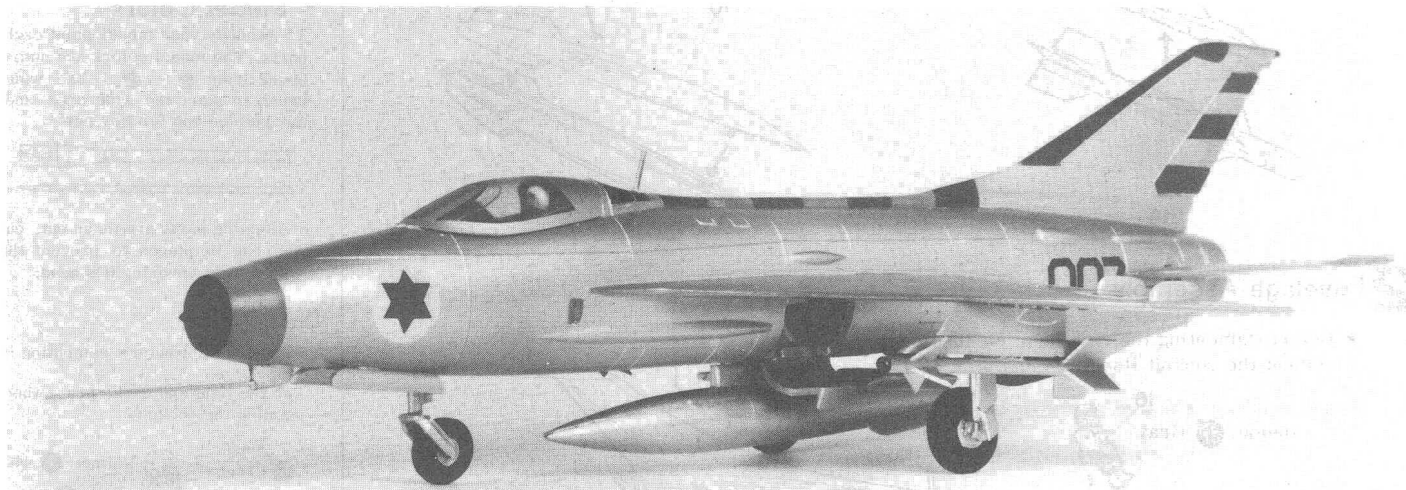


MIKOYAN/ GUREVICH **MIG-21 FISHBED**

1/72 Scale Series Kit No. JS-012



HASEGAWA



HISTORY

Commented by: T. Nozawa

The design of the Mig-21 fighter aircraft was begun in 1953, under Colonel-General Artem I. Mikoyan, the head of the Soviet design bureau. This short-range delta-wing fighter was first seen in the Soviet Aviation Day display at Tushino airport, Moscow, in June, 1956. The name "Fishbed" was used by NATO as the identification. The A model, with a delta wing; B model, with the wing tip slightly cut off; C model, a clear-weather fighter; D model, all-weather fighter with an enlarged mach cone on the nose; F model, a remodeled D model; G model, which became the VTOL, and the 2-seater "Mongol" trainer were produced in large numbers. There are several versions of the E model, which has a special design for performance testing. The first 2-seater production model, Fishbed C, was high-speed jet fighter in the Mach 2 class, similar to the Lockheed F-104 and was assigned to the front line in 1959.

Fishbed C, with a jet engine can be outfitted with a rocket booster under the fuselage. This accelerates the take-off and the rate of climbing, enabling it to reach a high altitude. The climbing speed is about 150 m per second and it can climb to the height of Mt. Fuji in about 25 seconds. The maximum speed at 11,000 m altitude is Mach 2, which means 600 m per second.

For the armaments, it carries two 37 mm cannon, one on each side under the fuselage and an "Atol" air-to-air missile can be slung under both wings. Subsequently the cannons were removed and armed only with missiles. Mig-21s

have been supplied to Czechoslovakian, Polish, Rumanian, Hungarian, Finnish, Indian, Egyptian, Syrian, Iraqi, Cuban, Indonesian, North Vietnamese, Red Chinese and North Korean air forces. It has been said that Czechoslovakia and Red China are producing these aircrafts under license. In the Middle East War air battles, the Mig became famous in its battles with the French Mirage and the U.S. Phantom II. In the Vietnam War the Mig fought against the U.S. Air Force and the Navy fighters.

