VATA

Realism in Clinical Simulation

Otto Ostomy™ – Model 0310

USER MANUAL

308 South Sequoia Parkway, Canby, Oregon 97013 USA
ph. 503.651.5050 | fax 503.651.5052 | email *info@vatainc.com* | *www.vatainc.com*

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A better understanding of Ostomies… From the Inside Out!

Otto Ostomy™ will help clinicians, staff, patients, their families and friends become more knowledgeable about what to expect, while learning how ileostomies, colostomies, gastrostomies, ureterosigmoidostomies and tube cecostomies function. The more healthcare providers understand ostomies, the better they will be able to educate and encourage their patients about this life-changing event. To a great extent, ostomy care is a visual specialty. This has been described as "seeing and understanding how their 'plumbing' has been rearranged". With ***Otto Ostomy™***, healthcare staff and patients can grasp, visually, in a life-sized 3D model, what they may have had difficulty understanding from pictures and a verbal description. Seeing the 3D digestive and urinary tracts and visualizing the location and function of the various organs is essential to learning, especially in those cases where cognitive processes or language may be an obstacle. Proper teaching helps increase patients' understanding of their condition and the adjustments which may be necessary for achieving a satisfactory standard of life with their new stoma.

Using the organs and stomas on ***Otto Ostomy™***, helps clinicians learn to quickly diagnose problems, plan, implement and evaluate care specific to the simulation displayed in skills lab, or demonstrate their proficiency in competency testing, which results in confident staff and the best patient outcomes. Pre-operative teaching allows patients and their families to begin learning about ostomies prior to surgery when they are less distracted—reducing anxiety. That's why ***VATA***, a leader in anatomical healthcare models, has created ***Otto Ostomy™***, the ultimate educational tool for nurses and patients.

The organs on ***Otto Ostomy™*** were molded from an actual patient's CT scan, resulting in all the organs on the model being of the exact size and location as they were in the patient, except the bladder which was resized to represent a bladder with 170 cc of urine. ***Otto Ostomy™*** has the following structures molded from the same patient...

- Stomach
- Small Intestine
- Large Intestine
- Rectum
- Kidneys
- Ureters
- Bladder
- Clear Torso Shell

The ***Otto Ostomy™ Advanced Model 0310*** is supplied with the following accessories:

- 7/8" Diameter Stoma
- 2" Diameter Stoma
- Loop Stoma with Rod
- Urostomy Stoma with 3" Stents
- Loop Stoma without Rod
- Double Barrel Stoma
- Oval Stoma
- Mushroom Stoma
- Prolapsed Stoma
- 3" Diameter Stoma
- Granuloma Stoma
- Necrotic Stoma
- Ischemic Stoma
- In-Skin-Fold Stoma
- Parastomal Hernia Stoma
- Mucocutaneous Separation Stoma
- Recessed Stoma
- Flush Stoma
- Small Intestine Segment
- Ileal Conduit
- Ileostomy Loop Adapter
- Colostomy Loop Adapter
- Accessory Storage Board
- Carrying Case

The torso shell is easily removed for teaching and to facilitate in accessing and manipulating the stomas, organs and intestines. The flexible small and large intestines can be separated in 7 locations and attached to the backside of a stoma placed in the clear torso shell to demonstrate various simulation scenarios.

See page 35 for a complete listing of parts and accessories.

Contact Information

Whatever your question, problem, or comment, ***VATA's*** Customer Service is here to help. There are four quick, easy ways to contact us, so you can choose what works best for you. If there is anything we can do, just let us know!

VATA Inc.
308 South Sequoia Parkway, Canby, Oregon 97013, USA
Phone: **503.651-5050**
Fax: **503.651-5052**
E-Mail: ***info@vatainc.com***
Web: ***www.vatainc.com***

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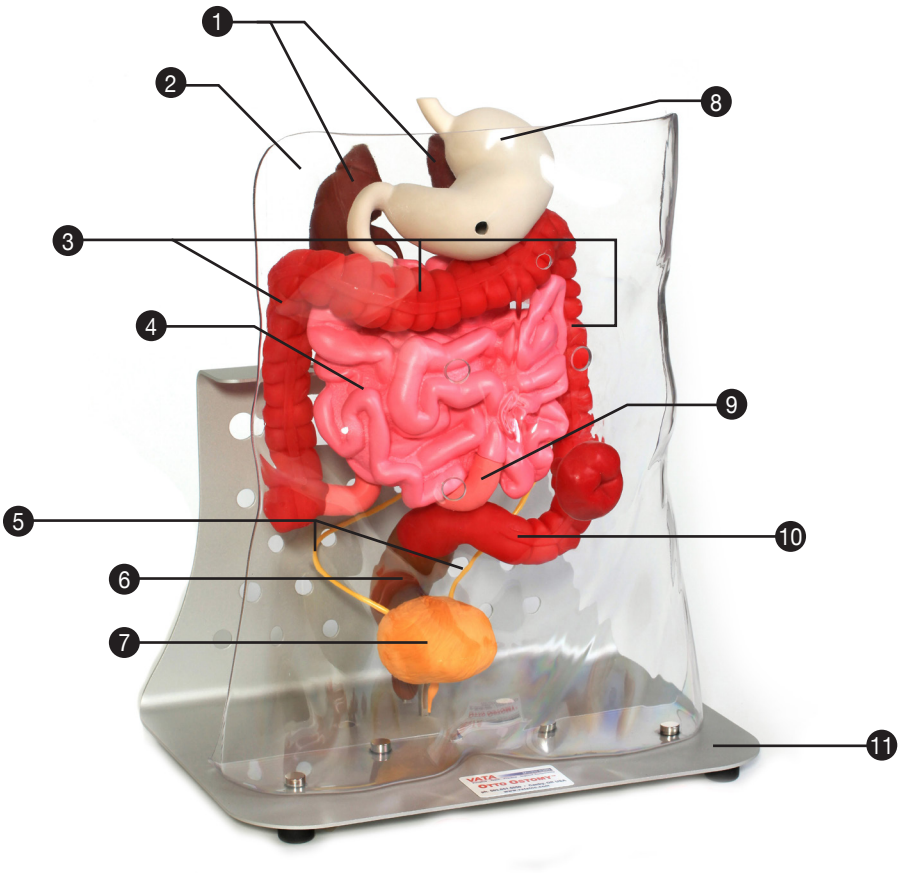
List of Components

1. Kidneys
2. Clear Torso Shell
3. Large Intestine
4. Small Intestine
5. Ureters
6. Rectum
7. Bladder
8. Stomach
9. Small Intestine Segment
10. Sigmoid Large Intestine
11. Metal Base



Carrying case included with model

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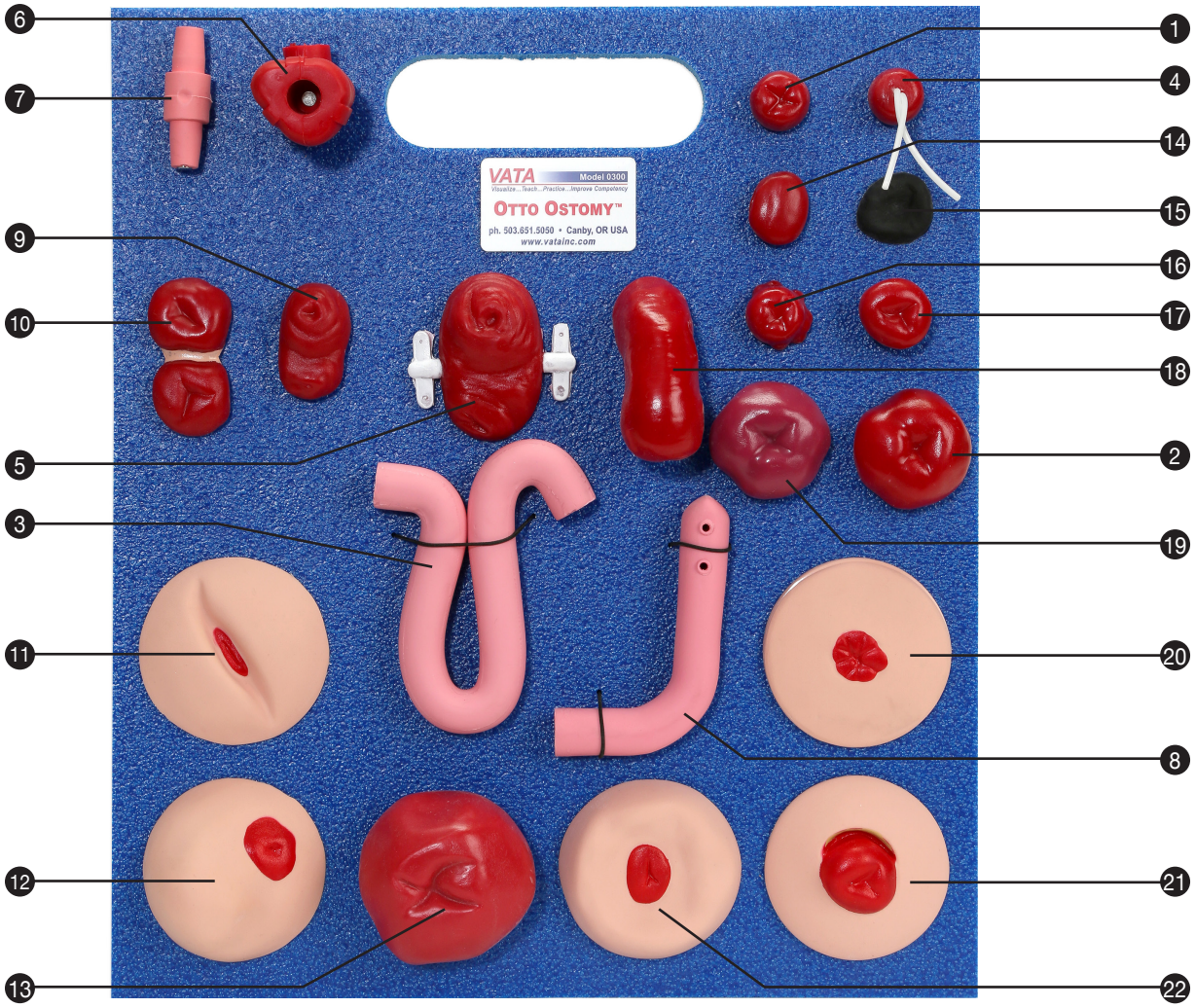
0310 Otto Ostomy™ Advanced Stoma Package

(0305 if ordered separately)



1. 7/8” Diameter Stoma – **0311**
2. 2” Diameter Stoma – **0312**
3. Small Intestinal Segment – **0341**
4. Urostomy Stoma With 3” Stents In Place – **0313**
5. Loop Stoma With Rod – **0314**
6. Colostomy Loop Adapter – **0343**
7. Ileostomy Loop Adapter – **0342**
8. Ileal Conduit – **0340**
9. Loop Stoma without Rod – **0315**
10. Double Barrel Stoma – **0316**
11. In-Skin-Fold Stoma – **0330**
12. Parastomal Hernia Stoma – **0331**
13. 3” Diameter Stoma – **0322**
14. Oval Stoma – **0319**
15. Necrotic Stoma – **0324**
16. Granuloma Stoma – **0323**
17. Mushroom Stoma – **0320**
18. Prolapsed Stoma – **0321**
19. Ischemic Stoma – **0325**
20. Flush Stoma – **0334**
21. Mucocutaneous Separation Stoma – **0332**
22. Recessed Stoma – **0333**

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IT IS STRONGLY SUGGESTED THAT THE ENTIRE MANUAL BE READ PRIOR TO USING OTTO OSTOMY™

Getting to Know Your Otto Ostomy™

You will find that performing the following tasks will help you to familiarize yourself with basic tasks required to simulate the many different scenarios possible with ***Otto Ostomy™***. Becoming familiar with these procedures will ensure you can perform all the simulations the model is capable of.

Removing and Replacing the Clear Torso Shell From the Metal Base

The clear torso shell is positioned on the metal base via four magnets located in its base which line up with four magnets in the metal base. The torso shell may need to be removed to set up the various teaching simulations. To remove the torso shell, stabilize the metal base and gently pull the top of the torso toward you (when standing in front of the model), approximately 2". This will separate the magnets in the torso base from those in the metal base and permit the torso shell to be easily lifted ***(See photo 1)***.

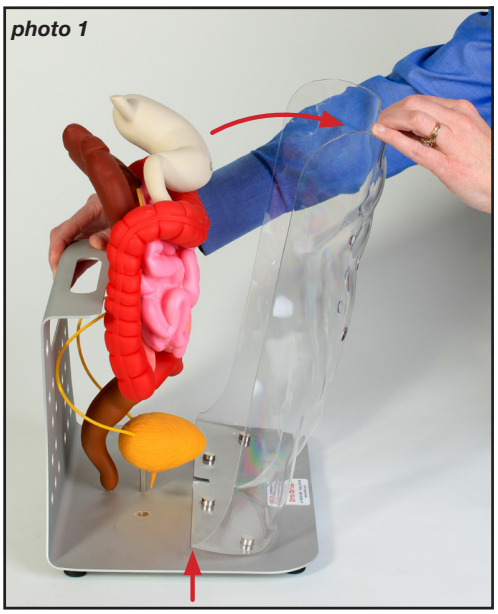
photo 1

To reattach the torso shell, you can directly line up the set of four magnets in the torso base over the four in the metal base. When the magnets come in close proximity to the magnets in the metal base, the magnetic attraction will pull them together and align them properly.

An alternate way to reposition the torso, one used more often when placing stomas in the clear torso shell and attaching the small or large intestines to the backside of the stomas, is to place the torso at a 90 degree angle to the metal base and line-up the outer-most magnet on either side of the torso base with those on the metal base; these will act as a pivot point later ***(See photo 2)***.

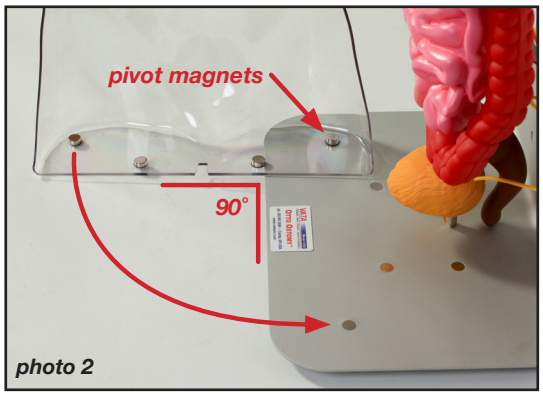

photo 2

After inserting a stoma, connecting the intestines, or performing another task, you can correctly re-position the torso shell by closing the opened side in the same motion used to close a door, while the torso shell pivots on the two magnets you earlier engaged. As in the first way of re-attaching the torso, when the magnets in the torso shell come in close proximity to the magnets in the metal base, the magnetic attraction will pull them together and align them properly ***(See photo 3)***.

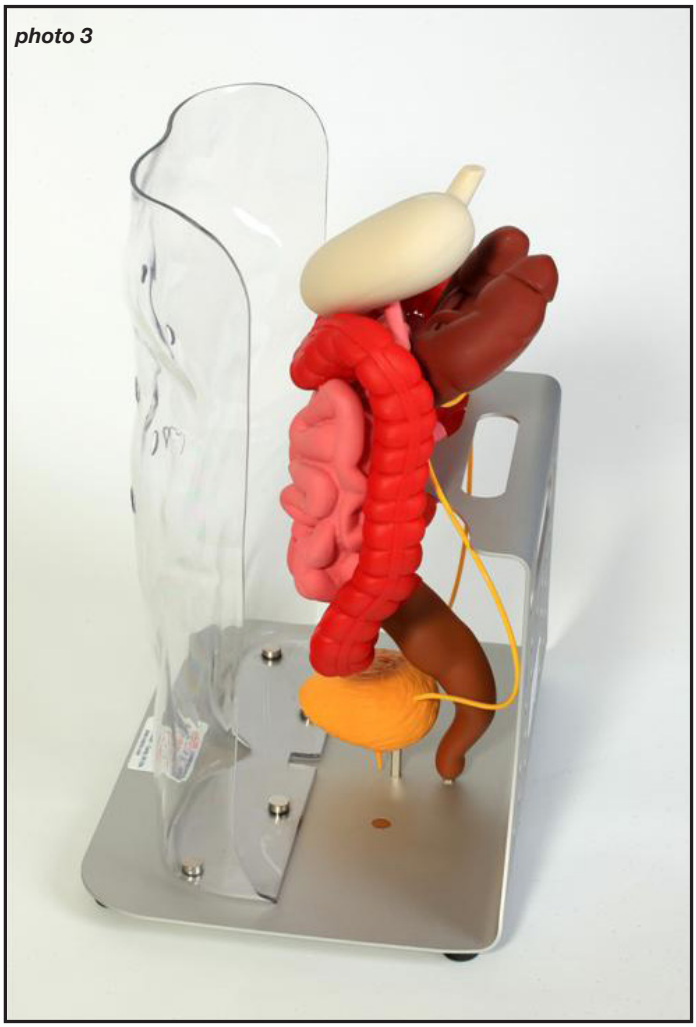
photo 3

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Stomas

Otto Ostomy™ permits the simulation of end ileostomies, loop ileostomies, end colostomies, loop colostomies, urostomies, gastrostomies, ureterosigmoidostomies and tube cecostomies.

Otto Ostomy™ Advanced Model 0310 is supplied with the following eighteen stomas: ***(See photo 4)***

- 7/8" Diameter Stoma - 0311
- 2" Diameter Stoma - 0312
- Urostomy Stoma with 3" Stents - 0313
  For more info go to ***Urostomy Simulation*** on page 25
- Loop Stoma with Rod - 0314
- Loop Stoma without Rod - 0315
- Double Barrel Stoma - 0316
- Oval Stoma - 0319
- Mushroom Stoma - 0320
- Prolapsed Stoma - 0321
- 3" Diameter Stoma - 0322
- Granuloma Stoma - 0323
- Necrotic Stoma - 0324
- Ischemic Stoma - 0325
- In-Skin-Fold Stoma - 0330
- Parastomal Hernia Stoma - 0331
- Mucocutaneous Separation Stoma - 0332
- Recessed Stoma - 0333
- Flush Stoma - 0334

Practice inserting a stoma by selecting an end stoma (as opposed to a double ***0314 – 0316***), and place it in one of the four ½" holes in the abdomen of the clear torso shell. The stoma is inserted from the front of the clear torso shell and pushed in until the radius of the stoma comes in contact with the torso surface ***(See photo 5).*** A back and forth, twisting motion may be helpful in placing stoma. You will need to support the backside of the top of the torso shell as you push the stoma in from the front. ***Please note: The single, smaller, fifth hole, above the four ½" holes in a square design, is for use with a gastrostomy tube and is not large enough to place a stoma (See photo 6).***

For more info on gastrostomies, go to Gastrostomy Simulation on page 28.

