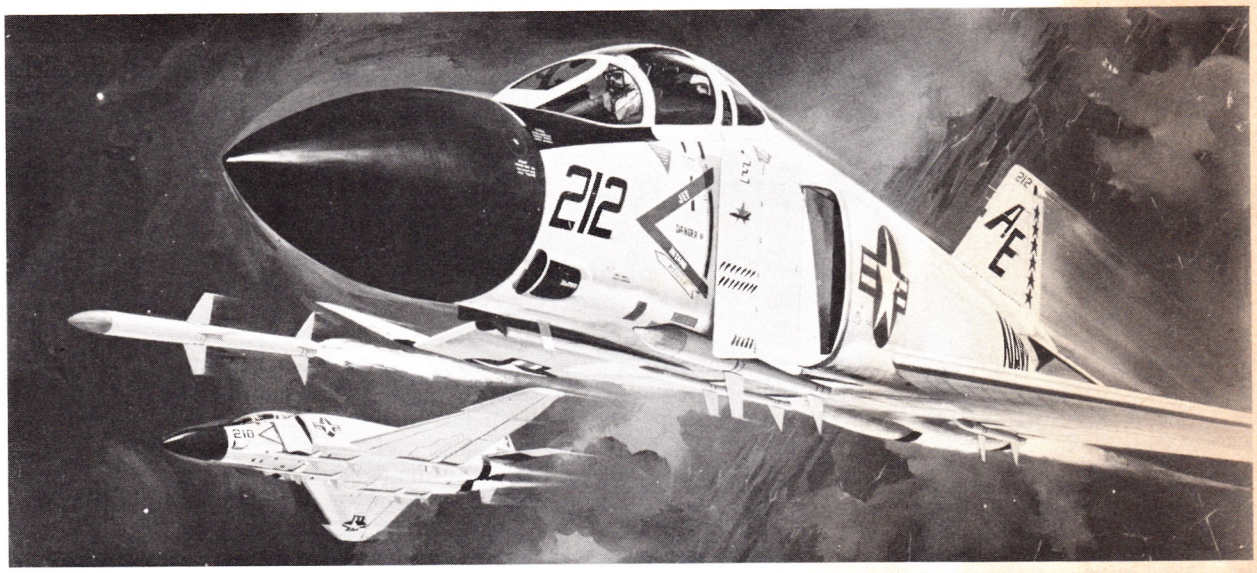


F-4J PHANTOM II

Revell

H-188-380

LITHO IN U.S.A.

"Faster than a speeding bullet (1,584 mph), more powerful than a locomotive (35,800 hp) . . ." Not a description of the mythical man of steel, these are the qualifications of McDonnell Douglas's superplane, the Phantom II. Riding on the thunderous blast of its two powerful engines, the Phantom can soar up to twenty miles above the tallest building.

This amazing plane has formed the basis of the United States fighter arsenal from October, 1961, when it began operations with the U.S. Navy. Since then, it has carried the colors of the U.S. Air Force and Marine Corps as well as those of several of our Allies. In direct confrontation with Russian-built Mig 21 fighters, the Phantom has proven the superiority of its unique design. Indications of this outstanding performance became evident early in the development of the Phantom.

The prototype Phantom, designated XF 4H-1, was first flown on May 27, 1958, after a development period of nearly five years. The new plane presented a startling appearance with its upswept wing tips and drooping stabilizers, but each of these strange features was the result of careful engineering to provide the best performance. The increased dihedral angle of the outer wing improves stability while the stabilizers droop below the turbulent wing downwash. During the flight test program the Phantom consistently set new performance and load-carrying records. There was no doubt about the championship capabilities of the new design.

As the Phantom, now designated F-4, gained operational status, its seemingly limitless abilities led to an expansion of its roles. Initially a fighter-interceptor, the F-4 was soon cast as an attack and close support aircraft. On ground support missions the F-4 can carry as much as 22,500 lbs. of bombs on external hard points. (The unladen weight of the Phantom is only 7,500 lbs. more than the weight of the bombs themselves.) Except for the Vulcan cannon on the F-4E versions, no weapons are carried internally on F-4 aircraft. Four Sparrow missiles are incorporated into the exterior shape of the Phantom. These are semi-buried in troughs beneath the fuselage. All other armament is carried on pylons which may be attached to the fuselage or wing hard points.

The F-4J model of the Phantom was developed for the U.S. Navy following combat experience between the earlier F-4B's and Mig 21's. Among the visible changes seen on the F-4J are the slotted stabilator and the removal of the infra-red heat sensor below the nose. The slots in the stabilator are a part of the F-4J's slow-speed landing system to aid in carrier landings.

One feature contributing to the Phantom's success is the use of two jet engines. This provides a great power reserve and more than one Phantom has returned home on a single engine after being damaged by enemy fire. In combat with the Mig 21, its major opponent, the heavier Phantom has been amazingly nimble; and many Mig fighters have found themselves as targets for the F-4's weapons.

A retractable refueling probe in the fuselage permits the F-4J to replenish its fuel supply even during supersonic flight. Non-stop flights of up to 9,000 miles have been made by the use of in-flight refueling. At full throttle the Phantom's two jet engines gulp enough fuel in one minute to drive a typical automobile across the United States.

For a fighter, the Phantom is a large airplane. Packed into its frame are 14 miles of electrical wiring which carry enough electricity to supply power to 40 homes. At full power the two engines suck in as much air in two seconds as the capacity of a six-room house. Twenty-eight and a half gallons of paint cover the Phantom and it takes 36 people two days to apply the finish.

The pilot is seated in the front cockpit with the radar intercept officer (RIO) situated in the rear seat. The RIO is responsible for the operation of the F-4's radar gear and guides the aircraft during blind flight and radar interceptions. He also assists the pilot in the weapons delivery. Since the operation of the fighter depends on the coordination of both crewmen, when a Phantom scores a "kill", each man is given full credit for one victory.

The Phantom is truly an aviation classic, ranking in fame with the Mustang, Spitfire, and Messerschmitt. Over 4,200 F-4's have been delivered to the United States and six foreign air arms. The latest Russian fighters have been designed specifically to combat the Phantom while improved F-4's continue to roll from the production lines.

The markings shown on Revell's model F-4J are those of a Phantom of VF-33 from the carrier USS America. This aircraft is credited with one Mig 21 kill.

