

Care, Handling, and Maintenance

Components

The VSI Ltd. Canine Spay Simulator consists of the following components:

- Upper thermoformed shell with suture pad attachment pins
- Lower thermoformed shell with suction cups.
- Spleen.
- Kidneys.
- Large & small intestine with mesentery, cecum.
- Bladder.
- Replaceable uterus with ovaries, broad, suspensory ligaments
- Multi-layer suture pad to represent the abdominal wall

The canine spay simulator comes fully assembled including three (3) replaceable multi-layer pads that represents the abdominal wall and three (3) replaceable uteri.

Cleaning

All components both hard and soft should be periodically cleaned using a mild detergent and warm water. Never use harsh chemicals or cleaners. This can damage the components. All internal soft components can be damaged by rough handling.

General maintenance

Periodically inspect the unit for damaged components. If the any of the soft components become damaged they can be repaired with any aquarium grade silicone (preferably clear). If they are not repairable, new ones are available from VSI Ltd. Hardware (pins, screws, etc.) are all nylon and should last indefinitely if handled appropriately. Any damaged components can be ordered from VSI Ltd.

The canine spay simulator comes properly assembled. It is best to observe the orientation and position of all the components to familiarize yourself with them and to ease the correct replacement of consumable or damaged components.

Uterus removal

All internal soft components can be damaged by rough handling.

Remove the upper shell, along with the suture pad, from the lower shell. Minimal force is required. The shells are held together with Velcro dots.

Gently pull the rectal end of the large intestine from its mounting post and move the entire mesentery assembly (large and small intestine, cecum and mesentery) out of the lower shell to expose the uterus mounting points.

The bladder has a barbed end that fits into a corresponding hole in the lower shell. The bladder does not need to be removed, only moved either left or right out of the lower shell to gain access to the uterus.

Carefully remove the vaginal end of the uterus from its pin (that is attached via elastic cord to the lower shell).

Remove the remaining portions of the broad ligament from the three mounting screws located in the base of the lower shell, 2 caudally located and one cranial. Carefully lift each kidney vertically from the mounting posts, and remove the remaining ends of the suspensory ligament mounts (flat kidney-shaped ends with holes) from the pins.

Uterus replacement

This is most easily achieved by observing the uterus attachment before its removal.

Lay out the new uterus and locate the right uterine horn, which is slightly longer cranially than the left uterine horn. Position the right suspensory ligament mount over the right kidney post and do the same for the left, making sure that the suspensory ligaments are positioned laterally. Replace both kidneys on their respective posts to hold the suspensory ligaments in position. Located on each end of the dorsomedial edge of the broad ligament are mounting holes which are placed over the mounting screws (one cranially and two caudally) located in the lower shell. The two cranial mounting holes fit over a single mounting screw, with the suspensory ligament ventral to the broad ligament. Insert the elastic-mounted pin into the vaginal end of the uterus. This elastic cord helps provide the extension needed to better externalize the uterus during the procedure.

Reinstall the rectal end of the large intestine over its mounting pin, making sure it is located dorsally to the uterus and medially to the broad ligaments.

Gently replace the mesentery assembly (large, small intestine, cecum and mesentery) into position. Place the bladder into position. Gently move the spleen dorsomedial as the upper shell is lowered over the bottom shell.

Removing and Replacing the Multi-layer Suture Pad

Gently pull the used suture pad off the eight (8) mounting pins located around the perimeter of the abdominal opening in the upper shell. Gently work the new suture pad over the pins in the upper shell.

Please contact Veterinary Simulator Industries Ltd. for specific repair instructions if required, in Calgary, Canada, (403)-262-9393,

