

## FLYING INSTRUCTIONS

### ENGINES

Igniters and complete engine installation instructions are included in "Engine Operating Instructions" which accompany all Centuri Engines.

Your Fighter can be launched with the following engines.

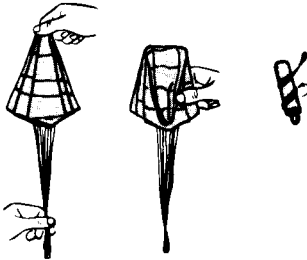
ENGINE	APPROXIMATE ALTITUDE	PURPOSE
A8-3	100 feet	<b>LOW ALTITUDE</b> - for first test flights and small launch areas.
B4-4 B6-4	200 - 250 feet	<b>MEDIUM ALTITUDES</b> - for general flying and medium size launch areas.
C6-5	400 - 600 feet	<b>HIGH ALTITUDES</b> - for extremely high flights and large launch areas.

### FLIGHT PREPPING

1. Inspect entire recovery system for good condition before each flight. If the recovery system is tangled from the last flight, cut it apart to untangle it.

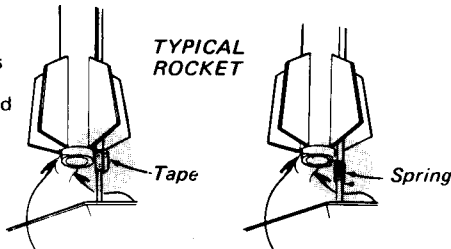
Insert flameproof chute wadding to protect your parachute from being melted by the engine's ejection charge. We recommend using 3 sheets of Centuri crepe wadding (#5846/SPW-19).

3. Fold parachutes as shown and tuck neatly into rocket . . . trying to avoid tangles. Chutes should be packed just before flight to avoid them possibly sticking together.

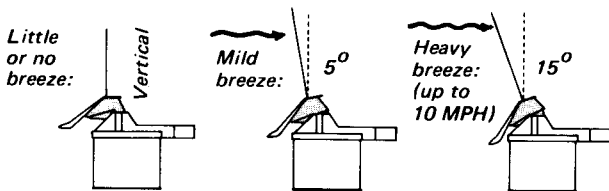


4. Tuck in shock cord and insert nose cone. The cone should fit snugly, yet be loose enough to eject.
5. Install igniter into engine, following instructions enclosed with engines.
6. Insert engine into its mount, securing with engine lock.

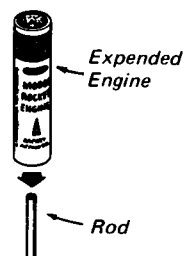
7. Mount the rocket on launcher and prepare for ignition. The rocket must be raised slightly off the launcher's deflector to avoid a short-circuit which might prevent ignition. If your launcher has a "positioning spring" use it as shown. Otherwise just wrap a little tape around the launch rod to support the rocket and the launch lug.



8. If your launcher has a rod-tilting feature, use it only for launching in breezes . . . normally model rockets are launched straight up. For reliable, impressive flights, never tilt the rod more than 15 degrees when flying your Fighter Kit . . . do not tilt the rod to its maximum angle.



Avoid eye injury by capping the exposed tip of the launch rod when not actually launching. Follow the instructions and the Safety Code, and have many happy hours with model Rocketry.



**Centuri**  
**FIGHTER FLEET™**

**F-15 Eagle**

Prod. No. 5318

The "FIGHTER FLEET" is a family of unique model rockets designed to look like famous jet aircraft. Each jet has been carefully re-styled for safe and stable vertical rocket flight.

A real jet airplane is intended basically for horizontal flight. Its wings have aerodynamic lift ability, and a pilot sits inside it to make all the corrections and adjustments for a safe flight.

A Centuri model rocket is designed for vertical flight. There is no pilot to guide it, and its "wings" (fins) must be placed far back to provide a satisfactory flight. This kit is not a scale model jet: It is a flying model rocket that looks like a jet.



## MODEL ROCKETEER'S SAFETY CODE

### CONSTRUCTION

My model rockets will be made of only lightweight materials such as paper, wood, plastic, and thin metallic foils, with the exception of payloads and engine holders made of wirelike material.

### ENGINES

I will use only pre-loaded factory made model rocket engines in the manner recommended by the manufacturer. I will not change in any way nor attempt to reload these engines.

### RECOVERY

I will always use a recovery system in my model rockets that will return them safely to the ground so that they may be flown again.

### WEIGHT LIMITS

My model rocket will weigh no more than 453 grams (16 oz.) at liftoff, and the engines will contain no more than 113 (4 oz.) of propellant, as prescribed by Federal Regulations.

### STABILITY

I will check the stability of my model rockets before their first flight except when launching models of already proven stability.

### LAUNCHING SYSTEM

The system I use to launch my rockets will be remotely controlled and electrically operated, and will contain a switch that will return to "off" when released. I will remain at least 10 feet away from any rocket that is being launched.

### LAUNCH SAFETY

I will not let anyone approach a model rocket on a launcher until I have made sure that either the safety interlock key has been removed or the battery has been disconnected from my launcher.

### LAUNCH AREA

My model rockets will always be launched from a cleared area, free of any easy-to-burn materials, and I will only use non-flammable recovery wadding in my rockets.

### BLAST DEFLECTOR

My launcher will have a blast deflector device to prevent the engine exhaust from hitting the ground directly.

