



KMC

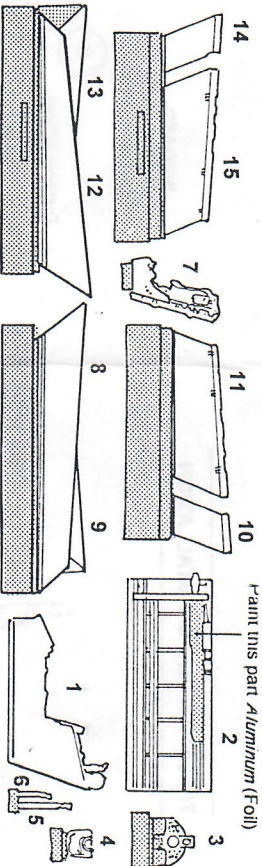
F-8E CRUSADER Update Set

1/48th scale 48-4020

Recommended kit: MONOGRAM #5826

NOTE  
ETCHED PARTS ARE MARKED  
IN SQUARE BOXES

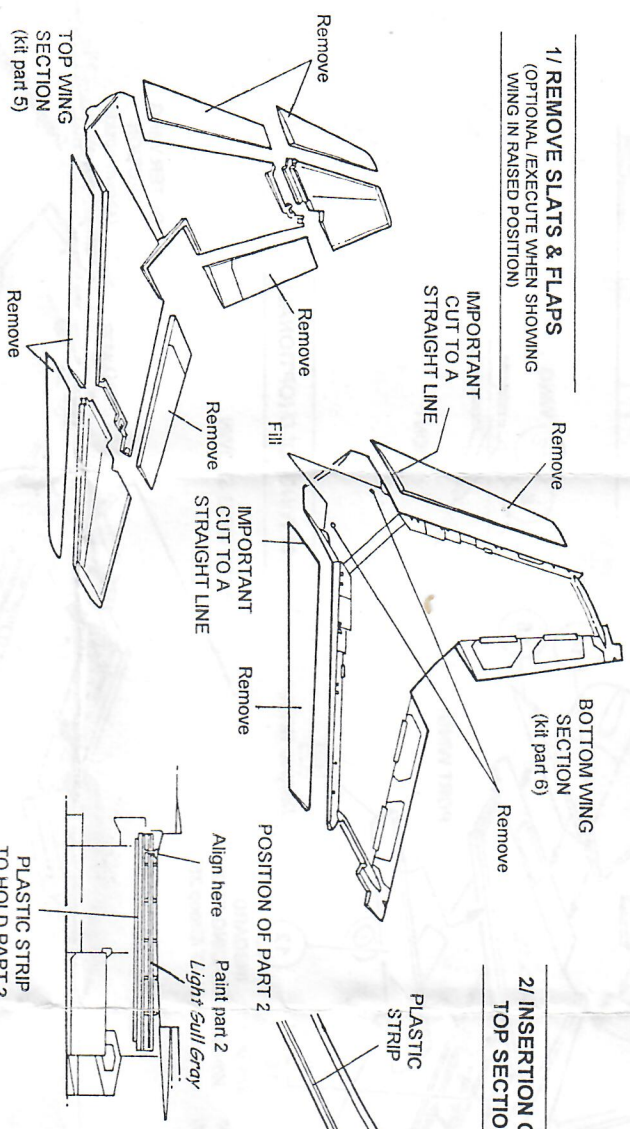
- PARTS LIST**
- 1/ TUB
  - 2/ INTAKE TOP SECTION
  - 3/ MAIN PANEL
  - 4/ INSTRUMENT COVER
  - 5/ WING STRUT
  - 6/ STICK
  - 7/ EJECTION SEAT
  - 8/ STBD INBOARD SLAT
  - 9/ STBD OUTBOARD SLAT
  - 10/ STBD INBOARD FLAP
  - 11/ STBD ALERON
  - 12/ PORT INBOARD SLAT
  - 13/ PORT OUTBOARD SLAT
  - 14/ PORT INBOARD FLAP
  - 15/ PORT ALERON



