Operator’s Manual

Adapted Snow Sled

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Important Safety Instructions:

This adapted sled should always be used under adult supervision. It is important that the rider is completely strapped in the sled before moving. Large slopes/hills and sharp turns should be avoided as they increase the risk of the sled falling over.

Parts and Accessories:

The adapted sled only consists of a few parts which are: the sled base, the seat with a full harness, the supporting tubes, and the front rope.

- Supporting Tubes
- Seat
- Full Harness
- Sled Base
- Front Rope

Figure 1: Adapted Sled

Features:

The adapted sled is unique in that it incorporates a seat with a full harness so the rider will be safe and secure while riding in it.
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1 Introduction:

1.1 Overview of Device

The adapted snow sled provides a way for our client, Joey Toce, to enjoy being in the snow during the winter. Joey has cerebral palsy, and it is important that the sled fully supports his head and trunk. What sets this sled apart from anything currently on the market is that it has a fully supportive seat with a full harness and an adductor between the legs. With these improvements the adapted snow sled will allow our client to enjoy being outside in the snow while most importantly keeping him safe and secure.

1.2 Device Operation

Using the adapted snow sled is very easy. Once the rider is secured in the seat using the two clips on the harness then they are able to be pulled around in the snow using the rope attached to the front.

2 Maintenance:

The adapted sled requires no maintenance, and it will not lose any of its functionality in the future.

3 Technical Specifications:

The following is the parts list for the adapted sled:

<table>
<thead>
<tr>
<th>Part Name</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sled</td>
<td>Plastic</td>
</tr>
<tr>
<td>Seat</td>
<td>Plastic</td>
</tr>
<tr>
<td>Full Harness</td>
<td>Nylon</td>
</tr>
<tr>
<td>Seat Side Supports (2)</td>
<td>1&quot; HDPE</td>
</tr>
<tr>
<td>Seat Back Supports (2)</td>
<td>PVC Pipe</td>
</tr>
<tr>
<td>Bolts (10)</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>Fender Washers (6)</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>Nuts (10)</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>Split Lockwashers (6)</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>Rope</td>
<td>Nylon</td>
</tr>
</tbody>
</table>

Table 1: Parts List for Adapted Sled
The following is the CAD drawing of the adapted sled with its dimensions:

![CAD Drawing of Adapted Sled](image)

*Figure 2: CAD Drawing of Adapted Sled*

**4 Troubleshooting:**

The only potential problem with the sled is that if there is not enough snow on the ground then it will be more difficult to pull the sled around, so it is recommended to use the adapted sled when there is plenty of snow on the ground.