**FLYING SAUCER**

**FLYING MODEL ROCKET**

**KIT NO. 1947**  Skill Level 2  This Kit Recommended For Intermediate Rocketeers

**PARTS VIEW**

- FLYING SAUCER SHELL
- ENGINE HOLDER
- FIN LOCK RING
- DECAL
- ENGINE LOCK RINGS
- SAUCER FINS
- WIRE FORMS

**MATERIALS**

Locate the parts and materials shown in the parts view and lay them out on the table in front of you. In addition to the parts included in the kit you will also need: tube type plastic cement or liquid plastic cement.

- TUBE TYPE PLASTIC CEMENT
- LIQUID PLASTIC CEMENT

**ASSEMBLY TIP**

Read all instructions before beginning work on your model. Make sure you have all parts and materials. When you are thoroughly familiar with the assembly procedure, begin construction. Check off each step as you complete it. In each step, test-fit the parts together before applying any cement. Pay special attention to the symbols for application of cement or no application as shown below.

- CEMENT
- NO CEMENT REQUIRED

**ASSEMBLY**

1. Remove any plastic flash from under the wireform tabs and launch lugs.

   ![Launch Rod Must Slide Freely Through Launch Lugs]

2. Apply cement to slots along engine holder. (three places)

3. Position saucer fins into slots and hook top part of fin into top slot on engine holder.
A. Apply a small amount of cement to top lobe on the three fins.
B. Push fin lock ring into place until it snaps securely onto engine holder.

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A. Apply a small amount of cement to inside of saucer fin location slots on inside surface of saucer shell.
B. Position saucer fin lock tabs in slots of saucer shell.
C. Push fins into slots until lock tabs snap into place. Allow Cement to dry thoroughly.
4. Snap three wire forms into place as shown.
B. Wire forms are made to take the impact of landing and can come off in a hard landing. If this happens, snap wire forms back into place.

5. Position one of the engine lock rings on engine holder and turn clockwise to lock it into place.
B. To remove engine lock ring turn ring counterclockwise and remove.
C. Your Flying Saucer comes with two lock rings. One is a spare to be used if the first one is lost or misplaced.

6. Apply self adhesive decals in positions shown.
A. Wipe decal areas with a clean cloth to remove any oily fingerprints.
B. Peel the decals from the backing sheet one at a time. Center each decal carefully onto its designated area and press it firmly into place.
FLYING YOUR SAUCER
Choose a large field away from power lines, tall trees, and low flying aircraft. For your first flight try to find a field at least 250 feet square. In choosing a launch area, the larger the better. Football fields and playgrounds are suitable. The larger the launch area, the better your chance of recovering your rocket.

LAUNCHING COMPONENTS
To launch your Saucer you will need the following items:
—An Estes model rocket launching system
—Recommended Engines: B6-0 and C6-0

SAUCER PREFLIGHT

A. SLIDE THE ENGINE INTO ENGINE HOLDER
   NOZZLE END UP

B. POSITION ENGINE LOCK RING OVER END OF ENGINE AND ENGINE HOLDER

C. TURN ENGINE LOCK RING CLOCKWISE TO LOCK IT INTO PLACE

D. SEPARATE IGNITERS

E. INSERT IGNITER INTO ENGINE NOZZLE

PUSH TAPE FIRMLY INTO ENGINE NOZZLE

F. BEND IGNITER FLAT TO RING AND SPREAD ENDS

G. SECURE WITH MASKING TAPE

COUNTDOWN CHECKLIST
1. Disarm the launch panel—REMOVE THE SAFETY KEY!

2. Slide the launch rod through both Saucer launch lugs and place Saucer on launch pad. Make sure the Saucer slides freely on the launch rod. Clean the micro-clips and attach them to the igniter wires. Arrange the clips so they do not touch each other or the metal blast deflector. Attach clips as close to protective tape on igniter as possible.

3. Move back from your Saucer as far as launch wire will permit. Alert bystanders that you are ready to launch.

4. Arm the launch panel—INSERT SAFETY KEY!

5. LAUNCH!! PUSH AND HOLD LAUNCH BUTTON UNTIL ENGINE IGNITES

MISFIRE PROCEDURE
Disarm the launch panel. Wait one minute before approaching the rocket on the launch pad. Remove the rocket, clean the igniter residue from the nozzle of the engine, and carefully install a new igniter. Repeat the Countdown Checklist.

Failure of the rocket engine to function properly is nearly always caused by a failure to install the igniter correctly. This failure permits the igniter to heat and burn into two pieces without igniting the engine.