

GE Healthcare

Single Plane and Biplane Innova Systems

Pre-Installation Kit Installation Procedures



OPERATING DOCUMENTATION

2290880-12-1EN
Revision 1

ATTENTION**LES APPAREILS A RAYONS X SONT DANGEREUX A LA FOIS POUR LE PATIENT ET POUR LE MANIPULATEUR SI LES MESURES DE PROTECTION NE SONT PAS STRICTEMENT APPLIQUEES**

Bien que cet appareil soit construit selon les normes de sécurité les plus sévères, la source de rayonnement X représente un danger lorsque le manipulateur est non qualifié ou non averti.

Une exposition excessive au rayonnement X entraîne des dommages à l'organisme.

Par conséquent, toutes les précautions doivent être prises pour éviter que les personnes non autorisées ou non qualifiées utilisent cet appareil créant ainsi un danger pour les autres et pour elles-mêmes.

Avant chaque manipulation, les personnes qualifiées et autorisées à se servir de cet appareil doivent se renseigner sur les mesures de protection établies par la Commission Internationale de la Protection Radiologique, Annales 26 : Recommandations de la Commission Internationale sur la Protection Radiologique et les normes nationales en vigueur.

WARNING**X-RAY EQUIPMENT IS DANGEROUS TO BOTH PATIENT AND OPERATOR UNLESS MEASURES OF PROTECTION ARE STRICTLY OBSERVED**

Though this equipment is built to the highest standards of electrical and mechanical safety, the useful x-ray beam becomes a source of danger in the hands of the unauthorized or unqualified operator.

Excessive exposure to x-radiation causes damage to human tissue.

Therefore, adequate precautions must be taken to prevent unauthorized or unqualified persons from operating this equipment or exposing themselves or others to its radiation.

Before operation, persons qualified and authorized to operate this equipment should be familiar with the Recommendations of the International Commission on Radiological Protection, contained in Annals Number 26 of the ICRP, and with applicable national standards.

ATENCION**LOS APARATOS DE RAYOS X SON PELIGROSOS PARA EL PACIENTE Y EL MANIPULADOR CUANDO LAS NORMAS DE PROTECCION NO ESTAN OBSERVADAS**

Aunque este aparato está construido según las normas de seguridad más estrictas, la radiación X constituye un peligro al ser manipulado por personas no autorizadas o incompetentes. Una exposición excesiva a la radiación X puede causar daños al organismo.

Por consiguiente, se deberán tomar todas las precauciones necesarias para evitar que las personas incompetentes o no autorizadas utilicen este aparato, lo que sería un peligro para los demás y para sí mismas.

Antes de efectuar las manipulaciones, las personas habilitadas y competentes en el uso de este aparato, deberán informarse sobre las normas de protección fijadas por la Comisión Internacional de la Protección Radiológica, Anales No 26: Recomendaciones de la Comisión Internacional sobre la Protección Radiológica y normas nacionales.

ACHTUNG**RÖNTGENAPPARATE SIND EINE GEFAHR FÜR PATIENTEN SOWIE BEDIENUNGSPERSONAL, WENN DIE GELTENDEN SICHERHEITSVORKEHRUNGEN NICHT GENAU BEACHTET WERDEN**

Dieser Apparat entspricht in seiner Bauweise strengsten elektrischen und mechanischen Sicherheitsnormen, doch in den Händen unbefugter oder unqualifizierter Personen wird er zu einer Gefahrenquelle.

Übermäßige Röntgenbestrahlung ist für den menschlichen Organismus schädlich.

Deswegen sind hinreichende Vorsichtsmaßnahmen erforderlich, um zu verhindern, daß unbefugte oder unqualifizierte Personen solche Geräte bedienen oder sich selbst und andere Personen deren Bestrahlung aussetzen können.

Vor Inbetriebnahme dieses Apparats sollte sich das qualifizierte und befugte Bedienungspersonal mit den geltenden Kriterien für den gefahrlosen Strahleneinsatz durch sorgfältiges Studium des Hefts Nr. 26 der Internationalen Kommission für Strahlenschutz (ICRP) vertraut machen: Empfehlungen der Internationalen Kommission für Strahlenschutz und anderer nationaler Normenbehörden.

Important Information

LANGUAGE

ПРЕДУПРЕЖДЕНИЕ (BG)

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 пациента в резултат на токов удар, механична или друга опасност.

警告 (ZH-CN)

本维修手册仅提供英文版本。

- 如果客户的维修服务人员需要非英文版本，则客户需自行提供翻译服务。
- 未详细阅读和完全理解本维修手册之前，不得进行维修。
- 忽略本警告可能对维修服务人员、操作人员或患者造成电击、机械伤害或其他形式的伤害。

警告 (ZH-HK)

本服務手冊僅提供英文版本。

- 倘若客戶的服務供應商需要英文以外之服務手冊，客戶有責任提供翻譯服務。
- 除非已參閱本服務手冊及明白其內容，否則切勿嘗試維修設備。
- 不遵從本警告或會令服務供應商、網絡供應商或病人受到觸電、機械性或其他危險。

警告 (ZH-TW)

本維修手冊僅有英文版。

- 若客戶的維修廠商需要英文版以外的語言，應由客戶自行提供翻譯服務。
- 請勿試圖維修本設備，除非 您已查閱並瞭解本維修手冊。
- 若未留意本警告，可能導致維修廠商、操作員或病患因觸電、機械或其他危險而受傷。

UPOZORENJE (HR)

Ovaj servisni priručnik dostupan je na engleskom jeziku.

- Ako davatelj usluge klijenta treba neki drugi jezik, klijent je dužan osigurati prijevod.
- Ne pokušavajte servisirati opremu ako niste u potpunosti pročitali i razumjeli ovaj servisni priručnik.
- Zanimarite li ovo upozorenje, može doći do ozljede davatelja usluge, operatera ili pacijenta uslijed strujnog udara, mehaničkih ili drugih rizika.

**VÝSTRAHA
(CS)**

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)**

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 uden at læse og forstå denne servicemanual.
- Manglende overholdelse af denne advarsel kan medføre skade på grund af elektrisk stød, mekanisk eller anden fare for teknikeren, operatøren eller patienten.

**WAARSCHUWING
(NL)**

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 alvorens 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)**

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, mechanical or other hazards.

**HOIATUS
(ET)**

See 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)**

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.

**ATTENTION
(FR)**

Ce manuel d'installation et de maintenance est disponible uniquement en anglais.

- Si le technicien d'un client a besoin de ce manuel dans une langue autre que l'anglais, il incombe au client de le faire traduire.
- Ne pas tenter d'intervenir sur les équipements tant que ce manuel d'installation et de maintenance n'a pas été consulté et compris.
- Le non-respect de cet avertissement peut entraîner chez le technicien, l'opérateur ou le patient des blessures dues à des dangers électriques, mécaniques ou autres.

**WARNUNG
(DE)**

Diese Serviceanleitung existiert nur in englischer Sprache.

- Falls ein fremder Kundendienst eine andere Sprache benötigt, ist es Aufgabe des Kunden für eine entsprechende Übersetzung zu sorgen.
- Versuchen Sie nicht diese Anlage zu warten, ohne diese Serviceanleitung gelesen und verstanden zu haben.
- Wird diese Warnung nicht beachtet, so kann es zu Verletzungen des Kundendienst-technikers, des Bedieners oder des Patienten durch Stromschläge, mechanische oder sonstige Gefahren kommen.

**ΠΡΟΕΙΔΟΠΟΙΗΣΗ
(EL)**

Το παρόν εγχειρίδιο σέρβις διατίθεται μόνο στα αγγλικά.

- Εάν ο τεχνικός σέρβις ενός πελάτη απαιτεί το παρόν εγχειρίδιο σε γλώσσα εκτός των αγγλικών, αποτελεί ευθύνη του πελάτη να παρέχει τις υπηρεσίες μετάφρασης.
- Μην επιχειρήσετε την εκτέλεση εργασιών σέρβις στον εξοπλισμό αν δεν έχετε συμβουλευτεί και κατανοήσει το παρόν εγχειρίδιο σέρβις.
- Αν δεν προσέξετε την προειδοποίηση αυτή, ενδέχεται να προκληθεί τραυματισμός στον τεχνικό σέρβις, στο χειριστή ή στον ασθενή από ηλεκτροπληξία, μηχανικούς ή άλλους κινδύνους.

**FIGYELMEZTETÉS
(HU)**

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.

**ADVÖRUN
(IS)**

Þessi þjónustuhandbók er aðeins fáanleg á ensku.

- Ef að þjónustuveitandi viðskiptamanns þarfnast annas tungumáls en ensku, er það skylda viðskiptamanns að skaffa tungumálþjónustu.
- Reynið ekki að afgreiða tækið 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.

**AVVERTENZA
(IT)**

Il presente manuale di manutenzione è disponibile soltanto in lingua inglese.

- Se un addetto alla manutenzione richiede il manuale in una lingua diversa, il cliente è tenuto a provvedere direttamente alla traduzione.
- Procedere alla manutenzione dell'apparecchiatura solo dopo aver consultato il presente manuale ed averne compreso il contenuto.
- Il mancato rispetto della presente avvertenza potrebbe causare lesioni all'addetto alla manutenzione, all'operatore o ai pazienti provocate da scosse elettriche, urti meccanici o altri rischi.

**警告
(JA)**

このサービスマニュアルには英語版しかありません。

- サービスを担当される業者が英語以外の言語を要求される場合、翻訳作業はその業者の責任で行うものとさせていただきます。
- このサービスマニュアルを熟読し理解せずに、装置のサービスを行わないでください。
- この警告に従わない場合、サービスを担当される方、操作員あるいは患者さんが、感電や機械的又はその他の危険により負傷する可能性があります。

**경고
(KO)**

본 서비스 매뉴얼은 영어로만 이용하실 수 있습니다.

- 고객의 서비스 제공자가 영어 이외의 언어를 요구할 경우, 번역 서비스를 제공하는 것은 고객의 책임입니다.
- 본 서비스 매뉴얼을 참조하여 숙지하지 않은 이상 해당 장비를 수리하려고 시도하지 마십시오.
- 본 경고 사항에 유의하지 않으면 전기 쇼크, 기계적 위험, 또는 기타 위험으로 인해 서비스 제공자, 사용자 또는 환자에게 부상을 입힐 수 있습니다.

**BRĪDINĀJUMS
(LV)**

Šī apkopes rokasgrāmata ir pieejama tikai angļu valodā.

- Ja klienta apkopes sniedzējam nepieciešama informācija citā valodā, klienta pienākums ir nodrošināt tulkojumu.
- Neveiciet aprīkojuma apkopi bez apkopes rokasgrāmatas izlasīšanas un saprašanas.
- Šī brīdinājuma neievērošanas rezultātā var rasties elektriskās strāvas trieciena, mehānisku vai citu faktoru izraisītu traumu risks apkopes sniedzējam, operatoram vai pacientam.

**[SPĖJIMAS
(LT)]**

Šis eksploatavimo vadovas yra tik anglų kalba.

- Jei kliento paslaugų tiekėjas reikalauja vadovo kita kalba – ne anglų, suteikti vertimo paslaugas privalo klientas.
- Nemėginkite atlikti įrangos techninės priežiūros, jei neperskaitėte ar nesupratote šio eksploatavimo vadovo.
- Jei nepaisysite šio įspėjimo, galimi paslaugų tiekėjo, operatoriaus ar paciento sužalojimai dėl elektros šoko, mechaninių ar kitų pavojų.

**ADVARSEL
(NO)**

Denne servicehåndboken finnes bare på engelsk.

- Hvis kundens serviceleverandør har bruk for et annet språk, er det kundens ansvar å sørge for oversettelse.
- Ikke forsøk å reparere utstyret uten at denne servicehåndboken er lest og forstått.
- Manglende hensyn til denne advarselen kan føre til at serviceleverandøren, operatøren eller pasienten skades på grunn av elektrisk støt, mekaniske eller andre farer.

**OSTRZEŻENIE
(PL)**

Niniejszy podręcznik serwisowy dostępny jest jedynie w języku angielskim.

- Jeśli serwisant klienta wymaga języka innego niż angielski, zapewnienie usługi tłumaczenia jest obowiązkiem klienta.
- Nie próbować serwisować urządzenia bez zapoznania się z niniejszym podręcznikiem serwisowym i zrozumienia go.
- Niezastosowanie się do tego ostrzeżenia może doprowadzić do obrażeń serwisanta, operatora lub pacjenta w wyniku porażenia prądem elektrycznym, zagrożenia mechanicznego bądź innego.

