

LUNDHALSEY®

Kontrol Height Adjustable Assembly Instructions



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Assembly Method Guidelines

Please Take care during the assembly. Please note the following:

- Always ensure weight is distributed evenly across the worktop
- Cables to be managed through the cross frame channels via the round cut-outs and never under the frame as they may get trapped when the worktop is in its lowest position.
- When raising the worktop, ensure none of the other buttons are pressed simultaneously with the paddle.
- Do not tap the paddle up or down rapidly adjusting the worktop in small increments.
- Do not exceed the maximum cable space of the energy chain.
- Cables Linking the control box to the actuators must be inserted with care to prevent the pins being bent over.
- Desk must be leveled left to right and front and back during installation.
- Desk should not be moved once fully assembled, and not lifted via the worktops.
- No items should be left on the rear sub top to prevent any obstructions when the console is lowered.
- Be careful not to trap chairs in the worktop when lowering
- Turn off mains power to the control box before fitting or removing actuator or paddle cables.

Tools Required:

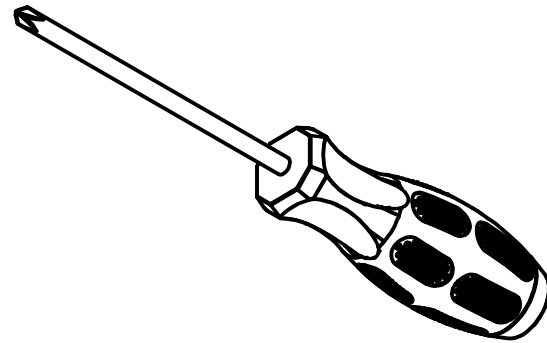
All tools shown are required. not all are provided.

We Provide:

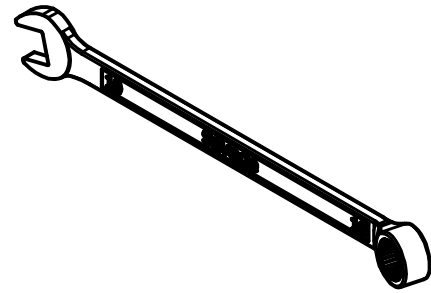
4mm Allen Key



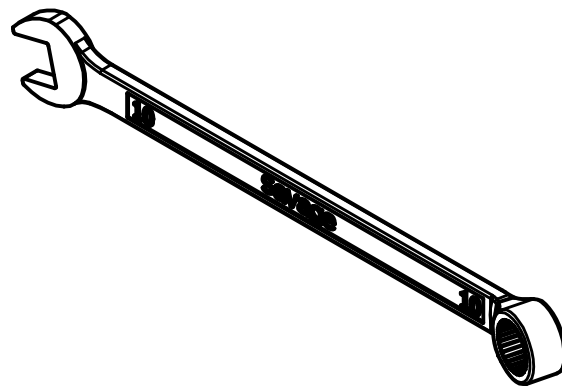
Screwdriver



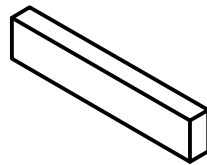
8mm Spanner



10mm Spanner

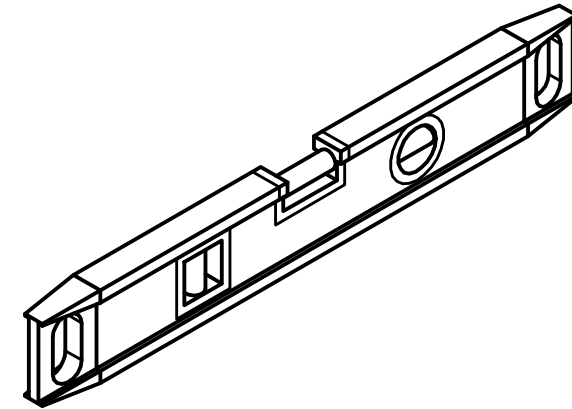


20mm Spacer

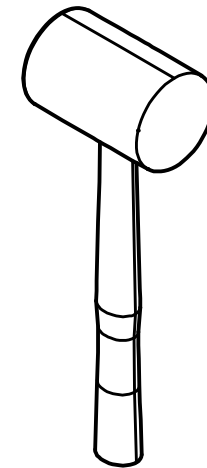


Additional Tools Required:

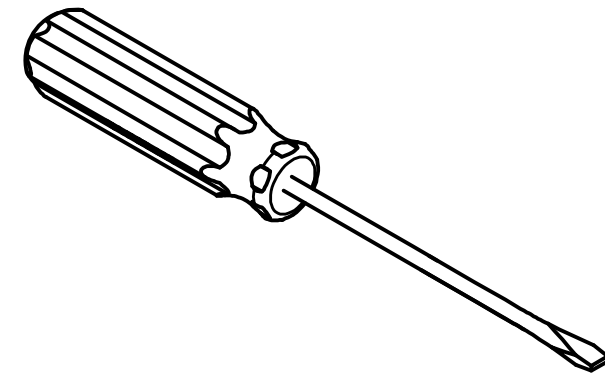
Spirit Level



Rubber Mallet

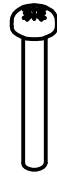


Flat Head Screwdriver



Fixing Kit

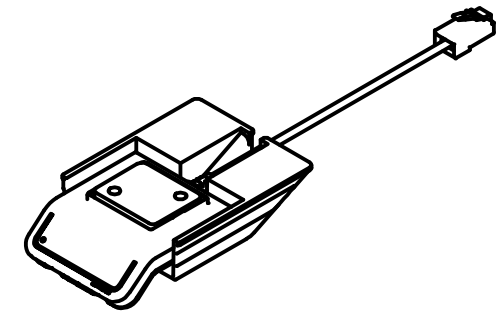
(A)
Bay Fixing
45mm M6 Bolt



(E)
Bay Fixing
M6 Washer



(I)
Linak Control Paddle
Bolts Separately



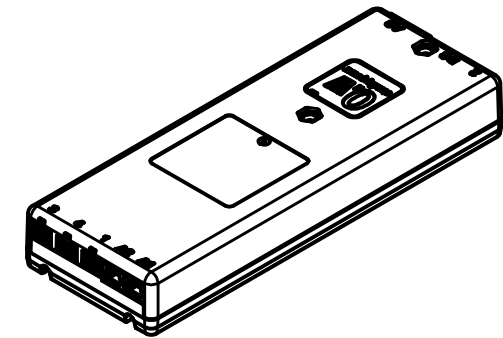
(B)
Actuator Fixing
15mm M6 Allen Bolt



(F)
Energy Chain Fixing
10mm M6 Allen Bolt



(J)
Linak Control Box
Bolts Separately
(Comes with Leads)



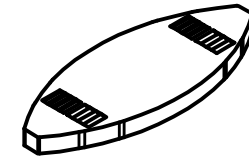
(C)
Bay Fixing
M6 Dome Nut
(For Use with 45mm Bolt)



(G)
Paddle Fixings
23mm M4 Dome



(K)
Worktop Biscuits
(Not Required on single piece Worktop)



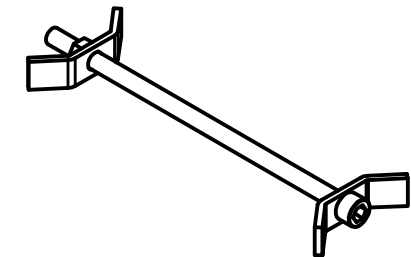
(M)
Sub Top Fixing
12mm M6 Bolt



(H)
End Cheek Fixing
30mm M6 Bolt



(L)
Worktop Connector
(Not Required on single piece Worktop)



(N)
Worktop Fixing
Oval Washer



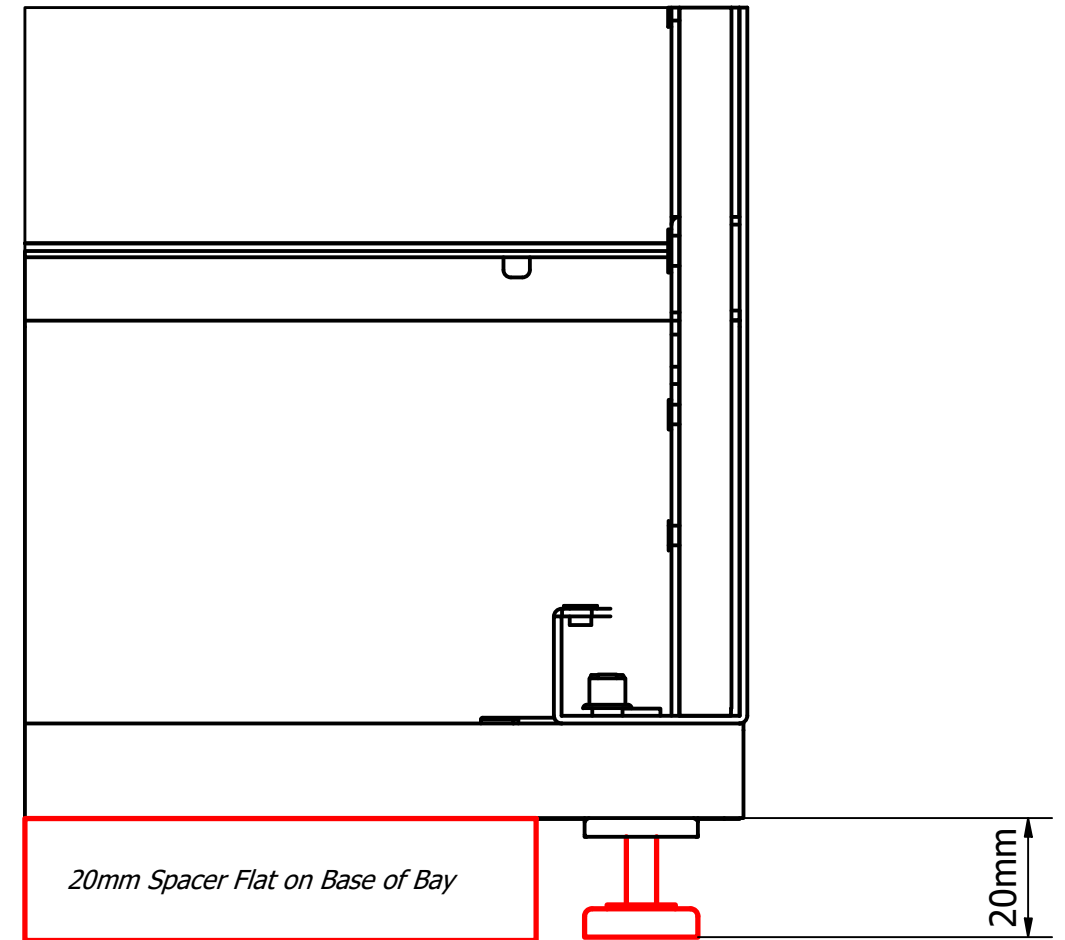
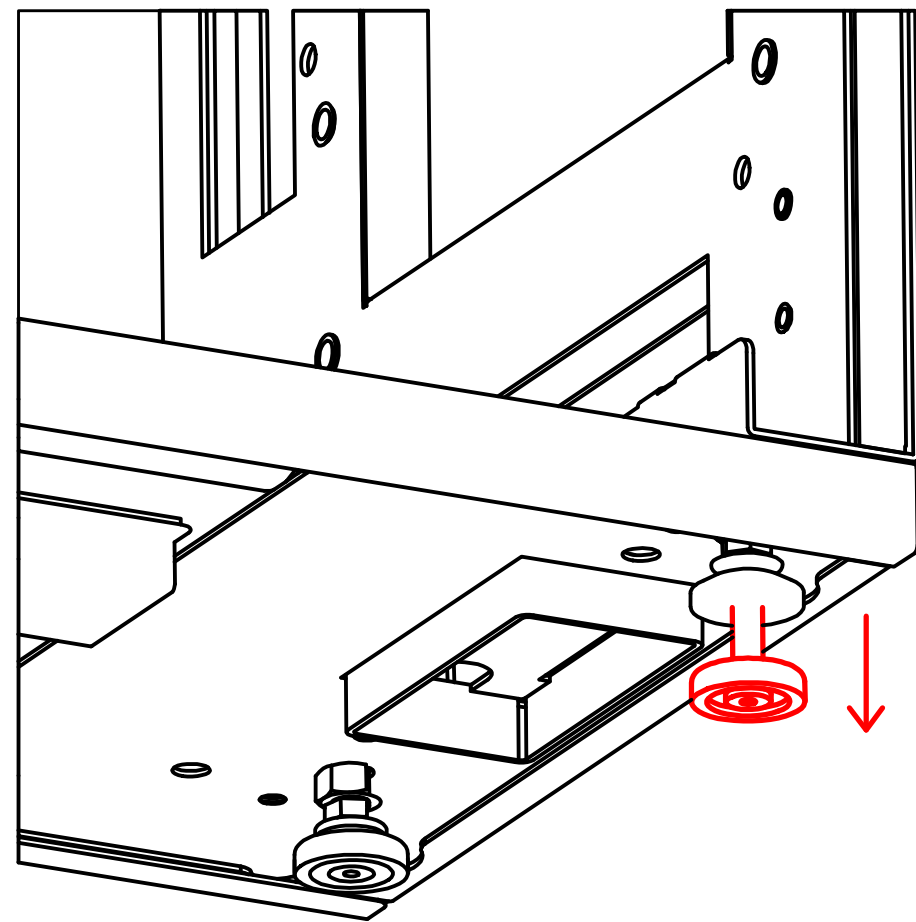
(D)
Control Box Fixings
M6 x 40mm Bolt



Step 1:

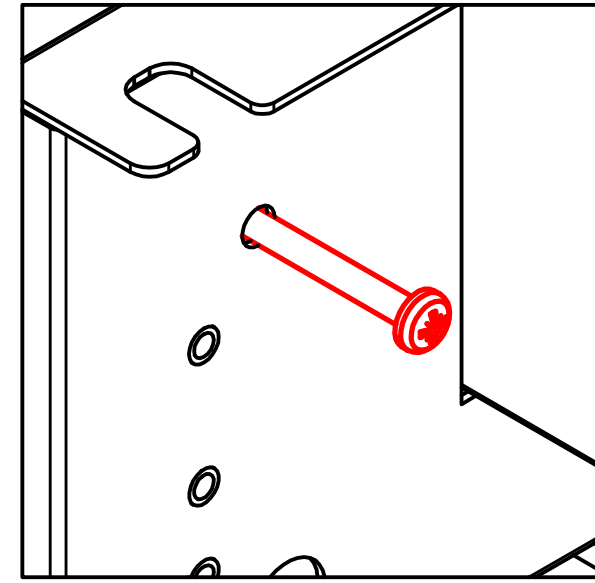
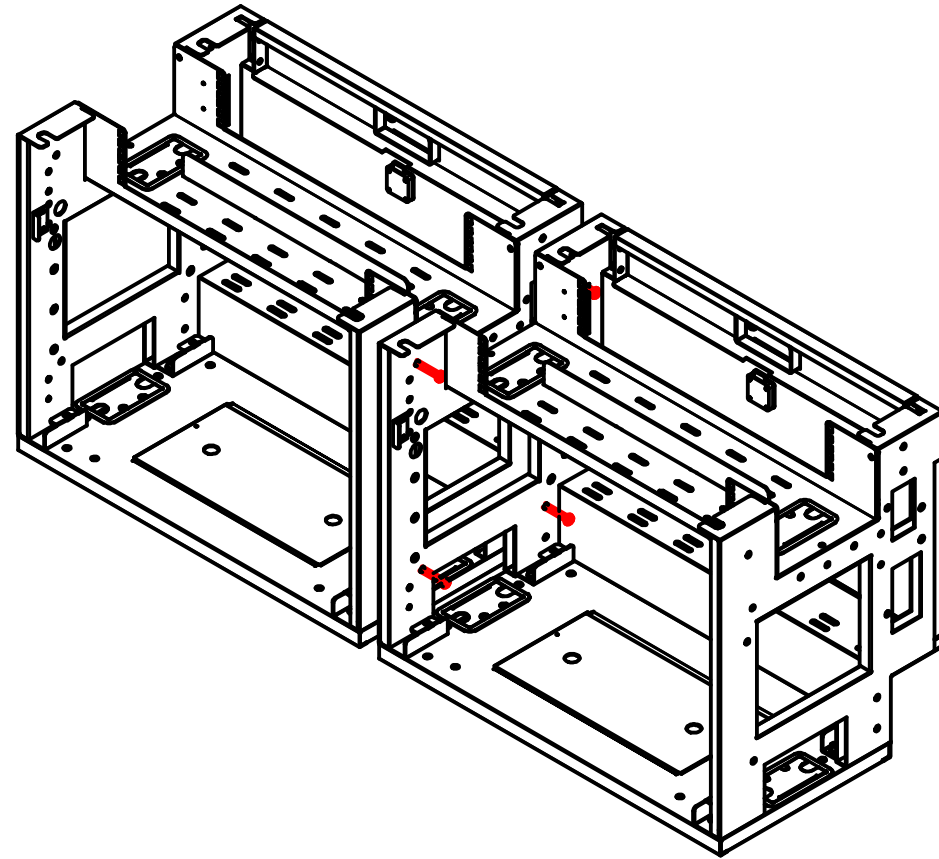
Remove all of the Bay sections from their packaging and **Level all of the feet** on each bay. There will be **4 Feet per Bay**.

Use the **20mm Spacer** provided, hold it against the base of the Bay and extend the foot so that it is flush with the spacer as shown.

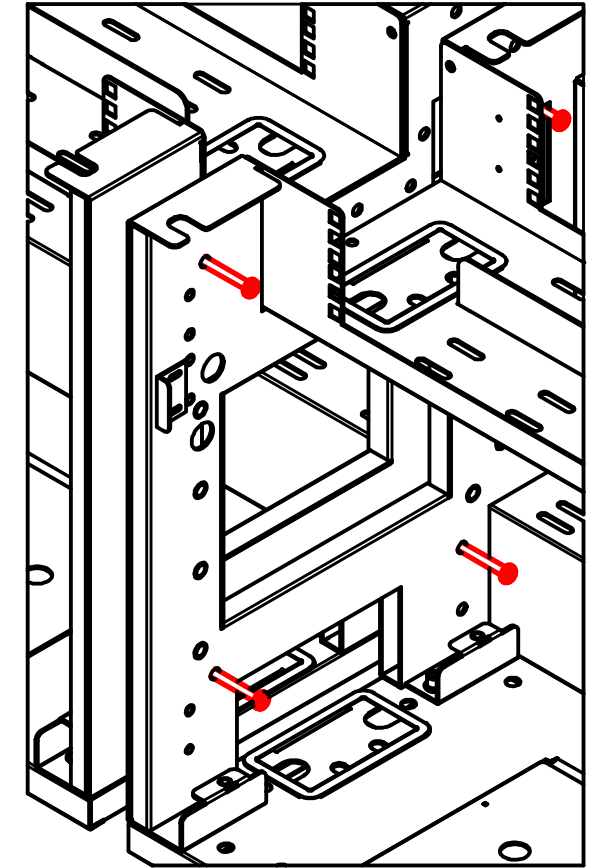


Step 2: Please Note: Doors are not shown for clarity

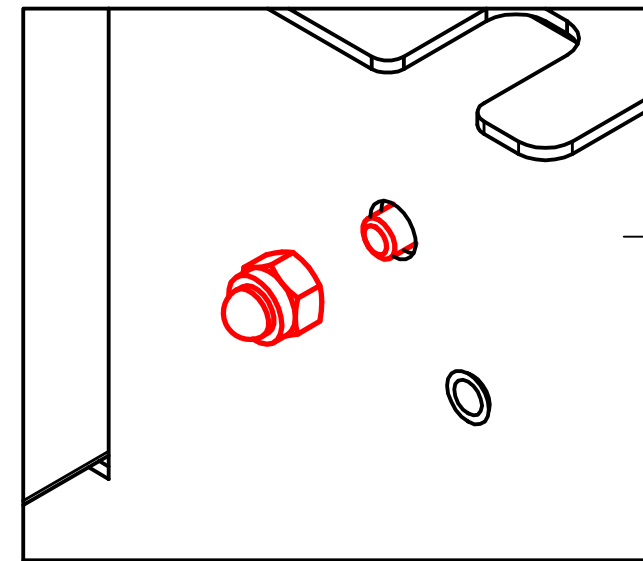
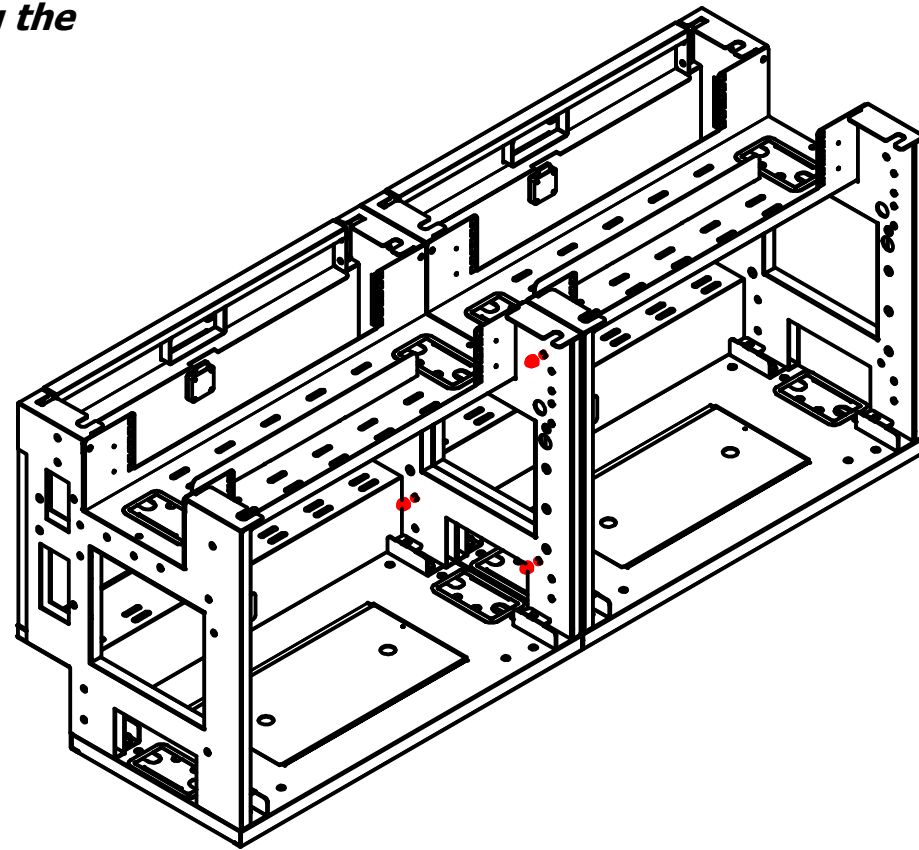
Loosely Fix the Allocated Bay to the next, Using the **45mm M6 Bolt (A)** and an **M6 Dome Nut (C)**



