

TABLE OF CONTENTS

table of contents	1
Function and purpose	2
1-1 Function.....	2
1-2 Purpose	2
1-3 Limitations	2
Mechanically centering the swing table	3
2-1 Achiving perpendicularity to the magnet.....	3
Adjustments	3
Note (for Authors)	エラー!ブックマークが定義されていません。
1- Section example (“Sec” style)	10
1-1 Subsection Example (“Ssec” style).....	10
1-1-1 Sub-subsection Example (“SSsec” style)	10
2- Text and graphics examples	10
2-1 List/Note Examples.....	10
2-2 Tools and Instruments Required Example	10
2-3 Table Example.....	11
2-4 Illustration Example	11
2-5 Computer Inputs/Outputs Examples	11
3- DANgers, warnings, and cautions examples	12
revision history	9

FUNCTION AND PURPOSE

1-1 Function

The Swing Table as its name implies can be moved to a minus 25 degree position and a plus 25 degree position to provide the customer with better image quality, for those parts of the human body that usually required off-center Field of View imaging techniques.

Due to the lower field strength, electrically adjusting the ISO Center or FOV of the scanner to accomplish off-center-imaging techniques would result in a level of image quality that the customer would not accept.

The solution to this was to design a patient table that could optionally swing +/- 25 degrees to facilitate the placement of a patients body related to magnet ISO center.

1-2 Purpose

This swinging action and the ability of the table to move laterally, left to right, allows the customer to center the anatomy of interest at ISO center thereby improving the Image Quality of the region of interest. These three positions, Plus 25 degrees, Minus 25 degrees and Zero, are designed to maintain clearance with the magnet support posts during normal scanning.

1-3 Limitations

The Signa® *OpenSpeedô* swing table system has three positions that can be used to position the patient for optimization of the scan. The table must be in one of these three fixed positions to enable scan. There is no accommodation for positional scanning between these 3 fixed points. Optimum image quality is attained at the zero center position of the Swing Table.



