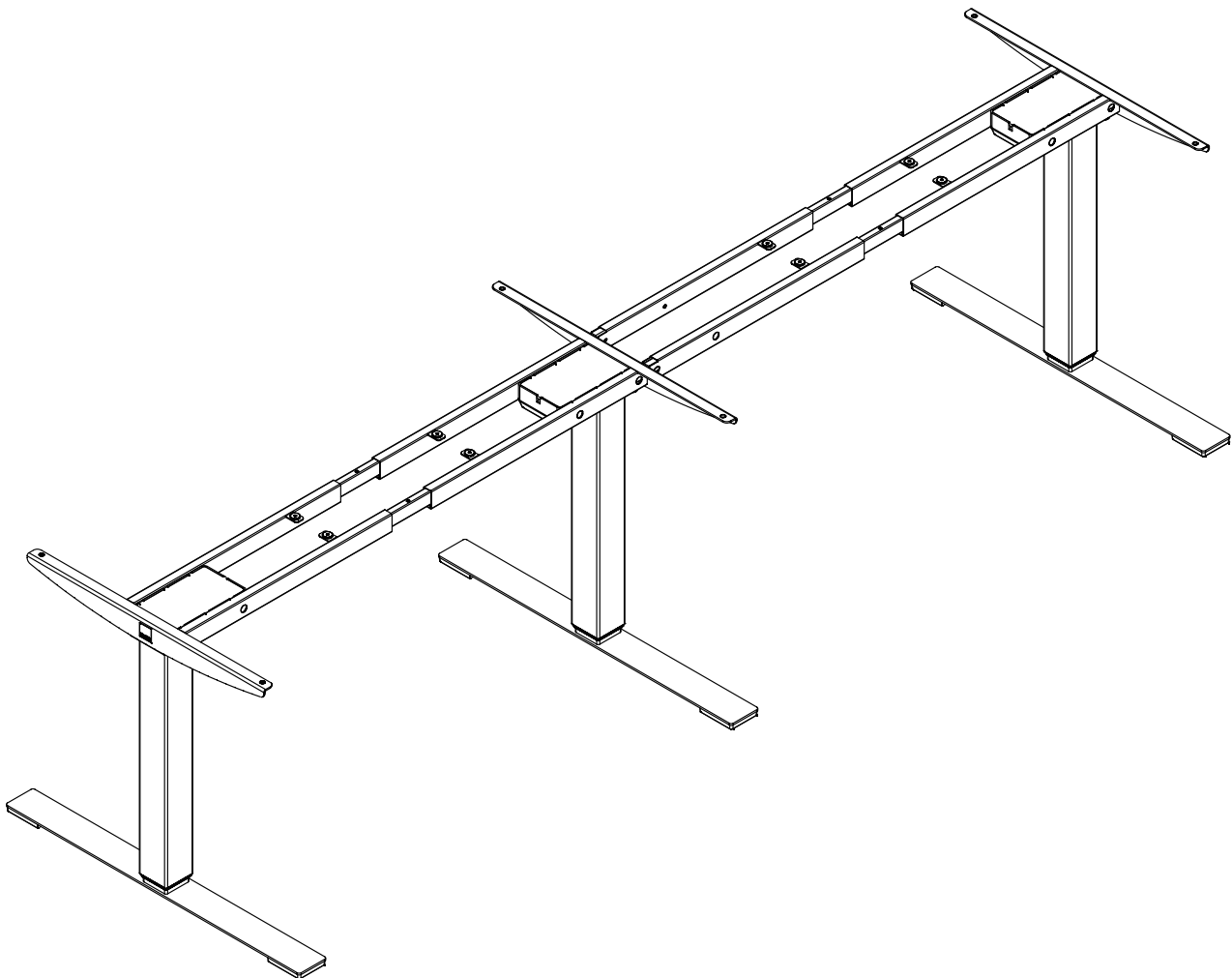


# EMP

3 LEG / 3 MOTOR  
40x20



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## 1. General

### 1.1 Local value of the user manual

The guiding principle for safe use and trouble-free operation of this adjustable frame is the knowledge of basic safety information and regulations. This user manual includes the most important information needed for assembling and operating the adjustable frame safely. More importantly, the safety information about the adjustable frame must be observed at all times.

### 1.2 Intended use

The adjustable frame must be used only as a workstation for sitting / standing within the office environment or other indoor areas. Please observe the provision of section 2, Safety Information. Children may be unaware of the dangers caused by the adjustable frame if unsupervised. Any other use except the above should be considered improper. The manufacturer can in no way be held liable for damage arising from improper use.