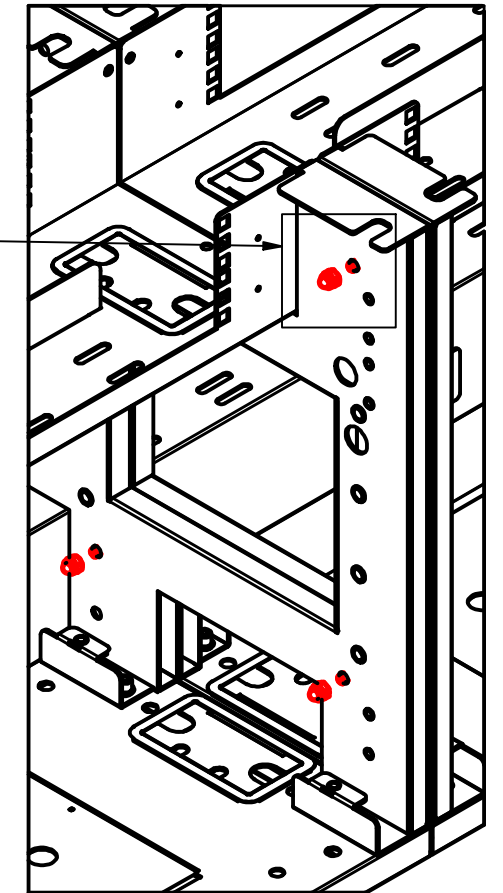
45mm M6 Bolt



The Bays are secured **Loosely** via the 4 fixing points to assist with **Levelling the Bays - SEE STEP 3.**

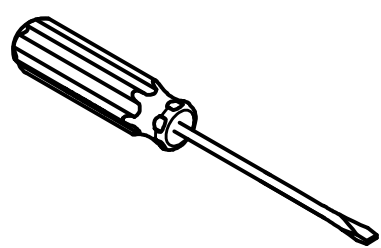


M6 Dome Nut

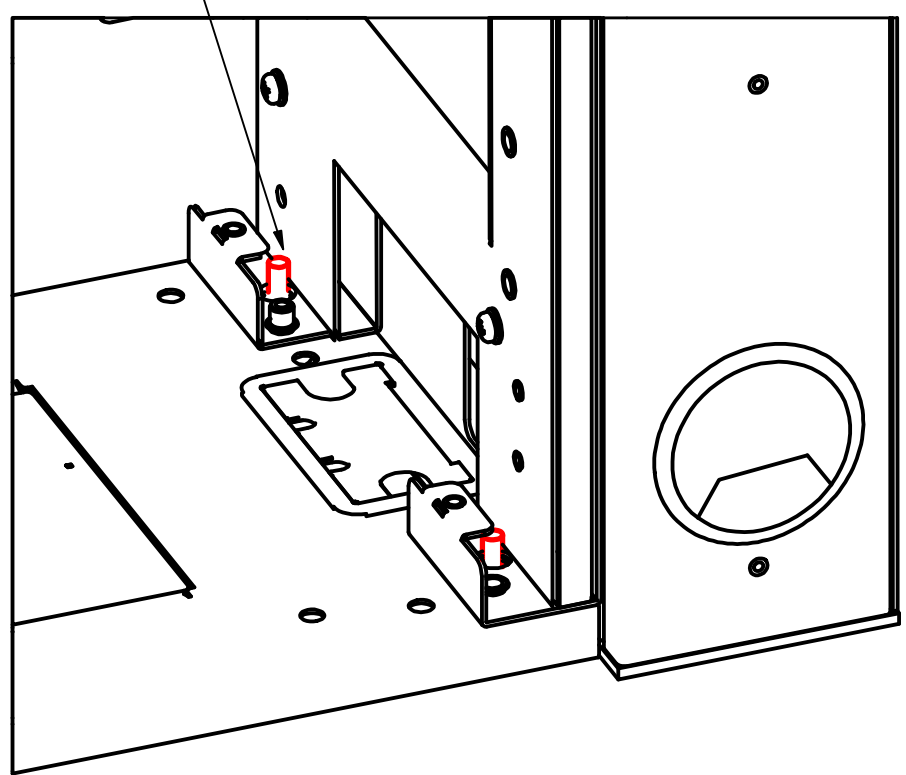


Step 3:

Use Flat Head Screwdriver to adjust Bay Feet



Adjustable Feet



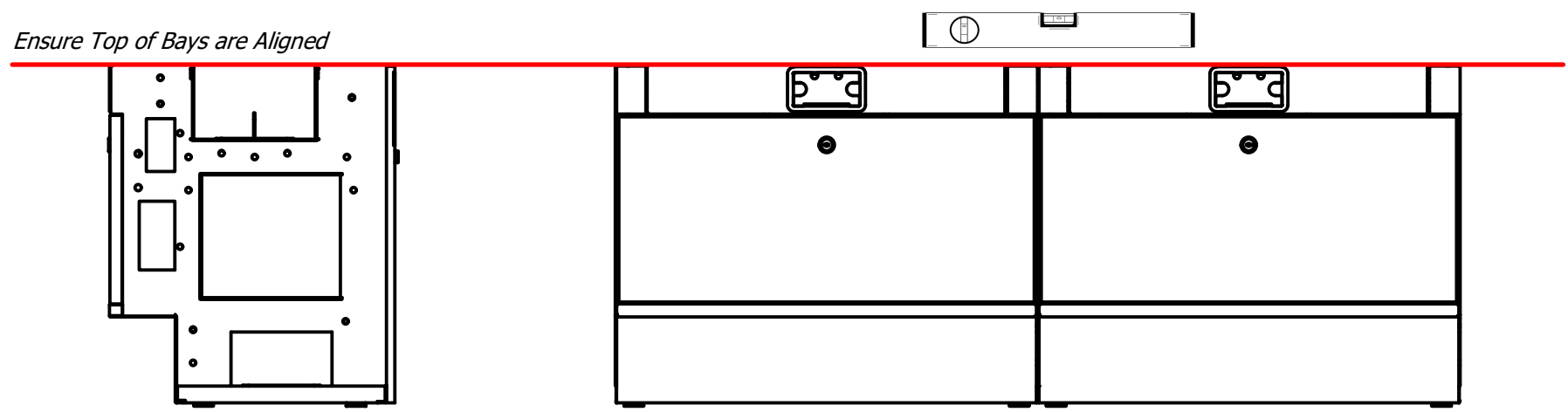
IMPORTANT:

As you connect each bay, be sure to use the **Adjustable feet** to level the Bays in both directions. this is to ensure the console sits and aligns correctly.

Once Aligned, Tighten Fixings A and C

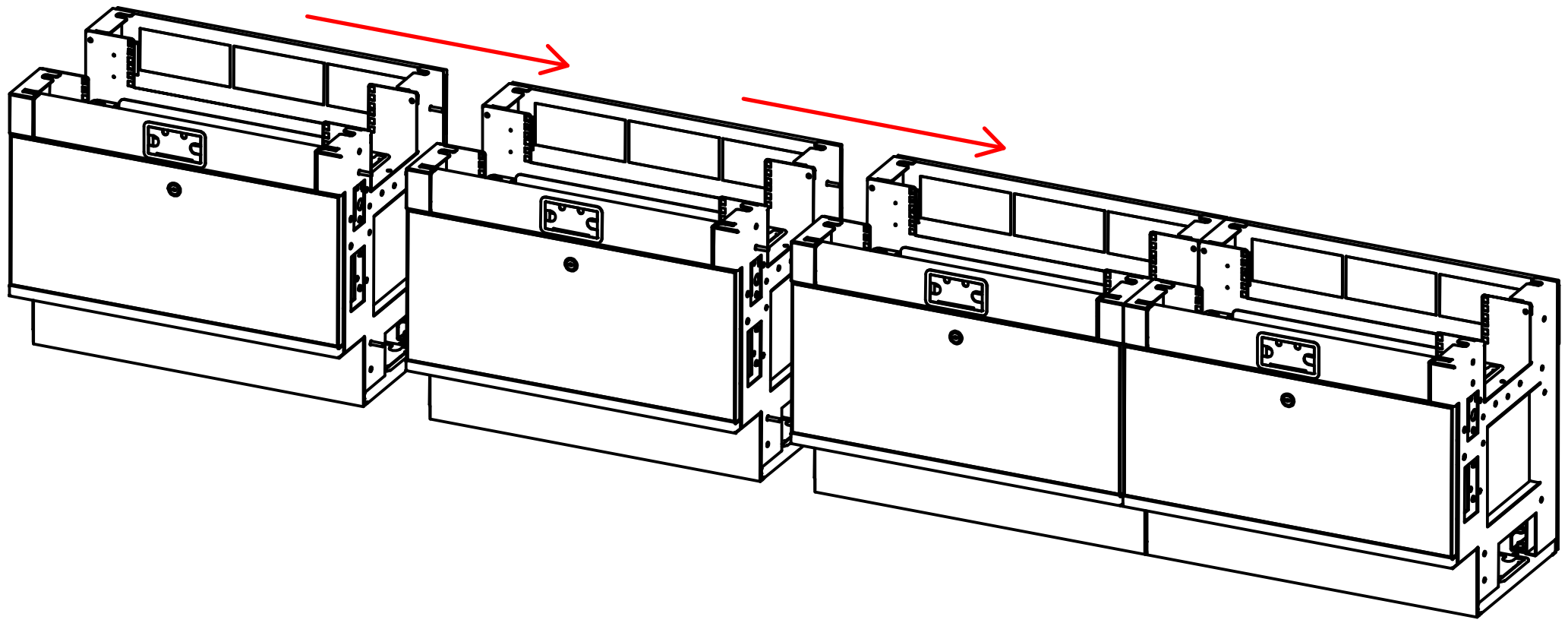
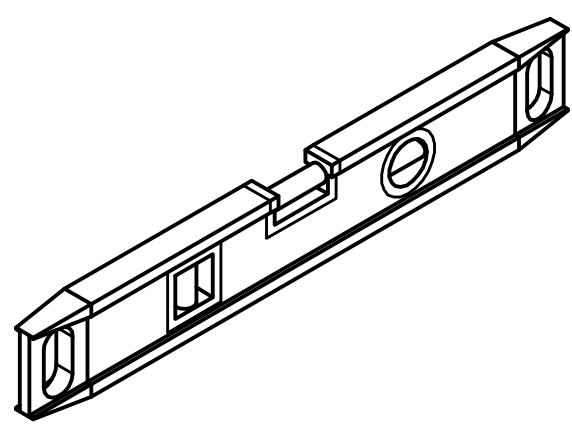
Use Spirit Level

Ensure Top of Bays are Aligned



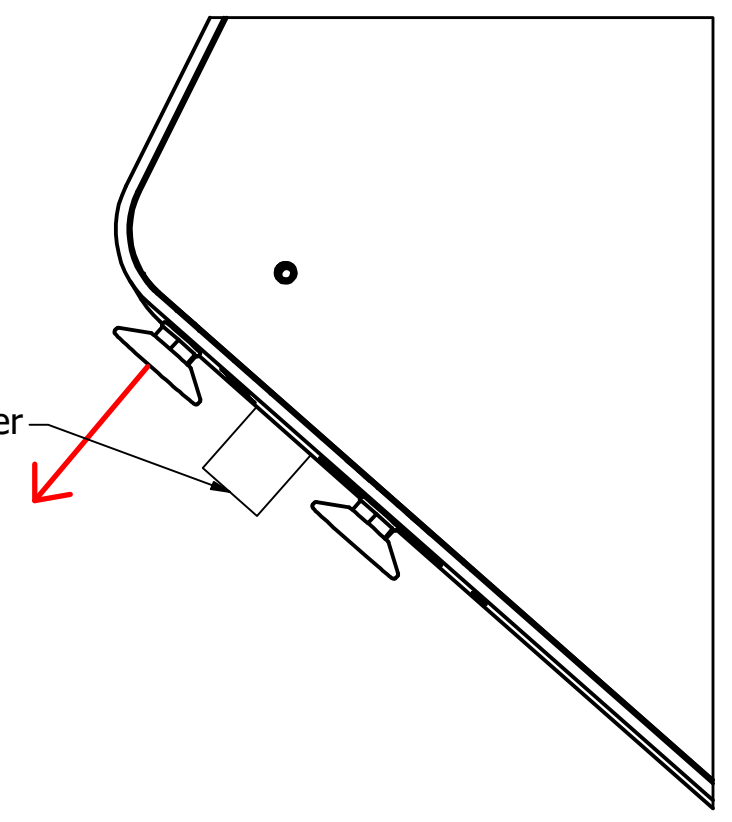
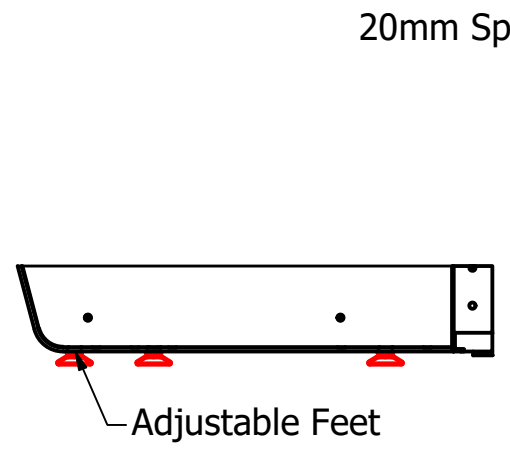
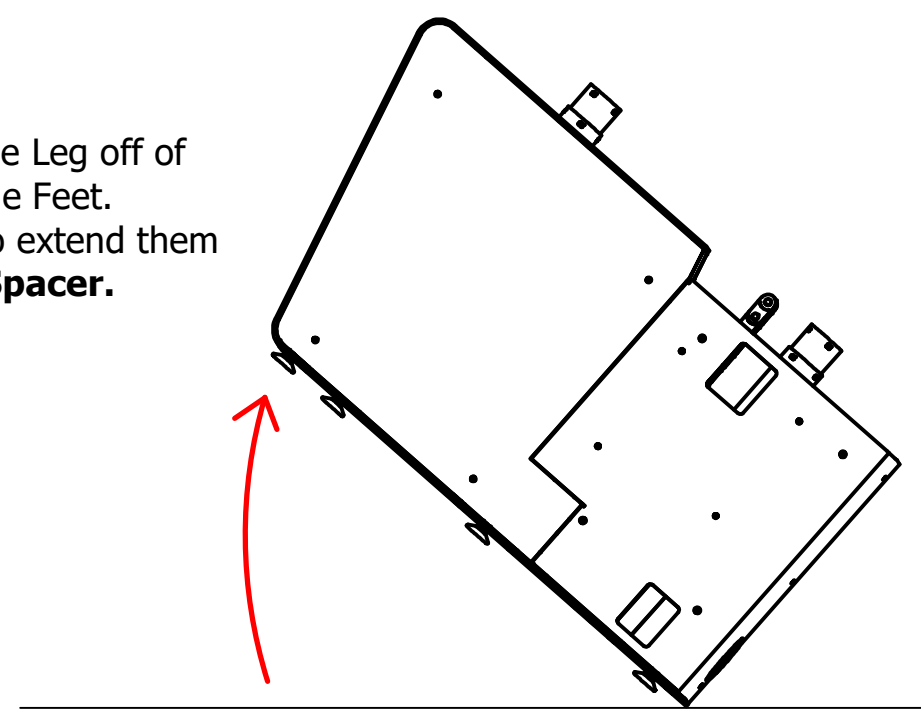
Step 4:

Attach all of the Bays together, repeating Step 3 and levelling each bay as you go.



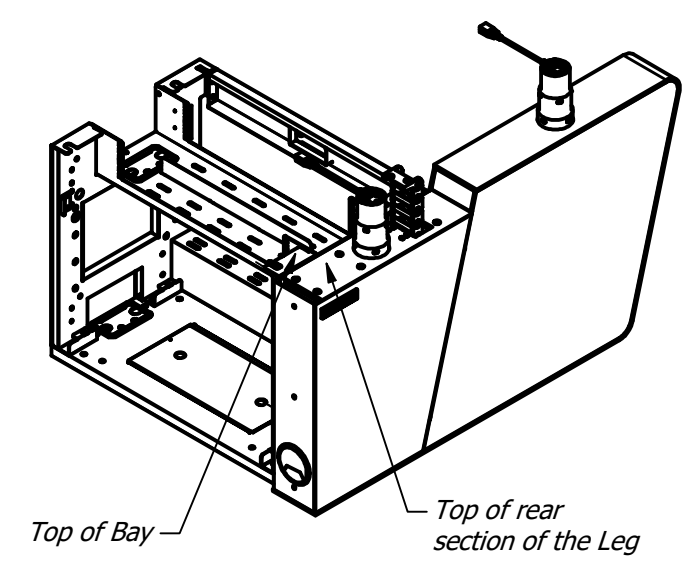
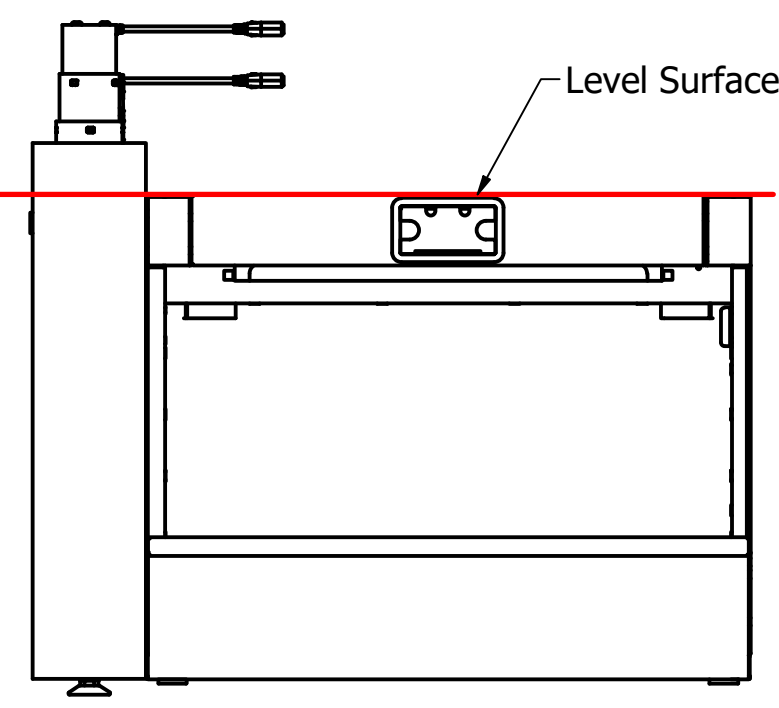
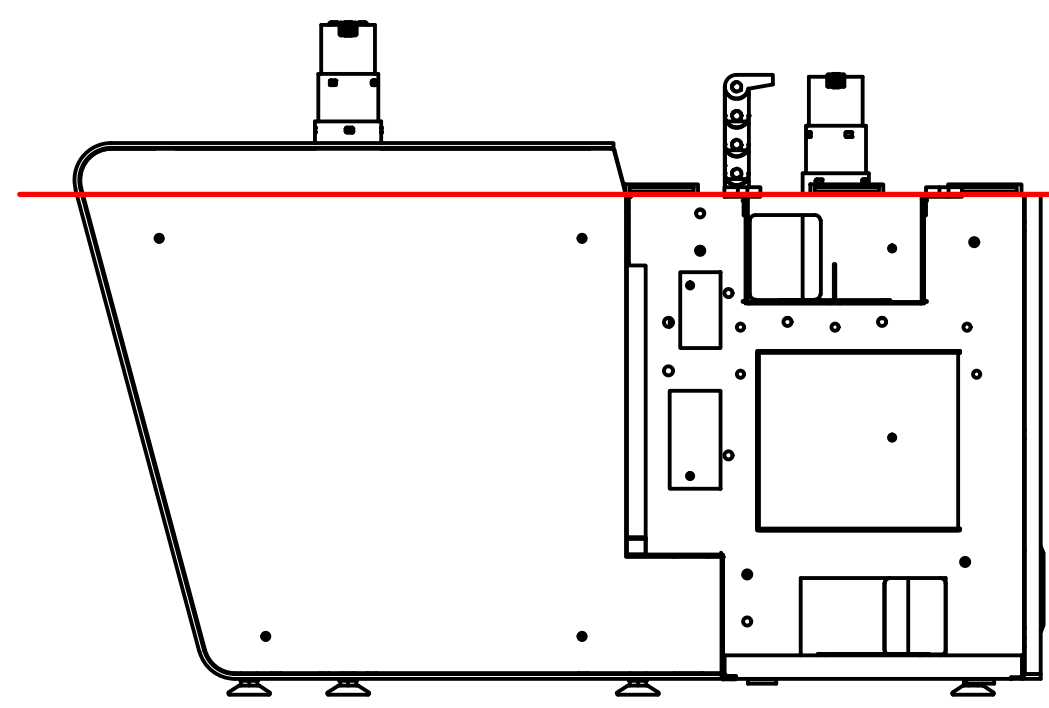
Step 5:
CAUTION: HEAVY OBJECT ⚠

With two People, Lift the Leg off of the ground to access the Feet. Rotate them by hand to extend them flush with the **20mm Spacer**.



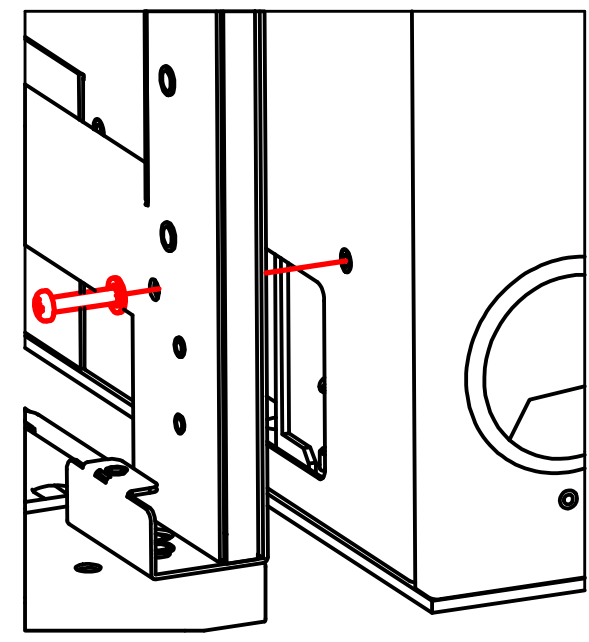
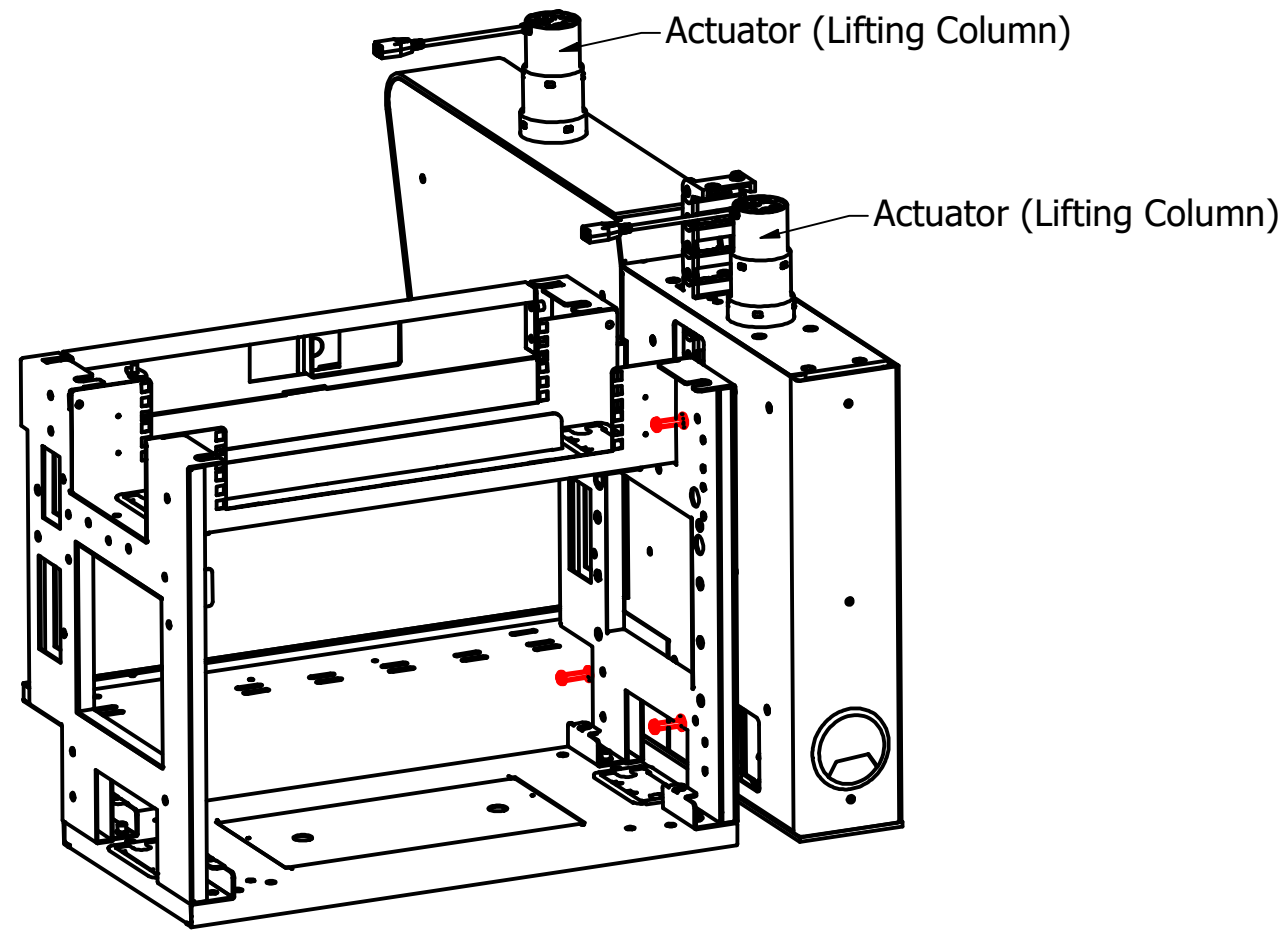
Step 6:

Once Roughly Levelled, offer it up to one of the level Bays and make minor adjustments to ensure the top of the rear section of the leg and the bay are aligned as shown below.



