



GE Medical Systems

Technical Publications

Direction 2318342
Revision 0

Signa LX Release CNV4 M4 Patch CNV_M4_O4 Software Load

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Operating Documentation

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.

Immediately complete a "Damage Loss Claim Form", available via MS Exchange Mail, after the damage is found.

MS Exchange Path:

Outlook/Public Folder/All Public Folders/Medical Systems/!Global Initiatives/Information Management/Forms/Common Forms/DAMAGE LOSS CLAIM FORM.

Send the completed form to the email address listed in the form.

For more information about the Transportation Claim Procedure, access the GE Medical Systems Intranet and enter the following URL address (case sensitive):

<ftp://3.87.40.2/globepro/qualsys/Docs/190016MF.PDF>

Rev. 11/15/2000

Direction 2128126 - Language Policy For Service Documentation, Rev 0

WARNING

- 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.

AVERTISSEMENT

- CE MANUEL DE MAINTENANCE N'EST DISPONIBLE QU'EN ANGLAIS.
- SI LE TECHNICIEN DU CLIENT A BESOIN DE CE MANUEL DANS UNE AUTRE LANGUE QUE L'ANGLAIS, C'EST AU CLIENT QU'IL INCOMBE DE LE FAIRE TRADUIRE.
- NE PAS TENTER D'INTERVENTION SUR LES ÉQUIPEMENTS TANT QUE LE MANUEL SERVICE 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

- DIESES KUNDENDIENST-HANDBUCH 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, DAS GERÄT ZU REPARIEREN, BEVOR DIESES KUNDENDIENST-HANDBUCH NICHT ZU RATE GEZOGEN UND VERSTANDEN WURDE.
- WIRD DIESE WARNUNG NICHT BEACHTET, SO KANN ES ZU VERLETZUNGEN DES KUNDENDIENSTTECHNIKERS, DES BEDIENERS ODER DES PATIENTEN DURCH ELEKTRISCHE SCHLÄGE, MECHANISCHE ODER SONSTIGE GEFAHREN KOMMEN.

AVISO

- ESTE MANUAL DE SERVICIO SÓLO EXISTE EN INGLÉS
- SI ALGÚN PROVEEDOR DE SERVICIOS AJENO A GEMS SOLICITA UN IDIOMA QUE NO SEA EL INGLÉS, ES RESPONSABILIDAD DEL CLIENTE OFRECER UN SERVICIO DE TRADUCCIÓN.
- 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.

ATENÇÃO

- ESTE MANUAL DE ASSISTÊNCIA TÉCNICA SÓ SE ENCONTRA DISPONÍVEL EM INGLÊS.
- SE QUALQUER OUTRO SERVIÇO DE ASSISTÊNCIA TÉCNICA, QUE NÃO A GEMS, SOLICITAR ESTES MANUAIS NOUTRO IDIOMA, É DA RESPONSABILIDADE DO CLIENTE FORNECER OS SERVIÇOS DE TRADUÇÃO.
- NÃO TENHA TENTADO REPARAR O EQUIPAMENTO SEM TER CONSULTADO E COMPREENDIDO ESTE MANUAL DE ASSISTÊNCIA TÉCNICA.
- NÃO CUMPRIMENTO DESTE AVISO PODE POR EM PERIGO A SEGURANÇA DO TÉCNICO, OPERADOR OU PACIENTE DEVIDO A CHOQUES ELÉTRICOS, MECÂNICOS OU OUTROS.

AVVERTENZA

- IL PRESENTE MANUALE DI MANUTENZIONE È DISPONIBILE SOLTANTO IN INGLESE.
- SE UN ADDETTO ALLA MANUTENZIONE ESTERNO ALLA GEMS 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.
- NON TENERE CONTO 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.

