

GE Healthcare

Accessory Interface Hardware Installation Manual



5321858-1EN

Rev 4

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LANGUAGE

ПРЕДУПРЕЖДЕНИЕ (BG)	<ul style="list-style-type: none">• Това упътване за работа е налично само на английски език.• Ако доставчикът на услугата на клиента изиска друг език, задължение на клиента е да осигури превод.• Не използвайте оборудването, преди да сте се консултирали и разбрали упътването за работа.• Неспазването на това предупреждение може да доведе до нараняване на доставчика на услугата, оператора или пациент в резултат на токов удар или механична или друга опасност.
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VÝSTRAHA (CS)	<ul style="list-style-type: none">• Tento provozní návod existuje pouze v anglickém jazyce.• V případě, že externí služba zákazníkům potřebuje návod v jiném jazyce, je zajištění překladu do odpovídajícího jazyka úkolem zákazníka.• Nesnažte se o údržbu tohoto zařízení, aniž byste si přečetli tento provozní návod a pochopili jeho obsah.• V případě nedodržování této výstrahy může dojít k poranění pracovníka prodejního servisu, obslužného personálu nebo pacientů vlivem elektrického proudu, respektive vlivem mechanických či jiných rizik.
ADVARSEL (DA)	<ul style="list-style-type: none">• Denne servicemanual findes kun på engelsk.• Hvis en kundes tekniker har brug for et andet sprog end engelsk, er det kundens ansvar at sørge for oversættelse.• Forsøg ikke at servicere udstyret medmindre denne servicemanual har været konsulteret og er forstået.• Manglende overholdelse af denne advarsel kan medføre skade på grund af elektrisk, mekanisk eller anden fare for teknikeren, operatøren eller patienten.
WAARSCHUWING (NL)	<ul style="list-style-type: none">• Deze onderhoudshandleiding is enkel in het Engels verkrijgbaar.• Als het onderhoudspersoneel een andere taal vereist, dan is de klant verantwoordelijk voor de vertaling ervan.• Probeer de apparatuur niet te onderhouden voordat deze onderhoudshandleiding werd geraadpleegd en begrepen is.• Indien deze waarschuwing niet wordt opgevolgd, zou het onderhoudspersoneel, de operator of een patiënt gewond kunnen raken als gevolg van een elektrische schok, mechanische of andere gevaren.

WARNING (EN)	<ul style="list-style-type: none">• This Service Manual is available in English only.• If a customer's service provider requires a language other than English, it is the customer's responsibility to provide translation services.• Do not attempt to service the equipment unless this service manual has been consulted and is understood.• Failure to heed this warning may result in injury to the service provider, operator, or patient, from electric shock or from mechanical or other hazards.
HOIATUS (ET)	<ul style="list-style-type: none">• Käesolev teenindusjuhend on saadaval ainult inglise keeles.• Kui klienditeeninduse osutaja nõuab juhendit inglise keelest erinevas keeles, vastutab klient tõlketeenuse osutamise eest.• Ärge üritage seadmeid teenindada enne eelnevalt käesoleva teenindusjuhendiga tutvumist ja sellest aru saamist.• Käesoleva hoiatuse eiramine võib põhjustada teenuseosutaja, operaatori või patsiendi vigastamist elektrilöögi, mehaanilise või muu ohu tagajärjel.
VAROITUS (FI)	<ul style="list-style-type: none">• Tämä huolto-ohje on saatavilla vain englanniksi.• Jos asiakkaan huoltohenkilöstö vaatii muuta kuin englanninkielistä materiaalia, tarvittavan käännöksen hankkiminen on asiakkaan vastuulla.• Älä yritä korjata laitteistoa ennen kuin olet varmasti lukenut ja ymmärtänyt tämän huolto-ohjeen.• Mikäli tätä varoitusta ei noudateta, seurauksena voi olla huoltohenkilöstön, laitteiston käyttäjän tai potilaan vahingoittuminen sähköiskun, mekaanisen vian tai muun vaaratilanteen vuoksi.
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<p>FIGYELMEZTETÉS (HU)</p>	<ul style="list-style-type: none"> • Ezen karbantartási kézikönyv kizárólag angol nyelven érhető el. • Ha a vevő szolgáltatója angoltól eltérő nyelvre tart igényt, akkor a vevő felelőssége a fordítás elkészítése. • Ne próbálja elkezdni használni a berendezést, amíg a karbantartási kézikönyvben leírtakat nem értelmezték. • Ezen figyelmeztetés figyelmen kívül hagyása a szolgáltató, működtető vagy a beteg áramütés, mechanikai vagy egyéb veszélyhelyzet miatti sérülését eredményezheti.
<p>AÐVÖRUN (IS)</p>	<ul style="list-style-type: none"> • Þessi þjónustuhandbók er eingöngu fánleg á ensku. • Ef að þjónustuveitandi viðskiptamanns þarfnast annas tungumáls en ensku, er það skylda viðskiptamanns að skaffa tungumálapjónustu. • Reynið ekki að afgreiða tæknið nema að þessi þjónustuhandbók hefur verið skoðuð og skilin. • Brot á sinna þessari aðvörun getur leitt til meiðsla á þjónustuveitanda, stjórnanda eða sjúklings frá raflosti, vélrænu eða öðrum áhættum.
<p>AVVERTENZA (IT)</p>	<ul style="list-style-type: none"> • Il presente manuale di manutenzione è disponibile soltanto in inglese. • Se un addetto alla manutenzione richiede il manuale in una lingua diversa, il cliente è tenuto a provvedere direttamente alla traduzione. • Si proceda alla manutenzione dell'apparecchiatura solo dopo aver consultato il presente manuale ed averne compreso il contenuto. • Il non rispetto della presente avvertenza potrebbe far compiere operazioni da cui derivino lesioni all'addetto, alla manutenzione, all'utilizzatore ed al paziente per folgorazione elettrica, per urti meccanici od altri rischi.
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OSTRZEŻENIE (PL)	<ul style="list-style-type: none">• Niniejszy podręcznik serwisowy dostępny jest jedynie w języku angielskim.• Jeśli dostawca usług klienta wymaga języka innego niż angielski, zapewnienie usługi tłumaczenia jest obowiązkiem klienta.• Nie próbować serwisować wyposażenia bez zapoznania się i zrozumienia niniejszego podręcznika serwisowego.• Niezastosowanie się do tego ostrzeżenia może spowodować urazy dostawcy usług, operatora lub pacjenta w wyniku porażenia elektrycznego, zagrożenia mechanicznego bądź innego.
ATENÇÃO (PT)	<ul style="list-style-type: none">• Este manual de assistência técnica só se encontra disponível em inglês.• Se qualquer outro serviço de assistência técnica solicitar estes manuais noutro idioma, é da responsabilidade do cliente fornecer os serviços de tradução.• Não tente consertar o equipamento sem ter consultado e compreendido este manual de assistência técnica.• O não cumprimento deste aviso pode pôr em perigo a segurança do técnico, do operador ou do paciente devido a choques elétricos, mecânicos ou outros.

