

## MSD II Testing – Heated Seat Functionality

---

Team: P18347: Stroller with HVAC capability

Test Engineer:

Date:

### Purpose:

The purpose of this test is to ensure that the heated seat will function properly (turning on, producing heat) in a cold environment.

### Engineering Requirement:

Requirement #	Importance	Metric	Unit	Ideal Value	Marginal Value
S3.b	9	Lowest outdoor temp. to maintain internal stroller temp.	[°F]	68-74	55-78

### Materials:

- a.) Closed stroller pod with heated seat
- b.) BME Cold Room and/or cold environment
- c.) Thermocouples

### Test Procedure:

- 1.) Place thermocouples in stroller pod
- 2.) Confirm proper start up and heat production at all settings of the heated seat prior to placing in cold room
- 3.) Turn off seat and let cool down completely
- 4.) Place stroller in cold room for 5 minutes
- 5.) Turn on heated seat
- 6.) Test heat production at different temperatures
- 7.) Measure ambient temperature of stroller pod and monitor for each different temperature setting of seats
- 8.) Remove stroller and turn off heated seat

### Pass/Fail Criteria:

Pass	Fail
$55 \leq T \leq 78$	$55 > T > 78$

Completion Date: