

SMB2 Super Mystère / IAI Sa'ar Duo Pack with Book



(EN)

Instructions / Návod

The French Dassault Super Mystere B2 was the first Western European, mass production-built jet fighter to achieve supersonic speed in a level flight. The type was a follow-on development of Dassault's earlier successful jet fighter airplanes such as the Ouragan or Mystere IV and a number of test prototypes too. The first prototype Super Mystere, designated the SMB1 first flew on 2 March 1955. In spite of the plane possessing rather superb performance, the French Air Force refused to use the type – as the production SMB1s were to be powered by a French licence copy of the British R&R Avon RA-21 turbojet and it was feared that it would take far too much time to introduce the licence production in France. Dassault, however, had already had another ace up their sleeve – this being a project of a truly French version of the Super Mystere powered by an Atar 101G-1 turbojet with a reheat. The first prototype of this plane, known as the SMB2 01 was taken aloft for the first time by Dassault's factory pilot Gérard Muselli. The new type's behaviour and characteristics were tested using five airframes, but the production had already been ordered, in actual fact yet before the prototype first flew. The first production airframe, out of the total of 180 built, first flew on 26 February 1957, with the production machines being allocated to No.10, 12 and 5 escadrons of the Armée de l'Air, they also served with test centres CEV and CEAM and in flying schools. Later machines were fitted with more powerful Atar 101G-2 or G-3 engines. The type was on strength of combat squadrons until 1977 when the last remaining SMB2s of No.12 Escadron were replaced by more modern Mirage III jets. The service of SMB2s with the French military was quite uneventful, the only exception to the dull military routine were the occasional air force exercises which took place in NATO countries or in Africa and also the Operation Air Bull in Thailand.

The most important operator of the type outside of France, the Israel Air Force saw much more interesting flying and combat career of the type – their SMB2s took part in a series of clashes, conflicts and wars between Israel and its Arab neighbours. These wars are known as the War over Water, Six Day War, Yom Kippur War and also the rather lengthy conflict between these „regular“ wars, the Attrition War. The State of Israel had placed the order for the SMB2 fighters already in 1956, this being confirmed only two years later, in 1958. The SMB2, locally known as the Sambad, were delivered in two batches of 24 and 12 airframes. Seven more of them were delivered later to make up for losses suffered during the service. Soon after the Sambads had been delivered, Israel acquired also the excellent Mirage IIIC jets which became its major front line fighter aircraft, so the Sambads were deployed just to one Tayeset, or Squadron (the 105th) and flew mainly in the fighter-bomber role. Sambads excelled in the amount of external stores and armament they were able to carry and deliver to the target, but once this lethal cargo dropped, they were also perfectly capable of performing the fighter role. They were particularly dangerous opponents at low levels where they could easily tackle even a generation-younger MiG-21 jets. The Israeli Sambads have six aerial victories under their belt, including a pair of MiG-21s, a Mi-6 helicopter, large number of aircraft and military vehicles destroyed on the ground and also two Egyptian torpedo boats. While in France the further development of the SMB2 was ceased in favour of more modern Mirage III aircraft (except for two prototypes of more powerful SMB4 version equipped with the Atar 9 engine), the operational life of Israeli airframes was made substantially longer by the installation of a new engine. Owing to the trouble with spare parts caused by the French arms embargo, the Israeli Aircraft Industries (IAI) proposed to fit the already rather worn out airframes with the US-built J52 turbofan. Even though these powerplants lacked the reheat, they were 25% lighter, had lower fuel consumption and offered thrust almost comparable to their French counterparts (Atar 9,900lb, J52 9,300lb). As the new unit weighed less, it had to be mounted further back in the rear fuselage and as the nozzle was also already longer, it resulted in much longer jet pipe of the new machines compared to the standard Sambad. In the end, this change proved to help the type's survivability after being hit by enemy's IR-guided anti-aircraft missiles – the missiles homed usually on the hot exhaust nozzle and when exploded, the war head fragments did not hit the tail control surfaces as lethally as was the case with the standard, short tailed Sambad type. The performance remained almost the same, except for acceleration and initial rate of climb. What is more, the type could carry much more underwing stores, had much larger range and could operate in the combat area much longer. In total, 26 airframes were re-engined and they were known in the IAF as the Sa'ar, or Storm in Hebrew. In a short time, they got the opportunity to show their capabilities in the 1973 Yom Kippur War and excelled in the ground attack role. In 1975, the 105th Tayeset received their new F-4 Phantom II jets and the already obsolete Sa'ars finally retired. Two of them were put on display at the IAF museum, the remaining 18 airframes were overhauled, fitted with a new hot seat and eventually sold to Honduras where they were the backbone of the country's air defence and flew well until the 1990s when being replaced by the F-5 Tiger jets. The Honduran Sa'ar can boast themselves with downing several aircraft of drug cartels and a Nicaraguan Mi25 helicopter.

