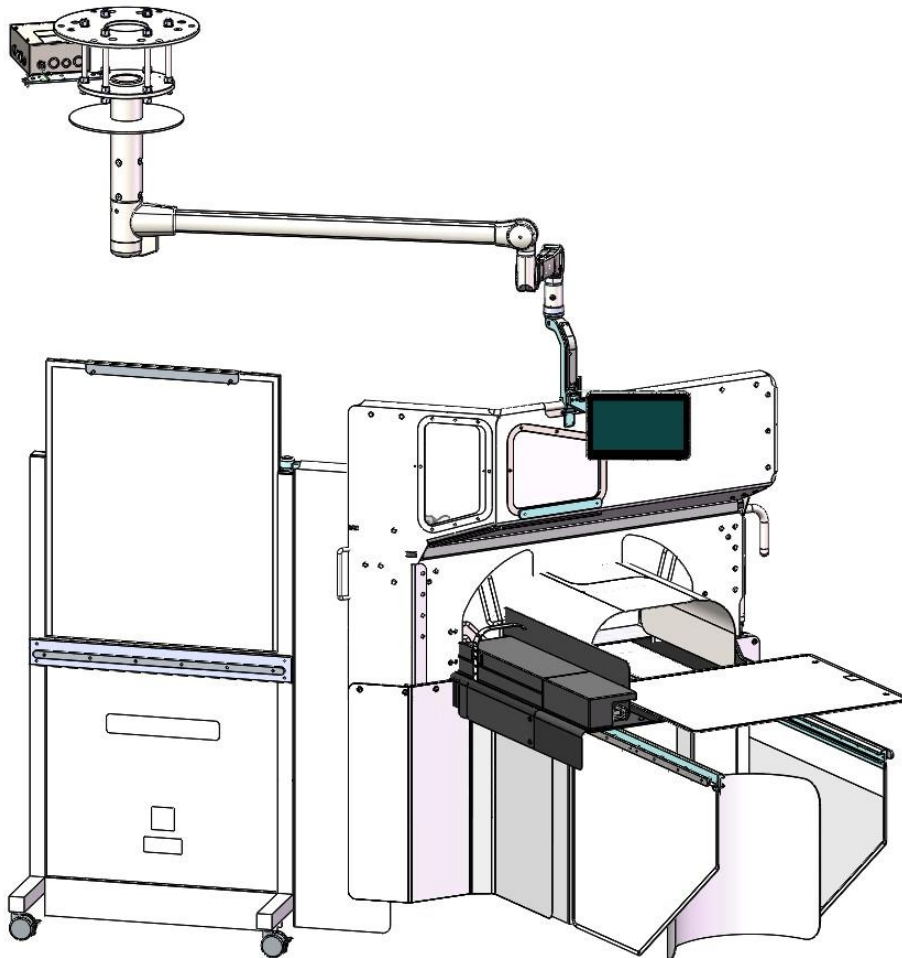




Protego[®] AFCMS OEM Suspension System (Adapted Fixed Ceiling Mounted System)