<p>ATENȚIE (RO)</p>	<ul style="list-style-type: none"> • Acest manual de service este disponibil numai în limba engleză. • Dacă un furnizor de servicii pentru clienți necesită o altă limbă decât cea engleză, este de datoria clientului să furnizeze o traducere. • Nu încercați să reparați echipamentul decât ulterior consultării și înțelegerii acestui manual de service. • Ignorarea acestui avertisment ar putea duce la rănirea depanatorului, operatorului sau pacientului în urma pericolelor de electrocutare, mecanice sau de altă natură.
<p>ОСТОРОЖНО! (RU)</p>	<ul style="list-style-type: none"> • Данное руководство по обслуживанию предлагается только на английском языке. • Если сервисному персоналу клиента необходимо руководство не на английском, а на каком-то другом языке, клиенту следует самостоятельно обеспечить перевод. • Перед обслуживанием оборудования обязательно обратитесь к данному руководству и поймите изложенные в нем сведения. • Несоблюдение требований данного предупреждения может привести к тому, что специалист по обслуживанию, оператор или пациент получат удар электрическим током, механическую травму или другое повреждение.
<p>UPOZORENJE (SR)</p>	<ul style="list-style-type: none"> • Ovo servisno uputstvo je dostupno samo na engleskom jeziku. • Ako klijentov serviser zahteva neki drugi jezik, klijent je dužan da obezbedi prevodilacke usluge. • Ne pokušavajte da opravite uređaj ako niste pročitali i razumeli ovo servisno uputstvo. • Zanemarivanje ovog upozorenja može dovesti do povređivanja servisera, rukovaoca ili pacijenta usled strujnog udara ili mehanickih i drugih opasnosti.
<p>UPOZORNENIE (SK)</p>	<ul style="list-style-type: none"> • Tento návod na obsluhu je k dispozícii len v angličtine. • Ak zákazníkovi poskytovateľ služieb vyžaduje iný jazyk ako angličtinu, poskytnutie prekladateľských služieb je zodpovednosťou zákazníka. • Nepokúšajte sa o obsluhu zariadenia skôr, ako si neprečítate návod na obsluhu a neporozumiete mu. • Zanedbanie tohto upozornenia môže vyústiť do zranenia poskytovateľa služieb, obsluhujúcej osoby alebo pacienta elektrickým prúdom, do mechanického alebo iného nebezpečenstva.
<p>ATENCION (ES)</p>	<ul style="list-style-type: none"> • Este manual de servicio sólo existe en inglés. • Si el encargado de mantenimiento de un cliente necesita un idioma que no sea el inglés, el cliente deberá encargarse de la traducción del manual. • No se deberá dar servicio técnico al equipo, sin haber consultado y comprendido este manual de servicio. • La no observancia del presente aviso puede dar lugar a que el proveedor de servicios, el operador o el paciente sufran lesiones provocadas por causas eléctricas, mecánicas o de otra naturaleza.
<p>VARNING (SV)</p>	<ul style="list-style-type: none"> • Den här servicehandboken finns bara tillgänglig på engelska. • Om en kunds servicetekniker har behov av ett annat språk än engelska ansvarar kunden för att tillhandahålla översättningstjänster. • Försök inte utföra service på utrustningen om du inte har läst och förstår den här servicehandboken. • Om du inte tar hänsyn till den här varningen kan det resultera i skador på serviceteknikern, operatören eller patienten till följd av elektriska stötar, mekaniska faror eller andra faror.

<p>DIKKAT (TR)</p>	<ul style="list-style-type: none">• Bu servis kilavuzunun sadece ingilizcesi mevcuttur.• Eđer müşteri teknisyeni bu kilavuzu ingilizce dışında bir başka lisandan talep ederse, bunu tercüme ettirmek müşteriye düşer.• Servis kilavuzunu okuyup anlamadan ekipmanlara müdahale etmeyiniz.• Bu uyarıya uyulmaması, elektrik, mekanik veya diğer tehlikelerden dolayı teknisyen, operatör veya hastanın yaralanmasına yol açabilir.
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DAMAGE IN TRANSPORTATION

All packages should be closely examined at time of delivery. If damage is apparent, have notation "damage in shipment" written on all copies of the freight or express bill before delivery is accepted or "signed for" by a General Electric representative or a hospital receiving agent. Whether noted or concealed, damage MUST be reported to the carrier immediately upon discovery, or in any event, within 14 days after receipt, and the contents and containers held for inspection by the carrier. A transportation company will not pay a claim for damage if an inspection is not requested within this 14 day period.

To file a report:

- Call 1-800-548-3366 and use option 6.
- Fill out the GIQ workflow for any items missing, damaged, OBF/FOI for in process installs:
http://supportcentral.ge.com/ProcessMaps/form_new_request.asp?prod_id=268679&form_id=573167&node_id=1916016&map_id=&reference_id=&reference_type
- Contact your local service coordinator for more information on this process.

CERTIFIED ELECTRICAL CONTRACTOR STATEMENT

All electrical Installations that are preliminary to positioning of the equipment at the site prepared for the equipment shall be performed by licensed electrical contractors. In addition, electrical feeds into the Power Distribution Unit shall be performed by licensed electrical contractors. Other connections between pieces of electrical equipment, calibrations and testing shall be performed by qualified GE Medical personnel. The products involved (and the accompanying electrical installations) are highly sophisticated, and special engineering competence is required. In performing all electrical work on these products, GE will use its own specially trained field engineers. All of GE's electrical work on these products will comply with the requirements of the applicable electrical codes.

The purchaser of GE equipment shall only utilize qualified personnel (i.e., GE's field engineers, personnel of third-party service companies with equivalent training, or licensed electricians) to perform electrical servicing on the equipment.

IMPORTANT...X-RAY PROTECTION

X-ray equipment if not properly used may cause injury. Accordingly, the instructions herein contained should be thoroughly read and understood by everyone who will use the equipment before you attempt to place this equipment in operation. The General Electric Company, Medical Systems Group, will be glad to assist and cooperate in placing this equipment in use.

Although this apparatus incorporates a high degree of protection against x-radiation other than the useful beam, no practical design of equipment can provide complete protection. Nor can any practical design compel the operator to take adequate precautions to prevent the possibility of any persons carelessly exposing themselves or others to radiation.

It is important that anyone having anything to do with x-radiation be properly trained and fully acquainted with the recommendations of the National Council on Radiation Protection and Measurements as published in NCRP Reports available from NCRP Publications, 7910 Woodmont Avenue, Room 1016, Bethesda, Maryland 20814, and of the International Commission on Radiation Protection, and take adequate steps to protect against injury.

The equipment is sold with the understanding that the General Electric Company, Medical Systems Group, its agents, and representatives have no responsibility for injury or damage which may result from improper use of the equipment.

Various protective materials and devices are available. It is urged that such materials or devices be used.

LITHIUM BATTERY CAUTIONARY STATEMENTS



CAUTION
Risk of
Explosion

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.



ATTENTION
Danger
d'Explosion

Il y a danger d'explosion s'il y a remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du même type ou d'un type recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

OMISSIONS & ERRORS

Customers, please contact your GE Sales or Service representatives.

GE personnel, please use the GEMS CQA Process to report all omissions, errors, and defects in this publication.

Revision History

Revision	Date	Reason for change
4	12/07/21	Update Material List.
3	06/24/10	Updated Section 2.0 Material List due to switch hub 5115334 EOL
2	12/12/08	Updated Section 2.0 Material List Updated Section 3.4 setp 5 for IPC BD connection, added step 6 for Powerpan and GND wire connection
1	11/13/08	Initial release.

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Chapter 1

Overview

This option is applied to:

- LightSpeed RT16 system
- Discovery CT590RT / Optima CT580
- Discovery RT

Section 1.0

Introduction

1.1 Overview

The Accessory Interface Hardware option provides interface for the following options.

- Prospective Respiratory Gating
- Cardiac Gating
- Advantage 4D Respiratory Gating
- Smart Step
- Xtream Injector

The Accessory Interface Hardware option is shipped ready for immediate installation. The following installation procedure describes how to install that hardware on the Gantry.

Refer to [Section 2.0 - Material List](#) for a listing of the parts in the kit.

1.2 Prerequisites

If system is LightSpeed RT16, Gantry should be with New Power Pan (5269061).