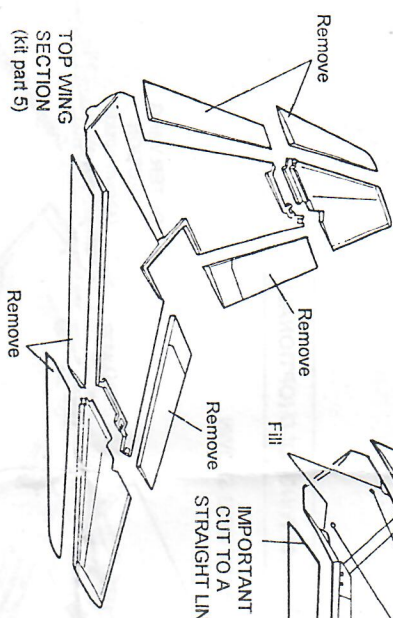
NOTE  
SEE ADDITIONAL SHEET FOR REFERENCES  
AND INFORMATION ON F-8 CRUSADER TYPES

RESIN PARTS  
REMOVE SHADED AREAS

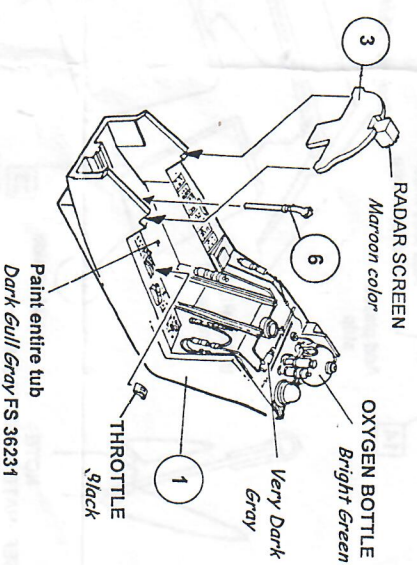
2/ INSERTION OF INTAKE  
TOP SECTION



1/ REMOVE SLATS & FLAPS  
(OPTIONAL, EXECUTE WHEN SHOWING  
WING IN RAISED POSITION)

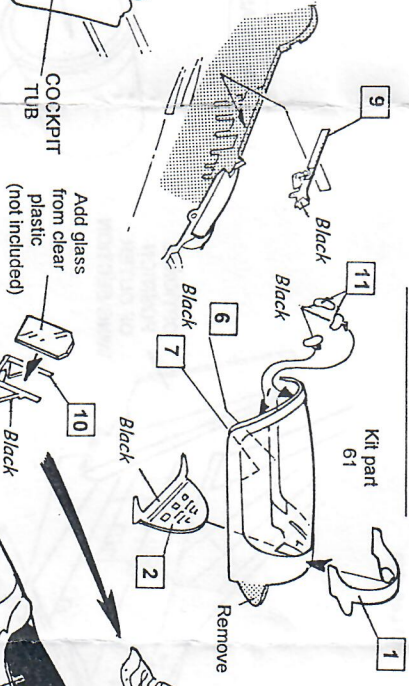


3/ COCKPIT TUB

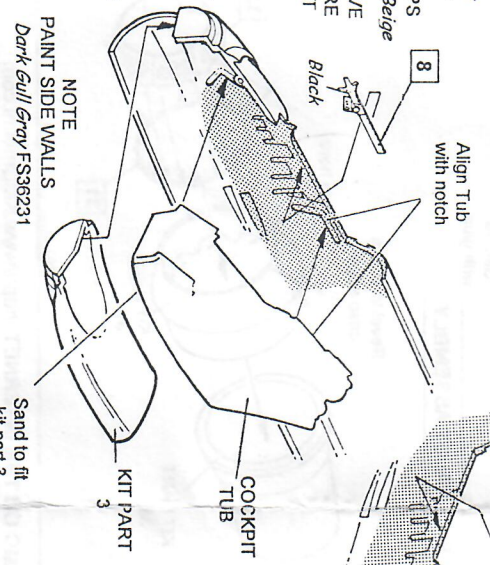


- 1/ Glue etched part 13 in place (one side only)
- 2/ Position resin part 2 in alignment with 13
- 3/ Glue plastic strip at bottom to support part 2
- 4/ Repeat for opposite side
- 5/ Glue resin part 2 secure in place.

