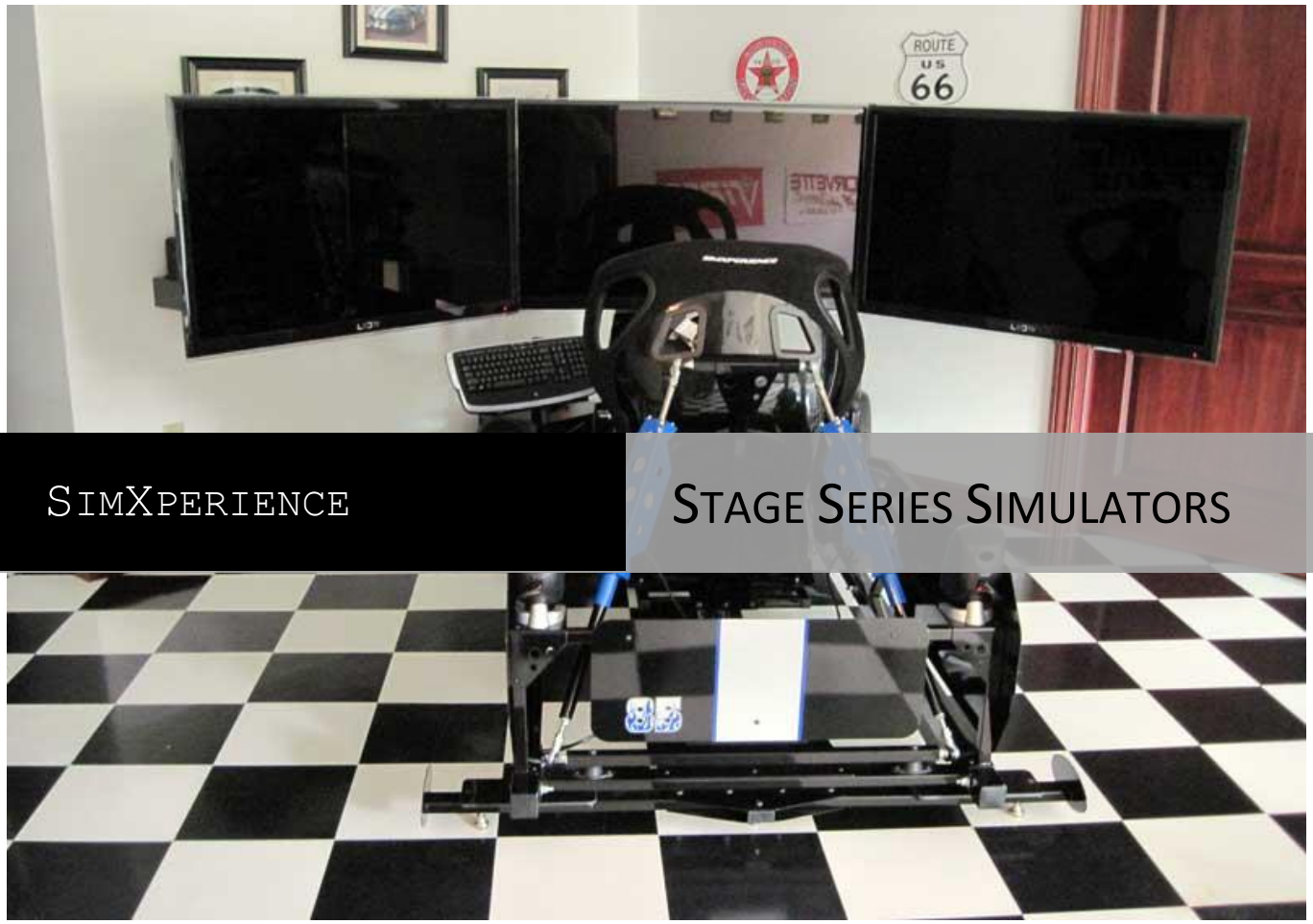


SIMXPERIENCE

STAGE SERIES SIMULATORS

Congratulations on the purchase of your SimXperience Stage Series Simulator.

Your Stage Series Simulator was designed to provide you with years of trouble free operation when properly assembled. Average build times for Stage Series simulators are as follows:

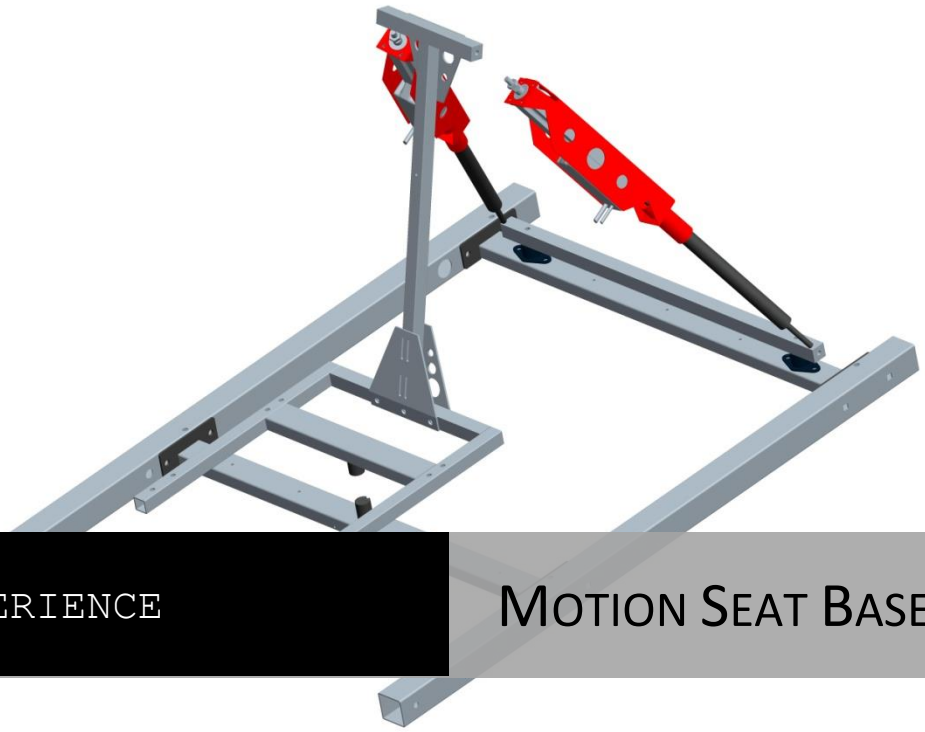
Stage	Build Time
Stage I	4 Hours
Stage II	8 Hours
Stage III	16 Hours
Stage IV	24 Hours

Please take your time and enjoy the process of assembling your simulator.

Tools Required

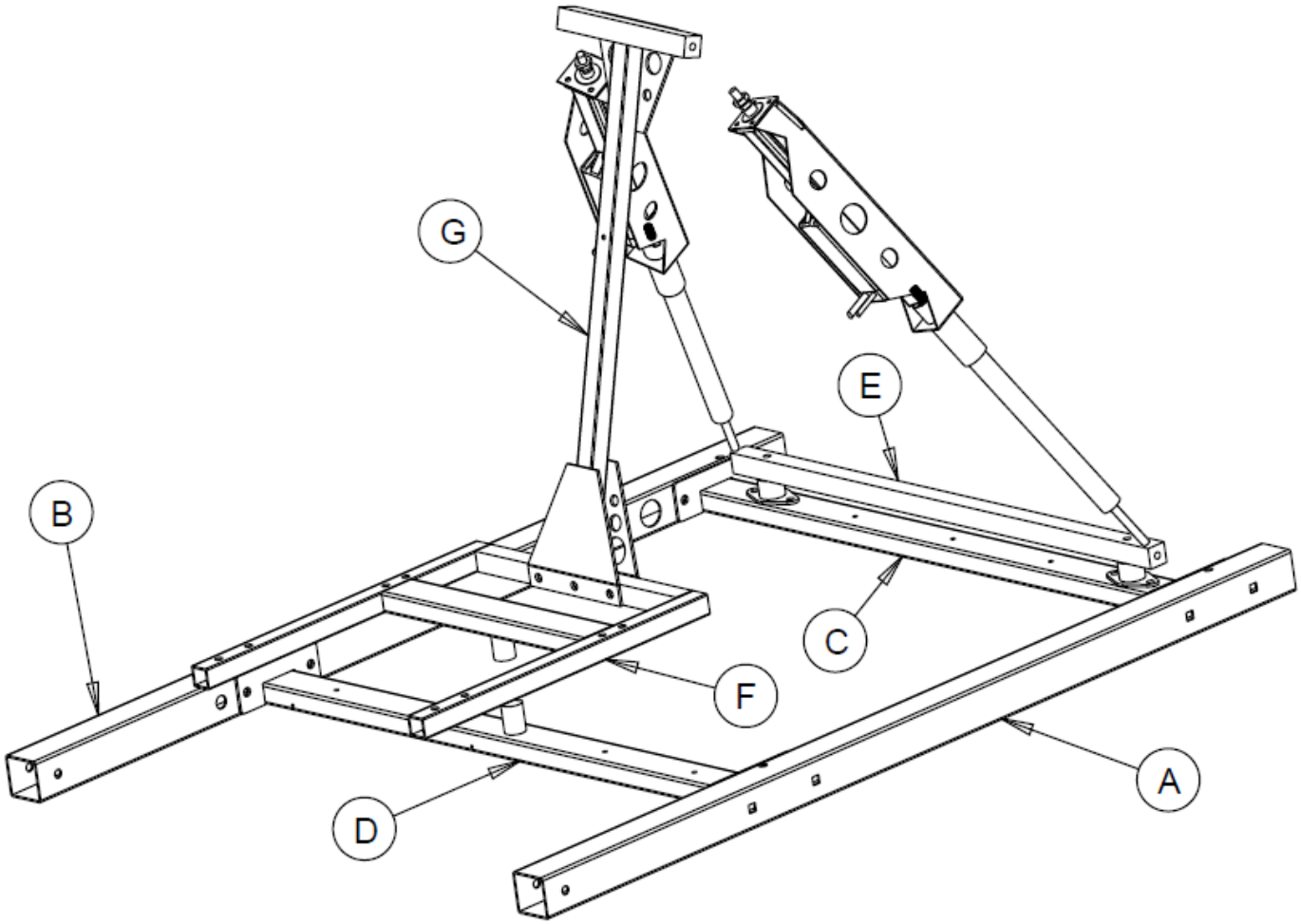
- Rubber mallet or hammer
- Tape measure
- Torpedo level
- Standard wrench set
- Metric wrench set
- Standard Allen wrench set that has 64th inch sizes
- Metric Allen wrench set
- Utility knife
- Crescent wrench
- ¼" ratchet set
- 3/8 ratchet set

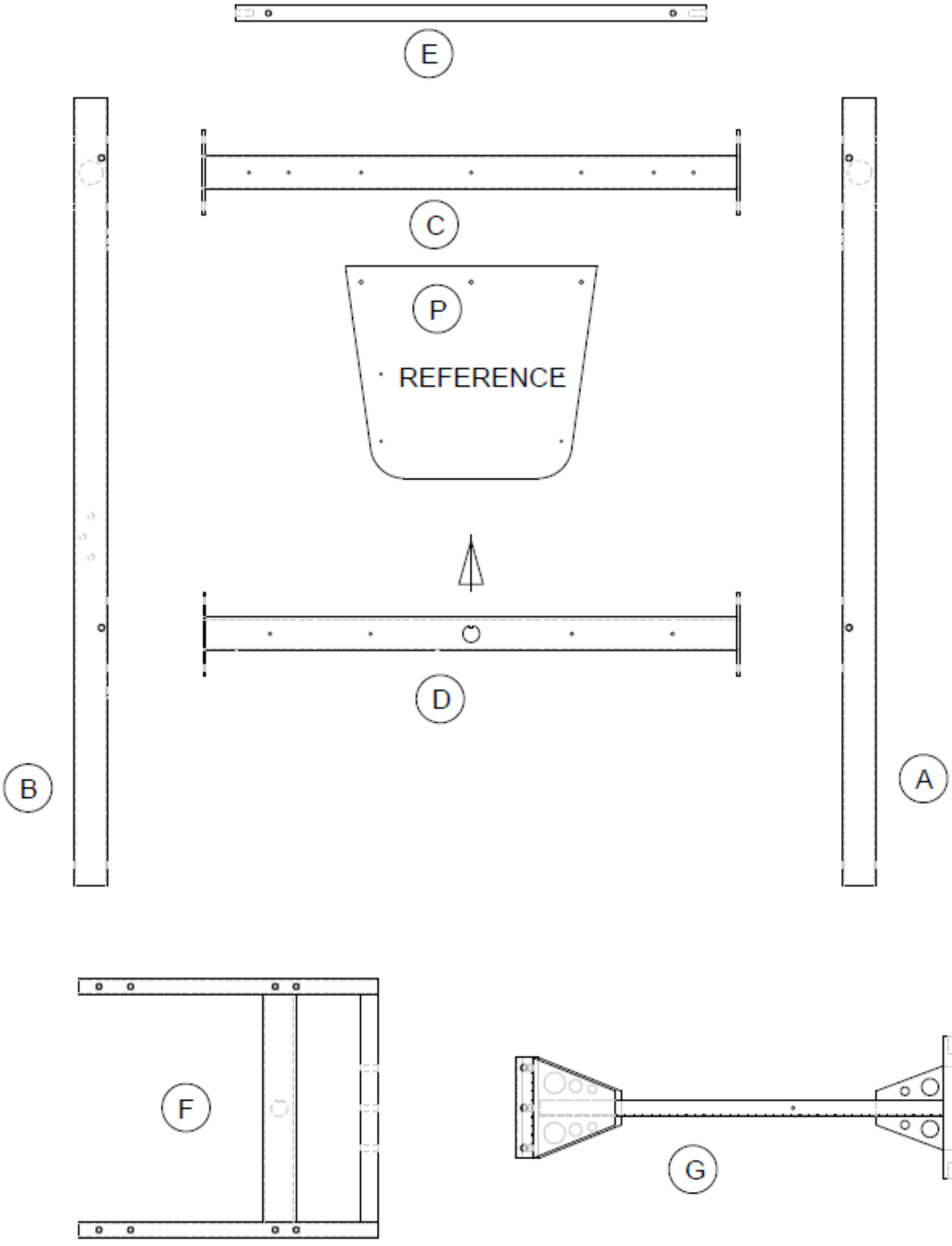
If you have questions about the assembly of your Stage Series Simulator, please email CustomerSupport@SimXperience.com or visit our support forums online at www.SimXperience.com.



SIMXPERIENCE

MOTION SEAT BASE





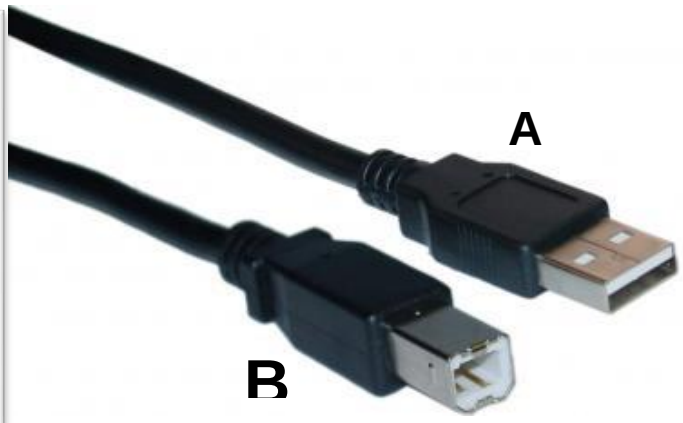
Seat Base Hardware List

1. 2 - 2” X 2” BLACK PLUGS (Inserts to Part A and B)
2. 2 - 2” X 2” BLACK PLUGS WITH HOLE (Inserts to Part A and B)
3. 2 - VIBRATION DAMPENERS (Installs to Part C)
4. 5 - 7/8 PLASTIC GROMMET (Inserts to Part A and B)
5. 4 - 1” X 1” BLACK PLUGS (Used on Part F)
6. 1 - 3/8 ID GROMMET (Used on Part B)
7. 1 - RUBBER BUMPER (Installed to Part G with 8-32x1/2 button head)
8. 2 - 1/4 X 1/4 OVERSIZED KEYSTOCK (Used w/ U-Joint)
9. 1 - U-JOINT
10. 1 - 8-32 X ½ BUTTON CAP BOLTS (Used on Part G)
11. 4 - ¼ - 20 X 1” BUTTON HEAD BOLTS (Used to install Vibration Dampeners to Part C)
12. 10 - ¼ - 20 US F/WS
13. 2 - 5/16 - 18 X 1.5” HEX HEAD BOLTS (Used to install Vibration Dampeners to Part C)
14. 4 - 5/16 - 18 X 1.5” CARRIAGE BOLTS (Used on Part F)
15. 4 - 5/16 - 18 NYLOCK NUTS (Used on Part F)
16. 11 - 5/16 - US F/W
17. 3 - 3/8 - 16 X 2” BUTTON HEAD BOLTS (Used to install Part G to Part F)
18. 8 - 3/8 - 16 X 3” CARRIAGE BOLTS (Used to install Part D and C to Parts A and B)
19. 11 - 3/8 - 16 NYLON LOCKNUTS (Used with 3” Carriage Bolts and 3/8-16x2” button heads)
20. 2 - 3/8 - 16 X .375 SET SCREW (Used w/ U-Joint)
21. 1 - LOCTITE 242

1. Locate your Left and Right seat base rails.

2. Install the SimXperience decals between the square holes for the carriage bolts. (Decals no longer used)

3. If you plan on installing Sim vibe brackets, place decals in front of the carriage bolts on seat base. Portion of the sticker will be on the front end base. (Decals no longer used)



USB Cable Routing
1) Locate the Power and USB cords included in the SX-4000 box. 2) Take the male power cord end and the USB type A end and pull them through the 1.25 inch hole in the motion seat base rail (Side B preferred but can use either side) to the front of the seat base. Leave approximately 2 feet of the USB and power cable out of the 1.25 inch hole to connect to the SX-4000. Make sure 2-3 feet of wiring left to install for speaker and butt kicker if being used.

If you are building a complete Stage Series simulator or a stage four, now is the time to run your speaker and transducer wires.

	Speaker and Bass Transducer Wire Installation
	• Pull both rear speaker wires and rear transducer wires through the 1.25” holes of the right base. • Leave approximately 2 feet hanging out of speaker wire to attach your speakers after installing the side rails and panels.

	Bass Transducer (Butt Kicker) Installation / Preparation
	• Pull your speaker wire through the hole leaving approximately 3’ hanging out to hook up to the transducer. Coil up your wires on both ends to keep them from getting in the way or damaged during the remaining installation.

Frame Assembly

3) Locate the two cross members (parts C & D)

4) Lay them out between the two Motion seat base rails (parts A & B)

5) Make sure the keyway on the 1 inch shaft on part D is facing forward. See picture below.

Frame Assembly (Continued)

6) Bolt Parts A, B, C & D together using (Eight 3/8 - 16 X 3” CARRIAGE BOLTS, Eight 3/8 US Flat washers, and Eight 3/8 Nylon Lock Nuts)

7) Snug the bolts up evenly in a crisscross pattern

Take your time and snug each bolt a little at a time in a crisscross pattern while continuously checking to assure the base frame lays flat and does not rock when pushing down on each corner) Perform this step on a flat surface.

Wiring & Plastic Grommets for Frame

8) Locate four 2 inch x 2 inch plastic plugs (One will have 1.25” hole drilled in it for a 7/8” plastic grommet)

9) Locate three 7/8” plastic grommets

10) Cut two of the grommets with a utility knife as shown in *figure 3*

(Be sure to cut away from yourself or lay on a flat surface and cut by pressing downward)

Figure 3

Figure 4

Wiring & Plastic Grommets for Frame (Continued)

11) Slide one of the cut grommets over the USB and Power cords

12) Press the grommet into the 1.25 inch hole on the inside edge of part A of the motion seat base rail

13) Press the other uncut grommets into the motion seat base rail B (locations are indicated by the black arrows shown in *figure 2* above)

14) With a rubber mallet tap the 2 inch x 2 inch plastic plugs without the 1.25” hole in it into the ends of the Motion seat base rails A & B (Back side of the seat base only)

If building a complete simulator, skip this section until you are assembling the Front End Module.

15) Take the 2 inch x 2 inch plastic plug with the 1.25 inch hole drilled in it and slide the USB and power cord (speaker) wires through it

16) Use a rubber mallet tap the plug into motion seat or front-end base rail A

17) Using the other 7/8” grommet that you cut with a utility knife, slide it over the USB and Power cord (speaker) wires and press into the 2 inch x 2 inch plastic plug

18) Now tap the other 2” x 2” plastic plug into the motion seat or front-end base rail Part B.

If you have the Rear Traction Loss Module Please Perform These Steps Now

19) Locate Part P from the Rear Traction Loss box

20) Locate Three ¼ - 20 x ½ BUTTON HEAD BOLTS

21) Bolt part P to the rear cross member (part C) using the Three ¼ inch bolts *(shown in figure 2)*

Rear Dampening Bar Installation

22) Locate the Rear Dampening bar

23) Locate Two Vibration Mounts

24) Locate Two 5/16 - 18 X 1.5" HEX HEAD BOLTS

25) Locate Two 5/16 - SAE Flat Washers

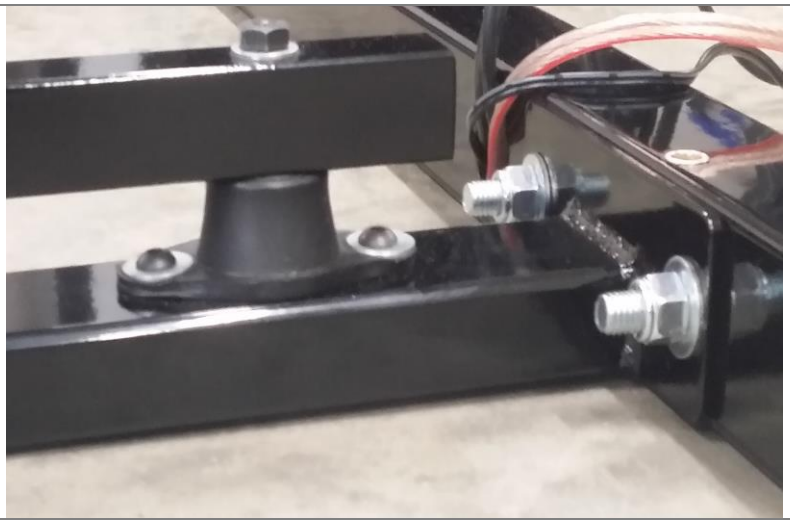
26) Locate Four ¼ - 20 X 1" BUTTON HEAD BOLTS and Four ¼ x 20 US Flat Washers

27) Locate the small tube of Loctite

28) Bolt the two rubber vibration mounts to the cross member (Part C) using four ¼ - 20 X 1" BUTTON HEAD BOLTS AND ¼ - 20 Flat Washers

Be sure to apply a Drop of Loctite to each bolt.
NOTE, DO NOT USE Loctite where you will screw into a brass insert.

29) Set the dampening bar on top of the vibration mounts and bolt in place using Two 5/16" x 1 ½" Hex Head Bolts and Two 5/16" SAE Flat Washers.



Attach Seat Back To Seat Bottom

30) Locate the seat back and seat bottom

31) Locate Three 3/8 - 16 X 2” BUTTON HEAD BOLTS

32) Locate Three 5/16 US Flat Washers

33) Locate Three 3/8 – 16 Nylon Lock Nuts

34) Locate Four Black 1” x1” plastic plugs

35) Tap the Four 1 inch x 1 inch plastic plugs into the seat bottom

36) Attach the seat bottom to the seat back using Three 3/8 x 2 inch bolts, Three 3/8” Flat Washers and Three 3/8” Lock Nuts.

37) Locate the 8 – 32 x ½ BUTTON HEAD BOLT and 1 rubber bumper. Place the button head through the bumper and screw it tightly into Part G of seat base.

Installing the Universal Joint & Connecting the Seat Frame to the Base
(If you are installing the Aluminum Floorboard, do not complete these steps until the Floorboard is installed)

38) Locate the Universal joint and Two ¾ ” pieces of Key stock

39) Next you will be doing a test run of sliding the u-joint and key stock to 1” shaft of seat bottom. This will help you understand where everything needs to be before you add the Loctite.

40) Slide the ¾” key stocks into the keyways on the seat bottom and then the upper part of u-joint

41) Slide the universal joint onto the 1 inch shaft on the seat bottom

42) Now place Part F’s shaft into the u-joint

43) After the dry run remove everything completely and get ready to repeat what you just did. Get your Two 3/8-16x. set screws and Loctite ready.

44) Place Loctite on the key stock that will go in keyway on the cross member (part D). Also add a drop of Loctite to th set screw going into bottom part of u-joint. Go ahead and get the set screw started. Place u-joint onto the shaft o Part D. Now tighten the set screw.

The following step is much easier if you have help. Be careful not to drop the seat assembly. Your new simul is scratch resistant, not scratch-proof!

45) Next add Loctite to the 2nd key stock and slide it into the upper keyway on the u-joint. At this time add Loctite to s screw and get it started.

46) Carefully pick up the seat frame (Part F) and slide its shaft into the universal joint. Check to make sure the seat fra
is parallel to cross member D. Lean the seat frame forward and tighten up set screw.

47) Now you are ready to bolt on your SIMXPERIENCE racing seat.

48) If you have purchased our seat you will receive it with the brackets bolted on like shown in the picture below.

49) You will need to swap the brackets from one side to the other. Make sure you realign the brackets on your seat aft
you do this but leave the bolts loose. The bolts should insert in the pattern as shown in the picture below displayir
the side view of seat after the brackets have been swapped.

50) Next you will be getting ready to install seat onto base (Part F).

51) Locate the Four 5/16-18x1.5" Carriage Bolts, Four 5/16 Lock nuts, and Four ¼ x 20 F/w's.

Install your seat using Four 5/16 x 1.5" carriage bolts, Four ¼ x 20 F/W's and Four 5/16 lock nuts. Set your seat on Part F carefully. There are 4 sets of square holes in the bottom of Part F. These will keep the carriage bolt locked in p while you tighten the 5/16 lock nuts and washers on top. Both sides have 2 sets of holes in the front and back. will be using the rear holes in each set. Each side of seat bracket itself has 2 sets of 5 ovule holes. You will be u the middle ovule hole on each set.

Place one of the carriage bolts up through the bottom of Part F's back holes (doesn't matter which side). You only want to push up carriage bolt just enough to where you only see a few threads (For this part is the reason the bolts were left loose on side of bracket screwed into seat). Next, place a washer overtop of the threads vis and then place the nut on. There will only be and 1/8" gap in between nut and seat so you might have to use a

of needle nose pliers to get it started. You only want to get the nut started. Do not tighten yet.

Once you get both of the rear nuts started, you can move to the front sets.

52) Wait until you get each nut started until you tighten them all up. See pictures below of where bolts need to be.

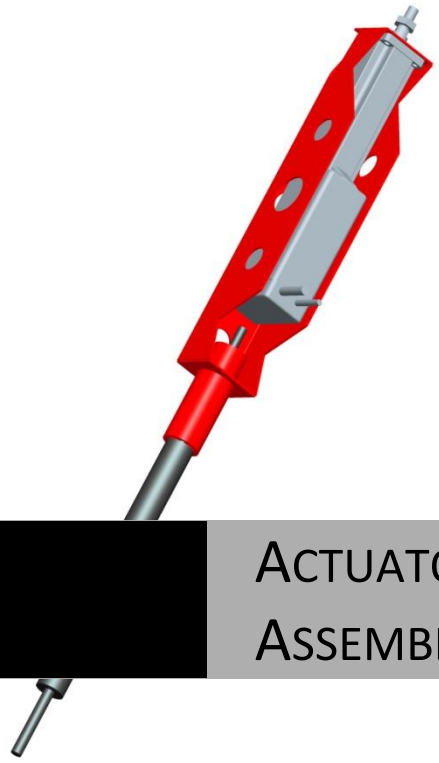
53) Make sure the back of seat is touching the bumper after you have tightened up all nuts as shown in image on next page.

Do NOT install seat sliders! Use only the mounting brackets included with your seat!

Some seats may require the seat bracket to be flipped in order to achieve the alignment specified above.

These settings are critical!

Failure to properly install your seat could hinder motion quality & cause actuator damage.



SIMXPERIENCE

ACTUATOR COVER / DAMPENER ASSEMBLY & OPTIMIZATION

Preparing for Actuator Cover / Dampener Assembly

1) Locate two SCN5 actuators
2) Locate two actuator covers
3) Locate two black rod extensions
4) Locate two 3/8” x 6” all thread
5) Locate four 1 inch x 1 inch rubber bushings
6) Locate two 5/16” 3 arm knobs
7) Locate two M10 x 1.25 ball joints
8) Locate two 3/8-24 ball joints
9) Locate twelve 5/16” flat washers
10) Locate eight M5-.80x18mm cap screws
11) Locate sixteen M5 flat washers
12) Locate eight M5-80 lock nuts
13) Locate one M10 x 1.25 nuts
14) Locate four 3/8-24 nuts
15) Locate two 3/8 US Flat washers

Actuator / Dampener Cover Assembly

16) Insert two rubber bushings, one on each end on the bottom tube on the actuator cover *(see figure 10)*

17) Slide the 5/16 threaded end of the rod extension up through the rubber bushings and the lower actuator tube
18) Slide six 5/16 flat washers onto the rod extension and thread the 5/16 3 arm knob *(see figure 11)*

Figure 10

Figure 11

Actuator / Dampener Cover Assembly (Continued)

19) Spin the knob down until it snug's up against the washers…. This will be tightened after the seat leveling process is finished.

20) Place a 3/8" US Flat Washer on the 3/8 all thread

21) Next screw two 3/8-24 nuts onto the 3/8 all thread up from one end at least 1"

22) Thread the 3/8" ball joint onto the all thread locking it in place with one nut

Leave a 1" gap between the nuts *(as shown in figure 12)*

23) Snug the nut to the rod extension finger tight only.

24) Lay the actuator cover on its back and carefully slide your 100 or 150 mm actuator in position

25) Bolt the actuator in place using four M5 cap screws, eight M5 flat washers and four lock nuts

26) Tighten in a crisscross pattern.....

Be careful with your allen wrench so it does not rest against the painted surfaces and cause chips or

scratches when tightening *(see Figure 13)*

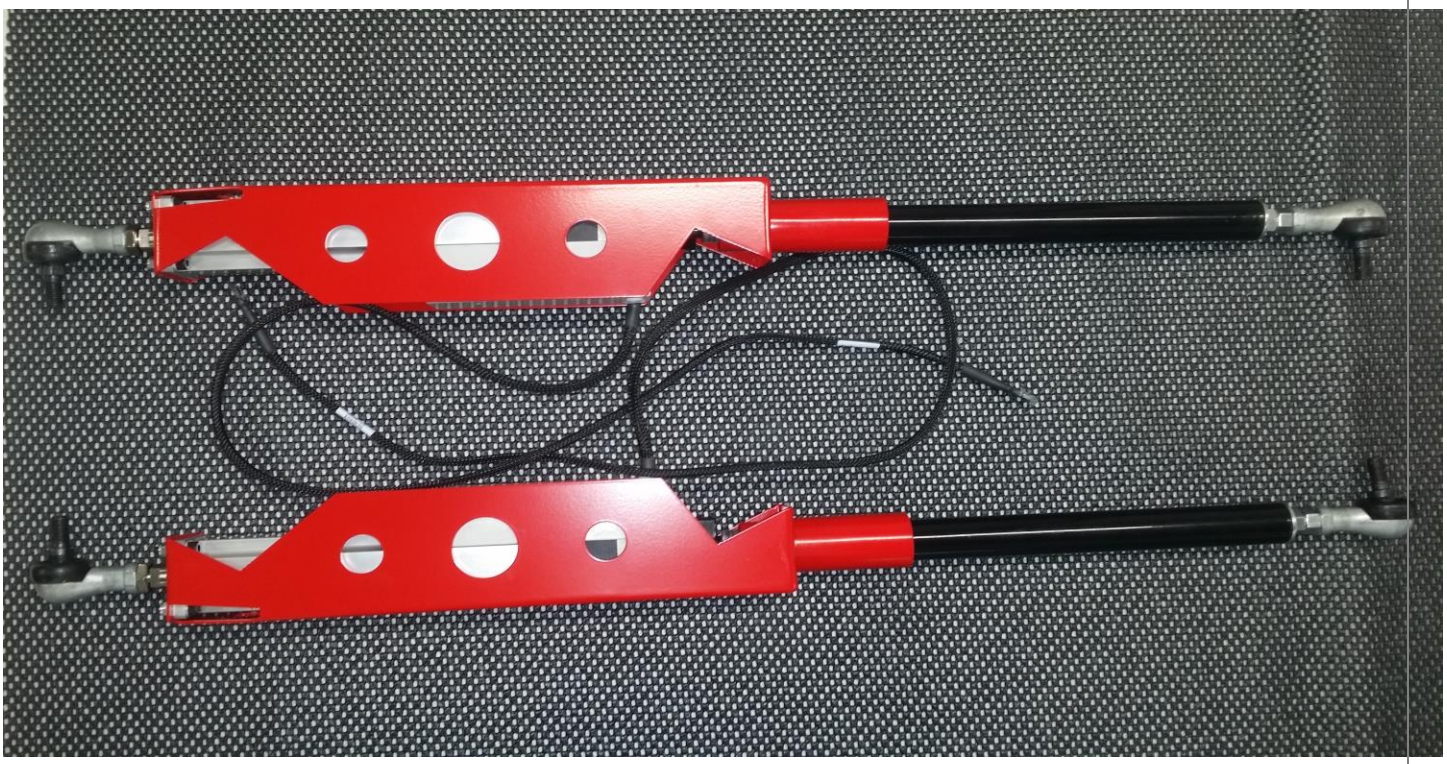


Figure 12

Figure 13

Actuator / Dampener Cover Assembly (Continued)

27) Thread the M10 ball joint completely down onto the actuator rod (do not tighten)

28) Set aside and build out your 2nd actuator

29) Once completed lay the actuators side by side and orient the top and bottom ball joints so they are facing each other, making a left and a right actuator.