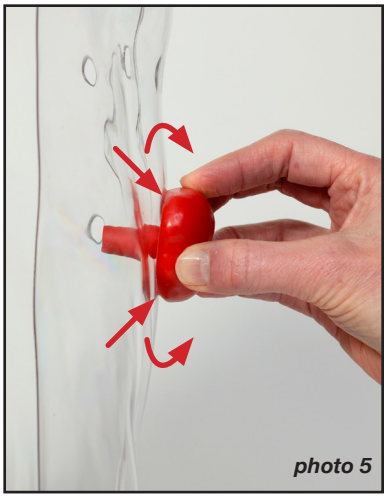
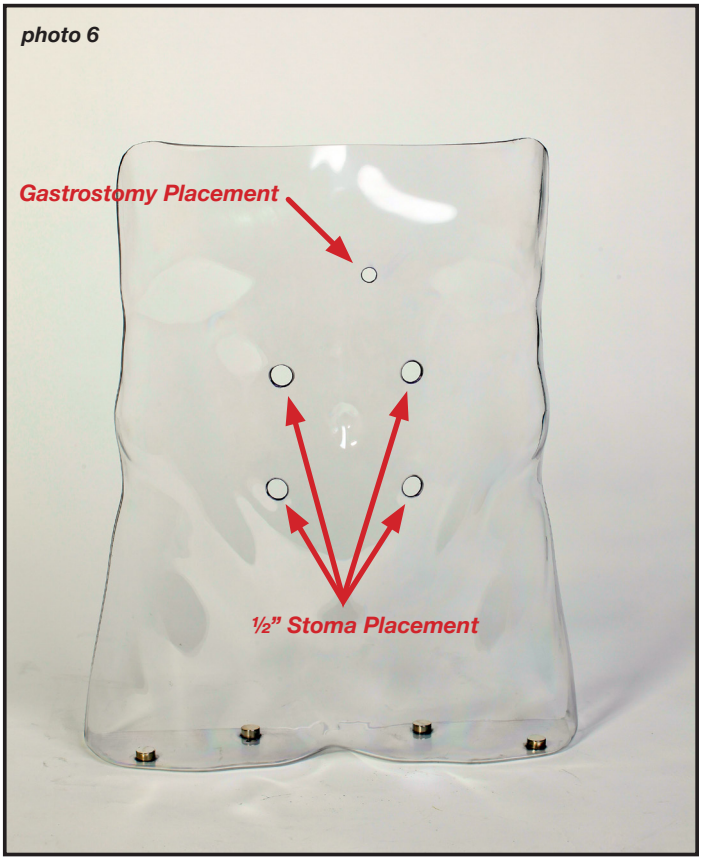


photo 5

photo 4 (See page 3 for details)

photo 6



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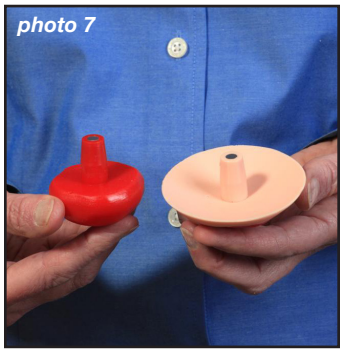
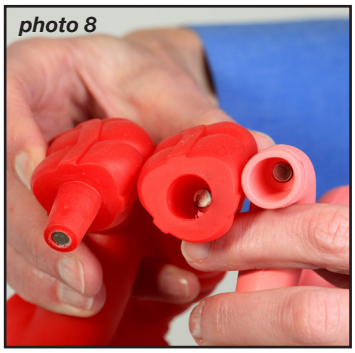
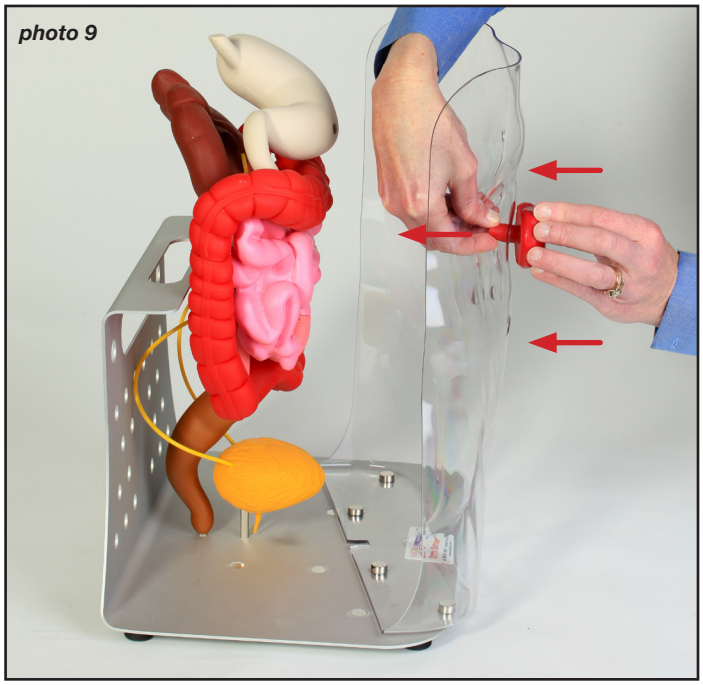
Stomas, Cont.

The backsides of all stomas have a male tapered connector design, slightly larger than the hole it is inserted through, that aids in positioning the stoma and holding it in place. The end of the male taper on each stoma has a recessed magnet to insure a secure connection when the intestines are connected to it from the backside. Each male and female taper connection on all the intestinal segments also has a magnet ***(See photos 7 & 8)***.

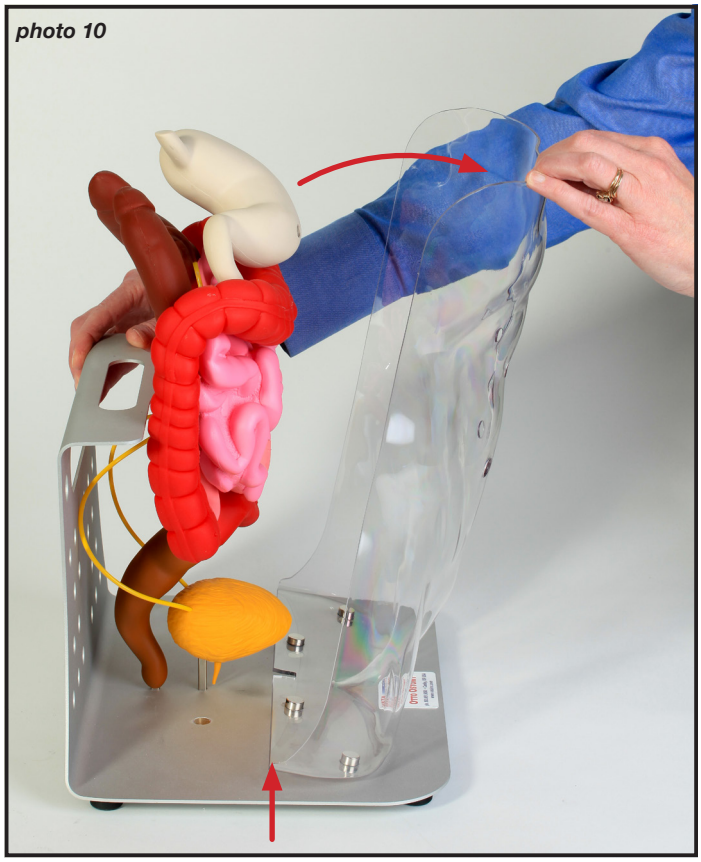




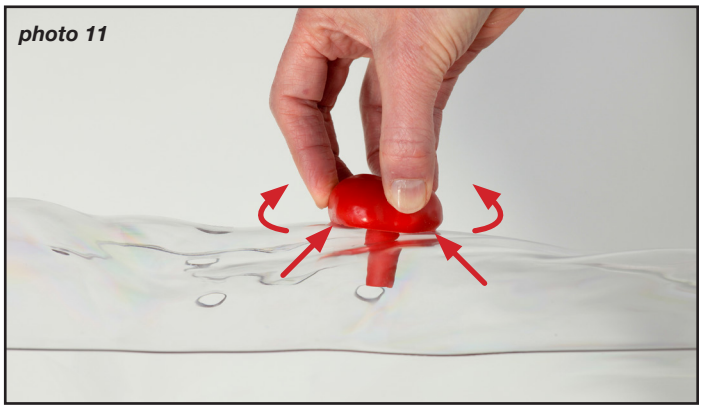
Depending on the stoma selected, it may be easier to initially insert a short length of the stoma's male taper through the hole from the front of the clear torso shell and then pull the taper through the hole from the backside, until the radius of the stoma comes in contact with the torso surface ***(See photo 9)***.



You may also install the stoma with the clear torso shell removed from the metal base. To remove the torso shell, stabilize the metal base and gently pull the top of the torso toward you (when standing in front of the model), approximately 2". This will separate the magnets in the torso base from those in the metal base and permit the clear torso shell to be easily lifted ***(See photo 10)***.



With the torso removed, you can lay it in a supine position and insert the stoma ***(See photo 11)***.



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Stomas, Cont.

To replace the torso to the base, place the torso shell at 90 degrees to the metal base and engage the two outer-most magnets on either side of the torso shell with those in the metal base; this will act as a pivot point later ***(See photo 12)***.

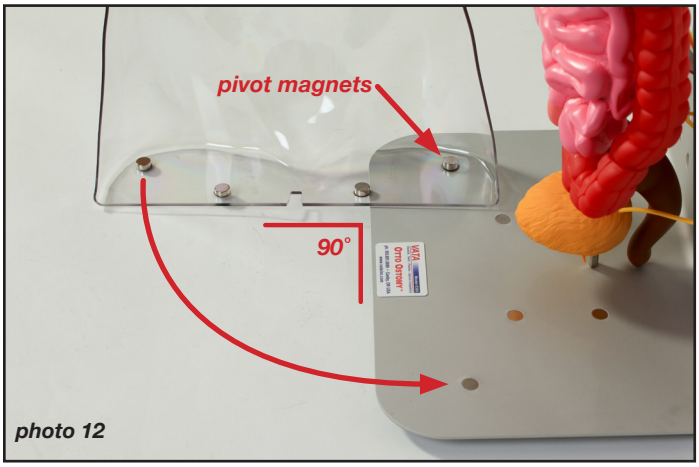
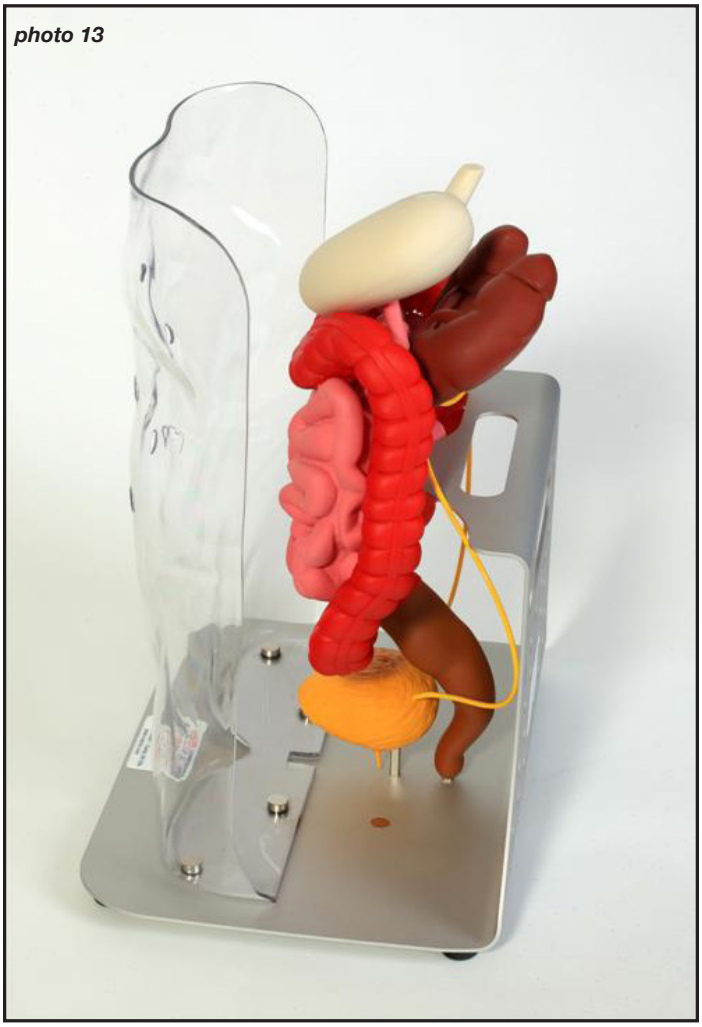


photo 12

After making the connection, you can correctly position the torso shell by closing the opened side of the torso shell with the same type of motion used to close a door, while the torso shell pivots on the two magnets you earlier engaged. When the magnets come in close proximity, the magnetic attraction will correctly align and position the torso ***(See photo 12 & 13)***.

photo 13



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End Ileostomy Simulation

An end stoma is constructed by dividing the intestine and bringing out the proximal end through the abdomen as a single stoma. Select the desired single stoma from the blue foam stoma board supplied with your ***Otto Ostomy™*** (See photo 14) and place it in one of the four ½" holes in the abdomen of the clear torso shell. The stoma is inserted from the front of the clear torso shell and pushed in until the radius of the stoma comes in contact with the torso surface ***(See photo 15)***. ***Please note: The single, smaller, fifth hole, above the four ½" holes in a square design, is for use with a gastrostomy tube and is not large enough to place a stoma (See photo 16).***

For more info on gastrostomies, go to Gastrostomy Simulation, see page 28.

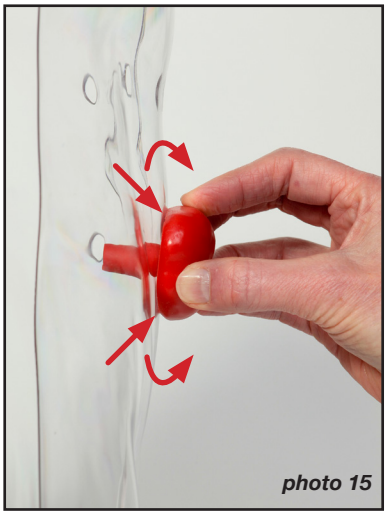


photo 15

A back and forth, twisting motion may be helpful in placing stoma. You will need to support the backside of the top of the torso shell as you push the stoma in from the front. The backsides of all stomas have a male tapered connector design, slightly larger than the hole it is inserted through, that aids in positioning the stoma and holding it in place. The end of the male taper on each stoma has a recessed magnet to insure a secure connection when the intestines are connected to it from the backside. Each male and female taper connection on all the intestinal segments also has a magnet ***(See photos 17 & 18)***.

photo 17

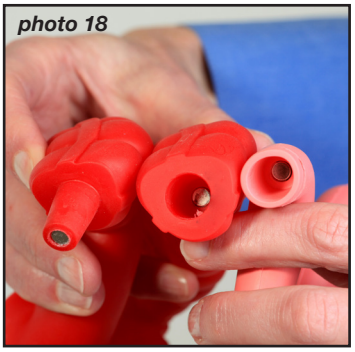
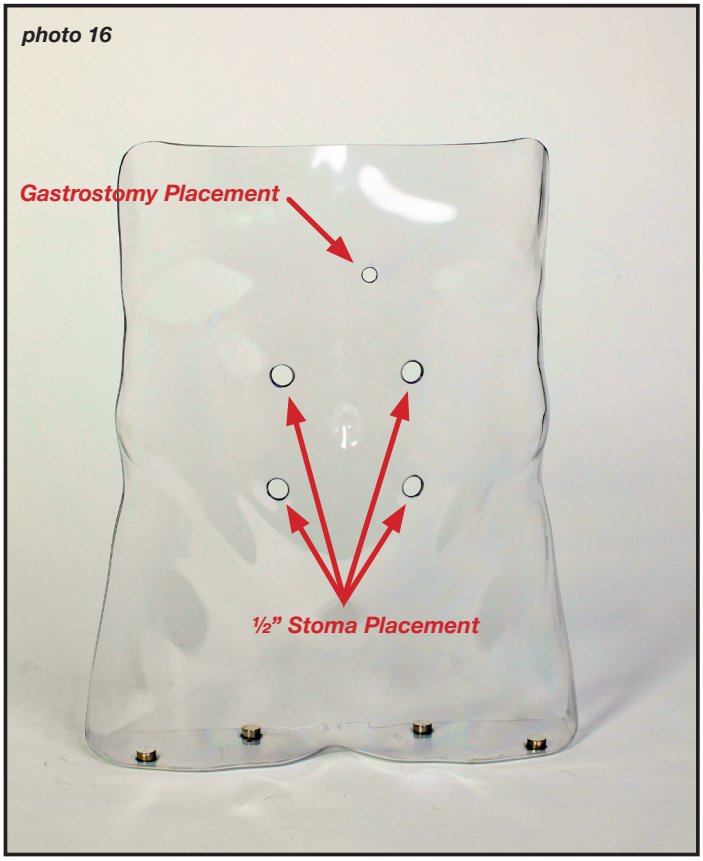


photo 18

photo 14 (See page 3 for details)

photo 16



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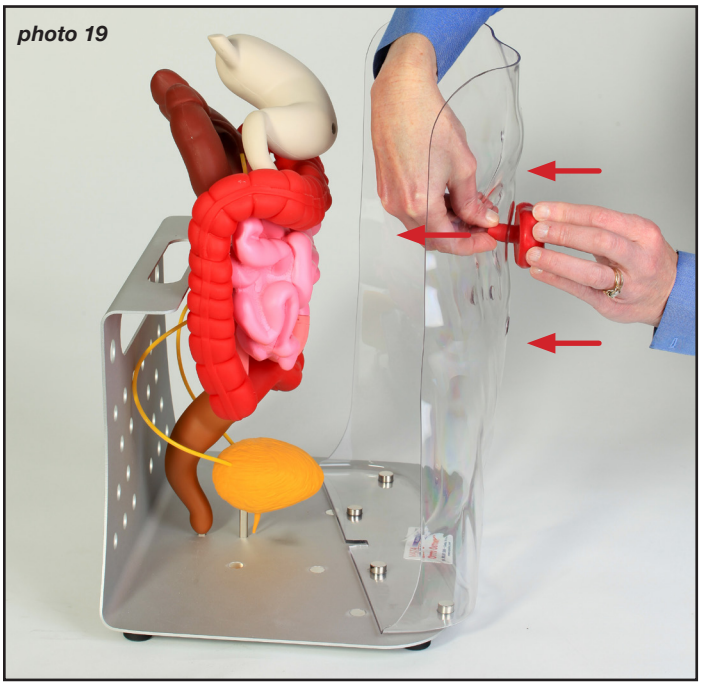
End Ileostomy Simulation, Cont.