Wingspan: 10.51 m, length: 14.13 m, top speed at sea level / at 12,000 m: 1.038 kmh / 1.189 kmh (1.12 Mach), range with external tanks: 1,790 km, ceiling: 16,667 m.

(CZ)

SMB-2 Super Mystere byl prvním velkosériově vyráběným západoevropským letounem, který překonal rychlosť zvuku ve vodorovném letu. Firma Dassault při jeho vývoji navázala na své předchozí sériově vyráběné stíhačky typu Ouragan a Mystere IVB a množství pokusných prototypů. První prototyp Super Mystere s označením SMB-1 vzletěl 2. března 1955. Francouzské letectvo jej, přes vysoké výkony do výzbroje nepřijalo. Poháněj je totiž anglický motor R&R Avon RA-21. Rozběh licenční výroby tohoto motoru by trval dluho. Dassault ale měl připraven návrh verze s francouzským motorem Atar 101G-1 s přídavným spalováním. 15.5. 1956 vzletěl poprvé prototyp SMB-2 01, pilotovaný továrním pilotem G. Musellim. Vlastnosti nového letounu byly testovány na pěti prototypech. Sériová výroba byla objednána ještě před vzletem prototypu. První sériový letoun, ze 180 vyrobených, byl zalétán 26.2. 1957. Nové letouny byly postupně zařazeny k třem escadrám Armée de l'Air, číslo 10, 12 a 5, létaly také u testovacích středišek CEV a CEAM a v leteckých školách. Později vyrobené kusy SMB-2 dostávaly výkonnější motor Atar 101G-2 nebo G-3. U bojových escader létaly Super Mystery až do roku 1977, kdy byly vyřazeny poslední SMB-2 escadry 12 a nahrazeny stroji Mirage III. Služba SMB-2 Armée de l'Air byla relativně poklidná, speštěná cvičeními ve státech NATO, v Africe a účasti na operaci Air Bull v Thajsku.

