



## **Heart Rate Test – Bike**

This test is meant to find and gauge an athlete's respective heart rate zones. These numbers can then be applied in future workouts to help identify different training loads. Please exercise caution, as this test is quite strenuous. Consult a physician if you feel you are at risk of personal injury.

### **Equipment**

This test requires a trainer, heart rate monitor and proper cycling attire. A computer that does velocity, cadence, power, and time would also be ideal but are not required. Put the bicycle on a slight incline by elevating the front wheel.

### **Warm up**

Duration – *15 minutes*

Start with light pedaling. Include some short bursts of speed. This can be done on the trainer or outdoors. The athlete should be fully warmed up prior to testing.

### **Test**

Duration – *30-45 minutes*

Athlete begins at comfortable pace; an effort that could be sustained indefinitely. If they cannot, slow adjust effort down and start over. Make note of heart rate, power, and velocity.

### **Power Testing**

Comfortable pace is the initial value for the testing. Increments of 20Ws every 3 minutes will be done until failure. Failure is when the athlete cannot sustain the wattage.

1. Begin by taking power and heart rate at the beginning of each interval.
2. Take heart rate in the middle of each the interval: 90 seconds.
3. After the 3 minute interval, increase the power by 20W by either spinning faster or adding more tension.
4. Keep increasing speed until athlete can no longer keep up with the pace.

After the test is finished, the athlete should cool down by either some light jogging or on a spin bike.

## Velocity Testing

Comfortable pace is the initial value for the testing. Increments of 2km/h (convert to mi/h) every 3 minutes will be done until failure. Failure is when the athlete cannot sustain the wattage.

1. Begin by taking velocity and heart rate at the beginning of each interval.
2. Take heart rate in the middle of each the interval: 90 seconds.
3. After the 3 minute interval, increase the power by 20W by either spinning faster or adding more tension.
4. Keep increasing speed until athlete can no longer keep up with the pace.

After the test is finished, the athlete should cool down by either some light jogging or on a spin bike.

## **Results**

Email the results to [livemultisport@gmail.com](mailto:livemultisport@gmail.com) or put the data into Excel. Attached is a copy of what some results could look like and be interpreted as.