**ATENÇÃO
(PT-BR)**

Este manual de assistência técnica encontra-se disponível unicamente em inglês.

- Se outro serviço de assistência técnica solicitar a tradução deste manual, caberá ao cliente fornecer os serviços de tradução.
- Não tente reparar o equipamento sem ter consultado e compreendido este manual de assistência técnica.
- A não observância deste aviso pode ocasionar ferimentos no técnico, operador ou paciente decorrentes de choques elétricos, mecânicos ou outros.

**ATENÇÃO
(PT-PT)**

Este manual de assistência técnica só se encontra disponível em inglês.

- Se qualquer outro serviço de assistência técnica solicitar este manual noutra linguagem, é da responsabilidade do cliente fornecer os serviços de tradução.
- Não tente reparar o equipamento sem ter consultado e compreendido este manual de assistência técnica.
- O não cumprimento deste aviso pode colocar em perigo a segurança do técnico, do operador ou do paciente devido a choques eléctricos, mecânicos ou outros.

**ATENȚIE
(RO)**

Acest manual de service este disponibil doar 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.

**ОСТОРОЖНО!
(RU)**

Данное руководство по техническому обслуживанию представлено 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 техническим обслуживанием оборудования обязательно обратитесь к данному руководству и поймите изложенные в нем сведения.
- Несоблюдение требований данного предупреждения может привести к тому, что специалист по техобслуживанию, оператор или пациент получит удар электрическим током, механическую травму или другое повреждение.

**UPOZORENJE
(SR)**

Ovo servisno uputstvo je dostupno samo na engleskom jeziku.

- Ako klijentov serviser zahteva neki drugi jezik, klijent je dužan da obezbedi prevodilačke usluge.
- Ne pokušavajte da opravite uređaj ako niste pročitali i razumeli ovo servisno uputstvo.
- Zanemarivanje ovog upozorenja može dovesti do povređivanja serviser, rukovaoca ili pacijenta usled strujnog udara ili mehaničkih i drugih opasnosti.

**UPOZORNENIE
(SK)**

Tento návod na obsluhu je k dispozícii len v angličtine.

- Ak zákazník poskytovateľ služieb vyžaduje iný jazyk ako angličtinu, poskytnutie prekladateľských služieb je zodpovednosťou zákazníka.
- Nepokúšajte sa o obsluhu zariadenia, kým si neprečítate návod na obsluhu a neporozumiete mu.
- Zanedbanie tohto upozornenia môže spôsobiť zranenie poskytovateľa služieb, obsluhujúcej osoby alebo pacienta elektrickým prúdom, mechanické alebo iné ohrozenie.

**ATENCION
(ES)**

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.

**VARNING
(SV)**

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.

**OPOZORILO
(SL)**

Ta servisni priročnik je na voljo samo v angleškem jeziku.

- Če ponudnik storitve stranke potrebuje priročnik v drugem jeziku, mora stranka zagotoviti prevod.
- Ne poskušajte servisirati opreme, če tega priročnika niste v celoti prebrali in razumeli.
- Če tega opozorila ne upoštevate, se lahko zaradi električnega udara, mehanskih ali drugih nevarnosti poškoduje ponudnik storitev, operater ali bolnik.

**DİKKAT
(TR)**

Bu servis kılavuzunun sadece ingilizcesi mevcuttur.

- Eğer müşteri teknisyeni bu kılavuzu ingilizce dışında bir başka lisandan talep ederse, bunu tercüme ettirmek müşteriye düşer.
- Servis kılavuzunu 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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Revision History

Part/Rev	Date	Reason for Change	Pages
2290880-2-100 rev 1	January, 2006	Initial Release of Direction 2290880-2-100. The changes to this document integrate SPR EURge38214. The previous release of this document was 2290880-1-100.	44
2290880-3-100 rev 1	June, 2006	Migration to Sigmalink platform. Initial release of 2290880-3-100. The previous release of this document was 2290880-2-100.	
2290880-4-100 rev 1	September, 2006	Initial release of 2290880-4-100. The previous release of this document was 2290880-3-100. Updated with Tilt Table.	48
2290880-5-100 rev 1	October, 2006	Initial release of 2290880-5-100. The previous release of this document was 2290880-4-100. Updated with Innova 2121-IQ and 3131-IQ.	48
2290880-6-100 rev 1	July 22, 2007	Initial release of 2290880-6-100. The previous release of this document was 2290880-5-100. Updated with modifications to 2285048 - Base Plate Assembly Title modified	54
2290880-7-1EN rev 1	May 5, 2008	Initial release of 2290880-7-1EN. The previous release of this document was 2290880-6-100. Updated with modifications to Baseplate kit flow diagram.	58
2290880-8-1EN	July, 2008	Table for table/LC positioner updated.	58
2290880-9-1EN, rev A	1 October, 2008	Initial release 2290880-9-1EN, rev A. The previous release of this document was 2290880-8-1EN. Description of Screw (2300939) modified.	60
2290880-9-1EN, rev 1	13 October, 2008	Initial release 2290880-9-1EN, rev 1. The previous release of this document was 2290880-9-1EN rev A.	60
2290880-10-1EN, rev 1	5 March, 2009	Initial release 2290880-10-1EN, rev 1. Table / LC distances table modified. The previous release of this document was 2290880-9-1EN rev 1.	60
2290880-11-1EN, rev 1	14 April, 2009	Initial release 2290880-11-1EN, rev 1. Name of Tilt Table updated to Innova ^{IQ} Table. The previous release of this document was 2290880-10-1EN rev 1.	58
2290880-12-1EN, rev 1	28 January, 2011	Initial release 2290880-12-1EN, rev 1. The previous release of this document was 2290880-11-1EN rev 1.	54

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Chapter 1 Installation Procedure

1 PIST0002 - Prepare Floor - LC Base Plate and Omega/Innova IQ Table

1.1 Personnel Requirements

Personnel Requirements	Preliminary Reqs	Procedure	Finalization
1	0 min	1 hour	0 min

1.2 Overview

This direction describes the hospital exam room floor preparation required prior to installing an LC Gantry and an Omega/Innova^{IQ} Table. Mylar floor drilling template is needed. The floor preparation process consists of drilling LC Gantry (12) holes and Omega Table (4) holes or Innova^{IQ} Table (10) mounting holes in the floor so that as the equipment arrives on-site, the installation crew can:

- Pour a grout pad for the LC Gantry around the pre-drilled mounting holes.
- Mount and anchor the LC Gantry Base plate and Omega/Innova^{IQ} Table baseplate to the floor.
- Mount the LC Gantry.
- Mount the Omega or Innova^{IQ} Table with the correct alignment to the gantry (Isocenter aligned and proper clinical usage distance between gantry and table).

NOTE: The preferred method of gantry/table floor mounting is the anchored bigplate supporting the LC and the table, or else using through bolts. This method has been pre-approved for use in all seismic zones. If the floor structure prevents using through-bolts, floor anchors may be used. Through-bolt hardware and anchors are provided to the installation crews before/with the equipment delivery.

1.3 Preliminary Requirements

1.3.1 Tools and Test Equipment

Item	Qty	Effectivity	Part#	Manufacturer
Carbide-tipped drill bit for installing gantry and table anchors: ANSI B94.12 or 5/8" for on-grade above anchors	1	-	-	-
Carbide-tipped drill bit for installing gantry and table through bolts: 25 mm (1") recommended,	1	-	-	-

Item	Qty	Effectivity	Part#	Manufacturer
10 mm (3/8") drill bit for pilot holes	1	-	-	-
Impact drill for use with carbide-tipped drill bits. We recommend Skill #906 roto-hammer or equivalent.	1	-	-	-
1" wire brush for cleaning out mounting holes	1	-	-	-
Vacuum cleaner	1	-	-	-

1.3.2 Consumables

Item	Qty	Effectivity	Part#	Manufacturer
Vascular pre-installation anchor kits	1	-	2285048	-
Elegance Add-on kit (Innova ^{IQ} Table/Innova 2100-IQ/3100/4100 only)	1	-	2360538	-

1.3.3 Safety



⚠ WARNING

PERSONAL INJURY DUE TO IMPROPERLY MOUNTED EQUIPMENT!
 AVOID POTENTIAL THROUGH-BOLT MOUNTING FAILURES BY HAVING THE HOSPITAL STRUCTURAL ENGINEER OR ARCHITECT VERIFY THE FLOOR CONSTRUCTION BEFORE DRILLING HOLES. PAN-TYPE FLOOR CONSTRUCTION REQUIRES THE USE OF SPECIALLY DESIGNED BENEATH-THE-FLOOR STEEL CHANNELS TO ENSURE THE THROUGH-BOLT MOUNTING HARDWARE DOES NOT FAIL DURING USE. THESE CHANNELS MUST BE DESIGNED BY AN AUTHORIZED LOCAL STRUCTURAL ENGINEER. AVOID POTENTIAL FLOOR ANCHOR FAILURES BY HAVING THE HOSPITAL STRUCTURAL ENGINEER OR ARCHITECT INSPECT THE COMPRESSION STRENGTH OF THE CONCRETE FLOOR BEFORE USING FLOOR ANCHORS. THE MAXIMUM PULLOUT FORCE PER ANCHOR WAS CALCULATED ASSUMING A REGULAR WEIGHT CONCRETE HAVING A MINIMUM COMPRESSION STRENGTH OF 2500 PSI (176 KG/CM²) AT THE TIME OF INSTALLATION, AND ANCHORS INSTALLED TO THE REQUIRED HOLE DEPTH. ENSURE THE CONCRETE FLOOR MEETS THIS MINIMUM COMPRESSION STRENGTH BEFORE USING FLOOR ANCHORS.

1.4 Procedure



NOTICE

Avoid costly floor rework and installation delays!

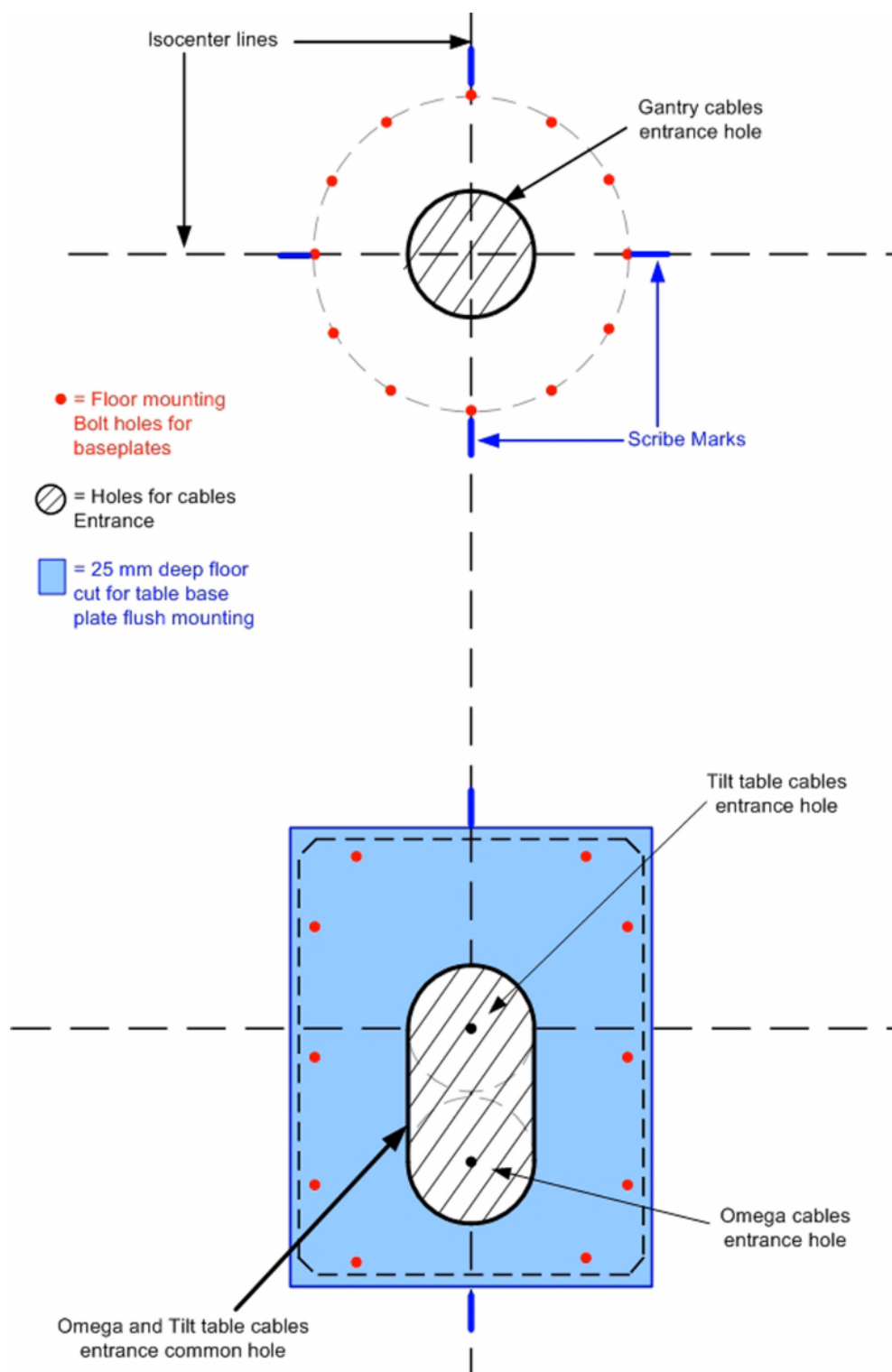
Floor repair and mounting hole re-drilling will be required if the correct drilling template is not used and/or the sub-floor has not been inspected and approved. Prior to drilling holes in the exam room floor, verify the following:

- The Correct drilling template (three are supplied) is used. Contact the GE Field Engineer or Installation Specialist assigned to the site to ensure the proper gantry/table alignment is met with the correct drilling template.
- An authorized hospital structural engineer or architect has approved the gantry/table placement and floor hole drilling plan. The approval should include an inspection of the floor concrete strength, identification of any sub-floor obstructions, and drill hole size and depth requirements.

