

# GTM

motion simulator



**GTR**  
SIMULATOR

## Please read all instructions prior to assembly.

If any of the parts below are missing and you cannot complete the assembly of your GTM Motion Simulator, please contact [info@gtrsim.com](mailto:info@gtrsim.com).

Congratulations on your purchase and thank you for choosing GTR Simulator.

You will need to Download the Latest Software at [www.gtrsimulator.com](http://www.gtrsimulator.com).

Please see [www.gtrsimulator.com](http://www.gtrsimulator.com) for official GTR racing liveries to affix to your vehicle and we look forward to seeing you on the track!



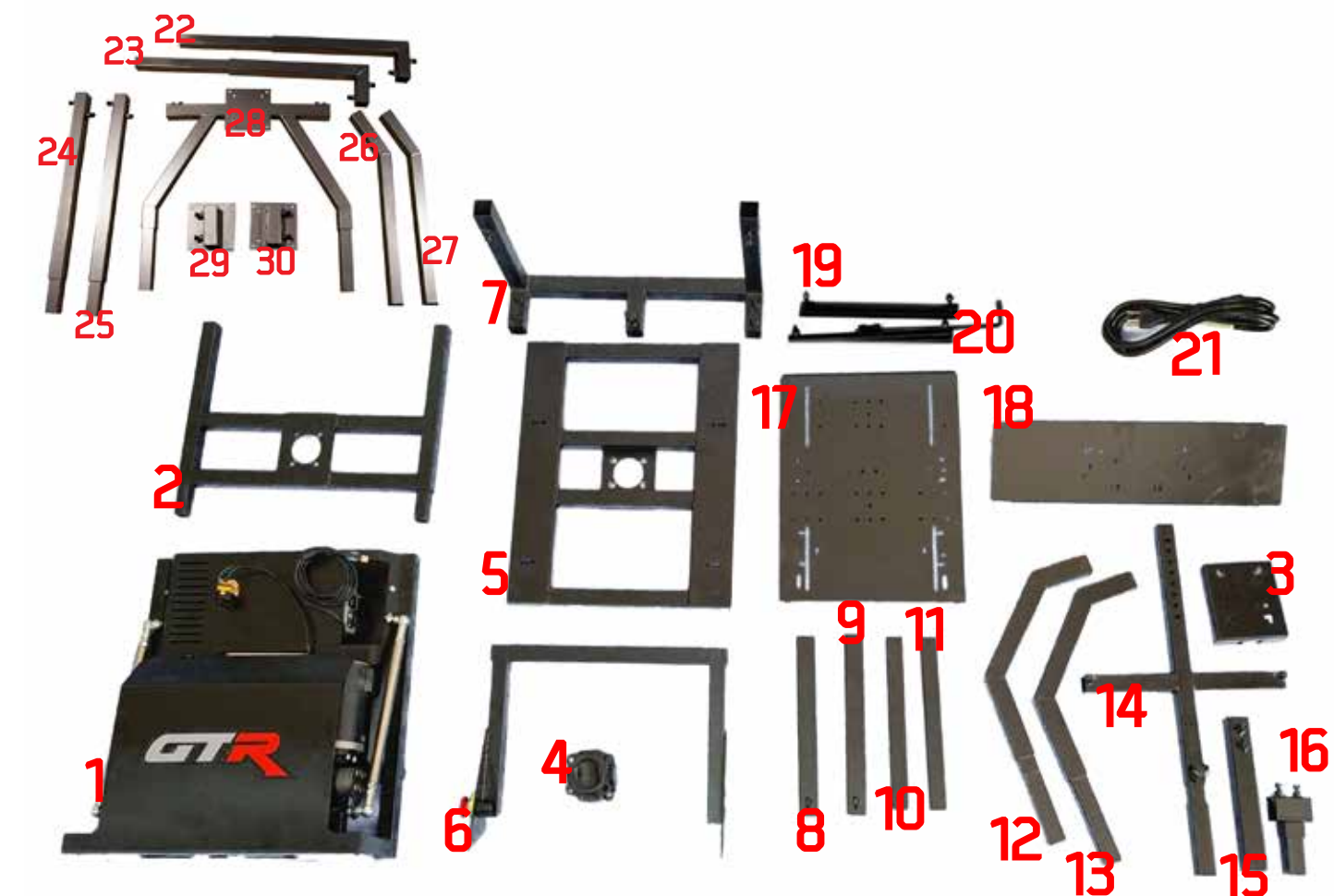
NOTES:

For Complete Instructions please visit [www.gtrsimulator.com](http://www.gtrsimulator.com)

GTR Simulator has included everything necessary to assemble your brand new GTM Motion Simulator and has also included some tools to help you along the way; however, you may need a second wrench or a ratcheting socket (we need to include what sized socket here) to hold the bolts still while tightening nuts.

The GTM Motion Simulator is adjustable to accommodate your physical stature. It is important to note that certain steps will be affected by future steps or may later have to be repeated by loosening and re-tightening bolts in order to properly set the dimensions. It is recommended to hand tighten certain components as to prevent unnecessary thread wear, head stripping, or washer crushing.

[gtrsimulator.com](http://gtrsimulator.com)



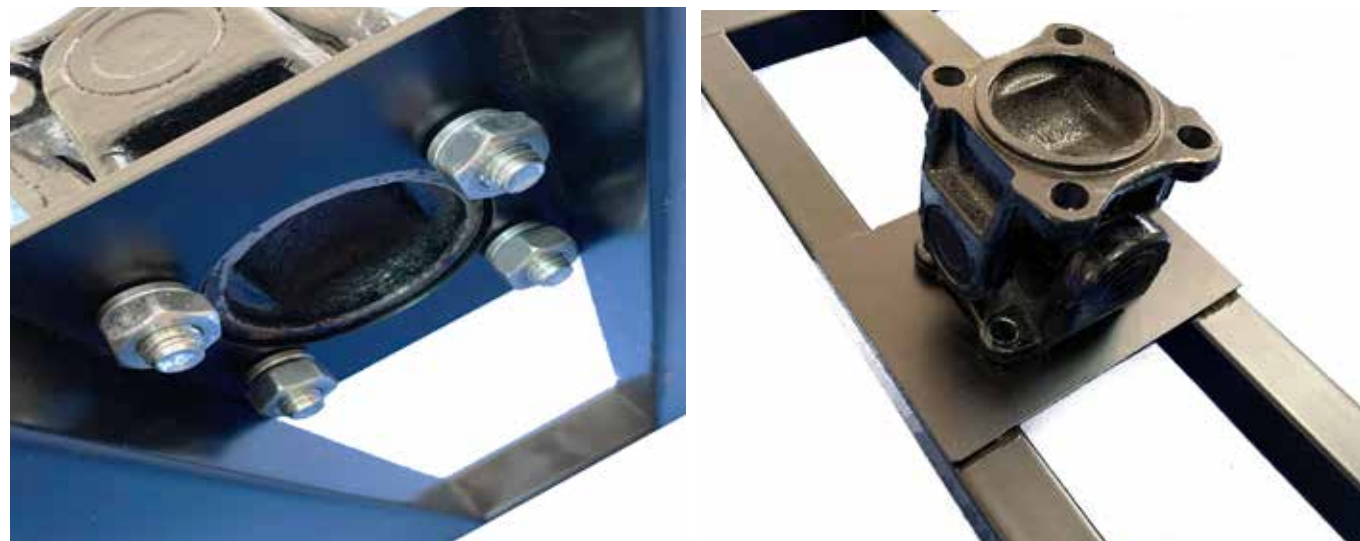
## Parts Included:

- |                                |   |
|--------------------------------|---|
| 1. GTM Motion Unit             | 16. Shift-Mount Bracket                 |
| 2. Lower Seat Frame Assembly   | 17. Pedal Mounting Plate                |
| 3. Shift-Mount Plate           | 18. Control Deck                        |
| 4. U-Joint Coupler             | 19. Under-Seat Mounting Rail            |
| 5. Upper Seat Frame Assembly   | 20. Adjustable Under-Seat Mounting Rail |
| 6. Rear Seat Frame Assembly    | 21. Power Cable                         |
| 7. Control Deck Frame Assembly | 22. Lateral Frame Support               |
| 8. Lateral Frame Assembly      | 23. Lateral Frame Support               |
| 9. Lateral Frame Assembly      | 24. Forward Frame Support               |
| 10. Lateral Frame Unifier      | 25. Forward Frame Unifier               |
| 11. Lateral Frame Unifier      | 26. Lateral Monitor Support             |
| 12. Control Deck Support Arm   | 27. Lateral Monitor Support             |
| 13. Control Deck Support Arm   | 28. Central Monitor Mounting Frame      |
| 14. Center Cross-Beam          | 29. Lateral Monitor Support Bracket     |
| 15. Shift-Mount Arm            | 30. Lateral Monitor Support Bracket     |

## STEP 1



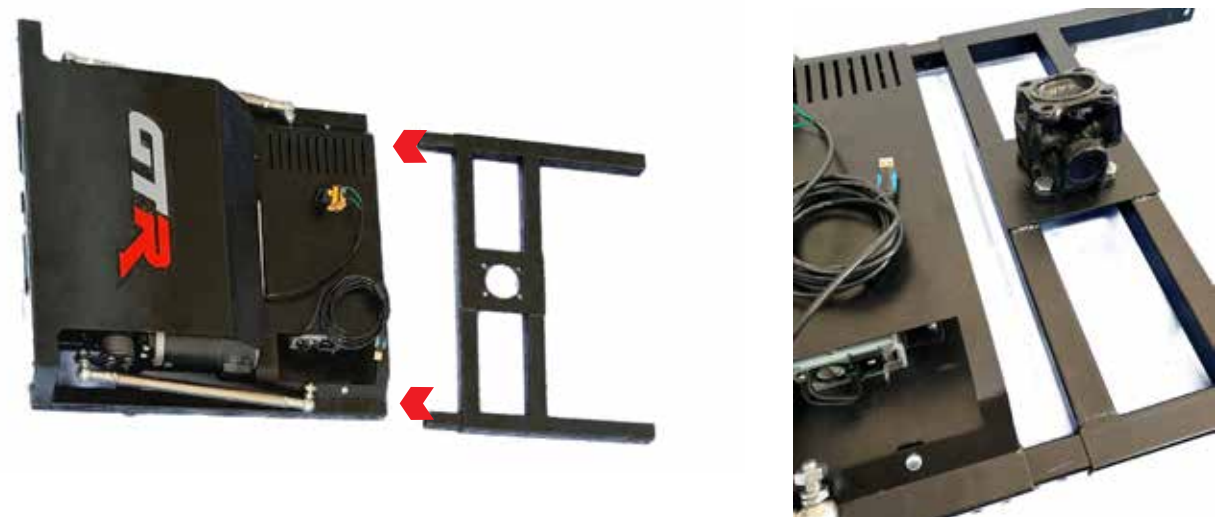
Bolt U-Joint coupler (part 4) to the flush side of the Lower Seat Frame Assembly (part 2) with included hardware. Once the bolts are through, slip a locking washer and nut over each one, then hand tighten the nuts onto the washers. Use a wrench to secure the bolt head and use a second wrench or ratcheting socket to incrementally tighten the nuts. Do this little by little in a cross pattern from one bolt diagonally to the next, repeating until the bolts are securely tightened in place without misaligning the frame assembly.