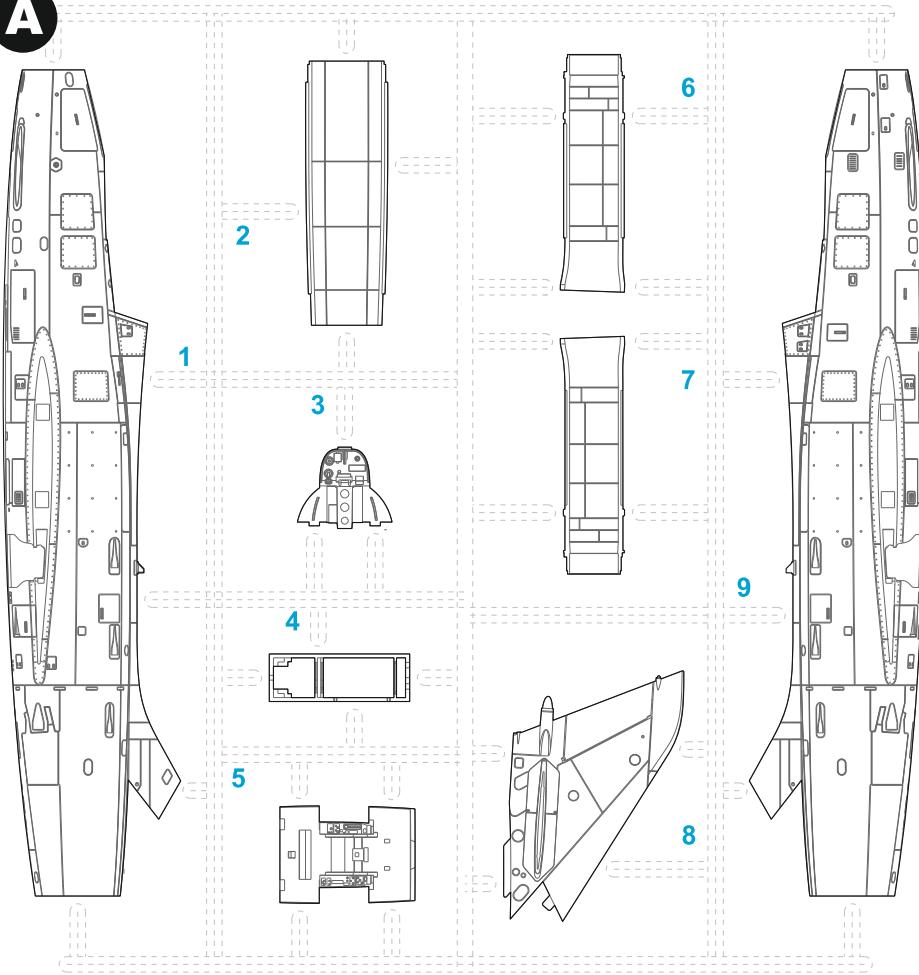
U druhého uživatele, izraelského letectva, to bylo přesně naopak. Služba SMB-2 v IAF byla speštěna účastí v sérii konfliktů s arabskými sousedy Izraele, pojmenovaných Válka o vodu, Šestidenní válce, válce Jom-Kippur a vlekým konfliktem mezi těmito válkami, tzv. opořebovací válkou. Izrael objednal SMB-2 již v roce 1956, v roce 1958 byla objednávka potvrzena. SMB-2, v Izraeli pojmenované Sambad, byly dodány ve dvou dodávkách, po 24 a 12 kusech. Později bylo dodáno ještě sedm kusů jako náhrada ztrát. Brzy po Sambadech byly do Izraele dodány vynikající Mirage IIIC, které se staly hlavními prvoliniovými stíhačkami. Sambady byly proto přiděleny jen jedné jednotce 105. tajeset a byly používány hlavně jako stíhači bombardéry. Vynikající nosnost podvěšené výzbroje. Ale po jejím odhození se stávaly plnohodnotnými stíhačkami. Byly, zejména v malých výškách, nebezpečné i generaci mladších Migů 21. Na kontě Sambadů je šest sestřelů, včetně dvou Migů 21 a vrtulníku Mi-6, množství letecké a pozemní techniky zničené na zemi a také dvě egyptské torpédrovky.

Zatímco ve Francii byl vývoj Super Mystere mimo dvou prototypů výkonější verze SMB-4 s motorem Atar 9 zastaven ve prospěch modernějších Mirage III, v Izraeli se část letounů dočkala přestavby na nový motor. Pro potíže s dodávkami náhradních motorů Atar zabudovala firma IAI do všech zbyvajících SMB-2 americké motory J-52. Ty sice neměly přídavné spalování, ale byly lehké a měly o 25% vyšší výkona při nižší spotřebě paliva. Motory J-52 měly proti Ataru delší trysku. Díky tomu byl prodloužen trup za ocasními plochami. To zvýšilo pasivní tepelnou ochranu letounu. Výkony letounu, až na akceleraci a počáteční stoupavost zůstaly prakticky stejné. Zvětšila se ale nosnost výzbroje, dolet a výdrž v bojové oblasti. Celkem bylo přestavěno 26 kusů. Ty dostaly nové jméno Sa'ar. Velmi brzy se zapojili do války Jom-Kippur, hlavní útoky proti pozemním cílům. V roce 1973 přešla 105. tajeset na nové F-4 Phantom a Sa'ary byly vyřazeny. Dva kusy zůstaly v Izraeli jako muzejní, zbylých 18 kusů koupil Honduras. Před dodáním prošly Sa'ary generální opravou, při které byla do letounů zabudována modernější vystřelovací sedačka. Honduras používal Sa'ary až do devadesátých let minulého století. Dopřichodu F-5 Tiger představovaly páteř protivzdušné obrany. Na kontě honduraských Sa'arů je několik sestřelů drogových mafíí a také nikaragujský vrtulník Mi 25.

rozpětí: 10,51 m, délka: 14,13 m, max. rychlosť u hladiny moře/ve výši 12000 m: 1038 km / 1189 km (1,12 Mach), dolet s přídavnými nádržemi: 1790 km, dostup: 16 667 m.