警告

- ・このサービスマニュアルは英語版しかありません。
- ・GEMS以外で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。

注意:

- 本维修手册仅存有英文本。
- 非 GEMS 公司的维修员要求非英文本的维修手册时，客户需自行负责翻译。
- 未详细阅读和完全了解本手册之前，不得进行维修。
- 忽略本注意事项会对维修员，操作员或病人造成触电，机械伤害或其他伤害。

REVISION HISTORY

<u>REV</u>	<u>DATE</u>	<u>PRIMARY REASON FOR CHANGE</u>
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0	Jan 15, 2001	Initial version of procedure.
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<u>PAGE</u>	<u>REV</u>	<u>PAGE</u>	<u>REV</u>	<u>PAGE</u>	<u>REV</u>	<u>PAGE</u>	<u>REV</u>
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Title Page	0						
Damage in Trans.....	-						
Direction 2128126 ..0*							
5 to 10	0						

* This revision/letter corresponds to the indicated document's revision control system.

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1- OVERVIEW

The CNV4 M4 Patch CD 2328352 Rev 001 contains the following patches:

- **CNV4_MR_04** Provides the GE Protocol "fMRI BrainWave" for 1.5T SR150 systems in the head protocols folders. This patch supports the BrainWave feature of the CNV4 'SuperNova' release.

Note

Signa software must be at Release CNV4 M4 to install this patch CD.

2- LOADING SIGNA CNV4 PATCHES FROM CD-ROM

1. With the system running and software at the scanning level, go to the Service Desktop and select the [**C Shell**] button in the lower left toolbar.
2. Inside the C Shell window, log in as the root user by typing the following:

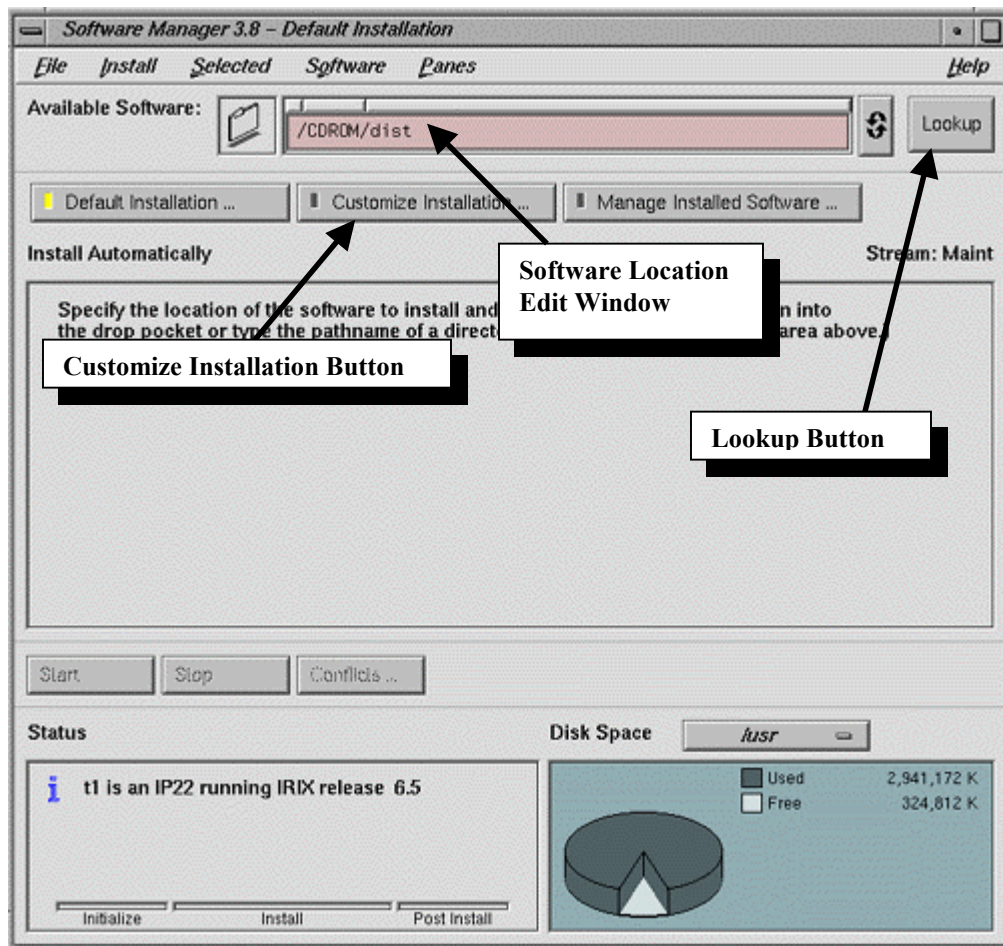
su <Enter>

Password: **operator <Enter>** ("operator" is the system default root password. Use whatever password is appropriate for the system you are working on if it has been changed.)

