

# **Tamiya F-4 C-D**

**by Thierry Laurent & Ben Brown**

TYPE: Mc Donnell Douglas F-4C/D Phantom II (USAF)

SCALE: 1/32

COMPANY: Tamiya

KIT Number: 60305

MOLD CREATION DATE: 1995

TWEAKS LIST VERSION 1.2 (publication date: April 2005)

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The following list is intended to help modelers in improving scale accuracy of an airplane model replica. In no way is it intended to support or be offensive towards a scale model company.

As such, it is only the result of a progressive process and is in no way intended to be absolute or even comprehensive. Hence, it is intended to focus on commonly admitted discrepancies and will probably not cover some errors. It is up to the modeler to decide whether correcting the listed issues is worth the time and money he will have to invest in the quest for accuracy process.

No aftermarket correction or detail set is mentioned in this document as the availability of such items may be very variable. Hence, refer to other LSP sections to find relevant information. Moreover, aftermarket sets do not necessarily correct all listed issues. Please refer accordingly to relevant documentation.

## **1. NOTICEABLE FUSELAGE ISSUES (from front to rear)**

" Air conditioning intake scoops are 6mm too long. This is easily fixed by cutting down the kit parts.

" Intake ducts do not match intake lips. Replace entire intake with aftermarket one or use sheet plastic/two components putty to get a smooth transition. If you do not want to use a resin correction set, the best way to obtain a smooth transition is to cut the intake duct part from the fuselage and to assemble the duct with the other parts (B26-27/42-43), smooth the joints, glue the duct to the engine front and intake parts (B11-12/17-18/A1-2/C-17) and glue the assembly to the fuselage. Another option is to use FODs to hide intake issues!

" Improve vari-ramps (air splitter plates) vents (rear of parts B17/18): thin edges and add two thin internal walls. The outboard panels of the vari-ramps were moveable, and they had a panel that slid over the inboard section on the top and bottom of the ramp. Made them with very thin styrene. Also note how the inboard edge of the ramp is angled down, not straight across like every F-4 kit ever produced has. The one on the underside is straight across.

" A small drain exhaust is missing on each fuselage side (above the root of the leading edge of the wing).

" Take care to position correctly A3 part as it is smaller than the opening. Use plastic strip.

" Blade of "splitter plate" on intake at base of fin is too thick.

" Small bare metal bleed air exhaust located on each fuselage side just above the engine exhaust is wrongly shaped. (very difficult to correct)

" Post that provides mounting point for fin is too tall and interferes with brace inside of fin. Remove a couple of millimeters and fin will fit much better.

" Drill an oblong hole in the indented square located up to the front titanium area on the starboard fuselage (forward of the right stabilator). This is door 62 on the full scale airframe. Add the window and arresting hook gear hydraulic oil servicing gauge and air filler valve with a yellow cap: Some plastic sprue lengths with a spare gauge decal behind an oblong transparent part will mimic this.

" Lower aft fuselage does not fit well. Area is hard to paint after stabilators are installed. It is best to remove stabs from pivot mount and install them during final assembly. Leave the semi-circular tabs attached to the stabs.

" Exhaust nozzle edge is smooth whereas each moving flake has protruding edges (add photoetched flakes or add one very small rounded plastic strip at each corner of flake edge).

" Remove triangular structural reinforcement plates on stabilators for early versions (check your references)

" Add missing small drain pipe under tail, between the stabilators.

" Add V shaped part behind the arresting hook end (scratchbuilt or photo etched part).

" Add missing pull rod for opening the drag chute door, under the aft fuselage, between the stabs.

" Raised panels all over fuselage are not present on most F-4s. Sand these off and scribe panel lines where edges of raised panels used to be. BTW, these are not Battle Damage Repair panels!

## **2. NOTICEABLE WING/WEAPONS ISSUES**

" Dihedral of outer wing panels is too great: it should be 12.5 degrees.

" Remove structural reinforcement plates on wings for sixties versions as additional wing ribs only appeared during the seventies. However, as they were retrofitted on older airframes, keep them for an ANG plane.

" As upper wing halves have no locations on the fuselage sides and are somewhat flexible, add thick plastic spacers between wing halves to keep the wing solid.

" To avoid as much as possible to use filler between upper wing and fuselage, dry test the fit between them and add a spreader bar between both internal fuselage sides to decrease as much as possible fuselage flexibility. However take care to avoid interfering with other internal elements such as air intake ducts.

" AIM-9E Sidewinders are hybrid: front part of 1st generation but rear part and general length of 2nd generation. Two possible solutions: use aftermarket missiles or decrease height of rear wings and add 8mm to the body to obtain correct AIM-9E.

" Add Sparrows exhaust.

" Add detonator wires and cross-shaped airscrew on Mk 82 bombs body (scratchbuilt or photoetched part).

" Add connector hoses on the rear part of TERs & MERs.

## **3. NOTICEABLE COCKPIT ISSUES**

" Add seat belts or use aftermarket resin seats. Use aftermarket Mkh5 seats or convert kit ones if you want to build an early C airframe (early sixties era).

" Add map reading lamp in each cockpit station (a length of sprue with a coiled wire).