Section 2.0 Material List

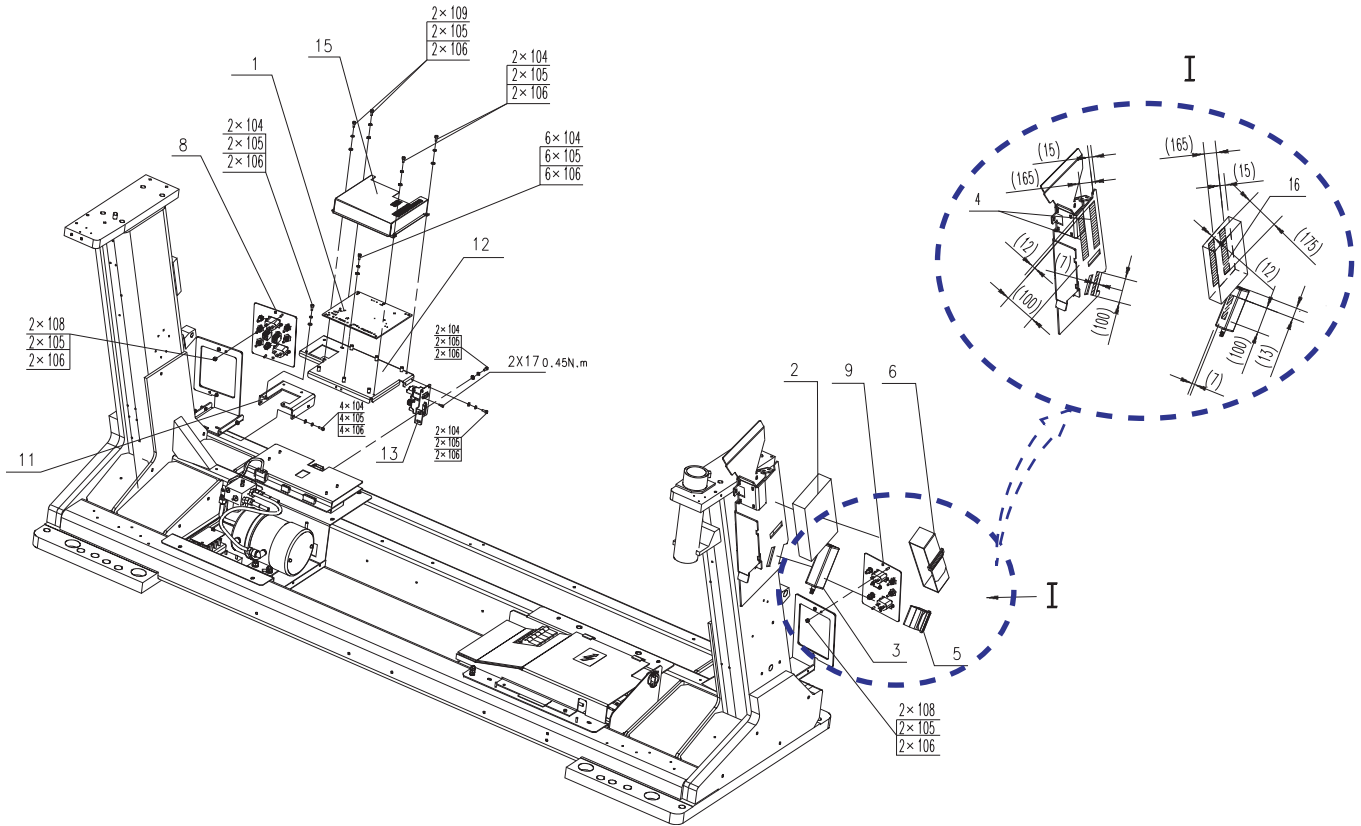


Figure 1-1 5323070ADW / 5323070-2ADW

MARK	QTY	PART NUMBER	DESCRIPTION
1	1.0	5136002	Integrated Peripheral Controller PWA
2	1.0	5264954-2	8-port Ethernet Switch hub, with NO power adaptor included
3	1.0	5136650	ups-120vac to 12vdc
4	2.0	46-136246P18	1 WIDE, WHT, ADH BACK, VELCRO HOOK 75 FT PER RL
5	1.0	2315482	VELCRO TAPE LENGTH IS 320
6	1.0	2315482-3	VELCRO TAPE LENGTH IS 830
7	1.0	5316347	IPC option kit cable harness, RT Vision
8	1.0	5306106	Accessory Panel LH ASM, CT HD
9	1.0	5306107	Accessory Panel RH ASM, CT HD
10	1.0	5306201	Cable, Cardiac Pulmonary, CT HD
11	1.0	5309358	BSD V3 IPC MNT brkt cushion
12	1.0	5423104	IPC base

Table 1-1 5323070 Material List (B70232RT)

MARK	QTY	PART NUMBER	DESCRIPTION
13	1.0	5309361	BSD V3 connector MNT brkt
15	1.0	5423102	IPC cover without front
16	2.0	46-136246P16	1 WIDE, WHT, ADH BACK, VELCRO LOOP 75 FT PER RL
17	2.0	5215307-4	Female Jackscrew Kit, qty two per kit, #4-40 thread, 11.94mm overall length, RoHS compliant Plating 7.92mm bottom, Kit includes 1 nut, 1 lock washer, and 1 flat washer, ROHS Compliant
18	30.0	5394300-3	SELF LOCKING CABLE TIE, 178 N TENSILE STRENGTH, 290 MM LENGTH, 76 MM BUNDLE DIAMETER, 3.7 MM WIDTH, 1.3 MM THICK, SERVICE TEMP. RANGE -60 TO 85 DEG C
19	30.0	5394300-4	SELF LOCKING CABLE TIE, 534 N TENSILE STRENGTH, 368 MM LENGTH, 102 MM BUNDLE DIAMETER, 7.6 MM WIDTH, 1.9 MM THICK, SERVICE TEMP. RANGE -60 TO 85 DEG C
104	18.0	1000-M4C010-04	Hexagon Socket Head Cap Screw, ISO 4762, M4-0.7, X10mm Long, Grade 8.8 Steel, Zinc Plated, RoHS Fastener
105	24.0	2203-M4-07	Curved Lock Washer, DIN 128A, M4, Spring Steel, Zinc Plated, RoHS Fastener
106	24.0	2000-M4-02	Flat Washer, ISO7089, M4, Steel 140HV, Zinc Plated, RoHS Fastener
108	4.0	3000-M4C-04	Hexagon Nut, ISO4032, M4-0.7, Grade 8 Steel, Zinc Plated, RoHS Fastener
109	2.0	1000-M4C012-04	Hexagon Socket Head Cap Screw, M4-0.7, X12mm Long, Grade 8.8 Steel, Zinc Plated, RoHS Fastener

Table 1-1 5323070 Material List (B70232RT)

MARK	QTY	PART NUMBER	DESCRIPTION
1	1.0	5136002-20	Integrated Peripheral Controller PWA
2	1.0	5264954-2	8-port Ethernet Switch hub, with NO power adaptor included
3	1.0	5136650	ups-120vac to 12vdc,
4	2.0	46-136246P18	1 WIDE, WHT, ADH BACK, VELCRO HOOK 75 FT PER RL
5	1.0	2315482	VELCRO TAPE LENGTH IS 320
6	1.0	2315482-3	VELCRO TAPE LENGTH IS 830
7	1.0	5316347	IPC option kit cable harness, RT Vision
8	1.0	5306106-4	Accessory Panel LH ASM, RT
9	1.0	5306107-4	Accessory Panel RH ASM, RT
10	1.0	5306201	Cable, Cardiac Pulmonary, CT HD
11	1.0	5309358	BSD V3 IPC MNT brkt cushion
12	1.0	5423104	IPC base

Table 1-2 5323070-2 Material List (B70233RT)

MARK	QTY	PART NUMBER	DESCRIPTION
13	1.0	5309361	BSD V3 connector MNT brkt
15	1.0	5423102	IPC cover without front
16	2.0	46-136246P16	1 WIDE, WHT, ADH BACK, VELCRO LOOP 75 FT PER RL
17	2.0	5215307-4	Female Jackscrew Kit, qty two per kit, #4-40 thread, 11.94mm overall length, RoHS compliant Plating 7.92mm bottom, Kit includes 1 nut, 1 lock washer, and 1 flat washer, ROHS Compliant
18	30.0	5394300-3	SELF LOCKING CABLE TIE, 178 N TENSILE STRENGTH, 290 MM LENGTH, 76 MM BUNDLE DIAMETER, 3.7 MM WIDTH, 1.3 MM THICK, SERVICE TEMP. RANGE -60 TO 85 DEG C
19	30.0	5394300-4	SELF LOCKING CABLE TIE, 534 N TENSILE STRENGTH, 368 MM LENGTH, 102 MM BUNDLE DIAMETER, 7.6 MM WIDTH, 1.9 MM THICK, SERVICE TEMP. RANGE -60 TO 85 DEG C
104	18.0	1000-M4C010-04	Hexagon Socket Head Cap Screw, ISO 4762, M4-0.7, X10mm Long, Grade 8.8 Steel, Zinc Plated, RoHS Fastener
105	24.0	2203-M4-07	Curved Lock Washer, DIN 128A, M4, Spring Steel, Zinc Plated, RoHS Fastener
106	24.0	2000-M4-02	Flat Washer, ISO7089, M4, Steel 140HV, Zinc Plated, RoHS Fastener
108	4.0	3000-M4C-04	Hexagon Nut, ISO4032, M4-0.7, Grade 8 Steel, Zinc Plated, RoHS Fastener
109	2.0	1000-M4C012-04	Hexagon Socket Head Cap Screw, M4-0.7, X12mm Long, Grade 8.8 Steel, Zinc Plated, RoHS Fastener

Table 1-2 5323070-2 Material List (B70233RT)

Chapter 2

Accessory Interface Hardware Installation

Section 1.0 Installation Procedure



DANGER RISK OF ELECTRIC SHOCK. USE PROPER LOCKOUT/TAGOUT PROCEDURES.

1.1 Base Cover Removal

- 1.) Move the table cradle to the home position.
- 2.) Remove the gantry two side covers.
- 3.) Turn **OFF** all 3 switches (Axial Drive, HVDC, 120 VAC) on the service switch panel on Gantry.
- 4.) Shutdown the system by normal shutdown procedure, then turn OFF main power to system at A1 panel or PDB.

Note: If there is a UPS, switch OFF the UPS output.