3. Place the 2328352 Rev 001 CD in the system CD drive. Wait 20 seconds for the system to see the CD, or until the amber light on the front of the CD drive stops blinking.
4. Inside the C Shell, type the following:

mediad <Enter> (This command mounts the CDRom.)

swmgr <Enter> (This command starts the software manager which is used to load the patch.)

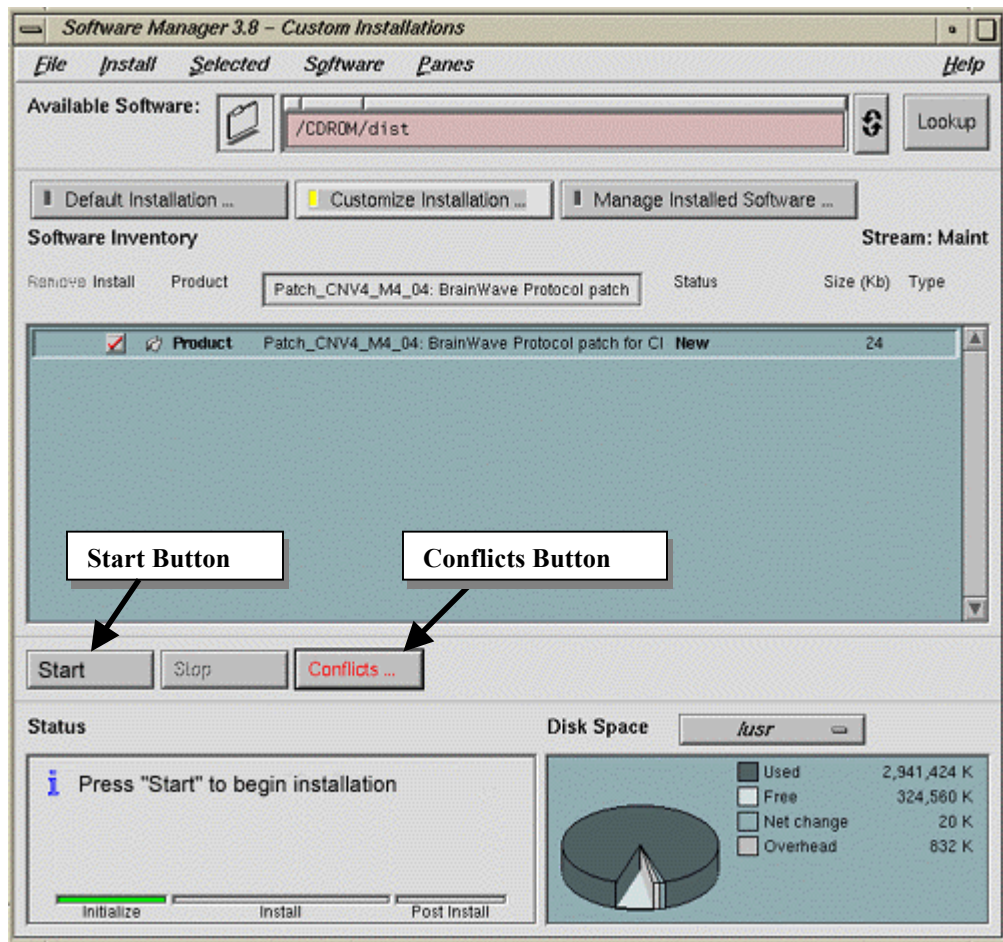


SOFTWARE MANAGER INITIALIZATION
ILLUSTRATION 2-1

5. Once the Software Manager starts, begin typing the following in the **[Software Location Edit Window]**. See Illustration 2-1.

