

7.2.2.2 Ear Centering Circles setting



NOTE: This adjustment needs a personal computer directly connected to the I-Max Touch where the "QuickVision" program is installed and the use of the CD (P/N 5807304100) supplied with the centering tools kit.

Place the Ear Centering device in a Latero-Lateral position with the Ear Centering Circles in a completely open position.

To perform the ceph sensor alignment start from point 16 of paragraph 7.2.2.1 and:

17. Press keys "Arrow right"  or "Arrow left"  until the following is displayed:

**DIGITAL CEPH
LINING UP TEST**

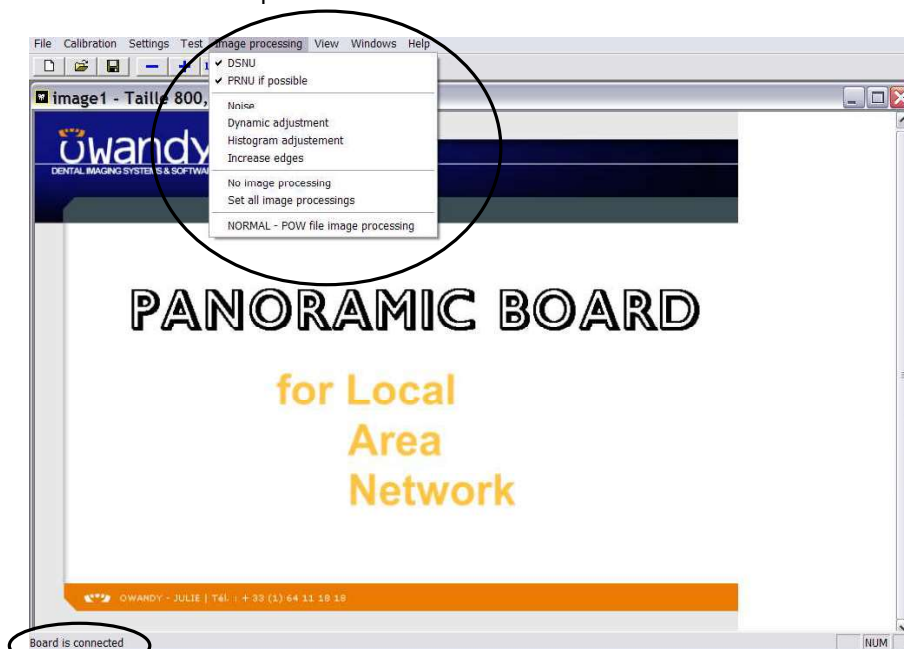



Press key "Patient entrance" (6/25) . The following message will be displayed:

**72kV 06mA 1.00s
LINING UP TEST**

This is a short exam specific to take images to adjust the Ear Centering Circle.

18. Open the "Ear centering" program on the CD (P/N 5807304100) and wait until the message "Board is connected" is displayed on the bottom bar of the program. Check that in the menu "Image processing" all the items are not selected except for DNSU and PRNU.








19. Press key "M" (24)  . The machine gets ready to take a 10x22 exam.



NOTE: If the following message will be displayed:

**DIGITAL SENSOR
IS NOT READY**

check the connection with the PC. Press key (6/25)  to reset the message and press key (24)  again.

20. Acting on key "P" (23)  and on keys increase  or decrease  set the exposure parameters, as suggestion set 60kV, 6mA.



WARNING: X-rays will be emitted during the performance of the following operations. Authorised Technicians are therefore recommended to use the greatest caution and to comply with the safety regulations and laws of their country.

21. Press the X-ray push button and keep it depressed until the end of the exposure.
22. Check on the image if the Ear Centering Circles are concentric (small circle inside the big circle); if it is necessary to adjust the Ear Centering Circles position, perform the setting actions described in paragraphs 7.2.2.2.1 and 7.2.2.2.2.
23. Repeat steps 21 and 22, take a new images until the Ear Centering Circles are concentric.

24. At the end of Ear Centering calibration, evaluate on the image if the X-ray beam is vertically displaced (i.e. more than 10 mm upper or lower white border present); if it will be necessary to change the height of the CEPH arm, loose the two screws "A" (Figure 33), and acting on the screw "B" adjust the height of the Ceph group. Repeat the exposure until the vertical alignment is reached. Tighten the loosened screws "A".