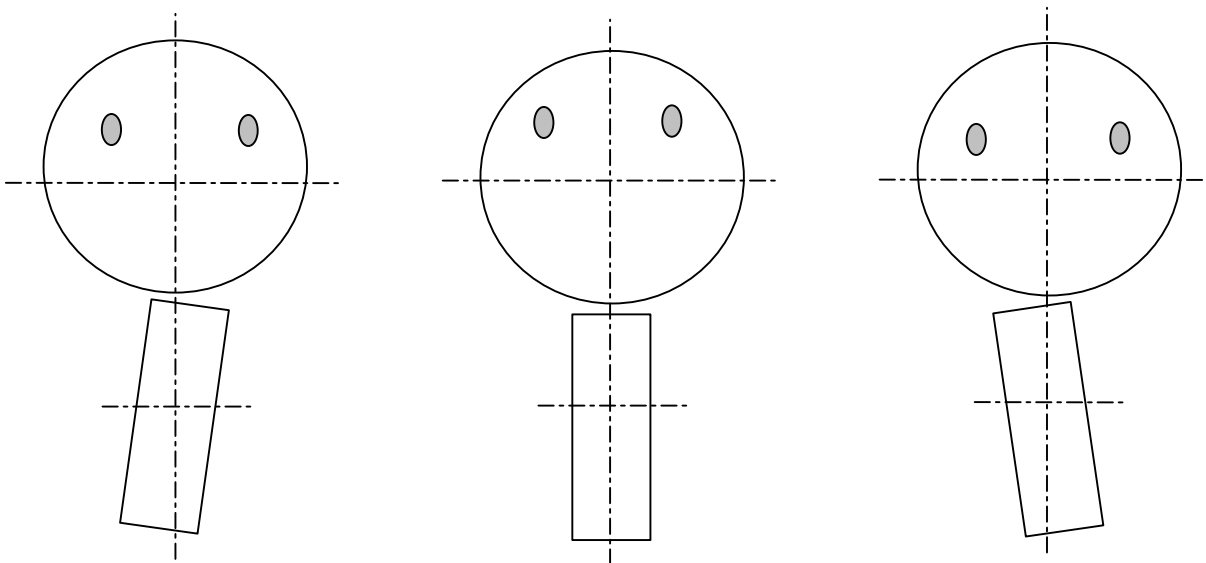
Swing Table
ILLUSTRATION 1-1

MECHANICALLY CENTERING THE SWING TABLE

2-1 Achieving perpendicularity to the magnet

The swing table must be mechanically installed and adjusted to insure that it is perpendicular to the magnet. Failure to correctly perform this procedure will result in a lack of image quality and possible physical interference with the magnet support posts while using the lateral function of the swing table. It is essential that this procedure be completed prior to installing the Enclosure and adjusting the laser align lights.

Incorrect Table Placement **CORRECT Table Placement** **Incorrect Table Placement**