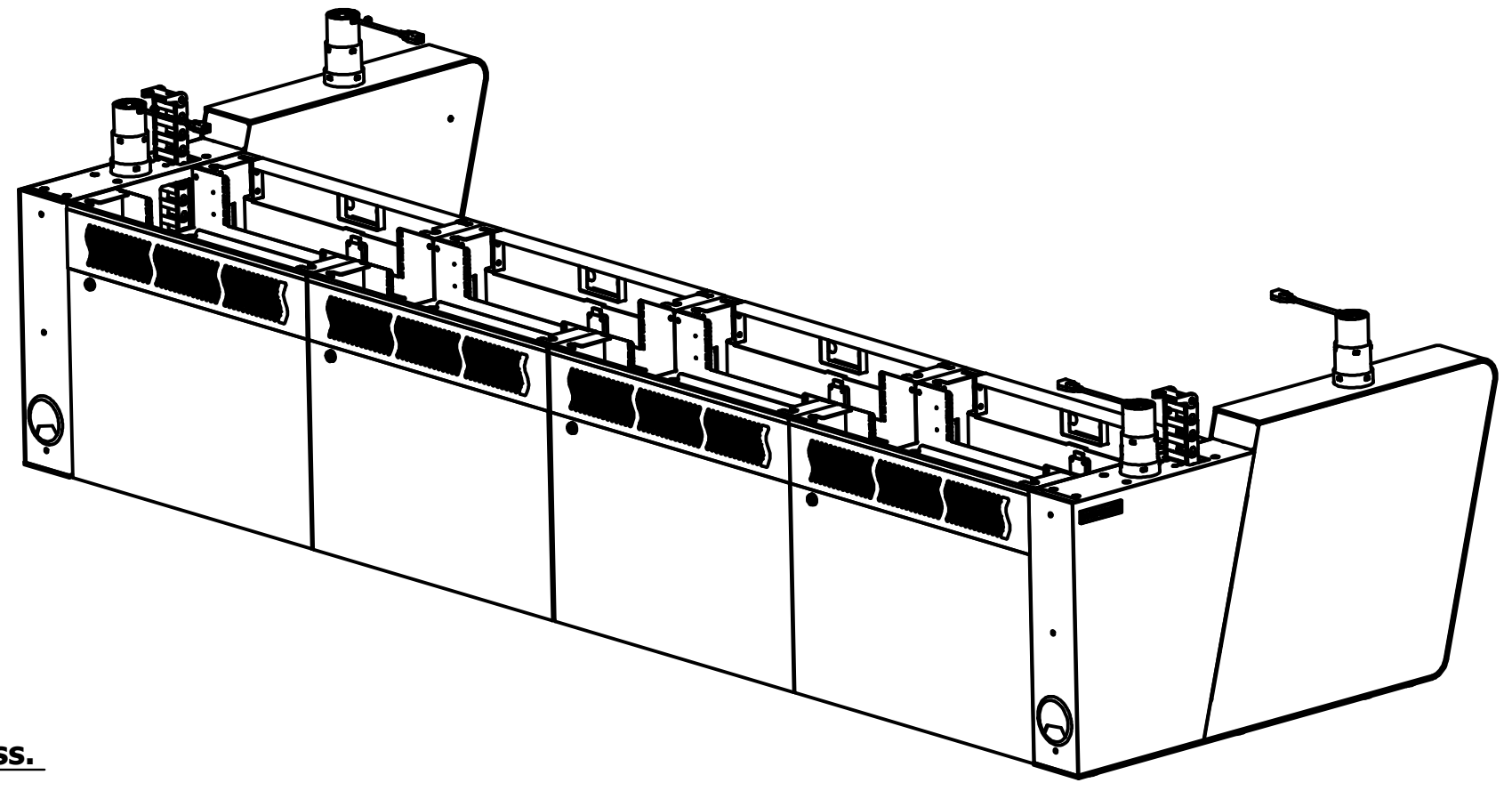
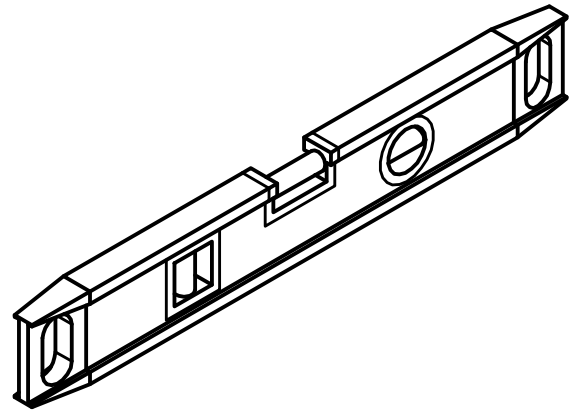
Step 7:

Offer up the Allocated End Cheek to the Bays Using the **M6 30mm Fixings (H)** with a **Washer (E)**



Step 8:

Attach the other end cheek, and do final checks and adjustments to ensure the console is sitting level.



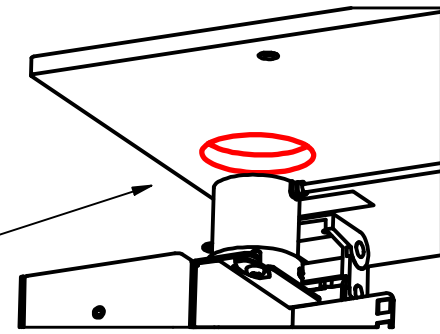
Use a **Spirit Level** to carry out checks on multiple positions on the console at this stage.

! ENSURE All Feet are touching the ground during this process.

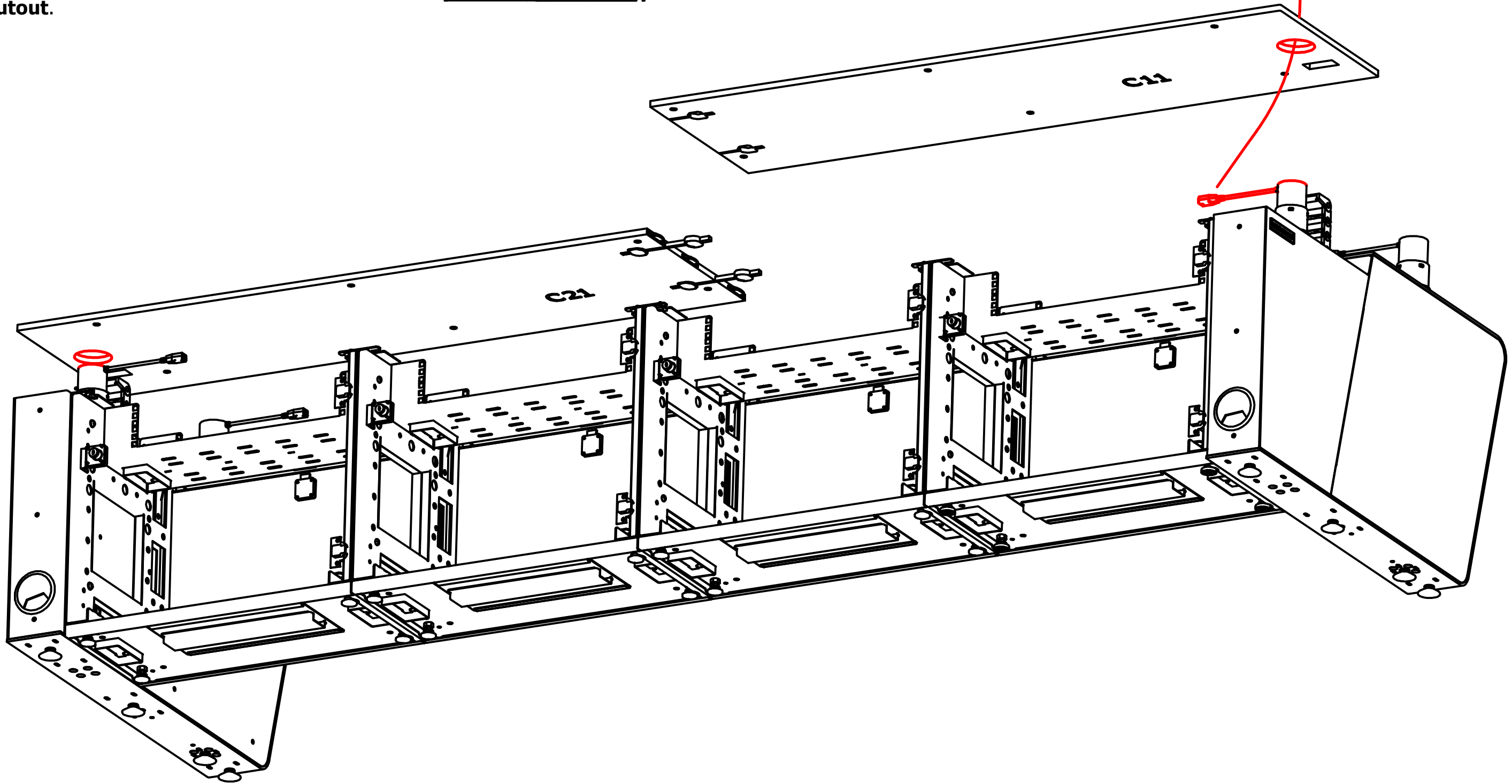
Step 9:

Lower the Individual Tops onto the bays in their correct layout positions. They will be unsecured.

Ensure to fit them over the **Actuator (Lifting Column)** Via the **designated Cutout**.

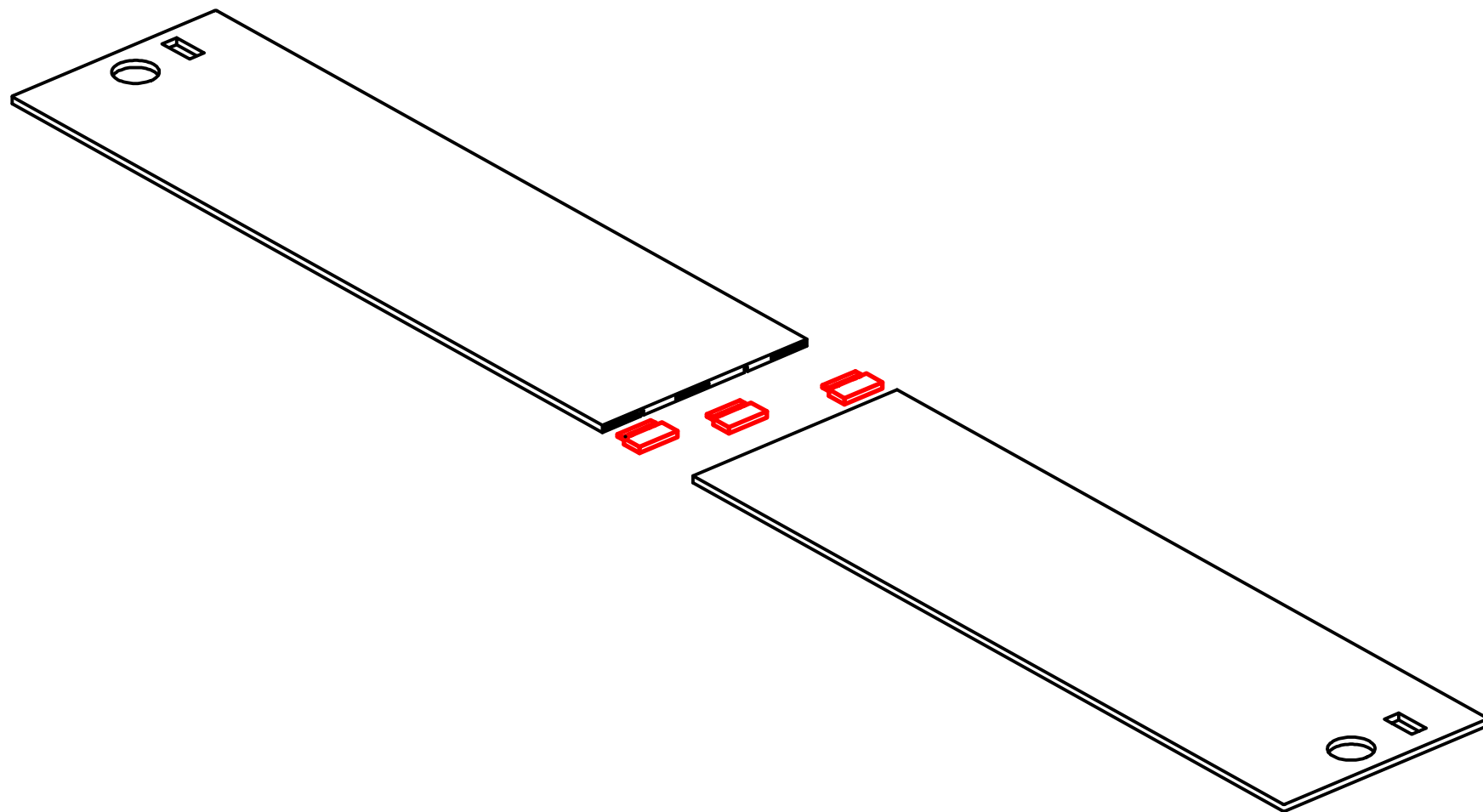
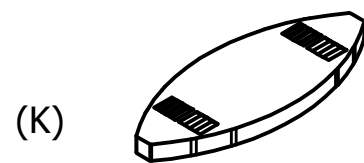


Feed Actuator Cable Through Cutout when Placing the Worktop

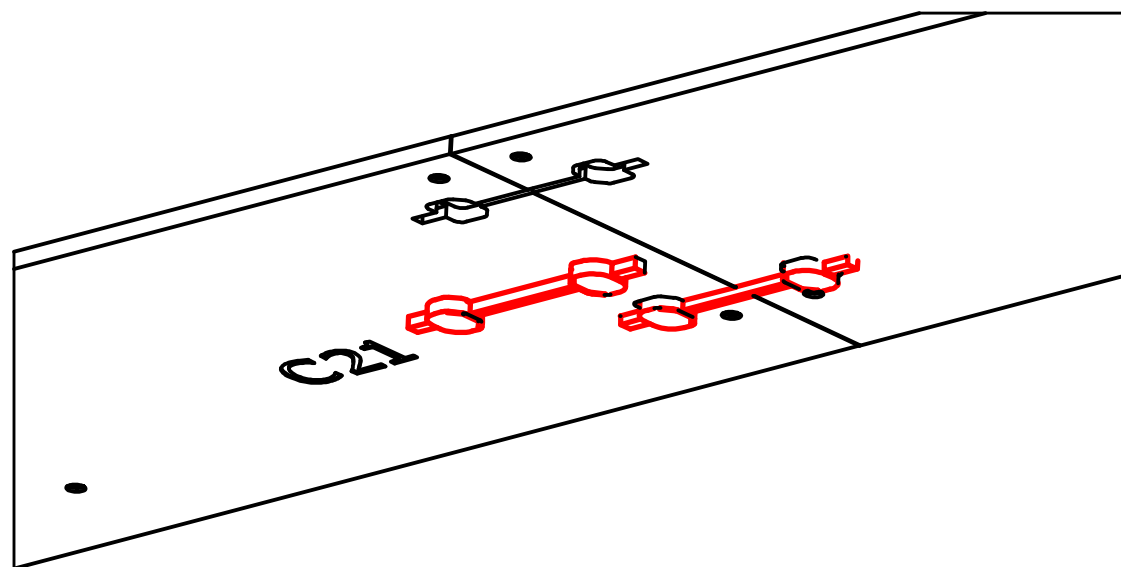
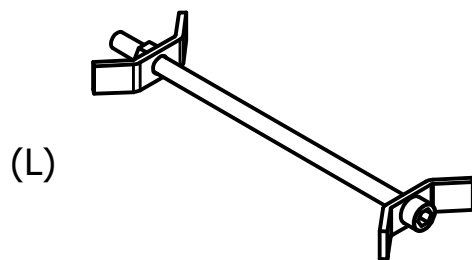


Step 10: *Ignore this step on Single Piece Worktops*

Fix the Lower Shelf Worktop together Using the **Worktop Connectors (L)** and **Biscuits (K)** to Secure them.



Fix the **Worktop Connectors (L)** in the **Slots on the Underside of the Worktop** and tighten them to make the combined work surfaces rigid.

