

GRUMMAN F-14A TOMCAT

1/48 AIRCRAFT SERIES

ACADEMY

HOBBY MODEL KITS



The failure of the F-111B to meet the requirements set forth by the Navy resulted in a new competition for a suitable carrier-based fighter. Although variable-sweep wings were not required under the new specifications, Grumman proposed such a feature on their entry. By virtue of their involvement with the XF10F-1 Jaguar and the F-111B, Grumman had accumulated more experience with movable wings than any of the competing companies. On January 15, 1969, Grumman's Model 303 was selected to become the Navy's new F-14A air superiority fighter; the designation F-13 was bypassed. Six planes were to be built for the development program, followed by six more pre-production F-14A's. By the end of 1970, the prototype F-14A was completed, and given the name Tomcat.

Following the necessary ground tests, the F-14A was readied for its first flight on December 21, 1970—a full month ahead of the program. Unfortunately, the time gained by the earlier test schedule was lost when, on the second flight, the hydraulic system failed and the first Tomcat was destroyed. The ejection system functioned as advertised, however, and the crew safely abandoned the stricken plane.

An interesting feature of the F-14 is the pair of retractable vanes mounted in the leading edge of the glove which blends the movable wings into the fuselage. These triangular glove vanes extend outward for added stability as needed

and can be operated manually or programmed by a computer. The Tomcat is also unusual in being the first production plane to use strong, but lightweight, composite boron-epoxy in its construction. The horizontal stabilizer structure features this material.

The F-14A reflects a return to fixed cannon armament with the inclusion of an M61A-1 20 mm rotary cannon, with 675 rounds, in the port side of the fuselage. Six Phoenix AIM-54A missiles can be carried and launched simultaneously—each one directed to a different target. All the hardpoints are situated on the rigid portion of the glove and fuselage, obviating the need for swiveling pylons on the wings.

Nacelles mounted beneath the glove house a pair of Pratt & Whitney TF30-P-412 turbofans with an afterburning rating of 20,900 lbs. Internal fuel capacity is 16,445 pounds. The unloaded weight of a Tomcat is 40,070 pounds; take-off gross weight is 55,000 pounds.

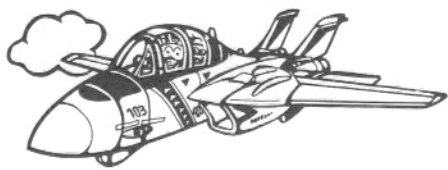
With its wings in the forward position, the F-14A has a span of 64 feet 1½ inches. In normal swept condition, the span reduces to 38 feet 2 inches. For carrier stowage, the wings can be positioned over the stabilizers reducing the span to only 33 feet 3½ inches. Wing area is 565 square feet. In flight, the sweep angles range from 20 to 68 degrees. Overall length is 61 feet 11½ inches; height is 16 feet even. The Tomcat's maximum design speed is Mach 2.34, or over 1,500 mph.

Courtesy U. S. FIGHTERS
by Lloyd S. Jones
Aero Pub.

ENGLISH	FRENCH
WHITE	BLANCO
YELLOW	JAUNE
RED	ROUGE
BLUE	BLEU
GRAY	GRIS
GUNMETAL	METALLIC
GREEN	VERT
SILVER	ARGENT
BLACK	NOIR

GERMAN	SPANISH
WEISS	BLANC
GELB	AMARILLO
ROT	ROJO
BLAU	AZUL
GRAU	GRIS
METALLIC	METALICO
GRUN	VERDE
SILBERN	PLATA
SCHWARTZ	NEGRO

ITALIAN
BIANCO
GIALLO
ROSSO
BLU
GRIGIO
METALLICO
VERDE
ARGENTO
NERO



IMPORTANT

Read the instructions first before starting assembly.

If not sure, dry assemble the parts together using cello tape before applying model cement.

Always use a cement designed for styrene model kits.

Don't use too much cement

Always paint in a very well ventilated area.

