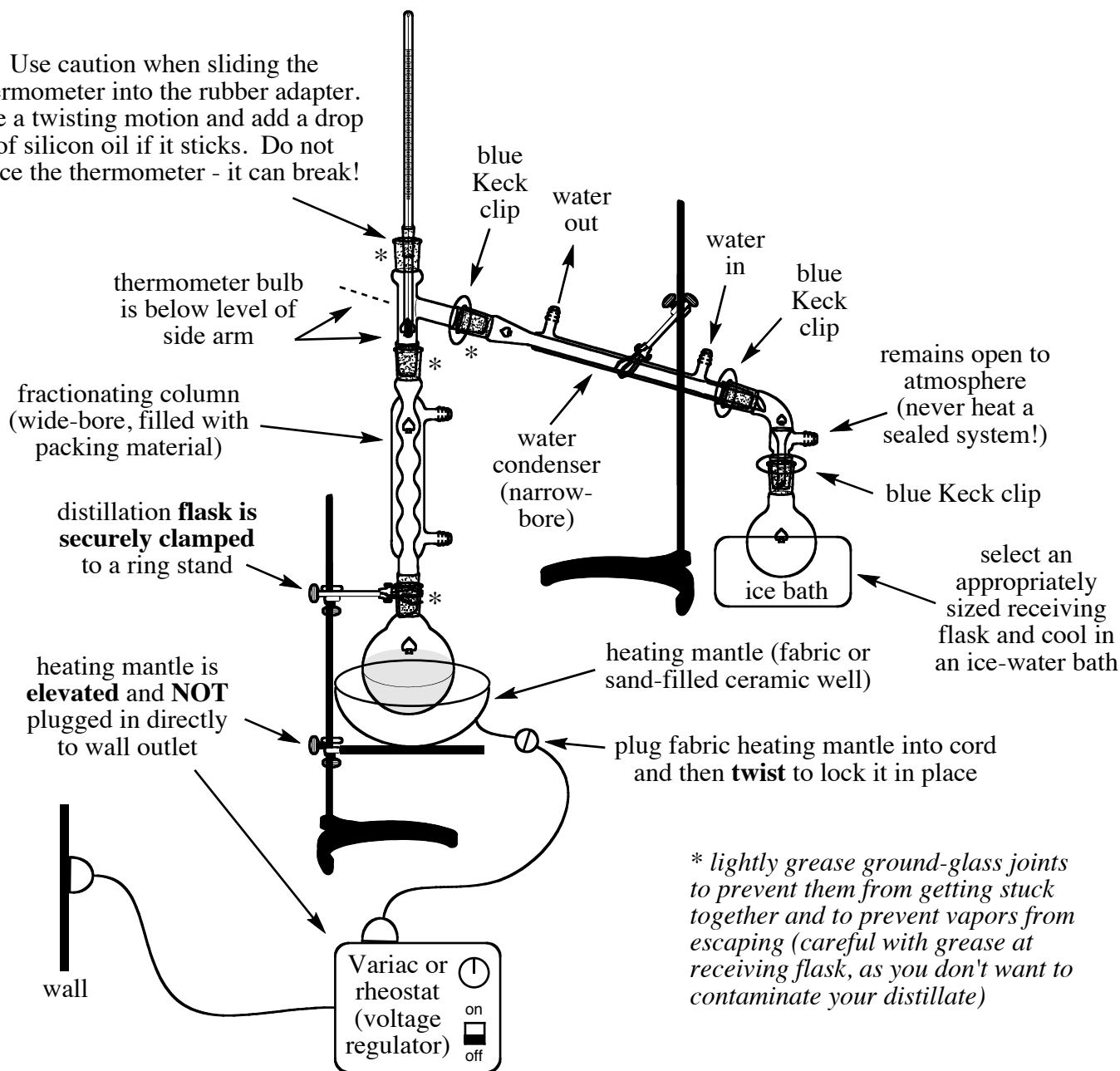


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 Distillation Apparatus set up guidelines

Use caution when sliding the thermometer into the rubber adapter. Use a twisting motion and add a drop of silicon oil if it sticks. Do not force the thermometer - it can break!



*\* lightly grease ground-glass joints to prevent them from getting stuck together and to prevent vapors from escaping (careful with grease at receiving flask, as you don't want to contaminate your distillate)*

**Before you begin heating, check the following:**

- 1) appropriately sized round-bottom flask used? (1/2 – 2/3 full, NOT pear-shaped)
- 2) placement of thermometer (see diagram, below arm leading to condenser)
- 3) cooling water running? from bottom to top? Flow should be just strong enough to keep condenser filled.
- 4) all reaction/distillation materials plus 1-2 boiling chip(s) in place? (double check reagent table)
- 5) all apparatus is clamped and secure?
- 6) ALL ground glass joints lightly greased?
- 7) any loose ground glass joints?
- 8) heating mantle plugged into the Variac ONLY? Not into an outlet: FIRE!!
- 9) notebook/data table ready to record observations IN INK?
- 10) if all of the above have been verified, then have the **instructor** look it over before heating.