**Any changes or modification not expressly approved by the manufacturer could void the user's authority to operate the equipment.**

## 2. Safety Information

**When installing and using electrical equipment, basic safety precaution should always be followed to avoid a risk of fire, electric shock, or injury to persons.**

### 2.1 Informal safety measures

- Keep the user manual in the place where the adjustable frame is used at all times.
- Keep children away from the appliance when operation.

### 2.2 Use of the adjustable frame

- When adjusting upwards and downwards, make sure that no persons or items will collide with the frame.
- Don't use the adjustable frame on an uneven surface, or it will not be steady.
- Never exceed the maximum load capacity on the adjustable frame. Please check the load capacity in Section 7, Specification.
- The control unit is only used for specified linear actuator, don't use appliances not recommended by the manufacturer.

### 2.3 Specific Dangers

- When assembling and operating the adjustable frame, make sure there is enough space to avoid collisions in all available directions.
- Don't pull, push or lift the frame if operating. Make sure to avoid twisting the legs.
- Insert the plug only into a proper socket. If it does not fit, contact a qualified electrician to install the proper outlet. Don't change the plug in any way.
- Be aware that the control box can only be connected to the voltage printed on the label.

### 2.4 In an emergency

- Stop using the adjustable frame immediately if you notice anything unusual (strange sounds etc.).
- The frame should be repaired by professional staff. Stop using the adjustable frame until it has been successfully repaired.
- Any other emergencies please contact customer services.

### 2.5 Maintenance

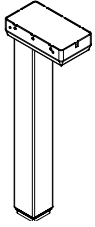
- The adjustable frame and its components are low-maintenance items and need no special regular maintenance.
- Any broken components removed must be replaced with new, original components made by the manufacturer.
- Don't alter the construction of the adjustable frame.

### 2.6 Cleaning

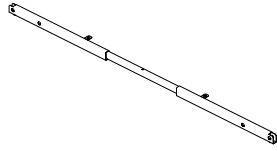
- Clean the frame once a week with a dry cloth.
- Clean the frame with a damp cloth and a weak solution of cleaner once every two weeks.

### 3. Packaging

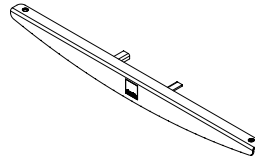
#### 3.1 Part Check List



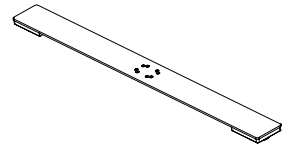
Leg (3 Pcs)



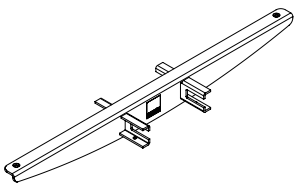
Frame (4 Pcs)



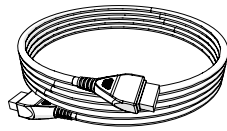
End Pipe (2 Pcs)



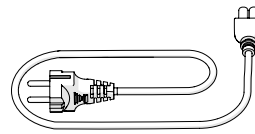
Feet (3 Pcs)



3rd End Pipe (1 Pcs)



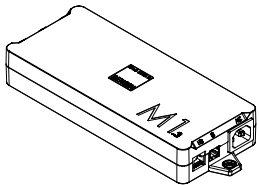
Connection Cable (2 Pcs)



Power Cable (1 Pcs)

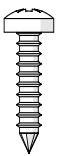


Remote Control (1 Pcs)

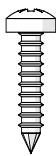


Control Unit (1 Pcs)

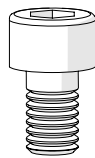
#### 3.2 Screw List



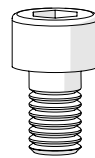
3.5x15 (2 Pcs)



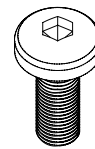
5.0x20 (10 Pcs)



M6x12 (20 Pcs)



M6x16 (12 Pcs)



M6x16 (6 Pcs)

## 4. Assembly



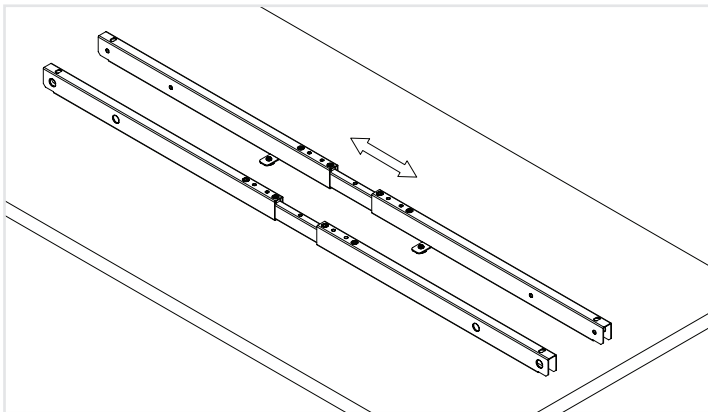
Before attempting assembly of the Height Adjustable Frame, please read safety information in Section 2.