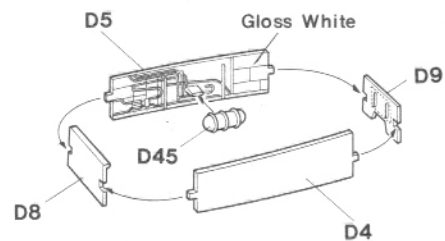


THE PILOT AND PLANE

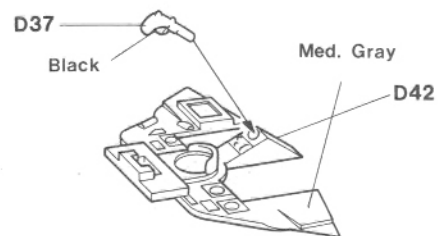


THE PILOT'S OFFICE

ASSEMBLY OF COCKPIT BASE

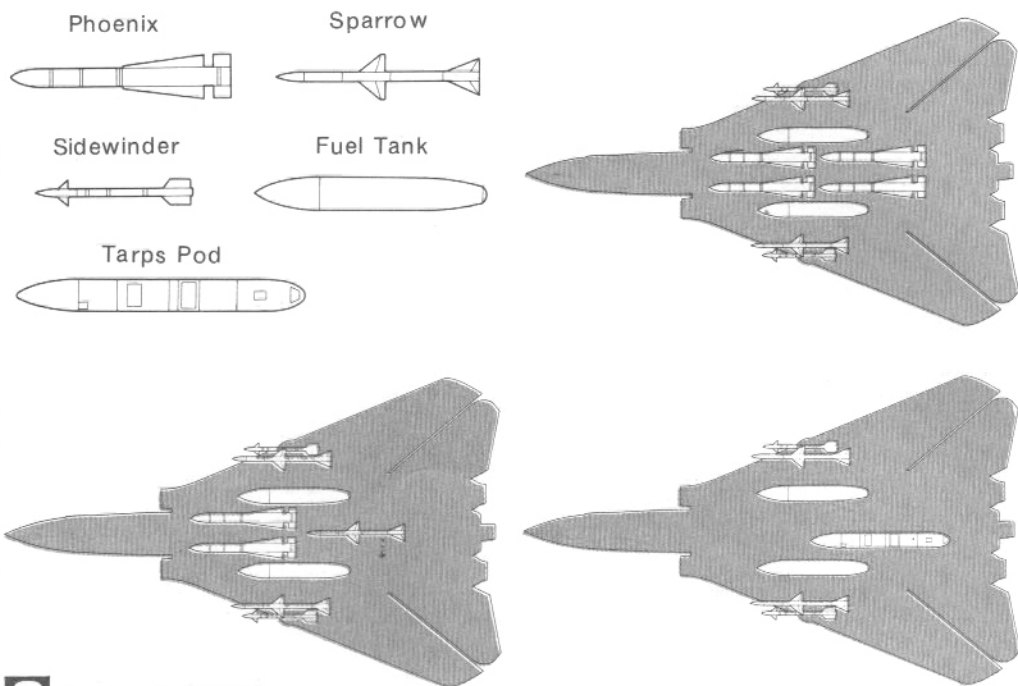


ASSEMBLY OF CONSOLE

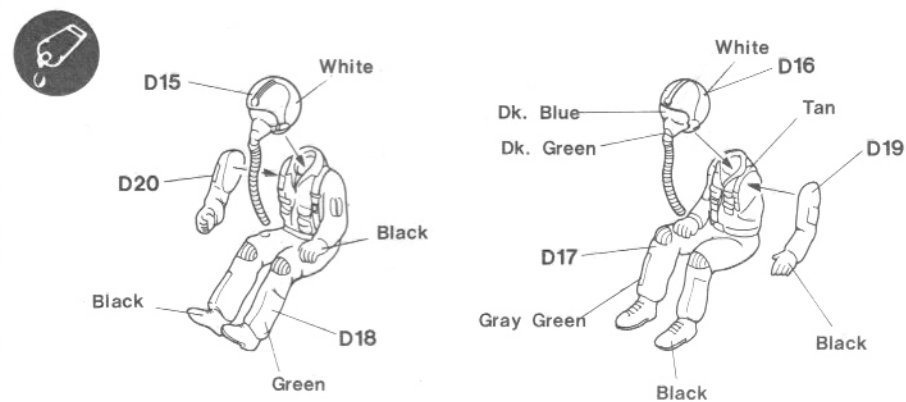


1 WEAPONS AND STORES

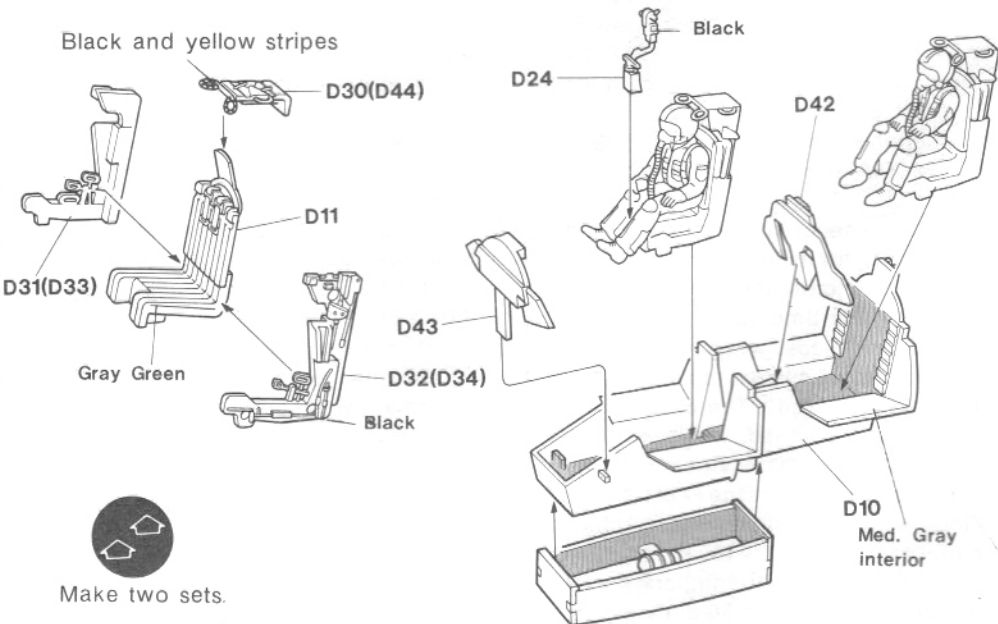
Identification and location



2 CREW FIGURES

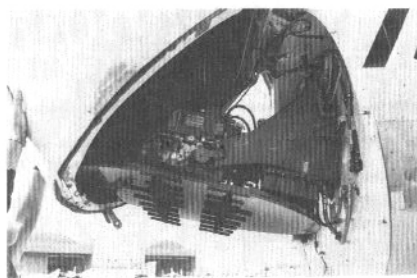


3 COCKPIT ASSEMBLY

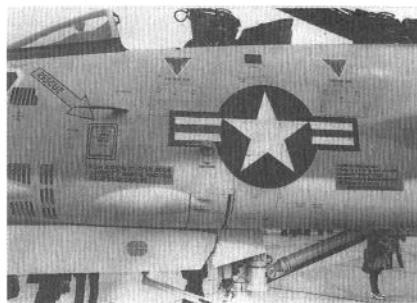
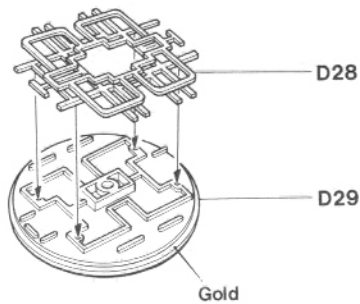


Make two sets.