McDONNELL DOUGLAS F-4J PHANTOM II

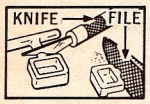
Dimensions: . . . . . Wingspan — 38 feet 4 inches; Length — 58 feet 3 inches

Powerplants: . . . . . Two General Electric J79-GE-10 rated at 11,870 lbs. thrust; 17,900 lbs. with afterburner

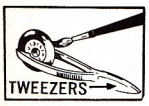
Performance: . . . . Maximum Speed — Mach 2.4 (1,584 mph at 48,000 feet) Service Ceiling — 70,000 feet

★ ★ ★ BEFORE YOU BEGIN ★ ★ ★

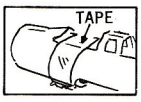
GET YOUR TOOLS READY:



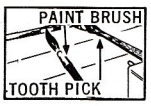
KNIFE TO DETACH AND TRIM PARTS **FILE** TO REMOVE EXCESS PLASTIC



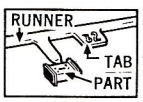
TWEEZERS TO PICK UP AND HOLD SMALL PARTS



TAPE AND CLOTHES PINS TO CLAMP AND HOLD PARTS UNTIL THEY ARE DRY



CEMENT USE TOOTHPICK PAINT BRUSH OR PIN TO APPLY IT



DO NOT DETACH PARTS UNTIL YOU ARE READY TO USE THEM! PARTS ARE NUMBERED TO HELP YOU FIND THEM. LOOK FOR THE NUMBER ON TAB NEXT TO PART OR ON PART ITSELF.

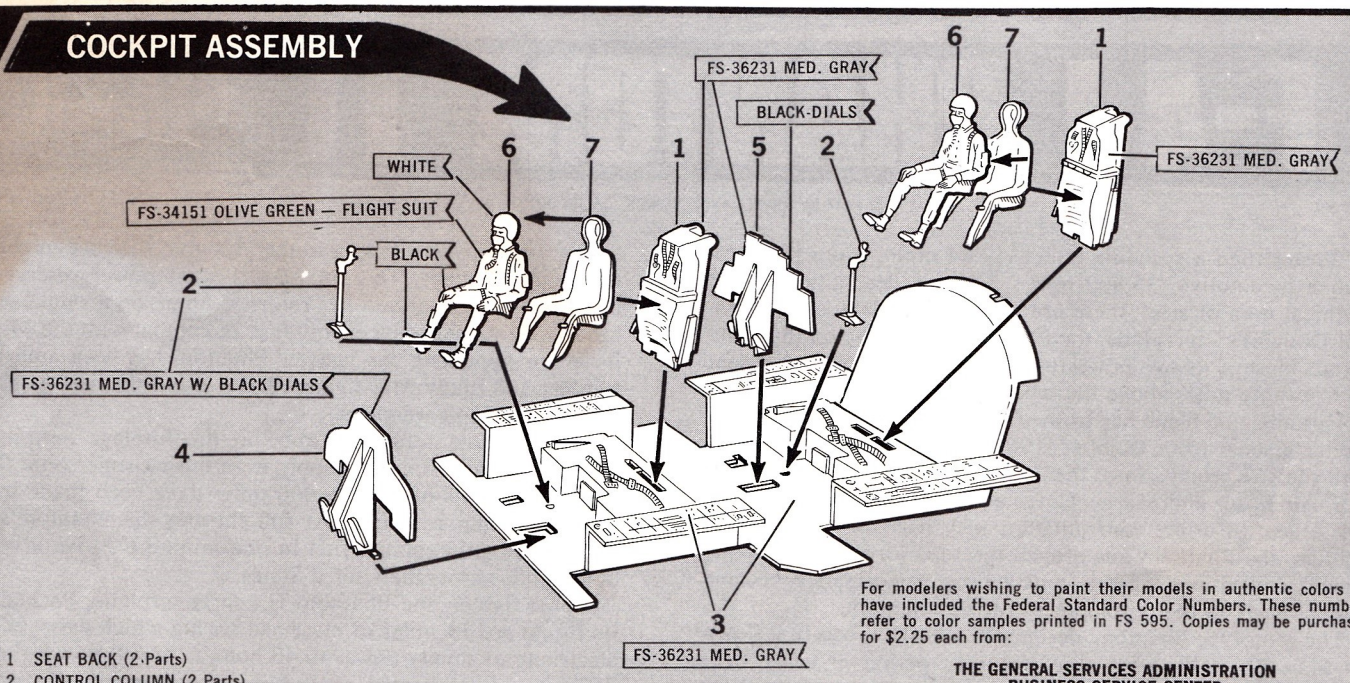
FIRST, FIT PARTS TOGETHER and TRIM EXCESS PLASTIC. Use a toothpick, pin or small paint brush to apply cement. APPLY CEMENT SPARINGLY. Too much cement will damage your model.

NOTE: In the illustrations some of the details on the parts have been OMITTED FOR CLARITY.

IF YOU WISH TO PAINT YOUR MODEL — See PAINTING FLAGS ⊏ for color suggestions.

- **Use paints made for plastics only.**
- Paint small parts **before** detaching from runner.
- Start with the lighter colors.
- Scrape off paint where cement is to be applied. Cement will not work on paint.

1 COCKPIT ASSEMBLY



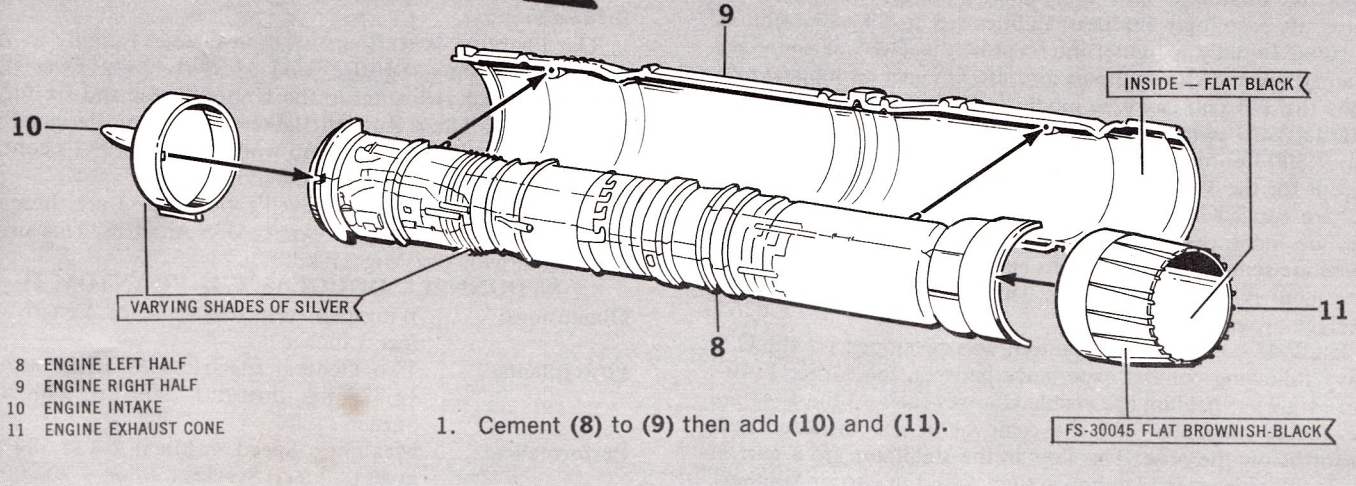
1 SEAT BACK (2 Parts)
2 CONTROL COLUMN (2 Parts)
3 COCKPIT FLOOR
4 PILOT'S INSTRUMENT PANEL
5 RADAR OPERATOR'S PANEL
6 CREW FIGURE FRONT
7 CREW FIGURE BACK

For modelers wishing to paint their models in authentic colors we have included the Federal Standard Color Numbers. These numbers refer to color samples printed in FS 595. Copies may be purchased for $2.25 each from:

THE GENERAL SERVICES ADMINISTRATION
BUSINESS SERVICE CENTER
REGION 3
WASHINGTON 25, D.C.