At this time write down the serial numbers of each actuator, noting which is left and right.

30) Due to the length of ball joints being shorter, using the M10 nut and 3/8 – 24 nut are no longer necessary.

31) Lay both actuators behind the seat base with the open ends of the covers facing up exposing the actuators.

32) With a wrench, thread the ball joint studs in completely. (*see figure 14***)**

The next step is easier if you have a helper!

33) Standing behind the seat, stand up one actuator and thread it into the seat back by hand

34) Stand up the 2nd actuator and attach it to the seat back

35) With a wrench, thread the ball joint studs in completely.

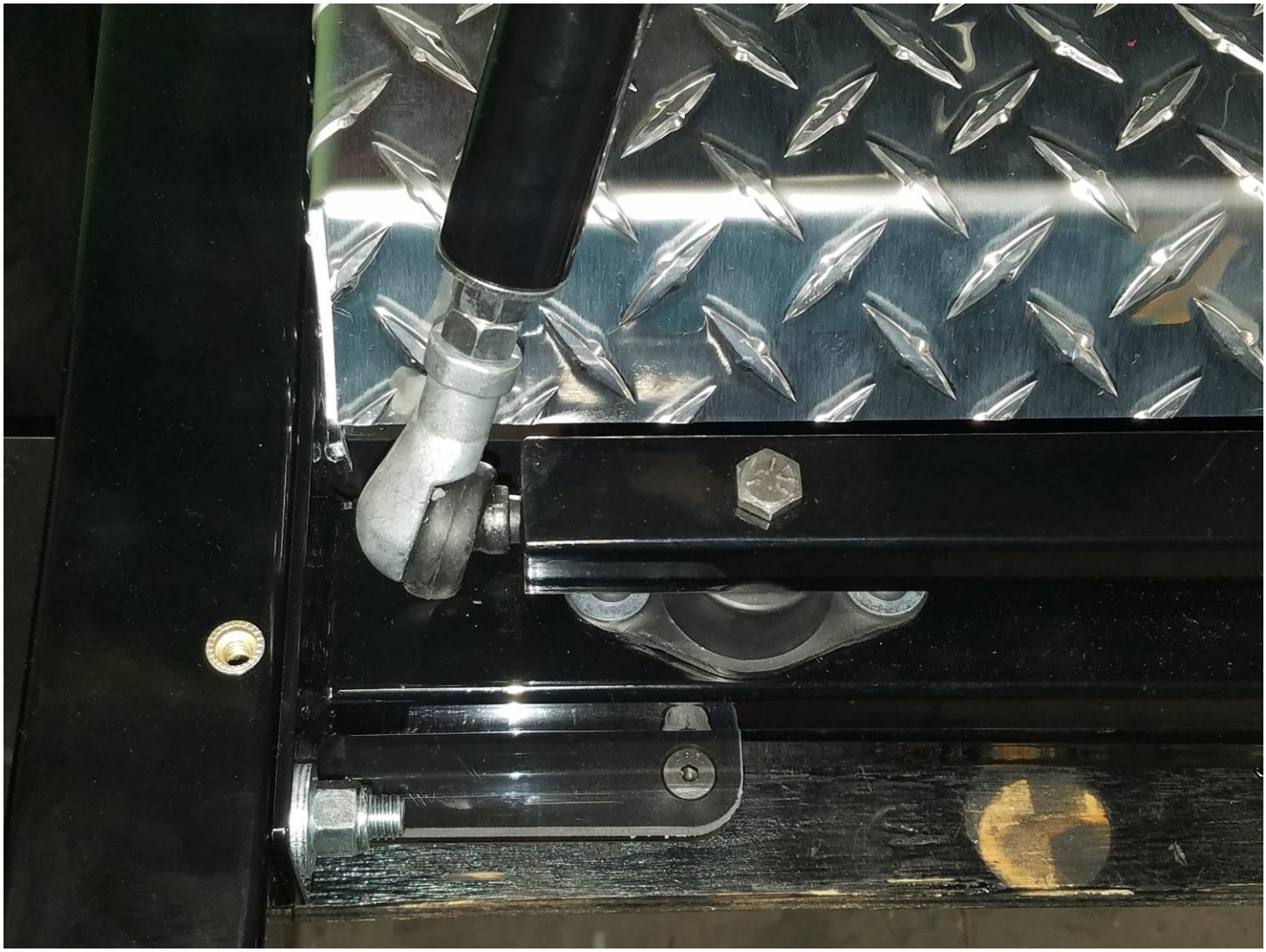
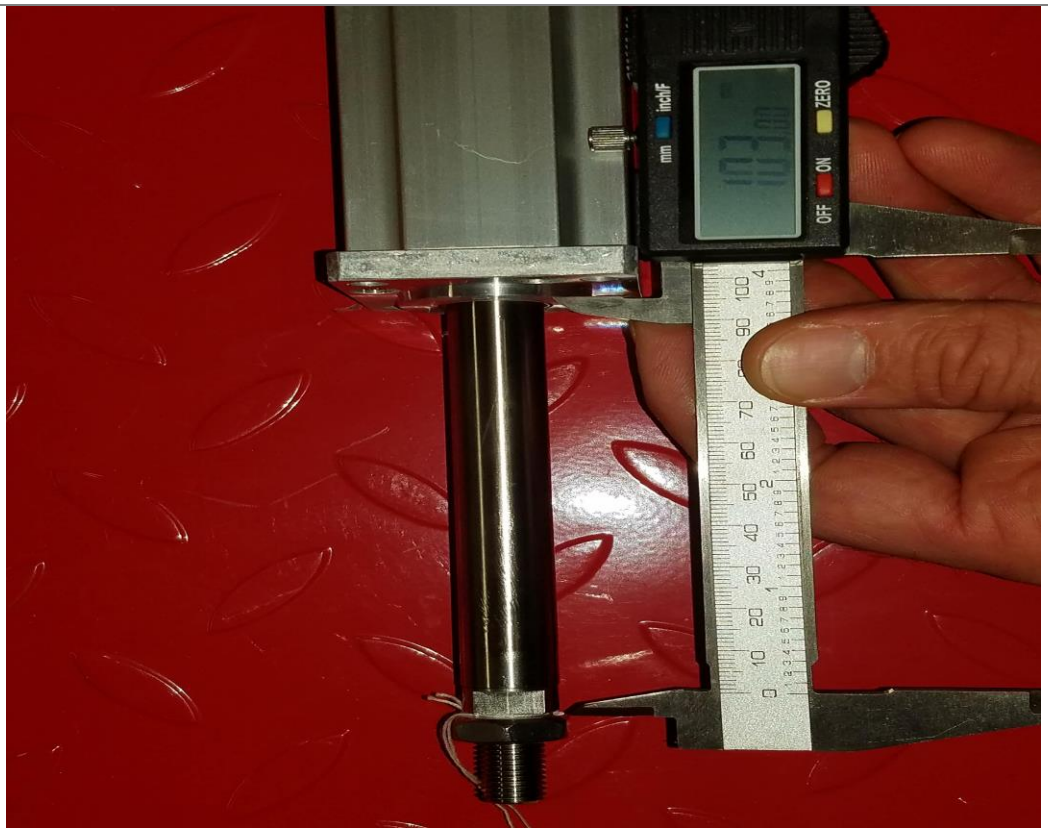


Figure 14

Leveling the Seat
36) Extend both actuators out 103 mm. Make sure they both measure out exactly the same. Do not move them during the leveling process! See picture



37) Place a small level on top of the seat bottom and check that it is level in both directions

It is very important that you are level in both directions…To level, loosen the three arm knob on the actuator cover *(figure 11)* and the 3/8 nut on the rod extension *(figure 12)*.

To tilt the seat bottom backwards, turn the rod extension clockwise.

To tilt the seat bottom forward, turn the rod extension counter clockwise.

Take your time

Make sure the seat bottom is level. Failure to do so could hinder motion quality & reduce actuator life.

Actuator Adjustment

38) *(Looking down on the top of the seat back and the top of the actuators),* Lock the ball joint to the actuator rod with the M10 nut supplied with the actuator.

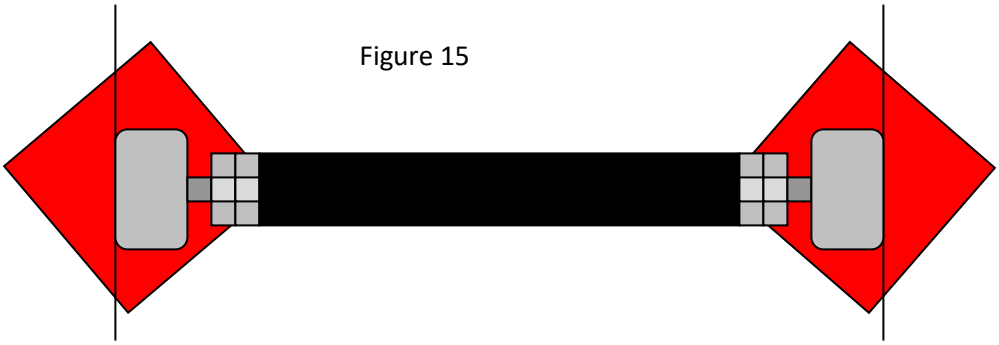
DO NOT TRY TO TURN THE ROD OF THE ACTUATOR!! It does not rotate and will cause unrepairable damage!!

The next step is easier if you have a helper.

39) Hold the actuator rod and ball joint in place with wrenches

40) With a separate wrench, tighten the M10 nut up against the ball joint to lock in place *(See figure 15 for the top view of the alignment)*

Figure 15



41) Tighten the 3/8 nuts against both rod extensions *(see figure 12)*

42) Turn the **left** actuator cover and the rod extension clockwise until both ball joints come to a full stop

43) Holding both the actuator cover and the rod extension in place, turn the 3 arm knob down until it is up against the washers and then tighten approximately two additional complete turns

44) Turn the **Right** actuator cover and the rod extension counter clockwise until both ball joints come to a full stop

45) Holding both the actuator cover and the rod extension in place, turn the 3 arm knob down until it is up against the washers and then tighten approximately two additional complete turns

Once complete, turn each actuator back and forth, making sure that it moves freely and the ball joints are hitting the stops at the same time

When the actuators are in a relaxed state, looking down from the top they should look the same as in *(figure 15)*

If you are installing the Rear Traction Loss Module, Complete this Step

46) Bolt the SX-4000 to part P using four 8-32 x ½ button heads.

Do not plug-in the actuator in the step below if you are installing the Rear Traction Loss Base. This step will be completed after the installation of your third actuator.

SX-4000 Motion Control Adapter – Physical Installation

47) Ensure that your USB cable will reach, but do NOT plug it in at this time. This will be the final step.

48) Starting from left to right, standing behind the motion seat, plug your left actuator in the 1st hole on the left of the SX-4000 and Right actuator in the center hole

If you will be installing the rear traction loss module, skip this step until the completed simulator is set on its Rear Traction Loss Base. Then connect the Rear Traction Loss actuator to the right plug on the SX-4000.

If you are installing the Rear Traction Loss Module, Complete this Step

49) Bolt the SX-4000 to part P that is found only in the Rear Traction Loss using four 8-32 button heads.

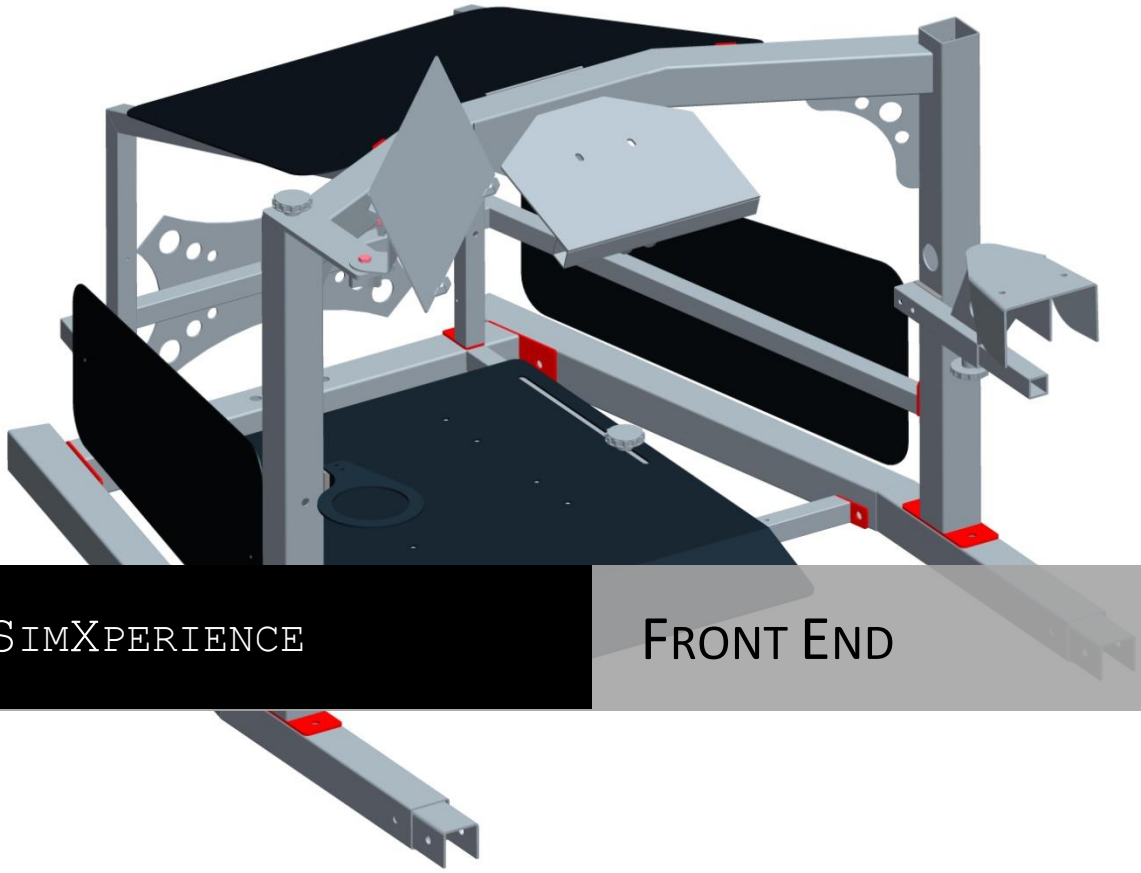
Do not plug-in the actuator in the step below if you are installing the Rear Traction Loss Base. This step will be completed after the installation of your third actuator.

SX-4000 Motion Control Adapter – Physical Installation

50) Ensure that your USB cable will reach, but do NOT plug it in at this time. This will be the final step.

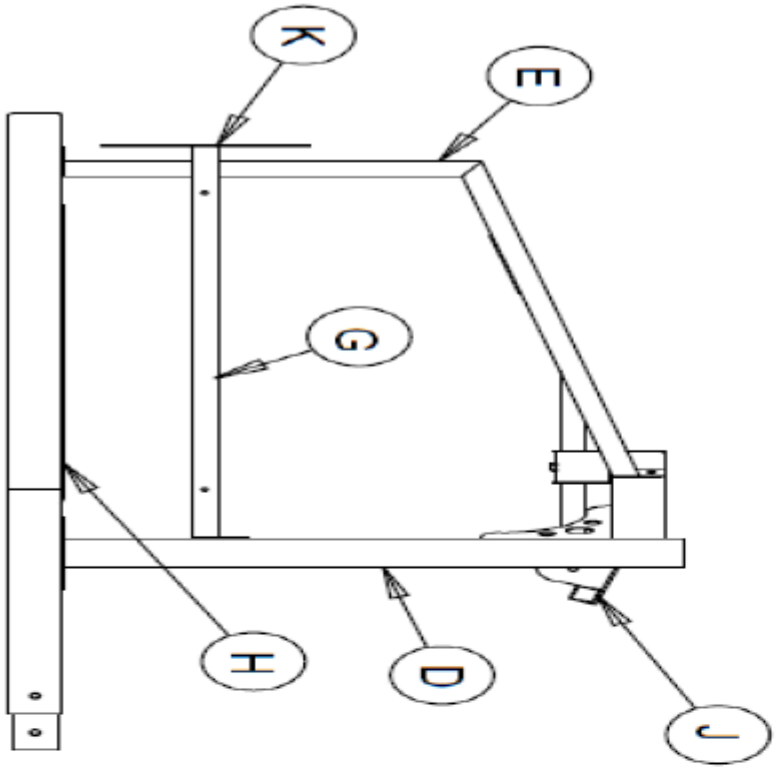
51) When plugging in the SCN5 wires to the ports on SX4000, it does not matter which one goes where.

If you will be installing the rear traction loss module, skip this step until the completed simulator is set on its Rear Traction Loss Base. Then connect the Rear Traction Loss actuator to the right plug on the SX-4000.



SIMXPERIENCE

FRONT END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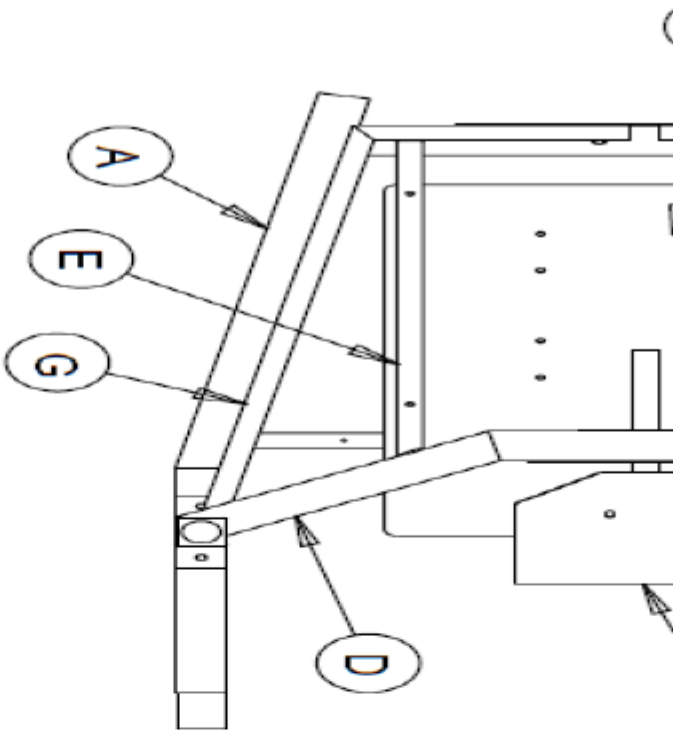
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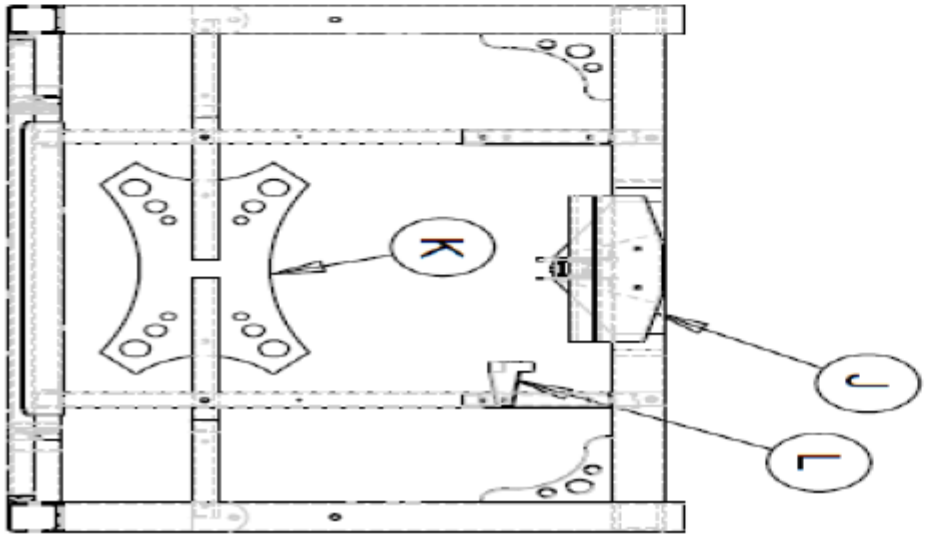
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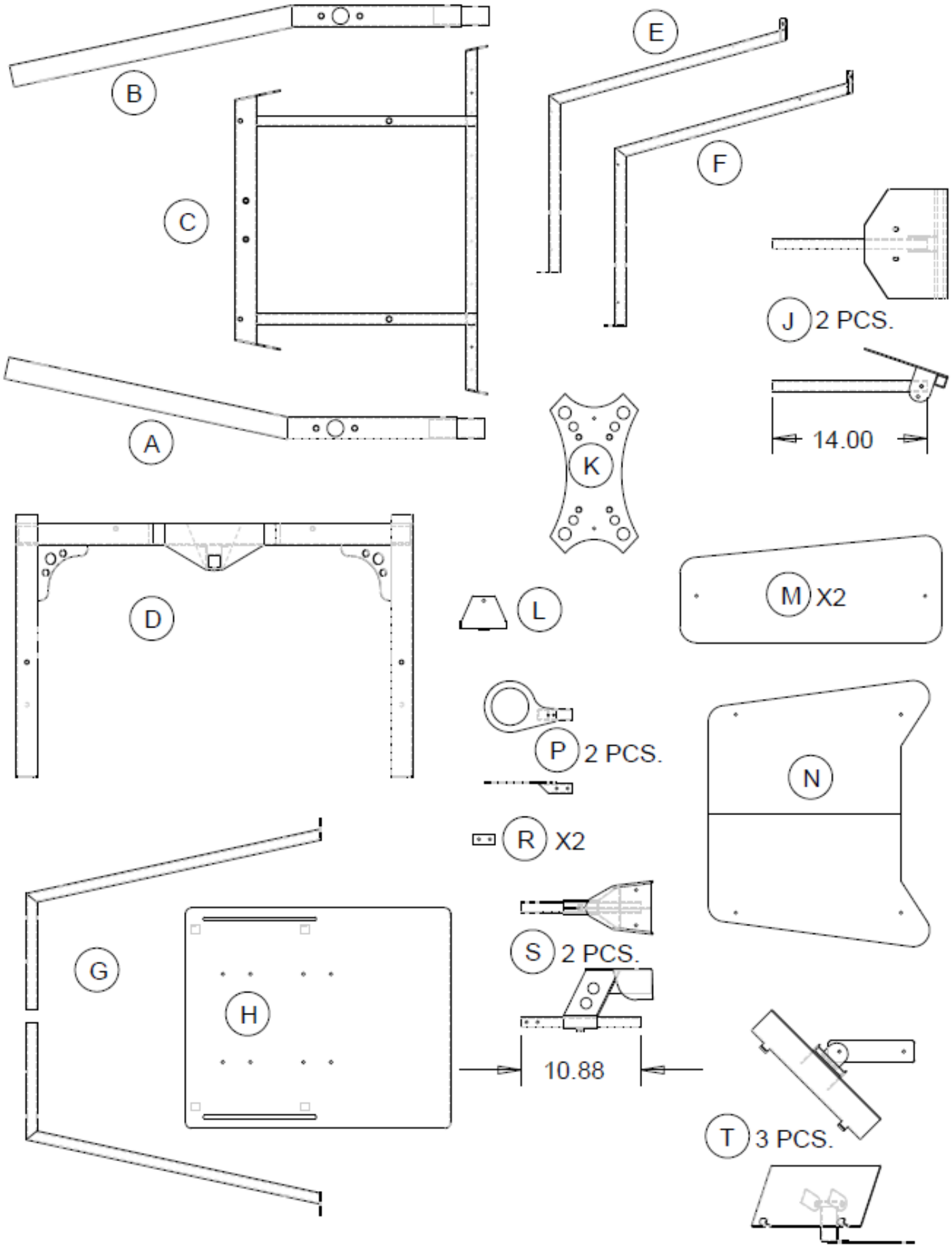
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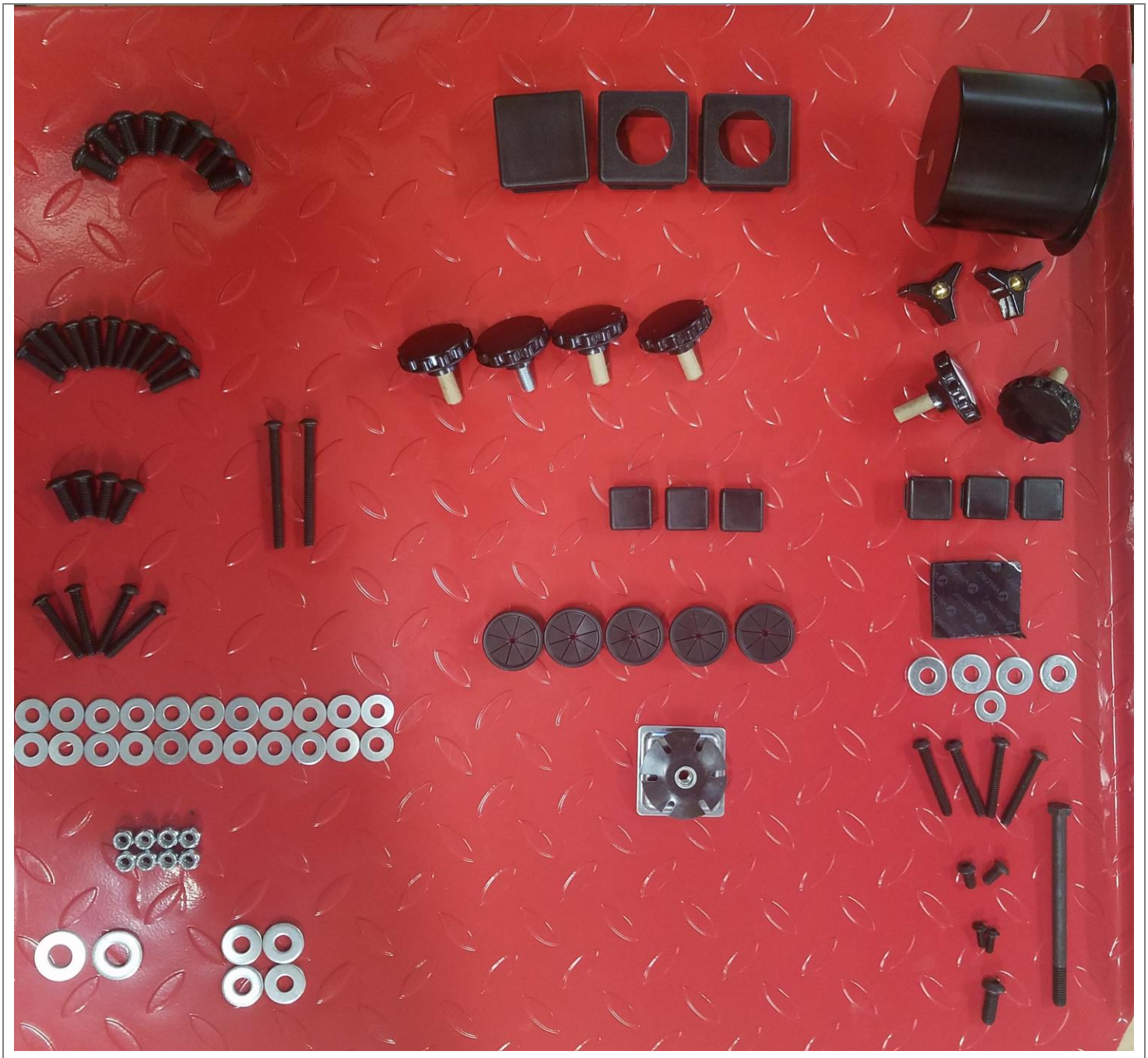
Preparation for Front End Assembly

1) Unpack the contents of the box and ensure that you have all the parts shown on the previous page.

Below is a hardware list that will be found inside hardware bag and cupholder

(11) ¼-20x1" BUTTON HEAD BOLTS (Part L &C of rear traction loss; Part G1 & G2; Part E & F; Part K)
(4) ¼-20x.5" BUTTON HEAD BOLTS (Part M x 2)
(4) ¼-20x1.5" BUTTON HEAD BOLTS (Part P and Part S)
(4) ¼-20 x1.75" BUTTON HEAD BOLTS (Part N)
(2) ¼-20x2.75" BUTTON HEAD BOLTS (Part G1 and G2)
(8) ¼-20 NYLON LOCK NUT
(22) ¼-20 US FLAT WASHERS
(2) 10 – 24 x .5" BUTTON HEAD BOLTS (Cupholder)
(1) 5/16-18 4.5" GRADE A BOLT (Part T)
(1) 5/16-18x2" BUTTON HEAD BOLT (Part J)
(5) 5/16-18x.875" BUTTON HEAD BOLTS (Part D and Part T)
(1) 5/16-18 NYLON LOCK NUT (Part J)
(8) 5/16 US FLAT WASHERS
(6) 5/16-18 ROUND KNOBS (Keyboard holder, wheel mount, pedal tray)
(2) 5/16-18 3 ARM KNOBS and (Keyboard holder
(1) 5/16-18 SQUARE STAR TYPE (Part T)
(8) 3/8-16x.75 BUTTON HEAD BOLTS (Part C
(2) ½" US FLAT WASHERS (Part T)
(6) 1"X1" BLACK PLASTIC PLUG
(1) 2"X2" BLACK PLASTIC PLUG
(2) 2"X2" BLACK PLASTIC PLUGS W/ HOLES
(5) .875 BLACK GROMMET TO PLUG INTO 2"X2" BLACK PLASTIC PLUGS W/ HOLES
(1) Velcro (For Keyboard)
(1) Cupholder



2) Locate your Front end base rails (A & B)
3) Locate the foot board support (Part C)
4) Lay parts A,B, & C in front of the seat base

If you are installing a bass transducer or rear speaker, complete this step

5) Pull your rear speaker wires and transducer wires through the right front end base rail , exiting the 1.5” hole on the front inside edge that bolts to Part C

Front End Wiring

6) Pull your USB and Power cord (speaker wires) through the right front end base and out through the front

Previously Skipped in Seat Base Assembly

7) Follow steps 15-18 in the Seat Base Assembly Instructions that were previously skipped until Front End Assembly.

Front End Assembly

8) Using Four 3/8-16X.75 BUTTON HEAD BOLTS and Four 5/16 US FLAT WASHERS, loosely bolt the front end side rails A & B to Part C

Make sure not to pinch any wires during this process

9) Slide the front end base assembly into the motion seat base assembly and bolt the Two assemblies together using Four 3/8-16X.75 BUTTON HEAD BOLTS.