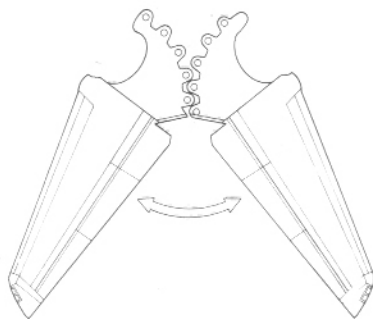
THE RADAR ARRAY



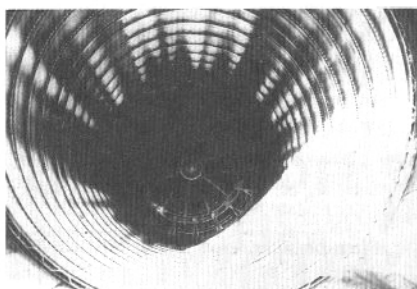
ASSEMBLY OF RADAR ARRAY



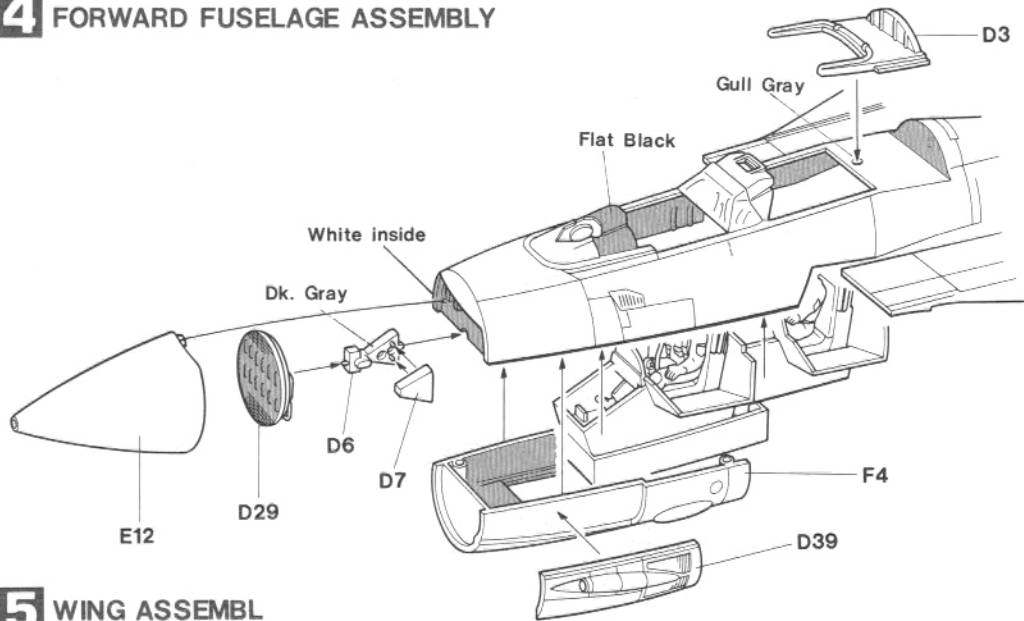
ASSEMBLY OF MOVEABLE WINGS



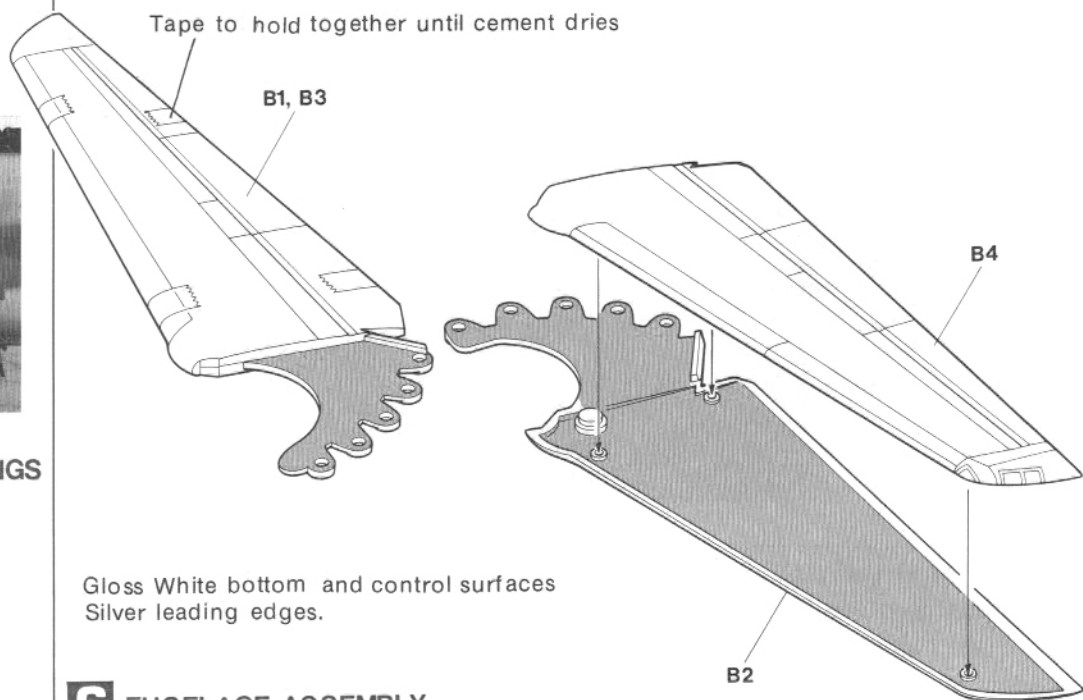
VIEW OF EXHAUST INTERIOR



4 FORWARD FUSELAGE ASSEMBLY

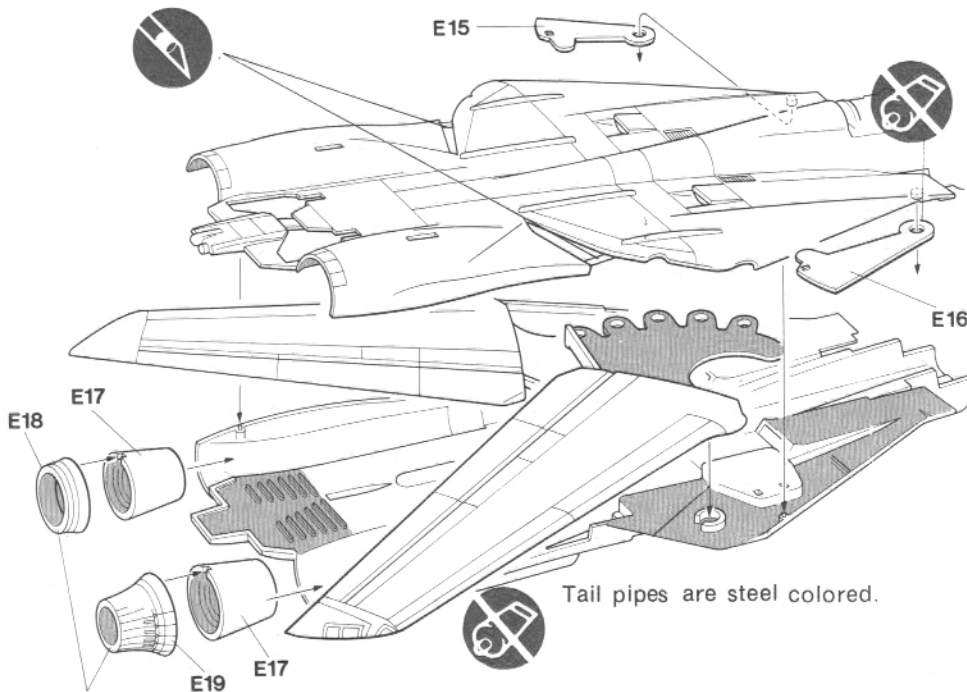


5 WING ASSEMBLY

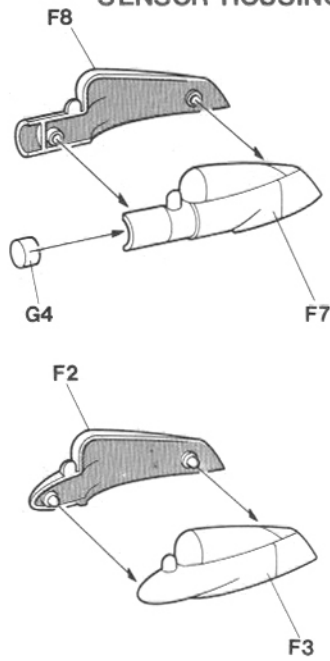


6 FUSELAGE ASSEMBLY

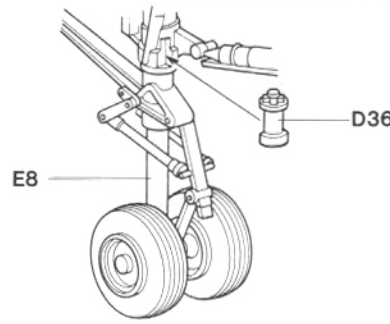
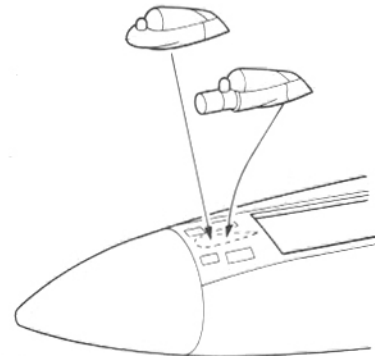
DO NOT LET CEMENT CONTACT WINGS OR GLOVE VANES



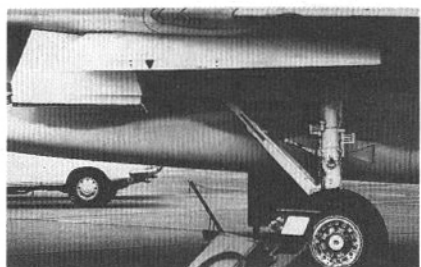
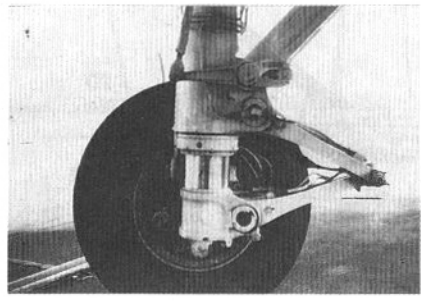
**OPTIONAL INFA-RED
SENSOR HOUSINGS**