### LAUNCH ROD

To prevent accidental eye injury I will always place the launcher so the end of the rod is above eye level or cap the end of the rod with my hand when approaching it. I will never place my head or body over the launching rod. When my launcher is not in use I will always store it so that the launch rod is not in an upright position.

### POWER LINES

I will never attempt to recover my rocket from a power line or other dangerous places.

### LAUNCH TARGETS AND ANGLE

I will not launch rockets so their flight path will carry them against targets on the ground, and will never use an explosive warhead nor a payload that is intended to be flammable. My launching device will always be pointed within 30 degrees of vertical.

### PRE-LAUNCH TEST

When conducting research activities with unproven designs or methods, I will, when possible, determine their reliability through pre-launch tests. I will conduct launchings of unproven designs in complete isolation from persons not participating in the actual launching.

### FLYING CONDITIONS

I will not launch my model rocket in high winds, near buildings, power lines, tall trees, low flying aircraft or under any conditions which might be dangerous to people or property.

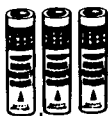
# ASSEMBLY INSTRUCTIONS

## HOW IT WORKS

Your "Fighter Fleet" model rocket is designed to fly in the same manner as most model rocket kits. The electrically ignited engine blasts the rocket-jet off the launch pad, guiding it into proper flight by the launch rod. The rocket continues coasting to peak altitude while the engine's delay-charge burns. Then the ejection charge ignites, pushing out the nose cone and parachute system. Your rocket-jet drifts to earth ready to be prepared for another flight.

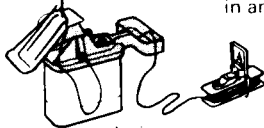
## WHAT IT TAKES TO FLY

You will need engines, igniters, an electrical launch system and parachute wadding to fly your rocket. These supplies are NOT included in individual rocket kits, but are available separately and ARE included in every Centuri Starter Set or Rocket Outfit.



We recommend using Centuri engines; each package includes the famous "Sure-Shot" igniters, acclaimed as the world's most reliable model rocket igniter.

The popular Centuri "Powr-Pad" is an ideal basic launch system; compact, highly portable, reliable, and offering features not found in any other launch system.



Always use standard remote-control electrical ignition and follow the engine recommendations. Be sure to comply with any laws that may apply in your area, for the good of Model Rocketry and your own enjoyment.

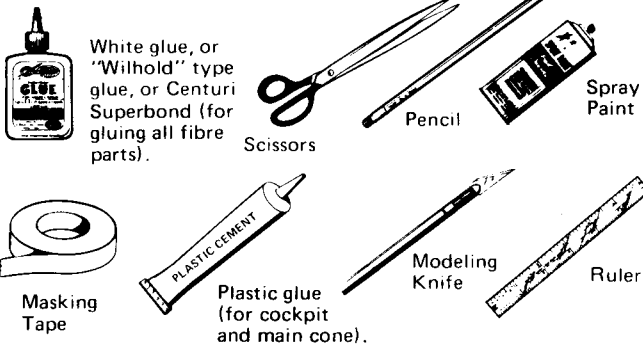
## RIGHT MATERIALS FOR THE JOB

Different model rocket kits are made out of a wide variety of materials, depending on the needs of each kit. The chart below explains why this particular kit is designed using certain materials.

PART	REQUIREMENTS	MATERIAL
Fins	<ul style="list-style-type: none"> <li>No tools required</li> <li>Precision edges</li> </ul>	Pre-cut Fibreboard
Nose Cone	<ul style="list-style-type: none"> <li>No tools required</li> <li>Durability</li> </ul>	Molded Styrene

## TOOLS YOU WILL NEED

In addition to the parts supplied you will need the following tools to assemble and finish this kit (DO NOT use model airplane glue for building model rockets).



## BEFORE YOU START

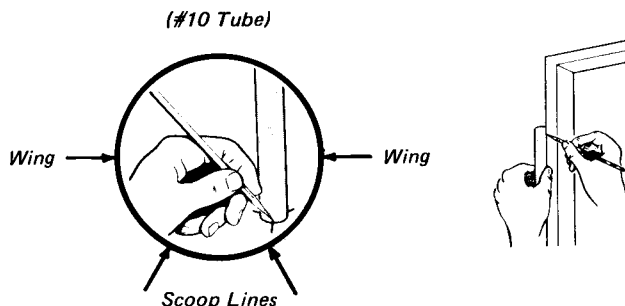
In case you are new to model rocketry, here are some general tips to get you off to a good start.

- Choose a practical assembly area: well lighted, big enough to work in, and out of the way of relatives or pets who might accidentally mess up your work.
- Cover your worktable with plywood or heavy cardboard to protect the table from glue, paint, cuts, etc.
- Remove the entire contents of your kit package carefully to avoid losing or damaging small parts. Lay them out neatly and identify each by referring to the "exploded view" drawing on this instruction.
- NOTE: Sometimes certain parts are packed INSIDE of other parts, such as tape discs inside parachutes, decals or couplers inside body tubes, etc.