Make sure the front end assembly and motion seat assembly stay flat during this process

10) Tighten all Eight 3/8-16X.75 BUTTON HEAD BOLTS the front end assembly (take your time and snug each bolt a little at a time in a crisscross pattern while continuously checking that the front end base frame lays flat and does not rock when pushing down on it)

If you are installing the rear traction loss module, complete steps 12-14 now.

11) Locate parts L & M from the Rear Traction Loss kit

12) Install part L of rear traction loss to the bottom front side of Part C using Two ¼-20x1" BUTTON HEAD BOLTS and Two ¼-20 US FLAT WASHERS.

13) Install part M to the bottom side of motion seat base rail Part B using Two ¼-20x1" BUTTON HEAD BOLTS and Two ¼-20 US FLAT WASHERS. These bolts and washers will be in the hardware from rear traction loss.

The center threaded hole is to be to the outside edge and will line up with the hole drilled in the motion seat base rail Part B

Front End Assembly

14) Locate Part D, Four 5/16-18X.875" BUTTON HEAD BOLTS and Four 5/16 SAE F/W s

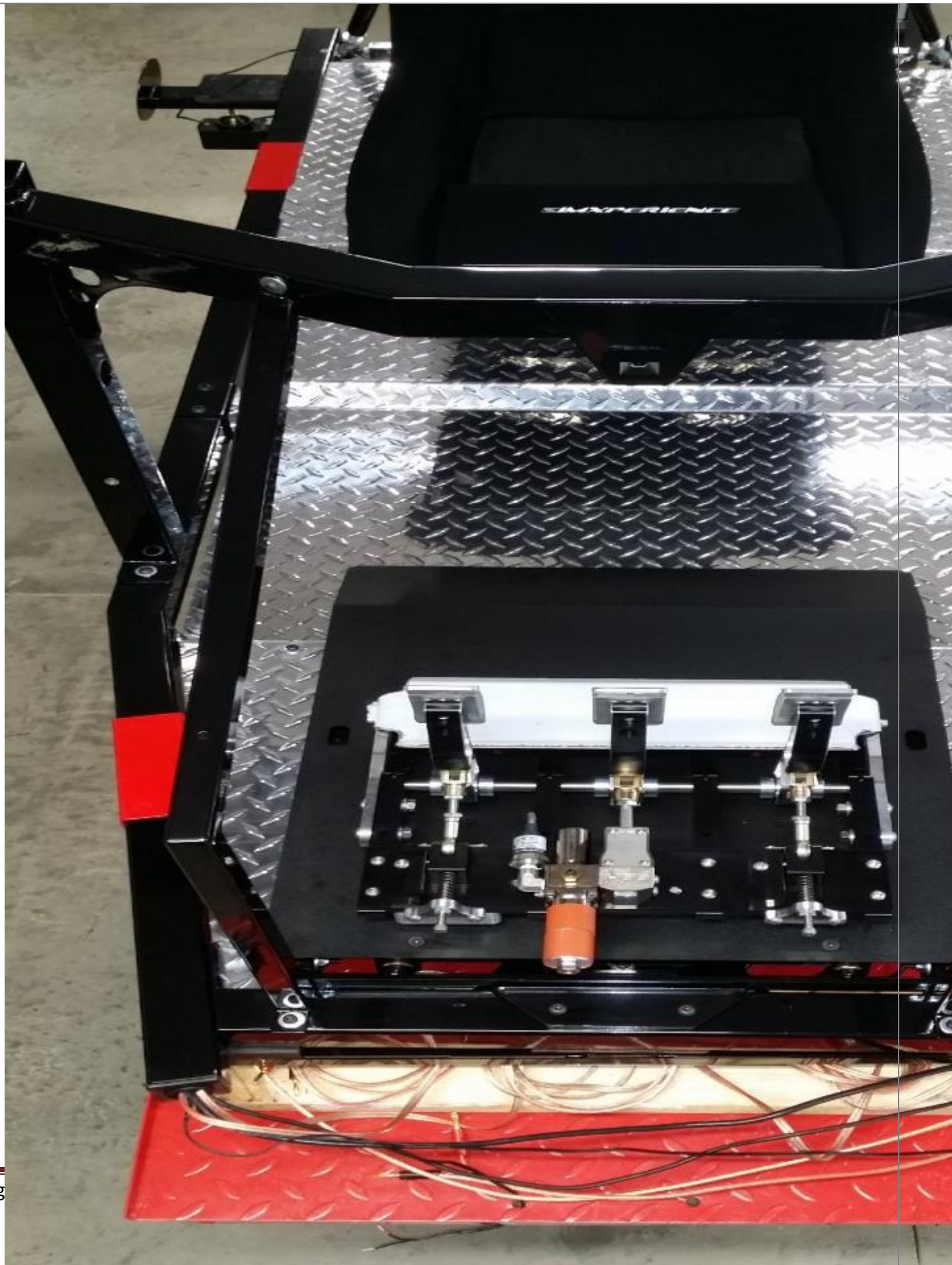
15) Bolt Part D to the Front End base rails (See picture Below)

16) Locate Parts E and F

17) Locate Four ¼ x 1" BUTTON HEAD BOLTS

18) Locate Four ¼ - 20 US F/W s

19) Bolt parts E & F to Parts C and D (See picture below)



Gear Shift & Pedals

55) Locate Three 7/8” plastic grommets

56) Locate One 2”x2”x 5/16” metal tubing plug

57) Locate One 2”x2” plastic plug

58) Locate Two Black Round Knobs

59) Locate Two 5/16 SAE Flat Washers

60) Using Three 7/8” plastic grommets, cut two of the grommets with a utility knife as shown in figure 3 of the seat base assembly instructions

Be sure to cut away from yourself or lay on a flat surface and cut by pressing downwards

The gear shift mount is pre- drilled for a Logitech G-25 gear shifter and the Thrustmaster TH8RS.

61) Bolt your shifter to the gear shift mount **(M6 x 14 Socket Head Screws not supplied)**

62) Pull the shifter wires through the hole on the inside of the upright support on part D into the horizontal tube and over to the hole in the bottom of the 2”x2” tube next to the steering column

63) Use the Two 7/8” plastic grommets that you cut: slide them over the wires and press them into the hole that you just pulled your wires thru.

64) Install the third 7/8” plastic grommet in the hole just above the cup holder.

65) Run your power cords for the steering wheel and slip the transformer for the wheel into part L

66) Part E & F have been pre-drilled for a # 8 sheet metal screw for tying the wires up using a plastic clamp sized correctly for the wires on the steering wheel / pedal set *(See figure 18 for style reference)*

Figure 18

Steering Wheel Wiring & Mounting

Part J has been pre-drilled for a G-25

Mounting screws are not supplied due to the variety of steering wheels that may be mounted

67) Mount your steering wheel (use the manufacturer supplied instructions and hardware when possible).

Pedal Set Mounting

 Mounting screws are not supplied due to the variety of pedal sets that may be mounted

 Part H has been drilled for a G-25 with two different sets of mounting holes. The closest set of holes to the seat are for people under 6' and the other set of holes are for someone that is over 6'…mounting

68) Mount your pedal set to the plate (use the manufacturer supplied instructions and hardware when possible).

69) Once the pedal set is mounted to plate H, fasten it with two round knobs and two 5/16 flat washers.

 Be sure that you have all wires ran through the upright post of part D for the steering wheel, gear shifter & any other wiring specific to your simulator

70) Locate one 2"x2" plastic plug

71) Locate one 2"x2"x 5/16 metal tubing plug

72) Using a rubber mallet, tap the 2"x2" plastic plug into the top of the upright post on part D on the gear shift side

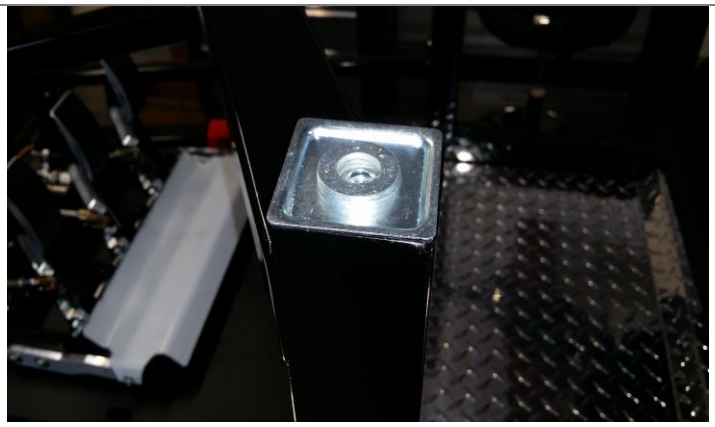
73) Install the 2"x2"x 5/16 metal tubing plug on the upright post on part D cup holder side

 Use a block of wood or fold over a piece of cardboard and tap in with a hammer to avoid damage.

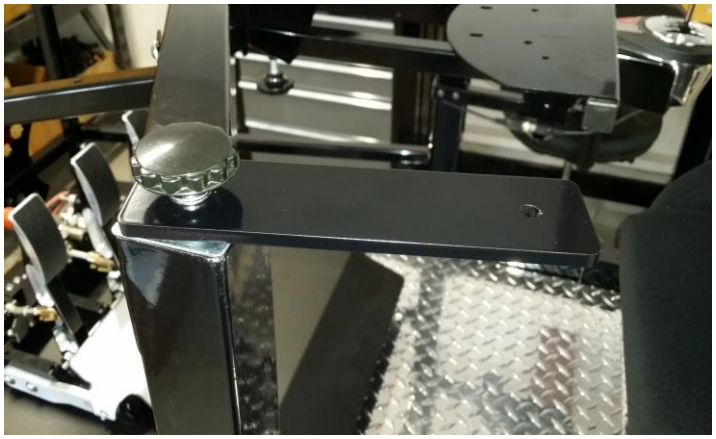
Keyboard Holder Assembly & Mounting

74) Locate Part T (three pieces), One Black Round Knob, Two 3 Arm Knob, One 7/8x7/8 Velcro, One 5/16 x 4.5" Hex Headed Bolt, Four 5/16 US Flat Washers, Two ½ US Flat Washers, One 5/16-18 x 7/8" Button Head Bolt

75) Take Two ½ US F/W and set them on top of the 2"x2"x5/16 metal tubing plug with One Black Round Knob and One ¼-20 US Flat Washer



76) Install 2” wide flat stock (Part T) to the 2”x2”x5/16 metal tubing plug



77) Install L bracket (Part T) using One 5/16-18 x7/8 Button Head Bolt, One ¼ -20 US Flat Washer, and One 3 Arm Knob. The knob can be on the bottom or top.

78) Install keyboard support (Part T) using One 5/16x4.5” Hex Head Bolt, Two ¼ - 20 US flat washers and One 3 Arm Knob

79) Slide One ¼ -20 US Flat Washer onto the 4.5” Hex Head Bolt

80) Slide the 4.5” Hex Head Bolt through the keyboard support and the tube on the L bracket

81) Slide a ¼ - 20 US Flat Washer on and tighten using the 3 arm knob

The L bracket should be installed on the bottom side of the 2” flat stock like in the picture below

82) Peel the backing off of one side of the Velcro strip and stick it to the top center of the back of your keyboard first

83) Peel the backing off of the other side of the Velcro and set your keyboard onto the keyboard holder making sure it is centered

84) Press the keyboard firmly against the keyboard holder

The Velcro is necessary to help hold the keyboard in place if you have the rear traction loss module.

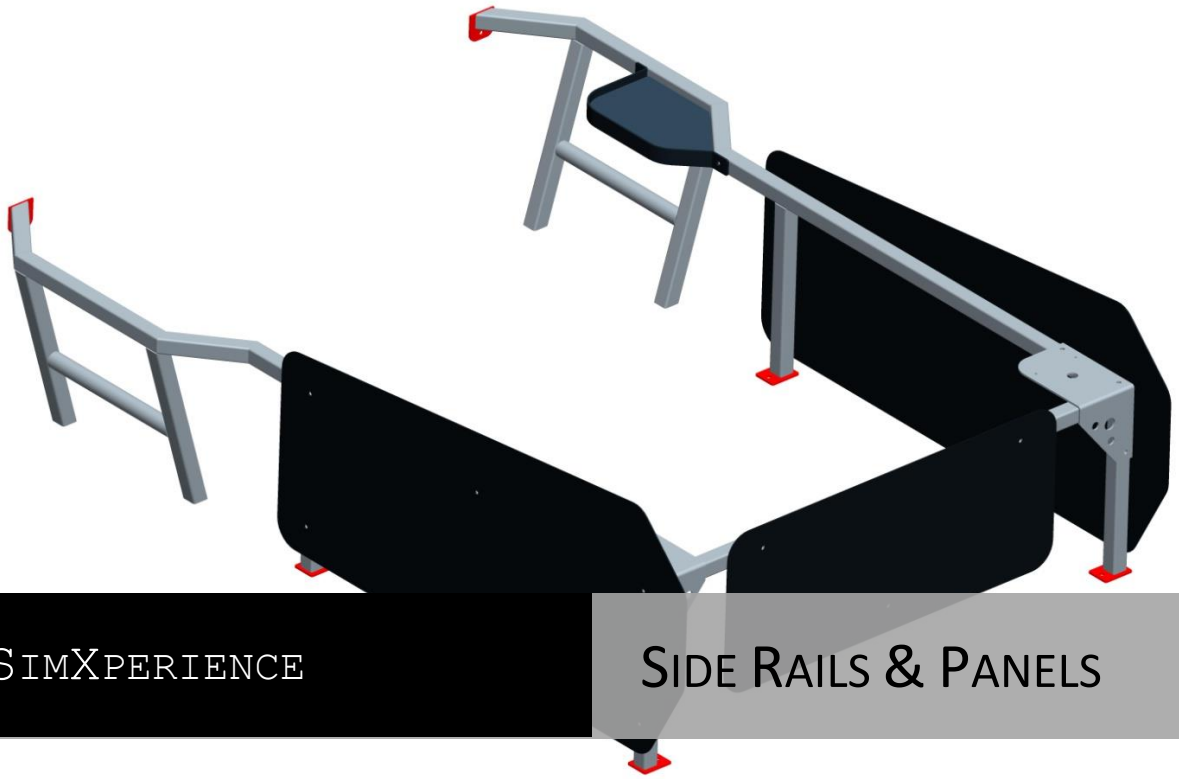
Front End Side Panel Mounting

85) Locate parts M x 2 and N

86) Locate Four ¼ - 20 x .5 Button Head Bolts and Four ¼ - 20 x 1.5” Button Head Bolts

87) Bolt the side panels (part M) to G1 & G2 using Four ¼ - 20 x .5”
88) Button Head Bolts

89) Bolt the top panel (part N) to E & F using Four ¼ - 20 x 1.5 Button Head Bolts and four ¼ -20 Nylon Lock Nuts



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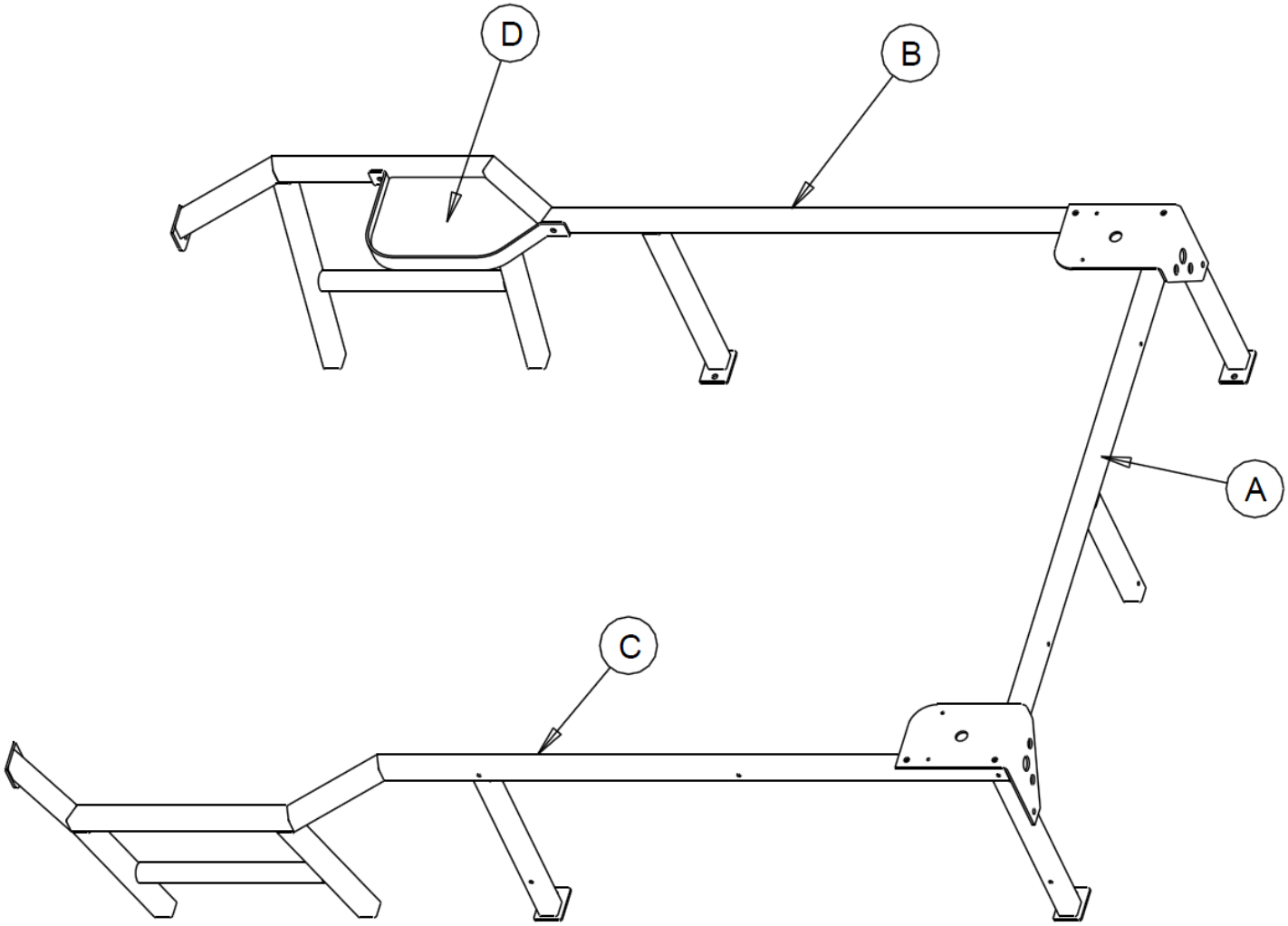
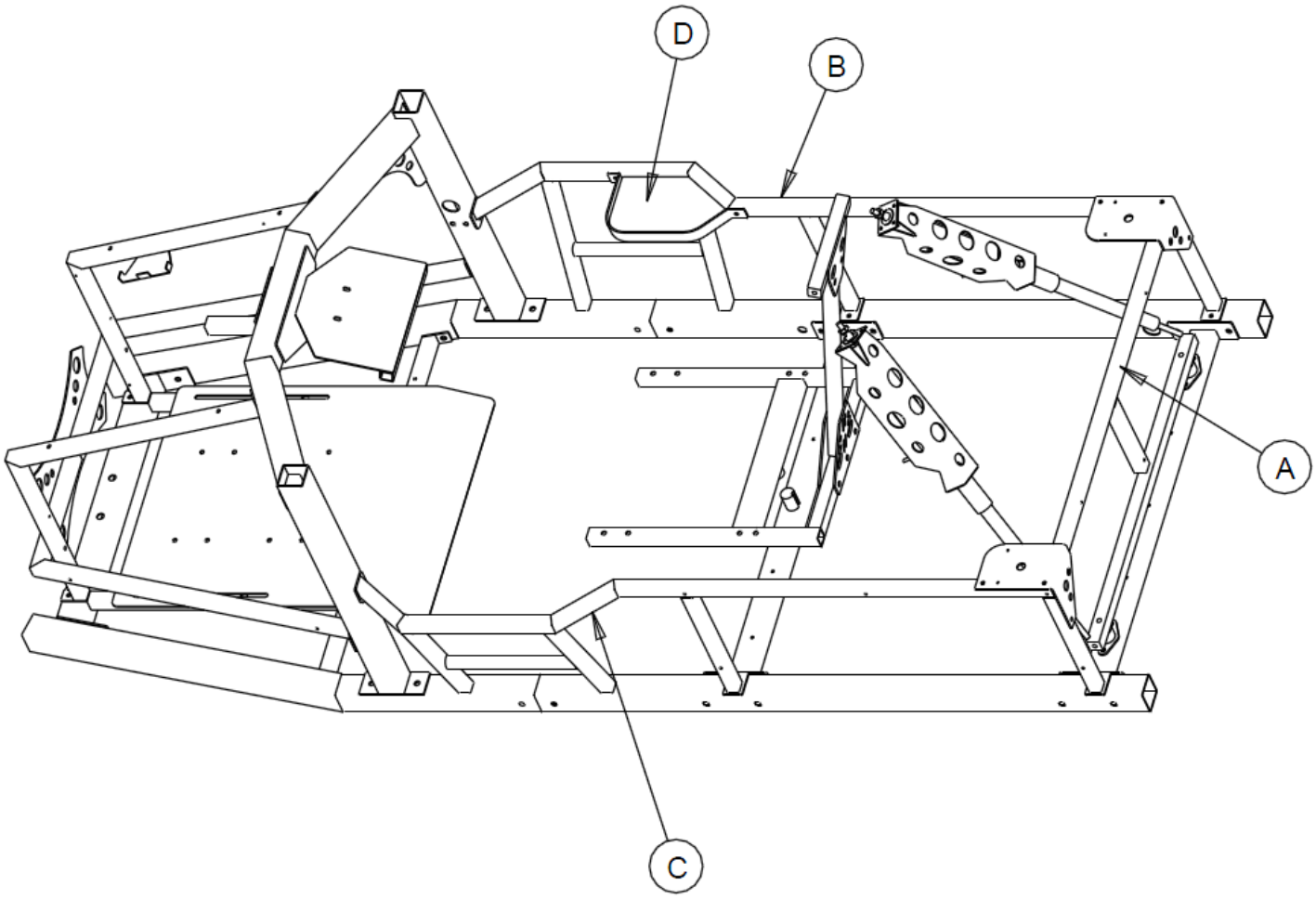
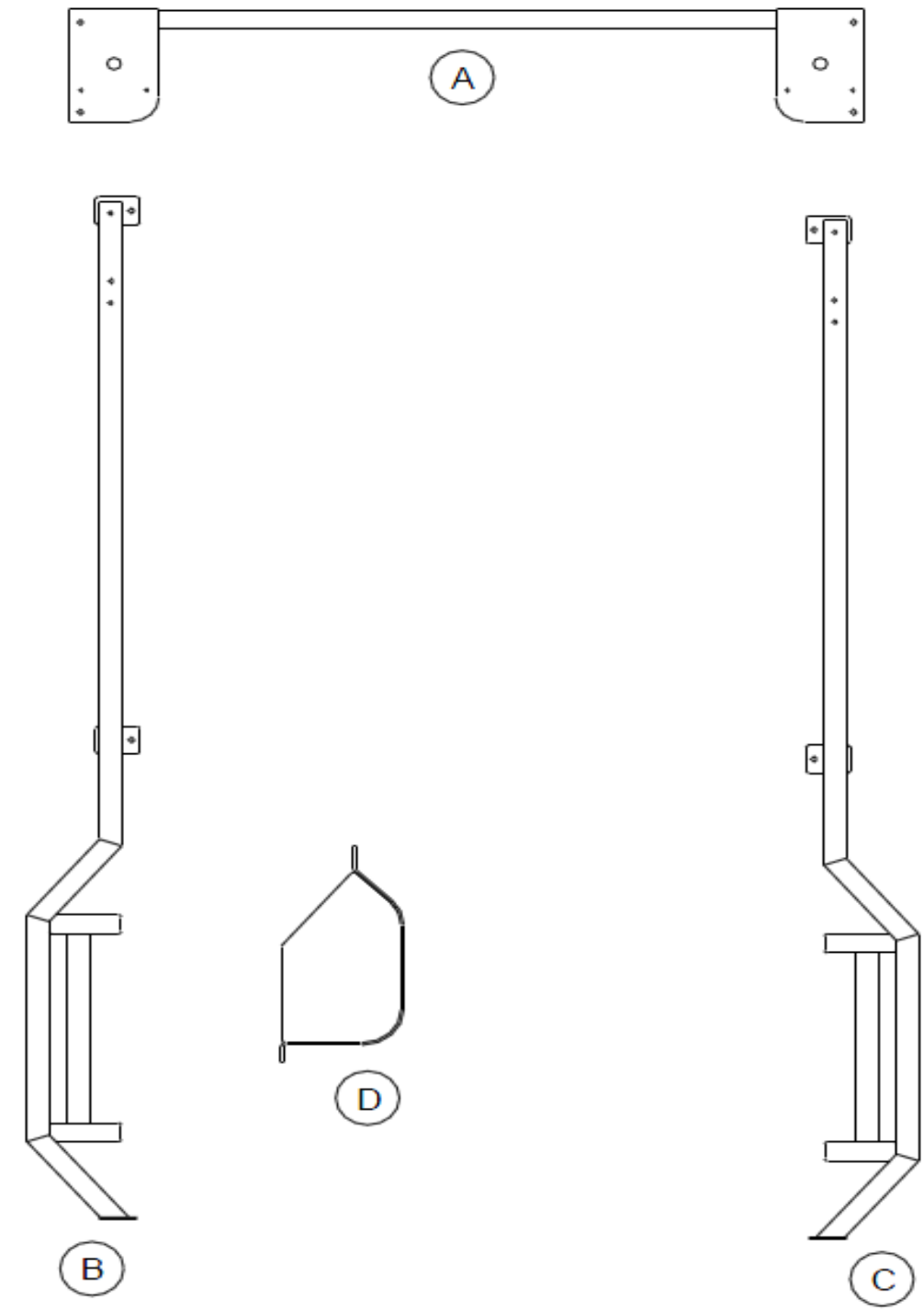
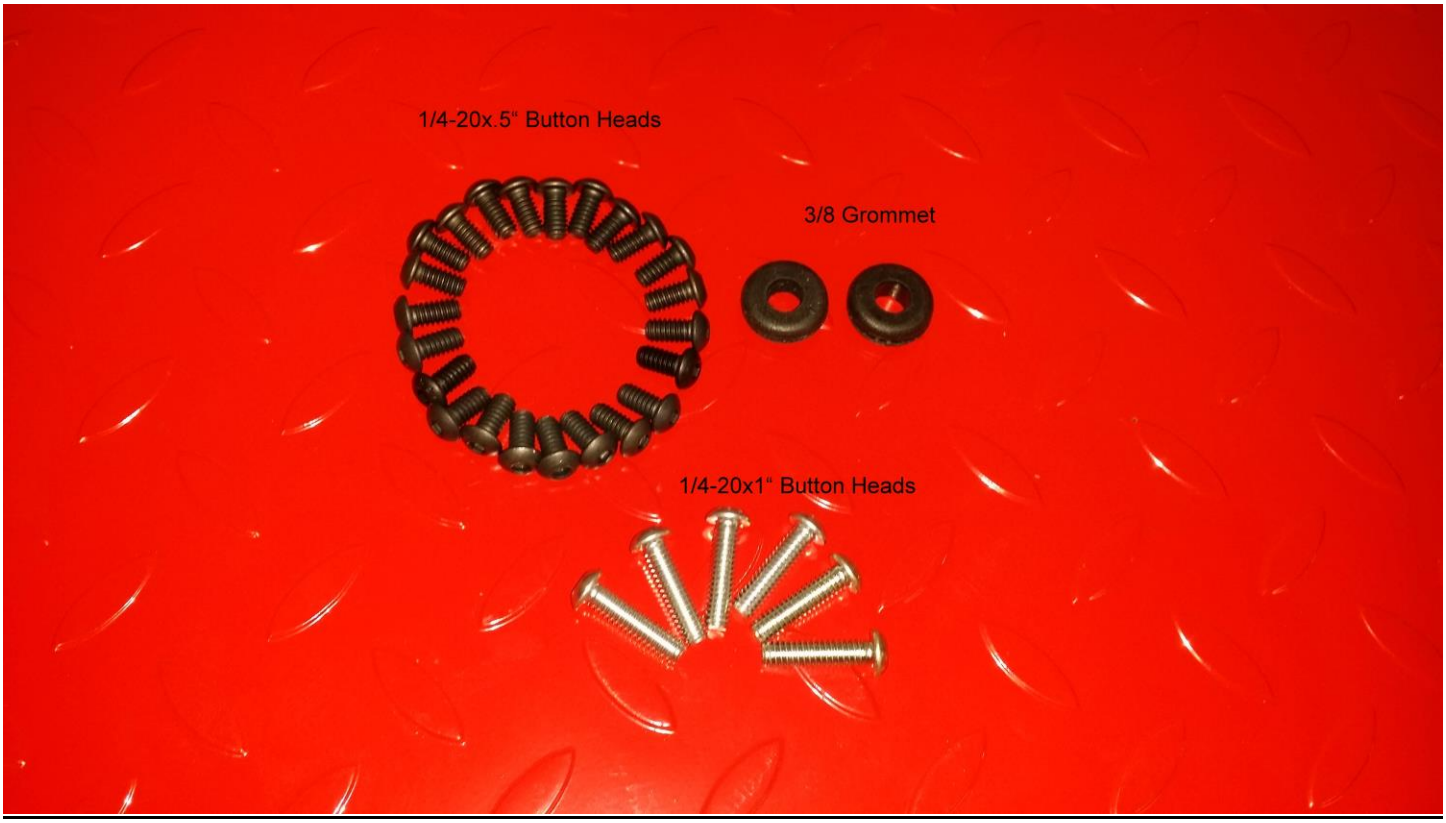
SIDE RAILS & PANELS







RAIL KIT



Side Rail / Panel & Rear Speaker Mounting

1) Unpack the contents of the box and be sure that you have all the parts listed and shown above.

2) Locate parts A,B,C, & D

3) Locate Twenty-One ¼ - 20x .5” Button Head Bolts and Six ¼ -20 x 1” Button Head Bolts

4) Locate Two 3/8 ID rubber grommets

5) Bolt the side rails B & C to Motion seat base rails A & B and part D of the front end assembly using Six ¼ - 20 x 1” Button Head Bolts

6) Bolt the rear rail part A to the side rails parts B & C using Six ¼-20 x .5” Button Head Bolts

7) Bolt the mouse tray to side rail B or C depending on your preference using Two ¼-20 x .5” Button Head Bolts

8) Install the rubber grommets into the 5/8 diameter holes in the top rear of the side rails B & C at the rear speaker locations

9) Mount your rear channel speakers in the space provided on the rear of the side rails B & C, there are 8-32 holes drilled and tapped for Logitech’s upper end speaker system and holes drilled in the vertical corner posts for #8 sheet metal screws for the wire clamps to fasten your speaker wires shown in *(see figure 18)*

10) Install rear panel part A on the rear rail part A using Three ¼ - 20 x .5" Button Head Bolts

11) Install side panels part B & C on the rear rails part B & C using Ten ¼ - 20 x .5" Button Head Bolts

12) Locate a mouse pad , cut into the shape of the mousepad holder (part D), and place it into part D. The reflective surface of the Simxperience finish can cause a laser mouse to behave unpredictably.

Your main simulator is now complete and can be set aside until it is ready to be positioned atop the rear traction loss module.

