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# **Radiographic Positioning Guide**

**OPERATOR'S MANUAL**

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## *SKULL ROUTINE*

### **TOWNES VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise**
- < **Bucky**
- < **Measurement Taken From Forehead To Back Of Occipital Bone**

#### *Positioning Information:*

**Patient positioned AP with chin tucked. Angle tube 30-35 degrees caudal. Central Ray should enter at hairline and exit at EAM. Center film to Central Ray.**

### **PA VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise**
- < **Bucky**
- < **Measurement Taken From Forehead To Top Of Occipital Bone**

#### *Positioning Information:*

**Patient positioned PA with forehead and nose on bucky. Put top of film 1" above top of skull. Center Central Ray to film.**

### **LATERAL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Transverse**
- < **Bucky**
- < **Measurement Taken At Mid-Parietal Bones**

#### *Positioning Information:*

**Patient positioned PA with slight rotation away from affected side. Affected side of skull is positioned against the bucky, with chin up slightly. Put top of film 1" above top of skull. Center Central Ray to film.**



## *SINUS ROUTINE*

### **CALDWELL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 8 x 10 Lengthwise**
- < **Bucky**
- < **Measurement Taken From Forehead To Top Of Occipital Bone**

#### *Positioning Information:*

**Patient positioned PA with forehead and nose on bucky. Angle tube 30 degrees caudad. Central Ray should exit at base of nose. Center film to Central Ray.**

### **WATERS VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 8 x 10 Lengthwise**
- < **Bucky**
- < **Measurement Taken From Forehead To Top Of Occipital Bone**

#### *Positioning Information:*

**Patient positioned PA with chin on bucky. Tilt of head should be approximately 35 degrees. Central Ray should exit at base of nose. Center film to Central Ray.**

### **LATERAL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 8 x 10 Lengthwise**
- < **Bucky**
- < **Measurement Taken At Mid-Parietal Bones**

#### *Positioning Information:*

**Patient positioned PA with slight rotation towards unaffected side. Place affected side on bucky in true lateral position. Center Central Ray to corner of eye. Center film to Central Ray.**



## ***CHEST ROUTINE***

### **PA VIEW**

- < **Focal Film Distance: 72"**
- < **Cassette Size: 14 x 17 Lengthwise Or Transverse**
- < **Bucky**
- < **Measurement Taken At Mid-Chest**

#### ***Positioning Information:***

**Patient positioned PA. Put top of film slightly above shoulder. Place patient's hand on hips, and roll shoulders forward. Center Central Ray to film. Exposure done on inspiration.**

### **LATERAL VIEW**

- < **Focal Film Distance: 72"**
- < **Cassette Size: 14 x 17 Lengthwise**
- < **Bucky**
- < **Measurement Taken At Base Of Scapula**

#### ***Positioning Information:***

**Position patient with left side of body against the film. Place hands on top of head, elevate chin, and bring elbows forward. Place top of film at level of patient's shoulder. Center Central Ray to film. Done on inspiration.**

### **LORDOTIC VIEW**

- < **Focal Film Distance: 72"**
- < **Cassette Size: 14 x 17 Transverse**
- < **Bucky**
- < **Use AP Measurement**

#### ***Positioning Information:***

**Position patient AP. Have patient take two steps forward and then lean the patient's shoulders back against the film. Center Central Ray at level of T6. Center film to Central Ray. Done on inspiration.**



## *RIB ROUTINE*

### **UPPER RIB VIEW (ABOVE DIAGPHRAM)**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 14 x 17 Lengthwise**
- < **Bucky**
- < **Measurement Taken At Mid-Chest**

#### *Positioning Information:*

**Position patient AP. Place top of film 1" above shoulder. Center Central Ray to film. Position patient so that the Vertical Centering Line is down the mid-line of the affected side. Done on inspiration.**

### **LOWER RIB VIEW (BELOW DIAGPHRAM)**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Transverse**
- < **Bucky**
- < **Measurement Taken At Angle Of Ribs**

#### *Positioning Information:*

**Position patient AP. Place bottom of film 1" above crest. Center Central Ray to film. Position patient so that the Vertical Centering Line is down the mid-line of the affected side. Done on expiration.**