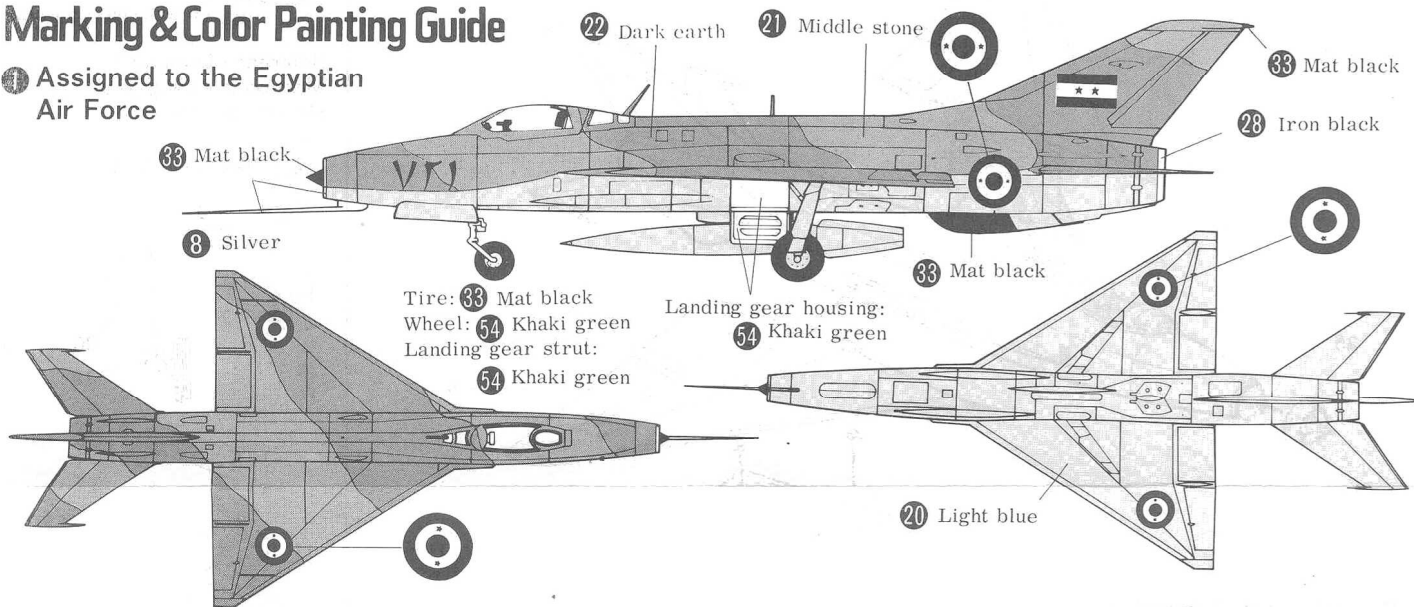
Completed Model

DATA

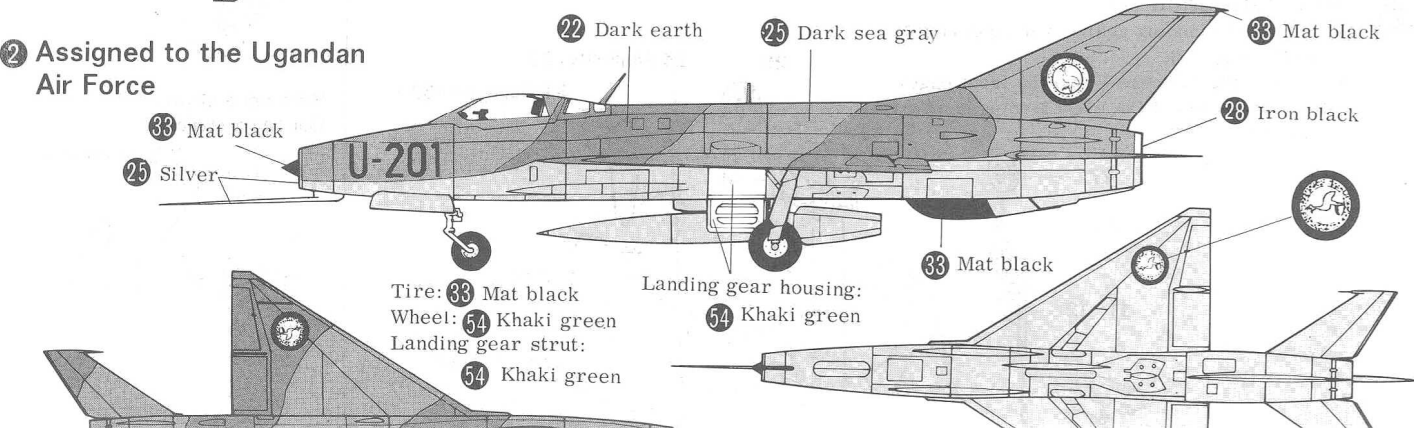
Crew	: 1
Engine	: TDR 31 Turbojet, Thrust 6,500 kg (with afterburner 9,000 kg)
Wing span	: 7.62 m
Overall length	: 14.32 m
Overall height	: 4.38 m
Wing area	: 23.2 m ²
Weight,	: fully armed, 4,380 kg with extra fuel tank, 8,528 kg
Max. speed	: Mach 2 (altitude of 11,000 m)
Service ceiling	: 17,600 m
Range	: 1,200 km