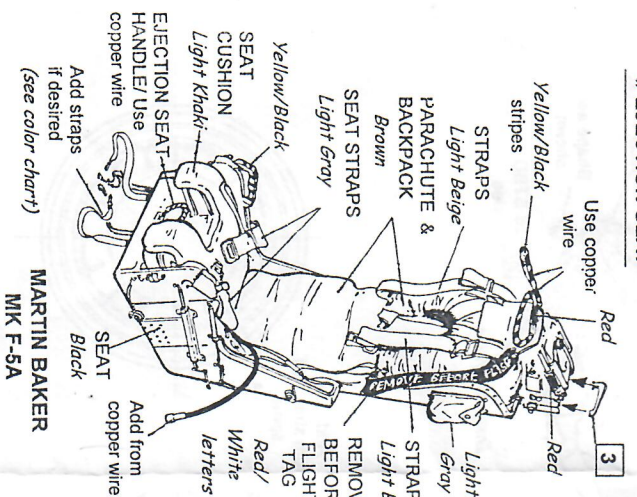
6/ COCKPIT SILLS & CANOPY



5/ INSTALLATION OF  
COCKPIT TUB

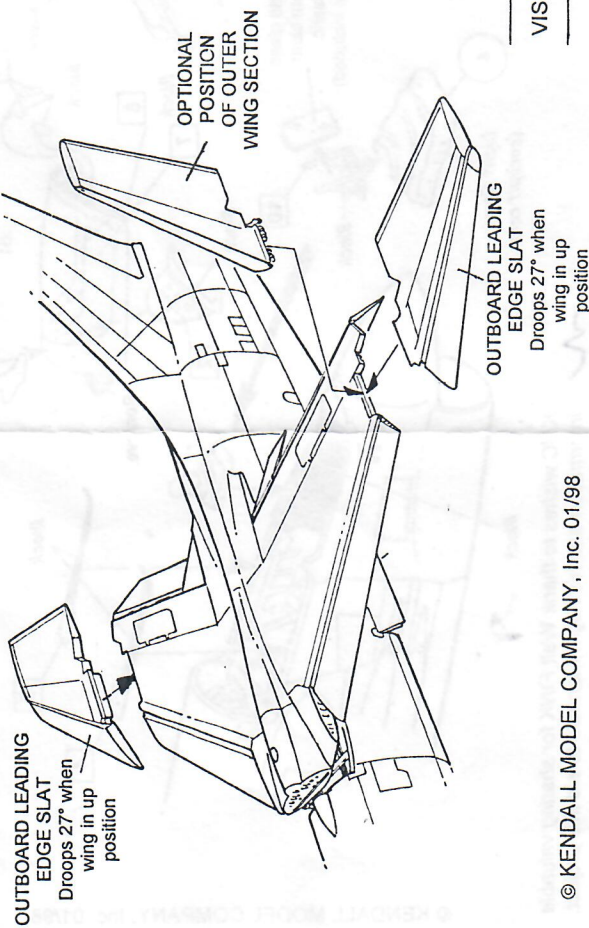
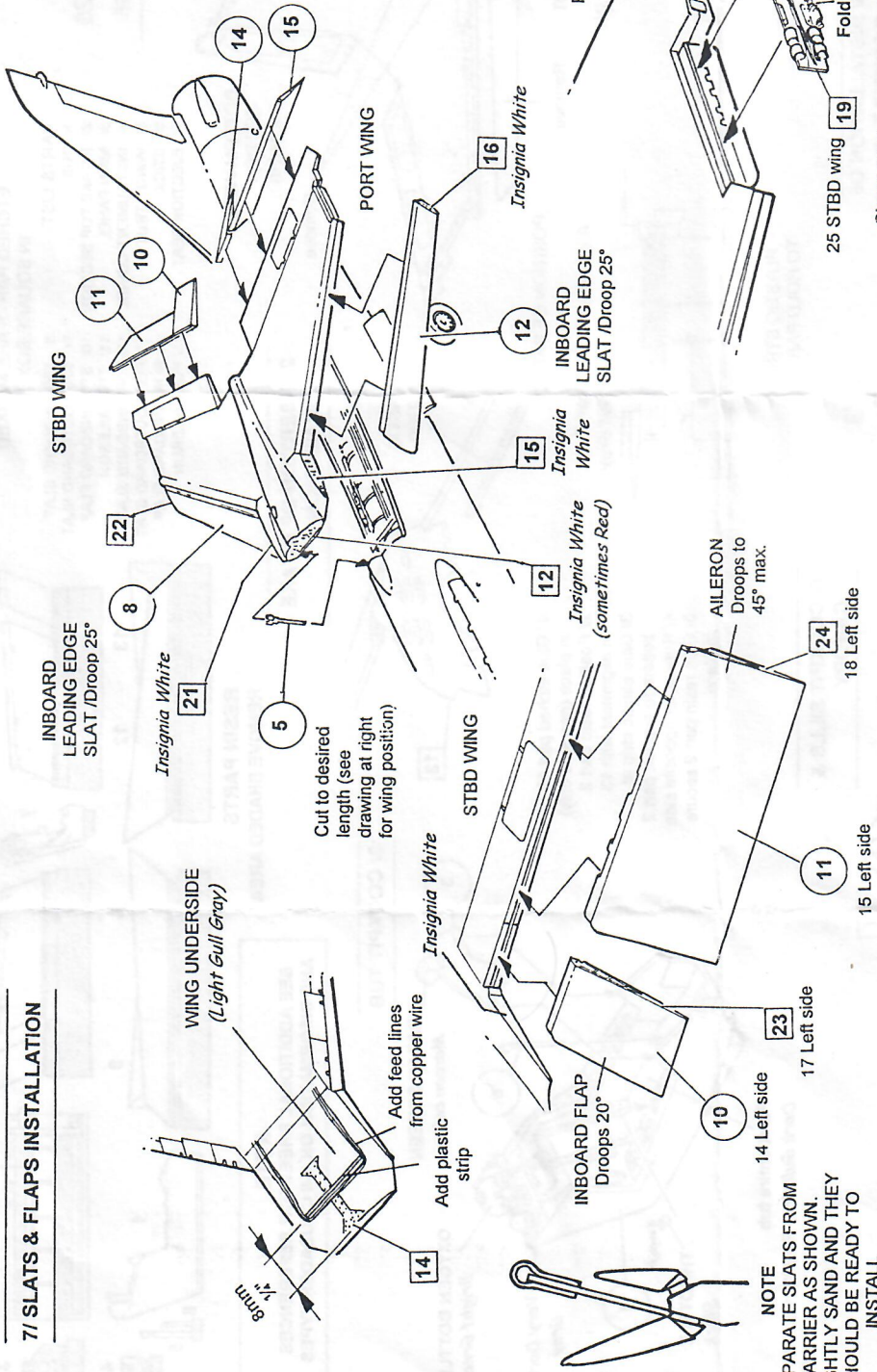