- 5.) Apply proper Lockout / Tagout procedures to ensure all power is off to NGPDU.
- 6.) Remove all Gantry base covers.

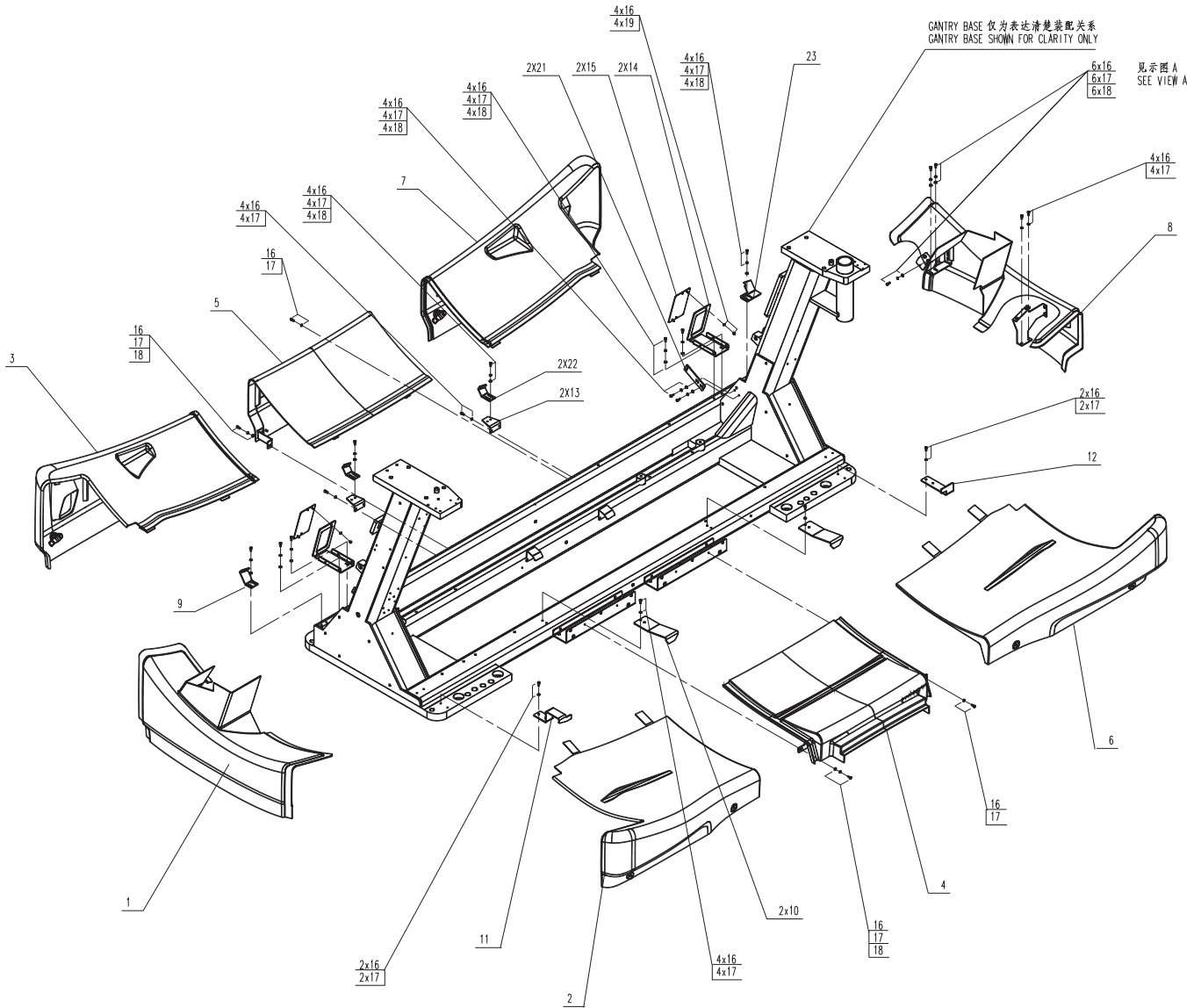


Figure 2-1 Gantry Base Cover

1.2 Install LAN Switch Hub and Adapter

1.2.1 LAN Switch Hub (5264954-2)

- 1.) Clear the contact surface of Bracket and LAN switch (5264954-2) using alcohol before adhering VELCRO HOOKS and LOOPS.
- 2.) Adhere 46-136246P18 (two slices) to Bracket which is at gantry leg of right side.
- 3.) Adhere 46-136246P16 (two slices) to LAN switch (5264954-2).
- 4.) Press LAN switch on Bracket and use Velcro tape (2315482-3) to fix it. Please refer to [Figure 2-2](#).

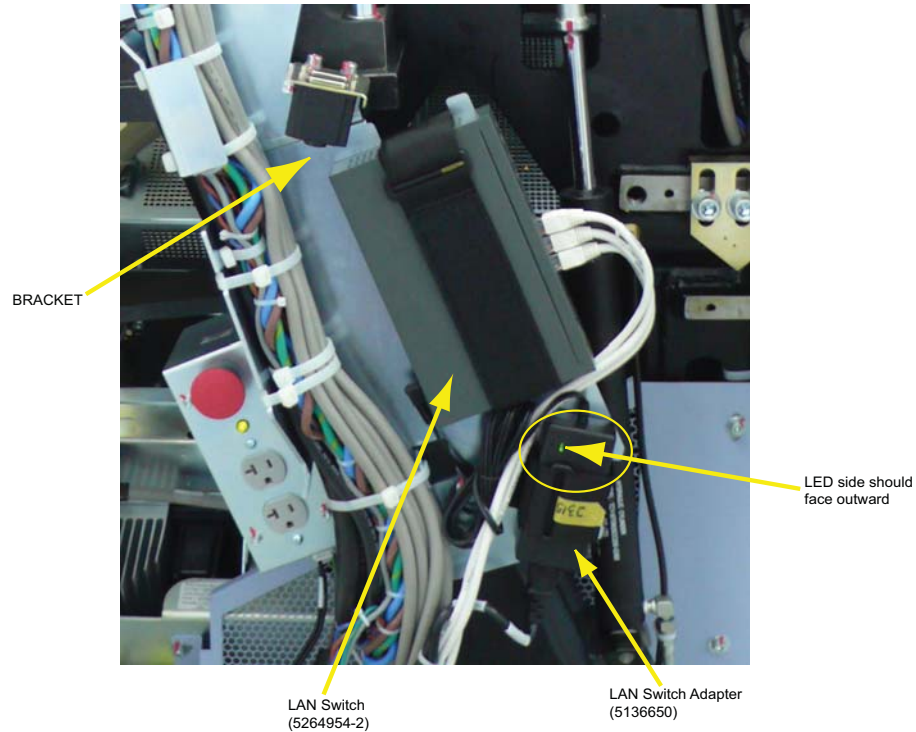


Figure 2-2 LAN Switch Assembly

1.2.2 LAN Switch Adapter (5136650)

Fix the adapter (5136650) using Velcro tape (2315482) to the bracket. Please refer to [Figure 2-2](#).

1.3 Install IPC and Accessory Panel

- 1.) Install the Joint Bracket to the Mounting Bracket. Tighten four screws. (Ssee [Figure 2-3](#))



Figure 2-3 Joint Bracket to Mounting Bracket

- 2.) Assemble the IPC and the left accessory panel.