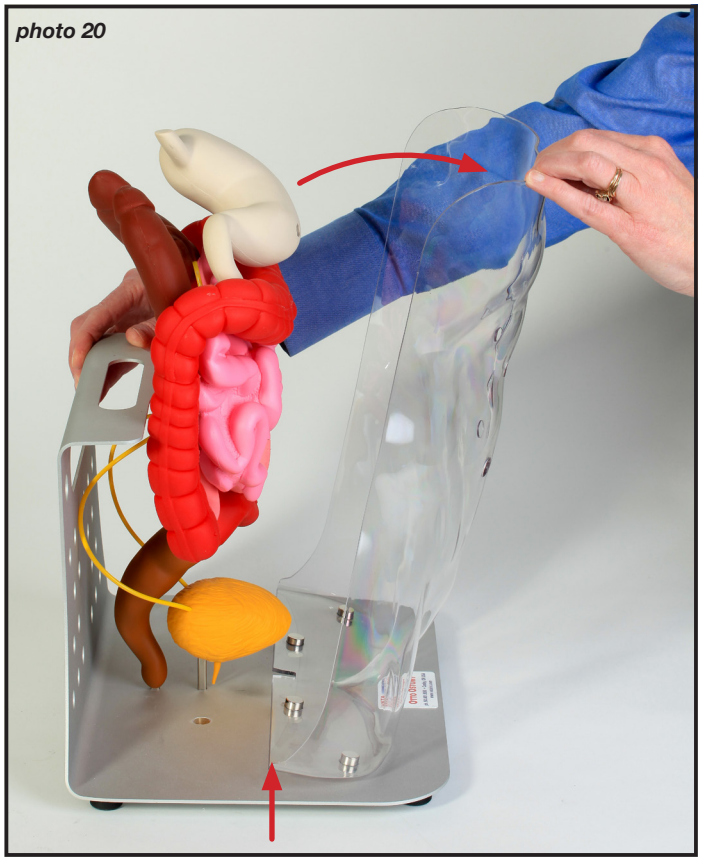
Depending on the stoma selected, it may be easier to initially insert a short length of the stoma's male taper through the hole from the front of the clear torso shell and then pull the taper through the hole from the backside, until the radius of the stoma comes in contact with the torso surface ***(See photo 19)***.

photo 19



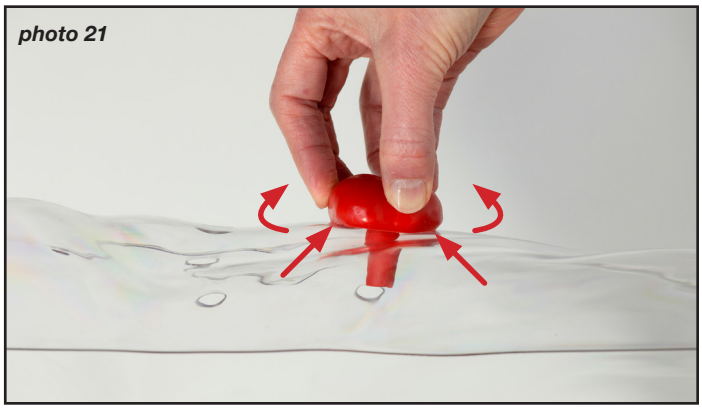
You may also install the stoma with the clear torso shell removed from the metal base. To remove the torso shell, stabilize the metal base and gently pull the top of the torso toward you (when standing in front of the model), approximately 2". This will separate the magnets in the torso base from those in the metal base and permit the clear torso shell to be easily lifted ***(See photo 20)***.

photo 20



With the torso removed, you can lay the torso in a supine position and insert the stoma ***(See photo 21).***

photo 21



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End Ileostomy Simulation, Cont.

To replace the torso to the base, place the torso shell at 90 degrees to the metal base and engage the two outer-most magnets on either side of the torso shell with those in the metal base; this will act as a pivot point later ***(See photo 22)***.

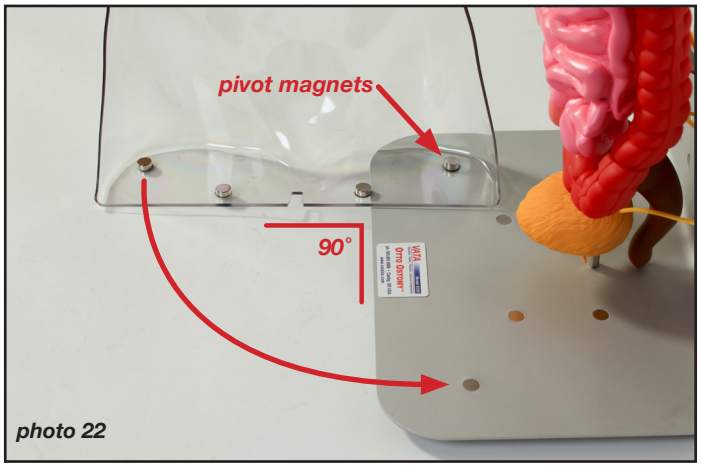

photo 22

The next step is to attach the ***Small Intestine Segment 0341*** to the stoma just placed in the torso shell. Disconnect the distal end of the flexible, pink, small intestine segment where it attaches to the proximal end of the red, ascending large intestine ***(See photo 23)***.


photo 23

As each side of the connection has a magnet, it may take more effort to initiate the separation of the two parts. From the backside of the small intestine, remove this segment from the recessed channel and pull it downward to expose the entire length ***(See photos 24 & 25)***.

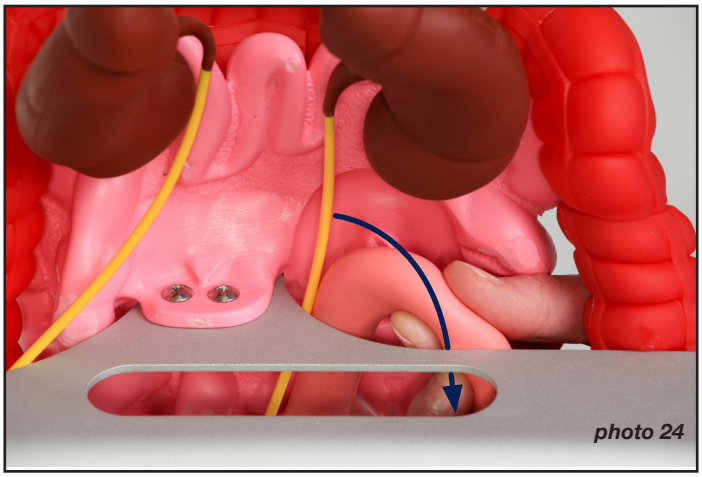
photo 24


photo 25

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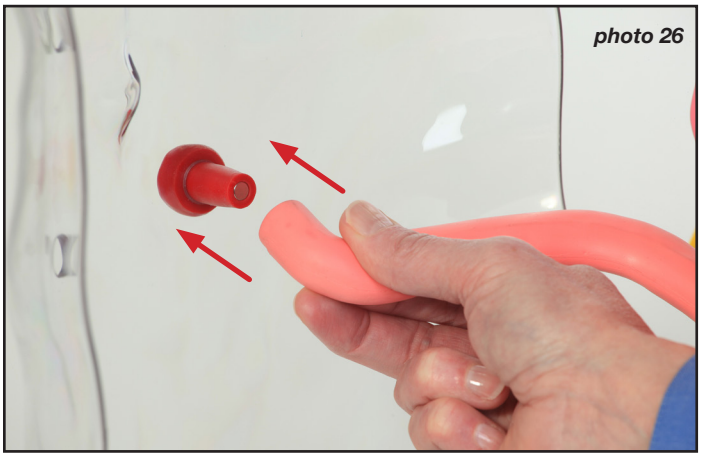
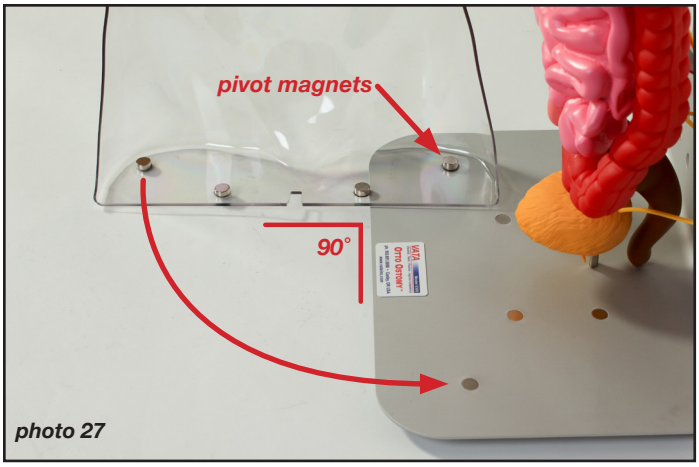
End Ileostomy Simulation, Cont.

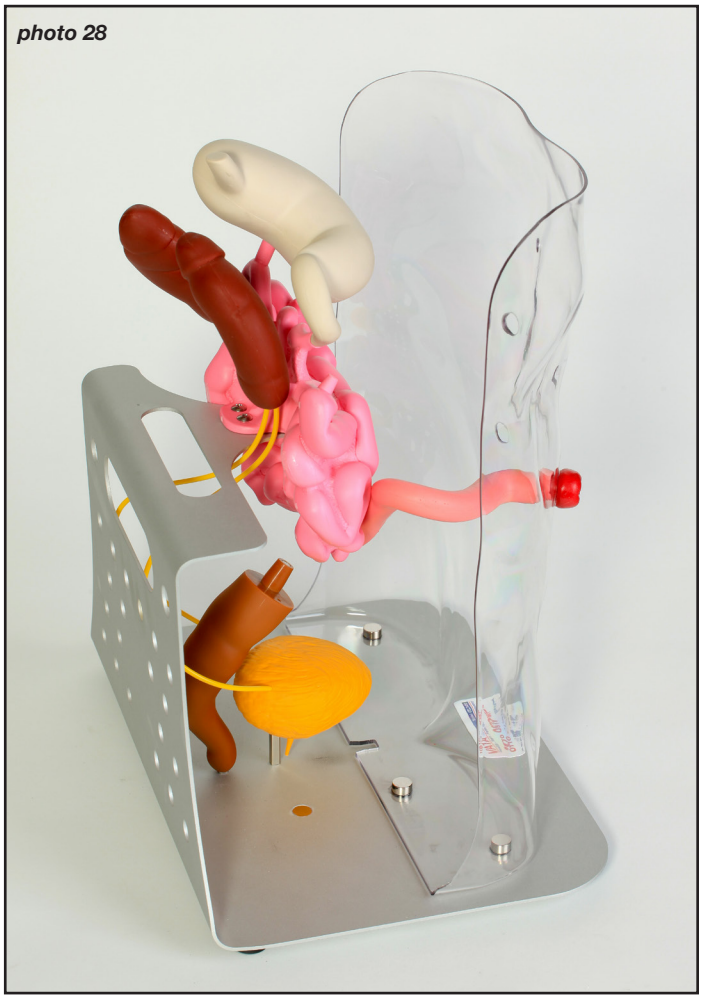
Take the exposed distal end and attach it to the stoma, previously placed in the clear torso shell ***(See photo 26).***



When the two connectors come in close proximity, the magnetic attraction will pull them together and align them properly. If you find you do not have enough length of the small intestine to connect to the stoma, you may need to reposition the stoma to an alternate hole in the torso abdomen. Reversing the ends of this segment may give you more usable length, due to the "S" shape. You can also pivot the torso shell closer to the organs to reduce the length required. After making the connection, you can correctly position the torso shell by closing the opened side of the torso shell with the same type of motion used to close a door, while the torso shell pivots on the two magnets you earlier engaged ***(See photo 27)***.



When the magnets come in close proximity, the magnetic attraction will correctly align and position the torso on the metal base ***(See photo 28)***.



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Loop Ileostomy Simulation

A loop stoma is constructed by bringing a loop of intestine to the abdominal surface and then opening the anterior wall of the intestine to provide fecal diversion. The loop of intestine may open either transversely or longitudinally. This results in a stoma with a proximal and distal opening, with an intact posterior wall. Loop stomas are usually temporary. Select the desired double stoma (***stomas 0314 – 0316***, ***See photo 29)*** from the blue foam stoma board supplied with your ***Otto Ostomy™*** and place it in one of the four ½" holes in the abdomen of the clear torso shell. The stoma is inserted from the front of the clear torso shell and pushed in until the radius of the stoma comes in contact with the torso surface ***(See photo 30)***. ***Please note: The single, smaller, fifth hole, above the four ½" holes in a square design, is for use with a gastrostomy tube and is not large enough to place a stoma (See photo 31).***

For more info on gastrostomies, go to Gastrostomy Simulation, see page 28.

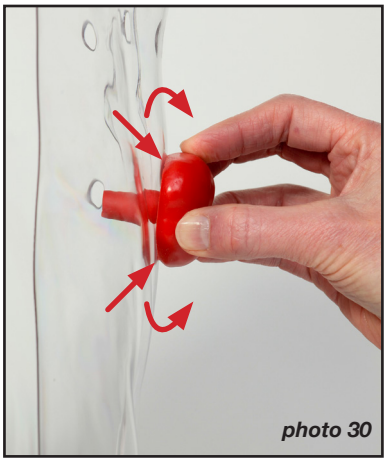


photo 30

A back and forth, twisting motion may be helpful in placing stoma. You will need to support the backside of the top of the torso shell as you push the stoma in from the front. ***Please note: The male taper connector on the backside of the double stomas is not centered, but offset to one side.*** This enables the user more placement options by rotating the stoma until the desired transverse or longitudinal positioning is found ***(See photos 32 & 33)***.

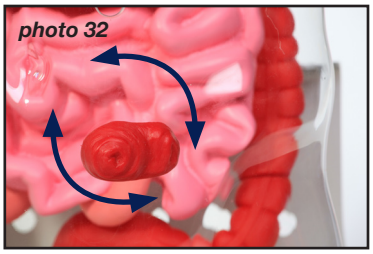


photo 32

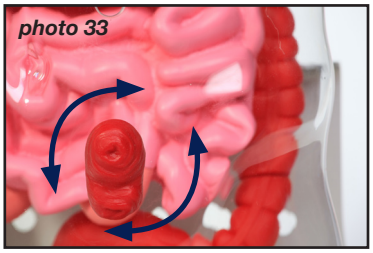
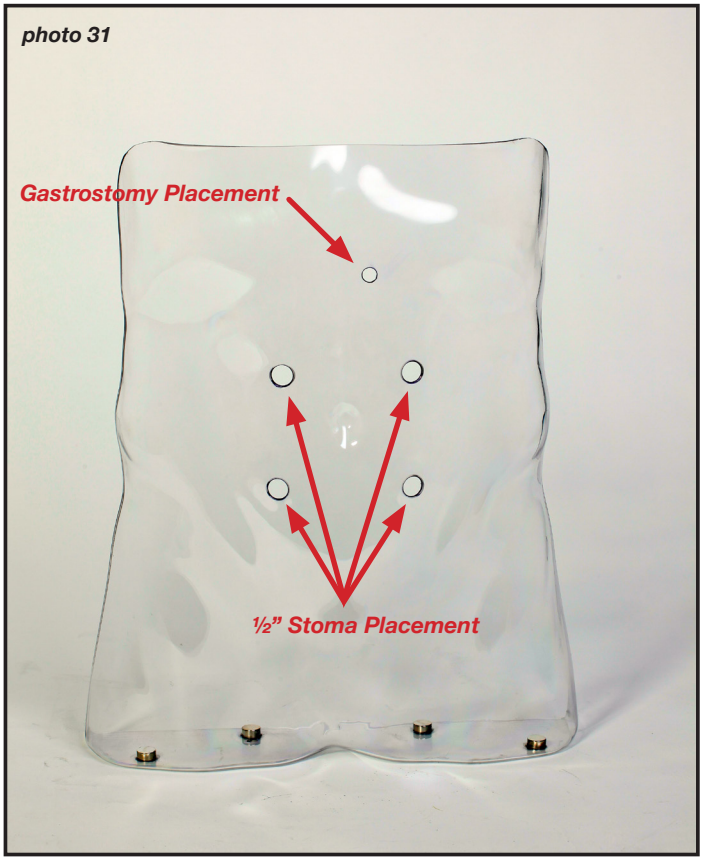


photo 33

photo 29 (See page 3 for details)

photo 31



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Loop Ileostomy Simulation, Cont.

The backsides of all stomas have a male tapered connector design, slightly larger than the hole it is inserted through, that aids in positioning the stoma and holding it in place. The end of the male taper on each stoma has a recessed magnet to insure a secure connection when the intestines are connected to it from the backside. Each male and female taper connection on all the intestinal segments also has a magnet ***(See photos 34 & 35)***.


photo 34

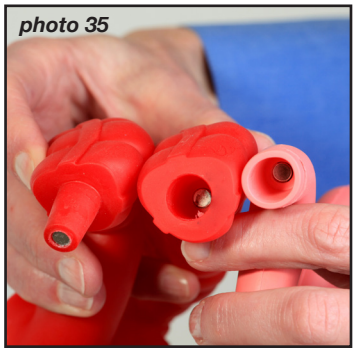


photo 35

Depending on the stoma selected, it may be easier to initially insert a short length of the stoma's male taper through the hole from the front of the clear torso shell and then pull the taper through the hole from the backside, until the radius of the stoma comes in contact with the torso surface ***(See photo 36)***.