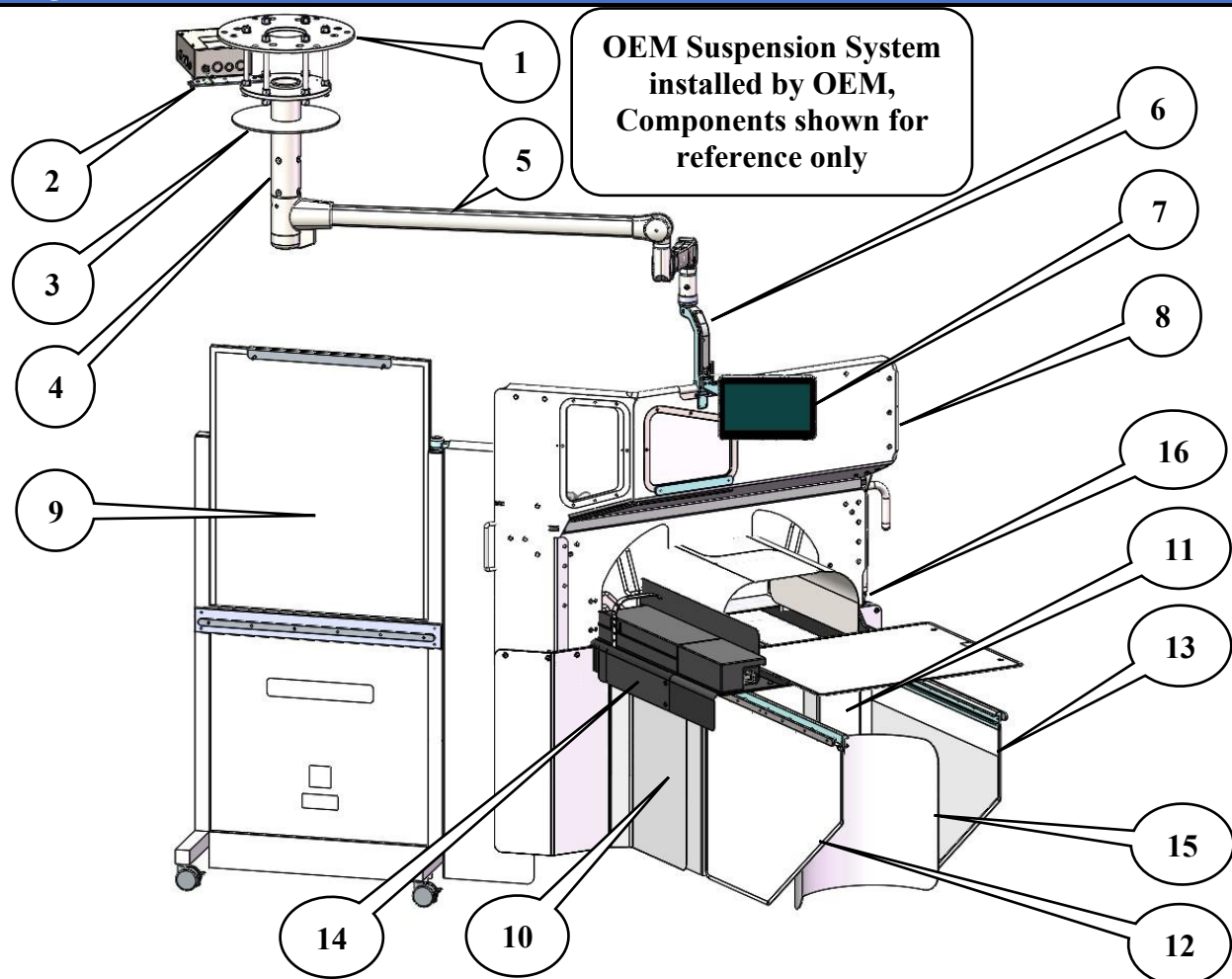
Installation Guide

The text of this manual was originally written, approved, and published by the manufacturer in English. The information and images in this document are proprietary to IDI and are only for use for and by IDI representatives or their Agents.

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1. Protego Product Picture - Main Assemblies Installation



2. Protego Product BOM, Main Assemblies Philips, Siemens, GE, Toshiba with varying variations

- Item 1: Interface Plate – **OEM provided and installed**
- Item 2: A800-0500 Power Box Assy (All), IDI Boxed
- Item 3: Cover or Disc – **OEM provided and installed**
- Item 4: Drop Tube – **OEM provided and installed**
- Item 5: Central Axis Horizontal & Spring Arm(s) – **OEM provided and installed**
- Item 6: IDI Shaft Hub Extension - Varies (All), IDI Boxed
- Item 7: A800-0327 Tablet Mount Kit (All), IDI Boxed
- Item 8: A800-0185 Protego Main Shield (All), IDI Boxed
- Item 9: A800-0155 Mobile Shield (All), Strapped to Pallet
- Item 10: Wing Shield, Right, A800-0305 (Philips), A800-0277 (Siemens Artis), A800-0422 (Siemens Icono/Toshiba), A800-0430 (GE), On Item 9 Rail
- Item 11: Wing Shield, Left, A800-0306 (Philips/Siemens Icono/Toshiba), A800-0278 (Siemens Artis), A800-0428 (GE Innova), IDI Boxed, On Item 9 Rail
- Item 12: A800-0171 Table Side Shield, Right, (Siemens/Philips/Toshiba), A800-0421 (GE)
- Item 13: A800-0171 Table Side Shield, Left, (Siemens/Philips/Toshiba), A800-0421 (GE)
- Item 14: A610-0338 Patient Shield Kit (Contains: Arm/Ext Board with all needed patient shielding panels), All, IDI Boxed
- Item 15: Pedestal Shield, Z800-0226 (Philips), A800-0200 (Siemens Artis),

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A800-0450 (Siemens Icono), Z800-0424 (Toshiba), A800-0425 (GE Innova),
In Item 14 box or IDI boxed

Item 16: A610-0375 Left Arm Board (Philips/Siemens Icono/Toshiba/GE Innova) A610-0378
(Siemens Artis), IDI Patient Box

3. Protego Accessories & Disposables, not shown

X800-0147 – Radial Arm Pad, 0.25mm Pb EQ (12"x 16"), Box 15 pouches – 2 Boxes provided.

X800-0251 – Femoral Pad, 0.25mm Pb EQ (12" x 17"), Box 15 pouches – 2 Boxes provided.

A800-0310 – ProKit, Box 25 pouches – 2 Boxes provided.

A800-0501 – Training Kit, Disposable, IDI Boxed

Optional: A610-0372 Kit, Metric 7 in Accy Rail: (Siemens/Philips/Toshiba),
A610-0382 (GE), Not Shown, IDI Patient Box

Optional: A610-106 Articulating Radiation Shield (Philips/Siemens/Toshiba/GE)

Optional: A610-0425 RaySafe Kit; Containing K000-0360 Kit, Rad Real-Time Dosimetry,
C000-1794 Stand, Monitor
J000-0458 Battery, 3v, 2x

Other Accessories and Disposables may be added or changed for future use and improvements.

4. Other Protego features

- 4.1. All Protego shield panels rated for 0.50mm Pb EQ.
- 4.2. All Arm Boards panels rated for 0.50mm Pb EQ.
- 4.3. All Patient shield panels from Patient Shield Kit are rated for 0.25mm - 0.50mm Pb EQ.
- 4.4. Magnet 180 degree turn knob locks for right and left rail slides. It is used to connect Main Shield to table rails.
- 4.5. Lower Right- and Left-Wing Shields can slide 8" inches and lock in seven positions with a plunger lock for variable patient waist shield barrier alignments.
- 4.6. Articulating Arm can be adjusted to counterbalance Main Shield. The 3 rotational arm connection points must have one stop at each location preventing arm rotating over 360 degrees. All Suspension Articulating Arm adjustments to be specified by OEM per OEM Arm Suspension Manual.

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5. Site Installation Instructions

5.1. **Crate Unpacking performed by crate shipping company staff or IDI Rep. Installer**

5.1.1. The boxed crate(s) unloaded, and the Protego System has been removed from crate and all components including boxes are at a designated location for installation in Lab Room.

5.2. **IDI Representative or OEM Lab Installation:**

5.2.1. IDI Rep. or OEM tools needed: Multimeter, Utility Knife for boxes, Allen Wrench sets for English and Metric, 9” Torpedo Level, Fish Tape (Draw wire), Pliers, Philip Head medium screwdriver.

5.2.2. Mobile Shield (**Item 9**), keep this wrapped in plastic. Patient Shield Kit, keep boxed for future patient procedure use to be set up by IDI Sales Rep.