## STEP 2



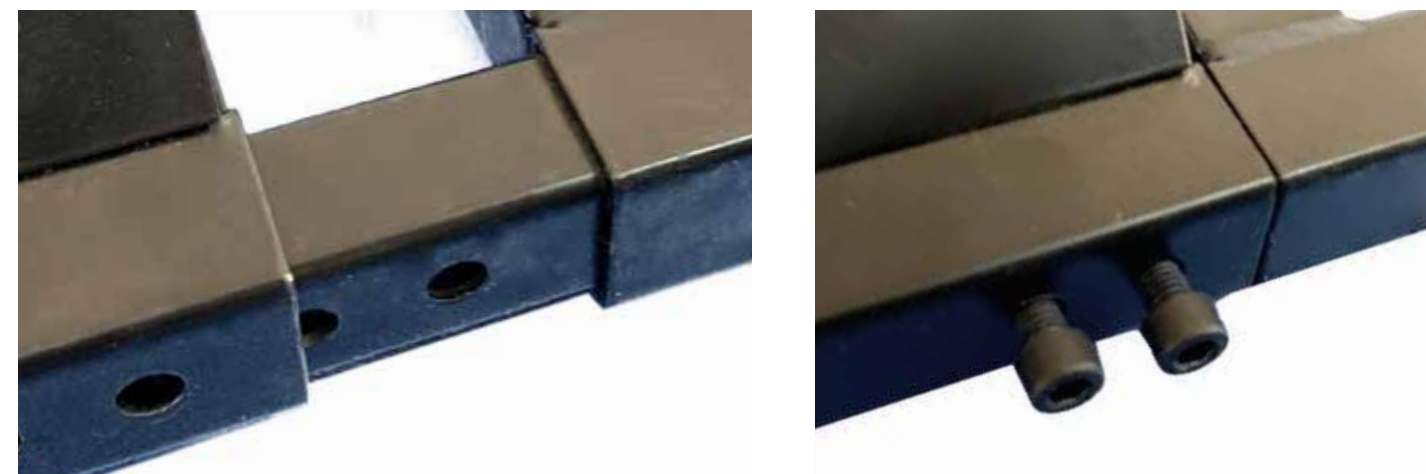
Slide the short end of the frame assembly (part 2) with now bolted U-Joint Coupler into the square tubing of the GTM motion unit (part 1).



## STEP 3



Ensure that both holes are aligned correctly with both components on both sides of the Lower Seat Frame Assembly (part 2) and the GTM Motion Unit (Part 1). Insert bolts into the aligned holes of the mated Seat Frame Assembly and GTM Motion Unit (parts 2 and 1), cap bolts with lock washers and nuts, then gently hand tighten until each is in place. Once properly inserted and aligned, secure the nuts with a wrench and tighten the bolts with the included Allen wrench. Carefully secure the hardware without over-tightening the bolts. Over-tightening can strip the threading of the hardware.



## STEP 4



Lay the Upper Seat Frame Assembly (part 5) with the center mount flush on the floor, align its two rear holes with the brackets of the Rear Seat Frame Assembly (part 6) and secure with the included bolts. Slip a locking washer over each bolt and hand tighten a nut onto each of the washers, creating an "L" shape with the two frame components. Steady each nut with a wrench and tighten the bolts securely with the included Allen wrench once alignment has been checked to be correct.



