BEFORE YOU START

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 glue. If some part doesn’t fit properly, sand lightly or build up as required for precision assembly.

PARTS LIST KIT NO. 1360

A 1 Engine Mount Tube (type BT-20) ..... 30326
B 1 Engine Hook (type EH-2) ..... 35025
C 1 Retainer Ring (type HR-20) ..... 30168
D 1 Engine Block (type AR-520) ..... 30162
E 1 Adapter Ring Set (type RA-2056) ..... 30126
F 1 Shock Cord Mount (type SCM-80) ..... 84444
G 1 Shock Cord (type SC-1) ..... 85730
H 1 Body Tube (type BT-55) ..... 30382
I 1 Die-Cut Balsa Fin Sheet (type BF-1300)32382
J 1 Die-Cut Balsa Fin Sheet (type BF-1300)36538
K 1 Launch Lug (type LL-2A) ..... 38175
L 1 Plastic Nose Cone (type PNC-55AC) ..... 71070
M 1 Parachute (type PK-12) ..... 85564
N 1 Shroud Line (type SLT-72) ..... 38237
O 1 Tape Discs Set (type TD-3F) ..... 38400
P 1 Decal (type KD-1360) ..... 37536
Q 1 Fin Marking Guide ..... 84258

TOOLS AND MATERIALS

In addition to the parts included in the kit you will need an X-Auto type modeling knife, white glue (Elmer’s, Titebond, or similar), scissors, pencil, ruler, masking tape, fine and extra-fine grit sandpaper, sanding sealer, dowel, and a medium-size modeling paint brush. To paint your model we recommend camouflage gray or white enamel spray paint. Gloss clear spray may be used to protect the decals. For easy and positive alignment of the rear fins on your model, we recommend the use of Estes’ Fin Alignment Guide part number 2231.

RECOMMENDED ENGINES

AB-3 B4-4 B6-4 B8-5 C5-3 C6-5
ASSEMBLY INSTRUCTIONS

Mark across the engine mount tube (part A) 1/4" and 1-1/2" from one end as shown. Cut a 1/8" wide slit in the tube at the 1/4" mark. Apply glue from the slit to the 1-1/2" mark. Push one end of the engine holder (part B) into the slit and press the main part of the hook into the glue. Apply a thin layer of glue 1/4" wide around the tube to the rear of the 1-1/2" mark. Slice the retainer ring (part C) over the engine hook and the rear of the tube up to the 1-1/2" mark. Wipe off any excess glue.

Apply glue to the inside front of the engine tube. Immediately push in the engine block (part D) until the block is against the engine hook. Carefully separate the two adapter rings (part E) from the die-cut card sheet. Cut a notch 1/8" wide and 1/16" deep on the inside of one of the rings as shown. Slide the notched adapter ring over the rear of the engine tube up to the retainer ring so that the notch is over the engine hook. Slide the other adapter ring over the front of the engine tube up to the engine hook and as shown. Glue the rings in place by applying a line of glue where ring meets tube all around both sides of each ring. Set the assembly on one end while the glue dries.

Cut out the shock cord mount (part F). Crease it on the dotted lines by folding. Spread glue on the first section (1) and lay the end of the shock cord (part G) into the glue. Fold over and apply glue to the back of the first section and the exposed part of section 2. Lay the shock cord as shown and fold over again. Clamp the unit together with your fingers until the glue sets.

Smear glue over the entire back side of the shock cord mount. Hold the mount as shown and press it into place inside the end of the rocket body tube (part H). Make sure the front of the mount is at least 1" from the end of the tube. Hold the mount in place until the glue dries.

When the glue on the engine mount has dried completely, check the fit of the rings inside the body tube. The rings should slide easily into the tube. If the fit is tight, sand the outer edges of the rings until they slide easily in the body tube.

Apply a ring of glue around inside of rear end (the end opposite the shock cord mount) of body tube about 2" to 2-1/2" from the end of the tube. Slide the engine mount unit, engine block first, into the body tube so that the engine tube and body tube are even. Do not pause while inserting the engine mount or the glue may "grab" with the mount in the wrong position. Finish the installation by applying glue to the joint between the rear ring and the body tube. (Use a dowel or toothpick to apply the glue.)

Cut out the body tube marking guide (part I) from back of the panel. Wrap the guide tightly around the rear of the body tube. Align the guide lines and tape the guide together. Line up the launch lug line with the engine hook. Mark the fin lines and the launch lug lines on the body tube. Using the guide, draw a line around the body tube 3" from the rear of the tube. Remove the guide. Press the body tube firmly against the inside of a door frame as shown. Draw a line through each pair of marks the entire length of the body tube.
细砂纸打磨所有方向的木片。仔细地将木片从原木上分离，使用锋利的刀片小心地从角和边缘切开。将后翼木片叠放并粘上。重复此过程，将后翼木片粘在前翼木片上，注意木片的边缘。将后翼木片的边缘对齐，边角整齐。

9. 擦粘胶到根部边缘

将粘胶涂抹到每个木片的边缘上。然后将后翼木片粘在前翼木片上，确保紧密贴合。确保木片的边缘对齐，且每对翼木片的边缘都平齐。

10. 剪掉多余的塑料

剪掉每个木片的多余塑料。确保木片边缘清晰。

11. 夹紧降落伞

将降落伞用胶带固定在结构上，确保降落伞固定牢固。

12. 定位发射喉

将发射喉固定在发射喉的导线线上，确保发射喉位置正确。

13. 粘合加强

当所有木片和发射喉都干燥后，将木片粘合到发射喉上，保证粘合牢固。

14. 沙纸打磨

在所有粘合料干燥后，用细砂纸打磨木片，准备上漆。至少涂两层封层到所有表面，让其干燥。然后用细砂纸彻底打磨表面，每层涂上封层后都要打磨。
NOTE: DO NOT pack parachute until you are actually ready to launch. For maximum parachute reliability, lightly dust the ‘chute with ordinary talcum powder before each flight, especially in cold weather.

T-12 Pack parachute, shroud lines, and shock cord neatly into rocket body. Slide nose cone into place.

Nose cone should separate easily from rocket body tube, but should not be extremely loose. If fit is too tight, sand inside of body tube and shoulder of nose cone with fine sandpaper. If fit is too loose, add a wrapping of transparent tape or masking tape to the shoulder of the nose cone.

T-11 Select an engine and install an igniter as directed in the engine instructions. Use a B4-4 engine for your first flight.

T-10 Insert engine into rocket engine mount. Engine hook must latch securely over end of engine.

T-9 Disarm the launch panel – REMOVE SAFETY KEY!

T-8 Slide launch rod through rocket launch lug and place rocket on launch pad. Make sure the rocket 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 engine as possible.

T-7 Clear the launch area, alert recovery crew and trackers. Check for low flying aircraft and unauthorized persons in the recovery area.

T-6 Arm the launch panel – INSERT SAFETY KEY!

- 5-4-3-2-1-LAUNCH !!

Repeat the Countdown Checklist for each flight.

MISFIRE PROCEDURE

Occasionally the igniter will heat and burn into two pieces without igniting the engine. This is almost always caused by a failure to install it correctly. REMOVE SAFETY KEY from launch panel, remove the model, clean the igniter residue from the engine nozzle, and install a new igniter. Repeat the Countdown Checklist.