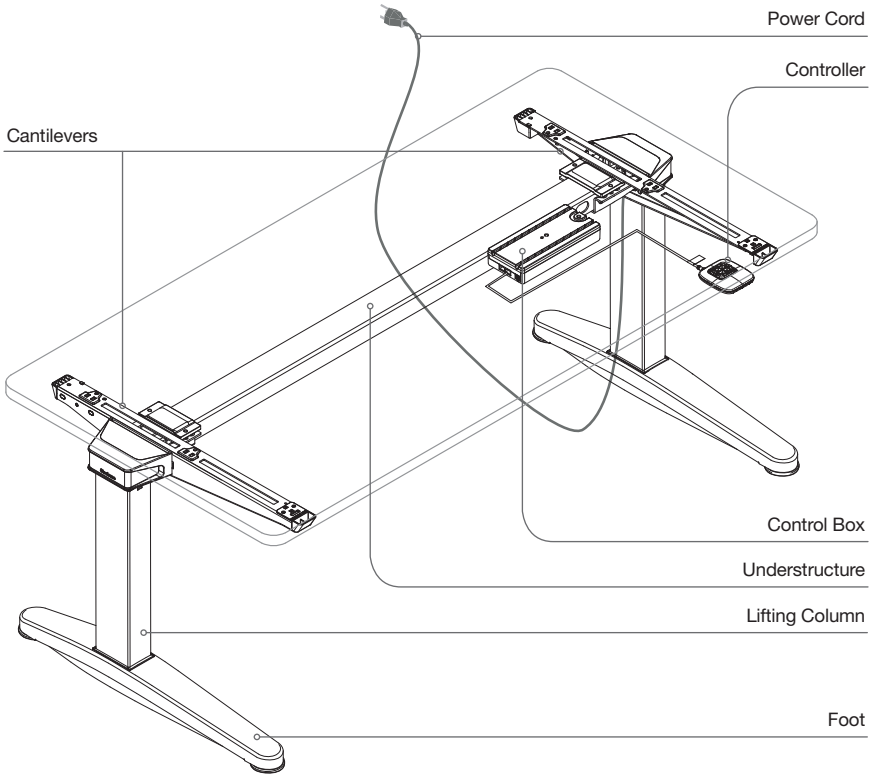


# Troubleshooting Guide



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# Ology<sup>TM</sup>

## height-adjustable desk and bench

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## Obtain a set of parts or order the Ology/Flex Maintenance Kit, OLMEKT (Available Fall 2020). The kit includes:

- Active Touch Controller
- Low-Voltage Cable
- Power Cord
- 3-leg Control Box
- Battery (optional)
- Support Software Connection Cables (optional)
- User Guide
- Troubleshooting Guide



Always maintain a complete kit of spare parts that are known to work properly, to quickly identify the root cause of problems and resolve issues.



For ease of troubleshooting a digital error code reader (e.g. Active Touch Controller) is recommended.

**Note:** Desks shipped prior to December 18, 2017 have software 3002000 v1.37 which is not compatible with the Active Touch controller. The Active Touch Controller Kit, OLATKT, can upgrade an existing Ology desk to replace the Up/Down or 4 Preset Programmable Controller.

## Read the Assembly Directions and User Guide:

Reference the Assembly Directions, also available online at [steelcase.com/installers](http://steelcase.com/installers), to ensure the desk or bench is assembled correctly.

Reference the User Guide, available online at [steelcase.com/ology/userguide/en](http://steelcase.com/ology/userguide/en) for information on how to operate the desk, presets and height display information.

If after confirming proper assembly, and there are still problems with the Steelcase desk, reference the troubleshooting steps throughout this document.

