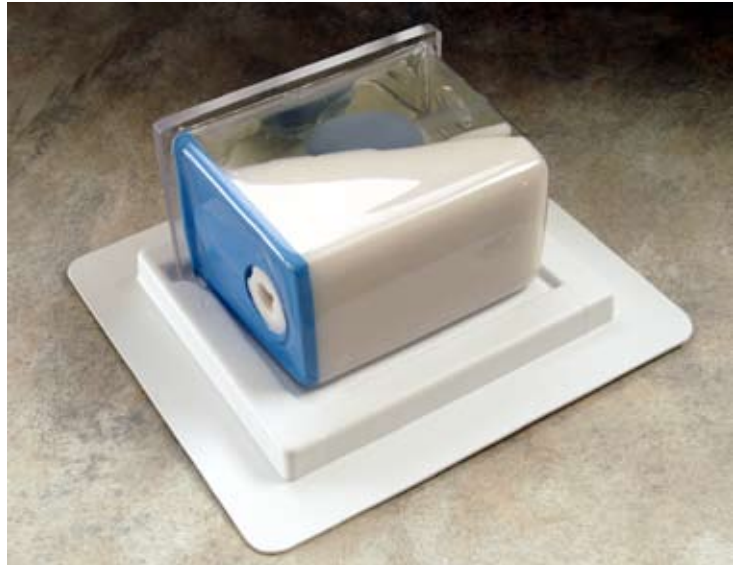


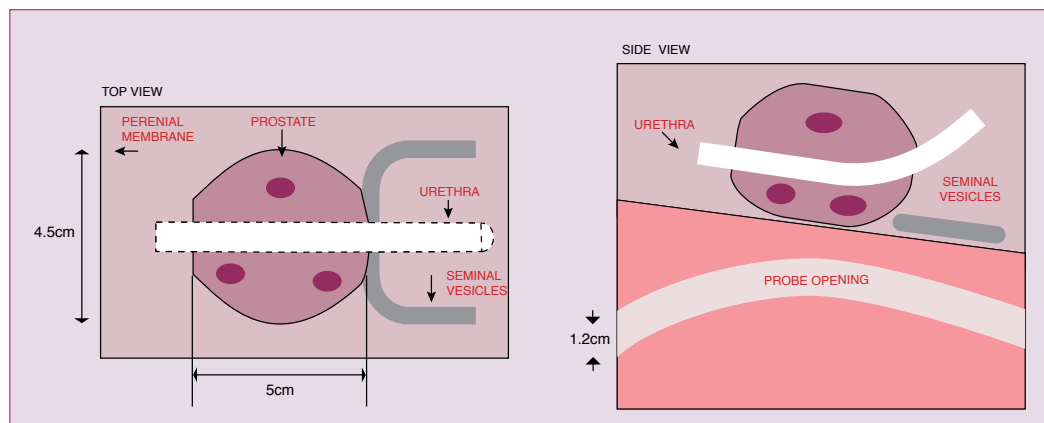
# Prostate Biopsy Phantom

*The ideal training device for end-fire transducers*

The CIRS Model 053A-EF Prostate Biopsy Phantom is a disposable phantom developed for practicing biopsy procedures which involve scanning the prostate with an end-fire rectal transducer. The prostate along with structures simulating the rectal wall, seminal vesicles and urethra is contained within an 11.5 x 7.0 x 9.5 cm clear plastic container. The redesigned housing more accurately simulates patient position during routine biopsy procedures. The prostate contains three hypoechoic 0.5 - 1.0 cm lesions for practicing biopsy technique.



**Model 053A-EF**



# Model 053A-EF Specifications:

## CONTAINER

Material: Clear PETG  
 Dimensions: 11.5 x 7.0 x 9.5 cm  
 Front probe opening: 1.2 cm Ø

## PERINEAL MEMBRANE

4.5 cm Ø 5 mm thick urethane

## BACKGROUND GEL

Similar to water with very little backscatter attenuation  
 $\leq 0.07$  dB/cm-MHz

## URETHRA

Dimensions: 0.7 cm Ø  
 Material: Zerdine<sup>®</sup>(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: 5 x 4.5 x 4.0 cm  
 Material: Blue Zerdine, high scatter  
 Volume: approximately 53 cc

## RECTAL WALL

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

## LESIONS

Quantity of 3 Hypoechoic to prostate



Model 053A-EF Lesion Shown

## 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