NOTE: You may use core drilling as an alternate, through bolt, drilling method; 1" recommended.

1. Use the center of the installed cable exit hole for the gantry isocenter. Refer to the Room Layout Drawing and the following illustration. Make sure the isocenter is at least 82" (2083 mm) from any obstructions to the rear, and 82" (2083 mm) from any obstructions to either side. (If less than 82", contact your local GE Field Engineer or Installation Specialist.)

Illustration 1-1:



2. Draw a line on the floor going through the center of the hole and extending in the direction the table is to be installed. This is the isocenter line. It passes through the gantry isocenter and the table pivot point.

3. Draw a line on the floor through the isocenter perpendicular to the isocenter line.
4. Locate the appropriate template based on your system configuration per Table 1. Place the template over the isocenter lines.

Table 1-1:

SYSTEM CONFIGURATION	TEMPLATE
Gantry with Omega Angio Table	2127792
Gantry with Innova ^{IQ} Table	2360133
Base plate for Innova ^{IQ} Table add-on	2361993

NOTE: Determine the position of the reinforcement bars in the concrete floor so the anchor holes will not run into them. The template can be slightly adjusted about the cable exit hole isocenter to accommodate the rebar positioning. Be sure to shift the isocenter line, if necessary, to accommodate positioning the Omega/Innova^{IQ} Table.

5. Mark the bolt hole locations for the Gantry and table base plates with a punch and hammer.
6. Scribe lines on the floor at 0, 90, 180, and 270 degrees about the isocenter as shown in [Illustration 1-1](#).
7. Drill the mounting bolt pilot holes (using 3/8" drill).

1.5 Finalization

No finalization steps.

2 PIST0003 - Vascular Gantry Base Plate and Innova IQ Table Base Plate

2.1 Personnel Requirements

Personnel Requirements	Preliminary Reqs	Procedure	Finalization
1	0 min	2 hours	0 min

2.2 Overview

2.3 Preliminary Requirements

2.3.1 Tools and Test Equipment

Item	Qty	Effectivity	Part#	Manufacturer
Torque wrench, 150 ft-lbs (20 daN.m)	1	-	-	-
Hammer for tapping in floor anchors	1	-	-	-
1" wire brush for cleaning out table anchor holes	1	-	-	-
(1-1/4") 30 mm open end wrench for (3/4") 20 mm nuts	1	-	-	-
(1-1/4") 30 mm socket for (3/4") 20 mm bolts	1	-	-	-
15/16" torque wrench socket	1	-	-	-
Vacuum cleaner	1	-	-	-

2.3.2 Consumables

Item	Qty	Effectivity	Part#	Manufacturer
Base Plate Assembly	1	-	2285048	-
Elegance Add-on kit	1	-	2360538	-
Above grade, Floor anchors without insert	1	-	2285051	-
Through bolts without insert	1	-	2285646	-
On grade, Floor anchors	1	-	2286398	-
Above grade, Floor anchors and insert	1	-	2285052	-
Through bolts and insert	1	-	2285053	-

Item	Qty	Effectivity	Part#	Manufacturer
Floor plate / Base plate Assembly	1	-	2285632	-

2.4 Procedure

2.4.1 Grouting Procedure Installation

The principal reason for grouting is to provide a level surface for the installation of equipment. This will prevent distortion of the mounting structures and the operational problems resulting from a not level condition. It, therefore, is very important the grouting procedure be carefully followed and the pad be level to ensure proper operation of the equipment.

2.4.1.1 Tools and Materials



NOTICE

The relationship between the table base and the positioner base plate is critical. Prior to drilling mounting holes contact local GE Medical Systems installation specialist or lead field engineer to verify that the proper full size floor mounting template is used.

1. Assure the following tools for grouting:

- 1/2" heavy-duty double-insulated electric drill, 650 rpm or greater
- Ardex T-1 Mixing Paddle, to be used with drill
- Ardex T-4 Spreader, for the installation of Ardex K-15
- Ardex T-5 Smoother, for feather-edging and touch-up work
- 25 lb (11.4 kg) scale for weighing grout
- Quart (0.95 liters) jar for measuring water
- Machinist Level (accuracy within .005 inch/foot) (1 part in 2400)
- Ten gallon (38 liters) container
- Knife and scraper
- Sponge or cloth rags
- 1/4 inch weather stripping
- Double sided tape

2. Assure the following materials for grouting:

- Ardex P-51 Primer for preparation of concrete floors

- Ardex P-82 Primer for preparation of non-porous floors such as tile, sealed concrete and terrazzo
- Ardex K-15 Self leveling grout (10 kg pails)

Ardex tools and materials can be obtained from local Ardex distributors if not included in installation kit. Contact Ardex at the location below for a list of local distributors:

Ardex, Inc.

630 Stoops Ferry Road

Corapolis (Pittsburgh), PA 15108

Phone: (412) 264-4240 Telex: 866264 us cora

2.4.1.2 Requirements

The quantity of self-leveling grout needed for an installation depends upon two variables: The area to be covered and the variation in the level of the floor.

1. Use the following to assist you in determining the amount of grout to mix for your installation. :
One pail contains 10 kg of grout and covers 60 sq. ft. (5.4 sq. meters) at a grout thickness of 2.5 mm.
2. Also refer to manufacturers instructions.

2.4.1.3 Floor Preparation And Priming

Ardex P-51 and P-82 Primers are used to prepare the flooring surfaces upon which grout will be applied to improve bonding and to reduce moisture lost from the grout during drying.

NOTE: If the floor is tiled, the tile must be removed under the area to be primed and grouted. Remove as much mastic as possible but do not use a solvent. Solvents prevent good bonding.

NOTE: If the floor is carpeted it must be cut and removed from the area to be primed and grouted. A minimum additional 2 inches (51 mm) must be temporarily lifted out of the way all around if a dam is to be constructed.

NOTE: Prepare the floor such that the Innova^{IQ} Table base plate will be flush with the floor surface.

1. Floor surface must be clean and free from grease, wax, latex compounds, curing compounds, dust and other foreign matter where grouting will be applied. Use a vacuum cleaner to clean dust from floor area.
2. Mark outline on floor to dimensions of area to be grouted.
3. Prepare Ardex P-51 or P-82 Primer by diluting with an equal part of water.
 - a. Use Ardex P-51 on concrete floors and wood subfloors.

- b. Use Ardex P-82 on non porous floors such as terrazzo, ceramic tile, sealed concrete and epoxy coated.
4. Apply a coat of primer with a sponge or brush on the area to be grouted.
5. Remove all puddles with cloth or brush.
6. Allow primer to dry a minimum of one hour before beginning grouting procedure.
7. Construct a foam dam according to the appropriate Installation Directions.

2.4.1.4 Grouting

1. Plug the bolt holes in the floor with wood dowels. Wrap the dowel ends in tape to prevent grout from getting into the anchor holes if holes are larger than the dowels.

NOTE: Do not use grease on the dowels, as this may keep the anchor from setting.

2. Seal the cracks around the wood dowels with clear RTV 108 silicone rubber compound before grouting.

NOTE: It is recommended to lightly lubricate the foam tape for easy removal after the grout pad has set.

3. Construct a dam with adhesive foam tape along the outline previously marked on the floor.
4. Dampen the area to be grouted with water.

2.4.1.5 Grout Preparation Procedure

Ardex K-15 when mixed with water becomes a liquid compound which seeks its own level and automatically produces a smooth and flat surface. This grouting procedure is recommended for use with X-Ray tables and positioners. It will also fill voids by capillary action.

1. For mixing, four environmental factors that must be controlled to maintain a 10 minute grout flow period:
 - a. Floor surface must be cool, primed and cleaned.
 - b. Air temperature should not exceed 70°F (21°C).
 - c. Grout powder should be allowed to cool to room temperature if brought in from a hot vehicle.
 - d. Water temperature should be 70°F (21°C) or cooler. Chilled water may be used to slightly compensate for the 3 previous steps.
2. Remove plastic bag containing Ardex K-15 powder from the mixing pail.
3. Install the Ardex T-2 mixing paddle in the 1/2 inch drill.

NOTE: Never use warm water; it shortens the grout flow time.

4. Add cold water to the mark on the pail. This is equivalent to 1 part by volume of cold water to 3.5 parts by volume of grout powder.
 5. Pour the grout powder into the water pail while mixing continuously with the drill. Mix entire contents of plastic bag.
 6. Mix grout thoroughly for approximately 1 minute to obtain a lump free mixture.
 7. **Do not hesitate!** Immediately pour grout mixture evenly all around the inside of the foam dam. Pour in sufficient grout to adequately cover all high points.
 - Grout has a flow time of ten minutes maximum at 70°F (21°C). This flow time decreases with higher water or room temperatures.
 - After pouring, discard any liquid grout mixture not used.
 8. Allow the grout to cure for at least 12 hours before subjecting it to a compressive load.
 9. After grout has dried, remove the dam and carefully trim the grout edge.
- NOTE:** If the level is off by more than 1/32" (0.8 mm), the grout pad must be removed and repoured.
10. Use a level to check the levelness of the grout pad prior to proceeding to either or .
 11. Proceed to either or and complete the base plate installation procedure.

2.4.2 Base plate Placement – Floor Anchor Installation

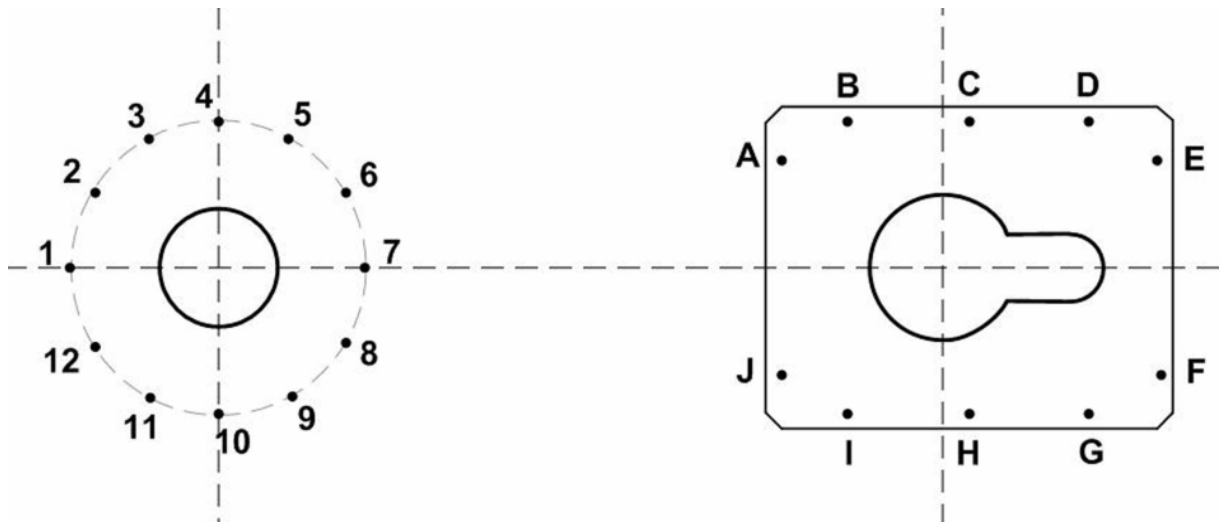
2.4.2.1 Gantry Base plate

1. After grout has hardened remove the foam.
2. Smooth off the air bubble shells and clean off the bottom of the base plate and bolt holes. Any chips left on the base plate can cause the plate to set up in other than a level position. Remember, the grout has very high compression strength. Chips will not penetrate the grout or, for that matter, the bottom of the base plate.
3. Position base plate over the anchor holes, hardstop towards the table. Tap each anchor through the base plate and into its hole with a hammer. Refer to [PIST0002 - Prepare Floor - LC Base Plate and Omega/InnovaIQ Table](#).
4. Make sure anchors are seated firmly in the floor and installed securely in place.