## STEP 5



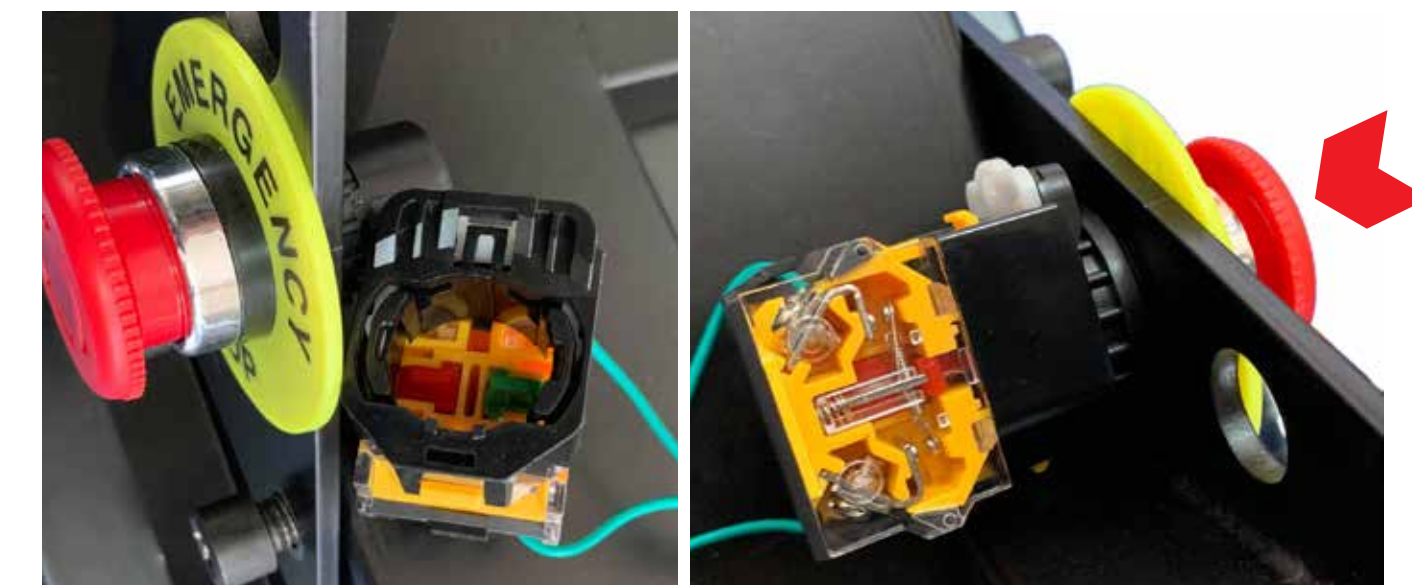
Center the Upper Seat Frame Assembly (part 5) over the upright U-Joint Coupler (part 4) of the Lower Seat Frame Assembly (part 2) with the emergency stop button toward the GTM Motion Unit, and the 5 open holes to the front. Gently lower the seat frame so that the inner lip of the U-Joint Coupler (part 4) can be inserted through the center opening. With the Upper Seat Frame Assembly (part 5) in place, align the holes of the two components and slide bolts up through the bottom one at a time. Once each bolt is through, top each one with a locking washer and then hand tighten it down a bit with the one of the included nuts. Carefully hand tighten down the nuts to align the components, then once aligned, use a wrench to secure each bolt head on the bottom and then use a second wrench or ratcheting socket to incrementally tighten the nuts up top. Do this little by little in a cross pattern from one bolt diagonally to the next, repeating until the bolts are securely tightened in place without misaligning the frame assembly.



## STEP 6



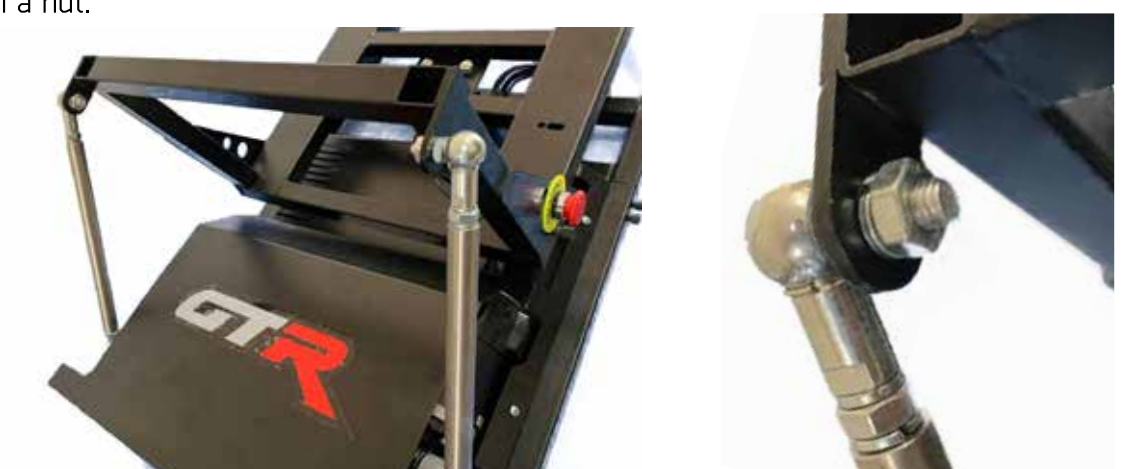
Locate the lead and emergency electronic switch wired to the GTM Motion Unit (part 1) and position it near the Emergency Stop Plunger located on the Rear Seat Frame Assembly (part 6). Align the electronic switch housing over the Emergency Stop Plunger and gently insert the switch until it clicks in place. Once in place, the leads within the emergency switch housing can be seen in the disengaged position. Press the emergency plunger and notice that the leads are now touching the contact plates. Ensure that the emergency switch has been properly installed and working before piloting the simulator. To disengage the emergency stop: twist the red plunger in the direction of its arrows and see that the upper leads have disengaged from the contacts.



