**Test Plan**

Name: Spirit.1

Objective: Fix potential failures

Type of Testing: Black box- Developer

Entry Criteria: v 1.0.0

Exit Criteria: Tests fully completed and failures, if found, successfully corrected.

Components to be tested:

Serial Communication using UART

* Correct sending and receiving of messages
* Correct response from Nema steppers

Stepper Motor Movement

Core XY mechanism

Platform up and down mechanism

Software interruptions

Selenoid push mechanism

Electronic components

Test enviroment setup: Pickit 3, PIC18F4550, NEMA17 stepper motor, MPLAB X, Multimeter, DuckLight, YP-05 UART receptor.

Test Effort Estimates: 2 persons , 18 hours

Expected Number of Test Cycles: 36