



**ImageWorks**

Generations of Imaging

**Panoura X-ERA**  
**Pan-Only Installation and Assembly Quick**  
**Guide**

# Summary

**These instructions serve as supplemental assembly guidance of the Panoura. They are not meant to replace the installation manual, but rather serve to complement it.**

**If there are any questions, please do not hesitate to contact us**

**914-592-6100**

# Agenda

1. **Division of Responsibility**
2. **Packaging Contents**
3. **Tooling Required**
4. **Install Column**
5. **Attaching the Main Top Section**
6. **Attach Chinrest**
7. **Final Leveling **Critical Adjustment****
8. **Install Handswitch**
9. **Connecting PC Cables**
10. **Install Covers**

# 1. Division of Responsibility

## Operator Responsibilities before installer arrives

- Floor is level
- Desired location for equipment is identified and has adequate space\*
- Location has adequate power and data sources\*
- Scanner PC is connected to Internet and imaging software loaded
- Location for PC/monitor identified and any specialized PC/monitor mounting or shelving is complete
- Conduit and pull cables installed at any location where wiring is desired behind walls
- Location of handswitch identified within appropriate distance\*
- Mounting Wall backing plate or equivalent installed.

## Installer Responsibilities

- Column is secured to the floor and to the wall
- Column is level in both axis (checked with level)
- C-arm is hung on column and unit is assembled
- Top of C-Arm frame is level
- Handswitch is hung in desired location with cabling run and connected to the unit
- The 2 Ethernet cables are run and connected between unit and PC
- Double check of packaging for missed items\*\*
- Disposal of packaging
- Wall and area are clean and aesthetics are pleasing to the office

## ImageWorks Responsibilities

- Alignment and Calibration
- Assemble all covers
- Final Testing and Quality Assurance
- Staff training

*\*refer to pre-install checklist for requirements*

*\*\*some items are commonly missed in packaging so please inspect thoroughly*

# 1. Division of Responsibility

Before Installation occurs, office must assure PC is ready for alignment and integration:

- Install imaging software that office will plan to use (e.g. Dexis, Eaglesoft, Apteryx, Evasoft, etc)
- PC is connected to network and has internet access

***NOTE: These items above will be needed to fully integrate the unit and train the staff. It's recommended to check these items BEFORE starting installation, so that if they are not done, office can work on completing this in parallel with installation.***

## 2. Package Contents

**Basic Pan arrives in two boxes containing:**

1. **Column, Components, hardcopy Install Manual.**
2. **Main C-Arm Assembly, Sensor and Components**

**The Scanner PC arrives in two boxes containing:**

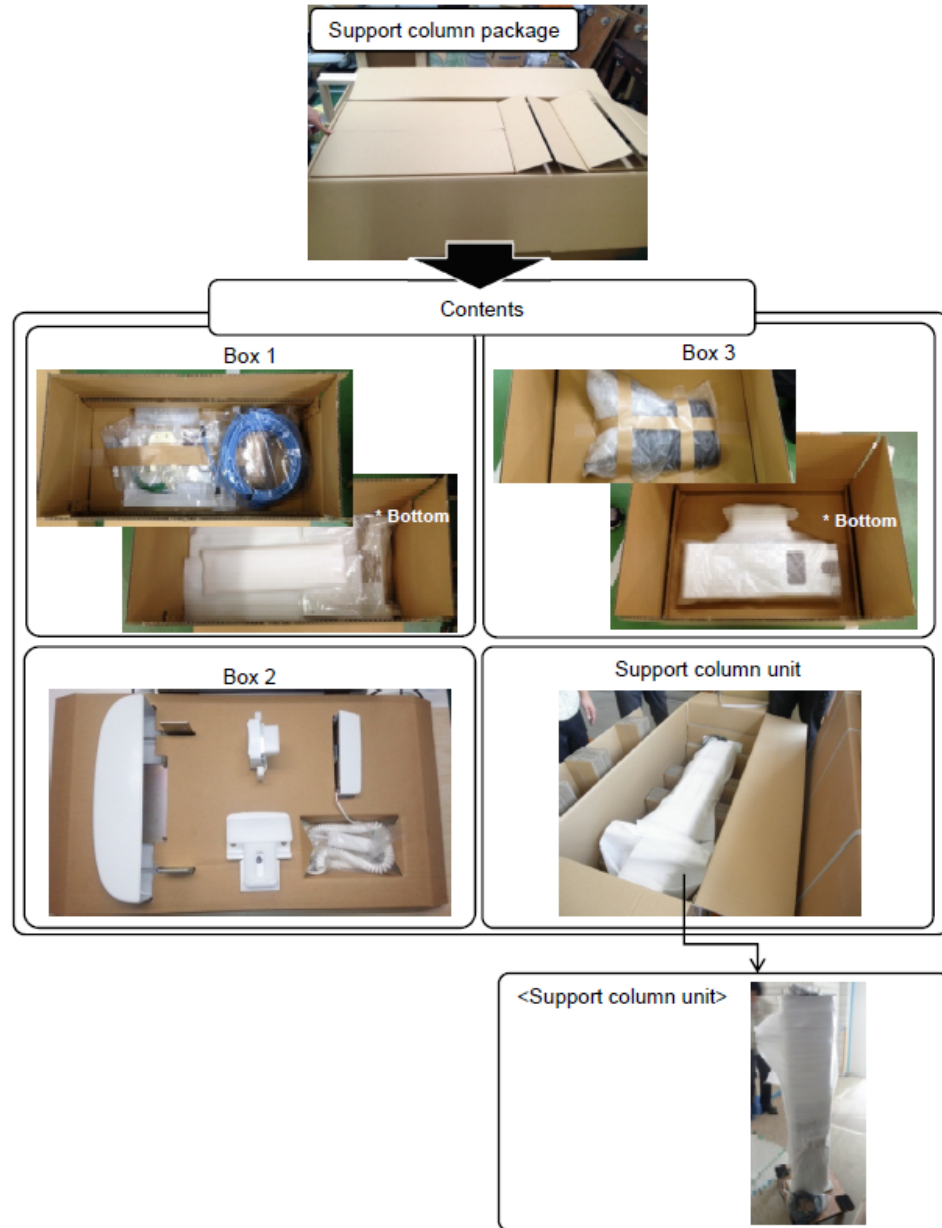
1. **PC with preinstalled software & USB license dongle.**
2. **Monitor.**

### 3. Required Tools (hardware is metric)

- **No.2 Phillips screwdriver (both normal and short)**
- **Allen wrenches (1.5 - 8 mm)**
- **Box wrench (5.5 mm)**
- **Box/Open End Wrenches (5.5 - 19 mm)**
- **Cutting tool such as nippers**
- **Tool for working with electrical terminals (precision screwdriver, etc.) (blade: 3.5 x 0.5 mm)**
- **Power drill (Hammer drill if installing into masonry)**
- **Masonry drill bits (4 mm bit for pilot holes, 12.5 mm bit for anchor bolts)**
- **Digital Volt Meter**
- **Level and tape measure**