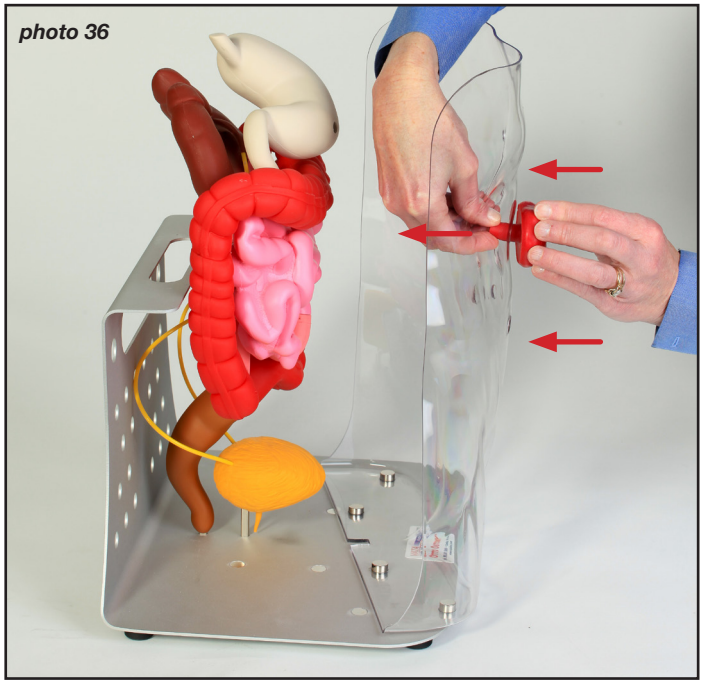


photo 36

You may also install the stoma with the clear torso shell removed from the metal base. To remove the torso shell, stabilize the metal base and gently pull the top of the torso toward you (when standing in front of the model), approximately 2". This will separate the magnets in the torso base from those in the metal base and permit the clear torso shell to be easily lifted ***(See photo 37)***.


photo 37

With the torso removed, you can lay the torso in a supine position and insert the stoma ***(See photo 38).***

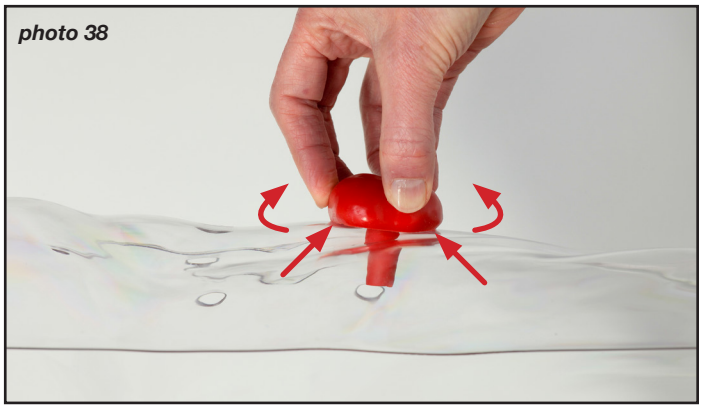


photo 38

Loop Ileostomy Simulation, Cont.

To replace the torso to the base, place the torso shell at 90 degrees to the metal base and engage the two outer-most magnets on either side of the torso shell with those in the metal base; this will act as a pivot point later ***(See photo 39)***.

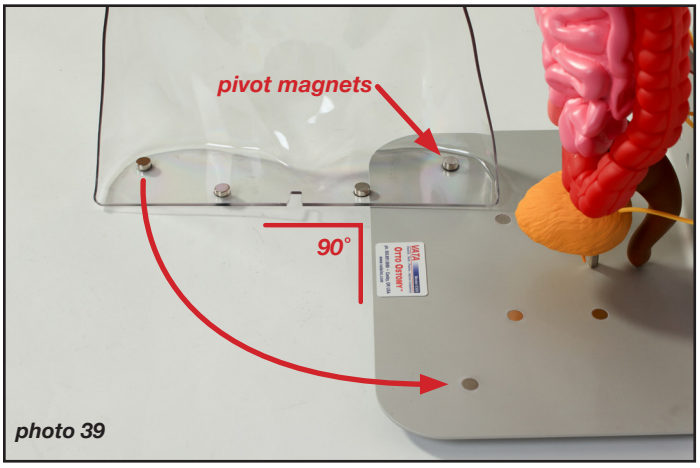


photo 39

As you will be simulating a loop ileostomy, you will need to attach two of the flexible, pink ***Small Intestine Segments 0341*** to the double stoma just placed in the torso shell. First you will need to attach the pink, ***Ileostomy Loop Adapter 0342 (See photo 40)*** to the stoma's male taper connector. Place the opening/hole in the pink male adaptor, over the male taper of the stoma, and push it down until it makes contact with the backside of the clear torso shell. Then rotate the pink, ***Ileostomy Loop Adapter 0342*** until it is hidden behind the double stoma, if viewed from the front of the model ***(See photo 41)***.

photo 41

Loop Adapter in Contact with Torso Shell

Disconnect the distal end of the flexible, pink, ***Small Intestine Segment 0341***, where it attaches to the proximal end of the red, ascending large intestine ***(See photo 42)***.

photo 42

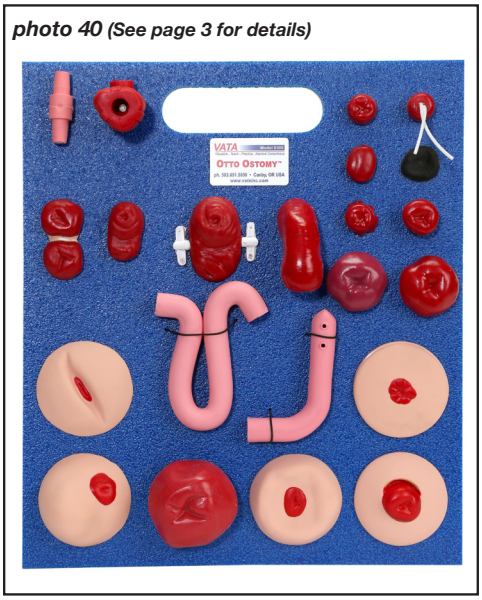


photo 40 ***(See page 3 for details)***

VATA
Realism in Clinical Simulation

Loop Ileostomy Simulation, Cont.

As each side of the connection has a magnet, it may take a bit more effort to initiate the separation of the two parts. From the backside of the small intestine, remove this segment from the recessed channel it is laying in and pull it downward to expose the entire length ***(See photos 43 & 44)***.

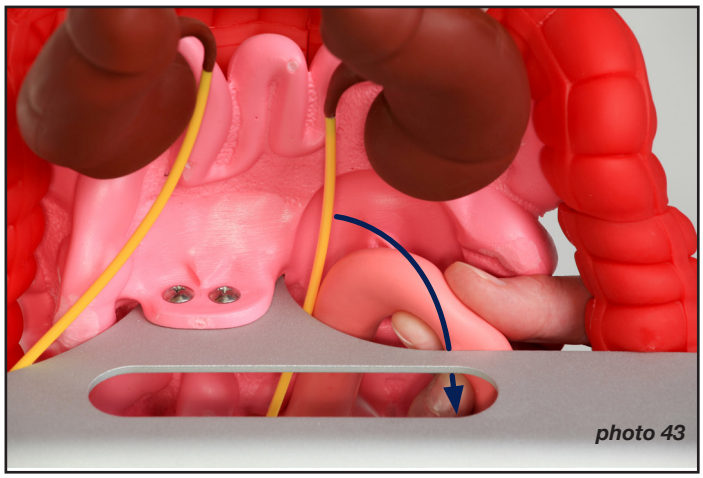


photo 43


photo 44

Take the exposed distal end of the small intestine and attach it to one of the two male taper connectors ***(See photo 45)***.

When the two connectors come in close proximity, the magnetic attraction will pull them together and align them properly. Next, remove the second flexible, pink, ***Small Intestine Segment 0341*** from the blue stoma board ***(See photo 46)***. Attach one end to the male taper connector on the proximal end of the red, ascending intestine, where you just removed the distal end of the small intestine ***(See photo 47)***.


photo 45

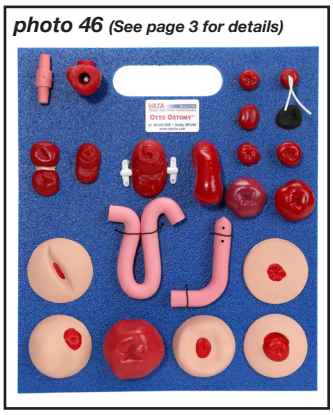


photo 46 *(See page 3 for details)*

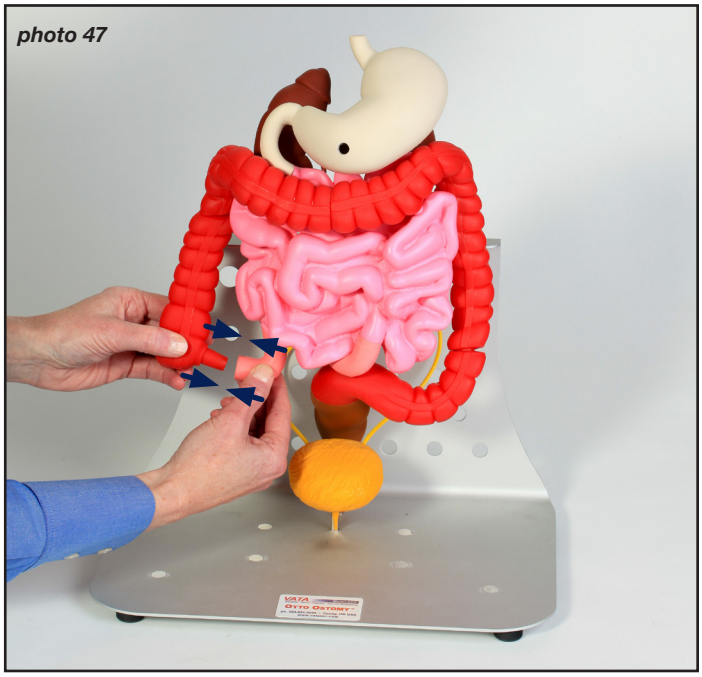


photo 47

VATA
Realism in Clinical Simulation

Loop Ileostomy Simulation, Cont.

Take the other end and attach it to the remaining stoma male taper ***(See photo 48)***.

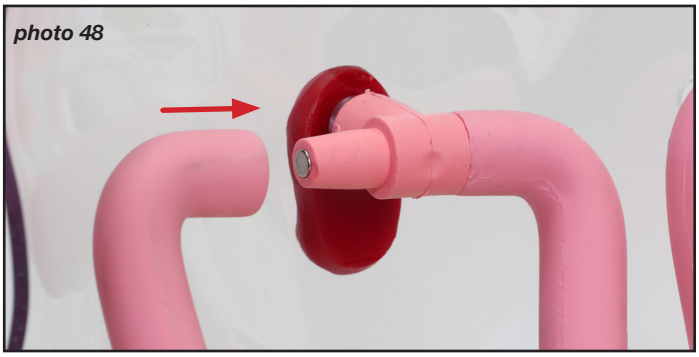


photo 48

If you find you do not have enough length for the ***Small Intestine Segment 0341*** to connect to the stoma, you may need to reposition the stoma to an alternate hole in the torso abdomen. Reversing the ends of one or both of the flexible, pink, ***Small Intestine Segment 0341*** may give you more usable length due to the "S" shape. You can also pivot the torso shell closer to the organs to reduce the length required. After making the connection, you can position the torso shell correctly by closing the opened side of the torso shell in the same type of motion used to close a door, while the torso shell pivots on the two magnets you earlier engaged ***(See photo 49)***.

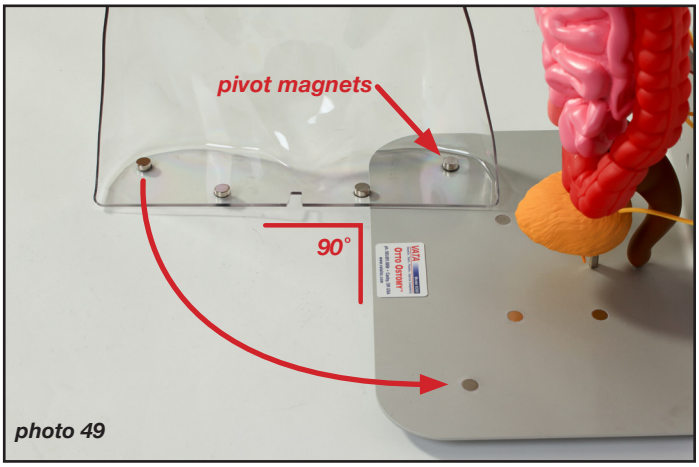


photo 49

When the magnets come in close proximity, the magnetic attraction will correctly align and position the torso ***(See photo 50)***.


photo 50

VATA
Realism in Clinical Simulation

End Colostomy Simulation

An end stoma is constructed by dividing the intestine and bringing out the proximal end as a single stoma through the abdomen. Select the desired single stoma from the blue foam stoma board supplied with your ***Otto Ostomy™ (See photos 51)*** and place it in one of the four ½" holes in the abdomen of the clear torso shell. The stoma is inserted from the front of the clear torso shell and pushed in until the radius of the stoma comes in contact with the torso surface ***(See photo 52)***. ***Please note: The single, smaller, fifth hole, above the four ½" holes in a square design, is for use with a gastrostomy tube and is not large enough to place a stoma (See photo 53)***.

For more info on gastrostomies, go to Gastrostomy Simulation, see page 28.

photo 51 *(See page 3 for details)*

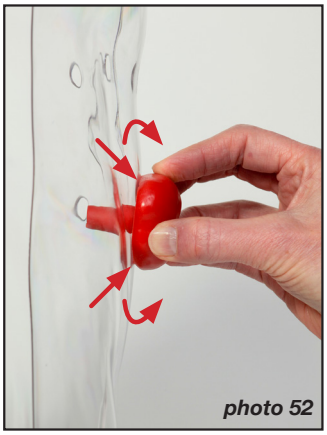
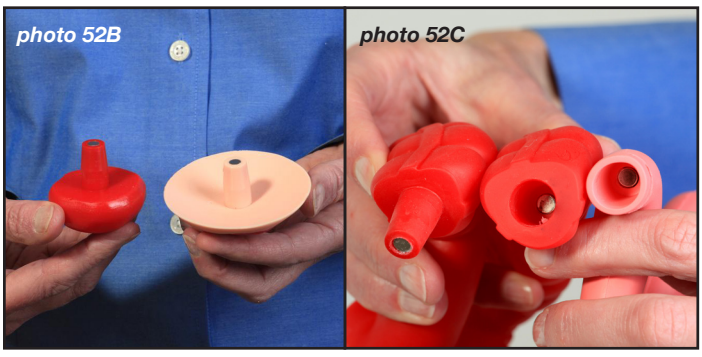


photo 52

A back and forth, twisting motion may be helpful in placing stoma. You will need to support the backside of the top of the torso shell as you push the stoma in from the front. The backsides of all stomas have a male tapered connector design, slightly larger than the hole it is inserted through, that aids in positioning the stoma and holding it in position. The end of the male taper on each stoma has a recessed magnet to insure a secure connection when the intestines are connected to it from the backside. The end of the male taper on each stoma has a recessed magnet to insure a secure connection when the intestines are connected to it from the backside.



Each male and female taper connection on all the intestinal segments also has a magnet ***(See photos 52B & 52C)***.

Depending on the stoma selected, it may be easier to initially insert a short length of the stoma's male taper through the hole from the front of the clear torso shell and then pull the taper through the hole from the backside, until the radius of the stoma comes in contact with the torso surface ***(See photo 54)***.

photo 53

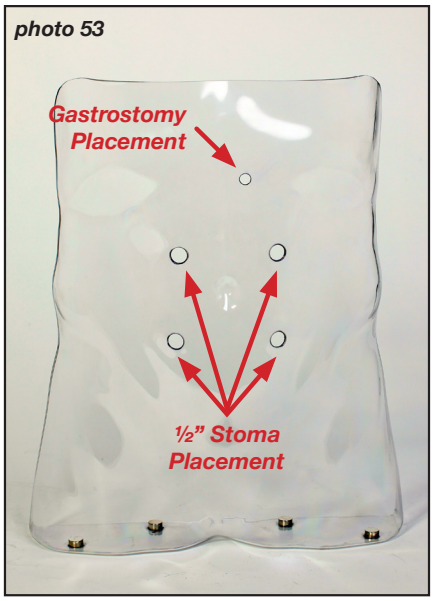
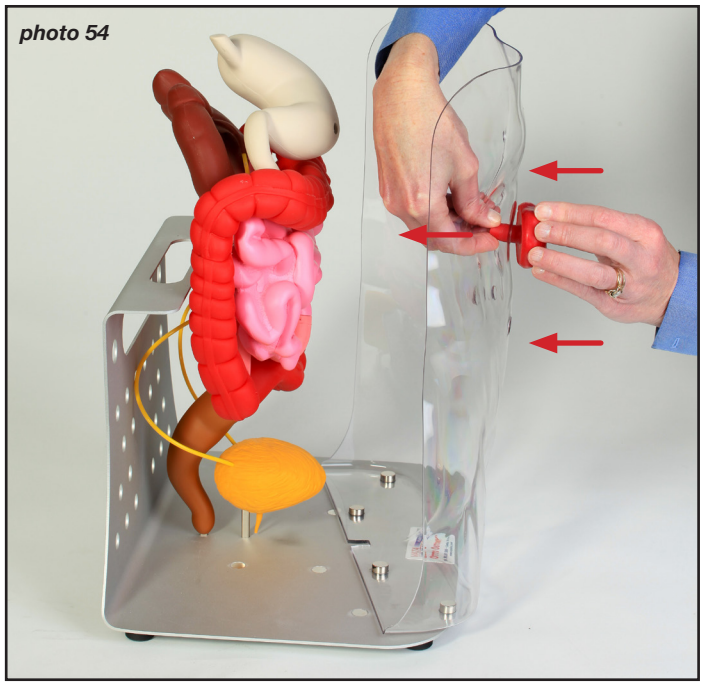


photo 54



VATA
Realism in Clinical Simulation

End Colostomy Simulation, Cont.

You may also install the stoma with the clear torso shell removed from the metal base. To remove the torso shell, stabilize the metal base and gently pull the top of the torso toward you (when standing in front of the model), approximately 2". This will separate the magnets in the torso base from those in the metal base and permit the clear torso shell to be easily lifted ***(See photo 55)***.


photo 55

With the torso removed, you can lay the torso in a supine position and insert the stoma ***(See photo 56)***.

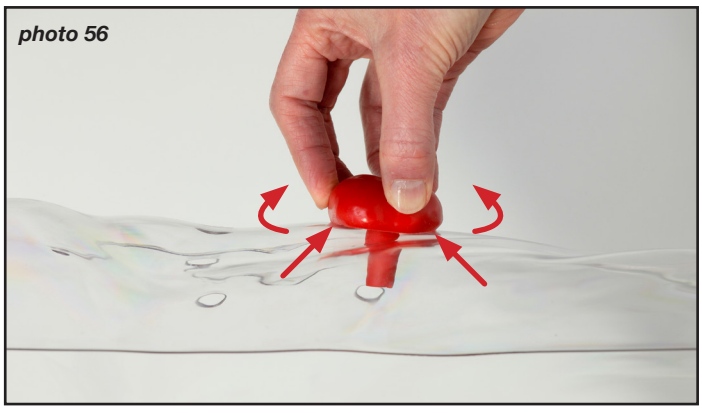


photo 56

To replace the torso to the base, place the torso shell at 90 degrees to the metal base and engage the two outer-most magnets on either side of the torso shell with those in the metal base; this will act as a pivot point later ***(See photo 57)***.

