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DANGER!!

THE SWING TABLE ELEVATION MOTION IS ACHIEVED BY A SCISSORS ACTION OF TWO FRAMES THAT CAN CAUSE SEVERE TRAUMA AND POSSIBLE DISMEMBERMENT. NEVER PLACE ANY HANDS OR FINGERS BETWEEN THESE FRAMES WITHOUT BLOCKING THE TABLE IN THE UP POSITITON.

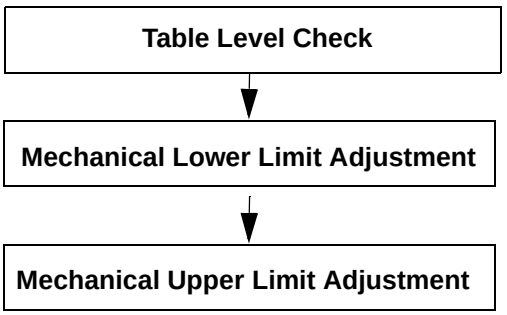
1. Required Tool

•Level Gauge
•Ruler(15 cm)
•Ruler(100 cm)
•Metric hexagon wrench set.
•Small Flat blade screwdriver.
•Small Phillips screwdriver.
•Voltmeter

2. SWING TABLE ELEVATION THEORY

- The Swing Table moves up and down by depressing the foot pedals located on either side of the table. These foot pedals are located in the front of the Swing Table nearest to the magnet.
- The purpose of this up and down travel is to provide the operator and patient convenience when loading the table.
- The elevation motion it self is provided by a 38vdc screw-gear type drive mechanism that is assisted by two gas shocks. These gas shocks have more than enough power to drive the table to the uppermost position should the mechanical drive mechanism fail.
- The Position of the table is critical for scan operation. If the table is not in the full up position, the scanner will pause and the error log will indicate that the table is not up. The signal that allows for the system to know the position of the table is controlled by a single adjustment of an optical sensor that is fed to the SRI (Scan Room Interface) and then back to the ISE (Integrates System Electronics). In addition, there are two other optical sensors that are used to setup the Mechanical limits of the table. The same type of adjustment is made to set the Mechanical UP and the Mechanical DOWN limit of the table.
- Due to small variations in siting, these adjustments must be checked, and occasionally adjusted during the Swing Table Installation. Any further adjustment would be necessary only if the elevation mechanism is replaced or if the optical sensors fail.
- The Elevation Adjustment should be checked periodically, to insure that the correct table height is maintained.

3. TABLE HIGHT ADJUSTMENT



3-1 Location of the Sensor Adjustment Assembly

The sensor Adjustment assembly is located at the front of the table.
It is necessary to remove the lower cover by removing the screw fasteners on each end of table.

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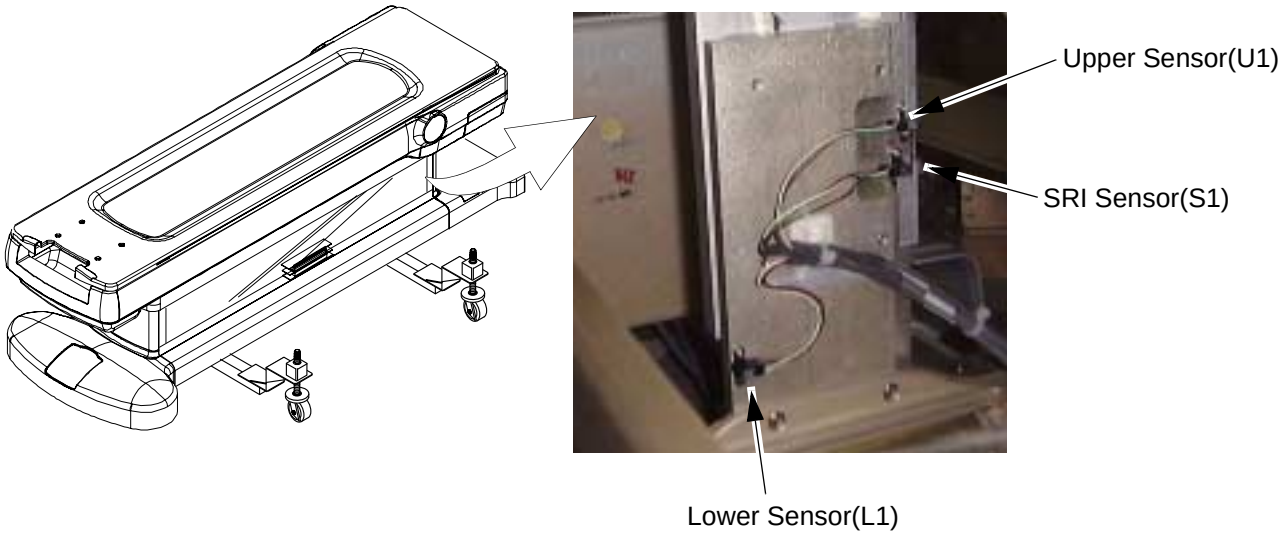


