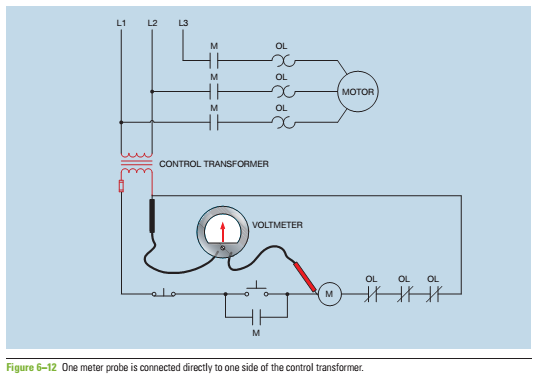
**Lab 3**

Construct the following circuit on the Amatrol trainer.



After construction, check to be sure the circuit works. Begin the lab with the Motor Off.

Using a volt meter check the following points.

1. Measure the voltage across the secondary of the control transformer \_\_\_\_\_\_\_\_\_
2. Measure the voltage across the load side of the fuse to the common side of the transformer.

\_\_\_\_\_\_\_\_\_

1. Measure the voltage between the stop and start switches. \_\_\_\_\_\_\_\_\_
2. Measure the voltage on the logic side of the coil of contactor M. \_\_\_\_\_\_\_\_\_
3. Press the start switch.
4. Measure the voltage between the stop and start switches. \_\_\_\_\_\_\_\_\_
5. Measure the voltage on the logic side of the coil of contactor M. \_\_\_\_\_\_\_\_\_

When contacts are in series, measuring across a contact may give you erroneous readings. Always troubleshoot by measuring with a reference to common rather than across individual contacts.

Next repeat the lab, only measure across the components. Fill out the chart below

Motor off Motor Running

Stop SW \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_

Start SW \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_

Coil M \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_

Overloads \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_