### Torque Guide

#### Max torque

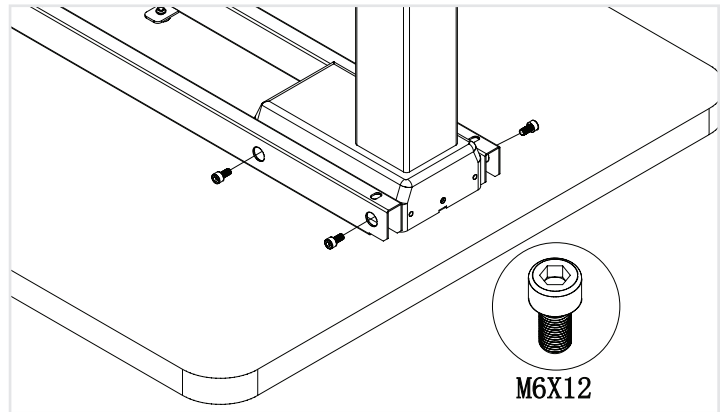
- M6 Screw's max torque = 6nm
- M8 Screw's max torque = 6nm
- M10 Screw's max torque = 6nm
- Tapping screws is hand tightening only

### 4.1 Assembly Step by Step



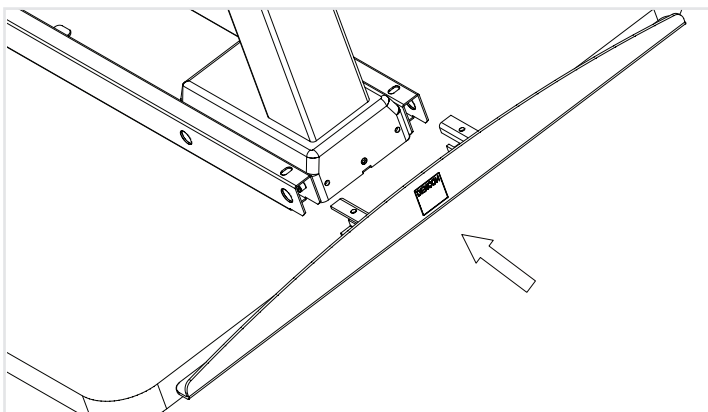
#### Step 1

Adjust Top Frame to suitable length.



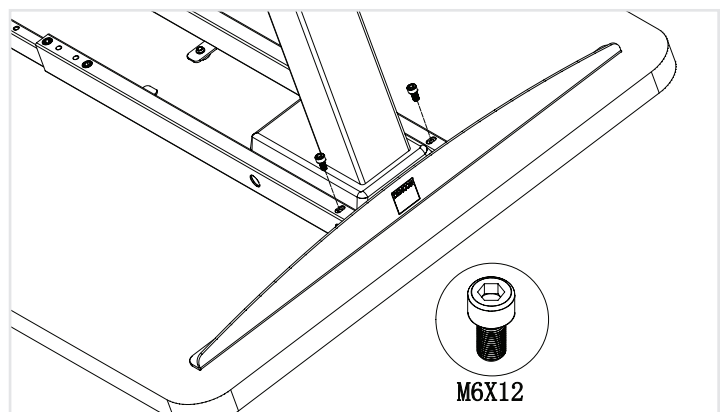
#### Step 2

Assemble the Leg and Frame as illustrated above. Please refer to **Torque Guide**.



#### Step 3

Mount the End Pipe as illustrated above.