Scan the QR code to visit the product support page:  
[steelcase.com/ology/support](http://steelcase.com/ology/support)



## Service parts list:

	STYLE	PART NO.
<b>BASIC HEIGHT:</b>		
Lifting Column	Desk	1106409001SR
	Bench	1112273001SR (LH)
		1112273002SR (RH)
<b>EXTENDED HEIGHT:</b>		
Lifting Column	Desk	24465401SR
	Bench	1041141001SR (LH)
		1041141002SR (RH)
<b>ELECTRONICS:</b>		
Control Box		841364900SR (2-leg) 841300004SR (3-leg, International)
		
Active Touch Controller		1093247001SR (North America)
		
Simple Touch Controller		1093294001SR (Non-Antimicrobial) 1093294002SR (Antimicrobial) 1093294003SR (Non-Antimicrobial, Int'l)
		
4 Preset Controller		24316101SR (North America) 24316102SR (Int'l)
		
Low-Voltage Cable		24012601SR ( $\leq 57\frac{15}{16}$ "W) 24012602SR ( $\geq 58$ "W)
		
Power Cord		22047301SR (North America) 22047320SR (Chicago) 25380201SR (Int'l, desk only)
		

## Obtaining replacement parts:

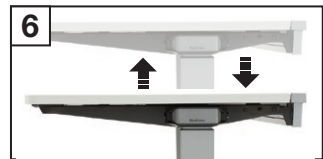
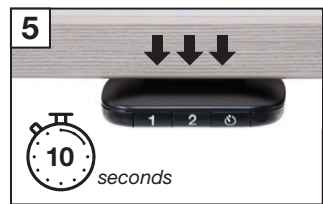
After troubleshooting the desk, if replacement parts are required refer to the Product Reference portal for assistance or contact your local Steelcase dealer. If you need help, call 888.STEELCASE.

# Common Procedures

## How to synchronize the desk:

(Digital Display: E01, INITIALIZE, SYNCHRONIZE)

1. Move objects from under the desk that may impede the lowest height when the desk is fully lowered (e.g. storage, chairs).
2. If items are attached to the desk (e.g. privacy screens, computer), make sure they are free from obstruction too.
3. Adjust the desk to its lowest position.
4. Release the Controller.
5. Press down on the Controller and hold for 10 seconds. When synchronized, the desk will move up and down slightly.
6. Raise the desk all the way up to ensure cords are not disconnecting. Then lower all the way down to confirm proper function.



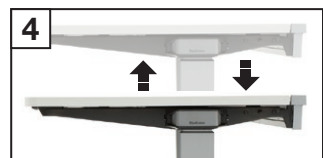
Every desk must be synchronized periodically for proper use.

After replacing parts, the desk must be synchronized.

## How to power cycle the Control Box:

In the unlikely event an error occurs, and the desk is unresponsive:

1. Unplug the desk Power Cord from the outlet.
2. Wait 10 minutes.
3. Reconnect power to the desk.
4. Synchronize the desk. (see above)

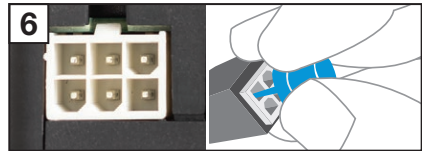
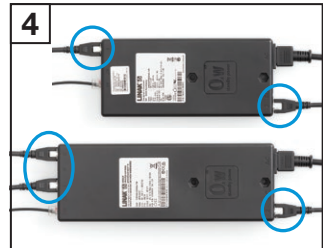


# Troubleshooting Problems and Solutions

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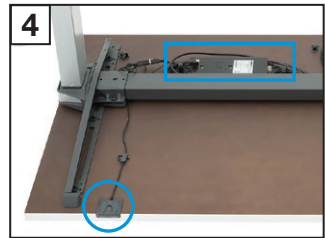
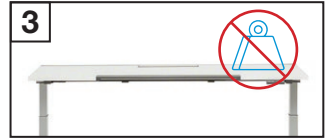
## No power to desk:

1. Check for power at the outlet.
2. Check that the Power Cord is fully seated in the Control Box.
3. Inspect the Power Cord for defects; replace the defective cord.
4. Check that all the Low-Voltage Cables are fully connected.
5. Inspect the Low-Voltage Cable for defects; replace any defective cables.
6. Inspect the Control Box for damaged pins. If any appear bent, use a thumb tack to correct.
7. Synchronize the desk.  
*(Refer to page 05.)*