NOTE: Bolt heads must not protrude above top surface of base plate.

5. Start by torquing down each of the anchor bolts to 20 ft-lbs (2.7 daN.m) to seat the plate and keep it from moving. Continue to torque each bolt by 20 ft-lbs (2.7 daN.m) increments until 100 ft-lbs [13.5 daN.m] is reached. Torque sequence is as follows: 1-7-4-10-2-8-5-11-3-9-6-12 (12-holes).

Illustration 1-2:



6. After you have torqued the bolts, go back every half-hour and check the torque (two times should be adequate). A *creeping* function of the bolt may have caused the torque to adjust. Re-torque any bolts which adjusted.
7. After the grouting procedure is completed for on-grade applications, install vinyl trim on cable access pipe extending through floor and use white lithium grease to lubricate the vinyl trim. This will protect the trim as cables are pulled through the pipe.

2.4.2.2 Innova^{IQ} Table Base plate

1. After grout has hardened remove the foam.
2. Smooth off the air bubble shells and clean off the bottom of the base plate and bolt holes. Any chips left on the base plate can cause the plate to set up in other than a level position. Remember, the grout has very high compression strength. Chips will not penetrate the grout or, for that matter, the bottom of the base plate.
3. Position base plate over the anchor holes, hardstop towards the table. Tap each anchor through the base plate and into its hole with a hammer. Refer to [PIST0002 - Prepare Floor - LC Base Plate and Omega/InnovaIQ Table](#).
4. Make sure anchors are seated firmly in the floor and installed securely in place.

NOTE: Bolt heads must not protrude above top surface of base plate.

5. Start by torquing down each of the anchor bolts to 20 ft-lbs (2.7 daN.m) to seat the plate and keep it from moving. Continue to torque each bolt by 20 ft-lbs (2.7 daN.m) increments until 100 ft-lbs [13.5 daN.m] is reached. Torque sequence is as follows: A-F-E-J-C-H-B-G-D-I (10-holes) (Refer to [Illustration 1-2](#)).
6. After you have torqued the bolts, go back every half-hour and check the torque (two times should be adequate). A *creeping* function of the bolt may have caused the torque to adjust. Re-torque any bolts which adjusted.

7. After the grouting procedure is completed for on-grade applications, install vinyl trim on cable access pipe extending through floor and use white lithium grease to lubricate the vinyl trim. This will protect the trim as cables are pulled through the pipe.

2.4.3 Base plate Placement – Through Bolt Installation

2.4.3.1 Gantry Base plate

1. After grout has hardened remove the foam.
2. Smooth off the air bubble shells and clean off the bottom of the base plate and bolt holes. Any chips left on the base plate can cause the plate to set up in other than a level position. Remember, the grout has very high compression strength. Chips will not penetrate the grout or, for that matter, the bottom of the baseplate.
3. Position base plate (hardstop towards the table) over the through-bolt holes and, using loctite, install through-bolts, washers, plates and nuts. Refer to [PIST0002 - Prepare Floor - LC Base Plate and Omega/InnovaIQ Table](#).

NOTE: Bolt heads must not protrude above top surface of base plate.

4. Insert and torque each of the base plate bolts to 20 ft-lbs (2.7 daN.m) to seat the plate and keep it from moving. Continue to torque each bolt in 20 ft-lbs (2.7 daN.m) increments until 95 ft-lbs (12.8 daN.m) for 3/4" bolts is reached. Torque sequence is as follows:
1-7-4-10-2-8-5-11-3-9-6-12 (12-holes) (Refer to [Illustration 1-2](#)).
5. After you have torqued the bolts, go back every half-hour and check the torque (two times should be adequate). A *creeping* function of the bolt may have caused the torque to adjust. Re-torque any bolts which adjusted.

2.4.3.2 Innova^{IQ} Table Base plate

1. After grout has hardened remove the foam.
2. Smooth off the air bubble shells and clean off the bottom of the base plate and bolt holes. Any chips left on the base plate can cause the plate to set up in other than a level position. Remember, the grout has very high compression strength. Chips will not penetrate the grout or, for that matter, the bottom of the base plate.
3. Position base plate (hardstop towards the table) over the through-bolt holes and, using loctite, install through-bolts, washers, plates and nuts. Refer to [PIST0002 - Prepare Floor - LC Base Plate and Omega/InnovaIQ Table](#).

NOTE: Bolt heads must not protrude above top surface of base plate.

4. Insert and torque each of the base plate bolts to 20 ft-lbs (2.7 daN.m) to seat the plate and keep it from moving. Continue to torque each bolt in 20 ft-lbs (2.7 daN.m) increments until 95 ft-lbs (12.8 daN.m) for 3/4" bolts is reached. Torque sequence is as follows: A-F-E-J-C-H-B-G-D-I (10-holes) (Refer to [Illustration 1-2](#)).

5. After you have torqued the bolts, go back every half-hour and check the torque (two times should be adequate). A *creeping* function of the bolt may have caused the torque to adjust. Re-torque any bolts which adjusted.

2.4.4 Base plate placement – Floor plate

In some countries, a floor plate (Customer expense) is locally supplied to support the gantry and the table.

1. Position base plate (hardstop towards the table) over the threaded holes and, using loctite, install screws and washers delivered into the kit 2285632.
2. Insert and torque each of the base plate bolts to 20 ft-lbs (2.7 daN.m) to seat the plate and keep it from moving. Continue to torque each bolt in 20 ft-lbs (2.7 daN.m) increments until 150 ft-lbs (20 daN.m) for 3/4" bolts is reached. Torque sequence is as follows:
1-7-4-10-2-8-5-11-3-9-6-12 (12-holes)
3. After you have torqued the bolts, go back every half-hour and check the torque (two times should be adequate). A *creeping* function of the bolt may have caused the torque to adjust. Re-torque any bolts which adjusted.

2.5 Finalization

No finalization steps.

3 PIST0004 - Above Grade Base Plate Insert Installation

3.1 Personnel Requirements

Personnel Requirements	Preliminary Reqs	Procedure	Finalization
1	0 min	1 hour	0 min

3.2 Overview

The base plate insert, is provided to separation of the electrical cables and the water hoses as they pass through the building floor as required by NEC (National Electrical Code) or other local code requirements. Installation of this insert requires coordination with the electrical contractor to determine the length of the 6" threaded NPT (National Pipe Thread) conduit that will be required to connect between the insert and the contractor supplied conduit.

3.3 Preliminary Requirements

3.3.1 Consumables

Item	Qty	Effectivity	Part#	Manufacturer
(Base Plate Assembly)	1	-	2285048	-
(grout + anchor bolts + water / electric Separator)	1	-	2285052	-
(grout + through bolts + water / electric Separator)	1	-	2285053	-
Elegance Add-on kit	1	-	2360538	-

3.4 Procedure

1. Verify floor cable opening is drilled to a size of 9" (225 mm).
2. Attach contractor supplied 6" conduits to the base plate insert. Refer to [Illustration 1-3](#) or [Illustration 1-4](#).
3. Place insert into cable opening.
4. Connect vertical conduit to floor conduit (contractor supplied hardware).

Illustration 1-3:

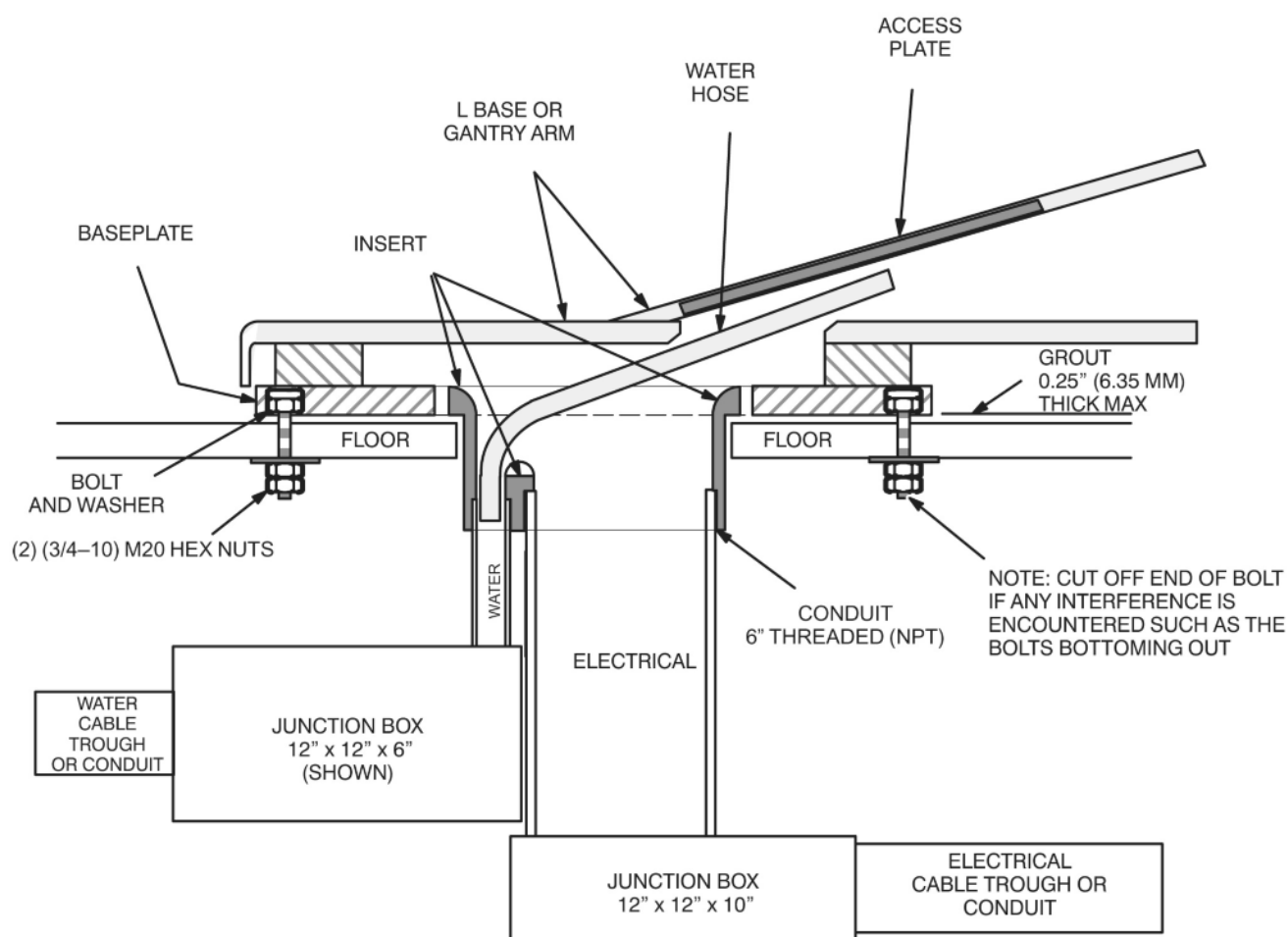
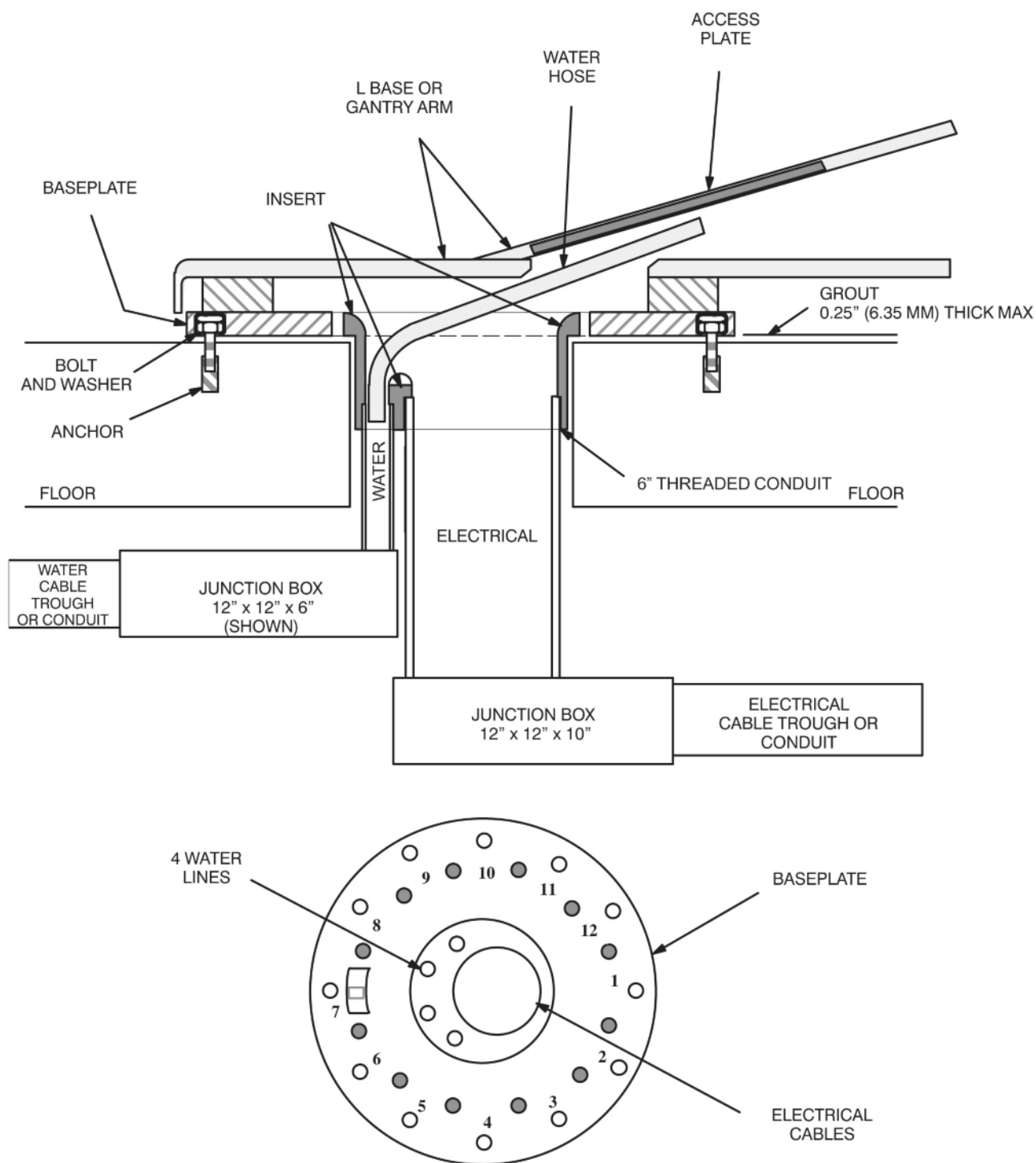