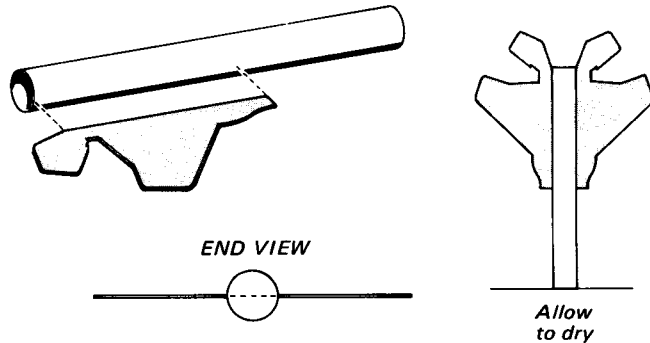
## BEFORE YOU START:

- Place the "Exploded View" plan sheet where you can refer to it while following these assembly instructions. Look it over to get familiar with all the parts.
- You MUST follow these instructions for satisfactory flights. The shape and placement of the model's parts has been carefully engineered for safe flights. DO NOT try to change the design, "customize" it, or leave off any parts!
- Locate the different flat parts in the pre-cut fibreboard sheet. Carefully push them out as needed to avoid bending them. Use a modeling knife, if necessary, to free any partially cut parts.

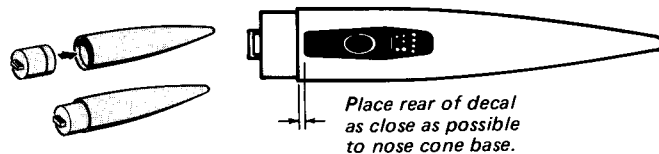
- 1 Stand the main body tube on the fin guide to mark fin locations. Find a convenient channel or groove, such as a door jamb, partially open drawer, or molding. Extend the marks the full length of the tube.



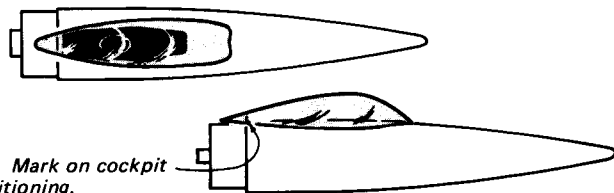
- 2 Note how the wings are glued with nicks on the same side as the body tube's scoop lines. All gluing steps require white glue, unless stated otherwise. Apply a bead of glue to one wing's foot edge and press onto the body tube along a wing line. Remove, allow it to become tacky. Add fresh glue to fin, and reposition. Repeat with the other wing. Allow assembly to dry, standing upright.



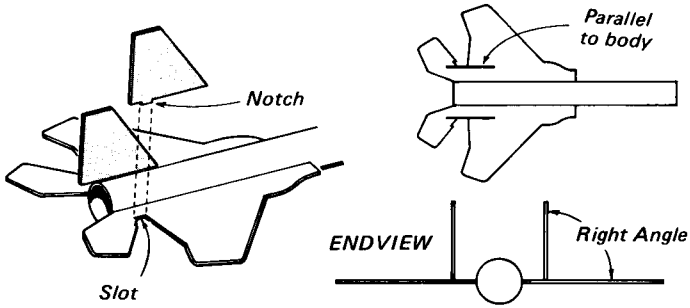
- 3 Assemble the main nose cone by snapping its insert into the cone until you hear and feel the parts locking in place (NOTE: plastic glue will provide an even stronger joint.) Cut the "cockpit interior" decal from the decal sheet and apply it onto the nose cone exactly as shown. (General decal instructions are printed on the back of decal sheet).



- 4 Use PLASTIC glue to attach the cockpit to the nose cone. Center it neatly around the decal, and position as shown.

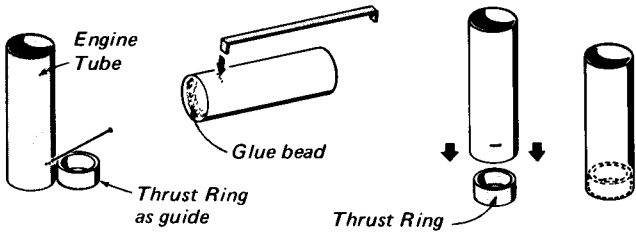


- 5** Glue the rudders onto the wings, joining the notches and slots. **NOTE:** Position the assembly so the nicks on wing surfaces are on the underside.

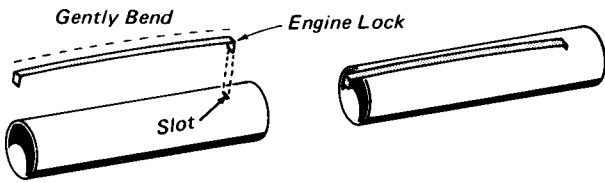


- 6** Make an engine-lock slit in the engine tube by poking holes with a pin or modeling knife. Push engine lock into tube to finish the slit, then remove the lock.

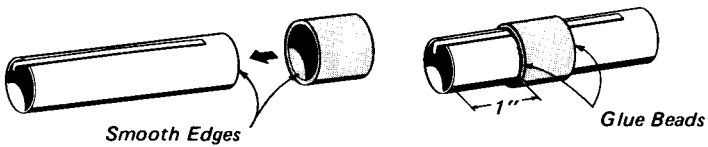
Run glue bead around inside of the slit end of the tube. Insert thrust ring by pushing tube down over it.