" Add circuit breakers, other details and insulated panels on sidewalls if you do not use an aftermarket cockpit (OOTB there is nothing except the big starboard rear circuit breaker panel).

" Add oxygen hoses, map case as well as landing gear, brakes and other missing levers if you do not use an aftermarket cockpit.

" Add details in front of rear side of upper WSO panel (many conduits and circuits wires are missing between the stations)

" Add similar wires behind the WSO station.

" Radar display appears to be too small in diameter.

" WSO Cockpit instruments are for the F-4D version. LORAN (Long Range Navigation) version and C version need different instrument panels.

" Note that in the rear cockpit, the consoles did not go all the way back to the rear bulkhead, but stop about even with the middle of the seat. Aft of these, there were shelves with the various black boxes on them. Consequently, add missing black boxes at the rear of side instrument consoles and on rear bulkheads if you do not use an aftermarket cockpit.

" Rear bulkhead of aft cockpit should be vertical.

#### **4. NOTICEABLE CANOPY ISSUES**

" Take care removing clear canopy parts from the sprue (the way they are molded makes it very easy to damage them).

" There are no canopy hooks. Use photo-etched ones.

" Add canopy knives, data cards and other details on canopy internal sides.

" There are no holes in cockpit sills (corresponding to abovementioned hooks).

" F2 and F3 canopy retraction struts are a little bit too long (1 to 2 mm)

" Add some rear-view mirrors. (Tamiya gives no mirror for the pilot, and give them inside the central section between the two cockpits for the WSO. However, F-4s generally have the mirrors mounted to the underside of each canopy)

" The "Canopy Interdictor Block" (keeps the seat from firing until the canopy has been jettisoned) wire is missing. This is a small coiled wire that goes from the right rear of the ejection seat to the rear of each canopy.

#### **5. NOTICEABLE LANDING GEAR ISSUES**

" Nose gear strut: a lot of wiring is missing as well as a rod that is probably part of the nose wheel steering system.

" "Shrink links" (the spur-like tabs) are mounted on centerline of main gear struts. Should be mounted on outboard side of strut, with a bare metal rod connecting the tip of the link with the lower part of the strut where the oleo bolts to the strut.

" Main landing gear doors rear edge should be reshaped (kit has "Navy" doors" that have a different profile above the notch in the door).

" Add hydraulic lines, wiring & linkages detail in gear bays.

" Add hydraulic lines on gear legs.

" Possibly replace landing gear tie-down rings with new ones made from brass wire.

## **6. OTHER NOTICEABLE ISSUES & MISCELLANEOUS REMARKS**

" Kit offers three options: F-4C, F-4D & F-4D LORAN (block 32-33 phantom with AN/ARN-92). However, cockpit is only correct for a classical D version. Kit also has some later features (e.g. reinforcement plates) but decals for earlier ones. Unfortunately, it gives neither F-4D "herpes" nose nor Air National Guard decals that would help in building a more historically correct model OOTB.

" Upper section of front and main landing gear legs (fixing points) is simplified to ensure model rigidity. Fixing this is very difficult but fortunately the discrepancies are not really visible. Moreover, correcting it and keeping model rigidity is far from obvious.

" No landing gear down locking jack is provided.

" No centerline fuel tank.

" Detail inside the auxiliary air intakes on the belly is very simplified. Actually, the undersides of the engines need to have various pumps, pipes, and wiring added. However, this area is far from being really visible on a model.

" Throttles should be put on the full aft ("idle/cut off") position.

" First releases had Scalemaster thin decals but some batches were quite brittle. Moreover, some releases missed the red vertical line that goes from the port to the starboard fuselage sides. Later releases had Tamiya decals (good but on the thick side, put decals between gloss coats).

" Decals do not include panel numbers. If you want to add them, use aftermarket ones (wet or dry).

**The following sources were used to build this list.**

**Modelling essentials:**

" Francillon, René, Mc Donnell F-4D, Aerofax Minigraph n° 4, Aerofax Inc., 1985.

" Kinzey, Bert, F-4C, F-4D & RF-4C Phantom II, Detail & Scale, Kalmbach/Squadron Signal Publications, 1994.

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### **Scale plans and TM extracts:**

" - , F-4C/D/M Phantom II, Famous Airplanes of the World n° 57, Bunrin-Do, 1975.

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### **Colour pictures photofiles:**

" Dorr, Robert, Phantoms forever, Osprey Colour Series, Osprey Publishing Limited, 1987.

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" Holmes, Tony, F-4 Phantom II, Osprey Publishing Limited, 1991.

" Soulaine, Daniel, Phantom Guardians - The F-4 in the Air national Guard, Osprey Aerospace, Osprey Publishing Limited, 1992.

### **Other used books:**

" Boyne, Walter, Phantoms in combat, Schiffer Military/Aviation History, 1994.

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" Scuts, Jerry, Hunting MIGs over Vietnam, Airlife Publishing, 1987.

" Thornborough, Anthony, Davies, Peter, The Phantom Story, Arms & Armour Press, 1997.

**Other references:**

" Some magazines articles (more particularly from Scale Models, Tamiya magazine, Air Fan, IPMS USA & Replic)

" Some web pages (more particularly LSP)

" "F4Sforever" newsgroup old posts

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