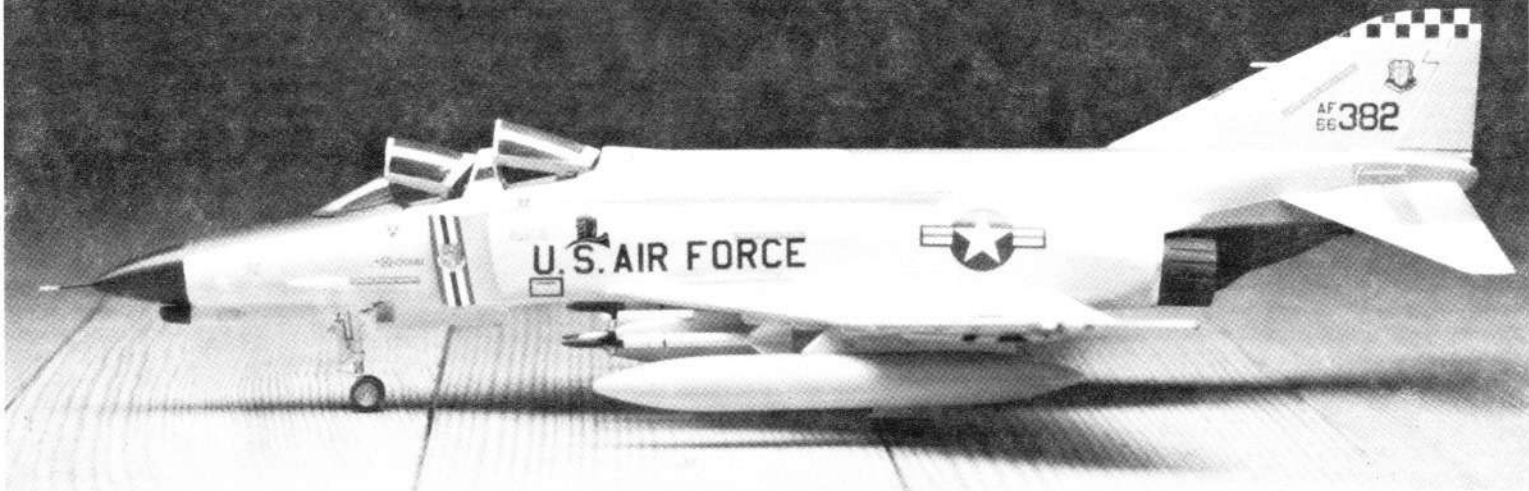


F-4E/G PHANTOM II

No. 687

TESTORS



HISTORY

The F-4 Phantom II was in production for over 20 years and well over 5,000 were produced. First flown in 1958 as a design to U.S. Navy specification, the Phantom was later adapted to U.S. Air Force needs while also being acquired by many foreign nations.

Highly adaptable, the F-4 in its many variants has performed in air defense, ground support, photo reconnaissance and electronic warfare roles. In each role the aircraft has an admirable record. Further - during the 1960's - both the U.S. Navy Blue Angels and U.S. Air Force Thunderbirds - flew the Phantom in precision flight demonstrations.

The Phantom is expected to serve for many more years even though out of production. It is clear the F-4 Phantom is one of aviation's classic designs.

SPECIFICATIONS

Powerplant	2 General Electric J-79 turbojets
Weight	29,000 lbs. (empty) 59,000 lbs. (max loaded)
Span	38' 4 $\frac{7}{8}$ "
Length	62' 11 $\frac{3}{4}$ "
Height	16' 5 $\frac{1}{2}$ "
Max. Speed	2.1 Mach @ 37,000' (approx. 1,470 mph)
Service Ceiling	58,000'
Combat	900 miles
Combat Radius	

Reference Sources

F-4 Phantom "In Action",
Phantom II (A Pictorial History) (Squadron/
Signal Publications
F-4 Phantom II, Part 2
Detail & Scale Vol 7 (Aero Publishers, Inc.)
Koku-Fan (February 1982)

Your F-4 kit may be built as an F-4E, F-4G "Wild Weasel," or an F-4EJ. The modeler should decide which version he prefers before proceeding. (See photos and instruction sheet pages 9, 10 and 11).

BEFORE STARTING

1. Study the illustrations and sequence of assembly before beginning.
2. Decide how much detail you wish to add to your model and whether or not you intend to modify or "convert" the basic model in any way. Study carefully all available reference material before beginning to ensure an authentic model.
3. Due to the amount of parts in this kit, do not detach the parts from the runners (sprue) until you need them. This helps avoid confusion and lost parts.
4. When cementing the parts together, check the way in which one part fits together with another. This ensures a neat job.
5. Always remember, when working with plastic model cement and paint, make sure your work is well-ventilated. The fumes from plastic modeling products can be harmful if inhaled.

PREPARATION OF PARTS

1. Never tear parts off the runners (sprue). Use a Testor Hobby Knife, nail clippers, or small wire cutters.
2. It is possible some parts may require a little attention with a file or sandpaper to ensure a proper fit and neat appearance. Hobby files and Testor Hobby Sandpaper appropriate for model-building are available in most good hobby shops.
3. If you desire, you may fill any seams (where parts go together) or imperfections with Testor Contour Putty for Plastic Models which is also available at good hobby shops.

PAINTING

You can obtain an excellent finish on your model using Testor Enamels. Parts of the model are painted individually, and then the entire model is oversprayed when you have finished construction.

First of all, be sure your brushes are soft, clean and flexible. (Keep them that way by cleaning them thoroughly with Testor Paint thinner.) Never use inexpensive brushes! A selection of Testor Shed-Proof Brushes will serve you well.

Wash plastic parts before detaching them from the sprue. Warm water and liquid detergent remove the oils left from the manufacturing process. Let the parts dry and avoid excessive handling. Immediately before painting, wipe the parts with a "tac rag" (available at automotive centers) to remove dust and lint.

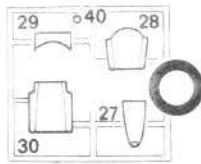
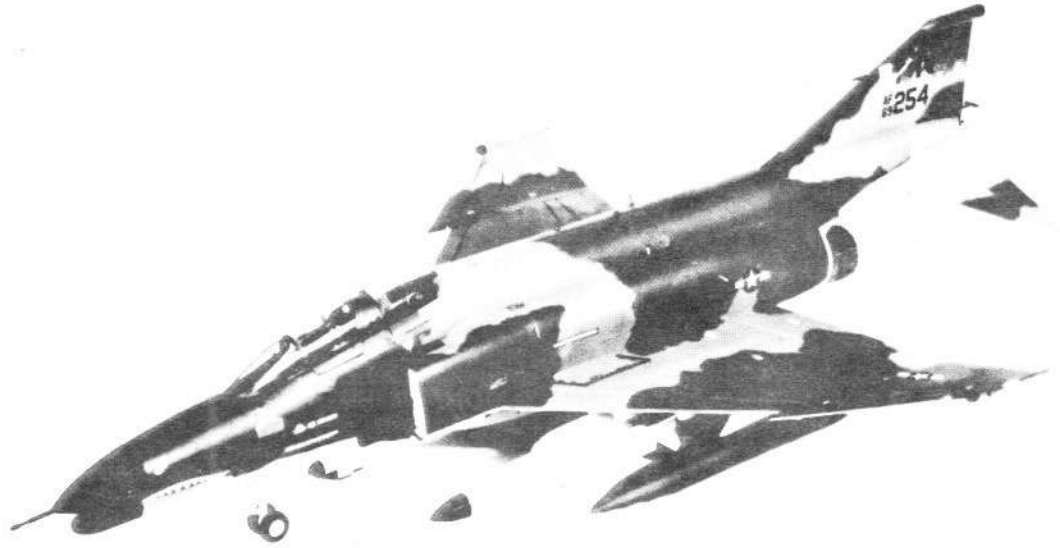
Most parts are best painted while still attached to the sprue or they may be detached and held with tweezers or "magic" type transparent tape. Paint in one direction only. If your paint is the correct consistency, brush strokes will disappear as the color dries. If the paint seems too thick, thin it with Testor Paint Thinner. Wheels may be detached from the sprue and fit onto toothpicks or matchsticks for painting. Then just hold the paintbrush against the edge of the wheel and rotate the wheel to obtain a neat clean finish.

Let the paint dry completely before handling. When the parts are dry, assemble the model, following the directions closely. Remember cement will not stick to painted surfaces. Using your Testor Hobby Knife, carefully remove paint from all surfaces to be cemented. After you have assembled your model you may touch up areas where cement has marred the finish.

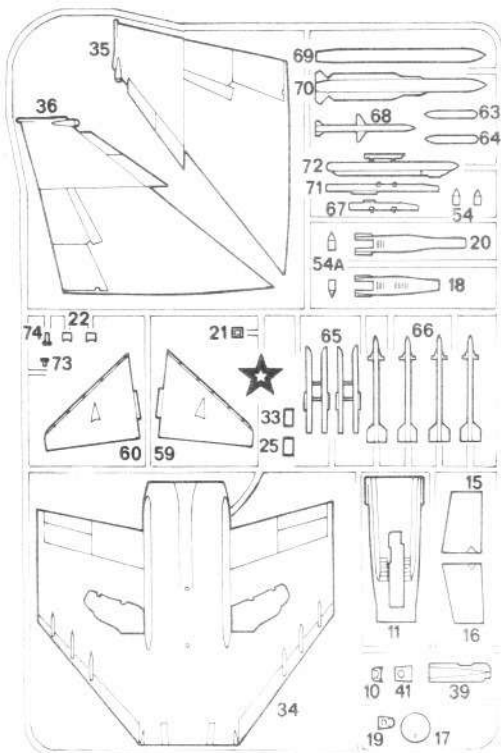
When your model is completed, apply a coat of Testor Dullcote #1260 to the entire model. This will give it an authentic, dull finish and protect the surface of the model.

