

MiG-21bis

eduard

1/48 Scale Plastic Model Kit

WEEKEND
edition



item # 84130

The MiG-21 was the most-produced supersonic fighter in the world serving with more than fifty Air Forces over four continents. Its continuous development lasted for nearly three decades as design bureau of Mikoyan and Gurevitch tried follow the needs of many different users.

The MiG-21 was one of many aircraft of the Mikoyan-Gurevich design bureau which were integrated not only into the Soviet Air Force (VVS - Voenno-vozhdushnye sily), but also into the Air Forces of all members of the Warsaw Pact and also of many allied client states. Its predecessors included such notable types as the MiG-15, MiG-17 and the supersonic MiG-19.

The roots of MiG-21 project reach back to the first half of the fifties. In 1954, the preliminary design study Ye-1 came to its end and was quickly replaced by the heavily reworked Ye-2 prototype. Both had a swept wing and the first MiG design to feature the delta wing was the Ye-4 prototype, which took to the air for the first time on June 16, 1955. It was also demonstrated a year later at the Moscow airfield Tushino. The new aircraft with the MiG-21 designation was the first successful Soviet design integrating fighter and interceptor characteristics. It was also quite light Mach 2 aircraft, although the long-lasting development was adding weight gradually. The design featured sleek fuselage with the front air intake and shock cone. This design feature later limited development of the avionics equipment due to the very small space available for the radar.

Cold War warrior

The first of the new line to enter production was the MiG-21F, which together with the MiG-21P and MiG-21F-13 represented the first generation of this line. These versions were in production through the end of the fifties and at the beginning of the sixties. Subsequent versions included the PF, FL, PFM and R with production of these peaking at the end of the sixties. The production of third generation started in 1968 and included the most advanced versions of MiG-21 like the M, SM, MF, SMT or bis among others. Simultaneously, two-seat training versions were also produced and designated as MiG-21U, UM and US. Production of the MiG-21 ended in 1985. The new aircraft came off Soviet production lines in Moscow, Gorky and Tbilisi, the MiG-21F-13 was also built under the license in Czechoslovakia and the MiG-21FL, M and bis were built in India by Hindustan Aeronautics Ltd. The Soviet Union produced 10,645 examples of all versions, 194 were built in Czechoslovakia and 657 in India. That counts 11,496 aircraft produced. NATO assigned it the reporting name "Fishbed", while the Soviet pilots called it "Balalaika" due to the shape resembling it with the popular Russian musical instrument.

Aces from Asia, Middle East or Africa

Outside of the Soviet Union, the type flew with a long list of nations on four continents (Europe, Asia, Africa and South America) and participated in many conflicts and wars. The most remarkable combat use includes the Vietnam war, the Indo-Pakistan wars, the Cuban

participation in Angola and in the Arab world's attempts to eliminate Israel. It is no wonder there were many pilots achieving their ace status flying one or more variants of MiG-21.

Thanks to the high volume of use and intensive combat actions, the Vietnamese pilots are topping the list of aces of MiG-21 with Nguyen Van Coc with 9 kills as the most successful among them followed by three eight-victory aces Mai Van Cuong, Nguyen Hong Nhi and Pham Thanh Ngan. From the other nations the Syrian pilots Bassam Hamshun and Majid Zugbi both achieved seven kills flying MiG-21MF, while Adeb Al-Jarf had the same score with MiG-21FL. Egyptian pilots Ali Vajai, Sami Marei and Sami Marei scored five times. In the interceptor role the MiG-21 served with the Soviet Union and other nations of the Warsaw Pact into the eighties when it began to be replaced by the MiG-23 in seventies and MiG-29 in eighties.

This kit: MiG-21bis

The MiG-21bis was designated "Izdelye 75" in factory documentation. As opposed to the MF and SMT versions, it was intended to be a fighter with ground attack capability as only the secondary role. It was powered by a Tumansky R-25-300 engine which was more powerful than unit used with MiG-21SM and it also offered better economy. The maximum thrust rose from 6,490 kp of the R-13-300 to 9,900 kp of the R-25-300. Because of the change of the engine, the diameter of the frontal air inlet had to be enlarged from 870 mm to 900 mm. The regulation cone was taken over from SM version, but the radar inside was changed from the RP-22SM unit to the RP-22M (Jay Bird) one. It was capable to follow the air targets even when they were detected against the ground surface background. The bigger No.7 fuel tank was installed (600 l instead of 510 l) in the fuselage and the change necessitated bigger, more spacious fuselage ridge. But it was not as massive as with the MiG-21SMT version, where the huge 900 l tank affected the general performance of the aircraft negatively. The solution adopted with MiG-21bis was a compromise between the endurance and the performance.

The MiG-21bis was armed with a twin barreled GS-23-2L 23 mm cannon with 200 rounds of ammo. Hardpoints could be loaded with R-13M, R-55, R-60 and R-60M missiles, UB-16-57 or UB32A rocket pods, S-24 unguided rockets, bombs up to 500 kg caliber and ZB-360 napalm bombs.

The aircraft was delivered to nations of the former Warsaw Pact and the Third World either as the model "Izdelye 75A" with the Lazur ground control intercept system, or as the "Izdelye 75B" with the Polyot OI ILS (Instrument Landing System). The former carried the NATO code "Fishbed N", and the latter "Fishbed K". Both versions served as "Izdelye 75" with Soviet air force and airspace defense units.

ATTENTION



UPOZORNĚNÍ



ACHTUNG



ATTENTION



注意



Carefully read instruction sheet before assembling. When you use glue or paint, do not use near open flame and use in well ventilated room. Keep out of reach of small children. Children must not be allowed to suck any part, or pull vinyl bag over the head.



Před započítím stavby si pečlivě prostudujte stavební návod. Při používání barev a lepidel pracujte v dobře větrané místnosti. Lepidla ani barvy nepoužívejte v blízkosti otevřeného ohně. Model není určen malým dětem, mohlo by dojít k požití drobných dílů.

INSTRUCTION SIGNS * INSTR. SYMBOLS * INSTRUKTION SINNBILDEN * SYMBOLES * 記号の説明

OPTIONAL
VOLBABEND
OHNOUTSAND
BROUSITOPEN HOLE
VYVRTAT OTVORSYMETRICAL ASSEMBLY
SYMETRICKÁ MONTÁŽREMOVE
ODŘÍZNOUTREVERSE SIDE
OTOČITAPPLY EDUARD MASK
AND PAINT
POUŽIT EDUARD MASK
NABARVITPLEASE CHECK THE LATEST VERSION OF THE INSTRUCTIONS ON www.eduard.com

PARTS



DÍLY



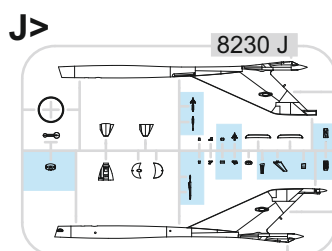
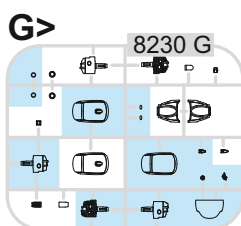
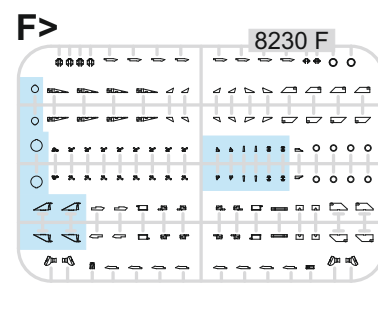
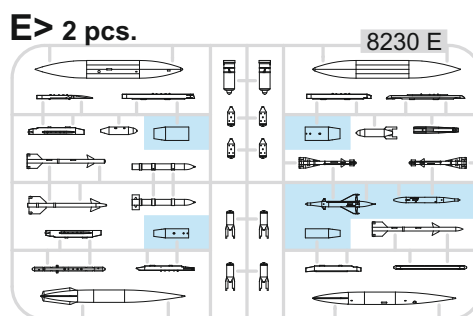
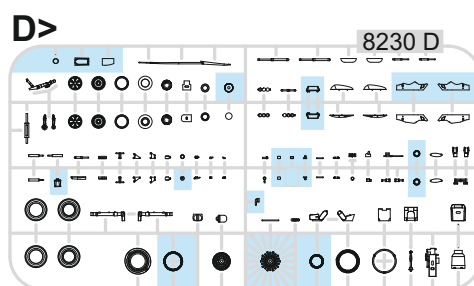
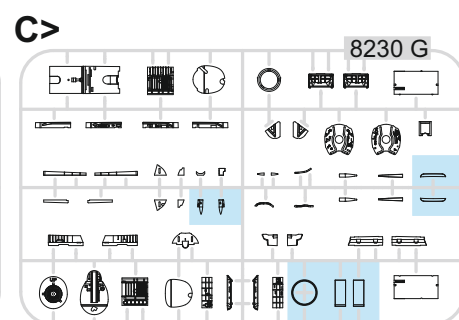
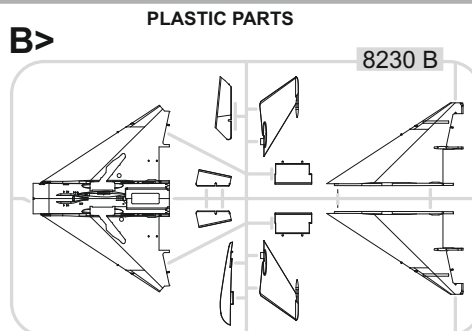
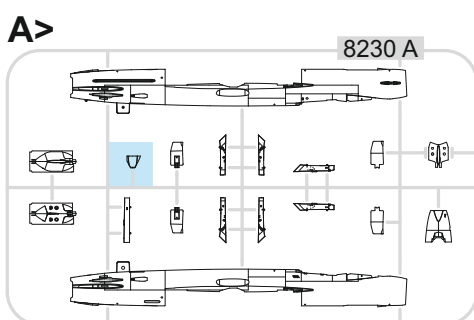
TEILE



PIÈCES



部品



RP - RESIN PARTS

eduard
BRASSIN

-Parts not for use. -Teile werden nicht verwendet. -Pièces à ne pas utiliser. -Tyto díly nepoužívejte při stavbě. - 使用しない部品

COLOURS



BARVY



FARBEN



PEINTURE

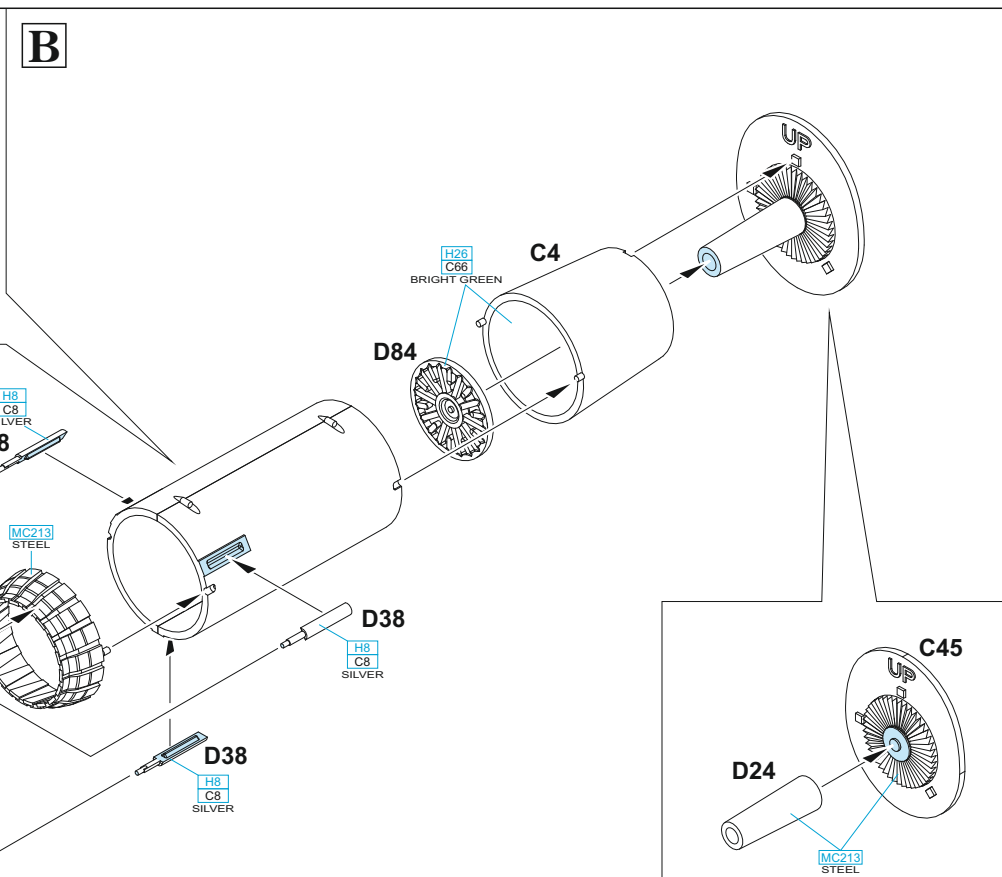
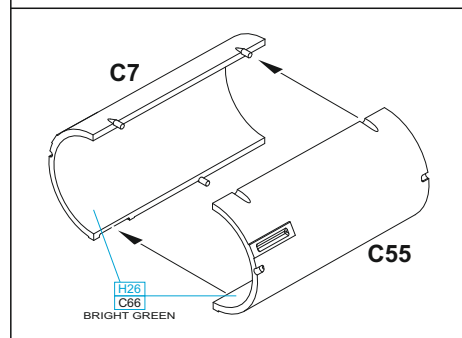
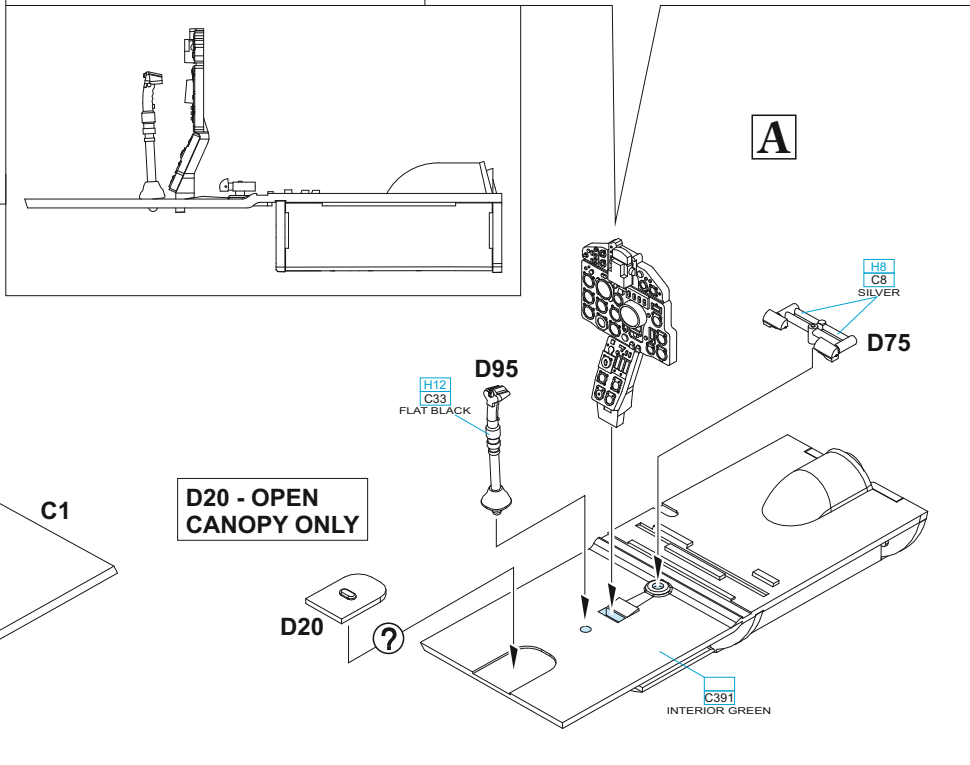
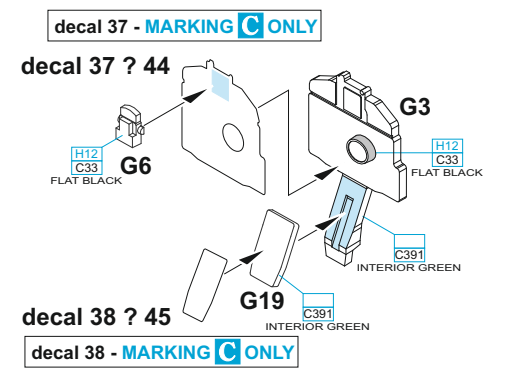
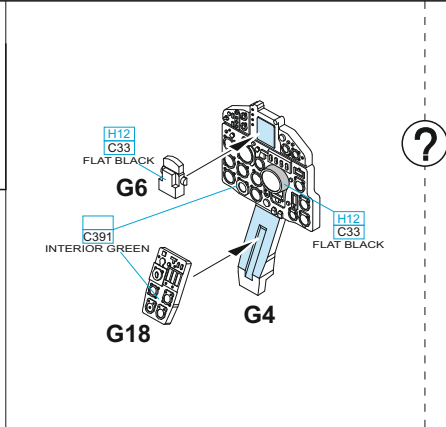
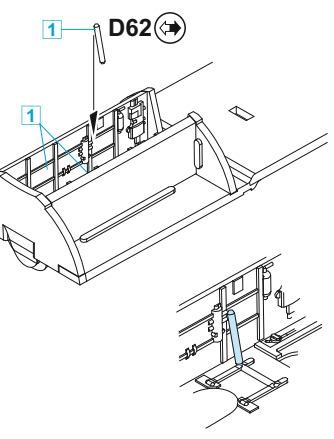


