



GE Medical Systems

Technical Publications

Direction 2404642
Revision 2

Signa® Gradient Cable Lead Board Upgrade Kit

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Service Documentation

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General Requirements

Personnel Requirements:	1 Field Engineer for 4 hours
Tools and Test Equipment:	Non Magnetic Metric Allen wrench set Non-Magnetic Phillips and Flat Blade Screwdrivers Non-magnetic Metric Socket Set Lock out Tag out (LOTO) Locks
Safety:	Standard Magnet Safety Procedures for personnel working in and around magnets.
Required Conditions:	Systems with one-piece bridge will need to have IQ Kit 5195386 /M3090NE installed.
PURPOSE:	Install lead board to restrain movement of BRM Gradient Cables in cases where white pixel artifacts are caused by movement of the gradient cables at the end bell.
Effectivity:	Wide Open Magnets, MagnaShield, CX/LCC Salt Block

Furnished Materials:

BRM Gradient Cable Lead Board Kit (5110336), consisting of the following:

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1	2377933	Hose/Cable Clamp Base	1
2	2370909	Cover, BRM Lead Board	1
3	2370629	Lead Board, BRM Gradient Cables	1
4	2109866-20	Screw Hex Head 10 mm 25 mm	4
5	2109866-22	Cap Screw Hex Head 10 mm X 1.5 X 35 mm	4
6	2109866-23	Cap Screw Hex Head 10 mm x 1.5 x 40 mm	6
7	2109873-26	Screw Pan Head 6 mm X 20 mm	8
8	46-294151P8	Never- Seeze ~ Lube and Anti -Seeze Compound.	1
9	2227841	Foam Gasket, Hose/Cable Clamp	1
10	46-208758P5	Tie Wrap Nylon	100
11	2404642	FMI Instructions	1
12	2239902-2	Confor Foam	1
13	2239902-3	Confor Foam	1
14	2228286	Cable Hose Clamp Foam Block	2
15	2228287	Cable Hose Clamp Foam	2
16	2185175	Foam, Closed Cell, BRM Conquest	8
17	2109866-21	Screw Hex Head 10 mm X 30 mm	6
18	???????	Air Dam	1

Gradient Cable Block Kit (5127441), consisting of the following:

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1	5126956	Gradient Cable Clamp Block	12
2	5126957	Gradient Cable Clamp Block Cove	12
3	2109874-22	SCREW COUNTERSUNK HEA 6 MM 25 MM	36
4	2109874-25	SCREW COUNTERSUNK HEA 6 MM 40 MM	36
5	2109866-17	SCREW HEXAGON HEAD 6 MM 50 MM	2
6	2109879-2	WASHER PLAIN - LARGE 6.4 MM, 18MM OD	2

Gradient Cable Block Kit for BRM (5127441-2), consisting of the following:

1	5126956	Gradient Cable Clamp Block	6
2	5126957	Gradient Cable Clamp Block Cover	6
3	2109874-22	SCREW COUNTERSUNK HEA 6 MM 25 MM	36
5	2109866-17	SCREW HEXAGON HEAD 6 MM 50 MM	2
6	2109879-2	WASHER PLAIN - LARGE 6.4 MM, 18MM OD	2

LCC with Salt Block Enclosure Kit (5220794), consisting of the following:

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1	5172976	LCC Lead Board and Adapter Plate Asm	1
2	5215563	Air Dam, Enclosure, Salt Box	1
3	2377933	CLAMP BASE, HOSE & CABLE, BRM LD BRD	1
4	2109866-20	SCREW HEXAGON HEAD 10 MM 25 MM	4
5	2109866-22	CAP SCREW HEX HEAD 10 MM X 1.5 X 35 MM	4
6	2109866-23	CAP SCREW HEXAGON HEAD 10 MM X 1.5 X 40	6
7	2109873-26	SCREW PAN HEAD 6 MM 20 MM	8
8	46-294151P8	BOSTIK ~NEVER-SEEZE~	1
9	2227841	FOAM GASKET, HOSE/CABLE CLAMP	2
10	2109866-21	SCREW HEXAGON HEAD 10 MM 30 MM	6
11	2239902-2	CONFOR FOAM	1
12	2239902-3	CONFOR FOAM	1
13	2228286	FOAM SEAL, CABLE/HOSE CLAMP	2
14	2228287	FOAM BLOCK, CABLE/HOSE CLAMP	2
15	2185175	FOAM, CLOSED CELL, BRM CONQUEST	10
16	46-208758P5	SELF LOCKING CABLE TIE	100
17	46-294167P73	FLAT WASHER, METRIC, NYLON, M10	5
18	2109866-20	SCREW HEXAGON HEAD 10 MM 25 MM	5
19	5220809	Leveling Shim	1
20	2404642	DIRECTION GRADIENT CABLE LEAD BD U/G FOR BRM	1

BRM Gradient, Lead Board and Adapter for S series Magnets Kit 5198802, consisting of the following:

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
1	5197808	Lead Board and Adapter, Signa Enclosure, Salt Box	1
2	2370909	COVER, BRM LEAD BOARD, LCC	1
3	2377933	CLAMP BASE, HOSE & CABLE, BRM LD BRD	1
4	2109866-20	SCREW HEXAGON HEAD 10 MM 25 MM	4
5	2109866-22	"CAP SCREW HEXAGON HEAD10 MM X 1.5 X 35 MM "	4
6	2109866-23	"CAP SCREW HEXAGON HEAD10 MM X 1.5 X 40 MM "	6
7	2109873-26	SCREW PAN HEAD 6 MM 20 MM	8
8	46-294151P8	BOSTIK ~NEVER-SEEZE~	1
9	2227841	FOAM GASKET, HOSE/CABLE CLAMP	2
10	2109866-21	SCREW HEXAGON HEAD 10 MM 30 MM	6
11	2239902-2	CONFOR FOAM	1
12	2239902-3	CONFOR FOAM	1
13	2228286	FOAM SEAL, CABLE/HOSE CLAMP	2
14	2228287	FOAM BLOCK, CABLE/HOSE CLAMP	2
15	2185175	FOAM, CLOSED CELL, BRM CONQUEST	10
16	46-208758P5	SELF LOCKING CABLE TIE	100
17	46-294167P73	"FLAT WASHER, METRIC, NYLON, M10"	5
18	2109866-20	SCREW HEXAGON HEAD 10 MM 25 MM	5
19	46-252318P19	NUT,HEX .375-16 S.S.	3
20	2370892	G10 FIBERGLASS FLAT WASHER	3
21	5215563	Air Dam, Enclosure, Salt Box	1
22	2404642	DIRECTION GRADIENT CABLE LEAD BD U/G FOR BRM	1

NOTE: Before shutting down the power, read through the entire procedure. Make sure the carriage is in the proper position for the bridge removal procedure.

NOTE: The following lock out tag out procedures should apply in most cases. However, if you have a system type not covered in this section, proceed to the safety section of the appropriate service documentation and follow the Lock Out Tag Out procedures.

All Systems

1-0 Power Down & Lock Out Tag Out Procedures



POSSIBLE PERSONAL INJURY! AVOID SERIOUS INJURY OR DEATH BY ELECTROCUTION. REMOVE POWER FROM THE ACGD HARDWARE BEFORE WORKING ON THE MODULE. LOCK AND TAG OUT POWER TO THE ACGD HARDWARE SYSTEM WALL BOX DISCONNECT BEFORE STARTING WORK.

1. Bring the PC software down.

LX (SGI based) system software shutdown.

- a. Toggle mouse control to the PC monitor using the hard key on the top, left side of the keyboard housing.
 - b. From the PC monitor use the mouse to select **Start → Shutdown → Shut down.**
Bring the Signa software down.
 - c. Toggle mouse control back to the Signa monitor using the hardkey on the top, left side of the keyboard.
 - d. Single-click on the **Toolbelt** icon.
 - e. Single-click on the **System Shutdown** softkey on the Service Desktop Manager.
 - f. Select **OK** to confirm the shutdown.
2. Wait for the system to indicate on the monitor that it is safe to power off the computer before proceeding. This usually takes about 90 seconds before this message is seen.

Horizon (Genesis console) system software shutdown.

Bring the Signa software down.

- a. Touch **Utilities**.
 - b. Touch **System Shutdown**.
 - c. Select **OK** to confirm the shutdown.
 - d. Wait for Boot Prompt (this indicates it is safe to proceed).
3. Remove the cover from the front of the ACGD cabinet, See Illustration 1-1.



BREAKER LOCATION
ILLUSTRATION 1-1

4. Rotate the main breaker on the ACGD/PDU labeled INPUT counter-clockwise to the green, O (OFF) position. See Illustration 1-2.