1. Cement two **parts (1)** and two **parts (2)** to **part (3)**.
2. Cement **(4)** and **(5)** to **part (3)**.
3. Cement halves of CREW FIGURES **(6)** and **(7)** together and to SEATS.

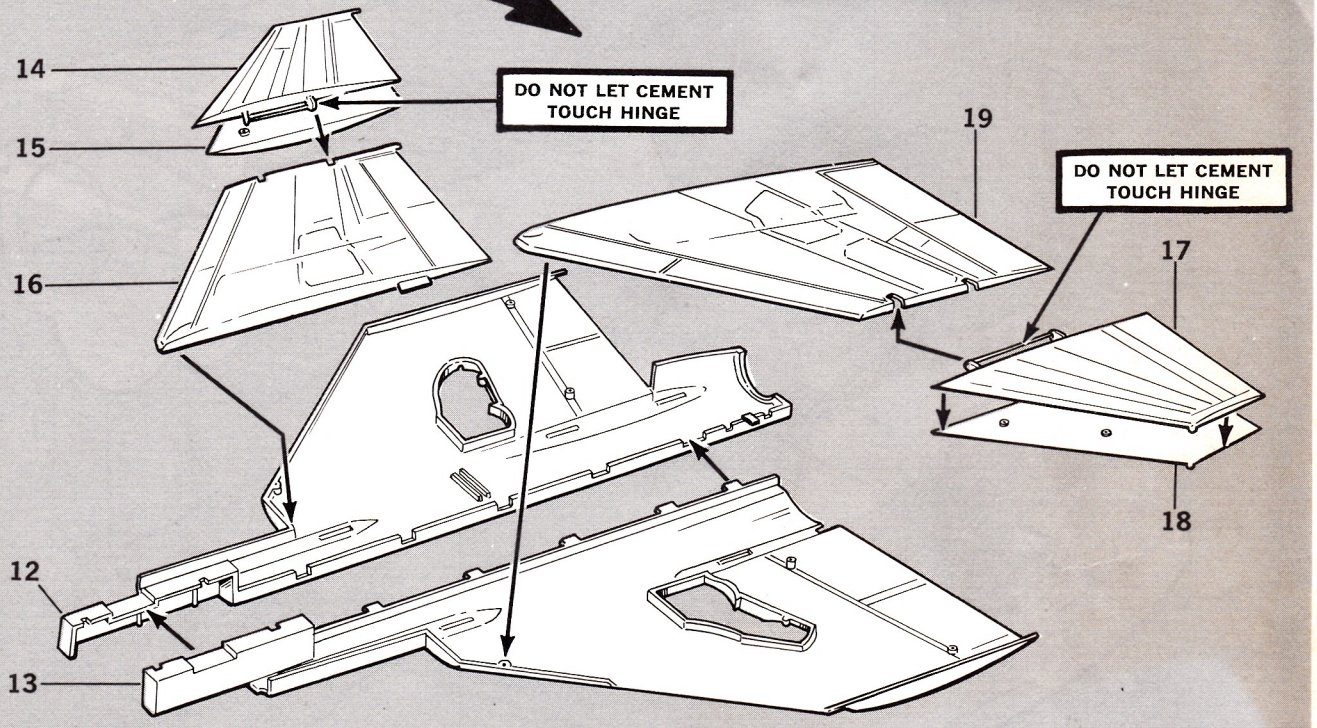
2 ENGINE ASSEMBLY



8 ENGINE LEFT HALF
9 ENGINE RIGHT HALF
10 ENGINE INTAKE
11 ENGINE EXHAUST CONE

1. Cement **(8)** to **(9)** then add **(10)** and **(11)**.

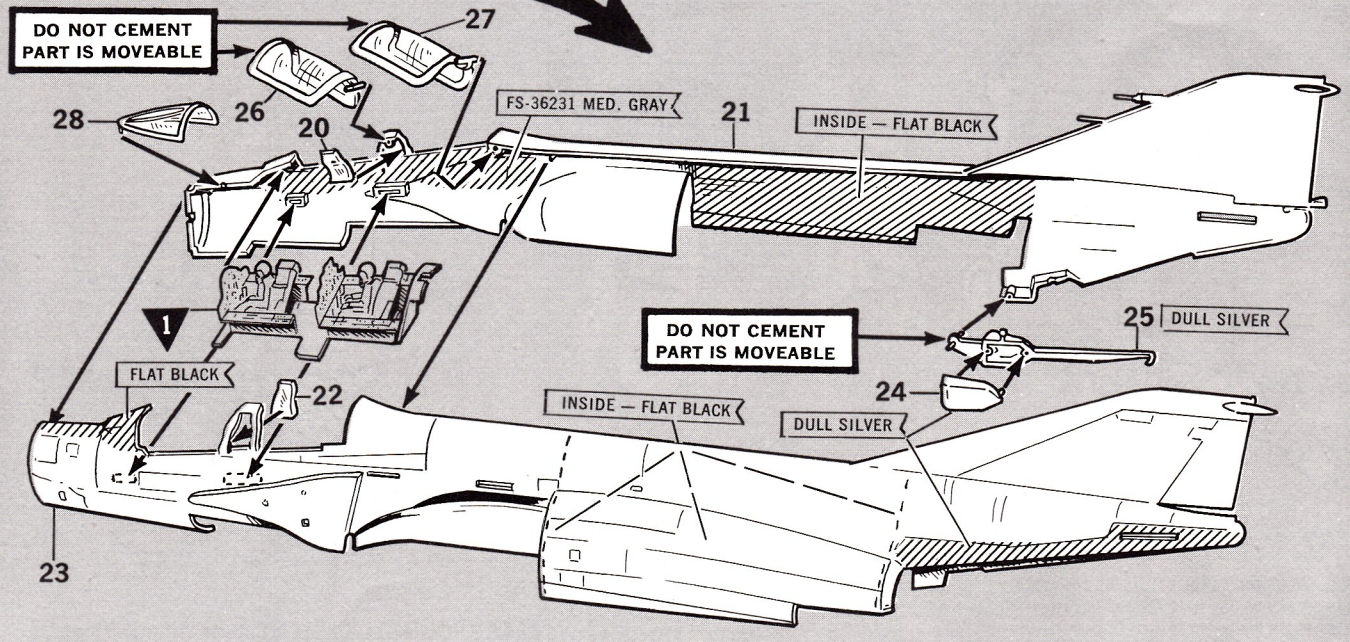
3 WING ASSEMBLY



12 LOWER WING SECTION RIGHT
13 LOWER WING SECTION LEFT
14 RIGHT OUTER WING TOP
15 RIGHT OUTER WING BOTTOM
16 RIGHT INNER WING TOP
17 LEFT OUTER WING TOP
18 LEFT OUTER WING BOTTOM
19 LEFT INNER WING TOP

1. Cement **(12)** to **(13)**, then **(14)** to **(15)**.
2. To be sure your WINGS fold into stowed position **PLACE, DO NOT CEMENT** OUTER WING in notches of **(12)** and cement **(16)** in position. **DO NOT LET CEMENT TOUCH HINGE OR WING WILL NOT FOLD.**
3. Cement **(17)** to **(18)** and assemble to **parts (13)** and **(19)** in the same way as on RIGHT WING.