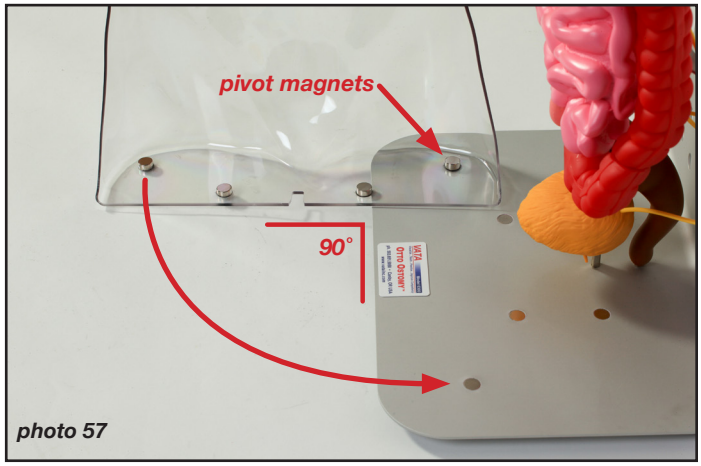


photo 57

The next step is to attach a segment of the red, large intestine to the stoma just placed in the torso shell. The red, large intestine can be separated at the following 5 locations:

1. Where the flexible, pink, ***Small Intestine Segment 0341*** connects to the proximal end of the red, ascending intestine
2. In the mid-ascending large intestine
3. In the mid-transverse large intestine
4. In the mid-descending large intestine
5. At the junction of the sigmoid intestine and the rectum

(See photo 58)

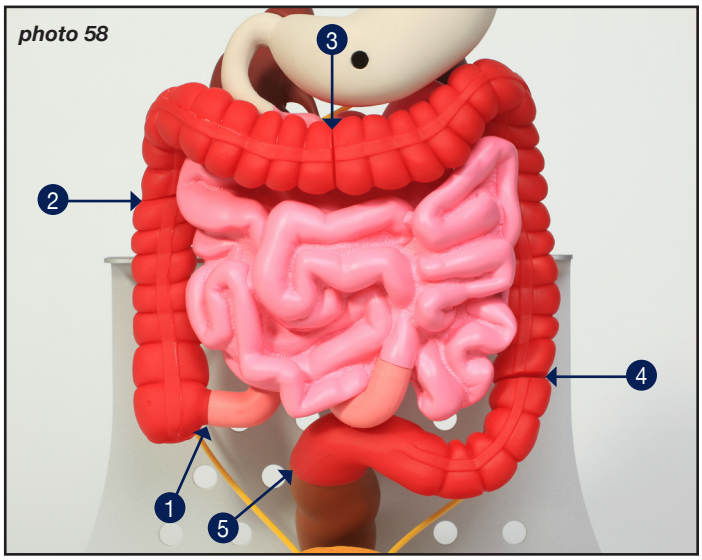


photo 58

End Colostomy Simulation, Cont.

The four large intestinal segments are joined by a female taper connection with magnet, at the distal end and a male taper connection with magnet, at the proximal end.

To separate the red, large intestinal segments, locate the desired disconnection point, grasp each side and pull apart. It may take more effort to initiate the separation, as you disengage the contact between the magnets ***(See photo 59)***.

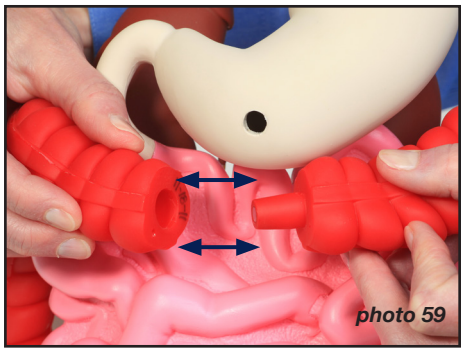


photo 59

Take the exposed female taper connection from the separation point and connect to the male taper connector of the stoma previously placed in the clear torso shell ***(See photo 60)***.

When the two connectors come in close proximity, the magnetic attraction will pull them together and align them properly. In most simulations you will need to separate the large intestine from the small intestine to reach the stoma.

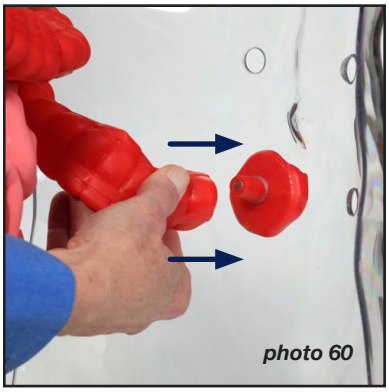


photo 60

Please note: The red, large transverse intestine is held in place on the pink, small intestine mass at each end by resting on round pegs extending up from the small intestine – there are corresponding recesses on the red, large intestines into which the round pegs fit. To free the red, large transverse intestine, lift the ends of the transverse intestine up approximately ¼" to clear the peg and pull it forward ***(See photo 61)***.

You can either leave the segments of the red, large intestine, distal to where the separation was made, attached to the model or remove them completely – this includes the rectum, depending on the simulation you wish to present ***(See photo 62)***.

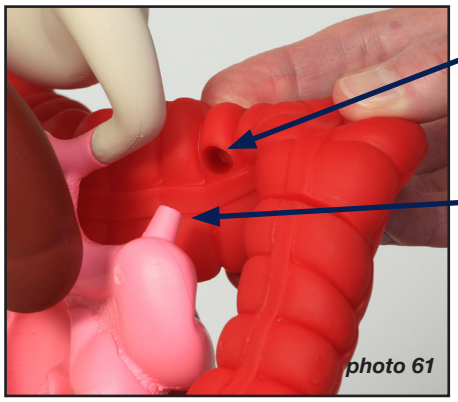


photo 61


photo 62

VATA
Realism in Clinical Simulation

End Colostomy Simulation, Cont.

If you find you do not have enough length of the large intestine to connect to the stoma, you may need to reposition the stoma to an alternate hole in the torso abdomen. You can also pivot the torso shell closer to the organs to reduce the length required. After making the connection, you can correctly position the torso shell by closing the opened side of the torso shell with the same type of motion used to close a door, while the torso shell pivots on the two magnets you earlier engaged ***(See photo 63)***.

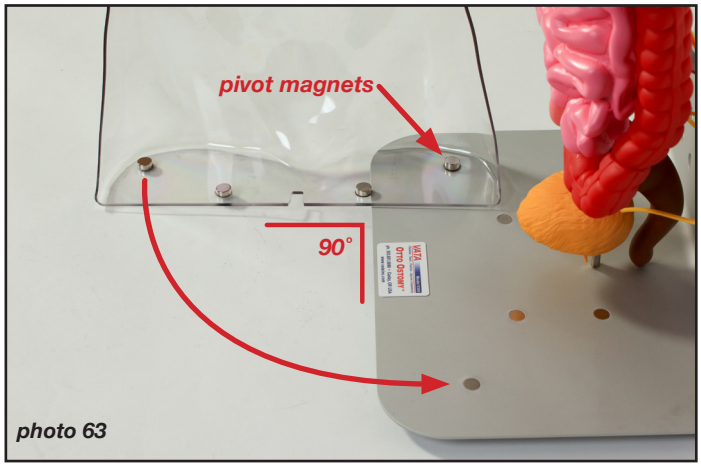


photo 63

When the magnets come in close proximity, the magnetic attraction will correctly align and position the torso ***(See photo 64)***.

photo 64

VATA
Realism in Clinical Simulation

Loop Colostomy Simulation

A loop stoma is constructed by bringing a loop of intestine to the abdominal surface and then opening the anterior wall of the intestine to provide fecal diversion. The loop of intestine may open either transversely or longitudinally. This results in a stoma with a proximal and distal opening and an intact posterior wall. Loop stomas are usually temporary. Select the desired double stoma (***stomas 0314 – 0316***, ***See photo 65)***, from the blue foam stoma board supplied with your ***Otto Ostomy™*** and place it in one of the four ½" holes in the abdomen of the clear torso shell. The stoma is inserted from the front of the clear torso shell and pushed in until the radius of the stoma comes in contact with the torso surface ***(See photo 66)***. A back and forth, twisting motion may be helpful in placing stoma. You will need to support the backside of the top of the torso shell as you push the stoma in from the front. ***Please note: The single, smaller, fifth hole, above the four ½" holes in a square design, is for use with a gastrostomy tube and is not large enough to place a stoma (See photo 67)***.

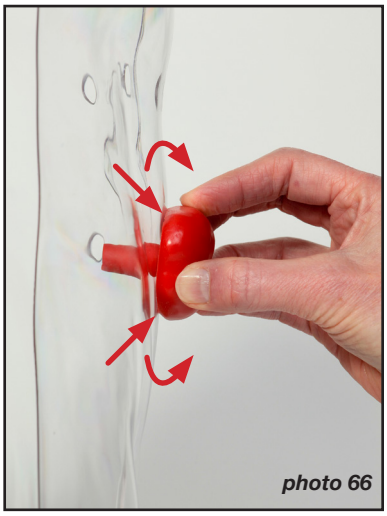


photo 66

For more info on gastrostomies, go to Gastrostomy Simulation, see page 28.

Please note: The male taper connector on the backside of the double stoma is not centered, but offset to one side. This enables the user more placement options by rotating the stoma until the desired transverse or longitudinal positioning is found ***(See photos 68 & 69)***.

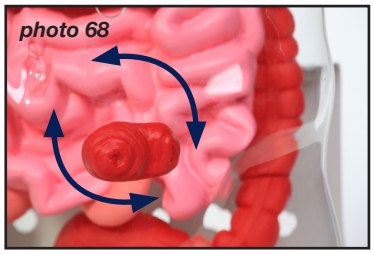


photo 68

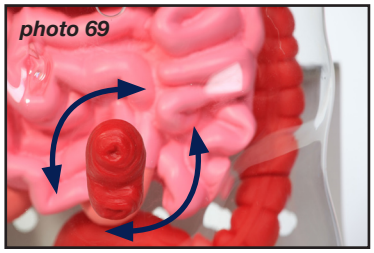
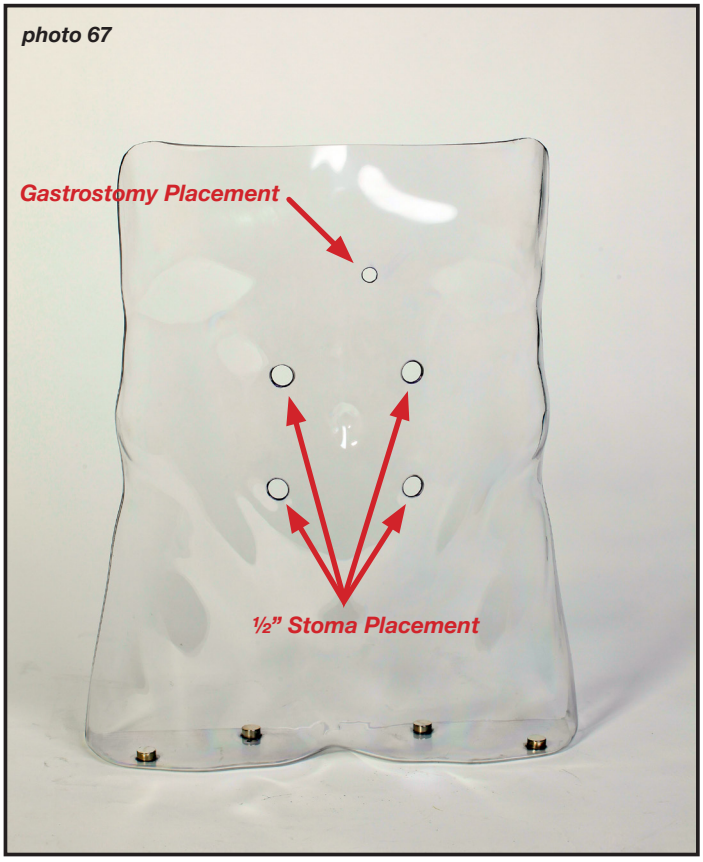


photo 69

photo 65 (See page 3 for details)

photo 67



VATA
Realism in Clinical Simulation

Loop Colostomy Simulation, Cont.

The backsides of all stomas have a male tapered connector design, slightly larger than the hole it is inserted through, that aids in positioning the stoma and holding it in position. The end of the male taper on each stoma has a recessed magnet to insure a secure connection when the intestines are connected to it from the backside. Each male and female taper connection on all the intestinal segments also has a magnet ***(See photos 70 & 71)***.

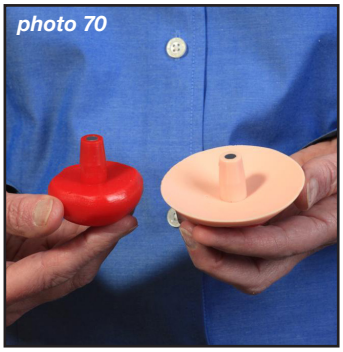


photo 70

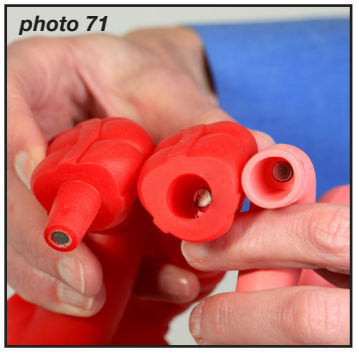


photo 71

Depending on the stoma selected, it may be easier to initially insert a short length of the stoma's male taper through the hole from the front of the clear torso shell and then pull the taper through the hole from the backside, until the radius of the stoma comes in contact with the torso surface ***(See photo 72)***.

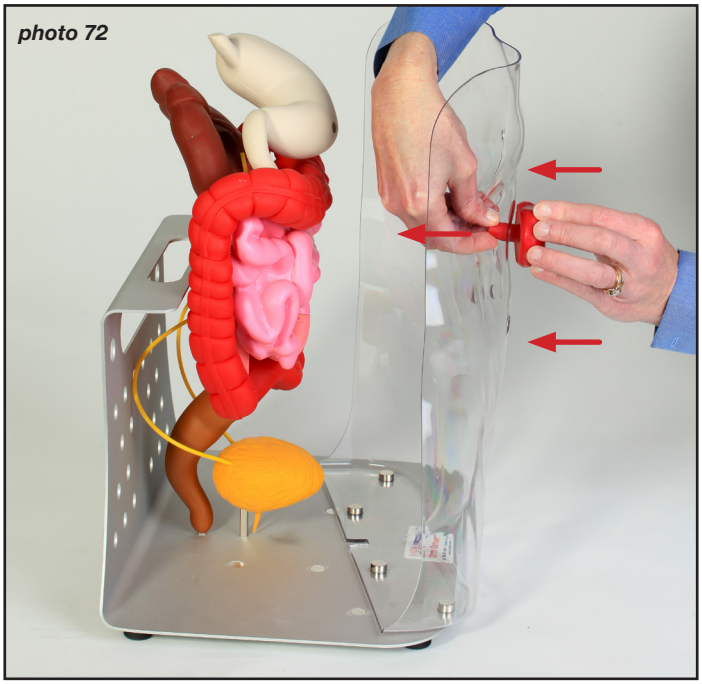


photo 72

You may also install the stoma with the clear torso shell removed from the metal base. To remove the torso shell, stabilize the metal base and gently pull the top of the torso toward you (when standing in front of the model), approximately 2". This will separate the magnets in the torso base from those in the metal base and permit the clear torso shell to be easily lifted ***(See photo 73)***.

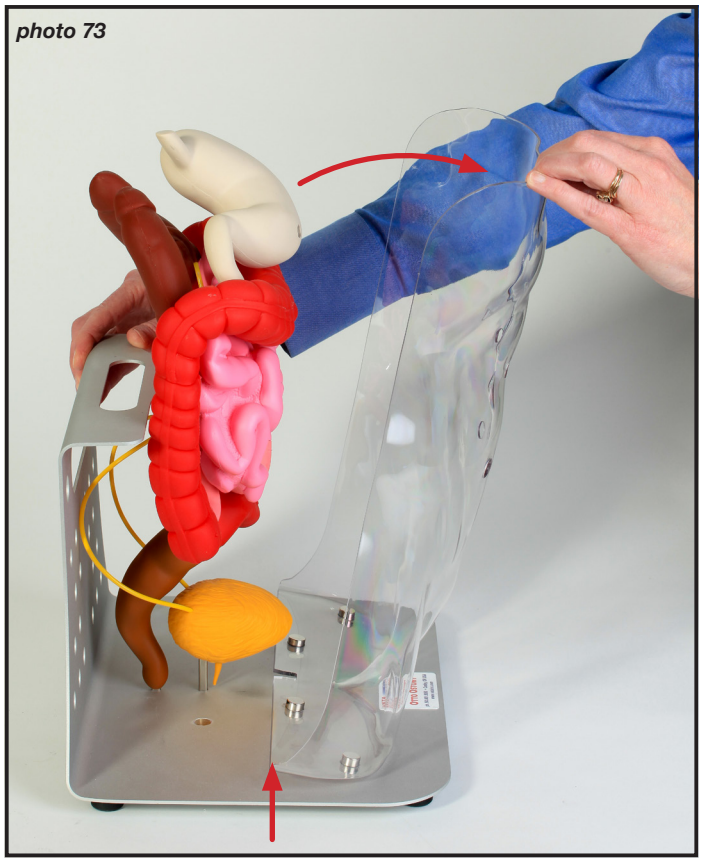


photo 73

With the torso removed, you can lay the torso in a supine position and insert the stoma ***(See photo 74)***.

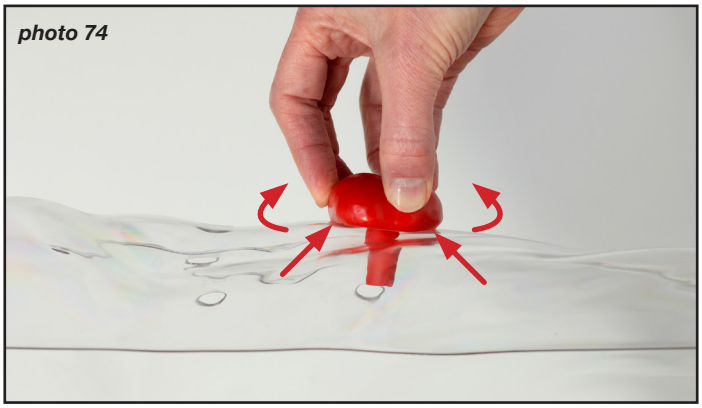


photo 74

Loop Colostomy Simulation, Cont.

To replace the torso to the base, place the torso shell at 90 degrees to the metal base and engage the two outer-most magnets on either side of the torso shell with those in the metal base; this will act as a pivot point later ***(See photo 75)***.