Marking & Color Painting Guide

① Assigned to the Egyptian Air Force



② Assigned to the Ugandan Air Force

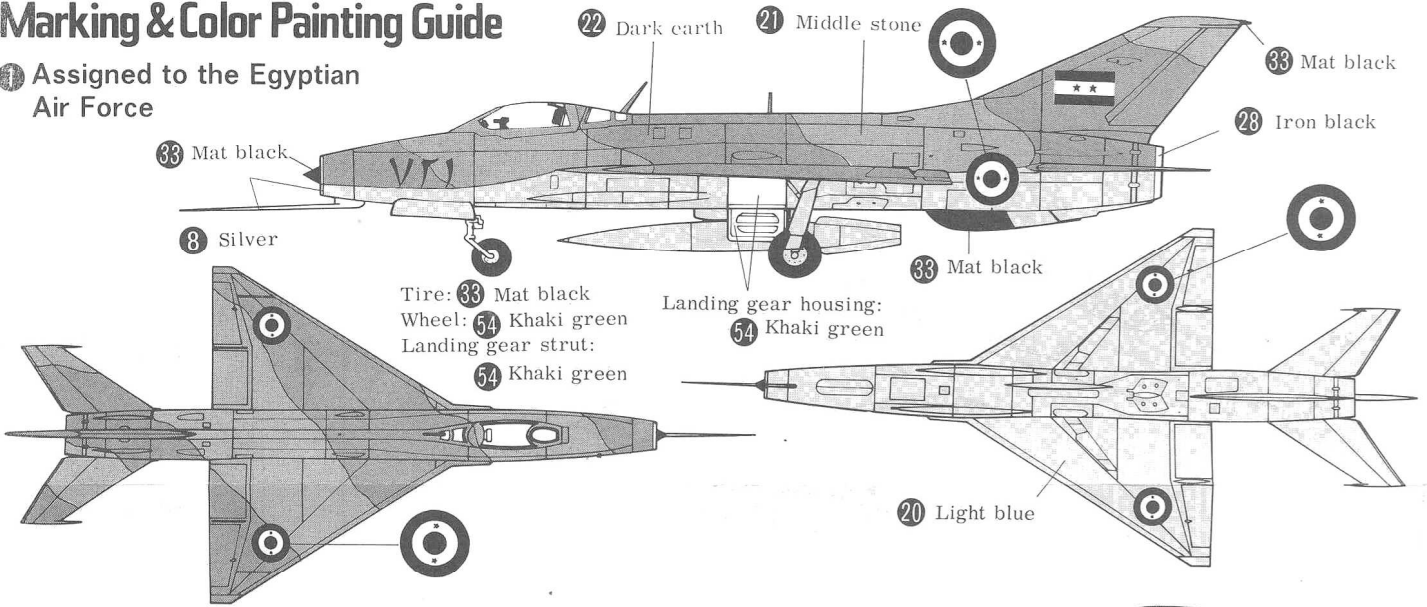


For the armaments, it carries two 30 mm cannon, one on each side under the fuselage and an "Atol" air-to-air missile can be slung under both wings. Subsequently the cannons were removed and armed only with missiles. Mig-21s

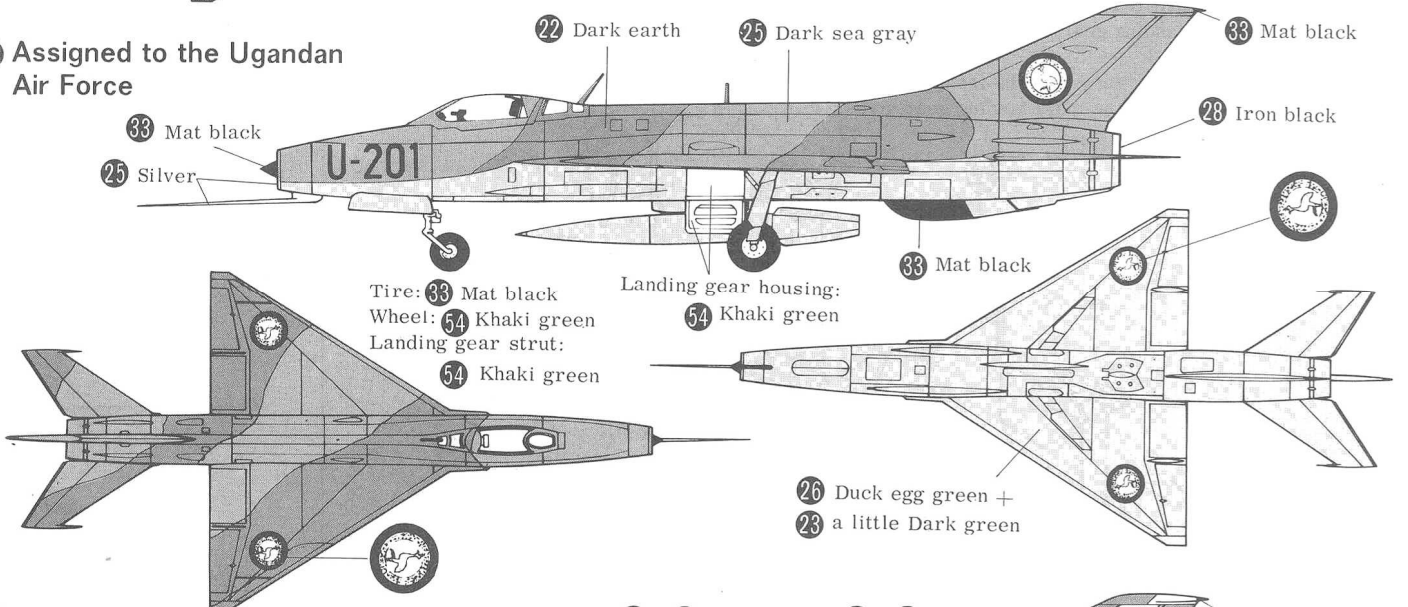
Max. speed : Mach 2 (altitude of 11,000 m)
 Service ceiling : 17,600 m
 Range : 1,200 km

Marking & Color Painting Guide

1 Assigned to the Egyptian Air Force

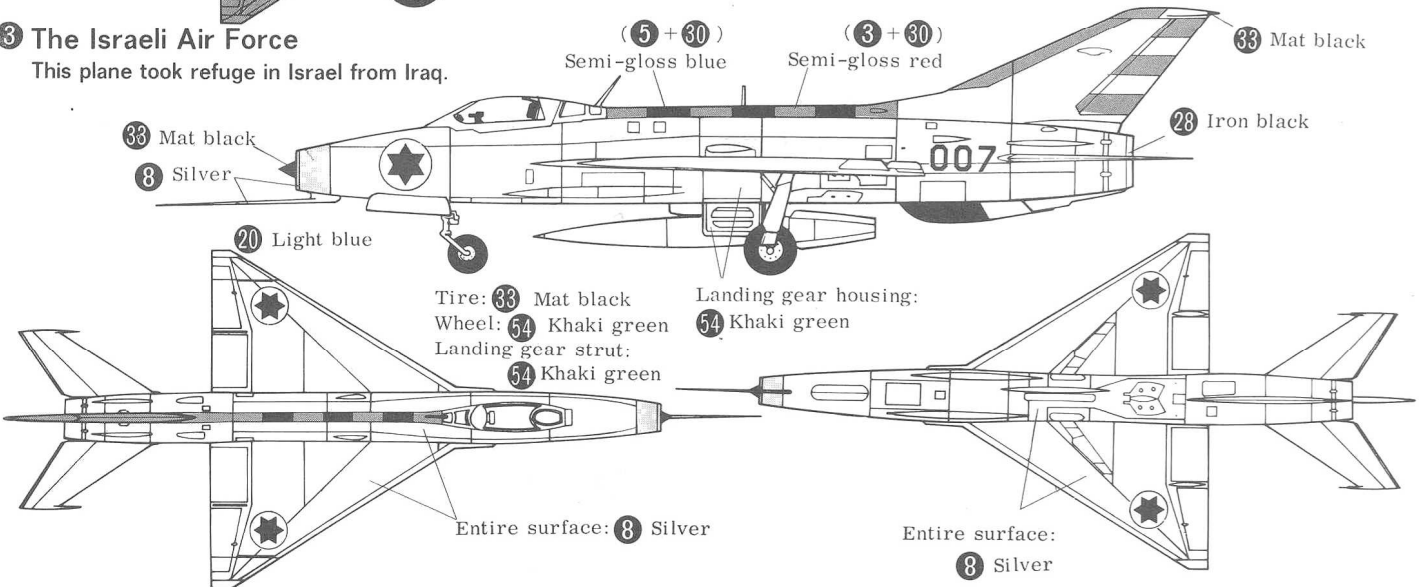


2 Assigned to the Ugandan Air Force



3 The Israeli Air Force

This plane took refuge in Israel from Iraq.