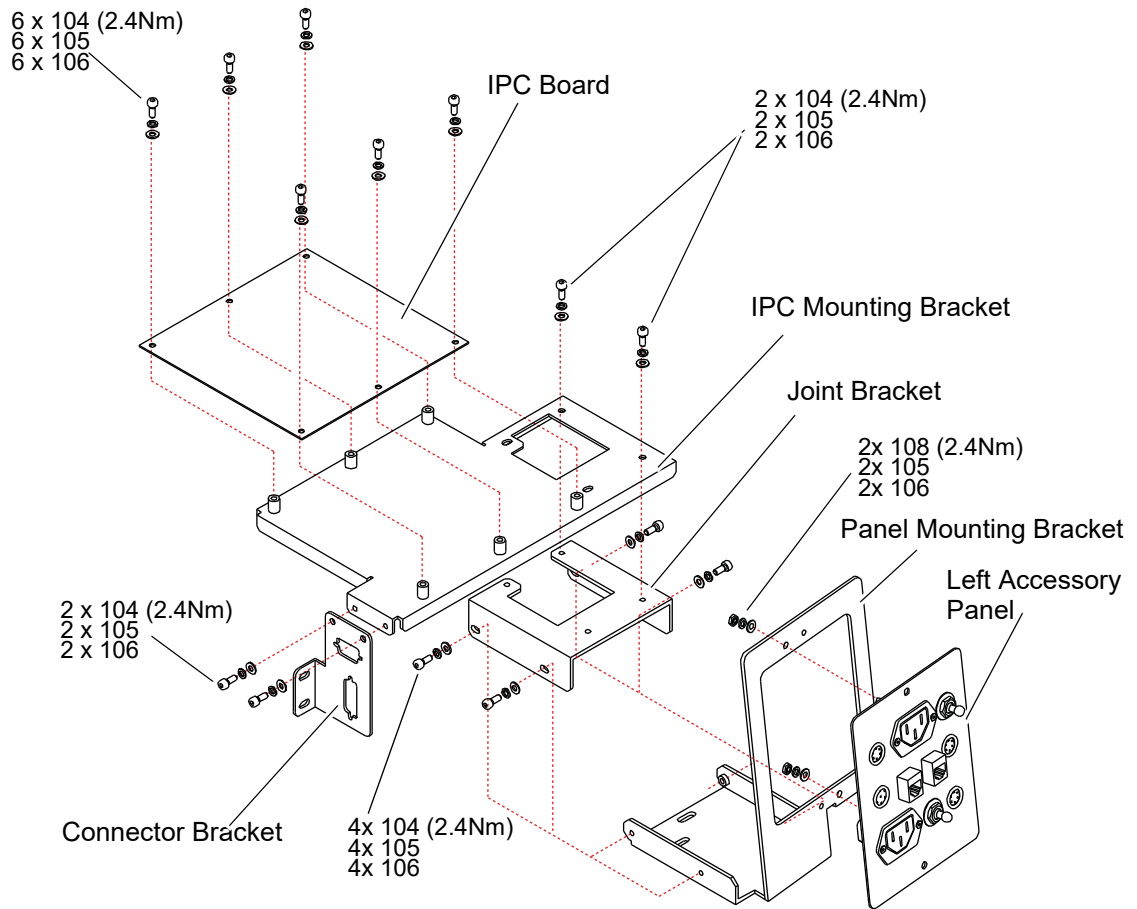


Figure 2-4 IPC Board and Left Accessory Panel

3.) Install the IPC assembly and left panel to the Gantry rear base.

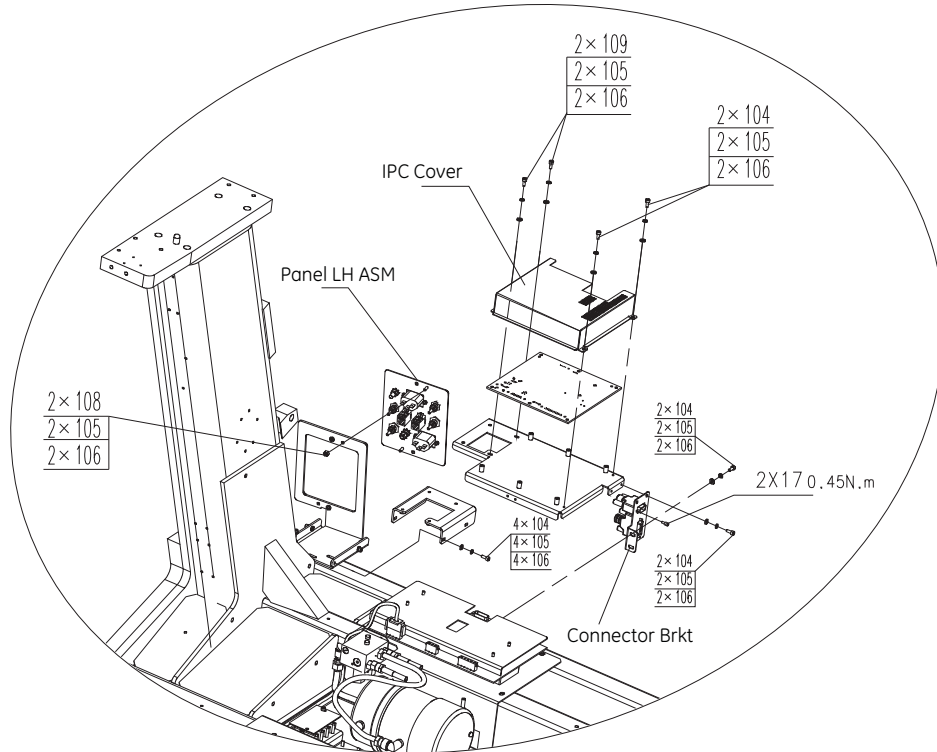


Figure 2-5 IPC and Left Accessory Panel Installation

4.) Connect 5306201 cable (Connector Bracket <-> IPC, J11 <-> Left Accessory Panel).



Figure 2-6 Cable (5306201) Connection

5.) Assemble the right accessory panel, and install it to the Gantry rear base.

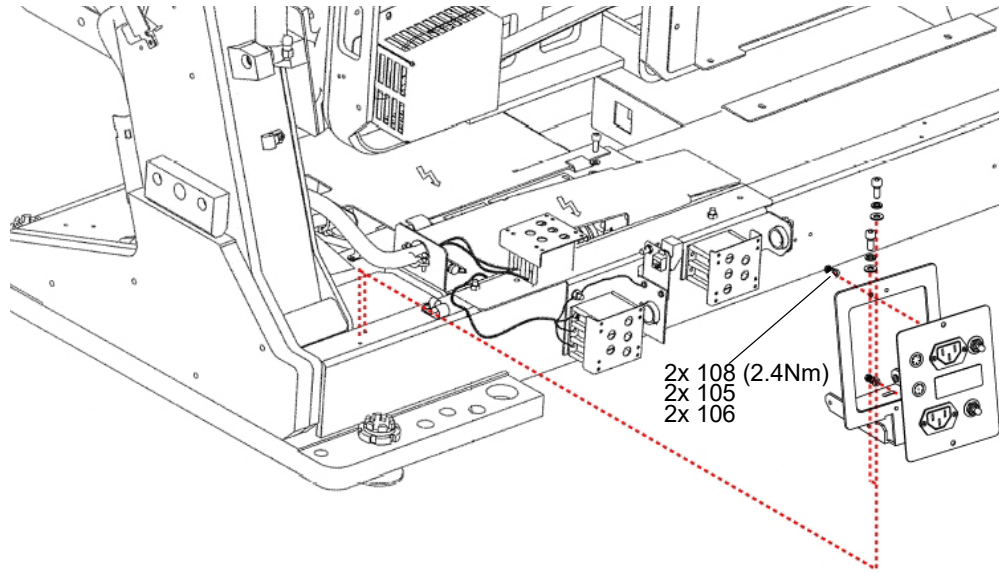


Figure 2-7 Right Accessory Panel Installation

1.4 Install Cable Harness

- 1.) Carefully route the cable harness (5316347) as shown in illustration [Figure 2-8](#).