色

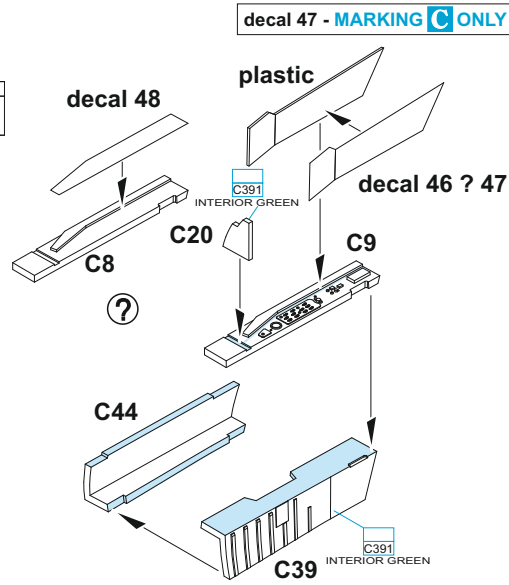
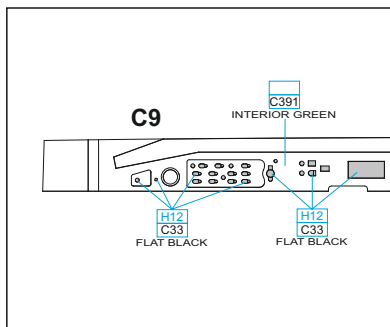
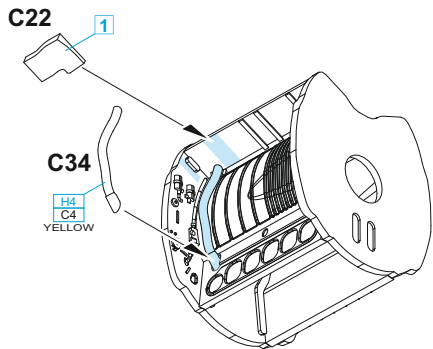
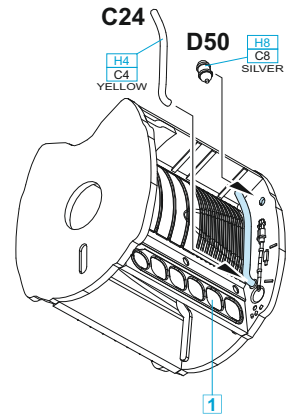
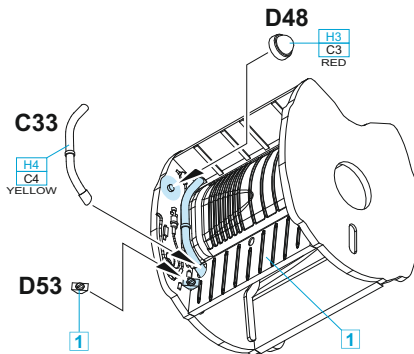
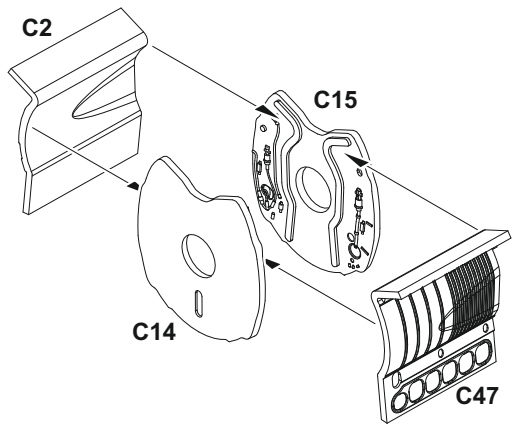
GSI Creos (GUNZE)		
AQUEOUS	Mr.COLOR	
H1	C1	WHITE
H3	C3	RED
H4	C4	YELLOW
H5	C5	BLUE
H7	C7	BROWN
H8	C8	SILVER
H11	C62	FLAT WHITE
H12	C33	FLAT BLACK
H26	C86	BRIGHT GREEN
H51	C11	LIGHT GULL GRAY
H53	C13	NEUTRAL GRAY
H66	C119	SAND YELLOW
H67	C115	LIGHT BLUE
H70	C60	GRAY
H72	C369	DARK EARTH
H77	C137	TIRE BLACK
H81	C55	KHAKI
H82	C32	DARK GRAY
H84	C42	MAHOGANY
H90	C47	CLEAR RED

GSI Creos (GUNZE)		
AQUEOUS	Mr.COLOR	
H94	C138	CLEAR GREEN
H302	C302	GREEN
H304	C304	OLIVE DRAB
H308	C308	GRAY
H309	C309	GREEN
H312	C312	GREEN
H318	C318	RADOME
H332	C332	GRAYISH BLUE
H337	C337	LIGHT AIRCRAFT GRAY
	C19	SANDY BROWN
	C131	RED BROWN
	C391	INTERIOR TURQUISE GREEN
	C511	RUSSIAN GREEN
Mr.METAL COLOR		
	MC213	STEEL
	MC214	DARK IRON
	MC218	ALUMINIUM
Mr.COLOR SUPER METALLIC		
	SM206	CHROME SILVER

- H11** - MARKING **C**
- C62** FLAT WHITE
- H51** - MARKING **A**
- C11** GRAY
- H70** - MARKING **D**
- C60** RLM 02 GRAY
- F308** - MARKING **B**
- C308** GRAY

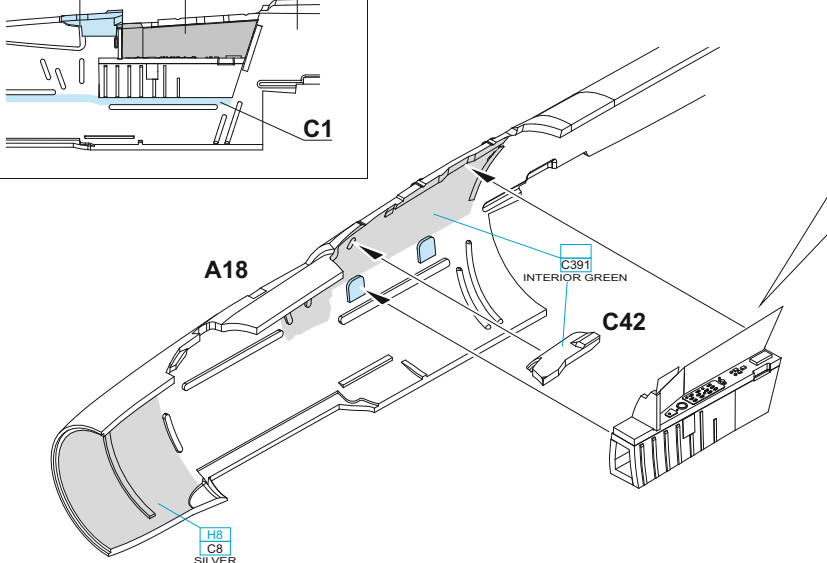


C



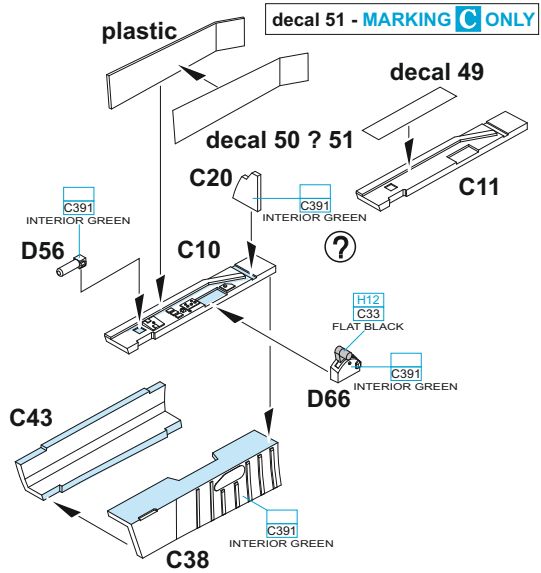
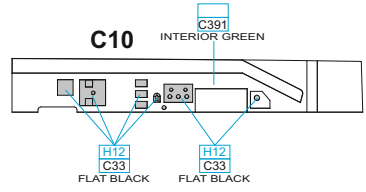
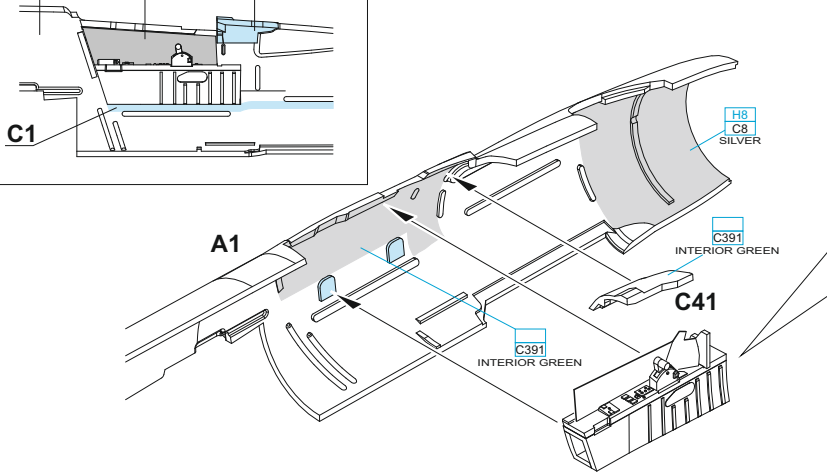
C42 decal 46 ? 47 A18

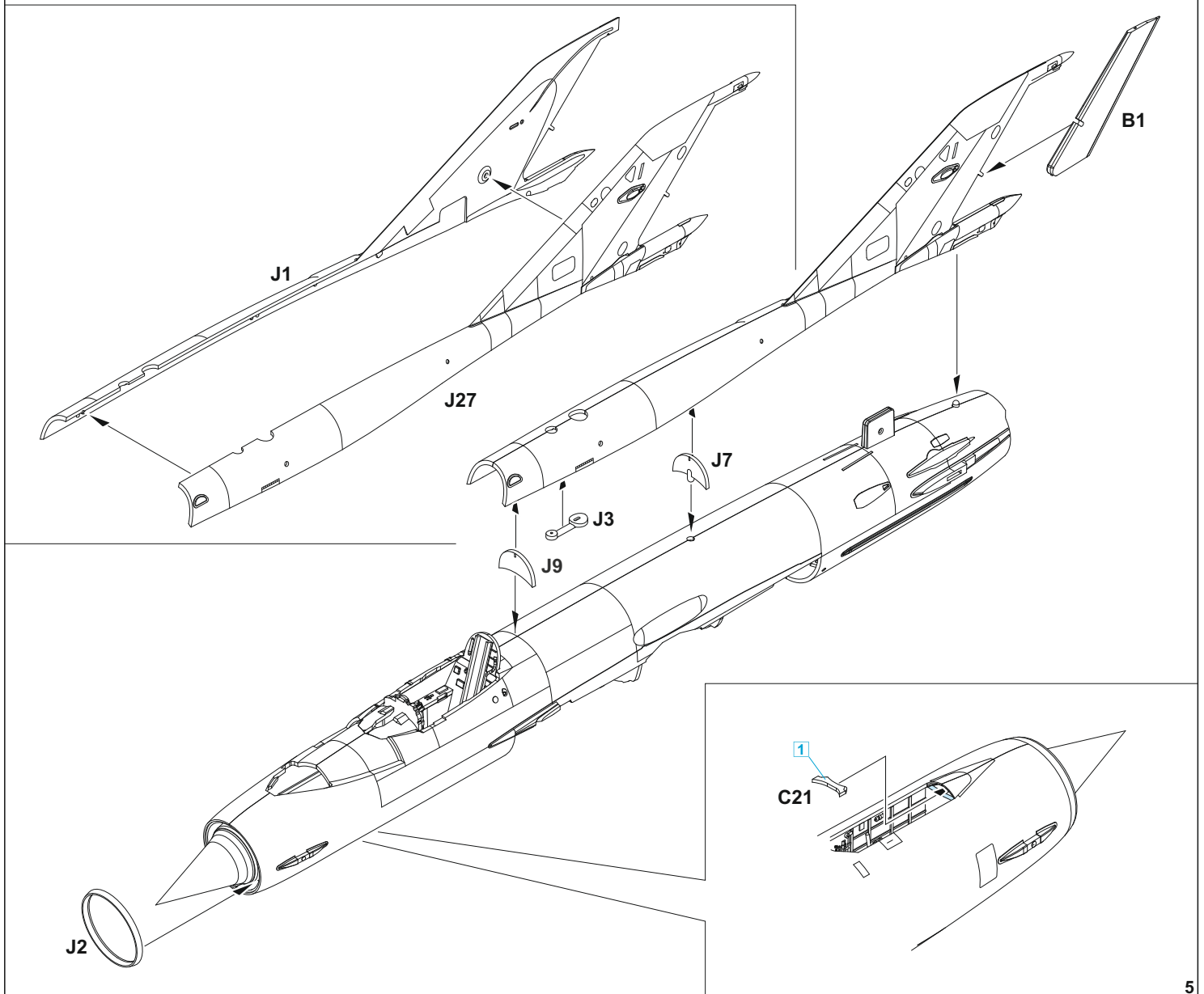
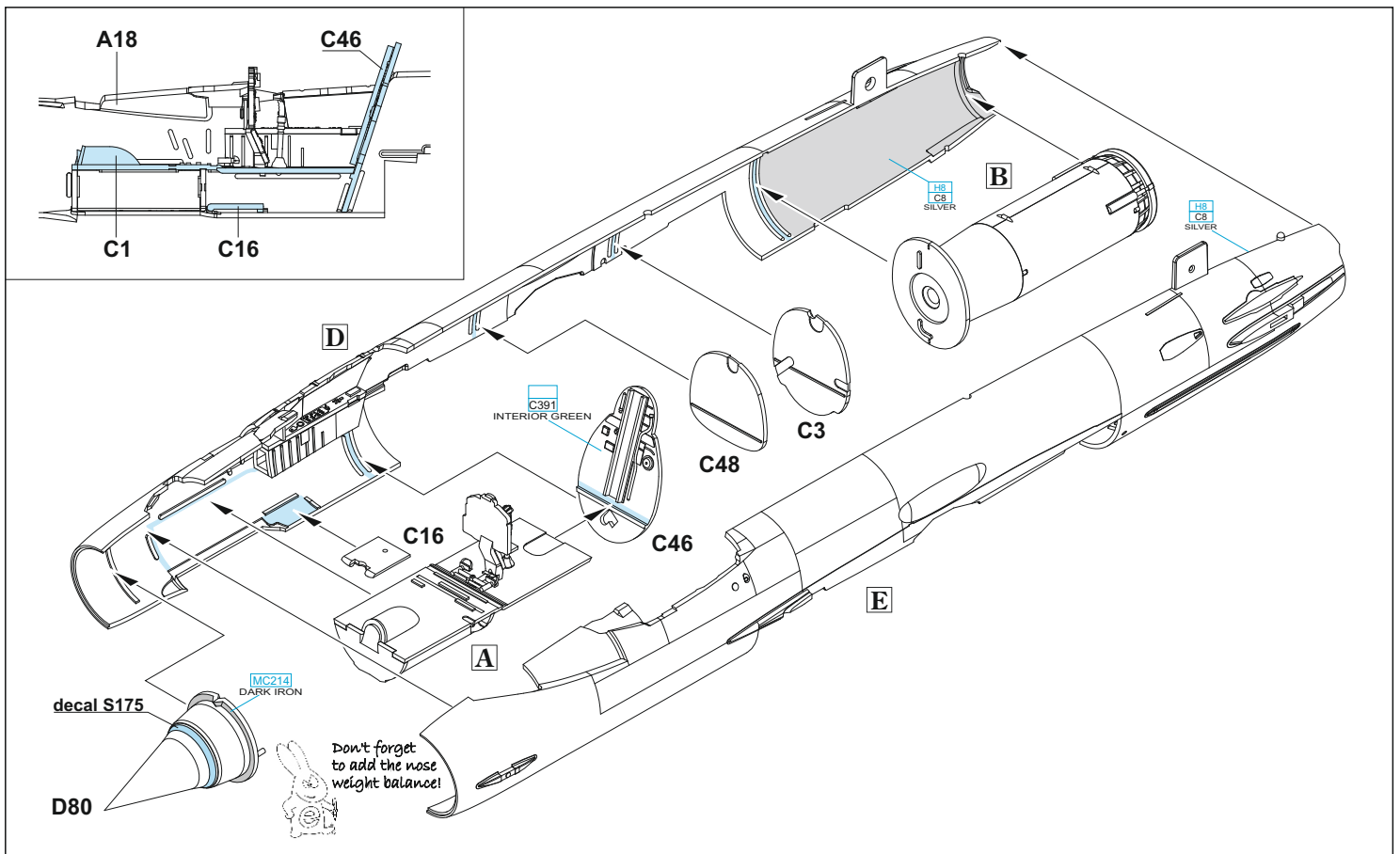
D