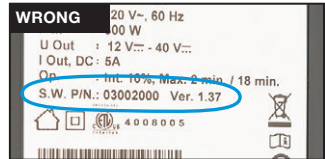


## Desk will not go up or down:

1. Check for power to desk.  
(Refer to “No power to desk” on page 06.)
2. Check for a foreign device (Error Code E09). Verify the Controller is the only device plugged into the Control Box. Unplug cables (e.g. phone, Ethernet) from the secondary RJ45 connector on the Control Box. Synchronize the desk. (Refer to page 05.)
3. Check that the desk is not severely overloaded (Error Code E41, E42, E43, Overload). Remove or redistribute weight on the desk; weight needs to be evenly distributed and not concentrated over one Lifting Column. Synchronize the desk.  
*Tip: The lifting capacity varies by desk size and the calculated lifting capacity amount is labeled under the desk.*



4. Check the Controller by plugging a **new Controller** into the Control Box.
5. Adjust the desk up or down. If the desk starts to move, replace the defective Controller. After the Controller is replaced, synchronize the desk.
6. Check the Control Box by plugging the original Power Cord, Controller and Low-Voltage Cables into the **new Control Box**.  
*Tip: Software 3002000 v1.37 is not compatible with the Active Touch controller. Replace with a compatible Control Box with software that is labeled SW 3002000 v1.57.*
7. Adjust the desk up or down. If the desk starts to move, replace the non-working Control Box. After the Control Box is replaced, synchronize the desk.
8. Test individual Lifting Columns. (Refer to page 10.)



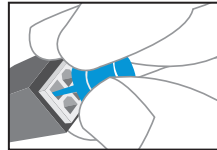
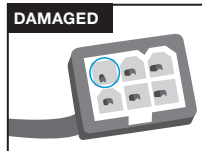
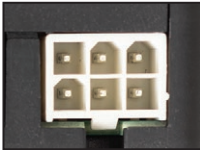
## Desk does not go through full range of motion, Lifting Columns are not synchronized (one is higher than the other):

(Error Code E12)

1. Synchronize the desk. (Refer to page 05.)
2. Test individual Lifting Columns. (Refer to page 10.)

## Desk goes up, but does not go down (or vice versa):

1. Synchronize the desk. (Refer to page 05.)
2. Power cycle the Control Box. (Refer to page 05.)
3. Unplug each Low-Voltage Cable from the Control Box.
4. Inspect the Low-Voltage Cables and Control Box for damaged pins. If any appear bent, use a thumb tack to correct.



5. Adjust the desk up and down. If the desk starts to move, synchronize the desk.
6. Check the Control Box by plugging the original Power Cord, Controller and Low-Voltage Cables into the **new Control Box**.
7. If the desk still does not adjust properly, adjust the desk up or down. If the desk starts to move, replace the non-working Control Box. After the Control Box is replaced, synchronize the desk.
8. If the desk still does not adjust properly, remove the end cap to check the Low-Voltage Cable connection at the Lifting Column.  
*Tip: Disassembly of the desk will be necessary to access the center Lifting Column on a 3-leg desk.*
9. Check the Low-Voltage Cable by plugging a **new Low-Voltage Cable** into the Lifting Column and Control Box.
10. Adjust the desk up and down. If the desk starts to move, replace the defective Low-Voltage Cable. After the Low-Voltage Cable is replaced, synchronize the desk.




## Desk movement is not smooth; Lifting Columns jerk or hop when raised or lowered:

1. Synchronize the desk. (Refer to page 05.)
2. Check that the glides are properly adjusted, and the desk is level.
3. Test individual Lifting Columns. (Refer to page 10.)
4. Loosen (but do not remove) all the screws attaching the Lifting Columns to the worksurface.
5. Adjust the desk all the way up and all the way down, then re-tighten worksurface attachment screws.
6. If the Lifting Columns are still binding, take everything off the desk, flip it upside down and remove the worksurface screws completely.
7. Adjust the desk all the way up and all the way down.
8. The position of the Lifting Columns may shift slightly; re-install worksurface screws in the adjusted position.

## Height displayed is incorrect:

### A | Height is displayed in centimeters:

1. On the Controller, press and hold the **1** and  buttons simultaneously for 3 seconds.
2. The display will change from “CM” to “INCH” or “INCH” to “CM”.
3. The new selection will flash until the light guide fills. When all three bars are full, the height selection is saved.

