

6. INSTALL SHOCK CORD MOUNT

A. Cut out Shock Cord Mount from BACK PAGE.

B. Apply glue. Fold forward.

C. Apply glue. Fold forward.

D. Squeeze tightly and hold for one minute.

E. Glue mount 1.5" (3.8 cm) inside upper Body Tube. Hold until glue sets. Let dry.

7. ATTACH PARACHUTE & SHOCK CORD

A. Remove excess flash and clean the eyelet of the nose cone.

B. Form loop in Shroud Lines and push through hole in Nose Cone.

C. Pass 'Chute through loop.

D. Tie Shock Cord to Nose Cone using a double knot.

HELPFUL HINT: IF NOSE CONE/COUPLER FIT IS...

TOO LOOSE: ADD MASKING TAPE.

TOO TIGHT: SAND FOR FIT.

8. FINISHING YOUR ROCKET

First spray rocket with white primer, except for internal tube. Let dry and sand. Repeat until rocket is smooth. FOLLOW THE PAINT SCHEME ON THE PACKAGE.

When paint is dry, peel decals one at a time from backing sheet and apply where shown. Rub down to remove bubbles.

OPTIONAL: Spray a clear coat on entire rocket after paint dries and after decal placement.

PREPARE PARACHUTE FOR FLIGHT

A. Insert 6-8 squares of loosely crumpled recovery wadding into rocket.

B. Spike Parachute.

C. Fold.

D. Roll.

E. Wrap lines loosely. Insert 'Chute, Shock Cord and Nose Cone into Body Tube.

NOTE: Only Estes Wadding (302274) Recommended.

PREPARE ENGINE

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 igniter before storing your engine.

A. Separate igniter and plug.

B. Insert igniter.

C. Insert plug.

D. Push down.

E. Gently bend igniter wires to form leads as shown.

F. Insert Engine.

COUNTDOWN AND LAUNCH

KEY ALWAYS OUT UNTIL FINAL COUNTDOWN!

1... Masking Tape

2...

3...

4...

5...

LAUNCH BUTTON

INSERT KEY. PUSH DOWN AND HOLD.

HOLD KEY DOWN AND PRESS LAUNCH BUTTON UNTIL LIFT-OFF!

ESTES LAUNCH SUPPLIES (Sold Separately)

- Porta Pad® II Launch Pad (Requires 3/16" [5 mm] Maxi™ Rod - sold separately).
- Electron Beam® Launch Controller
- Recovery Wadding
- Igniters (with Engines)
- Igniter Plugs (with Engines)
- Recommended Engines: D12-3, D12-5

PRECAUTIONS

NAR Safety Code

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 the 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.

MISFIRES

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

ANSARI X PRIZE™ TEAM OVERVIEW Space Transport Corporation

One of the newest entrants to the ANSARI X PRIZE race, Space Transport Corporation was founded in August of 2002 by Eric Meier and Philip Storm, former engineers for Aerojet. The company was founded with the vision of maximizing efficiency in development, production, and administration to provide inexpensive space access. The company operates from a 3,500 square foot office/shops in Forks, WA. The community in the beautiful Forks area is founded on a pioneering spirit and STC is proud to be a part of a new generation of pioneers in the region. STC has launched several unmanned sounding rockets, one to a height of 150,000 feet, and has successfully tested the engines that will be used on its manned ANSARI X PRIZE vehicle, the Rubicon.

TEAM SPECIFICATIONS:
Name: Space Transport Corporation. Website: www.space-transport.com
Country of Origin: Forks, Washington, USA

VEHICLE SPECIFICATIONS:
Name: Rubicon
Length: 22 feet (6.7 m). Diameter: 38 inches (96.5 cm). GTOW: 5,000 (2,268 KG).
DRY WT: 1,500 lb (680 KG). Engines: Seven. Total Thrust: 20,000 lb (88,964 N).
Payload Capacity: 595 lbs (270 kg). Crew Environment: Pressurized cabin.

MISSION SPECIFICATIONS:
Launch Method: Vertical Take-off from ground. Max. Accel. Force on Ascent: 7 G's.
Max. Speed: 3,000 mph (1,341 m/s). Max. Altitude: ~68 miles (110 km). Time in Weightless Conditions: ~3 minutes. Landing Method: Ocean splashdown via parachute. Total Flight Duration: ~25 minutes.

ESTES® Space Transport Corporation RUBICON #2189

www.estesrockets.com

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Penrose, CO 81240
PRINTED IN CHINA

FLYING MODEL ROCKET KIT INSTRUCTIONS
KEEP FOR FUTURE REFERENCE

ASSEMBLY TIP: Read all instructions before beginning work on your model. Make sure you have all parts and supplies.

