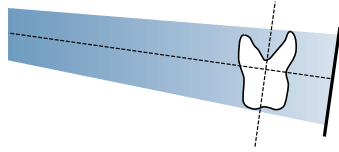




## Rinn XCP-DS® Instrumentation

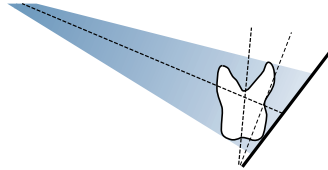
The XCP (Extension Cone Paralleling) technique produces radiographs with minimal distortion and presents the objects being radiographed in their true anatomical relationship and size.



- ◆ A long cone, or PID (position indicating device), of 12-16" should be used for the most accurate radiographs.
- ◆ To position the film parallel to the tooth and without distortion, the film holder and film should be moved away from the tooth being radiographed, into the center of the mouth.

## Rinn BAI Instrumentation

The BAI (Bisecting Angle Instrumentation) is founded on the principle of projecting the x-ray beam at right angles to an imaginary plane bisecting the angle formed by the longitudinal axis of the tooth and the plane of the film packet. Regardless of the technical precision of the operator, this technique results in dimensional distortion.



- ◆ A short PID of 8" should be used for the most accurate radiographs.
- ◆ For correct placement, the film holder and film should be placed as close to the tooth being radiographed as possible.

### Helpful Hints

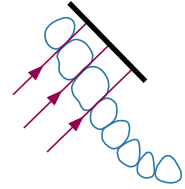
Follow these tips for patient comfort and operator success.

- ◆ When positioning the PID (cone), make sure it is parallel and flush to the metal arm and flush with the aiming ring of the XCP or BAI. The ring does not attach to the PID; it merely helps align it.
- ◆ Always use a Rinn lead apron to protect patients from radiation. When not in use, the aprons should be hung — not folded.
- ◆ Instruct the patient to close slowly when placing a film holder. This allows musculature to relax and the patient will find the positioning more comfortable.
- ◆ For patient comfort, corners of film packet may be softened by slightly rolling edges; but creasing or bending a film packet may cause cracking of the emulsion and distort the image. If necessary, use a smaller film to ease placement.

- ◆ Place all films in the bite-blocks with the dot on the film toward the occlusal or incisal edges, to make mounting consistent and to prevent the dot from interfering with diagnosis.

### Bite-wing Radiographs

To avoid overlapping of the contact areas, it is recommended that the film be positioned perpendicular to the interproximal spaces. To place the film holder, the bite block rests on the same arch as the teeth being radiographed. Use the line on the bite surface to help align the interproximal spaces.



### Edentulous Technique

The XCP and BAI instruments can be used in a partially or totally edentulous mouth by substituting a cotton roll for the space normally occupied by the crowns of the missing teeth. The thickness of the cotton rolls, or similar radiolucent material, will determine the amount of film coverage of the edentulous ridges.

## Taking Care of Rinn XCP and BAI instruments

Rinn XCP and BAI instruments are designed to be used in a **steam autoclave**. Other forms of sterilization are not recommended.

### Plastic Bite Blocks and Aiming Rings

The plastic pieces are porous and have a limited life. It is possible they will absorb the chemicals used in sterilization and react to temperature variation. Your plastic pieces should be replaced periodically.

- ◆ NEVER bleach your plastic pieces. Serious harm could occur to a patient or office staff from these fumes upon sterilization or use.
- ◆ Always disassemble the arm from the aiming rings and bite blocks. Because metal and plastic react differently to temperature changes, expansion and contraction of the plastic around the metal arm may cause permanent damage.
- ◆ The temperature in the autoclave should never exceed 270° F (132° C).
- ◆ Do not use ultrasonic cleaners or cold sterilizing solutions before or instead of the steam autoclave process.

### Stainless Steel Aiming Arms

- ◆ Always disassemble the arms and block in a straight or parallel motion. Unusual pressure may damage the arm.
- ◆ When sterilizing, always disassemble the arm from the block and the ring. Do not bag the arm with the ring or bite-block.

Complete instructions for XCP and BAI instrumentation use can be found in the illustrated manual, *Intraoral Radiography with Rinn XCP/BAI Instruments* (part number 54-0800).