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| Test Writer | | Abbigail Caballero | | | | | |
| Test Case Name | | Merge Circuit Kill Switch Test | | | | Test ID# | MRG-IT-3 |
| Description | | Verify that the kill switch shuts off the motors and sends a signal to the MCU verifying that motors have been switched off | | | | Type | Whitebox |
| Test Information | | | | | | | |
| Name of Tester | |  | | | | Date |  |
| Hardware Version | | Merge Circuit 1.0 | | | | Time |  |
| Setup | | Attach 14.8V power supply to merge circuit to the high and ground terminals of the battery inputs. Prepare multimeter for voltages up to 14.8V. Attach USB to Teensy and upload data polling code. Poll output of killswitch. Turn on output of power supply. | | | | | |
| Step | Action | Expected Results | Pass | Fail | N/A | Comments | |
| 1 | Measure output of the kill switch with multimeter | Output measures 14.8V +/- 0.1V |  |  |  |  | |
| 2 | Measure output of kill switch with Teensy | Output measures Logic High |  |  |  |  | |
| 3 | Flip the mechanical killswitch | Output of killswitch is now 0V +/- 0.1V and signal from killswitch to MCU has gone from high to low |  |  |  |  | |
| 4 | Turn off power supply and disconnect from the board. Turn off multimeter. | None |  |  |  |  | |
| Overall Results | | |  |  |  |  | |