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| Test Writer: Jeremiah Franke | | | | | | | | | | | | |
| Test Case Name: | | | | | Voltage Regulator Output Test | | | | | Test ID#: | | VRO-1 |
| Description: | | | | | Test that the output of the voltage regulator is approximately 5v when supplied with a 9v input. | | | | | Type: | | Black Box  White Box |
| Tester Information: | | | | | | | | | | | | |
| Name of Tester: | | | Jeremiah Franke | | | | | Date: | | | 11/29/2014 | |
| Hardware Ver: | | | 1.0 | | | | | Time: | | | 12:00pm | |
| Setup: | | | | | | | | Make sure that there is a capacitor hooked up to the input of the regulator. Prior to the test, check that the battery is outputting approximately 9v. Have a voltmeter available. | | | | |
| Step | Action | Expected Result | | Pass | | Fail | N/A | | Comments | | | |
| 1 | Hook 9v battery positive terminal to capacitor input. Test the output of the capacitor. | Approximately 9v output measured at the capacitor. No less than 7v. | | Pass | |  |  | | Measured 7.54 volts from the 9v battery. | | | |
| 2 | Remove 9v from input of capacitor.  Hook output of capacitor to input of voltage regulator. | No voltage at the output of voltage regulator. | | Pass | |  |  | | Voltage regulator shows no voltage. | | | |
| 3 | Hook 9v output to input terminal of capacitor. | Check to make sure connections are secure. | | Pass | |  |  | | System is connected. | | | |
| 4 | Test output of voltage regulator | Approximately 5v output measured at the output of the voltage regulator. No less than 4v. | | Pass | |  |  | | 4.94 volts measured at the output of the voltage regulator. | | | |
| Overall test results: | | | | Pass | |  |  | | The voltage regulator is working correctly. | | | |