Remove this page from the instruction sheet by cutting along indicated line. Use the drawings of the complete sprue as a part-locating reference when building the model.

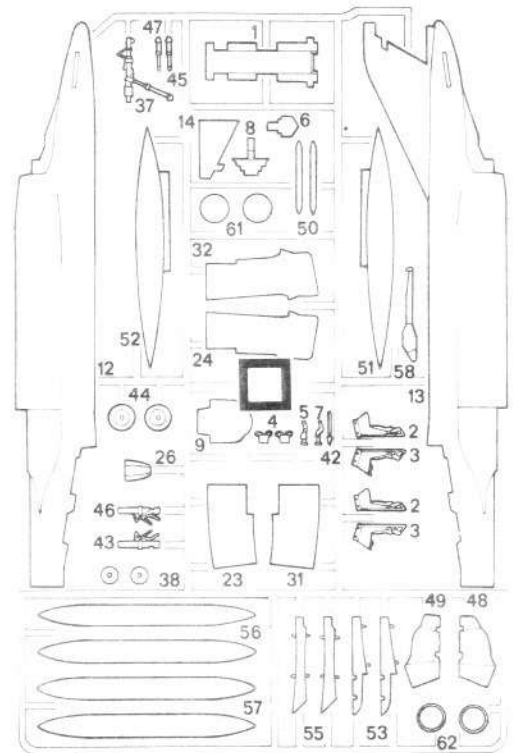
Tweezers will be useful in assembling the many small parts in this kit. The type used by postage stamp collectors is recommended.



Parts from this section are identified with this symbol: ○



Parts from this section are identified with this symbol: ☆



Parts from this section are identified with this symbol: □

Your F-4 kit may be built as an F-4E or an F-4G "Wild Weasel." The modeler should decide which version he prefers before proceeding (refer to box photos and drawings on pages 9, 10 and 11).

1 PARTS 1-9

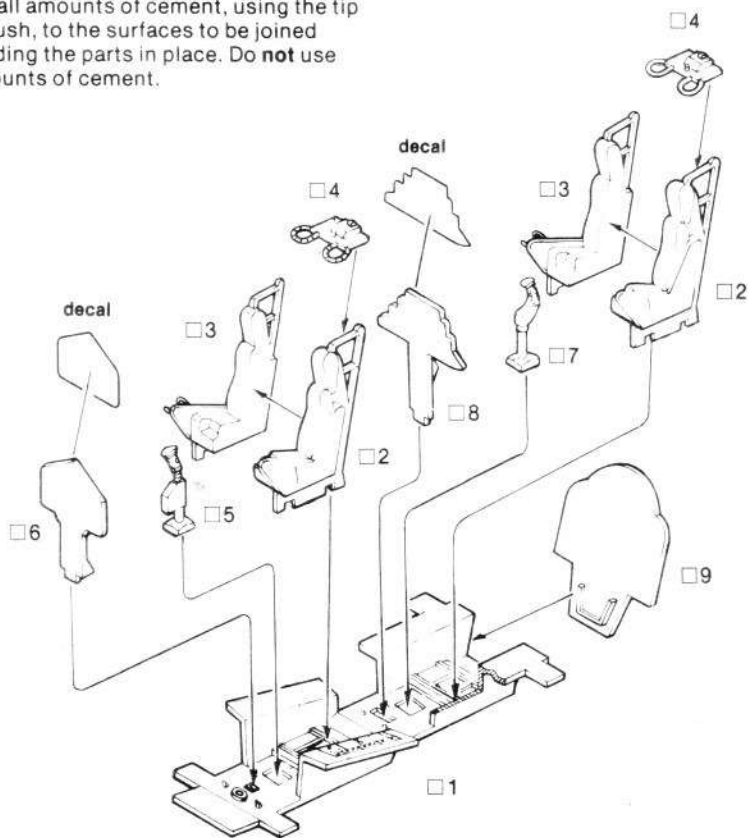
Preliminary Painting

- 1 sides and top of consoles only; □ 5, □ 6, □ 7, □ 8, □ 9:
"Light Gray" (mix 1 part #1163 Flat Battle Gray and 3 parts #1168 Flat White)
- 1 floor boards only:
"Dark Gray" (mix 3 parts #1163 Flat Battle Gray and 1 part #1149 Flat Black)
- 5, □ 7 handgrips only; □ 2, □ 3, □ 4:
#1149 Flat Black
- 4 pull rings only:
#1169 Flat Yellow with #1149 Flat Black stripes (see photos on box)
- 2, □ 3 seat cushions only:
#1165 Flat Army Olive

Assembly

- 1. Apply instrument panel decals to front and rear instrument panels □ 6 and □ 8. Notice that the shape of the decal corresponds to the shape of the part. Apply side console decals to top of side consoles on crew module □ 1. Allow decals to dry before proceeding.
- 2. Cement ejector seat halves □ 2 and □ 3 together making two seats. Glue one head protector shield □ 4 to the top of each seat and set aside to dry. Cement front control column □ 5 and rear control column □ 7 into square depressions in front and rear cockpits as shown.
- 3. Cement front instrument panel □ 6 into slot in front cockpit and rear instrument panel □ 8 into slot in rear cockpit. Cement ejector seat assemblies onto locators in front and rear cockpits. Cement rear bulkhead □ 9 onto back of crew module.

Liquid cement, Testor #3502, is recommended for construction since it can produce the neatest, quickest, and strongest glue joints. Apply small amounts of cement, using the tip of a 00 brush, to the surfaces to be joined while holding the parts in place. Do **not** use large amounts of cement.



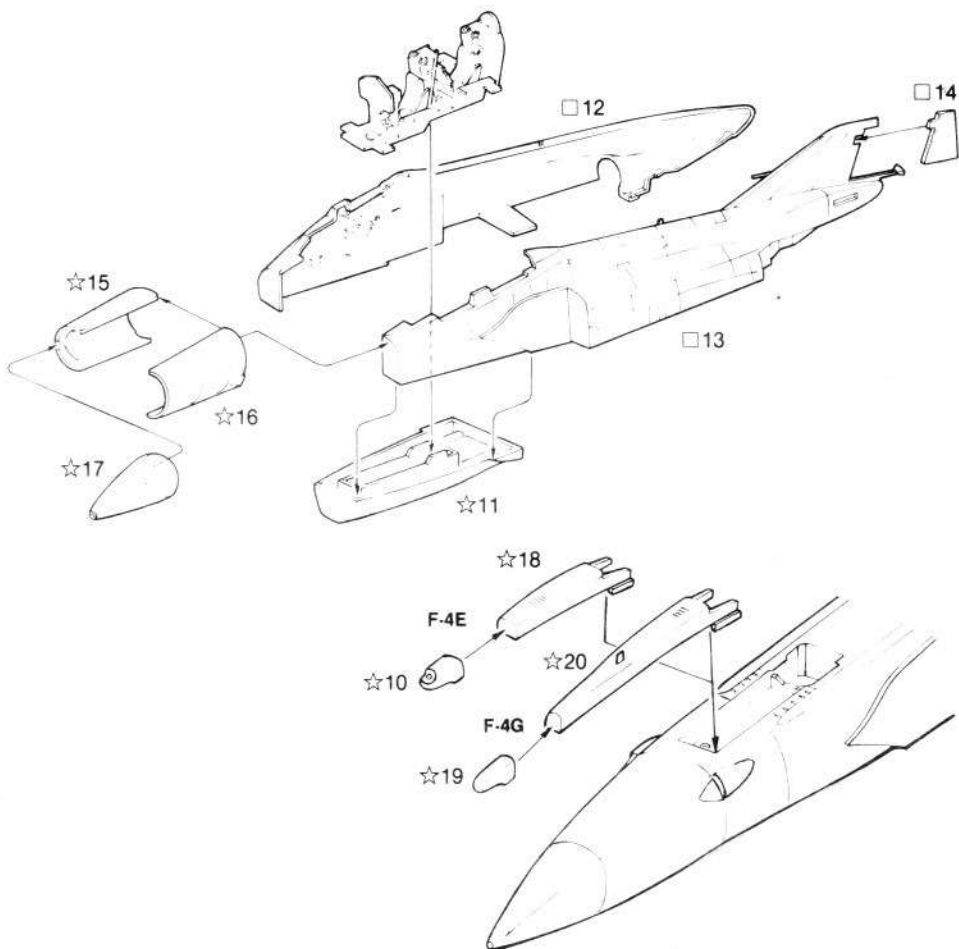
2 PARTS 10-20

Preliminary Painting

- 12, □ 13 inside walls of cockpit area:
"Light Gray" (mix 1 part #1163 Flat Battle Gray and 3 parts #1168 Flat White)

Assembly

- 1. Cement crew module assembly to lower fuselage panel ☆11 as shown. Cement this assembly to right fuselage half □ 12, then cement left fuselage half □ 13 to right fuselage half, lower panel and crew module. Take care to see that all these parts line up properly before proceeding.
- 2. Cement forward fuselage halves ☆15 and ☆16 together, then glue to front of fuselage. Cement nose cone ☆17 to forward fuselage. Cement rudder □ 14 to tail fin as shown.
- 3. Cement nose fairing and fairing cap to underside of nose as shown on drawings. For an F-4G use radar fairing ☆20 and fairing cap ☆19. For an F-4E use Vulcan fairing ☆18 and fairing cap ☆10.



