

PLC122 LAB 1.3: TROUBLESHOOTING III

Student Name: _____

Student ID: _____

LAB OUTCOMES:

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

1. Explain the purpose of various devices in an electrical circuit.
2. Troubleshoot the electrical circuit that has a fault condition.
3. Return the electrical circuit for full operation.

Lab Process:

Open the AC/DC Training Unit. Setup the unit on its base, or lay flat on the work table.

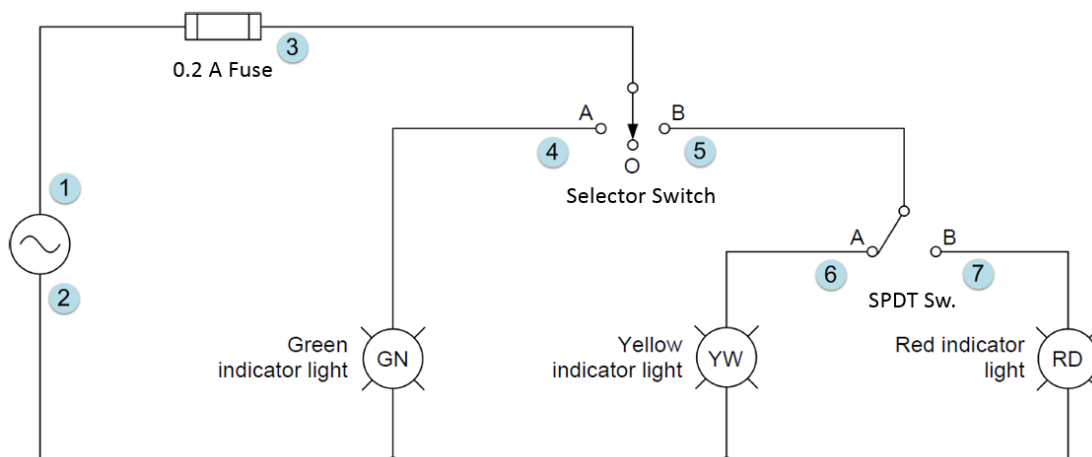
Make sure all fault switches are in the 0 position.

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

Change the color covers (globes) on the pilot lights to have the following sequence: 1st indicator light is green, 2nd indicator light is yellow, and the 3rd indicator light is red.

Part 1

Wire the following circuit on the AC/DC training system.



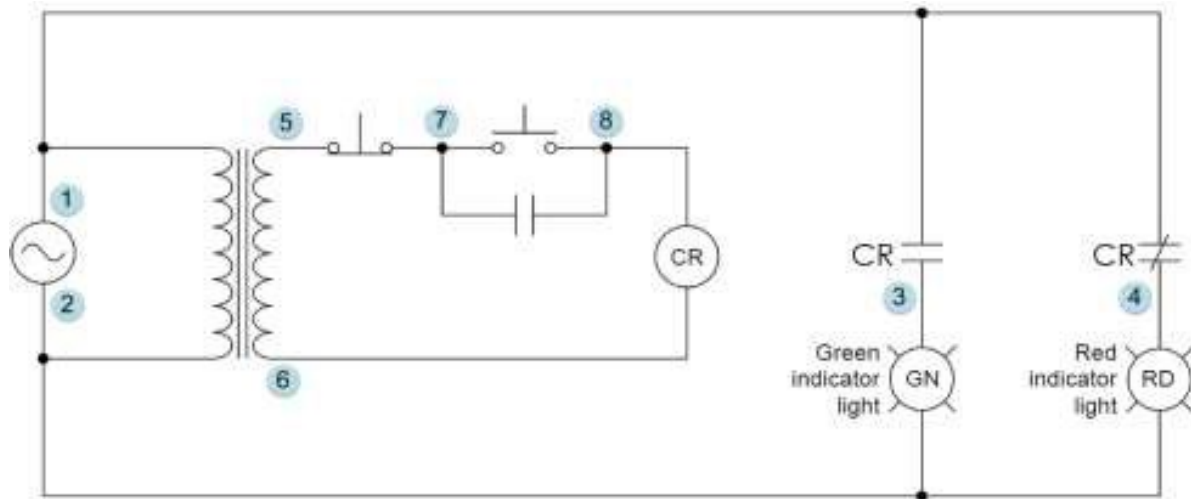
1. Explain the operation of the circuit and purpose of each component.

2. Explain the voltage drop at each node specified by the instructor.

3. Troubleshoot a fault that will be injected into the circuit.

Part 2

Wire the following circuit on the AC/DC training system.



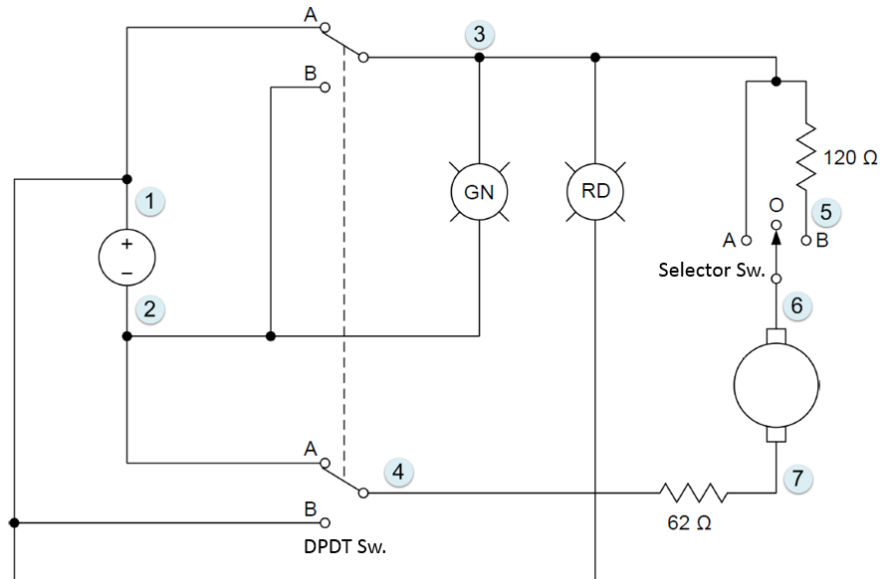
1. Explain the voltage drops that should be measured on each electrical node if the relay is pulled in, and also when it is off.

2. Measure the voltage at nodes specified by the instructor.

3. Troubleshoot a fault that will be injected into the circuit.

Part 3

Wire the following circuit on the AC/DC training system.



1. Explain the operation of the circuit and purpose of each component.
2. Explain the voltage drop at that should be measured at each electrical node if the relay is pulled in, and also when it is off.
3. Troubleshoot a fault that will be injected into the circuit.

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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