



The Lockheed F-104 Starfighter is just one of a number of classic aircraft to have sprung from the imagination of the immortal Clarence Kelly Johnson. One of the most widely-used fighters in the world during the 1960s, the elegant lines and remarkable design of the missile with a man in it still capture the imagination.

The F-104 was essentially a point-defense interceptor, not a fighter, designed to get from the ground to extreme high altitude just as quickly as possible to intercept incoming enemy nuclear bombers. As such it represented a number of compromises. The pencil-thin fuselage and extraordinarily short, razor-sharp wings - so sharp they had to be covered by special mats when parked to protect the ground crews - left little or no room for fuel. Its powerful-but-thirsty J-79 engine gave it tremendous speed - it was the first combat aircraft capable of sustaining Mach 2 speeds and the first plane to hold both altitude and speed records simultaneously - but little range or liter time, and its short wings gave it little maneuverability for dog fighting. The F-104 was also the first aircraft to mount the M-61 Vulcan 20mm cannon, capable of firing 6,000 rounds per minute. At supersonic speeds there might only be time for one firing pass, so it had better be a good one.

Due in part to limitation in cockpit size and overall weight, and the assumption that the need to eject would occur at altitude and speed, thus making it difficult to clear the tall T-tail, the first F-104s had seats that ejected downward through the bottom of the aircraft. In response to the disastrous design flaw and the alarmingly-high Luftwaffe pilot losses, a standard upward-firing Lockheed C2 ejection seat soon replaced this system in U.S. aircraft, and a Martin-Baker Mk5 seat in all others.

While not terribly successful in USAF service, serving in small numbers for less than ten years, the G-version was widely produced and used in over a dozen air forces.

Your AMT/Wings Collection kit enables you to make three highly-colorful versions: a QF-104A drone from the USAF; an F-104G in Luftwaffe retirement livery, and; a 25th anniversary scheme from 421 Squadron CAF. Your kit comes complete with a choice of ejection seats, wing-tip and centerline fuel tanks and wing-tip Sidewinder missiles.

> Special thanks to the following for their assistance in the preparation of this kit: Alan Griffith, Tom Bly, Jennings Heilig, Chuck Sterns

Before you begin to assemble your model kit, study the instructions carefully. This will help you to familiarize yourself with the part locations as you proceed. Prior to cementing parts together, be sure to "TEST FIT" them in order to assure proper alignment and also to check for excess "FLASH" that may occur along parting lines. Use a sharp hobby knife or file to remove flash if necessary.

If you wish to paint your model, various sub-assemblies and components should be painted before any parts are attached. During assembly, you may note that the recommended color is stated after the part name.

This model kit is molded from the finest high-impact styrene plastic. Use only paints and cements which are specifically formulated for styrene. Read all labels and warnings carefully.

Because the cement will only adhere to bare plastic, it is necessary to remove any paint or "plating" from the area to which the cement is to be

## BUILDING TIPS FOR THE ADVANCED MODELER

For the best possible finish, your kit should be painted, even if molded in color. Paint should be applied evenly, in several thin coats rather than one heavy coat. The first coat should not completely cover the surface. Each layer should be allowed to thoroughly dry before the next is

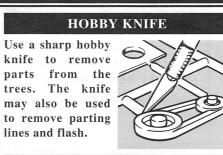
It is important to keep your hands clean when working with your model and wash parts thoroughly before painting to remove any mold release agent that may have been used during manufacture, body oil from your hands, sanding residue, and dust, which is naturally attracted to plastic by static electricity. Use a mild solution of dishwashing detergent and water. A tack rag should be used to dry the parts, DO NOT use paper towels or tissues, since they will leave lint on the part.

Parting lines and glue joints should be sanded or filed prior to painting. Because paint has a tendency to draw away from sharp edges, they should be lightly filed. Use filler putty designed for plastic to fill small gaps that may occur between parts and to blend contours. This should be done only after the first, or "primer," coat of paint is applied.