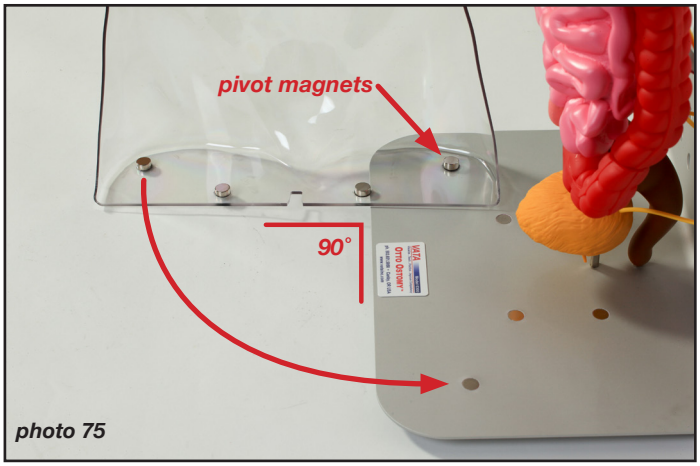


photo 75

As you will be simulating a loop colostomy, you will need to attach two of the red, large intestinal segments to the double stoma just placed in the torso shell. First you will need to attach the red, ***Colostomy Loop Adapter 0343 (See photo 76)*** to the stoma's male taper connector for this purpose. Place the opening hole in the red, ***Colostomy Loop Adapter 0343*** over the male taper of the stoma and push it down until it makes contact with the backside of the clear torso shell. Then rotate the red ***Colostomy Loop Adapter 0343*** until it is hidden behind the double stoma if viewed from the front of the model ***(See photo 77)***.

photo 76 ***(See page 3 for details)***

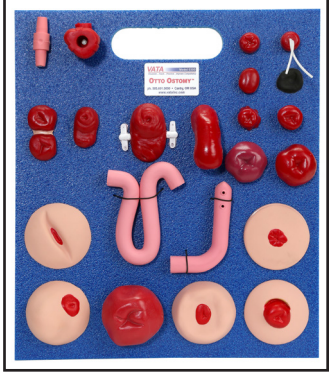


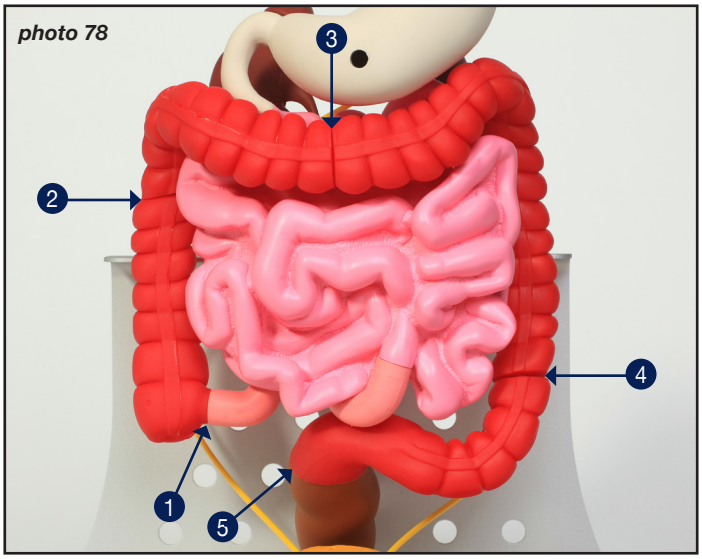
photo 77

The next step is to attach two segments of the red, large intestines to the stoma male taper connector and the red, female adapter connector on the backside of the clear torso shell. The red, large intestine can be separated at the following 5 locations:

1. Where the flexible, pink, ***Small Intestine Segment 0341*** connects to the proximal end of the red, ascending intestine
2. In the mid-ascending large intestine
3. In the mid-transverse large intestine
4. In the mid-descending large intestine
5. At the junction of the sigmoid intestine and the rectum

(See photo 78)

photo 78



The four large intestinal segments are connected by a female taper connection with magnets at the distal end and a male taper connection with magnets at the proximal ends. To separate the red, large intestinal segments, locate the desired disconnection point, grasp each side and pull apart. It may take more effort to initiate the separation, as you disengage the contact between the magnets ***(See photo 79)***.

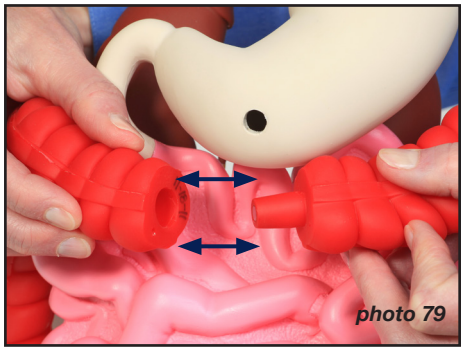


photo 79

VATA
Realism in Clinical Simulation

Loop Colostomy Simulation, Cont.

Once the separation is made, you will have an exposed male taper connection and a female taper connection. Attach these to the corresponding connectors on the stoma and the red ***Colostomy Loop Adapter 0343*** previously placed in the clear torso shell ***(See photos 80, 81 & 82).***


photo 80

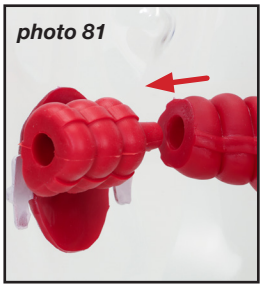


photo 81

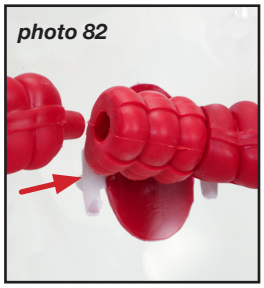


photo 82

When the two connectors come in close proximity, the magnetic attraction will pull them together and align them properly. In most simulations you will need to separate the large intestine from the small intestine to reach the stoma.

Please note: The red, large transverse intestine is held in place on the pink, small intestine at each end by resting on round pegs extending up from the small intestines – there are corresponding recesses on the red, large intestine into which the round pegs fit. To free the red, large transverse intestine, lift the ends of the transverse intestine up approximately ¼" to clear the peg and pull it forward ***(See photo 83)***.

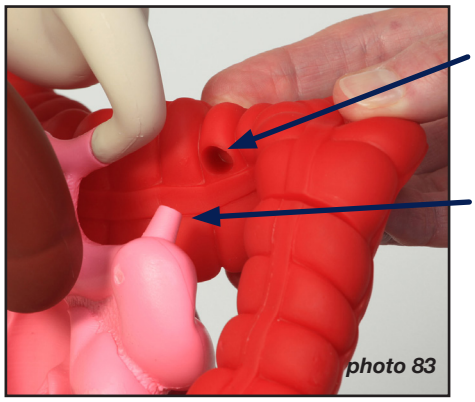


photo 83

If you find you do not have enough length of the large intestine to connect to the stoma, you may need to reposition the stoma to an alternate hole in the torso abdomen. You can also pivot the torso shell closer to the organs to reduce the length required. After making the connection, you can correctly position the torso shell by closing the opened side of the torso shell with the same type of motion used to close a door, while the torso shell pivots on the two magnets you earlier engaged ***(See photo 84)***.

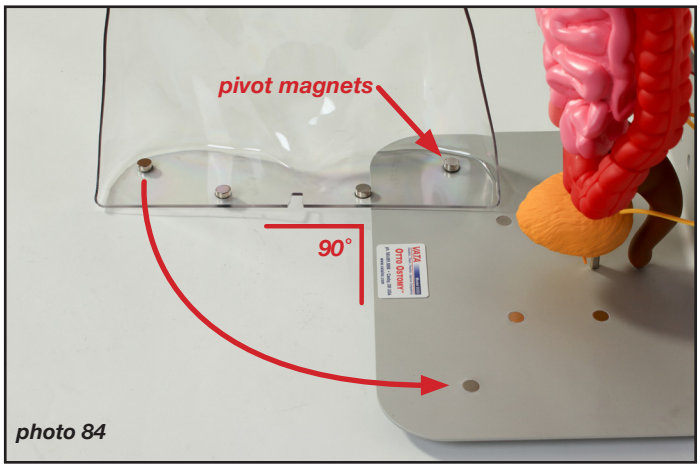


photo 84

When the magnets come in close proximity, the magnetic attraction will correctly align and position the torso ***(See photo 85)***.


photo 85

VATA
Realism in Clinical Simulation

Urostomy Simulation

The most commonly performed urinary diversion is the ileal conduit. A segment of the ileum is resected and the proximal end closed. The distal segment is brought through the abdominal wall as a stoma. The ureters are removed from the bladder and are anastomosed to the ileal conduit. For this simulation select the ***Urostomy Stoma with Stents 0313*** from the blue foam stoma board supplied with your ***Otto Ostomy™ (See photo 86)***. Place it in one of the four ½" holes in the abdomen of the clear torso shell. The stoma is inserted from the front of the clear torso shell and pushed in until the radius of the stoma comes in contact with the torso surface ***(See photo 87***). A back and forth, twisting motion may be helpful in placing stoma. You will need to support the backside of the top of the torso shell as you push the stoma in from the front. ***Please note: The single, smaller, fifth hole, above the four ½" holes in a square design, is for use with a gastrostomy tube and is not large enough to place a stoma (See photo 88)***.

For more info on gastrostomies, go to Gastrostomy Simulation, see page 28.

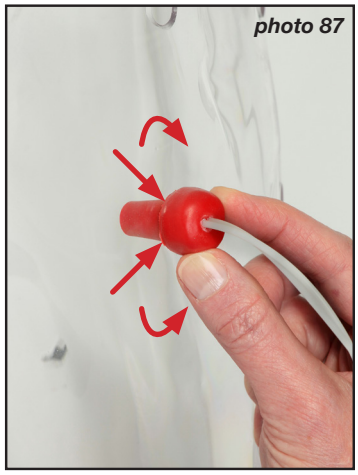


photo 87

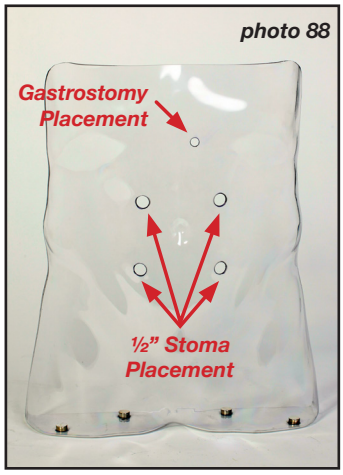


photo 88

The backsides of all stomas have a male tapered connector design, slightly larger than the hole it is inserted through, that aids in positioning the stoma and holding it in position. The end of the male taper on the stoma has a recessed magnet to insure a secure connection when the pink, ***Ileal Conduit 0340 (See photo 86)*** is connected to it from the backside. You may also install the stoma with the clear torso shell removed from the metal base. To remove the torso shell, stabilize the metal base and gently pull the top of the torso toward you (when standing in front of the model), approximately 2". This will separate the magnets in the torso base from those in the metal base and permit the clear torso shell to be easily lifted ***(See photo 89)***.

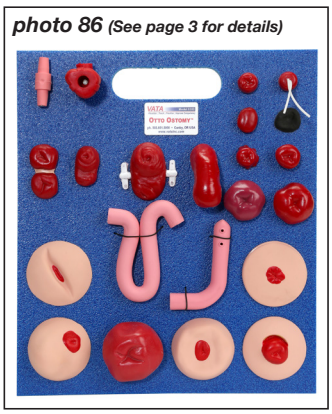


photo 86 *(See page 3 for details)*


photo 89

With the torso removed, you can lay the torso in a supine position and insert the stoma ***(See photo 90)***.

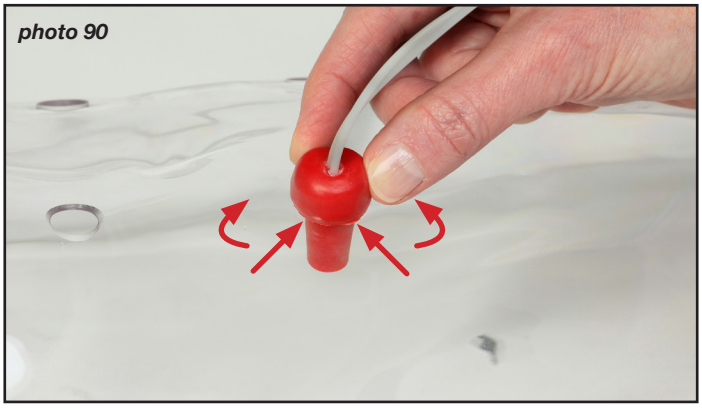


photo 90

VATA
Realism in Clinical Simulation

Urostomy Simulation, Cont.

To replace the torso to the base, place the torso shell at 90 degrees to the metal base and engage the two outer-most magnets on either side of the torso shell with those in the metal base; this will act as a pivot point later ***(See photo 91)***

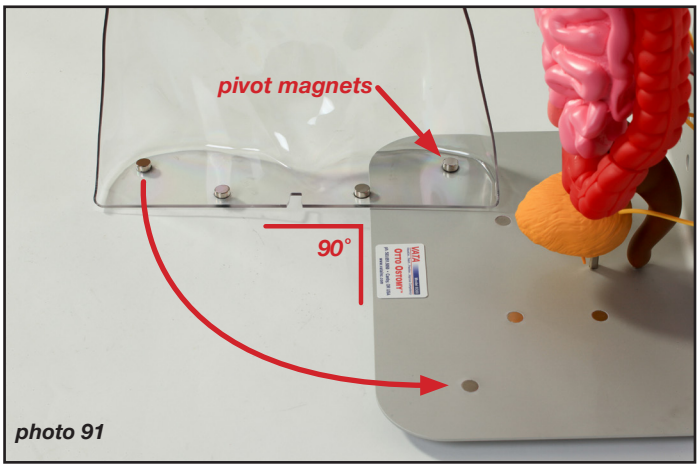


photo 91

Remove the yellow ureters from the yellow bladder. To remove the yellow ureters, grasp one of the ureters with two fingers where it enters the bladder, lift up approximately 3/8" to remove and let hang ***(See photo 92)***. Repeat for second ureter. ***Please note: The ureters are not removable from the kidneys***.

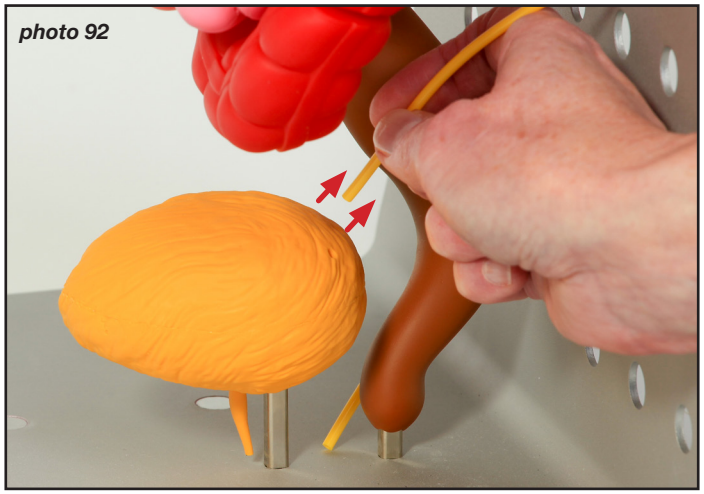


photo 92

The yellow bladder is removable for a simulation where the bladder has been removed, or it can be left in place. The bladder has a magnet inside to help keep it in contact with the metal post, attached to the metal base of the model. To remove the bladder, grasp the bladder and lift up approximately ½". It may take more effort to initiate the separation, as you disengage the contact between the magnets in the bladder and the metal post ***(See photo 93)***.

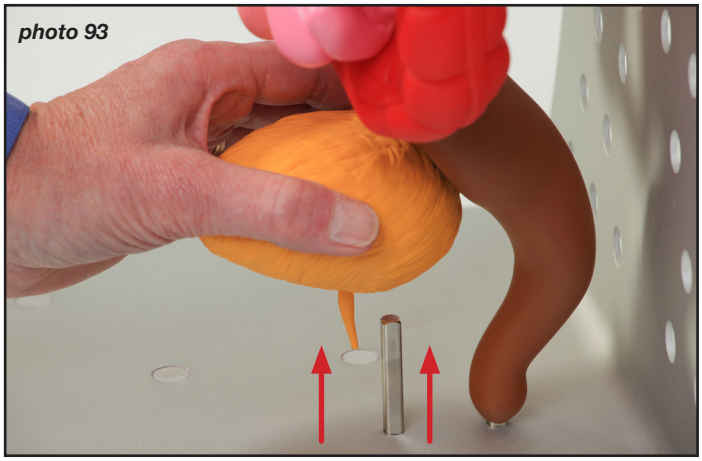


photo 93

To replace the bladder, reverse the process.

Next take the pink, ***Ileal Conduit 0340 (See photo 94)*** and attach it to the male taper of the Urostomy stoma previously placed in the clear torso shell ***(See photo 95)***.

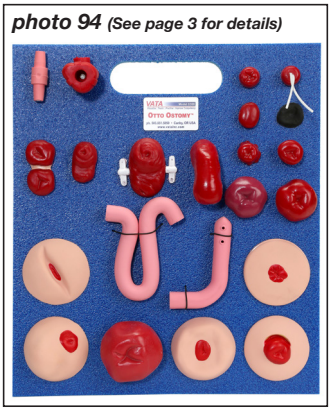


photo 94 *(See page 3 for details)*

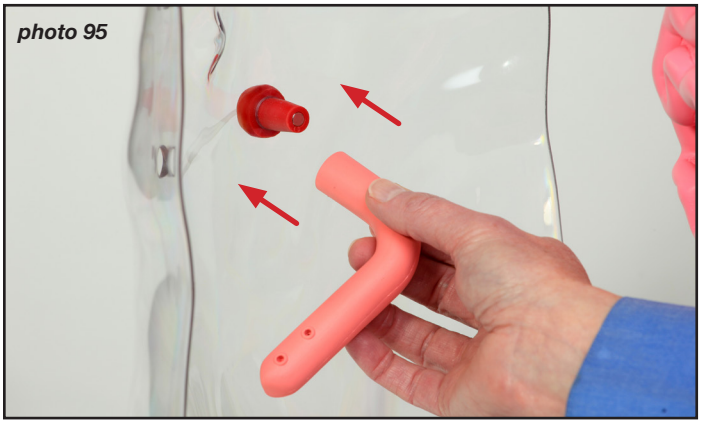


photo 95

VATA
Realism in Clinical Simulation

Urostomy Simulation, Cont.

Please note that each side of the ileal conduit has two small openings into which you will be placing the two, now disconnected, ureters. Thread the previously disconnected ureters under the pink small intestine and insert the distal ends into the two small holes on either side of the ileal conduit. The purpose of having holes on both sides of the ileal conduit is so that the ureters can be inserted from either side ***(See photo 96)***.