# 4. Install Column

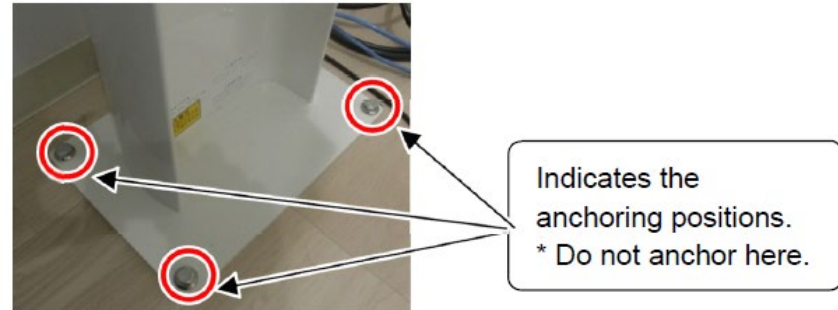
## Unbox the Support Column Unit





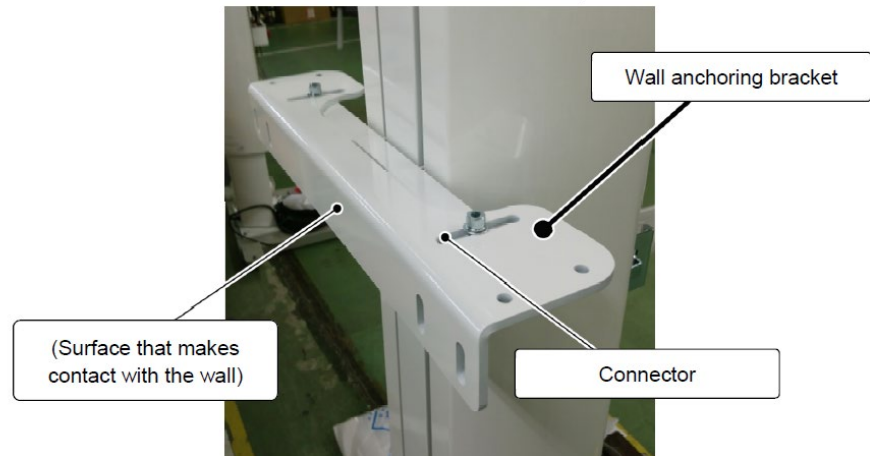
## 4. Install Column

Determine the anchoring location of the support column, and temporarily set the support column on the floor. **DO NOT ANCHOR YET. Only Anchor after performing the Leveling procedure.**



Tighten the connectors of the wall anchoring bracket. Tighten them at the same position on both the left and right sides.

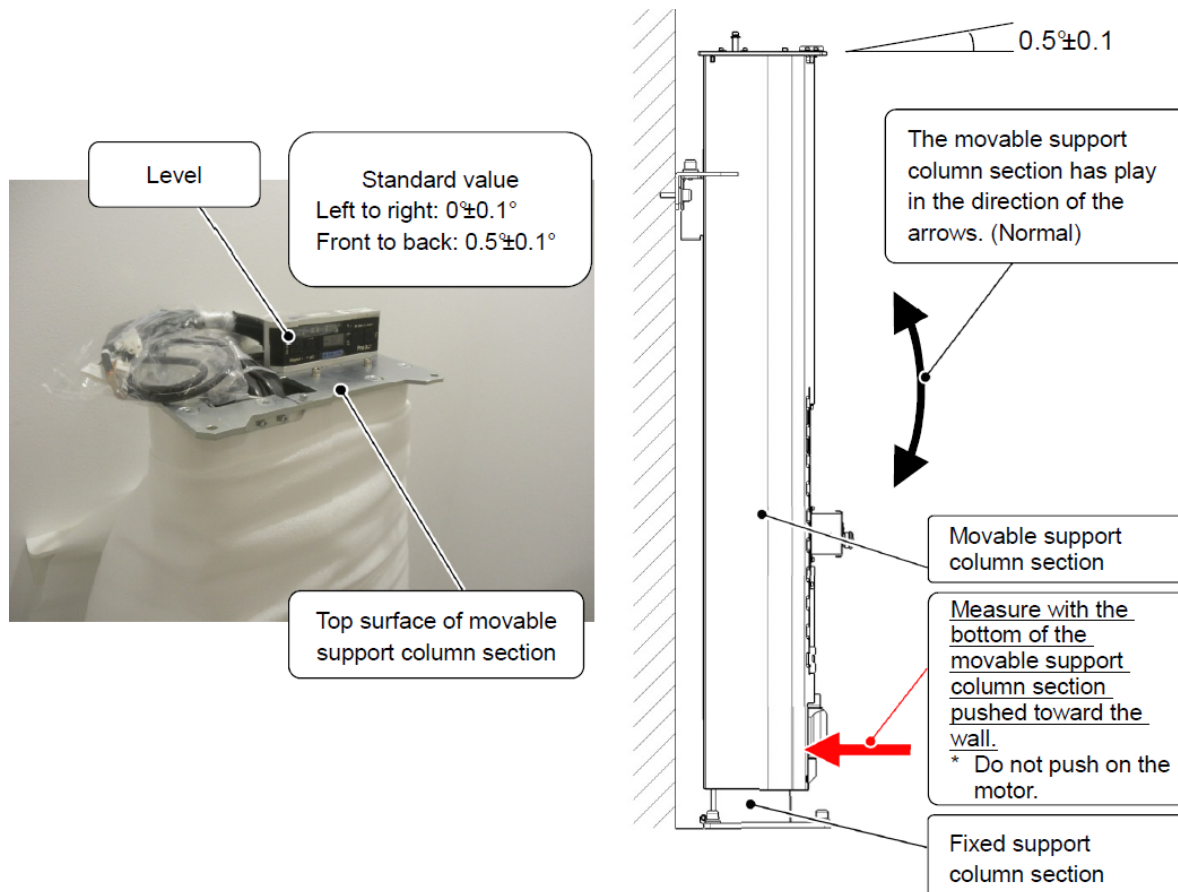
\* To ensure an allowance for adjustment after the angle is adjusted later, tighten the wall anchoring bracket in the middle of the connectors as shown in the following diagram.



## 4. Install Column (Initial Level Adjustment)

Place the level on the top surface of the movable support column section, and check the angle in the front to-back direction and the right-to-left direction.

\* The movable support column section has been designed to be stable when the main top section is attached. When checking horizontality, push the bottom of the movable support column section against the wall to make it the same state.



## 4. Install Column (Initial Level Adjustment)

Adjust horizontality to be between  $+0.4^\circ$  to  $+0.6^\circ$  as a guide. Adjust the angle by slipping the included adjustment shims under the base plate.