When painting a multi color scheme, the lightest color should be painted first. Use frosted, or "magic," tape to mask off the area you do not want painted. After the second color is dry to the touch, the tape can be removed. Use a very fine brush to touch up edges if necessary. If decals are to be added, do so before adding any gloss coat. A gloss coat will help even out the edges between the two colors as well as set the decals.

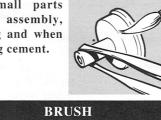
NOTE: Federal standard colors The military services use standardized colors, each receiving a specific five digit identification number. Grays, for instance, are all 6000, and gloss paints begin with a 1, semi-gloss 2, flats 3. Thus a gray color can be gloss (16251), semigloss (26251) or flat (36251)

### RECOMMENDED TOOLS



### **TWEEZERS** Use tweezers to hold small parts

during assembly, painting and when applying cement.



# We recommend the

use of liquid polvstvrene cement. Apply with a fine brush. Use sparingly or a sloppy job will result.

### READ ALL LABELS AND WARNINGS CAREFULLY

We take great pride in providing the finest model kits available, giving strong attention to detail and craftsmanship. Should you have any difficulty with assembly or missing parts, please call the appropriate number listed below between the hours of 8:00 am to 4:30 pm central time, Monday through Friday.

> In the U.S.A. call toll free **-** 800 - 553 - 4886 **-**Outside of the United States call

-1 - 319 - 875 - 2000 -

When in the Midwest, please visit the ERTL Company for a tour of the AMT production facilities, 10am & 1pm weekdays. Reservations suggested.

### DECAL APPLICATION

- Choose the decals you want to put on your kit and use a scissors to cut it from the decal sheet.
- Dip the decal in a cup of luke warm water for about fifteen seconds to loosen the decal from the backing paper.
- Place the decal in position and slide the decal off the backing paper and onto the model.
- Use a soft, damp cloth to gently rub away any water bubbles under the decal.

### COLOR SELECTION

This kit includes the appropriate markings to build one of three versions of the F104 Starfighter. Listed here are the corresponding Federal Standard colors needed to accurately match the original aircraft you decide to build.