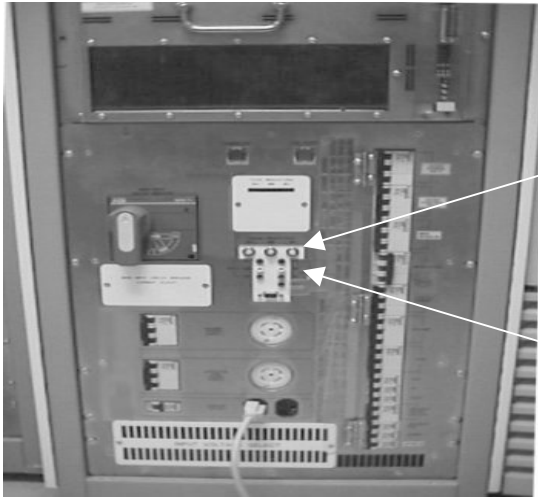


MAIN INPUT BREAKER IN THE OFF POSITION
ILLUSTRATION 1-2

5. Verify that the 3 phase indicator lamps on the front of the power distribution unit (Illustration 1-5) are not illuminated
6. Lock Out / Tag Out the PDU "INPUT" circuit breaker.
 - a. Press on the left-pointing arrow on the end of the handle to expose the location where the lock and tag can be placed.
 - b. Lock and tag out the PDU "INPUT" circuit breaker as shown in Illustration 1-3



PDU MAIN INPUT CIRCUIT BREAKER LOCKED AND TAGGED OUT
ILLUSTRATION 1-3



Phase Indicators

Test Points

ILLUSTRATION 1-4

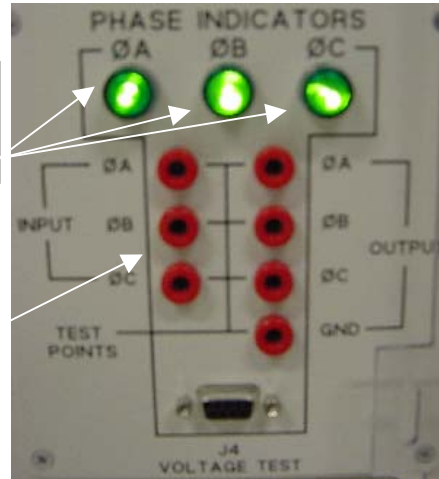


ILLUSTRATION 1-5

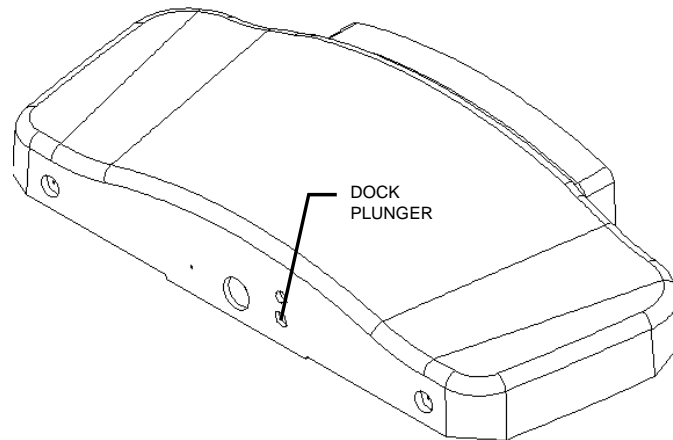
ACGD Cabinet –PDU (Front Cover Removed)

7. Verify that all energy has been dissipated. Measure the power at the front panel 420 and 208 test points of the PDUs See Illustration 1-4 voltages should now be at 0vac

Note: The test points are 100 :1 ratio (208 Vac = 2.08 Vac 420Vac = 4.20Vac)

2-0 One Piece Bridge Removal

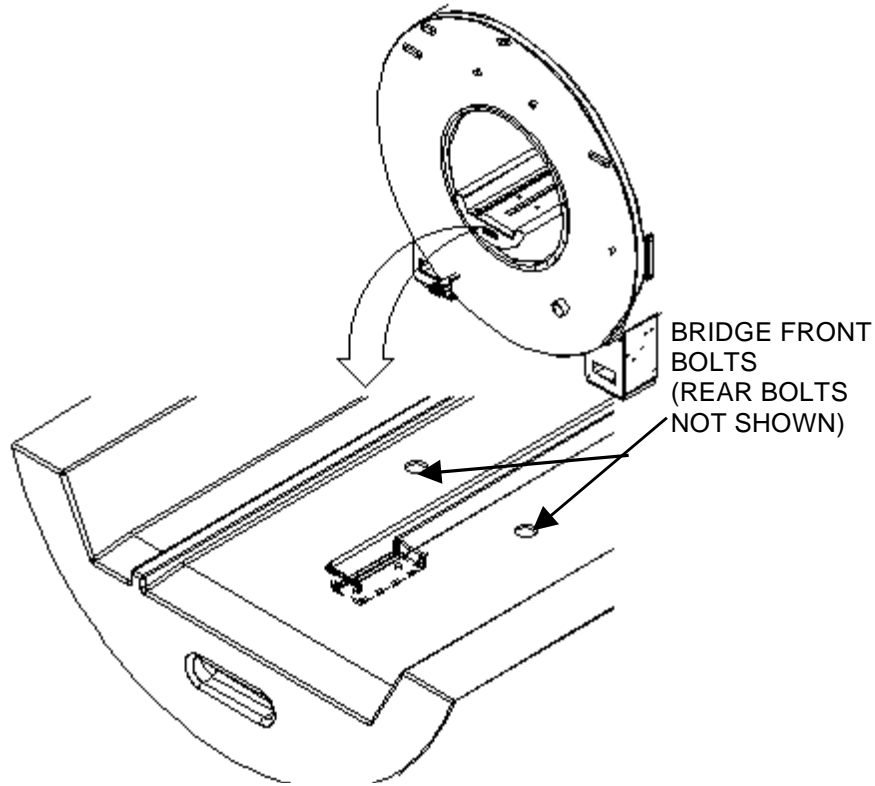
1. Undock Patient Transports. Move Patient Transport out of the way of the front cover of the magnet.
2. Remove covers on Rear Pedestal. See Illustration 3-1.
3. While holding in the patient transport dock plunger (see Illustration 2-1), move the carriage to the rear of the magnet by pressing the **[In Fast]** button on the enclosure.



HOLDING DOCK PLUNGER
ILLUSTRATION 2-1

4. Remove four screws from the top of the carriage cover. See Illustration 3-3.
5. Lift the carriage cover and remove it from the carriage.
6. Using an Allen wrench, remove (4) four M6 bolts holding down bridge. Two of the bolts are in the front of the bore and two bolts are in the back of the bore. Lift front of bridge off front bridge pin (Illustration 2-2).
NOTE: IF you performed this step it is mandatory that IQ Kit 5195386 / M3090NE is ordered and installed.
7. Lift the tension arm to release tension from carriage drive belt. See Illustration 3-2. Unclamp both ends of the belt by removing the four screws holding down the two belt clamp plates. See Illustration 3-3.
8. Remove the rear section of the belt from being routed through the drive motor and rear pedestal. DO NOT pull the belt completely out from beneath the bridge.
9. Remove the four bolts holding the cable track cup. See Illustration 3-4.
10. Slide the rear pedestal assembly back away from the Rear End Bell assembly

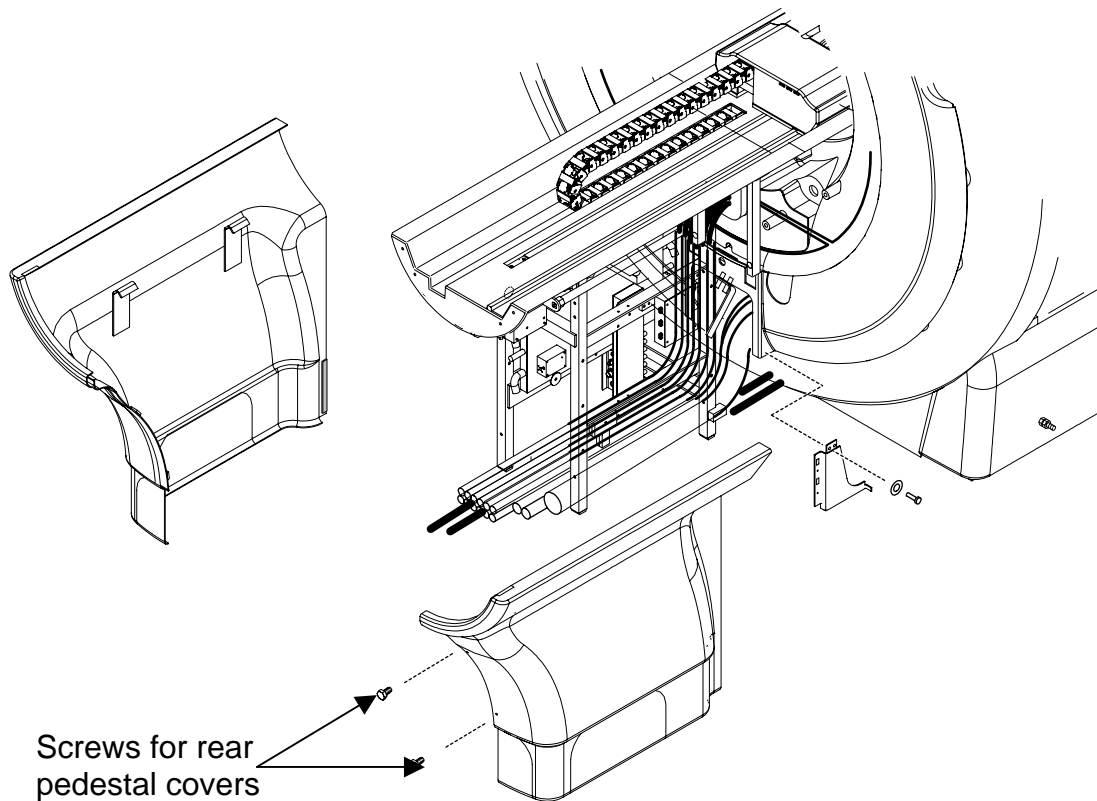
NOTE The carriage cover cables do not need to be disconnected from the rear pedestal.



