

Motor Test Plan Team 14418

Before testing begins:

The motors will be attached individually to the motor testing mount detailed on edge here: <https://edge.rit.edu/edge/P14418/public/5-Detailed%20Design/Testing>. The motors will each be connected to drive a 7ohm load. The input to the motors will be from a power supply.

Equipment needed for testing:

- 5V+ power supply
- Motor mount test rig
- Digital Multimeter
- Motor(s)
- Notebook/PC

Testing Objectives:

There are two main objectives for this testing procedure. The first is to ensure that each motor can individually produce the required amount of voltage.

Testing Setup

The motor mount test setup uses a dc servomotor to drive the motors that we want to test. Using specifications of the servomotor, we are able to measure the rpm into the test motor and measure the corresponding output voltage. This is easily done when each motor is being tested individually.

Failure criteria:

If any one motor cannot output 5.5V alone at 2000rpm, then that motor will be deemed a failure. A replacement will need to be found for that particular motor.