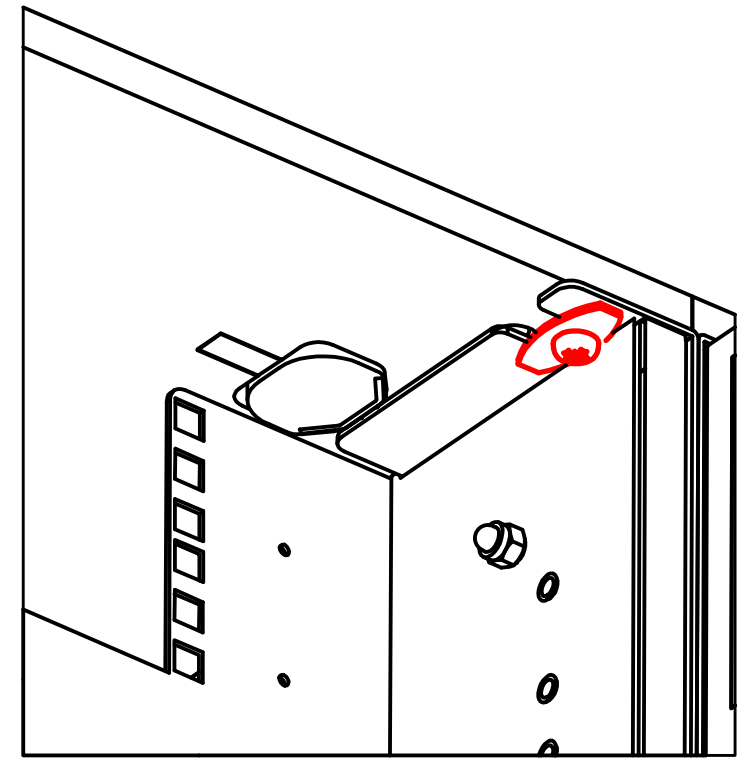
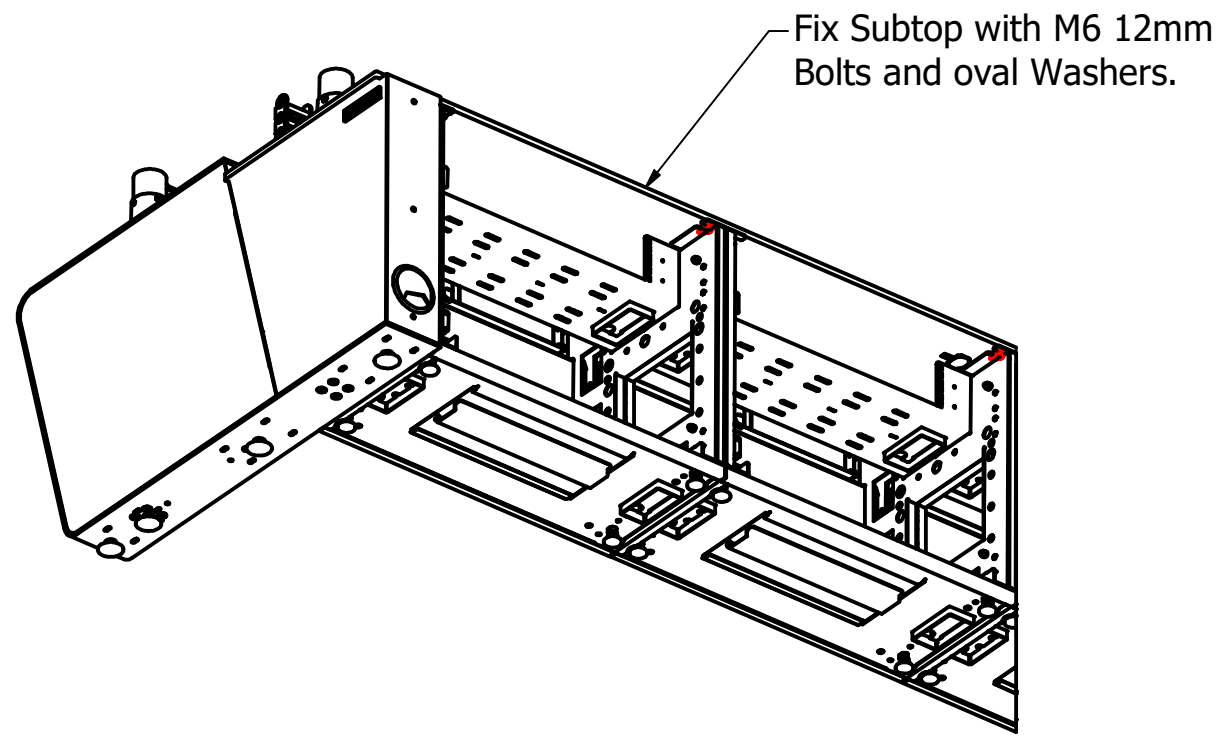
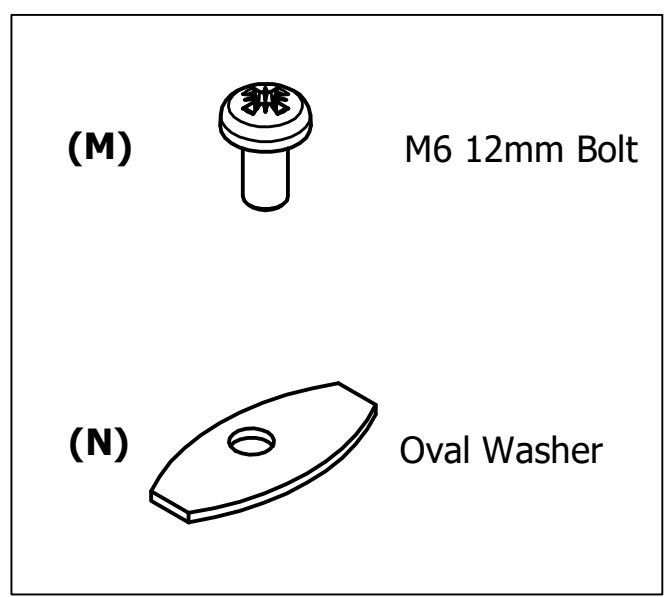
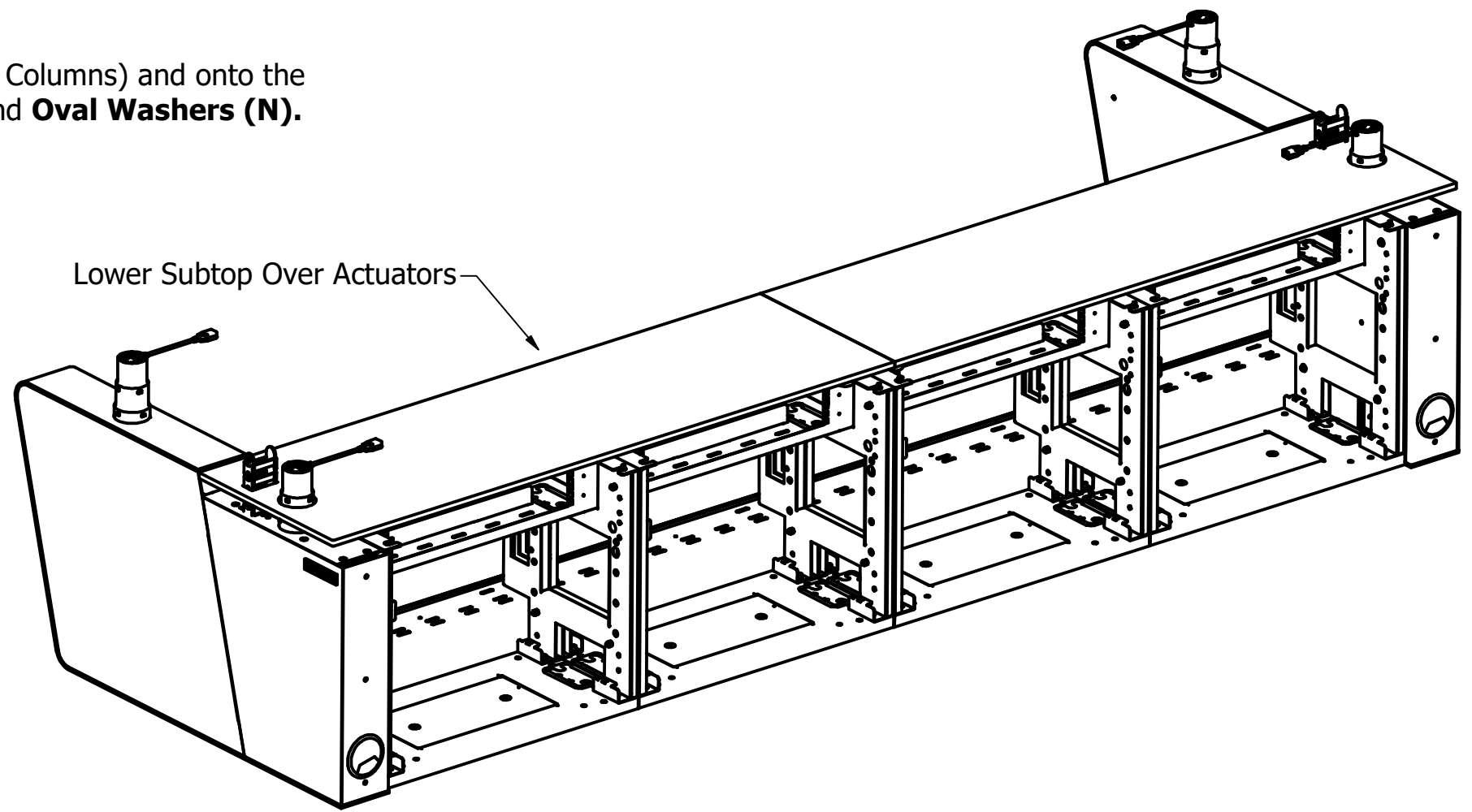


Step 11:

Once the Sub Top has been lowered over the actuators (Lifting Columns) and onto the top of the bays, fix **loosely** using the **M6 12mm Bolts (M)** and **Oval Washers (N)**.

IMPORTANT: Ensure fixings at this step are done **loosely** to allow for adjustment in the next step.

WARNING: Ensure Correct Bolt length is being used to avoid breaking through the worksurface.



Step 12:

With the Sub Tops loosely secured, evaluate if any adjustment is needed to get the spacing in **Fig.1** to Look Correct.

There are **4 adjustment points** located on the leg as shown in **red**. Using the **4mm Allen Key**, adjust these fixings to ensure the Actuator (Lifting Column) cutout is correctly aligned on **both sides of the console**.

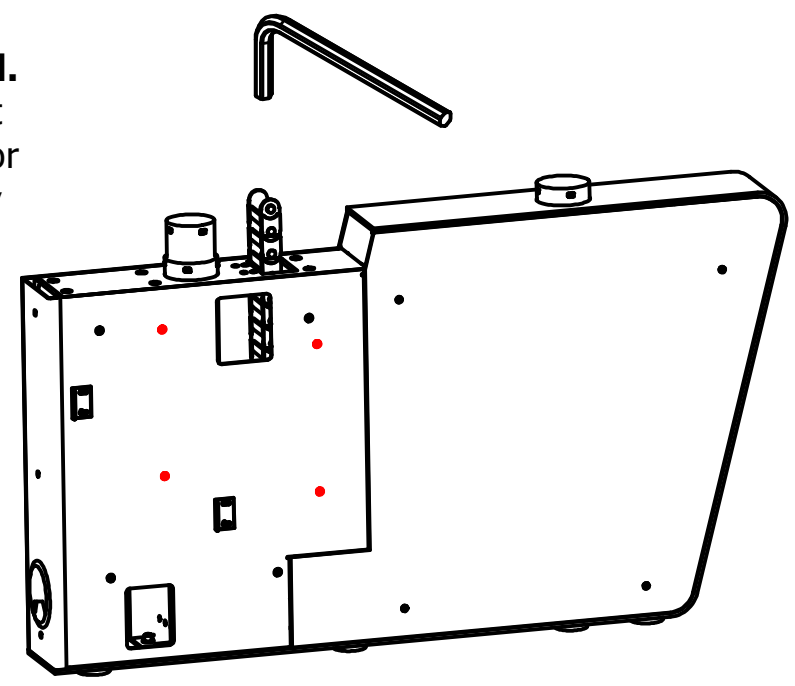


Fig. 1

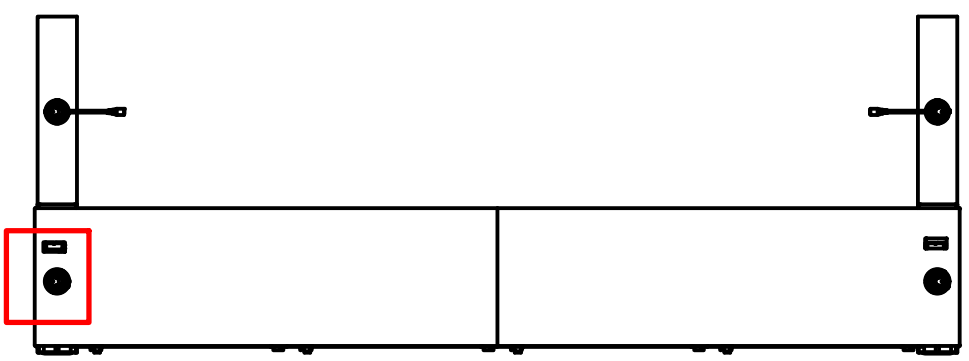


Fig.1 Incorrect
Requires Adjustment

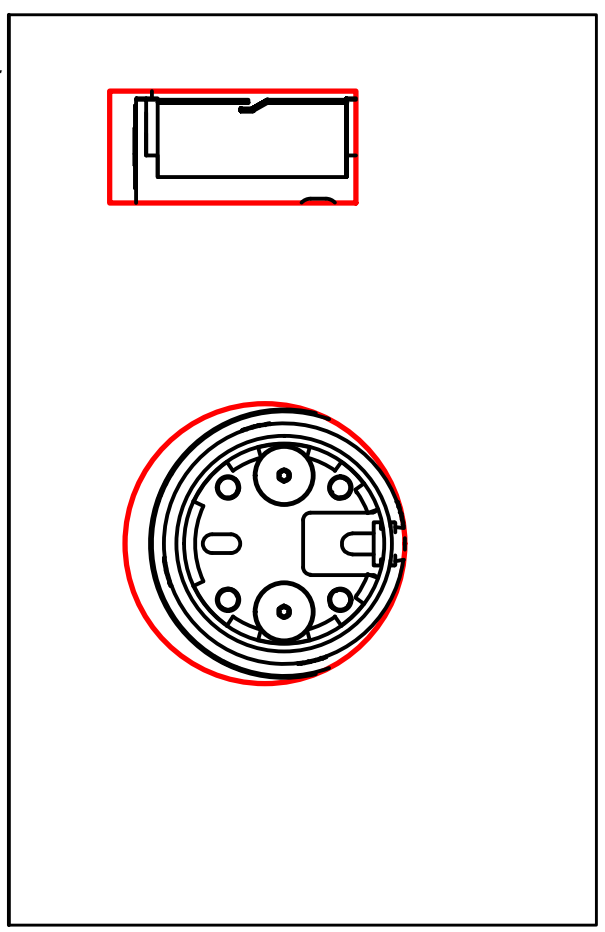
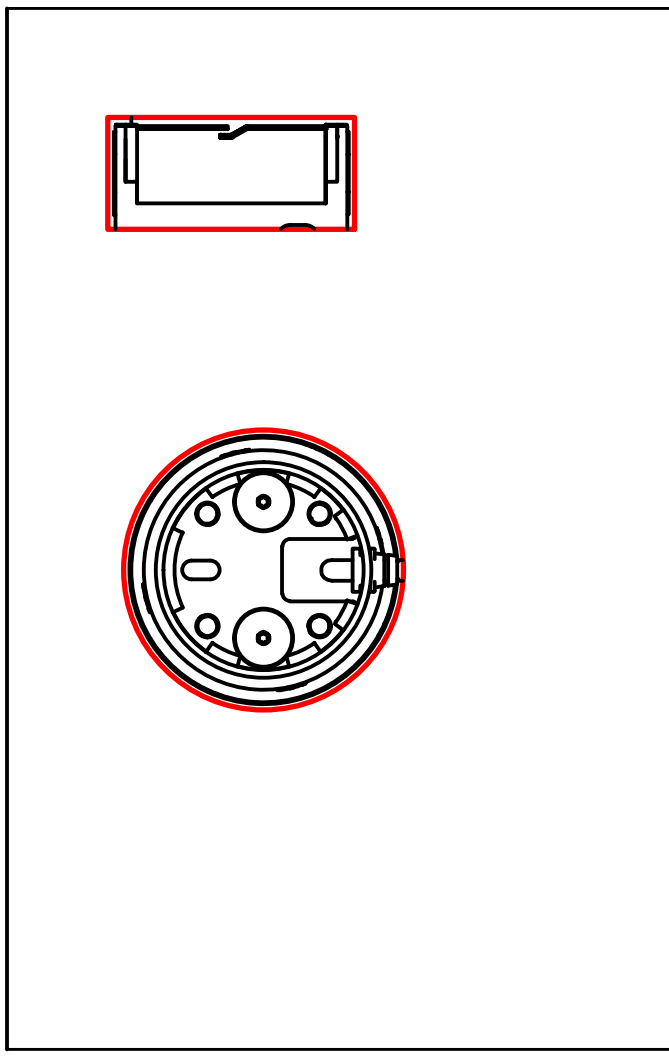


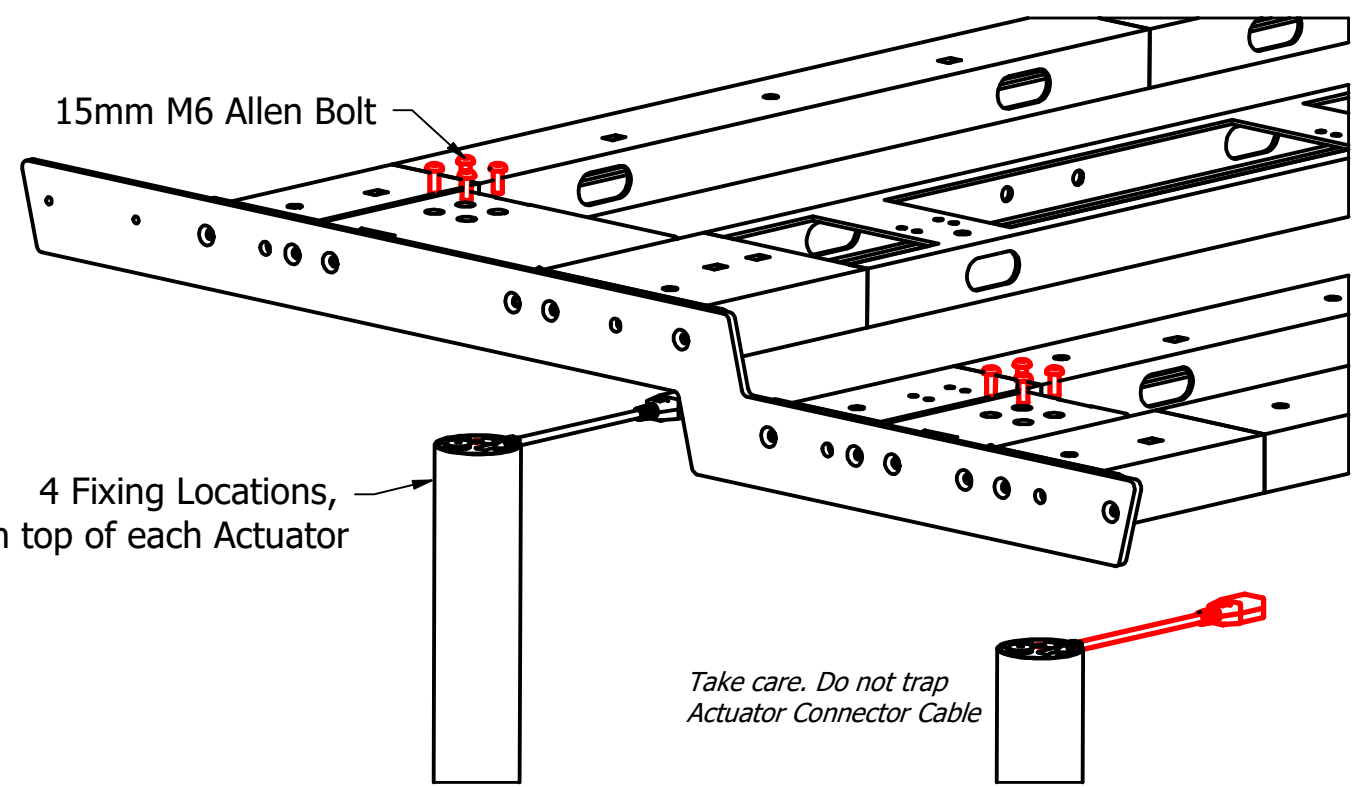
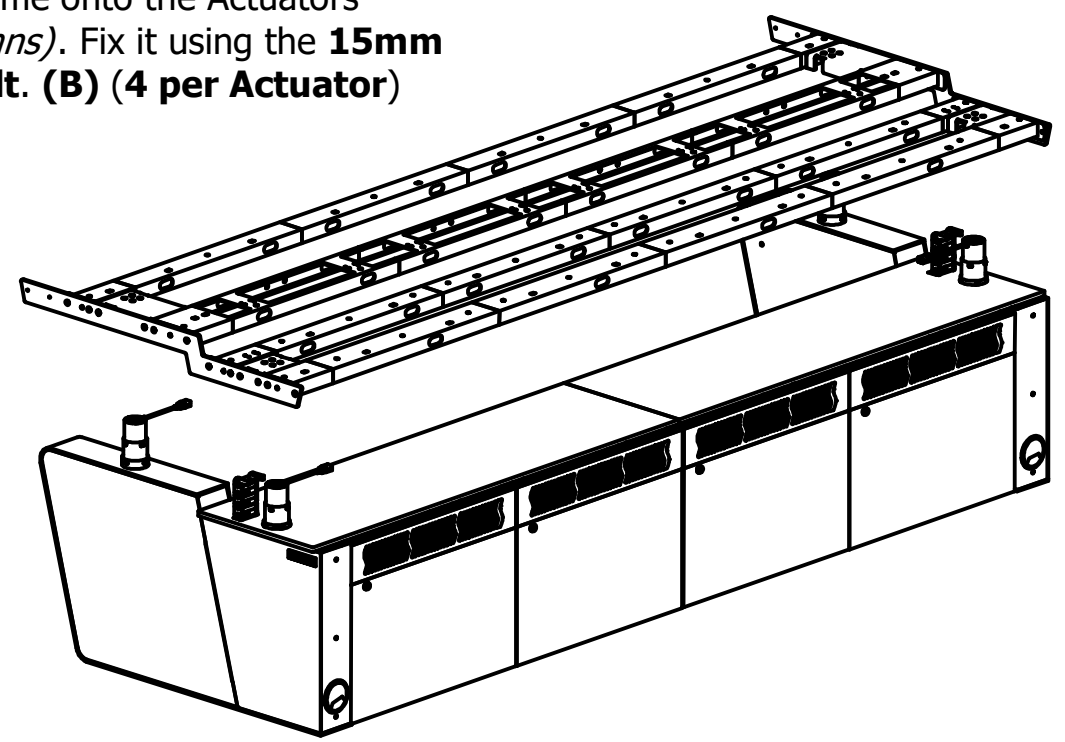
Fig.1 Correct
No Adjustment Needed



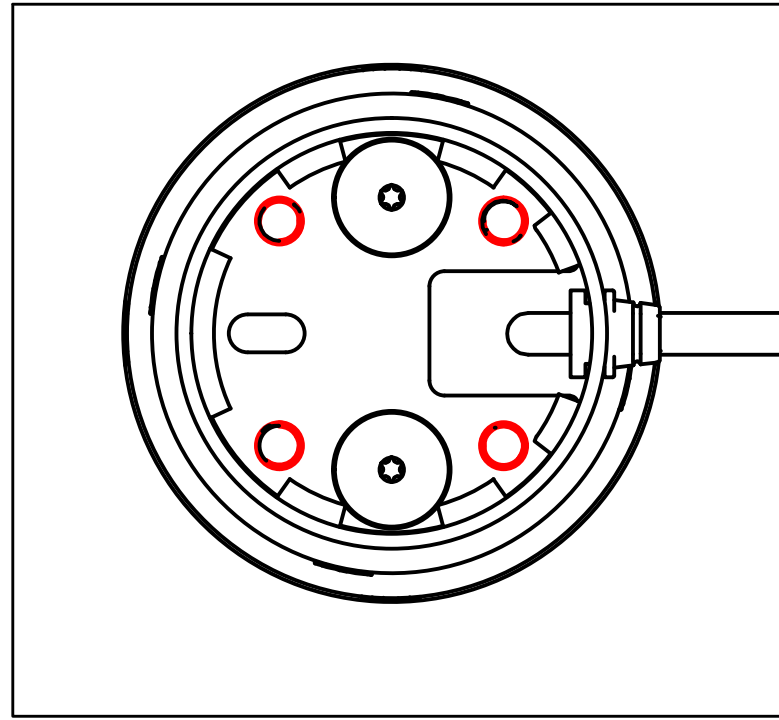
Step 13:

CAUTION: HEAVY OBJECT 

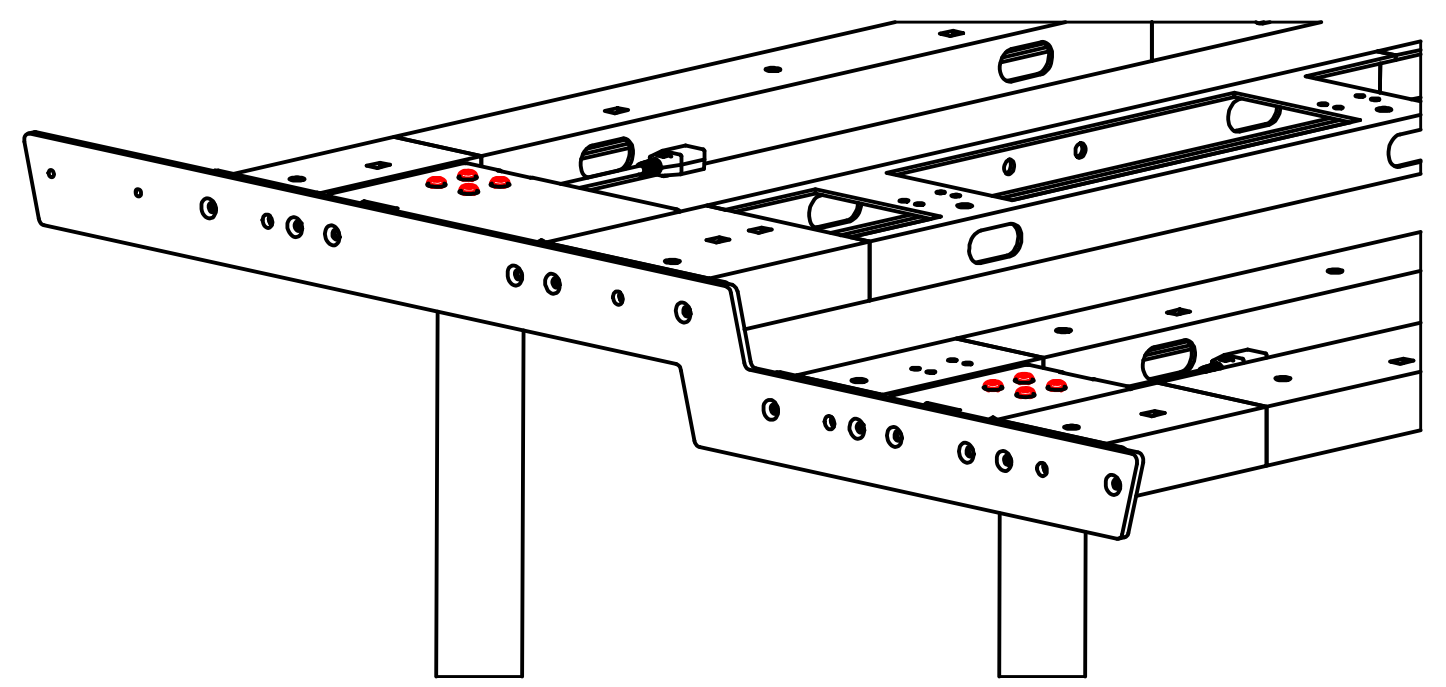
Lower the Frame onto the Actuators (Lifting Columns). Fix it using the **15mm M6 Allen Bolt. (B) (4 per Actuator)**



Fixing Points on Top of Actuator

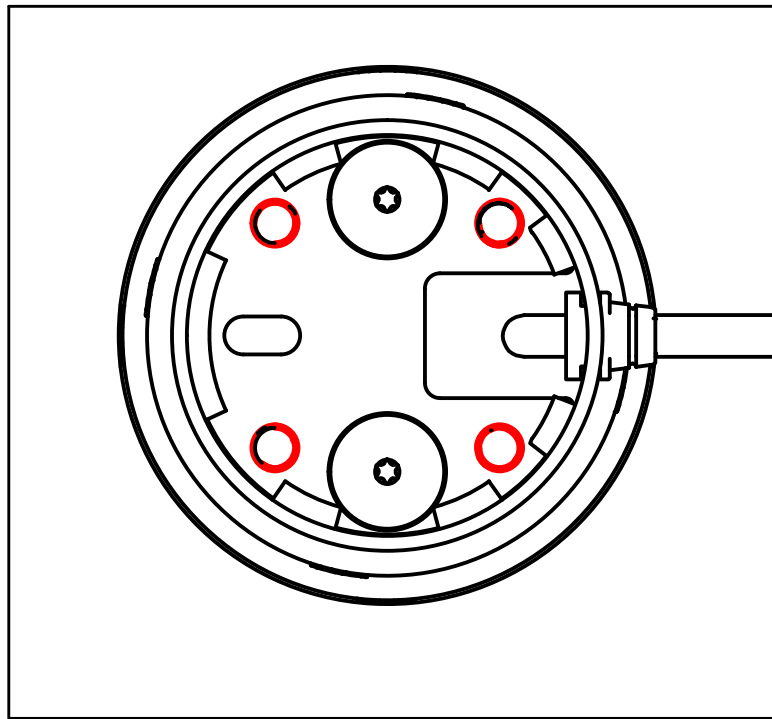


Once all Fixings are loosely fitted, tighten all fixings.

