

## Carotid Head Simulator Set-Up Instructions

### Parts Included

- Line Tubing x 3
- CCA (**red** marks) tubing
- ICA (**blue** and **black** marks) tubing
- ECA (**green** and **black** marks) tubing
- Reservoir with Push-to-Connect connectors
- Pump with Push-to-Connect connectors
- Zip ties
- Extra tubing and connectors

### Assembly

1. Fill the reservoir with water and screw on the lid.
2. Remove the LifeLike Carotid Artery with Plaque model from its packaging.
3. Using a pair of forceps, carefully push the Common Carotid Artery (CCA) through the large hole in neck incision so it feeds all the way through and out the other side.
4. Attach the CCA to the tubing with the **red** mark on the end. Use a zip tie to secure the vessel to the connector. You will need to trim any excess length from the zip tie.
5. Attach the Internal Carotid Artery (ICA) to the tubing with the **blue** and **black** marks on the end. Use a zip tie to secure the vessel to the connector. You will need to trim any excess length from the zip tie.
6. Repeat for the External Carotid Artery (ECA) using the tubing with the **green** and **black** marks on the end.
7. Pull the tubing now connected to the Carotid Artery with Plaque so the vessel goes into the recesses in the head simulator and the bifurcation and plaque are located around the middle of the neck opening.
8. Attach the **blue** end of the short piece of tubing to one of the **blue** connectors on the reservoir by pushing the tubing into the connector. Push the tubing in so the grey piece of plastic in the tubing is all the way into the connector.
9. Attach the **green** end of the same tube to the **green** inlet connector on the pump. If looking at the face of the pump, the inlet connector is on the left.
10. Attach the **green** end of one of the long pieces of tubing to the **green** outlet connector on the pump. If looking at the face of the pump, the inlet connector is on the right.
11. Attach the **red** end of the same tube to the **red** connector in the neck area of the simulator.
12. Attach the **black** end of the remaining piece of tubing to the **black** Y-shaped connector at the top of the head.
13. Attach the **blue** end of the same tube to the open **blue** connector on the reservoir.
14. Plug in the pump, turn on, and let the water run through the system while checking for any leaks.

**\*NOTE\***: Extra tubing and connectors have been provided for the common, internal and external carotid arteries. These can be used to set up a Carotid model prior to the previous training session being completed for a quick switch out.

1. Locate the extra tubing and connectors. Take out a new Carotid Artery and connect the ICA and ECA vessels to the appropriate tubing pieces as indicated above. Use zip ties to secure the vessels to the connectors. Trim any excess length from the zip ties.

2. Remove the CCA tubing in the simulator from the grey connector by holding down the grey ring on the outside of the connector while pulling the tubing outwards. Repeat for the ICA and ECA. Pull the tubing out of the simulator completely so nothing remains.
3. Insert the new Carotid Artery and tubing into the simulator by pushing the ICA and ECA tubing through the channels in the upper half of the head simulator. The ECA tubing is coloured **black** and **green** and is placed into the channel closest to the face. The ICA tubing is coloured **black** and **blue** and is placed in the channel closest to the back of the neck. A bit of water on the outside of the tubing will help it to slide through the channel more easily.
4. Pull the tubing so the vessel goes into the recesses in the head simulator and the bifurcation and plaque are located around the middle of the neck opening.
5. Reconnect the tubing to the grey connectors.
6. The used Carotid Artery can be cut away from the tubing and discarded. The extra tubing can now be used to set up another training session.

### Disassembly

1. Turn off the pump. Loosen the lid on the reservoir slightly. Remove the tube attached to the pump from the reservoir by holding down the grey ring on the outside of the connector while pulling the tubing outwards. Hold tube end in the air so water does not spill out.
2. Turn on the pump and run until water has emptied from the entire system back into the reservoir. Once empty, turn off the pump and unplug.
3. Disconnect all tubing and empty the reservoir.
4. Remove the model from the head simulator. Cut away the zip ties and discard the used Carotid Artery. Place the tubing back into the appropriate channels in the simulator.
5. Dry off the simulator before storing.

### LIFELIKE CAROTID HEAD SIMULATOR SET-UP

#### Diagram

