RC 360 Detector, Motor Test Cases

Test Writer: Matt Whiteside, T08			
Test Case:	Motor control	**Test ID:**	RC360-t1
Description:	This test verifies that the motor is spinning at a useful rate, which allows the sensor to detect objects in semi-realtime.	**Type:**	White box
Objective:	Verify that the motor meets the requirements in the product specification, i.e., that it spins at a rate of 1 Hz. Acceptance test. Also a stress test to verify that the motor can spin continuously without damaging the system.		
Name of Tester:	Homer	**Date:**	
Hardware Ver:	1.0	**Time:**	
Setup:	Preconditions: the complete car powered on, right side up, and ready to run.		
Resources:	the completely assembled car		

Step	Action	Expected Result	Pass	Fail	N/A	Comments
1	motor spin rate	motor should complete at least 2 revolutions per second				
2	power switch	switch should cut power to entire system when thrown				
Overall Test Result:						

References

1) Servo subsystem documentation: https://github.com/RC360Detector/RC360Detector/blob/master/system-modeling/motor-subsystem.pdf
2) Product specification: https://github.com/RC360Detector/RC360Detector/blob/master/RC%20Car%20360%20Degree%20Proximity%20Detection.pdf

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