SENSOR LOCATION
ILLUSTRATION 1

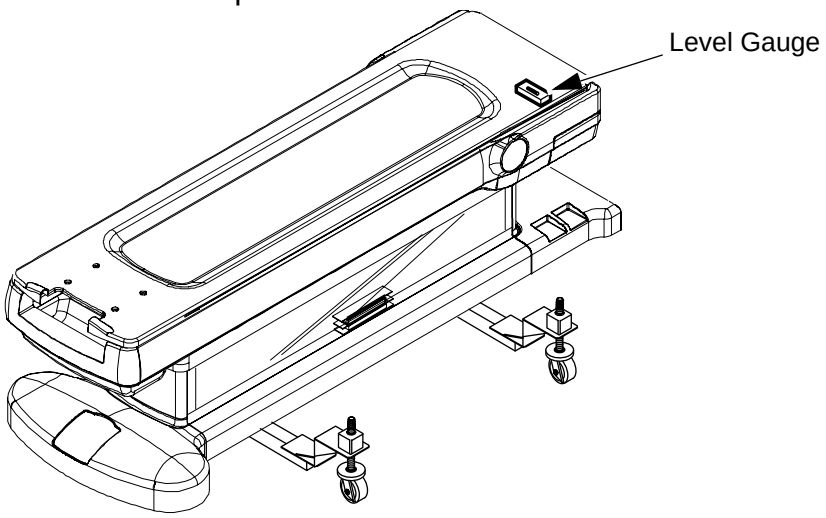
Note

The following procedures should be done after the table has been installed and leveled properly on site. If the table is not level prior to performing the Elevation Limit Adjustments you will need to repeat the procedure unnecessarily at a later date and could cause aesthetic damage to the magnet enclosure

3-2 Table Level Check

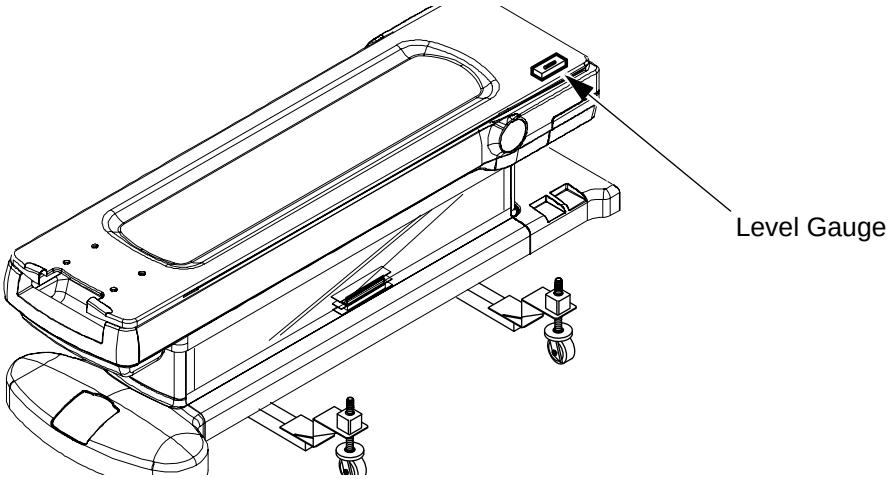
Table leveling is achieved by proper placement of the correct amount of shims under the table Rail during the initial Swing Table Installation. There are no adjustments on the Swing Table wheels. Shimming the Swing Table Rail is the sole method used to adjust table level FRONT to BACK (ANTERIOR to POSTERIOR) and Left to right. If re-shimming the table is required to achieve proper level, it will be necessary to perform all of the Mechanical Table Installation procedure alignments before adjusting the Sensor Adjustment Assembly. Failure to do perform the Installation procedures and measurements will result in table misalignment and severe problems achieving proper image quality.

1. Place at least a 2 foot level on the side of the table. Insure that the table is level, front to back. If you find this out of adjustment you will need to re-shim the Swing Table Rail. It will be necessary to perform all of the Mechanical Table Installation procedure alignments. Refer to the Swing Table Installation procedure.



LEVEL CHECK 1
ILLUSTRATION 2

2. Check the level of the table Left to right at the approximate center of the Swing Table.If you find this out of adjustment you will need to re-shim the Swing Table Rail. it will be necessary to perform all of the Mechanical Table Installation procedure alignments. Refer to the Swing Table Installation procedure.



LEVEL CHECK 2
ILLUSTRATION 3

3-3 Mechanical Lower Limit Check

Note

This is factory set and no adjustment is necessary during initial installation.
Proceed with this calibration only is you find it necessary to do so.

1. Using the foot pedal, drive the table to it lowest position.
2. Using a 100cm Ruler and a 15cm Ruler, measure the measurement from the cradle roller rail to the Swing Table wear plate or finished floor. In the absolute down position, this measurement should be 65.5cm +/- 5mm (Approximately 25-7/8"). If this is not correct, Adjust the Lower Limit sensor (See Section 3-4 Mechanical Lower Limit Adjustment).

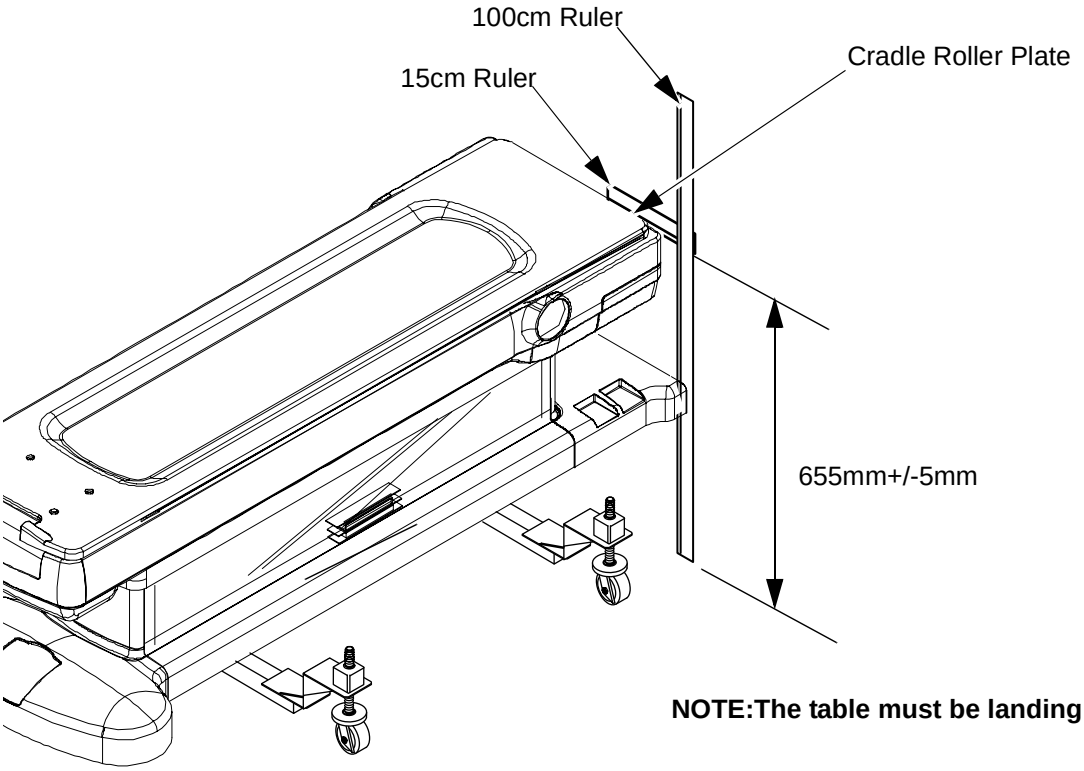


TABLE LOWER LIMIT CHECK
ILLUSTRATION 4

3-4 Mechanical Lower Limit Adjustment

The adjustment is accomplished by loosening the two screws holding the adjustment slide-plate, and sliding the plate Up or Down as necessary to achieve 65.5cm +/- 5mm (25-7/8") height from the table wear plate or finished floor.

