

PANORAMICS

All panoramic machines differ from one another but a few points seem to be universal.

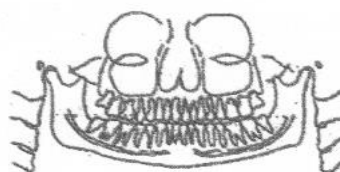
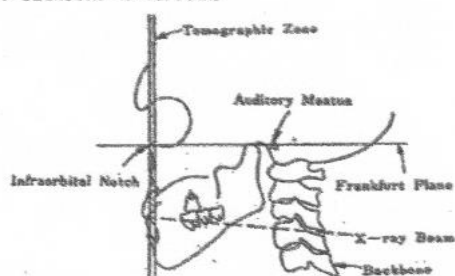
- The patient removes all artefacts (hair grips, earrings, chains, high zips, dentures, braces)
- The patient removes bulky clothes around the shoulders (jackets etc)
- Before the patient goes into the machine
- The patient sits or stands “tall” with their back as straight as possible...standing is ideal. Tummy thrust forward to keep the cervical spine as straight as possible
- Check the patients “edge to edge bite” and practice how they bite in the bite block...at this stage you will see if the “bite” is naturally central.
- If it is impossible for the patient to achieve an edge to edge bite with both upper and lower dentition in the bite block then ascertain which area is of most importance ...upper or lower ...and place that area in the focal trough bite block.
- Now remove the bite block
- Before positioning in the machine look at the patient from the side (lateral skull position) and place one finger in the lower border of orbit and one in the upper part of the external auditory meatus. This line is the Frankfort plane Tip the chin up and down till you see this line is parallel to the floor. Now you see what you are trying to achieve when the patient is in the machine.
- Start positioning the patient
- Direct the patient into the panoramic machine
- Start positioning the patient from the floor to the ceiling i.e.:
Feet first, then ... Hips.... Hands... Chin...
Teeth.....Forehead
- Feet slightly apart and central to the x- ray machine

- Hips not rotated
- Hands holding the handles and tuck the thumbs under
- Shoulders stroked down and not rotated
- A slight tummy thrust forward will help straighten the cervical spine or a small step forward!
- The operator gently holds the patient at the base of the skull i.e. nape of neck with one hand while controlling the height of the machine with the other.
- Chin slightly raised from Frankfort plane...not too high as it is uncomfortable for the patient.
- Machine height... just a couple of centimetres higher than needed for completed positioning. This helps the patient not to slouch.
- Chin onto the ledge (if the machine has one) and stretch the cervical spine up to reduce ghost shadows...hold the nape of the neck to control the stretch...as the spine straightens tip the forehead forward into Frankfort plane parallel to the floor.
- The focal trough is ascertained and the teeth bite edge to edge in the trough. The trough is narrow and it is very important to be as particular as possible on this point. The head must be mid sagittal centred
- Bring the machine down the short distance to allow Frankfort plane positioning still holding the nape of the neck to assist positioning...tip the forehead slightly forward
- The Frankfort plane (lower border of orbit - tragus of the ear) will be parallel to the floor
- The mid sagittal light is positioned down the centre of the face and the head is supported in the correct position.
- The tongue is placed against the roof of the mouth behind the front teeth to minimise the amount of air in the mouth as this will show as a dark area on the resultant radiograph.
- Ask the patient to swallow to push the tongue onto the palate reducing air shadows
- The eyes are closed during the exposure so that the patient does not move their head by watching the rotating cassette.

- Lips are closed gently to minimise the air shadow that is formed when the lips are apart..

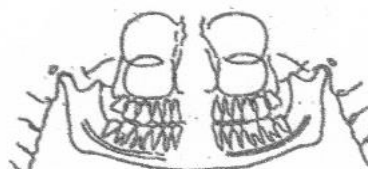
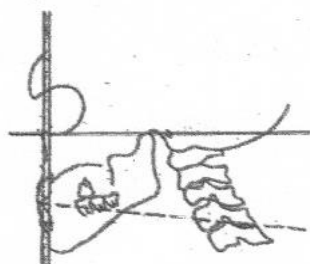
PANORAMIC POSITIONING CORRELATION BETWEEN THE TOMOGRAPHIC ZONE AND THE FRANKFURT PLANE

Correct positioning
(The backbone is vertical)

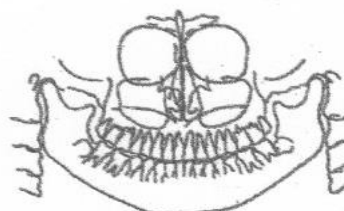
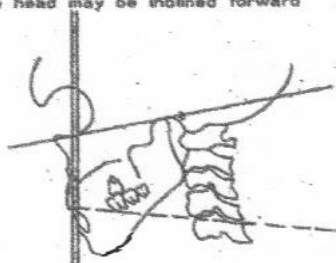


Good tomograph picture The backbone is vertical

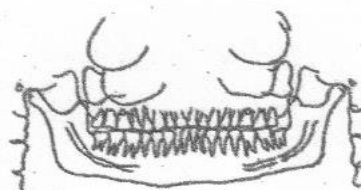
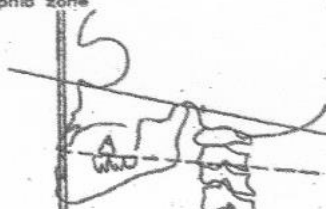
When the backbone position is not vertical



Positioning with the maxilla as main target
(The usual front position is anteriorly moved
so that the head may be inclined forward)



Positioning with the mandible as main target
(The head is anteriorly moved and entire eye
sockets are so positioned as to far behind
the tomographic zone)



CORRECT POSITIONING OF THE PATIENT CORRELATION BETWEEN THE JAWS AND THE TOMOGRAPHIC ZONE