PLASTIC PARTS

A

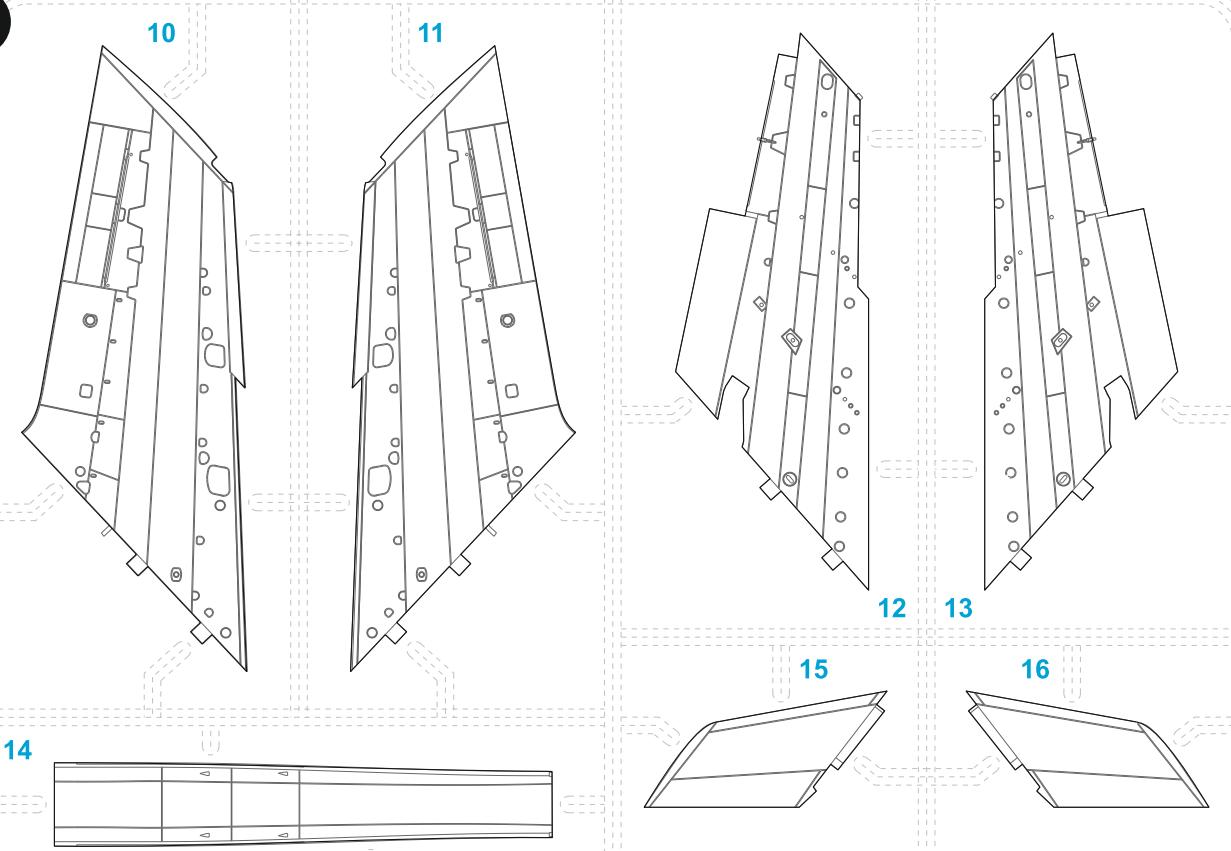


Barvy GUNZE/ GUNZE Colour No.

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|----------|--------------------------------|-------------|
| A | Černá / Black | H12/C33 |
| B | Bilá / White | H11/C62 |
| C | Hliníková / Aluminium | H/C8 |
| D | Matná hliníková / Dull Alumin. | H8+11/C8+62 |
| E | Opálený kov / Burnt Iron | H76/C61 |
| F | Chromová / Chrome Silver | MC211 |
| G | Žlutá / Yellow | H/C4 |
| H | Krémově žlutá / Cream Yellow | H34 |
| I | Červená / Red | H/C3 |
| J | Červená čirá / Clear Red | H90/C47 |
| K | Zelená čirá / Clear Green | H94/C138 |
| L | Barva pneu / Tire Black | H77/C137 |
| M | Letecká šedá / Aircraft Gray | H57/C73 |
| N | Světle hnědá / Tan | H51/C44 |
| O | Olivová / Olive Drab | H52/C12 |
| P | Tm. modrošedá / Dk. Blue Grey | H/C326 |