Illustration 1-4:



3.5 Finalization

No finalization steps.

4 PIST0005 - Floor Anchor Mounting On Grade

4.1 Personnel Requirements

Personnel Requirements	Preliminary Reqs	Procedure	Finalization
1	0 min	1 hour	0 min

4.2 Preliminary Requirements

4.2.1 Tools and Test Equipment

Item	Qty	Effectivity	Part#	Manufacturer
Carbide-tipped drill bit for installing gantry and table anchors: ANSI B94.12 or 5/8" for on-grade anchors	1	-	-	-
Carbide-tipped drill bit for installing gantry and table through bolts: 25 mm (1") recommended	1	-	-	-
10 mm (3/8") drill bit for pilot holes	1	-	-	-
Impact drill for use with carbide-tipped drill bits. We recommend Skill #906 roto-hammer or equivalent.	1	-	-	-
1" wire brush for cleaning out mounting holes	1	-	-	-
Vacuum cleaner	1	-	-	-

4.2.2 Consumables

Item	Qty	Effectivity	Part#	Manufacturer
grout + anchors + cable conduit	1	-	2286398	-

4.2.3 Safety



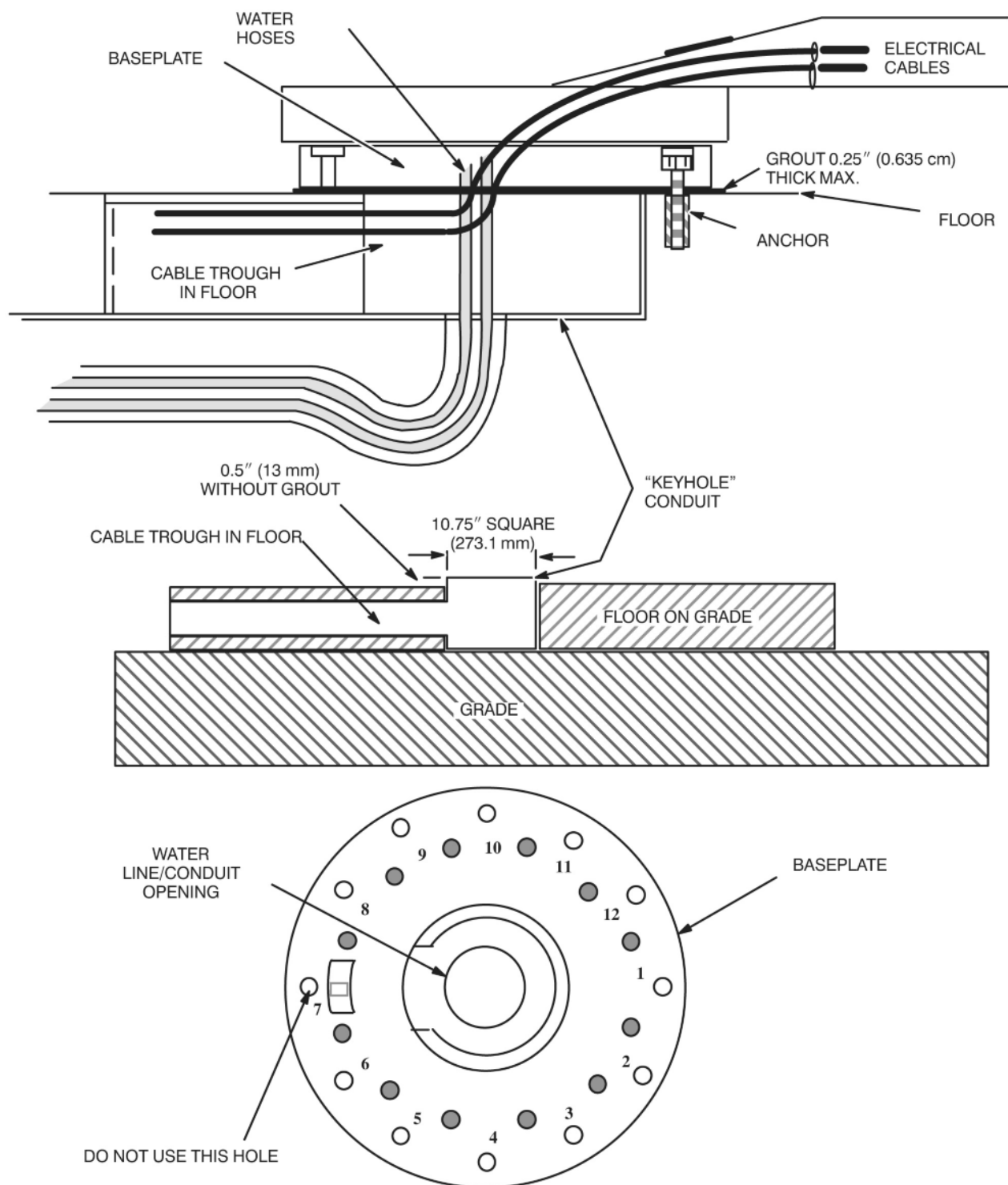
⚠ WARNING

PERSONAL INJURY DUE TO IMPROPERLY MOUNTED EQUIPMENT! AVOID POTENTIAL THROUGH-BOLT MOUNTING FAILURES BY HAVING THE HOSPITAL STRUCTURAL ENGINEER OR ARCHITECT VERIFY THE FLOOR CONSTRUCTION BEFORE DRILLING HOLES. PAN-TYPE FLOOR CONSTRUCTION REQUIRES THE USE OF SPECIALLY DESIGNED BENEATH-THE-FLOOR STEEL CHANNELS TO ENSURE THE THROUGH-BOLT MOUNTING HARDWARE DOES NOT FAIL DURING USE. THESE CHANNELS MUST BE DESIGNED BY AN AUTHORIZED LOCAL STRUCTURAL ENGINEER. AVOID POTENTIAL FLOOR ANCHOR FAILURES BY HAVING THE HOSPITAL STRUCTURAL ENGINEER OR ARCHITECT INSPECT THE COMPRESSION STRENGTH OF THE CONCRETE FLOOR BEFORE USING FLOOR ANCHORS. THE MAXIMUM PULLOUT FORCE PER ANCHOR WAS CALCULATED ASSUMING A REGULAR WEIGHT CONCRETE HAVING A MINIMUM COMPRESSION STRENGTH OF 2500 PSI (176 KG/CM²) AT THE TIME OF INSTALLATION, AND ANCHORS INSTALLED TO THE REQUIRED HOLE DEPTH. ENSURE THE CONCRETE FLOOR MEETS THIS MINIMUM COMPRESSION STRENGTH BEFORE USING FLOOR ANCHORS.

4.3 Procedure

1. Refer to [PIST0002 - Prepare Floor - LC Base Plate and Omega/InnovaIQ Table](#).
2. Refer to illustration below:

Illustration 1-5:



4.4 Finalization

No finalization steps.

5 PIST0006 - Vascular Above Without Insert

5.1 Personnel Requirements

Personnel Requirements	Preliminary Reqs	Procedure	Finalization
1	0 min	1 hour	0 min

5.2 Preliminary Requirements

5.2.1 Tools and Test Equipment

Item	Qty	Effectivity	Part#	Manufacturer
Carbide-tipped drill bit for installing gantry and table anchors: ANSI B94.12 or 5/8" for on-grade anchors	1	-	-	-
Carbide-tipped drill bit for installing gantry and table through bolts: 25 mm (1") recommended	1	-	-	-
10 mm (3/8") drill bit for pilot holes	1	-	-	-
Impact drill for use with carbide-tipped drill bits. We recommend Skill #906 roto-hammer or equivalent.	1	-	-	-
1" wire brush for cleaning out mounting holes	1	-	-	-
Vacuum cleaner	1	-	-	-

5.2.2 Consumables

Item	Qty	Effectivity	Part#	Manufacturer
grout + above grade floor anchors without insert	1	-	2285051	-