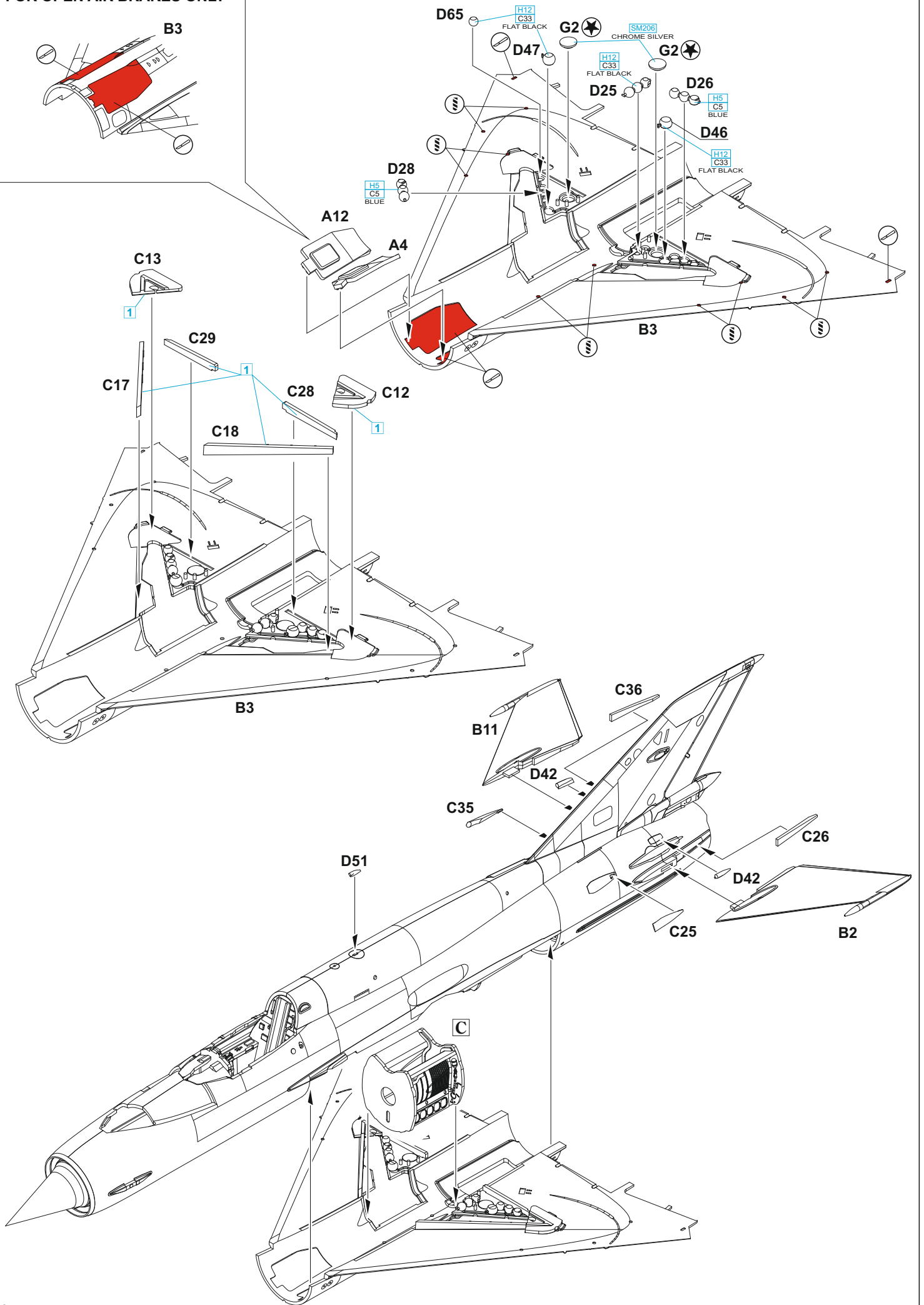
A1 decal 50 ? 51 C41

E



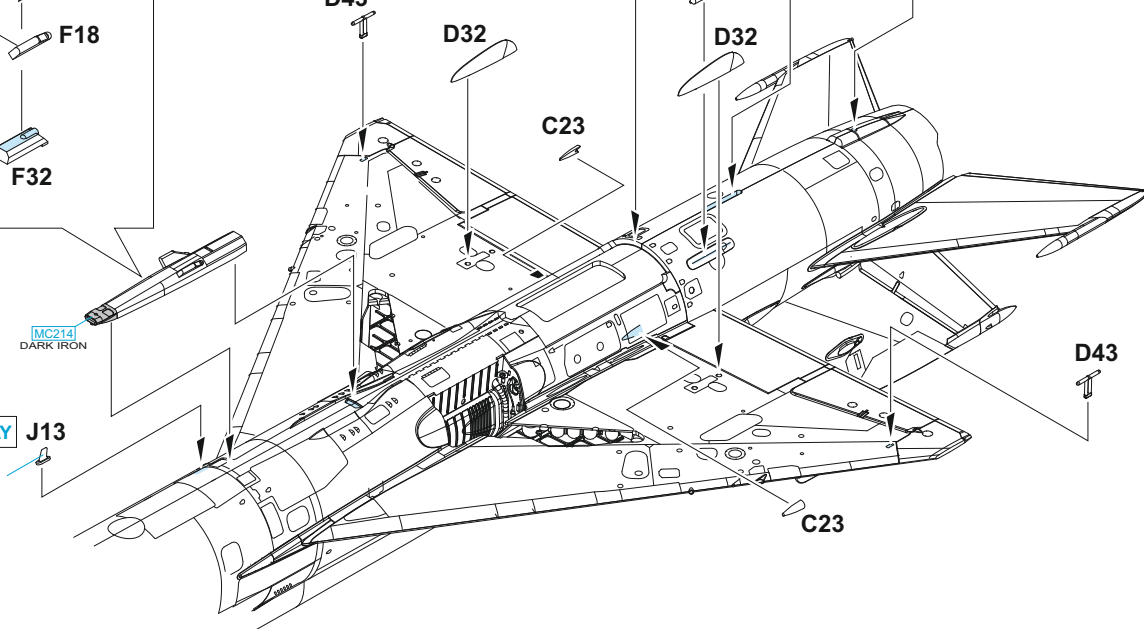
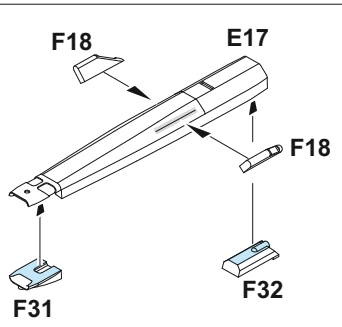
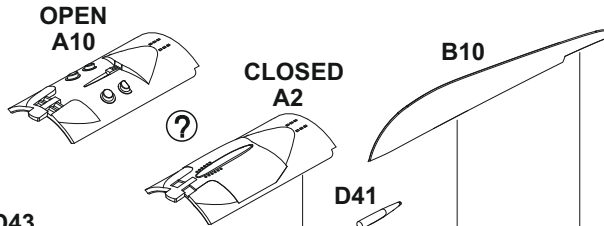
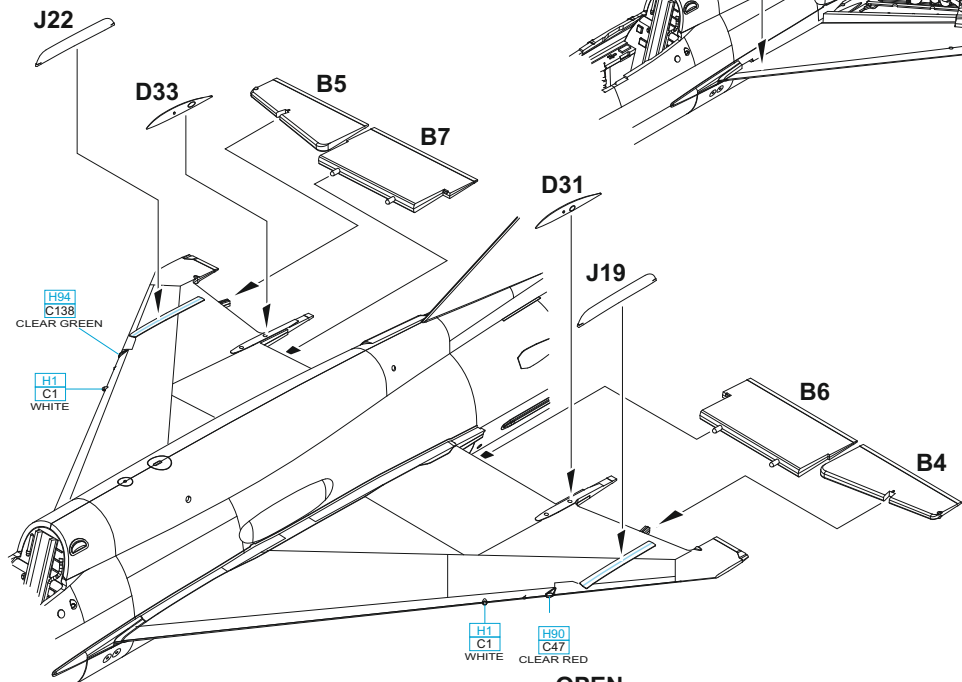
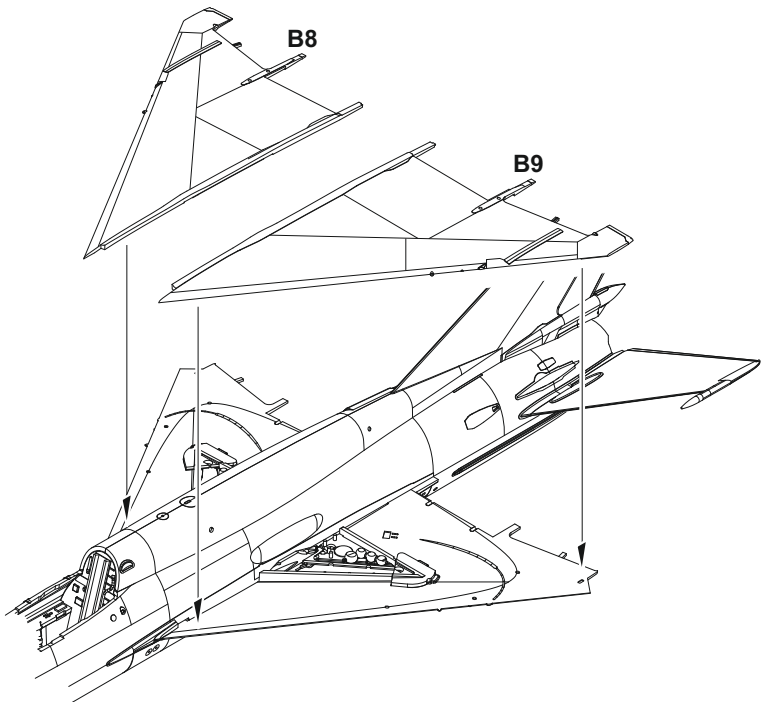