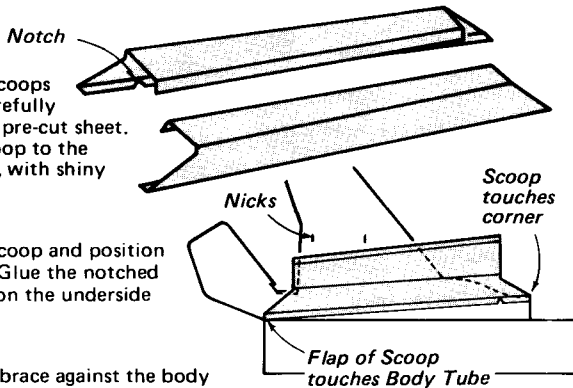
- 7** Bend the engine lock gently into a slightly curved shape. Now insert one end of the lock into the engine tube slot. This assembly is called an engine mount.



- 8** Slide the centering ring over the engine tube as shown. **NOTE:** Because these parts are precision fit, smooth any rough edges before joining. Apply glue beads (front and back) as shown.

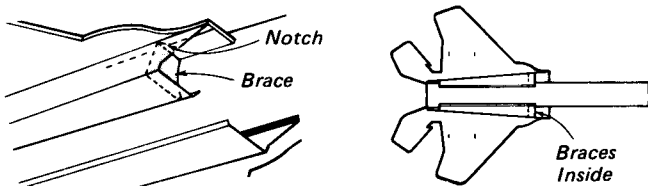


- 9** Remove the scoops and braces carefully from the thin pre-cut sheet. Bend each scoop to the shapes shown, with shiny side out.

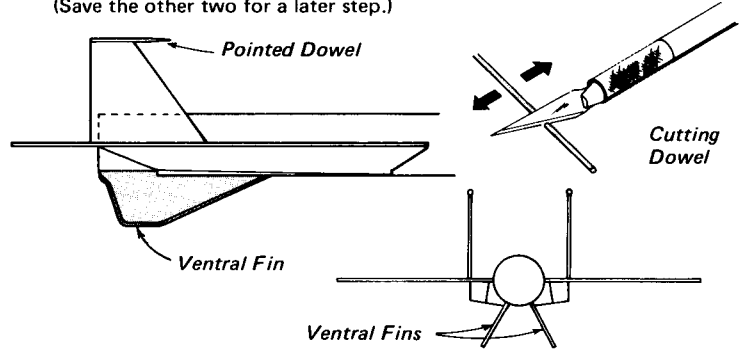


- 10** Choose one scoop and position it as shown. Glue the notched flap in place on the underside of a wing.

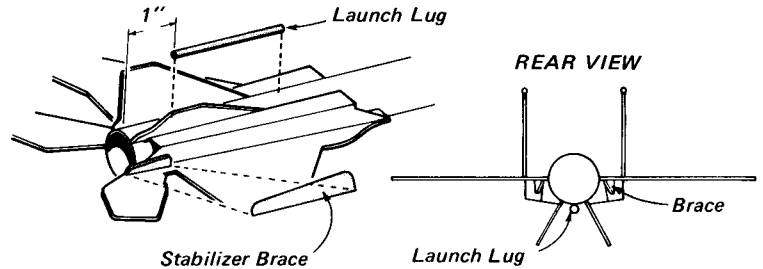
- 11** Glue a scoop brace against the body tube, positioning it in the flap-notch. Now fold the scoop into place against the body tube, placing its edge parallel to the drawn scoop line. Run a bead of glue along the seam and hold in place until it sets. Repeat for the other scoop.



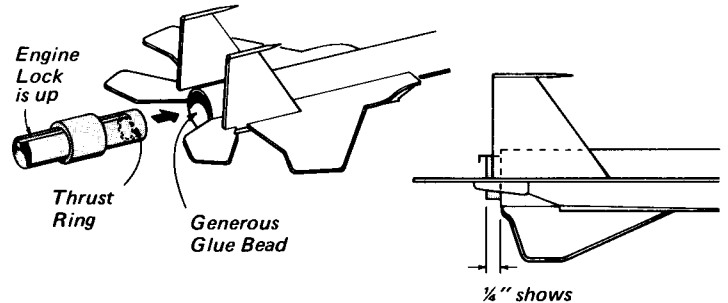
- 12** Glue the ventral fins in place against the scoops as shown. Cut the wooden dowel into four pieces approximately 1 3/8" long. Taper two of them to a point and glue on top of the rudders as shown. (Save the other two for a later step.)



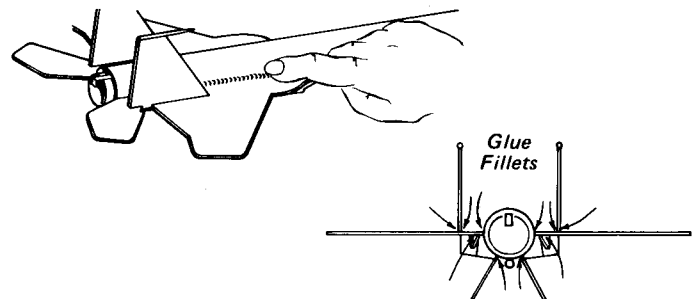
- 13** Glue the stabilizer braces against the rear scoops as shown. Center the launch lug approximately one inch from the rear of the body tube.