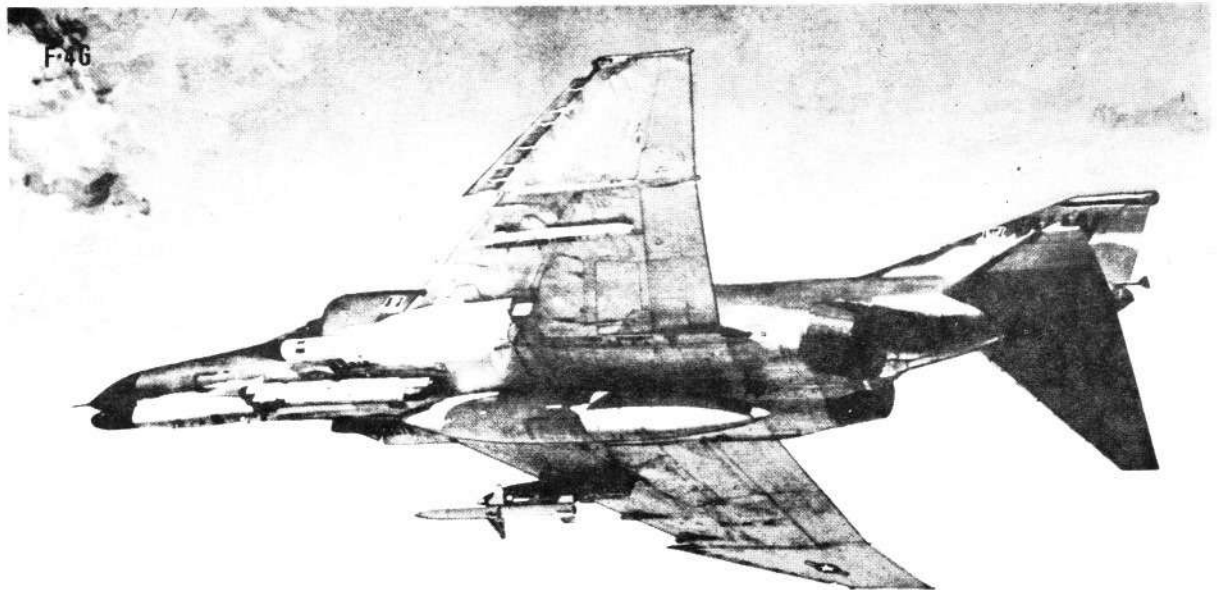
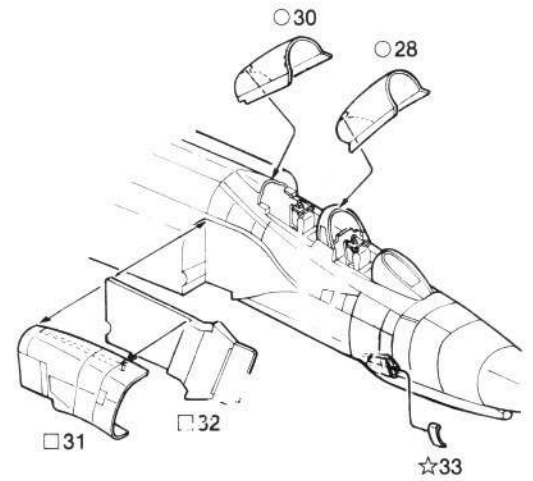
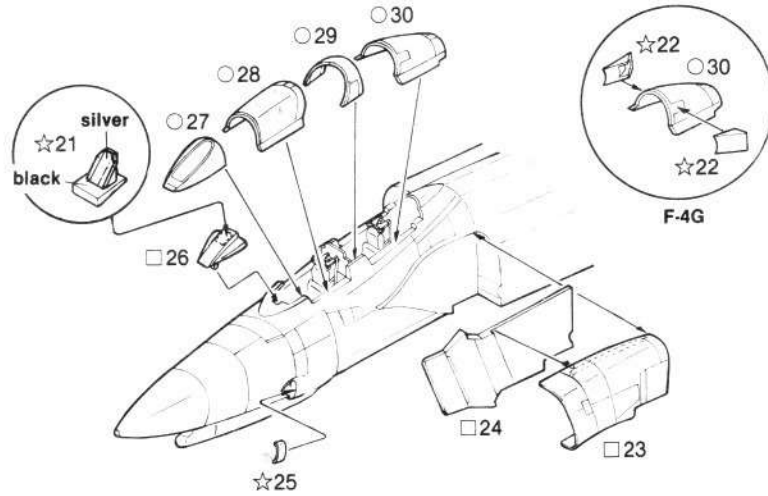
3 PARTS 21-33

Preliminary Painting

- 26; ☆ 21 all except reflector:
#1149 Flat Black
- 23, □ 24, □ 31, □ 32 interior of intakes:
#1168 Flat White
- ☆ 21 reflector only:
#1146 Silver
- 27, ○ 28, ○ 29, ○ 30 canopy frames only:
Overall Body Color (differs depending on which version you choose to build; see drawings on pages 9, 10 and 11, refer to box photos for positioning)

Assembly

1. Cement intake □ 23 to left intake baffle □ 24, then glue to left side of fuselage. Cement right intake □ 31 to right intake baffle □ 32, then cement to fuselage. Cement left and right air inlets ☆ 25 and ☆ 33 to projecting portions on left and right side of fuselage as shown in drawings.
2. Cement heads up display ☆ 21 to top of scuttle fairing □ 26 at position indicated, then cement to fuselage. Glue wind-screen ○ 27 into position on forward fuselage. Glue turnover pylon ○ 29 to raised section between front and rear cockpits. If you are building the F-4G version, glue one rear view mirror ☆ 22 to each side of rear canopy ○ 30. *Do not* use mirrors for F-4E version. Front and rear canopies ○ 28 and ○ 30 can be glued in place in either closed position, or open position (as shown in box photos).