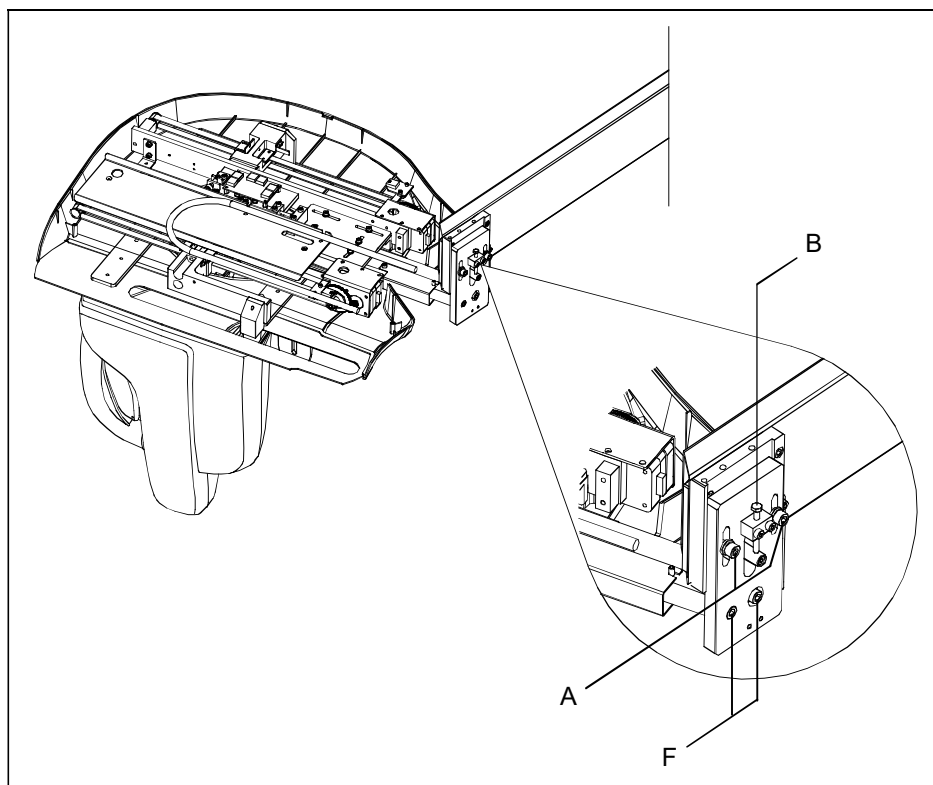



Figure 33

25. When the right setting is reached press key (6/25)  to exit the menu item.

7.2.2.2.1 Projection of Non-Concentric Ear Centering Circles

Loosen the four fixing screws "C" (Figure 34) and using adjustment screw "D" adjust (rotate) the Ceph group. If the greater diameter (ear set farthest from the sensor) is shifted more towards the nose-rest with respect to the smaller diameter (ear-rest nearer to the sensor), screw adjustment screw "D" and manually turn the group clockwise. In the opposite case, unscrew adjustment screw "D" and the group will shift automatically. Once the correct centering is obtained (a test exposure is required), fix screws "C" and block adjustment screw "D" using security nut "E".

