

PLC124 LAB 3.4: CONTROL CIRCUITS

Student Name: _____

Student ID: _____

LAB OUTCOMES:

Upon completion of this lab procedure, the student should be able to:

1. Identify symbols on a print
2. Interpret electrical prints
3. Wire, explain and troubleshoot a run/jog motor control circuit
4. Wire, explain and troubleshoot a dual start/stop motor control circuit
5. Wire, explain and troubleshoot a multiple start/stop control circuit

LAB PROCESS:

Set up NSCC 120VAC wiring board. Setup the unit on its base, or lay flat on the work table.

Connect the power cord and turn off the power input switch to make sure the unit is not powered.

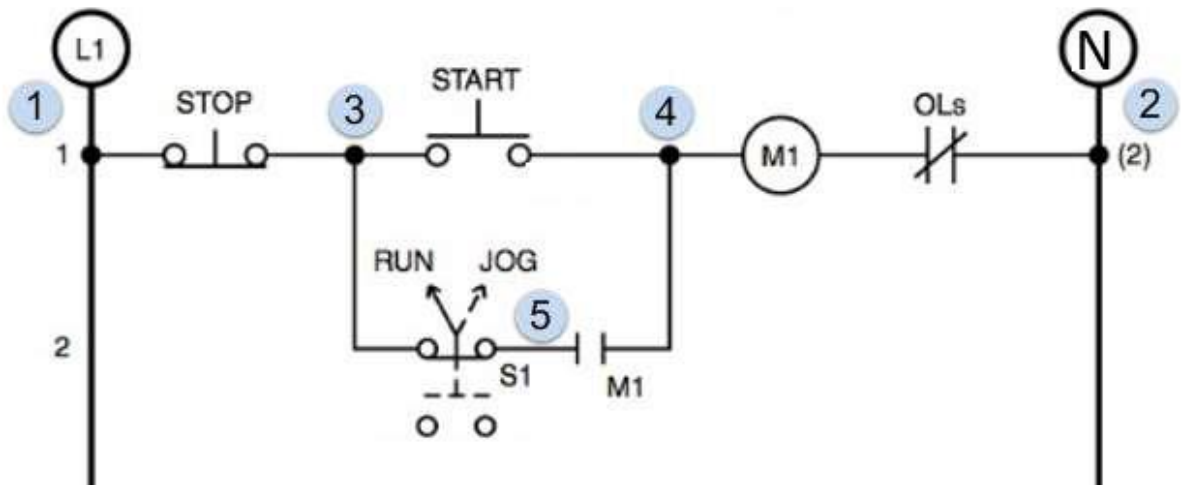
Part 1:

1. Review the print on the next page. Identify the meaning of the various symbols on the print.
2. Identify the color of wires that should be used with the print. Explain the meaning of each.
3. Interpret the print on the next page.



Part 2:

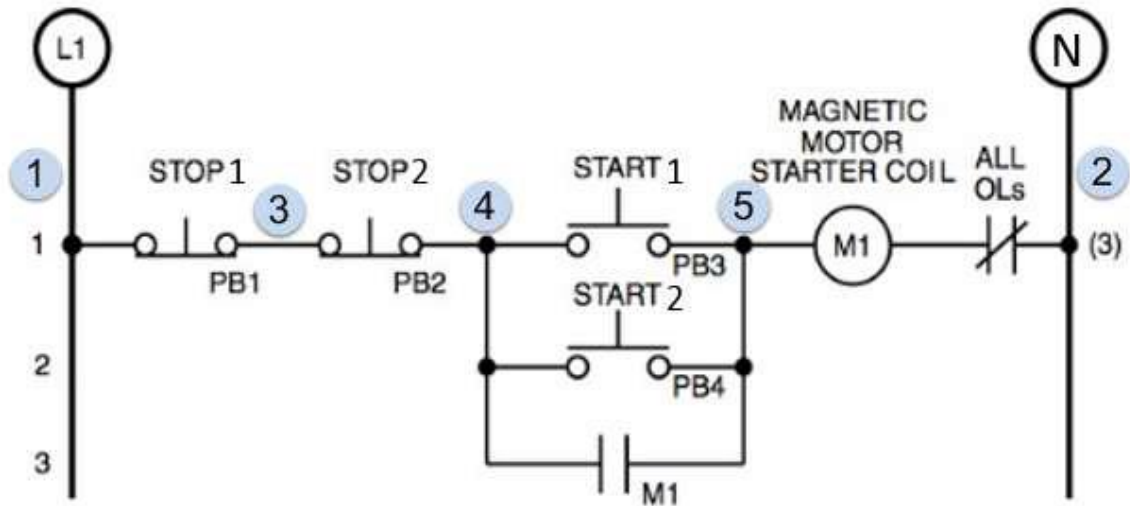
1. On the training board, wire a run/job motor control circuit.