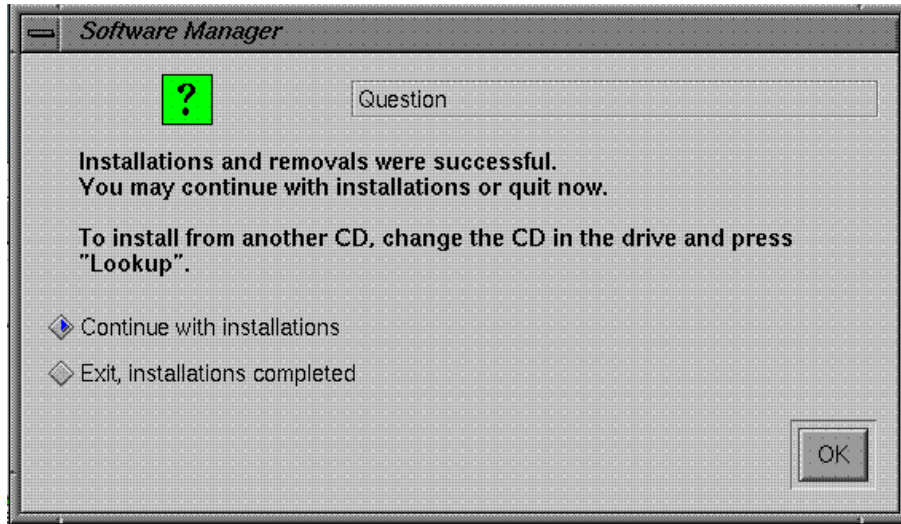
/CDROM (The system will automatically enter */ldist* after you type */CDROM*.)

6. Click the **[Lookup]** button found to the right of the **[Software Location Edit Window]**. See Illustration 2-1.
7. Click the **[Customize Installation]** button at the top of the screen. See Illustration 2-1.



LOADING THE CNV4 M4 PATCHES
ILLUSTRATION 2-2

8. All available patches should be visible at this time in the selection window. Any patches that apply to your system and are not loaded will be selected (check marked). Make sure "Patch CNV4_M4_4 Release" is checked; make sure no others are checked. See Illustration 2-2. One of two things will happen next:
 - a. The **[Start]** button will activate (The letters in "Start" will change colors or shades). If the **[Start]** button activates, push it and the patch load will begin. A progress bar will open and count up from 0 to 100%. The load takes less than 1 minute. When the progress bar goes away, a confirmation window will be displayed. Select **[Exit]** to quit the Software manager.
 - b. After the patch is selected, if there is a problem, the **[Conflicts]** button will activate, (the letters in "Conflicts" change colors or shades). If this happens, this indicates that your system does not need this patch and the indicated patch will not be loaded. Push the **[Conflicts]** to view the error if desired.
9. After installation, select **Exit, Installations completed** checkbox, then select **[OK]**. See Illustration 2-3.



INSTALLATION DECISION WINDOW
ILLUSTRATION 2-3

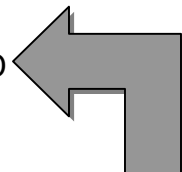
10. In the C Shell type the following to eject the CD-ROM from the drive:

umount /CDROM <Enter> (Un-mounts the CD from the system.)
eject /CDROM <Enter> (Opens the CD drawer.)

11. If the patches were required and loaded, verify they are installed by typing in the C Shell:

getver <Enter> You should see an entry for the CNV4 patch as follows:

```
Build number for MrpApps is CNV4.283B_M4_0140.c
Build number for PostSdC is CNV4.283B_M4_0140.c
Build number for cclass is CNV4.283B_M4_0140.c
Build number for driverSupport is CNV4.283B_M4_0140.c
Build number for insite is CNV4.283B_M4_0140.c
Build number for install is CNV4.283B_M4_0140.c
Build number for os_cd is 6.8.a
Build number for os_u_cd is 6u7.14.a
Build number for patch_CNV4_M4_04 is CNV4.283B_M4_0140.c.PD
Build number for pc is CNV4.283B_M4_0140.c
MR Software release: C.N.V.4.0140c
```



This Line Indicates
The patch is loaded.

12. Reboot Signa for the patches to take effect.