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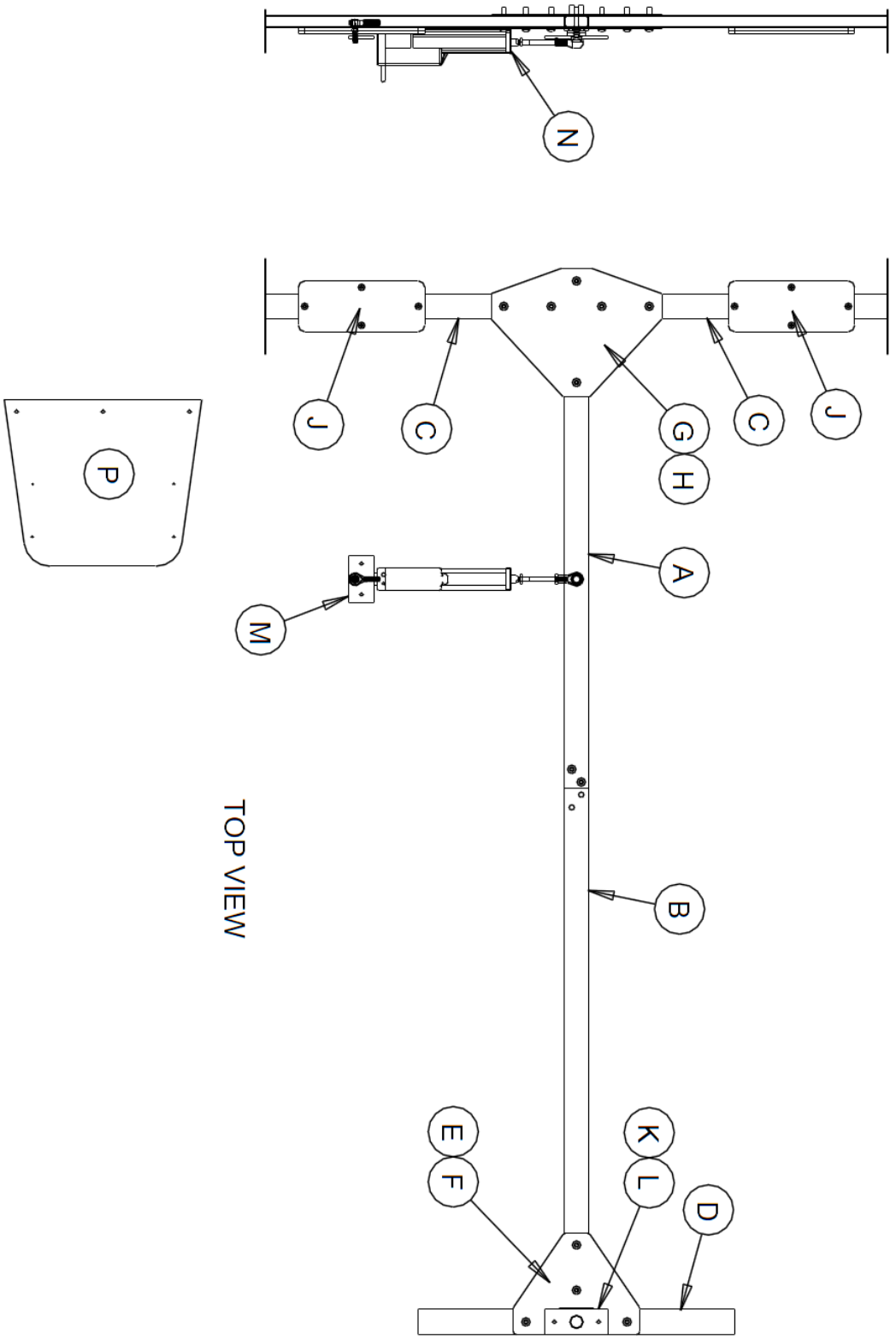
REAR TRACTION LOSS MODULE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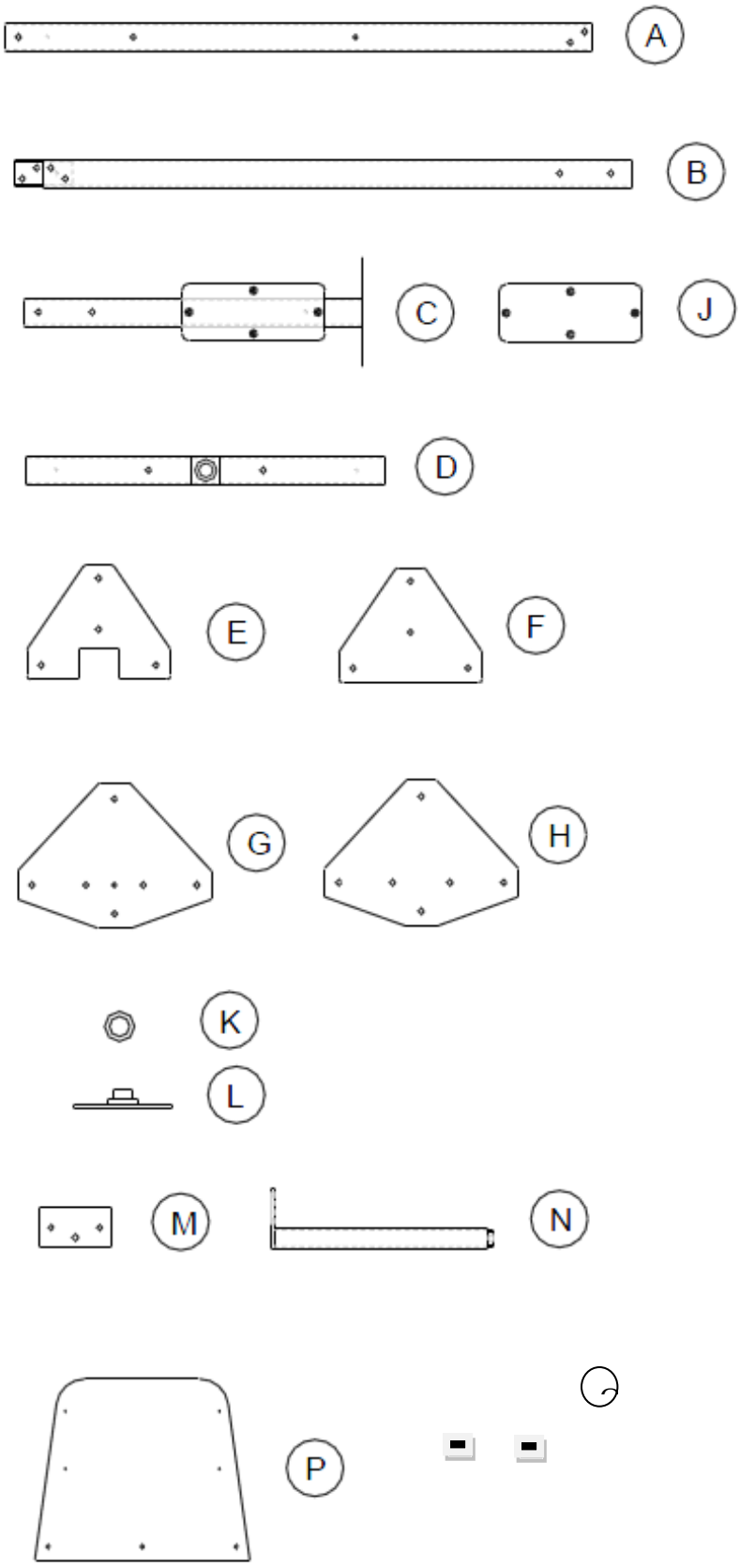


Rear Traction Loss Module – Frame Assembly

1. Unpack the contents of the box and check to assure all parts are there
   *Part K is pressed into Part D from Factory

2. The following is a list of hardware needed:

- (1) M10 X 1.25 NUT (Balljoint)
- (3) ¼ - 20 X ½ BUTTON HEADS
- (4) ¼ - 20 X 1" BUTTON HEADS
- (8) ¼ - 20 X ½ FLAT HEADED SCREWS (Part J x2)
- (4) ¼ - 20 US FLAT WASHERS
- (12) 3/8 - 16 X 1/3/4 BUTTON HEADS (Installs the whole Rear Traction Loss together)
- (12) 3/8 - 16 NYLON LOCK NUTS (Used with every 3/8 – 16 x 1/3/4 Button Heads)
- (2) 3/8 - 24 NUTS (Used on tie rod)
- (1) 3/8 - 24 TIE ROD (Part M)
- (4) M5 - .80 X 18MM CAPPED SCREWS (Part N)
- (4) M5 - .80 NYLOCK NUTS (Part N)
- (8) M5 - FLAT WASHERS (Part N)
- (4) 8 – 32 X ½ BUTTON HEADS (Part P, SX4000 installs to this part)
- (1) M10 BALL JOINT (Threads to actuator)
- (6) FLOOR LEVELING MOUNTS
- (2) BALL TRANSFERS (Part A)
- (4) 1" X 2" BLACK PLASTIC PLUGS
- (2) POLYETHYLENE 2" X 2" SQUARE BARS W/ WHITE DOUBLESIDED TAPE

Part A, B, C & D have 5/16 tapped holes in them for the leveling pads. This will be referred as the bottom side in the remaining instructions)

(All bolt heads are to be on the top side and lock nuts on the bottom)

1 Locate part D

2 Locate part A & B

3 Locate Two 3/8 - 16 X 1/3/4 BUTTON HEADS

4 Locate Two 3/8 NYLON LOCK NUTS

5 Bolt part A & B together using Two 3/8 - 16 X 1/3/4 BUTTON HEADS and Two 3/8 NYLON LOCK NUTS (Please note how the bolt pattern is in the below picture. It shows how part A should be attached to part B)

6 Locate parts A,B,D,E & F

7 Locate Two 1” x 2” Black Plastic Plug and hammer them into sides of part D.

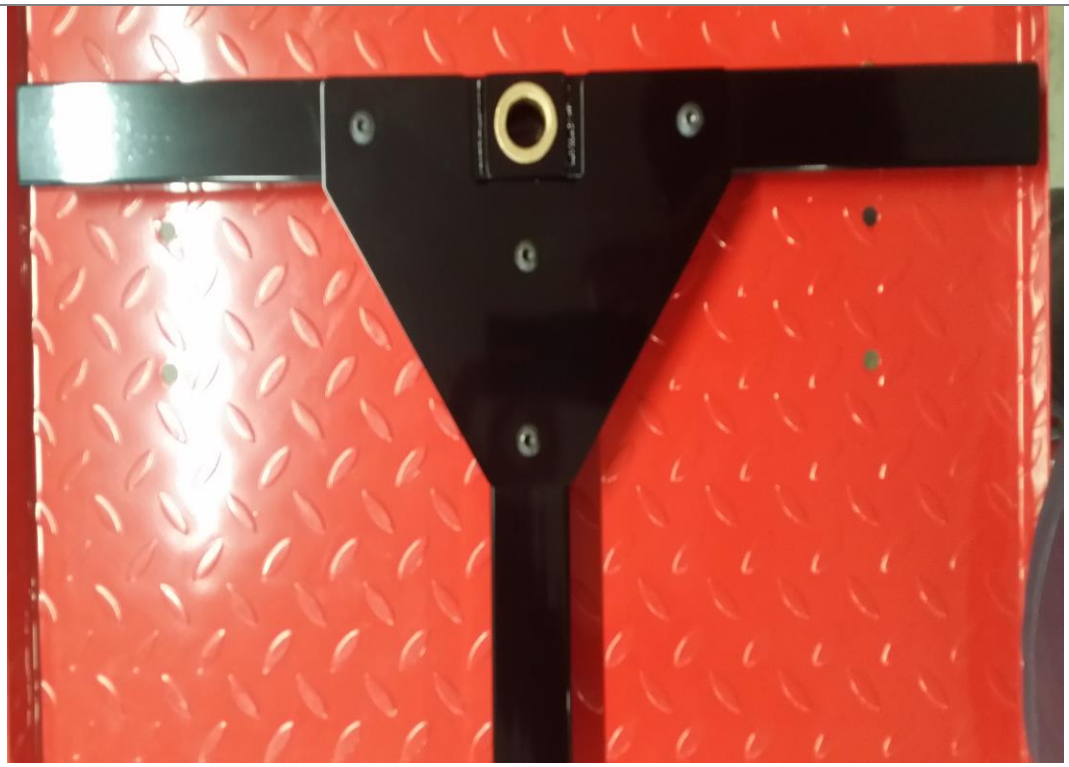
8 Locate Four 3/8 - 16 X 1/3/4 BUTTON HEADS
and Four 3/8 NYLON LOCK NUTS

9 Take part D with the bushing side up and place part E on top of part D with the notch in part E going around the bushing on part D

10 Slide Two 3/8 - 16 X 1/3/4 BUTTON HEADS down through both parts

11 Place part F under E & D and loosely thread on Two 3/8 Nylon Lock Nuts (See picture below of side view)

12 Slide part A-B with the B end in between the two plates E & F (See Picture Below)



Make sure that the 5/16 tapped holes are on the bottom side and part D's bushing is facing up

13 Bolt together using Two 3/8 3/8 - 16 X 1/3/4 BUTTON HEADS and Two 3/8 Nylon Lock Nuts.

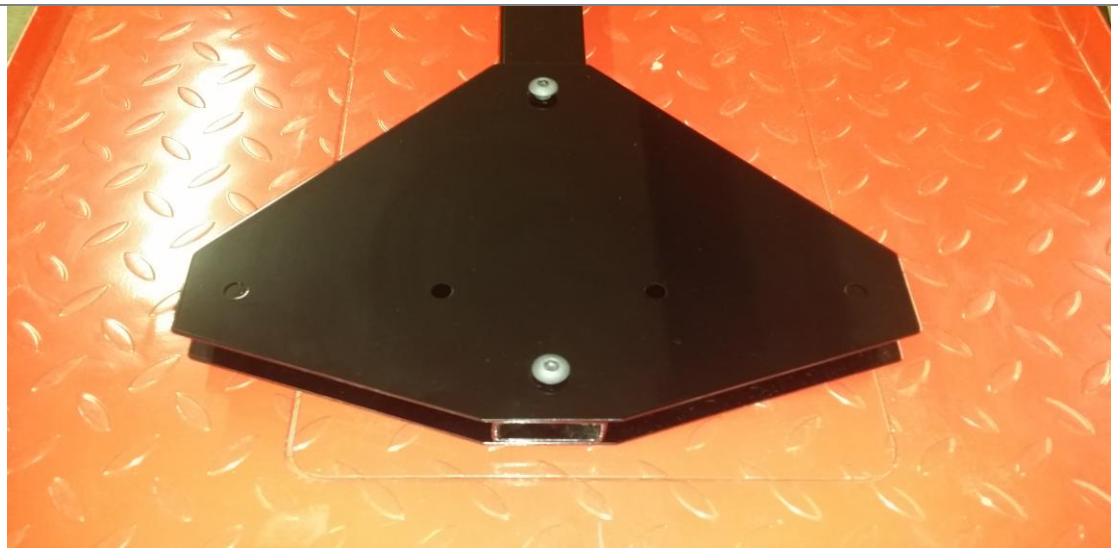
14 Using a square, make sure parts A-B are squared to Part D once all 4 bolts are tight.

15 Locate parts G, H, C1, C2

16 Locate Two 3/8 - 16 X 1/3/4 BUTTON HEADS and Two 3/8 Nylon Lock Nuts

17 Take part H and place it on top of part A-B. Take part G and line up holes from the underside of part A-B.

18 Slide the Two 3/8 - 16 X 1/3/4 BUTTON HEADS through both parts in the center holes that are in line with part A-B. At this point just snug up the Two 3/8 Nylon Lock Nuts by hand. (See picture below)



19 Locate a 1” x 2” Black Plastic Plug and hammer into end of part A shown in the above picture.

20 Slide C1 & C2 in place making sure the tapped 5/16 holes are facing towards the bottom side and bolt together using Four 3/8 - 16 X 1/3/4 BUTTON HEADS and 3/8 Nylon Lock Nuts. You can now tighten up all 6 button heads and locknuts.

Make sure C1 & C2 are square to A-B after they are tightened.

21 Locate six leveling mounts

22 Thread the Six Leveling Mounts into the bottom side of the Rear Traction Loss frame

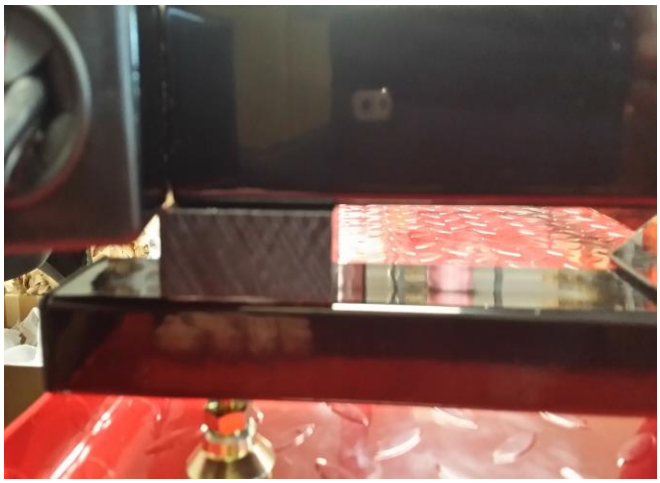
23 Set the Rear Traction Loss frame into its permanent location and level it. Make sure to leave enough height/ space for Sim Vibe brackets! Failing to do so can cause dents and scratches to you flooring!

24 Once the frame is level, lock the leveling pads in place by holding the leveling pad with a wrench and tightening the 5/16 nut up against the bottom side of the Rear Traction Loss Frame

25 Locate part J x 2 and Eight ¼ - 20 X ½ FLAT HEADED SCREWS

26 Bolt part J x 2 to part C1 & C2 using the Eight ¼ - 20 X ½ FLAT HEADED SCREWS

27 Locate Two POLYETHYLENE 2” X 2” SQUARE BARS W/ WHITE DOUBLE-SIDED TAPE part Q and peel the paper backing off the double sided tape and place them on top of part D of front end. Make sure the outside edge of part Q measures out 1/1/2” from edge of part D on left and right side. This will help remove most of the unwanted movement during exiting and entering your simulator as well as during operation of your simulator.



Installing Simulator Onto Rear Traction Loss Base

The next few steps requires one or two additional people to help set the simulator into position

28 Apply a light layer of grease to the shaft to part L on the front end. It will make it easier to slide onto part D

The grease should be enough to hold the washer on the shaft during the installation of the simulator onto the Rear Traction Loss base

29 Now have one person or two pick up rear of front end/seat base while another person picks up the front of front end/seat base. Walk the front end/ seat base to the top of rear traction loss. Line up the part L and part D. In order to get Part L to slide down part D, the rear end might have to be slightly moved back and forth. Also, you might have to use a rubber mallet.

30 At this time you can install the Two BALL TRANSFERS (see figure 19). Lift part A of the seat base up just enough to press one of the ball transfers into the 1 27/64" diameter hole. Lower the base back down so the weight will keep ball transfer in place.

31 Next, carefully lift part B from seat base and repeat step 30.

Figure 19

Installing Rear Traction Loss Actuator

32 Locate your 150 mm actuator

33 Locate FOUR M5 - .80 X 18MM CAPPED SCREWS and FOUR M5 - .80 NYLON LOCKNUTS

34 Locate Part N

35 Locate EIGHT M5 FLAT WASHERS

36 Lay the actuator mounting bar part N on its back and carefully slide the 150 mm actuator into position

37 Bolt the actuator in place using FOUR M5 - .80 X 18MM CAPPED BOLTS, EIGHT M5 flat washers and four M5-.80 NYLON LOCK NUTS

38 (See picture below) Tighten BOLTS in a crisscross pattern.

DO NOT TRY TO TURN THE ROD OF THE ACTUATOR. IT DOES NOT ROTATE AND CAN CAUSE PERMANENT DAMAGE!

The next step is easier if you have a helper

39 Thread the M10 BALL JOINT completely down onto the actuator rod so the M10 stud is in the vertical position as shown below. Hold the actuator rod and M10 BALL JOINT in place with wrenches and tighten the M10 nut against the ball joint. This will lock the ball joint in place.

Make sure the ball joint is centered and in the vertical position facing down when it is tight

40 Locate ONE 3/8-24 nut and thread it on the male shank end of the 3/8 – 24 TIE ROD shown in (*figure 21)*

41 Thread the male shank end of the 3/8 – 24 TIE ROD into the end of part N …locking it in place in the vertical position facing up as shown in **(***figure 23)*

42 Locate One M10-1.25 nut and thread it to the stud end of M10 BALL JOINT. Now locate One 3/8-24 NUT and thread it to the stud end of the 3/8 – 24 TIE ROD.

At this time write down the serial number of you rear actuator

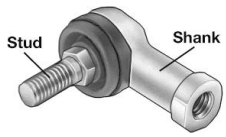


Figure 20

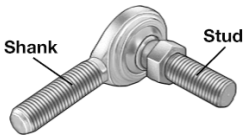


Figure 21

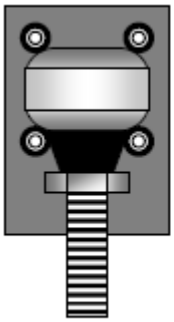


Figure 22

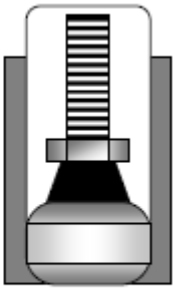
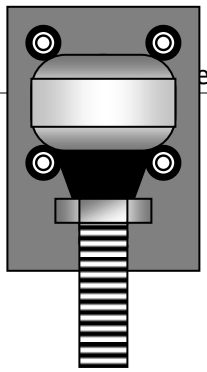
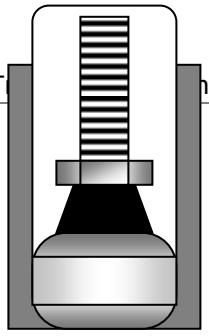
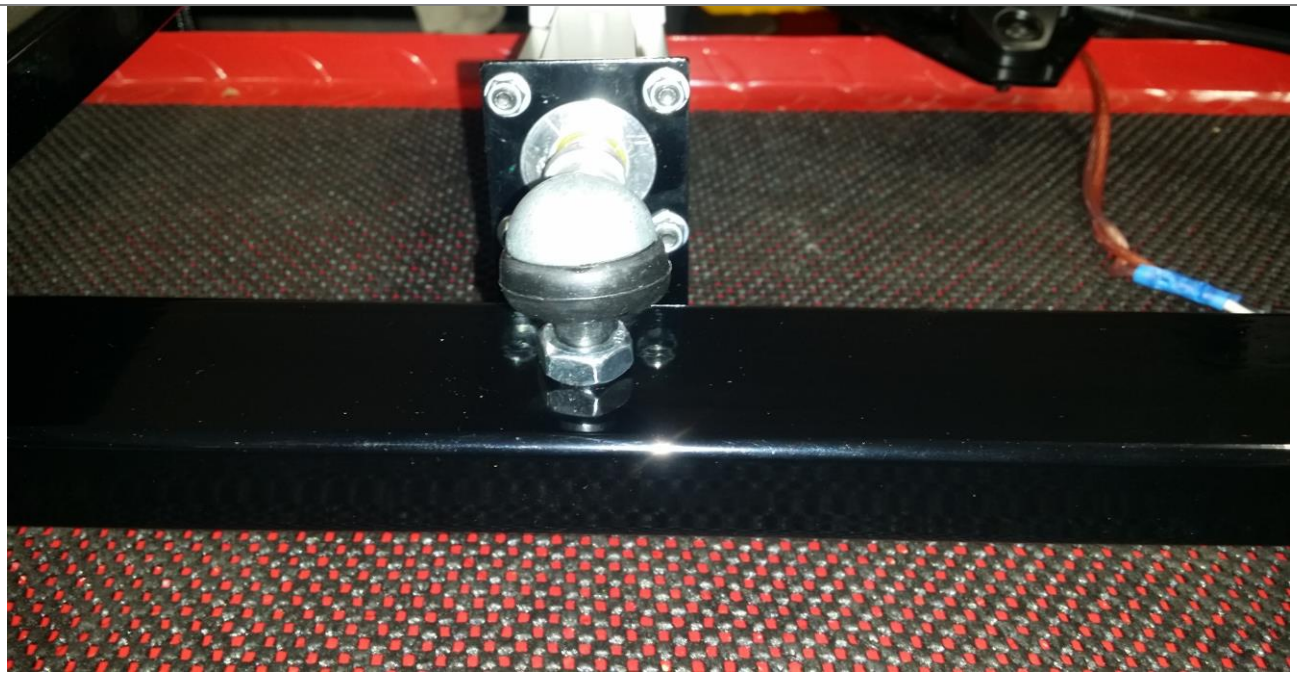


Figure 23



e M10 ball joint stud end into the Rear T he locking it into place with the M10 nut

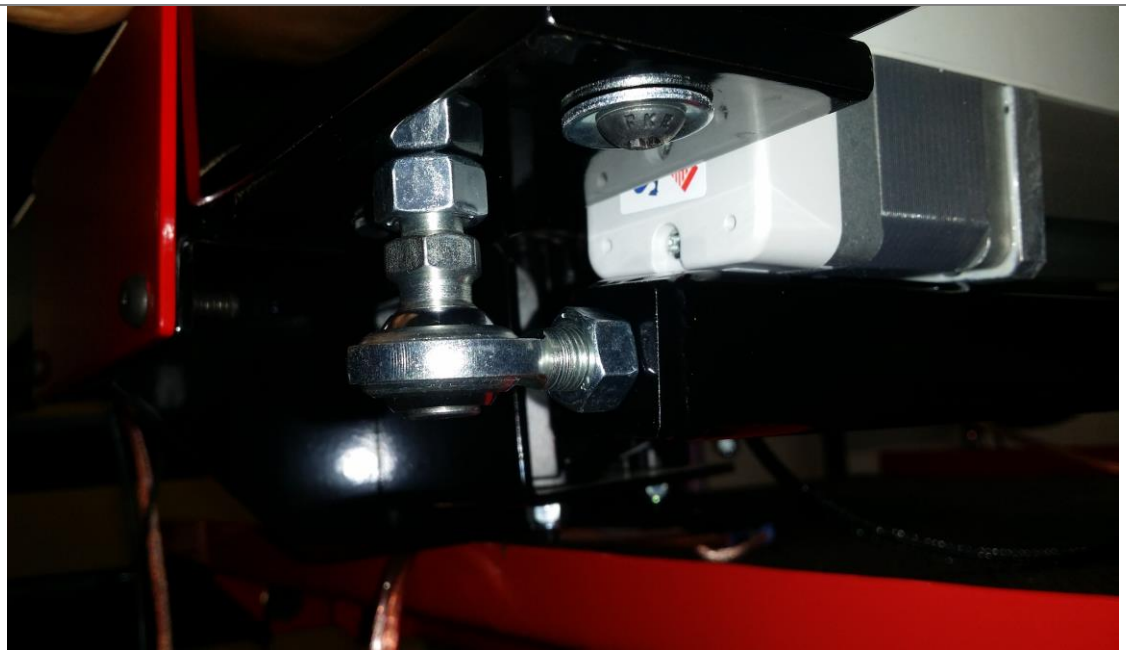




44 Start the threads of the 3/8 – 24 TIE ROD into part M and check your gap between the MOTION SEAT BASE RAIL B, and the back of the actuator where the serial numbers are located. The gap should be 1/8”

45 Adjust your gap by turning the shank end of the 3/8 – 24 TIE ROD in or out as needed.

46 Once the gap is set, thread the stud end of the 3/8 – 24 TIE ROD into part M and lock in place with the 3/8 nut.



Double check the 3/8 -24 TIE ROD and make sure it is square. Make sure the 3/8 nut is tight and locked in place.

Move the rear traction loss fully in each direction (by hand) to be sure the unit does not slide off of the Delrin pads. Check this before powering on the actuator.

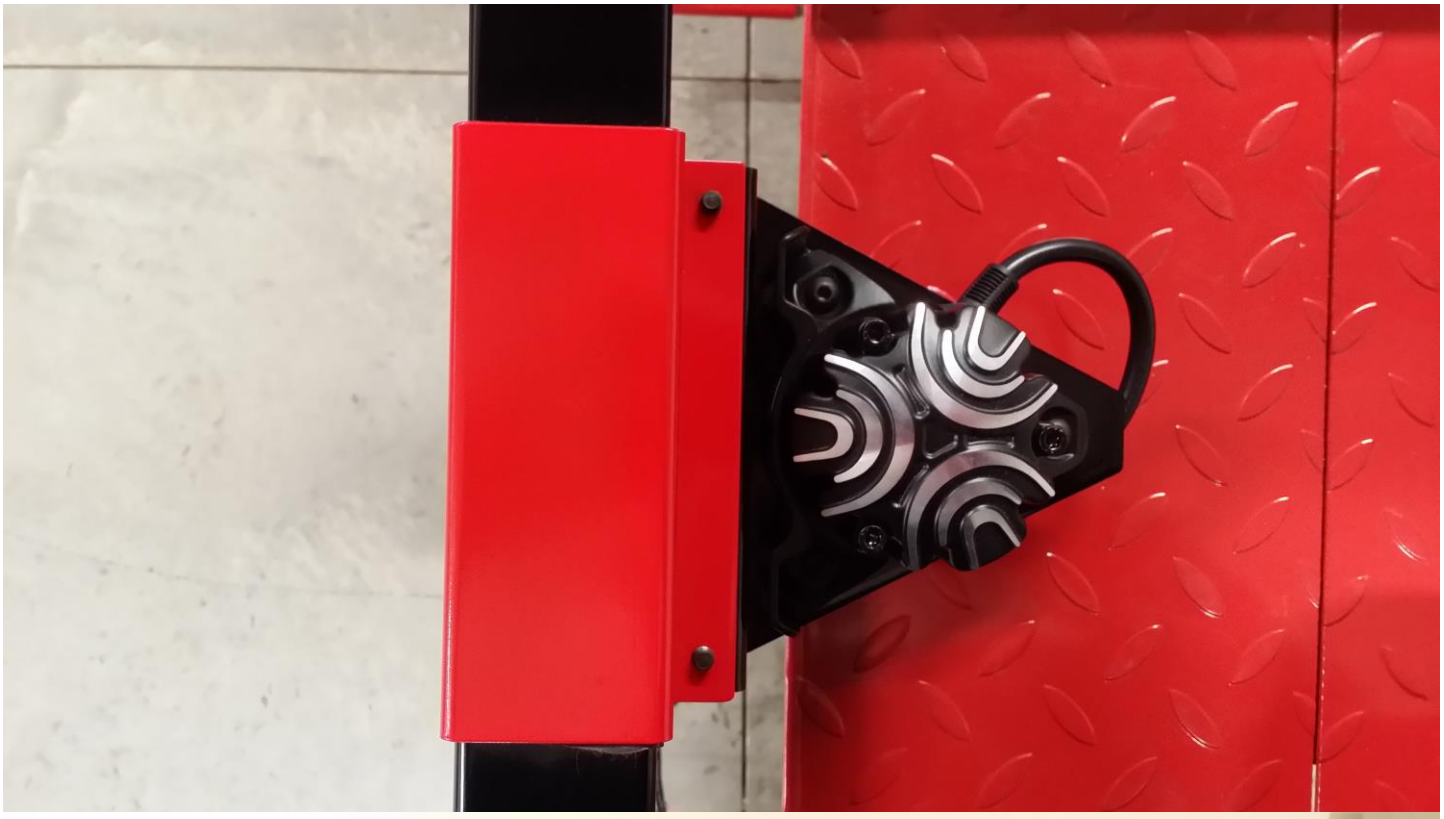
47 Plug the actuator into the right side plug of the SX-4000 Motion Control Adapter.