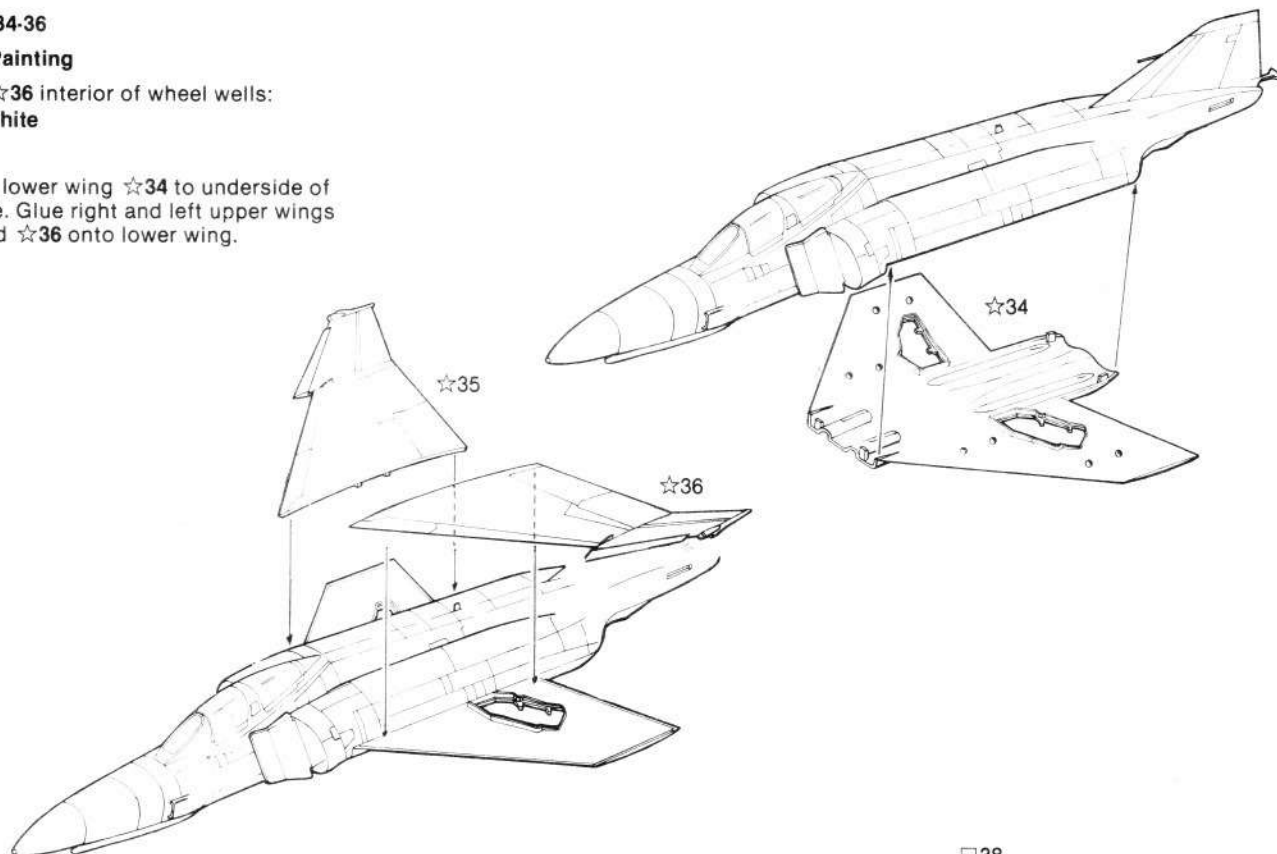
4 PARTS 34-36

Preliminary Painting

☆34, ☆35, ☆36 interior of wheel wells:
#1145 White

Assembly

1. Cement lower wing ☆34 to underside of fuselage. Glue right and left upper wings ☆35 and ☆36 onto lower wing.



5 PARTS 37-42

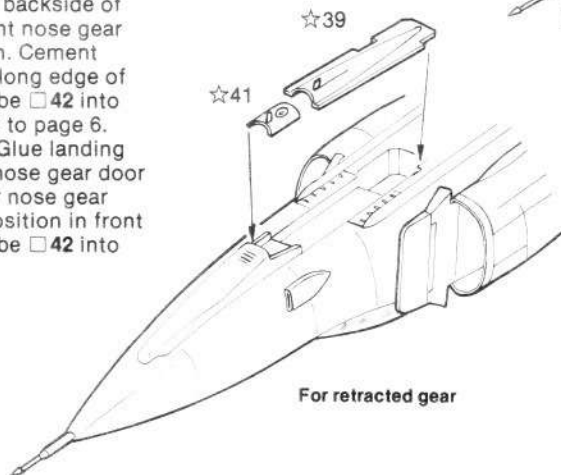
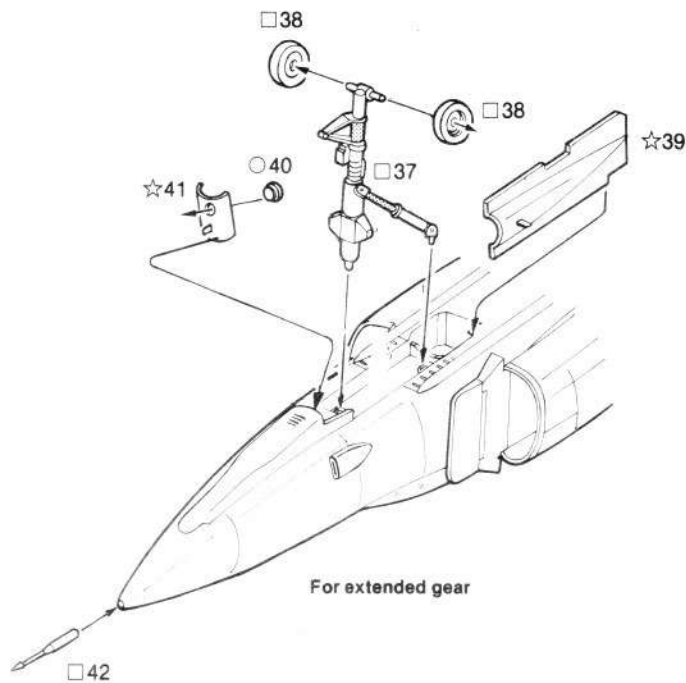
Preliminary Painting

- 38 wheel hub only; ☆39 ☆41 inner side only; interior of wheel well; □37: #1145 White
- 37 shaded portions on drawing; ○40 backside only; □42 pitot tip only: #1146 Silver
- 38 tires only: #1149 Flat Black

Assembly

NOTE: This model may be built with the landing gear in either extended or retracted position. Before proceeding, decide which option you prefer.

1. **For extended landing gear:** Glue one nose wheel □38 to each axle on nose gear strut □37. Cement □37 into front wheel well as shown.
2. Glue landing light ○40 into backside of nose gear door ☆41. Cement nose gear door ☆41 in place as shown. Cement main nose gear door ☆39 along edge of wheel well. Cement pitot tube □42 into hole on nose cone. Proceed to page 6.
3. **For retracted landing gear:** Glue landing light ○40 into backside of nose gear door ☆41. Cement front and rear nose gear doors ☆41 and ☆39 into position in front wheel well. Cement pitot tube □42 into hole on nose cone.



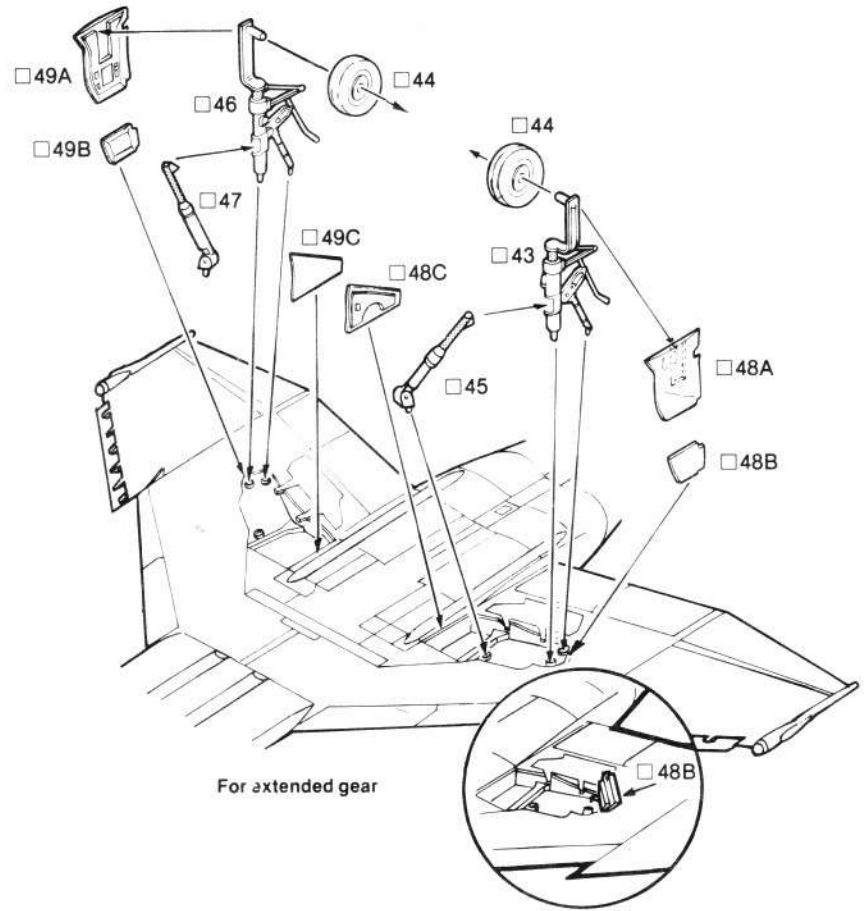
6 PARTS 43-50

Preliminary Painting

- 44 wheel hubs only; □ 48, □ 49 inner side only; □ 43, □ 45, □ 46, □ 47: #1145 White
- 43, □ 45, □ 46, □ 47 shaded portions on drawing: #1146 Silver
- 44 tires only: #1149 Flat Black

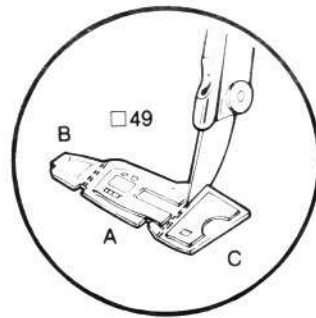
Assembly

- 1. **For extended landing gear:** Cement one wheel □ 44 to each main landing gear strut □ 43 and □ 46. Glue landing gear strut □ 43 into right wheel well and left strut □ 46 into left wheel well. Cement right actuator □ 45 into hole in right wheel well and notch on landing gear strut. Cement left actuator □ 47 to left wheel well and strut.
- 2. Cut main gear doors □ 48 and □ 49 into three pieces as shown in drawing. Cement door □ 48A onto right landing gear strut. Glue door □ 49A to left strut. Cement door □ 48B onto underside of wing at an angle so that it is parallel with the outer edge of the wheel well (see inset). Repeat procedure for left door □ 49B. Cement inner doors □ 48C and □ 49C to edges of right and left wheel well respectively. Cement one wing hinge fairing □ 50 to the fold point under each wing as shown. Proceed to page 7.
- 3. **For retracted landing gear:** Glue right main gear door □ 48 into right wheel well and left main gear door □ 49 into left wheel well. Cement one wing hinge fairing □ 50 to fold point under each wing.

