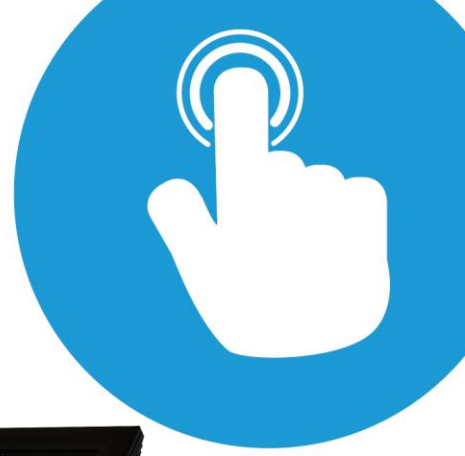




# Tilt Trolley Installation Guide



**Please note:** If you have received a paper copy of the instruction guide, please contact CommBox Support for an electronic copy of the guide. This will enable you to expand out the photos for better recognition of Parts and Procedures.

**commBOX**  
Interactive Touchscreens



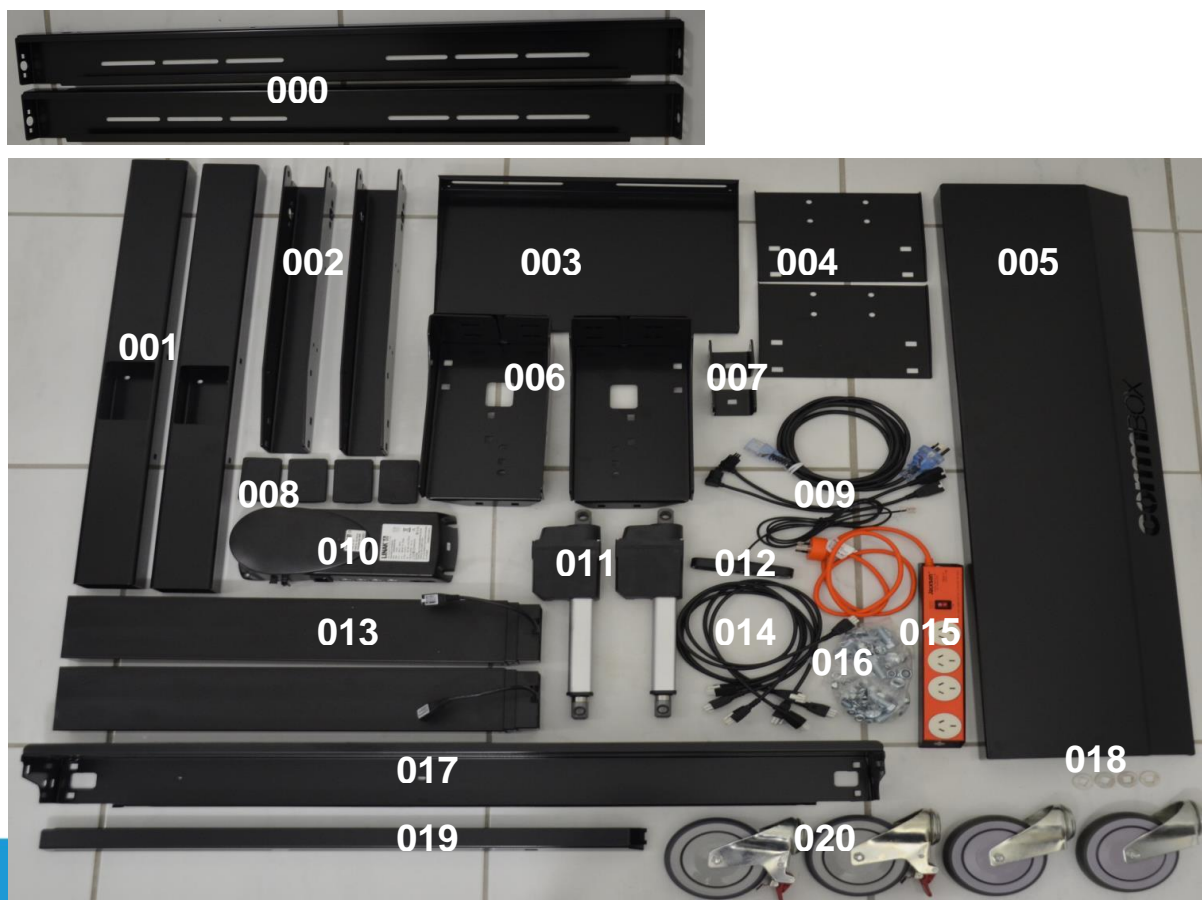
This Flat Panel Convertible Trolley has been designed as a generic product and some of the fasteners, holes and procedures may not apply to your products individual needs. Mounting some of the items to this product will require you to consult the manufactures instructions, Do so accordingly!