Painting

To camouflage the aircraft, first apply the base coat and then apply the final coat. The two colors for the final coat should be of the semi-gloss.
 To paint the entire air frame in silver, refer to the reference pictures; emphasize the external parts in a different silver tone. On the Israeli planes, before applying silver, apply the semi-gloss red, then semi-gloss blue and light blue. It is recommended that these colors be masked and then the silver paint applied.

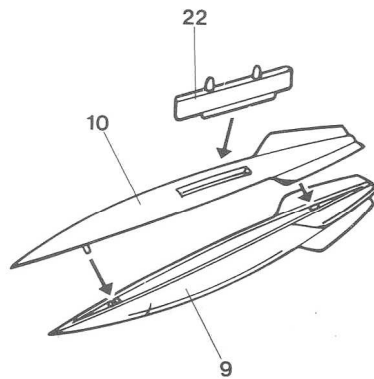
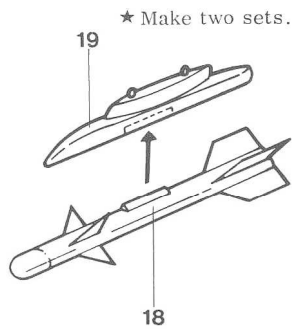
Decals

1. Cut out the decal and remove the film covering, then place in water for 20 seconds.
2. Slide off the decal from the paper and position it at the proper place.
3. Press the transferred decal with a soft cloth and remove the moisture.



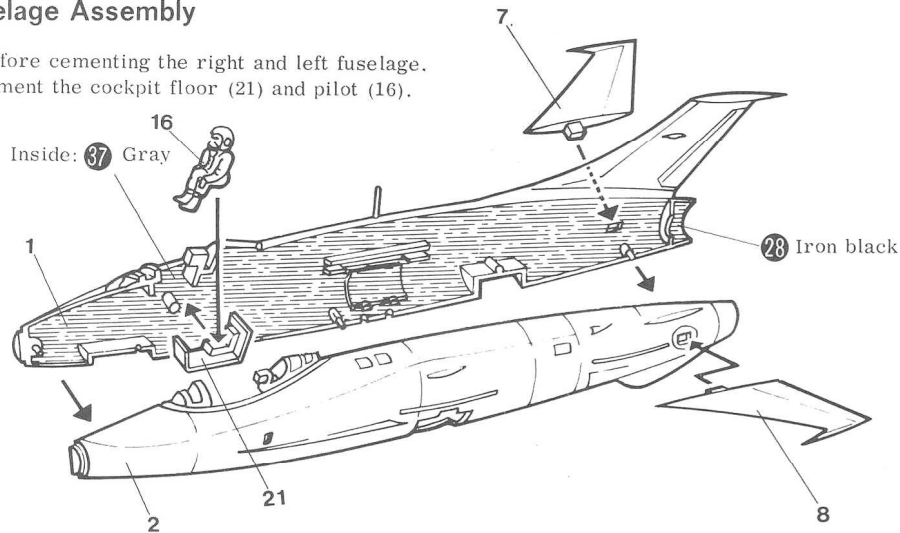
MANUFACTURED IN JAPAN
 & PACKED IN ENGLAND
 By A. A. HALES LTD.
 HINCKLEY, LEICS.

