

GE Healthcare

Direction 24239893TPH
1.5T HNS Coil Installation

Class A



Direction 24239893TPH
Rev 4
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Revision History

Date	Rev	Change Description
5-Sept-08	0	Updated to meet compliance
27-Oct-08	1	Initial Release
19-March-09	2	<ul style="list-style-type: none"> • Updated Table of Contents with the “Scope” section • Updated “Damage in Transportation” statement • Extended the scope of installation to HDx and Discovery MR450 & MR750 • Updated the “Coil Config” section with a note related to pop-up box specific to Discovery MR systems • Removed the HDx designator from Section 5 • Update Table 5.3.1 with phantom part number • Added Section 6 - HNS Coil Setup for Reverse Ramped System
9-Sept-09	3	<ul style="list-style-type: none"> • Updated Language Policy per DOC0620154 • Added information per Phantom Elimination Program
8-June-10	4	<ul style="list-style-type: none"> • Removed MCQA section and referenced service docs per SPR MRIhc46403 • Updated Language Policy to DOC0620154 rev 2 • Updated Damage in Transportation • Removed requirement to install coil configs

Language policy for service documentation (DOC0620154 rev 2)

ПРЕДУПРЕЖДЕНИЕ (BG)	<p>Това упътване за работа е налично само на английски език.</p> <ul style="list-style-type: none"> 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)	<p>本维修手册仅提供英文版本。</p> <ul style="list-style-type: none"> 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)	<p>本服務手冊僅提供英文版本。</p> <ul style="list-style-type: none"> 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、機械性或其他形式的危險。
警告 (ZH-TW)	<p>本維修手冊僅有英文版。</p> <ul style="list-style-type: none"> 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)	<p>Ovaj servisni priručnik dostupan je na engleskom jeziku.</p> <ul style="list-style-type: none"> 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. Zanemarite li ovo upozorenje, može doći do ozljede davatelja usluge, operatera ili pacijenta uslijed strujnog udara, mehaničkih ili drugih rizika.
VÝSTRAHA (CS)	<p>Tento provozní návod existuje pouze v anglickém jazyce.</p> <ul style="list-style-type: none"> 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)	<p>Denne servicemanual findes kun på engelsk.</p> <ul style="list-style-type: none"> 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 teknikereren, operatøren eller patienten.
WAARSCHUWING (NL)	<p>Deze onderhoudshandleiding is enkel in het Engels verkrijgbaar.</p> <ul style="list-style-type: none"> 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)	<p>This service manual is available in English only.</p> <ul style="list-style-type: none"> • 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)	<p>See teenindusjuhend on saadaval ainult inglise keeles</p> <ul style="list-style-type: none"> • 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)	<p>Tämä huolto-ohje on saatavilla vain englanniksi.</p> <ul style="list-style-type: none"> • 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)	<p>Ce manuel d'installation et de maintenance est disponible uniquement en anglais.</p> <ul style="list-style-type: none"> • 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)	<p>Diese Serviceanleitung existiert nur in englischer Sprache.</p> <ul style="list-style-type: none"> • 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 Kundendiensttechnikers, des Bedieners oder des Patienten durch Stromschläge, mechanische oder sonstige Gefahren kommen.
ΠΡΟΕΙΔΟΠΟΙΗΣΗ (EL)	<p>Το παρόν εγχειρίδιο σέρβις διατίθεται μόνο στα αγγλικά.</p> <ul style="list-style-type: none"> • 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)	<p>Ezen karbantartási kézikönyv kizárólag angol nyelven érhető el.</p> <ul style="list-style-type: none"> • 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.

AÐVÖRUN
(IS)

Þessi þjónustuhandbók er aðeins fánleg 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 aðvörðun 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.

ĮSPĖJIMAS
(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.

- AVISO**
(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 idioma, 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 elétricos, 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 pericolului 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 zákazníkovi 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.

ATTENTION!

Installation of this coil MUST be performed by a GE field engineer. Please contact your field engineer to arrange for installation.

Attempts to perform installation of this coil without proper system configuration will result in system errors.