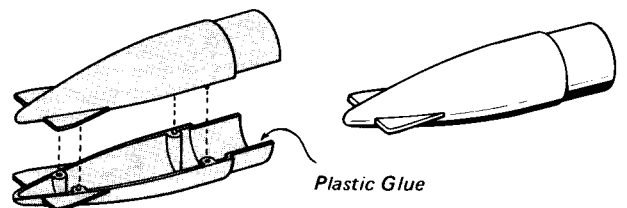
- 14** Test-fit the engine mount as shown, before gluing. Glue the engine mount in place by running a generous glue bead around the inside rear of the body tube. Push the mount into place quickly before glue sets. Position mount so only about 1/4" shows, with the engine lock up.



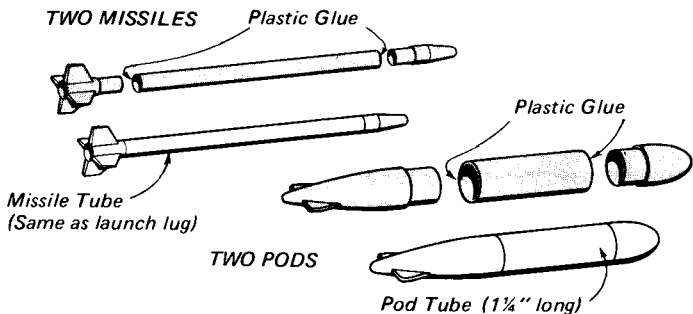
- 15** This is a very important step: Run a fine bead of glue along a fin joint, and smooth into neat even fillets with your finger. Repeat for every fin joint.



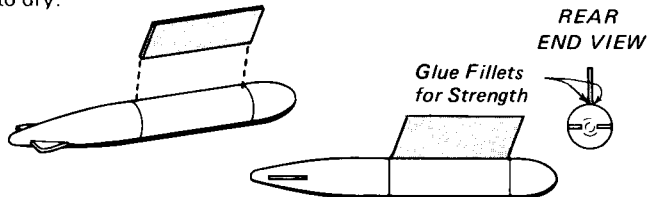
- 16** Form the pod tail cones by joining the halves with plastic glue. Align the halves so their pins and holes match. **NOTE:** Use a knife to cut the clear plastic parts from their runners, instead of breaking them off.



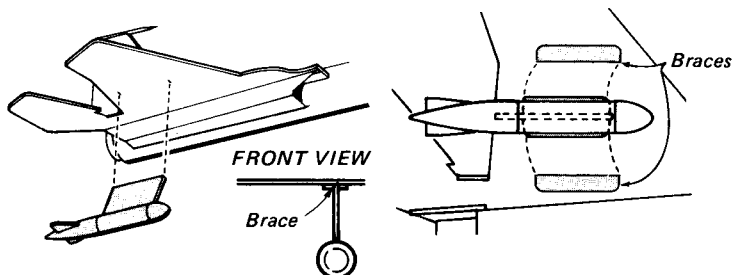
- 17** Assemble each missile and pod, one at a time, by putting a tiny amount of plastic glue into the tube and socketing the plastic part in place.



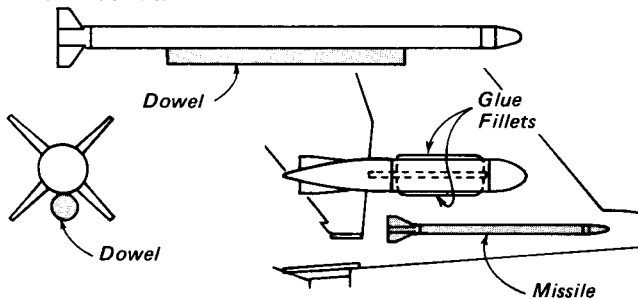
- 18** Glue the pod supports onto the pod tubes. Align as shown and allow to dry.



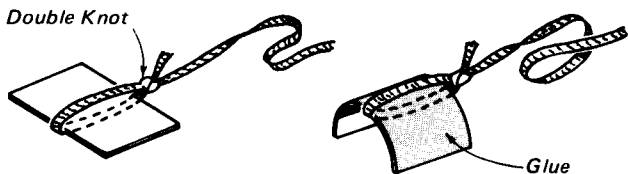
- 19** Glue the pod assemblies in place on the underside of wings, lining up with the wing's nicks. Glue their braces in place and run small glue fillets around all edges.



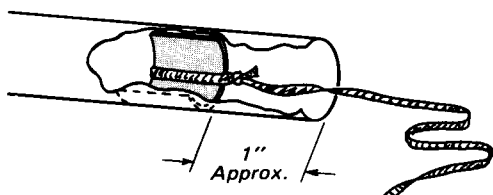
- 20** Glue the remaining dowels onto the side of the missiles as shown. Now glue the missiles in place between the pods and scoops, by applying glue to the dowels.



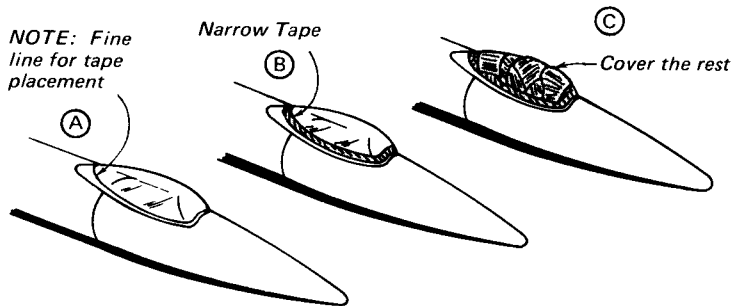
- 21** Tie one end of the shock cord around the heavy paper shock cord fastener (1/2" x 1"). Bend it neatly into a half-circle and apply glue to the entire outside surface.



