How to fill (and drain) the vaporizer on the XGI-8 Anesthesia machine.

The vaporizer attached to the XGI-8 anesthesia machine is for use with Isoflurane only. A key-fill system is used to fill (and drain) the vaporizer with isoflurane. The key-fill system requires three keyed elements. The isoflurane bottle has a special collar that allows an isoflurane bottle adapter to screw on to it. The fill and drain ports on the vaporizer only accept the special key that is unique to the isoflurane bottle. The isoflurane bottle adapter is pictured to the right. Below is a labeled diagram of the Isoflurane vaporizer for the XGI-8 anesthesia machine.

Before filling or draining the vaporizer you MUST make sure that the oxygen supply is TURNED OFF at the regulator. The XGI-8 unit is DEPRESSURIZED and the vaporizer dial is in the OFF position.
To fill the vaporizer:
1. Securely fit the keyways of the isoflurane bottle adapter to the keys of the bottle collar.
2. Confirm that the XGI-8 system is DEPRESSURIZED, the vaporizer is in the OFF position and that the oxygen supply is TURNED OFF at the regulator.
3. Carefully move the XGI-8 anesthesia machine towards the edge of the table.
4. Loosen the top retaining screw and remove the dummy filler key from the fill port.
5. Holding the bottle upright but below the fill port, insert the keyed bottle adapter into the fill port. The two holes should be facing downwards in the fill port.
6. Tighten the top retaining screw to seal the keyed bottle adapter in the vaporizer fill port.
7. Raise the bottle of isoflurane above the level of the fill port without kinking the adapter tube.
8. Monitor the level of isoflurane in the sight glass of the isoflurane level indicator.
9. Do not fill beyond the max level line.
10. When the vaporizer is filled to the max line of the isoflurane level indicator, lower the bottle of isoflurane below the level of the fill port and wait until all the isoflurane has drained back into the bottle.
11. Carefully and slowly loosen the top retaining screw and remove the keyed bottle adapter from the fill port. **Note:** if you loosen the retaining screw too fast the isoflurane may squirt out of the filler port.
12. Insert the dummy filler key and tighten it in place with the top retaining screw.
13. Carefully reposition the XGI-8 anesthesia machine on the desktop.

The XGI-8 anesthesia machine is now ready to use.

To drain the vaporizer:
1. Securely fit the keyways of the isoflurane bottle adapter to the keys of an EMPTY isoflurane bottle.
2. Confirm that the XGI-8 system is DEPRESSURIZED, the vaporizer is in the OFF position and that the oxygen supply is TURNED OFF at the regulator.
3. Carefully move the XGI-8 anesthesia machine towards the edge of the table.
4. Carefully prop up or tilt the XGI-8 anesthesia machine to allow access to the bottom retaining screw.
5. Insert the keyed bottle adapter into the drain port. The two holes should be facing upwards in the drain port.
6. Tighten the bottom retaining screw to seal the keyed bottle adapter in the vaporizer drain port.
7. Make sure the bottle is below the level of the drain port and that the tube is not kinked.
8. Remove the prop under the XGI-8 anesthesia machine so that the vaporizer is level and can drain properly.
9. For draining purposes and to allow air to vent, unscrew the top retaining screw and remove the dummy filler key from the fill port.
10. Open the front drain valve and allow the vaporizer to drain.
11. When draining is complete, securely close the drain valve.
12. Loosen the bottom retaining screw and remove the keyed bottle adapter from the drain port.
13. Replace the dummy key in the fill port and tighten the top retaining screw to secure it in place.
14. Carefully reposition the XGI-8 anesthesia machine on the desktop.