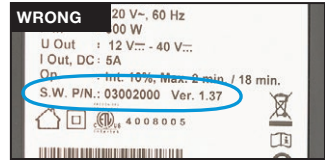
### B | Height of the desk does not match display:

1. On the Controller, press 1, 2, 1, 2.  
The display will begin blinking “SELECT”, “HEIGHT”.
2. Press down on the Controller to select the correct lowest starting height.
3. Wait for 2 seconds until the light guide fills. When all three bars are full, the height selection is saved.



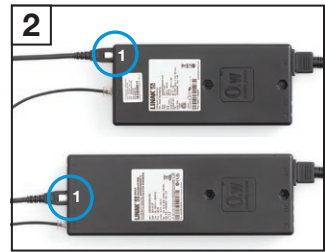
## Digital-Display Controller is unresponsive:

1. If the 4 Preset Programmable Controller is unresponsive, unplug the controller from the control box for 10 seconds. Plug the controller back in with nothing touching the faceplate. This will reset the calibration of the faceplate.
2. If the Active Touch Controller is unresponsive, verify that the Control Box software is current.  
*Tip: Software 3002000 v1.37 is not compatible with the Active Touch controller. Replace with a compatible Control Box with software that is labeled SW 3002000 v1.57.*



## How to test individual Lifting Columns:

1. For ease of troubleshooting, flip desk over.
2. Check individual Lifting Columns for function by unplugging the Low-Voltage Cable(s) from the Control Box, except for Port 1.
3. Adjust the Lifting Column all the way up and down. *Tip: If the leg adjusts through the full height range, the Lifting Column, Controller, Low-Voltage Cable and Power Cord are functional.*
4. If it does not move, replace the non-working Lifting Column. After the Lifting Column is replaced, synchronize the desk. (Refer to page 05.)
5. Check other Lifting Column(s) by plugging the Low-Voltage Cable into **Port 1** and adjusting the Lifting Column all the way up or down. *Tip: The desk will only function if a Low-Voltage Cable is plugged into Port 1.*



## How to test Control Box for function:

1. Follow the “Test individual Lifting Columns” steps above to verify the Lifting Column, Controller, Low-Voltage Cables and Power Cord are functional.
2. Keep the Low-Voltage Cable of leg 1 plugged into **Port 1**, and plug-in the Low-Voltage Cable of leg 2 in **Port 2**.
3. Adjust the Lifting Columns all the way up and down. Repeat with leg 3 plugged into **Port 3**, if necessary.
4. If the Lifting Column plugged into **Port 2** or **Port 3** does not move, replace the defective Control Box.
5. After the Control Box is replaced, synchronize the desk. (Refer to page 05.)

## Error code displayed on digital display Controller:

ERROR CODE	POTENTIAL CAUSE	SOLUTION / TROUBLESHOOTING
<b>SELECT HEIGHT</b>	<ul style="list-style-type: none"> <li>• Desk height not selected</li> </ul>	<ol style="list-style-type: none"> <li>1. Lift up or press down on the Controller to scroll through the starting heights.</li> <li>2. Choose the correct height.</li> <li>3. Wait for 2 seconds until the light guide fills. When all three bars are full, the starting height is saved.</li> </ol>
<b>E01 INITIALIZE SYNCHRONIZE</b>	<ul style="list-style-type: none"> <li>• Desk has an unknown position</li> <li>• Desk has been unused for a long period of time</li> <li>• Lifting Column added or replaced</li> <li>• Electronics added or replaced (e.g. Control Box, Controller, Low-Voltage Cable)</li> </ul>	<ol style="list-style-type: none"> <li>1. Synchronize the desk. <i>(Refer to page 05.)</i></li> </ol>
<b>E08</b>	<ul style="list-style-type: none"> <li>• Software program fault</li> </ul>	<ol style="list-style-type: none"> <li>1. Unplug the Power Cord from the outlet for 15 seconds, and plug back in.</li> <li>2. Synchronize the desk. <i>(Refer to page 05.)</i></li> <li>3. If steps 1-2 do not work, replace the Control Box.</li> <li>4. After replacing the Control Box, synchronize the desk.</li> </ol>
<b>E09</b>	<ul style="list-style-type: none"> <li>• Multiple Controllers activated at the same time</li> </ul>	<ol style="list-style-type: none"> <li>1. Test Controllers one at a time.</li> <li>2. If necessary, replace the faulty Controller.</li> <li>3. After replacing the Controller, synchronize the desk. <i>(Refer to page 05.)</i></li> </ol>
<b>E10</b>	<ul style="list-style-type: none"> <li>• Power Cord pulled during desk adjusting up or down</li> <li>• Internal fault after a power fail happened</li> </ul>	<ol style="list-style-type: none"> <li>1. Check that the Power Cord is not entangled and is allowed to freely travel.</li> <li>2. Check that the Power Cord is fully connected into the Control Box.</li> <li>3. Plug desk into a working outlet (it may not be the current outlet) to test.</li> <li>4. If steps 1-3 do not work, replace the Power Cord or Control Box.</li> <li>5. After replacing the Control Box, synchronize the desk. <i>(Refer to page 05.)</i></li> </ol>
<b>E11</b>	<ul style="list-style-type: none"> <li>• Lifting Column disconnected</li> <li>• Lifting Column added or replaced</li> </ul>	<ol style="list-style-type: none"> <li>1. Check Low-Voltage Cable connections for damage to the cord or pins.</li> <li>2. Synchronize the desk. <i>(Refer to page 05.)</i></li> <li>3. If steps 1-2 do not work, replace Low-Voltage Cable.</li> <li>4. Test individual Lifting Columns. <i>(Refer to page 10.)</i></li> <li>5. After replacing the Low-Voltage Cable or Lifting Columns, synchronize the desk.</li> </ol>