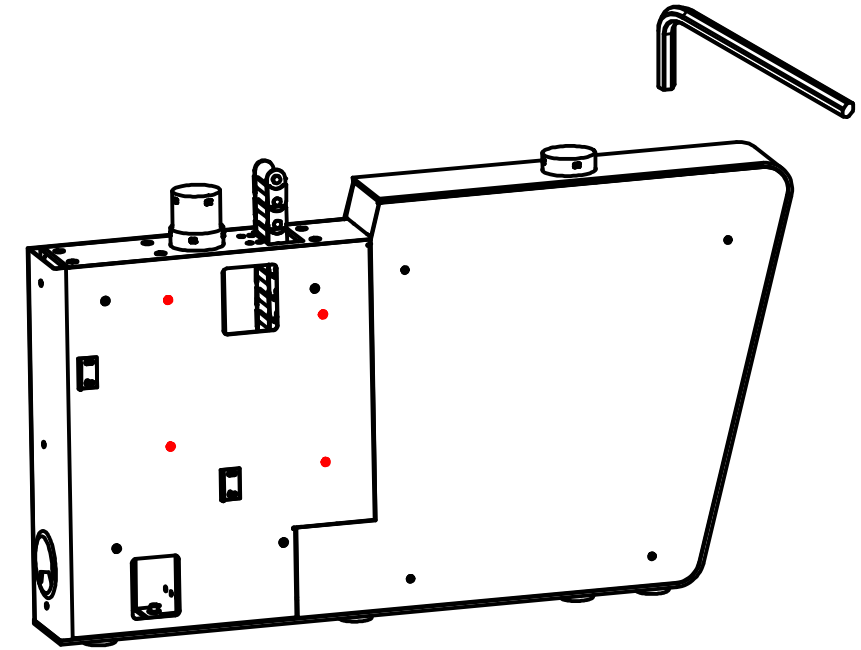


Step 13: Note

The frame should align with the 4 actuator holes on both sides of the console as shown.



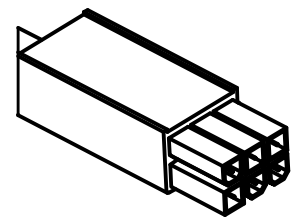
If the holes do not align, please refer to step 3 on adjusting the End Cheeks to achieve alignment.



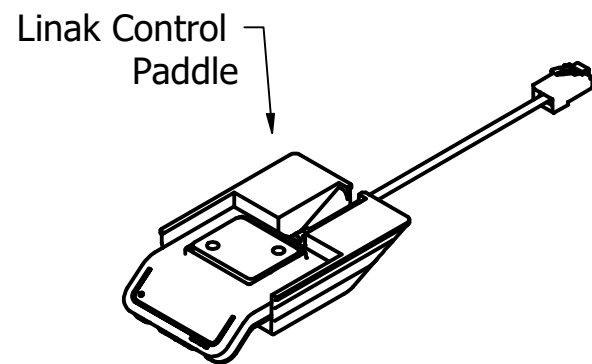
Step 14:

Connect the Correct Actuator to the Control Box using the Provided Leads.

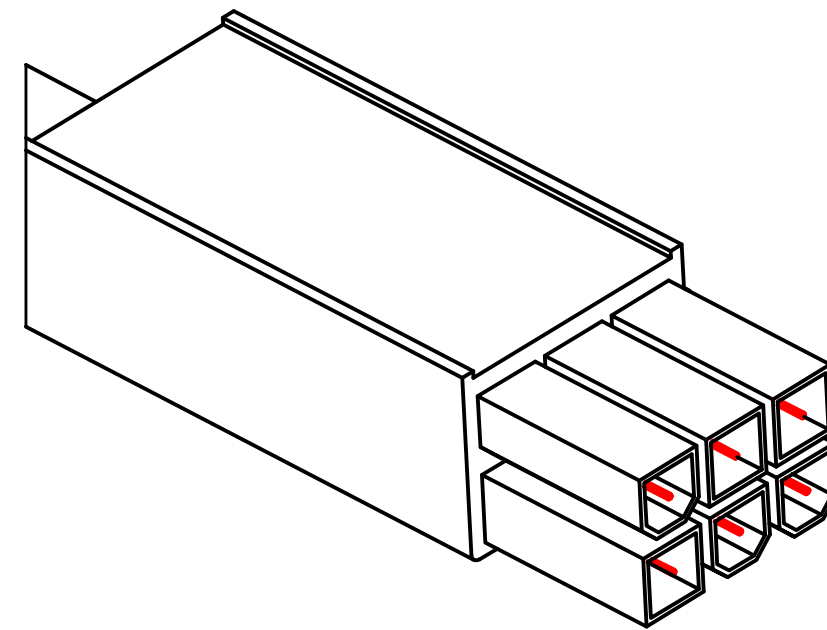
Take care not to bend the pins of the 6 Pin Actuator Cables. This can lead to a cable failure and result in actuators not functioning



Actuators use a 6 Pin Cable

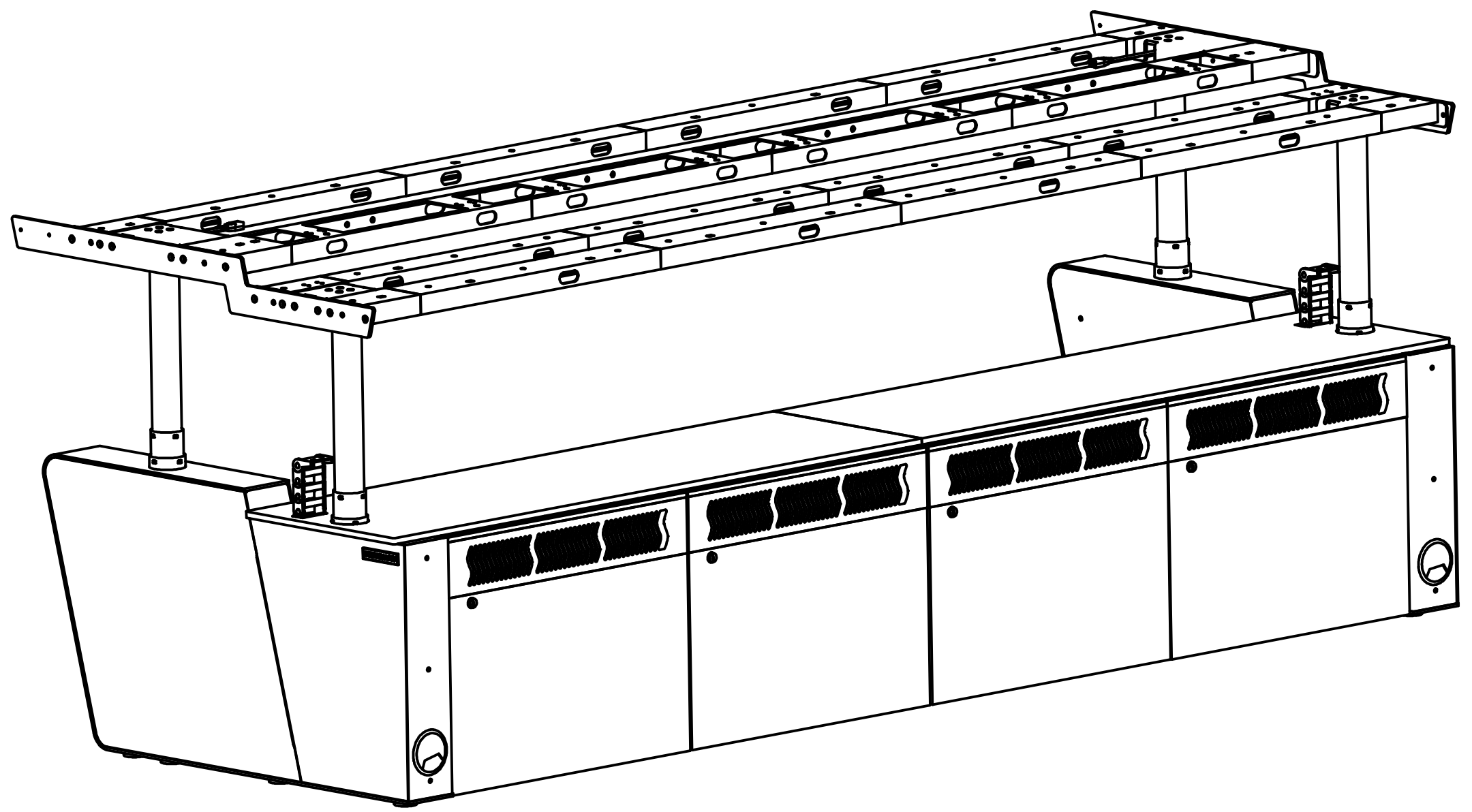
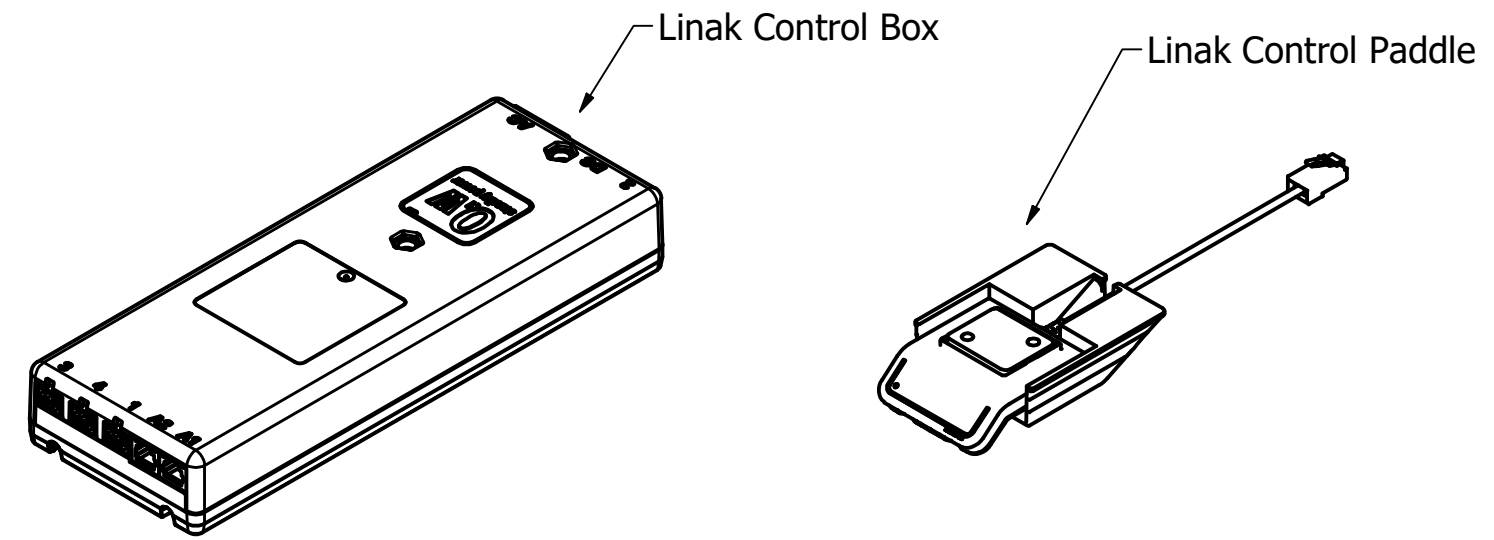


Control Paddle Uses a Cat 5 Cable



Step 15:

Using a **LINAK Control Box (J)** and **Paddle (I)**, Plug the Actuators into the Box and **Raise them** to a suitable working height to aid the process of adding the frame to the console.



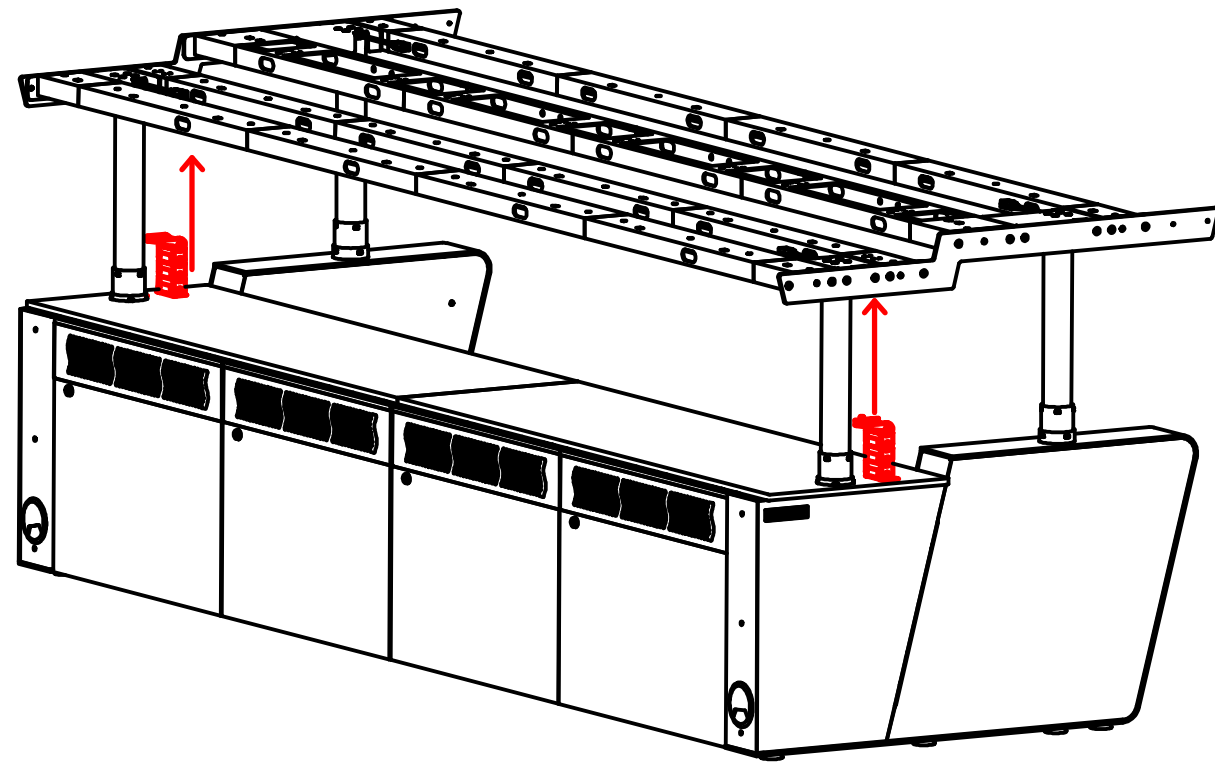
D
C
B
A

D
C
B
A

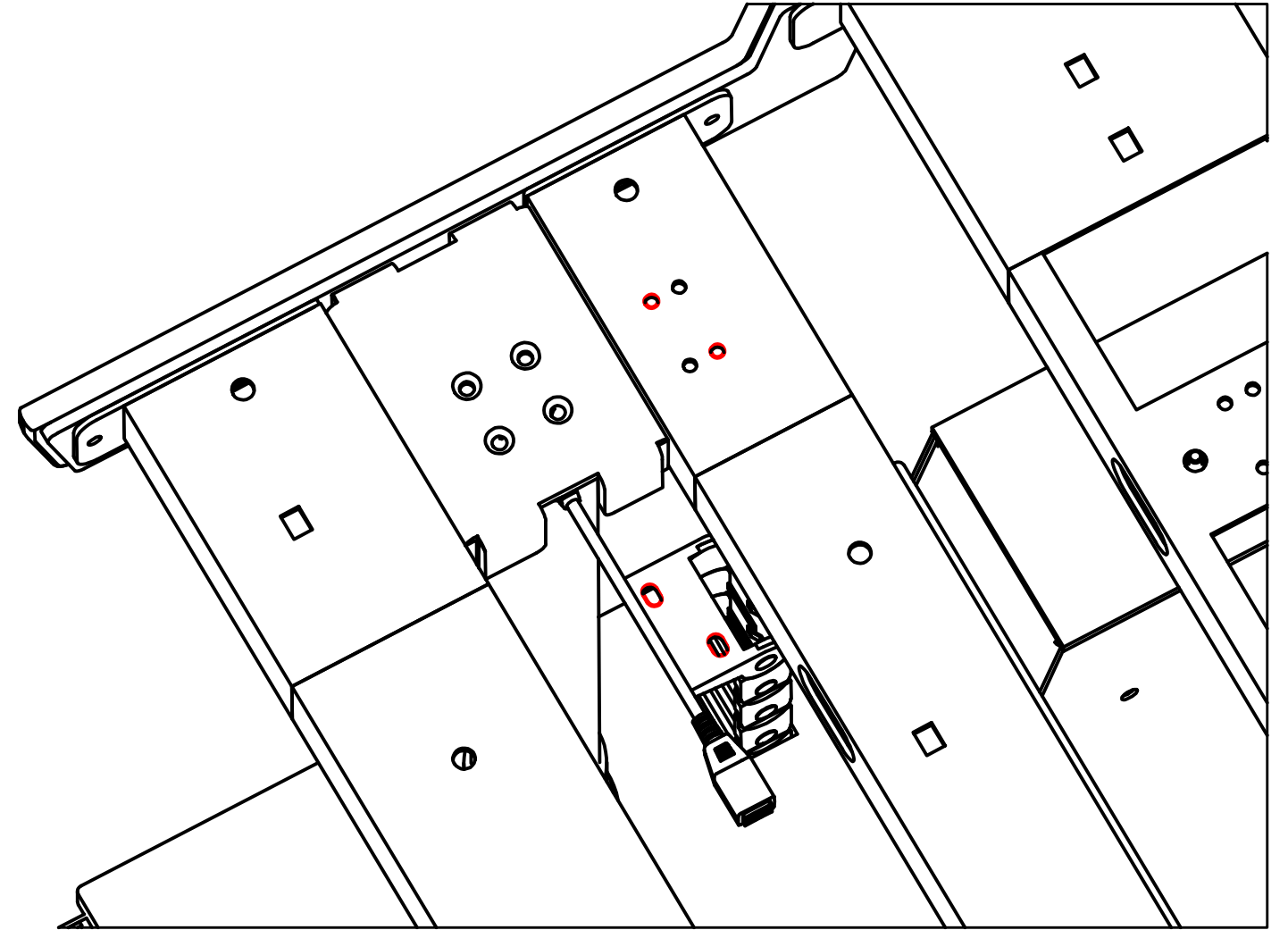
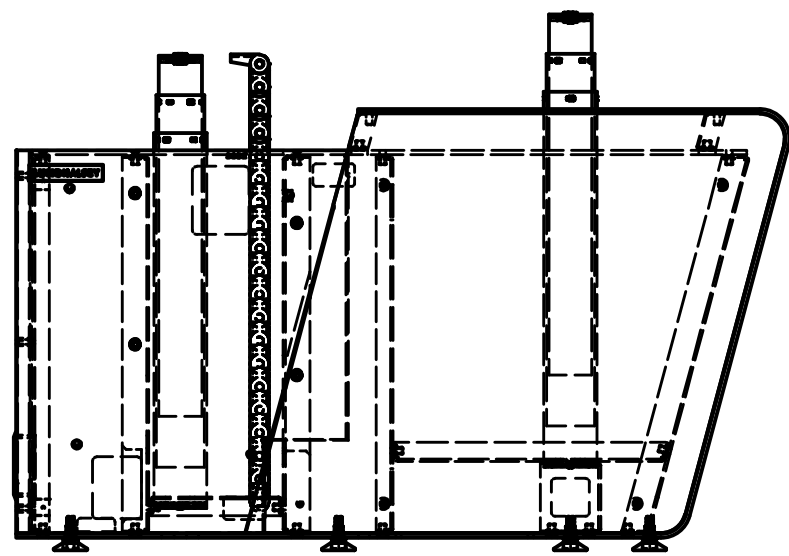


Step 16:

Attach the Black Cable Management Chain to the Frame using the **10mm M6 Allen Bolt (F)** fixing and **Washer (E)**.