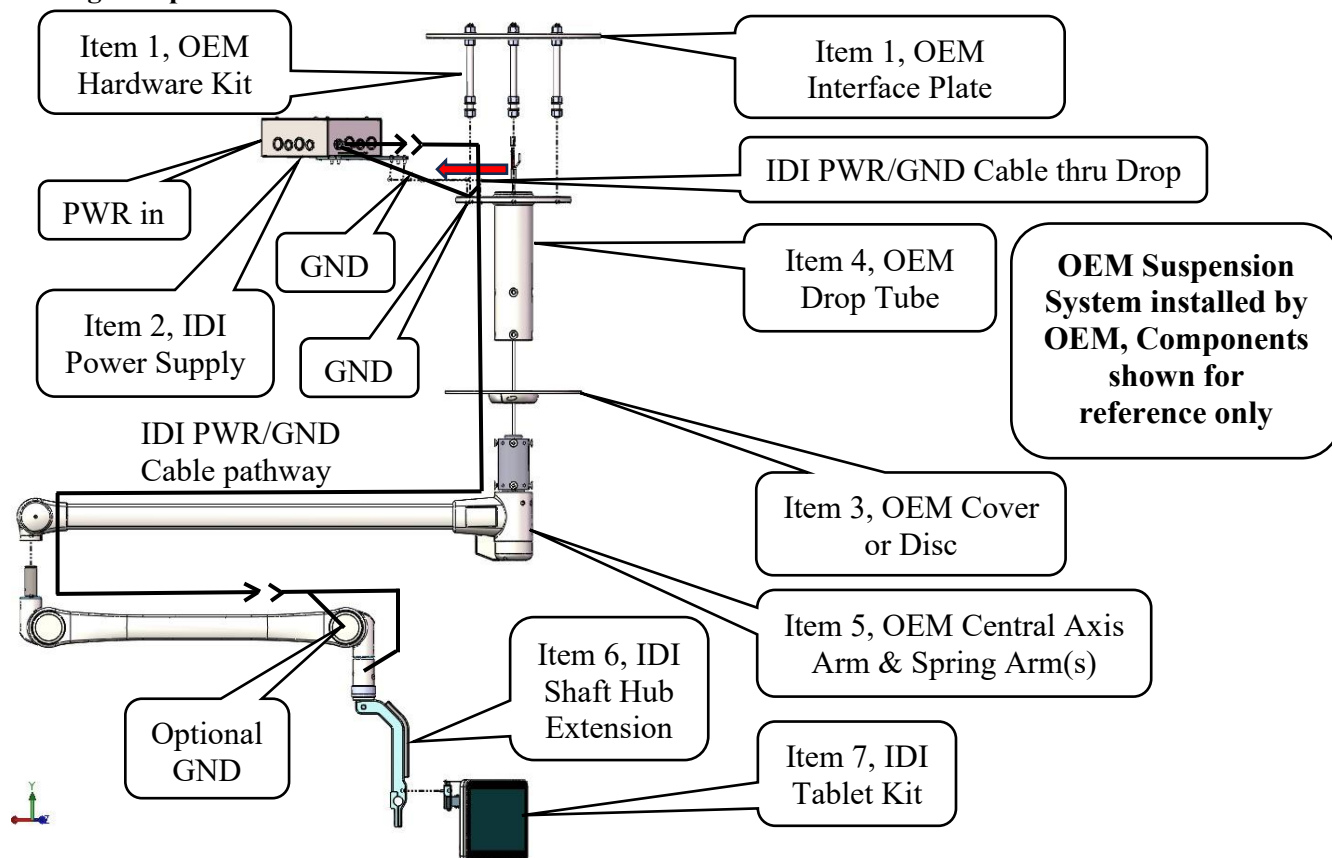
Keep plastic wrap
on for later patient
procedural use
removal

5.2.3. Move Mobile Shield (**Item 9**), remaining table shields and disposables to room for Protego Setup & Operator and staff Procedure review per following documents by IDI sales representative.

- L800-0512 User Manual, Protego FCMS
- L800-0513 Q-Card, Protego FCMS – **Attach to Mobile Shield rail**