1 Missile, Auxiliary Fuel Tank Assembly



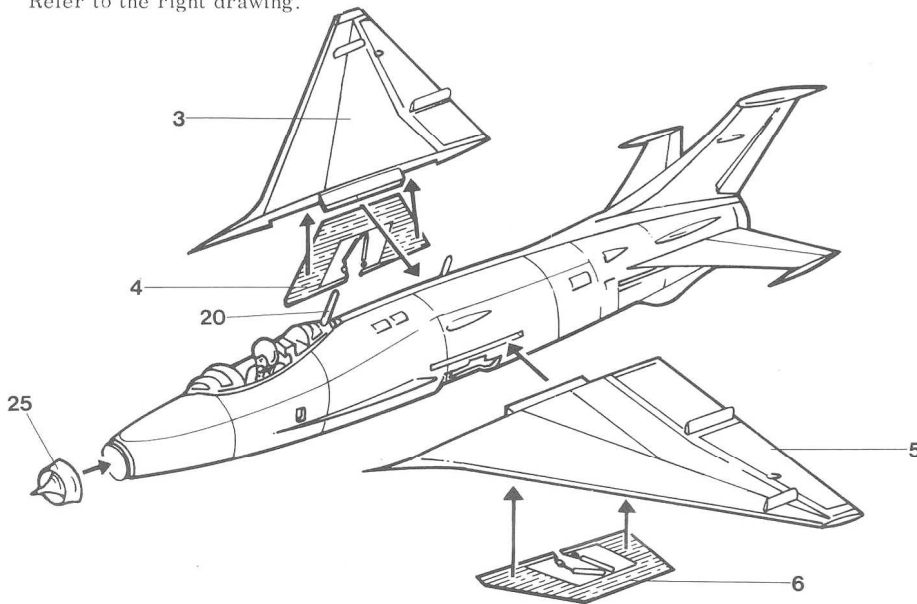
2 Fuselage Assembly

★ Before cementing the right and left fuselage, cement the cockpit floor (21) and pilot (16).



3 Main Wing Installation

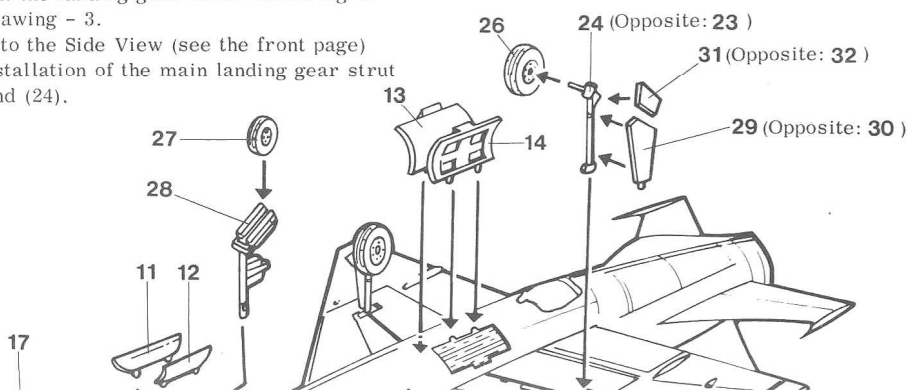
★ Main wing possesses a cathedral angle. Refer to the right drawing.



4 Parts Installation (1)

★ Cement the landing gear cover referring to the Drawing - 3.

★ Refer to the Side View (see the front page) for installation of the main landing gear strut (23) and (24).



★ Before Assembling

- First read all the instructions and follow them when working on the model.
- Cut off the parts from the stem with a nipper or cutter. First read all the introductions

★ Model Colors

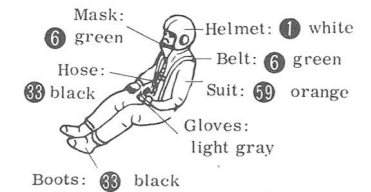
To beautify your model paint each parts. The model colors are numbered from ① - ⑫. Use wide brush to paint the wide area and the pointed one for tiny parts.



*After the parts are taken out, cut the bag in pieces to prevent the infant from covering it's head.

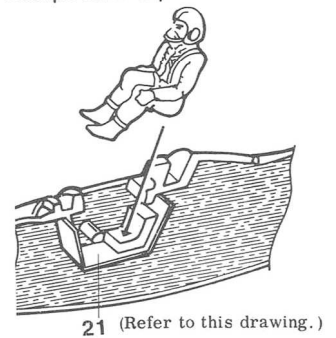
Drawing-1

Paint the pilot before cementing it to the seat. Use the light and dark gray when painting the cockpit.



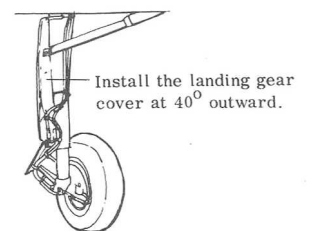
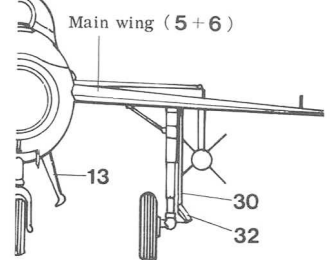
Reference Drawing-2

