



## Parts Detail

### Sustainer

|   |                      |  |   |              |               |
|---|----------------------|--|---|--------------|---------------|
|    | Nose cone            | Polycarbonate<br>(Lexan)<br>(1.2 g/cm <sup>3</sup> ) | Ogive   | Len: 304.8mm | Mass: 82.122g |
|    | Mass component       |  | Dia <sub>out</sub> 38.1mm                                 |              | Mass: 120g    |
|    | Body tube            | Cardboard<br>(0.68 g/cm <sup>3</sup> )               | Dia <sub>in</sub> 52.312mm<br>Dia <sub>out</sub> 56.312mm | Len: 152.4mm | Mass: 35.365g |
|    | Launch lug           | Cardboard<br>(0.68 g/cm <sup>3</sup> )               | Dia <sub>in</sub> 8mm<br>Dia <sub>out</sub> 10mm          | Len: 10mm    | Mass: 0.192g  |
|    | Inner Tube           | Cardboard<br>(0.68 g/cm <sup>3</sup> )               | Dia <sub>in</sub> 49mm<br>Dia <sub>out</sub> 50mm         | Len: 93.98mm | Mass: 4.969g  |
|    | Mass component       |  | Dia <sub>out</sub> 43mm                                   |              | Mass: 35g     |
|    | Bulkhead             | Birch<br>(0.67 g/cm <sup>3</sup> )                   | Dia <sub>out</sub> 49mm                                   | Len: 2mm     | Mass: 2.527g  |
|    | Transition           | Cardboard<br>(0.68 g/cm <sup>3</sup> )               | Fore Dia:<br>56.312mm<br>Aft Dia:<br>56.312mm             | Len: 75mm    | Mass: 17.653g |
|    | Bulkhead             | Cardboard<br>(0.68 g/cm <sup>3</sup> )               | Dia <sub>out</sub> 52.312mm                               | Len: 2mm     | Mass: 2.923g  |
|  | Shock cord           | Elastic cord<br>(round 2mm, 1/16<br>in)<br>(1.8 g/m) |   | Len: 406.4mm | Mass: 0.732g  |
|  | Body tube            | Cardboard<br>(0.68 g/cm <sup>3</sup> )               | Dia <sub>in</sub> 52.312mm<br>Dia <sub>out</sub> 56.312mm | Len: 200mm   | Mass: 46.41g  |
|  | Engine block         | Cardboard<br>(0.68 g/cm <sup>3</sup> )               | Dia <sub>in</sub> 30mm<br>Dia <sub>out</sub> 30mm         | Len: 75mm    | Mass: 0g      |
|  | Launch lug           | Cardboard<br>(0.68 g/cm <sup>3</sup> )               | Dia <sub>in</sub> 10.7mm<br>Dia <sub>out</sub> 12.7mm     | Len: 12.7mm  | Mass: 0.317g  |
|  | Inner Tube           | Cardboard<br>(0.68 g/cm <sup>3</sup> )               | Dia <sub>in</sub> 31mm<br>Dia <sub>out</sub> 32mm         | Len: 80mm    | Mass: 2.692g  |
|  | Parachute            | Ripstop nylon<br>(67 g/m <sup>2</sup> )              | Dia <sub>out</sub> 431.8mm                                | Len: 30mm    | Mass: 13.051g |
|   | Shroud Lines         | Elastic cord<br>(round 2mm, 1/16<br>in)<br>(1.8 g/m) | Lines: 6  | Len: 300mm   |               |
|  | Freeform fin set (4) | Cardboard<br>(0.68 g/cm <sup>3</sup> )               | Thick: 3mm  |              | Mass: 25.276g |