1. Loosen these two screws of Adjustment Plate and slide the plate Up or Down to achieve 65.5cm +/- 5mm (25-7/8") height from the table wear plate or finished floor.
   Then, tighten the screws.

Note

When tightening two screws after adjustment, tighten two screws holding the plate by another hand.

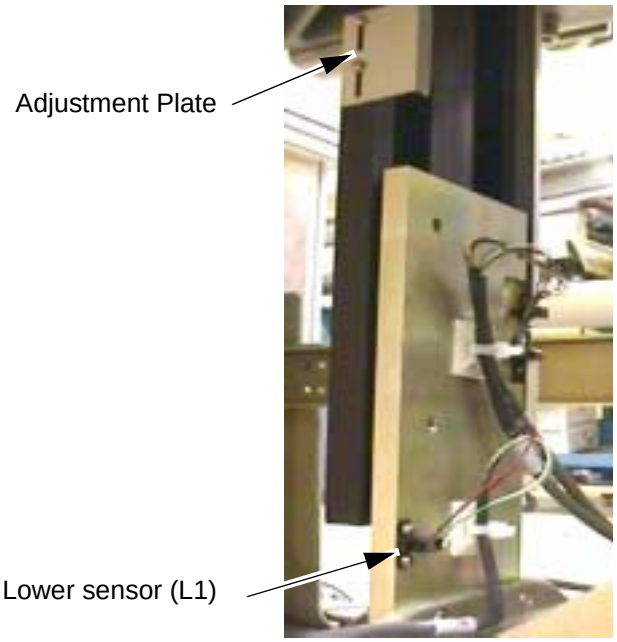


Table upper limit position

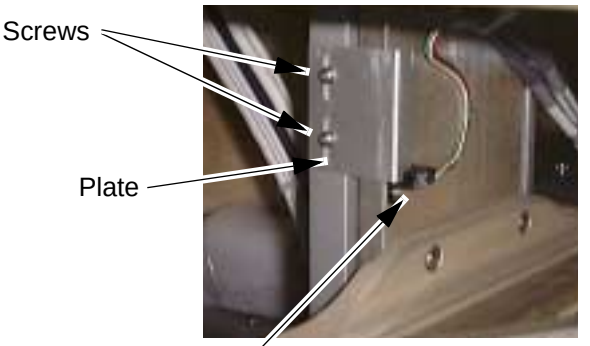


Table lower limit position

SENSOR ADJUSTMENT
ILLUSTRATION 5

2. Using a 15cm ruler and 100cm ruler, measure the height from the cradle roller rail to the Swing Table wear plate or finished floor. In the absolute down position, this measurement should be 65.5cm +/- 5mm (Approximately 25-7/8"). Re-check the measurement as necessary.
3. When your measurement is within the required distance, go to next procedure.
   When your measurement is not within the required distance, go back to step1 of this procedure.

3-5 Mechanical Upper Limit Check

This adjustment is done to insure that the table and the magnet are at the same level.
If this adjustment is not done properly the cradle rollers will collide with the magnet rather than transition smoothly with the magnet surface.
Due to the differences in screen room floor construction you should adjust the table height to achieve the smoothest cradle transition between the table cradle and the magnet surface.
The specifications as listed should get you very close to this.