4/ EJECTION SEAT

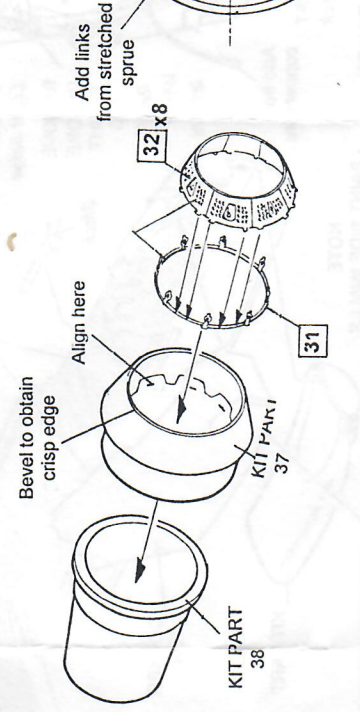


KMC wishes to thank Walt FINK for sharing valuable information and his Flight Manuals to aid this project.

**7/ SLATS & FLAPS INSTALLATION**



**9/ EXHAUST ASSEMBLY**



## The Monogram 1/48<sup>th</sup> F-8E Crusader (Kit #5826)

Released in late 1988 with raised panel lines, the Monogram 1/48 F-8E Crusader is thoughtfully engineered with delicate and accurate detail. The "E" was the last USN "new production" Crusader and included the latest equipment and armament. The kit has crisp gun ports, twin Sidewinder "Y" rails, openable canopy, a round, curved-edge, late-style radome, and triple ejector rack wing pylons with bombs. Included as separate pieces are the refuel compartment (with positionable probe), windshield infrared scanner, and ventral fins. Attention to detail includes a clear landing light on the upper right main gear strut, Approach Indicator Lights on the front nose gear door, a detailed nose strut, and a good effort at accurate wheel well interiors.

A modeler's improvements might include the removal of ejector-pin marks from the ventral fins, Sidewinders, "Y" rails, refuel door, and wing pylons. The inboard line (fore and aft) of the inboard slats should be a straight line on top and bottom, not curved and jagged, as in the kit. The aft canopy bulkhead should be positioned to clear the back of the seat when the canopy is closed. The intake lip can be sharpened from the outside with minimum loss of molded detail, and the speedbrake needs emphasis with paint technique and/or scribing, or a "drooped" replacement. Hollow out the fronts of the afterburner cooling scoops and improve the exhaust "eyelid".