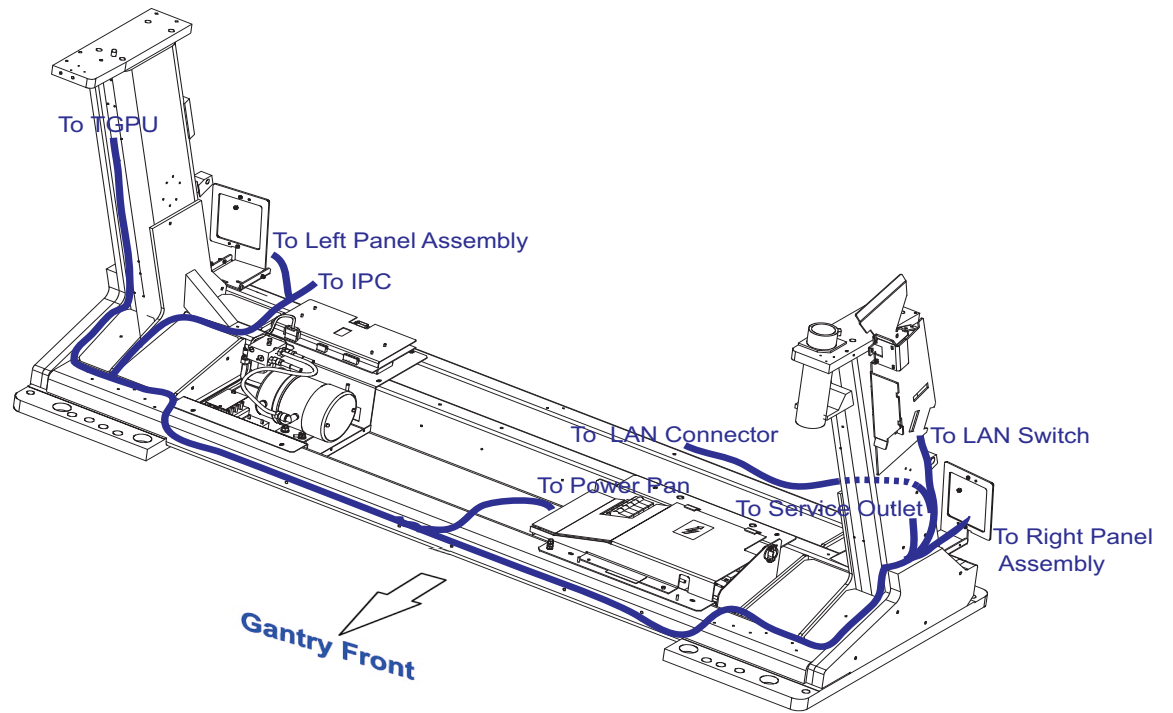
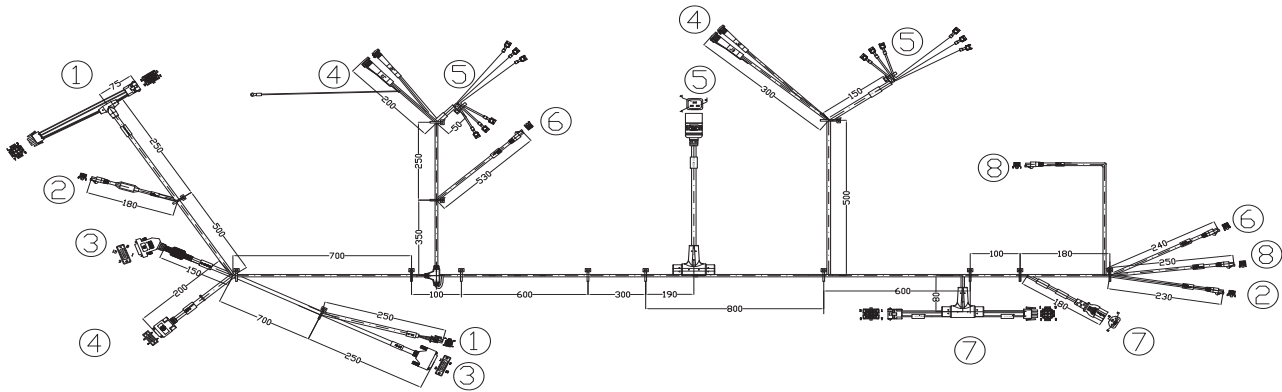


Figure 2-8 Cable Routing

2.) Connect all cable connectors of cable harness as shown in [Figure 2-9](#).
 (Refer to [Figure 2-10](#) through [Figure 2-15](#) for further information)



Cable Harness Assembly (5316347) Connection

Item	Part No.	Description	Cable Connection
1	5189456	Cable Asm - IPC power	IPC, J6 <-> TGP, J1 <-> Power Connector
2	5193967	Cable - TGP J5 to LAN Switch 1	TGP, J5 <-> LAN Switch 1
3	5169215	cable, cardiac-pulmonary_PathFinder	IPC, J13 <-> TGP, J22
4	2286150-2	Smart step cable for BSD Delight Lite.	R-panel, J2, J3 <-> TGP, J27 <-> L-panel, J2, J3
5	5306481	Power Cable, IPC Accessory Panel, VCT HD	R-panel <-> Power Pan <-> L-panel
6	5193969-10	Cable -LAN	IPC, J5 <-> LAN Switch 2
7	5265804	Cable Asm - Network Switch Power, Kitty Hawk	Service Outlet <->Harness Outlet <->LAN Switch
8	5193969-2	Cable - LAN	Power Pan <-> LAN Switch 3

Figure 2-9 Cable Connection

- 3.) Disconnect the DC Power cable from TGP, reconnect it to 5189456. Connect cables 5189456, 5193967, 5169215 and 2286150-2 to DC Power, J5, J22 and J27 of TGP BD according to their labels. as shown in [Figure 2-10](#).

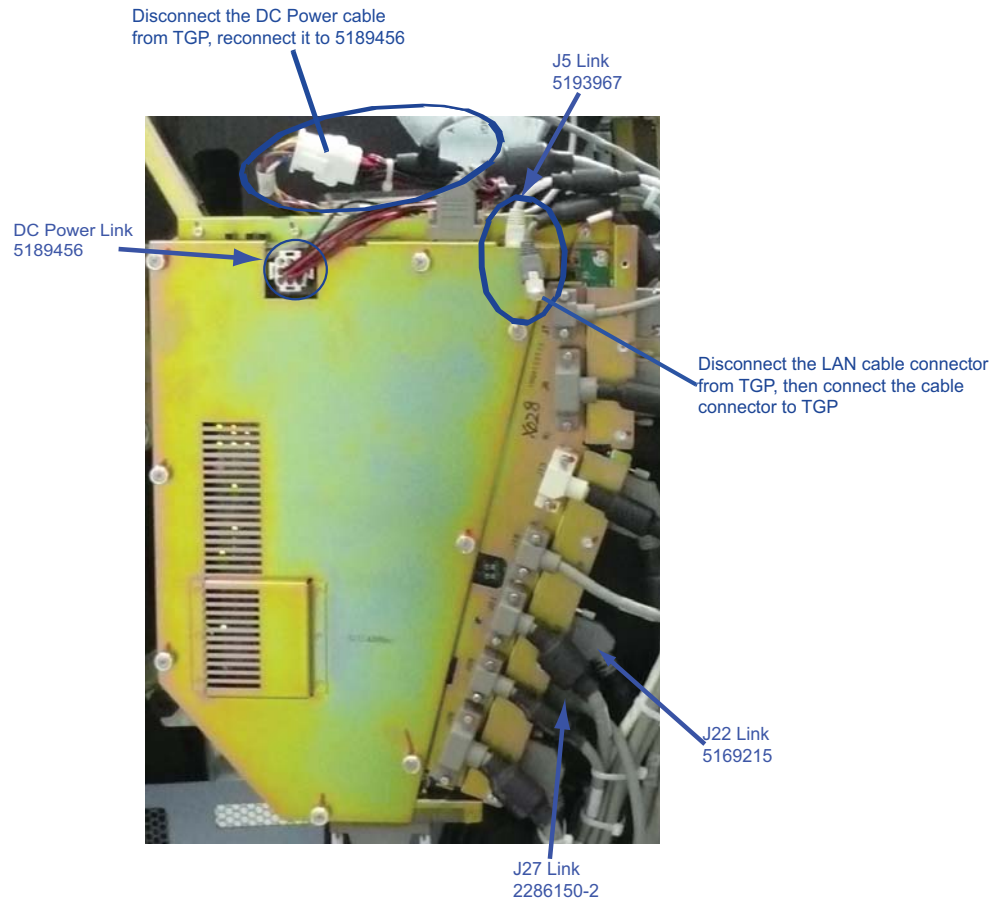


Figure 2-10 TGPU Connection

- 4.) Connect cables 2286150-2, 5306481 and 5306201 to Left Panel, as shown in [Figure 2-11](#).

Note: Brown wire of 5306481 should be connected to L pin of the power outlet, blue wire of 5306481 should be connected to N pin of the power outlet.

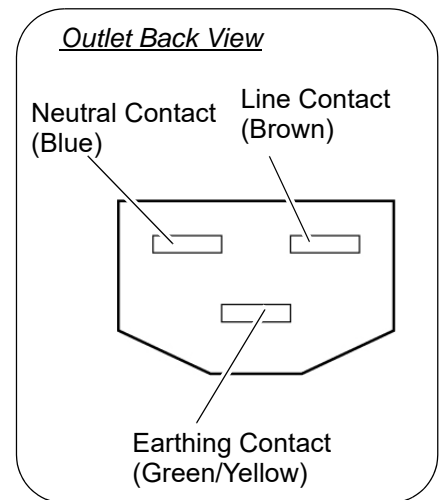
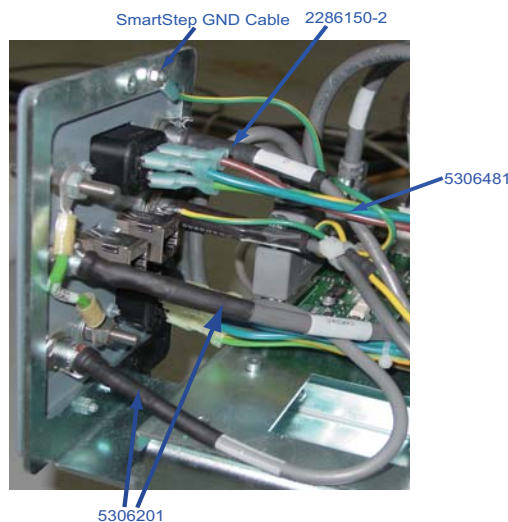


Figure 2-11 Left Panel Connection

- 5.) Connect cables 5189456, 5169215 and 5193969-10 to J6, J13 and J5 of IPC BD according to their labels. Connect cable 5306201 to J11 of IPC BD and IPC bracket using screw lock kit 46-221417P4 according to its labels, as shown in [Figure 2-12](#).