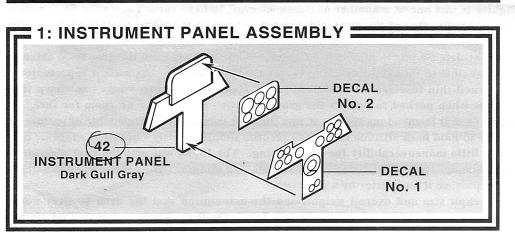
 Dark Gull Gray
 FS - 36231

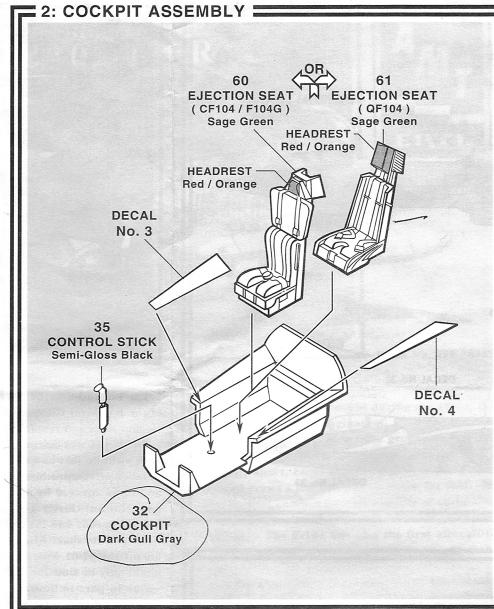
 Sage Green
 FS - 34087

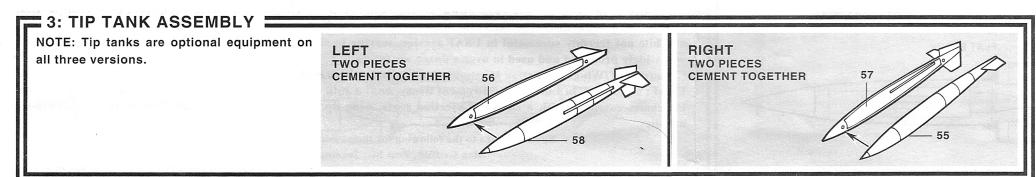
 Aluminum (U. S.)
 FS - 17178

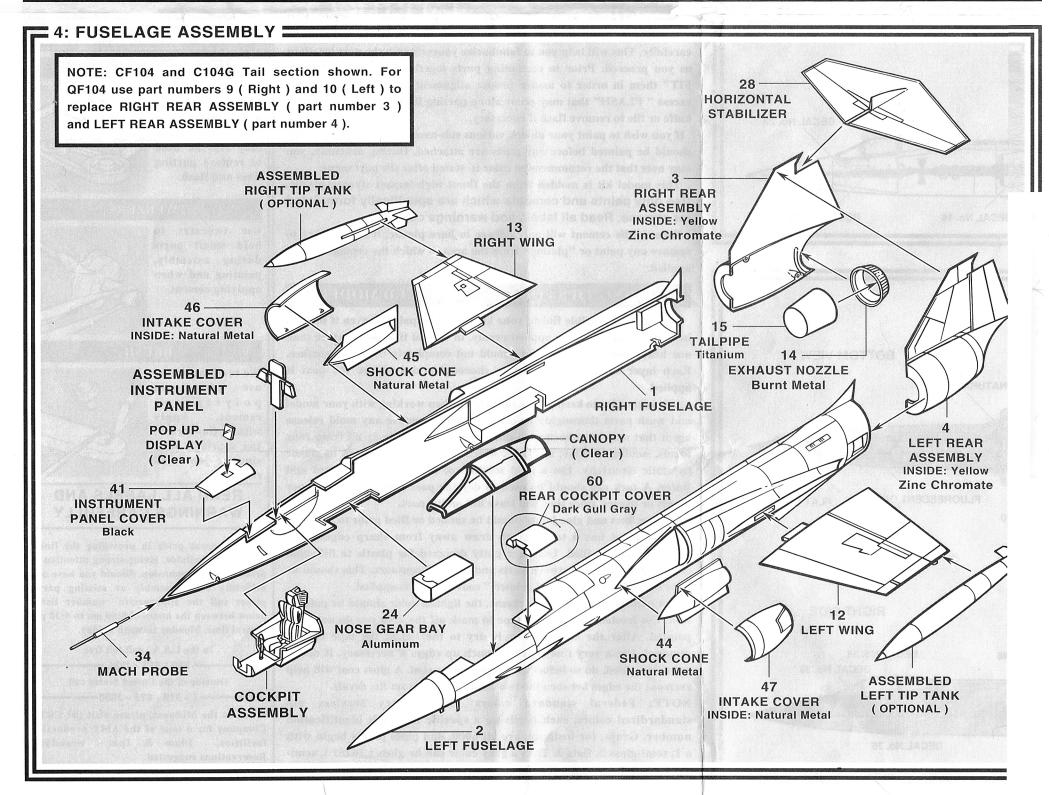
 Aluminum (CANADIAN)
 FS - 16473

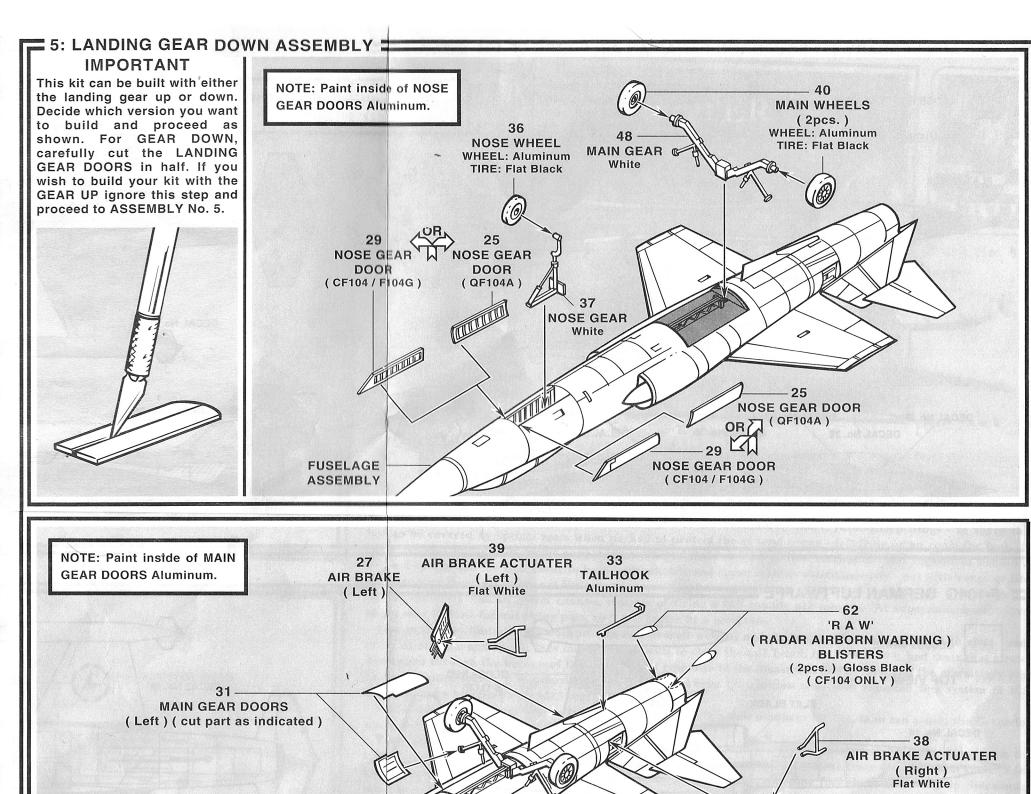
 Aluminum (GERMAN)
 FS - 16473