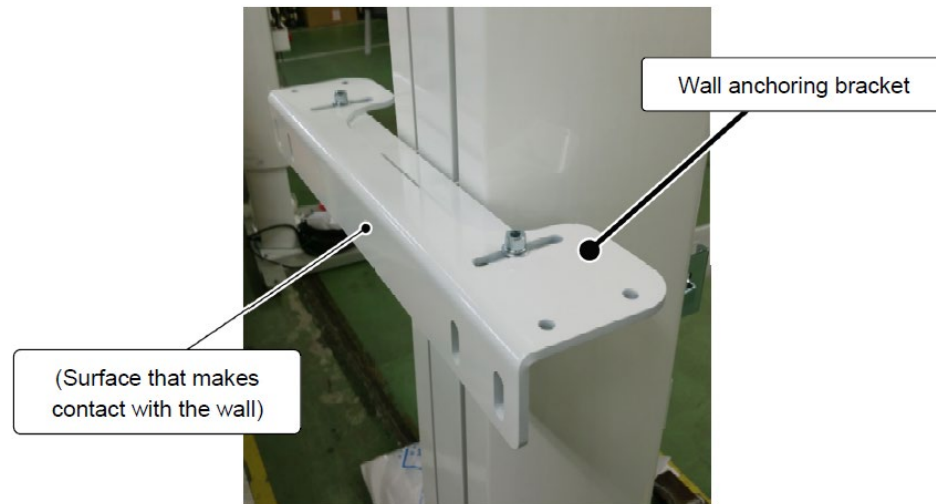


Temporarily anchor the wall anchoring bracket to the wall with the four anchor bolts or lag screws.

\* The following two types of lag screws are included. Select the screws according to the condition of the wall.

- 8×38 mm • 8×65 mm

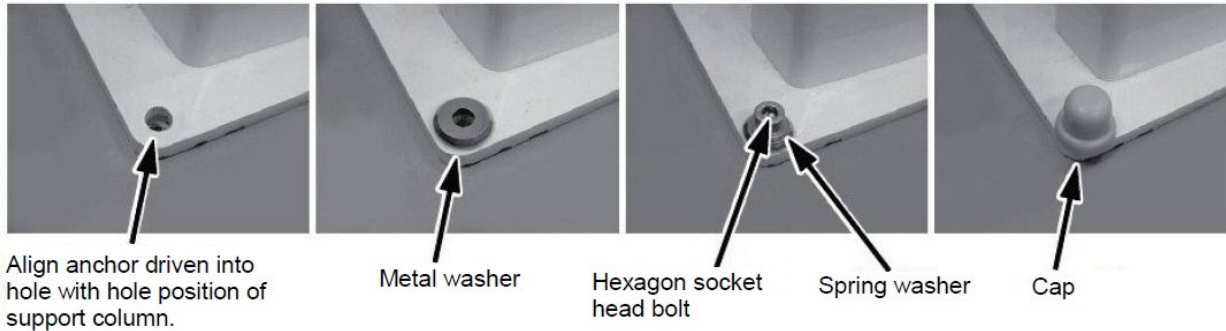
Tighten the screws while carefully checking that there is no deviation in the left-to-right angle.



## 4. Install Column

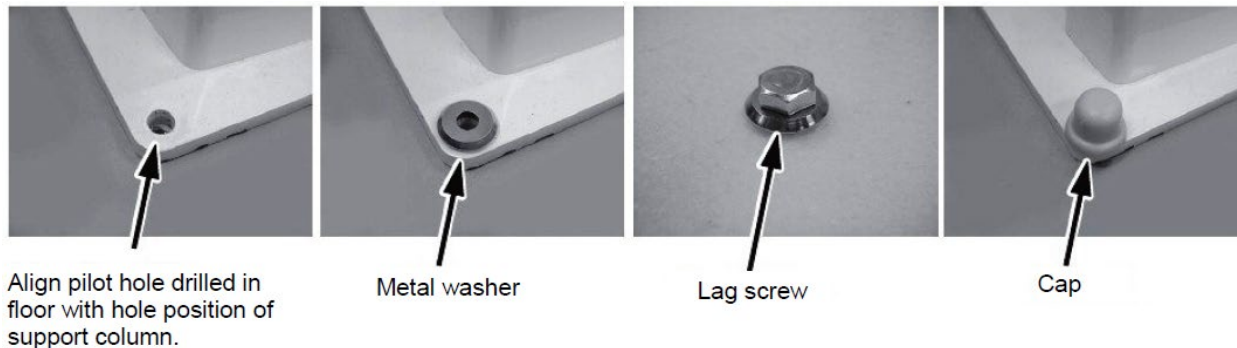
### Concrete Floor anchoring

- Determine the position to install the main unit, and drive the anchor bolts in the anchor hole positions.
- Anchor the support column to the floor with 4 hexagon socket head bolts.



### Non-Concrete Floor anchoring

- Determine the position to install the main unit, and drill pilot holes in the anchor hole positions.
- Anchor the support column to the floor with 4 lag screws.



## 5. Attaching the Main Top Section

Remove main top section and the wooden frame from the cardboard box.

**IMPORTANT:** This component is heavy and fragile. Strongly recommend 3 people, 2 to lift and hold and a third to attach bolts when mounting to column.

<Fasteners>

- M8 bolts (4 locations)

\* Be careful not to  
crush any wires!



## 5. Attaching the Main Top Section

Attach the main top section together with the wood frame to the support column section.

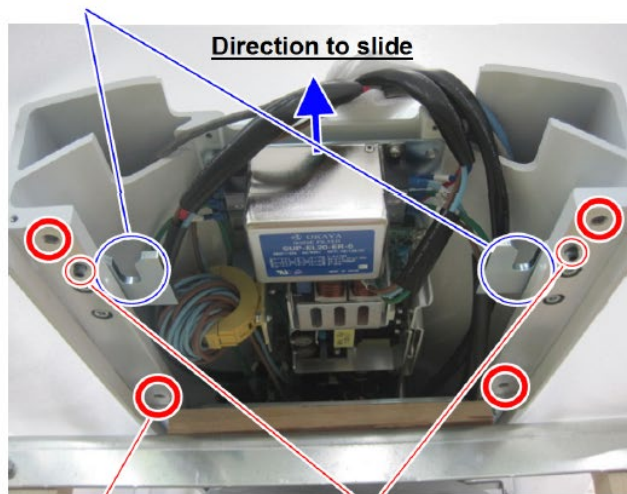
To do so, first set the main top section on the top surface of the support column section, and then slide the main top section toward the wall until the temporary hooks are hooked.

After the temporary hooks are hooked, tighten the bolts until the positioning pins (support column side) fit into the positioning holes on the top frame.

\* Tighten the bolts starting from the wall side.