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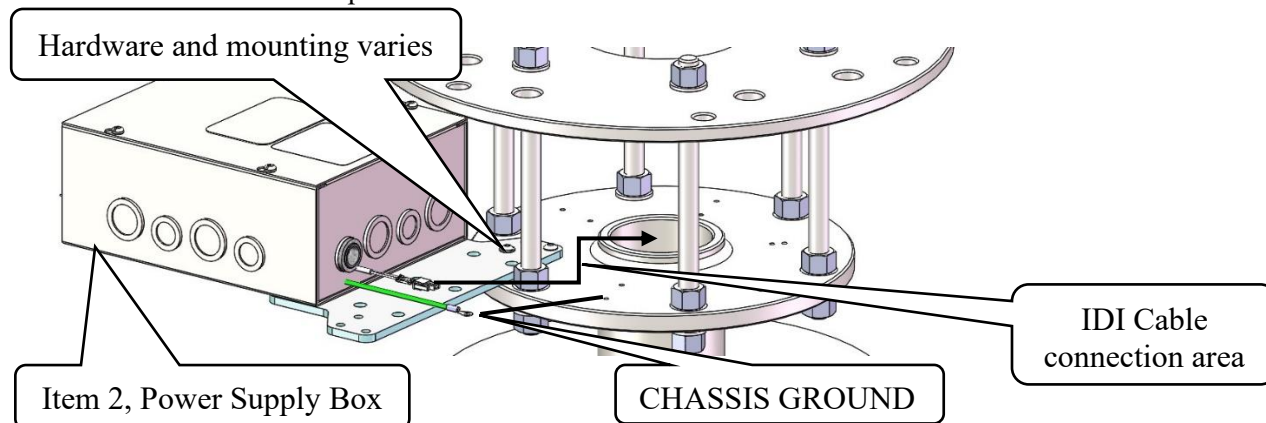
5.3. Ceiling Components Overview.



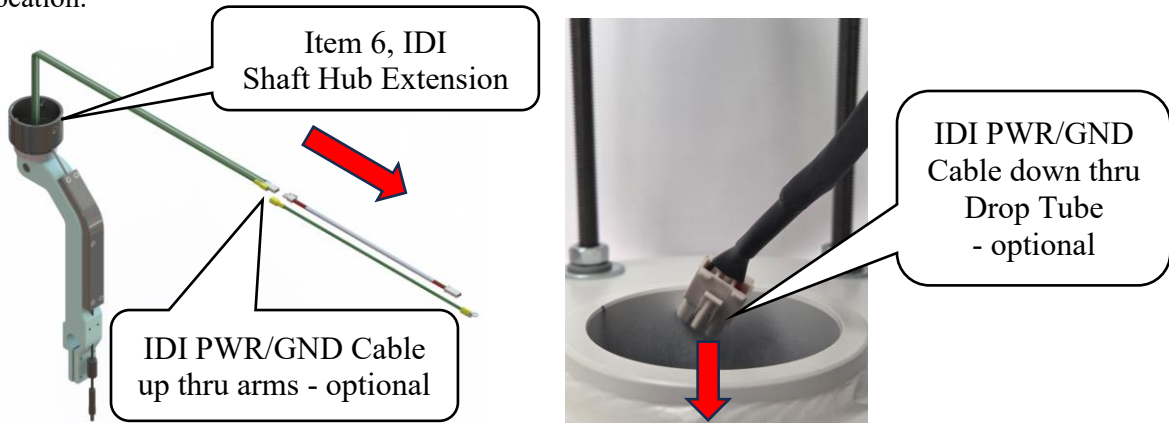
WARNING: Prior to installation and servicing the Protego Electrical Enclosure located in the ceiling, the 120V circuit breaker at the system's site supplying power to the Electrical Enclosure must be switched to the OFF position.

5.3.1. It is up to the OEM to install all components that make up their ceiling suspension and to connect and run the IDI provided Shaft Hub Extension and power and ground cables through OEM ceiling suspension. Either the Site Electrician, OEM or the IDI rep. can add the IDI Power Box and test power throughput shown in Steps below.

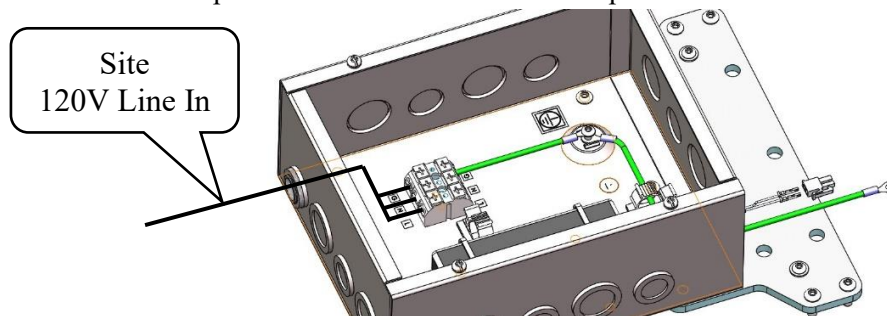
5.3.2. Installing Power Supply Box (Item 2). Mounting the Power Box end plate can vary per OEM hole location options on the Interface Plate or the Drop Tube Plate. Mount as needed. Ground the GND cable from the Power Box to a plate location.