FRONT BRIDGE PIN
ILLUSTRATION 2-2

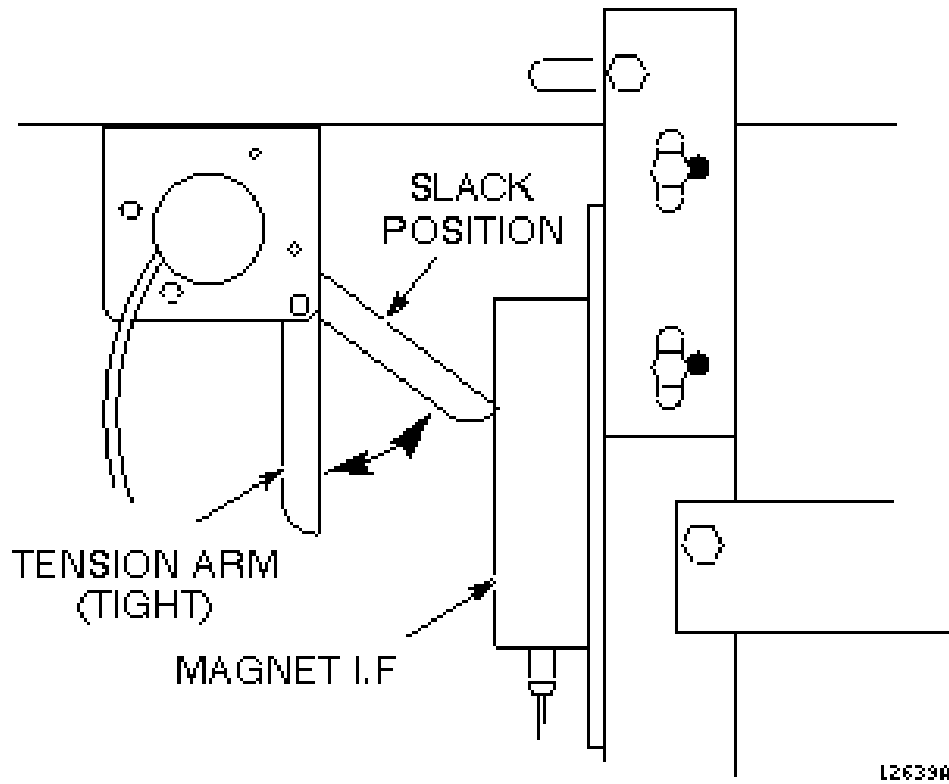
3-0 Two Piece Bridge Removal

1. With the patient transport docked, move the carriage to the front of the magnet by pressing the [OUT Fast] button on the enclosure.
2. Remove the rear pedestal covers. See Illustration 3-1.

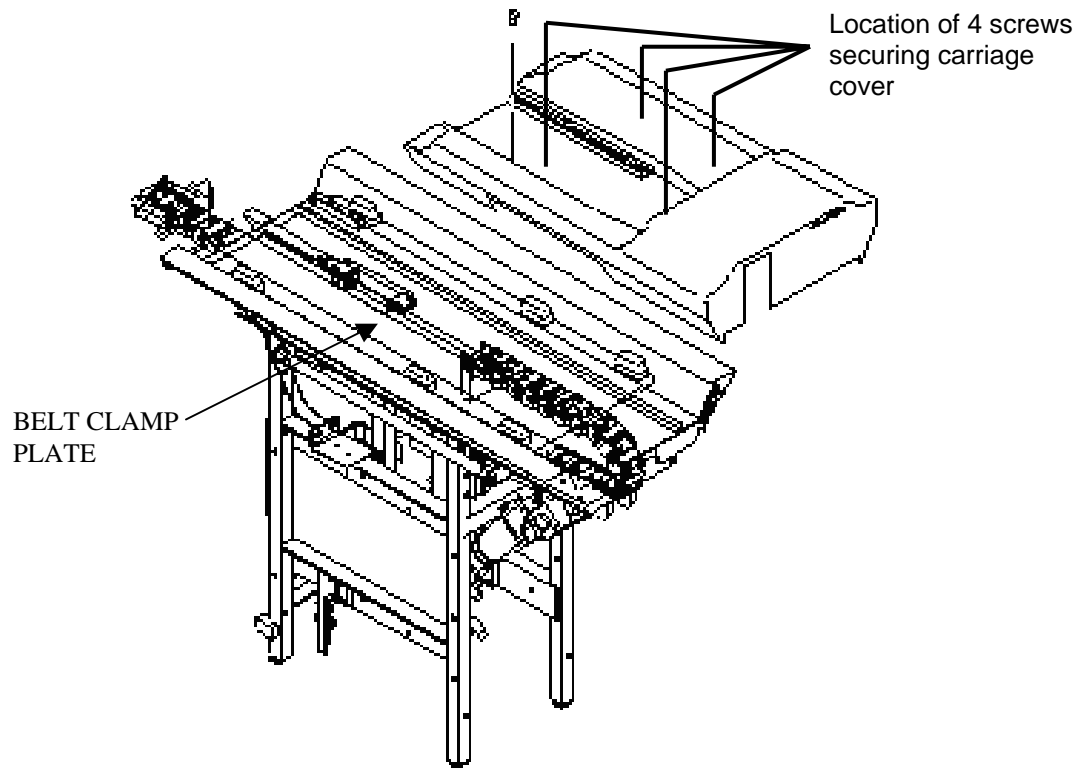


REAR COVERS
ILLUSTRATION 3-1

3. Remove four screws from the top of the carriage cover. See Illustration 3-3.
4. Lift the carriage cover and remove it from the carriage.
5. Lift the tension arm to release tension from carriage drive belt. See Illustration 3-2.