SIMVIBE BRACKETS

Installing the Sim Vibe Brackets should be the next step after you finish up Rear Traction Loss. If you have floorboards, make sure to install Sim Vibe Brackets first. Below is a link to the installation guide for the sim vibe brackets:

http://www.simxperience.com/Portals/0/Files/SimVibe/SVBracketManual.pdf

A 5/32 Allen Wrench socket and a C clamp along with some type of cloth will be needed for this process. The following is a picture of contents included in Sim Vibe Bracket boxes:

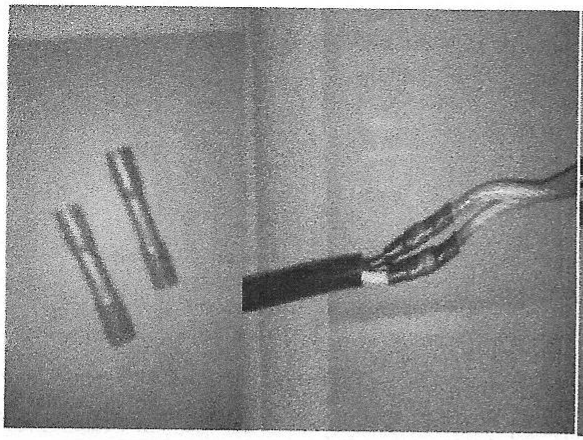


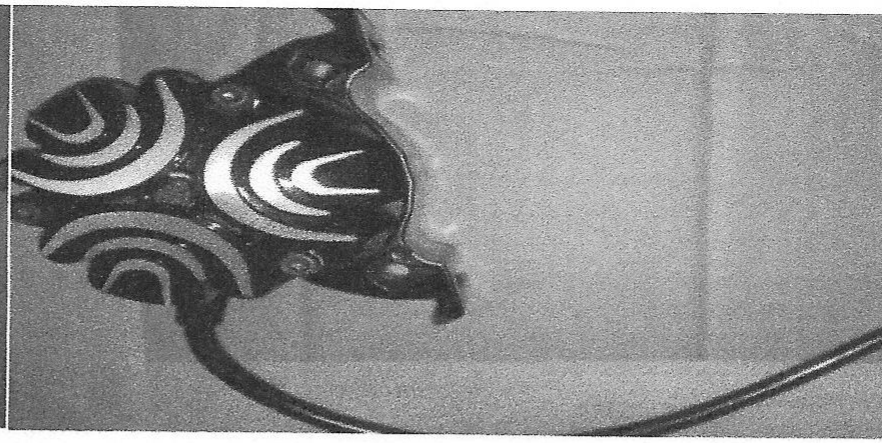
SIMVIBE WIRING INSTALLATION GUIDE

1. Find 50ft spool of speaker wire and cut 2x 17ft (rear
(fronts) lengths.

2. Strip wires and install banana jacks on one end of al

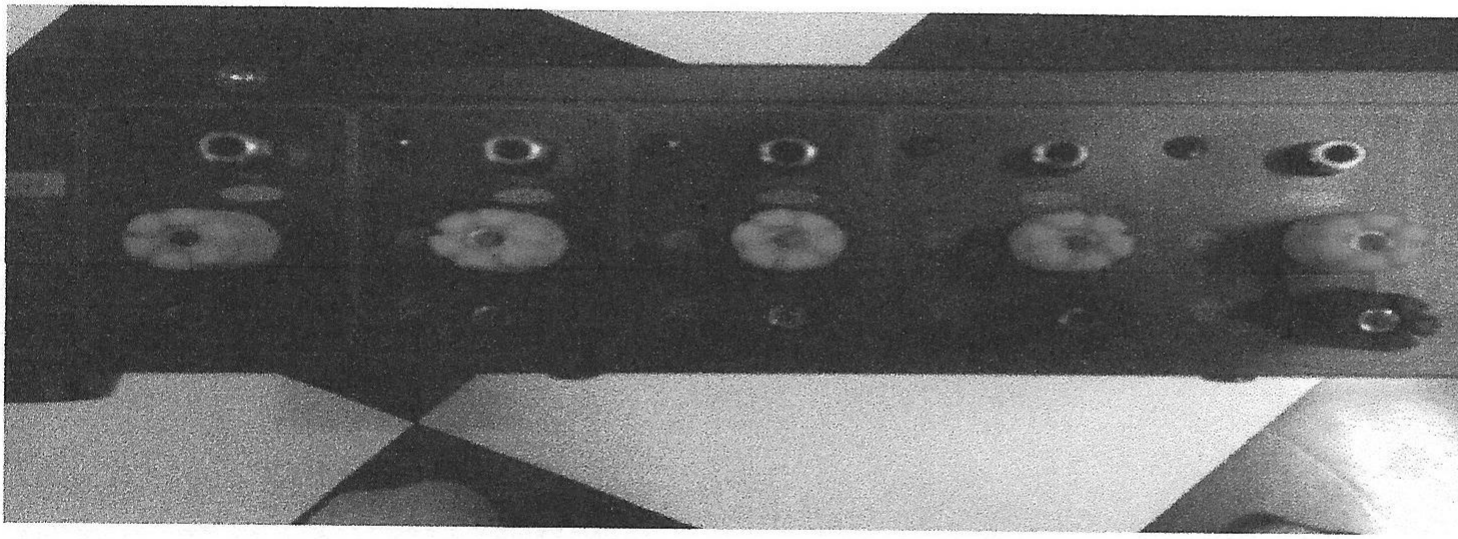
3. Crimp and heat shrink the other end of the wires to B





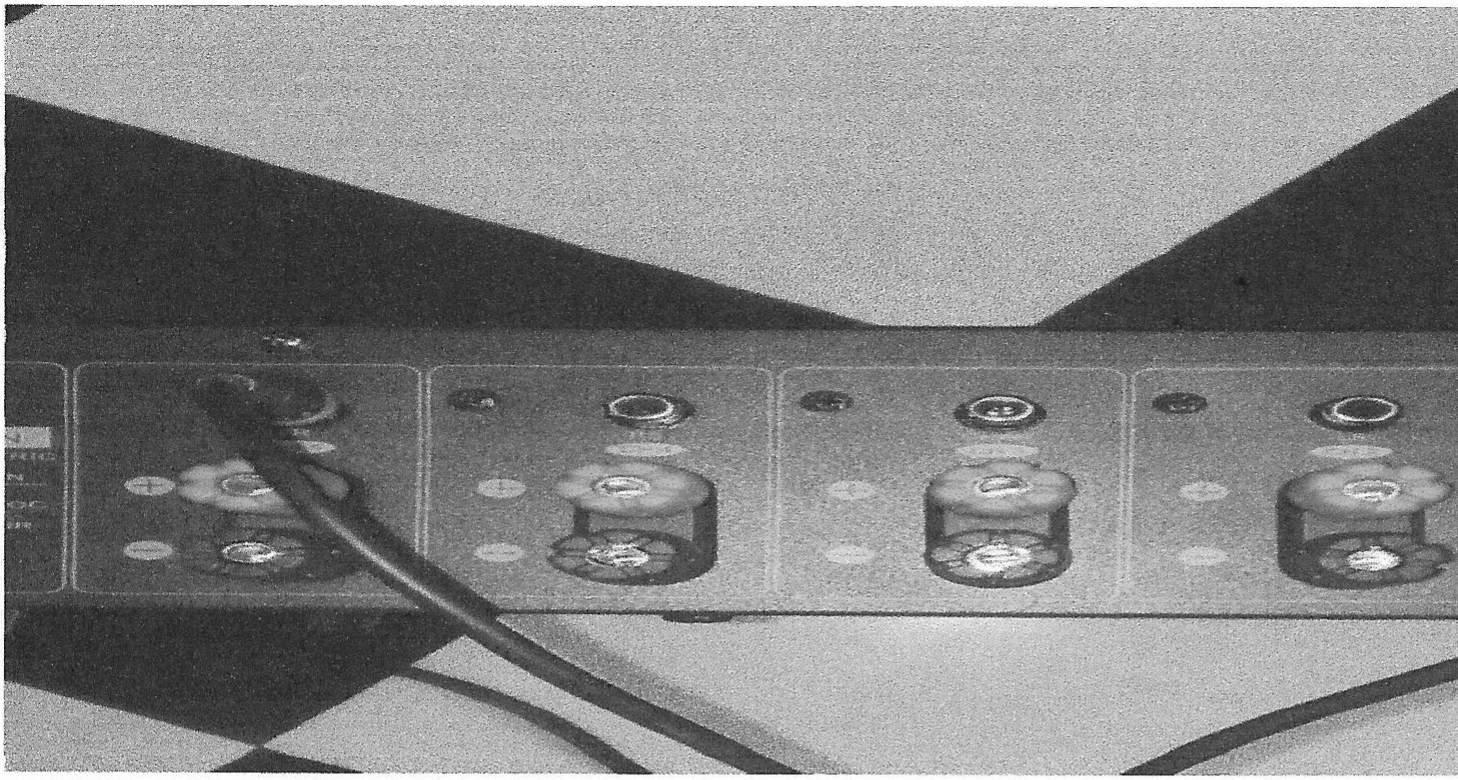
Wire the positive speaker wire to the white wire on th Buttkicker.

4. Plug the banana jacks into the correct locations on the amplifier.

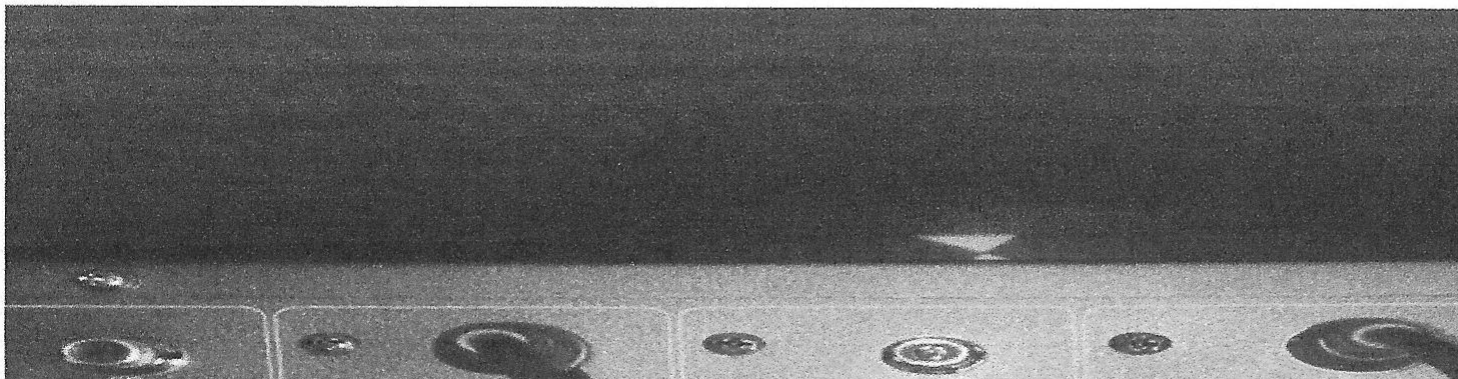


The wires will be labeled with identical wording as the on the amp.

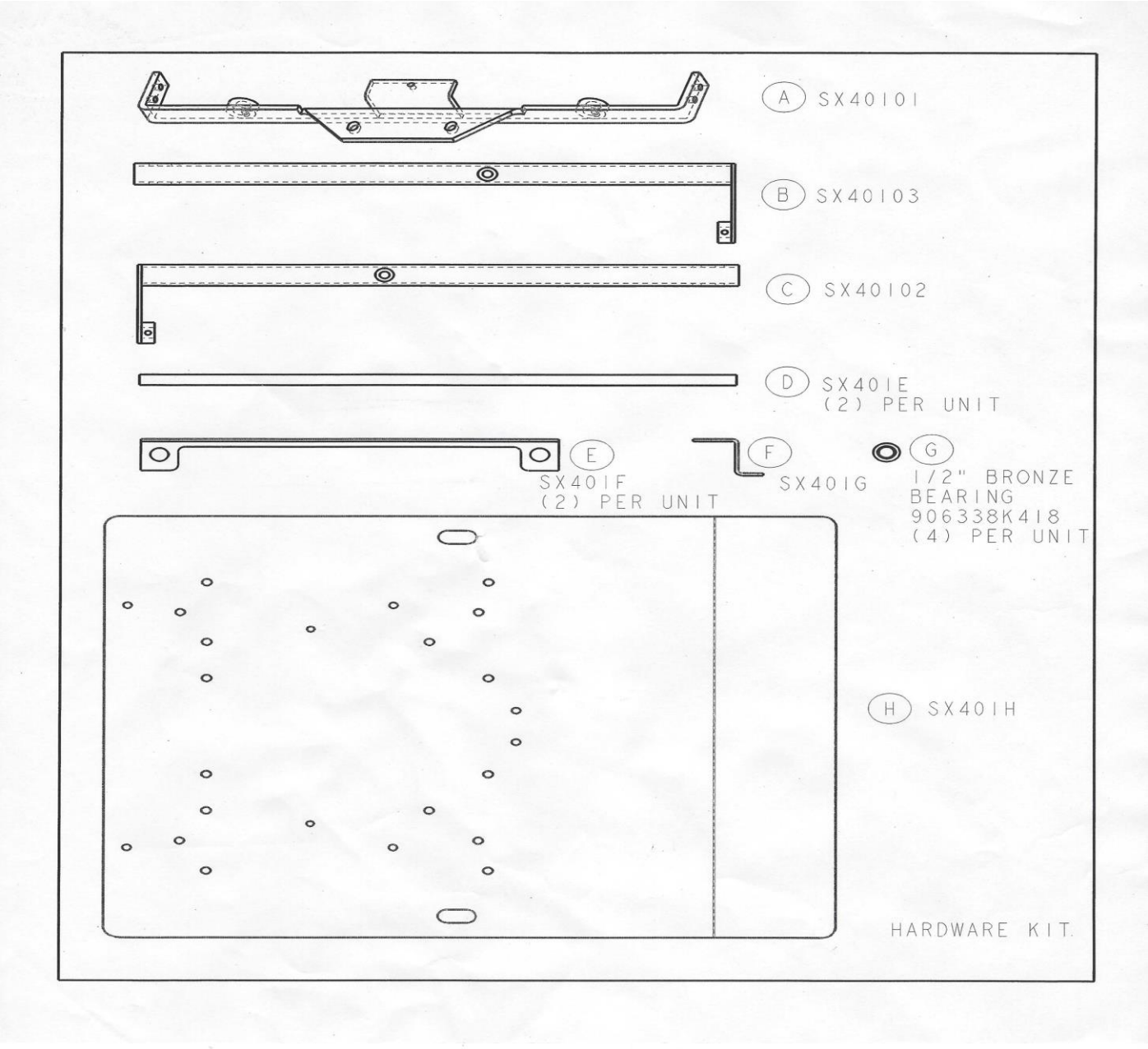
6. Select one rca-3.5 wire to be the Front channels. Wire
RCA's to FR (Front Right) and FL (Front Left) on the am
Make the red rca the right channel.



7. Select one rca-3.5 wire to be the Rear channels. Wire
RCA's to RS (Right Rear) and LS (Left Rear) on the amp
the red rca the right channel.



Power Pedal Tray Parts:



CHES (wires will be labeled for what each one goes plugs into)

on the picture of page 58

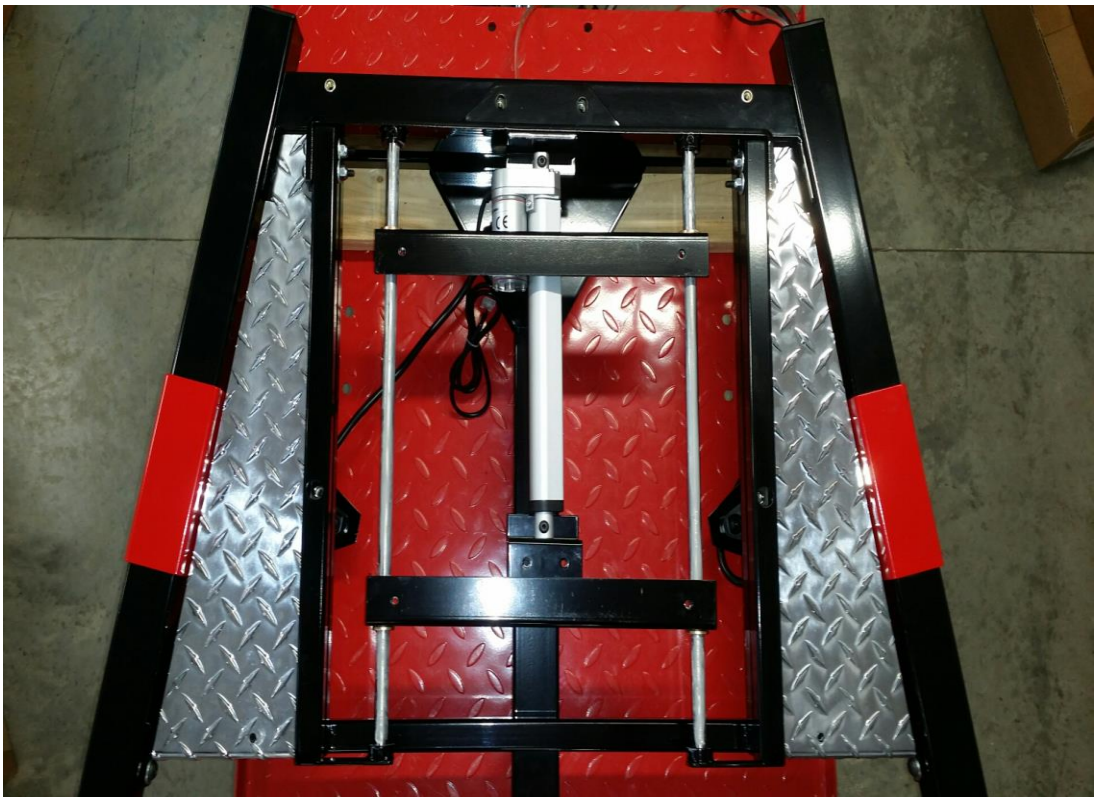
2 Slide the Two part D's through the bushings on the Two part E's.

3 Insert the Two part D's into part A. Make sure they are completely in as far as they can go. Stand part A in an upright position on the edge of a bench and use a mallet hammer. Now tighten the set screws that are already in the part A.

4 Locate part B and part C. Insert the other sides of part D's (rods) into part B and part C. Repeat the same procedure in step 3 to make sure they the rods are in as far as needed.

5 Locate Four ¼ - 20 x 2" BUTTON HEAD BOLTS, Eight ¼ - 20 US FLAT WASHERS, and Four ¼ -20 NYLON LOCK NUTS. Place Four of the washers down on all Four bolts. Next push the bolts through the outside holes of part A and to the other sides of part D's. Place the other four washers and lock nuts on the ends of the bolts and tighten them up. Tighten them up crisscross once all bolts are pushed through.

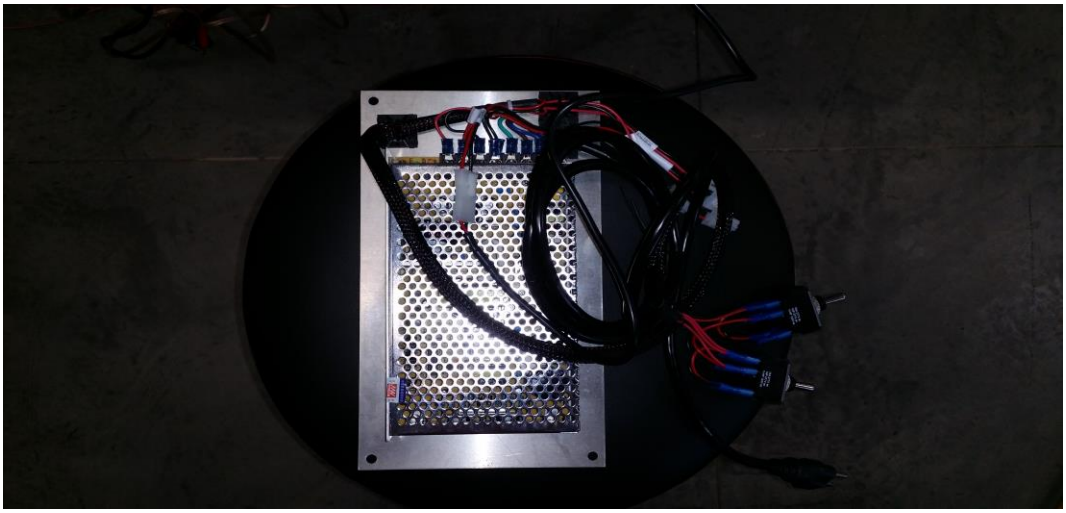
6 Locate ST092 Actuator, part F, Two ¼- 20 NYLON LOCK NUTS, and Two ¼ - 20 X 1.25" BUTTON HEAD BOLTS. Install the actuator with motor towards front of tray. Make sure the motor is flipped to the left if facing the front end. The button heads will go down through the top of the shafts on each side of actuator. These bolts will fasten the actuator to the power pedal tray and part F. The lock nuts will fasten up from the bottom of tray and part F. The first picture shows the Four 5/16 brass threaded inserts that the 5/16 – 18 X 1" BUTTON HEADED BOLTS will fasten tray to the front end frame. The second picture will show how the actuator should appear after it is installed.



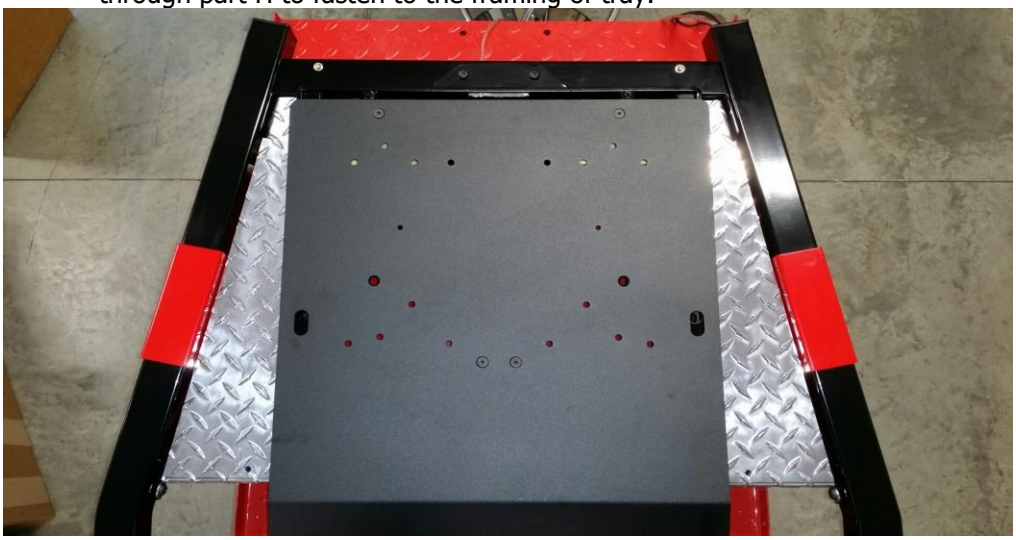
7 Locate Four 5/16 - 18 X 1" BUTTON HEAD BOLTS. The power pedal tray can now be placed onto the front end. The four holes in tray should line up above the four brass threaded inserts on the front end. Those areas are where the Four 5/16 - 18 X 1" BUTTON HEAD BOLTS will screw into. Tighten them all up.

8 Before you go any further now would be a good time to grease up part D's so it will slide with ease and protect against any possible moisture or corrosion in the future.

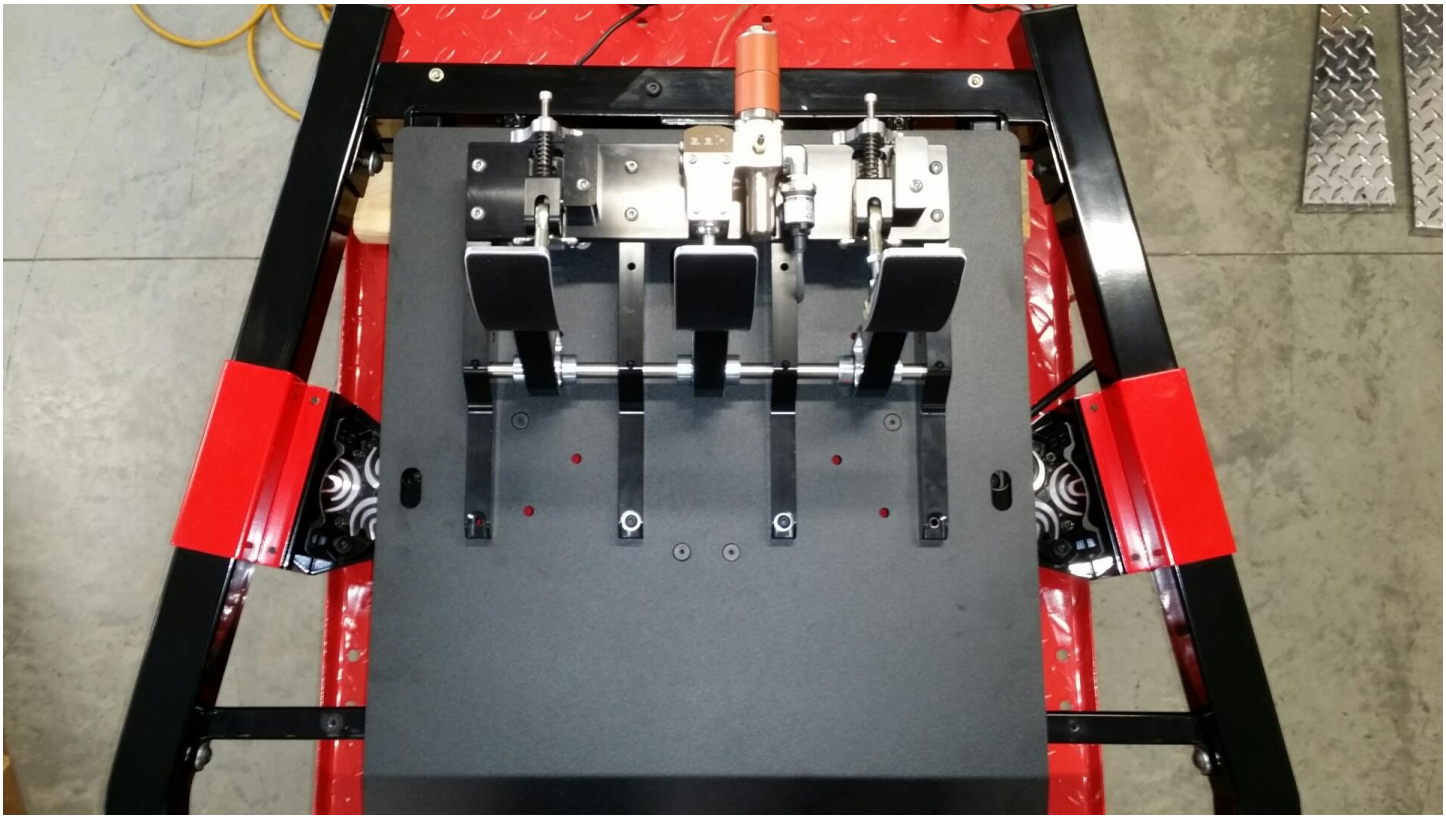
9 Locate Power Supply Unit. Plug in the Actuator to the appropriate plug on Power Supply Unit. Toggle the switch that will function the actuator back and forth to make sure it works correctly.



10 Locate the actual tray which is part H and Six ¼ - 20 x .5 FLAT HEADED SCREWS. Line up the Four larger holes of part H with threaded holes of the Two part E's. To line up the bottom two larger holes of part H with part F you will need to toggle the switch on power supply unit. Once everything is lined up you can fasten the Six ¼ - 20 x .5 FLAT HEADED SCREWS. Here is a picture of where the screws will go through part H to fasten to the framing of tray.

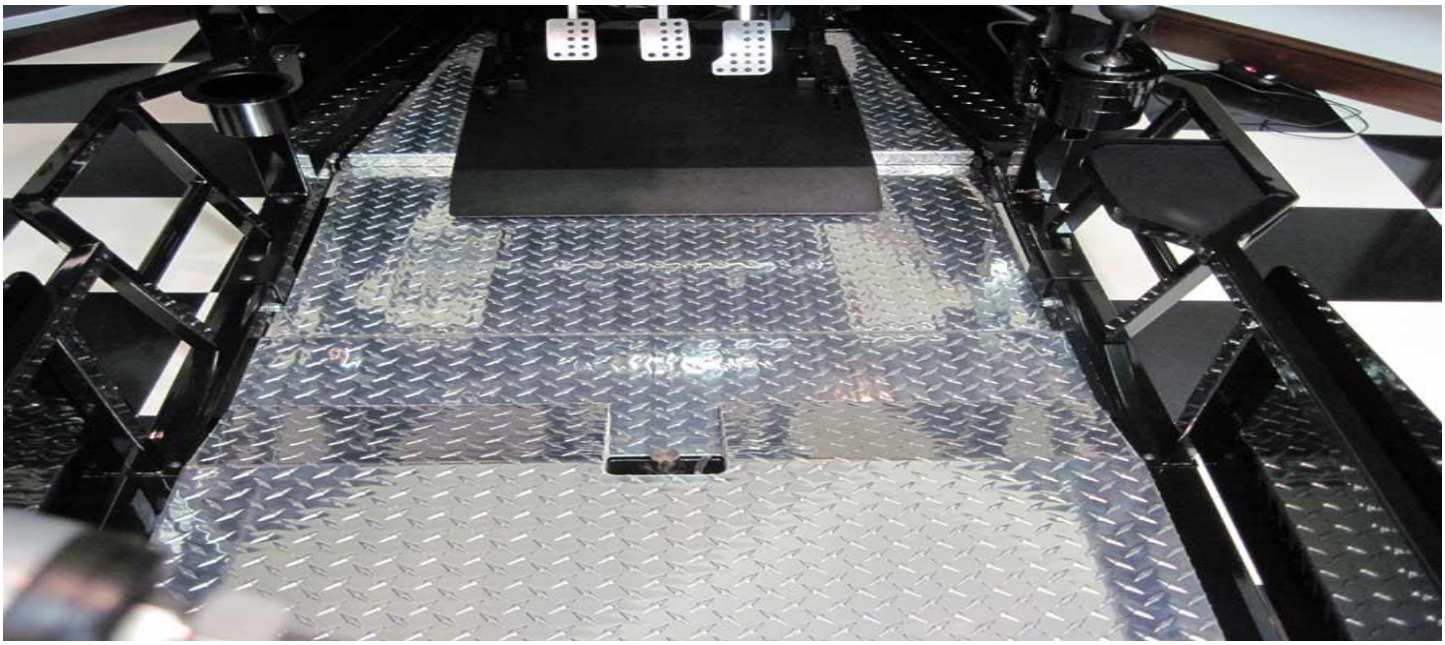


11 Next remove part B and part C floorboard pieces. It will make things easier for attaching your choice of pedal set to part H. You will be able to get your hands under to tighten up nuts and bolts much better. Here is a picture of how the Power Pedal Tray should look after installing your pedal set.



SIMXPERIENCE

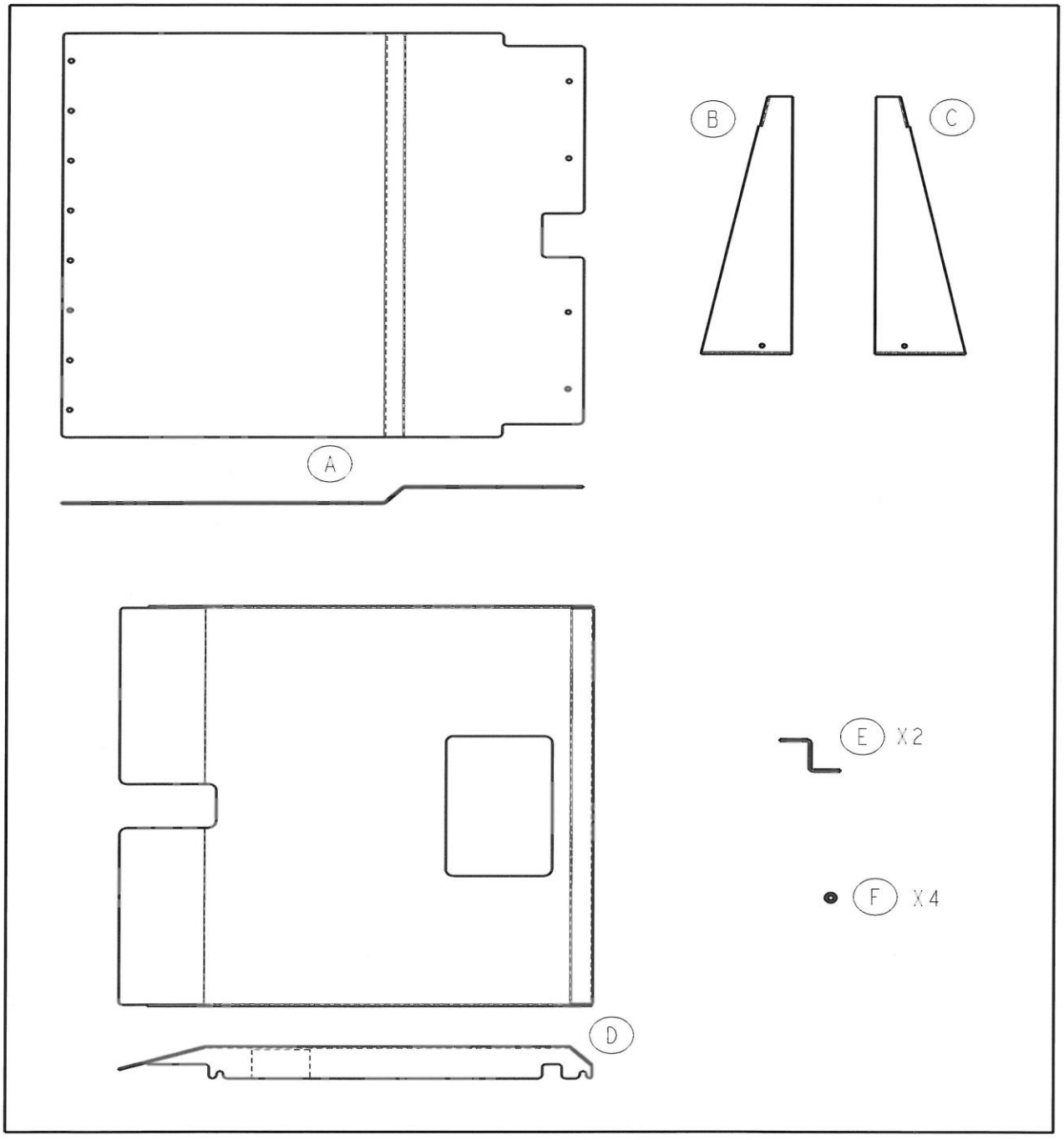
FLOORBOARD



The following is a list of hardware that is included in the contents of the Floorboard:

(15) ¼ - 20 x .875 BUTTON HEAD BOLTS
(15) ¼ - 20 US FLAT WASHERS
(2) FOAM TAPE

Here is a picture of all the contents of Aluminum Floorboard.