The Black Cable Management Chain will need to be pulled out from the internal of the Leg Assembly



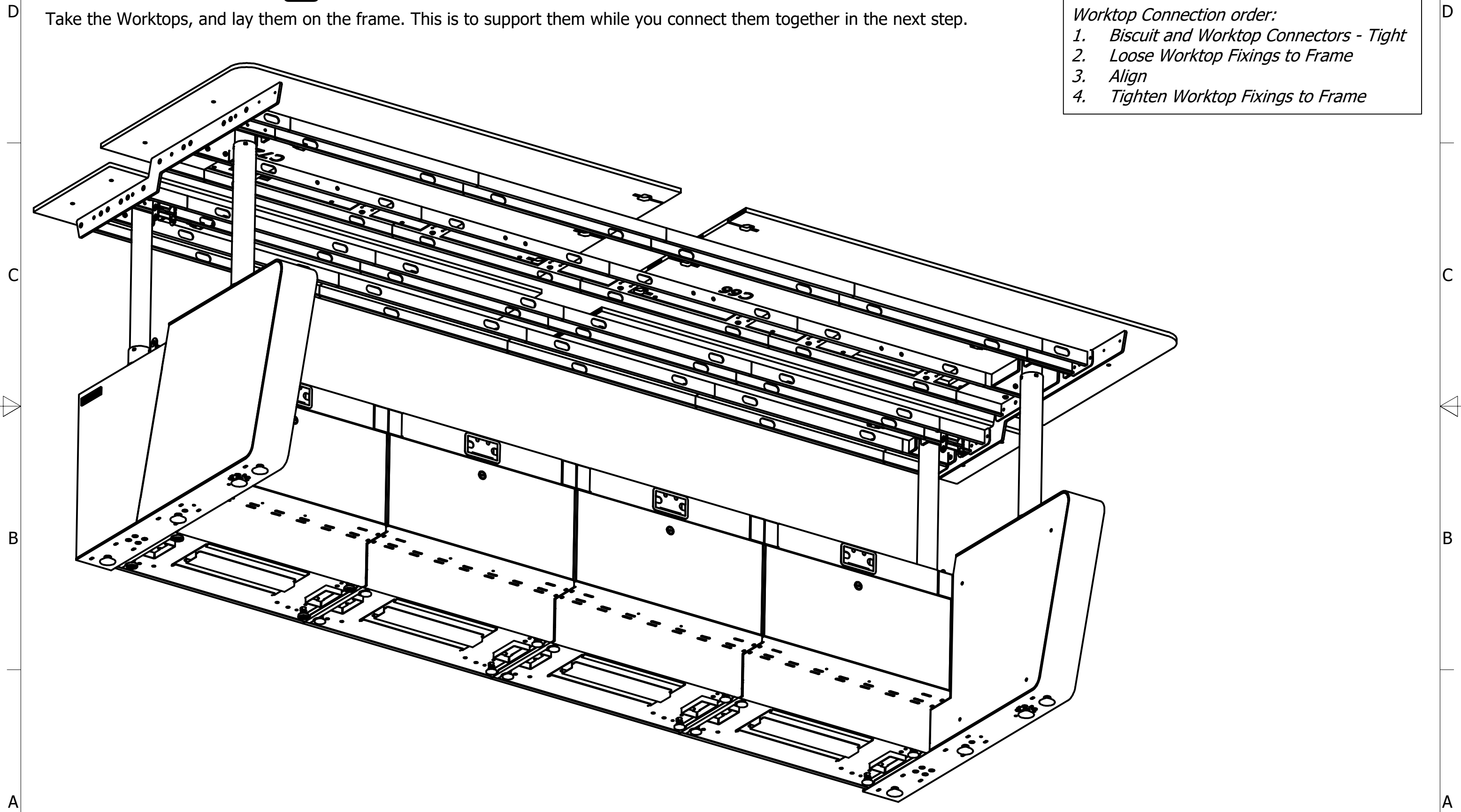
6 5 4 3 2 1

Step 17:

CAUTION: HEAVY OBJECT 

Take the Worktops, and lay them on the frame. This is to support them while you connect them together in the next step.

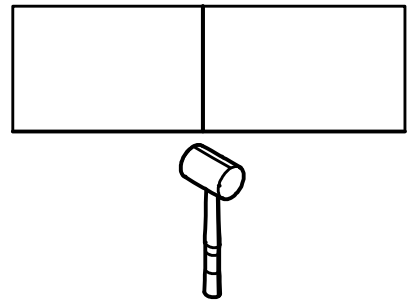
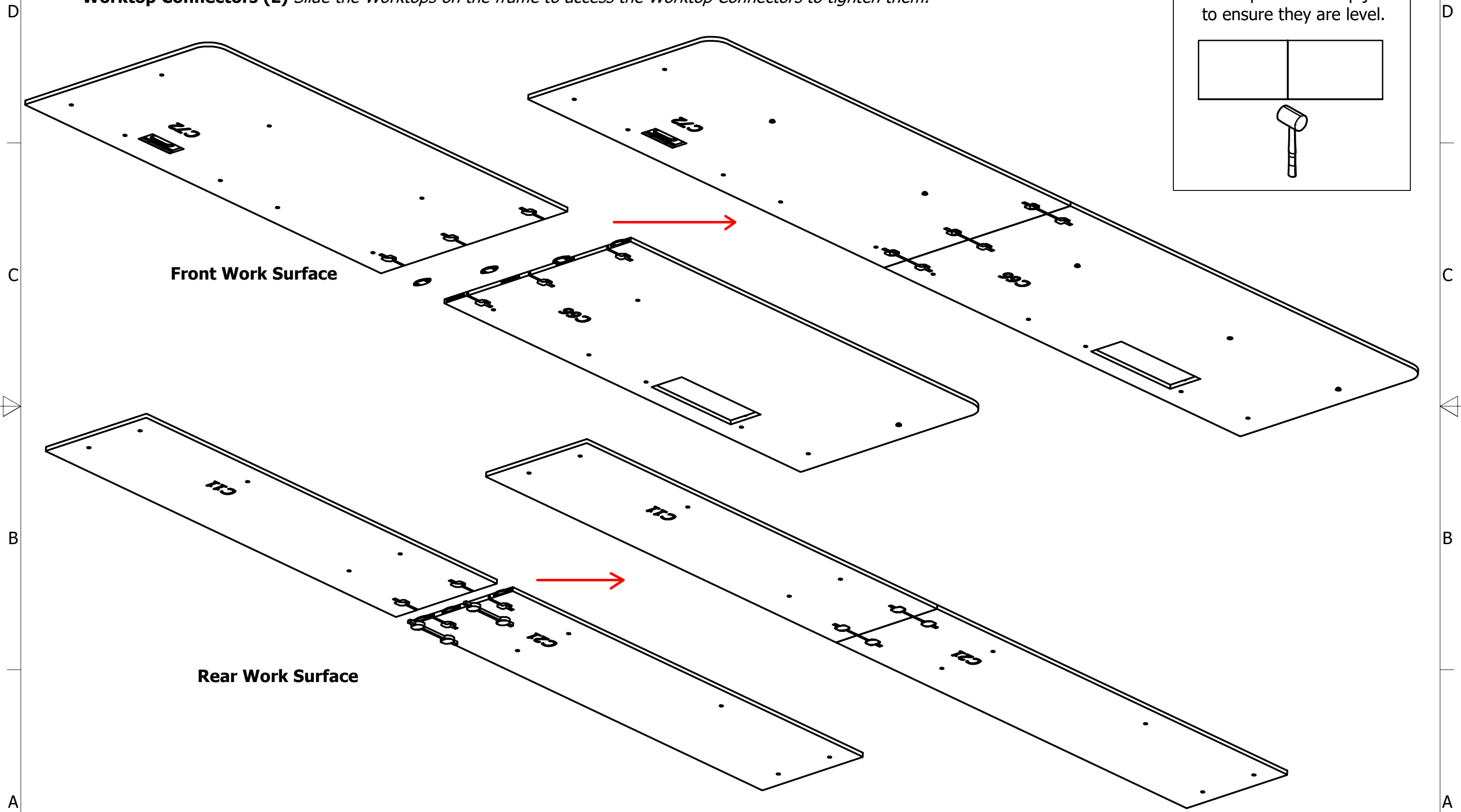
- Worktop Connection order:*
1. *Biscuit and Worktop Connectors - Tight*
 2. *Loose Worktop Fixings to Frame*
 3. *Align*
 4. *Tighten Worktop Fixings to Frame*



Step 18:

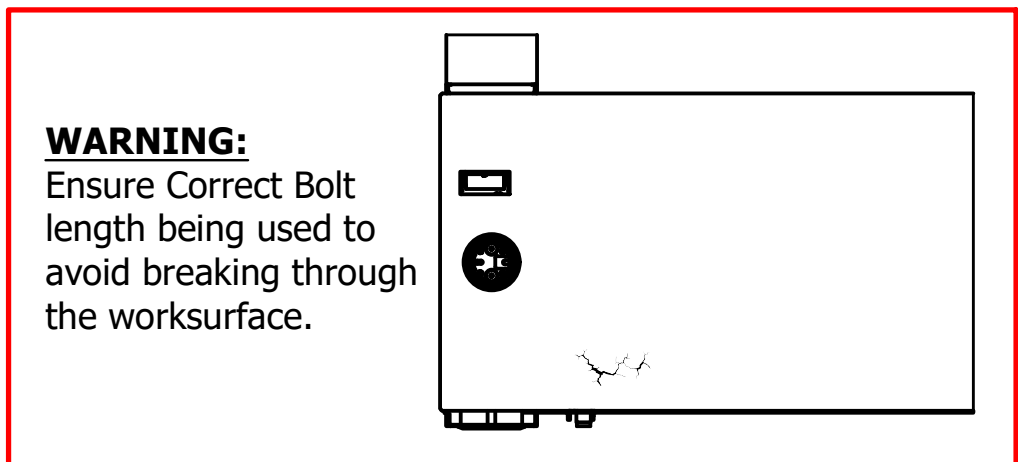
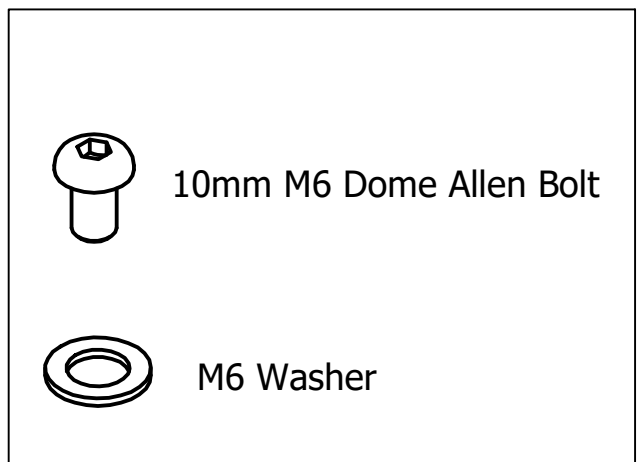
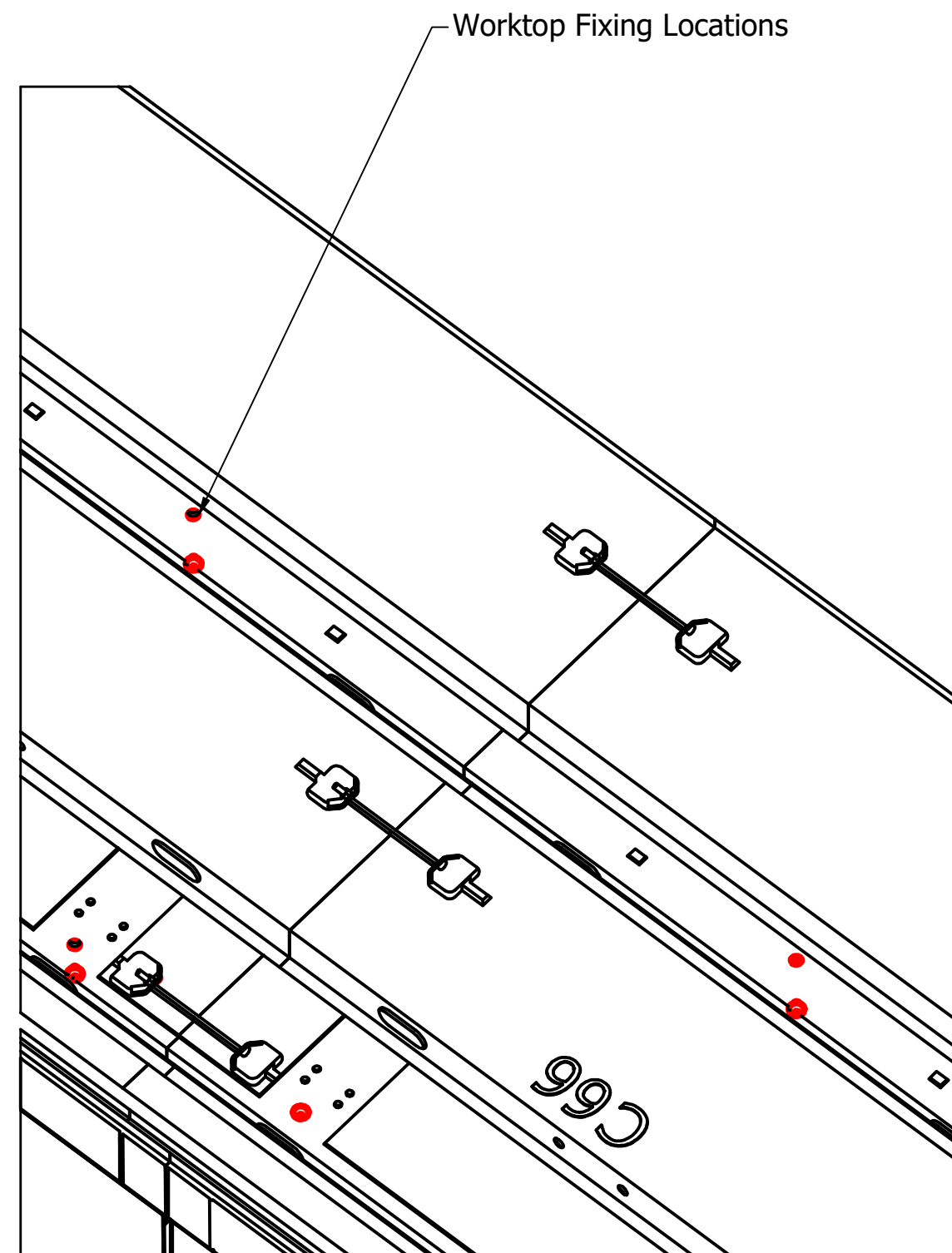
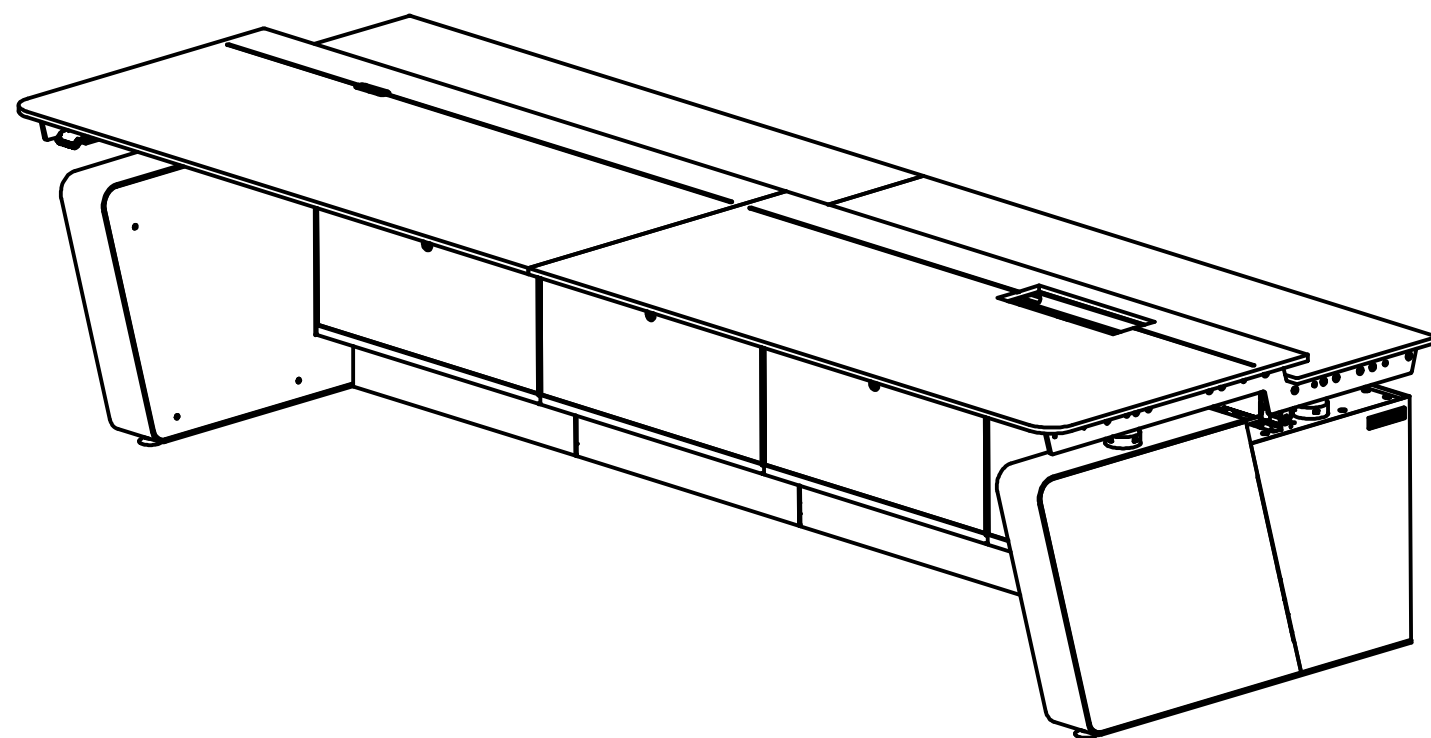
Similar to Step 5, Connect the front and rear work surfaces via their respective splits, using the **Biscuits (K)** and **Worktop Connectors (L)** Slide the Worktops on the frame to access the Worktop Connectors to tighten them.

Use a **Rubber Mallet**, and tap the Worktop joins to ensure they are level.

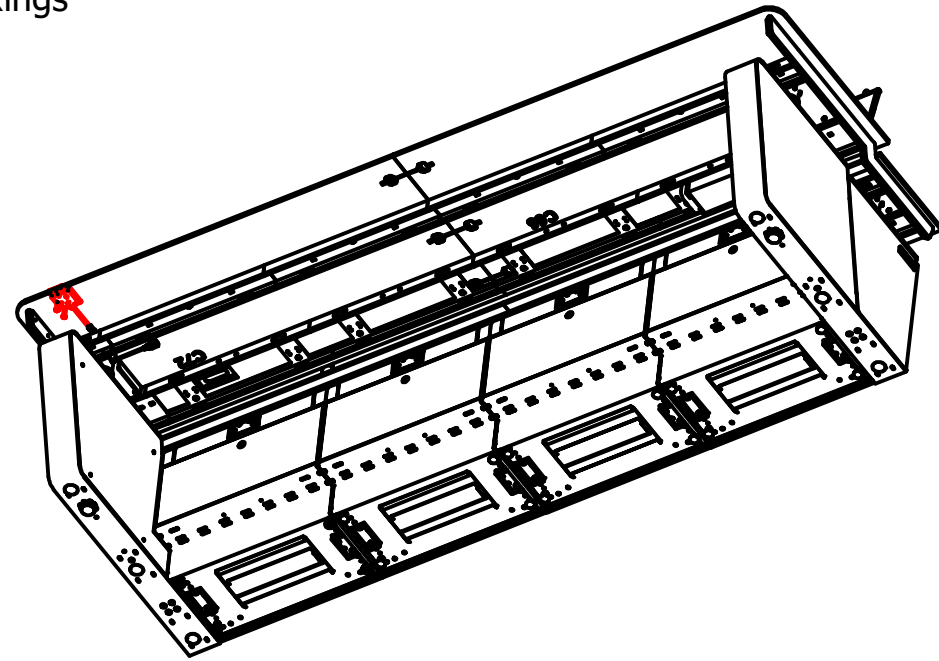
Step 19:

With the Front and Rear Worktops on the frame and the biscuit connectors and Worktop connectors secured loosely connect all of the **10mm M6 Allen Bolt (F)** and **Washer Fixings (E)**. Once all fixings are in place, tighten them to secure both of the Worktops.



Step 20:

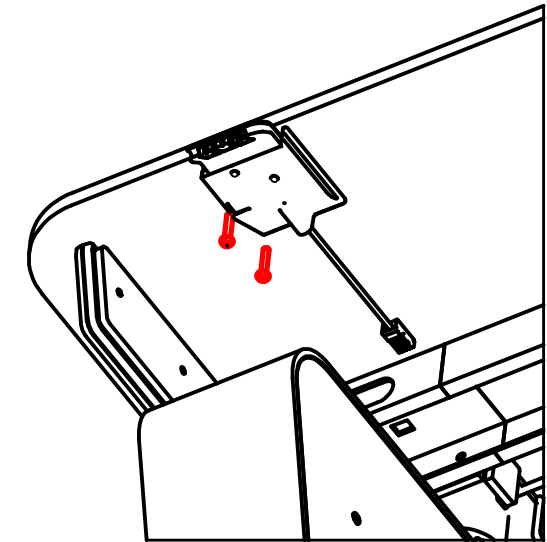
Secure the LINAK Control Paddle using the **23mm M4 Dome Bolt** Fixings



*Note: **LINAK Control Paddle** can be fixed on either side of the worktop.*

IMPORTANT:

Be sure to feed the Control Paddle Cable into the **Slot in the Worktop** to avoid it getting **pinched** or **crushed** by the frame.

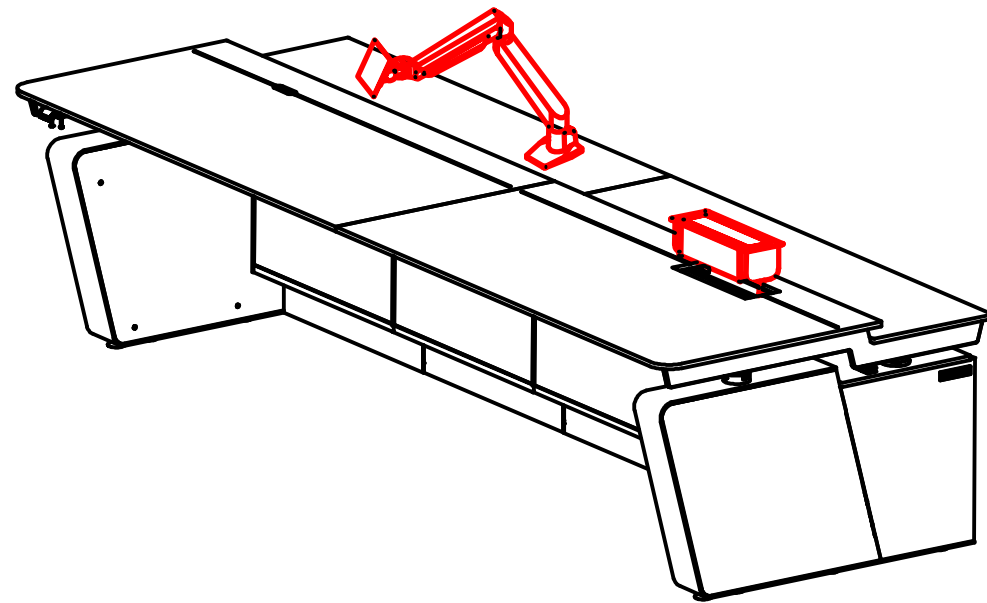


Step 21:

Fix **Accessories** to the Worksurface Where Necessary.