FOR OPEN AIR BRAKES ONLY

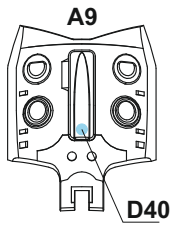


2 = **H51** - MARKINGS **A;D**
C11 GRAY
H308 - MARKING **B**
C308 GRAY
H337 - MARKING **C**
C337 GRAYISH BLUE

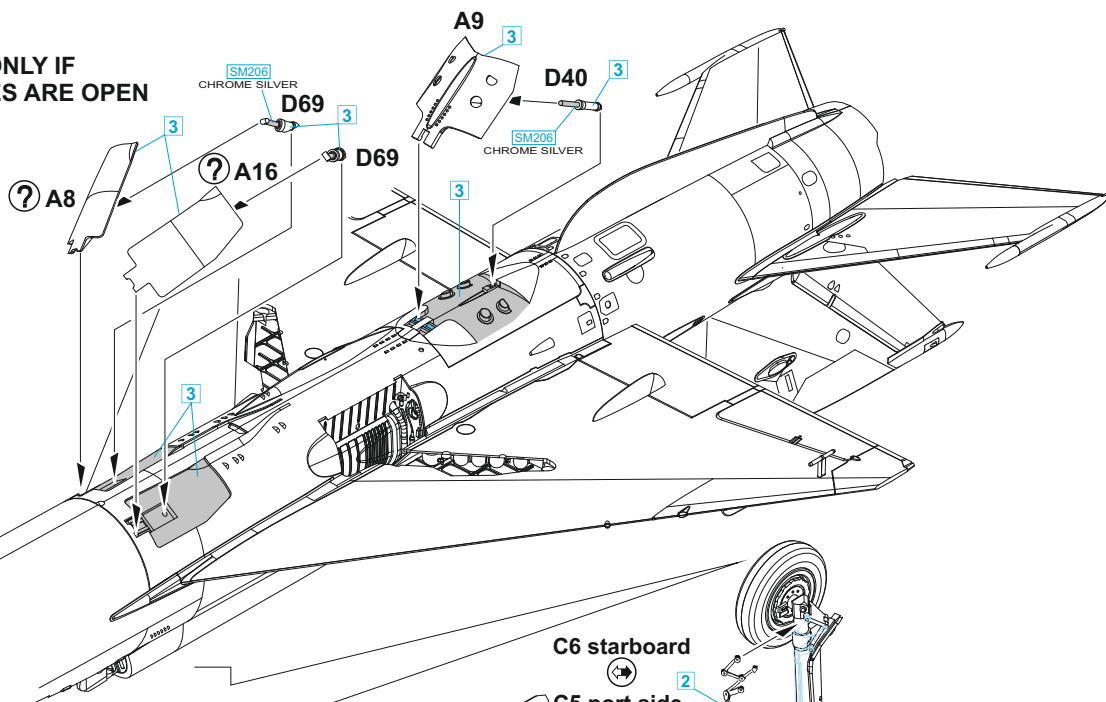
3 = **H67** - MARKING **A**
C115 LIGHT BLUE
H308 - MARKINGS **B;C**
C308 GRAY
H337 - MARKING **D**
C337 GRAYISH BLUE



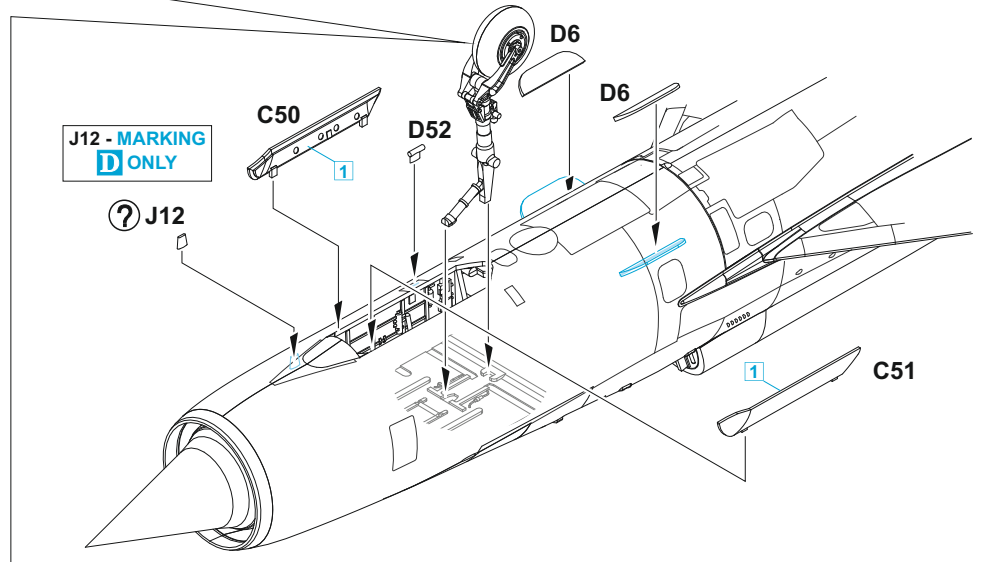
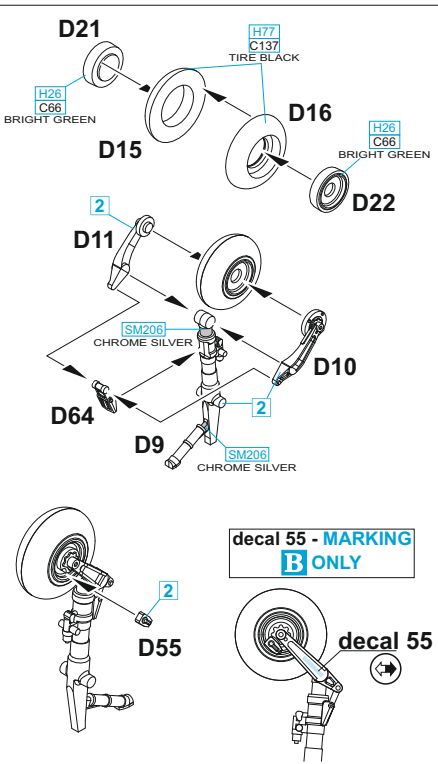
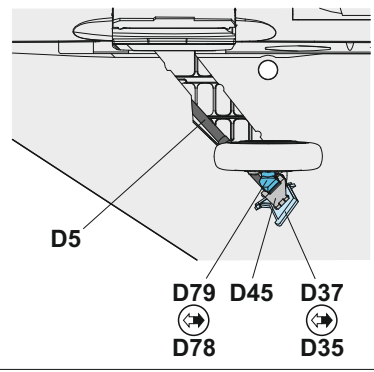
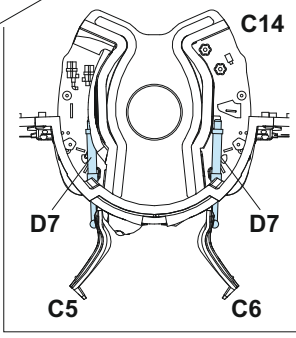
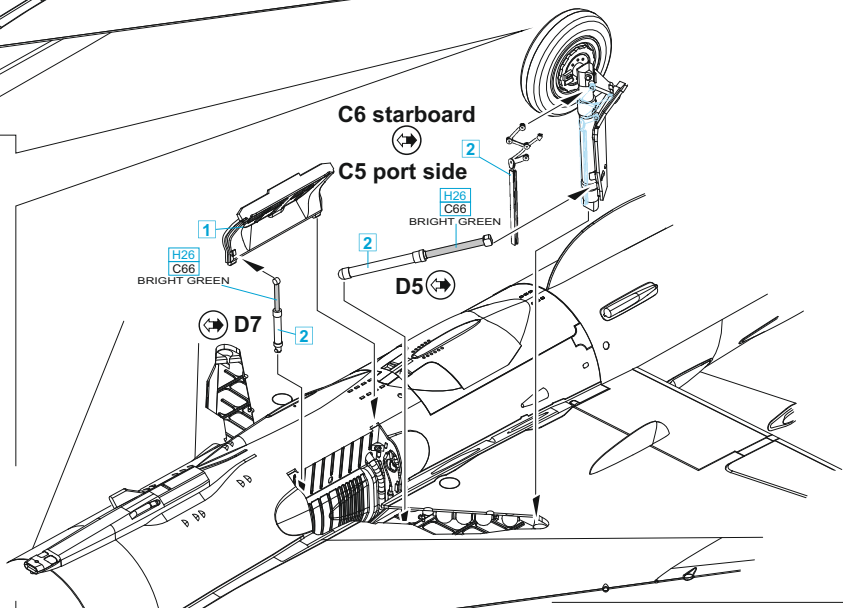
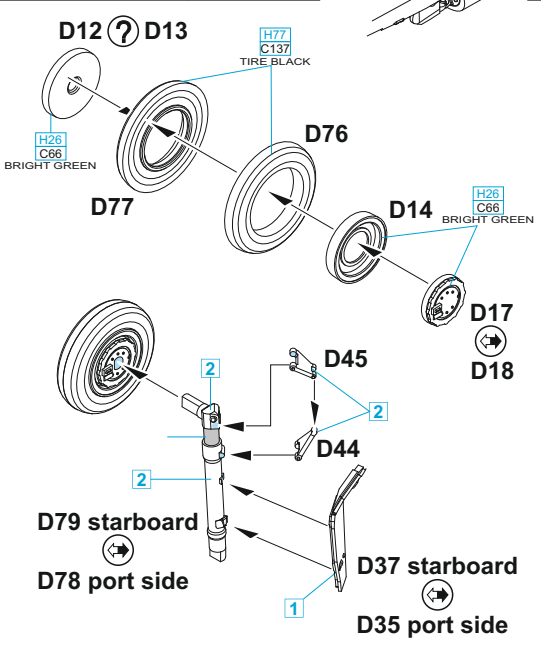
J13 - MARKING C ONLY



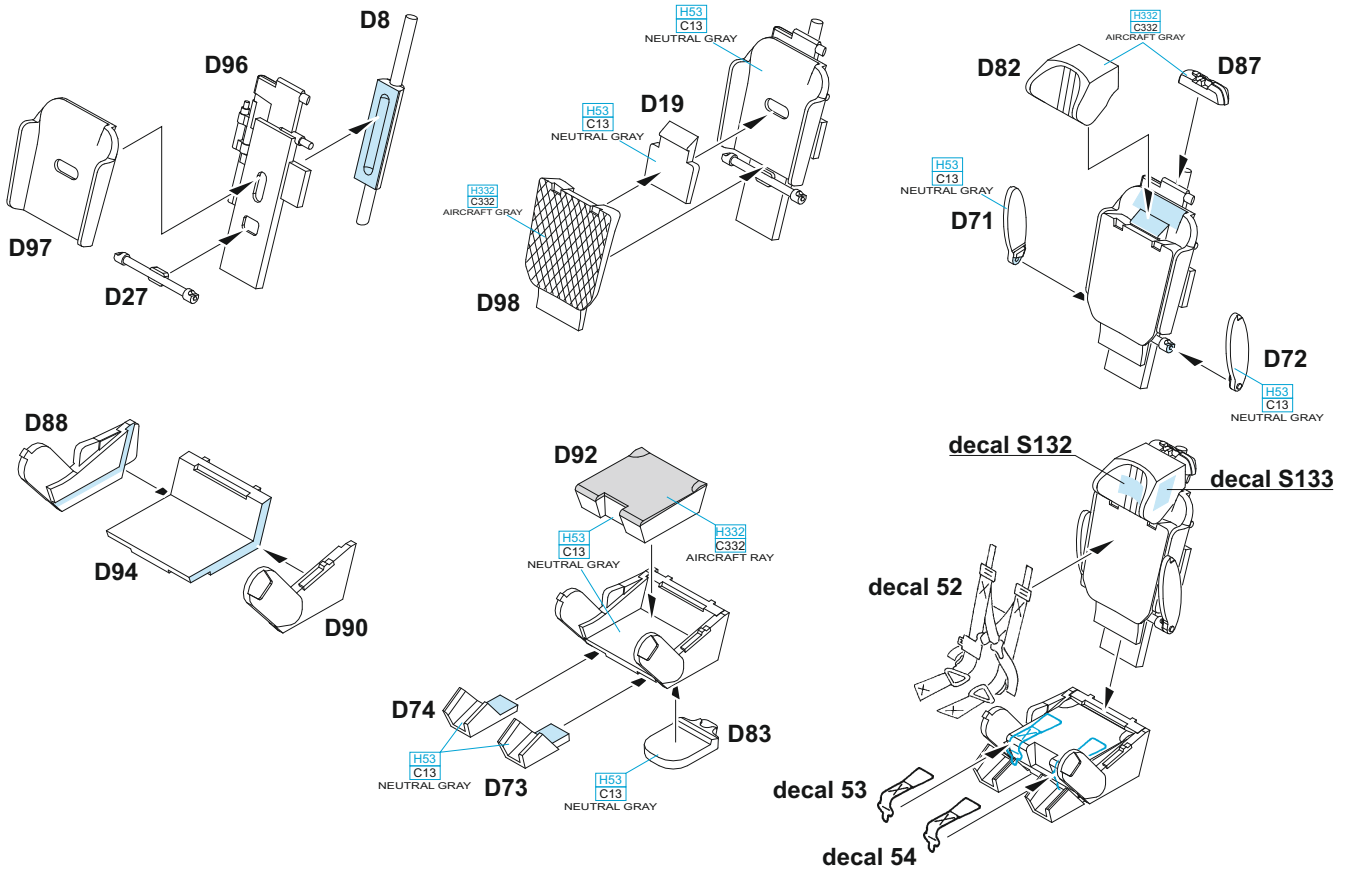
A8, A16 - ONLY IF AIRBRAKES ARE OPEN



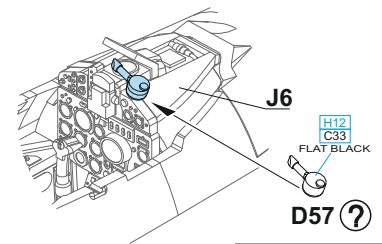
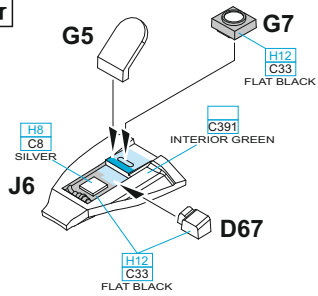
28°



F

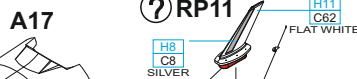
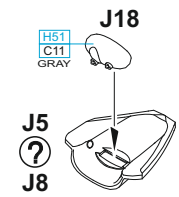