- 22** Insert the assembly into the main body tube. Make sure it's at least 1" into the tube, to allow room for the nose cone to be inserted later. Rub the fastener down firmly with eraser end of pencil and hold until dry. Tuck cord inside and socket the nose cone in place (chute rigging will be completed later).



- 23** Cover the cockpit with masking tape to protect it while you spray paint the model. Make a border of narrow tape, then cover the rest.



- 24** When painting plastic parts, never use dope or lacquer! Use enamel only! Dope or lacquer will melt the plastic.

For best paint results, spray first with enamel primer to seal the fibre-board edges. Or rub a thin film of glue on or use filler coat and a brush. You may then want to smooth the edges with very fine sandpaper.

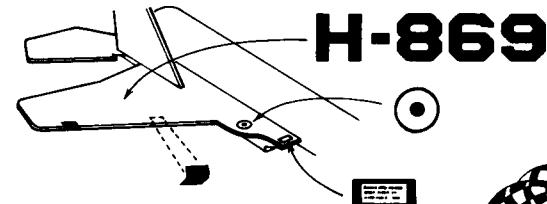
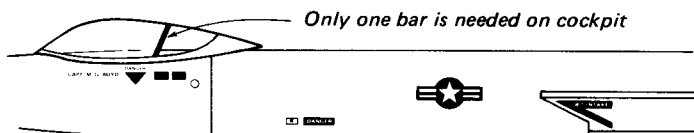
**RECOMMENDED COLOR:** Gray  
**MAY SUBSTITUTE:** Silver or Lt. Blue

Spray painting your finished model with a fast-drying enamel will produce the best results . . . IF IT IS DONE PROPERLY!! Most important is the number of coats of paint. DO NOT try to paint your model with one heavy coat! Instead, give it a couple of quick, light coats first and then a finish coat. Let each dry before applying the next.

Optional Step: You may wish to paint the pods and missiles a contrasting color. Wait until the other paint is dry, and use a brush.

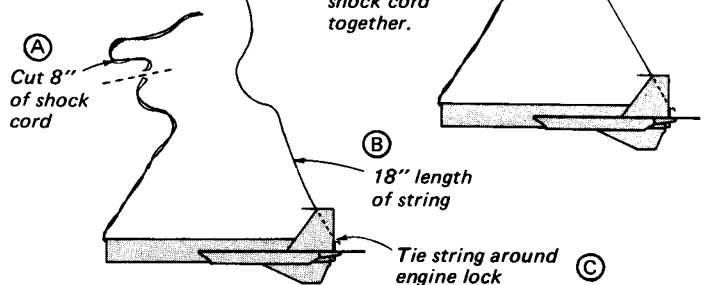
- 25** Applying decals is the next to last assembly step. Be sure paint is thoroughly dry . . . overnight is best. Read the general instructions. Round up your tools: Scissors, rag or paper towel, bowl of water.

Identify the different parts of decal. Notice how each design is covered with a clear shiny shape which holds the design together. Cut the decals apart and apply according to the photos on the package and in this instruction.

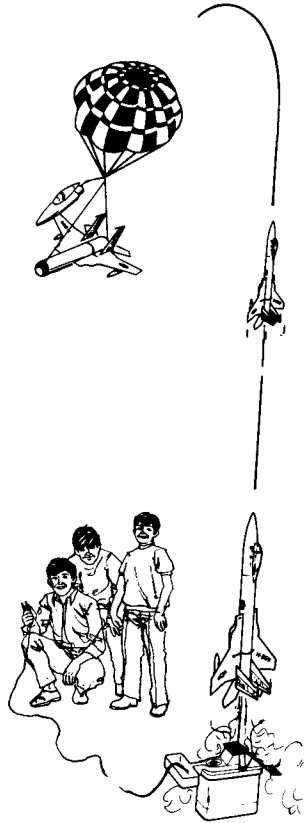


- 26** Assemble the parachute kit enclosed, following the instructions printed right on the chute material. Save the left over shroud line for the next step.

Rig the recovery system to make the model horizontally. Follow the lettered steps.