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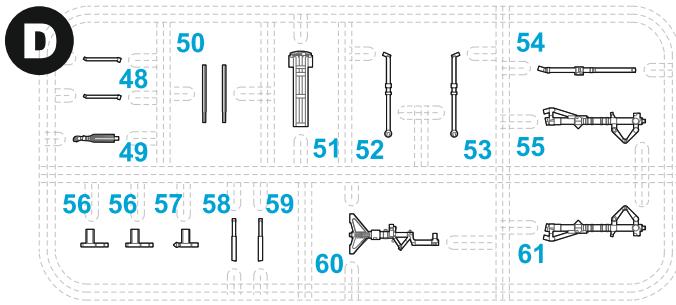
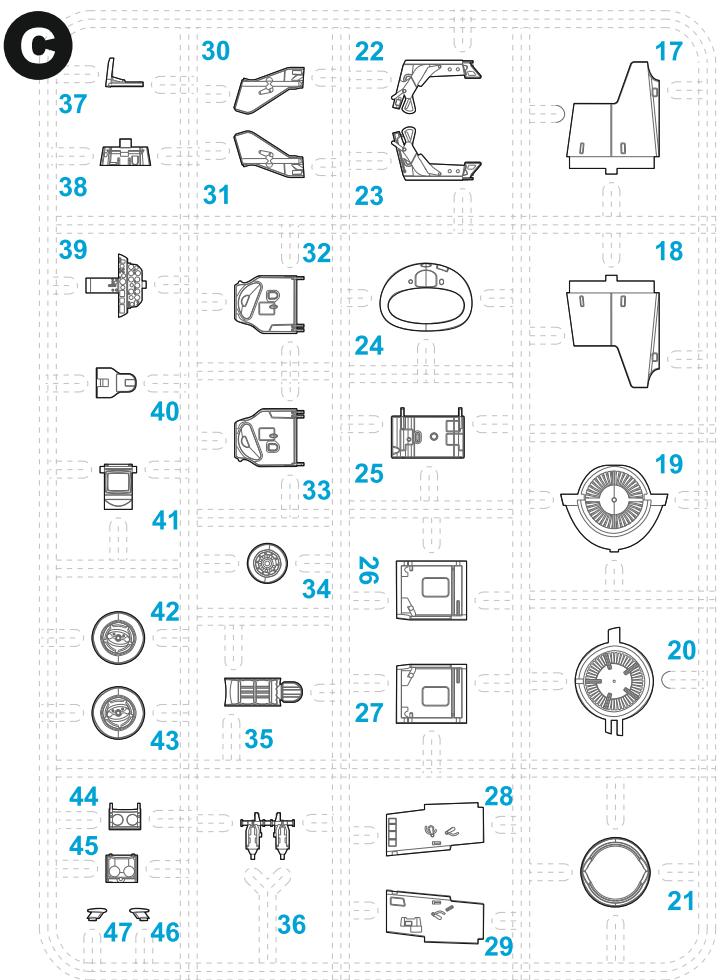
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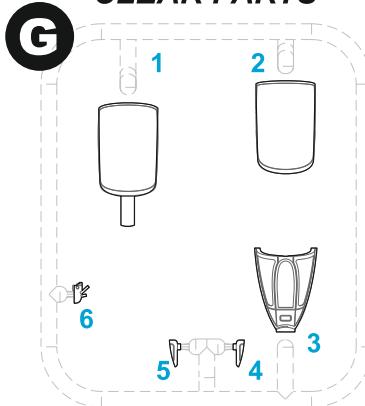
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SH72417A SMB2 Super Mystère / IAI Sa'ar

