NOTES
This document is provided as a consultation manual intended for the device technicians.

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The original version of this manual is in English.

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INFORMATIVE NOTE OF THE MANUFACTURER ON THE MEDICAL DEVICES

The medical device referred to in this manual is an X-ray device compliant with Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Any tampering with, modification, updating or other change both of hardware and software of the device as supplied and installed by the company (and in the conditions specified in the attached documentation) may partially or totally compromise the device expected operation. This may also alter the safety features with consequent hazard increase for patients, operators and surrounding environment.

For this reason, should the user need to modify the device, he/she must request a written authorisation by CEFLA s.c.

Failure to comply with what is specified in this informative note will null and void the device warranty and the civil and/or penal responsibility for any consequent damage and/or accident and/or worsening of the patient, operator or other people health (including the surrounding environment) will be borne by the person who tampered with the device or his/her legal representative.
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1 Patient Table

1.1 Unpacking and moving the equipment

1.1.1 Inspection and unpacking instructions

Thoroughly inspect the exterior of the crates for damages which might have occurred during shipment. Report any damage to delivering carrier and follow their instructions.

Cut the two belts that close the cartoon crate, and then remove the top cover and the side cartoon. Inspect the interior of the crate and verify that no damages have occurred during the transport.

The table comes with two handle bars already mounted. The remaining handle bars must be installed by the local technician. Once all the handle bars are mounted unscrew the 4 bolts located on the corners of the table base. These bolts anchor the table to the basement of the crate.

Extract the table from the crate with the aid of the mounted handle bars.
Move the table as close as possible to the final position (close to the scanner).

Dismount the pantograph motor cover by unscrewing the bolt located at the base of the cover (see following picture), and pulling it up (it is fixed with a piece of dual lock).

Once the table has been positioned in the final position, remove the two locking bolts (for motor X and Y) as shown in the following pictures.

Moving / transporting the table without the two locking bolts mounted can result in damaging the table without any warranty coverage.
With the aid of a portable drill with 6 mm hex allen bit mounted, rotate the pantograph motor drive shaft until the head rest plank of the table can enter in the scanner gantry.

**WARNING:**
Avoid lifting until reaching the limit switch.
Once the head rest plank can easily enter in the scanner gantry, move the table close to the scanner, and couple them together using the two bolts located on the front of the scanner that should match with the two holes located on the bracket at the base of the table.

In case the table need to be leveled it can be done adjusting the table feet.

Once verified the two components can be easily coupled, move back the table in order to facilitate the process of mounting the scanner covers.

1.2 Mounting and connecting the equipment

1.2.1 Mounting the console

Move the console closed to the hole in which the cables enter.

Connect the connector and insert a cable tie (provided in the package) as shown in the following picture (take care to do not pinch or fold the wires contacts).

Slightly insert the console pipe into the hole. Tighten the two bolts that fix the console pipe (see the following picture). The bold labeled as “1” can be accessed only with the back rest plate in horizontal position.
1.2.2 Mounting the equipment covers

Mount the carters on the main structure using the provided bolts (see following picture). Pay attention to the rubber gasket that must be left toward the top (as for the mounted covers).
1.2.3 Swapping the console location

In case the table console needs to be moved to the other side the following procedure must be followed: Verify the table top is in the horizontal position (see following picture)

Slide out the console “S” shaped pipe, disconnect the cables and cover the pipe with paper tape in order to protect it.

Remove the pillow of the seat by loosening (not removing) the 4 bolts located on its bottom (see next picture).
Unscrew the 2 bolts from the back carter and remove it.

Dismount the pillow of the back plate by removing the 4 bolts that hold it to the mechanical frame.
Cut the plastic wrappers that holds the cables

Disengage the conrod connected between the seat and the back plate of the chair (paying attention to the exact dismount sequence, position of the conrod, bolt and washer - see following pictures)

Remove the 2 bolts that fix the console support pipe to the mechanical frame.
Unscrew the 4 bolts from the connecting conrod and turn up side down the support pipe.

Mount the console support pipe on the other side of the chair back.

Mount back the crank of the console support pipe paying attention to the radial position (next picture shows the correct position in case of console mounted on the right of the patient).
Mount back the conrod. Next picture shown a correct assemblage in case the console must be mounted on the right of the patient.

Gently slide the console pipe cables in the support and connect them.

Before mounting the carters, make a complete movement of the chair back (up / down) to verify that the cables are not crushed.
WARNING:
To be able to move completely the chair back, the patient table must be completely out of the gantry, otherwise it will appear on the display console “Error 2016 Call tech support”

Disconnect the cables and gently, slide them out of the support pipe.

Mount the pillow of the back plate using the corresponding 4 bolts that hold it to the mechanical frame.

Insert the back carter cover, slide the cables back in and fix the cover.

Slide the console pipe all the way inside the support and fix it in the correct radial position with the proper bolts (around 30 degrees toward the sitting plate of the chair).