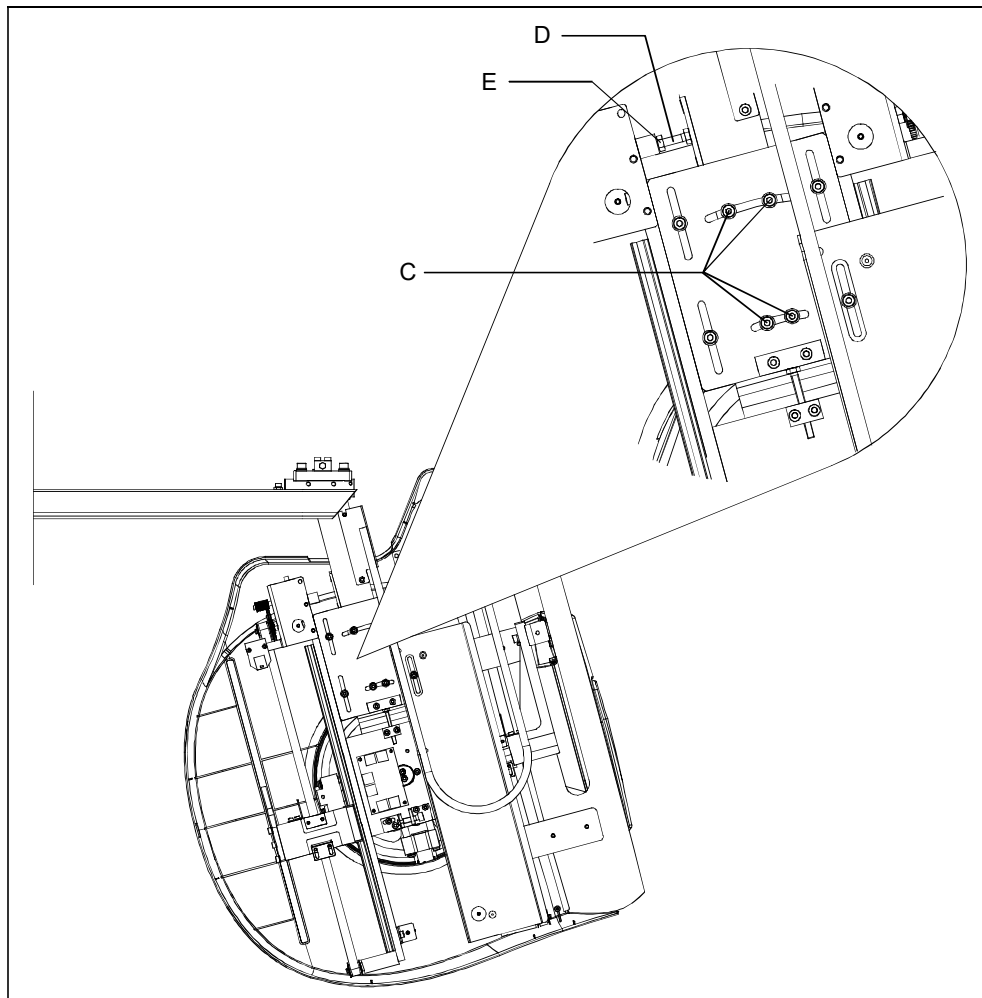


Figure 34 (Top view)

7.2.2.2.2 Projection of Vertically Non-Concentric Ear Centering Circles

Loosen the two screws "F" (Figure 33). Adjust position of the arm acting on screw "G" (Figure 35). Once the aligned position has been reached tighten bolt "H" (Figure 35) and tighten screws "F". Upon completion of the adjustment a test exposure is required, to verify it.

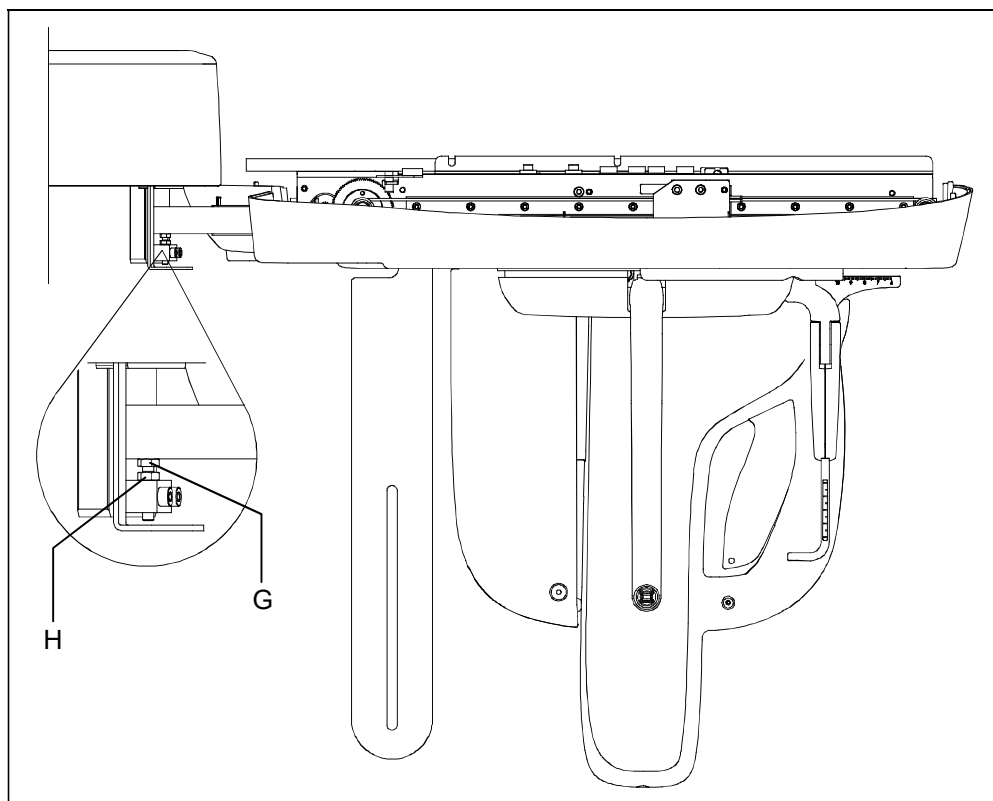


Figure 35 (Side view)