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| Name |  | Station |  | Date | |  |
| Filename | Manual MC Hands On 03 *[name]*.vsdx | | Location | | U:\Electrical\First\_Lastname | |
| Objective | | | | | | |
| Design a platform lift system. This job requires that an operator presses a button and a pump motor starts and the platform raises 2.5 feet. It has been determined that the platform advances 6 inches per second. You must design a circuit that when the operator presses a button, the platform shall rise until a limit switch indicates it has reached the desired level. If the pump motor runs longer than it should, the platform pump should stop and a yellow light shall illuminate. At any time, the operator can press the stop button to halt the platform. The plant manager also wants a green light to indicate when the platform is being lifted. | | | | | | |
| Job Instructions | | | | | | |
| Before any wiring, design your schematic in the space below. Use references to ladder rungs, terminal locations, wire numbers and cross-references of all components in your designed circuit. Once the designs are completed, you may start wiring your circuit. Ensure to use wire numbers on every wire. Once the wiring is complete, have an instructor grade both your hand drawing and your wiring circuit. When finished, render your design in Visio starting with the template at the following location;  O:\Electrical\Electrical Automation Tech\Wentzville\Manual Motor Controls\Ladder Diagram Template.vsdx  When completed, save it to the file name and location indicated above. | | | | | | |
| Grading Rubric | | | | | | |

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| Classification | Points | Score |
| Hand drawing | 15 |  |
| Schematic Design | 15 |  |
| Wiring | 20 |  |
| Wire Numbers | 15 |  |
| Circuit Operation | 20 |  |
| Visio Rendering | 10 |  |
| File naming and storage | 5 |  |

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