<b>ERROR CODE</b>	<b>POTENTIAL CAUSE</b>	<b>SOLUTION / TROUBLESHOOTING</b>
<b>E12</b>	<ul style="list-style-type: none"> <li>• Too much back drive occurred</li> <li>• Lifting Columns are not level (one is higher than the other)</li> </ul>	<ol style="list-style-type: none"> <li>1. Synchronize the desk. <i>(Refer to page 05.)</i></li> </ol>
<b>E13</b>	<ul style="list-style-type: none"> <li>• Squeezed Low-Voltage Cable</li> <li>• Short in Lifting Column motor</li> </ul>	<ol style="list-style-type: none"> <li>1. Check Low-Voltage Cable connections for damage to the cord or pins.</li> <li>2. Replace Low-Voltage Cable.</li> <li>3. Test individual Lifting Columns. <i>(Refer to page 10.)</i></li> </ol>
<b>E15</b>	<ul style="list-style-type: none"> <li>• Low-Voltage Cable pulled during adjustment</li> <li>• Internal fault</li> </ul>	<ol style="list-style-type: none"> <li>1. Check that the Low-Voltage Cable is not entangled, and is allowed to freely travel.</li> <li>2. If not installed already, use the strain-relief loop built into the Control Box to prevent pulling in the future.</li> </ol>
<b>E16</b>	<ul style="list-style-type: none"> <li>• Hitting multiple buttons simultaneously</li> </ul>	<ol style="list-style-type: none"> <li>1. Check Controller for full function. Does the desk adjust all the way up and down?</li> </ol>
<b>E17</b>	<ul style="list-style-type: none"> <li>• Control Box and Controller do not have up-to-date software</li> </ul>	<ol style="list-style-type: none"> <li>1. Verify the Control Box software is current. Software 30020000 v1.37 is not compatible.</li> <li>2. Replace the Control Box with an updated version.</li> <li>3. After replacing the Control Box, synchronize the desk. <i>(Refer to page 05.)</i></li> </ol>
<b>E23, E24, E25</b>	<ul style="list-style-type: none"> <li>• Disconnection</li> </ul>	<ol style="list-style-type: none"> <li>1. Check Low-Voltage Cable connections for damage to the cord or pins.</li> <li>2. Synchronize the desk. <i>(Refer to page 05.)</i></li> <li>3. If steps 1-2 do not work, test individual Lifting Columns. <i>(Refer to page 10.)</i></li> </ol>
<b>E29, E30, E31</b>	<ul style="list-style-type: none"> <li>• Change in Lifting Column type (i.e. extended height to basic height)</li> </ul>	<ol style="list-style-type: none"> <li>1. Check Lifting Column type to ensure it matches other Lifting Columns</li> <li>2. Change Lifting Column to correct type.</li> <li>3. Synchronize the desk. <i>(Refer to page 05.)</i></li> </ol>
<b>E35, E36, E37</b>	<ul style="list-style-type: none"> <li>• Loose or faulty Low-Voltage Cable</li> <li>• Sensor inside Lifting Column is sending errors</li> </ul>	<ol style="list-style-type: none"> <li>1. Check Low-Voltage Cable connections for damage to the cord or pins.</li> <li>2. Synchronize the desk. <i>(Refer to page 05.)</i></li> <li>3. If steps 1-2 do not work, test individual Lifting Columns. <i>(Refer to page 10.)</i></li> </ol>