### **OBLIQUE VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 14 x 17 Lengthwise**
- < **Bucky**
- < **Use AP Measurement**

#### *Positioning Information:*

**Position patient AP. Slightly rotate patient towards affected side approximately 20-30 degrees. Center Central Ray to mid-line, center film to Central Ray. Done on inspiration. Mark side down.**



## *CERVICAL SPINE ROUTINE*

### **AP VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 8 x 10 Lengthwise**
- < **Bucky**
- < **Measurement Taken At Level Of C4**

#### *Positioning Information:*

**Patient positioned AP with chin tilted up. Angle tube 20 degrees cephalic. Center Central Ray at level of C4. Center film to Central Ray.**

### **ODONTOID VIEW (AP OPEN MOUTH)**

- < **Focal Film Distance 40"**
- < **Cassette Size: 8 x 10 Lengthwise**
- < **Bucky**
- < **Use AP Measurement**

#### *Positioning Information:*

**Patient positioned AP. Open patient's mouth and adjust head to superimpose upper teeth over base of skull. Center Central Ray at level of C2. Center film to Central Ray. NOTE: Plates and Dentures should be removed.**

### **OBLIQUE VIEW**

- < **Focal Film Distance: 72"**
- < **Cassette Size: 8 x 10 Lengthwise**
- < **Bucky**
- < **Measurement Taken At Level Of C6**

#### *Positioning Information:*

**Position patient PA. Rotate patient 45 degrees off PA. Raise patient's chin and rotate head to form 45 degree angle with body plane. Angle tube 20 degrees caudad. Center Central Ray at level of C4. Center film to Central Ray. Mark side down.**



## *CERVICAL SPINE ROUTINE*

### **LATERAL VIEW**

- < **Focal Film Distance: 72"**
- < **Cassette Size: 8 x 10 Lengthwise**
- < **Bucky**
- < **Measurement Taken At Level Of C6**

#### *Positioning Information:*

**Patient positioned true lateral. Arms relaxed down, chin elevated. Place top of film at EAM. Center Central Ray at C6.**

### **LATERAL FLEXION VIEW**

- < **Focal Film Distance: 72"**
- < **Cassette Size: 10 x 12 Transverse**
- < **Bucky**
- < **Use Lateral Measurement**

#### *Positioning Information:*

**Patient positioned true lateral. Arms relaxed down. Chin tucked against chest. Center Central Ray at level of C4. Center film on Central Ray.**

### **LATERAL EXTENSION VIEW**

- < **Focal Film Distance: 72"**
- < **Cassette Size 10 x 12 Lengthwise**
- < **Bucky**
- < **Use Lateral Measurement**

#### *Positioning Information:*

**Patient positioned true lateral. Arms relaxed down. Have patient tilt head back as far as they can without any assistance. Center Ray at level of C4. Center film to Central Ray.**



## ***THORACIC SPINE ROUTINE***

### **AP VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 14 x 17 Lengthwise**
- < **Bucky**
- < **Measurement Taken At Xiphoid**

#### ***Positioning Information:***

**Position patient AP. Place top of film 1" above T1. Center Central Ray to film. Done on expiration.**

### **LATERAL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 14 x 17 Lengthwise**
- < **Bucky**
- < **Measurement Taken At Base Of Scapula**

#### ***Positioning Information:***

**Position patient true lateral. Bring arms and elbows together in front of patient. Angle tube 5-7 degrees cephalic. Center Central Ray at level of T7. Center film to Central Ray. Done on inspiration or with breathing technique.**





## *LUMBAR ROUTINE*

### **AP VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 14 x 17 Lengthwise**
- < **Bucky**
- < **Measurement Taken At Level Of Crest**

#### *Positioning Information:*

**Position patient AP. Center Central Ray 1" above crest. Center film to Central Ray. Done on expiration.**

### **OBLIQUE VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 14 x 17 Lengthwise**
- < **Bucky**
- < **Use AP Measurement**