G

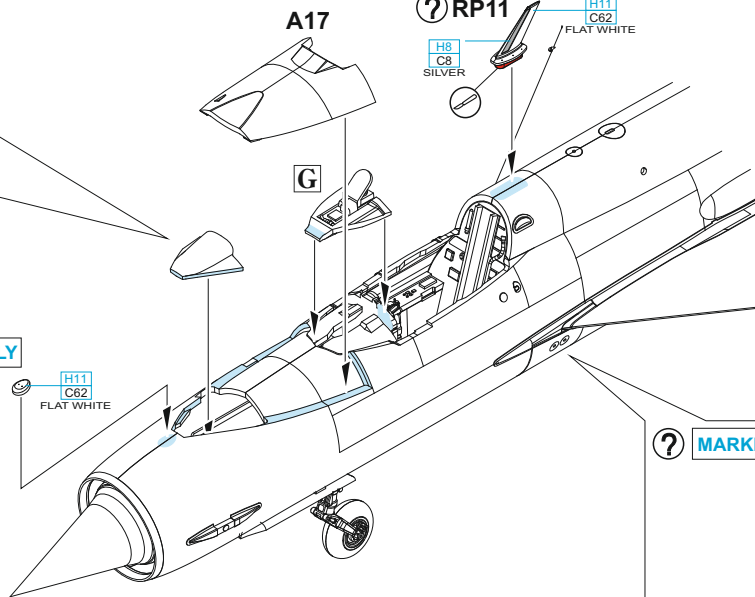


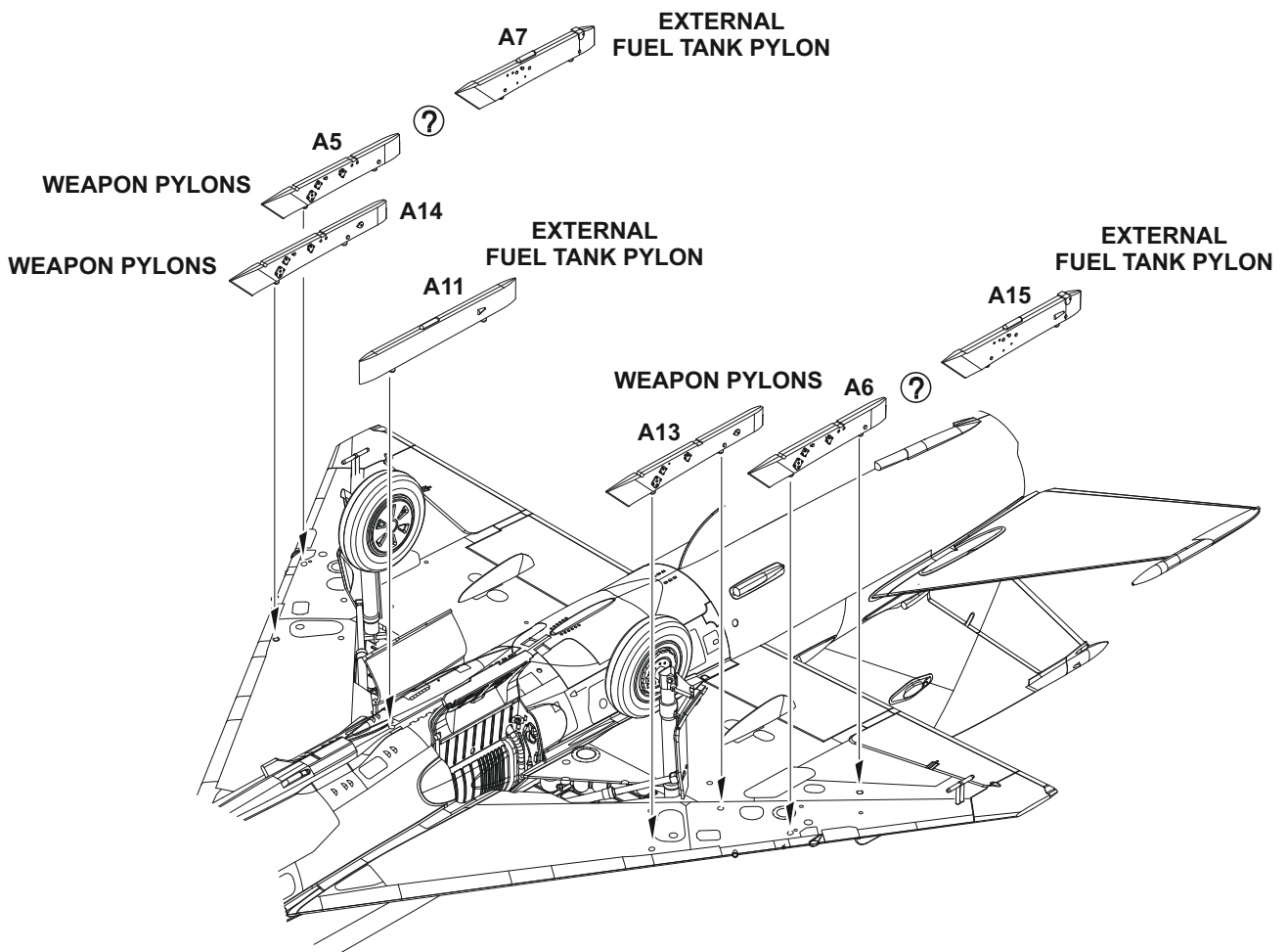
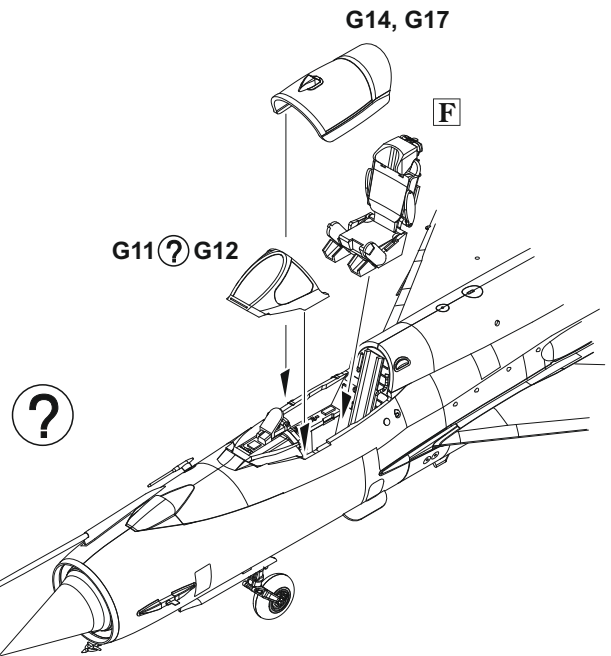
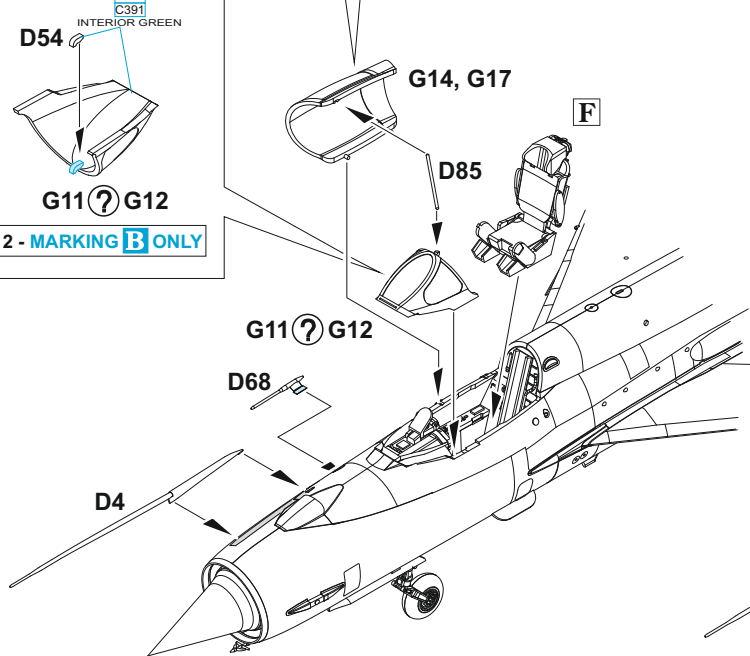
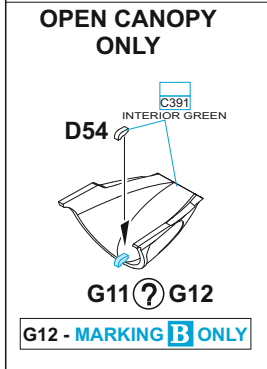
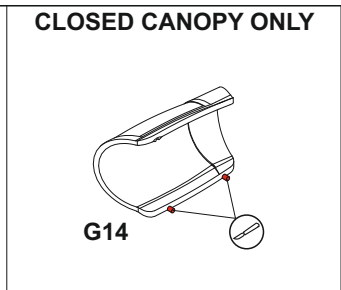
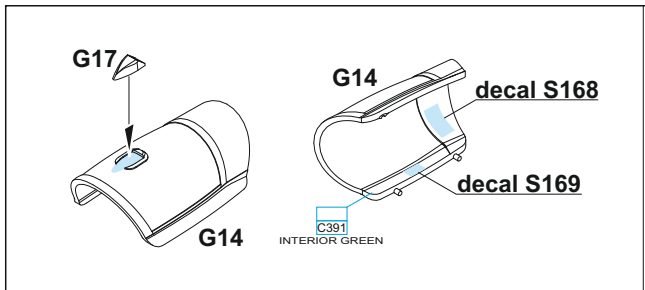
eduard BRASSIN
RP11 - MARKING C ONLY

D57 - MARKINGS A, B, D ONLY

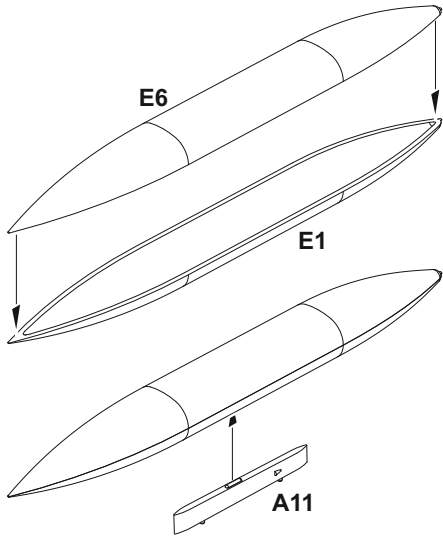


eduard BRASSIN
RP10 - MARKING C ONLY
RP10 (with question mark icon) Part with color code **H11 C62 FLAT WHITE**