TEST FIT ALL PARTS TOGETHER BEFORE APPLYING ANY GLUE!
If any parts don't fit properly, sand as required for precision assembly.

ANSARI X PRIZE™

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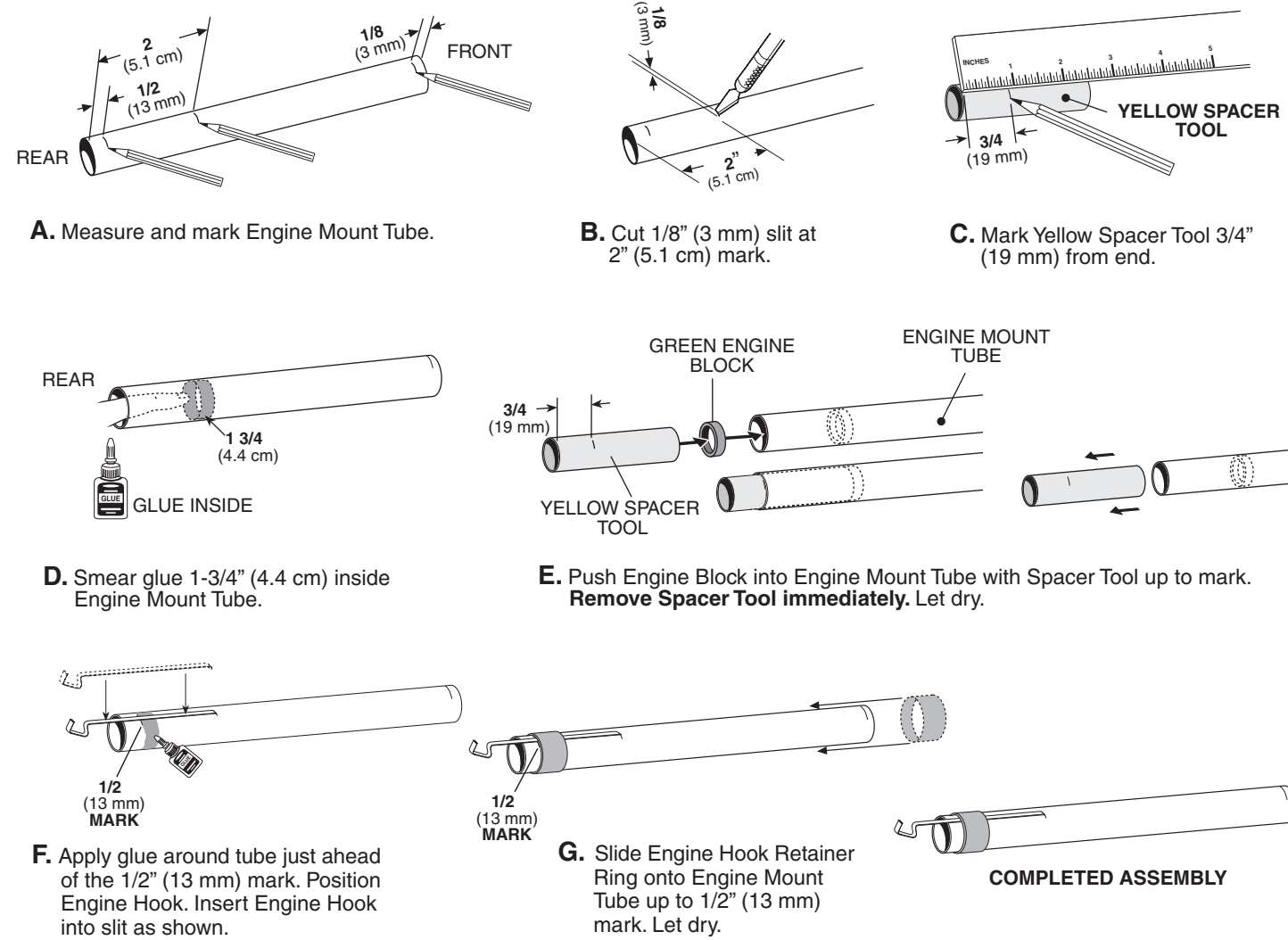
PARTS

Locate the parts shown below and lay them out on the table in front of you. DO NOT USE THIS DRAWING TO ASSEMBLE YOUR ROCKET.