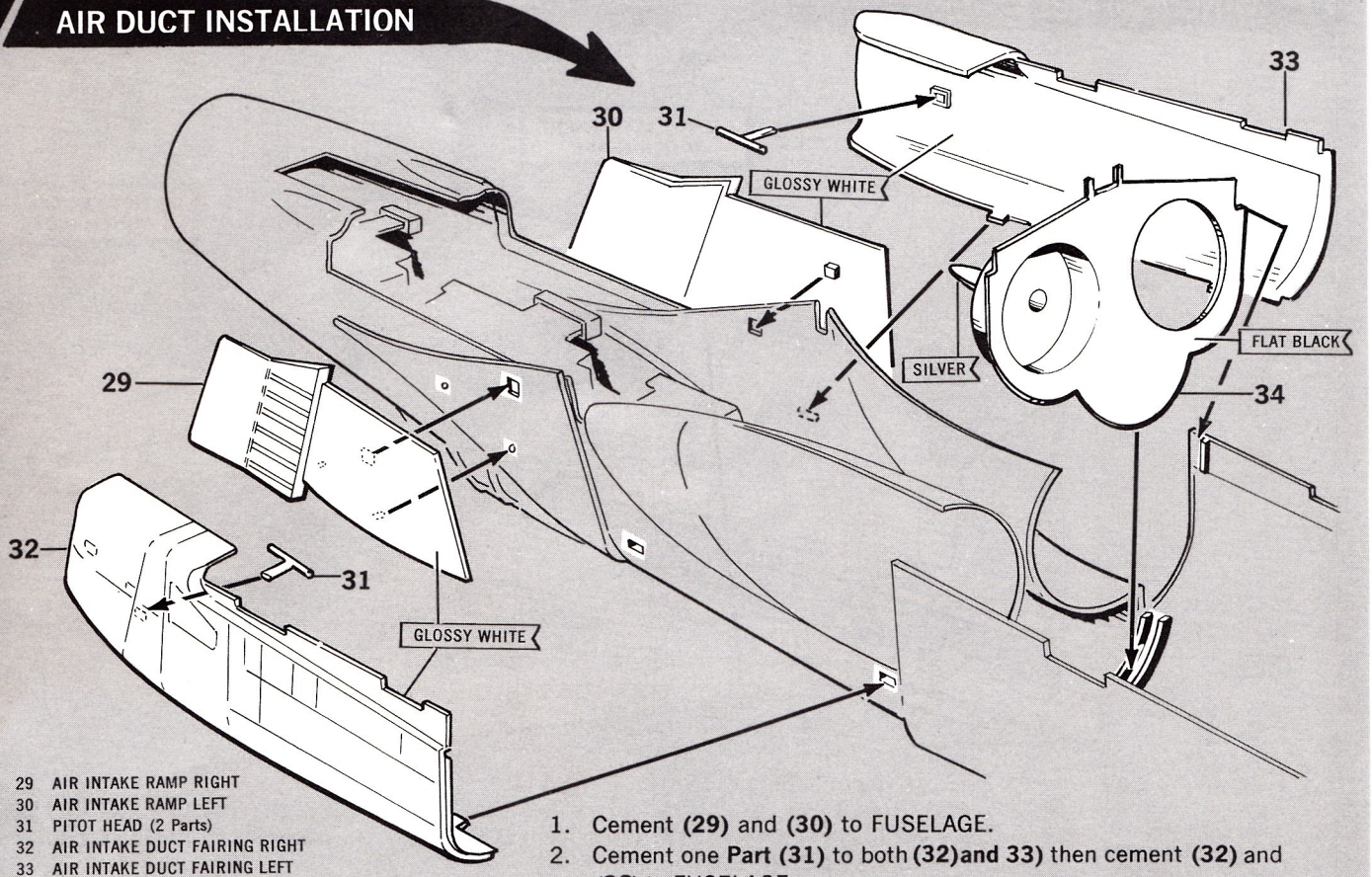
4 FUSELAGE ASSEMBLY



20 RIGHT WINDOW
21 RIGHT FUSELAGE HALF
22 LEFT WINDOW
23 LEFT FUSELAGE HALF
24 ARRESTING HOOK LEFT SIDE
25 ARRESTING HOOK RIGHT SIDE
26 PILOT'S COCKPIT CANOPY
27 RADAR OPERATOR'S CANOPY
28 WINDSHIELD

1. Cement WINDOW **(20)** and COCKPIT assembly **from Step 1** to **(21)**. Cement other WINDOW **(22)** to **(23)**.
2. Cement **(24)** to **(25) PLACE, DO NOT CEMENT (25)** to **(21)**.
3. Locate, **DO NOT CEMENT** PINS ON **(26)** and **(27)** to **(21)**.
4. Carefully cement **(23)** to **(21) DO NOT LET CEMENT TOUCH PINS ON (25), (26)** or **(27)** or parts will not move.
5. Cement **(28)** to FUSELAGE.

5 AIR DUCT INSTALLATION

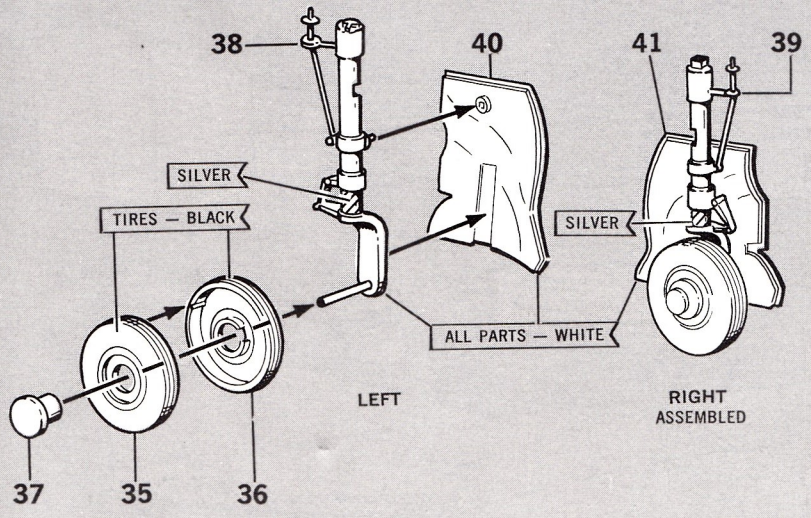


29 AIR INTAKE RAMP RIGHT
30 AIR INTAKE RAMP LEFT
31 PITOT HEAD (2 Parts)
32 AIR INTAKE DUCT FAIRING RIGHT
33 AIR INTAKE DUCT FAIRING LEFT
34 FUSELAGE BULKHEAD