## STEP 7



Gently rotate the steel actuator rods on the GTM Motion Unit (part 1) towards the rear tabs of the Rear Seat Frame Assembly (part 6). Inert each the threaded bolts through the rear tabs on each side of the Rear Seat Frame Assembly (part 6), slip a locking washer over each bolt then secure each with a nut.





## STEP 8



The following steps may be slightly different if your seat has been shipped pre-assembled.

Flip seat bottom over, spring side up, and seat front towards the top. Lay the sliding Under-Seat Mounting Rail (part 19) beside the springs to the left, with the Adjustable Under-Seat Mounting Rail (part 20) to the right (left-hand side when properly oriented). Slide the inner rails towards the top/-front of the seat revealing the mounting holes. Align the exposed holes with the mounting holes of the seat bottom and secure with the included hardware. You may want to hand tighten the screws until all mounting screws are properly aligned and inserted in the following steps.

Once the screws are secure, slide the inner rails down and repeat the previous steps with the currently exposed mounting holes. Once all screws are inserted and aligned properly, securely tighten them into place. Lay the seat bottom upright on its side and align it with the seat back in the same sideways upright position. Overlay the corresponding adjustable L-bracket (adjustable bracket with operable lever on the right side) and use it to align the mounting holes of the seat, back, and mounting hardware. You may want to install one screw to pin the hardware in place and then orient the chair components. You may also want to hand tighten the M8 bolts until they are installed into both sides of both brackets. Flip the seat over and repeat the previous steps.

Once everything has been properly aligned, tighten down the hardware to secure everything in place. Confirm that the chair is in proper working order then cover the exposed side brackets with the molded panel covers and screw them down in place. Lower the assembled Racing Seat onto the Upper Seat Frame Assembly (part 5) and align the mounting holes of the seat with the frame. Drop two bolts down through the exposed mounting holes and then hand tighten a set of locking washers and nuts from the underside. The Racing Seat should now be secure enough to activate the Adjustable Under-Seat Mounting Rail (part 20) to slide the seat enough to expose the other set of mounting holes. Repeat the previous steps to bolt the Racing seat to this set of mounting holes. Check that alignment of the seat is correct and then securely tighten all 4 sets of mounting hardware with the two wrenches.



## STEP 14



To complete the Monitor Support Frame Assembly, Slip the Forward Frame Assembly (parts 24 and 25) into the Lateral Frame Supports (parts 22 and 23) and secure it in place with the included hardware.



## STEP 9



Slide parts 8 and 9 over the square tubing extending from the GTM Motion unit (part 2) with the threaded mounts toward the front. Align the mounting holes and secure with 4x nuts and bolts.

Slip (part 7) over (parts 10 and 11) with the center knob facing the GTM Motion Unit.

This segment of the frame is adjustable, and you may not want to lock it down until the rest of the simulator is assembled and you can slide it into a position of your liking.



## STEP 10



Slip (part 7) over (parts 10 and 11) with the center knob facing the GTM Motion Unit.

This segment of the frame is adjustable, and you may not want to lock it down until the rest of the simulator is assembled and you can slide it into a position of your liking.

Slide the pre-drilled segment of the cross-beam (part 14) into the center opening of the control-deck frame (part 7).

This cross-beam will support your footrest with pedal mounting points. You may want to postpone tightening this part into position until you have the rest of the simulator assembled and your pedals mounted.



## STEP 15



Depending on the size of your monitor(s), it may be preferable to mount them to the individual components of the Monitor Support Frame Assembly prior to completing assembly. If your primary display is currently supported by its own stand, unplug all cables, turn it around so that the rear VESA mount of the monitor is facing you, and raise the flush side of the Central Mounting Frame (part 28) facing the rear of the monitor to align the mounts.