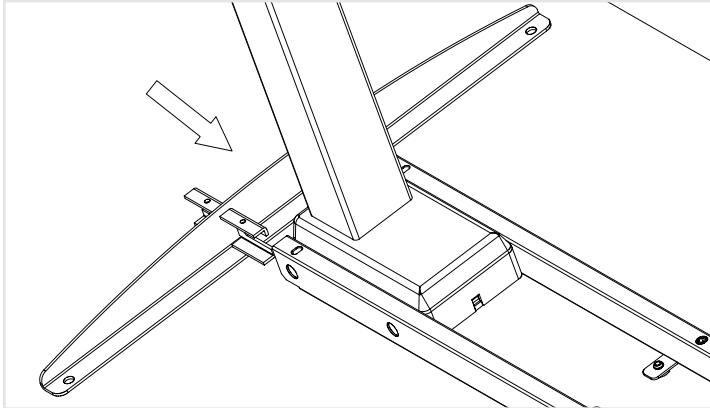


#### Step 4

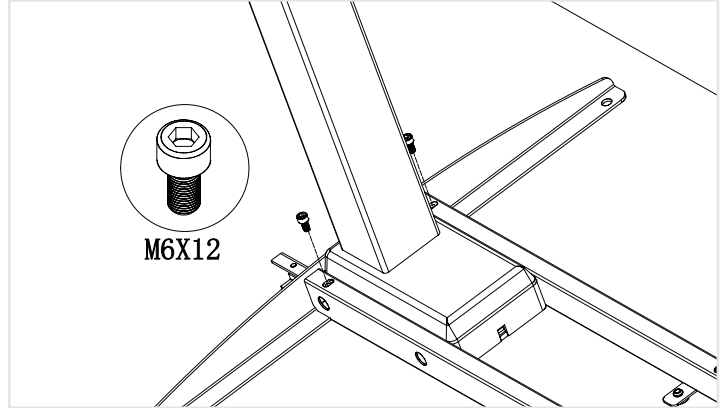
Assemble the End Pipe and Frame as illustrated above. Please refer to **Torque Guide**.

## 4. Assembly

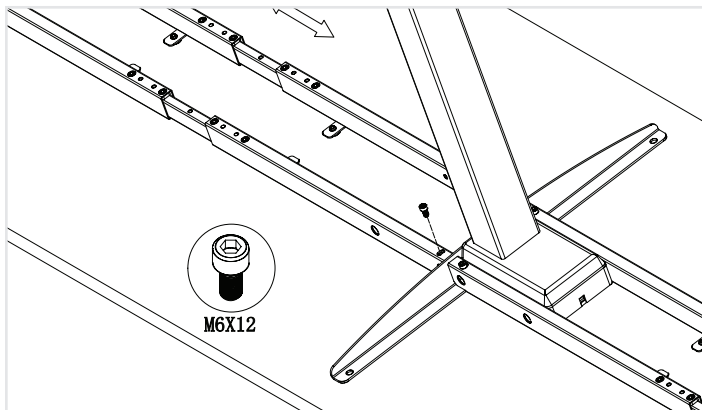
### 4.1 Assembly Step by Step



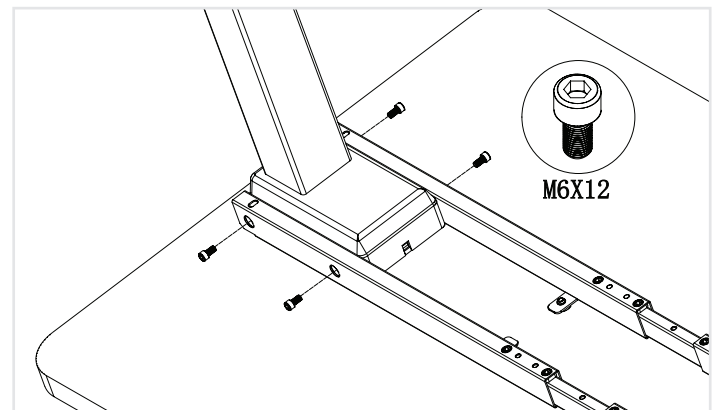
**Step 5**  
Mount the 3rd End Pipe as illustrated above.



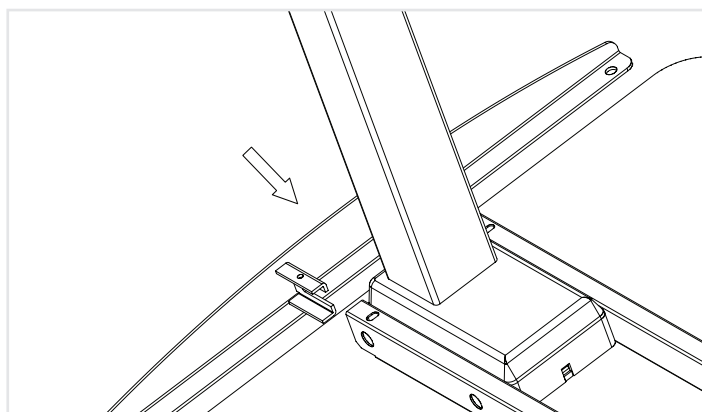
**Step 6**  
Assemble the End Pipe and Frame as illustrated above. Please refer to **Torque Guide**.



