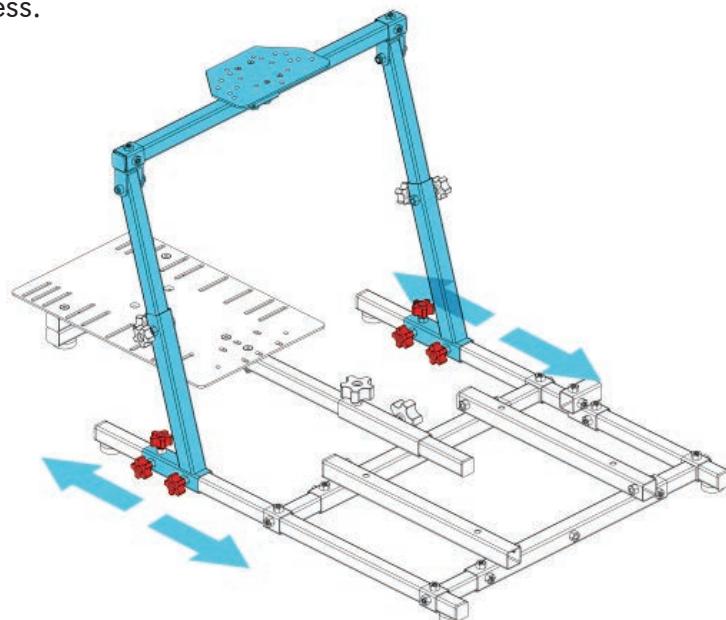


2.

3.

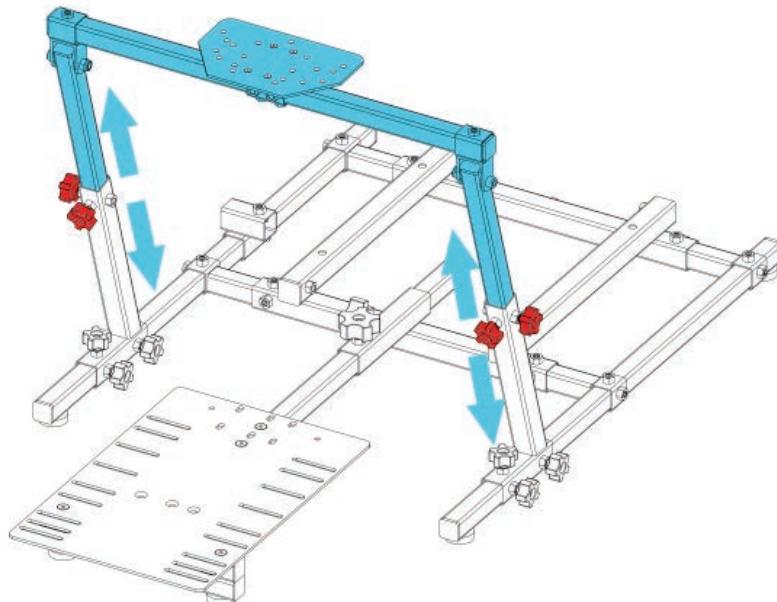
Adjust wheel arm reach by loosening side upright posts lower knobs.

* Make one direction adjustment at the time to maintain framework squareness.

