



**Expect Service**

**Radiation Products Design Inc**

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## INSTRUCTIONS

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### RPD INFORMATION

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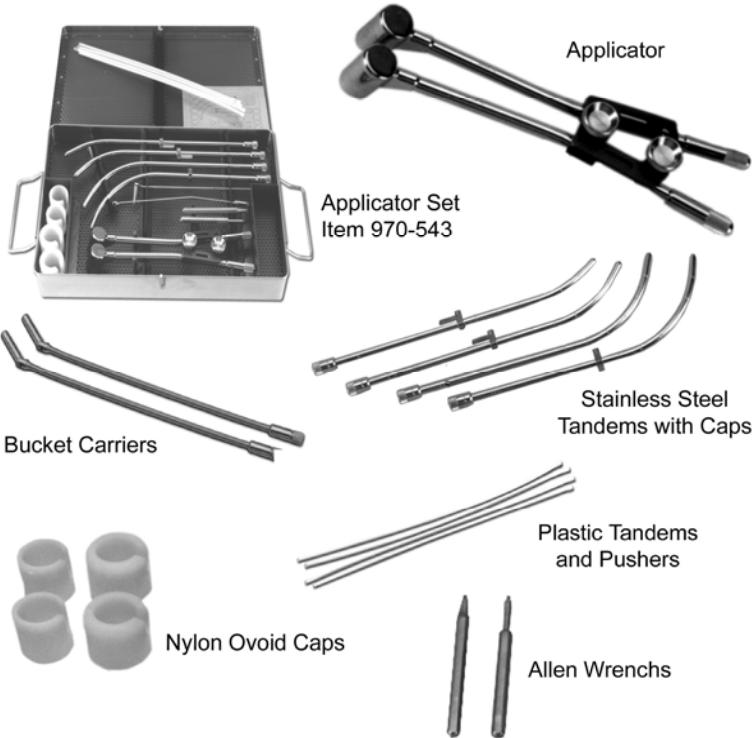
### RPD PRODUCT INFORMATION

<b>Item Number</b>	<b>Description</b>
970-543	FSD Shielded Round Ovoid Long Handle Applicator with Bracket Pivot and Tandem Support Hook Set, Includes Sterilization Tray
970-543-1	FSD Shielded Round Ovoid Long Handle Applicator with Bracket Pivot and Tandem Support Hook Set - No Sterilization Tray
970-543-2	FSD Shielded Round Ovoid Long Handle Applicator with Bracket Pivot, Caps and 1/16" Allen Wrench ONLY

**THIS PRODUCT IS NOT STERILE AND IS TO  
BE USED BY AUTHORIZED PERSONNEL  
ONLY.**

RADIATION PRODUCTS DESIGN INC  
assumes no liability for consequential damages  
of any kind for this material when used or for  
any direct or indirect consequences of its use  
or misuse by their customer.

FSD SHIELDED ROUND OVOID LONG HANDLE  
APPLICATOR



**ITEM 970-543 INCLUDES**

- (1) Applicator with Bracket Pivot and Two Bucket Carriers
- (2) 2.5 cm Diameter Nylon Ovoid Cap
- (2) 3.0 cm Diameter Nylon Ovoid Cap
- (4) Stainless Steel Tandems and Caps (15°, 30°, 45°, and 60°)
- (1) Cervical Stop
- (2) Flagged Cervical Stops
- (1) 3/32" Allen Wrench
- (1) 1/16" Allen Wrench
- (4) Plastic Tandems and Pushers for Sources
- (1) Sterilization Tray

**ITEM 970-543-1 INCLUDES**

- (1) Applicator with Bracket Pivot and Two Bucket Carriers
- (2) 2.5 cm Diameter Nylon Ovoid Cap
- (2) 3.0 cm Diameter Nylon Ovoid Cap
- (4) Stainless Steel Tandems and Caps (15°, 30°, 45°, and 60°)
- (1) Cervical Stop
- (2) Flagged Cervical Stops
- (1) 3/32" Allen Wrench
- (1) 1/16" Allen Wrench
- (4) Plastic Tandems and Pushers for Sources

**ITEM 970-543-2 INCLUDES**

- (1) Applicator with Bracket Pivot and Two Bucket Carriers
- (2) 2.5 cm Diameter Nylon Ovoid Cap
- (2) 3.0 cm Diameter Nylon Ovoid Cap
- (1) 1/16" Allen Wrench

## IMPORTANT

The density of the stainless steel applicator is  $7.916 \text{ g/cm}^3$ . and the tungsten density is  $19.3 \text{ g/cm}^3$ . However, it is strongly recommended that you obtain your own isodose curves before using the applicator for treatment purposes.

