

Collimator/Beam Alignment Test Tool

Model 07-661-7662

Collimator Verification of the proper alignment of the collimator light field with the x-ray field is essential in radiographic quality control. This device readily indicates a 1% or 2% misalignment at a 40 inch focal-film distance (FFD), but it may be used at any FFD. It consists of a flat 8 x 10 inch plate with a 14 x 18 cm pattern etched on its surface. It can also be used to check fluoroscopy alignment and collimation.

Beam alignment Improper central ray alignment will distort a radiographic image. This device provides a simple means of determining if the x-ray beam is perpendicular to the image receptor and centered with respect to the light field. A steel ball is mounted in the center of a disc at each

end of the 15 cm high clear plastic cylinder. When the balls are positioned over one another and at a right angle to the film, their images will appear as one if the central ray is truly perpendicular to the film. The approximate degree of improper angulation can also be determined.

Specifications

Dimensions beam alignment

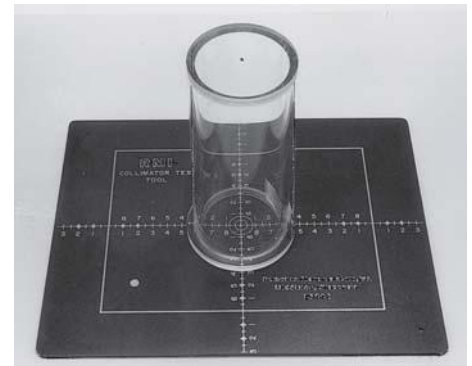
5.9 (h) x 2.5 in OD (15 x 006.3 cm)

Weight beam alignment 0.54 lb (0.24 kg)

Weight collimator 0.41 lb (0.19 kg)

Available model(s)

07-661-7662 Collimator/Beam Alignment Test Tool



Grid Alignment Test Tool

Model 07-644

Increased patient radiation dose and reduced image contrast can result from lateral decentering or tilting of a focused grid used in a Bucky apparatus. The Grid Alignment Test Tool is used to check whether a focused grid is aligned properly with the central ray and the center of the film cassette. It consists of a set of three plastic-covered, 0.062 inch thick lead plates: one 9.125 x 3.625 inch test plate, and two 3.56 x 2.375 inch blocker plates. The large test plate contains five 0.375 inch test holes and five 0.062 inch orientation holes.



It's easy to use. The test tool is centered on the x-ray table and fixed in position perpendicular to the grid lines. Five exposures are made, with the x-ray beam sequentially centered on each of five holes, and the optical densities of the hole images are compared. A properly centered and leveled grid will result in equal density changes in the hole images on either side of the central hole. Unequal density changes indicate the need for corrective action.

Specifications

Weight 1.5 lb (0.68 kg)

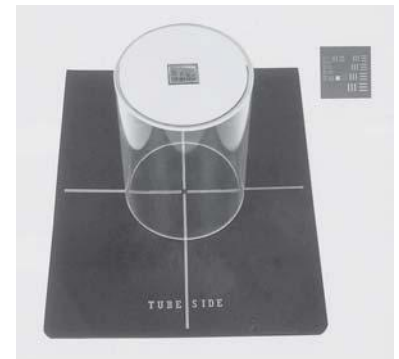
Available model(s)

07-644 Grid Alignment Test Tool, including three lead plates

Focal Spot Test Tool

Model 07-591

Provides a simple “pass-fail” test to determine if an x-ray tube focal spot has been damaged. Consists of a 6 inch high stand with an eleven-group test pattern. Each group has six bars, three of which are positioned at right angles to the adjacent set. The groups diminish in size from 0.66 line pairs/mm (1.75 mm) to 2.88 line pairs/mm (0.3 mm). By observing the radiograph and using the supplied chart, showing resolution vs. focal spot size, the nominal focal spot dimension (in mm) can be determined.



Focal Spot Test Tool shown in use with an optional flex film cassette

Specifications

Dimensions (stand) 2.50 in Ø x 6 in (h) (6.35 x 15.24 cm)

Weight 0.25 lb (0.11 kg)

Optional accessories

Flex Film Cassette, 5 x 7 inch (Model 07-800-5007)

Available model(s)

07-591 Focal Spot Test Tool

For more information, receive our full product catalog, or order online, contact **Radiation Management Services** business of **Fluke Biomedical**: 440.248.9300 or www.flukebiomedical.com/rms.

Specifications are subject to change without notice.

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