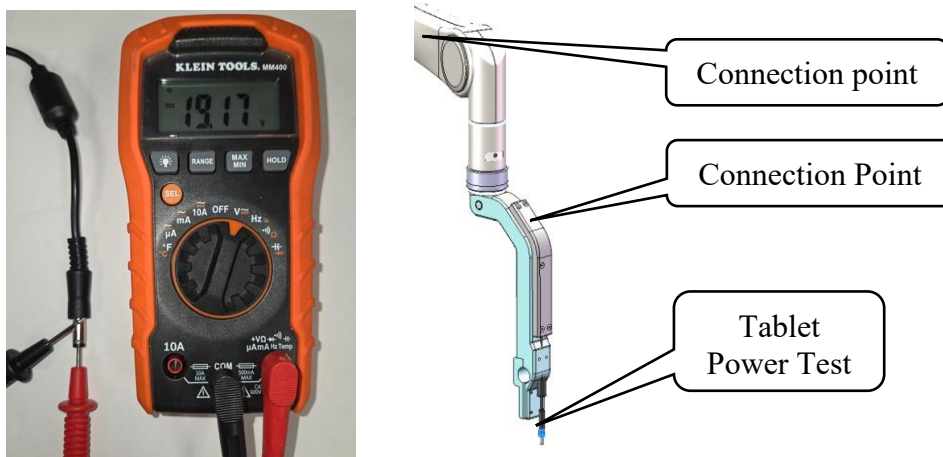
5.3.3. IDI Shaft Hub Extension and IDI PWR/GND Cable run through the OEM Suspension System (**Item 6**). Open up OEM Arm Covers to feed cable thru to ceiling plates. Feed the cable through OEM Spring Arm end when mounting Item 6. Use provided hardware to mount IDI Shaft Hub. Ground the GND Cable to the spring arm where possible if required. Feed IDI PWR/GND Cable (21ft) either down drop tube or up from suspension arms with fish tape if needed, then connect PWR/GND to IDI Shaft Hub cables in Spring Arm. Connect the Ground Wire going through Drop Tube to ceiling plate location.



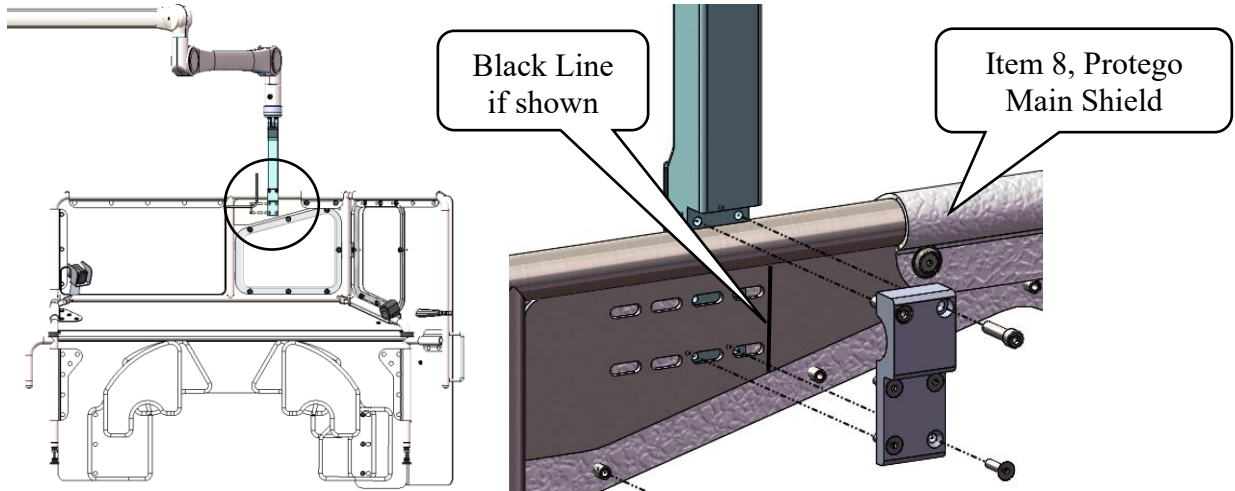
5.3.4. Site Electrician to connector 120V power to 4x2 Utility Box at end of Power Supply Box (**Item 2**) if possible before IDI Rep's or OEM leave the site. IDI Rep's or OEM to evaluate Power output.