Cockpit floor & pilot installation



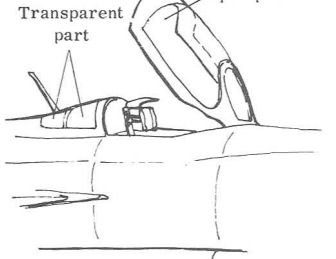
Reference Drawing-3

Main wing, landing gear strut installation

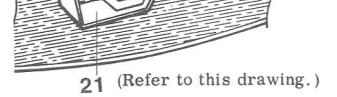
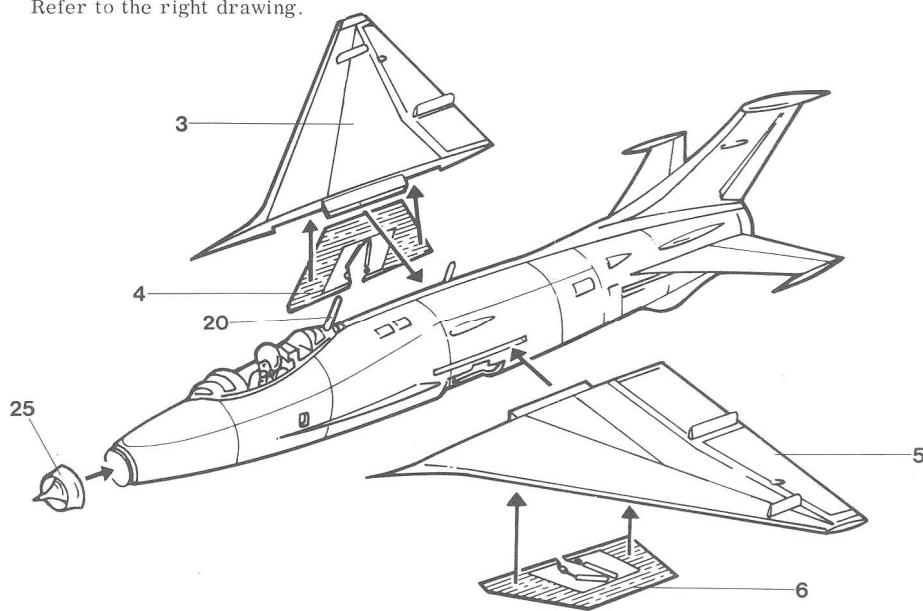


Reference Drawing-5

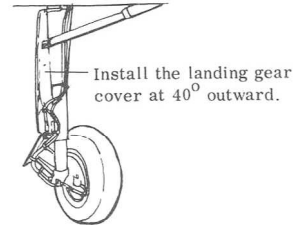
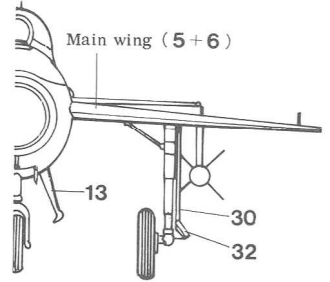
Canopy installation



Refer to the right drawing.

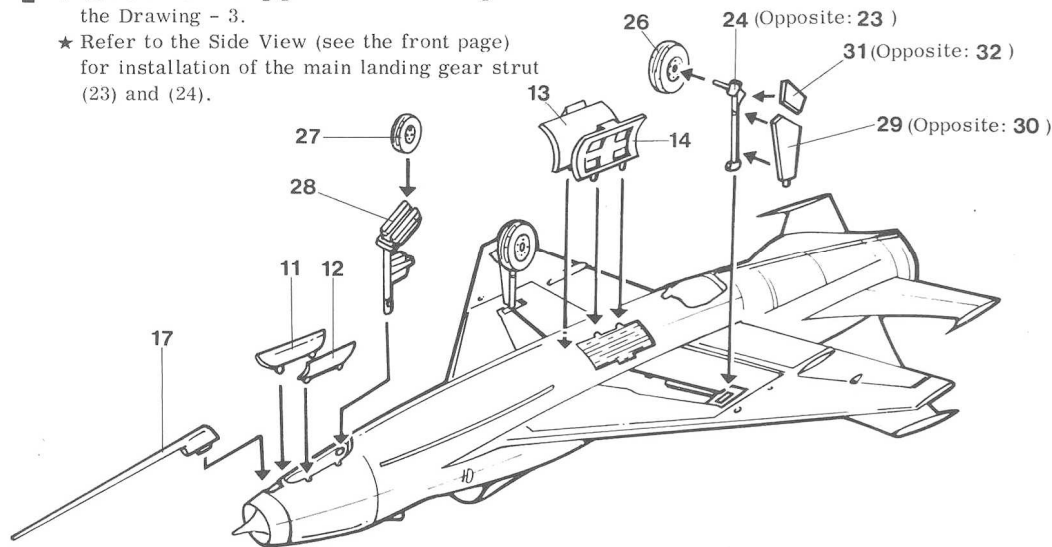


Reference Drawing-3
Main wing, landing gear
strut installation

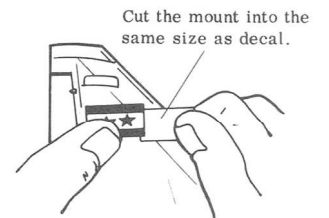
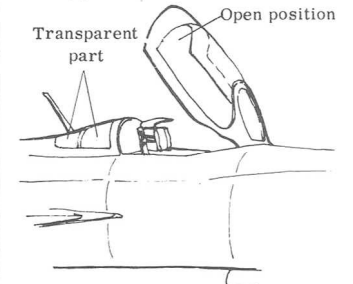


4 Parts Installation (1)

- ★ Cement the landing gear cover referring to the Drawing - 3.
- ★ Refer to the Side View (see the front page) for installation of the main landing gear strut (23) and (24).