PERPENDICULAR ALIGNMENT
ILLUSTRATION 1-2

Adjustments

The only adjustments you have to insure the swing table is perpendicular to the magnet are slight changes in the position of the rail support that the front of the table rides on.

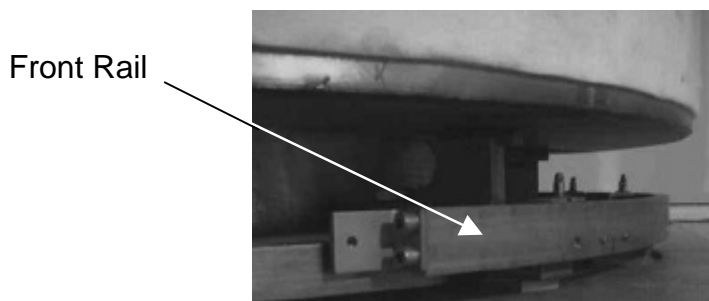


TABLE FRONT RAIL
ILLUSTRATION 1-3

Installing the Table Rail

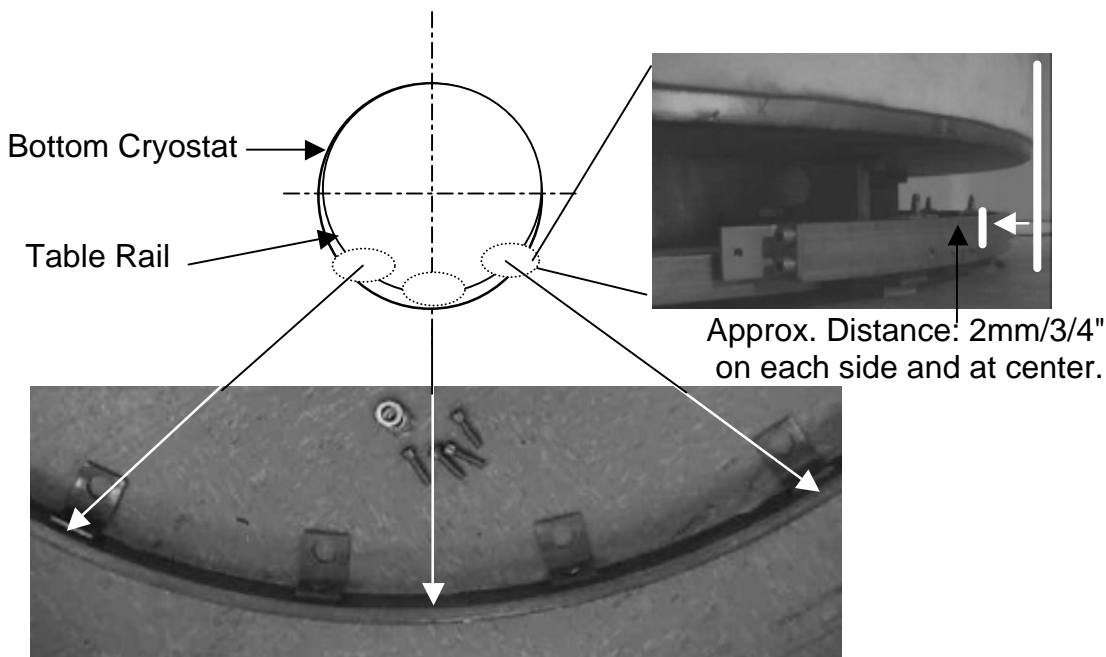
The Table Rail mounting holes are oversized on purpose to provide adjustment of the Table Rail position relative to the magnet cryostat. In the following steps you will make several measurements to insure that final placement of the rail and its arc follow the same arc on the magnet cryostat.

1. Once the magnet is in place install the Table Rail to the front mounts on the magnet baseplate with the 4 bolts and washers provided. Hand tighten at this time.

Note:

The number of washers used should be the same at all sites. Due to the variation of baseplate installation you may need to adjust the height of the Table Rail by adding or removing these shim washers.

The approximate position of the Table Rail should follow the same arc as the lower cryostat.



STRAIT EDGE AND MEASUREMENT POINTS

Illustration 1-4

2. Using a measuring tape or rule, measure from the strait edge to the rail on both the left and right sides. Adjust the rail achieving equal distances on both sides and center points. Finish this process by tightening down the rail bolts.

3-1 Installing the Swing Table Race (Wear Plate)

The Swing table rides on the front rail and the Race or rear wear plate. The location of the plate is critical. Once the front rail is positioned correctly. You can locate the race for installation on the floor. The race should be installed before the finished floor is installed and the table is in place. It is approximately 4mm thick. The finished floor should be put in after the race is located properly and glued down.

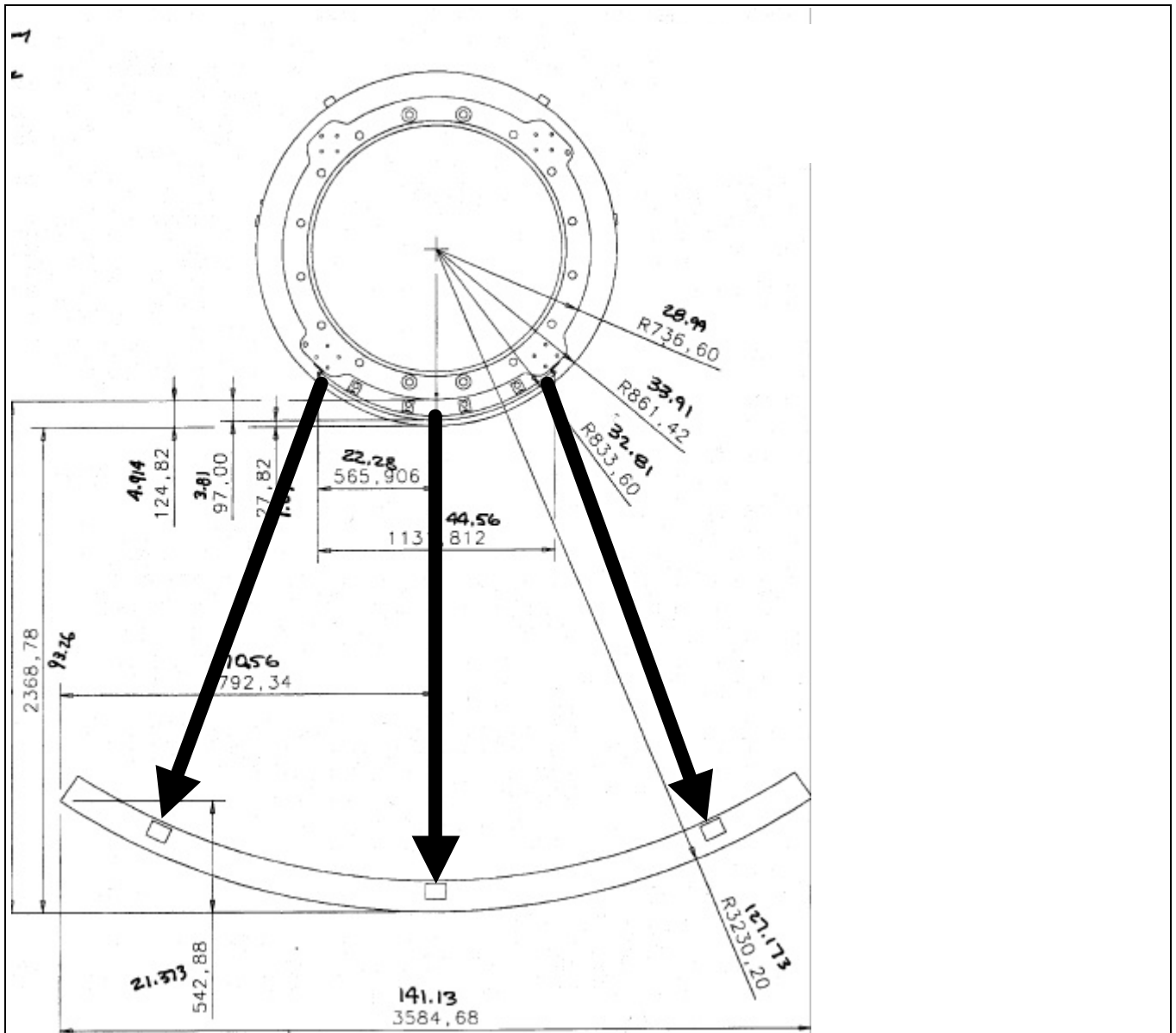
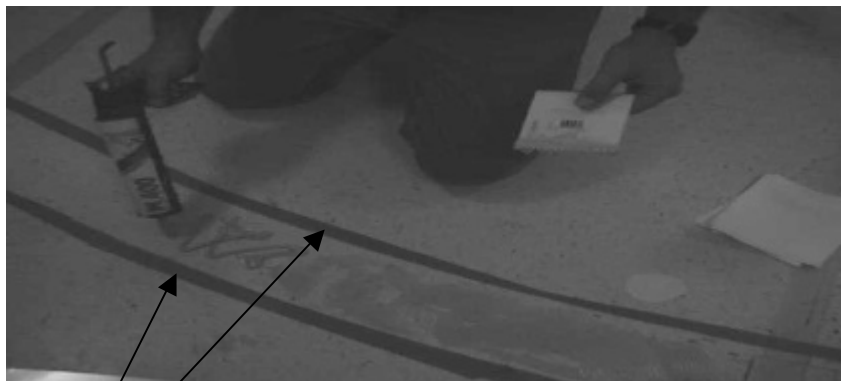


TABLE MEASUREMENTS
 ILLUSTRATION 1-5



1. Using a plumb bob and a string locate the zero degree point with relationship to the Mechanical Iso Center.
2. Use a ruler or tape measure. Measure along the black arrow above. The distance between the front rail and the Race should be 227.5 cm .
3. Clean the race plate and floor with denatured alcohol and place the race in position. Using masking tape, tape the race in position, then cut along the edge with a razor knife leaving an imprint of the race on the floor with the tape.



RACE (WEAR

PLATE)

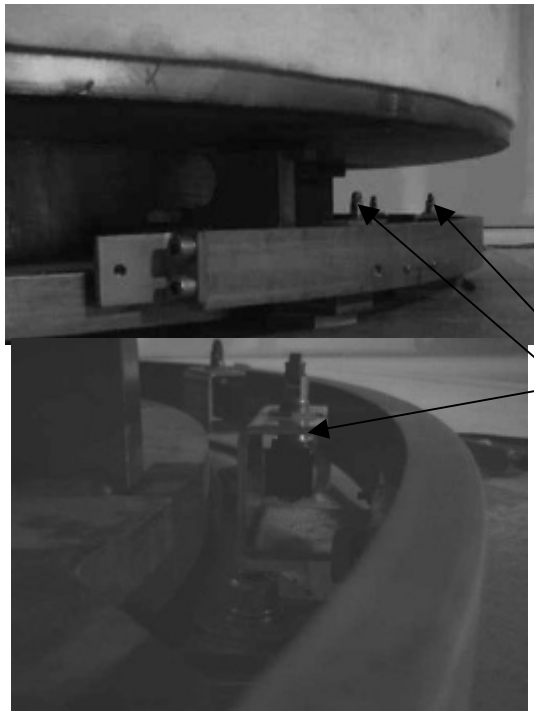
PLACEMENT
ILLUSTRATION 1-6

Tape

4. Glue the race into position. It must set for 24 hours before placing the table on it.

3-2-1 Installing the Swing Table on the front Rail.

1. Move the table into position using the shipping dollies attached.
2. Position the table at 15degrees off center. Carefully slide the cables under the magnet and retrieve them from the back of the magnet.
3. Remove the Rail Wheels from the front of the table and slowly slide the table under the magnet between the table Rail and the magnet itself. Be sure to watch for the switches. DO not break the switches.
4. Once the table is in position, replace the table rail wheels and bolt them tight.



5. Using the shipping dollies, slowly drop the table into position.
6. Remove the dollies from the table.
7. connect the cables to the mating cables at the rear of the magnet.

(Switches)



REVISION HISTORY

REV	DATE	AUTHOR	PRIMARY REASONS FOR CHANGE
A	Aug 15, 2000	D. Hofstetter	Initial version.

WDTMPLT.DOC is **read only**. If creating a new document from this file, edit a copy of it, enter your changes, then delete the unneeded template examples. If using the MRSRVDOC.DOT template (place a copy of this file in directory C:/MSOffice/Templates/Publications on your PC), select "File" -> "New" -> "Publications", then MRSRVDOC.DOT. A new document is created using this template's contents and styles. ("note" style)

1- SECTION EXAMPLE ("Sec" STYLE)

Using any mild detergent or spray cleaner, clean all areas of magnet enclosure **outside** magnet bore (front, rear, and side covers; trim skirts; rear pedestal; dock assembly), as necessary. . ("txtpar" style)

1-1 Subsection Example ("Ssec" style)

1-1-1 Sub-subsection Example ("SSsec" style)

Un-numbered Subsection Example ("SSSsec" style)

2- TEXT AND GRAPHICS EXAMPLES

2-1 List/Note Examples

The following example steps, sub-steps, note, and bullet list items:

1. Look for loose hardware. ("step" style)
 - a. Check under Head Carriage. ("sstep" style)
 - b. Check under table bridge.
2. Inspect trim skirt and floor between Front and Rear Covers for loose metal, such as:
 - paper clips ("bullet1" style)
 - staples.
 - second level list example ("bullet2" style)
 - Type "-", then tab over to start text.

2-2 Tools and Instruments Required Example

Item	Description (" <u>pl header</u> " style)	Part Number	Qty.
1.	Original Oxygen Monitor Calibration Kit (" <u>pl</u> " style)	46-271523G1	1
1.a	Newer Oxygen Monitor Calibration Kit	46-317271G1	1

2-3 Table Example

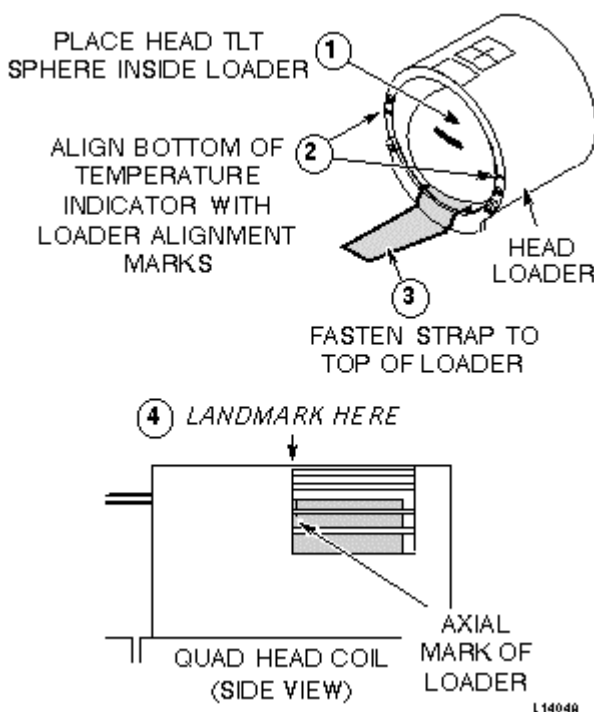
Refer to Table 2-1 for an example table.