The kit misses with an incorrect ejection seat (F-14, GRU type). The early Crusaders were equipped with a Vought seat adapted from the A-4 Skyhawk, but this was replaced (about 1960) with a Martin Baker Mk-5, then -5A, both requiring more distance between the side consoles. After 1968, the fully zero-zero MB Mk-F7 was used, and these can be found, at least, in the "Es" and re-manufactured aircraft.

The kit also misses with its apparently "too low" ground stance. This can be improved by separating the lower main landing gear doors and angling them outward from their too-vertical position, which over-emphasizes the low stance of the model. Actually, all three gear legs need to be angled downward more, yet meet at the apex, a difficult fix. Complete modification to "normal" stance would raise the nose 1/16" and tail cone 1/4" (see Ground Clearance-- in "Statistics"). Fine Scale Modeler has an article (July 1992, Wells) which partially addresses this problem with a nose gear shim and main gear leg rod inserts, but more strength will be required.

This article also points out that, contrary to the kit instruction's inference, both USN and USMC aircraft used the "Y" Sidewinder rails. Each missile had a unique position on its rail: viewed from the front, the "X" of the fins was bisected by the extended axis of the rail (see drawing). The triple ejector rack with three (of what appear to be) 750 lb. bombs is questionable. Each wing pylon was rated at a maximum of 2000 lbs. Additional ordnance (on missile rails, or ammo) could be 1000 lbs., at the expense of fuel load. Interesting possibilities are: single Sidewinder rails, various bomb loads, twin Zuni tubes on each "Y" rail, and an "E" with a Bullpup under each wing (Aircam, p.2).

With the wing incidence raised for takeoff or landing, the leading edges, ailerons, and flaps automatically droop and extend. The "Wing Incidence Handle", left rear side console (on the raised arc, outboard of the control boxes), would be slid aft. The slat droop on single-slat aircraft was 25 degrees in relation to the wing chord, with the outboards being increased to 27 degrees "somewhere" in history. Flaps and ailerons drooped to 20 degrees (increased only on the "J" and "FN", discussed later).

With the wingtips folded, the cockpit control, right rear side console (submerged handle, aft, outboard of control boxes) would be pulled up and aft. It is interesting that the wings could be folded with the wing incidence raised. Successful (and extremely memorable) takeoffs, "flight", and landings were made in this configuration.

With the refuel compartment, infra-red scanner and ventral fins as separate pieces, conversion to earlier models is possible with some extra work. This would include removing the top fuselage avionics hump and slightly reshaping the nose for a new, smaller, oval radome. The nose wheel leg would need slight modification. The horizontal tail in the kit is of the early, small, type (18' 2"), used on all versions with the "single" leading edges. A larger (19' 3.9") tail was used on the later French F-8E(FN) and the F-8J (but not the USN "E", from which the "J" was rebuilt). For these two versions, each leading edge flap is in two pieces, fore and aft, double drooped. For sticklers, the (FN) and "J" slat droop: inboard aft section is 8.9 degrees relative to the wing chord, and its forward section is 35 degrees relative to that aft section. Outboards: 20/35 degrees, respectively. The maximum flap/aileron position was also increased to 40 degrees relative to the wing chord. (Aviation Week, 2/24/64, p.67). All versions have the kit's equipment cooling outlets, below the right leading edge and left trailing edge.

**FROM THE MANUALS:** Span: 35' 8" Folded: 22' 6" Height: 15' 9.1"  
**Lengths varied** with the nose cone installed. F-8A, D, L,H, K: 54' 2.75"; F-8E/ F-8J/ E(FN): 54' 5.75".  
The photo versions, RF-8A (F8U-1P), re-built as the RF-8G, were different still. RF-8A: 54' 6.1", RF-8G: 55' 6.5"  
**Ground Clearance.** To intake lip underside: 3' 9"; to exhaust: 2'; to wingtip: 5' 6" (wing down), 3' 6" (wing up).  
**Wing anhedral:** -5 degrees. **Horizontal tail dihedral:** 5 degrees 25'.  
**Folded wing** is 90 degrees to the ground.

