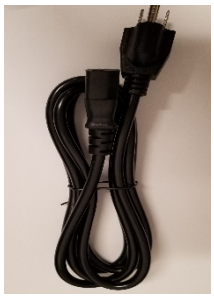
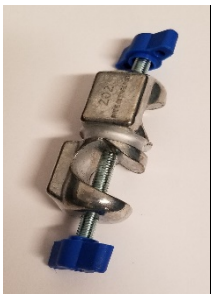
CHEMISTRY 1B – Reflux Equipment for the Synthesis of Esters

Item #	Equipment List	Quantity
1	Advanced Hotplate Stirrer, Isotemp RT AVCD HPS	1
2	Power Cord	1
3	Boss Head, 16 mm	2
4	Retort Clamp, 35 mm	2
5	Heat-On 50 mL Insert, Polymer Coated	2
6	Heat-On Multi-Well Holder, Polymer Coated	1
7	Round Bottom Flask, 50 mL (stored separately)	2
8	Mini Findenser Air Condenser (stored separately)	2
9	Ring Stand (on the lab benches)	2

		
1	**2**	**3**

		
4	**5**	**6**

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7	8	9

Adjusting the Temperature on the Advanced Hotplate Stirrer:

Note: The hot plate will heat up to the temperature that has been set previously; it will then maintain this temperature until the hotplate is powered down or a change to the temperature setting is made. For example, if a former group sets the temperature to 30°C and you are trying to boil water, your water won't boil because the temperature will never exceed 30°C (assuming you are not heating under lower pressure that is).

1. Make sure the main power switch is turned off and connect the power cord to the hot plate.
2. Plug the power cord into a power outlet nearby.
3. Turn on the main power switch. You are now ready to use the hot plate.
4. Check the current temperature setting by pressing the TEMP button. If this temperature works for you, press the RUN/STOP button and the hot plate will start heating up.
5. If you desire another temperature setting, after pressing the TEMP button, turn the Heater Knob to adjust the temperature and press the knob to save the temperature setting. The Heater Knob is the blue dial to the left. Press the RUN/STOP button and the hot plate will start heating up.
6. If you need to adjust the temperature during operation, repeat step 5.
7. Once finished, press the RUN/STOP button to cease heating. Make sure the power switch is off and disconnect the power cable. The hotplate will eventually cool down. **DO NOT move the hotplate and other pieces of hot equipment until they have cooled down!**

Reflux Apparatus Demo

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