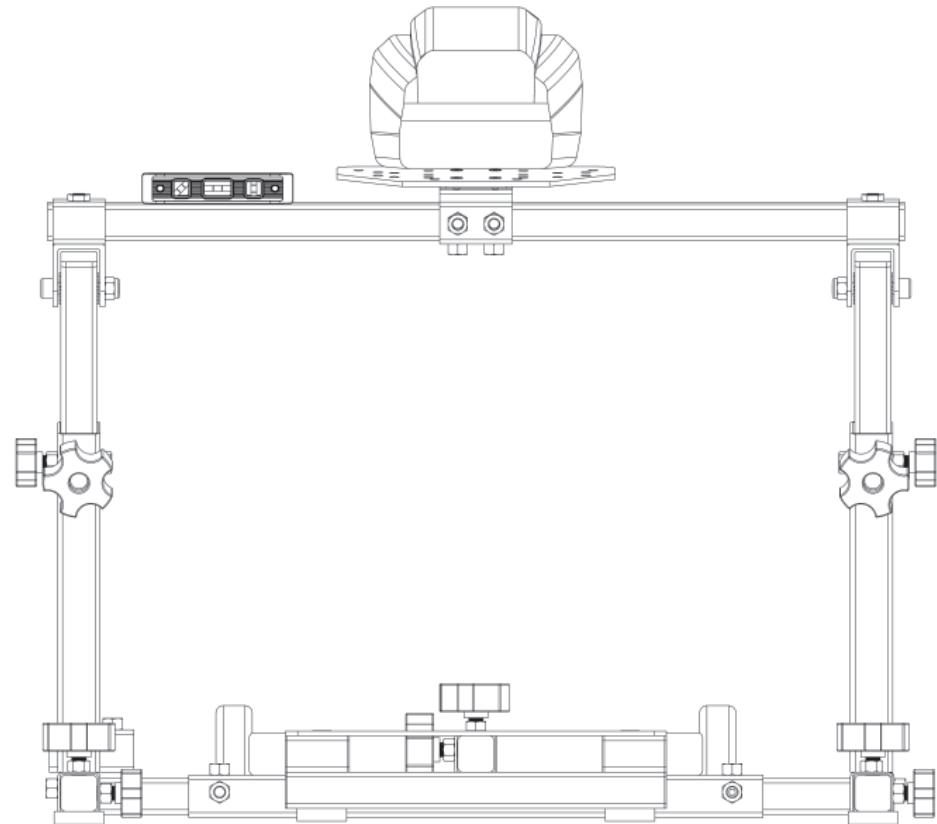


Adjust wheel height by loosening side upright post upper knobs.

* Make one direction adjustment at the time to maintain framework squareness.



Use torpedo level on horizontal cross bar. Once aligned and height adjusted, mark vertical columns at the top edge of side upright posts with sharpie for easier reset.

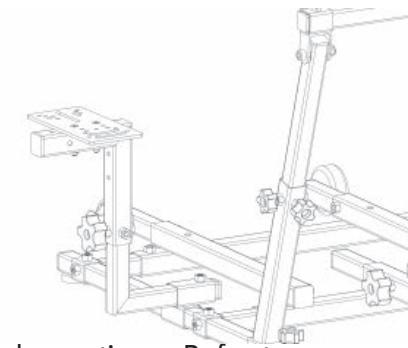
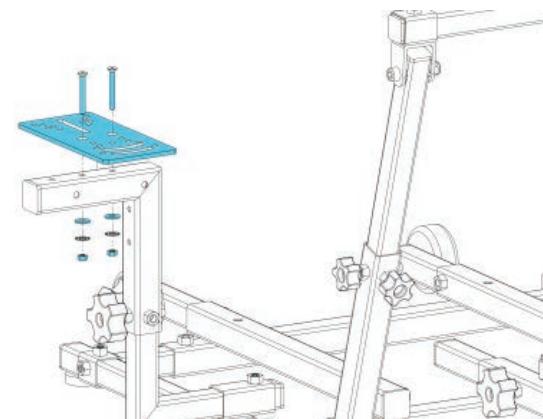
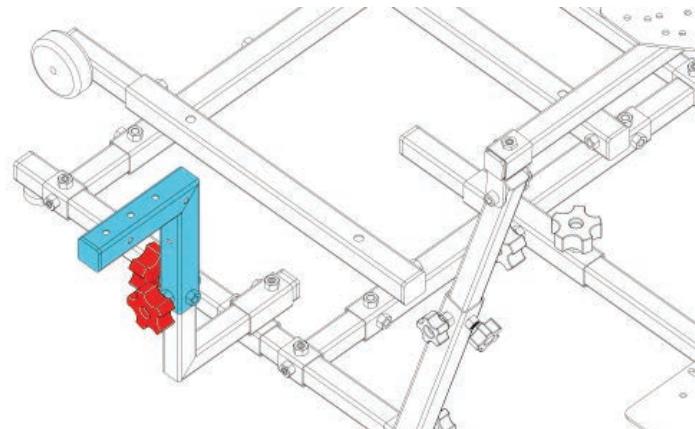
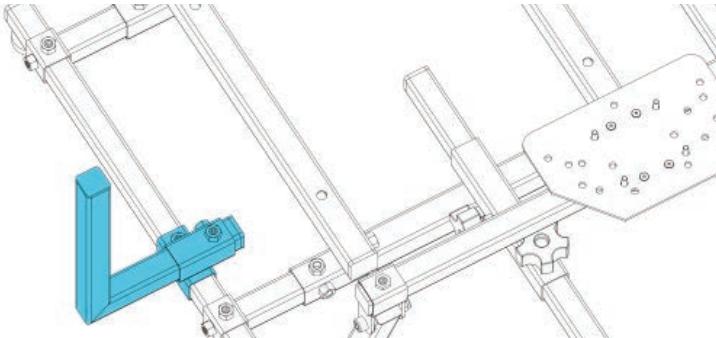


