

Volunteer # \_\_\_\_\_

Date \_\_\_\_\_

**Test #1 - Ease of Assembly**

*Engineering Requirement 8: Number of Installers*

*Engineering Requirement 9: Number of Tools*

<b>Task</b>	<b>Time Required (seconds)</b>	<b>Issues Noted:</b>
Secure bucket to track		
Secure gearbox to track		
Assemble bucket insert		
Attach pedals to gearbox		
Attach seat back to support		
<b>Total Time</b>		

**Checklist:**

- \_\_\_ User was asked to position gearbox at a place that may not accommodate their size
- \_\_\_ Full assembly inspected (ensures subsequent tests can be conducted appropriately)
- \_\_\_ Any necessary changes made to assembly
- \_\_\_ Volunteer has received questionnaire
- \_\_\_ Volunteer has returned questionnaire

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**Test #2 - Ease of Gearbox Repositioning on Track**  
*Engineering Requirement 4: Training Time*

<b>Task</b>	<b><i>Time from Start [mm:ss]</i></b>	<b><i>Time Required [s]</i></b>	<b><i>Issues Noted:</i></b>
Remove wingnuts			
Remove eyebolts			
Reposition gearbox			
Re-insert eyebolts			
Fasten wingnuts			
<b>Total Time</b>			

**Checklist:**

- \_\_\_ Volunteer has received verbal instructions
- \_\_\_ Device has been assembled correctly
- \_\_\_ If device has not been assembled correctly, necessary modifications have been made
- \_\_\_ Volunteer has received questionnaire
- \_\_\_ Volunteer has returned questionnaire

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**Test #3 - Ease of Power Generation**  
*Engineering Requirement 2: Generated Power*  
*Engineering Requirement 6: Effort Required*

<b>Metrics</b>		<b>Notes:</b>
Heart rate at rest [bpm]		
Amount of water sanitized at 5 minutes (if applicable) [gal]		
Amount of water sanitized at stopping point [gal]		
Heart rate at stop [bpm]		

**Checklist:**

- \_\_\_ Heart rate monitor is programmed to user
- \_\_\_ Volunteer is wearing heart rate monitor
- \_\_\_ Timer started when volunteer starts pedaling
- \_\_\_ Volunteer has returned heart rate monitor
- \_\_\_ Volunteer has received questionnaire
- \_\_\_ Volunteer has returned questionnaire