Table of Contents

1- DAMAGE IN TRANSPORTATION 11

2- Scope 12

3- COIL HARDWARE CONFIGURATIONS 13

4- COIL CONFIG..... 14

 4-1 Personnel Requirements 14

 4-2 Overview 14

 4-3 Preliminary Requirements 14

 4-4 Procedure 14

5- HNS Coil MCQA Setup..... 18

6- HNS Coil Setup for Reverse Ramped System..... 19

 6-1 Personnel Requirements 19

 6-2 Overview..... 19

 6-3 Tools and Test Equipment 19

 6-4 Procedure 19

1- 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.

File a report with

- Call 1-800-548-3366 and use option 8.
- Fill out a report on <http://egems.med.ge.com/edq/home.jsp>
- Contact your local service coordinator for more information on this process.

Rev. October 28, 2009

2- SCOPE

This coil installation service manual is applicable to the HDx/HDxt Upgrade System, HDx/HDxt Forward Production System, Discovery MR450, and Optima MR450w.

The HNS Coil has 5 rating plates so there are 4 sets of Product Locator cards included with the shipment.

The Global Install Base Database (also known as Product Locator System) tracks shipment, trans-shipment, and field location of the serialized models. There are now two methods for submitting Product Locator information.

1. At this time, for U.S. ONLY, the preferred method of submitting information is the *FE Site Verification Web Site* at:

<http://qib.gehealthcare.com>

The FE Site Verification consists of three components that are available on the web from the main menu. They are:

- _ Install/deinstall product locator model and serial numbers
- _ Add/modify ship to address information
- _ Update CARES FE data for primary/secondary FEs

To obtain a copy of the FE training tutorial for using this website, a downloadable copy is available at the following:

Product Locator Support Central Page – <http://supportcentral.ge.com/15563>

Note: One “Shipping Card” is filled out and submitted when shipped (extra cards are supplied for trans-shipments between storage and distribution points), and the “Installation Card” and extra shipment cards are attached.

2. Verify the serial and model number on each rating plate matches the installation card numbers before removing the installation cards.

Note: There may be one or more shipment cards and bar code labels with the installation card. These shipment cards are used to trace the transfer of serialized units between various inventory storage and distribution points until the product reaches its final installation destination. Process just the installation card and discard any extra shipment cards and labels.

3. Enter the information from the installation cards into the GIB database for this customer.

3- COIL HARDWARE CONFIGURATIONS

The HNS coil has 5 components (or called units). The components are listed below:

- Posterior Head Component (or called Posterior Head Neck Unit)
- Face Component (or called Anterior Head Neck Unit)
- TL Component (or called TL unit)
- Horseshoe Component (or called adaptor block)
- Chest Component (or called Neck Chest unit)

The HNS coil may be configured in 9 different ways using its modular design of its components. The configurations are listed below:

- Posterior Head and Face
- Posterior Head, Face and TL
- Posterior Head and Horseshoe
- Posterior Head, Horseshoe and TL
- Posterior Head, Face and Chest
- Posterior Head, Face, Chest and TL
- Posterior Head, Horseshoe and Chest
- Posterior Head, Horseshoe, Chest and TL
- TL only

4- COIL CONFIG

4-1 Personnel Requirements

Required Persons	Preliminary Reqs	Procedure	Finalization
1	Timing Not Applicable	30 Min	Timing Not Applicable

4-2 Overview

Installation is not required for the 1.5T HNS Coil. All coil modes are present in the cfg file location for HDxt, and in the coil database for MR450/MR450w on the host software. The steps below are required only if software prior to 15M4 is on the system.

4-3 Preliminary Requirements

4-4 Procedure

1. Go to the scan desktop and select the [New Patient] button.
2. Assemble the coil in one of the 5 valid hardware setup configurations below and make sure the coil components have a snug fit with each other.

Note: Each configuration of the HNS coil must be installed for the system to recognize it. However, only 5 configurations are needed to setup the coil to get all coil configurations installed. Connecting all the coil components together may not result in the coil getting completely configured.