## DESCRIPTION

FSD Shielded Round Ovoid Long Handle Applicator with Bracket Pivot employs the same features as the Rectangular Handle Fletcher-Suit Afterloading Applicator but is less bulky, lighter, and has an easier source loading procedure. The lead (density  $11.35 \text{ g/cm}^3$ ) shields were replaced with high density  $19.3 \text{ g/cm}^3$  tungsten. The handle is 19 cm long to the ovoid center. The ovoids are 20 mm in diameter, 30 mm high, have a  $15^\circ$  angle. The ovoid's have immovable tungsten shielding for bladder and rectal protection. The applicator uses a two piece adjustable handle pivot bracket with a tandem support hook. The applicator is completely Heli-Arc welded at all joints for unbreakable joints. The applicator bucket carriers accommodate Cesium 137 sources up to 3.2 mm diameter x 20 mm long. A hole in the bucket carrier allows the user to push the source out, if the source gets stuck inside the bucket carrier. Ovoid caps increase the diameter of the ovoid. Four ovoid caps, (2) 2.5 cm and (2) 3.0 cm diameter are furnished with the applicator. The stainless steel tandems are marked every 2 cm over a 12 cm range. Optional items available include Tungsten Dummy Sources (Item 985-030) and Cesium 137 Tube Sources (Items 067-6510 to 067-6540).

## STERILIZATION INSTRUCTIONS

### **Applicator, Ovoid Caps and Tandems**

Cleaning: Use detergent similar to Klenzyme®, Manu-Klenz® or NpH-Klenz® and water. Ultrasound cleaner may be used.

Sterilization: Steam Autoclave.

### **Sterilization Tray**

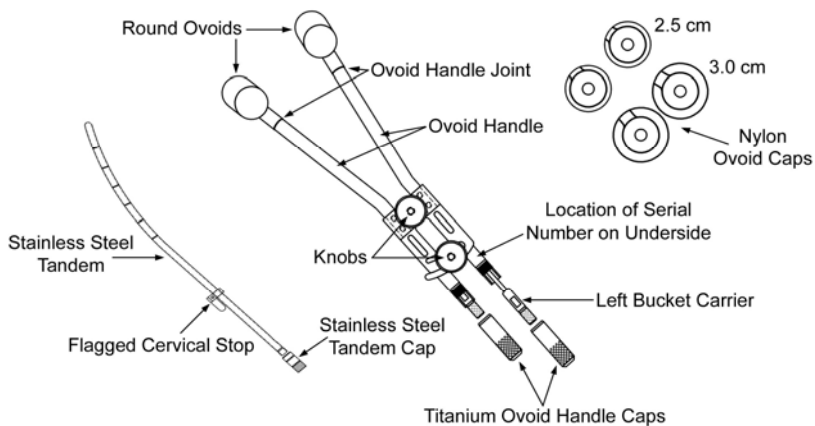
Sterilization: Steam Autoclave.

Warning: **DO NOT** Flash Steam Sterilize, may cause nylon coating to flake off. Not certified for Sterrad.