RIGHT SIDE VIEW OF REAR PEDESTAL (AS VIEWED FROM REAR)
ILLUSTRATION 3-2

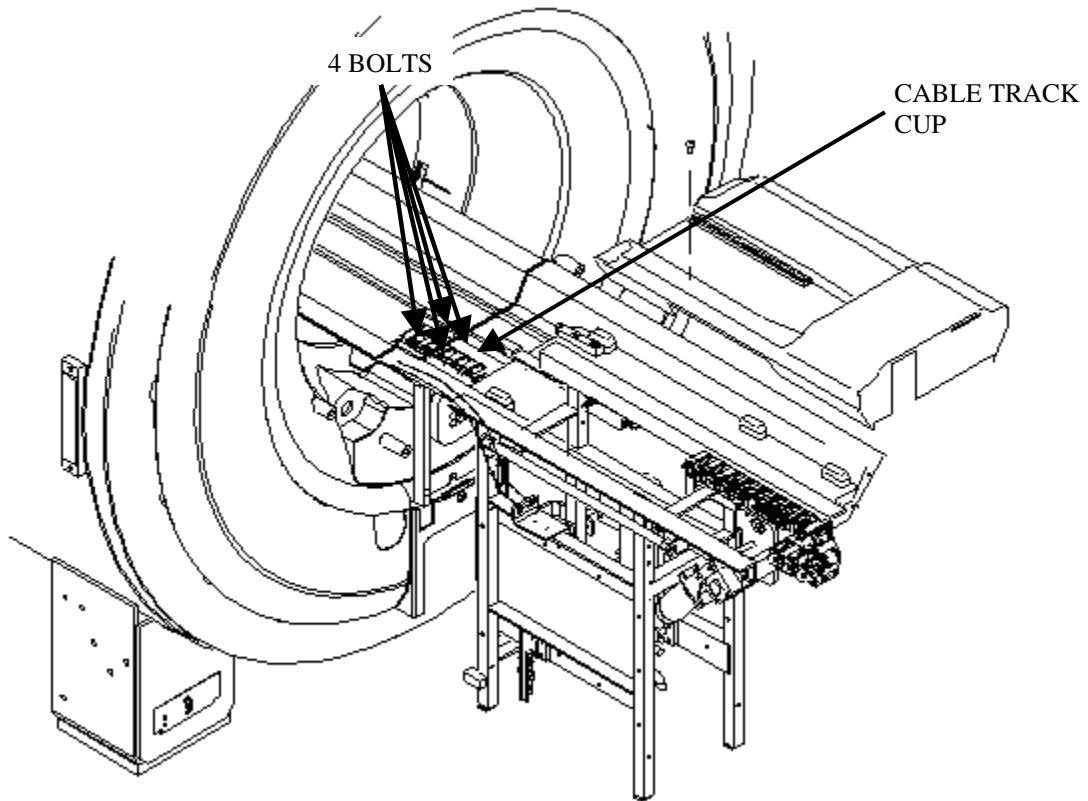


BELT CLAMP PLATES
ILLUSTRATION 3-3

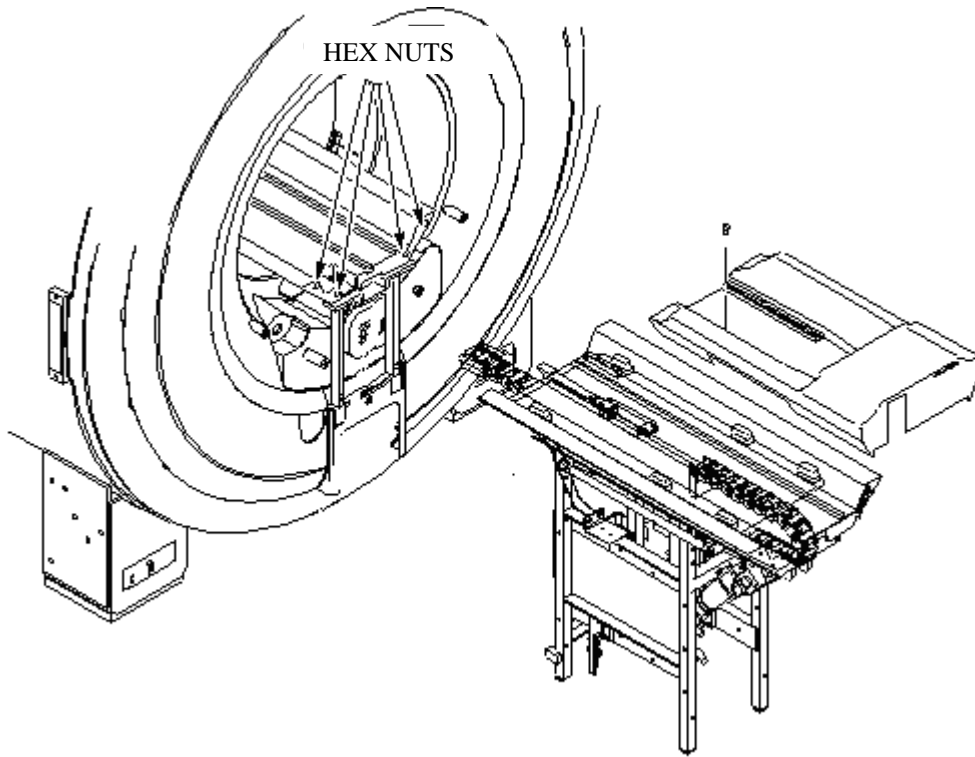
6. Unclamp both ends of the belt by removing the four screws holding down the two belt clamp plates. See Illustration 3-3.
7. Remove the rear section of the belt from being routed through the drive motor and rear pedestal. DO NOT pull the belt completely out from beneath the bridge.
8. Remove the four bolts holding the cable track cup. See Illustration 3-4.
9. Split Bridge Systems Remove the four M10 hex nuts holding the front bridge to the rear bridge, and slide the rear pedestal assembly back. The nuts are located on the rear pedestal side of the mating flanges. See Illustration 3-5.

NOTE

The carriage cover cables do not need to be disconnected from the rear pedestal.



CABLE TRACK PLATE
ILLUSTRATION 3-4

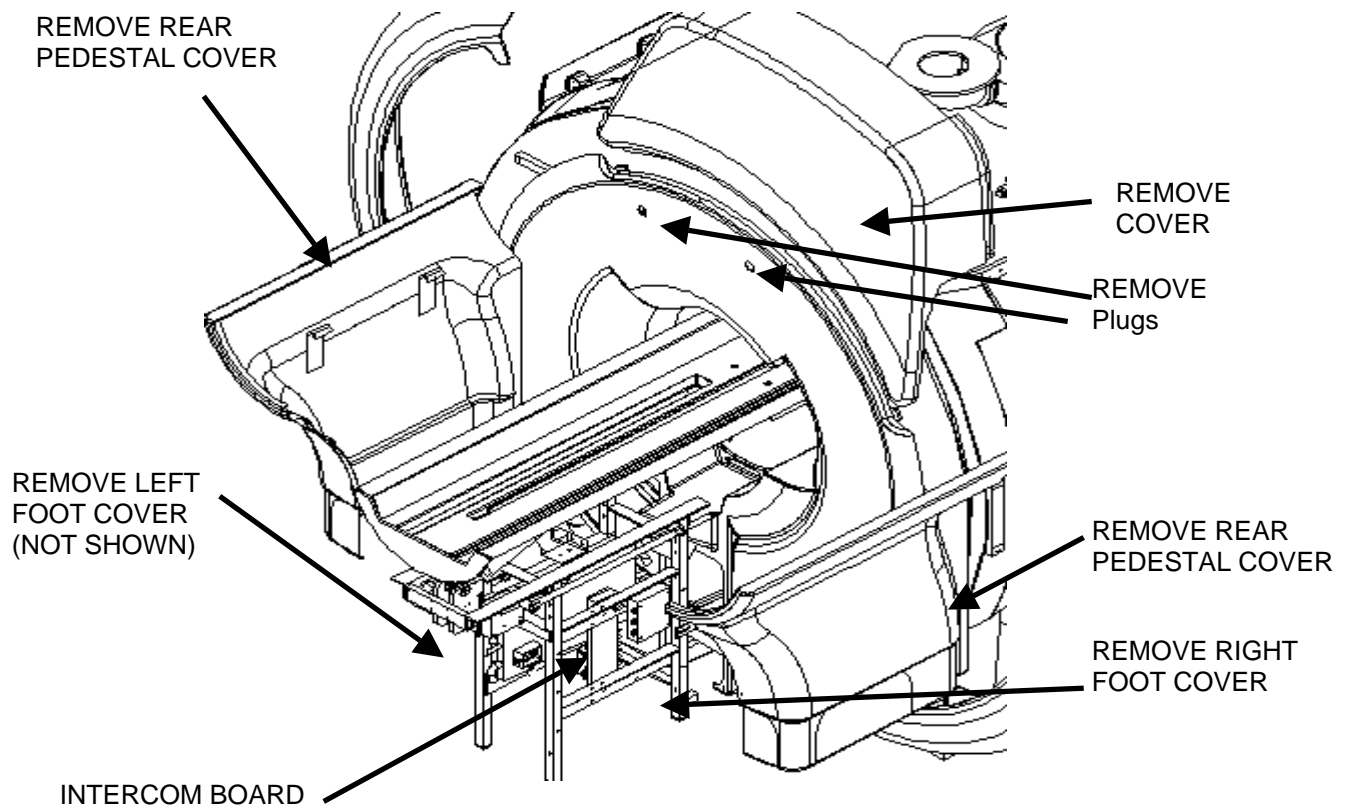


FRONT AND REAR BRIDGE CONNECTION
ILLUSTRATION 3-5

Wide Open Magnets

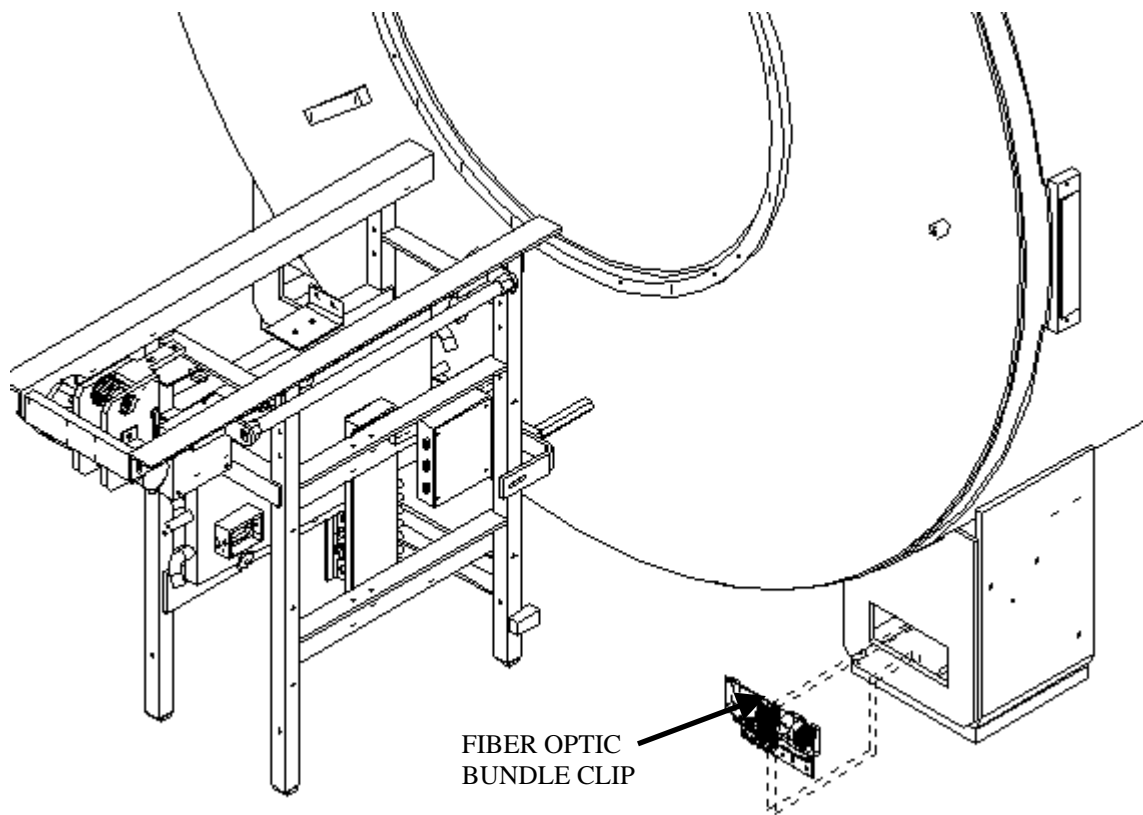
4-0 Procedure for Removing Rear End Bell

1. Disconnect speaker and microphone cables from intercom board located on rear pedestal. See Illustration 4-1.
2. Unclip the fiber optic bundle from light source located in rear right magnet foot. See Illustration 4-2.