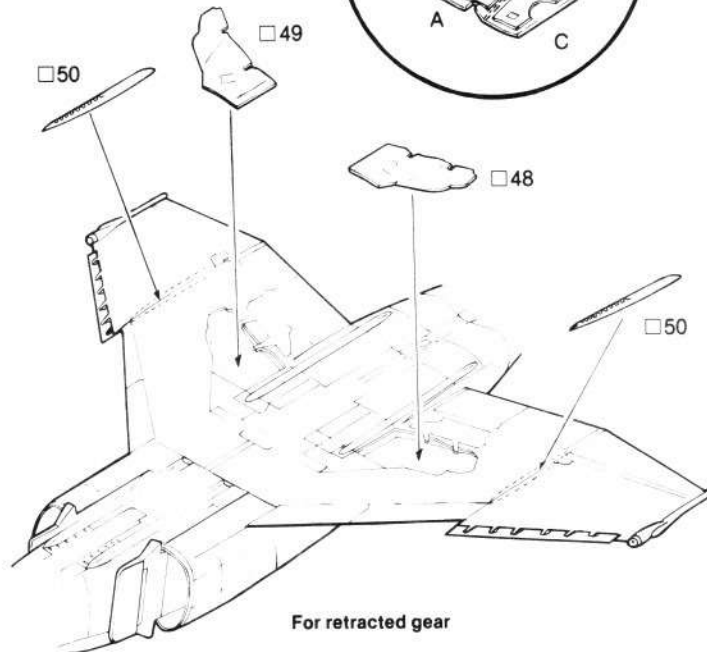
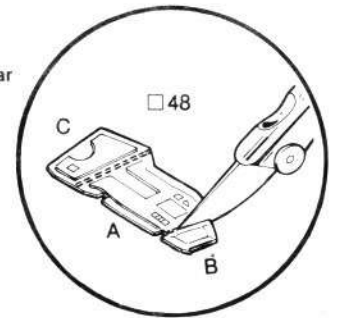


For extended gear

Position of upper undercarriage door, similar for □ 49B



For extended gear

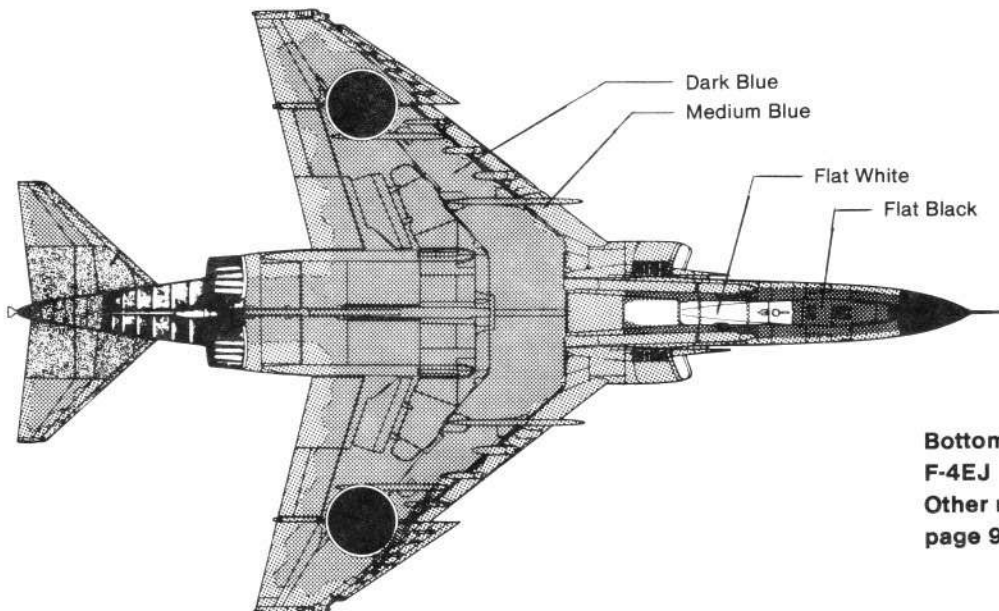
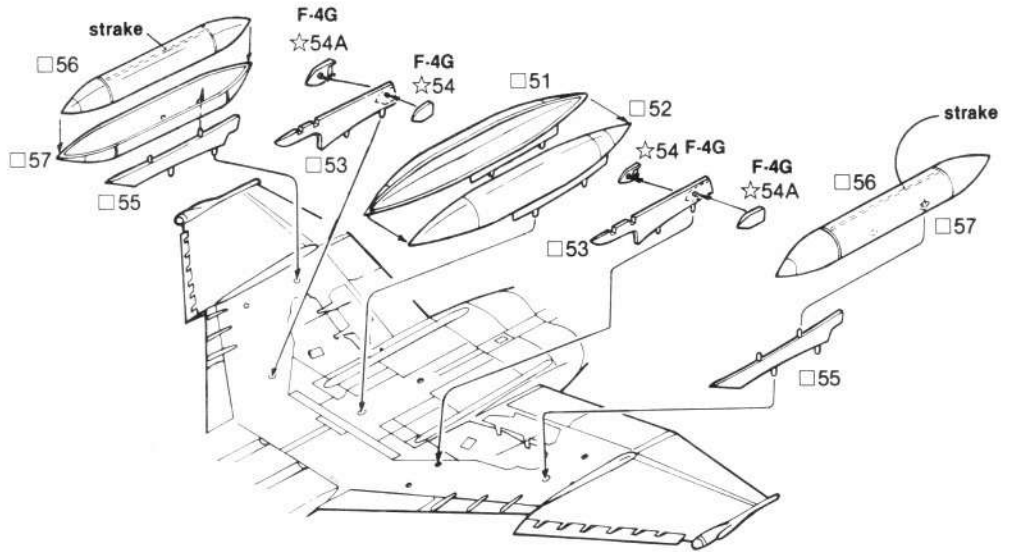


For retracted gear

7 PARTS 51-57

Assembly

- 1. Cement one inboard pylon □ 53 to the inboard station under each wing. If you are building the F-4G version, cement chaff dispensers ☆54 and ☆54A to the rear end of the inboard pylons as shown. Note that the large dispensers ☆54A face outboard and the small dispensers ☆54 face inboard. **NOTE: Do not use the chaff dispensers for F-4E**
- 2. Cement centerline drop tank halves □ 51 and □ 52 together, then cement to underside of fuselage. Cement one outboard pylon □ 55 to the outboard station under each wing. Cement outboard drop tank halves □ 56 and □ 57 together making two tanks. Glue one tank to each outboard pylon making sure that the horizontal strake under each tank faces to the left side of the plane.



Bottom View
F-4EJ
Other reference on
page 9

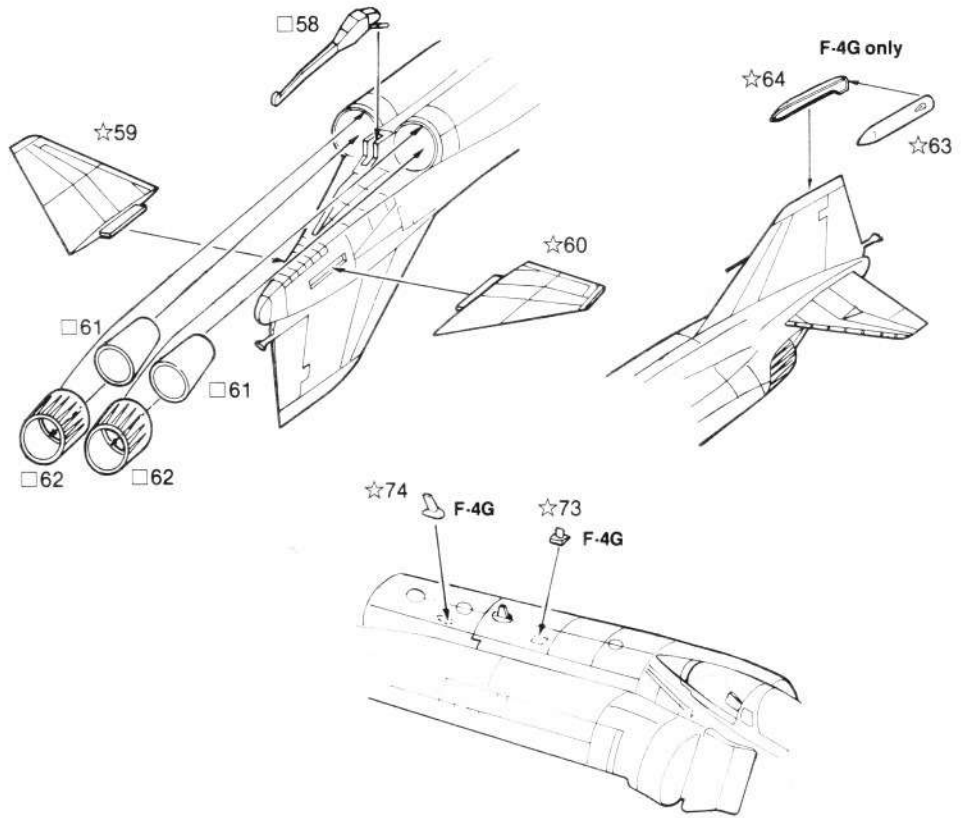
8 PARTS 58-64, 73, 74

Preliminary Painting

- 61: #1149 Flat Black
- 61 turbine detail only; □ 58, □ 62: #1180 Steel

Assembly

- 1. Cement arrestor hook □ 58 to underside of fuselage. Cement turbine housing □ 61 into rear of fuselage. Glue one tail cone □ 62 to each turbine housing. Cement right and left stabilators ☆59 and ☆60 to slots in right and left side of fuselage as shown.
- 2. **For F-4G only:** Cement radome fairing halves ☆63 and ☆64 to tail fin and each other as shown. Cement antennae ☆73 and ☆74 to upper right side of fuselage at positions shown in drawing.



