|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Test Writer:** Navid Karami-chamgordani | | | | | | | | |
| **Test Case Name:** | | Ultrasonic Sensor | | | | **Test ID#:** | |  |
| **Description:** | | Check the sensor functionality to ensure it functions properly before & after installing it | | | | **Type:** | |  |
| **Tester Information:** | | Team member | | | | | | |
| **Name of Tester:** | | Adam | | | | **Date:** | | 12/04/20 |
| **Hardware:** | |  | | | | **Time:** | | 12 PM |
| **Setup:** | | Step#1, sensor attached to atmega328P placed on breadboard. Step#2, sensor attached to atmega328P and installed on robocar | | | | | | |
| **Step** | **Action** | **Expected Result** | **Pass** | **Fail** | **N/A** | | **Comments** | |
| **1** | Write a program that constantly measures the distance using the sensor. Move a cardboard box attached to a measuring tape back and forth in front of the sensor and document the readings. | Program should be statically tested to verify accuracy. | X |  |  | | The readings had error. The error was in an acceptable range. | |
| **2** | Write a program that constantly measures the distance using the sensor. Measure a 30 cm long floor connected to a wall. Measure and place three markings each 10 cm apart. Compare the measured distance and the actual distance. | Program and sensor provide accurate measurements while vibration is involved due to robocar movements. | X |  |  | |  | |