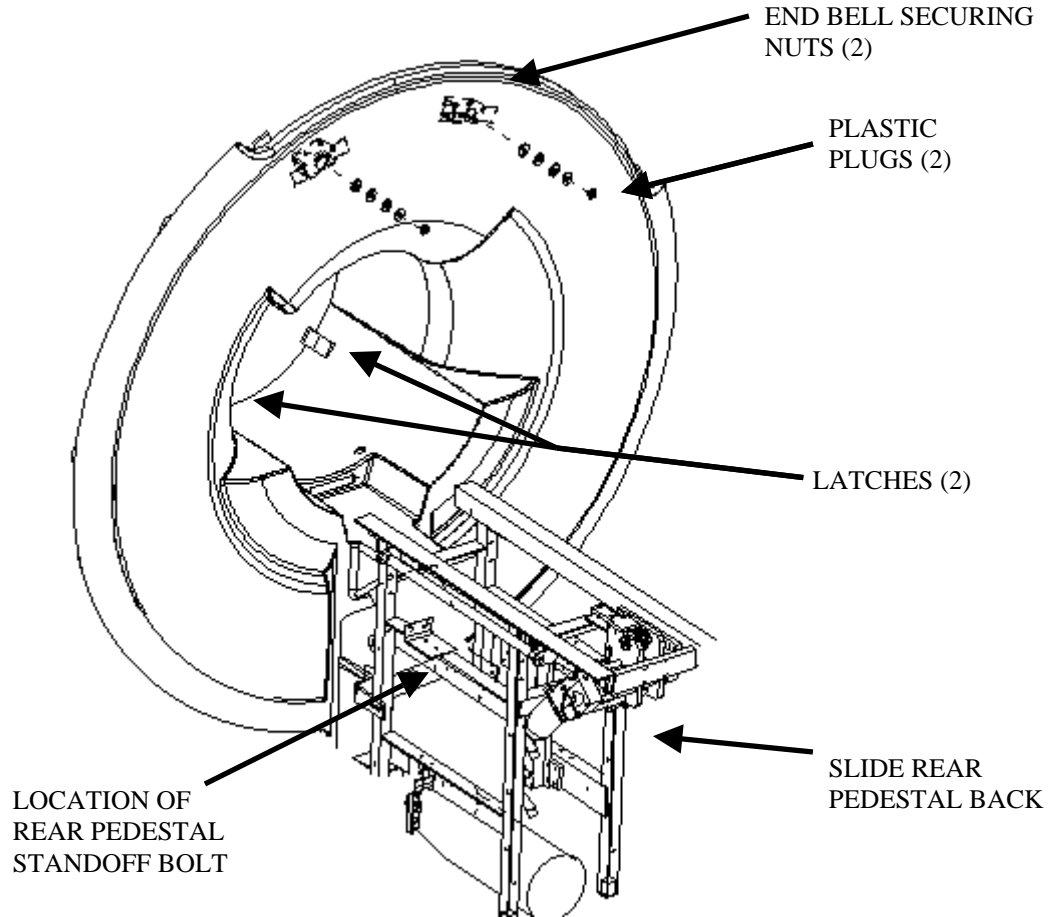


REAR COVERS
ILLUSTRATION 4-1

3. Un-route the fiber optic bundle that runs from the light source through the patient comfort module in the rear end bell. The fiber optic bundle will remain connected to the patient lights attached to the RF coil during the rear end bell replacement process.



FIBER OPTIC LIGHT SOURCE
ILLUSTRATION 4-2



REAR END BELL
ILLUSTRATION 4-3

4. Remove bolt holding rear pedestal standoff assembly to rear pedestal. Slide rear pedestal back 2 feet. See Illustration 4-3.
5. Lift open (2) two latches connecting the rear end bell and RF tube. See Illustration 4-3.
6. Pry (2) two plastic plugs out using a flat blade screwdriver. See Illustration 4-3.
7. Remove (2) two nuts holding rear end bell on. See Illustration 4-3.
8. Carefully pull rear end bell out by pulling out past studs, then lifting vertically to clear end bell inserts, then pulling straight out the rest of the way, taking care not to hang up attached cables. The fiber optic bundles will stay with the bore lights, which are attached to the RF coil.

5-0 Lead Board and Hose/Cable Clamp Base Installation

Note: New foam parts are supplied in the lead board kit because in most cases the disassembly process will damage the existing foam. Reassemble using new foam supplied in the kit. The Anti-Seeze Compound supplied in this kit shall be applied to all Stainless Steel Fasteners used in the following procedures.

1. With the End Bell removed use a fine point felt marker to mark the location of the End Bell Anchor Plate and Washer Block. This step is necessary to ensure the End Bell will align properly during the re-installation process See illustration 5-1
2. Remove the End Bell Anchor Plate and Washer Block
3. Remove the cable attachment blocks, hose cable clamp, and hose cable clamp base. Illustration 5-1
Note the position of the water-cooling lines and cable bundle in the hose cable clamp base.
4. Attach the lead board and the hose cable clamp with combination of 3 cap head 10mm x 1.5mm x 40mm supplied bolts (2109866-23) and reused hardware from the removed hose cable clamp, at the location shown in Illustration 5-2
5. Insert the gradient coil leads into the lead board and attach the cover loosely with the 10mm bolts as shown in Illustration 5.3

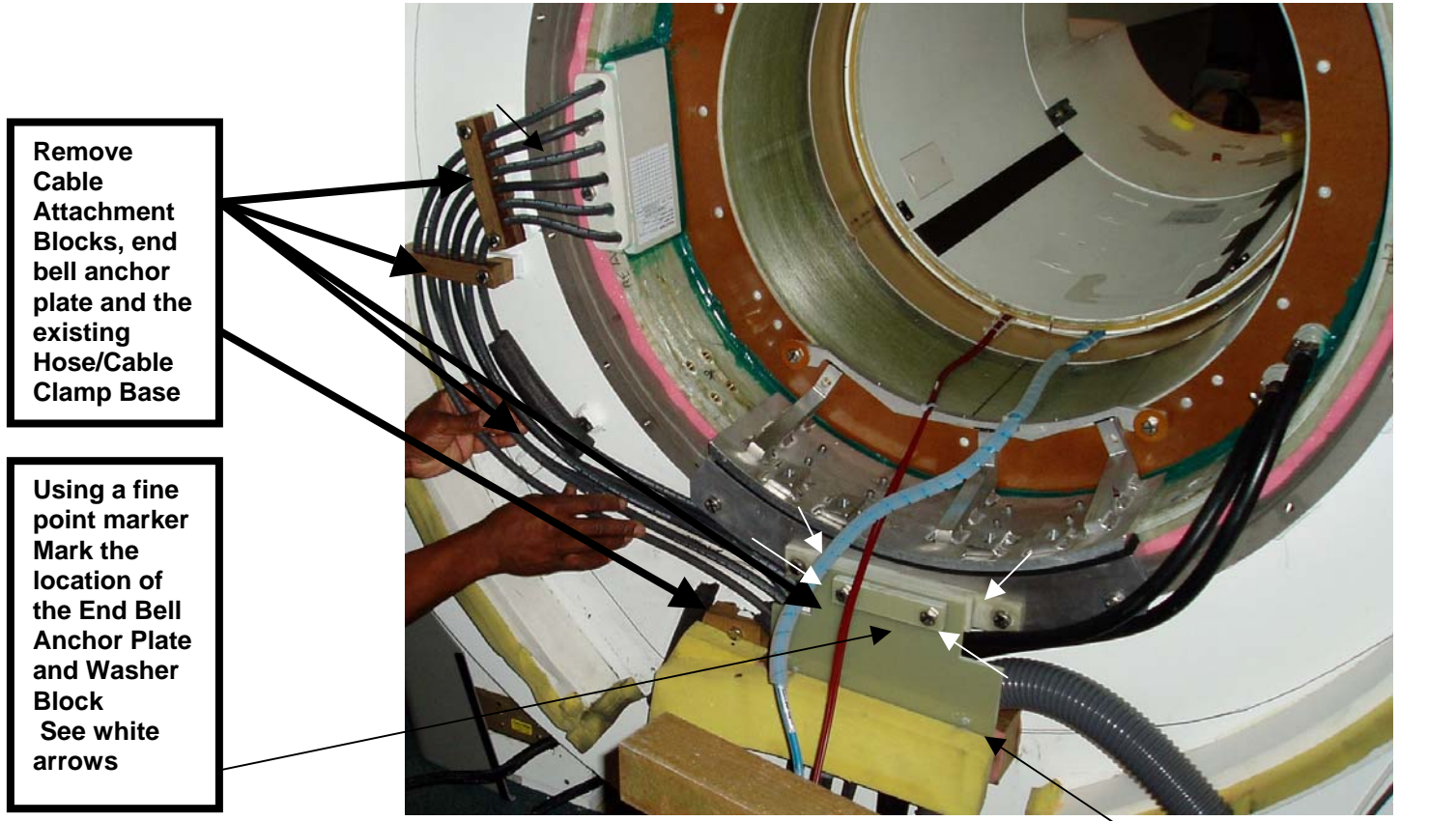


ILLUSTRATION 5-1

Make sure the new foam is not installed covering the end Bell mounting holes As Shown