You may need to bring the monitor toward the edge of a desktop or other work surface if it is safe to do so. If it is not possible to safely secure the monitor in the vertical position, you may need to lay the monitor display side down onto a clean surface that will not scratch or damage your display.

Please follow the monitor's user guidelines to properly remove any stands and abide by the user manual's VESA mounting instructions. Due to the many variables implemented by monitor manufacturers, monitor mounting hardware is not included with the GTM Motion Simulator. If the manufacturer of your monitor(s) did not include mounting hardware, you may have to purchase hardware separately.

All three monitor mounts of the Monitor Support Frame Assembly utilize brackets that have been pre-drilled for 75x75mm and 100x100mm VESA mounts. Should the holes of the mounting brackets not align, you may have to purchase a VESA mount adapter that fits either of the outlined specifications.

If you are utilizing multiple monitors, please follow the previous instructions for mounting monitors to the Lateral Monitor Support Brackets (parts 29 and 30). It is recommended to utilize these brackets with the hardware in the upright position in relation to the orientation of the monitor(s).



## STEP 11



Align the brackets under the footrest (part 17) with the mounting points of the center cross-beam (part 14) and complete the hinge joint with the included hardware.

Slip the shift-mount bracket (part 16) over either the left or right upward arm of the center bracket (part 7) depending on your preference to simulate either left-side or right-side drive.



## STEP 12



Once the shift-mount is loosely in place with the flush side facing the monitor side of the simulator and the protruding bracket facing the GTM Motion Unit, slip the center control deck arms (parts 12 and 13) through the open frame tubing of the center bracket (part 7) while taking care to carefully slip the arm of the shifter side through the shift-mount bracket (part 16) into the lower frame mount (part 7).

Once the control deck arms (parts 12 and 13) are secured into place, the shift-mount bracket can be raised or lowered into a position of your choosing. (You may want to tighten the mounting screws to the shifter-mount bracket once the simulator is fully assembled and have your shifter mounted in place.)

Slip the shift-mount arm (part 15) welded side first over the shift-mount bracket (part 16) and secure it in place with the included hardware.