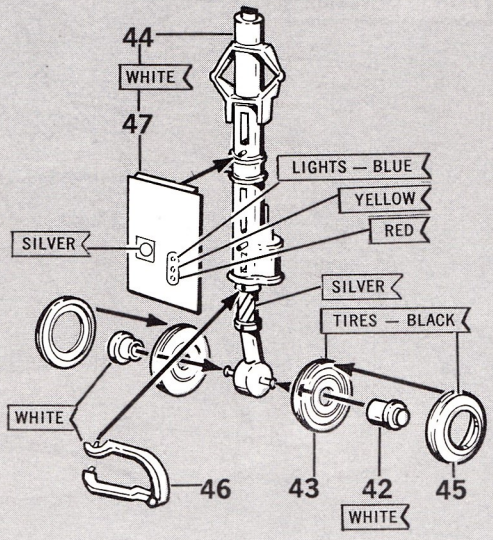
1. Cement **(29)** and **(30)** to FUSELAGE.
2. Cement one **Part (31)** to both **(32)and 33)** then cement **(32)** and **(33)** to FUSELAGE.
3. Cement **(34)** inside FUSELAGE.

6 LANDING GEAR ASSEMBLY

MAIN GEAR



NOSE GEAR



35 MAIN WHEEL HALF OUTSIDE (2 Parts)
36 MAIN WHEEL HALF INSIDE (2 Parts)
37 MAIN WHEEL RETAINER (2 Parts)
38 MAIN GEAR STRUT LEFT
39 MAIN GEAR STRUT RIGHT
40 LEFT GEAR STRUT DOOR
41 RIGHT GEAR STRUT DOOR
42 WHEEL RETAINER (2 Parts)
43 NOSE WHEEL INSIDE HALF (2 Parts)
44 NOSE GEAR STRUT
45 NOSE WHEEL OUTSIDE HALF (2 Parts)
46 NOSE GEAR YOKE
47 NOSE GEAR DOOR

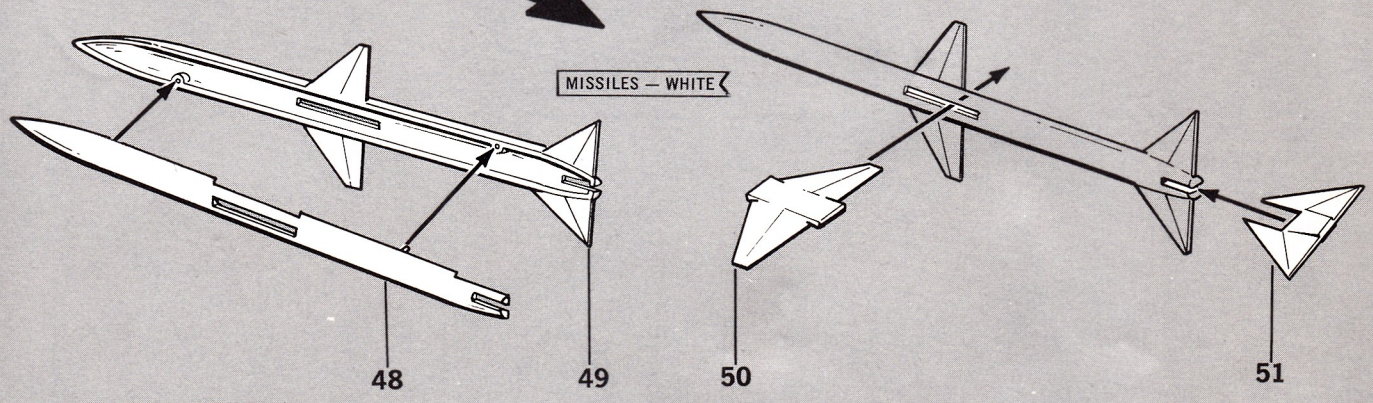
MAIN GEAR

1. Cement two **parts (35)** to **(36). PLACE, DO NOT CEMENT** assembled WHEELS on two **Parts (37)**, and carefully cement RETAINERS to MAIN GEARS **(38)** and **(39).**
2. Cement **(40)** to **(38)** and **(41)** to **(39).**

NOSE GEAR

1. **PLACE, DO NOT CEMENT** one **part (42)** in each **(43),** carefully cement each **(42)** to **(44).**
2. Cement a **part (45)** to each **(43).**
3. Cement **(46)** and **(47)** in position.