#### *Positioning Information:*

**Position patient AP. Rotate patient 45 degrees off AP. Center Central Ray at Crest. Center film to Central Ray. Done on expiration. Mark side down.**

### **LATERAL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 14 x 17 Lengthwise**
- < **Bucky**
- < **Measurement Taken 1" Above Crest**

#### *Positioning Information:*

**Position patient true lateral. Center film to Crest. Center Central Ray 1" above crest. Done on expiration.**



## *LUMBAR ROUTINE*

### **L5-S1 SPOT VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 8 x 10 Lengthwise**
- < **Bucky**
- < **Measurement Taken 1 ½" Below Crest**

#### *Positioning Information:*

**Position patient true lateral. Angle tube 7-10 degrees caudad. Center Central Ray at bisect line of Crest and ASIS. Center film to Central Ray. Done on inspiration.**

### **LUMBO-SACRAL BASE VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise**
- < **Bucky**
- < **Measurement Taken At A.S.I.S.**

#### *Positioning Information:*

**Position patient AP. Angle Tube 25 - 30 degrees cephalic. Center Central Ray to ASIS. Center film to Central Ray. Done on Inspiration.**



## *PELVIS ROUTINE*

### **AP PELVIS VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 14 x 17 Transverse**
- < **Bucky**
- < **Measurement Taken At Mid-Pelvis**

#### *Positioning Information:*

**Position patient AP. Place top of film 1" above Crest. Center Central Ray to film. Invert feet. Done on expiration.**

### **AP HIP VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise**
- < **Bucky**
- < **Measurement Taken At Mid-Pelvis**

#### *Positioning Information:*

**Position patient AP. Place top of film at ASIS. Center Central Ray to film. Position patient so Vertical Centering Line is down mid-line of affected side. Invert foot. Done on expiration.**

### **FROG LEG LATERAL HIP VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Transverse**
- < **Bucky**
- < **Use AP Measurement**

#### *Positioning Information:*

**Position patient AP. Bend knee of affected side up and drop knee out to the side. Center Central Ray at bisect line of Crest and Symphysis Pubis. Center film to Central Ray. Done on expiration.**



## ***FEMUR ROUTINE***

### **AP VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 14 x 17 Lengthwise**
- < **Bucky**
- < **Measurement Taken Mid-Femur**

#### ***Positioning Information:***

**Position patient AP. Place bottom of film slightly below knee. Center Central Ray to film.  
Position patient so Vertical Centering Line is down mid-line of affected side.**

### **LATERAL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 14 x 17 Lengthwise**
- < **Bucky**
- < **Measurement Taken Mid-Femur**

#### ***Positioning Information:***

**Position patient with affected side against bucky. Bring unaffected leg up and over affected leg. Place bottom of film slightly below knee. Center Central Ray to film.  
Position patient so Vertical Centering Line is down mid-line of affected side.**



## ***KNEE ROUTINE***

### **AP VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise**
- < **Bucky**
- < **Measurement Taken Mid-Knee**

#### ***Positioning Information:***

**Position knee AP. Angle tube 5-7 degrees cephalad. Center Central Ray to mid-knee. Position patient so Vertical Centering Line is down mid-line of affected side. Center film to Central Ray.**

### **LATERAL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise**
- < **Bucky**
- < **Measurement Taken At Mid-Knee**

#### ***Positioning Information:***

**Position patient lateral with affected side against bucky. Angle tube 5-7 degrees cephalad. Flex knee slightly. Center Central Ray to mid-knee. Position patient so Vertical Centering Line is down mid-line of affected side. Center film to Central Ray.**

### **SUNRISE VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Transverse**
- < **Non-Bucky**
- < **Use AP Measurement**

#### ***Positioning Information:***

**Position patient in sitting position with heel of foot at base of table. Bend knee 35-45 degrees. Angle tube cephalic. Central Ray should be parallel to plane of lower leg. Center Central Ray to base of patella. Have patient hold film, with approximately 3" against distal femur.**



