



Radiation Products Design, Inc.

Item 165-000 TLD Polystyrene Irradiation Phantom

100 Hold Pattern

Clamp five sheets of .040" Polystyrene in jig (mark REF on sheet), paper on. Use 3/16" dia. dulled drill to drill center hole first and install socket head cap screw #8-32 x 7/8". Then drill each corner hole separately and install screw before drilling next hole. Drill remaining holes.

Remove paper and mark polystyrene, thickness, 1-10 and 11-91.

Do Not Use Plastic Polish on These as it may contaminate TLD's .

Clamp bottom 1/4" and .040" polystyrene in jig and drill nine #43 holes.

Remove from jig and tap nine holes #4-40 in 1/4" polystyrene (use tapping head)

Open hole in .040" polystyrene in nine locations with clearance drill, then #33 by hand using pin vise.

Fasten together with #4-40 x 1/4" nylon flat head screws.

Remove one nylon screw at a time and countersink with 82°, so heads of screws are flush or below surface.

Secure with nylon screws in all holes.

Drill #28 through for 6-32 x 2 places

Place assembled bottom unit and 1/4" polystyrene on top in jug and drill four holes #36.

Remove from jig.

Remove .040" polystyrene from bottom 1/4" polystyrene plate.

Open four #36 holes in .040" polystyrene sheet with a 1/8" drill.

Then a #28 drill by hand using pin vise.

Tap bottom 1/4" polystyrene in four places (use tapping block)

Open four #36 holes in 1/4" top polystyrene sheet with #28 drill.

Then countersink with 82° so heads of screws are flush or below surface.

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Wash with soap and water only.

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