**INTRODUCTION**

The Launcher Assembly #LIA-50 is designed to carry electrical current to the rocket engine igniter and to guide your model rocket into a straight flight trajectory. Its compact styling permits fast assembly and breakdown for ease of transportation and storage.

The LIA-50 can be used with Centuri's Lectra-Line Ignition Device EFC-1, with the EP-612 Firing Panel, or the Ignition Control Panel EFC-2. The combination of this Launcher and any of these ignition devices make the perfect ignition and launching system for most model rockets.

**NOTE!!**

Do not attempt to launch any model rockets on this launcher weighing over 5 ounces or powered by E or F type engines.

**REPLACEMENT PARTS LIST**

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Part Name</th>
<th>Replacement Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>LB-50</td>
<td>Launcher Base</td>
<td>1.20</td>
</tr>
<tr>
<td>ID-50</td>
<td>Steel Deflector</td>
<td>.55</td>
</tr>
<tr>
<td>ECA-50</td>
<td>Igniter Clip-Lead (Set of 2)</td>
<td>.60</td>
</tr>
<tr>
<td>LR-50</td>
<td>Two-Piece Launch Rod</td>
<td>.35</td>
</tr>
<tr>
<td>PA-50</td>
<td>Asbestos Pad</td>
<td>.20</td>
</tr>
<tr>
<td>HW-50</td>
<td>Hardware Set (8 pieces)</td>
<td>.35</td>
</tr>
</tbody>
</table>

**ASSEMBLY DIRECTIONS**

**STEP 1**

Using ordinary white glue, glue the asbestos sheet to the top of the launcher base. With a pencil or other pointed object, locate the three holes in the launcher base and
**STEP 2**
Assemble the hardware and attach the ignition clip-lead terminals tightly to the binder posts as shown in Detail C.

**STEP 3**
Connect the two-piece launching rod and insert the larger diameter rod end into the center hole of the launcher base as shown in Detail.

Now slide the metal deflector over the launch rod until it rests on the launcher base. Point the face of the deflector away from the binder posts.

To make rods fit together more tightly, squirt a drop of glue into the hollow end of the large diameter rod and fit the two rods together again.

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**CONNECTING UP THE ELECTRICAL IGNITION SYSTEM**

Many different electrical ignition circuits can be used with the LIA-50 Launcher, however, since this launcher is most commonly used with Centuri's Lectra-Line (EFC-1) Ignition Device, we have shown the recommended circuit for this combination.

This is the same wiring hook-up as shown in the main illustration on Page 1.

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**OPERATING INSTRUCTIONS**

Clear a level launch area about 10 feet in diameter, free from dry grass or brush and set the launcher in the center. Install the igniter in the rocket motor as outlined in Centuri's Engine Operating Instructions, then set the rocket on the launcher, with the engine directly over the slanted side of the deflector. Connect up your firing circuit output leads to the binder post (wing nuts) and connect the clip leads to the engine igniter. The system is now ready for action.

PLEASE NOTE!! It is extremely important that the micro-clips be clamped firmly to the igniter wire as close up to the rocket engine as possible. Do not let the clips touch each other or the metal deflector.

CAUTION!! To avoid injury to the eyes (from the tip of the launch rod) avoid leaning directly over the launch rod. For safety sake, spray the top 4 inches of the rod with a bright fluorescent paint to improve visibility.

For further information regarding rocket engines, rocket kits, ignition devices, or igniters, write to:

CENTURI ENGINEERING COMPANY  
Department Q  
P. O. Box 1988  
Phoenix, Arizona 85001