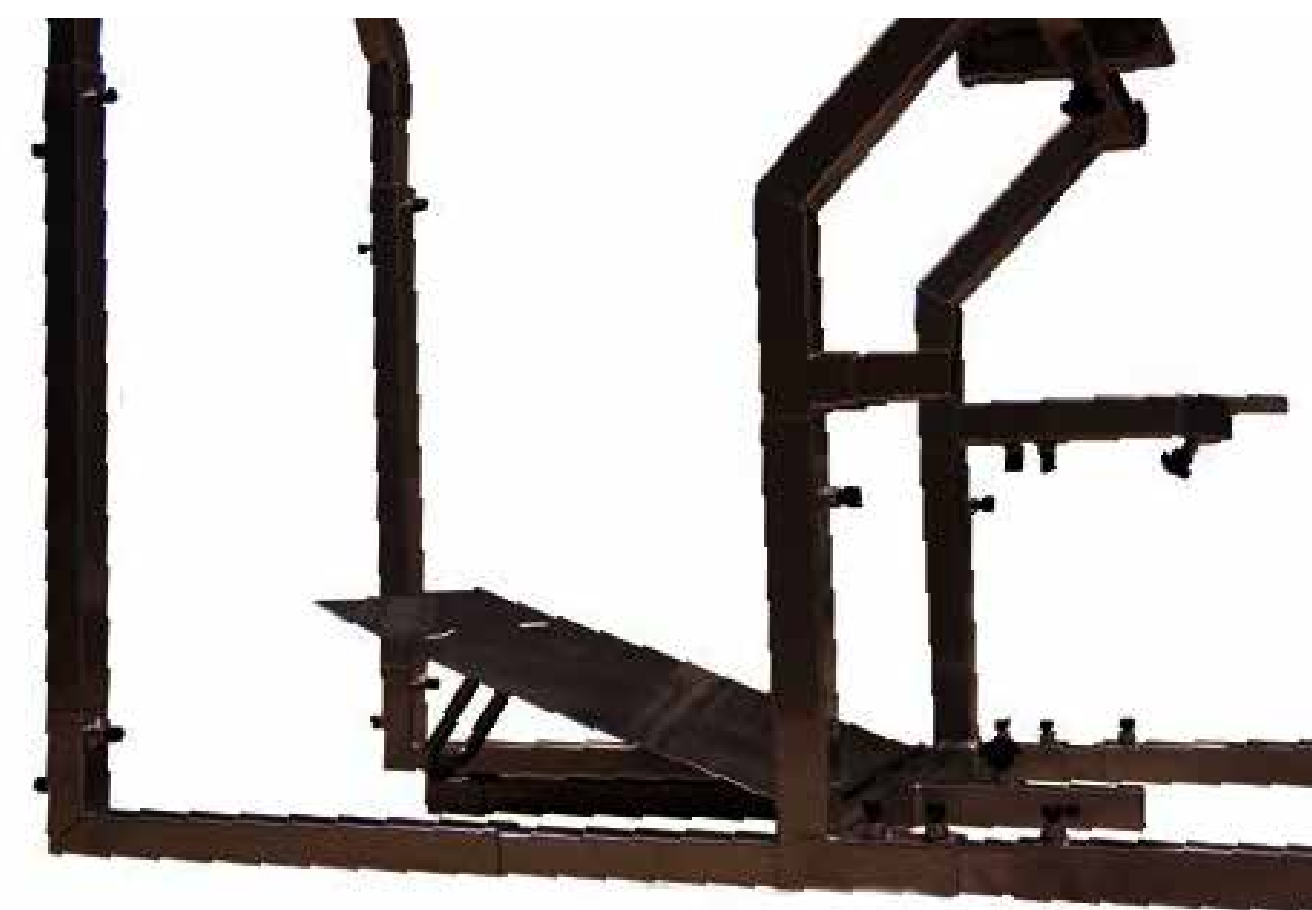
## STEP 16



Insert the Central Monitor Mounting Frame (Part 28) into the Forward Frame Assembly (parts 24 and 25) with the flush mount facing the GTM Motion Unit (part 1) and secure it in place with the included hardware.

From this point you can either use a single monitor or install the Lateral Monitor Supports (Parts 26 and 27) by inserting the short side of each component into the side extensions of the Central Monitor Mounting Frame (Part 28) for support up to three 36" flat panel displays.

The Lateral Monitor Supports (Parts 26 and 27) need to be angled toward the GTM Motion Unit (part 1) to properly orient the monitors. Once bolted in place, slip the Lateral Monitor Support Brackets (Parts 29 and 30) over the Lateral Monitor Supports (Parts 26 and 27). Align the monitors and tighten down all bolts with the supplied Allen wrench.



## STEP 13



Bolt the shift-mount plate (part 13) to the shift-mount arm (part 15). Place the control-deck mount (part 18) over the center frame arms (Parts 12 and 13) with the tabs facing the GTM Motion Unit and the mounting holes toward the front, monitor side of the simulator and secure it in place with the included hardware.

At this point the Simulator is complete to the point where all Human Interface Devices (HIDs) can be mounted. Carefully mount your Steering wheel, shifter, and pedals to the GTM Motion Simulator and adjust the seat position and all mounts to your liking. You may also slide the control deck forward if needed. Be sure to have someone help you so that you do not fall out of the chair, or temporarily mount the seat to a set of mounting points of the GTM Motion Unit frame (part 5), take note of your comfort and remount the seat if needed.



## STEP 17



Double check that everything is properly secure, plug in the power and interface cables of your monitor(s), connect your Windows PC to the monitors, all controls, and the GTM Motion Unit (part 1) USB cable.

Plug the female terminal of the power cable (part 21) into the GTM Motion Unit (part 1) then plug the male end into an AC power outlet.

From this point follow the instructions of the GTM software installation manual that you can find at [www.gtrsimulator.com/gtm-support/](http://www.gtrsimulator.com/gtm-support/).

Enter your serial number to access the document.