Floorboard Installation

1) Locate parts B&C (See fig. 1 on The Floorboard Assembly) and Two ¼ - 20 x .875 BUTTON HEAD BOLTS and ¼ - 20 US FLAT WASHERS.

2) On the front end to the left and right side of the pedal tray, loosen the Two 3/8 x 1" bolts bolting parts A&B to part C on the front end assembly (be sure to loosen enough to allow the aluminum plate to slide between the flange on part C and the washer)

3) Slide the slots on part B&C of the floorboard over the 3/8 bolts, making sure the washer is to the outside. Then start the Two ¼ - 20 x .875 BUTTON HEAD BOLTS and ¼ - 20 US FLAT WASHERS and snug by hand (bolting parts B&C to part C on the front end assembly) DO NOT TIGHTEN COMPLETELY YET!!

4) Press down on parts B&C while tightening the 3/8 bolt , then go back and tighten the ¼ - 20 x .875 BUTTON HEAD BOLTS

5) Locate the Two part E from the floorboard assembly and two pieces of foam tape

6) Remove the Four3/8 bolts that bolt the seat base to the front end and install part E (See fig. 2) with the floorboard support brackets facing each other.

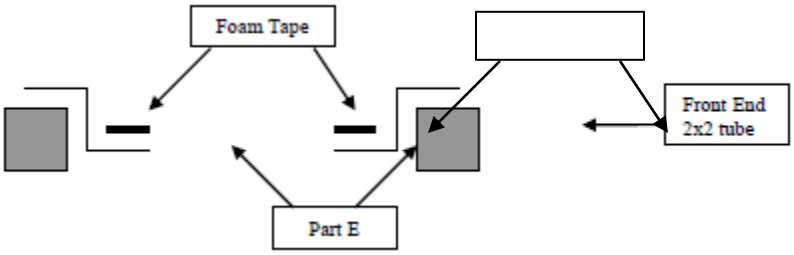
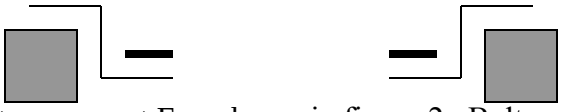
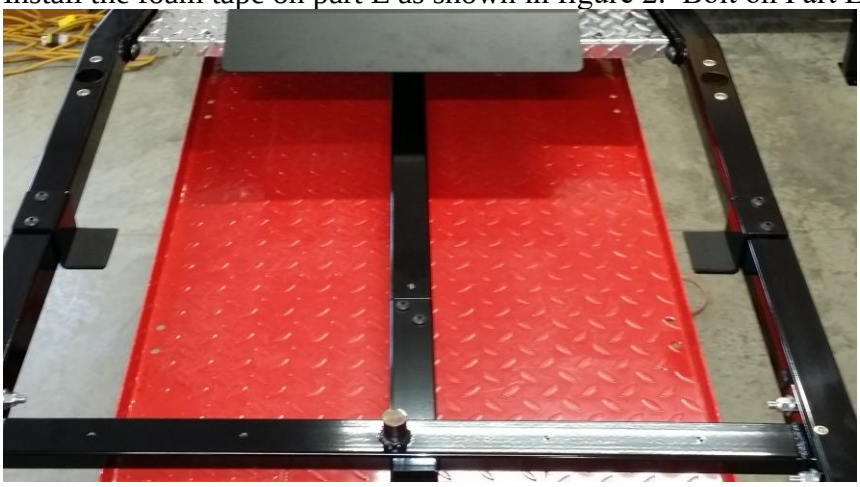


Figure 2



7) Install the foam tape on part E as shown in figure 2. Bolt on Part E's to each side. Below is a picture:



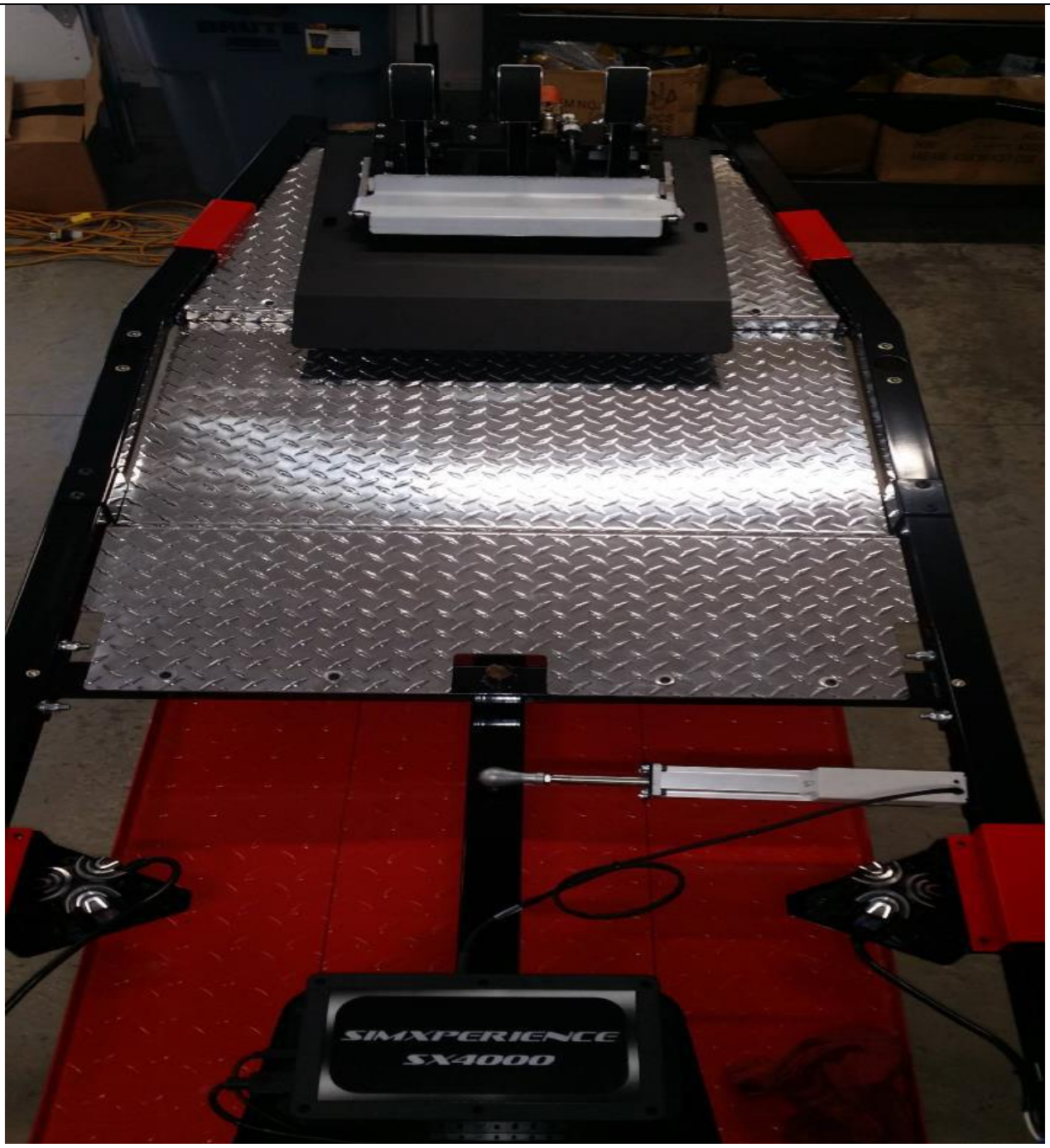
8) Locate part A and Twelve ¼ - 20 x .875 BUTTON HEAD BOLTS and Twelve ¼ - 20 US FLAT WASHERS

9) The notch in part A goes around the universal joint or 1" shaft on part D of the seat base.

10) Slide part A floor board under the 1" tube on the front end part C (At this time the floor board part A should be resting on part D of the seat base and part E of the floor board)

11) With Twelve ¼ - 20 x .875 BUTTON HEAD BOLTS and Twelve ¼ - 20 US FLAT WASHERS fasten the floor board part A to the simulator frame. Start all 12 Bolts by hand before tightening (8 bolts and washers will fasten the floor board to the bottom side of part C on the front end)

12) Four ¼ - 20 x .875 BUTTON HEAD BOLTS and Four ¼ - 20 US FLAT WASHERS will fasten the floor board part A to part D of the seat base.



13) Locate floor board part D

14) Loosen four 3/8 nuts on the seat base frame enough to allow part D of the floor board to easily slide between the seat base frame and the washer and nut.

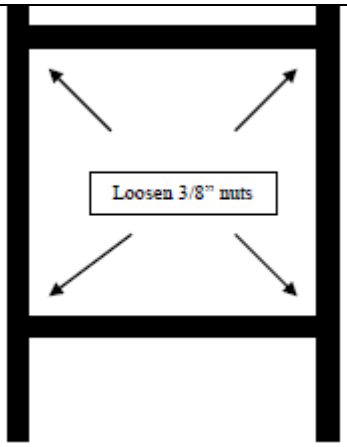
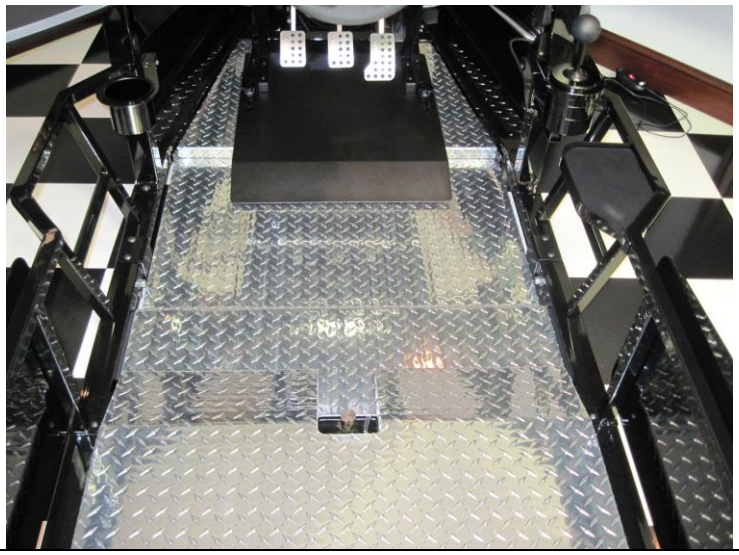
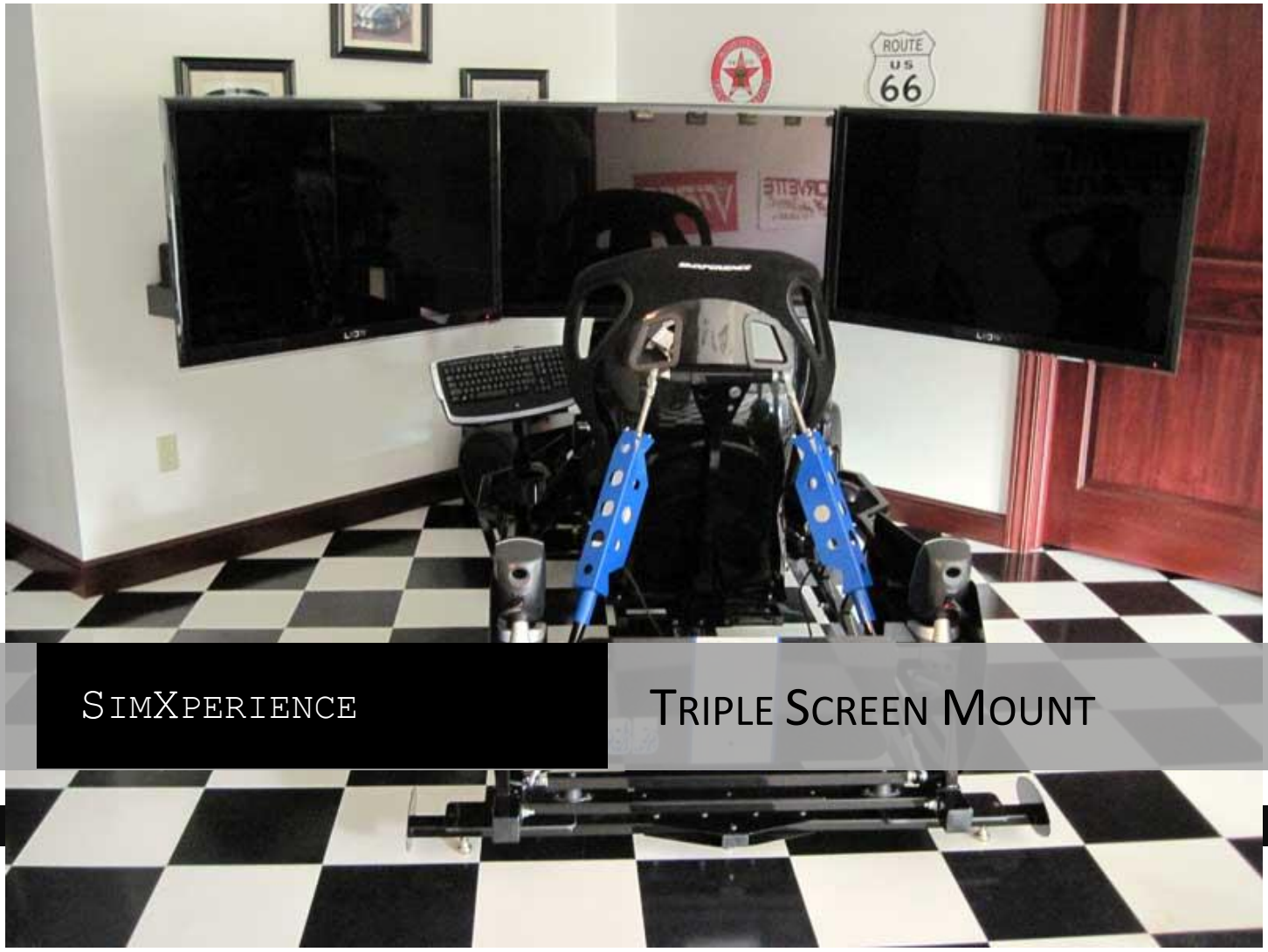


Figure 3

(Note:)
On some of the first units the 3/8 Carriage Bolts will need to be replaced with a longer carriage bolt so a ¼" aluminum spacer (part F) can be installed. The carriage bolts and spacers will be included with the floor board hardware.
The floor board part D will fit between the spacer part F and the washer/nut.

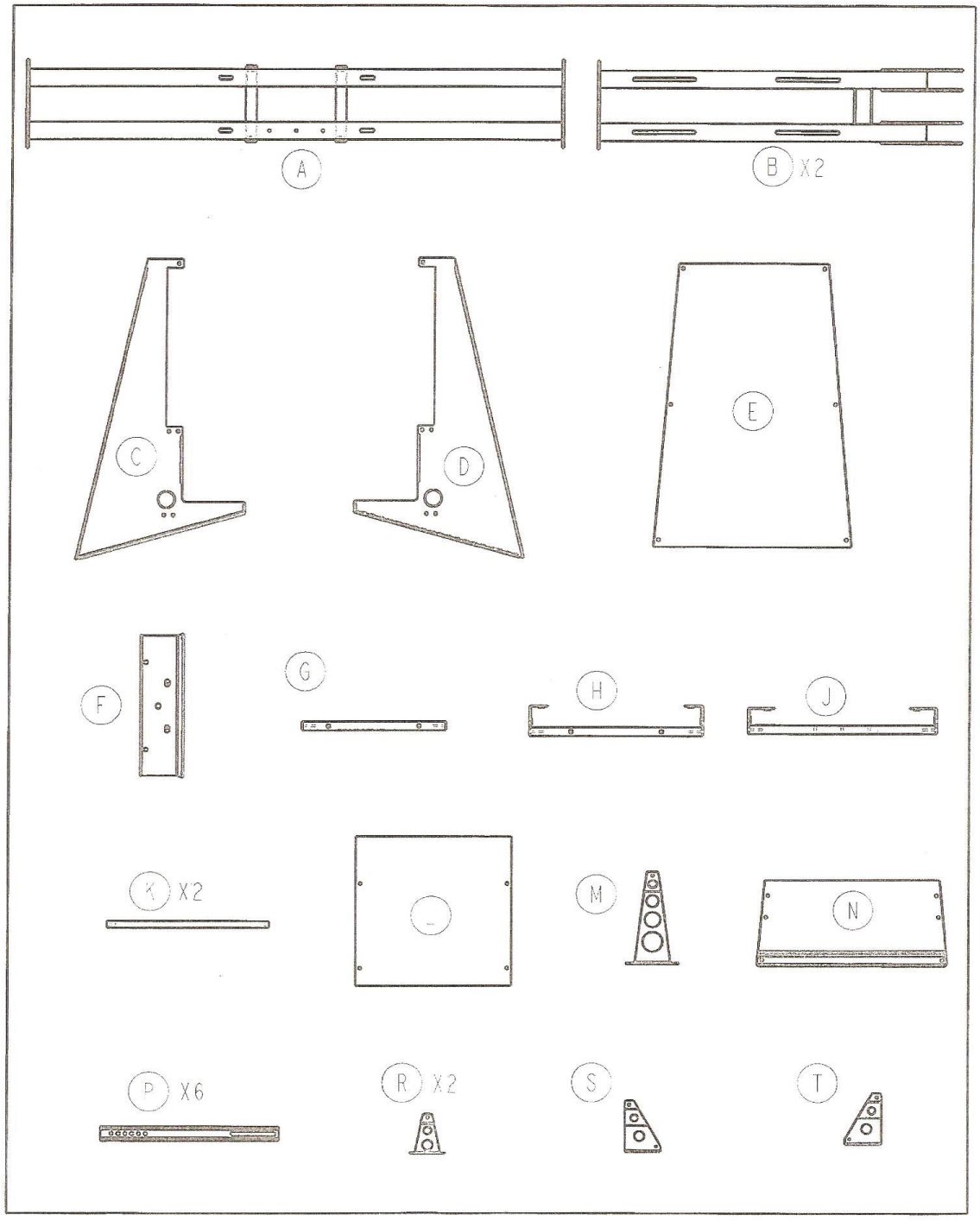
15) Once part D is in place, tighten the Four 3/8 nuts





SIMXPERIENCE

TRIPLE SCREEN MOUNT



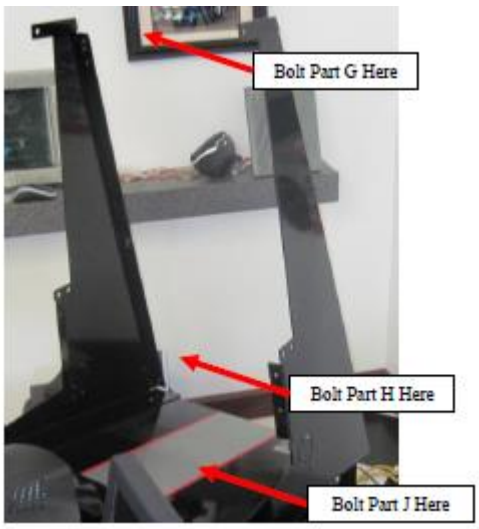
1) Unpack the contents of the box and Make sure that you have all the parts shown on the previous page.

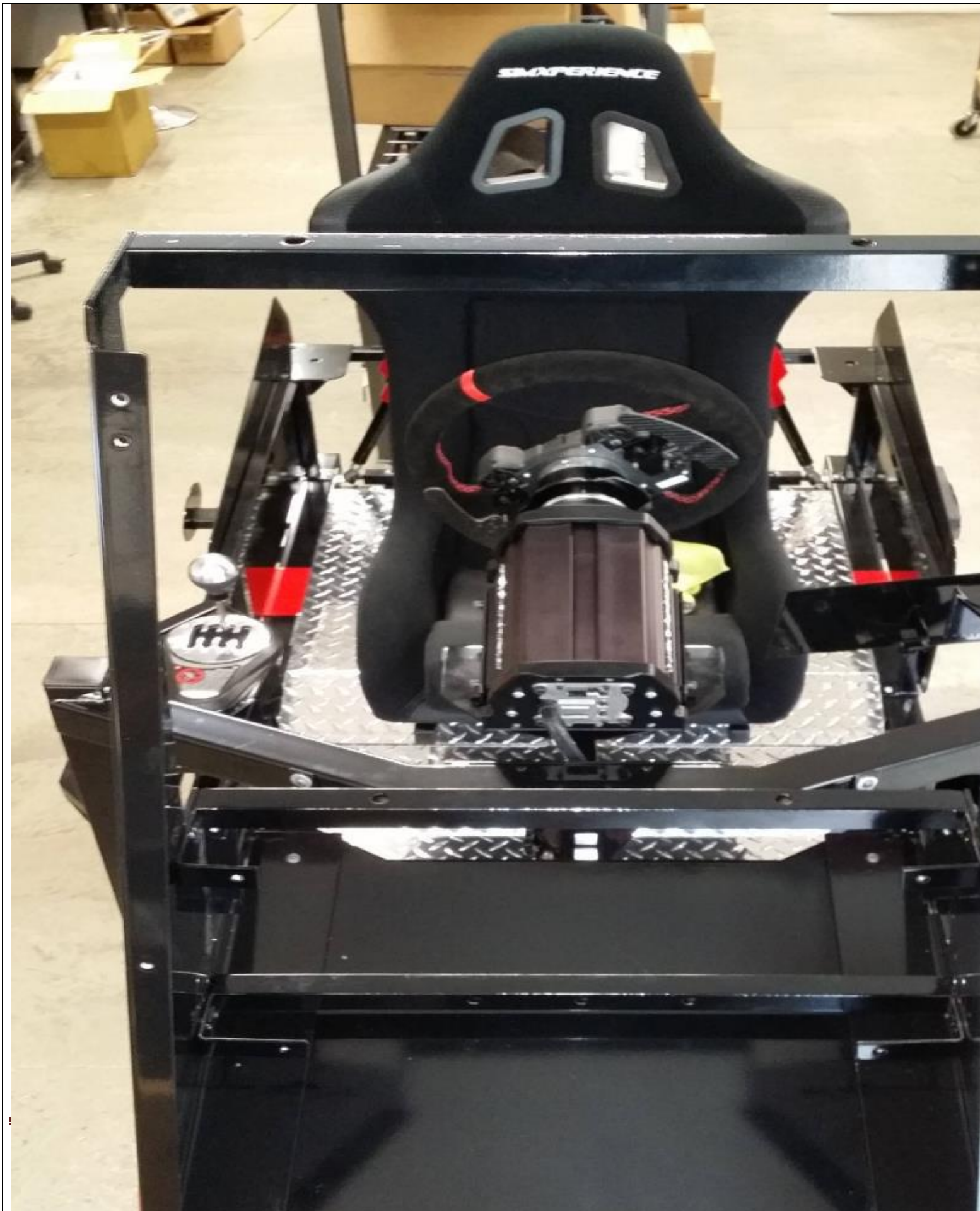
2) Locate panels C & D and Four ¼-20x2" bolts , ¼ x 20 flat washers and ¼ x 20 lock nuts

When installing these panels it is easier to remove only two of the hood panel bolts of the front end at a time. This keep the hood from sliding while installing the left and right panels (C & D) of the monitor stand.

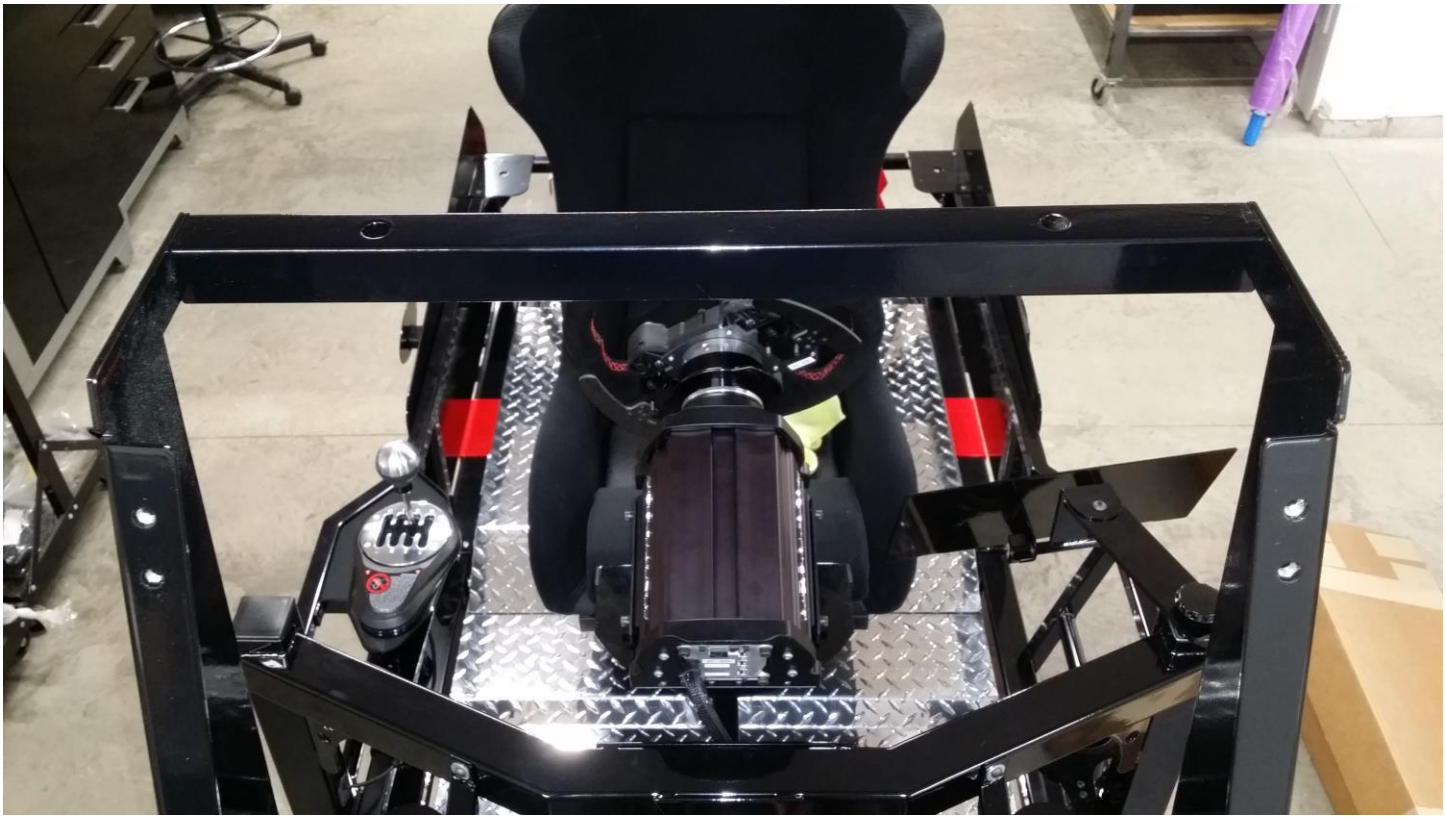
3) Loosely bolt panels C&D of the monitor stand to the front end using Four ¼-20 x 2" bolts, ¼ -20 flat washers an 20 lock nuts **(you want to tighten the four bolts enough so you can move panels by bumping them with you in or out allowing you to fit the other panels)** they do need to be snug

4) Locate the cross bars (parts H, J and G) and Ten ¼-20 x ½ bolts **(loosely bolt in place)** making sure the brackets and J are facing forward towards the front of the simulator and the brackets are angled down. Once both brackets place, you will bolt electrical panel (part L) to assure the holes line up, if not you may have to slightly bend the b to get the holes to align.




SIMXPERIENCE

5) On cross member (part G) make sure the Two 3/8" through holes are oriented in the vertical position.



6) Locate (part F) and loosely bolt in place with Two ¼-20 x ½" bolts

7) Locate (part E) and loosely bolt in place with Six ¼-20 x ½" bolts

8) Locate (part N) and loosely bolt in place with Six ¼-20 x ½" bolts

9) Now that all of your panels are in place tighten the ¼-20 x ½" bolts on parts F, H, and J

10) Now tighten the front Two ¼-20 x 2" bolts for panels C&D. Once tight, remove (part N) and tighten the back T
20 x 2" button head bolts

11) Now remove (parts E&L)

12) Locate (part A) and (part K x 2) and Four 3/8-16 x 1 ¾" button head bolts

13) Slide the two chrome shafts (part K x 2) through the bronze bushings on (part A), making them even

14) **This part requires an additional set of hands and Loctite**

Set part A with the two chrome rods part K's. Place them between parts G&H and snug the Four 3/8 button hea
with the loctite **(you want them snug, but not tightened all the way until you have the correct alignment nee
for part A)**

NOTE : You want to be able to slide part A freely up and down the chrome rods without it getting into a bind.

Make sure that (part A) is oriented so that the three actuator through holes are center bottom as in figure indicated by the yellow arrow.

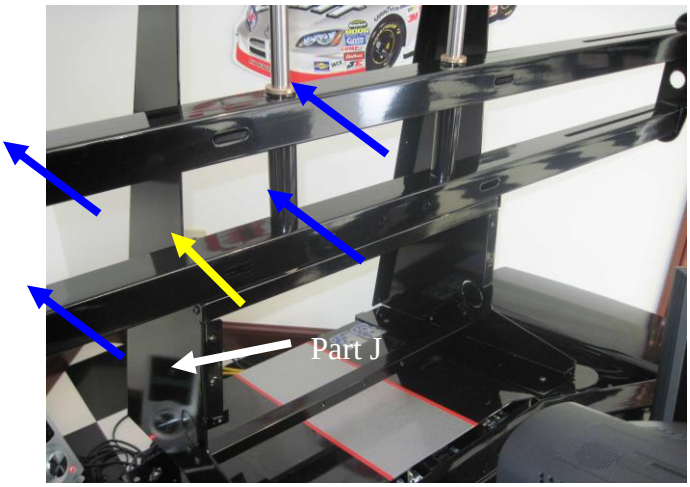
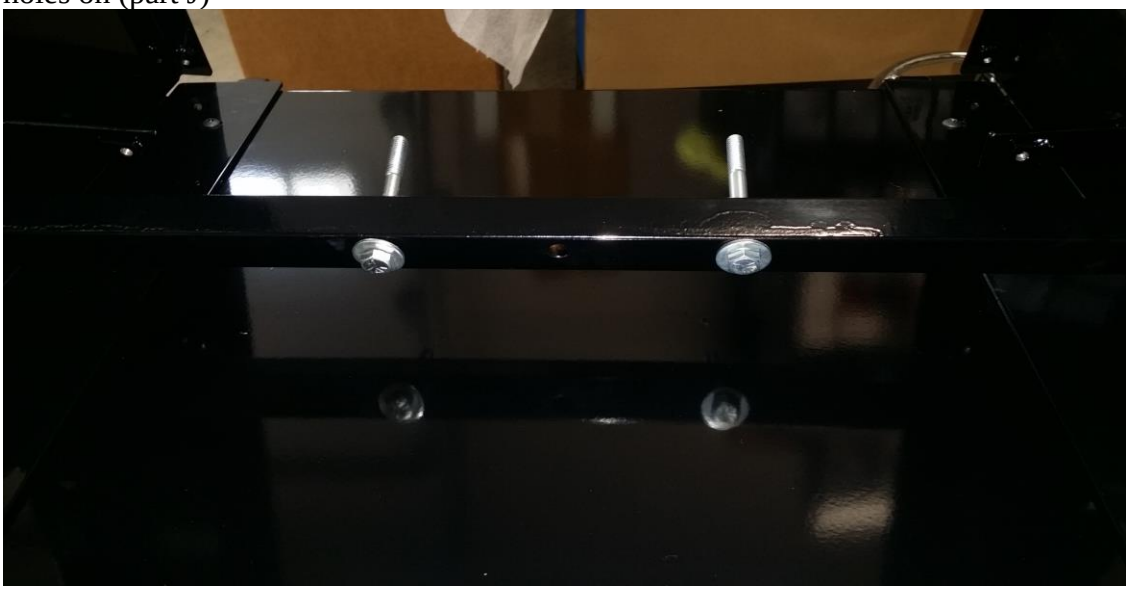


Figure B

15) Locate Two 200 mm actuators, Two 5/16-18 x 3" hex head bolts, Two 5/16-18 x 4" hex head bolts, Eighteen 5/1 flat washers, and Four 5/16 hex nuts.