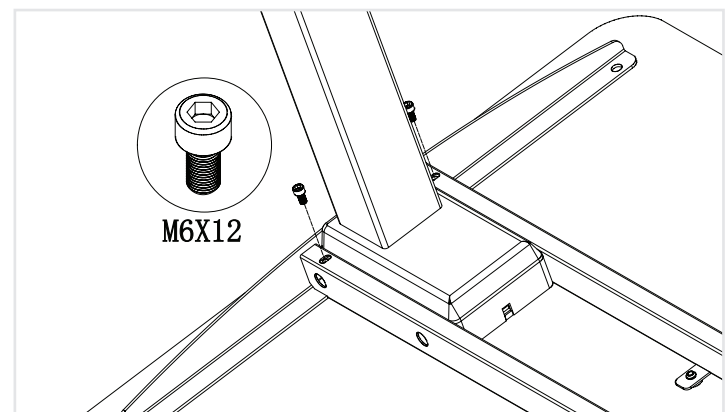
**Step 7**  
Adjust Top Frame to suitable length. Assemble the End Pipe and Frame as illustrated above. Please refer to **Torque Guide**.



**Step 8**  
Assemble the Leg and Frame as illustrated above. Please refer to **Torque Guide**.



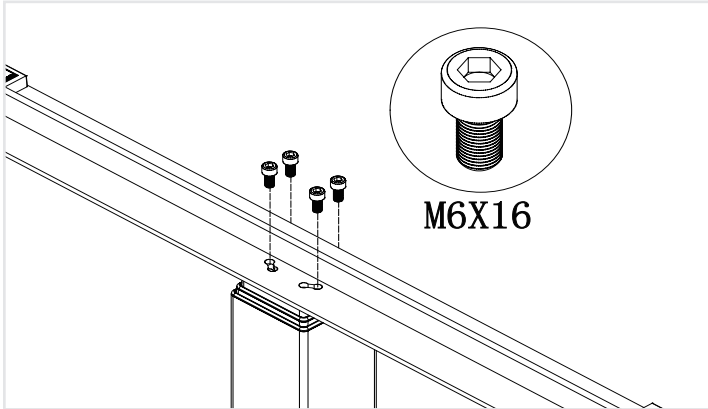
**Step 9**  
Mount the End Pipe as illustrated above.



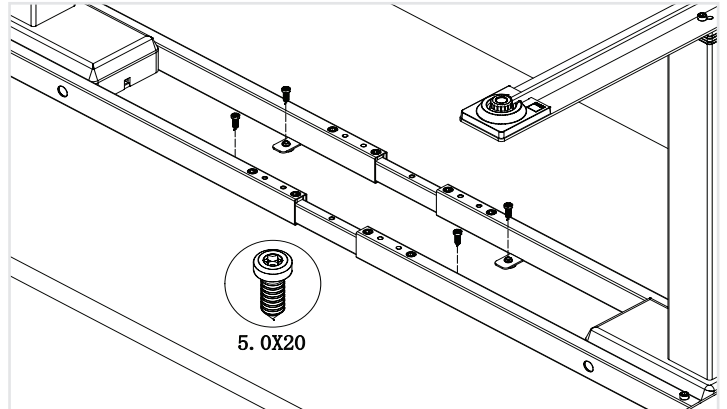
**Step 10**  
Assemble the End Pipe and Frame as illustrated above. Please refer to **Torque Guide**.