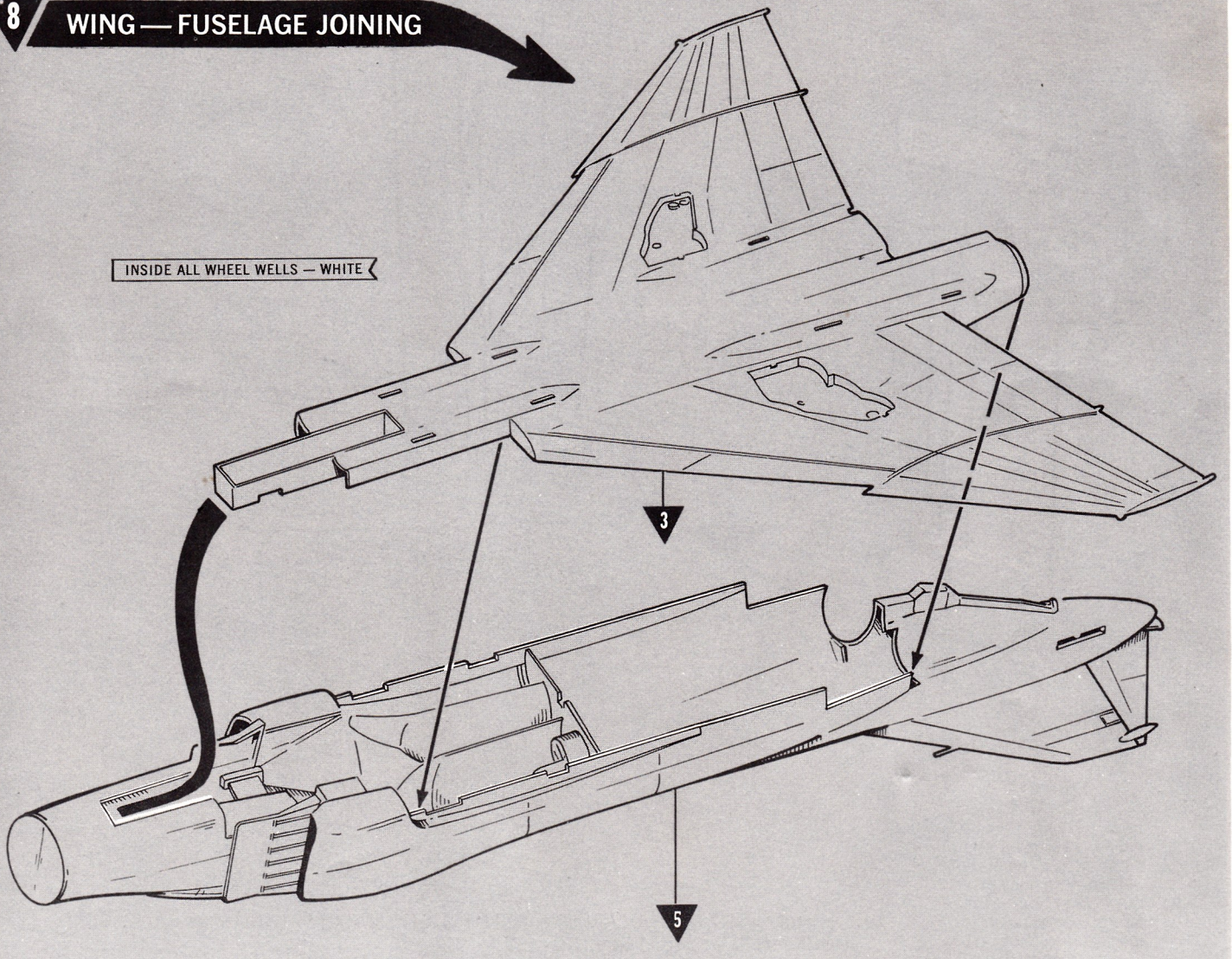
7 MISSILE ASSEMBLY



48 MISSILE BODY LEFT (4 Parts)
49 MISSILE BODY RIGHT (4 Parts)
50 MISSILE FIN (4 Parts)
51 MISSILE TAIL FIN (4 Parts)

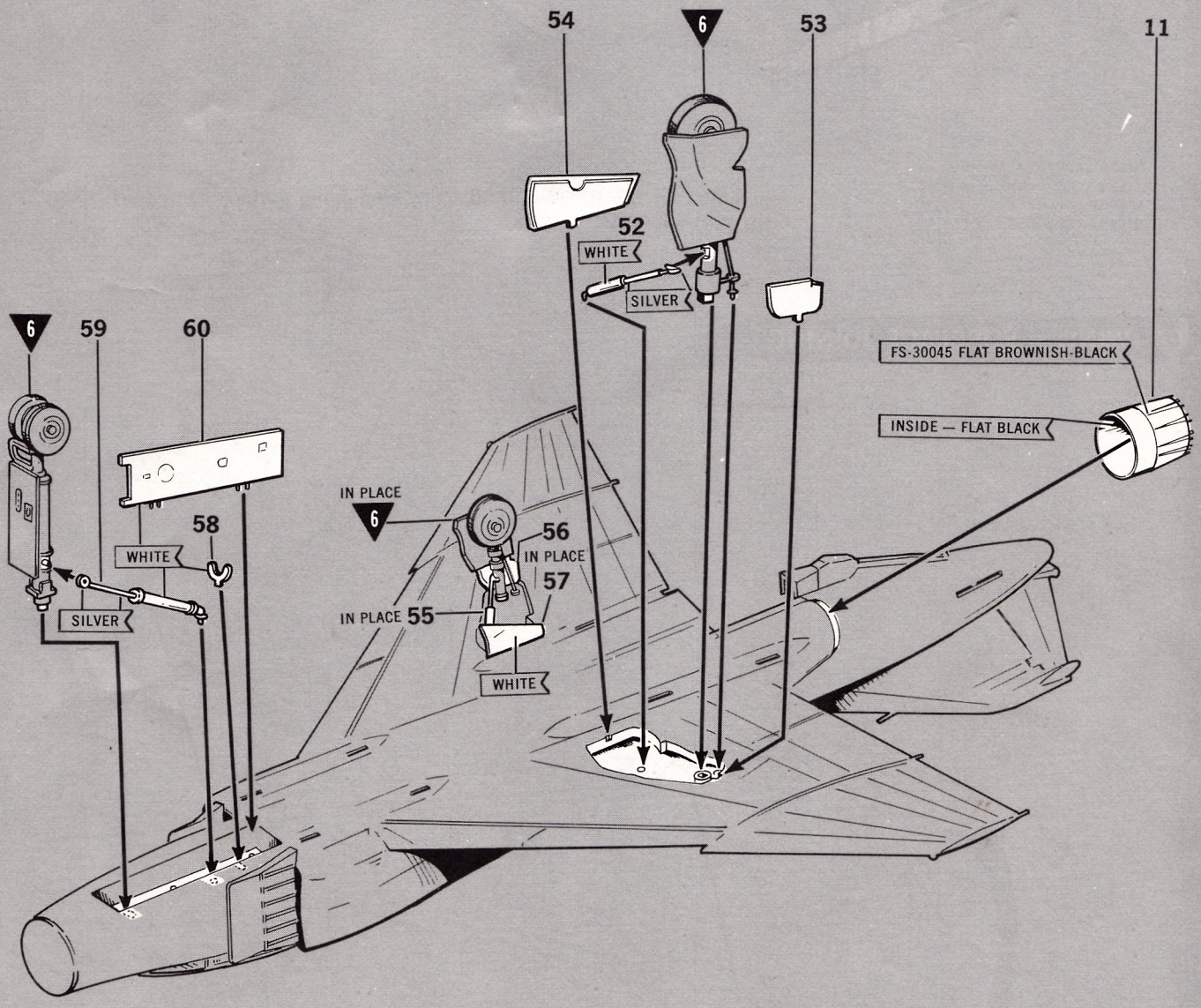
1. Assemble four SPARROW MISSILES by cementing **parts (48)** to **(49),** then install FINS **(50)** and **(51).**

8 WING — FUSELAGE JOINING



1. Slip forward end of WING assembly in FUSELAGE and slide forward until WING and FUSELAGE align and cement WING to FUSELAGE.