5.2.3 Safety



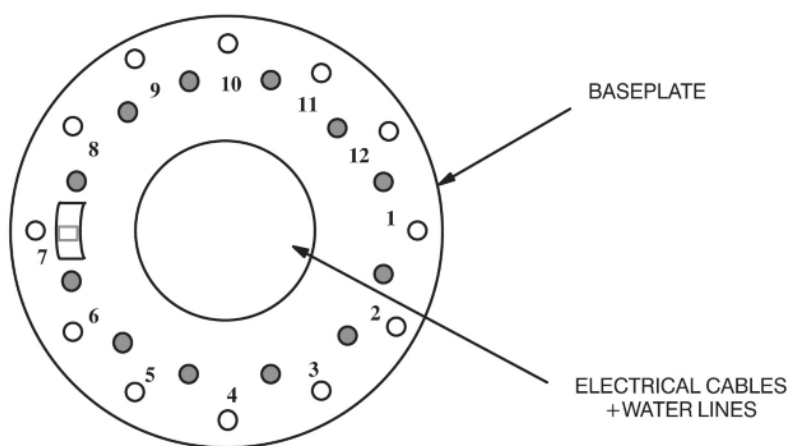
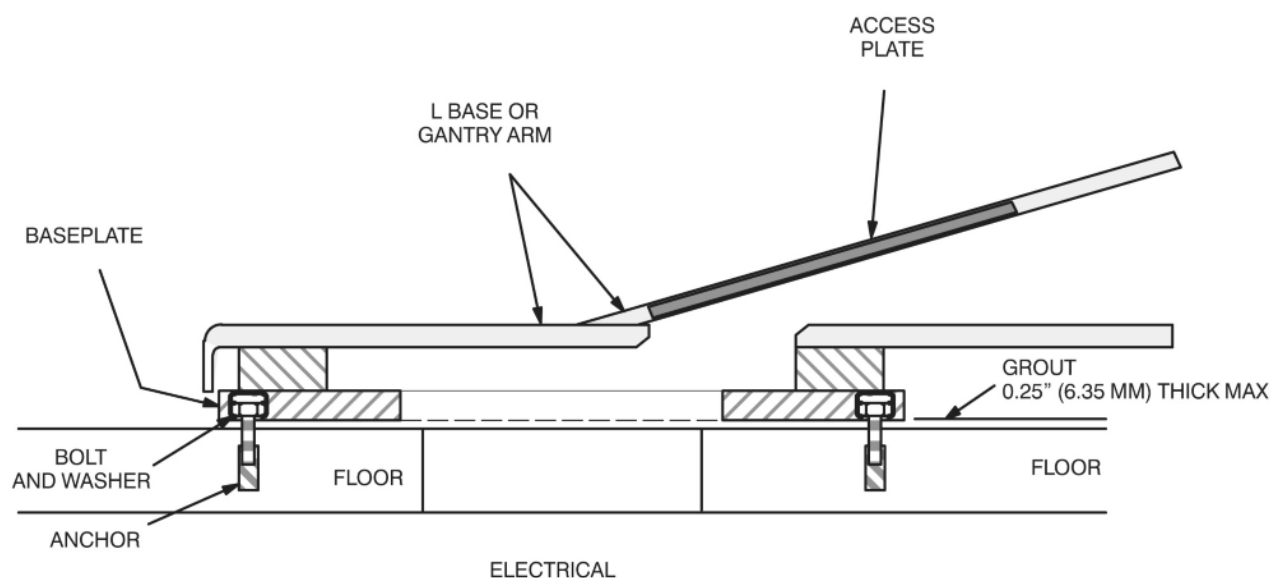
⚠ WARNING

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5.3 Procedure

1. Refer to [PIST0002 - Prepare Floor - LC Base Plate and Omega/InnovaIQ Table](#).
2. Refer to illustration below:

Illustration 1-6:



5.4 Finalization

No finalization steps.

Chapter 2 Innova LC Positioner and Omega/Innova IQ Table Floor Preparation Kits (GEMS supplied)

1 LC Positioner and Table Floor Preparation Kits

Illustration 2-1: Biplane kit selection

Notes: (1,2,3)

1. To be used if customer needs to see border of skull in 12cm FOV with patient positioned at max table top
2. Unique position for all applications, including neuro (see note 1)
3. No possibility for further Elegance table upgrade. Decision with customer

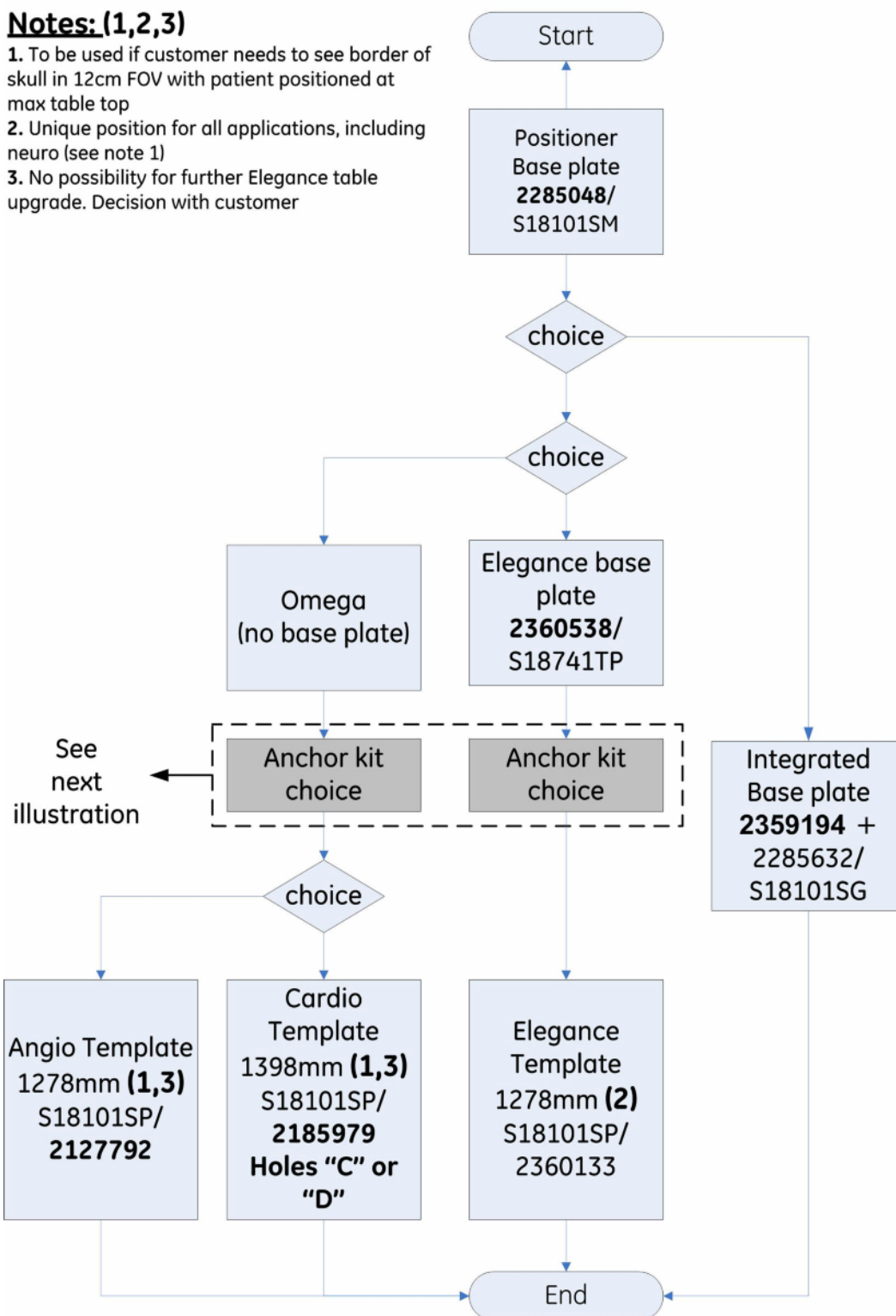


Illustration 2-2: Anchor kit choice

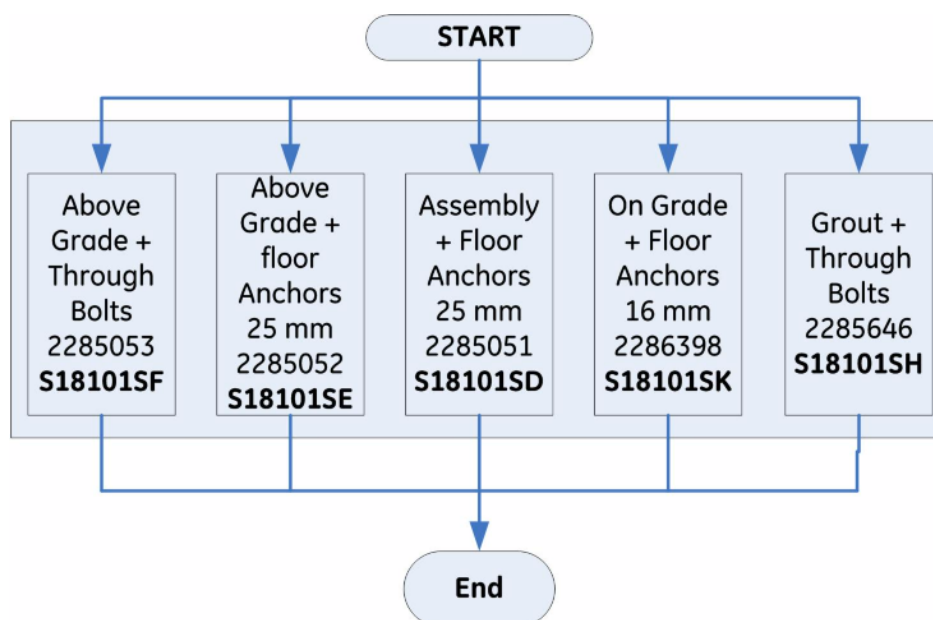
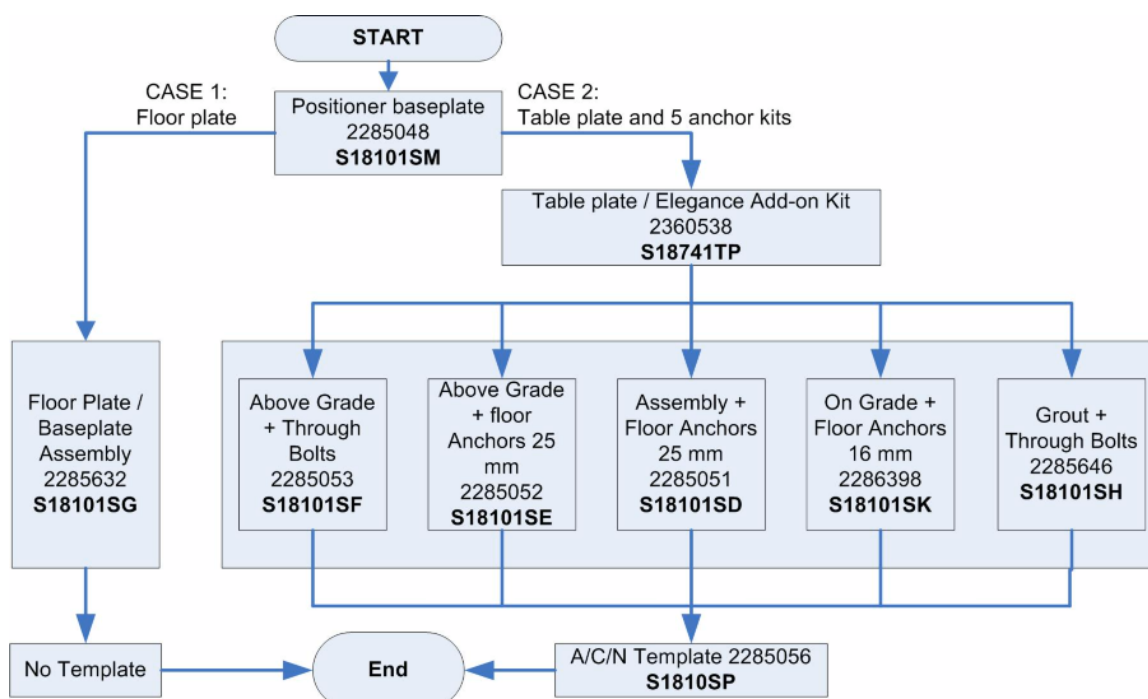


Illustration 2-3: Monoplane kit selection




NOTE: The table can be Omega or Innova^{IQ} Table.
The described preparation kits are supplied by GE Healthcare.

All GE supplied vascular system floor preparation are contained in catalog. There are some additional gantry/table mounting kits based on each mounting method: through bolts or floor anchors.

- Base plate assembly (mandatory) 2285048 – Refer to [Table 2-1](#)
- If there is no integrated baseplate plan (2359194) delivered with S18101SG, please refer to drawings 2359194 (Angio configuration [Illustration 2-4](#)) or 2359194 (Cardio configuration [Illustration 2-5](#)). Please order locally the integrated base plate based on this plan.
- Assembly and separation (Select kit) 2285050 – Refer to tables,
 - Above grade, Floor anchors without insert – 2285051.
 - Through bolts without insert – 2285646.
 - On grade, Floor anchors – 2286398.
 - Above grade, Floor anchors and insert – 2285052.
 - Through bolts and insert – 2285053.
 - Floor plate / Base plate Assembly – 2285632.
- Templates (select kit) – 2285054 – Refer to [Table 2-9](#)
 Angio/Cardio/Neuro templates – 2285056 (containing 2185979, 2127792 and 2360133 templates).