Attach the Lead Board And the Hose/Cable Clamp Base At these points using the Hardware Supplied in the Kit

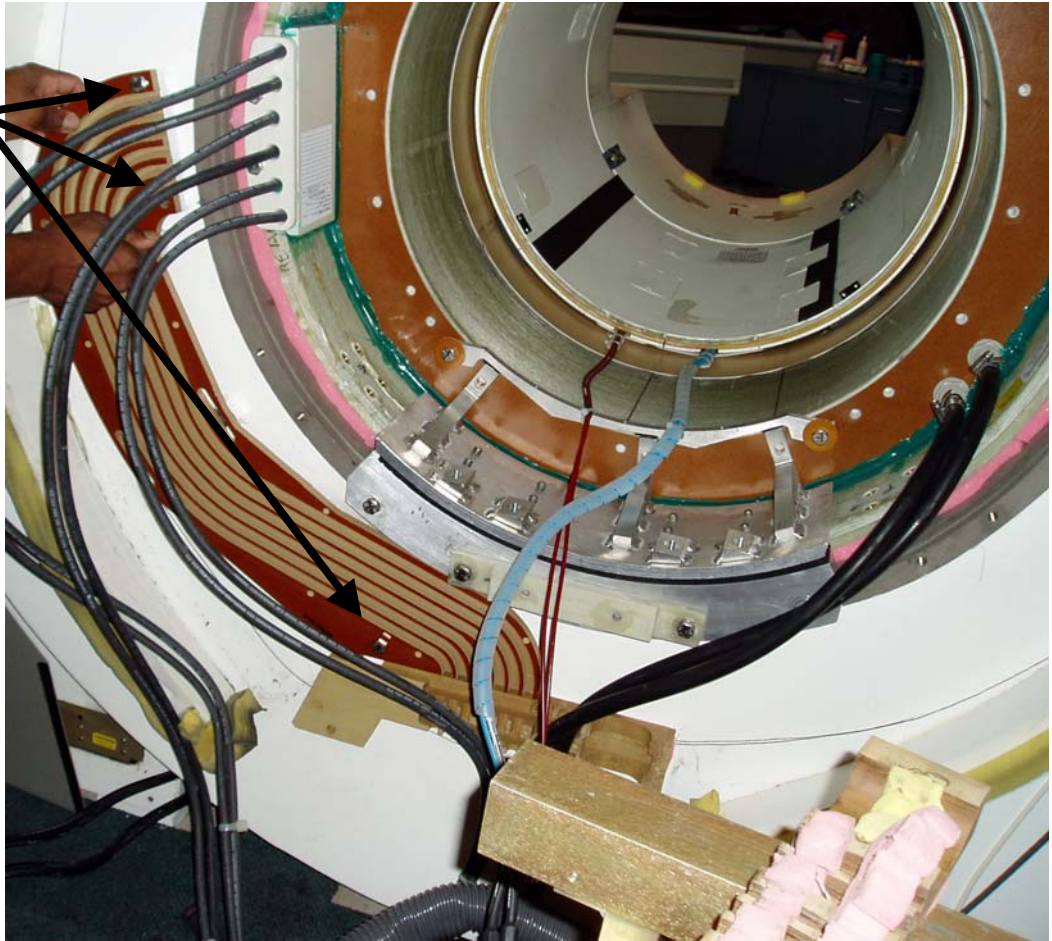
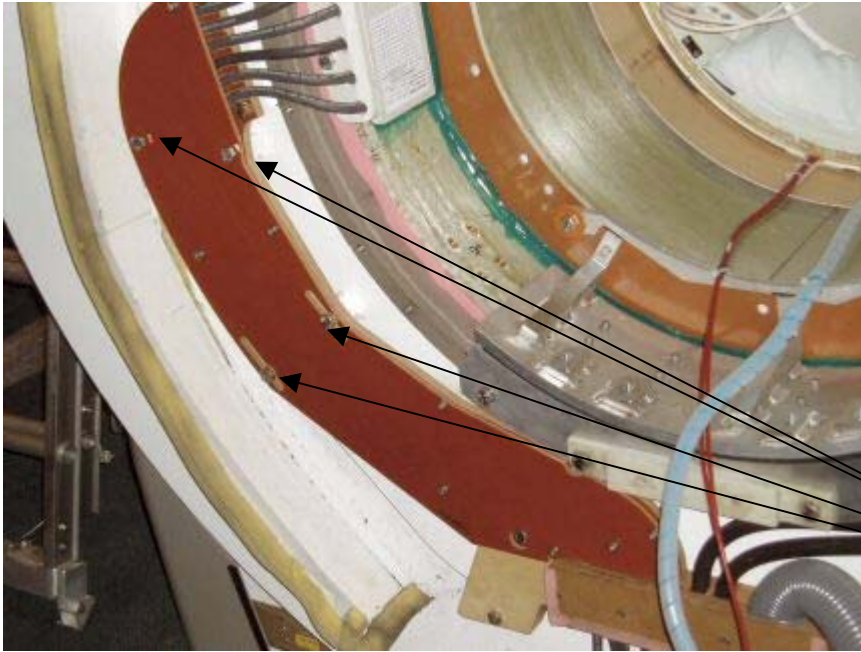


ILLUSTRATION 5-2



Install Lead board cover using Supplied hardware DO NOT FULLY TIGHTEN until the all the remaining hardware is inserted through the cover

ILLUSTRATION 5-3

6. Insert the gradient cooling lines and remaining cable bundle into the Hose Cable clamp. Attach the hose cable clamp cover and hardware. Note: reuse the original Hose Cable clamp cover and hardware.
7. Insert the supplied Pan Head 6 mm X 20 mm screws required to complete the attachment of the lead board cover.
8. Fully tighten all mounting hardware securing the lead board and cable hose clamp covers.
9. Reinstall the end Washer Block and End Bell Anchor plate by aligning to the marks from step 1. Use the new foam block supplied if necessary. Be careful not to cover the mounting holes with the new foam
Illustration 5-1

6-0 End Bell Reinstall

1. Reverse procedure in section 4 to reinstall end bell. Be sure to follow gap specifications in the next steps.
2. All enclosure component seams and gaps visible to the operator and patient shall be less than 0.25 inches (6.35 mm). Exceptions may be made in areas where esthetic visual enhancement of the component gap is required by industrial design.
 - The gap at the seam between the enclosure and RF coil shall not exceed 0.125 inches (3.175 mm).
 - Gap uniformity along any continuous seam shall be + - 0.0625 inch (1.59mm)
3. Proceed to Section 7-0 Bridge Restoration

MagnaShield Gradient Lead Restraint Kit

4-0 Procedure for Removing Rear End Bell

1. Disengage the flex latches on the top and bottom on each side of the back cover. Slide out cover panel to gain access to enclosure interior. Remove the Rear cover from the slide mechanism if more room is required for access.
2. Remove the Patient Comfort Module at the top of the bore. Illustration 4.0.a
3. Disconnect speaker and microphone cables from intercom board located on rear pedestal.
4. Disconnect the fiber optic bundle from light source located above the Patient Comfort module. See Illustration 4-0.b.
5. Remove the rear end bell fasteners and remove the end bell. See large white arrows Illustration 4.0.a

Illustration 4.0.a Patient Comfort Module

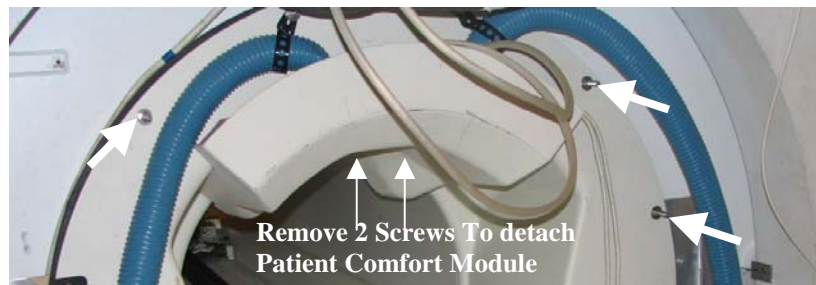
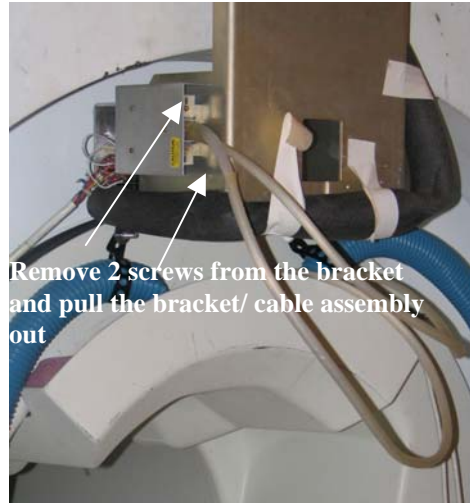