**COLORS:** (from MIL-C-18263D, 1964, and MIL-STD-2161, 1985)  
Upper: Light Gull Gray FS 36440. Lower & Wheel Wells: Insignia White FS 17875.  
Cockpit: Gray, FS 3623. Consoles, instrument panel, canopy interior: Flat Black.  
Seat: Gray, FS 36231. Cushions: drab Green. Leg garters: two blue (or brown) for right leg, two white for left.  
Area under raised wing: White, with aluminum foil-wrapped pipe; red, black, and natural metal details.  
Interior forward bulkhead of raised wing, speed brake, and edges of (some) gear doors: Insignia Red, FS 11136.  
Aft fuselage exhaust area: natural metal (initially painted on some aircraft, until it burned away)  
Walkways: Gray, FS 36231 or Black FS 37038. (On some aircraft: top fuselage beside the fin, and on the inboard portion of the horizontal tail).

*References differ in details and "the truth" is difficult to determine. The Crusader was manufactured in many versions, re-designated, then re-manufactured in many versions. The information here was taken from F-8 and RF-8G NATOPS Flight Manuals and... the best modeler references are... **Detail and Scale #31; In Action #70**, 1985 (the later issue); **Famous Airplanes of the World #1**, 1986-11 (& #41, 1973 version), Bunrin-Do, Japan; **IPMS 9U5** (Mar/Apr '84, Tommy Thomason's "Tailhook Topics" p.14...Thanks, Tommy); **Aircam #31**, Ward, Osprey, 197? (no date).*

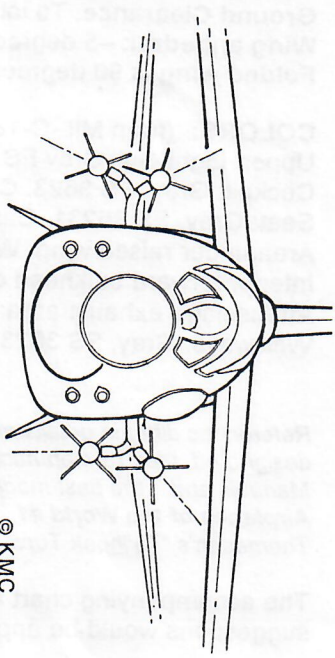
The accompanying chart and notes are an attempt to wrest order from chaos. Further information and suggestions would be appreciated. © Machmaster

# QUICK REFERENCE TO F-8 CRUSADER "Fighter" TYPES

Chart first indicates "pure" configuration, before any retrofit; information from handbooks, photos, reference texts.

## "Y" Rail Sidewinder Mount

The "Early" radome was 3" shorter, had an oval cross-section, and (nearly) straight-sided outline. The "Late" radome, beginning with the "E", was round, with bulged, curved sides. All versions after the first fifty "Bs" had the refuel station hump on the left side, and this was retrofitted to earlier "B" and "A" aircraft. Approach Indicator Lights (three, on nosewheel door) were introduced during F8U-1E (F-8B) production for all models, including Philippine "H". All fighter versions with four 20mm guns. Initially, single Sidewinder side rails, one each side, were often fitted. Later, these were a lightweight option to the "Y" rails. Paired "Y" rails (four Sidewinders): Introduced on the "D" in 1960, and added to "Cs". Available for later versions, they were often not fitted. Each station was also capable of paired Zuni rocket tubes. USN versions with the dorsal hump (E/J/H) were capable of carrying an AGM-12 Bullpup under each wing. The "Cooling Gills" were just behind the radome on the side of the nose. The radome "window" (small rectangle) was for the gun camera, and does not appear to be fitted under all radomes. The pitot tube, on left nose for most versions, was moved to the radome tip for the "Late" radome versions (E, J, FN). The early spoked nosewheel was see-through, the early spoked mainwheel was solid. Bolted disc hubs later became standard, but the spoked type was mixed with the disc as supplies lasted. In the F-8C and "D", there is a confusion of radar type and scope installed. Probably, only those for Vietnam service received later type scope along with other upgrade details. The ventral fin mount covers on the F-8L (only) were triangular fiberglass bumps along the lower sides of the aft fuselage. The "Stronger" landing gear reportedly had "slightly smaller wheels" and introduced a "slightly longer" nose leg with the large rocker arm having two upward "horns" at the front.