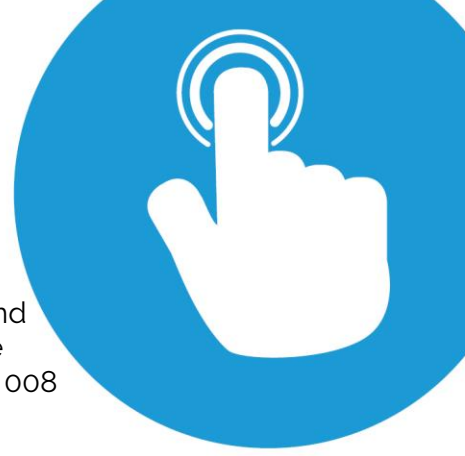
During the build-up of the FPMC there are a number of areas that lifting of parts etc can have adverse effects on personnel and parts if guidelines are not strictly adhered to. Please read any Notes carefully prior to completing each step.

During the engineering of this product ease of construction was our highest priority. One of the steps taken was to use Cup Head Bolts, referred to as CHB. The use of this fastening system enables construction with limited and basic hand tools.

Read each step thoroughly prior to starting that step. If you have any questions relating to the build-up of this product please contact your re-seller for guidance.

Parts Identification - All parts will be assigned a three digit number for ease of identification. Ensure shipping box has arrived in serviceable condition. Open box and remove all parts. Lay out for ease of identification. The breakdown of the bolt pack contents is on the last page.





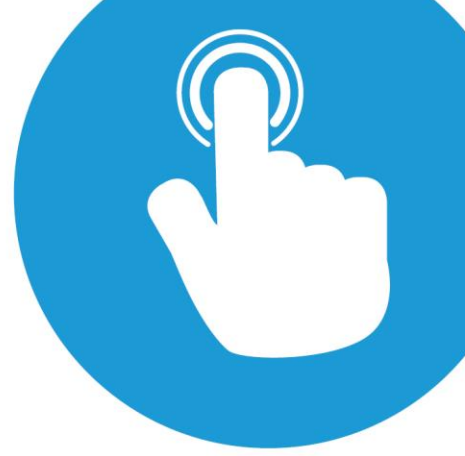
**Step 1:** Remove bolts from part 020 and using 4 12x30mm bolts and 12mm nylock nuts secure parts 020 to parts 001. Once castors are secured, using a soft blow hammer, knock in the plastic end caps 008 into the ends of 001.

*Note: the lockable castors go to the rear (shorter end)*



**Step 2:** Align parts 001 with 005 as shown. Using 4x 8x90mm bolts and 8mm nylock nuts loosely secure these parts.





Step 3: Using 8 8x20mm CHB's loosely secure parts 004 to 005



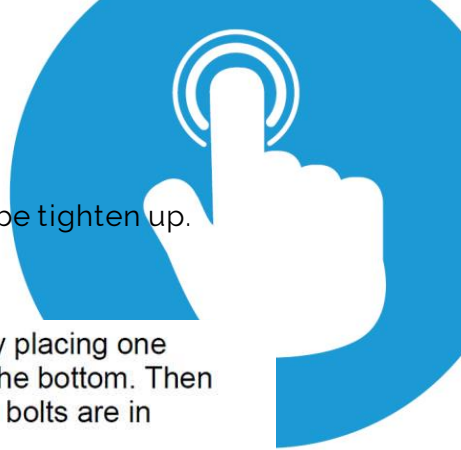
4 off 8x20mm CHB at each end

Step 4: *Minimum of two people required for this step.*

Aligning the control cable of 013 to the inside, secure both columns to the base structure using 8x 6x25mm bolts.