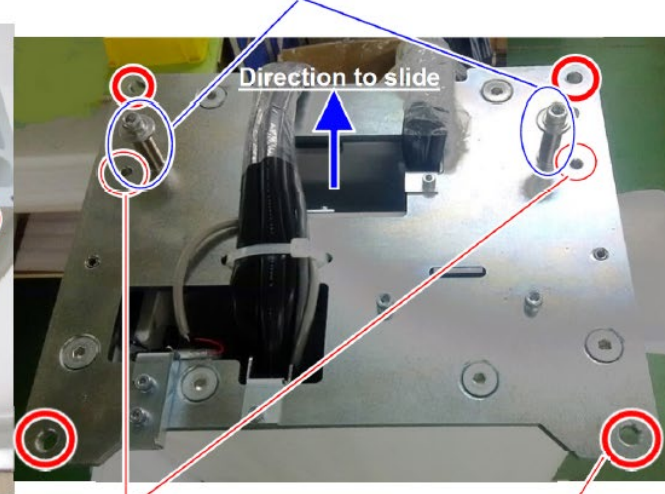
Temporary hooks (top side)



Location to fasten

Positioning pins (top side)

Temporary hooks (support column side)

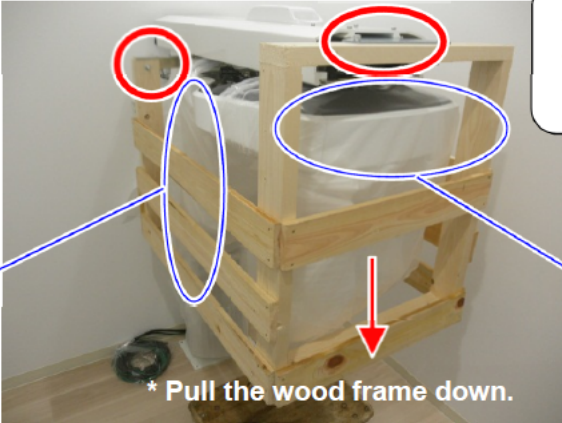


Positioning holes (support column side)

Location to fasten

# 5. Attaching the Main Top Section

Remove the wood frame.



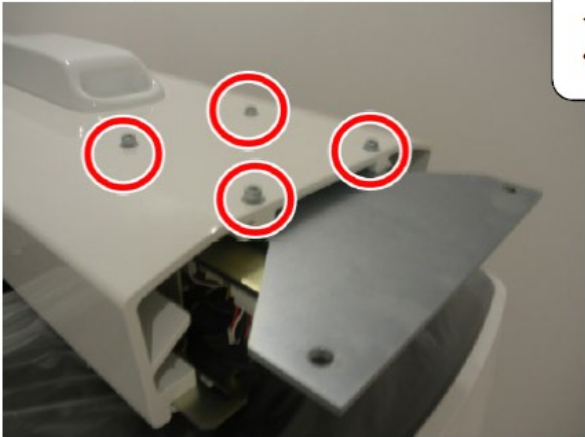
\* When removing the wood frame, be careful not to touch the support column section or X-ray tube head section!

<Fasteners>  
• M8 bolts and nuts  
(4 locations)

\* When removing the wood frame, be careful not to touch the edges of the main top section!

\* Pull the wood frame down.

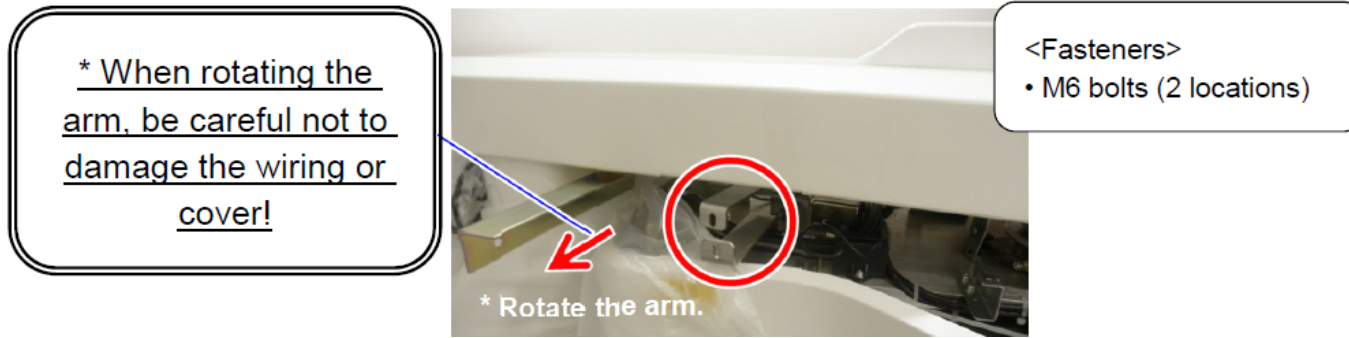
Remove the packing bracket (indicator lights section).



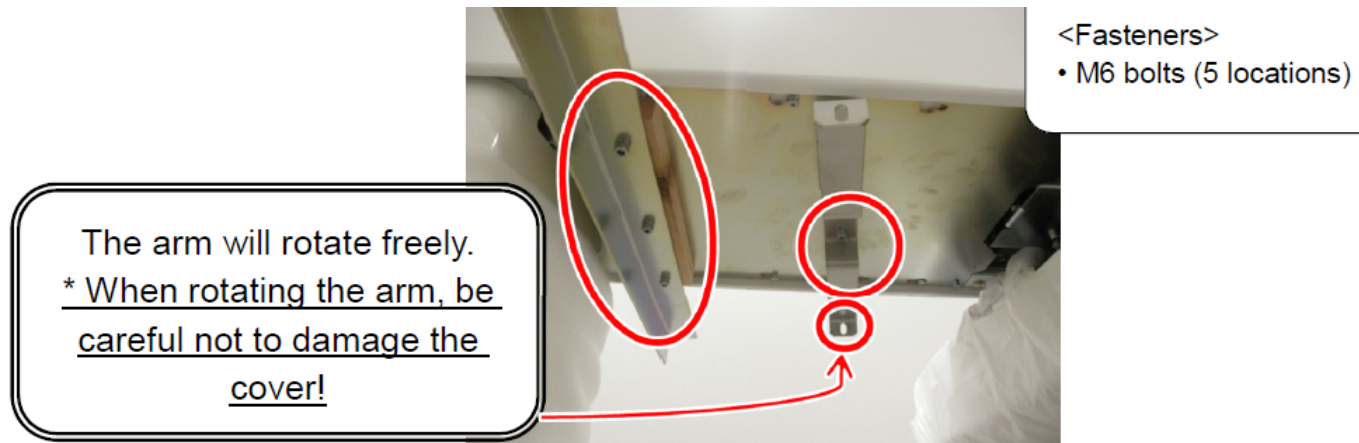
<Fasteners>  
• M6 bolts (4 locations)

## 5. Attaching the Main Top Section

Unscrew the screws on the packing bracket (to prevent rotation), and rotate the arm.



Remove the packing bracket (bottom of main top section).





## 5. . Attaching the Main Top Section

Remove the packing bracket (top of arm section).