16) There are three holes in the center of (part J) and (part A). You will be using the outer holes to mount the actuat

17) Take the Two 5/16-18 x 3" hex head bolts with a 5/16 US flat washer on each one and slide them through the tw holes on (part J)



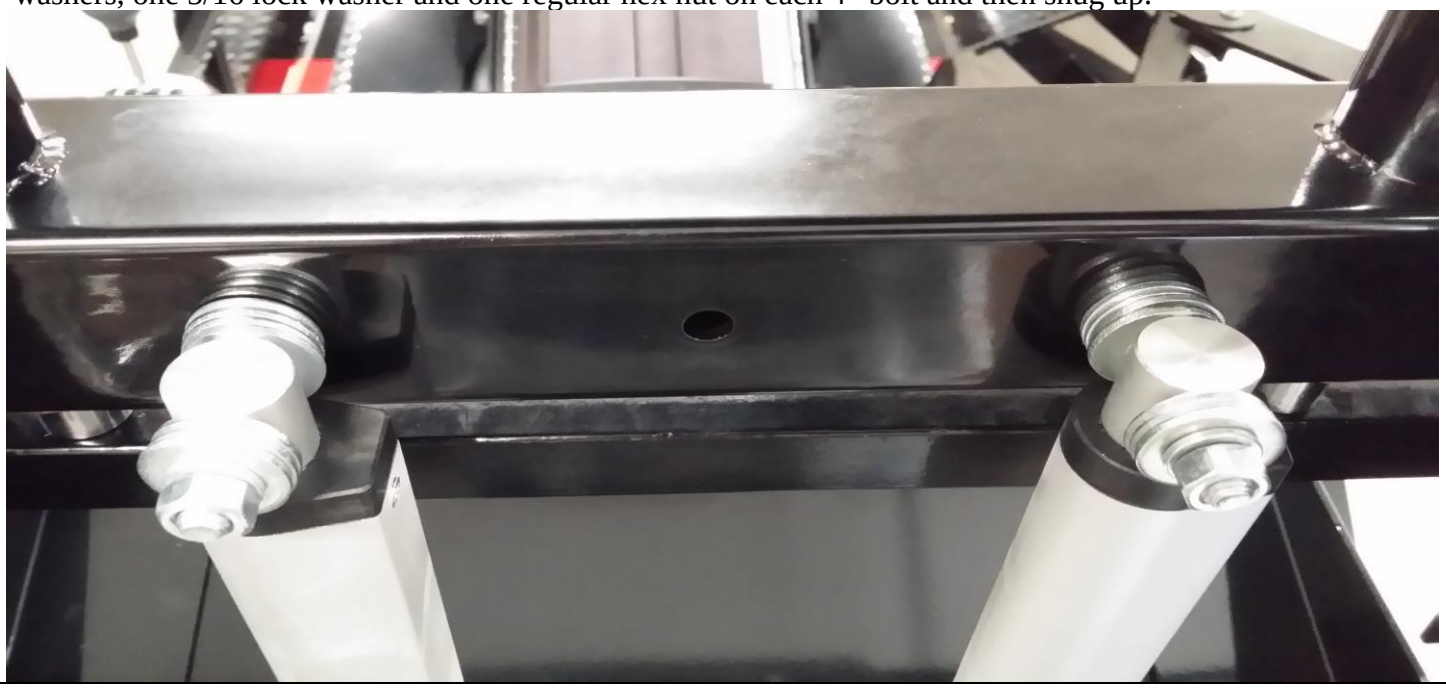
Note:
The bolts for mounting the actuators are to be slid through from the driver's side with the threads of the bolts sticking out on the front s the simulator.

18) Now slide the Two 5/16 x 4" hex head bolts with a 5/16 US flat washer through (part A) with the threads stickin the front side of (part A) approximately one inch. Then slide four more 5/16 US flat washers on the actuator side

19) Then from the front of the simulator slide both actuators onto the bolts with the motors both facing to your left. sitting in the seat of simulator the motors will be on your right.

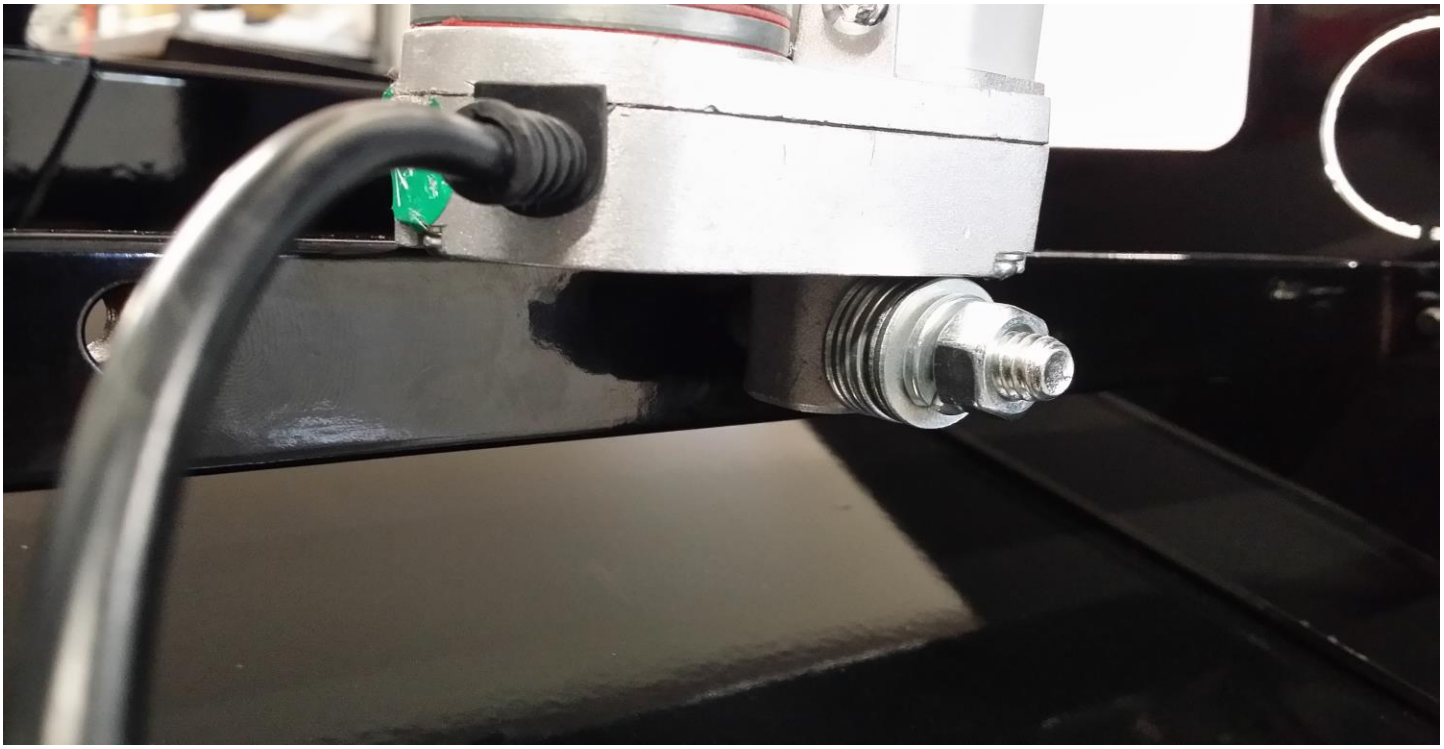
20) Now raising (part A) a little so it lines up with the holes in the actuator rod, slide the bolts through actuator.

21) Locate six 5/16 US flat washers, two 5/16 lock washers, and two 5/16 regular hex nuts. Install three more 5/16 U washers, one 5/16 lock washer and one regular hex nut on each 4" bolt and then snug up.



22) Locate twelve ¼ - 20 flat washers, two 5/16 lock washers, and two 5/16 regular hex nuts. Slide six of ¼- 20 flat washers on the other side of actuators on both of the 3" hex head bolts. Place a lock washer and regular nut on la snug them up.

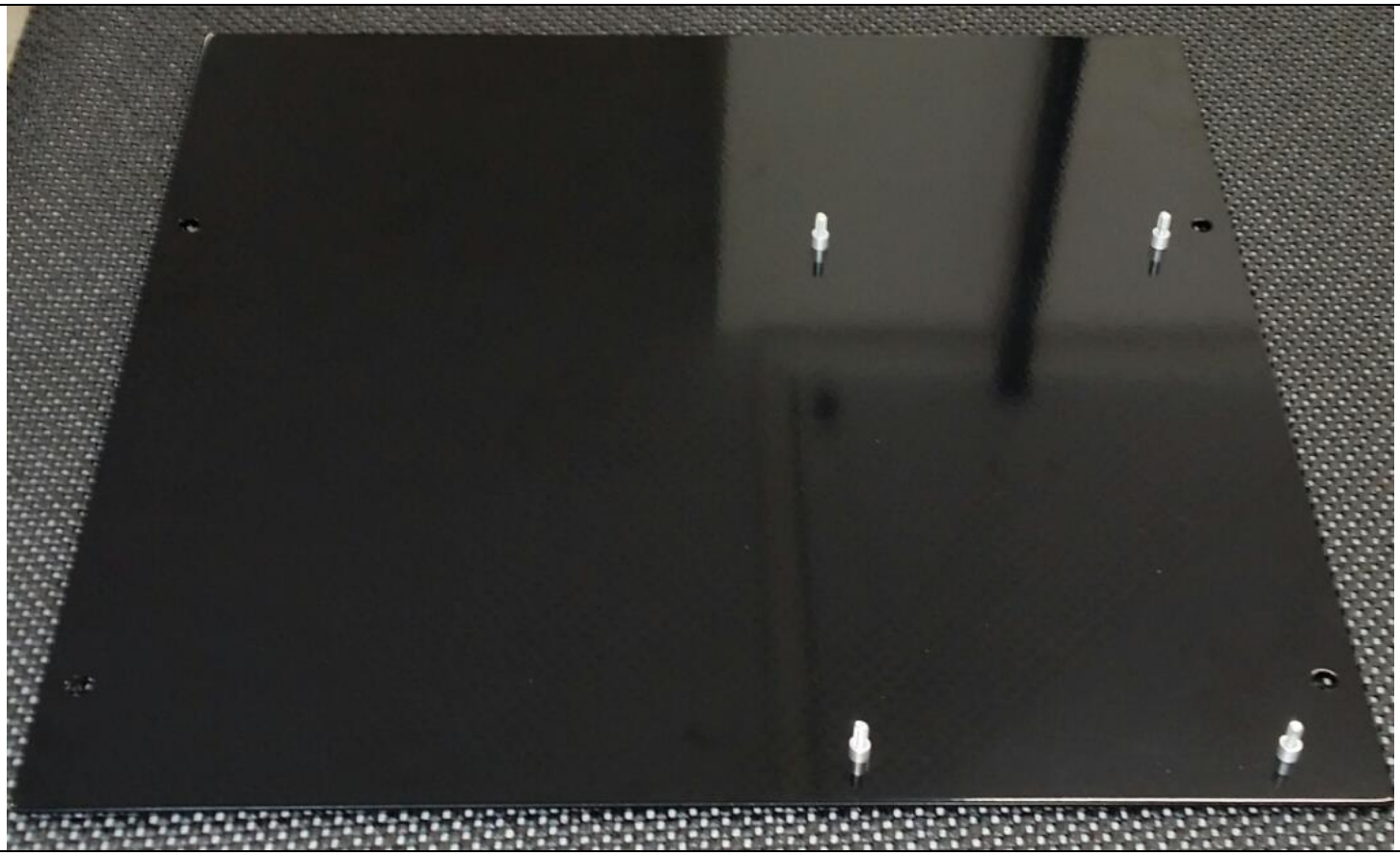
23) **IMPORTANT!!! Next, snug all four actuator bolts then loosen each one until the washer can turn freely.**

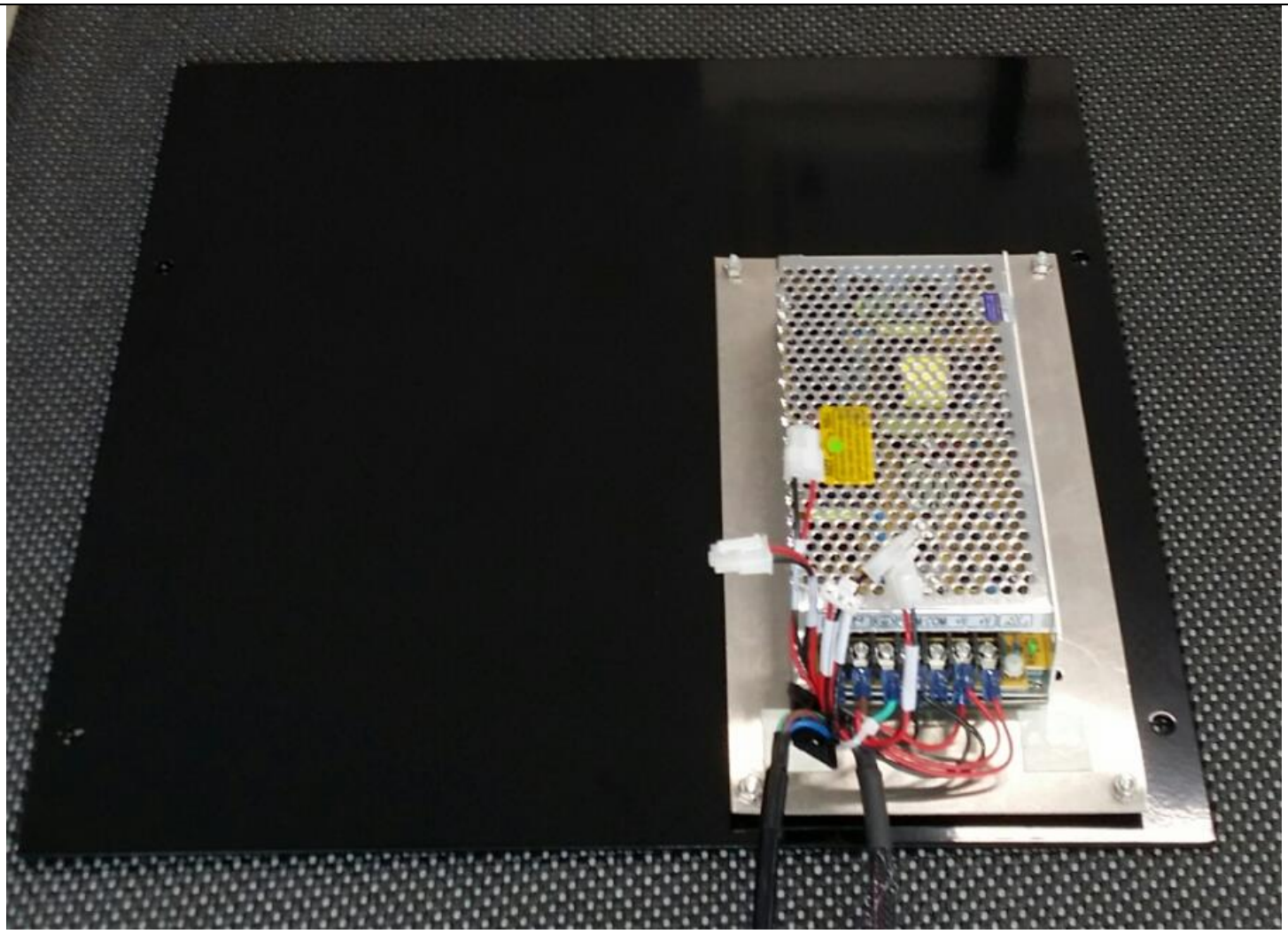


24) Locate the power supply, mounting screws and (part L)

25) You will notice on (part L) four drilled holes on the bottom right side of the panel; they will be used for mountin power supply.

26) Mount the power supply (be sure to install the ¼" stand offs between the panel (part L) and the back panel on th power supply)





NOTE: Before mounting the electric panel (part L), slide the wiring harness with the two toggle switches under the cross bar (part J) t the seat. Make sure both power cords for the actuators are hanging out the front.
At this time if you don't already have your steering wheel wires ran or any others, you can run them on the top side of the hood. The mo stand hangs over the hood by over an inch on the front and rear of the hood allowing you to conceal your wires and group them all toge down the front corner of the simulator to the PC.

27) Locate four ¼-20 x ½ bolts and mount the electric panel (part L) into the monitor stand.

28) Plug the two actuators into the plugs marked MONITOR (if you have the power pedal tray option plug it in now are two plugs marked SPARE for future add-ons

29) Mount the power strip with Velcro to the top left hand corner as shown in (figure C)

30) Plug in the power supply to the power strip. Plug in the power strip to your electrical outlet.

31) Locate the toggle switch marked Monitor
(**be sure to be careful not to touch any electrical connections**)
Run the actuators up and down a couple of times to align the rods (if they are binding lubricate with graphite or oil). If the binding continues loosen the four 3/8 bolts run the actuators all the way up and snug the top 3/8 bolts run the actuators down and snug the bottom bolts.
(Make sure to reapply Loctite if you had issues with binding and had to loosen up the 3/8 button head bolt

32) Once the actuators run up and down freely be sure to tighten the four 3/8 bolts.

CAUTION

Before continuing turn off the power to the monitor stand!

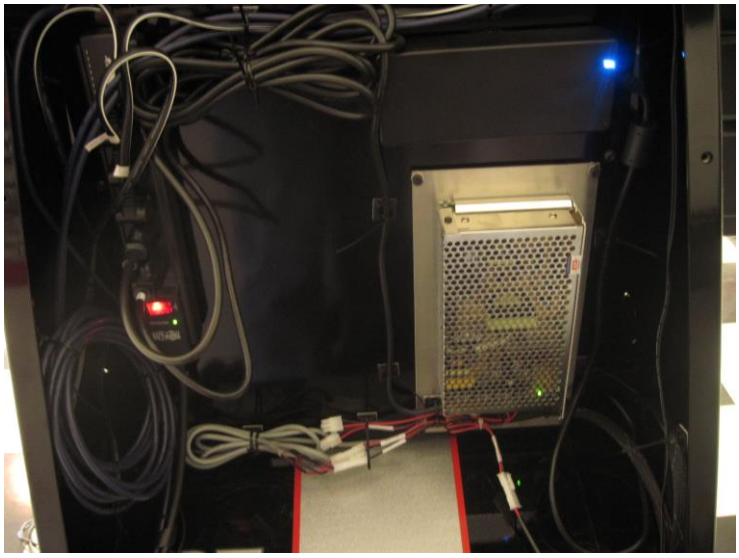


Figure C

33) Locate (part N) and six ¼-20 x ½" button head bolts.

34) Slide the toggle switches through the hole in (part N) and bolt the panel in place using the six ¼"-20 x ½ button bolts.
(See picture below)

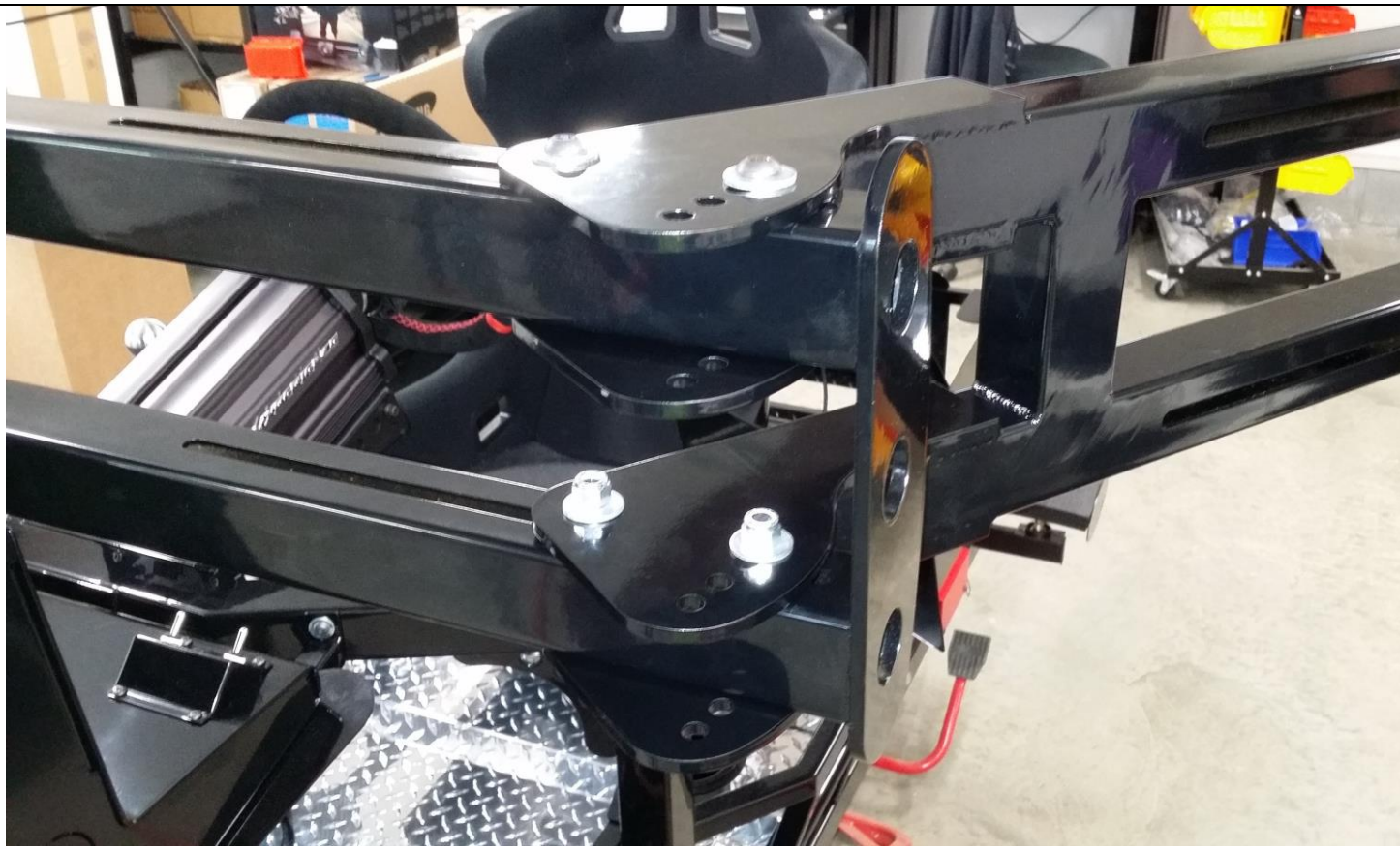
35) Locate the switch mounting bracket and four 10-32 x 1/2” button head bolts

36) Mount the toggle switches into the switch mounting bracket. Plug the extra hole with the ½” plastic plug **(be sur mount your switches so that when you push the switch up the monitors go up**) do the same for the power pe if you have that option.

37) Mount the switch mounting bracket to (part N) with the four 10-32 x ½ button head bolts

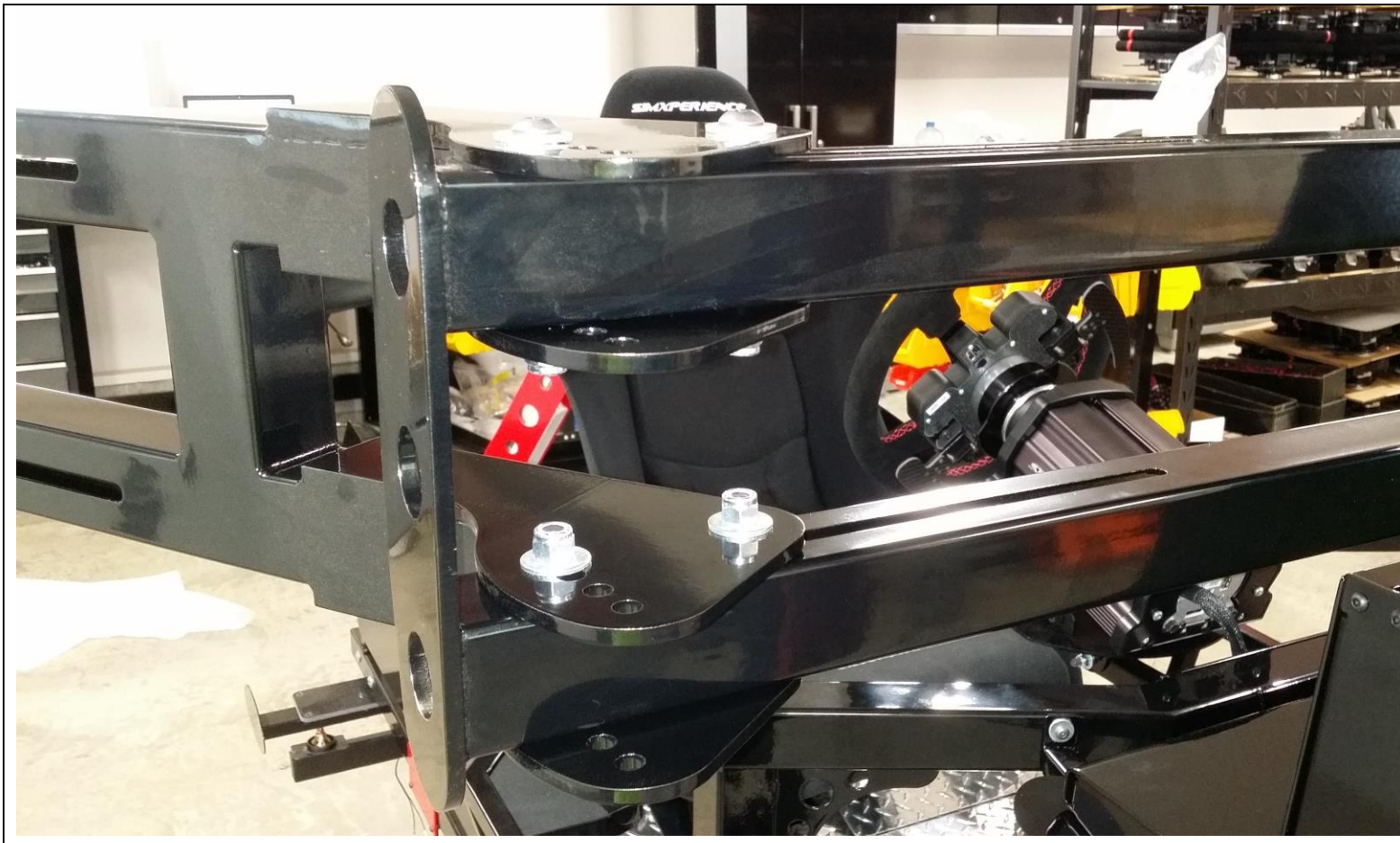
38) Locate (part B x 2) and eight 3/8-16 x 3 ¼” bolts, sixteen 3/8 US flat washer, and 3/8 lock nuts

39) Loosely mount the monitor mounting arms (part B x2) with the eight 3/8” bolts, washers, and lock nuts



(Picture above is how the hardware should be installed to left monitor stand arm Part B)

(Picture below is how the hardware should be installed for the right monitor stand arm Part B)

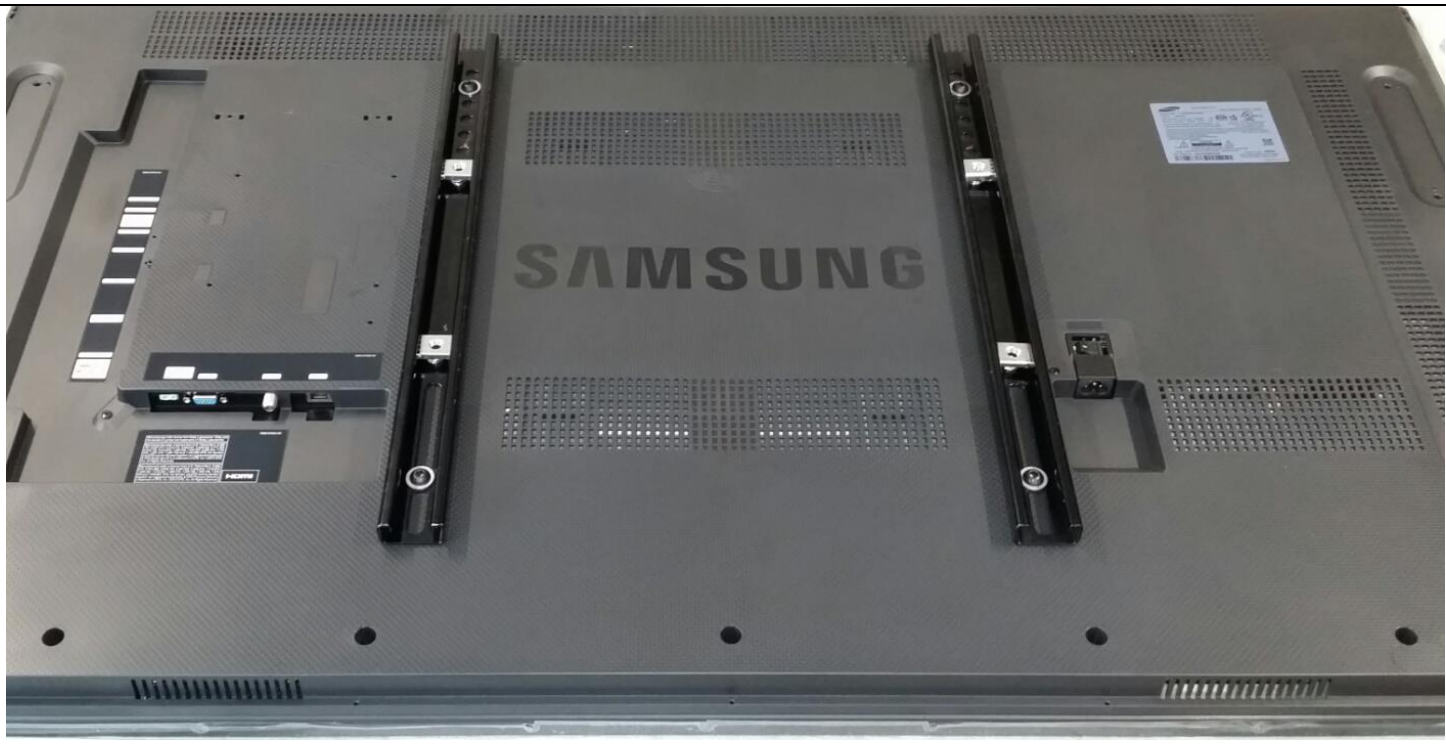


40) Locate (part P x 6), twelve M8x1.25mm x 25mm long bolts, and twelve ¼-20 US flat washers.