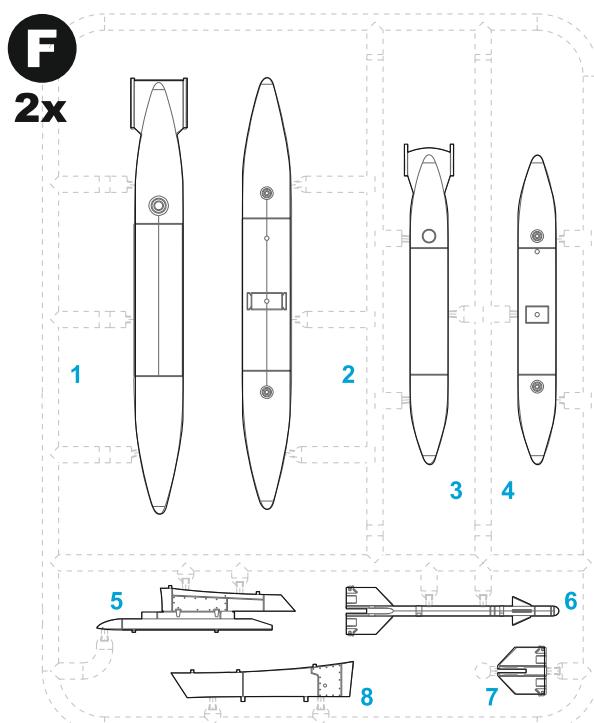
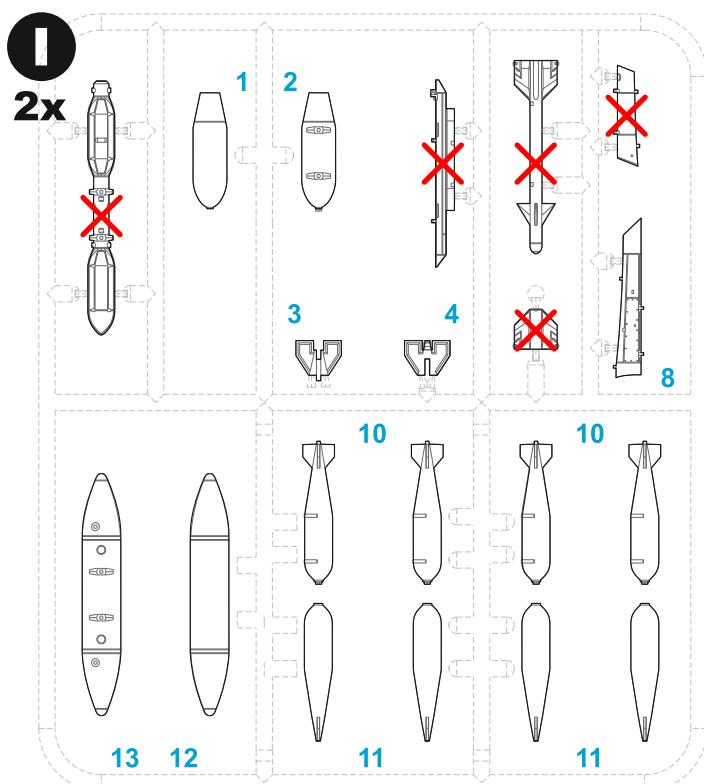
PLASTIC PARTS