Illustration 1 – Setup 1; Posterior Head Component + Face Component

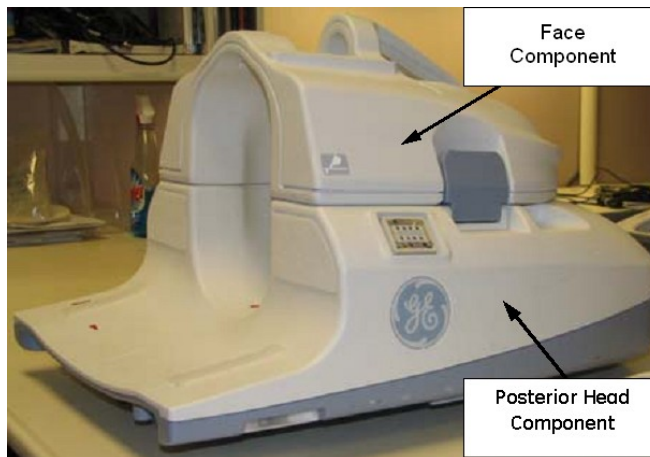


Illustration 2 – Setup 2; Posterior Head Component + Face Component + TL Component

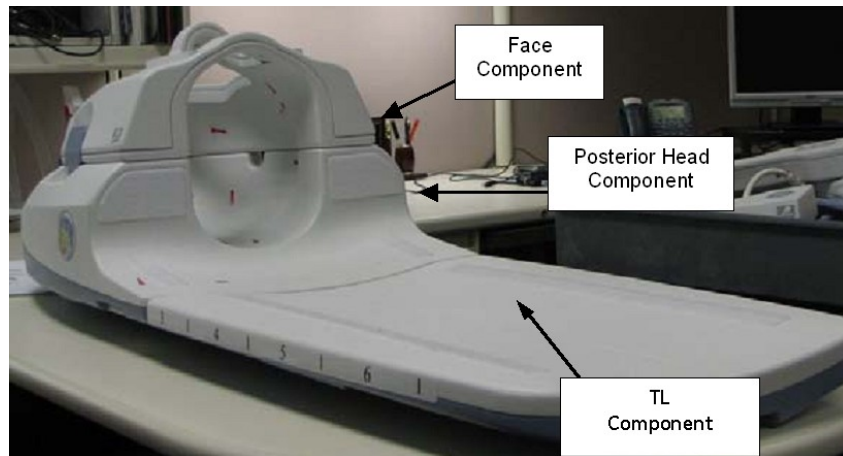


Illustration 3 – Setup 3; Posterior Head Component + Horseshoe Component + TL Component

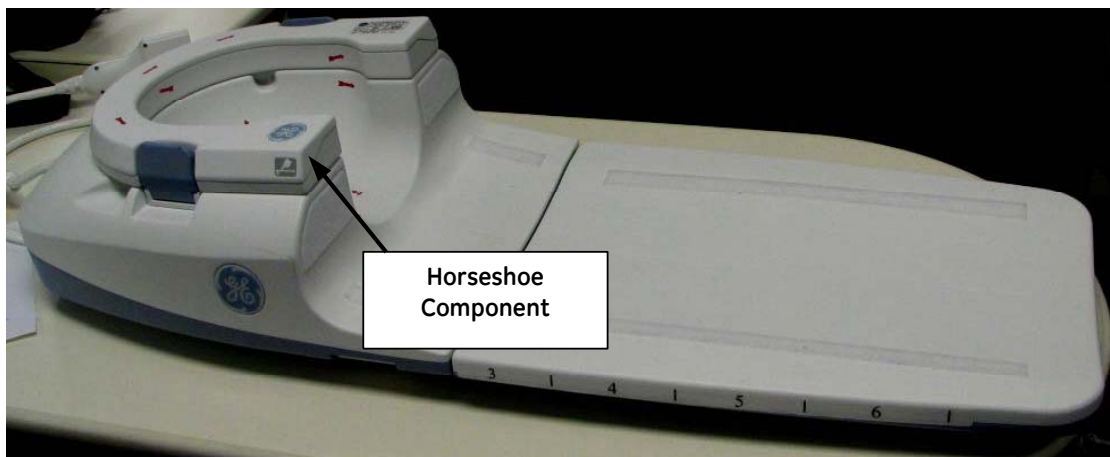


Illustration 4 – Setup 4; Chest Component Added To Setup 3

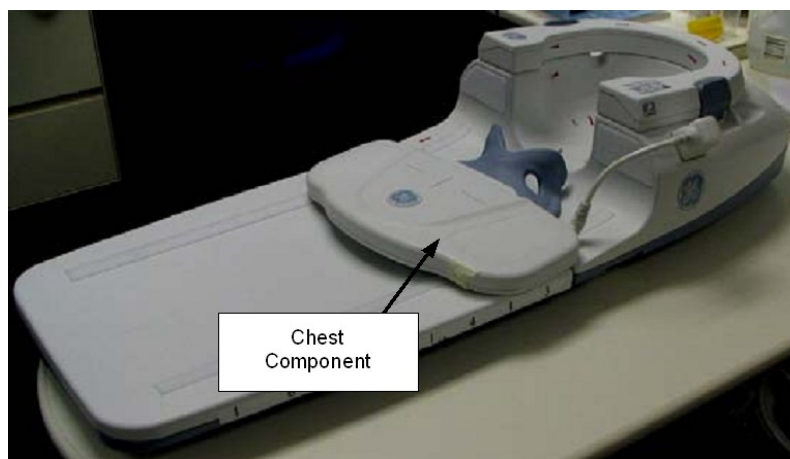
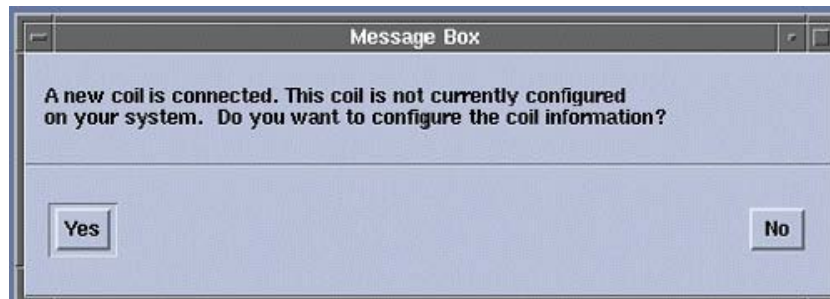


Illustration 5 – Setup 5; Posterior Head Component + Face Component + TL Component + Neck Component



- 3. Plug the connector, from the Head Neck Unit (HNU) of the coil, into the appropriate Port connector on the LPCA Port. If the coil is not configured on the system a pop-up box will appear. See Illustration 6. If the box does not appear, then proceed to step 5.

Illustration 6 – New Coil Detected Pop-up



- 4. Select **[Yes]** to configure the new coil. If the process is successful a pop-up message will be displayed as shown in Illustration 7. Continue the process of plugging in each of the five coil set-ups per illustrations 1-5.

Illustration 7 – Configuration Successful Pop-up

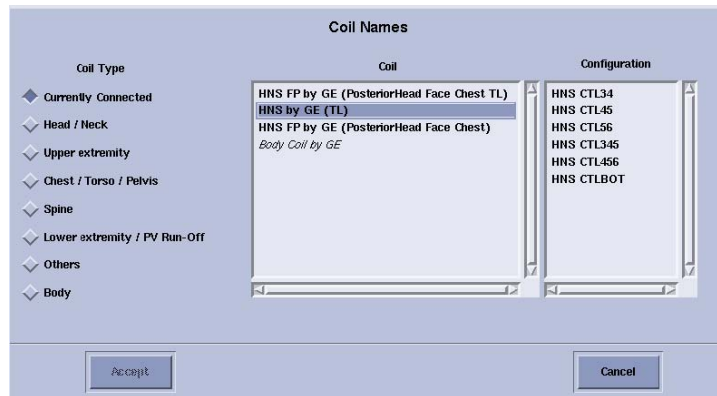


5. Prescribe a new exam and enter patient information.
6. Click on the coil selection button and verify that the HNS coil is present under currently connected on the scanner user interface. When the five coil Setups have been configured, you will see all the coil entries in the Coil Names window as shown in Illustrations 8a / 8b.

Illustration 8a - HNS coil modes present under currently connected on Discovery MR450 and Optima MR450w Systems



Illustration 8b - HNS coil modes present under currently connected on a HDxt system



Note: The presence of coil entries like those shown is a confirmation that the coil installed properly. If you do not see the HNS coil modes, **do not attempt to install the coil manually**, call the OnLine Center for coil configuration support.