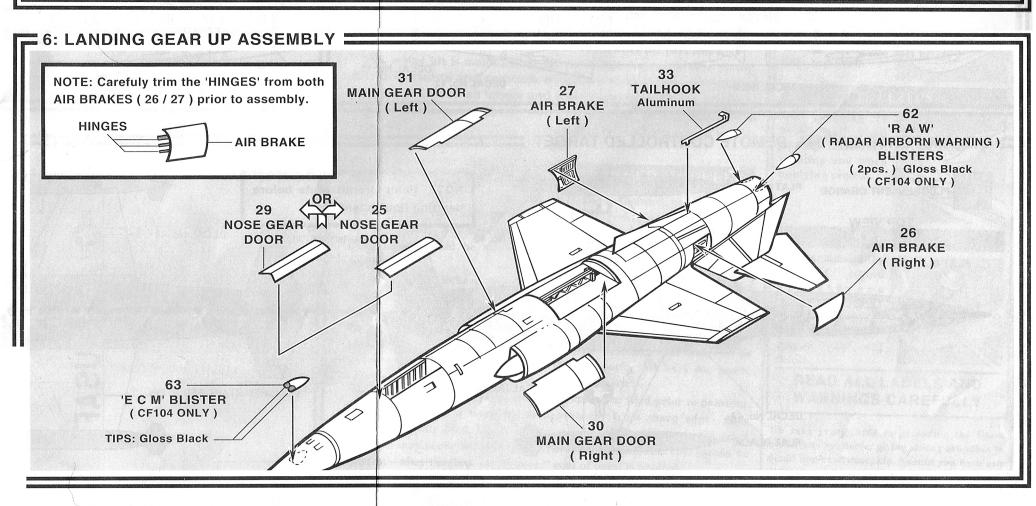












MAIN GEAR DOORS

( Right ) ( cut part as indicated )



'E C M' BLISTER (CF104 ONLY)

TIPS: Gloss Black

LOCKHEED
F-104 STARFIGHTER

The ERTL COMPANY, Inc. Highways 136 & 20 P. O. Box 500 Dyersville, Iowa 52040 - 0500

AIR BRAKE (Right)

NOTE: Paint inside of AIR

**BRAKES Zinc Chromate.** 

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