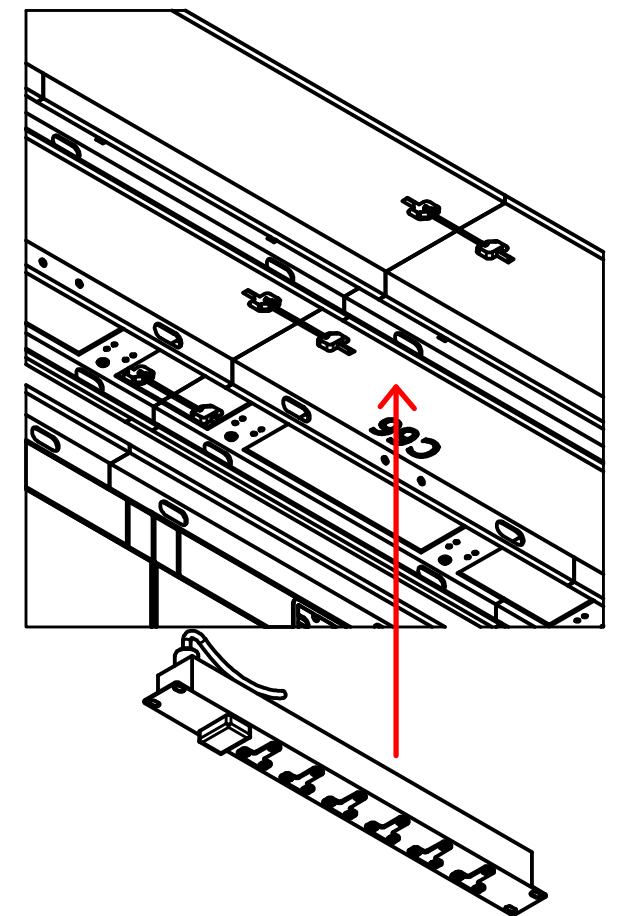
Accessory Possibilities:

*Kontrol Touch
Monitor Arms*



Step 22:

Fit the **PDU** onto the Underside of the Front Worktop in the Fixing locations provided. (Please Note: You may have multiple PDU Positions)



Step 23: Feed the Cables through the Cable Management Chains

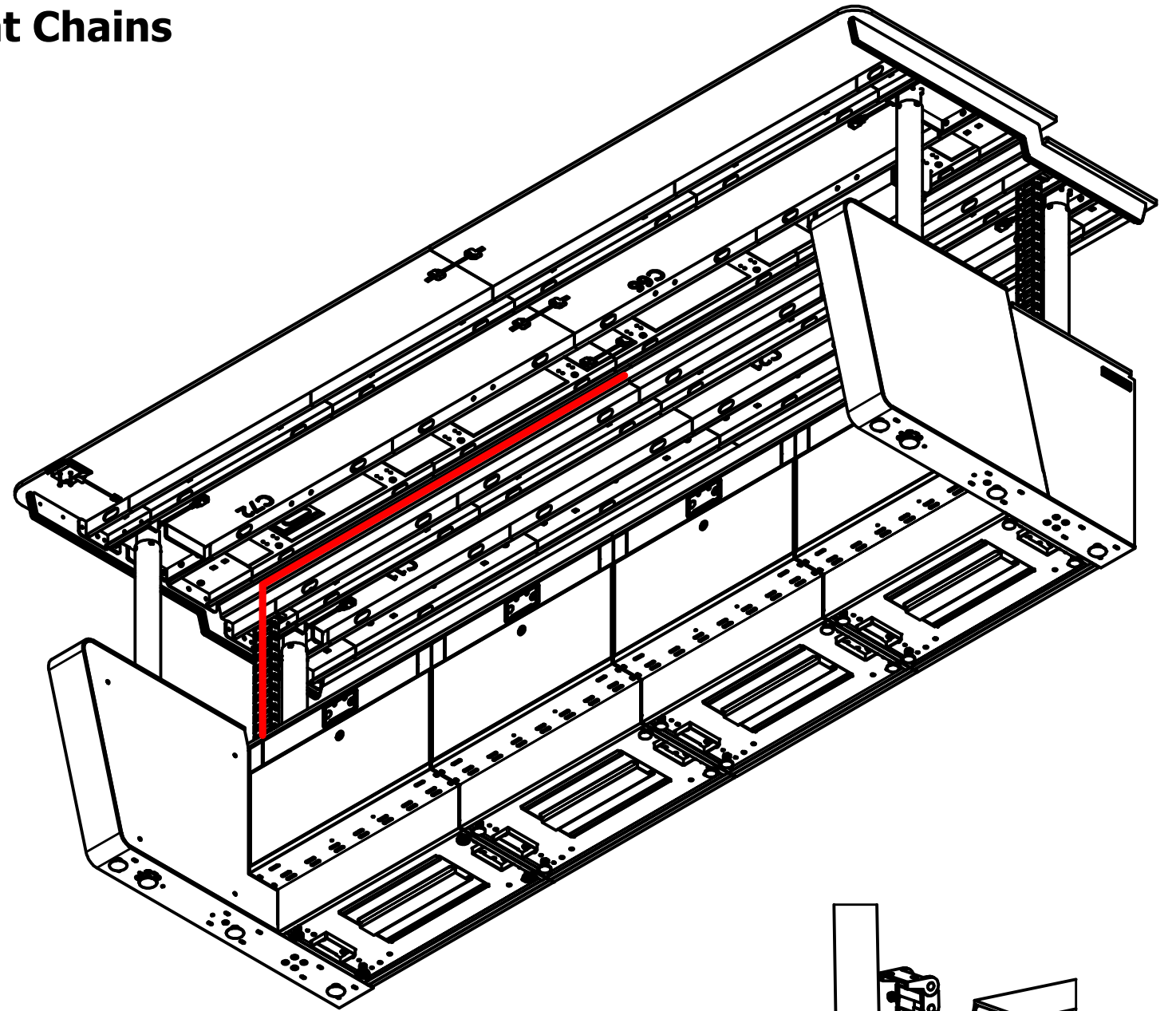
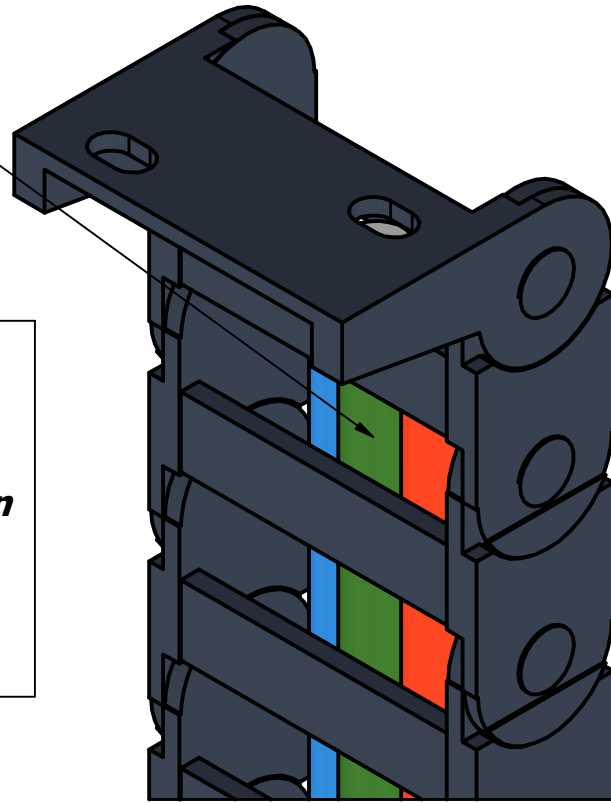
PDUs will be supplied with a flying lead to enable the passage through the Black Cable Management Chains

The Flying Lead will feed through the **Cable Management Chain**, down through the **Leg** into the **Bay sections**.

PDU Power Through Cable Management chain

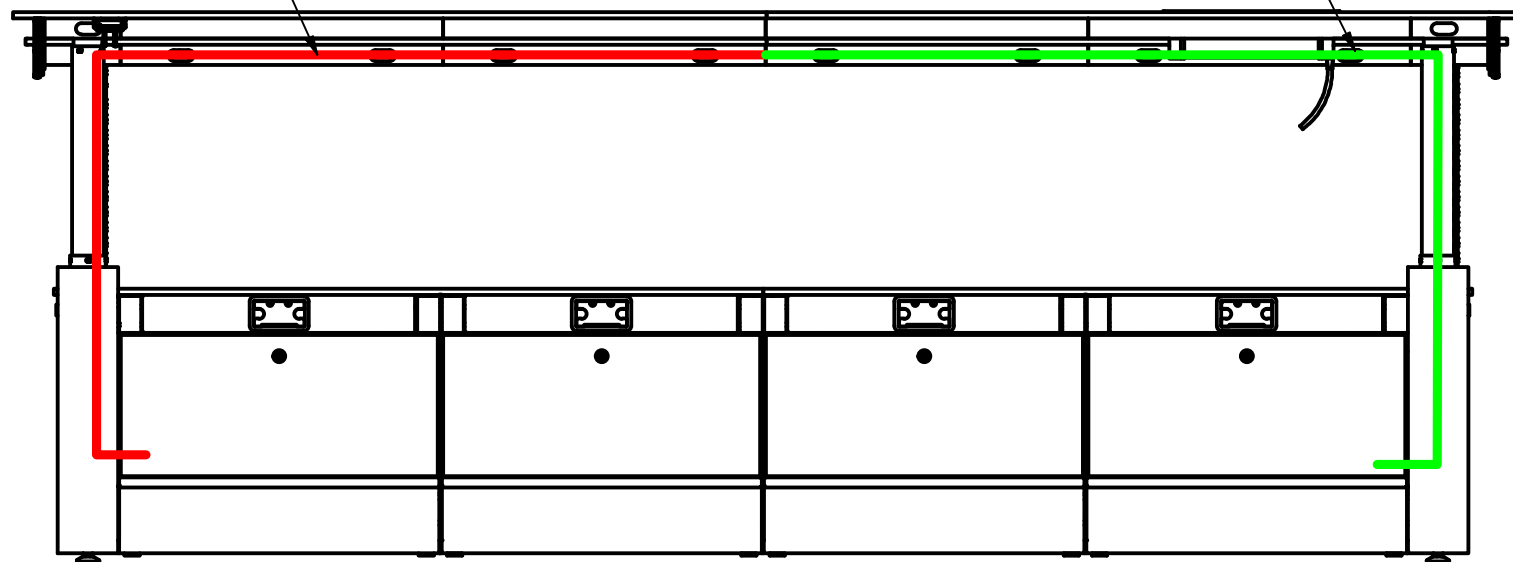
Max Cable Diameter = 13mm
Internal Dimensions = 50mm x 19mm

Exceeding Cable space will cause chain to become rigid. please stay within stated boundaries to function correctly.

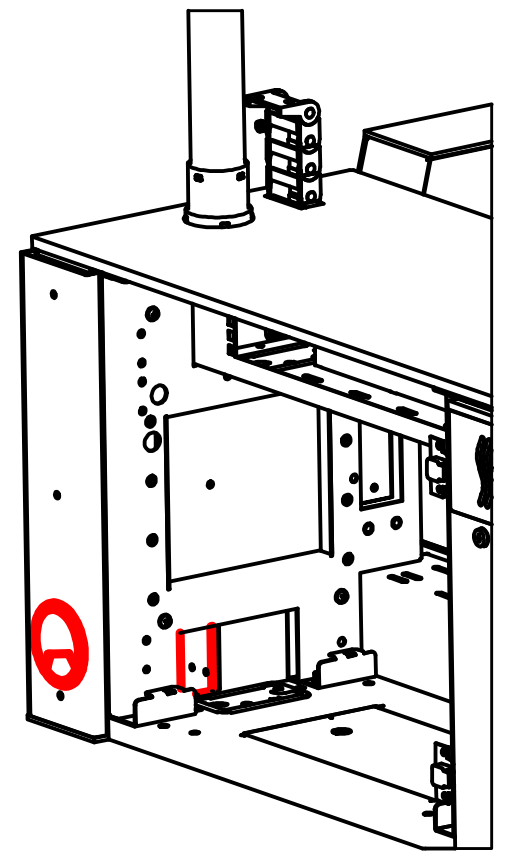


PDU power

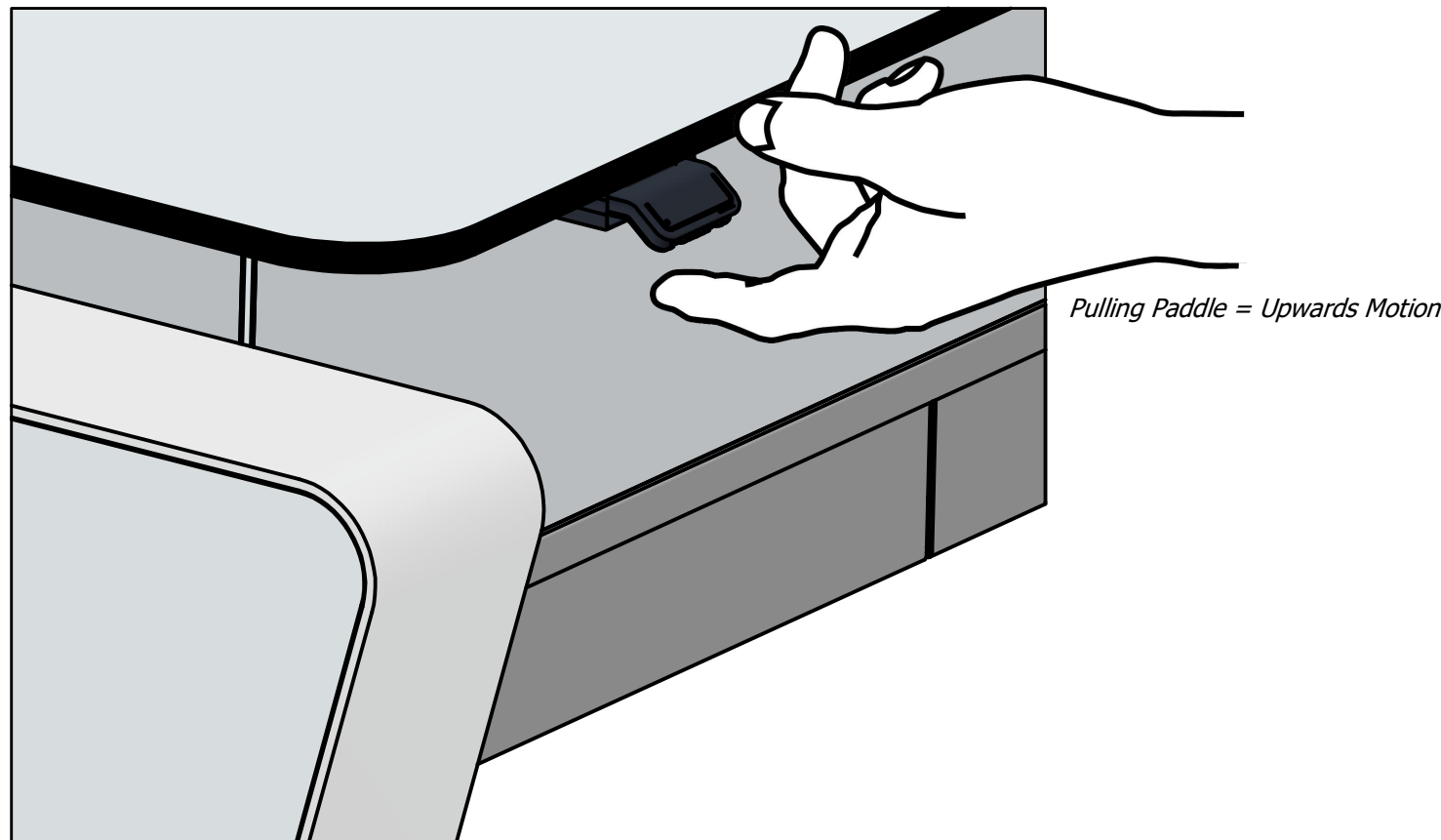
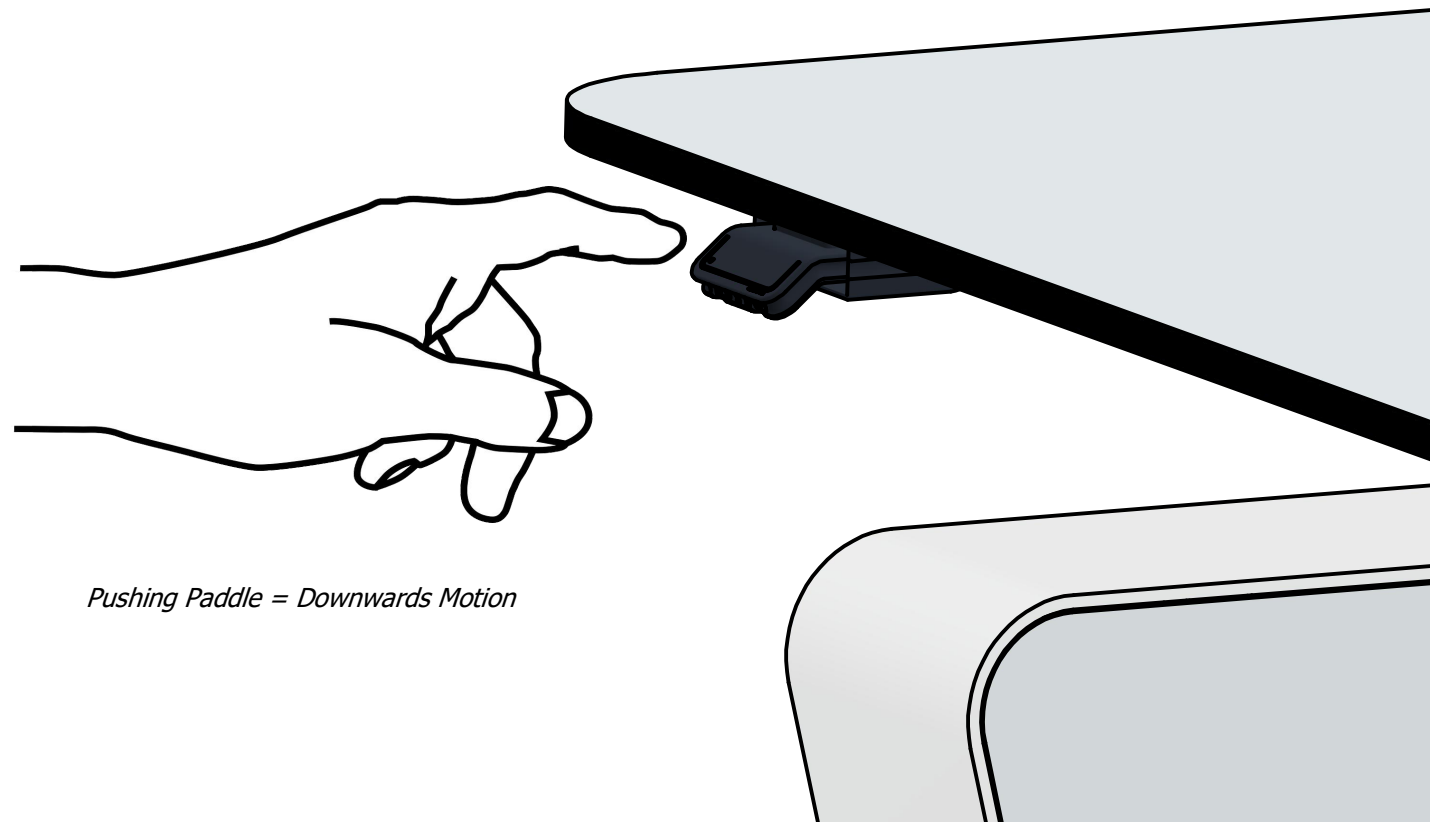
Data Cables (Alternate Cable Management Chain)



Cable access from the Leg to the Bay and Rear of the console.



Operating the Height Adjustment.



Operation:

1. Tilt and Hold up on the Paddle to drive the desk up, press and hold down to drive the desk down.
2. release the Paddle when you have reached the desired height



Desk Height Limits

in case the desk cannot be operated in its entire span (e.g a shelf is blocking the upwards movement or a filing cabinet is placed under the desk and blocking the downwards movement), it is possible to set an upper limit and a lower limit for the desk height.



Note:

It must always be possible to drive the desk to its minimum height in case initialisation is required. During initialisation, items placed under the desk must be moved.

Setting an Upper Limit:


1. Adjust desk to maximum allowable height
2. Press  and tilt the paddle up at the same time for 8 seconds until light flashes
3. Release  and the Paddle.

Setting a Lower Limit:

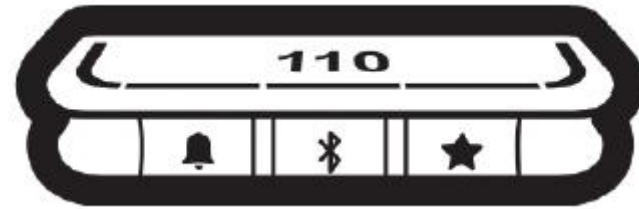
1. Adjust desk to minimum allowable height.
2. Press  and press the paddle down at the same time for 8 seconds until light flashes.
3. Release  and paddle.




Favourite Positions

Saving Favourite Positions 1 and 2

1. Adjust desk to a preferred position
2. Press  button for two seconds
3. the light strip flashes white two times to indicate that saving the positions is in progress.
4. the light becomes a static white to indicate that the position has been saved.



LINAK Paddle Settings and Controls



Symbol	Description	Function
	Reminder	Setting Reminders
	Bluetooth	Connecting the Desk Control App Via Bluetooth wireless technology
	Favourite	Saving favourite positions



Adjusting the displayed height of the desk

If the height shown in the display is not correct, it can be adjusted.

1. Press  and the  buttons on the paddle at the same time for 5 seconds and the height in the display starts to flash.
2. Tilt the paddle to change the displayed height without moving the desk. Up to increase height, down to decrease height.
3. Press any button to confirm the height or wait 10 seconds for automatic confirmation.

Changing the Measurement Unit

The measurement unit shown in the display can be set to either cm or inch.

1. Press  and  buttons on the controller at the same time for 5 seconds and the current measurement unit flashes in display.
2. When e.g "CM" flashes in display, tilt the paddle once to change the measurement to inches. "INCH" now flashes in the display.
3. Press any button to confirm measurement unit or wait for 10 seconds for automatic confirmation.

Height Adjustable Troubleshooting

Glossary of Common Terms

• Components

- » Console leg (DL) – The lifting columns, typically with powder coated steel profiles, responsible for lifting the working load of the application.
- » Control box (CBD6S) – Both the computer and power supply of the system.
- » Desk panel (DP) – The user interface. Depending on the model, it is used to activate the application, set memory positions, display the height, display error codes, connect to mobile apps, and give reminders to the user.
- » Motor cable – Transmits low voltage power (18-39 VDC) from the control box to the desk legs, and also transmits PIEZO signals when available from the desk leg.
- » Mains cable – Transmits high voltage power (120 VAC in US and Canada) to the control box.

• Other

- » Initialize – Procedure to reset all desk legs to the fully retracted position so that the control box knows where they are.
- » Reference – Any group of desk legs that run in parallel when an Up or Down command is sent to the control box. It is possible to have a custom control box configuration that allows for more than one Reference. [Example: Two (2) desk legs on Reference #1 (Channels

Standard Troubleshooting Procedures

P1 – Initialize the control box (“reset”)

Note: This is commonly the solution when a complaint is that a desk will move down but not up. When a control box requires initialization, this is how the system is programmed to behave.