2. Explain the circuit function.
3. The student should leave the lab and the instructor put a small fault in the circuit for the student to trace down. Identify the fault and repair it.

Part 3:

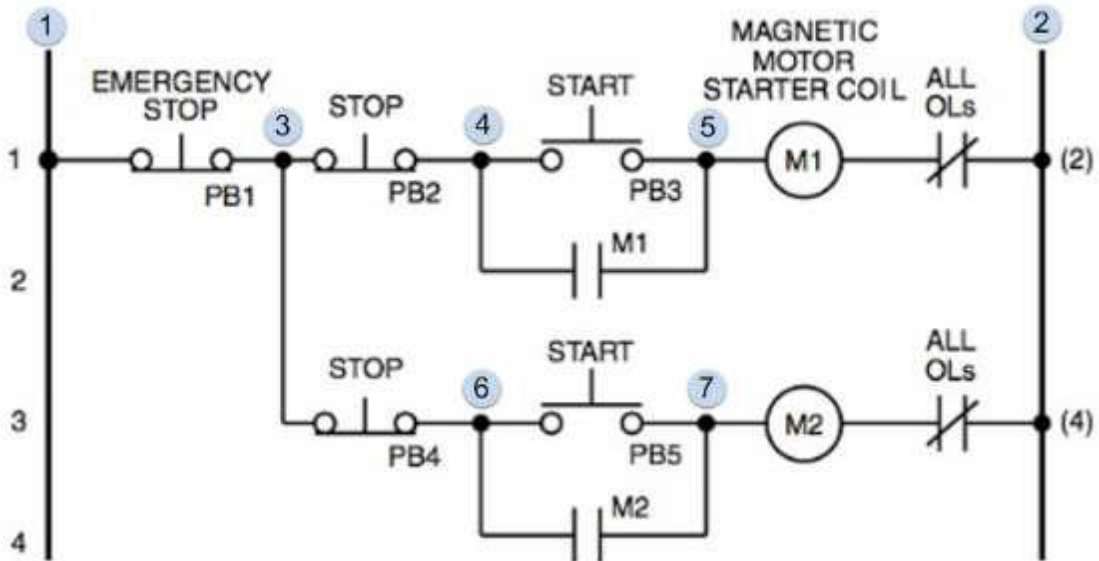
1. On the training board, wire a dual start/stop motor control circuit.



2. Explain the circuit function.
3. The student should leave the lab and the instructor put a small fault in the circuit for the student to trace down. Identify the fault and repair it.

Part 4:

1. On the training board, wire a multiple start/stop control circuit



2. Explain the circuit function.
3. The student should leave the lab and the instructor put a small fault in the circuit for the student to trace down. Identify the fault and repair it.

The outcomes of this exercise (listed on page 1) specifies the skills that the Student must demonstrate to the Instructor. Once the Instructor is satisfied with the demonstration of Knowledge & Skills by the individual student, they will sign this document (for the student), then enter a 100% into the Hands-On Lab grade in Sakai.

I verify that this student has completed all of the requirements of this Hands-On Assessment:

Student Name: _____

Faculty Signature: _____ Date: _____

DOL DISCLAIMER:

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