# Centuri F-15 Eagle Exploded View



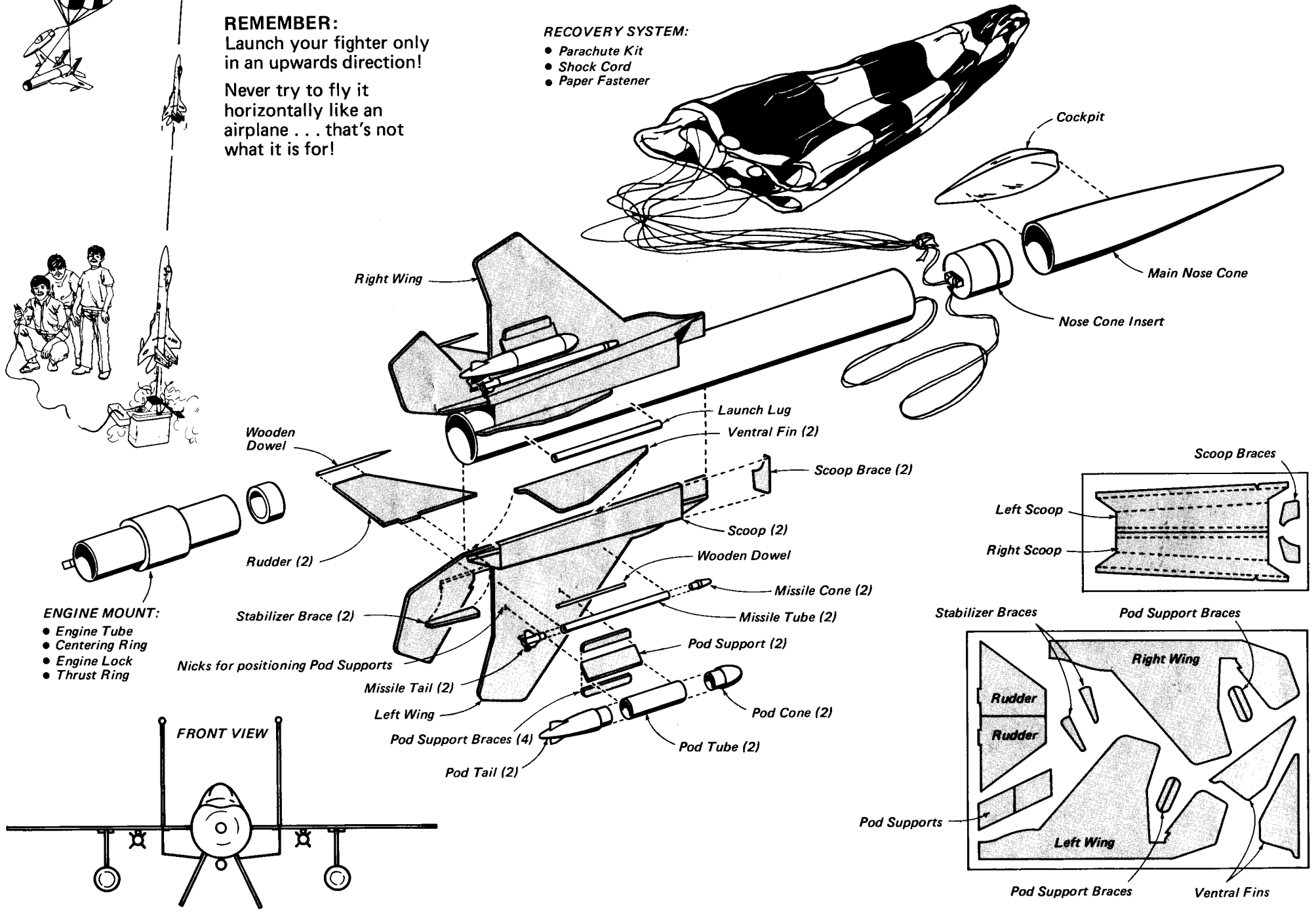
## REMEMBER:

Launch your fighter only in an upwards direction!

Never try to fly it horizontally like an airplane . . . that's not what it is for!

## RECOVERY SYSTEM:

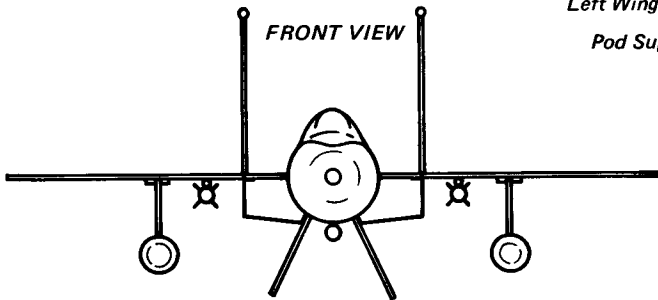
- Parachute Kit
- Shock Cord
- Paper Fastener



## ENGINE MOUNT:

- Engine Tube
- Centering Ring
- Engine Lock
- Thrust Ring

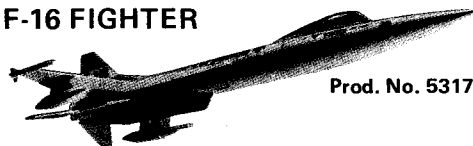
## FRONT VIEW



COLLECT THE WHOLE SERIES:

# FIGHTER FLEET™

F-16 FIGHTER



Prod. No. 5317

F-15 EAGLE



Prod. No. 5318

F-4 PHANTOM



Prod. No. 5319

# Centuri F-15 Eagle Data Sheet

The United States Air Force F-15 is the world's most maneuverable high-performance aircraft. Though larger than the F-4 Phantom, it is nearly 6,000 pounds lighter thanks to new space-age materials. During flight tests in 1974 the F-15 broke all existing fast-climb world records, previously held by the Soviet Union and U.S. Navy. It's remarkable speed and power are due to the new F-100 engine which have nearly twice the thrust-to-weight ratio of conventional jet engines.

Manufacturer	McDonnell-Douglas
Length	63.8'
Span	42.8'
Weight	40,000 + lbs.