1.2.4 Connecting the equipment

Please refer to the “Installation Manual” and “Service Manual” documents.
2 Patient Table with stretcher

2.1 Unpacking and moving the equipment

2.1.1 Inspection and unpacking instructions

The table is delivered in two different box: one box for the base and a crate containing the top structure, the covers and the accessories.
2.2 Mounting and connecting the equipment

2.2.1 Assembling the top structure

Carefully place the top structure on the main structure passing the cables through the hole as shown in the following pictures.

Once the top part is properly positioned fix it by using 4 hex head bolts 12x35 with a spring washer + flat washer on the top and flat washer + nut on the bottom (see following picture).

Mount the rack using 2 socket head 6 x 16 with a spring washer + flat washer, aligning it to the main structure, without fixing it firmly (see next picture).
Dismount the pinion gear in order to remove the motor shaft key (Fig. 1 and Fig. 2). Store the key in a safe place. Once done mount the pinion gear back. Be careful to do not tight pinion gear too much otherwise gear will stop turning.

NOTE: Be careful that the shaft key does not fall out into the chair. Once rack is installed we will reinstall key under pinion gear.

Move the rack closer to the pinion gear then adjust position of the rack until the movements of the rack from side to side is smooth all the way across (see next picture). Once the best alignment of the rack has been found, firmly fix the rack.
Move the top structure all the way to the left until the corresponding limit switch is engaged (see following picture).

Mount the potentiometer by carefully passing the cables through the provided hole and fixing it with 2 socket head bolts 4 x 10 with spring + flat washer. Wait before coupling the potentiometer pinion gear with the rack.

Rotate the potentiometer all the way counter-clockwise, then perform two rotations clockwise (see next pictures).

NOTE: lobe end position may differ from one machine to another.
Move the potentiometer toward the rack (see next picture) in order to mesh them paying attention to do not rotate the pinion gear, then fix it. Once done, verify the movements of the rack from side to side is smooth all the way across.

Connect the potentiometer cable and secure it to the structure with the aid of a cable tie.

Remove the pinion gear and re-install the motor shaft key. Once installed mount the pinion gear back and fix it using a 4 x 10 socket hex bolt with spring + flat washer.

NOTE: be carefully not to drop shaft key into chair assembly.
Fix the cables plate on the top structure by tightening the 2 socket head bolt 4 x 10, 2 countersunk head bolts, 2 pan head bolts 4 x 10 as shown in the next picture. Once done secure all the cables to the scanner and connect the connectors following the labels.
Mount the “STRETCHER ELECTRONIC COVER PLATE” (99934657) to cover the electronic using 6 pan head bolts 4 x 10 (see following picture).

Mount the “STRETCHER ELECTRONIC COVER PLATE GROUP” (99934633) to cover the cabling using 4 pan head bolts 6 x 8 (see following picture).
2.2.2 Mounting the covers

Once the table has been positioned closed to the final position, remove the locking bolt (for motor X) as shown in the following picture.

Remove the “FRONT PANEL THERMOFORMED CARTER” (97465006) by unscrewing the M4x20 socket head bolt located on its left side.

Remove the rear “PLASTIC RING” (97465003) by unscrewing the M4x20 self-tapping bolt located on its bottom side and unhooking it from the 4 back inserts.
Unscrew the 8 M6x20 socket head bolts that hold the “POSTERIOR THERMOFORMED CARTER” (97465005) in order to slide it out.

Lift up the device by tightening the M12x140 socket head bolt, in order to reach the expected quotation as shown in the following picture.
Mount the feet on both the “ANTERIOR STABILIZING PLATE” (99934636) (2 feet) and “POSTERIOR STABILIZING PLATE” (99934637) (n°6 feet).

Engage the “ANTERIOR STABILIZING PLATE” with the table structure. Pay attention to pass the cables of the table through the corresponding hole on the plate. Once the “ANTERIOR STABILIZING PLATE” is correctly engaged, fix it using 4 M10x25 socket head bolts and 4 M10 washers (refer to the following pictures).
Gently moves the table until the “ANTERIOR STABILIZING PLATE” slides under the Newtom 5G device (see following picture).

Rise or lower the scanner (using the M12x140 socket head bolt) until the two holding bolts approximately match with the corresponding holes located on the anterior stabilizing plate. Wait before coupling the plate to scanner structure.

Engage the “POSTERIOR STABILIZING PLATE” with the table structure and fix it using 4 10x25 socket head bolts and 4 M10 washers (refer to the following pictures).
Remove the table wheels and let the table rest on its feet (if necessary adjust the feet position).

Mount the two rollers as explained in the next picture.

Mount the handlebar by screwing it into the metal thread shaft. Once mounted verify the correct functionality by locking and releasing the handle bar.
Install the console, by carefully sliding the console pipe and the cables into the corresponding hole. Connect the cables connectors, adjust the console inclination and then tighten the bolts that hold the console pipe (see the following pictures).

Connect connectors C4F, C5F, C6M, C7F located on the front side of the scanner with the corresponding C4M, C5M, C6F, C7M connector of the patient table.