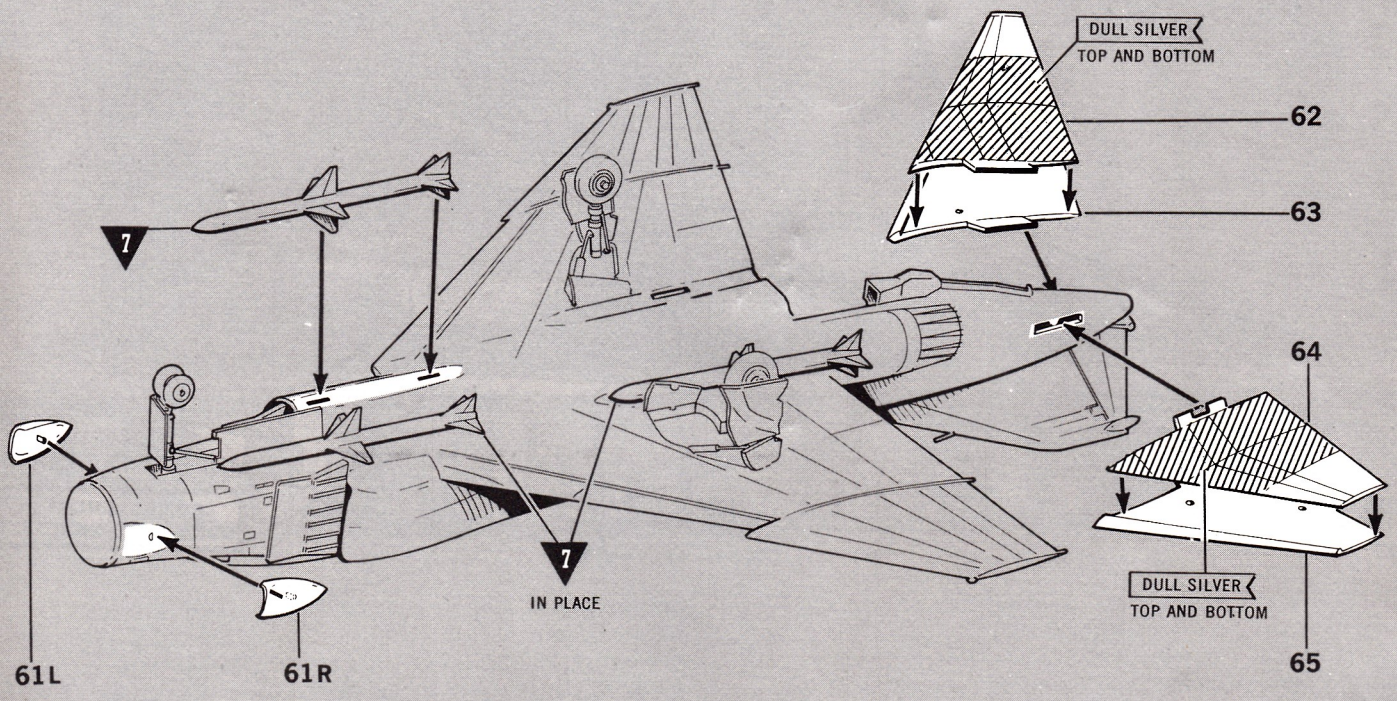
9 LANDING GEAR INSTALLATION



52 RIGHT GEAR RETRACT STRUT
53 OUTBOARD GEAR DOOR RIGHT
54 INBOARD GEAR DOOR RIGHT
55 LEFT GEAR RETRACT STRUT
56 OUTBOARD GEAR DOOR LEFT
57 INBOARD GEAR DOOR LEFT
58 NOSE GEAR RETRACT LOCK
59 NOSE GEAR RETRACT STRUT
60 NOSE GEAR DOOR
11 ENGINE EXHAUST CONE

1. Cement RIGHT MAIN GEAR, then RETRACT STRUT **(52)** to WING then RIGHT GEAR DOORS **(53)** and **(54)** to WING.
2. Cement LEFT MAIN GEAR and **parts (55), (56)** and **(57)** in place.
3. Cement **(58)** in place then NOSE GEAR and **(59)** and **(60)** as indicated.
4. Cement ENGINE EXHAUST CONE **(11)** to FUSELAGE.

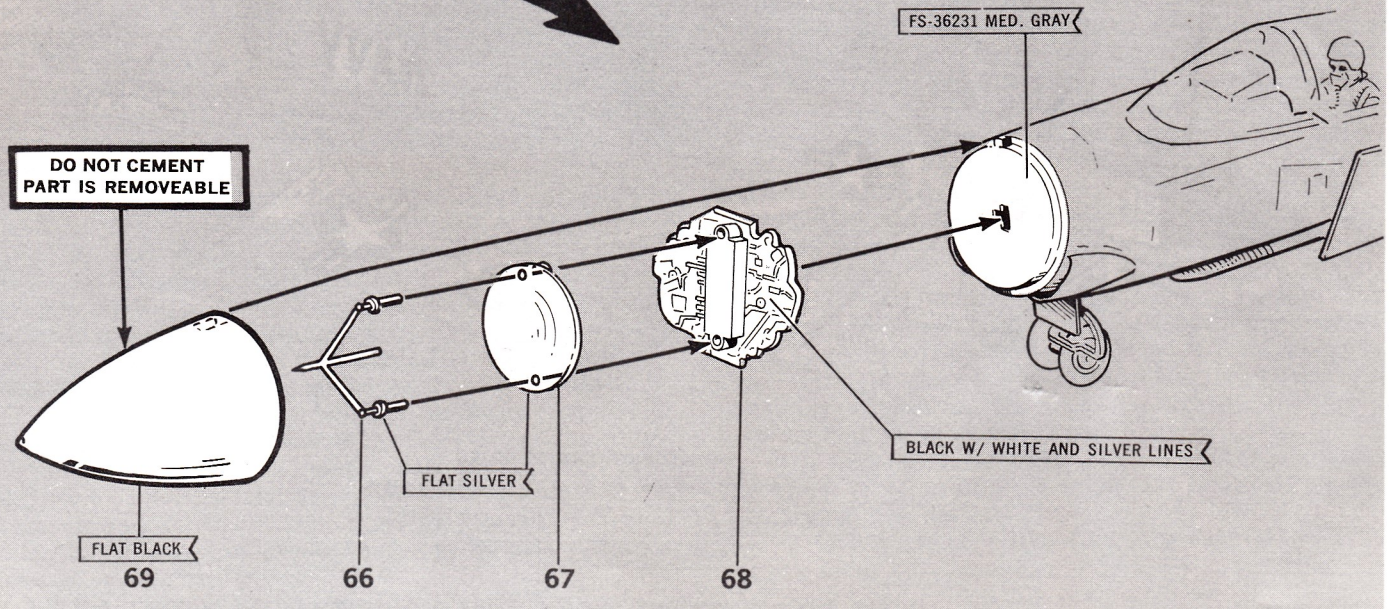
10 INSTALLATION STABILIZERS



61R RIGHT AIR DUCT FAIRING
61L LEFT AIR DUCT FAIRING
63 LEFT STABILIZER TOP
64 RIGHT STABILIZER BOTTOM
65 RIGHT STABILIZER TOP

1. Cement two AIR DUCTS **(61R and 61L)** to FUSELAGE.
2. Assemble LEFT and RIGHT STABILIZERS **parts (62), (63), (64)** and **(65).** Cement STABILIZERS to FUSELAGE.
3. Cement three SPARROW MISSILES in position as shown. Install SPARROW MISSILE #4 in Step 12.