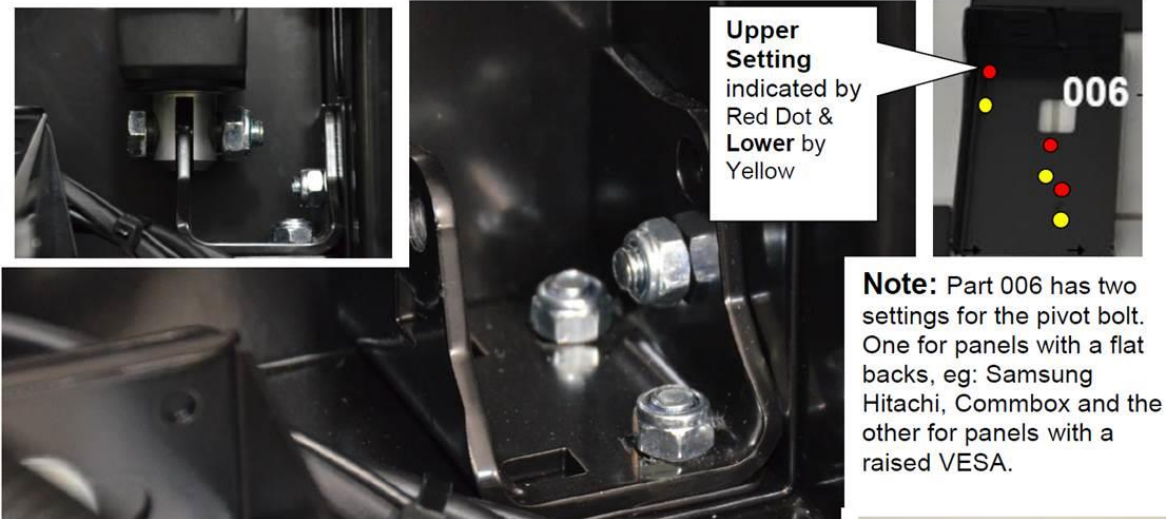
4 off 6x25mm Hex bolts



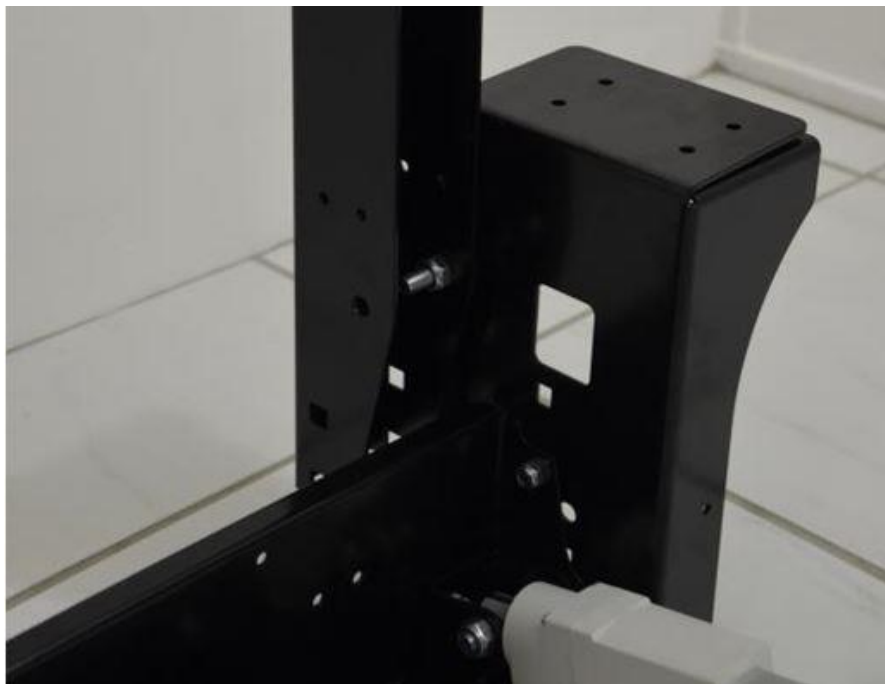
**Step 5:** Once 013 are in position and tight, all remaining bolts can be tighten up.

**Step 6:**

**Step 4:** Align parts 006, 007 & 017 as shown. Align parts 007 & 017 by placing one 8x20mm CHB in from the side and push two 8x20mm CHB's up from the bottom. Then push one 10x 40mm bolt in through the actuator and part 007. Once all bolts are in secure the 8x20mm CHB's. (**do not over tighten the 10mm nut**)



There is a second mounting hole for the 8x20mm CHB from the side (higher than shown here). The second 8x20mm CHB that secures the cable tray assembly is shown below.





**Step 7:** Then push one 10x 40mm bolt in through the actuator and part 007 as shown. Once all bolts are in, secure the 8x20mm CHB's from Step 6. (do not over tighten the 10mm nut)



**Step 8:** Using parts 002, 018, one 10x 30mm CHB bolt & 10mm nylock nut per side place two 018 washers between parts 002 & 006. The bolt should be through the upper hole on part 006, tighten the nut until firm.