<b>ERROR CODE</b>	<b>POTENTIAL CAUSE</b>	<b>SOLUTION / TROUBLESHOOTING</b>
<b>E41, E42, E43 OVER-LOAD</b>	<ul style="list-style-type: none"> <li>• Hit obstruction</li> <li>• Lifting Column is overloaded</li> <li>• Reached end stop</li> <li>• Overload up occurred</li> </ul>	<ol style="list-style-type: none"> <li>1. Remove obstruction from under the desk (e.g. storage, chair). Verify that items attached to the desk (e.g. privacy screens, computer) are free from obstruction too.</li> <li>2. Remove weight load from desk; weight load should be evenly distributed.</li> <li>3. Synchronize the desk. <i>(Refer to page 05.)</i></li> </ol>
<b>E47, E48, E49 OVER-LOAD</b>	<ul style="list-style-type: none"> <li>• Reached end stop</li> <li>• Hit obstruction</li> <li>• Overload down occurred</li> </ul>	<ol style="list-style-type: none"> <li>1. Remove obstruction from under the desk (e.g. storage, chair). Verify that items attached to the desk (e.g. privacy screens, computer) are free from obstruction too.</li> <li>2. Synchronize the desk. <i>(Refer to page 05.)</i></li> </ol>
<b>E53, E54, E55, E59, E60, E61 COLLISION</b>	<ul style="list-style-type: none"> <li>• Hit obstruction</li> </ul>	<ol style="list-style-type: none"> <li>1. Remove obstruction from under the desk (e.g. storage, chair). Verify that items attached to the desk (e.g. privacy screens, computer) are free from obstruction too.</li> <li>2. After too many “hit obstruction” errors, it may be necessary to synchronize the desk. <i>(Refer to page 05.)</i></li> </ol>
<b>E65, E66, E67</b>	<ul style="list-style-type: none"> <li>• Motor poles are crossed</li> <li>• Sensor cables crossed in Lifting Column</li> </ul>	<ol style="list-style-type: none"> <li>1. Check Low-Voltage Cable connection(s) for damage to the cord or pins.</li> <li>2. Synchronize the desk. <i>(Refer to page 05.)</i></li> <li>3. If steps 1-2 do not work, test individual Lifting Columns. <i>(Refer to page 10.)</i></li> </ol>
<b>E71, E72, E73, E74, E75, E76</b>	<ul style="list-style-type: none"> <li>• Damage to Power Cord</li> <li>• Damage to cable exiting Lifting Column</li> </ul>	<ol style="list-style-type: none"> <li>1. Inspect Power Cord for damage; if found, replace Power Cord.</li> <li>2. Inspect cable exiting Lifting Column for damage; if found, replace Lifting Column.</li> <li>3. After replacing the Power Cord or Lifting Column, synchronize the desk. <i>(Refer to page 05.)</i></li> </ol>

# How Ology Desks and Benches Work

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- Each Lifting Column contains an individual motorized lift mechanism.
- The Control Box contains a power transformer. This converts high-voltage AC current from the wall outlet (120v or 240v) to low-voltage 18v DC current, which powers the Lifting Columns.
- Only the main power cord carries high voltage. All other cables are low voltage.
- The Control Box contains a computer processor with embedded software controllers.
- The Control Box controls all aspects of the desk's movement, and synchronizes motion of the individual Lifting Columns.
- The Control Box will shut down the entire desk if a fault is detected. For example, if one Lifting Column is binding or trapped, it will draw significantly more current than the other Lifting Column, and the Control Box will shut down the entire desk to prevent further damage.
- The Controller is the user interface to the desk, and directs all desk movements by lifting or pressing down until the desired height is reached.
- Preset data is stored in the Controller, not the Control Box.

**Steelcase®**

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