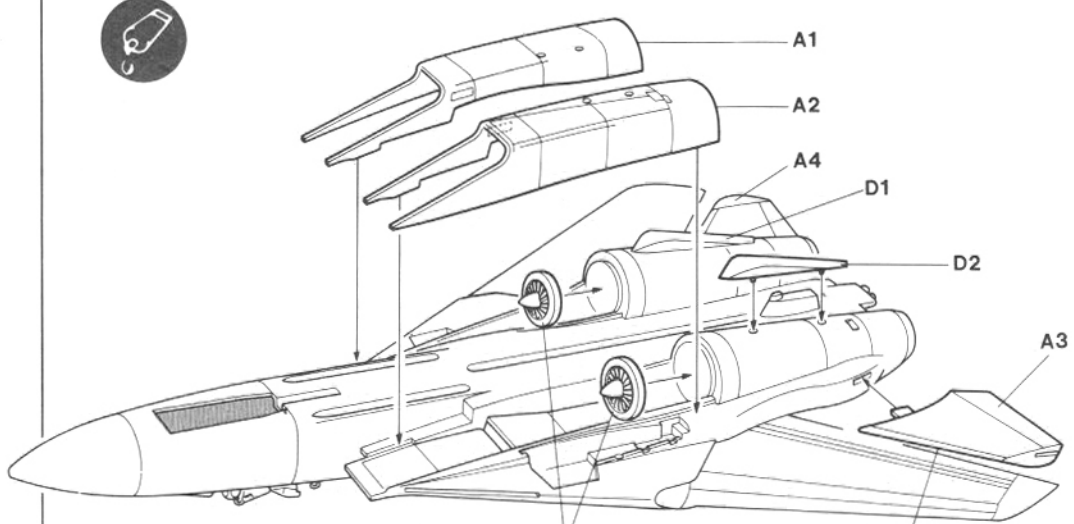
**ASSEMBLY OF FRONT
LANDING GEAR**



VIEW OF MAIN LANDING GEAR



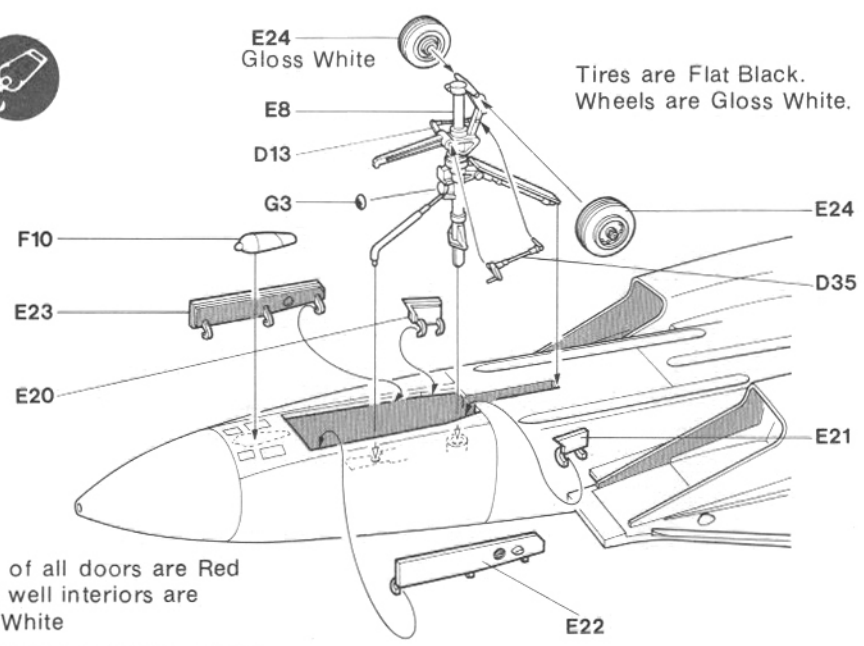
7 AIR INTAKES



Turbine fans are steel colored

Silver leading edges
Gloss White on both sides

8 FORWARD LANDING GEAR ASSEMBLY

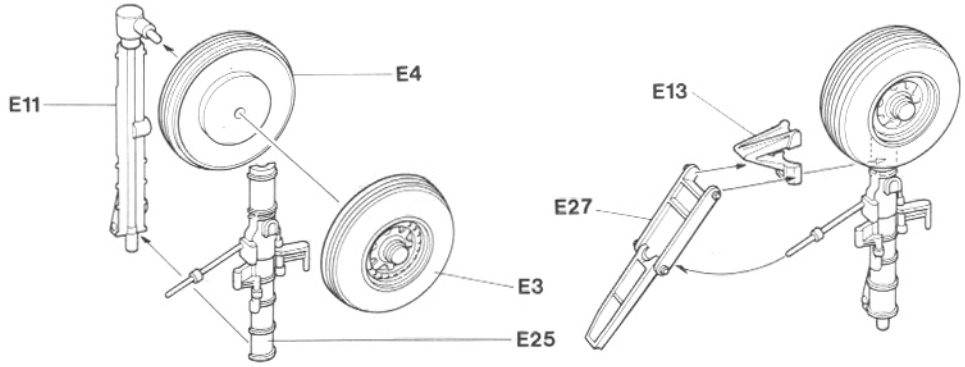


Tires are Flat Black.
Wheels are Gloss White.

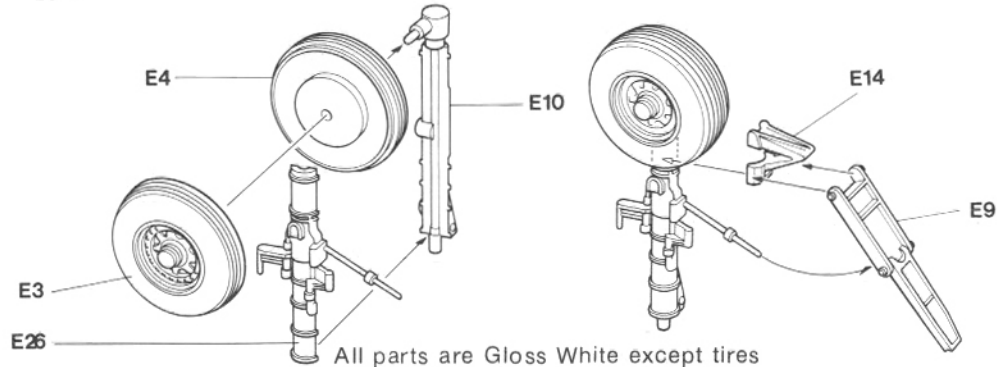
Edges of all doors are Red
Wheel well interiors are
Gloss White

