

Ultrasound Prostate Training Phantom

The ideal training device for permanent seed implantation procedures

The CIRS Model 053-I Ultrasound Prostate Training Phantom is a disposable phantom developed for practicing permanent seed implantation procedures. It contains several unique features to assist the teaching and learning process.

The simulated perineal membrane permits needle insertion with realistic resistance. In addition, the area below the rectal wall is a clear gel to permit visualization of probe orientation. The prostate is transparent to allow visual verification of seed placement. The phantom also includes a removable pubic arch simulation.

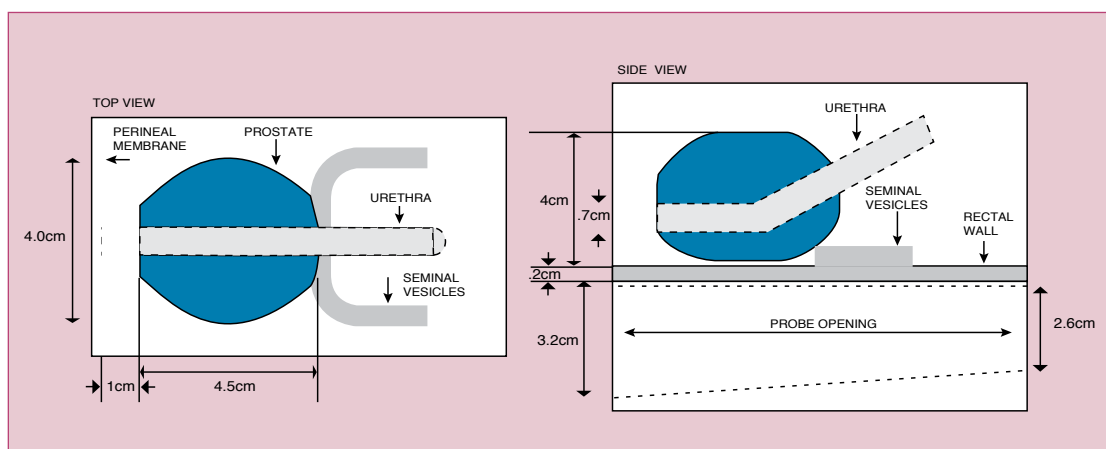


Model 053-I

This modification to the CIRS Model 053 phantom

Grimm and his associates at the Seattle Prostate Institute.

was developed with Dr. Peter



Model 053-I Specifications:

CONTAINER

Material: Clear acrylic
Dimensions: 11.5 x 7.0 x 9.5 cm
Front probe opening: 3.2 cm Ø
Rear probe opening: 2.6 cm Ø

PERINEAL MEMBRANE

3 mm thick urethane

BACKGROUND GEL

Similar to water with very little backscatter attenuation
≤ 0.07 dB/cm-MHz

URETHRA

Dimensions: 0.7 cm Ø
Material: Zerdine⁽¹⁾, low scatter

SEMINAL VESICLES

Dimensions: 7 mm Ø x 10 cm long
Material: Zerdine
Properties: Speed = 1540 m/s
Attenuation = 0.5 dB/cm-MHz
Backscatter similar to liver tissue

PROSTATE

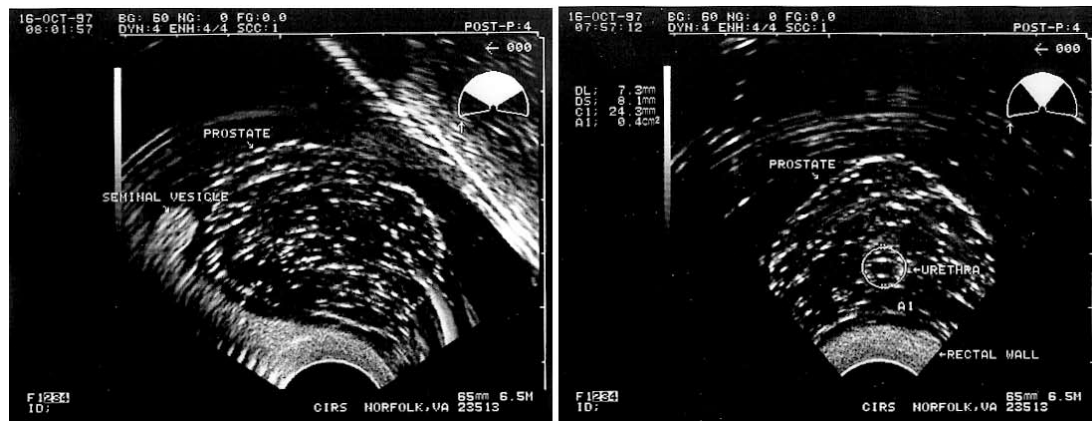
Dimensions: 4 x 4.5 x 4 cm
Material: Zerdine, low scatter

RECTAL WALL

Dimensions: 6 x 11 x 0.2 cm
Material: Zerdine
Properties: Speed = 1540 m/s
Attenuation = 0.5 dB/cm-MHz
Backscatter similar to liver tissue

OTHER FEATURES

Removable pubic arch



Note: This phantom not intended to ultrasonically mimic the human prostate.

Prostate Phantom Selection Guide

Model	Description	Intended Application	Transducer Type	Modality
053	Tissue Equivalent Ultrasound Prostate Phantom	General Purpose	Side-Fire or BiPlane	Ultrasound
053A	Prostate Training Phantom with Hypoechoic lesion for side-fire transducer	Biopsy	Side-Fire or BiPlane	Ultrasound
053A-EF	Prostate Biopsy Phantom	Biopsy	End-Fire	Ultrasound
053D	Prostate Training Phantom with semi-clear prostate gland	General Purpose	Side-Fire or BiPlane	Ultrasound
053F	Prostate Training Phantom with hollow urethra	Cryosurgery	Side-Fire or BiPlane	Ultrasound
053G	Prostate Training Phantom with modified prostate gel for minimal needle tracks	Brachytherapy	Side-Fire or BiPlane	Ultrasound
053-I	Ultrasound Prostate Training Phantom	Seattle Prostate Institute Training Model	Side-Fire or BiPlane	Ultrasound
058	Prostate Demonstration Phantom	Non-Interventional Scanning	Side-Fire or BiPlane	Ultrasound
058-EF	Ultrasound prostate demonstration phantom for end-fire transducer	Non-Interventional Scanning	End-Fire	Ultrasound
066	Prostate Elastography Phantom	Elastography Imaging	Side-Fire or BiPlane	Sonoelastography
053-MM	Multi-Modality Prostate Training Phantom	General Purpose	Side-Fire or BiPlane	MRI, CT & Ultrasound

⁽¹⁾ US Patent # 5196343