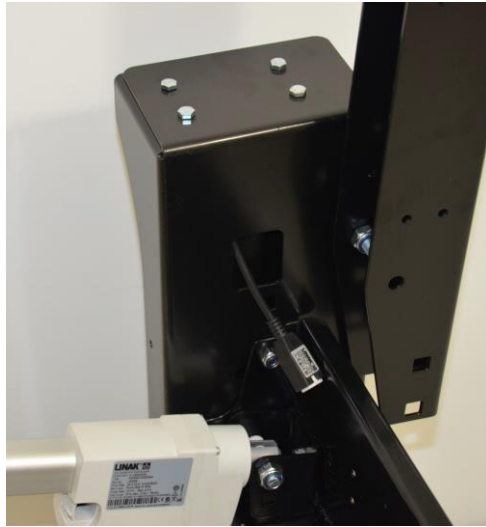
**Step 9:** Place the cable tray structure 006 onto the lift columns 013. The fixing screws should be lined up as shown in the upper mounting position.







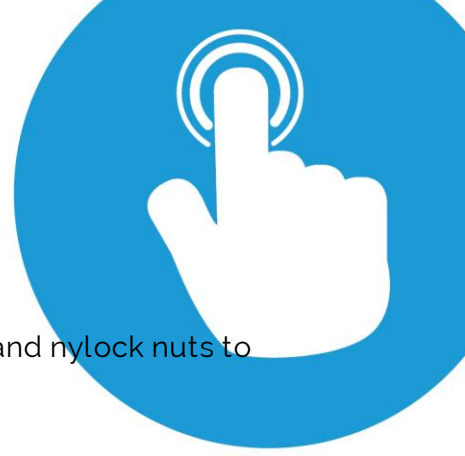
Ensure the columns cables are pushed through the large hole in parts 006.



**Step 9:** Using 8 6x25mm bolts secure parts 006 to 013 (lift Columns) as shown above

**Step 10:** Using 4x12mm bolts and 4mm nylock nuts secure the control box (part 010) to the cable tray 017.





**Step 11:** Then secure part 015 (power board), using 4x8mm bolts and nylock nuts to part 017.

**Step 12:** Secure part 003 (lap top tray) to part 017 using 2x 8x20mm CHB's, 2x 8mm washers and nylock nuts.

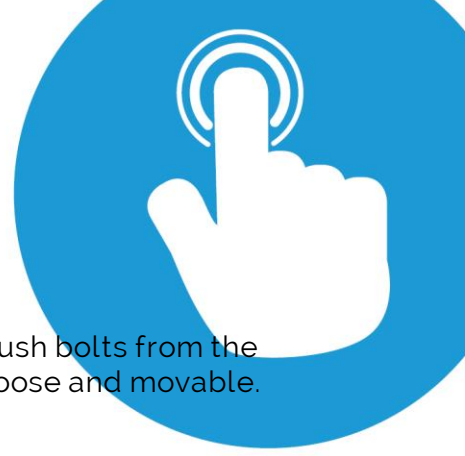
**Step 13:** Plug the actuator 013/ 011 extension leads into the actuator leads. 013 actuators (column) plug into #1 & 2 on the control box. Actuators 011 (tilting) plug into # 3 & 4.

*NOTE: Please cable tie any leads after observing how much slack is required during the operation of the trolley. This will ensure nothing is damaged during normal operation.*

**Step 14:** Bolt the 011 actuators to part 002 using 2off 10 x 65mm bolts and nylock nuts



*NOTE: Do not over tighten these bolts. There will be some movement of the tilting actuator on this bolt during operation.*



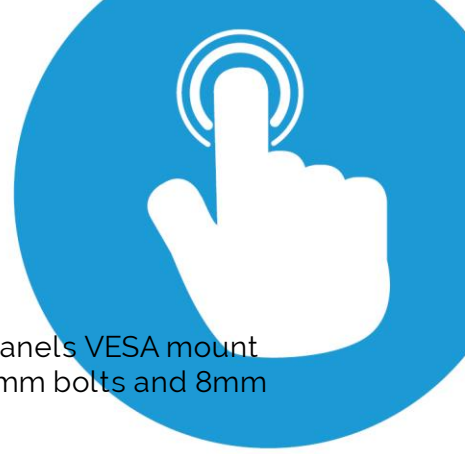
**Step 15:** Secure part 000 onto parts 002 using 4 8x20mm CHB's (push bolts from the outside towards the inside of the trolley). This part must remain loose and movable. To be secured during a later step.



