IMPORTANT: Please record date found on decal and keep for future reference. ______________

READ ALL INSTRUCTIONS. Make sure you have all parts and supplies. Test fit all parts before applying glue. Sand as necessary for precision assembly. Product color and shape may vary.

SUPPLIES

- SCISSORS
- PENCIL
- RULER
- FINE SANDPAPER
- CARPENTER’S GLUE
- HOBBY KNIFE
- MASKING TAPE
- CLEAR TAPE
- PRIMER (WHITE)
- CLEAR COAT (OPTIONAL)
- PAINT (GREEN, WHITE)
- SAND BLOCK

MODEL ROCKET INSTRUCTIONS

KEEP FOR FUTURE REFERENCE

SUPPLIES

- A 030362 Engine mount tube
- B 035021 Engine hook
- C 030164-2 Green engine block
- D 030480 Black engine hook retainer ring
- E 090052-1718 Laser cut centering rings
- F 046005 Main body tube
- G 090051-1718 Laser cut wood sheet
- H 030110 Nose cone
- J 030606 Clear payload section
- I 030362 Adapter
- K 038166 Launch lug
- L 038363 Shock cord
- M 035802 Parachute

SHOCK CORD MOUNT

Make a copy if you want to keep instructions.
PREPARE FINS

1. Sand both sides.

2. Use hobby knife to gently remove fins.

MARK BODY TUBE

1. Make a mark in the middle of any two fin slots.

2. Use a door frame to extend mark into line.

ASSEMBLE ENGINE MOUNT

1. Use hobby knife to remove centering rings.

2. Insert B.

3. Apply glue around A and side D to 1" (25 mm) mark.

4. Glue fillets. Insert B.

5. Apply glue to the inside of A and insert C.

6. Align E notch with B.

1. Apply glue inside F. Insert the engine mount.

2. ENDS EVEN

3. G

4. Let dry.

5. Check alignment using alignment guide below.

6. 2 3/4" (7 cm)

TOP VIEW

ALIGNMENT GUIDE
ATTACH LAUNCH LUG
1. Apply glue to F. Attach K as shown.
2. Apply glue fillets to both sides of all joints.

INSTALL SHOCK CORD
1. Apply glue to shock cord mount.
2. Hold until set.
3. Glue shock cord mount to the inside of F.
4. 1 1/2" (38 mm)
5. Apply glue to shock cord mount.
6. Glue shock cord mount to the inside of F.
7. 1 1/2" (38 mm)

NOTE:
Cut from page 1.

ROCKET FINISHING
1. Spray rocket with white primer, let dry, and sand. Repeat until rocket is smooth, then paint.
2. Apply self-stick decal.

ASSEMBLE PAYLOAD SECTION
1. Use hobby knife to cut nose cone into 2 sections.
2. Use hobby knife to remove excess plastic from eyelet piece.

NOTE:
Do not cut off eyelet.

ATTACH PARACHUTE
1. Use finger to hold until glue sets.
2. Glue shock cord mount to the inside of F.
3. 1 1/2" (38 mm)
4. Use finger to hold until glue sets.
5. DOUBLE KNOT

ATTACH LAUNCH LUG
6. 6" (15.2 cm)
PREPARE RECOVERY SYSTEM

1. Push recovery wadding down towards end of body tube.

NOTE:
Recovery wadding and parachute must slide easily into body tube. If too tight, redo.

PREPARE PAYLOAD SECTION FOR LAUNCH

1. Remove nose cone from payload section.

2. Use cushioning to pad egg on both ends.

3. Insert cushioning and egg into payload section.

4. Reattach nose cone to payload section.

SUGGESTIONS FOR CUSHIONING
• Paper
• Paper towels
• Tissue
• Tissue paper
• Sponge
• Foam

PREPARE ENGINE

1. STARTER
Use 1 each.

2. PLUG

3. TIP MUST TOUCH PROPELLANT!

WARNING: FLAMMABLE
To avoid serious injury, read instructions & NAR Safety Code included with engines. PREPARE YOUR ENGINE ONLY WHEN YOU ARE OUTSIDE AT THE LAUNCH SITE PREPARING TO LAUNCH. If you do not use your prepared engine, remove the starter before storing your engine.
PRE-LAUNCH CHECK  For safety, never launch a damaged rocket. Check the rocket's body, nose cone and fins. Also, check the engine mount, recovery system and launch lug(s). Repair any damage before launching the rocket.

FLYING YOUR ROCKET  Choose a large field (500 ft. [152 m] square) free of dry weeds and brown grass. The larger the launch area, the better your chance of recovering your rocket. Football fields and playgrounds are great. Launch only with little or no wind and good visibility. Always follow the National Association of Rocketry (NAR) SAFETY CODE (enclosed).

MISFIRES  TAKE THE KEY OUT OF THE CONTROLLER, WAIT ONE MINUTE BEFORE GOING NEAR THE ROCKET! Disconnect the micro clips and remove the engine. Take the plug and starter out of the engine. If the starter has burned, it worked but did not ignite the engine because it was not touching the propellant inside the engine. Put a new starter all the way inside the engine without bending it. Push the plug in place. Repeat the steps under Countdown and Launch.