**Unit: Manual Motor Controls Hands On: 2**

**Title: Stop/Start/Jog using Three Pushbuttons CLO# 1,2**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Station \_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Objectives**

1. Evaluate student’s motor circuit design skills.
2. Appraise student’s wiring skills associated with a motor control circuit.
3. Student shall prove their understanding of the concept of motor jogging.

**Assessment**

Students shall demonstrate a comprehension of the objectives listed above by scoring a minimum of 75% on this hands-on test. Grading shall be based on the Manual Motor Controls rubric.

**Instructions**

Design a stop/start/jog motor control circuit using three momentary pushbuttons. One pushbutton shall be a traditional “start” button. When the start button is pressed, the motor shall start and continue to run even if the “start” button is no longer pressed. If the “stop” button is pressed, the motor shall stop. If the remaining pushbutton, a “jog” button, is pressed the motor shall only run for as long as the button is being held down. Once the “jog” button is released, the motor shall stop running. While the motor is running, the green light shall come on and the red light shall be off. When the motor is not running, the green light shall be off and the red light shall be on even if stop button is held down. Use the space on the opposite side of this page to design your circuit. You may ask the instructor to look over your schematic, but any instructor help shall be a deduction in points. You may wire the circuit without the instructor reviewing your drawing, but you may **not** energize the circuit once wired. Double check your drawing and wiring. Ensure to label all wires with the appropriate wire numbers. Once you are ready for a grade, have your instructor review the drawing and wiring before energizing and testing the circuit.

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