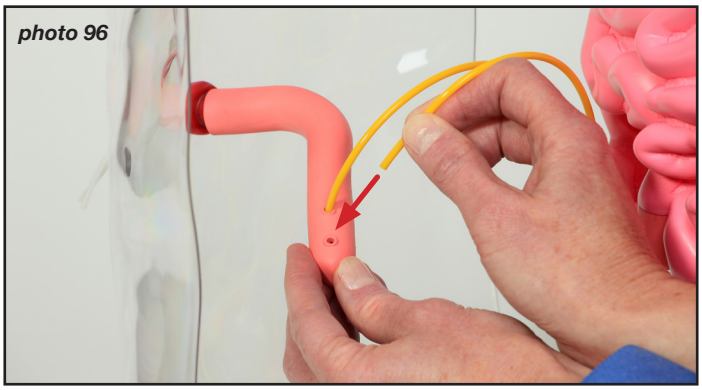


photo 96

After making the connection, you can position the torso shell in the correct location by closing the opened side of the torso shell in the same type of motion used to close a door, while the torso shell pivots on the two magnets you earlier engaged ***(See photo 97)***.

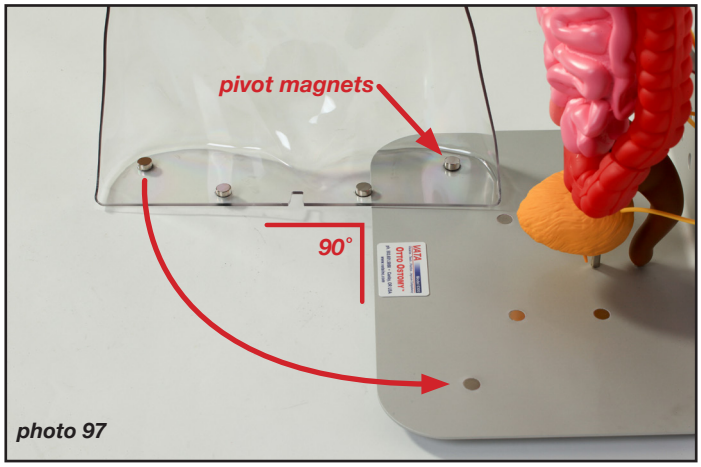


photo 97

When the magnets come in close proximity, the magnetic attraction will correctly align and position the torso ***(See photo 98)***.

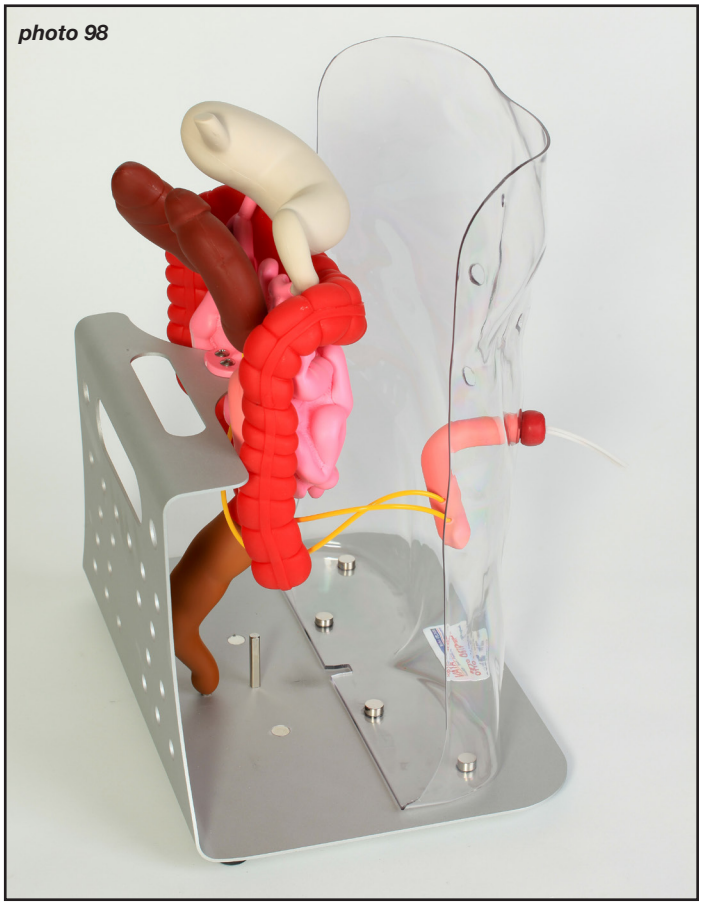


photo 98

VATA
Realism in Clinical Simulation

Gastrostomy Tube Simulation

Gastrostomy tube simulation is possible on ***Otto Ostomy™***. The model is designed to work with a 20Fr gastrostomy tube with a deflated retention cuff, to pass through the torso shell and into the opening in the stomach ***(See photo 99)***. ***Please note: The single smaller hole, above the four ½" holes in a square design in the torso abdomen, is for use with a gastrostomy tube.***

Normally the set of four magnets in the torso base are positioned over the four magnets in the metal base to correctly position and keep the torso in place. For this simulation the torso shell will need to first be moved back, bringing the clear torso shell closer to the stomach. You will be aligning the set of two magnets closest to the back edge of the torso to the two magnets closest to the vertical section at the back of the metal base ***(See photo 100 & 101)***.

photo 99

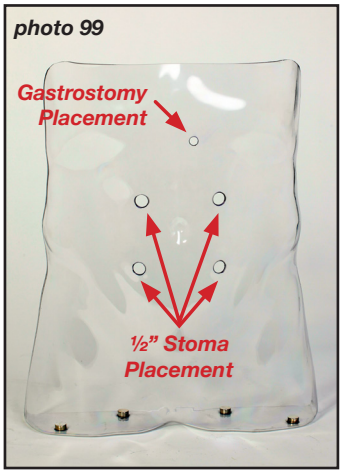


photo 100

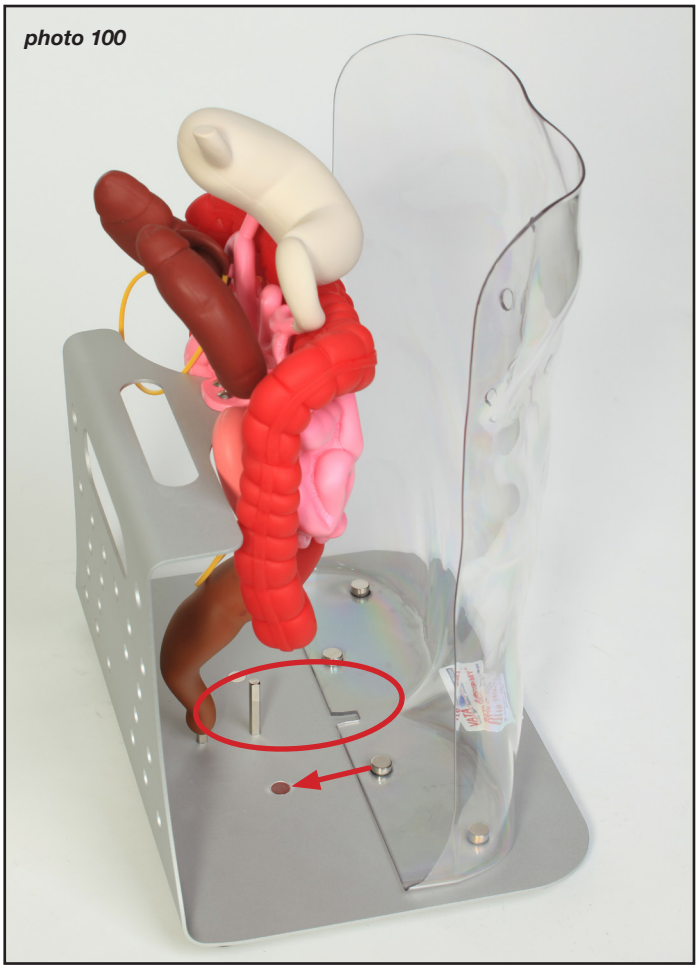
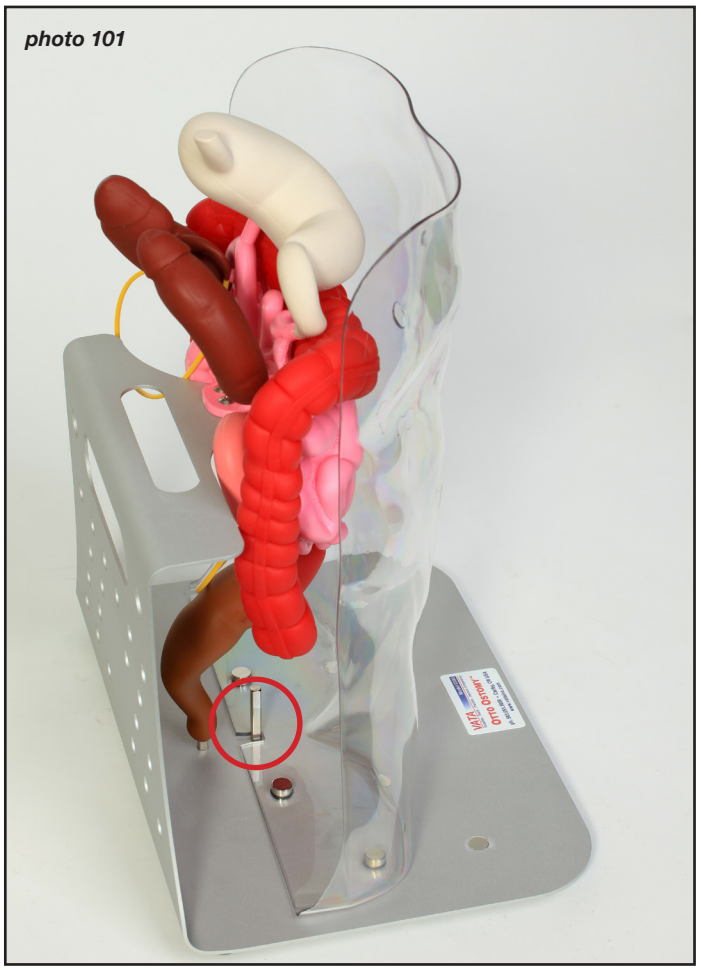


photo 101



VATA
Realism in Clinical Simulation

Gastrostomy Tube Simulation, Cont.

You may find it is easier to reposition the torso shell further back by removing it from the base. To remove the clear torso shell, stabilize the metal base and gently pull the top of the torso toward you (when standing in front of the model), approximately 2". This will separate the magnets in the torso base from those in the metal base and permit the clear torso shell to be easily lifted ***(See photo 102)***.


photo 102

To replace the torso on the metal base, hold the torso shell slightly above the metal base and align the two magnets closest to the back of the base with the two magnets closest to the vertical section of the metal base. A cutout in the center of the clear torso shell base allows for easier repositioning of the base. You are not able to position the torso shell too far back as the cutout will make contact with the metal post for the bladder and prevent further movement ***(See photo 103)***.

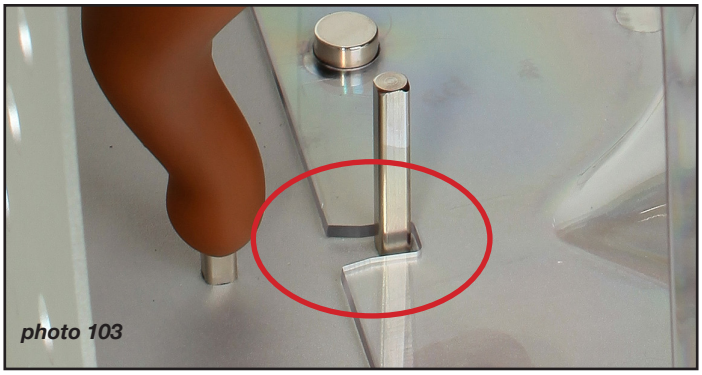


photo 103

Once the torso shell has been repositioned closer to the stomach, the gastrostomy tube can be inserted and the retention cuff inflated, to complete the simulation ***(See photos 104 & 105)***. Reverse the process to resume normal use.

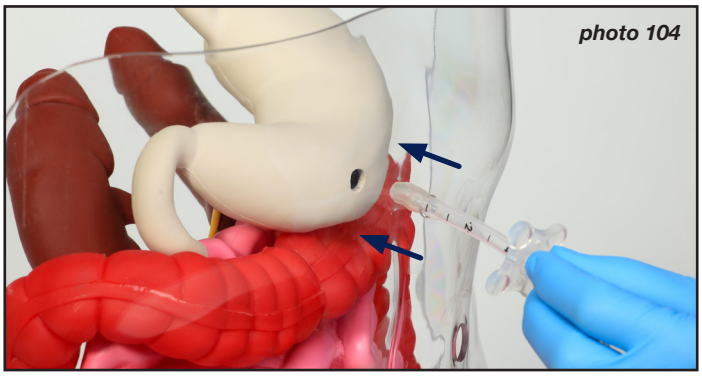


photo 104

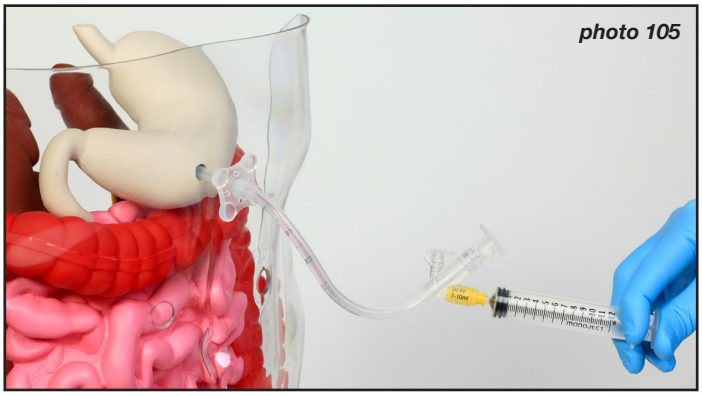


photo 105

VATA
Realism in Clinical Simulation

Ureterosigmoidostomy Simulation

Ureterosigmoidostomy is the surgical implantation of the ureters in the distal sigmoid intestine where the elimination of both urine and stool is then controlled by the anal sphincter.

For this simulation, remove the torso shell by stabilizing the metal base and gently pulling the top of the torso toward you (when standing in front of the model), approximately 2". This will separate the magnets in the torso base from those in the metal base and permit the clear torso shell to be easily lifted ***(See photo 106)***.

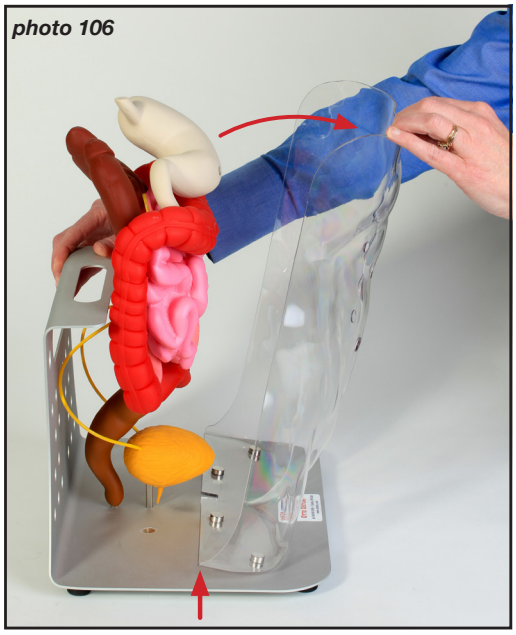


photo 106

Then place the torso shell at 90 degrees to the metal base and engage the two outer-most magnets on either side of the torso shell with those in the metal base, this will act as a pivot point later ***(See photo 107)***.

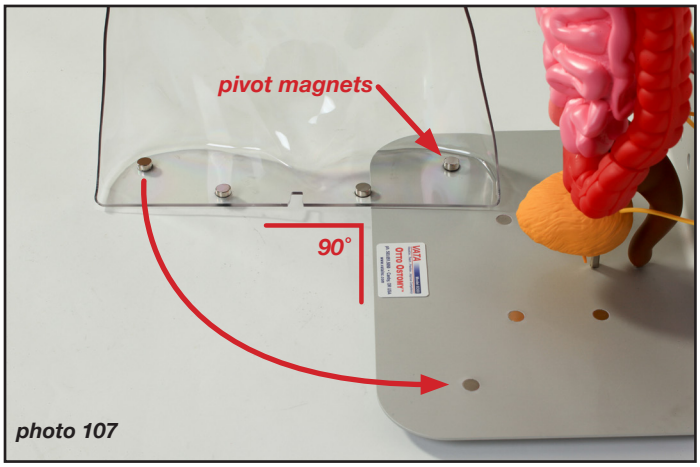


photo 107

Remove the yellow ureters from the bladder by grasping one of the ureters with two fingers where it enters the bladder, lift up approximately 3/8" to remove and let hang. Repeat for second ureter ***(See photo 108)***. ***Please note: The ureters are not removable from the kidneys***.

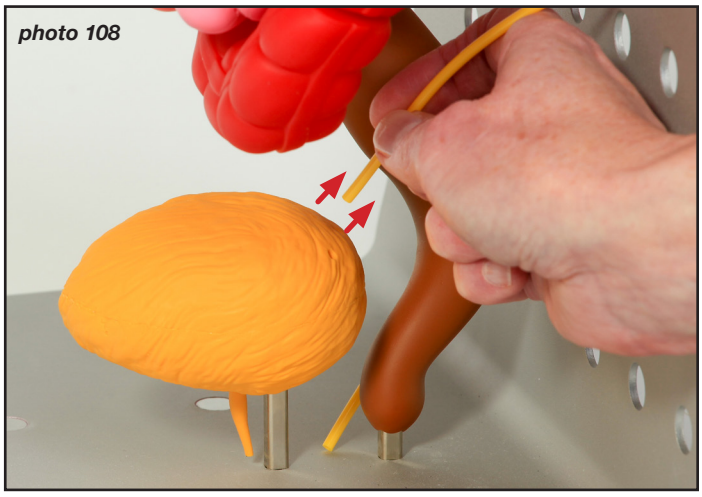


photo 108

The yellow bladder will then need to be removed. The bladder has a magnet inside to help keep it in contact with the metal post, attached to the metal base of the model. To remove the bladder, grasp the bladder and lift up approximately ½". It may take more effort to initiate the separation, as you disengage the contact between the magnet in the bladder and the metal post ***(See photo 109)***.