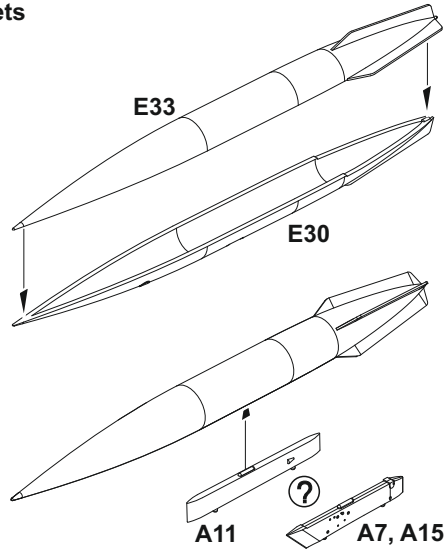




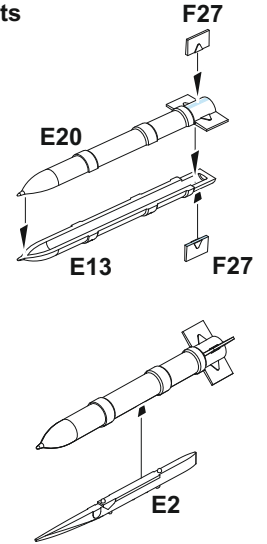
EXTERNAL FUEL TANK 800I



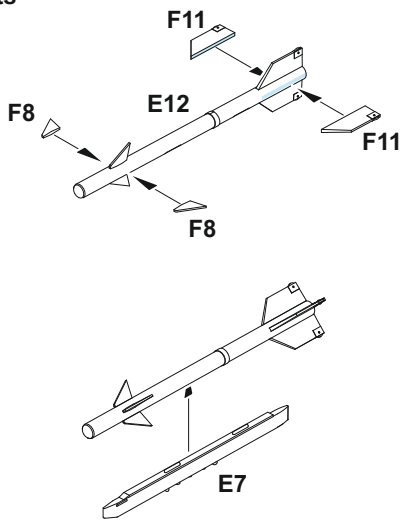
EXTERNAL FUEL TANK 490I
2 sets



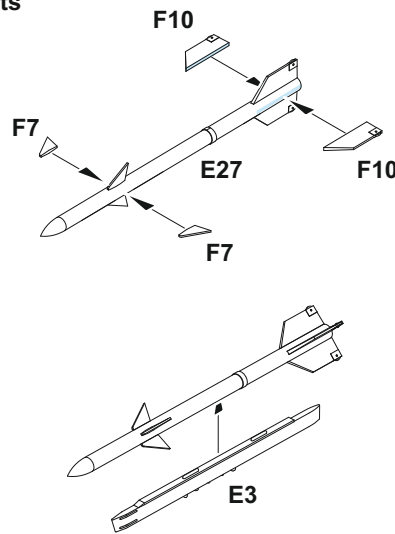
S-24
2 sets



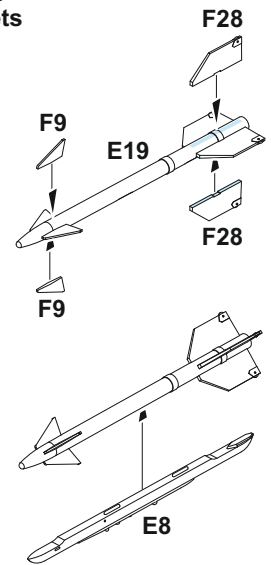
R-3S
2 sets



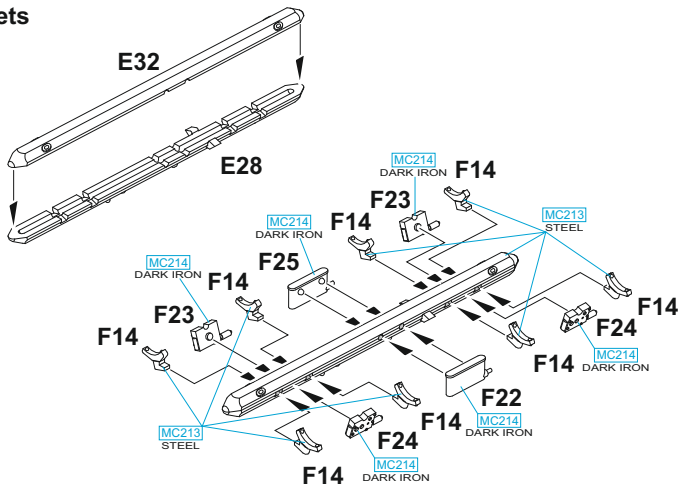
R-3R
2 sets



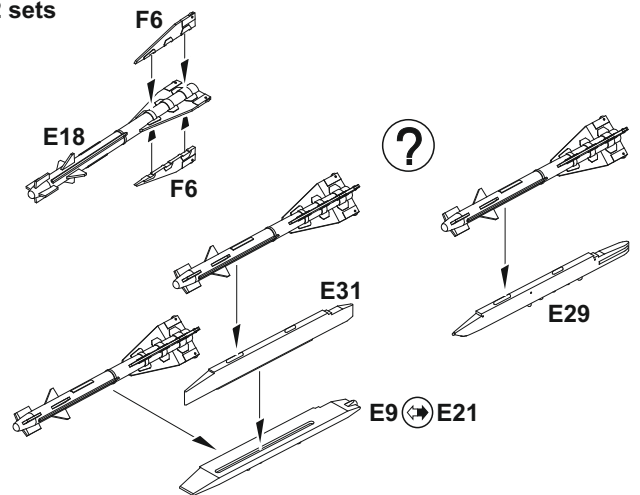
R-13
2 sets



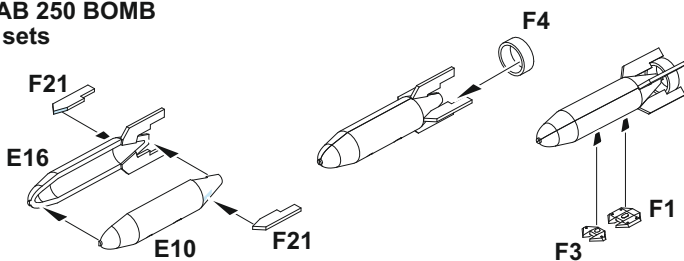
MBD FOR 4x FAB 100
2 sets



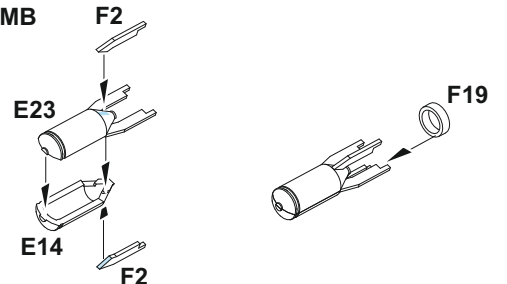
R-60
2 sets

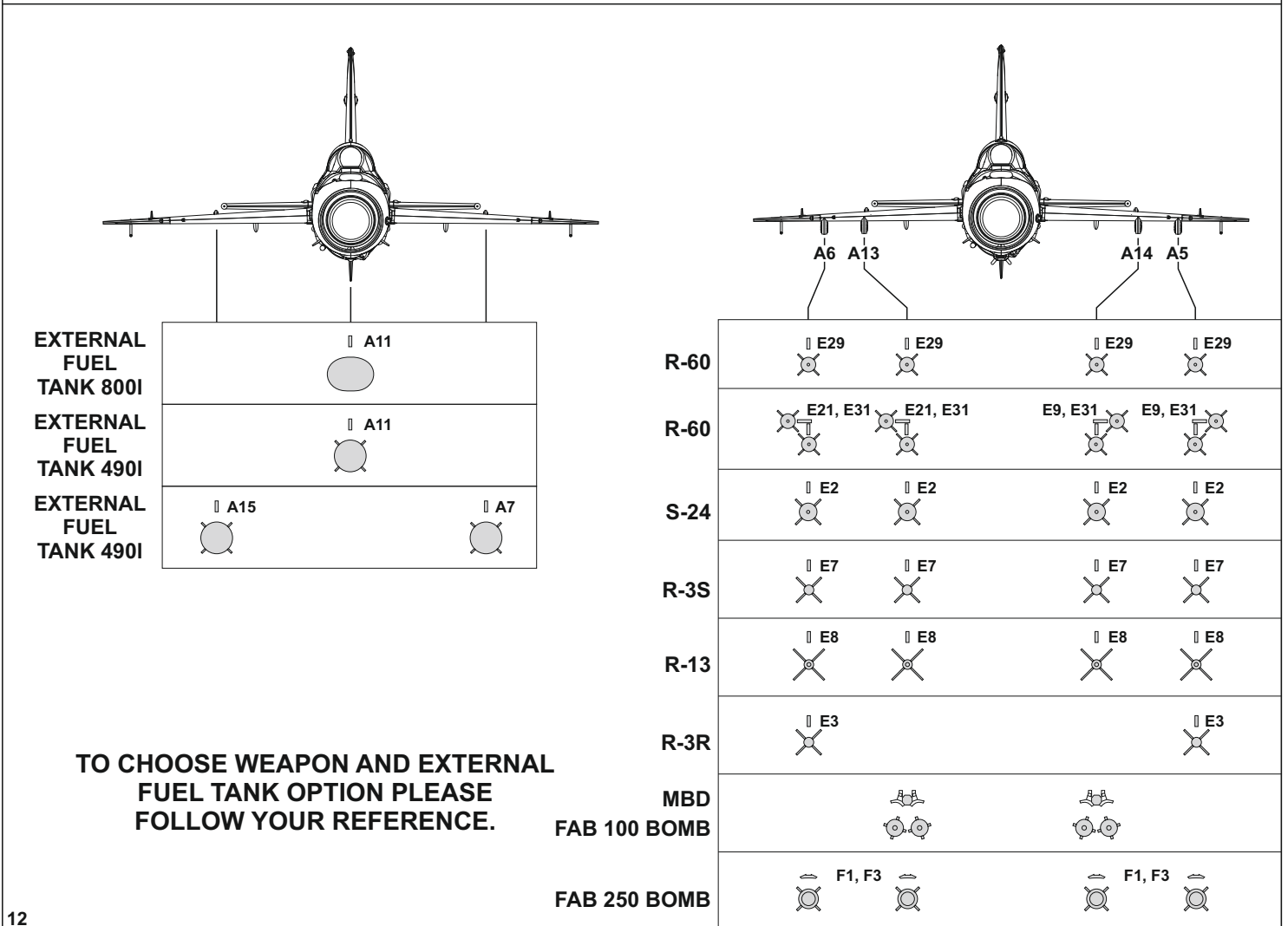
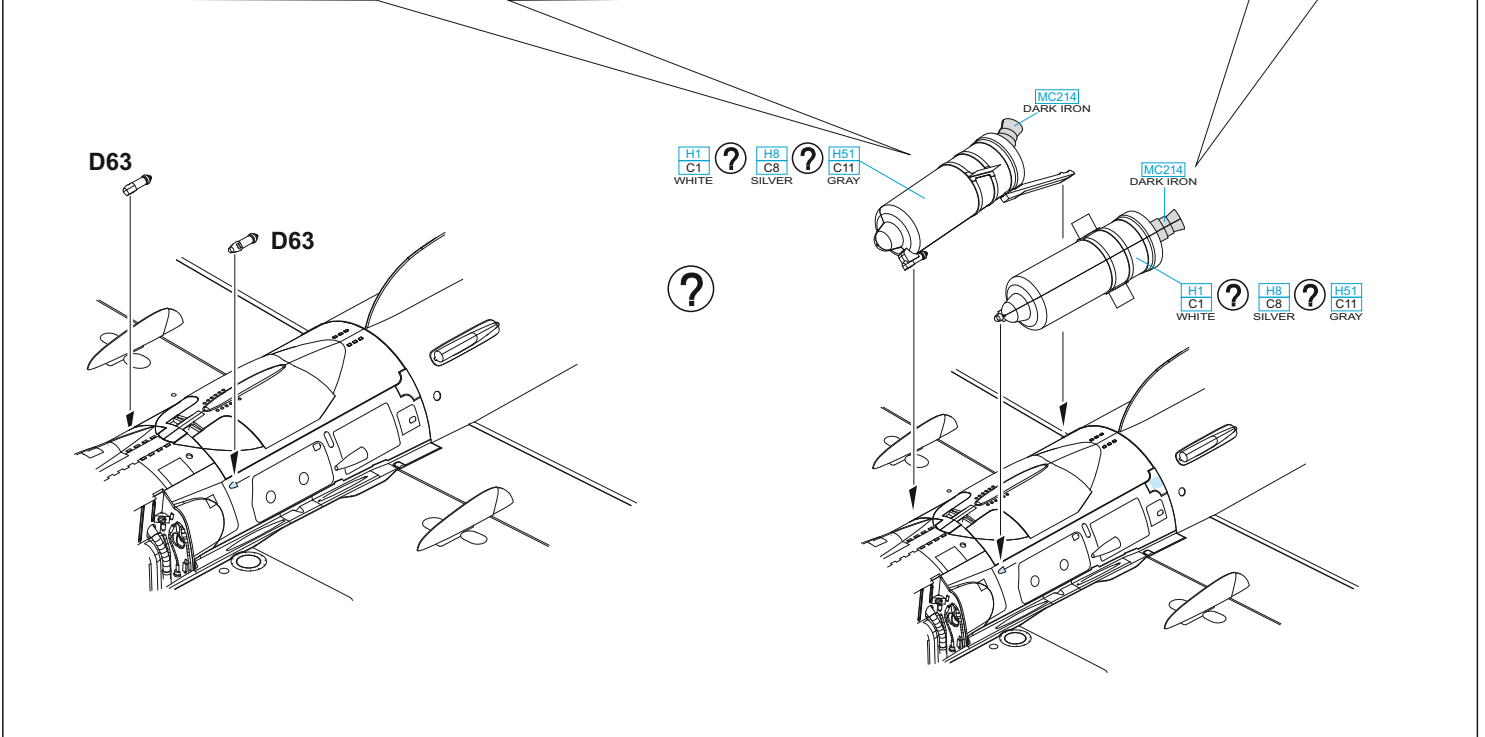
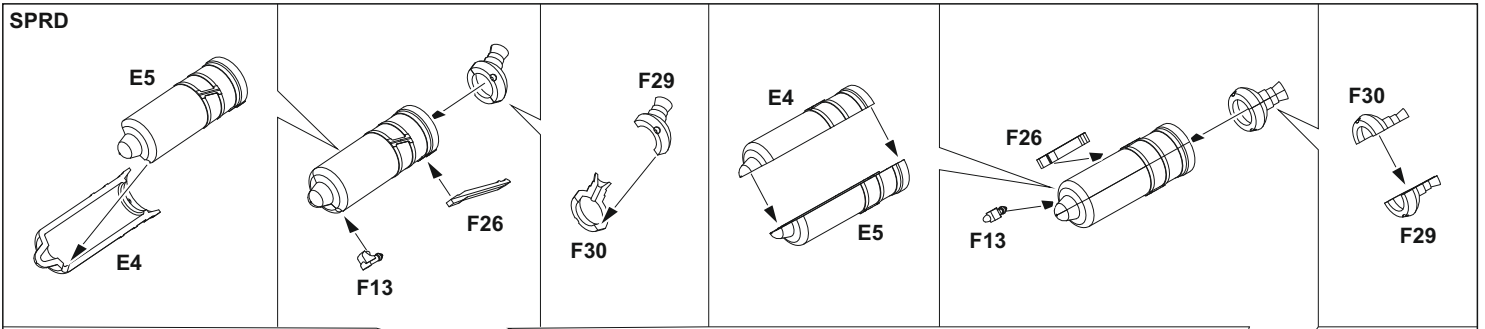


FAB 250 BOMB
2 sets



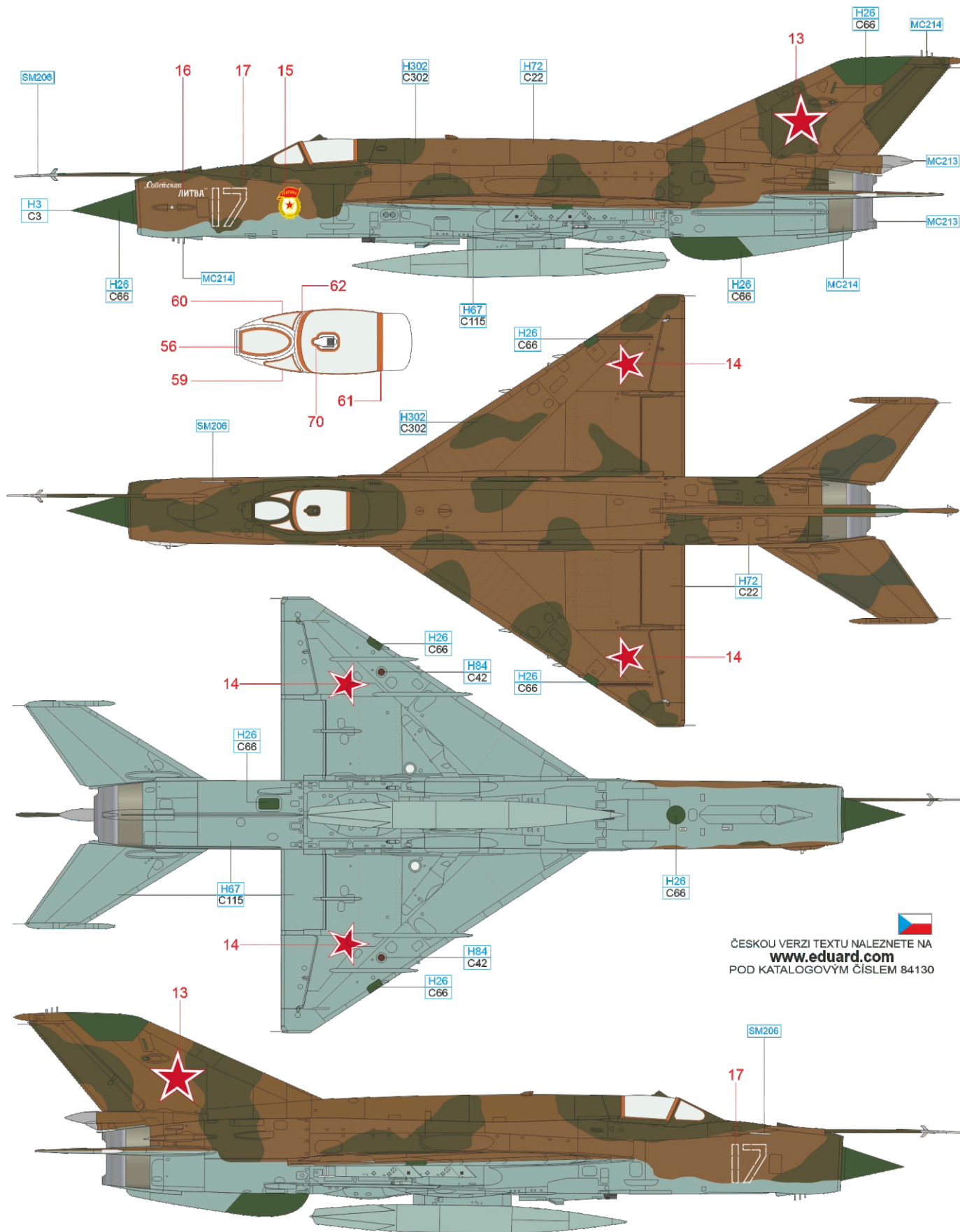
FAB 100 BOMB
8 sets





A MiG-21bis, 115th GIAP, Soviet VVS, Bagram Air Base, Afghanistan, 1980

Fighter cover duties during the Soviet invasion of Afghanistan were conducted by the 115th Guards' Regiment at the end of 1979. The unit was equipped with the MiG-21bis and was based at Kokaity in Uzbekistan, a Soviet Socialist State at the time. Three days after the invasion beginning, the 1st Squadron moved to Bagram Air Base, followed by a second Squadron on January 23, 1980. Due to the lack of any enemy fighters, the 115th GIAP became involved in ground support duties together with the 136th APIB. MiG-21bis aircraft of the 115th GIAP used in Afghanistan were painted in green and brown on the upper surfaces at the beginning of the war, with lower surfaces in a blue-grey tone.