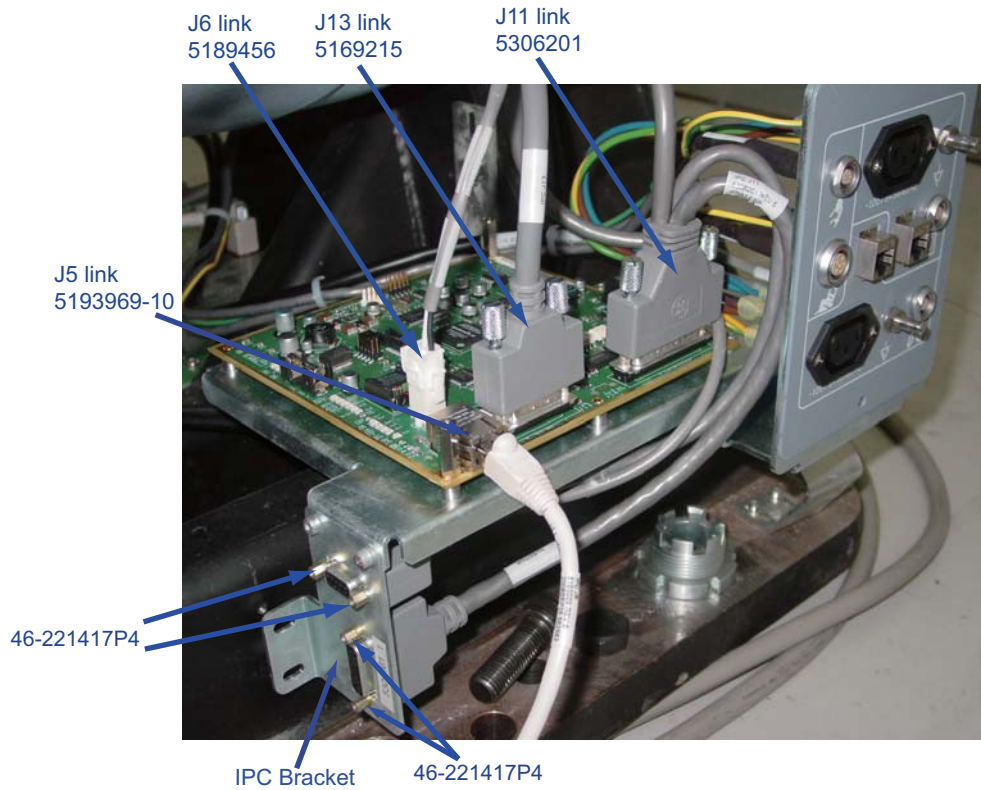


Figure 2-12 IPC BD Connection

- 6.) Connect cables 5193967, 5193969-10 and 5193969-2 to Port 1, 2 and 3 of Lan Switch according to their labels. Connect cable 5265804 to Service Outlet Power and Lan Switch adapter according to its labels as shown in [Figure 2-13](#).

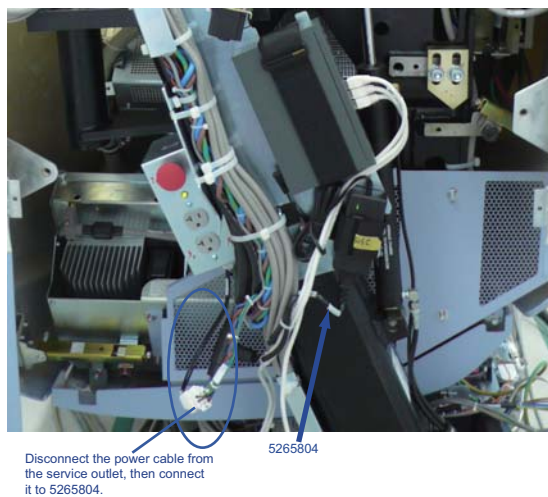


Figure 2-13 LAN Switch Connection

7.) Connect cables 5306481 and 2286150-2 to Right Panel, as shown in [Figure 2-14](#).

Note: Brown wire of 5306481 should be connected to L pin of the power outlet, blue wire of 5306481 should be connected to N pin of the power outlet.

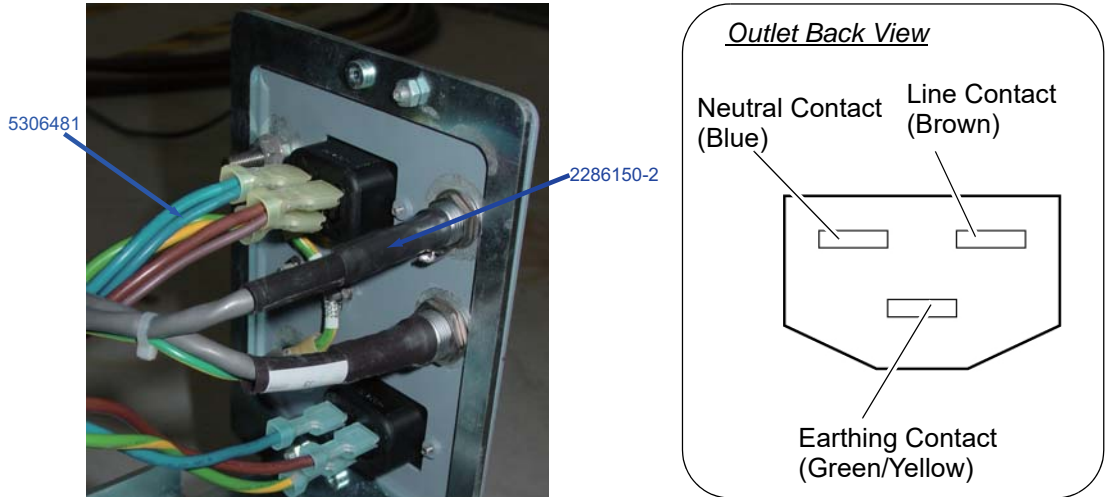
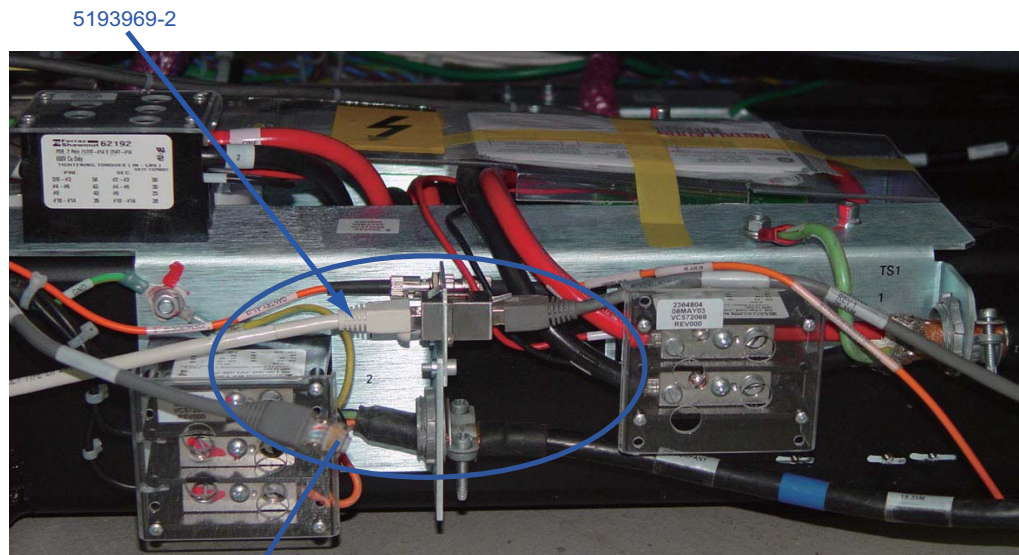


Figure 2-14 Right Panel Connection

8.) Connect cable 5193969-2 to the bulkhead of Power Pan according to its label, as shown in [Figure 2-15](#).



Disconnect the LAN cable connector from the relay connector, then connect the 5193969-2 connector to it.