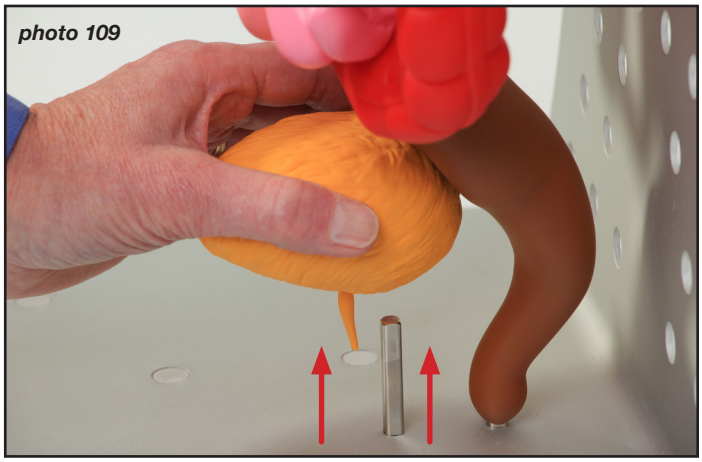


photo 109

VATA
Realism in Clinical Simulation

Ureterosigmoidostomy Simulation, Cont.

Remove the distal end of the sigmoid intestine from the top of the brown rectum, by lifting the distal end up and to the side. Insert the two yellow ureters into the two holes on the distal posterior end of the sigmoid ***(See photo 110)***.

Re-attach the distal end of the sigmoid intestine to the top of the rectum ***(See photo 112)***.

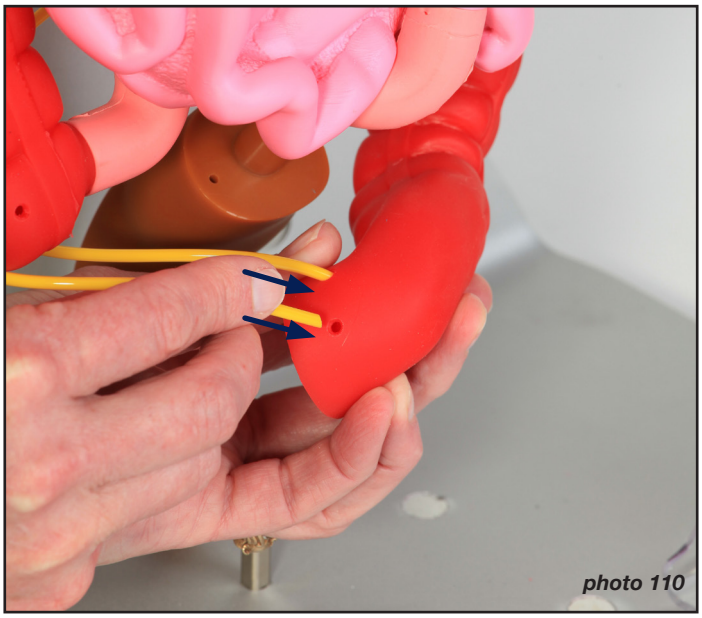


photo 110

After making the connection, you can position the torso shell in the correct location by closing the opened side of the torso shell in the same type of motion used to close a door, while the torso shell pivots on the two magnets you earlier engaged ***(See photo 111)***.

When the magnets come in close proximity, the magnetic attraction will correctly align and position the torso.

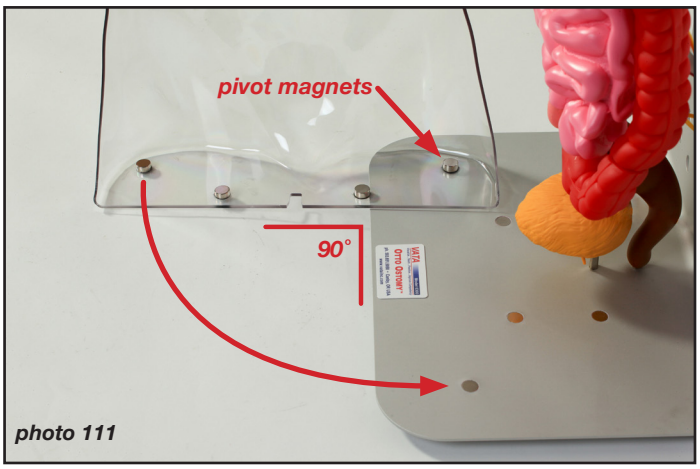


photo 111

photo 112

VATA
Realism in Clinical Simulation

Tube Cecostomy Simulation

For this simulation, remove the torso shell by stabilizing the metal base and gently pull the top of the torso toward you (when standing in front of the model), approximately 2". This will separate the magnets in the torso base from those in the metal base and permit the clear torso shell to be easily lifted ***(See photo 113)***.


photo 113

Then place the torso shell at 90 degrees to the metal base and engage the two outer-most magnets on either side of the torso shell with those in the metal base; this will act as a pivot point later ***(See photo 114)***.

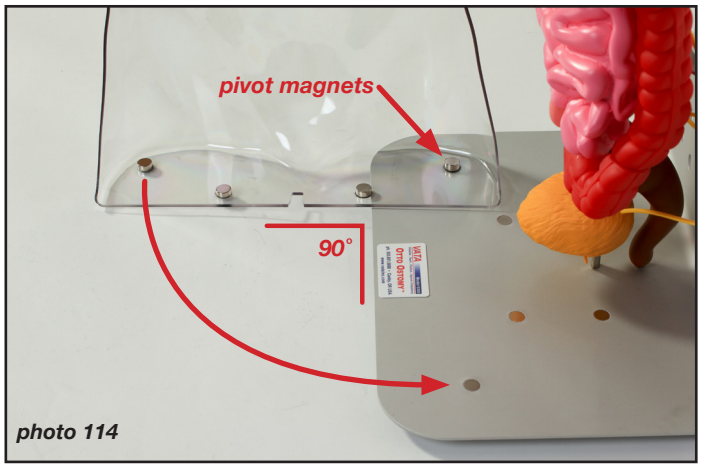


photo 114

Feed the distal end of the cecostomy tube into the hole on the superior, proximal section of the ascending intestine ***(See photo 115***).

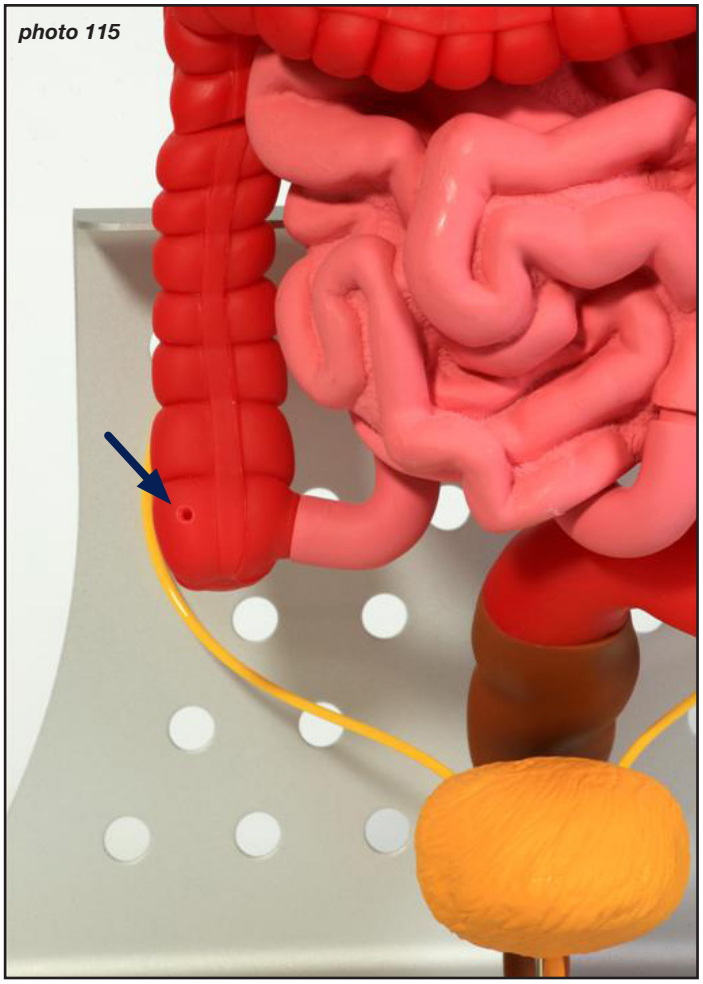


photo 115

After inserting the tube, start closing the opened side of the torso shell in the same type of motion used to close a door, while the torso shell pivots on the two magnets you earlier engaged.

When the torso shell is almost closed, feed the proximal end of the tube through the lower left hole in the abdomen (as viewed standing in front of the model), ***(See photo 116)***.

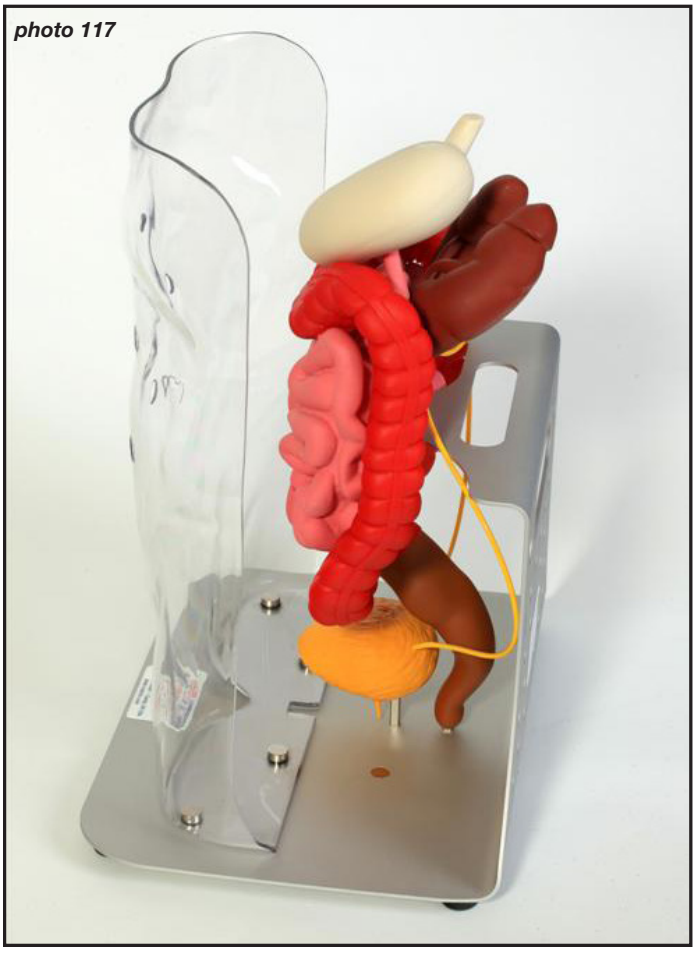
photo 116

VATA
Realism in Clinical Simulation

Tube Cecostomy Simulation, Cont.

When the magnets in the clear torso shell come in close proximity to the magnets in the metal base, the magnetic attraction will correctly align and position the torso ***(See photo 117)***.

photo 117



VATA
Realism in Clinical Simulation

Removing and Replacing the Yellow Ureters from the Yellow Bladder

The yellow ureters are removable from the yellow bladder. To remove the yellow ureters, grasp one of the ureters with two fingers where it enters the bladder and lift up approximately 3/8" and let hang. Repeat for second ureter ***(See photo 118)***. ***Please note: The ureters are not removable from the kidneys***. To replace ureters, reverse this process.

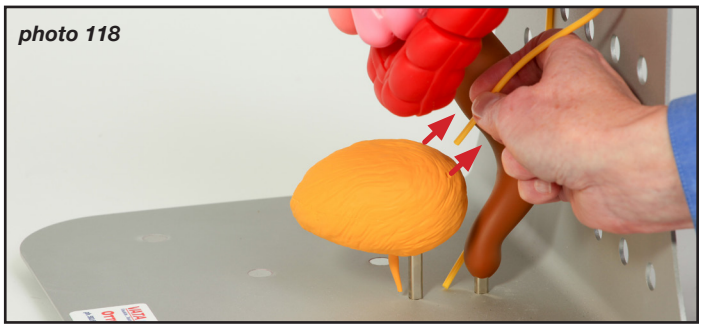


photo 118

Removing and Replacing the Yellow Bladder

The yellow bladder is removable for a simulation where the bladder is removed. The bladder has a magnet inside to help keep it in contact with the metal post, attached to the metal base of the model. To remove the bladder, grasp the bladder and lift up approximately ½". It may take more effort to initiate the separation, as you disengage the contact between the magnet in the bladder and the metal post ***(See photo 119)***. To replace the bladder, reverse the process.

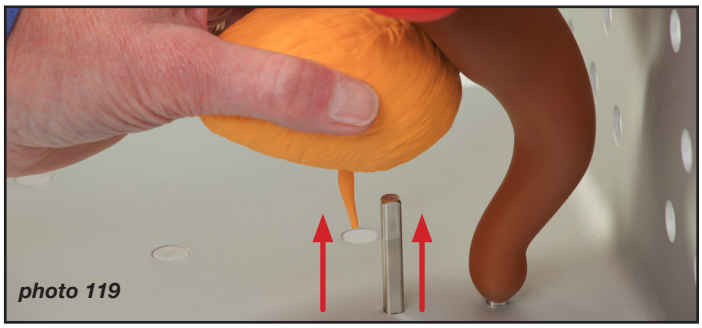


photo 119

Removing and Replacing the Brown Rectum

The brown rectum is removable. Remove the distal end of the red sigmoid from the top of the rectum by grasping and pulling the connection apart. It may take more effort to initiate the separation, as you disengage the contact between the magnets.

Once the sigmoid intestine has been removed, you can lift the rectum approximately 5/8", to clear the metal post and remove the rectum. To replace the rectum, reverse the process ***(See photo 120)***.

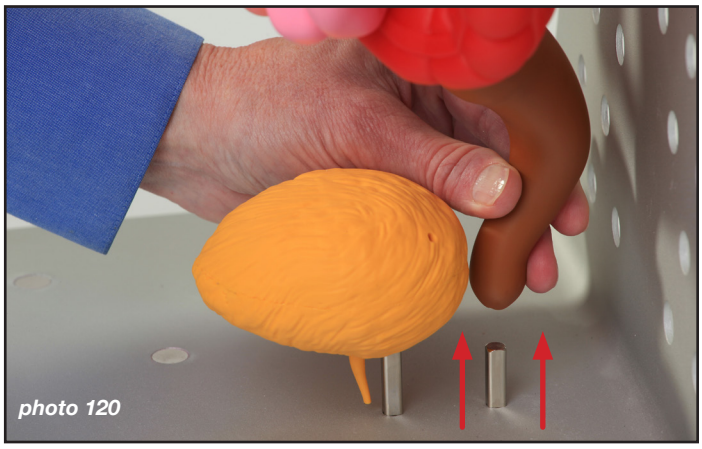


photo 120

Care and Cleaning of Otto Ostomy™

- The organs, stomas, clear torso shell and metal base can be cleaned using soapy water.
- Do not use any abrasive cleanser or cloth on the clear torso shell or it may scratch.
- Ballpoint pen will stain the various parts.

VATA
Realism in Clinical Simulation

Replacement Parts for Otto Ostomy™

For the past 25 years, ***VATA, Inc.*** has made a commitment to provide cost efficient products with a long, usable life. We are continuing this commitment with ***Otto Ostomy™.*** All parts on this model are available separately..

Item #	*Description*
0310	***Otto Ostomy™ Advanced Model*** Includes anodized aluminum base, clear torso shell with five openings for stoma placement and gastrostomy tube, stomach, small intestine, four large intestine segments, rectum, kidneys, ureters, bladder, ileal conduit, two small intestine segments, ileostomy loop adapter, colostomy loop adapter, eighteen stomas: 7/8" Diameter Stoma, 2" Diameter, Urostomy with 3" Stents, Loop with Rod, Loop without Rod, Double Barrel, Oval, Mushroom, Prolapsed, 3" Diameter, Granuloma, Necrotic, Ischemic, In-Skin-Fold, Parastomal Hernia, Mucocutaneous Separation, Recessed, and Flush, foam stoma storage board, and user manual. 16.25" X 10" X 16" (41.2cm X 25cm X 40.6cm) Ship Wt. 18 lbs. (8165 g)
0305	***Otto Ostomy™ Advanced Stoma Package - Replacement*** Includes the following items: Eighteen stomas: 7/8" diameter 0311, 2" diameter 0312, Urostomy with 3" stents 0313, Loop with rod 0314, Loop without rod 0315, Double Barrel 0316, Oval 0319, Mushroom 0320, Prolapsed 0321, 3" diameter, Granuloma 0323, Necrotic 0324, Ischemic 0325, In-skin-fold 0330, Parastomal hernia 0331, Mucocutaneous separation 0332, Recessed 0333, Flush 0334, Ileal Conduit 0340, Small Intestines Segment 0341, Ileostomy Loop Adapter 0342, Colostomy Loop Adapter 0343, and Advanced Foam Stoma Storage Board 0366. Ship Wt. 3 lbs. (1360 g)

Item #	*Description*
0306	***Otto Ostomy™ Replacement Soft-Side Carrying Case*** Ship Wt. 6 lbs. (2722 g)
0311	***7/8" Diameter Stoma***
0312	***2" Diameter Stoma***
0313	***Urostomy Stoma With 3" Stents In Place***
0314	***Loop Stoma With Rod***
0315	***Loop Stoma Without Rod***
0316	***Double Barrel Stoma***
0319	***Oval Stoma***
0320	***Mushroom Stoma***
0321	***Prolapsed Stoma***
0322	***3" Diameter Stoma***
0323	***Granuloma Stoma***
0324	***Necrotic Stoma***
0325	***Ischemic Stoma***
0330	***In-Skin-Fold Stoma***
0331	***Parastomal Hernia Stoma***
0332	***Mucocutaneous Separation Stoma***
0333	***Recessed Stoma***
0334	***Flush Stoma***
0340	***Ileal Conduit***
0341	***Small Intestine Segment***
0342	***Ileostomy Loop Adapter***
0343	***Colostomy Loop Adapter***
0350	***Torso Shell***
0351	***Ascending Large Intestine***
0352	***Ascending/Transverse Large Intestine***
0353	***Transverse/Descending Large Intestine***
0354	***Sigmoid Large Intestine***
0355	***Replacement Small Intestine, Stomach, Right Kidney With Ureter & Left Kidney With Ureter (sold as one unit)***
0359	***Rectum***
0360	***Bladder***
0361	***Otto Ostomy™ Replacement Base With Rubber Feet***
0362	***Replacement Post For Bladder***
0363	***Replacement Post For Rectum***
0365	***Standard Stoma Foam Board (does not include stomas)***
0366	***Advanced Stoma Foam Board (does not include stomas)***

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Notes

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308 South Sequoia Parkway, Canby, Oregon 97013 USA
ph. 503.651.5050 | fax 503.651.5052 | email *info@vatainc.com* | *www.vatainc.com*