CLEAR PARTS

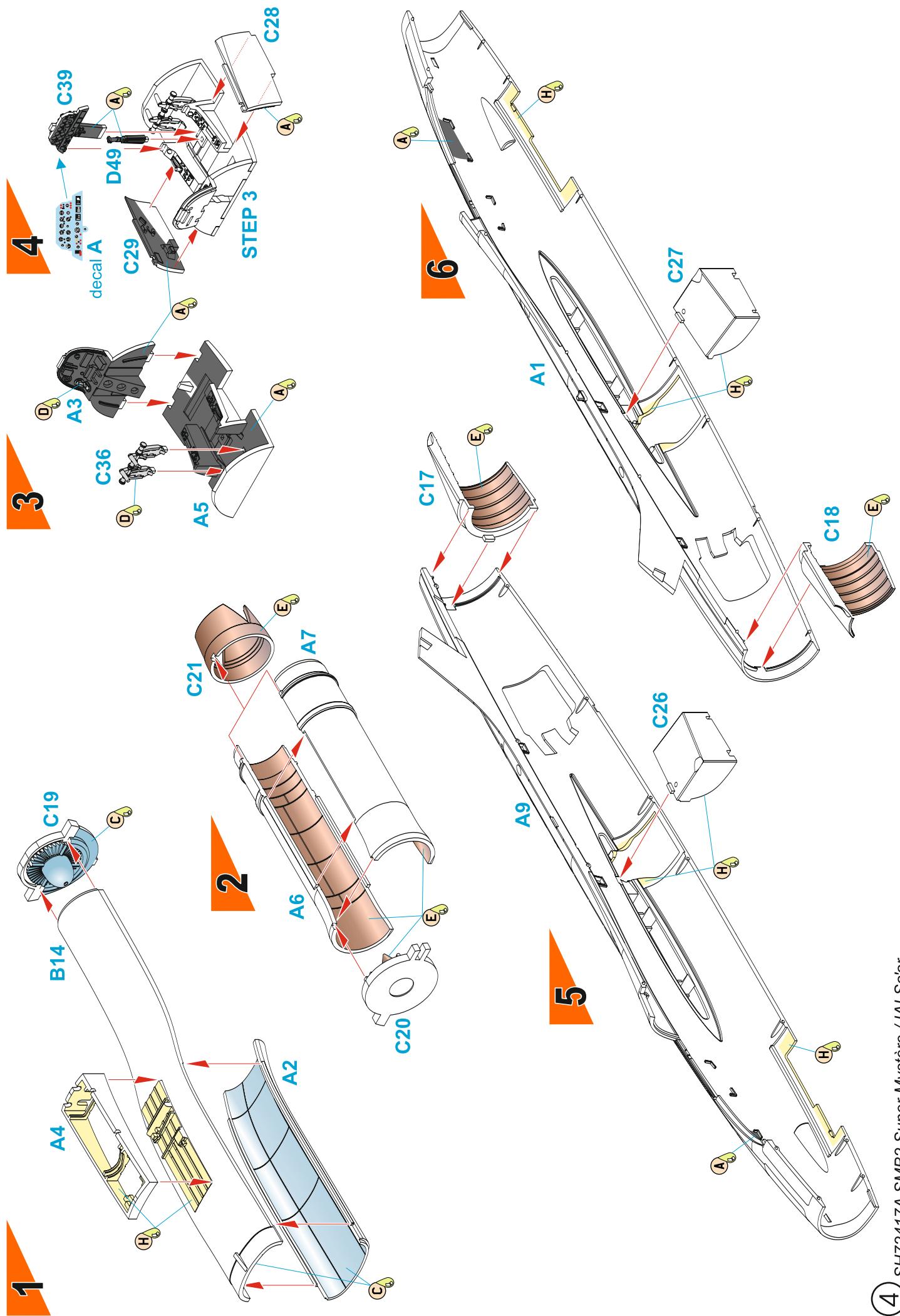


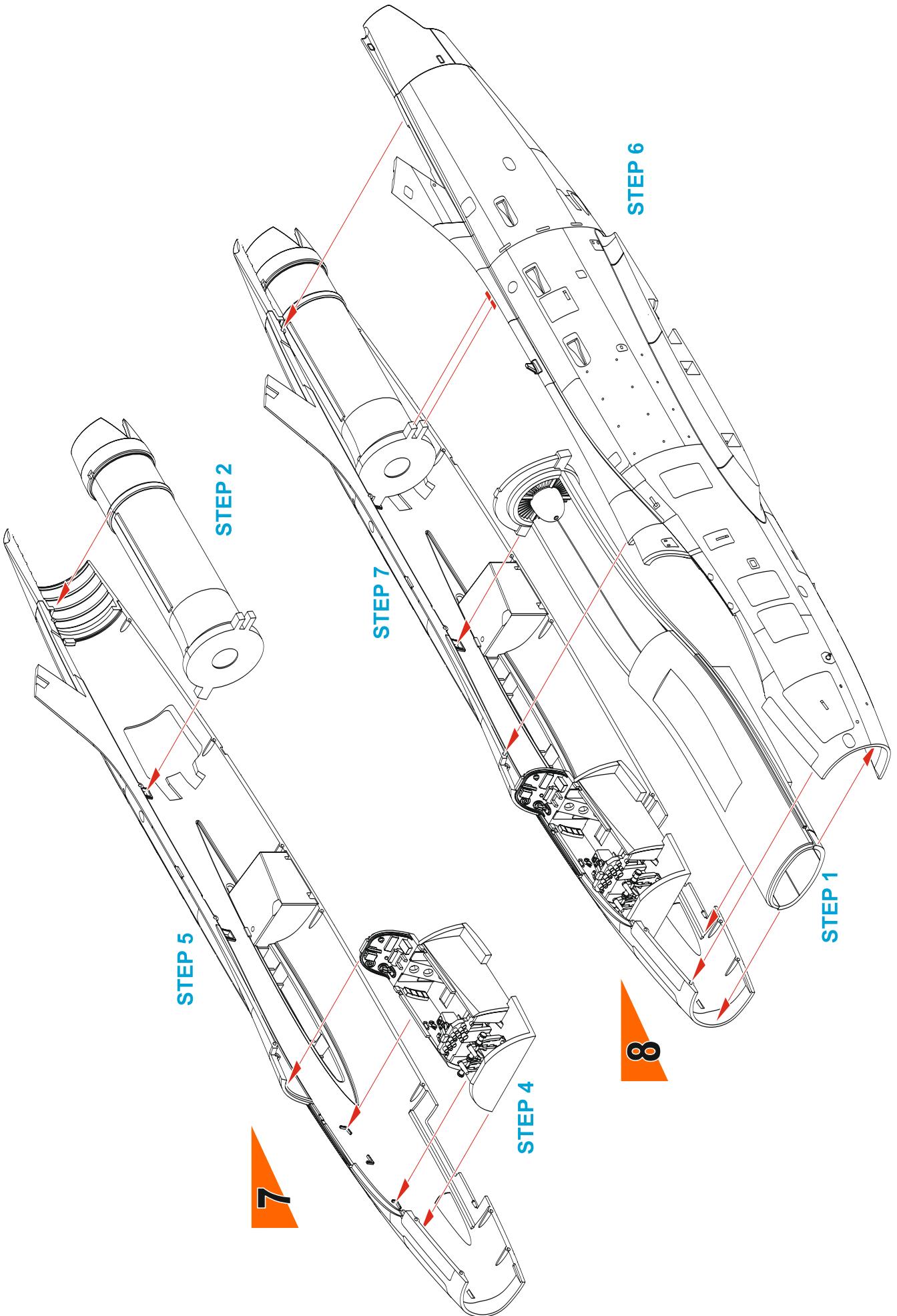