<Fasteners>  
• M6 bolts (2 locations)

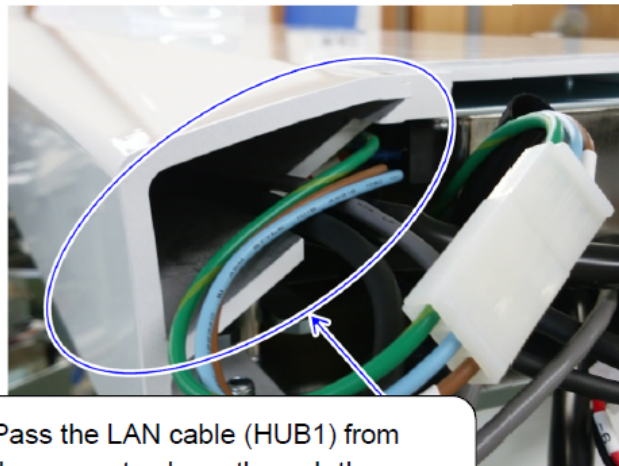
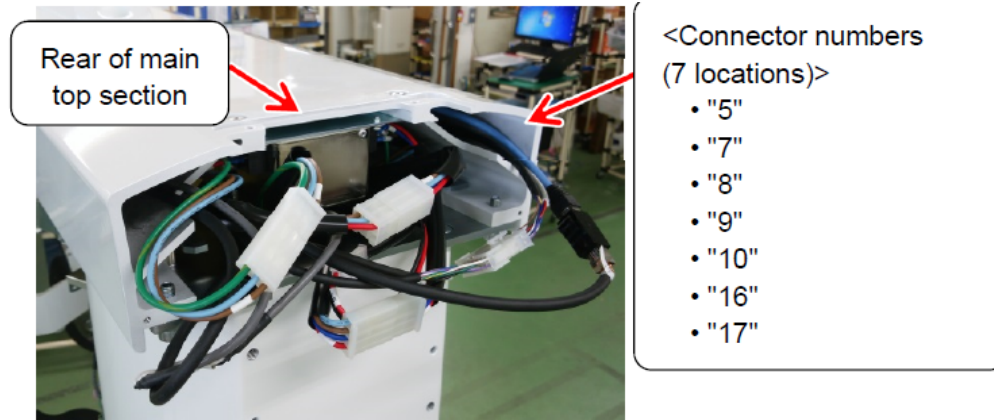
Remove packaging on the arm section. Be sure to remove the styrofoam for cushioning during transport inserted between the sensor cover and arm section cover.

Styrofoam inserted between arm and sensor section.

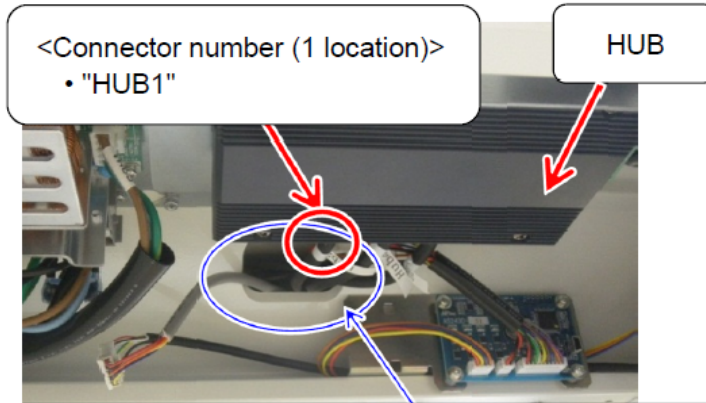


# 5. Attaching the Main Top Section

Connect the support column section and main top section connectors.



Pass the LAN cable (HUB1) from the support column through the space circled in blue.



The LAN cable from the support column comes out of this hole.

\* A plate with an access hole is actually attached, so access the cable from here.

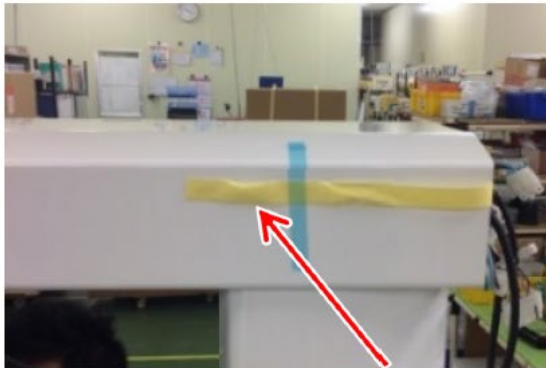
## 5. Attaching the Main Top Section

How to run the LAN cable (HUB1)

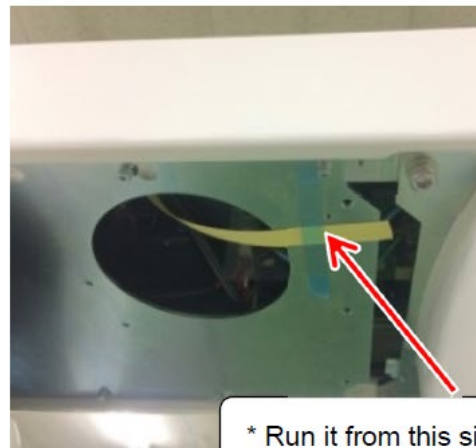
When running the LAN cable (HUB1), use the yellow bands attached to the equipment when it is in the packaging.



\* For the cephalometric type, first attach the cephalometric unit, and then perform this work at the same time as wiring the cephalometric unit side.



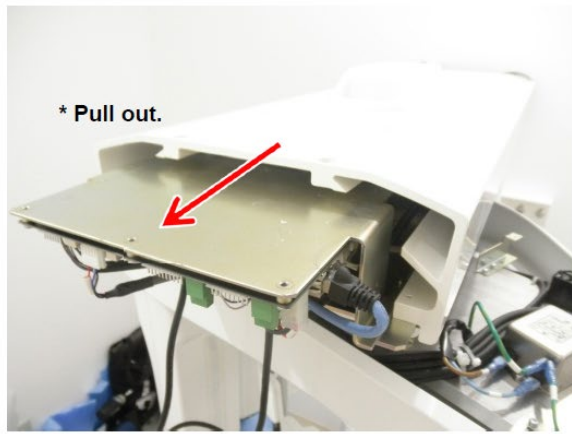
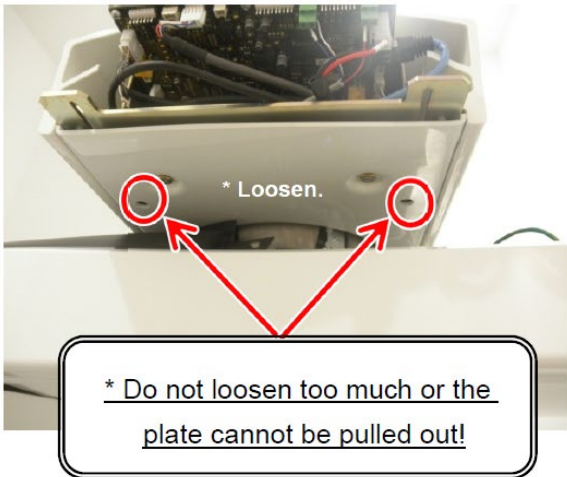
\* Fix the LAN cable (HUB1) to this side and run it from the access hole side.



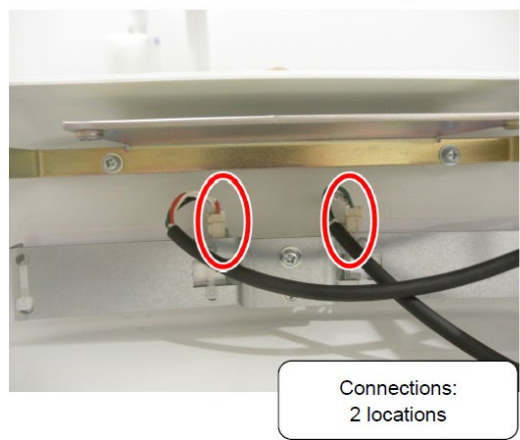
\* Run it from this side.

# 5. Attaching the Main Top Section

Loosen the fasten screws for the main control board mounting plate, and then pull it forward.