7. After successfully configuring the coil proceed to Section 5, HNS Coil MCQA Setup.

5- HNS COIL MCQA SETUP

Refer to Service Methods for MCQA set-up instructions found in the following paths:

- Signa HDxt: Installation > Coils > HDx & HDxt Surface Coils > *1.5T Coil Vendor Manuals* > Table 6 > [1.5T Head Neck Spine \(HNS\) Coil MCQA Setup](#)
- MR450/MR450w: Coils > MR450/MR450w 1.5T Coil Vendor Manuals > Table 3 > [1.5T Head Neck Spine \(HNS\) Coil MCQA Setup](#)

6- HNS COIL SETUP FOR REVERSE RAMPED SYSTEM

6-1 Personnel Requirements

Required Persons	Preliminary Requirements	Procedure	Finalization
1	N/A	15 mins	N/A

6-2 Overview

Procedure to make the coil compatible with reverse ramped magnets for HNS coil is provided.

6-3 Tools and Test Equipment

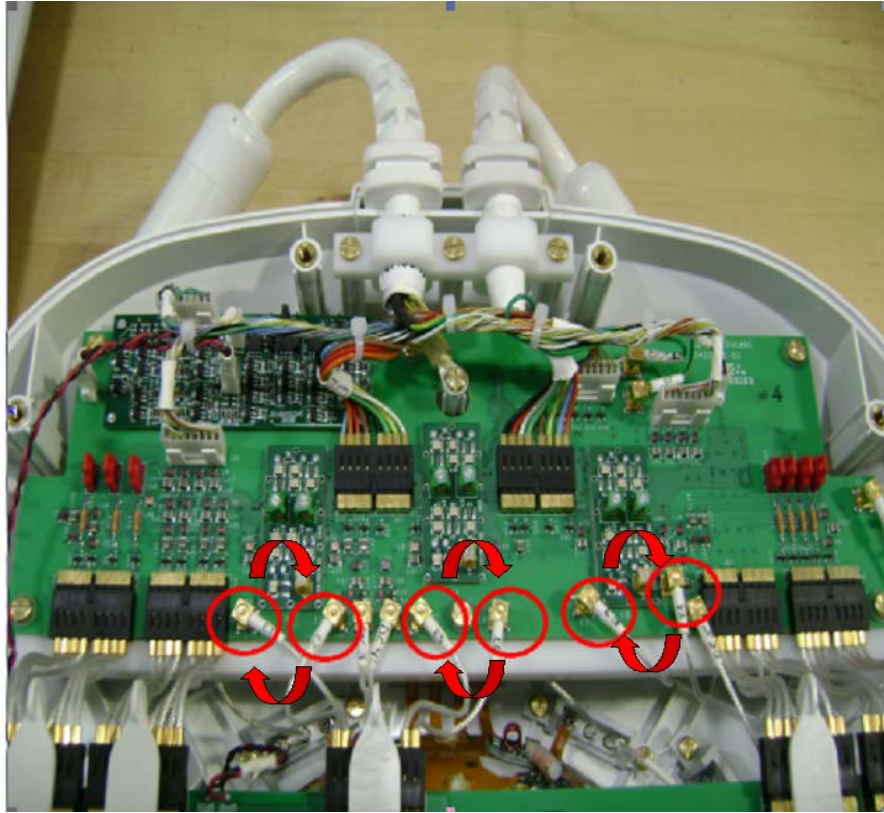
Item	Qty	Effectivity	Part#	Manufacturer
Standard Tool Kit-Flathead screwdriver	1	N/A	N/A	N/A