Illustration 4.0.b

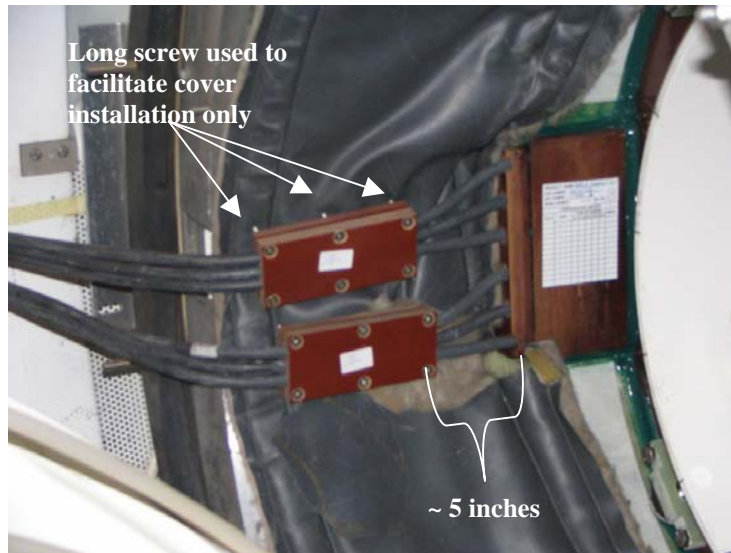


5-0 Installation of Lead blocks

1. Install the first two lead blocks (5127441) and covers as shown, approximately 5 inches from where the gradient leads enter the coil. Illustration 5-0.a
2. Use the long screws to help pull the cover in and set the cables. Once the cover is nearly tight to the block replace the long screws with the short supplied screws supplied.

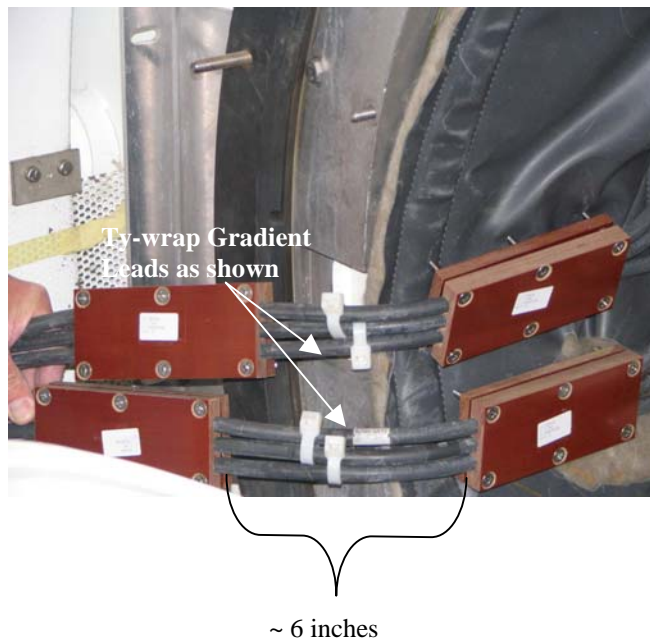
Caution: Do not leave the long screws in block. They are to be used to facilitate assembly only.

Illustration 5-0-a



3. Install the next two lead blocks and covers (5127441) as shown in illustration 5-0.b, approximately 6 inches away from the first set of blocks installed.
4. Ty-wrap the gradient leads between the blocks as shown in Illustration 5 0.b

Illustration 5-0b



5. Re-install the rear end bell. The second set of lead blocks should be positioned as in Illustration 5-0.c
6. Loosely install the Air Dam (5215563) over the opening in the rear end bell. Illustration 5-0.d
7. Place foam (2185175) around the gradient cables to minimize air loss. Tighten the Air Dam mounting Bolts.
8. Install the remaining 8 lead blocks and covers (5127441) every 10 inches. When complete the gradient cables will have lead blocks from the gradient to the floor directly under the rear pedestal. Make sure you install the blocks with the cables routed in the proper position at the back of the magnet. It will not be possible to bend the gradient leads into position when the blocks are installed.
9. Ty-wrap the gradient leads between all the blocks as shown in Illustration 5-0.b.
10. It is now necessary to use lead blocks (5127441-2) to secure the gradient cables on the floor from the back of the magnet to the end of the rear pedestal. Continue installing the lead blocks every 10 inches. It is also recommended that ty-wraps be used to secure the gradient cables, as done in step 4 & 8 above. Note: It may be necessary to remove the patient blower and gradient blower hoses to obtain access to the gradient cables under the rear pedestal.

Illustration 5-0.c



Illustration 4-0.d



6-0 Reinstall Rear End Bell Assemblies

1. Connect the fiber optic bundle to light source located above the Patient Comfort module. See Illustration 4-0.b.
2. Connect speaker and microphone cables to intercom board located on rear pedestal.
3. Replace the Patient Comfort Module at the top of the bore. Illustration 4.0.a
4. Reattach the rear cover to the slide mechanism if detached to gain better access to the rear of the magnet. Slide the rear cover into position then engage the flex latches on the top and bottom on each side of the back cover.
5. Proceed to Section 7-0 Bridge Restoration

Salt Block Magnet with BRM D or F Gradient Lead Restraint Kit

4-0 Procedure for Removing Rear End Bell

Note: It may not be necessary to remove the patient comfort module or rear end bell. Please review section 5-0 before removing these items.

1. Disengage the flex latches on the top and bottom on each side of the back cover. Slide out cover panel to gain access to enclosure interior. Remove the Rear cover from the slide mechanism if more room is required for access.
2. Remove the Patient Comfort Module at the top of the bore. Illustration 4.0.a
3. Disconnect speaker and microphone cables from intercom board located on rear pedestal.
4. Disconnect the fiber optic bundle from light source located above the Patient Comfort module. See Illustration 4-0.b.
5. Remove the rear end bell fasteners and remove the end bell. See large white arrows Illustration 4.0.a

Illustration 4.0.a Patient Comfort Module

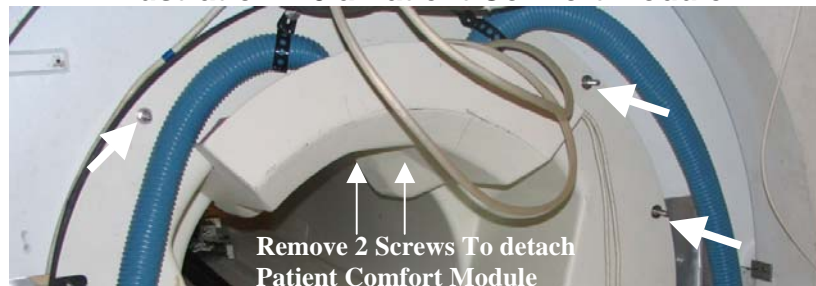
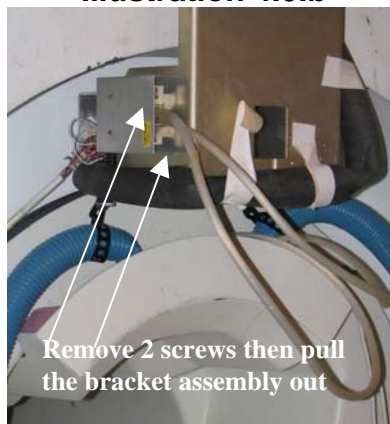


Illustration 4.0.b



5-0 Installation of the Gradient Lead Board and Lead Blocks

1. Remove the cover from the existing terminal board installed on the magnet Illustration 5.0.aa
2. Remove the Gradient Cables from the terminal board and move them out of the way
3. Remove the remaining components of the terminal board. Illustration 5.0.bb

Illustration 5.0.aa



Illustration 5.0.bb



4. Install the gradient lead board (5172976) on the magnet using screws supplied in the kit Illustration 5.0.cc
5. Route the gradient cables into the lead board.
6. Reinstall the rear end bell if removed.
7. Install the gradient lead board cover.

Illustration 5.0.cc

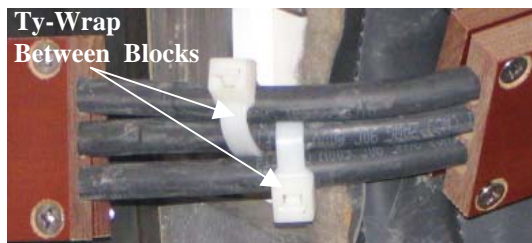


11. It is now necessary to use lead blocks (5127441-2) to secure the gradient cables on the floor from the back of the magnet to the end of the rear pedestal. Install the lead blocks every 10 inches Note: It may be necessary to remove the patient blower and gradient blower hoses to obtain access to the gradient cables under the rear pedestal.
12. Use the long screws to help pull the cover in and set the cables. Once the cover is nearly tight to the block replace the long screws with the short supplied screws supplied.