*NOTE: The 2 images above show the cradle mounted in the lower position. The cradle should be level with the vertical actuators*

**Step 16:** Temporarily plug the Control Head into the powerboard. Once it has been plugged in and all personnel, tools, cabling etc have been secured and moved to a safe distance, maneuver the trolley down using the LED control head buttons. The rotating arrows button changes the control head from the Lift Columns to the Tilt Actuators. Maneuver the Tilt Actuators to vertical prior to mounting the panel.





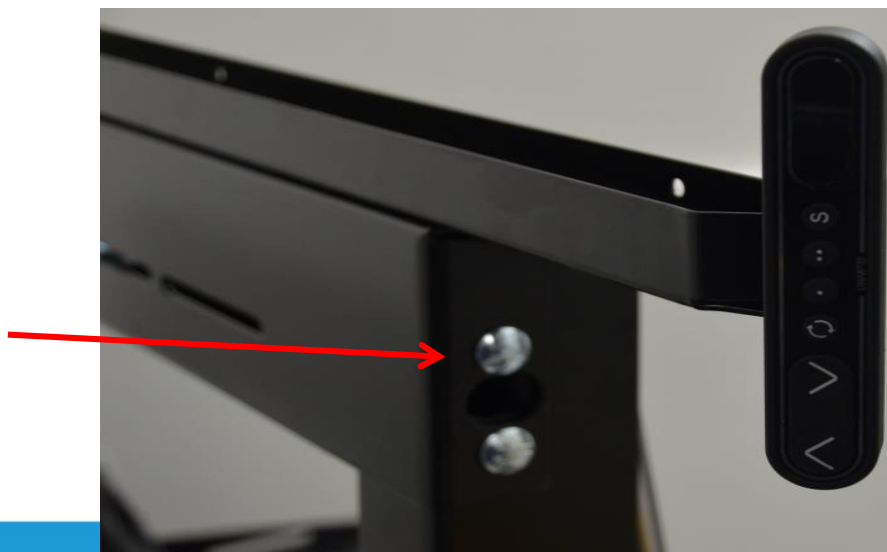
**Step 16:** Secure the remaining 000 bracket to the top row of the panels VESA mount using either the panels supplied hardware or two of the 8x12/ 20mm bolts and 8mm washers.

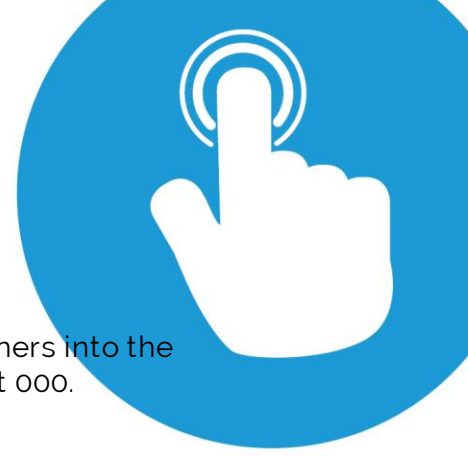


Apply the foot brackets for the remainder of the assembly.

**Step 17:** Using a minimum of two people raise the panel and locate part 000 onto the cut-outs in parts 002.

**Step 18:** Using 4 8x20mm CHB's secure the 000 bracket to parts 002.





**Step 19:** Secure the remaining 2 8x12/ 20mm bolts and 8mm washers into the touchscreen's lower VESA mounting holes through the lower part 000.

**Step 20:** Tighten the 4 8x20mm CHB's on the lower part 000

**Step 21:** The actuators need to be initialized to function correctly.

Using the buttons shown above lower the touchscreen until it hits its lowest vertical limit (indicated by a 1 on the LED screen on the control panel). Continue to hold the button down until the actuators move up slightly.

Press the rotating arrow button and lower the touchscreen to the horizontal position (indicated by a 2 on the LED control panel). Continue to hold the button down until the actuators move up slightly.

Once both steps are completed the trolley is ready to go.

## Additional Notes

- **Transportation:** When moving your tilt trolley around your campus, place the touchscreen in the vertical position and lower the touchscreen to within 10-20mm of the castor legs (parts 001). Ensure all leads are stowed safely and out of the way of moving parts.
- **Safe Operation of the trolley:** The Lift actuators have a built in safety feature (Pizo) where any change in pressure between sides will automatically stop and reverse the movement of the unit. This will also happen if the panel is lowered onto the castor legs.
- **Error E01:** The E01 error will appear if the actuators get themselves out of sync. If you get the E01 error follow the initialising procedure in step 20.

For any other errors please contact CommBox support on 02 9975 6001, or alternatively you can log it through the website [here](#).