9 MAIN LANDING GEAR

Right

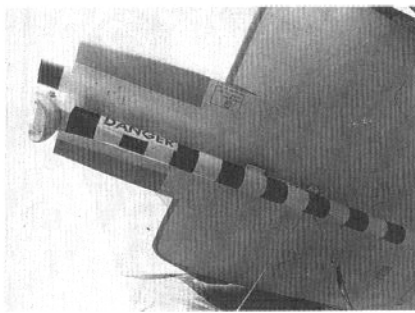


Left

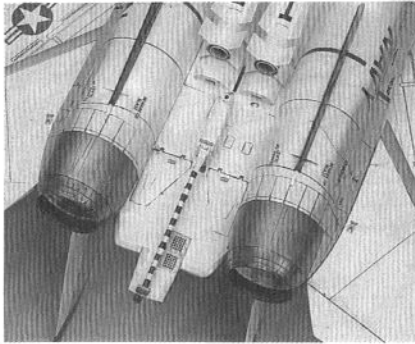


All parts are Gloss White except tires

THE ARRESTING HOOK



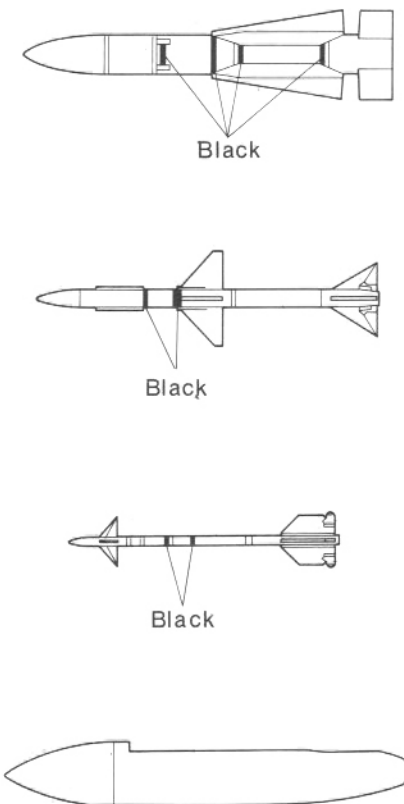
THE UNDERSIDE



THE ARMAMENT



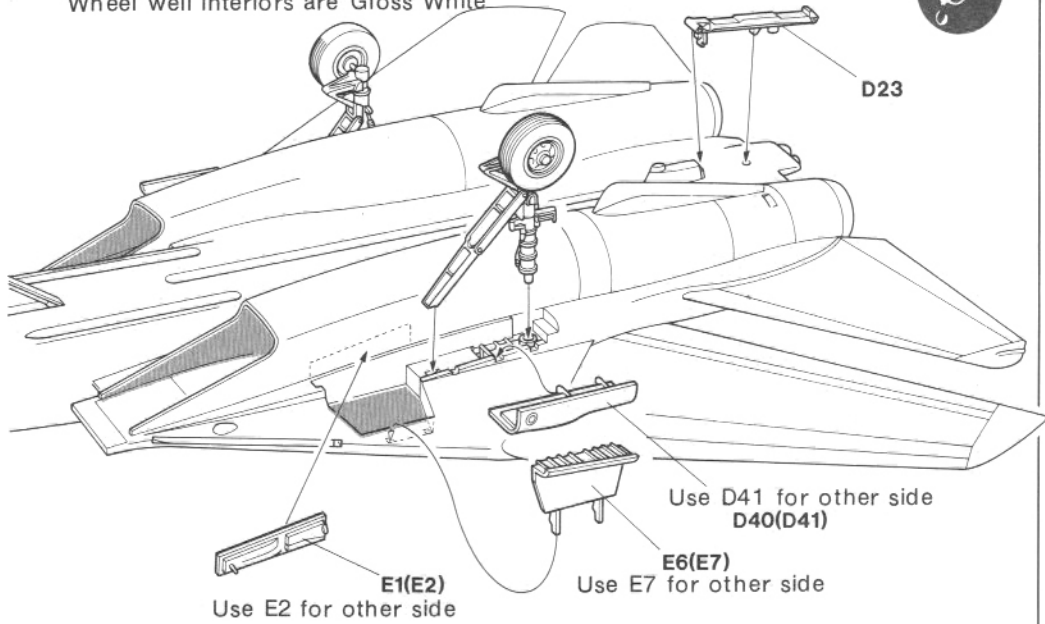
PAINTING OF MISSILES



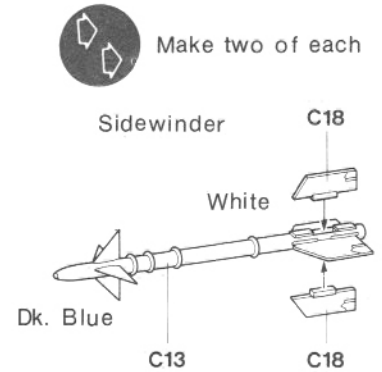
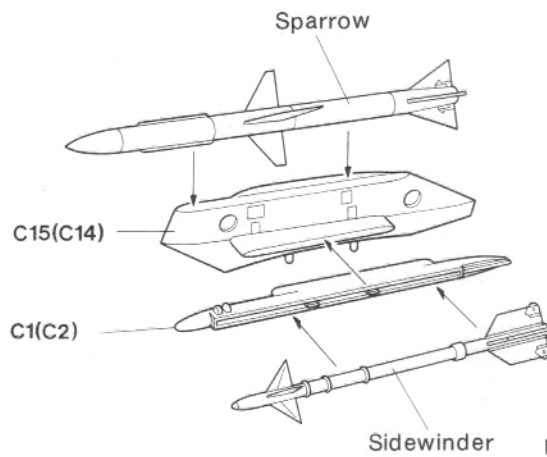
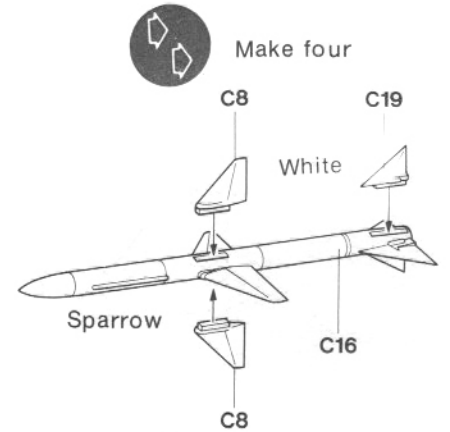
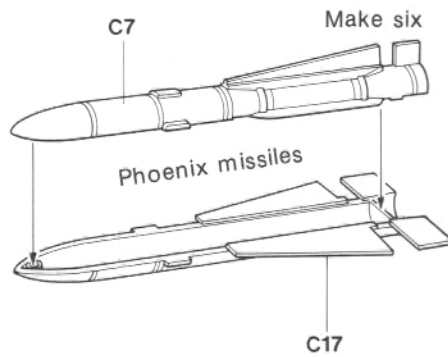
10 LANDING GEAR INSTALLATION

Edges of all doors are Red.