Caution: Do not leave the long screws in block. They are to be used to facilitate assembly only.

13. It is also recommended that ty-wraps be used to secure the gradient cables between the leadblocks (Illustration 5.0.dd). For more Info see service instruction included with Gradient Cable Clamp Block Kit Direction Number 5127441INS

Illustration 5.0.dd



6-0 Reinstall Rear End Bell Assemblies

6. Connect the fiber optic bundle to light source located above the Patient Comfort module. See Illustration 4-0.b.
7. Connect speaker and microphone cables to intercom board located on rear pedestal.
8. Replace the Patient Comfort Module at the top of the bore. Illustration 4.0.a
9. Reattach the rear cover to the slide mechanism if detached to gain better access to the rear of the magnet. Slide the rear cover into position then engage the flex latches on the top and bottom on each side of the back cover.
10. Proceed to Section 7-0 Bridge Restoration

S- Series Salt block Magnet

4-0 Procedure for Removing Rear End Bell

Note: It may not be necessary to remove the patient comfort module or rear end bell. Please review section 5-0 before removing these items.

1. Disengage the flex latches on the top and bottom on each side of the back cover. Slide out cover panel to gain access to enclosure interior. Remove the Rear cover from the slide mechanism if more room is required for access.
2. Remove the Patient Comfort Module at the top of the bore. Illustration 4.0.a
3. Disconnect speaker and microphone cables from intercom board located on rear pedestal.
4. Disconnect the fiber optic bundle from light source located above the Patient Comfort module. See Illustration 4-0.b.
5. Remove the rear end bell fasteners and remove the end bell. See large white arrows Illustration 4.0.a

Illustration 4.0.a Patient Comfort Module

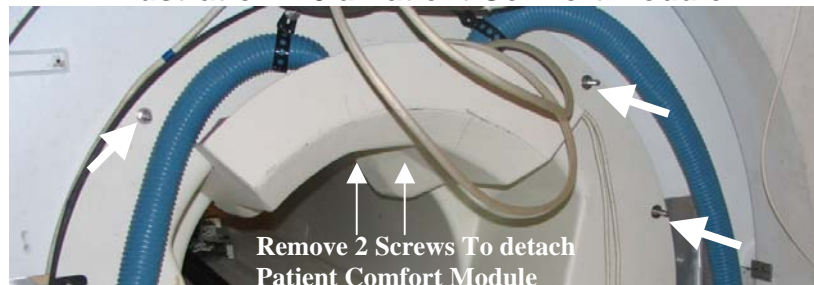
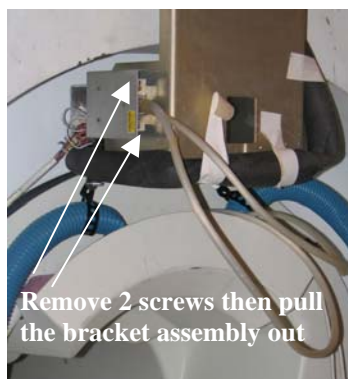


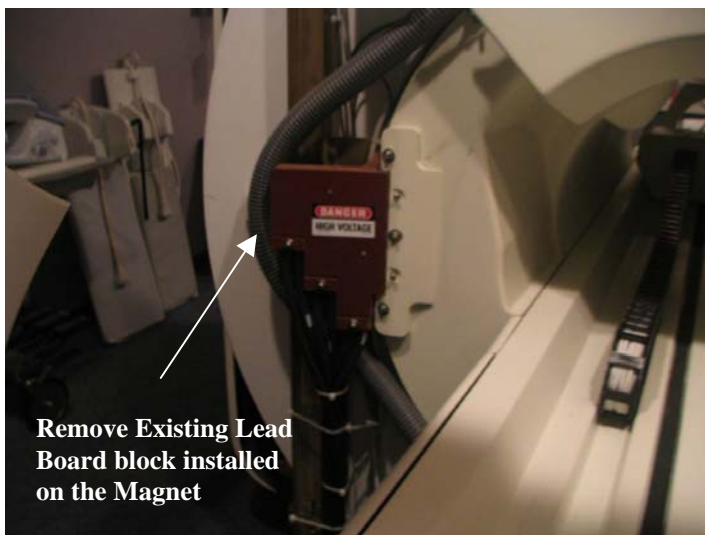
Illustration 4.0.b



5-0 Installation of the S bracket and Lead blocks

8. Remove the cover from the existing terminal board installed on the magnet Illustration 5.0.G Note: This terminal board will not be present with BRM-D.
9. Remove the Gradient Cables from the terminal board and move them out of the way
10. Remove the remaining components of the terminal board.

Illustration 5.0.G



11. Install the gradient lead board (5197808) on the magnet using screws supplied in the kit. Illustration 5.0.H
12. Route the gradient cables into the gradient lead board.
13. Reinstall the rear end bell (If removed).
14. Install the gradient lead board cover (2370909).
15. Loosely install the Air Dam (5215563) over the opening in the rear end bell. Illustration 5.0.H
16. Place foam (2185175) around the gradient cables to minimize air loss. Tighten the Air Dam mounting Bolts.

Illustration 5.0.H



14. It is now necessary to use lead blocks 5127441-2 to secure the gradient cables on the floor from the back of the magnet to the end of the rear pedestal. Install the lead blocks every 10 inches Note: It may be necessary to remove the patient blower and gradient blower hoses to obtain access to the gradient cables under the rear pedestal.
15. Use the long screws to help pull the cover in and set the cables. Once the cover is nearly tight to the block replace the long screws with the short supplied screws supplied.

Caution: Do not leave the long screws in block. They are to be used to facilitate assembly only.

16. It is also recommended that ty-wraps be used to secure the gradient cables between the leadblocks (Illustration 5.0.J).

Illustration 5.0.J



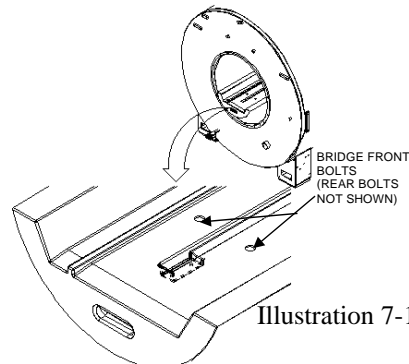
6-0 Reinstall Rear End Bell Assemblies

1. Connect the fiber optic bundle to light source located above the Patient Comfort module. See Illustration 4-0.b.
2. Connect speaker and microphone cables to intercom board located on rear pedestal.
3. Replace the Patient Comfort Module at the top of the bore. Illustration 4.0.a
4. Reattach the rear cover to the slide mechanism if detached to gain better access to the rear of the magnet. Slide the rear cover into position then engage the flex latches on the top and bottom on each side of the back cover.
5. Proceed to Section 7-0 Bridge Restoration

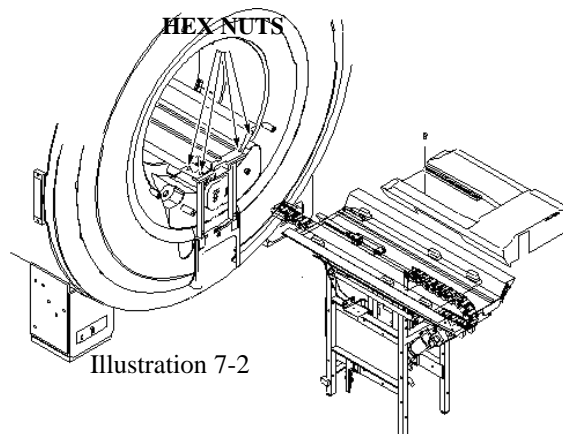
All Systems

7-0 Bridge Restoration

1. If moved, slide the rear pedestal back to its original position so it properly mates to the front bridge.
2. **For one-piece bridge:** Set the front of bridge onto the front bridge pin (see Illustration 7-1). Using an Allen wrench, replace (4) four M6 bolts holding down bridge. Two of the bolts are in the front of the bore and two bolts are in the back of the bore.



3. **For two-piece bridge:** Replace the four M10 hex nuts that hold the front bridge and rear bridge together (see Illustration 7-2).



4. Level the bridge by adjusting the vertical location of the front bridge support.
5. Reconnect the cable track cup that holds the bridge cables.
6. Re-clamp the belt using four screws holding the two belt clamp plates. See Illustration 3-4.
7. Push down the tension arm to reapply tension to carriage drive belt. See Illustration 3-2.
8. Replace the carriage cover and reinstall four screws in carriage cover.
9. Install covers on the rear pedestal. See Illustration 3-1.
10. Dock the patient transport.

8-0 System Power-Up and Functional Checks

1. Remove Lock-Out Tag-Out equipment from PDU and re-apply power to the ACGD Cabinet.
 - A. Rotate the main breaker labeled INPUT clockwise to the Red, 1 (ON) position
 - B. Press the Green Emergency Off reset button on the front of the PDU to power up the system.
 - C. Bring the Signa software back up.
 - D. Bring the PC software back up.
2. Complete one head scan to verify proper system operation.
3. Install the cover on the front of the ACGD cabinet.
4. Record the installation on the "Configuration History" label located on the inside of the rear door of the systems cabinet.
5. Close the Service Dispatch.