Figure 2-15 LAN Cable Connection

- 9.) Connect cable 5306481 to Power Pan, Gantry should be tilt 25° forward to access the connector, as shown in [Figure 2-16](#).

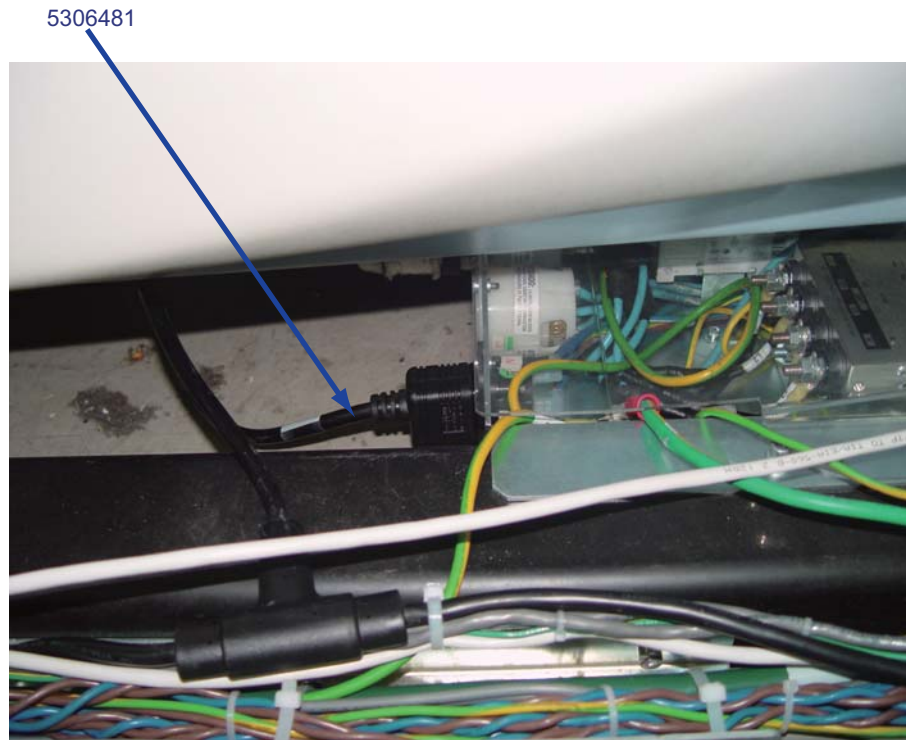


Figure 2-16 Cable to Power Pan

- 10.) Connect GND wire 5183501 of Left / Right Panel to the central GND bar between Table and Gantry.
- 11.) Secure the cables with tie wraps.
- 12.) Restore power to the system.
- 13.) After completion of 1st system reset after turn on 120V, need to run system reset again. The 2nd system reset will reset IPC, then Auto Flashdownload for IPC will run correctly.

Section 2.0 Finish Installation

2.1 LED Inspection of IPC Board

- To make sure the IPC board is functioning, an LED inspection should be made on the board. The LED configuration on the board should be as follows with power on but no options connected to the options interface panels:

LED	Color	Label	Status (without options connected)
DS1	Green	24V_PWR	On Solid
DS2	Green	PHY_FW_LED	Blinking with network activity
DS3	Green	HRTBT	Blinking
DS4	Green	FW_LED_0	Off
DS5	Green	FW_LED_1	Off
DS6	Green	FW_ERROR	Off
DS7	Green	24V_FUSE	On Solid
DS8	Green	RESET	On Solid
DS9	Yellow	RESET	Off
DS10	Green	R_PULSE_FILTERED	Off
DS11	Green	RESP_PULSE_FILTERED	Off
DS12	Green	R_PULSE_UNFILTERED	Off
DS13	Green	RESP_PULSE_UNFILTERED	Off
DS14	Yellow	FPGA_LOAD	Off
DS15	Green	FPGA_LOAD	On Solid
DS16	Yellow	B/A_CODE	Off
DS17	Green	B/A_CODE	On Solid
DS18	Green	+1.2V_OK	On Solid
Ethernet	Orange/Green	Ethernet-Hub	Blinking with network activity

Table 2-1 IPC Board LED Status

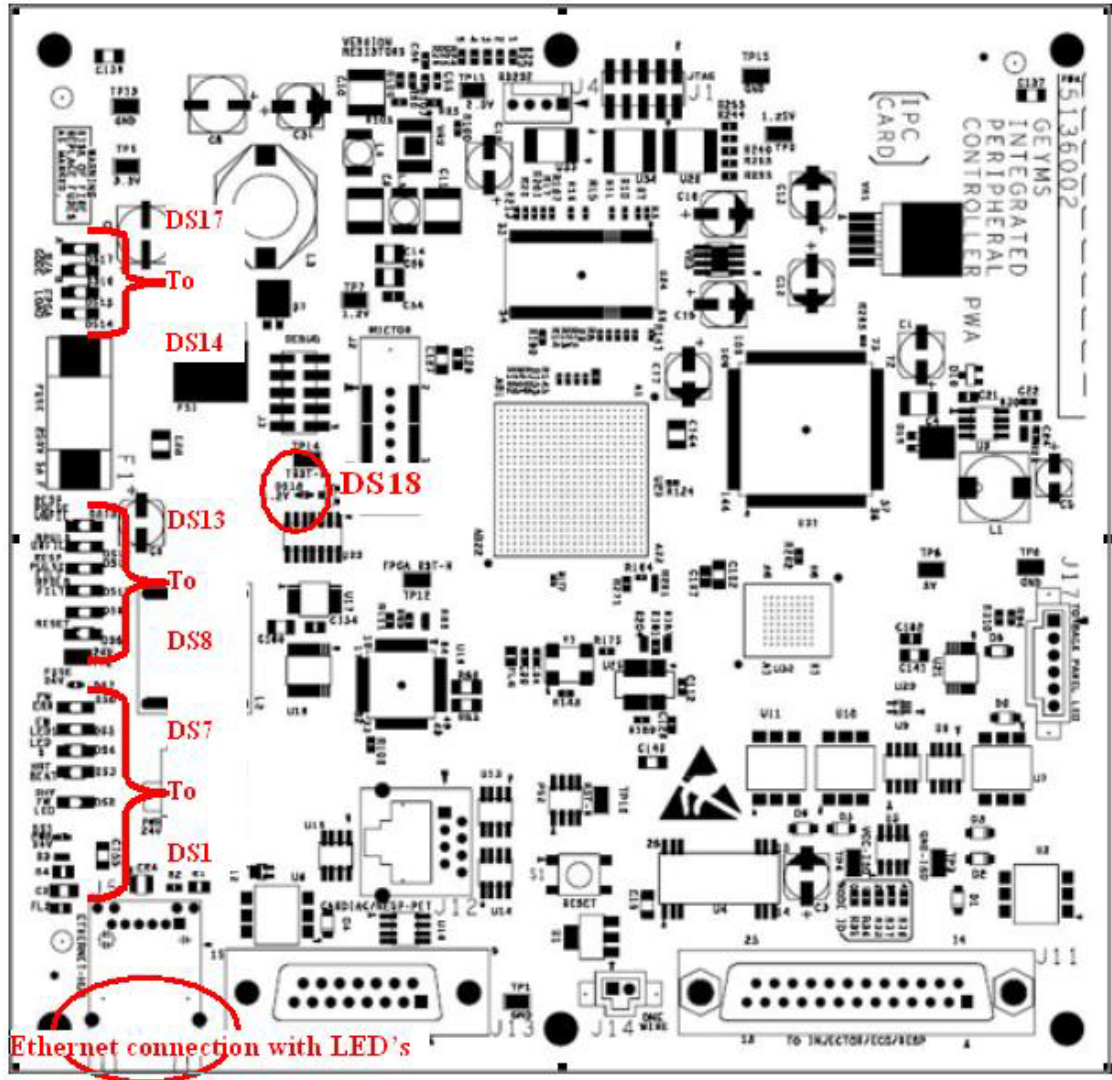


Figure 2-17 IPC Board LED locations

2.2 LED Inspection of LAN Switch

- 1.) Visually verify the front panel Power LED of the switch is illuminated.
- 2.) Visually verify that all appropriate Port LEDs show active links.

2.3 Finalization

- 1.) Perform an application scan to ensure proper system operation before turning the system over to the customer.
- 2.) Restore system power.
- 3.) Turn OFF all 3 switches (Axial Drive, HVDC, 120 VAC) on the service switch panel.
- 4.) Reinstall all Gantry base covers (see [Figure 2-1](#)).
- 5.) Reinstall the gantry side covers. Refer to your System Service Manual for any needed instruction.

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