TABLE 2-1 ("*TableNo.*" style)
INSTALLATION MANUAL REFERENCES ("*TableName.*" style)

DIRECTION	TITLE	REV	CLASS	DISTRIBUTION
2120460	Signa Horizon Pre-Installation		A	Tab 088 only
2128854	Signa Horizon System Installation		A	Shipped with product

2-4 Illustration Example

See Illustration 2-1 for an example illustration. (The .bmp format illustrations will look choppy if viewed at less than 100% screen size.)



POSITIONING TLT HEAD SPHERE INSIDE HEAD LOADER ("*illname*" style)

ILLUSTRATION 2-1 ("*illnumber*" style)

2-5 Computer Inputs/Outputs Examples

Computer outputs/prompts text is Courier New font; user input text is Arial, bolded; user comments are in Arial, italics. An example of this follows: ("*computer-table*" style)

```
{sdc@lx-bay4a} [1] eject <Enter> (This ejects the IRIX 5.3 CD-ROM from the CD-ROM.
Remove the IRIX CD-ROM and insert the MR Applications CD-ROM.)
{sdc@lx-bay4a} [2] sleep 30 <Enter>
{sdc@lx-bay4a} [3] mount -r -t iso9660 /dev/scsi/sc0d310 /mnt <Enter> (0d310 is zero,
d, 3, lower-case L, zero)
```

Alternatively, for long descriptions of extended I/O sessions, A/N display output can be presented, along with required inputs, in tabular format. See Table 2-2 (“*computer-table*” style). After typing output/prompts in Courier New font, manually space over to the input/comments column using the “period” key, then type type inputs/comments in arial font. By appropriately setting the “hanging indent” (4.7” for the example table) the comment text is automatically wrapped to the right column until you press the <Enter> key to start a new line.

TABLE 2-2
 COMPUTER I/O TABLE FORMAT EXAMPLE

OUTPUT/PROMPTS	INPUTS/COMMENTS
{sdc@lx-bay4a} [1]	eject <Enter> (<i>This ejects the IRIX 5.3 CD from the CD-ROM. Remove the IRIX CD and insert the MR Applications CD.</i>)
{sdc@lx-bay4a} [2]	sleep 30 <Enter>
{sdc@lx-bay4a} [3]	mount -r -t iso9660 /dev/scsi/sc0d3l0 /mnt <Enter> (<i>0d3l0 is: zero, d, 3, lower-case L, zero</i>)

3- DANGERS, WARNINGS, AND CAUTIONS EXAMPLES



FATAL ELECTRIC SHOCK HAZARD!! TO PREVENT FATAL ELECTRIC SHOCK, DISCONNECT POWER FROM THE PDU BEFORE YOU PERFORM THE FOLLOWING. (“*DANGER*” style)



SHOCK HAZARD! EXPOSED HIGH VOLTAGE CAPACITORS AT BOTTOM OF CHASSIS CAN INDUCE AN ELECTRIC SHOCK IF VOLTAGE BLEED-OFF CIRCUITRY IS FAULTY. DO NOT PLACE HANDS INSIDE CHASSIS. (“*WARNING*” style)



Adjust the valves slowly and only use low pressure. Adjusting the valves too fast or adjusting to excessive pressures may damage the sensor cell. (“*CAUTION*” STYLE)