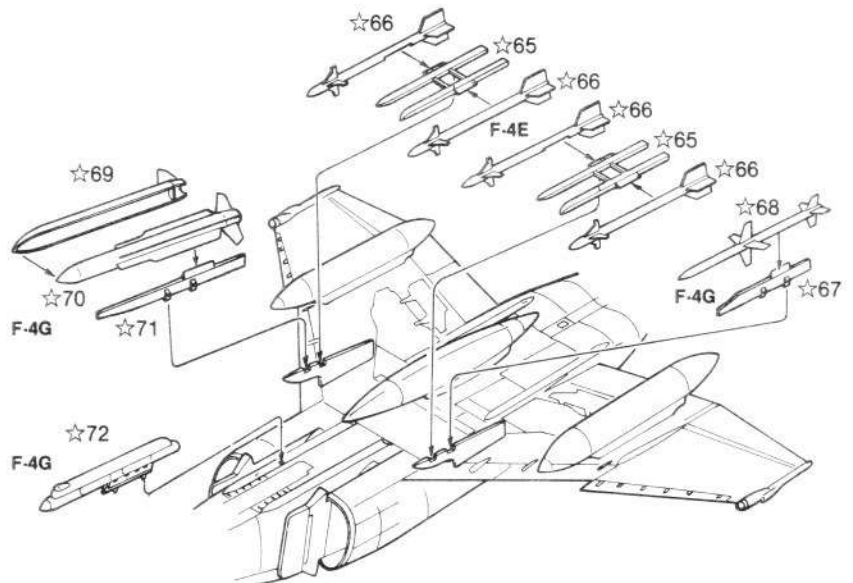
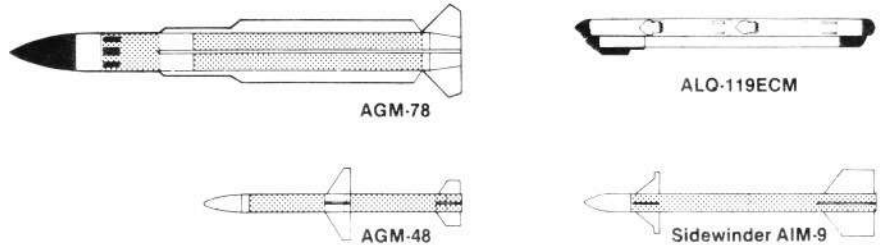
9 PARTS 65-72

Preliminary Painting

- ☆65, ☆67, ☆71: #1168 Flat White
- missiles and ECM pod; paint as shown in drawings:
 white areas #1168 Flat White, shaded areas #1111 Blue, black areas #1149 Flat Black

Assembly

- 1. **F-4E version only:** Cement one Sidewinder rack ☆65 to the inboard pylon under each wing. Cement two Sidewinder missiles ☆66 to each missile rack as shown (also see drawing on page 12).
- 2. **F-4G version only:** Cement missile rack ☆67 to inboard pylon under right wing, and missile rack ☆71 to inboard pylon under left wing. Cement AGM-48 missile ☆68 to rack under right wing. Glue AGM-78 missile halves ☆69 and ☆70 together, then cement to rack under left wing. Cement ECM pod ☆72 into left forward Sparrow well as shown (also see drawing on page 12).



**F-4EJ of Japanese Air Self
Defense Force,
302 Sq./2nd Air Wing**

COLOR KEY



1. Light blue, FS 35450. Mix 8 parts **Testor FS 35622** Duck Egg Blue with 3 parts **Testor No. 1162** Sky Blue and 1 part **Testor FS 35164** Intermediate Blue.



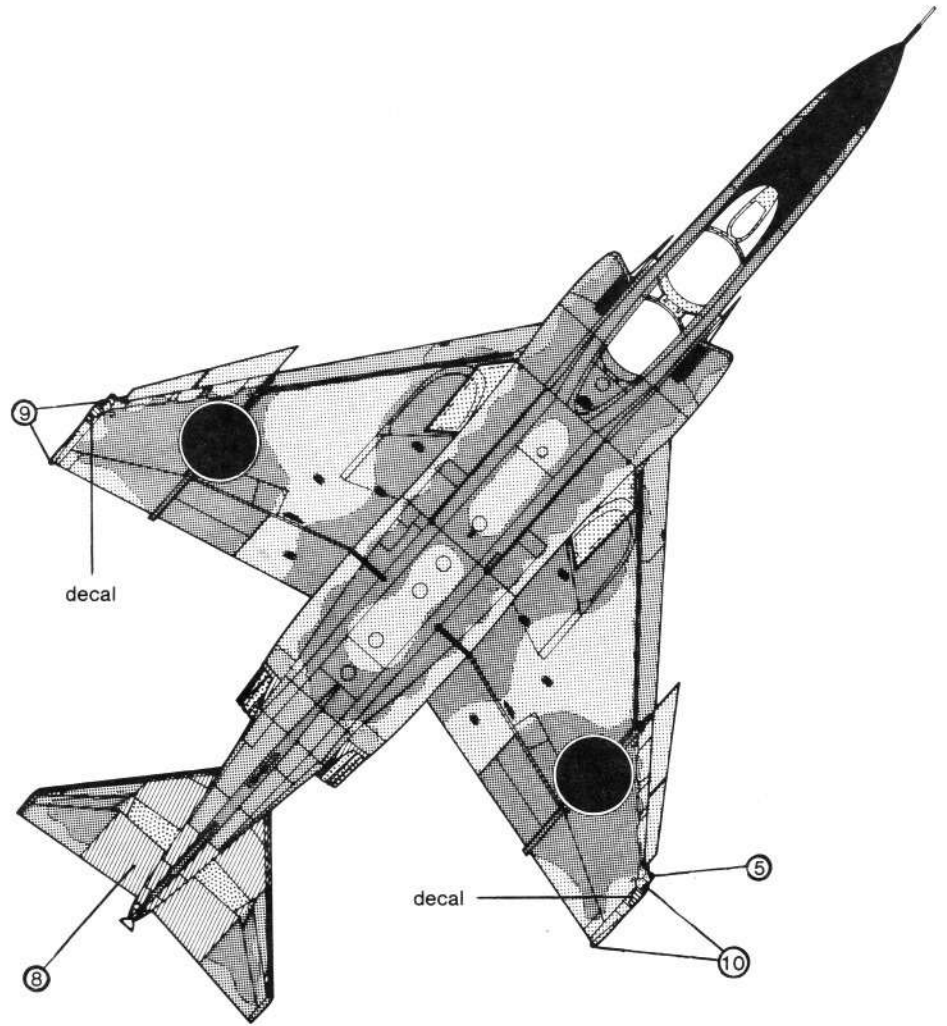
2. Medium Blue, FS 35190. Mix 1 part **Testor No. 1162** Sky Blue with 1 part **Testor FS 35164** Intermediate Blue.



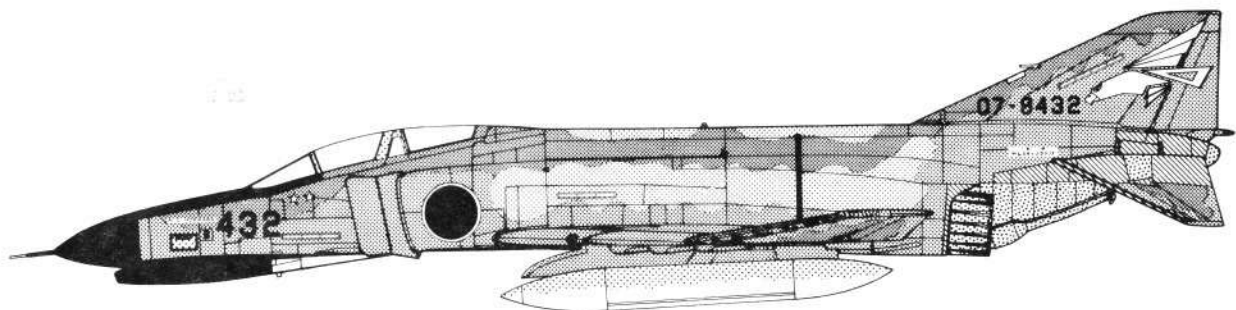
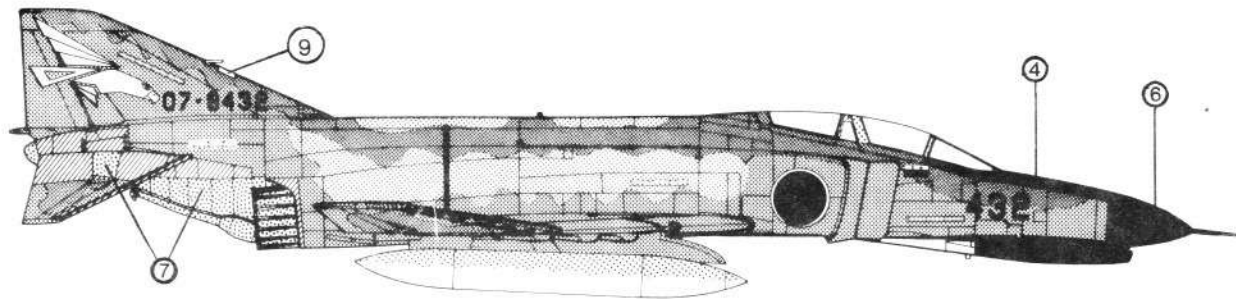
3. Dark Blue, FS 35177. Mix 3 parts **Testor FS 35164** Intermediate Blue with 1 part **Testor No. 1162** Sky Blue and 1 part **Testor No. 1172** Sea Blue.