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VERSION	Radome	Ventral Fins	IR Dome, windshield	A/B Cool Scoops	Rocket Pack	Cooling Gills	Dorsal hump	Horiz Tail	Stabs	Seat	Underwing Pylons	Wheels	Landing Gear	ECM pod over rudder	Radar Scope	Radar	Missiles	Engine	First Flight
XF8U-1	Early, metal, large probe	No	No	No	Closed	4 right None left	No	Small 18' 1.2"	Single	Vought	No	Spoke	Early	None	None	None	None	P-11, P-4	FF 25 Mar 55
F8U-1/F-8A	Early, Black tip window on left	No	No	No	Yes	4 right None left	No	Small 18' 1.2"	Single	Vought, then MB Mk-5	No	Spoke, then Disc	Early	None	AN/APG-30 Sight ranger	AIM-9B	P-12, P-4	FF 20 Sep 55	
F8U-1E/F-8B (became "L")	Early, all black window under	No	No	No	Yes, but sealed	4 right None left	No	Small 18' 1.2"	Single	Vought, then MB Mk-5	No	Spoke, then Disc	Early	None	AN/APG-67 A.I. Search	AIM-9B	P-12	FF 3 Sep 58	
F8U-2/F-8C (became "K")	Early, all black window under	Yes	No	Yes	Yes, but sealed	4 right 3 left	No	Small 18' 1.2"	Single	Vought?, MB Mk-5	No, but some in VN	Spoke, then Disc	Early	None, short box for VF-24, VN.	Round or Square AN/APQ-83?	AN/APG-67 AIM-9B	P-16	FF 20 Aug 58	
F8U-2N/F-8D (became "H")	Early, all black window under	Yes	No, just added to some	Yes	Deleted	4 right 3 left	No	Small 18' 1.2"	Single	MB Mk-5, Mk F7?	Not normally fitted	Spoke, then Disc	Early	None, short box for VF-111, VN.	Square AN/APQ-83	AIM-9B/C	P-20	FF 16 Feb 60	
<b>ONLY THE FOLLOWING THREE VERSIONS HAD THE "Late" RADOME WITH PITOT TUBE AT TIP:</b>																			
F8U-2NE/F-8E (became "J")	Late window under	Yes	Yes	Yes	Deleted	4 right 4 left	Yes (initially without)	Small 18' 1.2"	Single	MB Mk-5 then Mk-F7	Yes	Disc	Stronger	None, then short box	Square AN/APQ-94	AIM-9B/C/D AGM-12 Bullpup	P-20	FF Jun 61	
F-8E(FN) (French Navy)	Late window under	Yes	Mount only, doors removed	Yes	Deleted	4 right 4 left	Yes	Large 19' 3.9"	Double	MB Mk-F7?	Not normally fitted	Disc	Stronger	None	Square APQ-104 (Matra)	Matra R-530 & Sidewinder	P-20A	FF 1963	
F-8J (rebuild from "E")	Late window under	Yes	Yes	Yes	Deleted	4 right 4 left	Yes	Large 19' 3.9"	Double	MB Mk-F7	Yes	Disc	Stronger	Short, or long bullet	Square AN/APQ-149	AIM-9D/G/H AGM-12 Bullpup	P-20A then P-420	FF 31 Jan 68	
<b>OTHER REBUILDS:</b>																			
F-8H (from "D")	Early window under	Yes	Yes	Yes	Deleted	4 right 3 left	Yes	Small 18' 1.2"	Single	MB Mk-F7	Yes	Disc	Stronger	None, short, or long bullet	Round AN/APG-83	AIM-9D/G/H	P-420	FF 17 Jul 67	
F-8H/F-8P (Philippine AF)	Early window under	Yes	Yes	Yes	Deleted	4 right 3 left	Yes	Small 18' 1.2"	Single	MB Mk-F7	Yes (rarely fitted)	Disc	Stronger	Long bullet	Round Probably AN/APG-67	AIM-9B?	P-20	7 TFS, 5 FW	
F-8K (from "C")	Early window under	Yes	No	Yes	Deleted	4 right 3 left	No	Small 18' 1.2"	Single	MB Mk-F7	Yes (rarely fitted)	Disc	Stronger	None, then Short box	Round or Square AN/APG-67	AIM-9B	P-16/-16B	FF?	
F-8L (from "B")	Early window under	No: mount covers only	No	No	Deleted	4 right None left	No	Small 18' 1.2"	Single	MB Mk-F7	No	Disc	Stronger	None	Square AN/APG-67	AIM-9B	P-4	FF?	

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