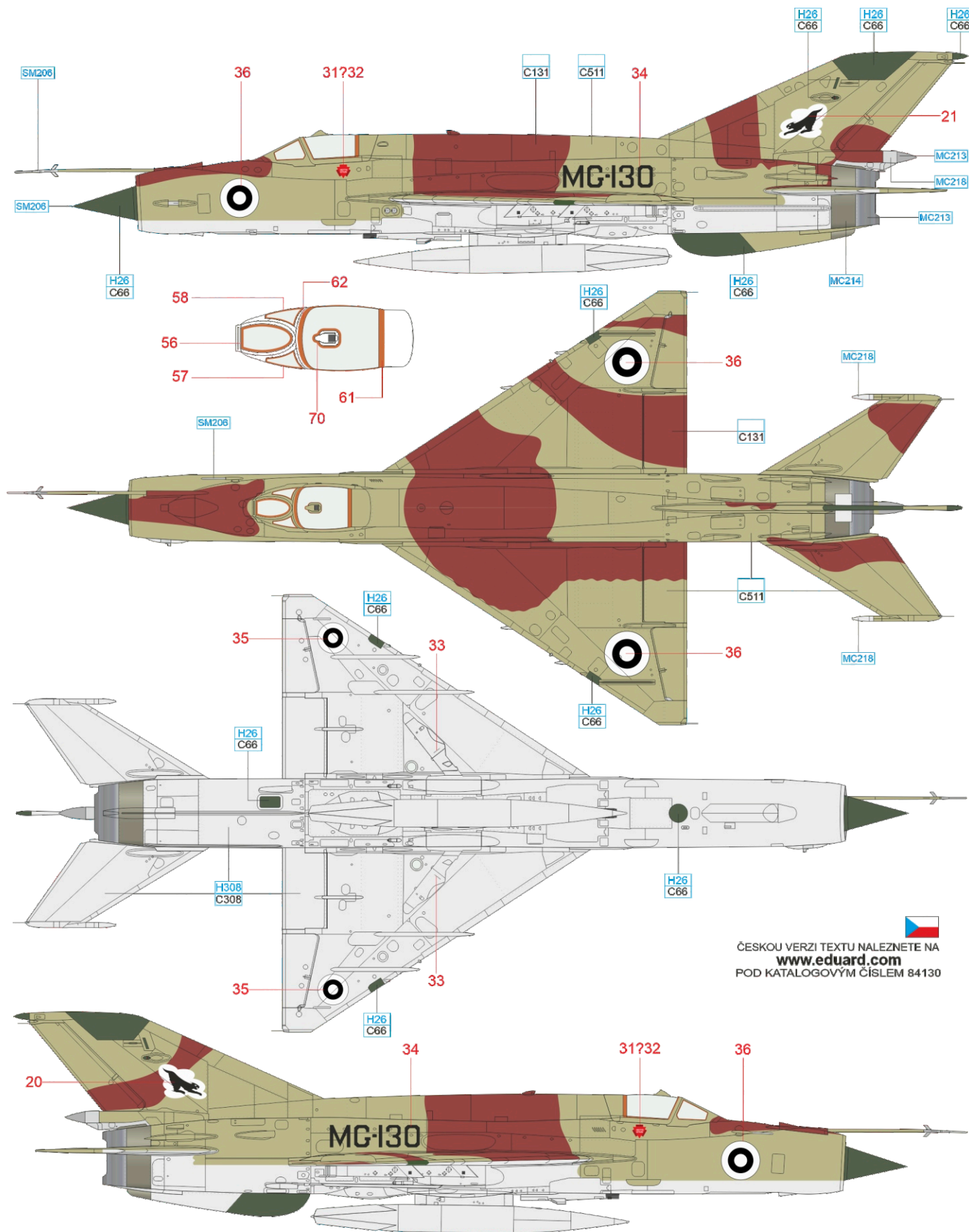
ČESKOU VERZI TEXTU NALEZNETE NA
www.eduard.com
 POD KATALOGOVÝM ČÍSLEM 84130

LIGHT BLUE	H67 C115	BRIGHT GREEN	H26 C66	DARK EARTH	H72 C22	MAHOGANY	H84 C42	GREEN	H302 C302	SUPER CHROME	SM206	DARK IRON	MC214	STEEL	MC213
------------	-------------	--------------	------------	------------	------------	----------	------------	-------	--------------	--------------	-------	-----------	-------	-------	-------



B MiG-21BIS, HävLLv 31, Suomen ilmavoimat, Kuopio-Rissala AB, Finland, 1980

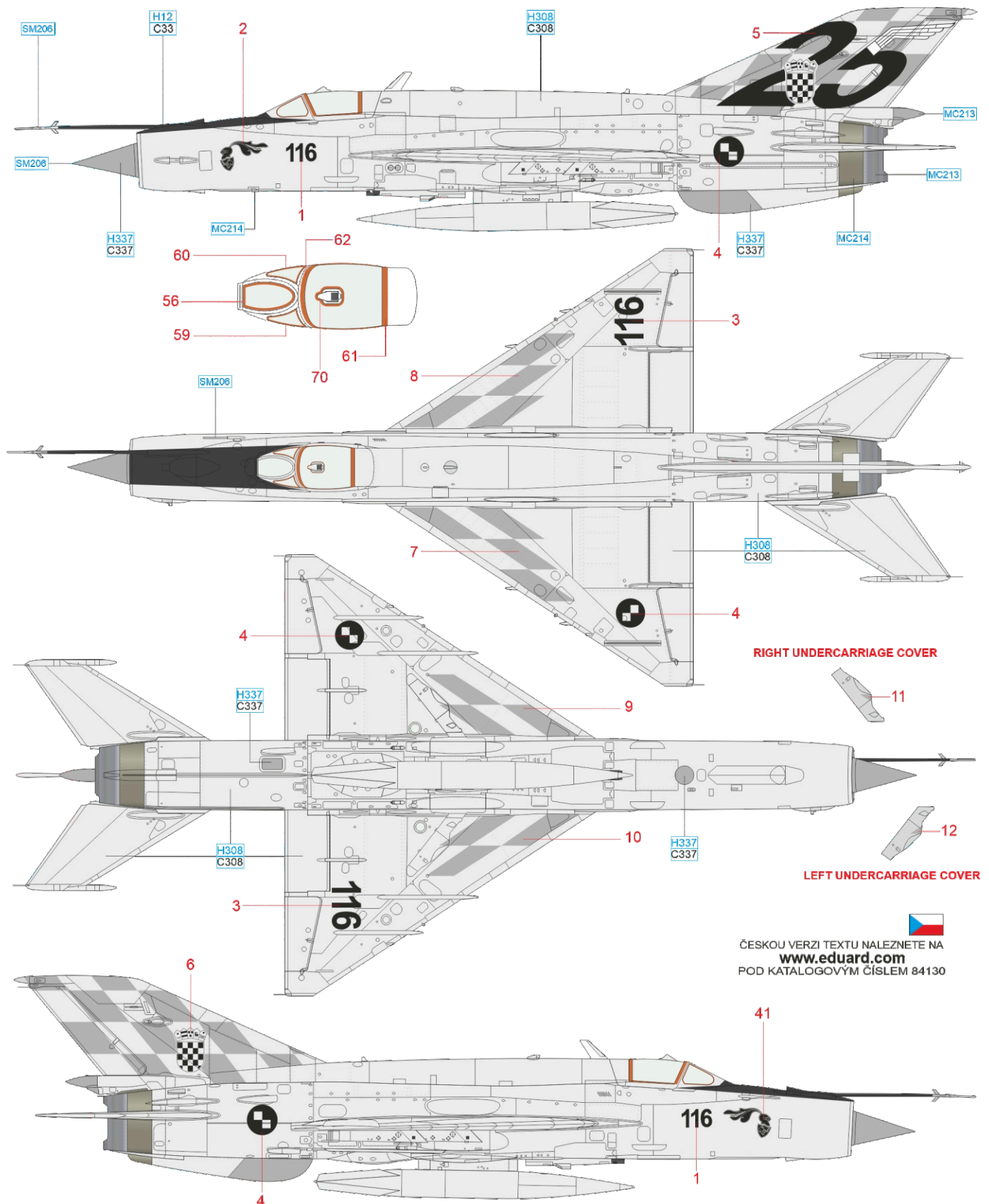
The newest version of the MiG-21, the "bis", was purchased to the tune of twenty-six pieces by the Finnish Air Force in the latter half of the seventies. The first aircraft were delivered in 1978, and at the beginning of the eighties, these aircraft began to be westernized. The process included a new instrument panel and radio equipment compatible with those of west European aircraft. The aircraft coded MG-130 was delivered to Finland on July 17th, 1980, and its westernization was conducted during 1982. It made its last flight on March 7th, 1998, and it can currently be seen on the roof terrace of the Verkkokauppa Oy Shopping Center in Helsinki. At the beginning of the eighties, MG-130 carried the camouflage scheme in which it was delivered from the Soviet Union, i.e. brown and green on the upper and side surfaces, while the lower surfaces in light grey.



ČESKOU VERZI TEXTU NALEZNETE NA
www.eduard.com
 POD KATALOGOVÝM ČÍSLEM 84130

- GRAY H308
C308
- LIGHT BROWN C131
- GREEN C511
- SUPER CHROME SM206
- DARK IRON MC214
- STEEL MC213
- ALUMINIUM MC218

The Croatian Air Force purchased forty MiG-21bis fighters and MiG-21UM trainers from Ukraine in 1995. In 2003, eight MiG-21bis aircraft were modernized to bisD standard in Romania. The modernization program included upgrade of the navigation, communication and IFF equipment. In 2014, another modernization took place involving seven Croat MiG-21bisD/UMD aircraft, along with a purchase of another five aircraft from repair facility in Odessa. The modernized aircraft received an all-grey camouflage scheme. Aircraft coded 116 received a stylized "25" on the left side of the fin to commemorate 25th anniversary of the Croatian Air Force.



ČESKOU VERZI TEXTU NALEZNETE NA
www.eduard.com
 POD KATALOGOVÝM ČÍSLEM 84130

D MiG-21bis, C2283, No.3 Squadron „Cobras“, Pathankot AB, India, early '90s

C2283 displays a unique combination of camouflage scheme and colorful ID markings. The unit personnel named their aircraft after snakes, among which "Rattler", "Mamba" and "Cobra" are known. The dorsal section of the fuselage was taken from another MiG-21bis, probably from a "Mamba". The history of No.3 Squadron goes back to October 1941, when the unit was activated in Peshawar, equipped with the Hawker Audax. During the second half of the Twentieth Century, the unit took part in every conflict that India was involved in with neighboring states. The No.3 Squadron used the MiG-21bis from July 1980 to 2002, when it was re-equipped with the modernized MiG-21 "Bison".

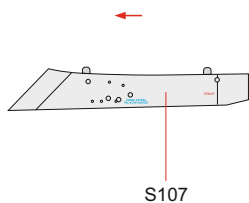


ČESKOU VERZI TEXTU NALEZNETE NA
www.eduard.com
 POD KATALOGOVÝM ČÍSLEM 84130

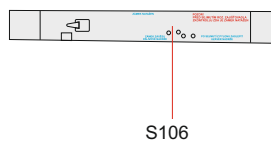
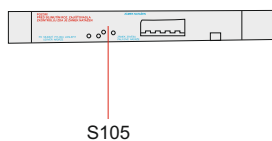
- | | | | | | |
|-------|--------------|------------|--------------|--------------|--------------|
| STEEL | MC213 | DARK IRON | MC214 | SUPER CHROME | SM206 |
| GREEN | H312
C312 | OLIVE DRAB | H304
C304 | GREEN | H309
C309 |
| | | GRAY | H337
C337 | SANDY BROWN | H66
C119 |
| | | | | GREEN | H26
C66 |
| | | | | BLACK | H12
C33 |

SN - SERIAL NUMBER
 SMALL FOR AIRFRAME
 MEDIUM FOR PYLONS
 LARGE FOR ROCKET LAUNCHERS

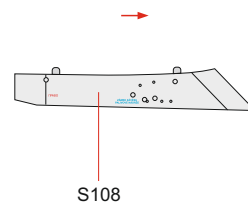
LEFT OUTSIDE
 UNDERWING TANK PYLON



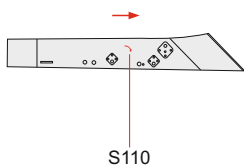
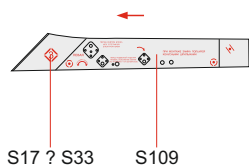
FUSELAGE PYLON



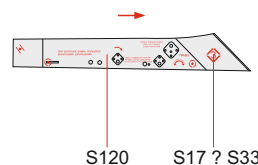
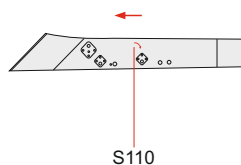
RIGHT OUTSIDE
 UNDERWING TANK PYLON



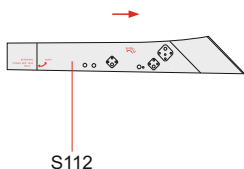
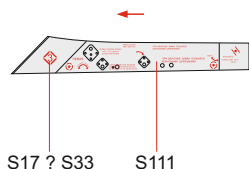
LEFT OUTSIDE PYLON



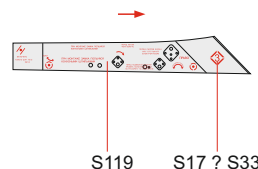
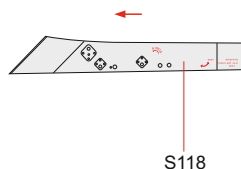
RIGHT OUTSIDE PYLON



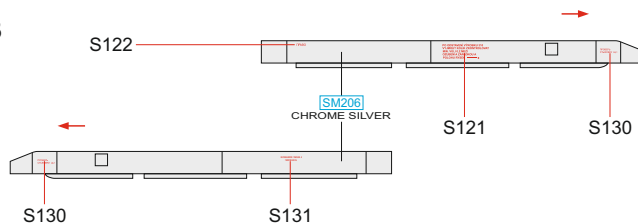
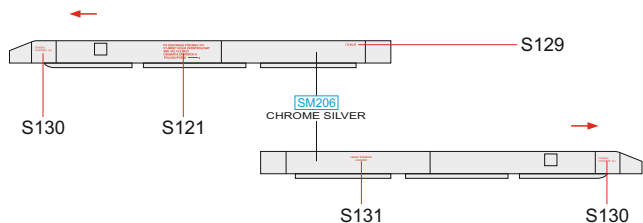
LEFT INSIDE PYLON



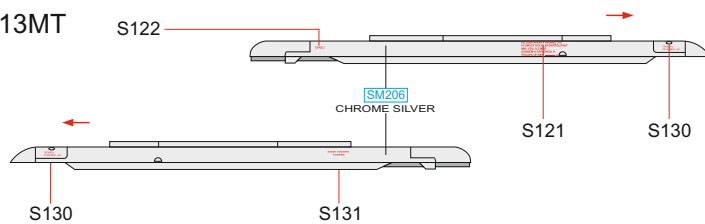
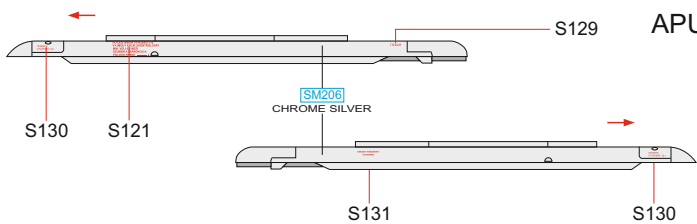
RIGHT INSIDE PYLON



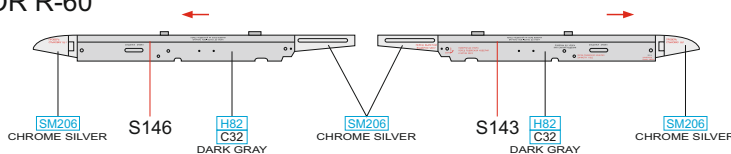
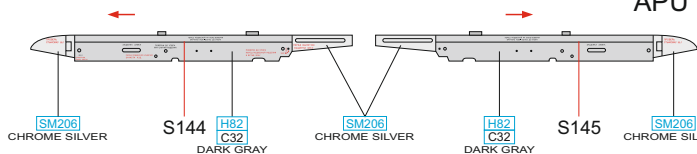
APU-13



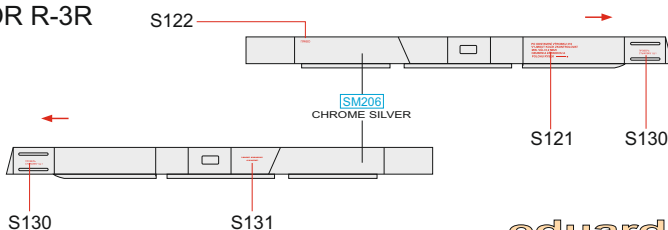
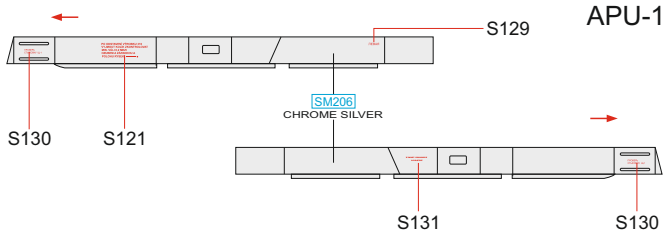
APU-13MT