6-4 Procedure



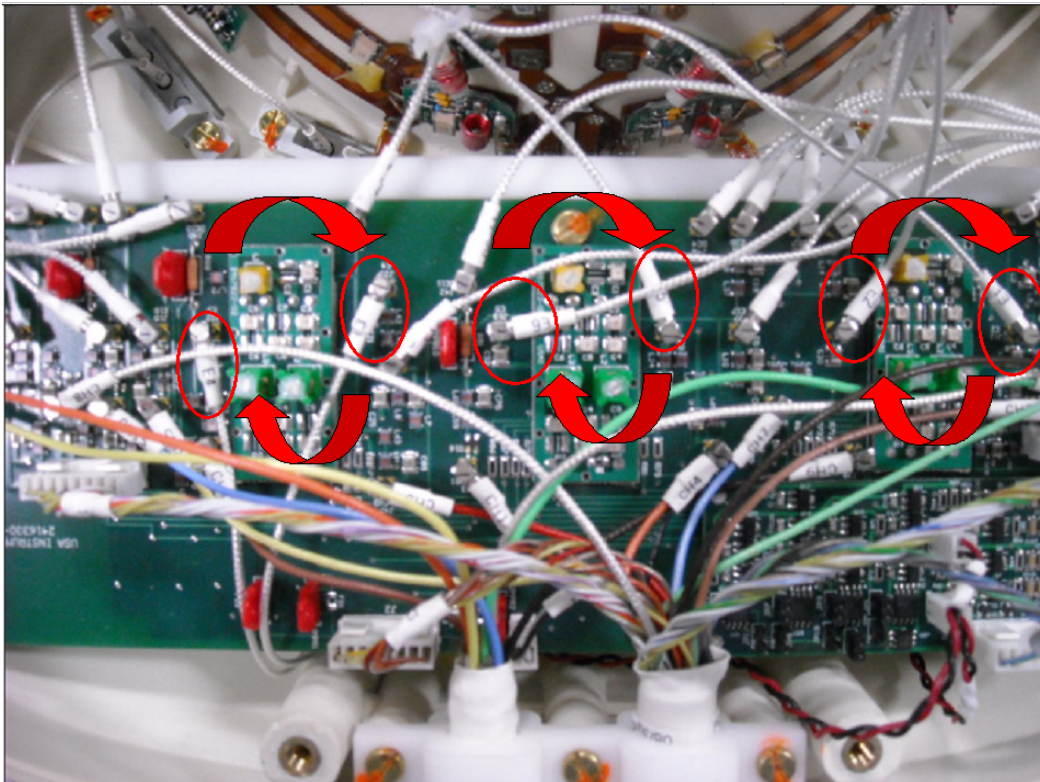
NOTICE

Observe anti-static precautions: Use wrist strap and ESD workstation (ESD mat connected to ground and place to connect ESD wrist strap).

Illustration 10 - Posterior Unit Interface board cable swap (HNS Rev 3)

The Rev 3 HNS coil can be made compatible with reverse ramped magnets for any system. To make the coil compatible the following steps are to be performed;

1. Put an ESD strap on and ground.
2. Unscrew the posterior cover and remove from coil. Retain the screws.
3. Swap cables E1-E2. Disconnect cables labeled E1 and E2. Connect the cable labeled E2 to location E1 on Interface sub-assembly. Similarly, connect the cable labeled E1 to location E2 on Interface sub-assembly.
4. Swap cables E3-E4. Disconnect cables labeled E3 and E4. Connect the cable labeled E3 to location E4 on Interface sub-assembly. Similarly, connect the cable labeled E4 to location E3 on Interface sub-assembly.
5. Swap cables E5-E6. Disconnect cables labeled E5 and E6. Connect the cable labeled E5 to location E6 on Interface sub-assembly. Similarly, connect the cable labeled E6 to location E5 on Interface sub-assembly.

Illustration 6-2 Posterior Unit- Interface board setup post-cable swap (HNS Rev 2)

The Rev 2 HNS coil can be made compatible with reverse ramped magnets for any system except DVMR system. To make the coil compatible the following steps are to be performed;

1. Put an ESD strap on and ground.
2. Unscrew the posterior cover and remove from coil. Retain the screws.
3. Swap cables E1-E2. Disconnect cables labeled E1 and E2. Connect the cable labeled E2 to location E2 on Interface sub-assembly. Similarly, connect the cable labeled E1 to location E1 on Interface sub-assembly.
4. Swap cables E3-E4. Disconnect cables labeled E3 and E4. Connect the cable labeled E3 to location E3 on Interface sub-assembly. Similarly, connect the cable labeled E4 to location E4 on Interface sub-assembly.
5. Swap cables E5-E6. Disconnect cables labeled E5 and E6. Connect the cable labeled E5 to location E5 on Interface sub-assembly. Similarly, connect the cable labeled E6 to location E6 on Interface sub-assembly.

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