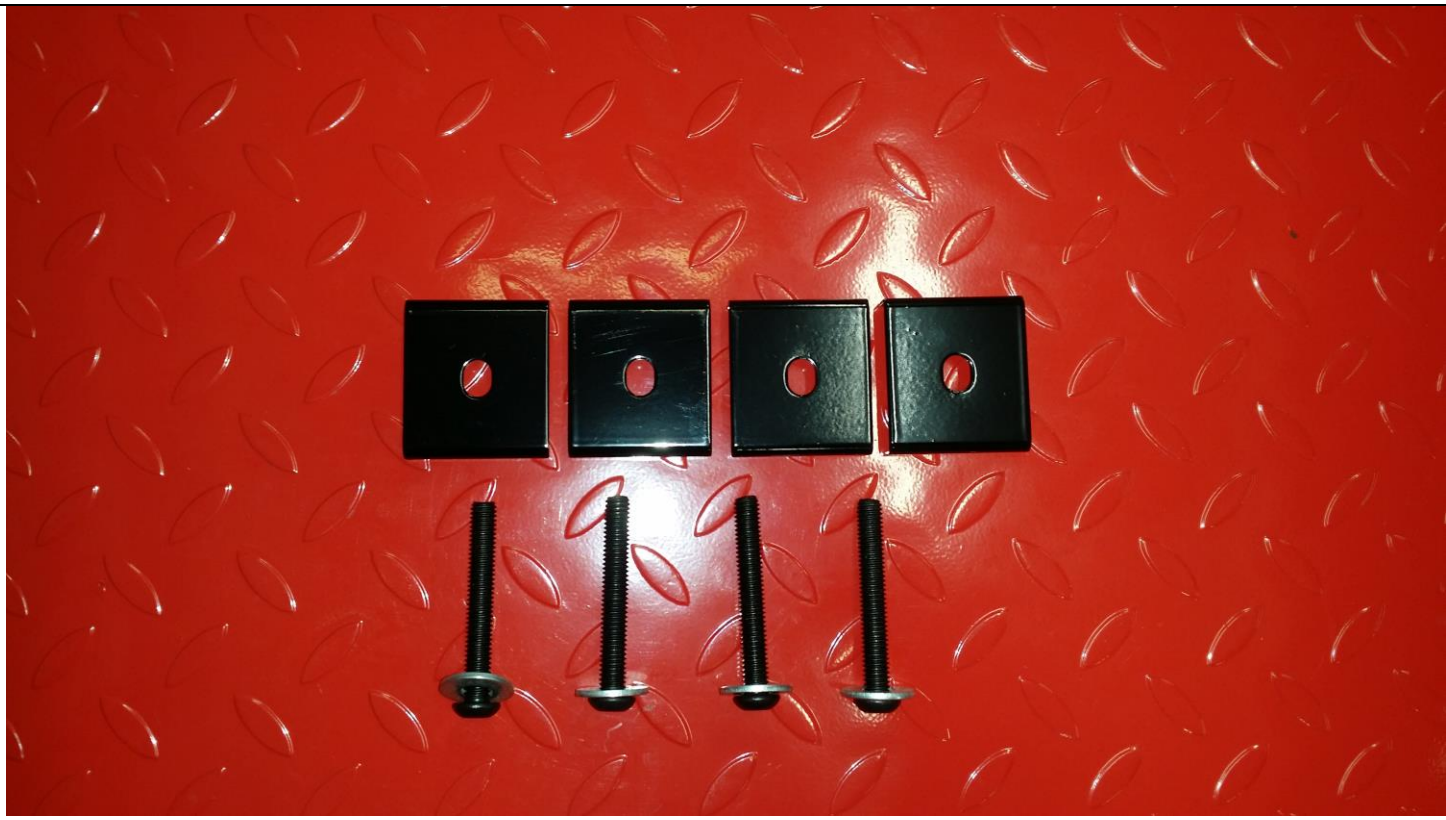
41) Locate your TV that will be going to the center of monitor stand.

42) Locate four 3/8-16 T-Nuts. Install two T-Nuts into the back of each unistrut, spacing them 6" apart from center unistrut (the T-Nuts are rectangle shaped). Turn the nut vertical and press it into the desired location on the unist compressing the spring while turning the nut clockwise until the nut is horizontal and the two groves lock into pl the unistrut to where they need to be.

43) Lay out the monitor face down on something that will not scratch the screen. Bolt the two pieces of unistrut (par vertically on the back of the monitor **(be sure to have the slotted hole on the bottom and center the unistrut f top to bottom on the back of the monitor)** Bolt the unistrut to the back of monitor using four of the M8x1.25m 25mm long bolts and four ¼- 20 flat washers.



44) Locate four 3/8-16 x 2 ¾ bolts, four 3/8 flat washers, and four reinforcement channels **(2" x 2 1/8 " black brac**
with hole through the center) See hardware in picture below



45) You will be pushing the 3/8-16 x 2 ¾ button head bolts and 3/8 flat washers through the reinforcement channels into the threads of the T-nuts in the unistrut bracket of T.V. **(See picture below for guidance)**

46) Two people are needed for the next part. Now it's time to install the TV into the center position on monitor stan

47) Next make sure the actuator arms for the monitor stand are lowered all the way.

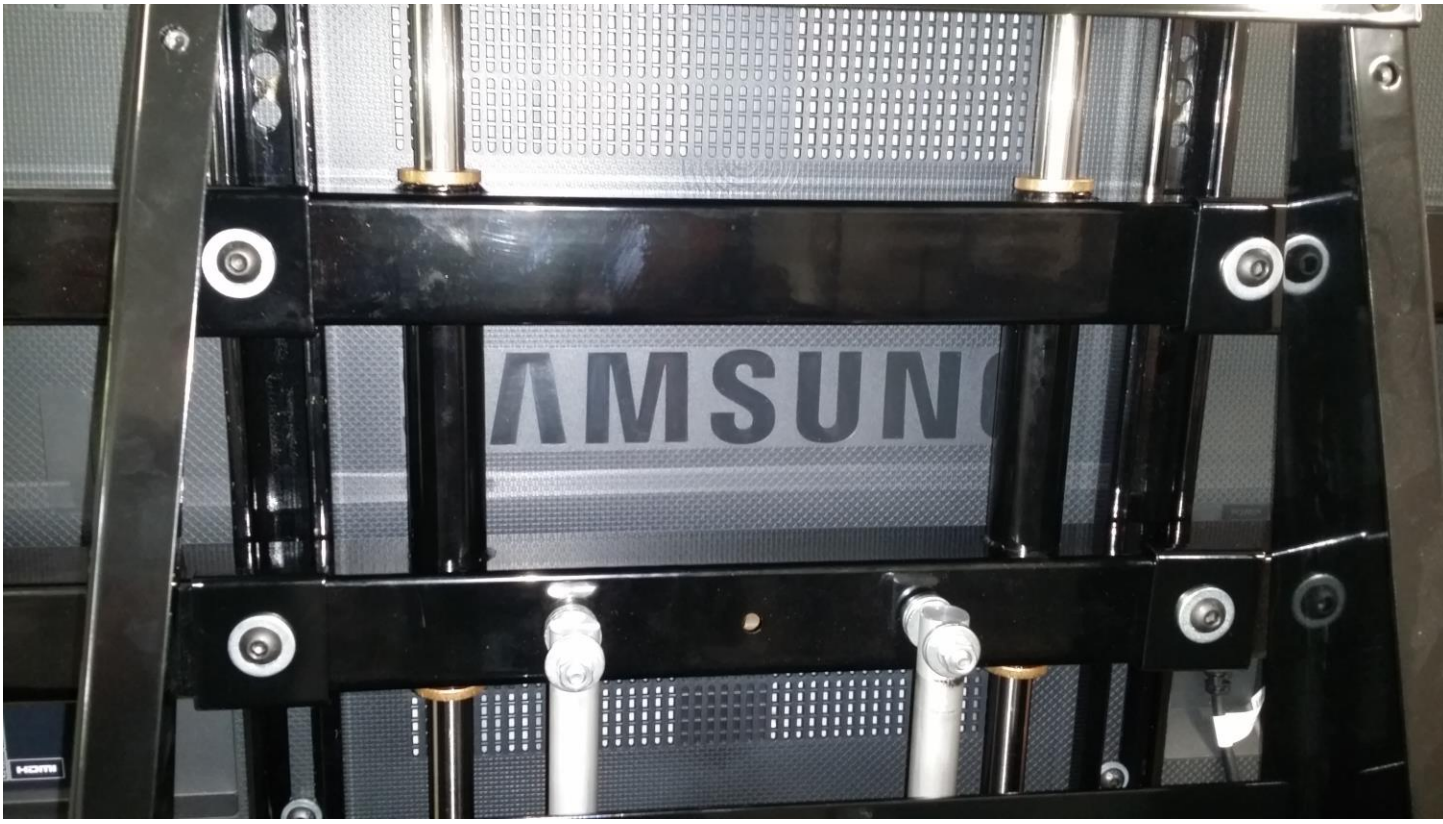
48) Get a piece of foam at least 3/8" thick to 4" thick. You will be placing this on top of Part N. This will be used t the TV on for guidance, gap preference, and plus to make sure it doesn't scratch part N.

CAUTION Failure to make sure the monitor stand is in the full down position during installat may result in damage to your monitors

49) Someone should stand on the front side of TV holding it up while the other person stands on the other side of the monitor stand facing the backside of TV. The person standing behind the monitor stand will have to guide the 3/ 3/8 washers, and reinforcement channels through the slots of Part A and into the T-nuts on unistrut bracket on th of TV.

50) Start the top two 3/8 bolts first with an allen wrench. Once they are tightened make sure the TV is secure.

51) ***Make sure helper is still standing there making sure TV is secure during this step.*** Now run the monitor stand until you can get access to tighten the bottom two**.** Once all four bolts are tightened, move the monitor stand all up and then back down until it comes to a complete stop. There should be anywhere from a 3/8 of an inch gap to inches in between bottom of TV and Part N. It depends on what you prefer or need depending on what else you installed on your sim. You might need a larger gap for plugs, wires, and etc.



52) Locate the hardware in picture below. Eight ¼ - 20 Flat Washers, Four ¼ - 20 Nylon Lock Nuts, Four ¼ - 20 x Button Head Bolts, Four Rubber Wheels, Four 2" x 1.5" black brackets with two holes, Four 3/8 -16 T Nuts, and 3/8 – 16 x .75" Button Head Bolts.

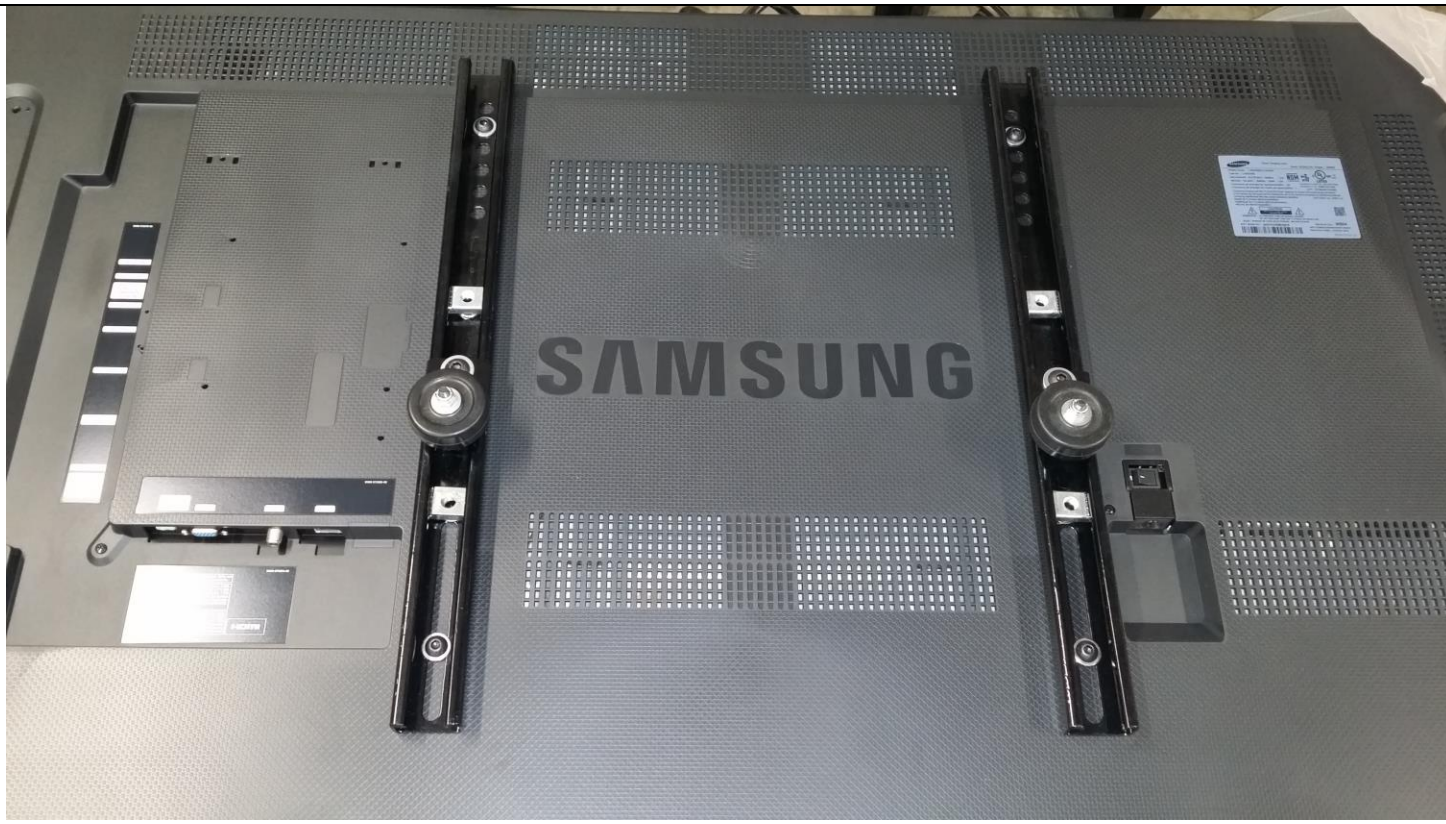
After assembling the hardware together the rollers should appear how they are in the picture below. Make sure have a ¼-20 Flat washer on each side of the wheel to allow proper functioning. The T-nuts and 3/8 – 16 x .75" button heads won't be included yet until you go to install them onto unistrut bracket.

53) Place three T-nuts inside each unistrut bracket for the next TV.

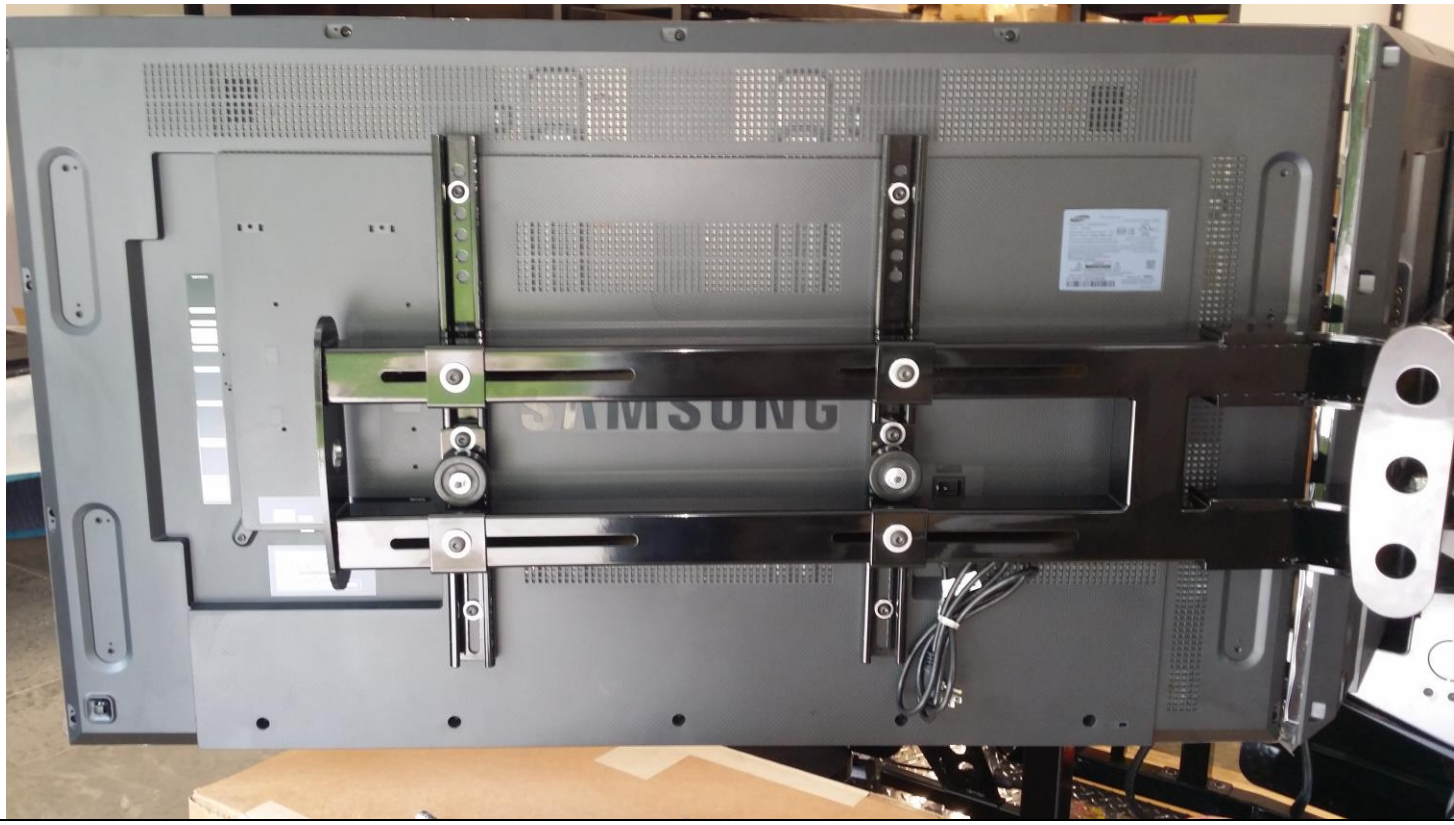
54) Locate two 3/8 -16 x ¾ button head bolts, two 3/8 flat washers, and two roller mounts.

55) Mount the roller inside the unistrut bracket first. The T-Nut for roller bracket should measure 9 inches from the of bracket going towards the center. **(measure to the hole where the bolt is going to be)**

56) The top T-Nut needs to be 8 1/8" measuring from the top to center of bracket. The bottom T-Nut needs to meas 5/8" from the bottom of bracket going towards the center. **(measure to the hole where the bolt is going to be) picture below**



57) **Mounting the side monitors,** this is a little tricky depending on your choice of monitors.



58) If you are mounting LED monitors this is a good starting point, slide both monitor mounting arms in so you hav approximately a ½" gap between the center monitor and the arm (part B) as shown in (figure F). This dimension vary depending on which type of monitor you are installing. **The bezel width and monitor thickness vary betv models and manufacturers**

CAUTION

Hold the side monitors in position until all four mounting bolts are tightened
Not doing so may result in damage to your monitor!

59) Locate eight 3/8 x 2 ¾ button head bolts, eight 3/8 flat washers, and eight reinforcement channels.

60) Using the eight 3/8 x 2 ¾ bolts and eight 3/8 washers, hang the side monitors so there is approximately a one in between the center monitor and the monitor you are hanging. Try to keep the tops of the monitors close to even, does not have to be exact at this time. **Make sure all bolts are snug before letting go of the monitor.**

61) Stand in front of your simulator and look at your center monitor bezel. What you want is to have side monitors c the center monitors side bezels. See picture below.

62) At this time you may have to move (part B x 2) monitor mounting arms in or out to achieve the proper bezel cov The side monitors still have to slide in closer to the center monitor on your final adjustment so there is a little gu at this point. Once you feel comfortable with your alignment have someone hold up on (part B x 2) the monitor

mounting arms while you tighten them.

63) With someone holding onto the monitor loosen the mounting bolts (four per monitor) just enough so that the mo will slide in the slots. This is where the rollers come into play.

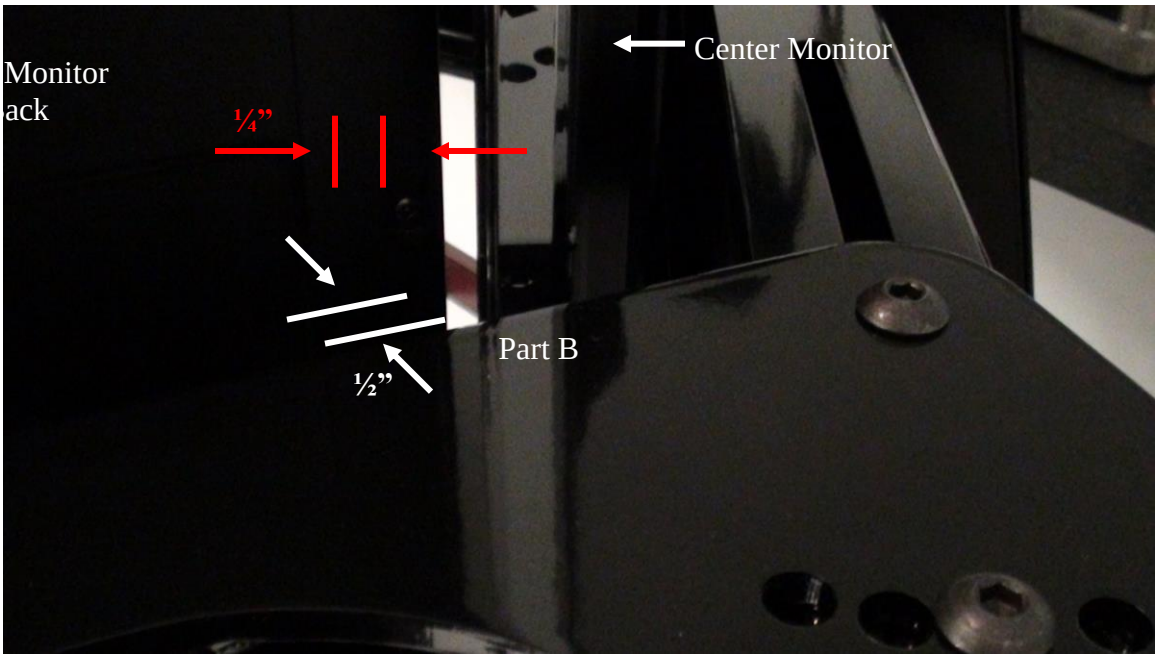


Figure F

64) Slide the monitor in so that you have a ¼” gap between it and the center monitor as shown in figure F indicated i Making sure the ¼” gap is even from top to bottom. Also the top of the side monitor is even with the center mon

65) Tighten the monitor bolts securely **(watch closely not to over tighten the bolts)** Over tightening will cause the square tubing to collapse along the slot making it more difficult to adjust in the future.

CAUTION

When running all cords into the Monitor Stand enclosure, make sure they are routed away from any potential pi points and are fixed into position!

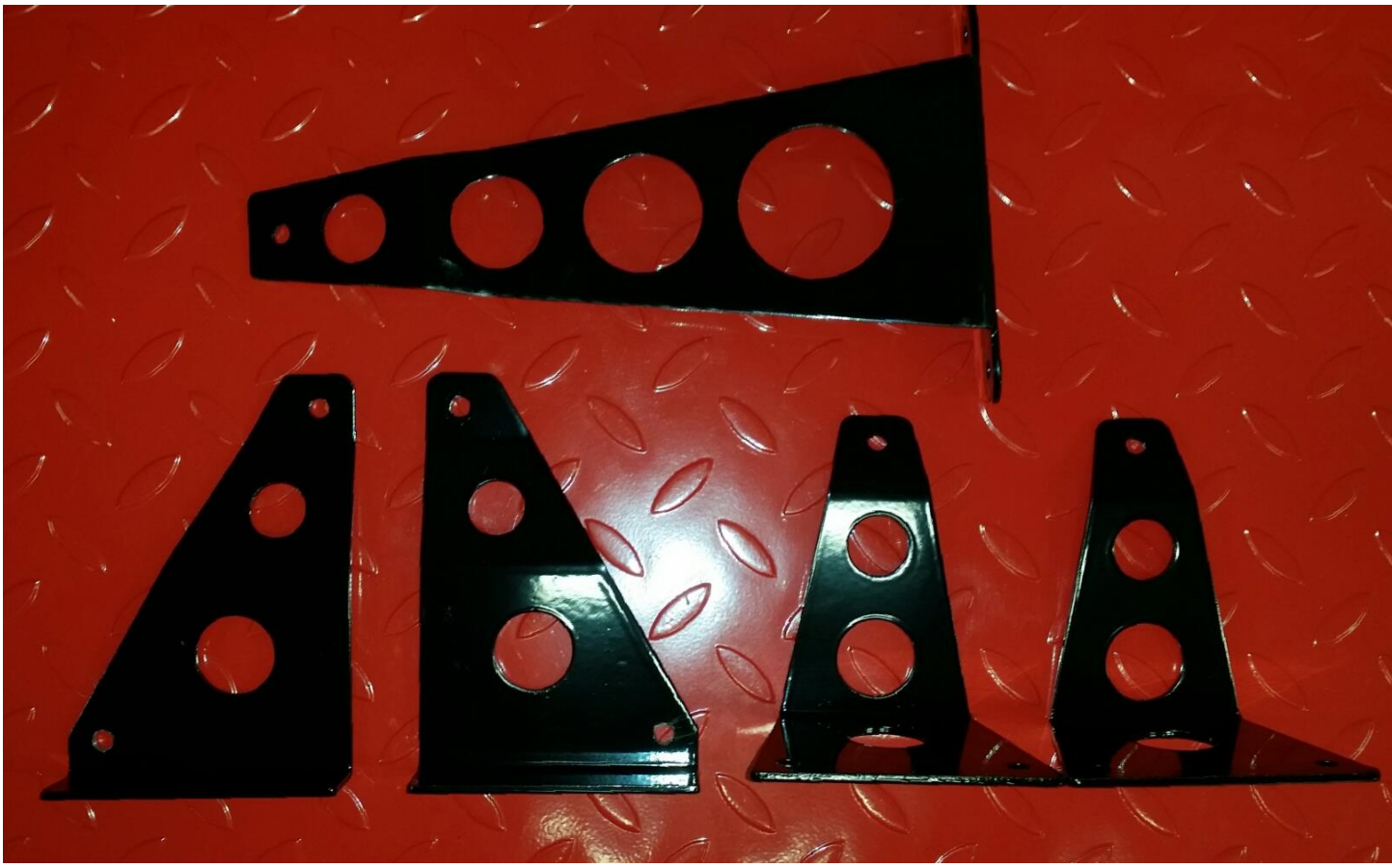
66) Plug the Monitors into the power strip.

67) Plug in the HDMI cords to the monitors, coiling up any extra cable and leaving it inside the monitor stand as sh figure C on the bottom left-hand corner.

68) Follow the PC connection instructions for the proper placement of the HDMI cords.

69) With a Stage V kit you will have speaker mounting brackets.

70) Locate parts T, S, M, and two R's.



71) Locate four #10-24x5/8 button head bolts, seven ¼ -20 x .5" button head bolts, and two #8-32 x .5" button head

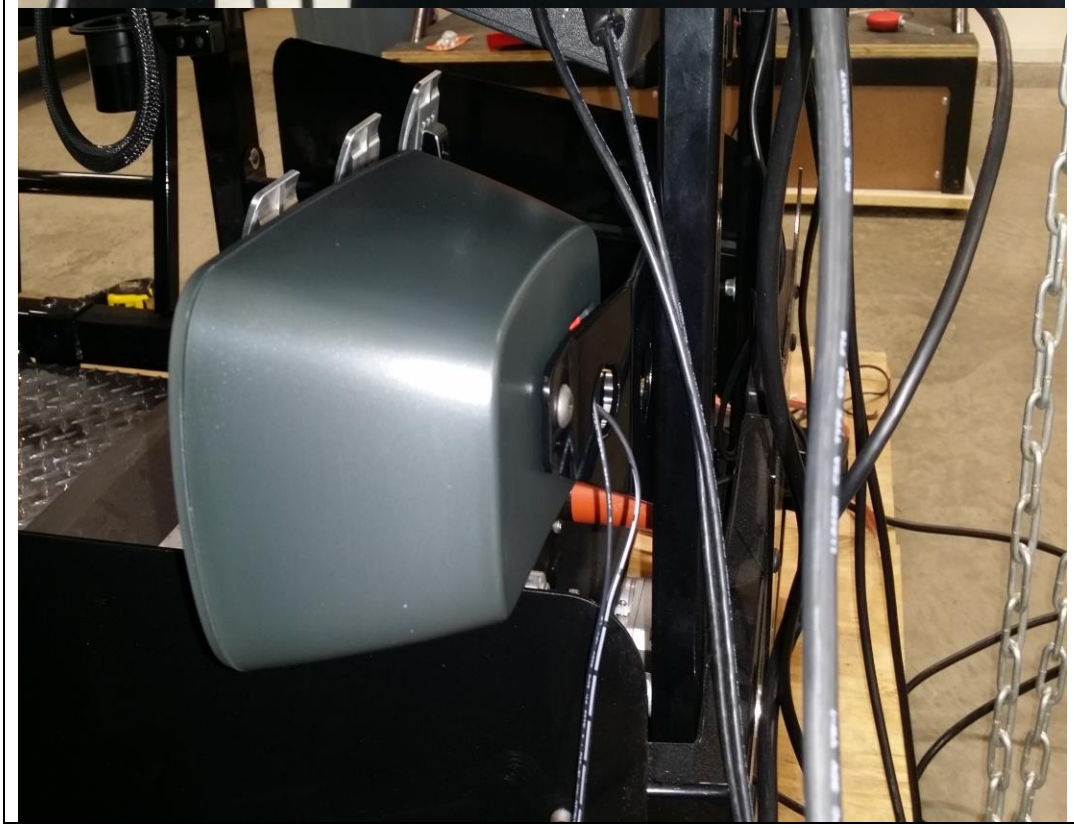
72) Part R's will be bolted onto the rear of simulator (Part A of Rail Kit) with the two #10 – 24 x 5/8 each.

73) Part S will be installed onto the front right of simulator (Part F of Front End Kit) with one #8-32 x .5" button head bolt.

74) Part T will be installed onto the front left of simulator (Part E of Front End Kit) with one #8-32 x .5" button hea

75) Part M will bolt on top of Part F of monitor stand. Use Two ¼ -20 x .5" button head bolts to install.

76) Install each speaker to the brackets with a ¼ -20 x .5" button head bolt.



77) Once all of your wiring is secure and out of the way from any potential pinch points, have someone run the mon
and down a few times while you watch just as an added precaution.

78) Install the Monitor Stand cover (part E) using six 1/4 – 20 x ½" bolts

SX-4000 & SOFTWARE

Connecting the Actuators

1) If you haven't already connected your actuators to the SX-4000, please do so now. The rear traction loss actuator should be plugged into the right plug (nearest plug) on the SX-4000

Connecting the Power Cord

2) Connect the supplied PC style power cord to the SX-4000 and plug it in.

Connecting the USB Cable

3) Ensure that your PC is started and that you are both logged in and connected to the internet.

4) Connect the USB cable to the SX-4000. There is only one USB plug (square) on the SX-4000

5) You should here a notification chime (from Windows) and see a notification in the bottom –right of your screen that Windows has found new hardware.

Windows Driver Installation

6) Windows drivers are automatically installed via Windows Updates when you connect the USB cord to your PC.

 This process can take up to 5 minutes to complete. Please be sure that the driver install has completed successfully before continuing. You can view the driver installation progress in the bottom right corner of your screen. If you see a circling green square (in the bottom-right system tray), please double click it to see the driver installation status.

SimXperience Commander Software Installation

7) The Commander 4 download link and license key can both be found by logging into SimXperience.com with the **account registered at the time of purchase** and browsing to Store> My Orders> Order Details.

With a Motion product or SimVibe purchase, there will be an automatically generated $0 order.

*Please note the name of the download and license you are installing.

SimVibe v4 is the Commander 4 (SimVibe only).

Sim Commander 4 is the Commander 4 (Motion, SimVibe, and AccuForce control)

With an AccuForce purchase, the license key and download can be found in the order details of the AccuForce purchase.

*If you already own a SImXperience motion product and are running the Commander 4, it is not necessary to install any additional licenses in order to run the AccuForce.

Please be sure to check out the Commander 4 webpage to see video tutorials on basic functionality of the software.

8) When the SimXperience Setup application appears, click 'Install Commander' and follow the on screen instructions.
9) Install any games that you will be using with your simulator.

Enjoy your new SimXperience Stage Series Simulator

If you have questions about the assembly of your Stage Series Simulator, please email CustomerSupport@SimXperience.com or visit our support forums online at www.SimXperience.com.