

| Test | Why we'd pass | Tests Passed | Total Tests |
|------|--|--------------|-------------|
| | | 41 | 58 |
| | | Percent | |
| | | 70.68965517 | |
| 1.1 | Initial part of GLV safety loop was proven to operate after integrated | | |
| 1.2 | Initial part of GLV safety loop was proven to operate after integrated | | |
| 1.3 | Precharge was verified on the bench and graphs were made and | | |
| 1.4 | Entering drive state was verified on the bench as well as the after the subsystems were integrated Pre-CarMan, therefore test would have likely passed by now | | |
| 1.5 | Leaving drive state was verified on the bench as well as the after the subsystems were integrated Pre-CarMan, therefore test would have likely passed by now | | |
| 1.6 | The wording would have been clarified and firmware modified to detect the fault and trip the safety loop. Faults are already detected and able to trip safety loop | | |
| 1.7 | This fault is already detected in the firmware and the safety loop trips for both above and below voltage thresholds. Lights activate, we would have gotten the reset switch et all to work along with this functionality | | |
| 1.8 | We already detect changes in voltages so this test would have passed as well | | |
| 1.9 | Since we already have various faults working which trip the safety loop we could have triggered the safety loop before the precharge relay closes, we would have passed | | |
| 1.10 | Since we have many faults already working we can easily trigger them after the precharge relay has closed and thereby pass this test | | |
| 1.11 | IMD fault was triggered when a short happened in dyno room. IMD fault light illuminated, safety loop opened and SSOK was turned off. | | |
| 1.12 | IMD fault was triggered when a short happened in dyno room. IMD fault light illuminated, safety loop opened and SSOK was turned off. | | |
| 1.13 | IMD fault was triggered when a short happened in dyno room. IMD fault light illuminated, safety loop opened and SSOK was turned off. | | |
| 1.14 | Brake Over-travel was verified to work on Tony's new panel and it operated in every state | | |
| 1.15 | Brake Over-travel was verified to work on Tony's new panel and it operated in every state | | |
| 1.16 | Brake Over-travel was verified to work on Tony's new panel and it operated in every state | | |
| 1.17 | GLV master switches and BRB's turned off the system in any state | | |
| 1.18 | GLV master switches and BRB's turned off the system in any state | | |
| 1.19 | GLV master switches and BRB's turned off the system in any state | | |
| 1.20 | Master reset was verified to work and the AMS faults were shown to work prior so this test would have passed | | |
| 1.21 | Master reset was verified to work and the IMD faults were shown to work prior so this test would have passed | | |
| 1.22 | Master reset was verified to work and the brake overtravel was shown to work prior so this test would have passed | | |
| 2.1 | On the test bench, 5 CellMan voltages were successfully measured and compared with the output voltage meters on lab power supplies. | | |
| 2.2 | On the test bench, 5 CellMan temperature were successfully measured. Comparing with a temperature sensor would be the next step, which would have occurred. | | |
| 2.3 | The charger did not work, but a different power supply would have been used to charge a full pack. Voltage and temperature values were measured on the bench, and there is no indication that charging would change the result. | | |
| 2.4 | Turning the SMD takes at most a few seconds, depending on where you are standing in relation to the pack at the start of the timer. The same goes for unplugging the high voltage cable. | | |
| 2.5 | CellMan voltage readings were measured on the test bench, and adding a check for whether a voltage is below a threshold would be straightforward. | | |
| 2.6 | The SMD's functionality has already been proven when the prototype pack was first assembled and PacMan was plugged in. PacMan turned off when the SMD was opened. | | |
| 2.7 | The AIRs were verified on the bench to open correctly with loss of coil voltage. TSI graphs have shown that the TS voltage drops within 5s to below 30%. Combining these tests would have occurred. | | |
| 2.8 | Both pack indicator lights were tested on the bench and shown to work properly in the correct setting. Any additional wiring and integration in the packs would have occurred by now. | | |
| 4.1 | In the dyno room, TSI board was reading from the relay board current sensor and sending data to SCADA. It was able to perform state transition given the over-current condition was asserted | | |
| 4.2 | With the adjustment, we would have passed the test since IMD was functioning properly to detect a short between HV and LV. | | |
| 5.1 | We would have purchased or obtained HV stickers by now and placed them wherever appropriate | | |
| 5.2 | Since we can measure the voltage accurately we would have been able to deduce when the voltage passes 40V threshold and activate the lights | | |
| 5.3 | Using a label maker on hand we would have labeled the cockpit display, if the new display panel was not manufactured the old one already had labels | | |
| 5.4 | TS panels are all labeled | | |
| 7.2 | Able to verify data received from TSI cooling sensors over CAN. This was done before integration of TSI into the new CarMan enclosure, but none of the required parts changed during integration, so we believe we would have passed this | | |
| 7.3 | All values on test were verified | | |
| 7.4 | TSI Voltage was verified along with Cooling Sensors | | |
| 7.6 | Verified independently that the pi had the ability to open the safety loop through software, and that SCADA could be configured to respond arbitrarily to different measurements. We were not able to test this feature on an integrated CarMan. | | |
| 7.7 | Verified reading drive states from TSI | | |
| 9.1 | Cooling temperature sensor were calibrated with thermometer. We would have passed this test after statistical analysis. | | |