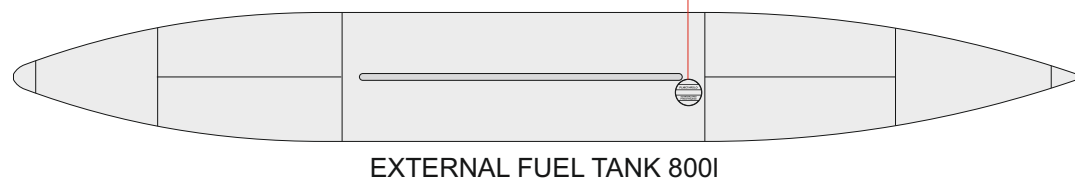
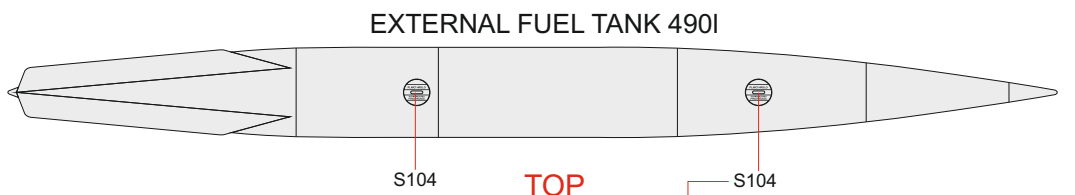
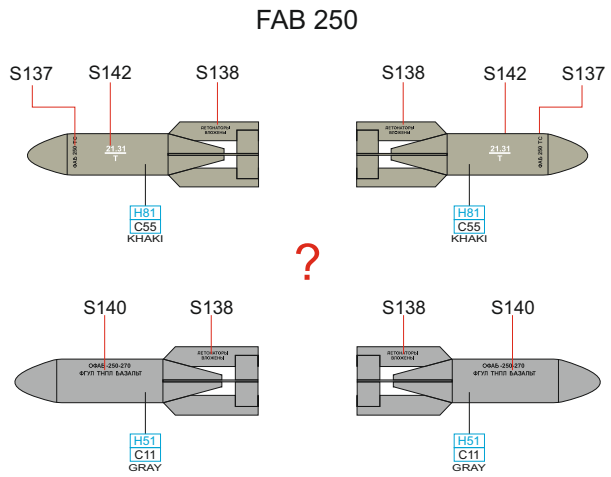
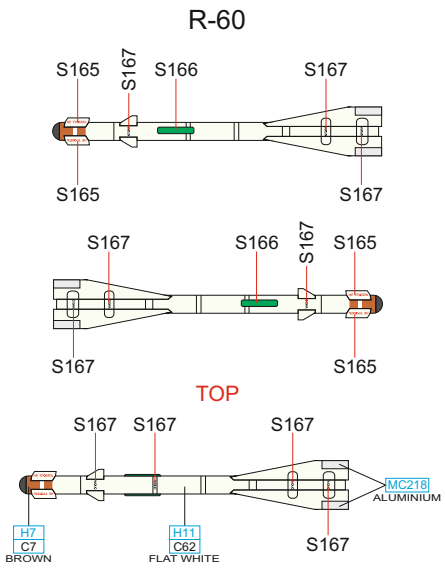
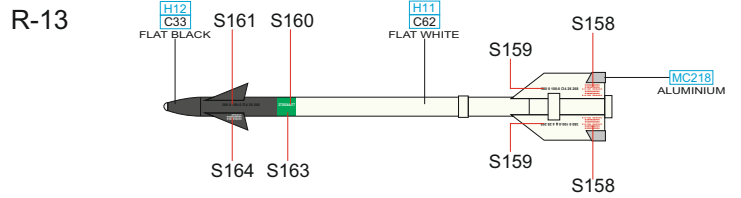
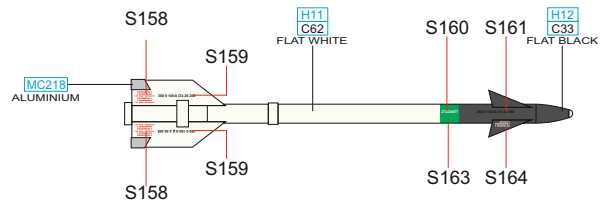
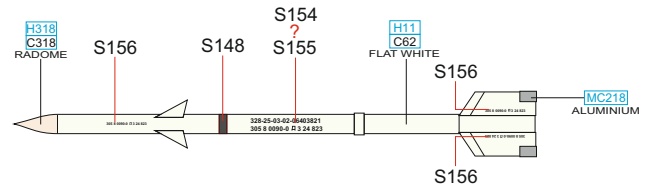
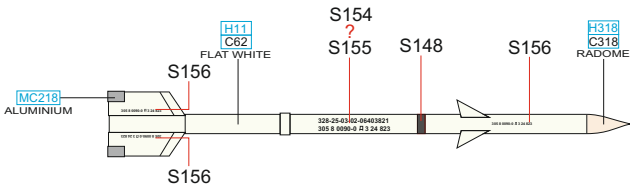
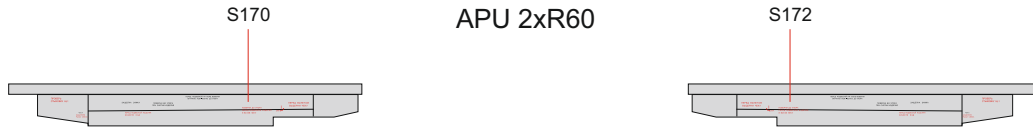
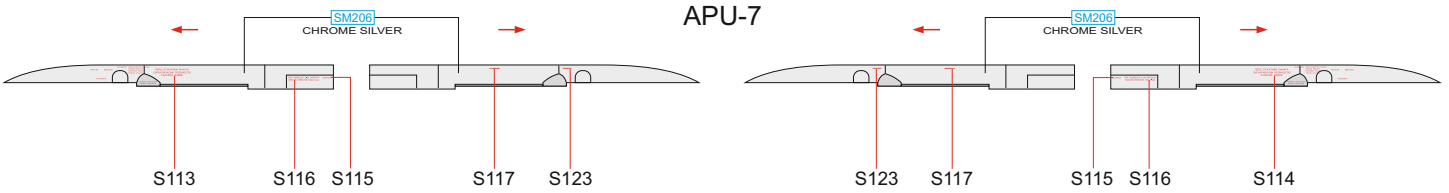


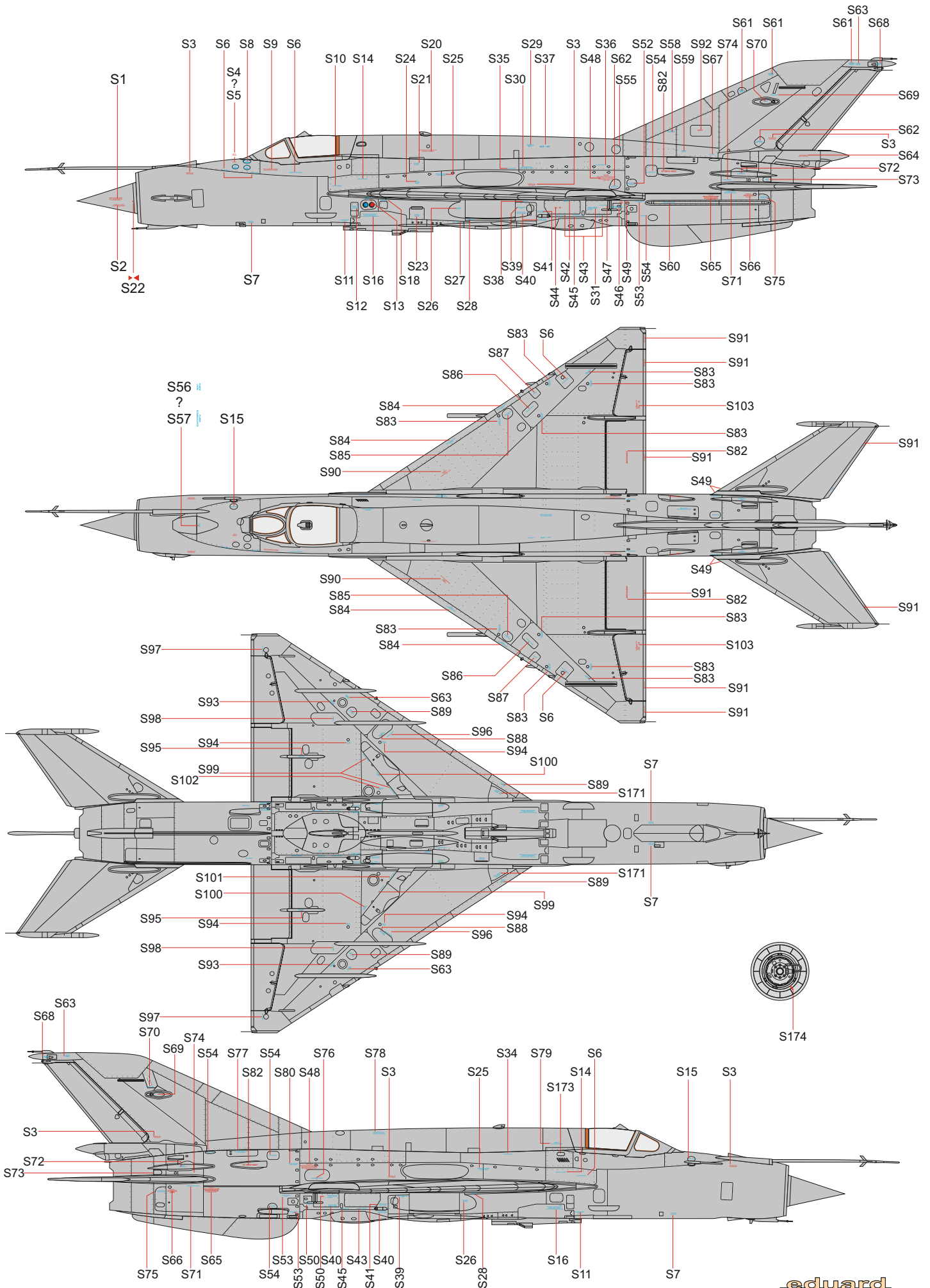
APU FOR R-60



APU-13 FOR R-3R







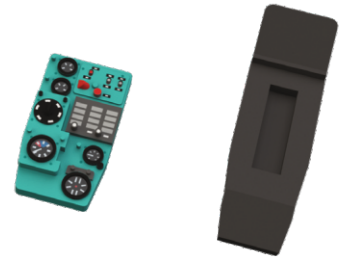
Eduard goodies for

MiG-21bis 1/48

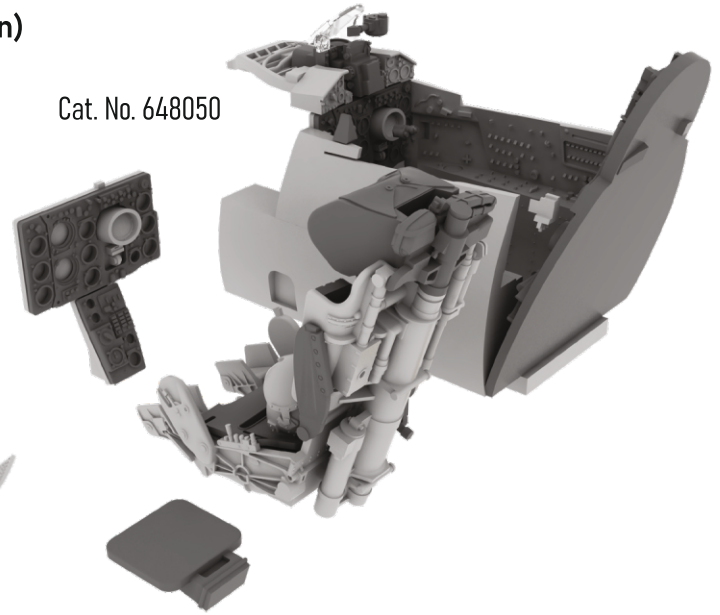
- 48994 MiG-21 surface panels (PE-Set)
- 481103 MiG-21bis exterior (PE-Set)
- FE1149 MiG-21bis Weekend (PE-Set)
- 644033 MiG-21bis LööK (Brassin)
- 648025 Rocket launcher UB-16 and UB-32 (Brassin)
- 648026 MiG-21 wheels (Brassin)
- 648030 MiG-21 seat late (Brassin)
- 648049 MiG-21 wheel wells (Brassin)
- 648050 MiG-21BIS interior (Brassin)
- 648051 MiG-21BIS exhaust nozzle (Brassin)
- 648064 MiG-21 late airbrakes (Brassin)
- 648080 MiG-21 undercarriage legs BRONZE (Brassin)
- 648082 R-60 / AA-8 Aphid (Brassin)
- 648125 R-3S / AA-2 Atoll-A (Brassin)
- 648126 OFAB-100 Soviet bombs (Brassin)
- 648127 OFAB-250 Soviet bombs (Brassin)
- 648173 UB-16 rocket launcher (2 pcs) (Brassin)
- 648490 MiG-21 F.O.D (Brassin)
- 3DL48026 MiG-21bis SPACE (3D Decal set)
- EX751 MiG-21bis Weekend (Mask)



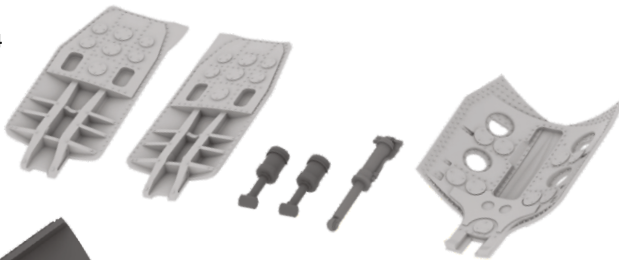
Cat. No. 644033



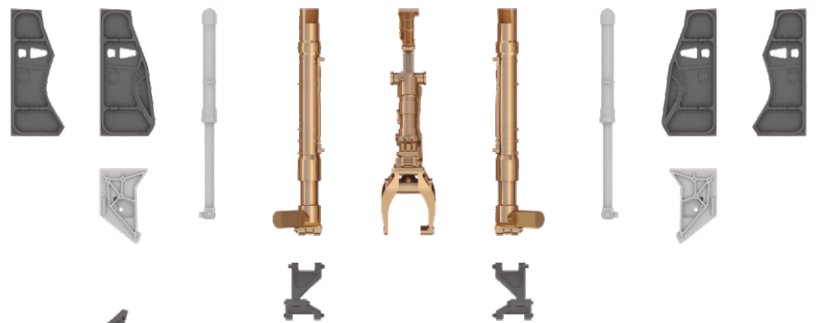
Cat. No. 648050



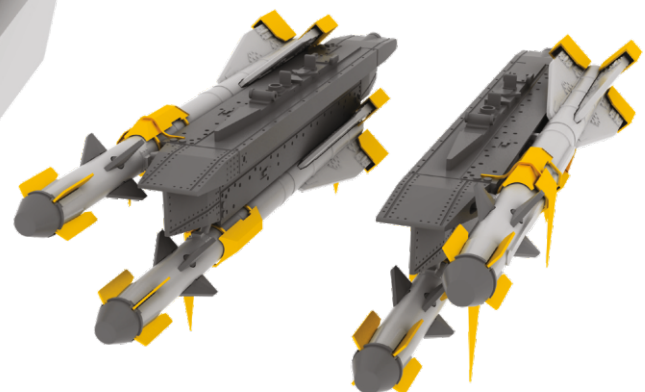
Cat. No. 648064



Cat. No. 648080



Cat. No. 648082



Cat. No. 648049