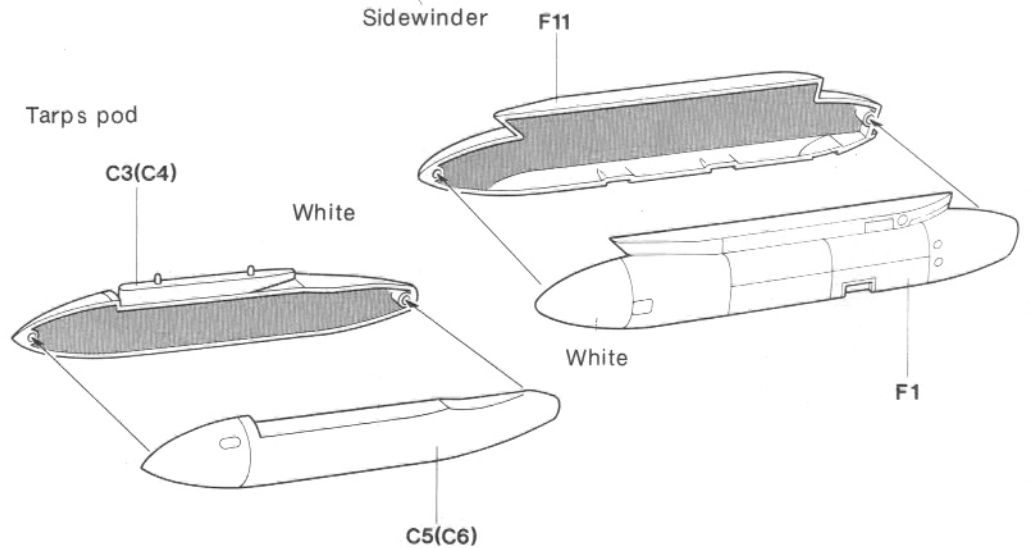
Wheel well interiors are Gloss White



11 MISSILES



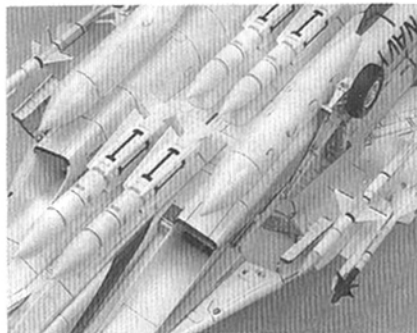
Tarps pod



THE TARPS POD



ALL WEAPONS IN PLACE



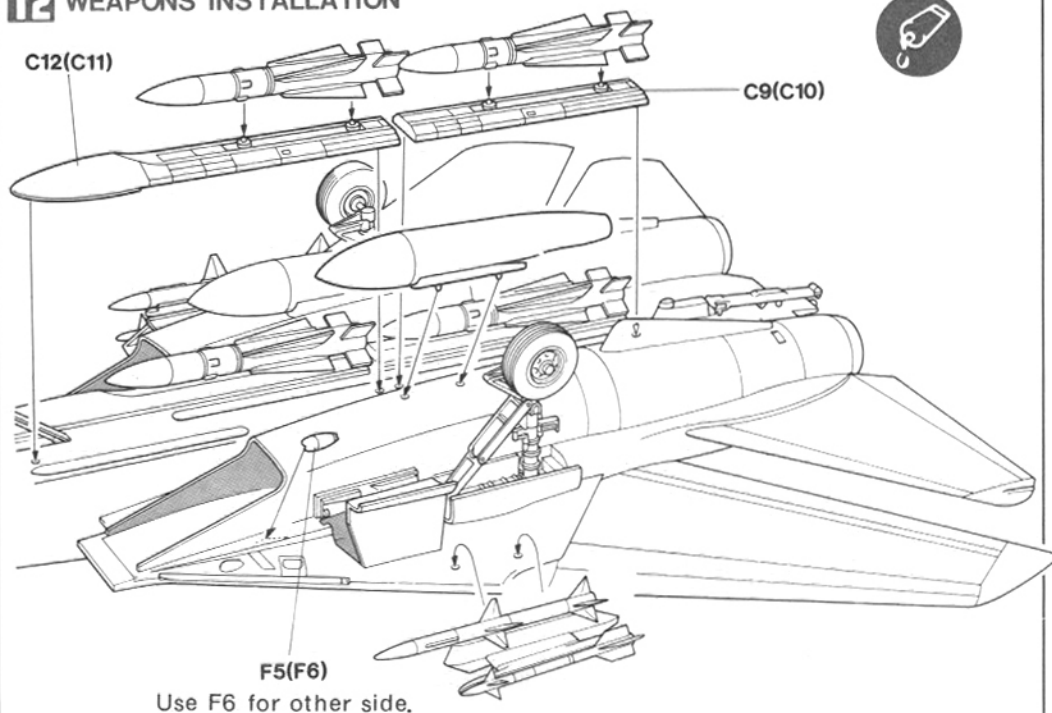
SIDE VIEW OF WEAPONS



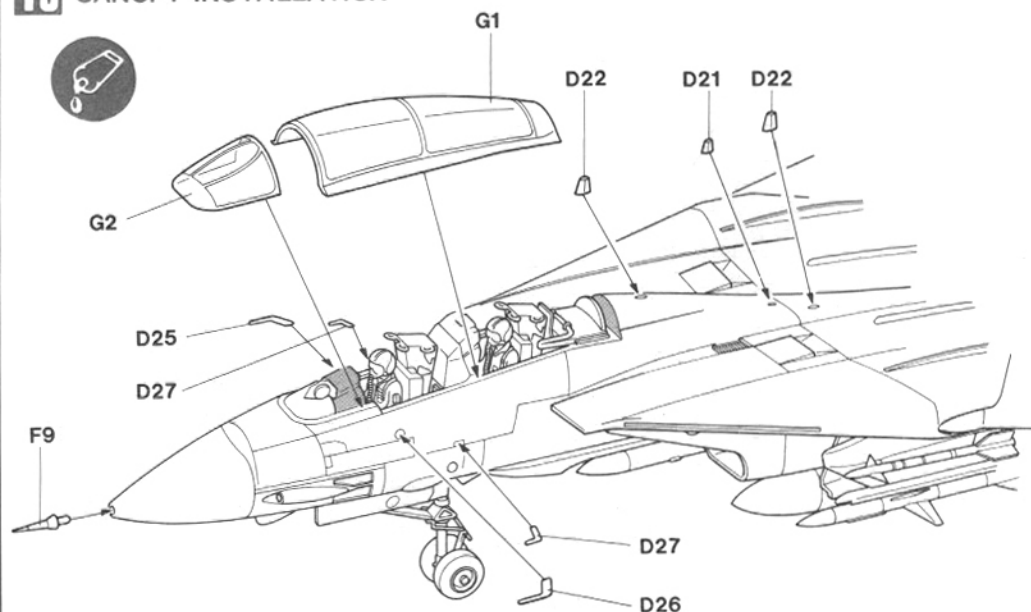
SPEED BRAKE UP



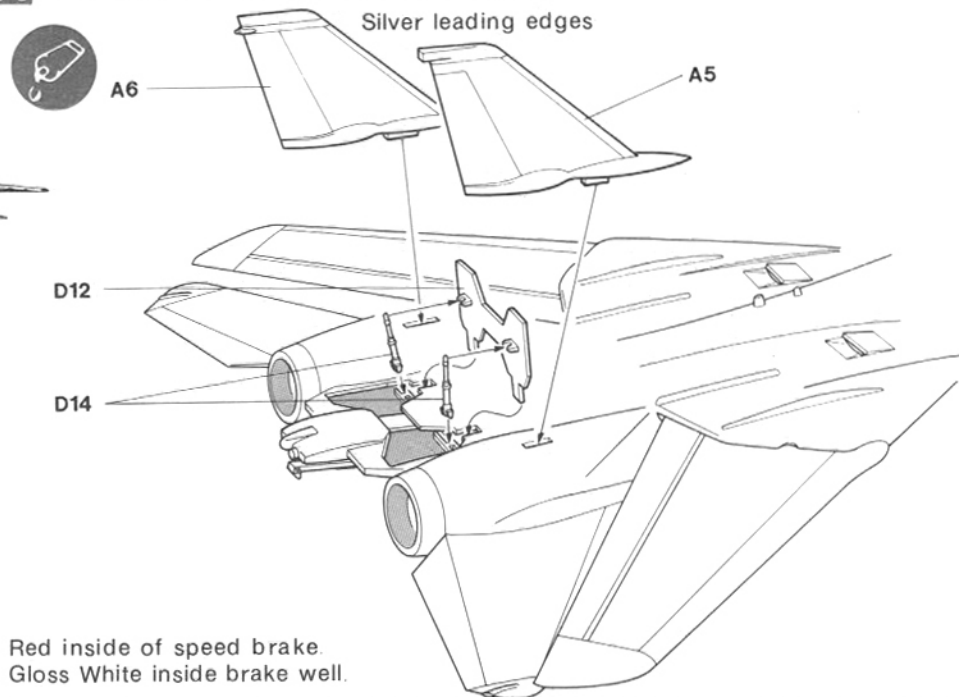
12 WEAPONS INSTALLATION



13 CANOPY INSTALLATION

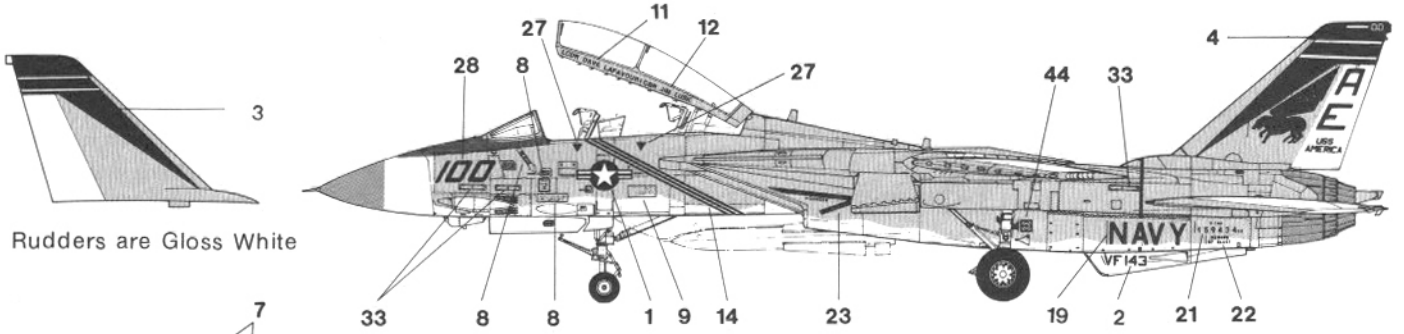
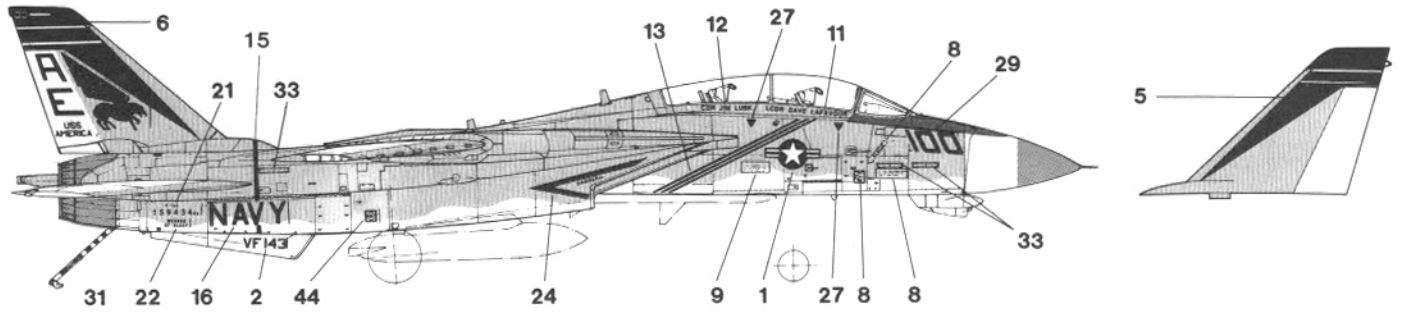


