Essential points for X-ray technicians

Planmeca USA

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Procedures for taking a ProMax Panoramic Exposure

• Set up computer to acquire image in the software.
  - Be sure to verify the patient present is the same as the patient showing on the computer screen.
• Select appropriate settings on GUI.
  1. kV
  2. mA
  3. Select Appropriate Program
     - Standard, Orthogonality, Bitewing
  4. Adult or Child
  5. Jaw Selection
  6. Segmenting
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Options:
- 64/4.0
- 64/8.0
- 66/9.0
- 68/12.0
- 70/14.0
Select program type - Pan

- standard
- improved orthogonality
- improved interproximality
- bitewing
Jaw Selection tip

- Select appropriate jaw size of patient if outside the average dimensions.
  - Ask yourself if you had to take an impression on this patient would you have to get an exceptionally large or small tray?
- Adjust accordingly.
  - Most patients will fit within the normal and average dimensions.
Patient Positioning - Page 1

• Adjust height of machine to approximate patient height.
• Ask Patient to step into machine.
• Have patient stand as tall as possible.
• Bring unit to patient’s correct chin level.
• Have patient hold handles if desired. (*I prefer Military At-Ease position.*)
• Manually align center of face (*not the nose*) with the Mid-Sagittal light.
  – Definition: Sagittal plane any vertical plane or section parallel to the median plane of the body which divides a body into right and left portions.
Patient Positioning - Page 2

• Close temple supports – *If patients head moves when supports close, OPEN and realign.*
• Patients head will not be moved if properly centered.
• Using the wheel, align Frankfort plane light to the orbital rim below the eye to the tragus of the ear.

*Definition: A horizontal plane represented in profile by a line between the lowest point on the margin of the orbit to the highest point on the margin of the auditory meatus.*

• To adjust the patient, use the up-down button on the machine while gently holding the back of the patients neck until the light is properly aligned.
• Move to the side of the patient in order to adjust the focal trough light.
• Using the wheel, Align the light with the apices of the central incisors.
  - Landmarks are the distal of #10 or the mesial of #11. In edentulous patients, use the inferior border of the ala of the nose.
  - Millimeter reading on the display is usually between 1 and –1.
• Touch READY on GUI.
• Watch for computer to say “Waiting for exposure”
Instruct patient as follows:

• Close your lips.
• Swallow.
• Put your tongue on the roof of your mouth and hold it there.
• Take a deep breath.
• Close your eyes.
• Try not to move.
• The machine will rotate around your head for 16 seconds. Once the exposure is complete, the tone will stop.
• The x-ray will release you when it is ok for you to move.
Final Steps

• Hold exposure button in until all sound emitted has stopped.
• Guide Patient safely out of the x-ray.
• Select Done on Computer screen to view the image.
Planmeca ProMax Maintenance

- Do not spray any chemicals directly onto the x-ray equipment.
- To clean, use pre-moistened disinfecting wipes, or spray a paper towel with non-alcohol based cleaner and then wipe the unit off.
- Temple supports and bite sticks can be autoclaved or protected with a plastic barrier.
Operator Safety

Excess exposure to radiation can be harmful. Technician should limit exposure at all times.

- X-ray Technician should always leave the room during an x-ray exposure.
- X-Ray Technician should be a minimum of 6 feet away from the x-ray during exposure if there are no walls present, at least 90 degrees from angle of beam of radiation.
- X-ray technician should never stay within radiation range during the exposure.
Operator Safety

• X-ray technician should wear a radiation badge if available.

• X-ray technician should report any x-ray failures or error codes to the head of the department immediately.

• Stop using any equipment that is failing, overheating or showing error codes immediately and contact qualified repair personnel.

• Follow all instructions listed in the product user manual.