1.1 2285048 - Base Plate Assembly

Table 2-1:












Item	Name	Part #	Description	Quan.	Notes
	Baseplate	2285059	12 Hole Floor Baseplate	1 pc	
	Lift Plate	2290939	Lifting Straps	2 pc	
	Hex Head Screw	5166535	Hex Head Screw 1/2"-13UNC L1 1/2" 12.9 Black	2 pc	
	Grease	2295599	Lithium grease lubricant 100g	2 pc	
	Doc	2230112-1-100	Vascular Gantry Baseplate and Table	1 pc	
	Doc	2229297-100	LCA/LCV+/LC+ System Baseplate and Omega IV/V/EP Table Floor Preparation	1 pc	
	Doc	2290880-2-100	Innova Pre-Installation Kit Install Procedure	1 pc	

NOTE: The 12 Gantry baseplate mounting screws are delivered with the system's Gantry. These screws are:

- cap screws 5166774; Screw Socket Head Cap 1/2"-20 UNF L1 1/2" 12.9 Black (used when installing new system on old baseplate (US threads))
- cap screws 2300939; Hex Head Cap screw; M12 40/40 Class 12.9 Black ; used to attach L-brackets on table shipping pallet to positioner dolly for table positioning (used when the new baseplate is metric threads)

1.2 2360538 – Elegance Add-On Kit




Table 2-2:

Item	Name	Part #	Description	Quan.	Notes
	Omega / Elegance common Plate	2361993	Plate to be anchored under the table	1 pc	
	Hex Screws	5120708	Screw M16x40x40 Inox A4-70 Pass	10 pc	4 only are used for Omega
	Washer, Flat	99125091	Washer Plain - Large 17 mm/40 mm	10 pc	
	Floor Anchor	46-302265P1	5/8 diameter 6" floor anchor bolts	6 pc	
	Dowel	2290937-2	Wood Dowel; 16 mm diameter	6 pc	
	Bolt, Hex	2296892	Through bolt M20-500-400	6 pc	
	Washer, Flat	99142204	Washer plain 21 mm/40 mm for Through Bolts; one for each bolt	6 pc	
	Plate	2290941	Special Steel Spacer Plate; 4 in. x 4 in. (102 mm x 102 mm); one for each bolt	6 pc	
	Nut, Hex	99141607	Hex Nut M20 STL galvanized, two for each bolt	12 pc	
	Dowel	2290937	Wood Dowel; 24 mm diameter	6 pc	
	Cap	5130979	Plastic Cap	10 pc	
	M16 Plug	5130982	Plastic Plug	6 pc	see note *

NOTE: * M16 plug is needed only when Omega V table is replaced by Innova^{IQ} Table. Therefore, these plugs have to be kept (bag let inside the table base) until Innova^{IQ} Table is installed (no need to fit them with Omega table).







1.3 2285050 – Assembly and separation select kit**1.3.1 2285051 – Above grade, Floor Anchors without insert**

Table 2-3:

Item	Name	Part #	Description	Quan.	Notes
	Floor Anchor	46-302265P1	Floor Anchor Bolt; 5/8 - 10x6" - (16 mm) drilling. (16 mm) drilling. 12 anchors for Gantry and 4 anchors for Table	16 pc	Above Grade anchor mounting method hardware
	Grout assy	2285055	- 10 kg Powdered Mortar Ardex K-15 - RTV Silicon Rubber Adhesive - 18 mm masking tape adhesive - Open cell foam	1 kit	Used in constructing Gantry grout dam
	Dowel	2290937-2	Wood Dowel; (16 mm) diameter	12 pc	




1.3.2 2285646 – Through bolts without insert

Table 2-4:

Item	Name	Part #	Description	Quan.	Notes
	Bolt, Hex	2296892	Through Bolt; M20 - 500-400 12 bolts for Gantry and 4 bolts for Table	16 pc	Through Bolt mounting method hardware
	Washer, Flat	99142204	Special Flat Washer for Through Bolts; one for each bolt	16 pc	same as above
	Plate	2290941	Special Steel Spacer Plate; 4 in. x 4 in. (102 mm x 102 mm); one for each bolt	16 pc	same as above
	Nut, Hex	99141607	Hex Nut M20 STL galvanized two for each bolt	32 pc	same as above
	Grout assy	2285055	- 10 kg Powdered Mortar Ardex K-15 - RTV Silicon Rubber Adhesive - 18 mm masking tape adhesive - Open cell foam	1 kit	Used in constructing Gantry grout dam
	Dowel	2290937	Wood Dowel; 24 mm diameter	12 pc	




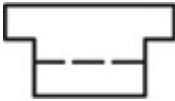
1.3.3 2286398 – On grade, Floor anchor

Table 2-5:

Item	Name	Part #	Description	Quan.	Notes
	Floor Anchor	46-302265P1	Floor Anchor Bolt; 5/8-10 x 6 in. 12 anchors for Gantry and 4 anchors for Table	16 pc	On Grade anchor mounting method hardware
	Grout assy	2285055	- 10 kg Powdered Mortar Ardex K-15 - RTV Silicon Rubber Adhesive - 18 mm making tape adhesive - Open cell foam	1 kit	Used in constructing Gantry grout dam
	Dowel	2290937-2	Wood Dowel; 16 mm diameter	12 pc	
	Cable Conduit	2285057	Cable conduit - sheet metal part	1 pc	
	Vinyl Trim	2296890	Gripping Range; 1.5 to 3 mm THK	1 m	
	Vinyl Trim	2296891	Vinyl trim with segmented metal core 12 mm	1 m	







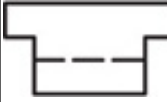
1.3.4 2285052 – Above grade, Floor anchor with insert

Table 2-6:

Item	Name	Part #	Description	Quan.	Notes
	Floor Anchor	46-302265P1	Floor Anchor Bolt; 5/8-10 x 6 in. drilling 12 anchors for Gantry and 4 anchors for Table	16 pc	Above Grade anchor mounting method hardware
	Grout assy	2285055	- 10 kg Powdered Mortar Ardex K-15 - RTV Silicon Rubber Adhesive - 18 mm making tape adhesive - Open cell foam	1 kit	Used in constructing Gantry grout dam
	Dowel	2290937-2	Wood Dowel; 16 mm diameter	12 pc	
	Water Electric Separator	2268647	Manufactured part introduced in Positioner key hole to fit 1 electrical conduit of 6".	1 pc	Electrical and water conduits separated inch size.




1.3.5 2285053 – Through bolts with insert

Table 2-7:

Item	Name	Part #	Description	Quan.	Notes
	Bolt, Hex	2296892	Through Bolt; M20 - 500-400 12 bolts for Gantry and 4 bolts for Table	16 pc	Through Bolt mounting method hardware
	Washer, Flat	99142204	Special Flat Washer for Through Bolts; one for each bolt	16 pc	same as above
	Plate	2290941	Special Steel Spacer Plate; 4 in. x 4 in. (102 mm x 102 mm); one for each bolt	16 pc	same as above
	Nut, Hex	99141607	Hex Nut M20 STL galvanized two for each bolt	32 pc	same as above
	Grout assy	2285055	- 10 kg Powdered Mortar Ardex K-15 - RTV Silicon Rubber Adhesive - 18 mm making tape adhesive - Open cell foam	1 kit	Used in constructing Gantry grout dam
	Dowel	2290937	Wood Dowel; 24 mm diameter	12 pc	
	Water Electric Separator	2268647	Manufactured part introduced in Positioner key hole to fit 1 electrical conduit of 6".	1 pc	Electrical and water conduits separated inch size.

1.3.6 2285632 – Floor plate / Base plate assembly

Table 2-8:


Item	Name	Part #	Description	Quan.	Notes
	Hex Screws	2360523	Screw M16x30x30 Inox A4-80 Pass	12 pc	For floor plate / Base plate assembly
	Washer	99125091	Washer P 17 mm/40 mm	34 pc	24 are used for the positioner integration
	Hex Screws	99133570	Screw M16x40x40 Inox A4-80 Pass	10 pc	4 only are used for Omega

NOTE: The kit 2285632 Floor plate / Baseplate assembly is needed when the floor plate is installed. This part isn't GE part. It's ordered locally.

1.4 2285054 – Templates

1.4.1 2285056 - A/C/N Templates

Table 2-9:

Item	Name	Part #	Description	Quan.	Notes
	A/C/N Templates	2185979	Gantry and Omega C/N Patient Table floor mounting template	1 pc	See Note (**)
		2127792	LCV+ Gantry and Omega A Patient Table floor mounting template	1 pc	
		2360133	Innova 4100 Template	1 pc	Specific for 41 cm detector


NOTE: (**) See illustrations:

- *Gantry/Omega IV Compact Or Omega V Long Table System Floor Mounting Template*
- *Gantry/Omega V Long Table System Floor Mounting Template (Optional)*

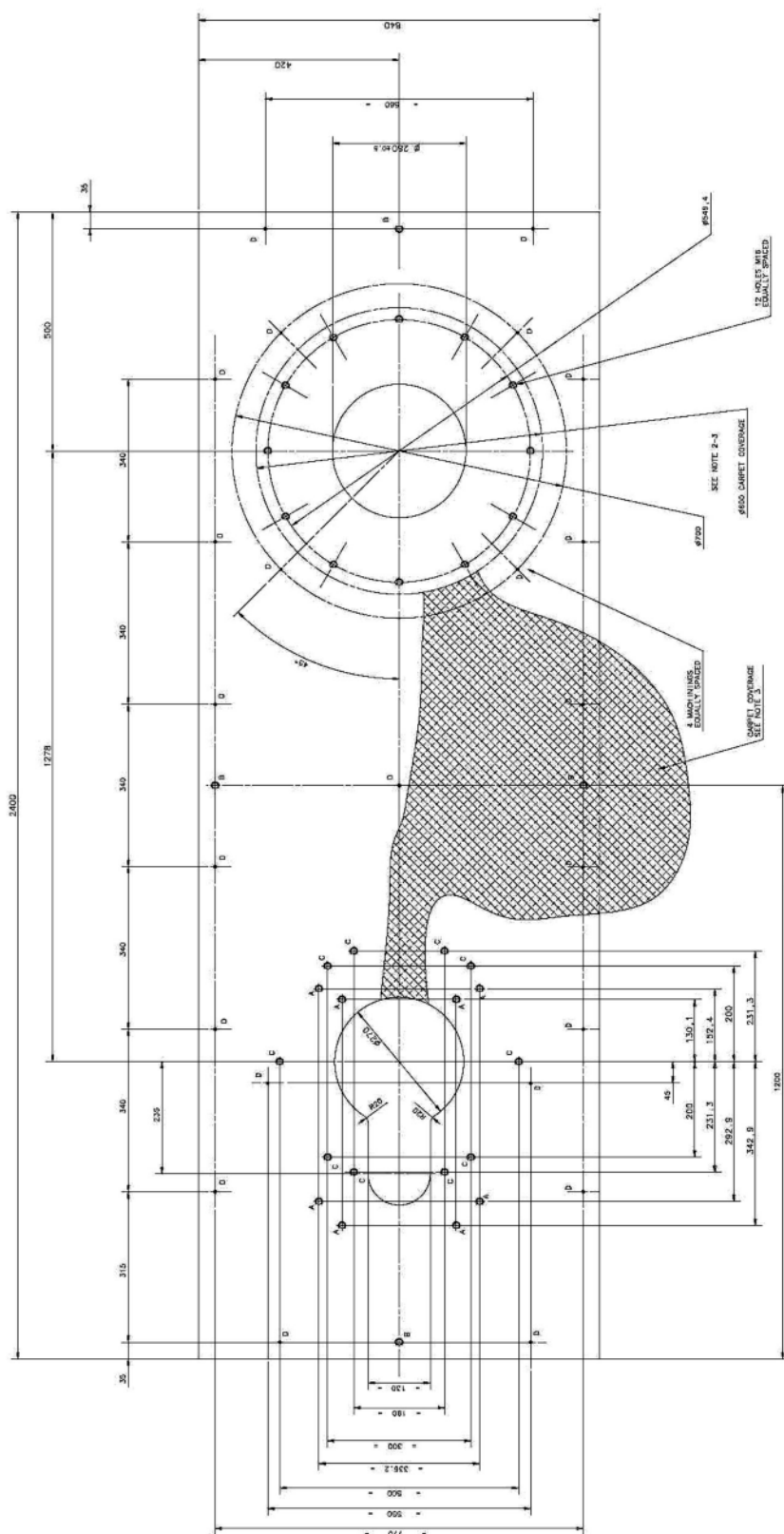
in [Chapter 3, Templates](#) for details.

1.4.2 2186109 – EP Template

Table 2-10:

Item	Name	Part #	Description	Quan.	Notes
	EP Template	2186109	LCV+ Gantry and EP Patient Table floor mounting template	1 pc	

ANGIO CONFIGURATION



NOTE 3:
The floor plate should be covered with a 3mm max. thick carpet, delivered separately.