14 RUDDER AND SPEED BRAKE INSTALLATION

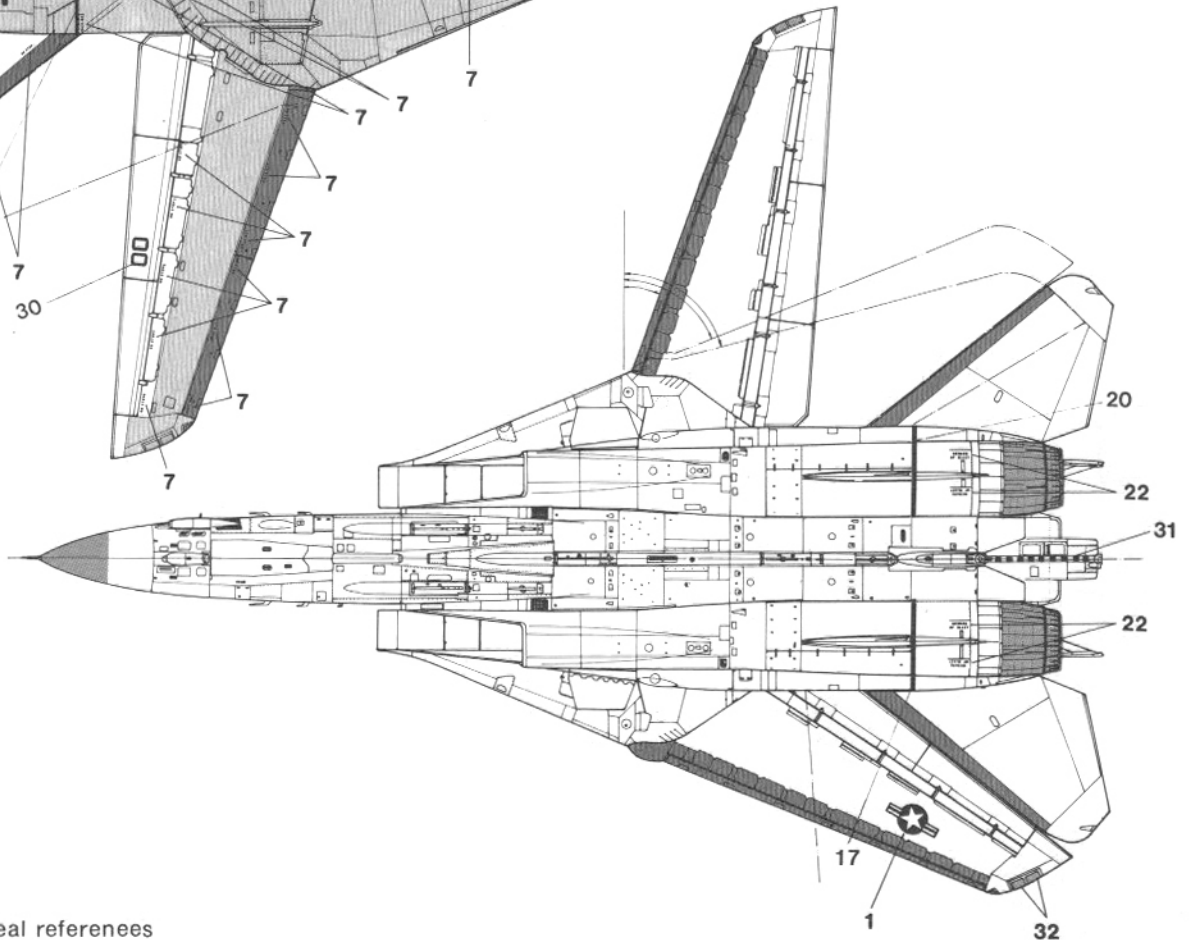
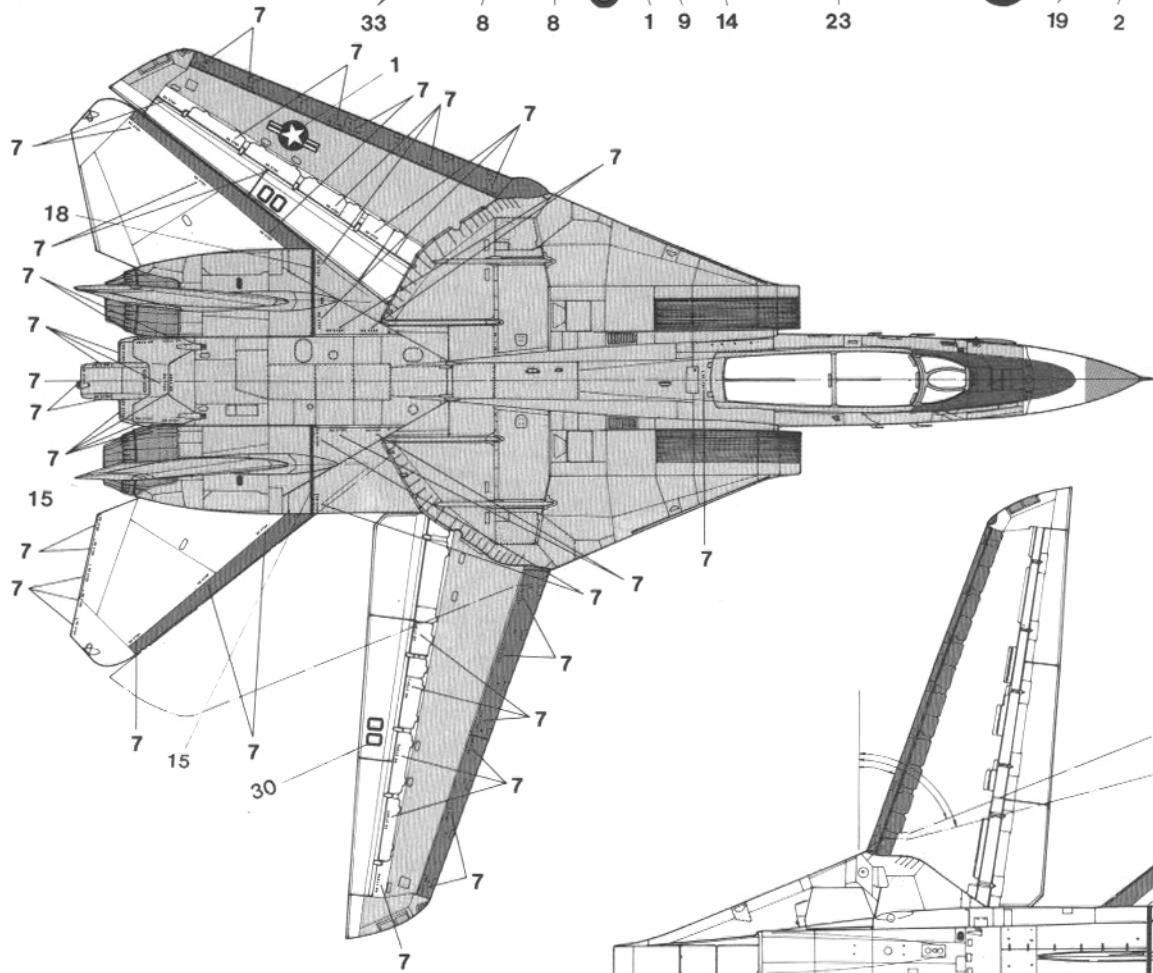


Red inside of speed brake.
Gloss White inside brake well.