4. Flat Black, **Testor #1149**
 5. Flat White, **Testor Color #1168**
 6. Gloss Black, **Testor color #1147**
 7. Steel, **Testor color #1180**
 8. Aluminum, **Testor color #1181**
 9. Flat Red, **Testor color #1150**
 10. Green, **Testor color #1124**

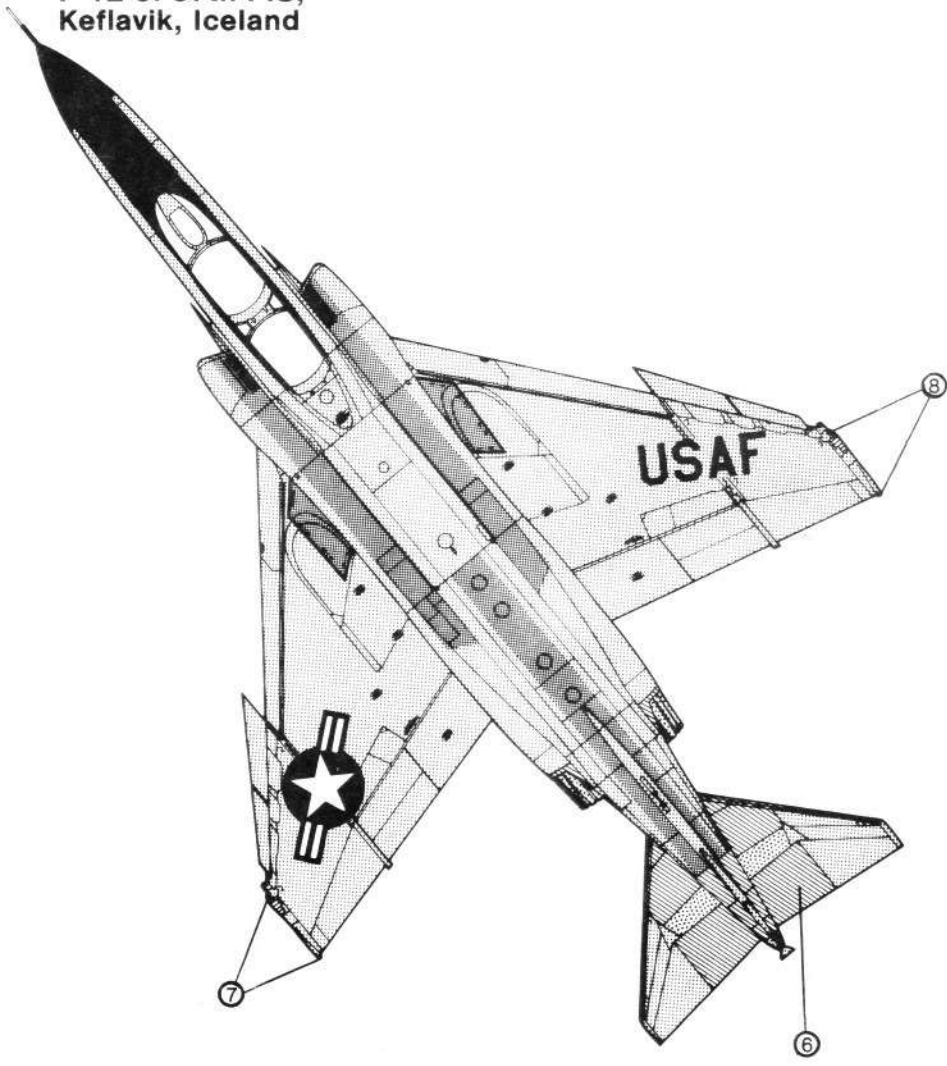
The numbers on the drawings correspond to the appropriate marking on the decal sheet. Numbers in circles refer to colors indicated on color key. **NOTE:** The small data decals shown here and on page 12 are optional. These are recommended for the experienced modeler only.



See bottom view on page 7



F-4E of 57th FIS,
Keflavik, Iceland



COLOR KEY



1. Aircraft Gray, *FS 16473 - Testor Model Master Series*



2. Gunship Gray, *FS 36118 - Testor Model Master Series*

3. Gloss Black, *Testor color #1147*

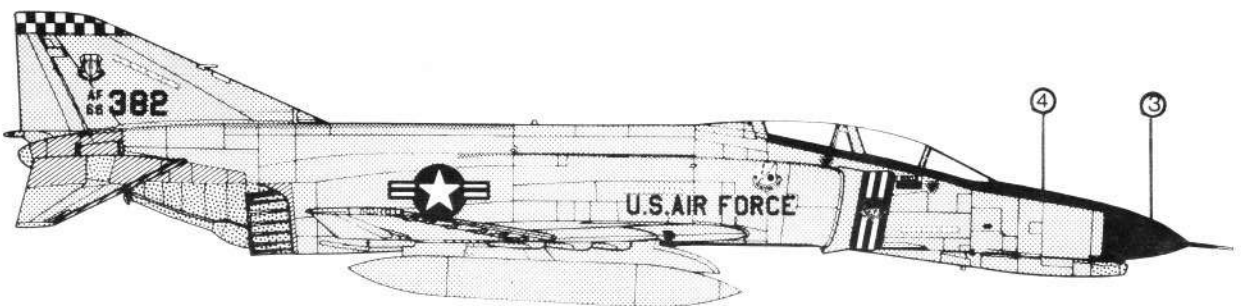
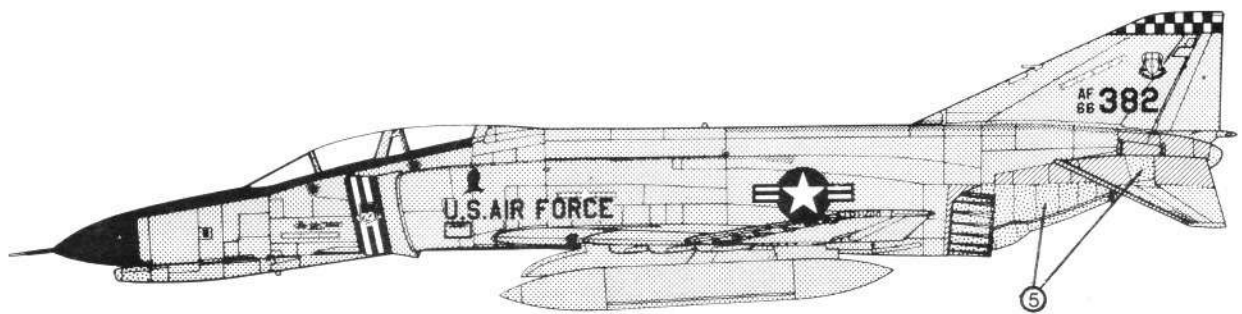
4. Flat Black, *Testor color #1149*