## BUCKET CARRIER INSERTION INSTRUCTIONS

- A. Hold the bucket carrier horizontally with the flat area of the handle facing up. The bucket will hang down, allowing the radiation source to be loaded.  
**IMPORTANT: Load source in a protected area, then transport to patient area.**
- B. Remove the ovoid handle caps from the patient applicator. Remove the patient left carrier marked "L" on the flat area of the handle, from the portable safe. Hold the bucket carrier in a downward angle and rotate the bucket carrier 180 degrees so the flat area marked "L" is down. Now the bucket is straight with the carrier handle and can be inserted into the patient left applicator ovoid handle tube easily. After inserting 3 cm, rotate the bucket carrier 180 degrees so the flat area marked "L" is up. Continue to insert the bucket carrier until it touches the tubing bend. Rotate the handle CW or CCW slightly while applying light forward pressure until the bucket goes past the tubing bend and into the ovoid head, **DO NOT FORCE**. The bucket flat area marked "L" is up and the carrier handle groove will then align with the end of the ovoid handle tube. Replace the ovoid handle cap on the applicator. A spring inside of the ovoid handle cap ensures that bucket carrier is always pushed forward into the ovoid head.
- Repeat steps for the patient right bucket carrier marked "R" on the flat area of the handle.
- To remove the bucket carrier, rotate the handle CW or CCW slightly to get past the tubing bend, **DO NOT FORCE**. Then place in portable safe. Replace the ovoid handle caps on the applicator.

## APPLICATOR DIAGRAM



## INSPECTION TEST

Separate the applicator Colpostat into two halves and conduct PRESSURE TEST on each half as follows:

### PRESSURE TEST

Conduct this test on each half of the Colpostat:

1. Remove the ovoid handle cap from the end of the ovoid handle.
2. Remove the bucket carrier.
3. Stand the colpostat in a beaker of water to a depth above the ovoid handle joint.
4. Apply slight air pressure on the open end of the colpostat handle (using for example, a 20cc syringe connected to surgical tubing connected to the colpostat handle), and look for air bubbles escaping from the ovoid or ovoid handle joint. If bubbles are seen, Test fails. If Test passes, the ovoid is solidly attached to the ovoid handle and no immediate action is necessary.

**IF TEST FAILS STOP USING APPLICATOR FOR PATIENT THERAPY.** Send complete unit in for repair, including bucket carriers, to Radiation Products Design, Inc.

### TANDEM TEST

Visually inspect each tandem for any signs of corrosion.

The above tests can be conducted at Radiation Products Design, Inc. for a minimal charge.

**REPLACEMENT PARTS**

<b>Item #</b>	<b>Description</b>
970-000	12 Plastic Tandems and Pushers
970-010	12 Plastic Tandems
970-020	12 Plastic Pushers
970-201	# 1 Tandem, 15° Standard with Cap
970-202	# 2 Tandem, 30° Standard with Cap
970-203	# 3 Tandem, 45° Standard with Cap
970-204	# 4 Tandem, 60° Standard with Cap
970-212	Cap for Tandem
970-216	Cervical Stop
970-217	Flagged Cervical Stop
970-218	Screw for Cervical Stop #4-40x5/16" Socket Head
970-220	3/32" Allen Wrench
970-643-22	Handle Bracket Set, Complete with Knobs, C-Hook, Nylon Pivot and Wrench
970-360-30	Titanium Cap for Ovoid Handle
970-541-40	Left Bucket Carrier - Stainless Steel
970-541-42	Right Bucket Carrier - Stainless Steel
970-541-50	2.5cm Left/Right Nylon Ovoid Cap
970-541-52	3.0cm Left/Right Nylon Ovoid Cap
970-645-06	Sterilization Tray w/Steam Autoclave Nameplate

**OPTIONAL ITEMS**

<b>Item #</b>	<b>Description</b>
067-6510	Cs-137 Tube Source, 10 mg Ra Equivalent-Red
067-6515	Cs-137 Tube Source, 15 mg Ra Equivalent-Black
067-6520	Cs-137 Tube Source, 20 mg Ra Equivalent-White
067-6525	Cs-137 Tube Source, 25 mg Ra Equivalent-Blue
067-6530	Cs-137 Tube Source, 30 mg Ra Equivalent-Orange
067-6535	Cs-137 Tube Source, 35 mg Ra Equivalent-Green
067-6540	Cs-137 Tube Source, 40 mg Ra Equivalent-Gray
970-101	DVD on Fletcher Colpostat Technique
970-200	Optional: Tandem, Straight Standard with Cap
985-030	Tungsten Dummy Source, 3.0mm Dia. x 20mm L

**End of Document**