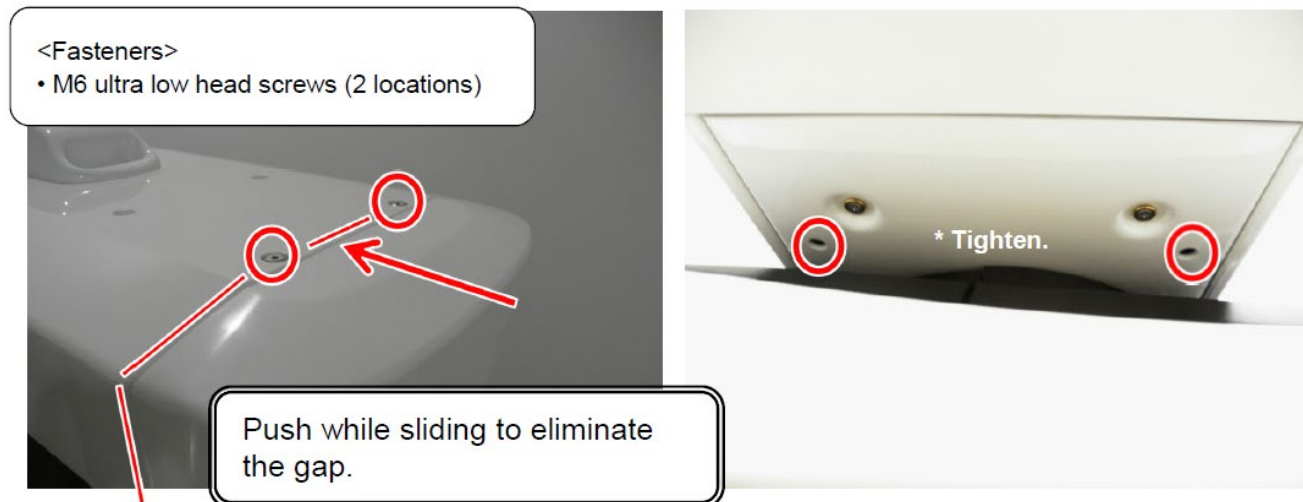


Connect the connectors to the indicator lights section, and then attach it to the main unit



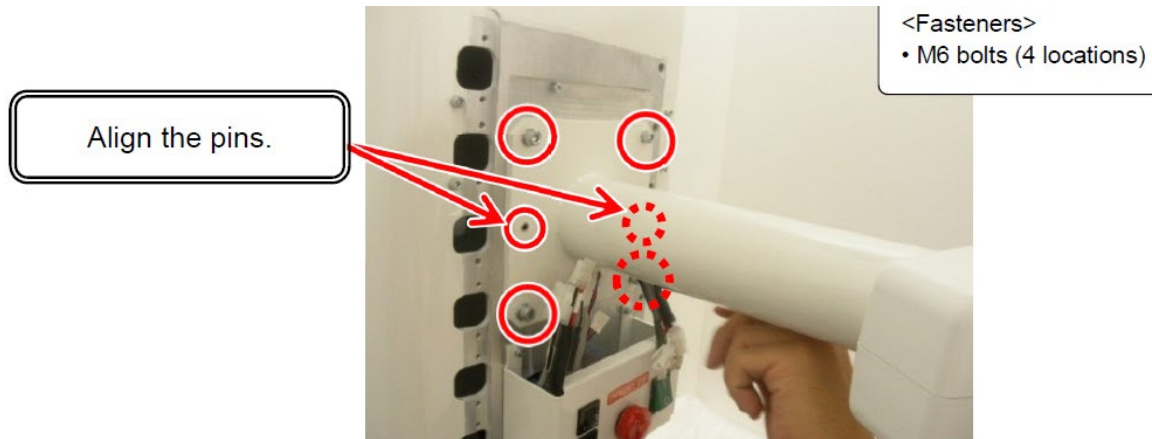
## 5. Attaching the Main Top Section

Slide the indicator lights section inside, and fasten it with screws. Close gently so that wires are not crushed and so that the indicator lights section is not slammed into the main unit damaging components.

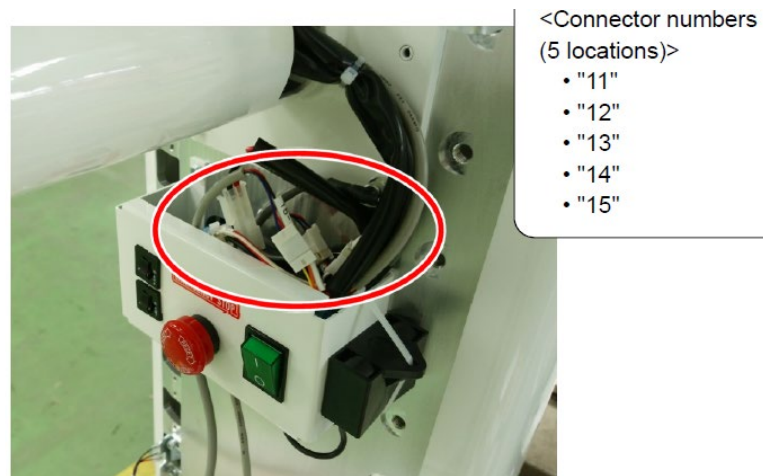


# 6. Attach Chinrest

Attach the chin rest section to the front of the support column section.



Connect the support column section and chin rest section connectors.

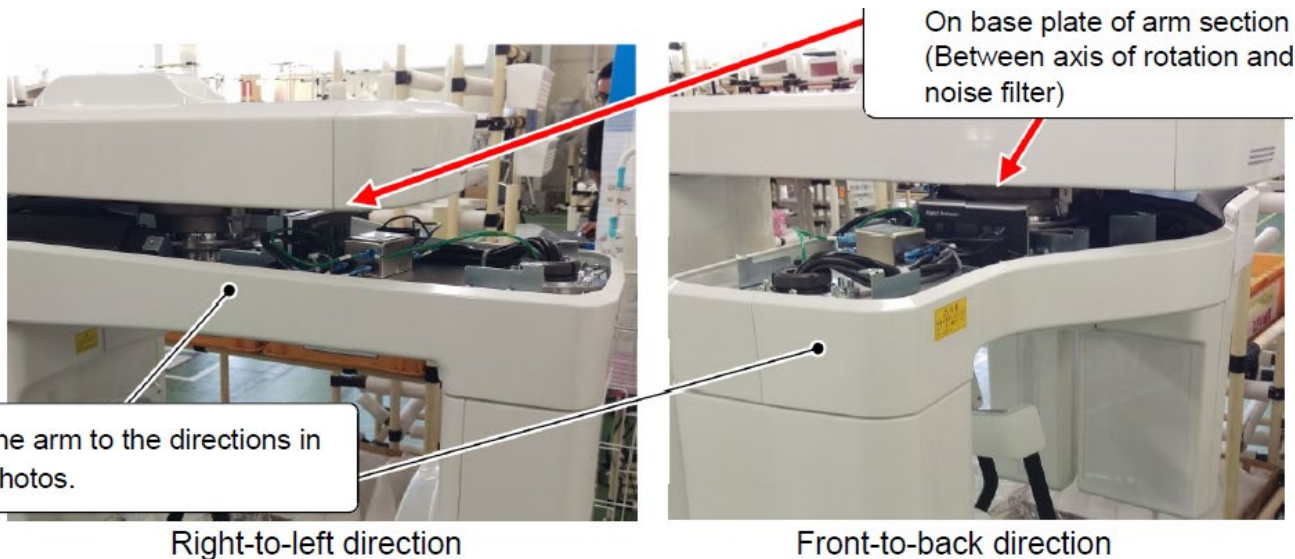


## 7. Final Leveling **Critical Adjustment**

Check and adjust horizontality of the arm section. Place the level on the base of the arm section, and check and adjust horizontality. Check and adjust the angle in the front-to-back direction and the right-to-left direction.