## 4. Assembly

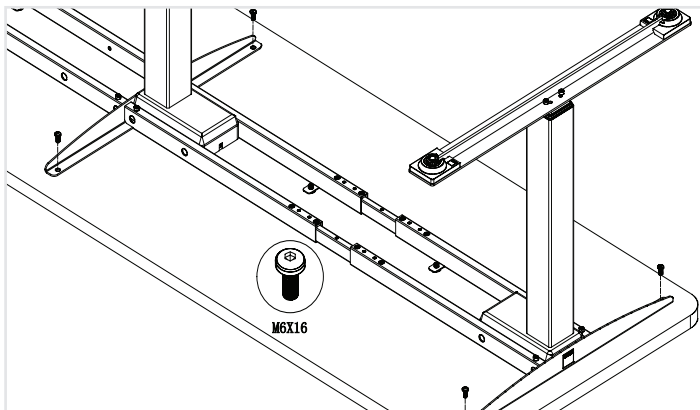
### 4.1 Assembly Step by Step



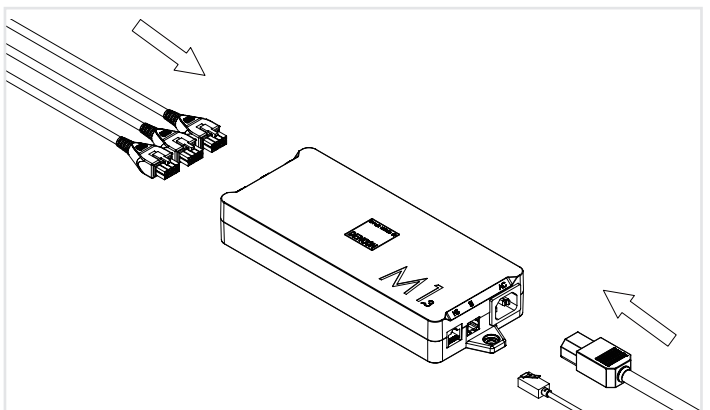
**Step 11**  
Mount the Feet as illustrated above. The smooth side of the plate faces the foot. Please refer to **Torque Guide**.



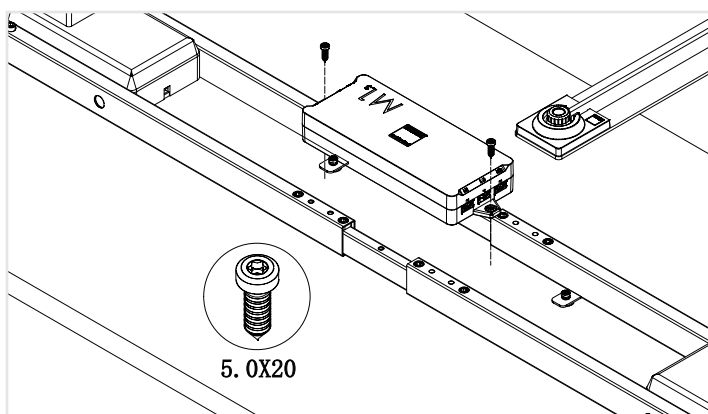
**Step 12**  
Mount the Frame to the Table top as illustrated above. Please refer to **Torque Guide**.



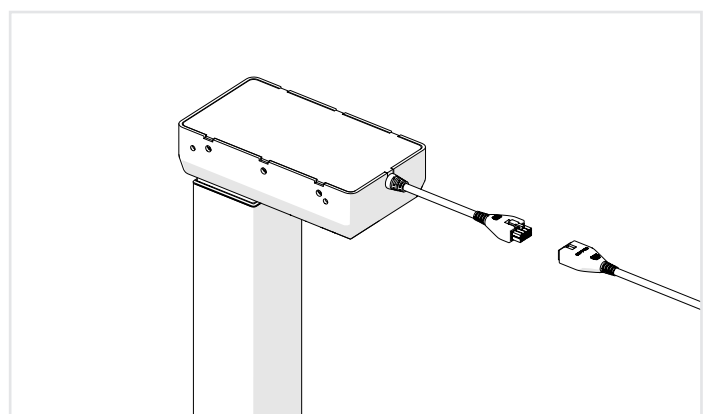
**Step 13**  
Mount the End Pipe to the Table top as illustrated above. Please refer to **Torque Guide**.