Optional. Install gear shift mount side bracket and adapter plate on top of upper L bracket.

Install lower L bracket to 4way coupling

Install Upper L bracket to lower L bracket.

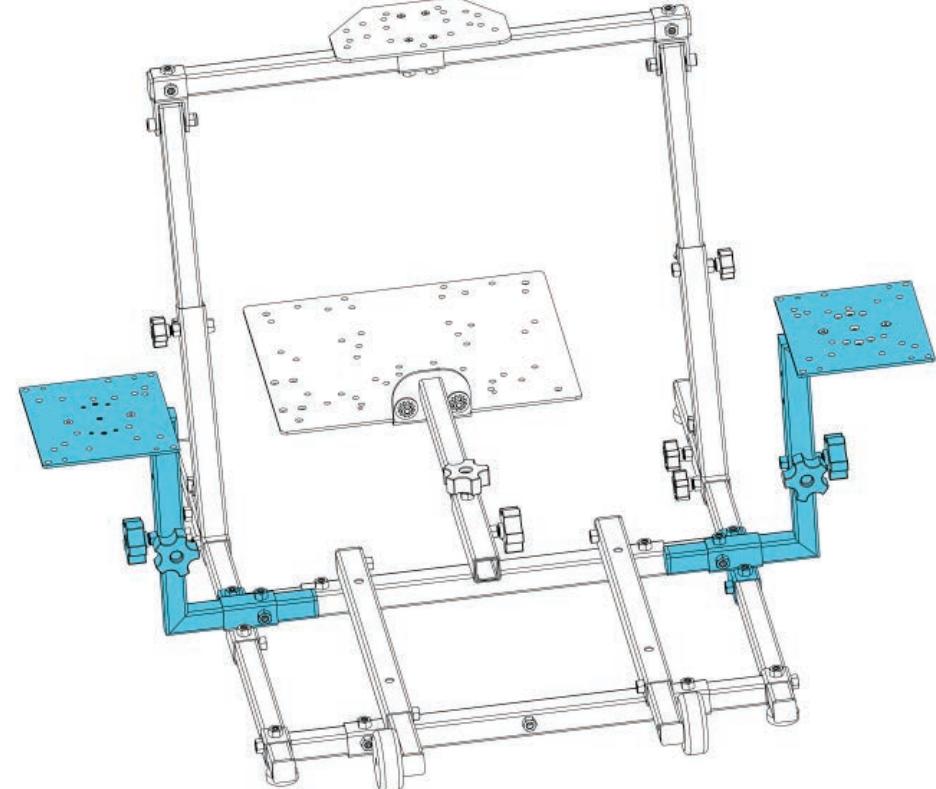
For certain models shifters and handbrakes, install adapter plate on upper L bracket.



Flight sim add-on modular options. Refer to appropriate add-on kits for detailed assemblies.

Side by side HOTAS style flight sim controls add-on installation (configuration #1 or #2 and #4).

Add 4 way coupling on each side support tubes. Coupling can be installed behind front T-extensions or in front. Follow add-on kit assembly manual for detailed installation steps.



General and commercial aviation add-on to DD framework (configurations #5 or #8).

Disconnect race wheel cross bar at vertical columns and upright posts.

Install throttle quadrant plate and vertical column to right side upright post.