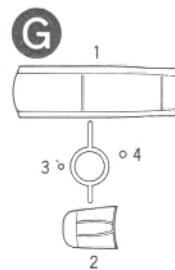
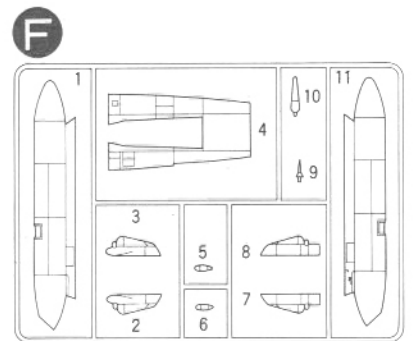
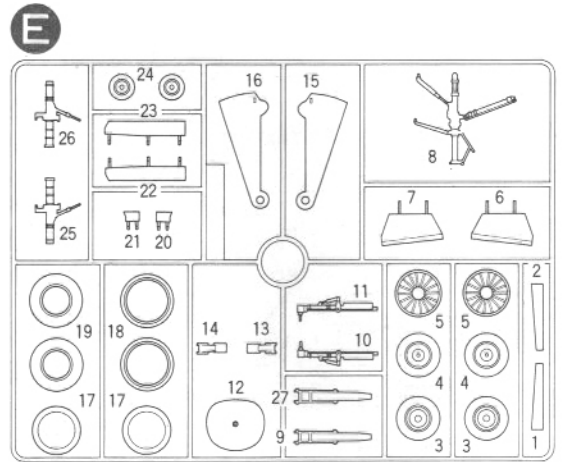
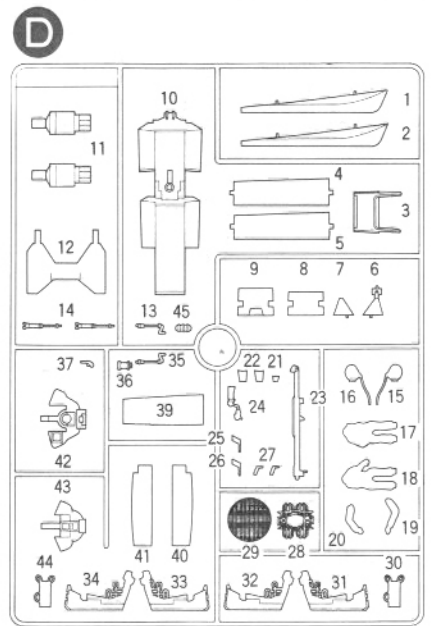
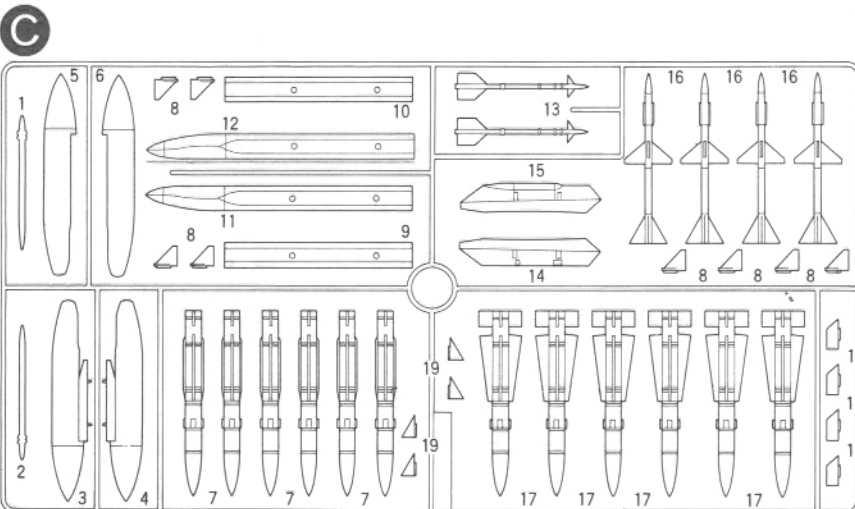
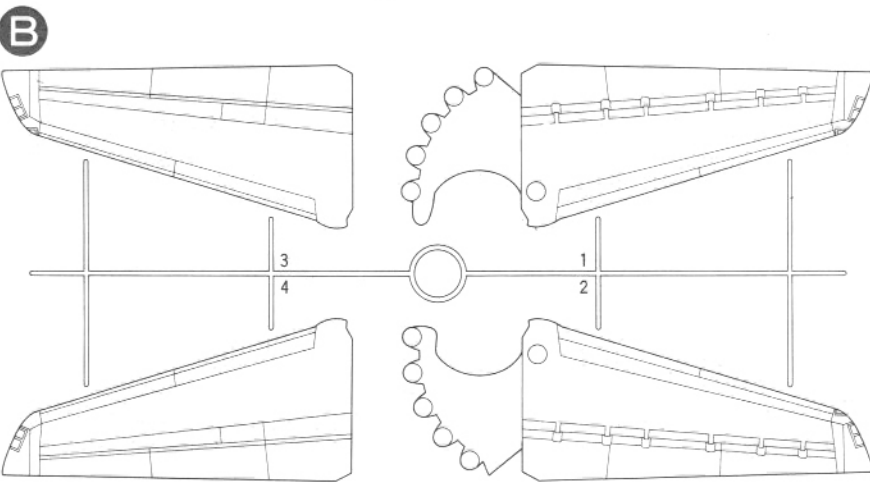
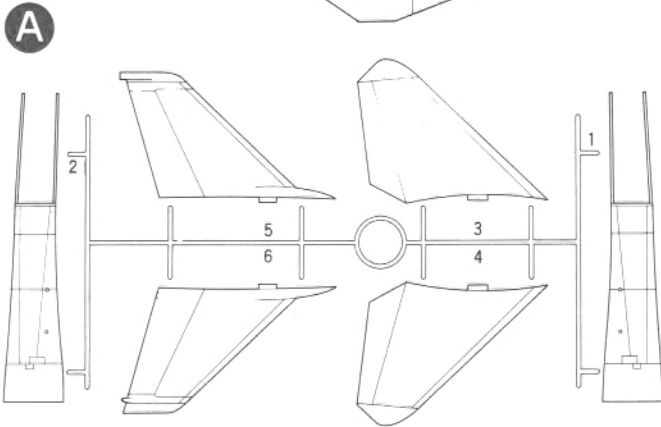
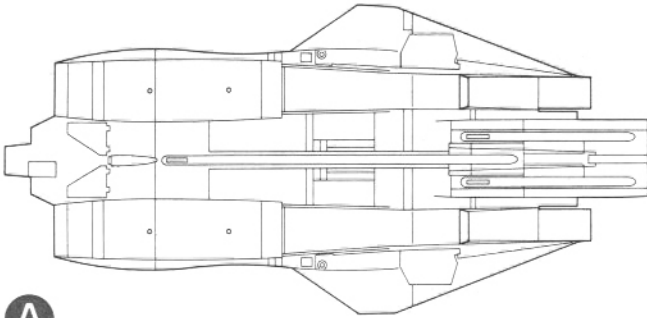
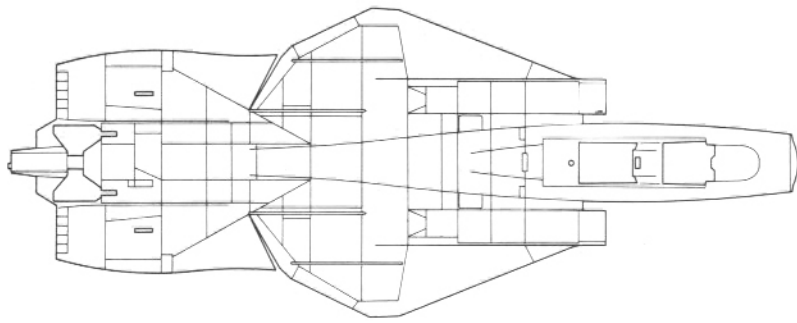
MARKINGS DIAGRAM AND DECAL PLACEMENT



Rudders are Gloss White



Numbers refer to decal referenees



ACADEMY
HOBBY-MODEL KITS

ACADEMY
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