## ***KNEE ROUTINE***

### **TUNNEL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise**
- < **Bucky**
- < **Use AP Measurement**

#### ***Positioning Information:***

**Position patient PA with distal femur against bucky. Flex knee approximately 40 degrees with foot resting on stationary object. Angle tube approximately 40 degrees or match the degree of flexion of the knee. Center Central Ray to popliteal surface of the knee. Center film to Central Ray.**

### **TUNNEL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise**
- < **Non-Bucky**
- < **Use AP Measurement**

#### ***Positioning Information:***

**Position patient in kneeling position with affected knee on center of the film. Lower leg and distal femur should create approximately 120 degree angle. Center Central Ray to popliteal surface of the knee.**

### **HUGHSTON VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise**
- < **Bucky**
- < **Use AP Measurement**

#### ***Positioning Information:***

**Position patient PA with distal femur against bucky. Flex knee approximately 50-60 degrees, resting foot on stationary object. Angle tube 45 degrees cephalic. Center Central Ray to popliteal surface of knee. Center film to Central Ray.**



## ***LOWER LEG ROUTINE***

### **AP VIEW**

- < **Focal Film Distance: 45"**
- < **Cassette Size: 14 x 17 Diagonally**
- < **Non-Bucky**
- < **Measurement Taken Mid-Tibia**

#### ***Positioning Information:***

**Position lower leg AP diagonally on film. Include both joints. Flex foot. Center Central Ray to mid-tibia.**

### **LATERAL VIEW**

- < **Focal Film Distance: 45"**
- < **Cassette Size 14 x 17 Diagonally**
- < **Non-Bucky**
- < **Measurement Taken Mid-Tibia**

#### ***Positioning Information:***

**Position patient laterally, with affected side down. Unaffected leg should be brought up and over affected leg. Flex knee and foot of affected leg. Center Central Ray down mid-leg.**



## ***ANKLE ROUTINE***

### **AP VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Transverse**
- < **Non-Bucky**
- < **Measurement Taken Mid-Ankle**

#### ***Positioning Information:***

**Position ankle AP. Flex foot. Center Central Ray to midline at ankle joint.**

### **LATERAL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise**
- < **Non-Bucky**
- < **Measurement Taken Mid-Ankle**

#### ***Positioning Information:***

**Rotate lower leg laterally. Position ankle true lateral. Flex foot. Center Central Ray to midline at ankle joint.**





## *FOOT ROUTINE*

### **AP VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise**
- < **Non-Bucky**
- < **Measurement Taken At Area Of Interest**

#### *Positioning Information:*

**Bend knee, placing foot flat on film. Angle tube 7 degrees cephalic. Center Central Ray to midline of foot.**

### **OBLIQUE VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise**
- < **Non-Bucky**
- < **Measurement Taken Mid-Foot**

#### *Positioning Information:*

**Bend knee, placing foot flat on film. Rotate lower leg, and foot internally. Center Central Ray to midline of foot.**

### **LATERAL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise**
- < **Non-Bucky**
- < **Measurement Taken At Mid-Foot**

#### *Positioning Information:*

**Bend knee and drop it out laterally. Place lateral aspect of foot on film. Flex foot. Center Central Ray to midline of foot.**

**\*IF TOES ARE AREA OF INTEREST, TAKE MEASUREMENTS AT DISTAL METATARSAL. LATERAL VIEW OF TOE SHOULD BE TAKEN WITH OTHER DIGITS TAPED OUT OF THE WAY.**



## ***CLAVICLE ROUTINE & HUMERUS ROUTINE***

### **CLAVICLE AP VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Transverse**
- < **Bucky**
- < **Measurement Taken Mid-Clavicle**

#### ***Positioning Information:***

**Position patient AP. Rotate chin towards unaffected side. Angle tube 15 degrees cephalic. Center Central Ray to midline of affected side. Center film to Central Ray.**

### **HUMERUS AP VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 14 x 17 Lengthwise**
- < **Non-Bucky**
- < **Measurement Taken 1" Below Humeral Head**

#### ***Positioning Information:***

**Position patient AP. Place top of film 1" above shoulder. Abduct arm slightly and externally rotate hand. Center Central Ray to film and down mid-line of affected side.**