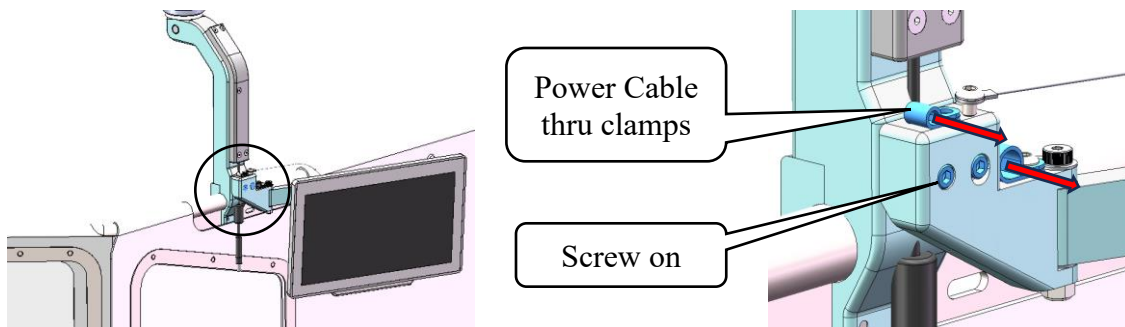
5.3.5. Cable DC voltage test. Using a Multimeter, evaluate the tablet power cable end at extension bracket location for 19 vdc current (18.8-19.3v). If good, continue with installation. If no voltage is shown, then cable has a connection issue. Testing connection points – evaluate the Spring Arm Hub in OEM spring arm connect for 19v up to Power Supply Box . Evaluate continuity from there down to the Tablet power plug. For issues, call IDI tech Support if needed (978-829-0009).



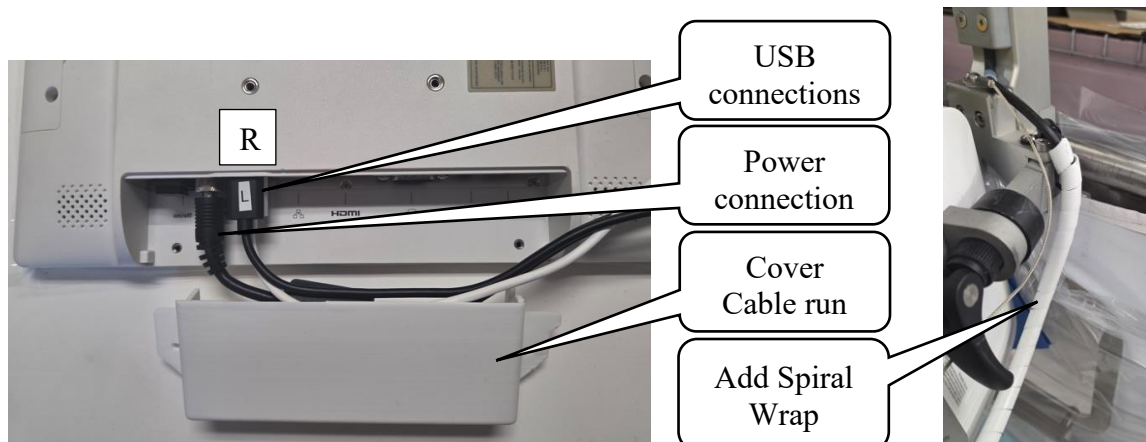
- 5.3.6. Connecting Protego Main Shield, **keep bag attached (Item 8)**. The Main Shield must be supported or lifted to spring arm extension bracket and mounted with the six screws using mount plate, align plate with black line for set position.