STEP 1. Hold Down button on desk panel to ensure the desk is retracted to its lower limit (whether it’s the fully retracted hard stop, or a configured lower limit).

STEP 2. Briefly release Down

STEP 3. Press and hold Down for 5 seconds, wait until all desk movement has stopped, then release

a. If initialization is successful, you should see a slight up/down “handshake” movement of the desk legs

b. If you have a desk panel with display, you should also see E01 during this part of the procedure.

P2 – Check all cable connections

STEP 1. Mains cable, connected to both the control box and power outlet.

STEP 2. All motor cables, connected to both the control box and desk leg.

a. Assuming a standard control box configuration, these must be connected in channels 1 and 2, or channels 1, 2 and 3 for a 3-leg table. They can’t be connected in channels 1 and 3 or 2 and 3 unless there is a configuration on the control box specifying this arrangement.

STEP 3. Desk panel cable, connected to the control box in either port A1 or A2 (doesn’t matter which)

P3 – Check for obstructions

STEP 1. Check under, above and on the sides of the desk for any obstructions that could prevent movement in either direction.

The next two procedures (P4 and P5) are for a two leg desk system. The same concepts can be used for a three leg system using Channel 3 and so forth.

P4 – Check for faulty component(s) WITH error codes (digital display on Desk Panel, or on app via Bluetooth)

Height Adjustable Troubleshooting

D

D

C

C

B

B

A

A

Symptom	Procedure
System will move down but not up	<ol style="list-style-type: none"> 1. Initialize (P1)
System unresponsive (no power to display with any button is pressed). If any of these steps activates the digital display, initialize the system (P1).	<ol style="list-style-type: none"> 1. Check mains cable connection 2. Test power outlet using another device (lamp, phone charger, etc.) 3. Plug in a new switch and test 4. Connect all existing cables to a new control box and test
System is powered, but will not initialize	<ol style="list-style-type: none"> 1. Try pressing and releasing the down button a few times before pressing and holding for 5 seconds. 2. Also, be aware if the control box has a special configuration: If the desk is programmed with a lower stroke limit, so as to avoid a collision with something like a file cabinet, it is possible that it also has a custom, longer Forced Initialization Time. This is the time required to hold Down before initialization begins. Sometimes this is 10 seconds or longer. 3. If you have a standard control box without a special configuration (i.e. "Plug & Play"), try to initialize each leg in Channel 1 by itself, with nothing else plugged into the motor channels on the control box. Also, swap the motor cables so that a different motor cable is used to initialize Channel 1 by itself. The problem could be a faulty desk leg or a faulty motor cable.
Channel-specific error (Ex: E41 – Channel 1 overload) – Everything except PIEZO errors (E59-E63)	<ol style="list-style-type: none"> 1. Swap the motor cable connections at the control box (Motor cable #1 from channel 1 to 2, motor cable #2 from channel 2 to 1). If It remains E41, there could be a problem with the application (load or obstruction on one side) or a bad control box. If the error changes to E42, go to step 2. 2. Swap the motor cable connections at the desk legs, so that the leg that was originally connected to Channel 1 is back in Channel 1, but with the motor cable that was originally connected to Channel 2. If it remains E42, it is most likely a bad motor cable, now connected to Channel 2. If it goes back to E41, it is most likely a bad desk leg, now connected to Channel 1.



Height Adjustable Troubleshooting

Symptom	Procedure
Desk is uneven	<ol style="list-style-type: none"> 1. Initialize the desk. If both legs begin to run down, complete the initialization. If only one leg moves, stop and move to Step 2. 2. Check motor cable connections. Check to ensure motor cables are not pulled during movement. With a standard, Plug & Play control box, it's possible that only one leg is connected, and connected to Channel 1. In this case, it will initialize and run Channel 1 only. If there is only one leg but it's connected to Channel 2, it will not initialize. 3. If a motor cable was disconnected, try initializing again. 4. If unsuccessful, connect the desk leg from Channel 2 into Channel 1, with nothing in Channel 2, and initialize. 5. Try initializing the same leg that's in Channel 1, but with a different motor cable. If it still won't initialize, replace the desk leg.

P5 – Check for faulty component WITHOUT error codes (no digital display on Desk Panel, no Bluetooth)

Symptom	Procedure
<p>System will move down but not up</p> <p>System will not initialize. OR System won't complete the full range of motion.</p> <p>– After each of these steps, attempt to initialize (P1).</p>	<ol style="list-style-type: none"> 1. Initialize (P1) 1. Check mains cable connection. Test power outlet using another device (lamp, phone charger, etc.) 2. Plug in a new switch. 3. Connect all existing cables to a new control box. 4. Try pressing and releasing the down button a few times before pressing and holding for 5 seconds. 5. Also, be aware if the control box has a special configuration: If the desk is programmed with a lower stroke limit, so as to avoid a collision with something like a file cabinet, it is possible that it also has a custom, longer Forced Initialization Time. This is the time required to hold Down before initialization begins. Sometimes this is 10 seconds or longer. 6. If you have a standard control box without a special configuration (i.e. "Plug & Play"), try to initialize each leg in Channel 1 by itself, with nothing else plugged into the motor channels on the control box. Also, swap the motor cables so that a different motor cable is used to initialize Channel 1 by itself. The problem could be a faulty desk leg or a faulty motor cable.

Height Adjustable Troubleshooting

Appendix

What is the Control Box Thinking?

There are many clever procedures, checks and measurements performed in the control box. Here is a brief description of what the control box is trying to accomplish while it is activating an application:

- **Safe activation of the application**

- o Parallel, even movement of all desk legs in the application is critical.

- » The control box does not directly know the position of each desk leg. Instead, the position of each leg is constantly calculated via Hall pulses from each motor. The legs on a single reference are not allowed to be more than +/- 5 Hall pulses out of sync. For a standard DL, this amounts to +/- 0.55 mm.

- » Motor cable disconnections are also detected as errors.

- o If PIEZO technology is present in the desk leg, the control box monitors for PIEZO “collision” signals from each channel. When a PIEZO signal is sensed, movement is immediately stopped and, if there is room, the system is ran in the opposite direction a small distance.

- o Anytime the control sees an incomplete signal, or more than one signal (multiple keys pressed, multiple desk panels activated at the same time), an error is determined and no movement is allowed at that moment. This is to prevent an action of movement that is not intended by the user.

- **Protection from equipment damage**

- o Internal temperature of the control box is monitored.

- o Maximum current draw for each motor channel, as well as the system as a whole, is measured. When the current exceeds an allowable limit, an error is presented.

Height Adjustable Troubleshooting

ERROR CODE	NAME	DESCRIPTION	POTENTIAL CAUSE	TROUBLESHOOTING
E01	Position Lost	The desk has an unknown position and needs to be initialized	<ul style="list-style-type: none"> » Position error » New Desk Leg added 	<ul style="list-style-type: none"> • Initialize the system (P1)
E02	General Overload Up	Overload in upward direction has occurred	<ul style="list-style-type: none"> » Obstruction » Bad leg or motor cable 	<ul style="list-style-type: none"> • Check all cable connections, (P2) initialize the system (P1) • Troubleshoot components by initializing 1 at a time (only possible with Plug & Play configuration) (P4)
E03	General Overload Down	Overload in downward direction has occurred	<ul style="list-style-type: none"> » Obstruction » Bad leg or motor cable 	<ul style="list-style-type: none"> • Check all cable connections, (P2) initialize the system (P1) • Troubleshoot components by initializing 1 at a time (only possible with Plug & Play configuration) (P4)
E08	Watchdog	Indicate that software failed to kick watchdog	<ul style="list-style-type: none"> » Program fault 	<ul style="list-style-type: none"> • Unplug mains cable for 15 sec • Initialize the system (P1) • Replace Control Box
E09	LIN collision	Collisions detected on the LIN bus	<ul style="list-style-type: none"> » Key pressed on two or more connected handset simultaneously » Multiple LINBUS devices activated 	<ul style="list-style-type: none"> • Check if another desk panel is connected and being activated • Unplug all but one desk panel and test system
E10	Power fail	Power fail happened, or power regulator adjusted below 10%	<ul style="list-style-type: none"> » Mains cable pulled during driving » Internal fault » Only 1 battery for a 3- or 4-channel system » "E10 is a power fail, voltage on power supply drops below a certain limit, power removed" 	<ul style="list-style-type: none"> • Check mains cable is not caught, and is allowed to freely travel • Use strain-relief loop built into control box • Use a 2nd battery; charge batteries

Height Adjustable Troubleshooting

ERROR CODE	NAME	DESCRIPTION	POTENTIAL CAUSE	TROUBLESHOOTING
E11	Channel mismatch	Change in number of actuators since initialization	<ul style="list-style-type: none"> » Disconnection » Desk Leg added 	<ul style="list-style-type: none"> • Check Motor cable connections and Integrity (P2) • Change Motor cable or Desk Leg • Initialize the system (P1)
E12	Position error	One channel have position different than others	<ul style="list-style-type: none"> » Too much back drive occurred 	<ul style="list-style-type: none"> • Move table to fully retracted position • Initialize system (P1)
E13	Short circuit	Short circuit detected during operation	<ul style="list-style-type: none"> » Squeezed Motor Cable » Short in motor 	<ul style="list-style-type: none"> • Check motor cable connections (P2) • Isolate and replace Motor Cable (P4) • Isolate and replace Desk Leg (P4)
E15	Power limit	System has reached its power limitation	<ul style="list-style-type: none"> » Mains cable pulled during driving » Internal fault » Many times will see this alongside E10 » "E15 is when power regulator has adjusted speed down on actuators without any significant current draw, usually caused by power supply dropping." 	<ul style="list-style-type: none"> • Check mains cable is not caught, and is allowed to freely travel • Use strain-relief loop built into control box
E16	Key Error	Illegal keys pressed (handled internally in DP1C).	<ul style="list-style-type: none"> » Hitting multiple buttons simultaneously 	<ul style="list-style-type: none"> • Check desk panel
E17	Safety missing	LIN bus unit does not support safety feature	<ul style="list-style-type: none"> » DP1C/DPF1C does not have up-to-date software 	<ul style="list-style-type: none"> • Try DP with more recent software version (printed on label)
E18	Missing Initialization plug	A special service tool is required to change number of channels to the system	<p>[BASELIFT Only]</p> <ul style="list-style-type: none"> » Service tool missing from BASELIFT system when initializing 	<ul style="list-style-type: none"> • Add service tool
E23	Ch1 missing	Channel 1 is detected missing	<ul style="list-style-type: none"> » Disconnection » Faulty motor cable » Faulty motor in leg 	<ul style="list-style-type: none"> • Check Motor cable connections and Integrity (P2) • Change Motor cable or Desk Leg • Initialize the system (P1)

Height Adjustable Troubleshooting

ERROR CODE	NAME	DESCRIPTION	POTENTIAL CAUSE	TROUBLESHOOTING
E24	Ch2 missing	Channel 2 is detected missing	<ul style="list-style-type: none"> » Disconnection » Faulty motor cable » Faulty motor in leg 	<ul style="list-style-type: none"> • Check Motor cable connections and Integrity (P2) • Change Motor cable or Desk Leg • Initialize the system (P1)
E25	Ch3 missing	Channel 3 is detected missing	<ul style="list-style-type: none"> » Disconnection » Faulty motor cable » Faulty motor in leg 	<ul style="list-style-type: none"> • Check Motor cable connections and Integrity (P2) • Change Motor cable or Desk Leg • Initialize the system (P1)
E26	Ch4 missing	Channel 4 is detected missing	<ul style="list-style-type: none"> » Disconnection » Faulty motor cable » Faulty motor in leg 	<ul style="list-style-type: none"> • Check Motor cable connections and Integrity (P2) • Change Motor cable or Desk Leg • Initialize the system (P1)
E29	Ch1 type	Channel 1 is not same type as when initialized	<ul style="list-style-type: none"> » Change in Desk Leg type » Loose wire inside motor 	<ul style="list-style-type: none"> • Check Desk Leg type • Change Desk Leg • Initialize the system (P1)
E30	Ch2 type	Channel 2 is not same type as when initialized or not same type as channel 1	<ul style="list-style-type: none"> » Change in Desk Leg type » Loose wire inside motor 	<ul style="list-style-type: none"> • Check Desk Leg type • Change Desk Leg • Initialize the system (P1)
E31	Ch3 type	Channel 3 is not same type as when initialized or not same type as channel 1	<ul style="list-style-type: none"> » Change in Desk Leg type » Loose wire inside motor 	<ul style="list-style-type: none"> • Check Desk Leg type • Change Desk Leg • Initialize the system (P1)
E32	Ch4 type	Channel 4 is not same type as when initialized or not same type as channel 1	<ul style="list-style-type: none"> » Change in Desk Leg type » Loose wire inside motor 	<ul style="list-style-type: none"> • Check Desk Leg type • Change Desk Leg • Initialize the system (P1)
E35	Ch1 pulse fail	Channel 1 had to many pulse errors	<ul style="list-style-type: none"> » Loose/faulty cable » Hall sensor PCB 	<ul style="list-style-type: none"> • Check motor cable connections and integrity (P2) • Change Desk Leg • Initialize the system (P1)

Height Adjustable Troubleshooting

ERROR CODE	NAME	DESCRIPTION	POTENTIAL CAUSE	TROUBLESHOOTING
E36	Ch2 pulse fail	Channel 2 had to many pulse errors	<ul style="list-style-type: none"> » Loose/faulty cable » Hall sensor PCB 	<ul style="list-style-type: none"> • Check motor cable connections and integrity (P2) • Change Desk Leg • Initialize the system (P1)
E37	Ch3 pulse fail	Channel 3 had to many pulse errors	<ul style="list-style-type: none"> » Loose/faulty cable » Hall sensor PCB 	<ul style="list-style-type: none"> • Check Motor cable connections and Integrity (P2) • Change Motor cable or Desk Leg • Initialize the system (P1)
E38	Ch4 pulse fail	Channel 4 had too many pulse errors	<ul style="list-style-type: none"> » Loose/faulty cable » Hall sensor PCB 	<ul style="list-style-type: none"> • Check Motor cable connections and Integrity (P2) • Change Motor cable or Desk Leg • Initialize the system (P1)
E41	Ch1 overload up	Overload up occurred on channel 1	<ul style="list-style-type: none"> » Leg is overloaded » Hit obstruction » Reached end stop (before initialization at upper endstop occurs) 	<ul style="list-style-type: none"> • Remove obstruction (P3) • Remove load • Initialize if necessary (P1)
E42	Ch2 overload up	Overload up occurred on channel 2	<ul style="list-style-type: none"> » Leg is overloaded » Hit obstruction » Reached end stop (before initialization at upper endstop occurs) 	<ul style="list-style-type: none"> • Remove obstruction (P3) • Remove load • Initialize if necessary (P1)
E43	Ch3 overload up	Overload up occurred on channel 3	<ul style="list-style-type: none"> » Leg is overloaded » Hit obstruction » Reached end stop (before initialization at upper endstop occurs) 	<ul style="list-style-type: none"> • Check Desk Leg type • Change Desk Leg • Initialize the system (P1)
E44	Ch4 overload up	Overload up occurred on channel 4	<ul style="list-style-type: none"> » Leg is overloaded » Hit obstruction » Reached end stop (before initialization at upper endstop occurs) 	<ul style="list-style-type: none"> • Remove obstruction (P3) • Remove load • Initialize if necessary (P1)

Height Adjustable Troubleshooting

ERROR CODE	NAME	DESCRIPTION	POTENTIAL CAUSE	TROUBLESHOOTING
E47	Ch1 overload down	Overload down occurred on channel 1	» Hit obstruction	<ul style="list-style-type: none"> Remove obstruction (P3) Initialize if necessary (P1)
E48	Ch2 overload down	Overload down occurred on channel 2	» Hit obstruction	<ul style="list-style-type: none"> Remove obstruction (P3) Initialize if necessary (P1)
E49	Ch3 overload down	Overload down occurred on channel 3	» Hit obstruction	<ul style="list-style-type: none"> Remove obstruction (P3) Initialize if necessary (P1)
E50	Ch4 overload down	Overload down occurred on channel 4	» Hit obstruction	<ul style="list-style-type: none"> Remove obstruction (P3) Initialize if necessary (P1)
E53	Ch1 anti-col	Anti-collision triggered on channel 1	» Hit Obstruction	<ul style="list-style-type: none"> Remove obstruction (P3) Initialize if necessary (P1)
E54	Ch2 anti-col	Anti-collision triggered on channel 2	» Hit Obstruction	<ul style="list-style-type: none"> Remove obstruction (P3) Initialize if necessary (P1)
E55	Ch3 anti-col	Anti-collision triggered on channel 3	» Hit Obstruction	<ul style="list-style-type: none"> Remove obstruction (P3) Initialize if necessary (P1)
E56	Ch4 anti-col	Anti-collision triggered on channel 4	» Hit Obstruction	<ul style="list-style-type: none"> Remove obstruction (P3) Initialize if necessary (P1)



Height Adjustable Troubleshooting

ERROR CODE	NAME	DESCRIPTION	POTENTIAL CAUSE	TROUBLESHOOTING
E59	Ch1 SLS/PIEZO	Safety limit switch activated on channel 1	» Hit obstruction	<ul style="list-style-type: none"> • Remove obstruction (P3) • Initialize if necessary (P1)
E60	Ch2 SLS/PIEZO	Safety limit switch activated on channel 2	» Hit obstruction	<ul style="list-style-type: none"> • Remove obstruction (P3) • Initialize if necessary (P1)
E61	Ch3 SLS/PIEZO	Safety limit switch activated on channel 3	» Hit obstruction	<ul style="list-style-type: none"> • Remove obstruction (P3) • Initialize if necessary (P1)
E62	Ch4 SLS/PIEZO	Safety limit switch activated on channel 4	» Hit obstruction	<ul style="list-style-type: none"> • Remove obstruction (P3) • Initialize if necessary (P1)
E65	Ch1 pulse dir	Pulses counted wrong direction in channel 1	<ul style="list-style-type: none"> » Motor poles are crossed » Hall sensor Cables are crossed 	<ul style="list-style-type: none"> • Check motor cable connections and integrity (P2) • Change Desk Leg • Initialize the system (P1)
E66	Ch2 pulse dir	Pulses counted wrong direction in channel 2	<ul style="list-style-type: none"> » Motor poles are crossed » Hall sensor Cables are crossed 	<ul style="list-style-type: none"> • Check motor cable connections and integrity (P2) • Change Desk Leg • Initialize the system (P1)
E67	Ch3 pulse dir	Pulses counted wrong direction in channel 3	<ul style="list-style-type: none"> » Motor poles are crossed » Hall sensor Cables are crossed 	<ul style="list-style-type: none"> • Check motor cable connections and integrity (P2) • Initialize the system (P1)
E68	Ch4 pulse dir	Pulses counted wrong direction in channel 4	<ul style="list-style-type: none"> » Motor poles are crossed » Hall sensor Cables are crossed 	<ul style="list-style-type: none"> • Check motor cable connections and integrity (P2) • Initialize the system (P1)

Height Adjustable Troubleshooting

ERROR CODE	NAME	DESCRIPTION	POTENTIAL CAUSE	TROUBLESHOOTING
E71	Ch1A short	Short circuit on channel 1 [If T-splitter is used, short circuit on 1A]	» Damage to motor cable » Damage to cable exiting leg (if applicable)	<ul style="list-style-type: none"> • Inspect motor cable for damage, replace if damaged • Inspect cable exiting leg (if applicable), replace if damaged.
E72	Ch1B short	Short circuit on channel 1 [If T-splitter is used, short circuit on 1B]	» Damage to motor cable » Damage to cable exiting leg (if applicable)	<ul style="list-style-type: none"> • Inspect motor cable for damage, replace if damaged • Inspect cable exiting leg (if applicable), replace if damaged.
E73	Ch2A short	Short circuit on channel 2 [If T-splitter is used, short circuit on 2A]	» Damage to motor cable » Damage to cable exiting leg (if applicable)	<ul style="list-style-type: none"> • Inspect motor cable for damage, replace if damaged • Inspect cable exiting leg (if applicable), replace if damaged.
E74	Ch2B short	Short circuit on channel 2 [If T-splitter is used, short circuit on 2B]	» Damage to motor cable » Damage to cable exiting leg (if applicable)	<ul style="list-style-type: none"> • Inspect motor cable for damage, replace if damaged • Inspect cable exiting leg (if applicable), replace if damaged.
E75	Ch3A short	Short circuit on channel 3 [If T-splitter is used, short circuit on 3A]	» Damage to motor cable » Damage to cable exiting leg (if applicable)	<ul style="list-style-type: none"> • Inspect motor cable for damage, replace if damaged • Inspect cable exiting leg (if applicable), replace if damaged.
E76	Ch3B short	Short circuit on channel 3 [If T-splitter is used, short circuit on 3B]	» Damage to motor cable » Damage to cable exiting leg (if applicable)	<ul style="list-style-type: none"> • Inspect motor cable for damage, replace if damaged • Inspect cable exiting leg (if applicable), replace if damaged.
E77	Ch4A short	Short circuit on channel 4 [If T-splitter is used, short circuit on 4A]	» Damage to motor cable » Damage to cable exiting leg (if applicable)	<ul style="list-style-type: none"> • Inspect motor cable for damage, replace if damaged • Inspect cable exiting leg (if applicable), replace if damaged.
E78	Ch4B short	Short circuit on channel 4 [If T-splitter is used, short circuit on 4B]	» Damage to motor cable » Damage to cable exiting leg (if applicable)	<ul style="list-style-type: none"> • Inspect motor cable for damage, replace if damaged • Inspect cable exiting leg (if applicable), replace if damaged.

Height Adjustable Troubleshooting

ERROR CODE	NAME	DESCRIPTION	POTENTIAL CAUSE	TROUBLESHOOTING
E86	Master	Connection to master lost OR following messages are from master	[Only used in multi-parallel system] » Poor cable connection to master box » If followed by another error code, then codes being communicated from master box	<ul style="list-style-type: none"> • Check connection to master box, check cable integrity • If communicating other error codes, see above
E87	Slave 1	Connection to 1st slave lost OR following messages are from 1st slave	[Only used in multi-parallel system] » Poor cable connection to slave box » If followed by another error code, then codes being communicated from slave box	<ul style="list-style-type: none"> • Check connection to master box, check cable integrity • If communicating other error codes, see above
E88	Slave 2	Connection to 2nd slave lost OR following messages are from 2nd slave	[Only used in multi-parallel system] » Poor cable connection to slave box » If followed by another error code, then codes being communicated from slave box	<ul style="list-style-type: none"> • Check connection to master box, check cable integrity • If communicating other error codes, see above
E89	Slave 3	Connection to 3rd slave lost OR following messages are from 3rd slave	» Damage to motor cable » Damage to cable exiting leg (if applicable)	<ul style="list-style-type: none"> • Inspect motor cable for damage, replace if damaged • Inspect cable exiting leg (if applicable), replace if damaged.
E93	DeskSensor 1 – Activation	Detected trigger from LIN bus safety limit switch, e.g. DS1	» Hit obstruction	<ul style="list-style-type: none"> • Remove obstruction
E94	DeskSensor 1 – Not Responding	LIN SLS unit (e.g. DS1) no longer responding	» LIN SLS unit (e.g. DS1) or cables are not connected	<ul style="list-style-type: none"> • Ensure DS1 unit and all cables are correctly mounted.