### **HUMERUS LATERAL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 14 x 17 Transverse**
- < **Non-Bucky**
- < **Measurement Taken 1" Below Humeral Head**

#### ***Positioning Information:***

**Position patient AP. Abduct arm 90 degrees to body. Bring forearm up to form 90 degree angle with humerus. Center Central Ray to midline of affected side. Center film to Central Ray.**



## ***SHOULDER ROUTINE & ELBOW ROUTINE***

### **SHOULDER AP VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise**
- < **Bucky**
- < **Measurement Taken At Level Of Humeral Head**

#### ***Positioning Information:***

**Position patient AP. Center Central Ray to Glenoid Fossa. Center film to Central Ray. \*Internal and External rotation of hand will demonstrate different aspects of humeral head.**

### **ELBOW AP VIEW**

- < **Focal Film Distance 40"**
- < **Cassette Size: 10 x 12 Transverse**
- < **Non-Bucky**
- < **Measurement Taken At Mid-Elbow**

#### ***Positioning Information:***

**Elevate film plane so elbow and shoulder are parallel. Position elbow AP. Supinate hand. Center Central Ray to mid-joint.**

### **ELBOW LATERAL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Transverse**
- < **Non-Bucky**
- < **Measurement Taken At Distal Humerus**

#### ***Positioning Information:***

**Elevate film plane so elbow and shoulder are parallel. Bend elbow to form 90 degree angle. Palm of hand should be facing patient. Center Central Ray to mid-joint.**



## ***FOREARM ROUTINE***

### **AP VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise Or Diagonally**
- < **Non-Bucky**
- < **Measurement Taken Mid-Forearm**

#### ***Positioning Information:***

**Elevate film plane so elbow and shoulder are parallel. Supinate hand. Center Central Ray to midline of affected side.**

### **LATERAL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise Or Diagonally**
- < **Non-Bucky**
- < **Measurement Taken Mid-Forearm**

#### ***Positioning Information:***

**Elevate film plane so elbow and shoulder are parallel. Bend elbow to form 90 degree angle. Palm of hand should be facing patient. Center Central Ray to midline of affected side.**



## ***WRIST ROUTINE***

### **PA VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 8 x 10 Transverse**
- < **Non-Bucky**
- < **Measurement Taken Mid-Wrist**

#### ***Positioning Information:***

**Place wrist PA on film. Center Central Ray to midline of affected side.**

### **LATERAL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 8 x 10 Transverse**
- < **Non-Bucky**
- < **Measurement Taken Mid-Wrist**

#### ***Positioning Information:***

**Position wrist laterally with lateral aspect of wrist on film. Center Central Ray to midline of affected side.**

### **NAVICULAR VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 8 x 10 Transverse**
- < **Non-Bucky**
- < **Use AP Measurement**

#### ***Positioning Information:***

**Position wrist PA on film. Position hand in ulnar deviation position. Angle tube 15 degrees cephalic. Center Central Ray to navicular bone.**



## *HAND ROUTINE*

### **PA VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Transverse**
- < **Non-Bucky**
- < **Measurement Taken Mid-Metacarpals**

#### *Positioning Information:*

**Place hand PA on film. Center Central Ray to midline of affected side.**

### **OBLIQUE VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Transverse**
- < **Non-Bucky**
- < **Measurement Taken At Mid-Metacarpals**

#### *Positioning Information:*

**Place hand PA on film. Slightly rotate hand externally, keeping fingers straight. Center Central Ray to midline of affected side.**

### **LATERAL VIEW**

- < **Focal Film Distance: 40"**
- < **Cassette Size: 10 x 12 Lengthwise**
- < **Non-Bucky**
- < **Measurement Taken At Mid-Metacarpals**

#### *Positioning Information:*

**Position hand laterally on film, with lateral aspect of hand on film. Flare fingers for lateral view of digits. Center Central Ray to midline of affected side.**

**\*IF SPECIFIC FINGER IS AREA OF INTEREST, SAME VIEWS AND POSITIONS CAN BE USED. TAKE MEASUREMENT AT MID-DIGIT. COLLIMATE DOWN TO SPECIFIC DIGIT FOR EACH VIEW.**