5. Steel, *Testor color #1180*

6. Aluminum, *Testor color #1181*

7. Flat Red, *Testor color #1150*

8. Green, *Testor color #1124*



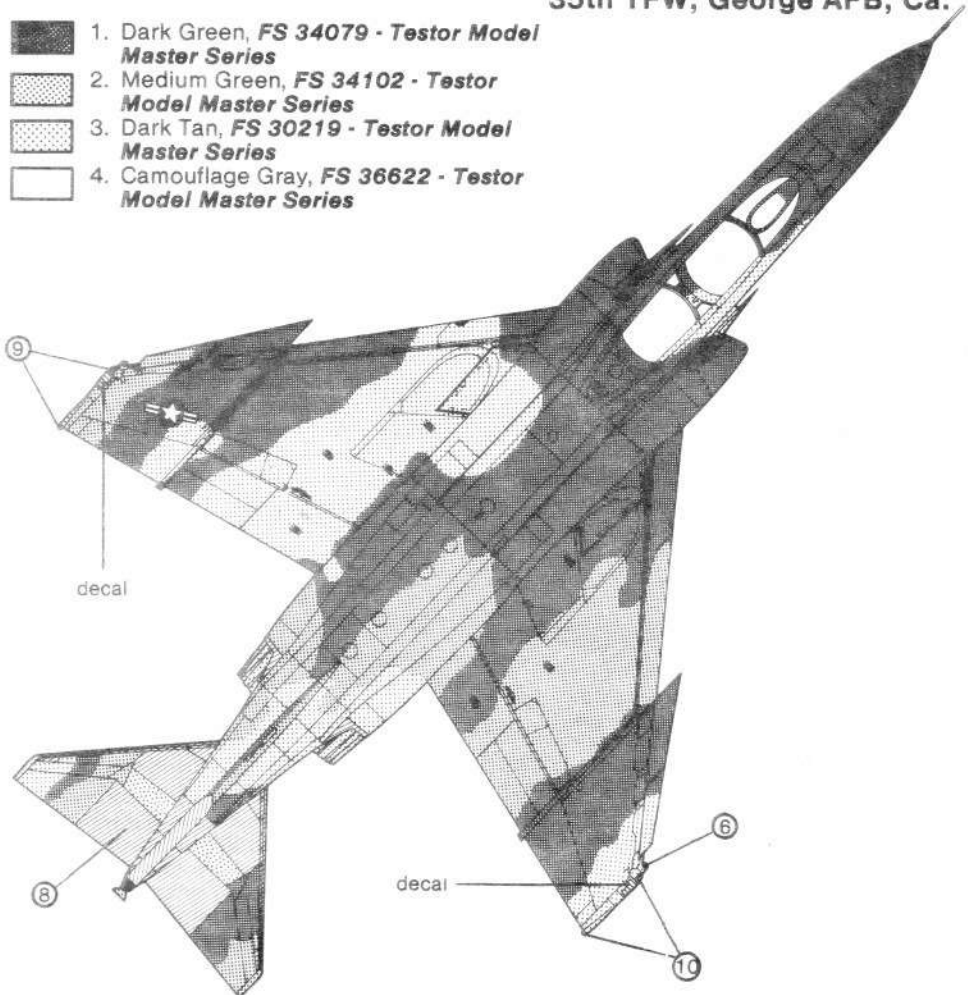
APPLYING DECALS

1. After carefully masking canopy and other clear areas, spray entire model with Testor Glosscote #1261. Decals adhere best to a smooth surface and the shinier the finish, the smoother it is. Allow the Glosscote to dry thoroughly before going further.
2. Select the decals you plan to use, and cut each of them out from the decal sheet with small scissors or Testor Hobby Knife.
3. Working with only one decal at a time, dip the decal in clear water for no more than five seconds, then remove it from the water and place on a dry paper towel for about one minute.
4. When the decal slides easily on the backing paper, slide it to the edge of the paper and onto the surface of the model with a soft paintbrush or tweezers. Remember: the decals are very thin and can be easily ripped if care is not taken. Work slowly and patiently.
5. Once the decal is in the desired position, apply a small amount of Testor Decal Set #8804. This will help the decal to conform to any irregularities in the surface of the model (rivets, curves, etc.). Allow the decal to dry undisturbed. Should you find the decal has moved or should you desire to purposely move it, apply a little Decal Set to a soft brush and push the decal slowly into the desired position.
6. When the decals are completely dry (usually overnight), apply a coat of Testor Dullcote #1260 to the entire model. This will give it an authentic, dull finish and protect the surface of the model. Then carefully remove masking from canopy and other clear areas.

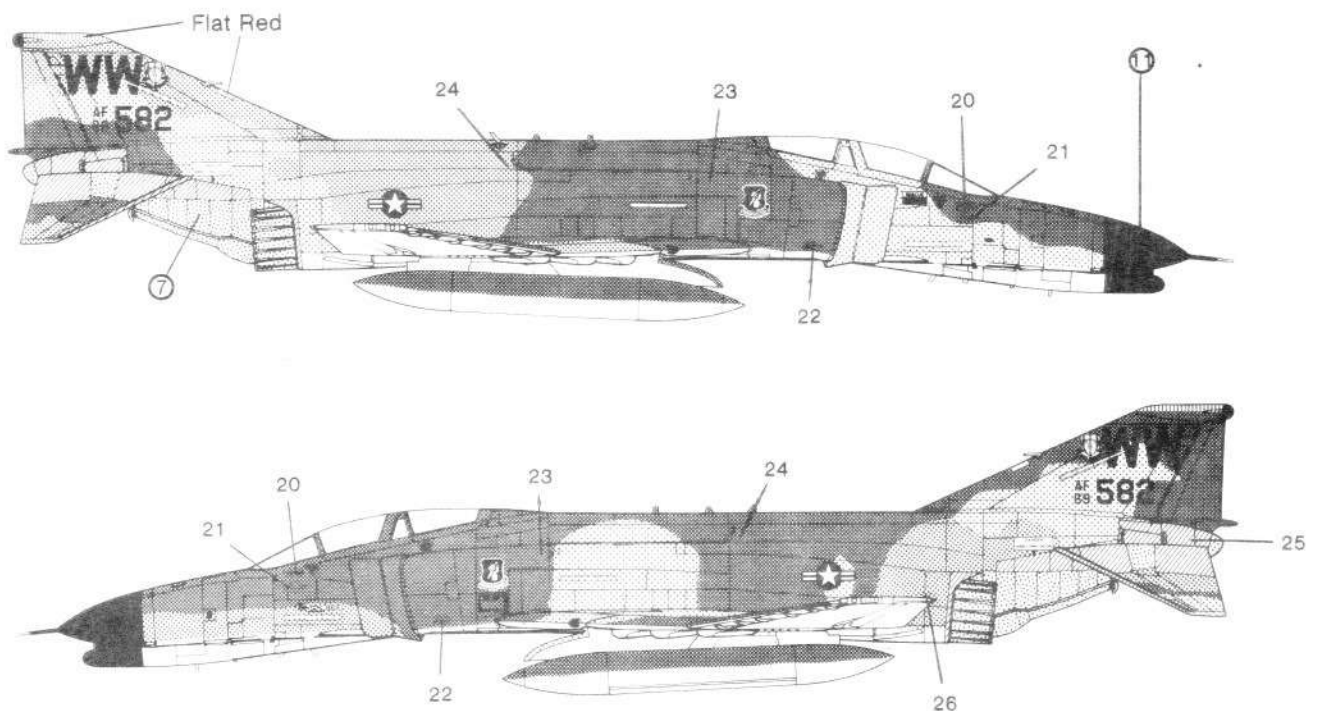
COLOR KEY

- | | |
|---|--|
|  | 1. Dark Green, <i>FS 34079 - Testor Model Master Series</i> |
|  | 2. Medium Green, <i>FS 34102 - Testor Model Master Series</i> |
|  | 3. Dark Tan, <i>FS 30219 - Testor Model Master Series</i> |
|  | 4. Camouflage Gray, <i>FS 36622 - Testor Model Master Series</i> |

F-4G of 563rd TFS,
35th TFW, George AFB, Ca.



5. Flat Black, *Testor color #1149*
6. Flat White, *Testor color #1168*
7. Steel, *Testor color #1180*
8. Aluminum, *Testor color #1181*
9. Flat Red, *Testor color #1150*
10. Green, *Testor color #1124*
11. Gloss Black, *Testor color #1147*



WEATHERING HINTS

Nearly all military aircraft show some signs of wear. The process by which the modeler imparts this look to the model is referred to as weathering. Many times the weathering, that is, the representing on the model of soot, oil stains, or chipped paint, etc., can really make a model stand out and give it amazing authenticity.

After you have painted your model the proper colors, you can add the decals. If you first paint your model with Testor Glosscote, the decal carrier film will seem to disappear. Apply one or two coats of Glosscote for a smooth, glossy finish. Then, after the paint dries, apply the decals. This gives them a "painted on" look. If you want your model to have a matte finish, wait 24 hours for the decals to dry. Then spray on one or two coats of Testor Dullcote. After this dries, you can begin weathering.

Always try to be logical in applying weathering techniques. For instance, you wouldn't want to put exhaust stains on a model and then apply a bright clean decal to the sooty area. Airplanes are normally well cared for, so they don't usually appear very battered. However, soot stains do tend to collect behind exhaust stacks and sometimes oil leaks onto the outside of the plane. Paint chips sometimes appear on leading edges or where crew members or maintenance men walk across the plane. However, try to remember that any well kept plane would only show minimum amounts of wear.

There are two methods of showing exhaust stains. The first is with an airbrush. This is a rather expensive item and requires practice to get the right effect. The second method is by using soft artist pastels or charcoal in shades of gray or black. Begin by grinding this material into a fine powder. Apply the powder to the model by rubbing it on with an old paint brush. Apply the color thicker and blacker near the exhaust outlet, and feather it out as it gets further away from the outlet. You should practice this on an old model or on a scrap of paper before trying it on your model. This technique is not very permanent, so it is a good idea to give your model a coat or two of Testor Dullcote to avoid rubbing off the stains.

Oil stains should be done very subtly. Oil really has very little color, so it only leaves light stains. Tint a small amount of thinner lightly with black paint. Add a small drop to the area you want to appear oily. Now with a strong breath, blow the "oil" back along the plane. Keep in mind the direction in which the plane flies, making sure you are blowing the "oil" from front to back. It is very easy to overdo this, so remember, one or two places are usually enough.

Paint chips are the simplest technique, but like the others, are easily overdone. An average military plane wouldn't have very many chips. They usually appear on the cutting edges

of the propeller blades, the leading edges of wings and flying surfaces, and any areas where crew members or mechanics walk across the plane (i.e., wing roots). Use #1181 Testor Aluminum for paint chips, applying with a fine pointed brush. With a very little amount of paint on the brush, apply the chips in small dots, the smaller the better. Large amoeba shaped chips look too obtrusive. Be wary of fabric covered control surfaces though; they don't chip.

Experienced modelers do several things to aid them in their hobby. One of the most helpful is attending meetings of their local International Plastic Modeling Society chapter. Here they see and discuss modeling techniques. Your local hobby shop will help you locate your local I.P.M.S. group. Serious modelers also collect books and photographs to use as reference when they finish their models. Again, your local hobby shop can help. Last, but certainly not least, your own observation will prove helpful. Visit museums. Look at buildings and vehicles around you. Notice how rust streaks a metal roof. See the oil and dirt on a piece of road grading equipment. Study railroad boxcars and locomotives to see what the weather has done to them. Your own observation can be the best aid of all.

Remember: try not to overdo weathering — and *keep practicing*. Be patient, it takes time to discover and master all the tricks of this fascinating hobby.

The drawings on this page show the location of the various data decals. The numbers correspond to the number on the decal sheet next to the appropriate decal. These markings are common to all models.