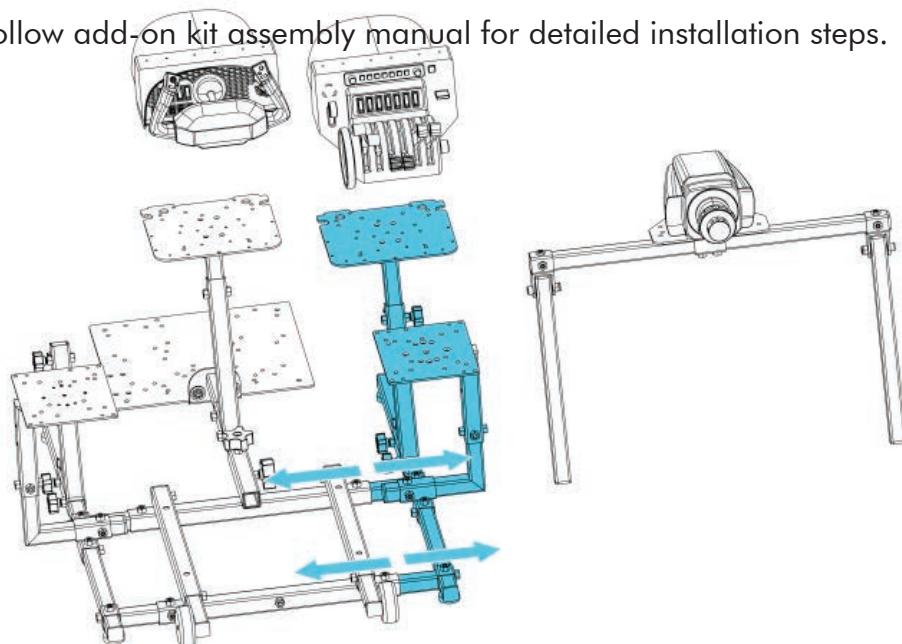
Adjust right side frame assembly sideways at the right side T-extensions.

Remove throttle quadrant assembly at vertical column to right side upright post when not used and re-assemble cross bar assembly with race wheel.

Assemble rudder plate to yoke upright post and connect it to seat frame center tube when in use. Exchange it with race pedal plate assembly when swapping setups at seat frame center tube disconnect point, held by pair of quick release knobs.

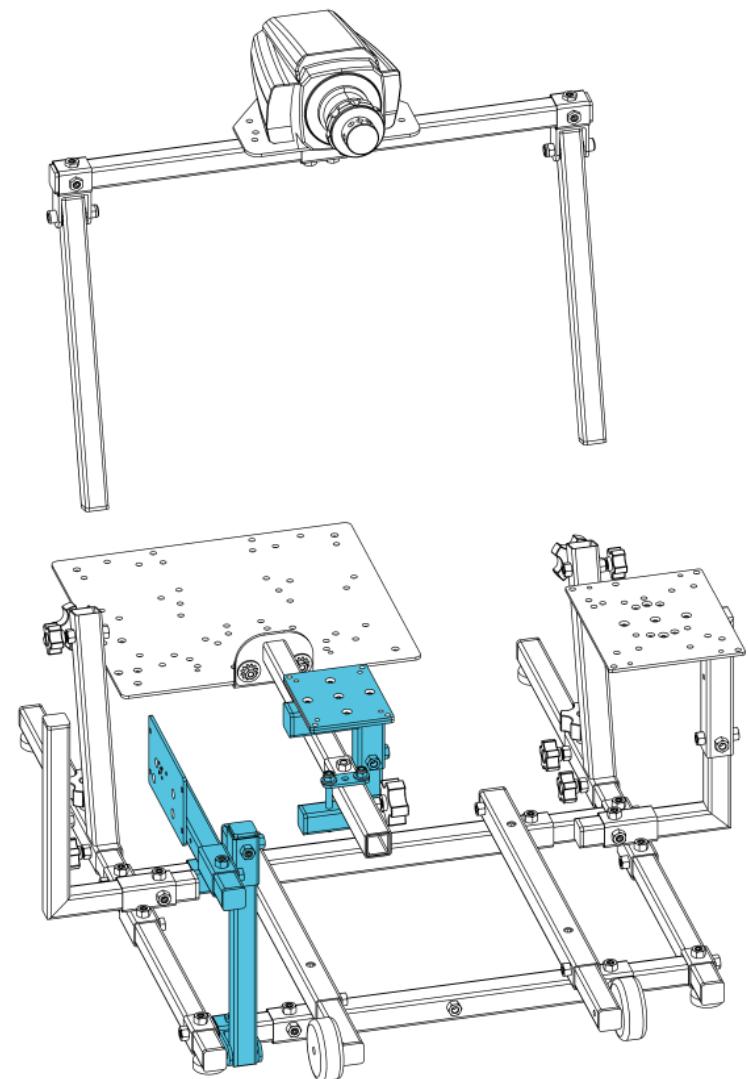
Side control upper L brackets can be flipped pointing towards seat and forming C shape with lower L brackets if necessary.