Turn on the device.

Verify the SN appearing on the display of the console matches with the one printed on the table sticker (next picture show where the sticker with the SN can be found on the main structure).

Perform the “X-Y Calibration” (refer to document “5G - Patient Table Service Procedures”) verifying the process is carried out correctly and no cables are pinched.

Once the “X-Y Calibration” is finished, turn off the device, carefully dismount the handlebar and the console and position them in a safe place.
Mount 2 “STRETCHER CARTER SUPPORT PLATE” (99934638) and fix it using 4 M4x10 countersunk head bolts (2 + 2)

Mount the “ANTERIOR MIDDLE STRETCHER PLATE” (99934619) and fix it using 4 M4x10 countersunk head bolts (refer to the following picture).
Fix 4 pieces of Velcro (2 x 30cm + 2 x 55cm) to the stretcher (lateral side)

Gently place the “STRETCHER” (97466087) on the top structure and fix it using 8 M12x30 countersunk head bolts (refer to the following picture).

Slide the stretcher all the way toward the scanner and verify the vertical adjustment of the two sliding roller. The two rollers must slightly touch the stretcher during its movement without forcing on it.
In case the vertical position of the sliding rollers needs to be adjusted, use the 4 M6x45 hex head bolts located below them (see next picture).

Once the sliding roller have been properly adjusted, mount the “STRETCHER MIDDLE PLATE” (99934647) using 4 M4x10 countersunk head bolts (refer to the following picture).
Place the BRUSHES (97481269) (1 for each side) in the ALUMINIUM PROFILES (97481268)

Put the “BRUSH STRETCHER SPACER PLATE” (99934662) on the “LATERAL RIGHT STRETCHER PLATE” (99934646) and “LATERAL LEFT STRETCHER PLATE” (99934645) inserts.

Mount the “LATERAL RIGHT STRETCHER PLATE” (99934646) and “LATERAL LEFT STRETCHER PLATE” (99934645) using 4 M4x10 flat head bolts (see next picture)
Mount the “POSTERIOR STRETCHER PLATE” (99934650) using 4 M4x10 pan head bolts (see next picture).

Mount the “ANTERIOR STRETCHER PLATE” (99934649) using 4 M4x10 pan head bolts (see next picture).

Mount the handlebar by screwing it into the metal thread shaft (see following picture). Once mounted verify the correct functionality by locking and releasing the handle bar. This should result in locking and releasing the stretcher along the horizontal axis.
Install the console, by carefully sliding the console pipe and the cables into the corresponding hole. Connect the cables connector, adjust the console inclination and then tighten the bolt that hold the console pipe (see the following pictures).

Mount the “ANTERIOR LOWER STRETCHER PLATE” (99934660) using 4 M4x10 pan head bolts (see next picture)

Mount the “POSTERIOR LOWER STRETCHER PLATE” (99934661) using 8 M4x10 pan head bolts (see next picture)
Mount the “TUNNEL CRIMP INT PLATE GROUP” (96600152) using 8 M4x10 pan head bolts (see next picture)

Mount the “UPPER PANTOGRAPH CARTER” (99931698) (see following picture) as explained in the following steps:

Turn on the device and press P2 button on the console to move the table to the lowest position. In this position it is possible to fix the 4 countersunk head bolts 4 x 10 (two for each side).

Mount the “PANTOGRAPH INF CARTER ASSEMB” (97461790) using 1 M4x10 pan head bolt (see next picture)
Mount the “PANTOGRAPH SUP. CARTER” (97461782) using 4 M4x10 countersunk head bolts (see next picture)

Mount the “PAINTED PLATE CART. UNDER SEAT” (99931672) using 2 M4x10 pan head bolts (see next picture)
Connect the cables of the table with the scanner, then turn the scanner on.

Press P1 on the table console and wait for the movement to complete. Paying attention to do not scratch it, slide the table top inside the scanner and place a level bar on it (see next picture).

Adjust the position of the table feet until the table is perfectly leveled.
Using the console manually move the table all the way to the right and to the left verifying it doesn’t hit against the scanner covers and checking it is centered in the gantry (see following pictures).

Once the table is leveled and centered fix it to the scanner by tightening the two nuts to the corresponding bolts located at the base of the scanner (see following picture). If necessary adjust the level of the scanner in order to match the holes on the Anterior stabilizing plate.

Mount the “POSTERIOR COVER SUPPORT PLATE” (99934641) using 2 M6x8 pan head bolts.
Mount the two spacers on the ANTERIOR STABILIZING PLATE as shown in the following picture.

Mount the “ANTERIOR COVER PLATE” (99934642) using 2 M4x10 countersunk head bolts and the “POSTERIOR COVER PLATE” (99934643) using 4 M4x10 countersunk head bolts (see next picture).

Check the complete functionality of the table using the P1 and P2 button, and verifying all the movements are working correctly (Refer to the “5G - Patient Table User Procedures”).
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