The Upper sensor (U1) is permanently mounted to an adjustable slide plate. It is necessary to adjust this slide plate up or down as necessary to achieve 2 mm +/- 1mm clearance between A(table roller) and B(magnet floor).

1. Using the foot pedal, drive the table to it up limit position.
2. Set a 100cm Ruler on the top of the Table. Then, measure the clearace between A(Ruler) and B(Magnet floor cover) using a 15cm Ruler.
3. This clearace should be 2 mm +/- 1mm.
4. When your measurement is within the required distance, move the cradle in and out and observe the cradle to magnet transition. It should be smooth and not drop or collide with the magnet surface. When satisfied that this is accomplished, it is not necessary to perform the upper limit adjustment,

   When your measurement is not within the required distance, perform the upper Limit adjustment. (See Section 3-6 Mechanical Lower Limit Adjustment),

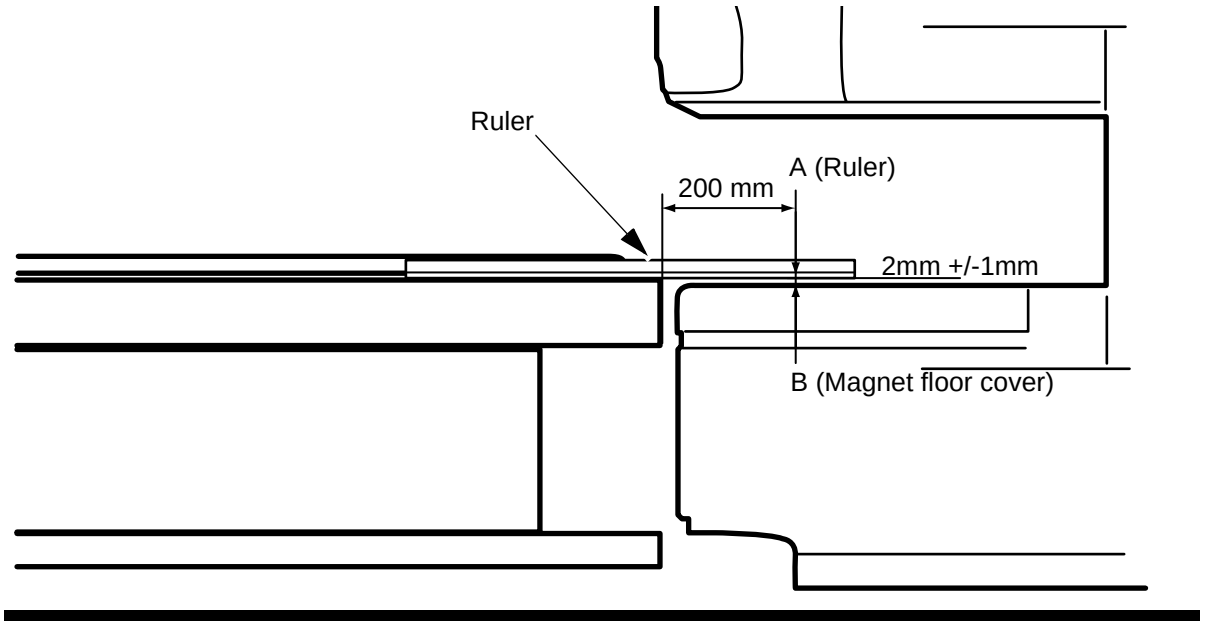


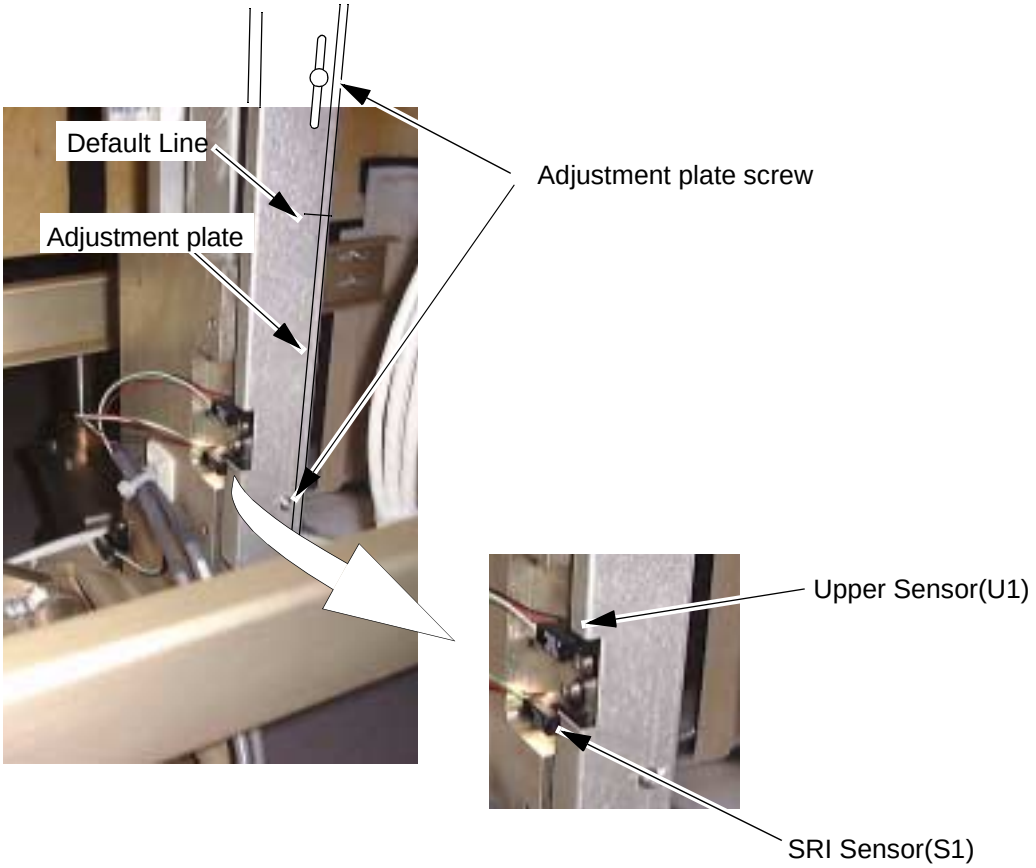
TABLE UPPER LIMIT CHECK
ILLUSTRATION 6

3-6 Mechanical Upper Limit Adjustment

1. Draw a default line on Adjusting plate and base.
2. Loosen two screws of adjustment plate and adjust the adjustment plate to UP or DOWN to achieve 2 mm +/- 1mm clearance between A(ruler) and B(magnet floor).
   Then, tighten the screws.

Note

When tightening a screw after adjustment, tighten two screws holding the plate by another hand.



SENSOR ADJUSTMENT
ILLUSTRATION 7

3. Using 100cm Ruler and 15cm Ruler,measure the clearance between A and B.
   Verify that the clearance is 2mm +/-1mm. See illusttration 6.

4. When the result is within the required clrearance, move the cradle in and out and observe the cradle to magnet transition. It should be smooth and not drop or collide with the magnet surface. When satisfied that this is accomplished, complete the adjustment by tightening the screws.

   When the result is is not within the required distance, repeat the adjustment.

3-7 Electronic Height Adjustment (SRI Limit)

This check should be performed to insure that the system knows when the table is in the calibrated up position. The SRI is informed of the table Up Position by a separate SRI sensor. This signal is necessary to allow the cradle to move freely into the magnet. When this sensor is correctly set, the SRI informs the system that the cradle can be released and that scan can take place. The setting of this sensor should be slightly below the Mechanical Upper Limit to insure full travel of the elevation drive system.

No further adjustment to this sensor is necessary.

3-8 Restoration of the table covers

Once the Swing Table Sensor adjustments/ Checks are complete restore the table covers with the screws provided.

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Oct 23, 2001	Y. Masumo	Initial Release