Follow add-on kit assembly manual for detailed installation steps.

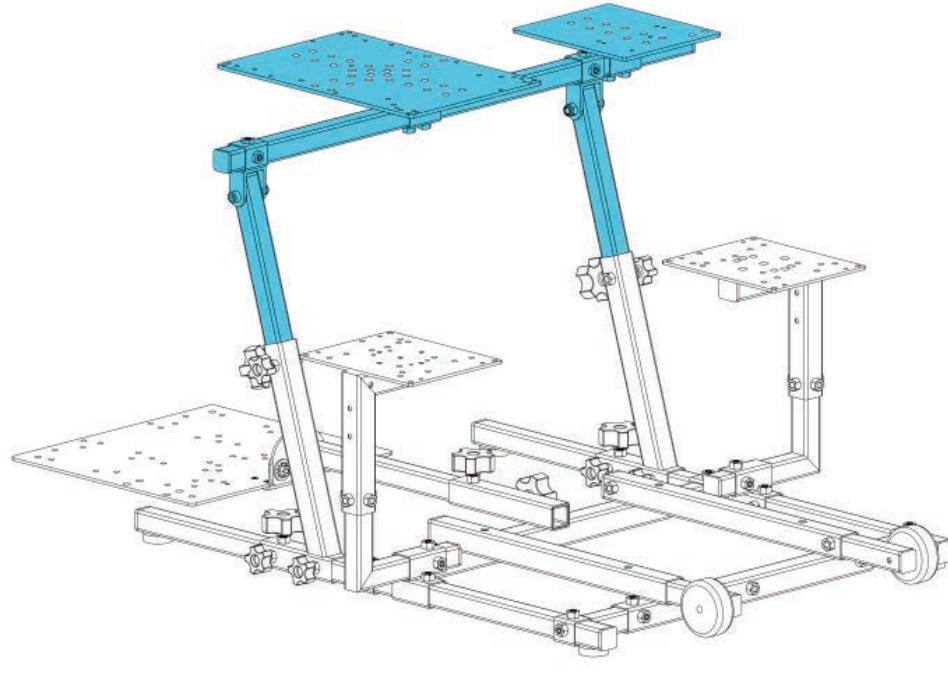


Helicopter sim setup add-on to DD framework (Configurations #4, #6 and #11)

Add collective bracket to left side support frame. Depending on length of collective, vertical pivoting bracket can be installed in front of rear t-extension tube or behind it. Follow assembly instructions in each kit specific manual. Hot swap between sim racing pedals and flight sim rudder pedals by loosening pair of knobs



Upgraded kit with cross bar add-on for heavier control loaded (force feedback) yokes, paired with thicker HD base plates. Option to mount throttle quadrant on the same plane as the yoke, Cessna Vernier style throttle quadrant. Refer to online store for controls compatibility list.



Specifications:

Recliner: max: 170 degrees

Construction: tubular steel frame with elastic strap supports

Seat Materials: high-density cold cure foam filling; Fabric, Steel chassis

Instructions during use and care:

Move simulator around with caution to avoid collision.

Keep out of direct sunlight and outdoor use.

Watch fingers when adjusting recliner.

Placing heavy or sharp objects on the seat may damage the surface material.

Do not use abrasive or chemically aggressive materials on the seat.

Use dry cloth or soft brush to clean the chair.

Dimensions:



Warranty Information

Return Policy

Terms And Conditions

<http://homeracer.com/ow-termsandconditions.html>