Place the level on the base section of the arm section (refer to the following photos), and check if horizontality is within the standard value in the front-to-back and right-to-left directions.

Standard value:  $\pm 0.1^\circ$

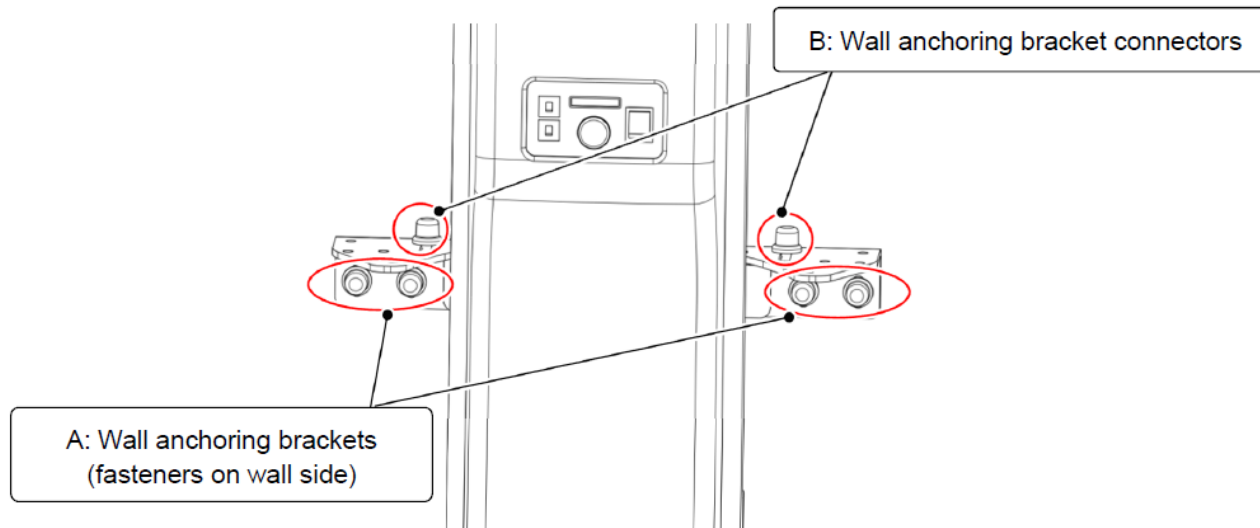


## 7. Final Leveling **Critical Adjustment**

Adjust horizontality if it does not satisfy the standard value. Adjust horizontality by adjusting the following two locations. Adjust the position of the wall anchoring bracket (wall side) if necessary.

A: Right-to-left direction: Wall anchoring bracket (fasteners on wall side)

B: Front-to-back direction: Wall anchoring bracket connectors



After you have completed making the adjustments, tighten and check the fastening screws for section A, section B, and the floor anchoring section.

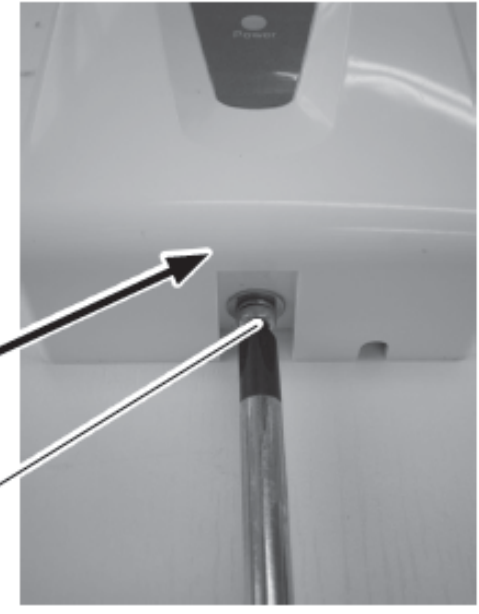


## 8. Install the Handswitch

Remove the Phillips pan-head machine screw from the underside of the hand switch box and remove the cover.

Hand switch box cover

Phillips pan-head machine screw  
(M4 x L8 with spring and flat washers)



Attach the wall-mounting bracket to the wall so that the hole lines up the metal plate

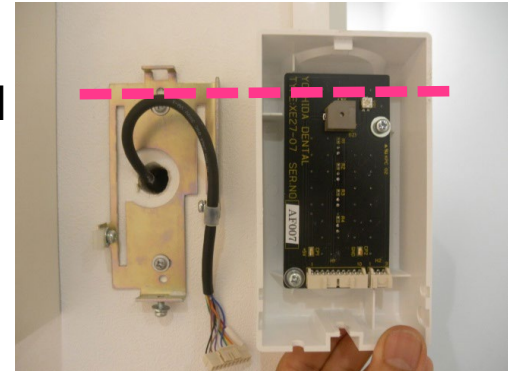
Secure the cable that runs up the wall to the wall-mounting bracket using a nylon

Nylon clip



## 8. Install the Handswitch

Run the cable loop so that it stays below the dotted line in the figure on the right (if it runs above the dotted line, it will interfere with the hand switch box circuit board and the cover may not sit flush against the wall).



Secure the hand switch cable to the wall-mounting bracket using a nylon clip. The cable should be secured roughly 3 and 3/8<sup>th</sup> inches from the connector.



## 8. Install the Handswitch

Plug the cable connectors into the hand switch box circuit board (Use connectors H1 and H2.)

Run the hand switch box cables so that they do not overlap when the cover is attached.



Attach the hand switch box cover taking care not to pinch cables by placing screw in the bottom.



Secure the hand switch mounting bracket somewhere close to the hand switch box



## 9. Connecting PC Cables

Connect the 2 Ethernet cables between the back of the unit and the Scanning PC.

- Ethernet connection “2” at the back of the X-ERA must go to PC Ethernet port marked “2 PAN Control”
- Ethernet connection “3” at the back of the X-ERA must go to PC Ethernet port marked “3 PAN Sensor”

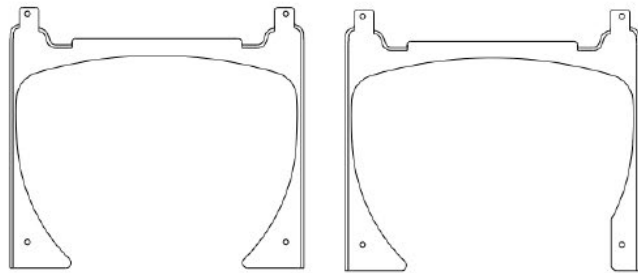
Connect X-ERA to the Mains AC Power.