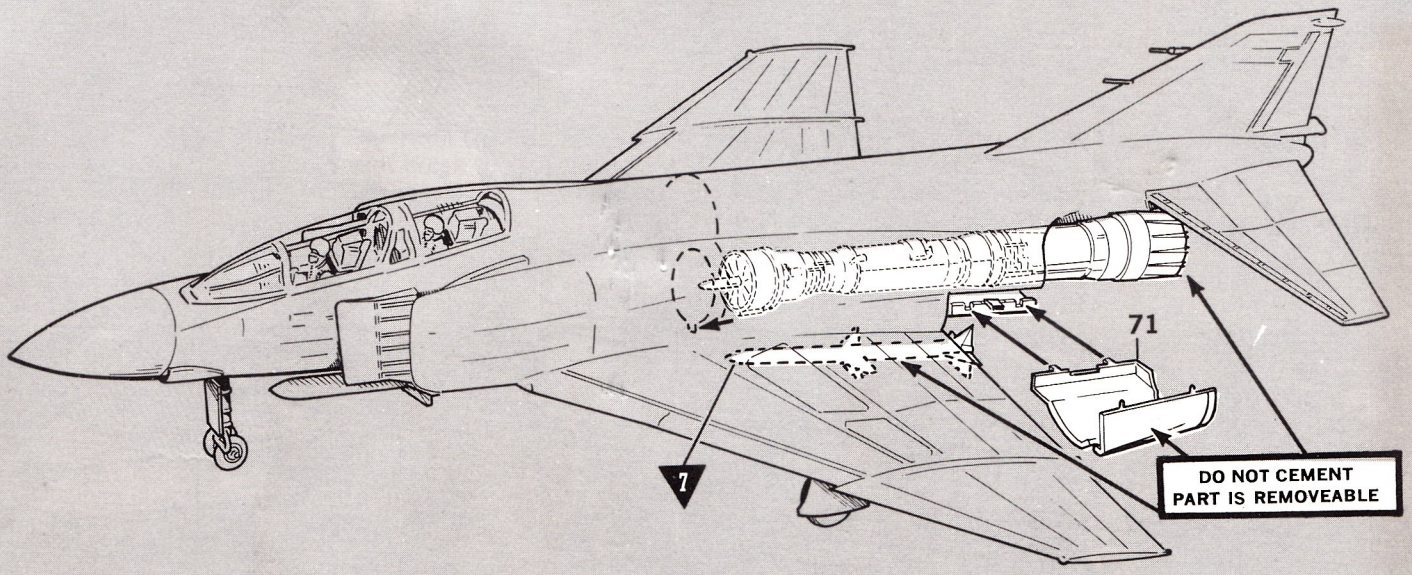
11 RADAR INSTALLATION

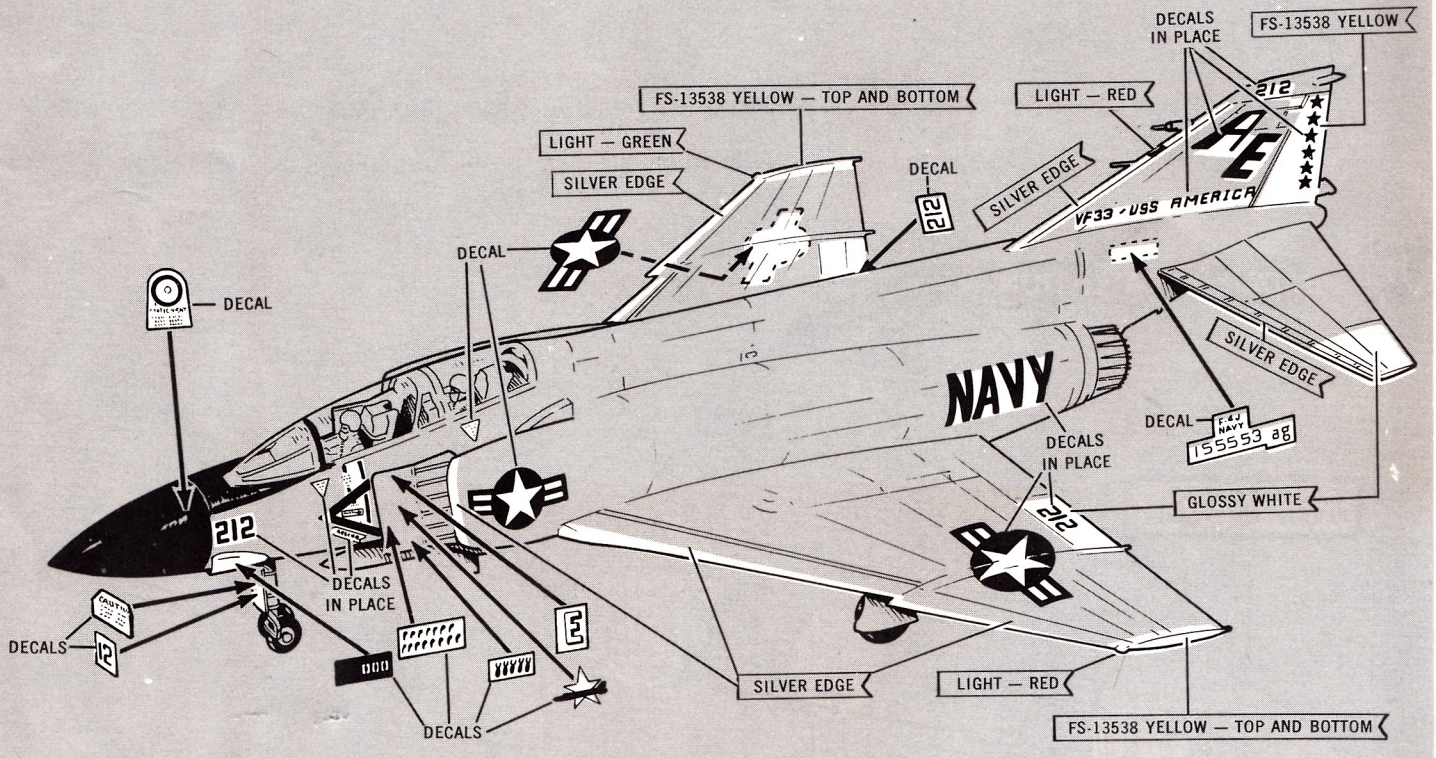


66 RADAR ANTENNA
67 RADAR DISH
68 RADAR UNIT
69 FUSELAGE NOSE CONE

1. Assemble RADAR UNIT **parts (66), (67)** and **(68),** cement to FUSELAGE.
2. NOSE CONE **(69)** snaps to front of FUSELAGE and may be removed to display RADAR.

12 FINAL ASSEMBLY





UNLESS OTHERWISE NOTED

ALL BOTTOM SURFACES ARE FS-17875 — GLOSSY WHITE

ALL TOP SURFACES ARE FS-36440 — FLAT LIGHT (GULL) GRAY

LEADING EDGES ARE NATURAL METAL

71 ENGINE ACCESS PANEL

1. **LOCATE, DO NOT CEMENT** ENGINE inside FUSELAGE and snap ENGINE ACCESS PANEL **(71)** into position. Both parts may be removed for display.
2. **PRESS, DO NOT CEMENT** remaining SPARROW MISSILE to FUSELAGE. This part is removeable.
3. Apply DECALS as indicated and allow to dry.