Max Speed	2,000 + mph.
Range	350 (loaded)
Engines	2 Pratt & Whitney F-100

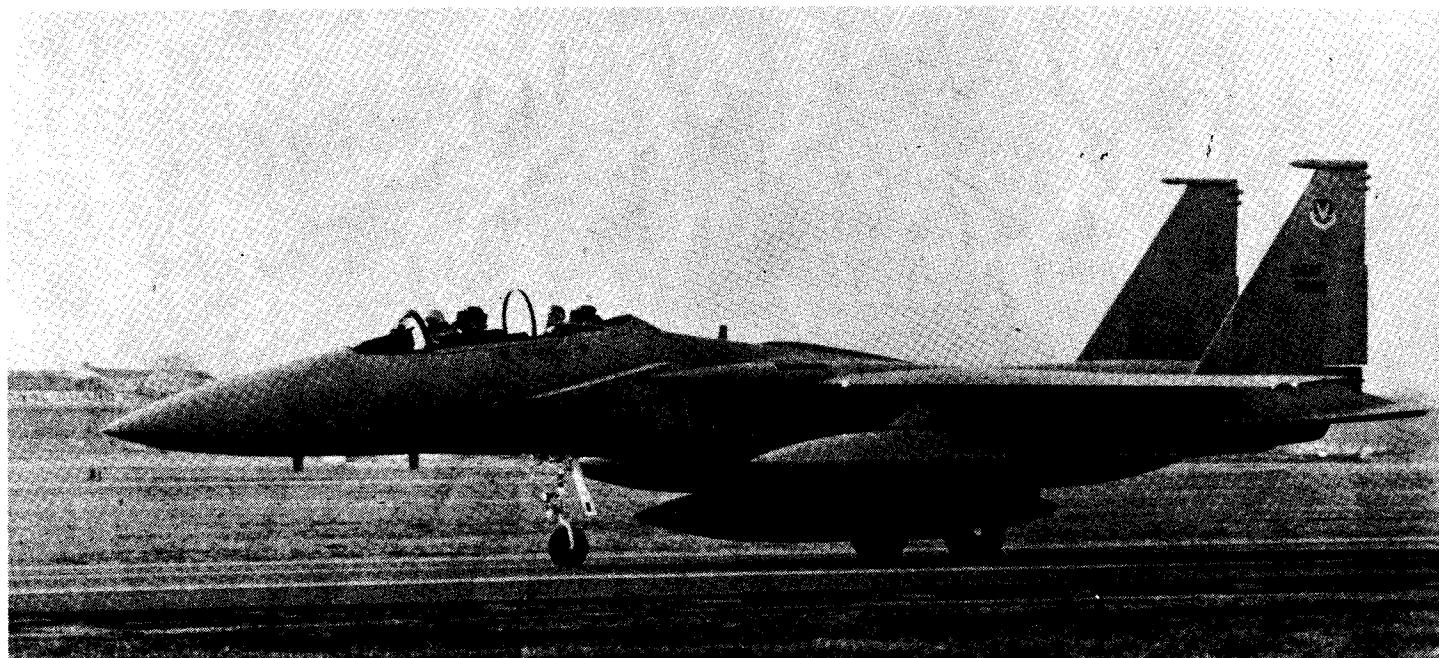
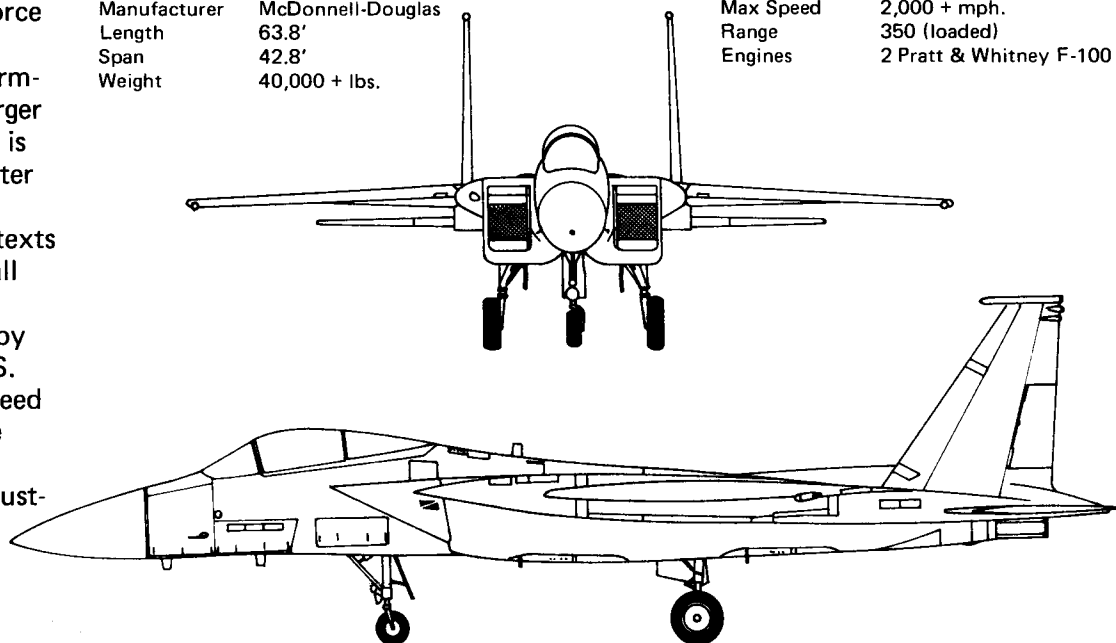


Photo by McDonnell Douglas