# 10. Install Covers

## Attaching the bottom cover of the top

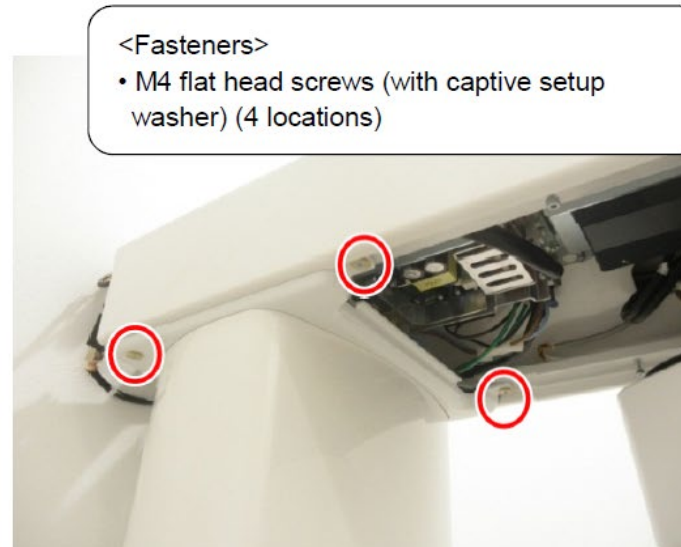
(1) Attach the bottom cover for the top (rear).

Use caution as the cephalometric type differs from the normal type.



Normal type

For cephalometric type



Attach the bottom cover for the top (middle).

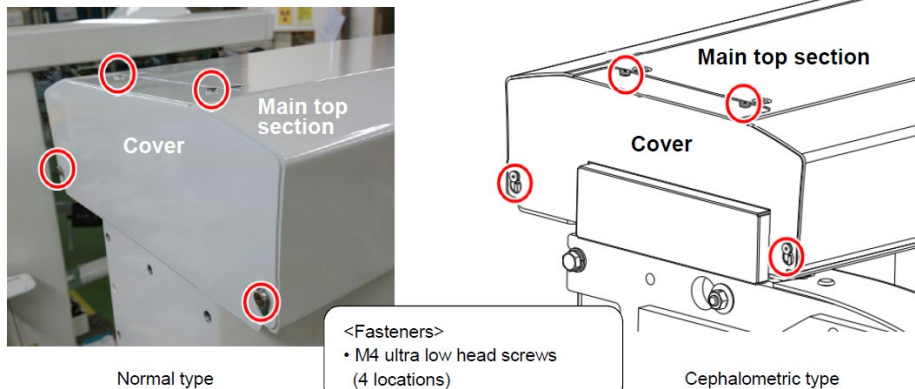
# 10. Install Covers

Attach the bottom cover for the top (middle).



Attach the rear cover for the top.

Be careful not to crush the wiring when attaching the cover.



# 10. Install Covers

## Attaching the top cover of the arm section

Attach the cover for the arm section.



<Fasteners>

- M4 ultra low head screws (4 locations)

## Attaching the cable cover

Attach the cable cover.



<Fasteners>

- M4: 3-piece SEMS screws (2 locations)

# 10. Install Covers

## Attaching the front cover of the support column

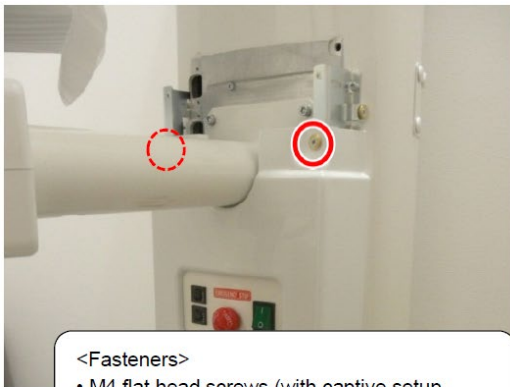
To attach the front cover (bottom) for the support column, turn ON the power supply and raise the support column.

Attach 2 cover stays.



<Fasteners>  
• M4 bolts (4 locations)

Attach the front cover for the support column.



<Fasteners>  
• M4 flat head screws (with captive setup washer) (2 locations)



<Fasteners>  
• M4 ultra low head screws (2 locations)

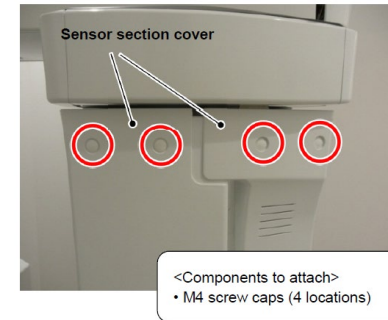
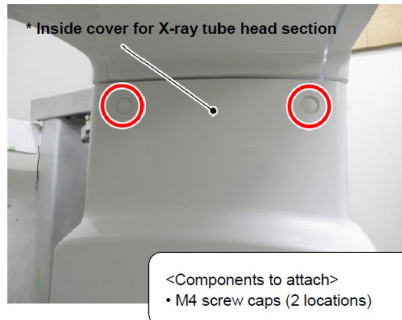
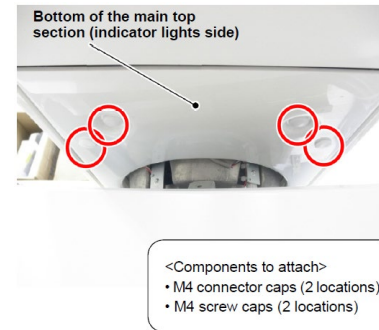
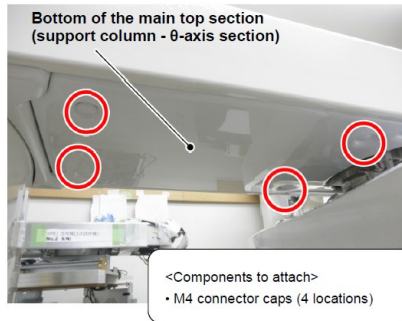
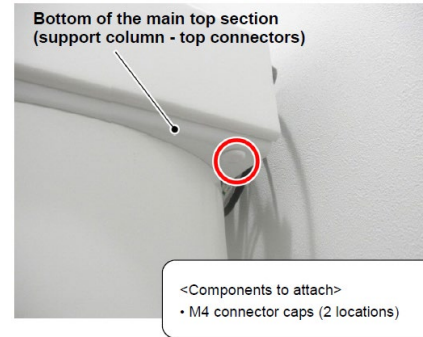
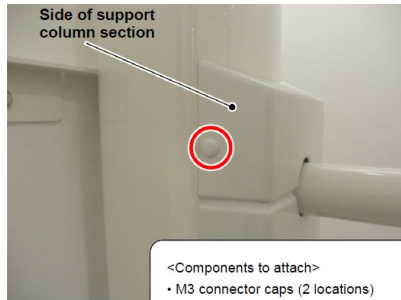


<Fasteners>  
• M3 flat head screws (with captive setup washer) (2 locations)



# 10. Install Covers

Attach the connector caps and screw caps covers.



***Continue with standard installation procedure from  
installation manual***