**Step 14**  
Connect the Cables to the Control Unit as illustrated above.



**Step 15**  
Mount the Control Unit as illustrated above. Please refer to **Torque Guide**.

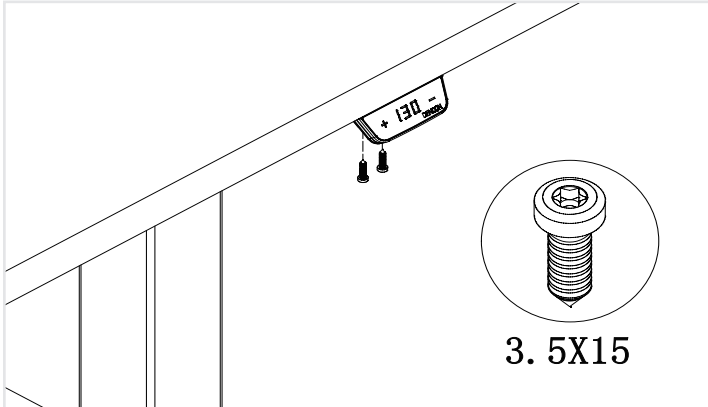


**Step 16**  
Connect the Motor Cable to the Leg as illustrated above.

 **Do not put power to the system before it is fully assembled.**

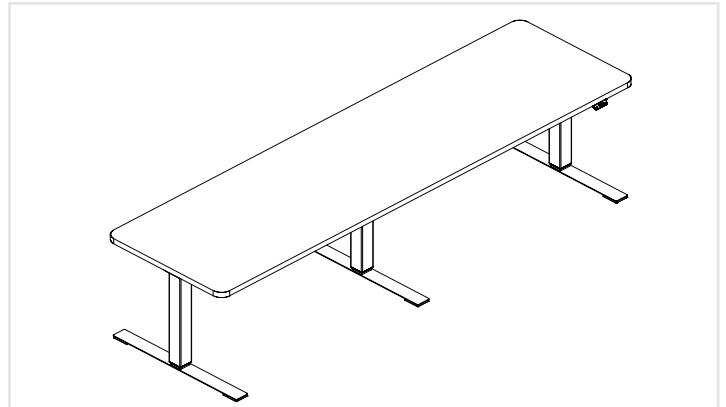
## 4. Assembly

### 4.1 Assembly Step by Step



#### Step 17

Mount the Remote Control to the Table top as illustrated above.  
Please refer to **Torque Guide**.

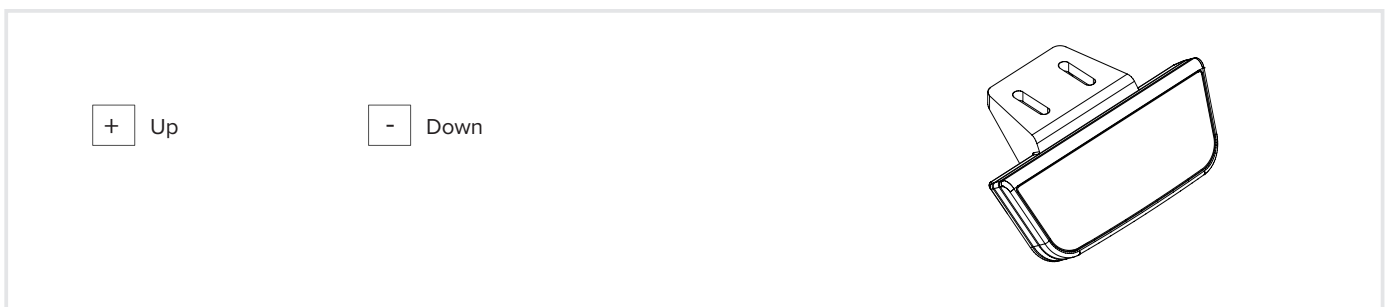


#### Step 18

Perform Zero Setting.

## 5. Operating Instructions

Please read below instructions carefully before operating the system.



### 5.1 Initialization operation:

When the system is abnormal, or the hand controller displays "RST", you need to initialize the sit stand desk. The initialization operation is to press and hold the "DOWN" button until the motor stops, release the button, and then press "DOWN" for 5 seconds to automatically enter initialization mode. At this time, the "DOWN" button cannot be released. If the "DOWN" button is released, the system stops the initialization mode. After the initialization is completed, the buzzer will sound a beep, indicating that the initialization is successful.



**Zero setting position is approximate 5mm lower than original starting height position.**

### 5.2 Up and down button operation:

When the "UP" key is pressed, the desktop runs upwards until it reaches the highestpoint of the desktop.

When the "DOWN" key is pressed, the desktop runs downward until it reaches the lowest point of the desktop.

When the "UP" or "DOWN" key is pressed for a short time, the desktop runs a small distance correspondingly to realize inching.



**The frame will continue moving upwards or downwards until you release the button or the maximum / minimum height is reached.**

## 5. Operating Instructions

### 5.3 Location storage and memory operation:

In the picture above, hand controller can memory 3 positions. The memory method is as follows. When running to a specific point, press the "S" button, the digital tube displays "S-", and "-" flashes at the same time, then press the any button number of "1-3" to store the current position to the corresponding key.

If you want the desktop to reach the memorized height, you only need to press the button number. At this time, the digital tube will display the height memorized at the button number, and then automatically run to the corresponding height. When running, any key can stop the system.