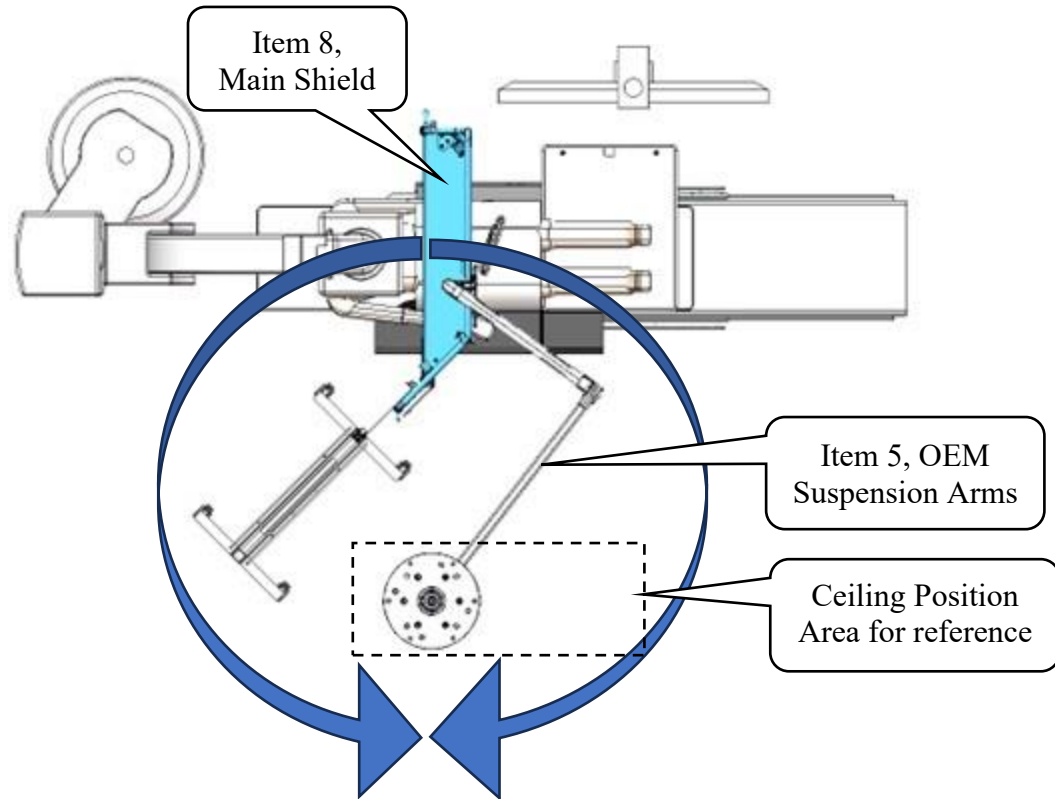
- 5.3.7. Connecting Tablet Mount Kit (**Item 7**). Screw on to extension bracket with 2x screws provided. Run Camera and Power cables thru cable grommets.



- 5.3.7.1. Plug in Power and 2x Camera connections to tablet. Power on tablet, wait for camera to come on, touch screen for camera split screen, check camera side viewing are right, if not reverse the camera's USB connections to tablet, try again. If there is still issue – one of the camera drivers will need to be deleted on Tablet – Settings/Devices/Camera. Attach white input cover.



5.3.8.OEM Central Axis Horizontal & Spring Arm(s) Positioning (**Item 5**). Add one rotational stop at each of the 3 rotational connections unless electrical slip ring is used at a rotation point. Arm stop positions can vary depending on equipment and ceiling suspension mount locations. It's recommended that the IDI representative advise on final stop locations. Note: Protego Main Shield (in Blue) shown at location for patient procedure.



5.3.9.**OEM Fixed Ceiling Mount with Protego Main Shield Completed.** All further steps to be completed by IDI Sales Representative before Staff Procedural Training.

5.3.10. **Attention: Refer to L800-0512 Operator Manual, Protego FCM for full table installation instructions.**

6. Instructions for Operation & Usage

6.1. For Protego FCM instructions for proper usage with patient shielded drapes and disposable sterile products, please see L800-0512 User Manual, Protego FCM.

7. General Cleaning

7.1. For Protego FCM instructions for proper cleaning, please see L800-0512 User Manual, Protego FCM.