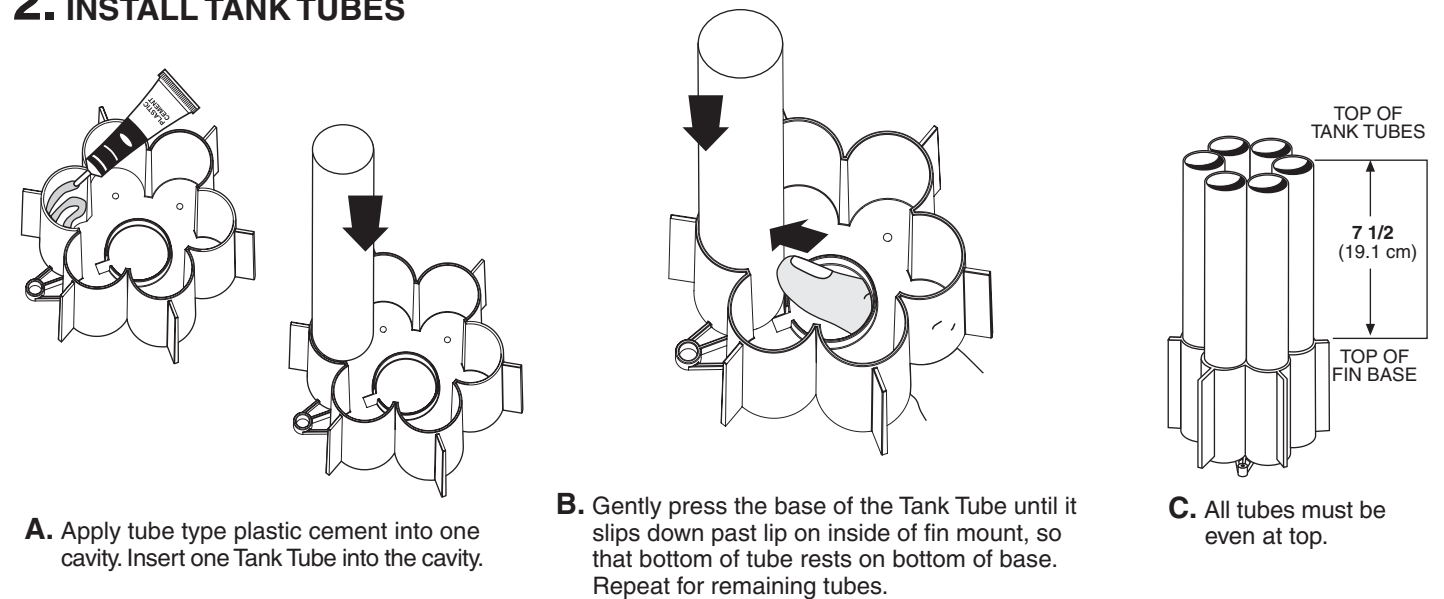
SUPPLIES

In addition to the parts included in the kit you will also need:

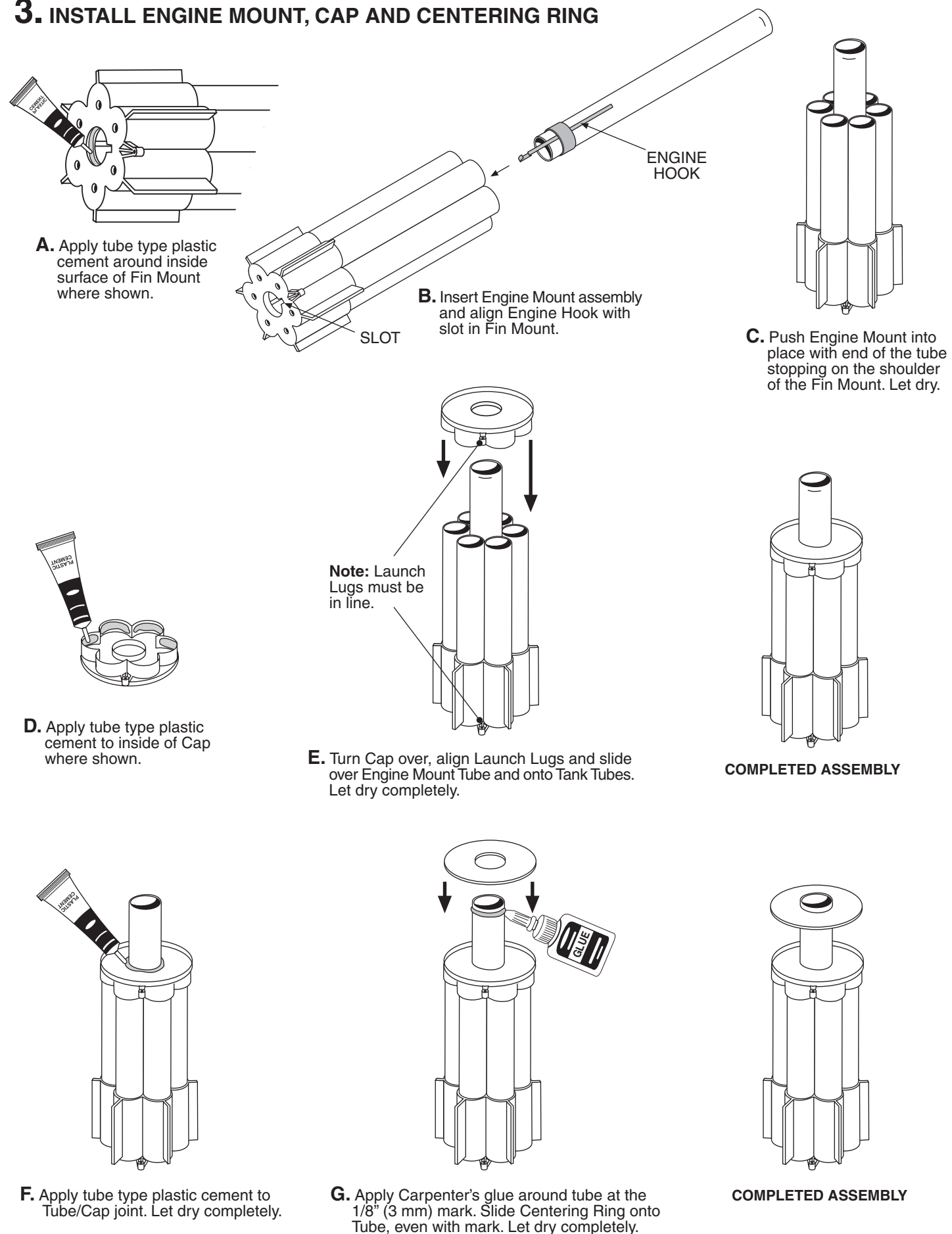
1. ASSEMBLE ENGINE MOUNT



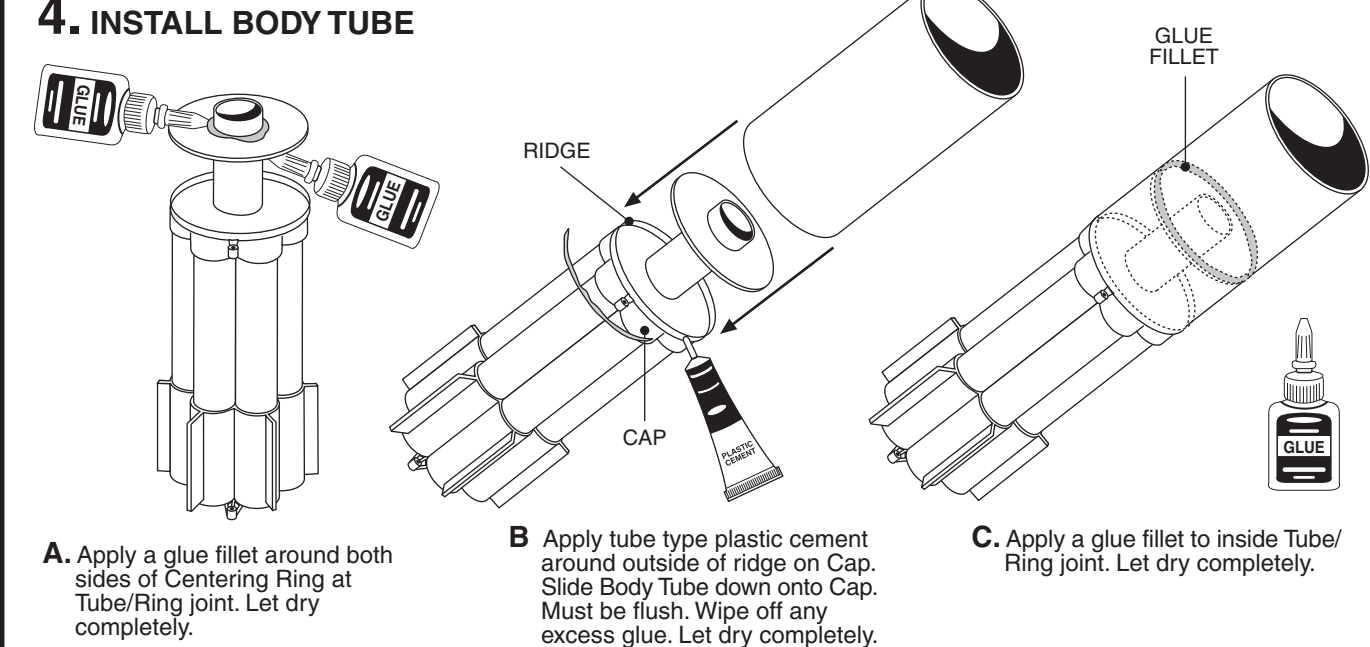
2. INSTALL TANK TUBES



3. INSTALL ENGINE MOUNT, CAP AND CENTERING RING



4. INSTALL BODY TUBE



5. ATTACH NOZZLES AND FINS