**A container stop position can only be stored in the lower half of the movement area and a shelf stop in the upper half. These steps have to be done for a container stop and a shelf stop position separately!**

To remove the container stop/ shelf stop position follow the instructions below:

- Move the frame to any position in the lower half to deactivate the container stop. Move the frame to any position in the upper half to deactivate the shelf stop. Do so by pressing the "UP" key or "DOWN" key until you reach the desired position.
- Press both ( "UP" key & "DOWN" key) for 5 seconds. you will hear the buzzer sound when the container stop / shelf stop position is deactivated.



**These steps have to be done for a container stop and a shelf stop position separately!**

## 6. Troubleshooting

In this section you will find detailed information on the following topics:

- Possible faults and remedies
- Error messages on the remote control display

### 6.1 Possible faults and remedies

#### Legs not working

##### Possible Cause

Power Cable is not connected  
 Legs are not connected  
 Poor plug contact  
 Control Unit is defective  
 Remote Control is defective

##### Remedy

Plug the Power Cable into the Control Unit  
 Plug the Motor Cables into the Control Unit and Legs  
 Check all connections  
 Replace the Control Unit  
 Replace the Remote Control

#### Legs only operating in one direction

##### Possible Cause

Mains power breakdown or main power is plugged off during movement  
 Control Unit is defective  
 Remote Control is defective  
 Leg is defective

##### Remedy

Zero setting (if movement is only possible downwards)  
 Replace Control Unit  
 Replace the Remote Control  
 Replace the Leg

#### Control Unit or Remote Control is not working

##### Possible Cause

Power Cable is not connected  
 Remote Control is not connected  
 Control Unit is defective  
 Power Cable is defective  
 Remote Control is defective  
 Poor plug contact  
 Exposed to liquids

##### Remedy

Plug the power cable into the control unit  
 Plug in the remote control  
 Replace the Control Unit  
 Replace the Power Cable  
 Replace the remote control  
 Check all connections  
 Replace the remote control

### 6.2 Error messages & Error code (Only on external remote with display)

The display reads **HOT**.

##### Possible Cause

The control unit is fitted with overheating protection. Overheating has caused it to stop the control unit

##### Remedy

Wait until the control unit has cooled down and **HOT** is no longer displayed. The control unit is then operational again

## 6. Troubleshooting

The display reads E + an error code

**NOTE: (If different error code than shown below, contact customer service)**

### Possible Cause

### Remedy

There is an internal fault in the control unit

Proceed as indicated in the following list

### Error code Note

### How to handle it

E01	The main supply voltage is over 45V	Check the main power supply
E02	The height deviation between the screws exceeds 1cm	Re-initialize
E04	Remote control connecting or communication error	Check the remote control cable
- - -	In the event of a drag-stop display	Release the button and run again
E06	Main power start did not succeed, lower than 20V	Replace the main power supply, or check the main power cable
E07	Protect when the main power supply is running, lower than 20V	Power up again
E08	Tilt when the desktop is running	Re-initialize
HOT	High power supply temperature, or run over 2 minutes in 18 minutes	Wait for the power temperature to drop and rerun
E11	Motor 1 not connected	Check the cable
E12	Motor 1 Error in current sampling channel	Replace the control panel
E13	Motor 1 missing phase, phase line disconnect	Check if the motor is not properly connected to the line
E14	Motor 1 hall error, or hall line disconnect	Check the hall signal, or replace the cable
E15	Motor 1 internal short circuit	Replacing the motor
E16	Motor 1 locked-rotor	Re-initialize

## 6. Troubleshooting

Error code Note		How to handle it
E17	Motor 1 wrong direction of operation	Switch the motor line or hall line
E18	Motor 1 overload	Reduce load
E21	Motor 2 not connect	Check the cable
E22	Motor 2 error in current sampling channel	Replace the control panel
E23	Motor 2 missing phase, phase line disconnect	Check if the motor is not properly connected to the line
E24	Motor 2 hall error, or hall line disconnect	Check the hall signal, or replace the cable
E25	Motor 1 internal short circuit	Replacing the motor
E26	Motor 2 locked-rotor	Re-initialize
E27	Motor 2 wrong direction of operation	Switch the motor line or hall line
E28	Motor 2 overload	Reduce load
E40	Controller drop line in series	Check the cable
E41	Error in the series signal	Check the cable, or replace the controller
E42	Memory error	Replacing the controller
E43	Disable sensor error	Replacing the controller



If the mains power supply is lost or becomes disconnected from the control unit during movement of the drives, zero setting might be necessary.