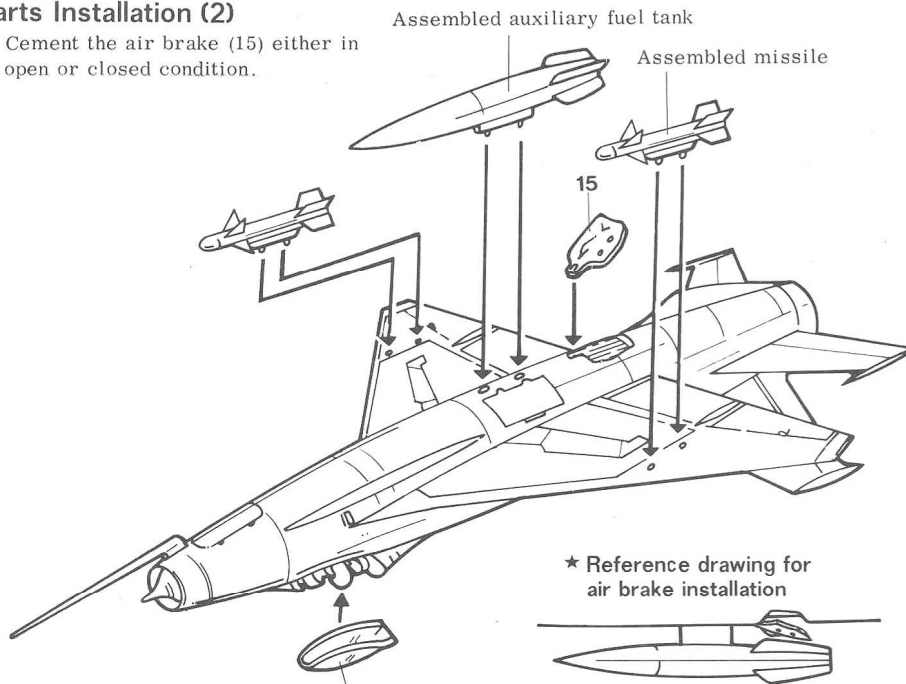
Reference Drawing-5
Canopy installation



Apply the transparent decal after cutting it off.

5 Parts Installation (2)

- ★ Cement the air brake (15) either in open or closed condition.



★ Reference drawing for
air brake installation

Canopy (Paint the canopy frame the same color as the fuselage)

Parts Number & Name

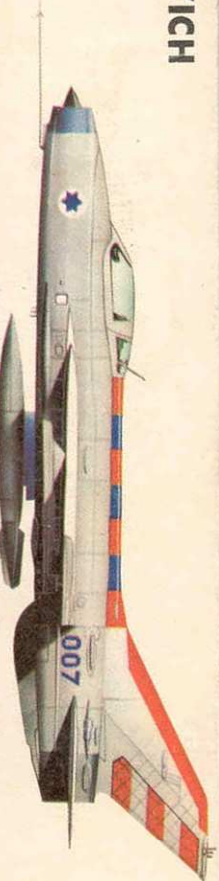
1. Fuselage, right
2. Fuselage, left
3. Main wing top, right
4. Main wing bottom, right
5. Main wing top, left
6. Main wing bottom, left
- 7-8. Tail wing
- 9-10. Auxiliary fuel tank
- 11-12. Front landing gear cover
- 13-14. Main landing gear cover (A)
15. Air brake
16. Pilot
17. Pitot tube
18. Missile
19. Missile mount
20. Antenna
21. Cockpit floor
22. Pylon
- 23-24. Main landing gear
25. Mach cone
26. Main wheel
27. Front wheel
28. Front landing gear strut
- 29-30. Main landing gear cover (B)
- 31-32. Main landing gear cover (C)

B2

1/72
SCALE SERIES

**MIKOYAN/GUREVICH
MIG-21
FISHBED**

MANUFACTURED BY HASEGAWA SEISAKUSHO CO., LTD. SHIZUOKA, JAPAN



DECAL MARKINGS

