

R10184

Hysteroscopy Simulator



INTRODUCTION

The **S607 Hysteroscopy Simulator III** is a full-sized, adult female lower torso (abdomen and pelvis). It is a realistic training tool developed to assist health professionals in the teaching of hysteroscopy. This simulator may also be used to teach bimanual pelvic examination, and vaginal speculum examination.

The outer skin of the model is foam-backed in order to simulate the feel of the anterior pelvic wall. The entire outer skin is removable to allow the model to be used for demonstration purposes.

The cervix has a centrally located, oval-shaped os which permits insertion of a hysteroscope.

The normal cervix is removable, and the interchangeable uteri feature the patented "screw" design for fast and easy changing through the opening at the top of the model.

ASSEMBLY

Once you understand how the simulator's parts fit together, we suggest you change the uteri through the opening at the top of the model. This helps to preserve the model's outer shell as you will have to remove it only to view the inside of the model.

To remove the uterus:

Unscrew the wide locking ring attached to the uterus using a **counter-clockwise rotation**.

To remove the cervix:

Unscrew the thin locking ring immediately outside the apex of the vagina.
The cervix should be pushed through the vagina and removed from the introitus.

To reassemble, proceed in reverse order.

If you wish to remove the cervix, first you must remove the uterus.

Grasp the uterus while turning the *wide* grey ring counterclockwise until the uterine body and cervix are separated.

To remove the *cervix*, turn the *thin* grey ring counter-clockwise until it comes off.

You can then push the cervix out through the vagina.

Removing and replacing the detachable skin and foam backing

First, carefully remove the outer skin and its foam lining away from the rigid base at the “top” end of the model. (“Top” refers to the portion of the simulator nearest to the metal carrying handle located above the umbilicus.)

Lift the skin and foam up and over the legs, one leg at a time.

Be as gentle as possible. The detachable skin is made of material that approximates skin texture and it *can* tear.

To reassemble, simply reverse this process.

To replace the skin and foam lining, start by pulling them down around the legs.

Then make sure the rectal opening is aligned with the opening in the rigid base.

Pull the skin and foam over the top of the model.

Finally, make sure both are pulled firmly down around the rigid base, and the skin is smoothly fitted over the foam.

HYSTEROSCOPIC VIEWING AND BIMANUAL PALPATION

The simulator includes a set of seven (7) uteri and one cervix with patent os. There is one normal uterus, and the remaining uteri have internal abnormalities visible through a hysteroscope and external abnormalities apparent by bimanual pelvic palpation. Each uterus is numbered and identified below. A description of each uterus follows.

EXTERNAL

1. Normal
2. Normal
3. Fibroid uterus
4. Normal
5. Normal
6. Hydro or pyosalpinx
7. Normal

INTERNAL

- Normal
- Endometrial polyposis
- Endometrial hyperplasia
- Torsion of sloughing fibroid
- Early carcinoma of endometrium
- Advanced carcinoma of endometrium
- Carcinoma of fundus

Uterus # 1

The first uterus is the "control" model, and represents a cavity which is **normal** and healthy in both external and internal appearance.

Uterus # 2

The second uterus is externally **normal**, but hysteroscopic examination will reveal **endometrial polyposis**, the proliferation of benign cancers within the lining of the uterine cavity.

Uterus # 3

The third uterus shows external evidence of uterine myoma or tumor, made up of various muscular and connective tissue. The uterine cavity in turn simulates the abnormal overgrowth of cells in the uterine lining, a condition known as **endometrial hyperplasia**.

Uterus # 4

The fourth cavity is **normal** in outward appearance, but internal examination indicates that a uterine myoma is being ejected from the tissue in which it formed. Further, the tissue which connects the tumor to the endometrium is being twisted in the myoma's separation. This sometimes results in severe pain, and the condition is known as **torsion of a sloughing fibroid**.

Uterus # 5

The fifth uterus is also externally **normal**, but hysteroscopy shows evidence of **early endometrial carcinoma**.

Uterus # 6

The sixth of the uteri is externally abnormal and indicates the possible collection of water or pus in an oviduct (**hydro or pyosalpinx uterus**). The interior of the uterine cavity shows **endometrial carcinoma** in an advanced stage.

Uterus # 7

The last of the uteri is externally **normal**, but internal examination with the hysteroscope shows there to be a **carcinoma of the uterine fundus**, located above the Fallopian junctures.

NOTE: To pass an instrument (such as a hysteroscope) through the cervical os, apply a small amount of clean water containing a **drop or two** of soap solution to the cervix (just as you would apply antiseptic solution in a patient). This will make passing the instrument through the cervical os easier.

SPECULUM EXAMINATION

For a speculum examination, use the following steps:

- Use a **medium** bivalve speculum
- Prior to inserting the speculum, dip it into clean water containing a small amount of soap. (This makes inserting the speculum easier.)
- To see the cervix, fully insert the speculum, angle it posteriorly (as in the human, the vagina in the simulator is angled posteriorly), **then** open the blades fully.
- Increase the diameter of the opening, use the speculum thumb screw (Pederson or Graves specula.)

CARE AND MAINTENANCE

The simulator is constructed of material that approximates skin texture. Therefore, in handling the model, use the same gentle techniques as you would in working with a patient.

To avoid tearing the skin when performing a pelvic exam, use a diluted soap solution to lubricate the instruments and your gloved fingers.

Clean the simulator after every training session using a mild detergent solution and rinse with clean water.

DO NOT write on the simulator with any type of marker or pen, as these marks may not wash off.

DO NOT use alcohol, acetone or Betadine® or any other antiseptic which contains iodine. They will damage or stain the skin.

Store the simulator in the carrying case and plastic bag provided.

DO NOT wrap this or any other simulator in other plastic bags, newspaper, plastic wrap or any other kinds of material, as these may discolor the skin.

If you have any questions pertaining to the simulator described in this manual, please contact Customer Service for additional information