THIS PLATE IS NOT A GE PART,
TO BE ORDERED LOCALLY

NOTE 1:

A: Omega 4/5 table integration M16
a: 4 holes M16 integration for hand

A: Omega 4/5 table integration M16
B: 4 holes M16 integration for handling

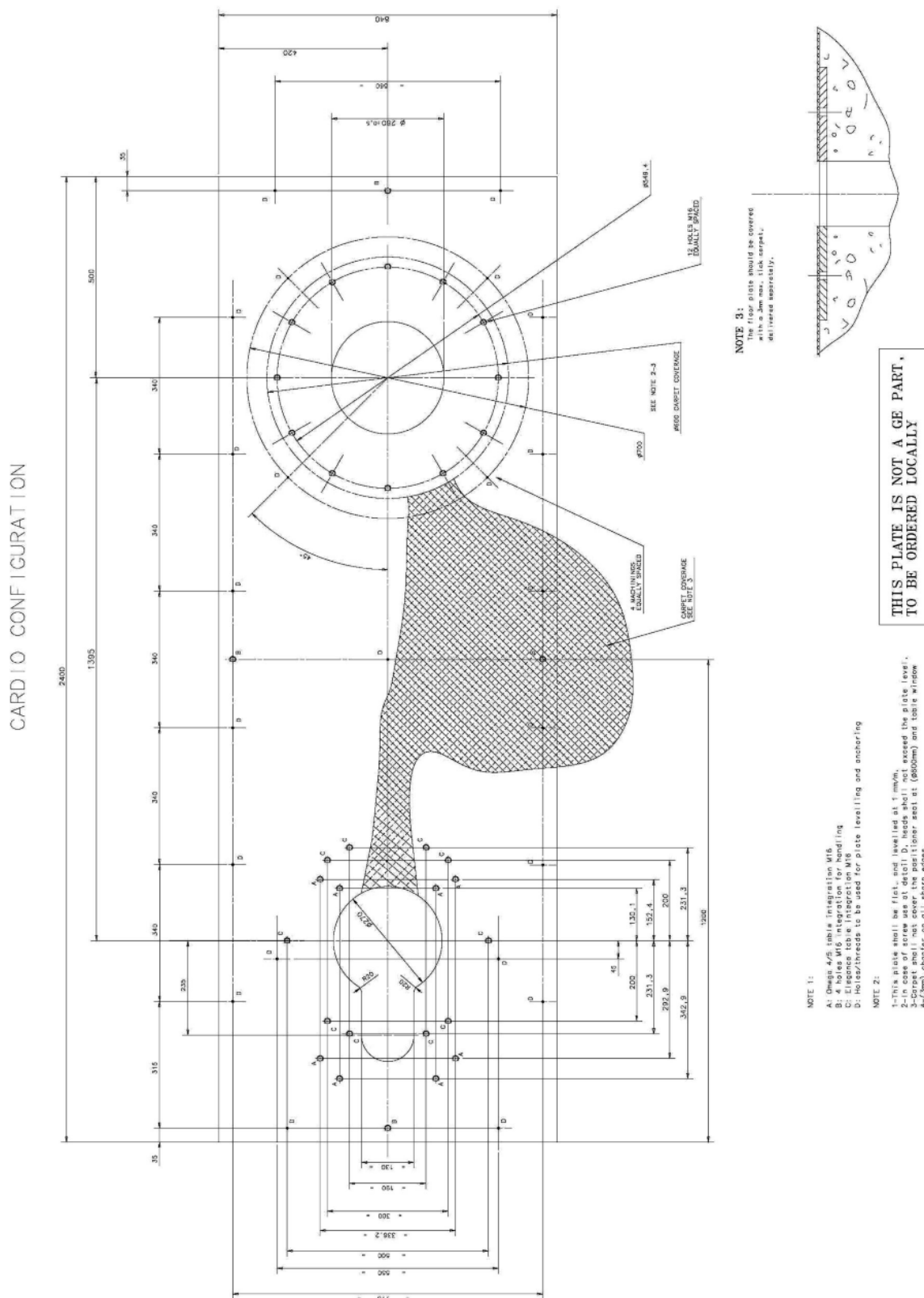
C: Elegance table Integration M16

D: Holes/threads to be used for plate levelling and anchoring

NOTE 2:

2-This plate shall be flat, and leveled at 1 mm/m.

Illustration 2-5: 2359194 Cardio Configuration



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Chapter 3 System Floor Mounting Template

1 Templates

Illustration 3-1: Hole Location in concrete floor

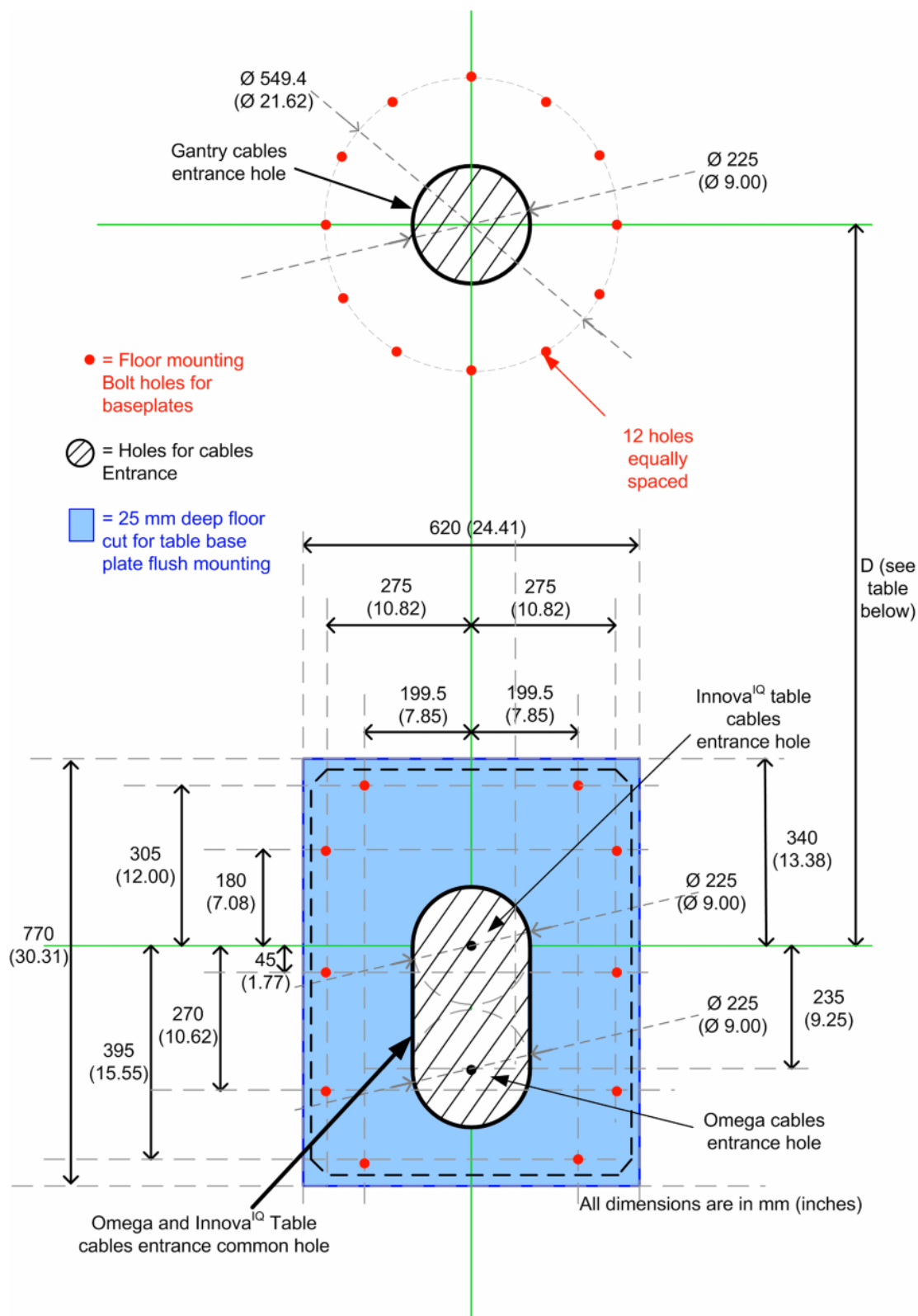
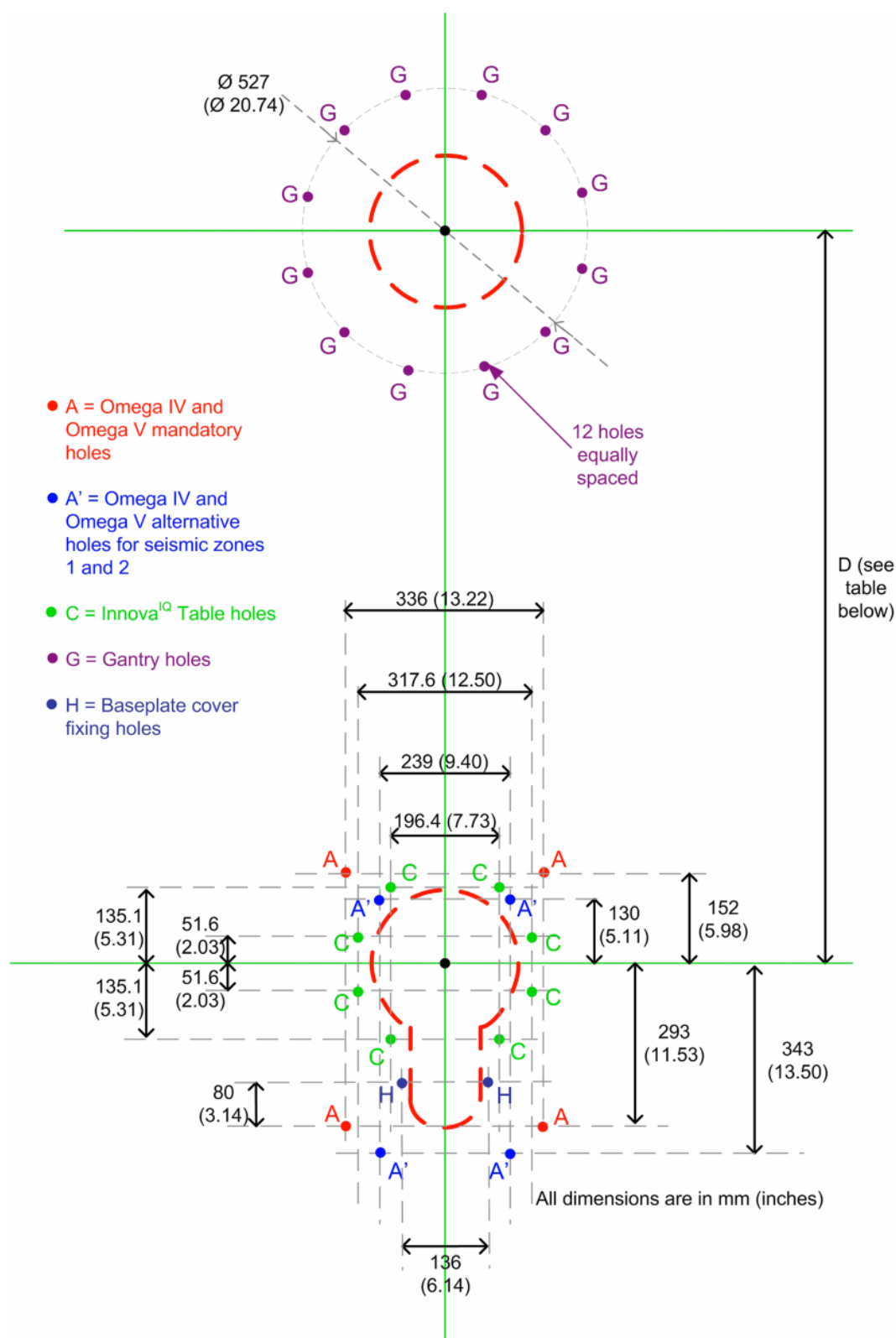


Illustration 3-2: Gantry and Table mounting holes



NOTE: It is not necessary to drill the baseplate cover fixing holes (H), as they are not used.

Table 3-1: D distance

	ANGIO	CARDIO	NEURO*
Omega IV Compact	NA	1395 mm (54.9 in)	NA
Omega V Long	1278 mm (50.3 in)	NA	1595 mm (62.8 in)
Omega V non motorized Long	1278 mm (50.3 in)	NA	1595 mm (62.8 in)
Innova ^{IQ} Table	1278 mm (50.3 in)	1395 mm (54.9 in)	1595 mm (62.8 in)

NOTE: * Distance not authorized for new installations.

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