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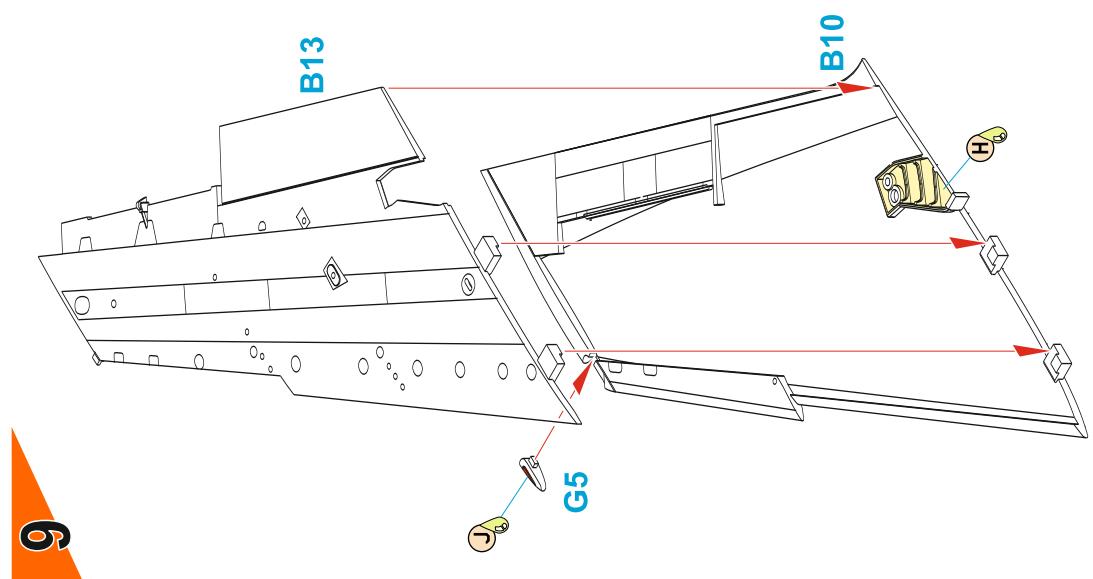
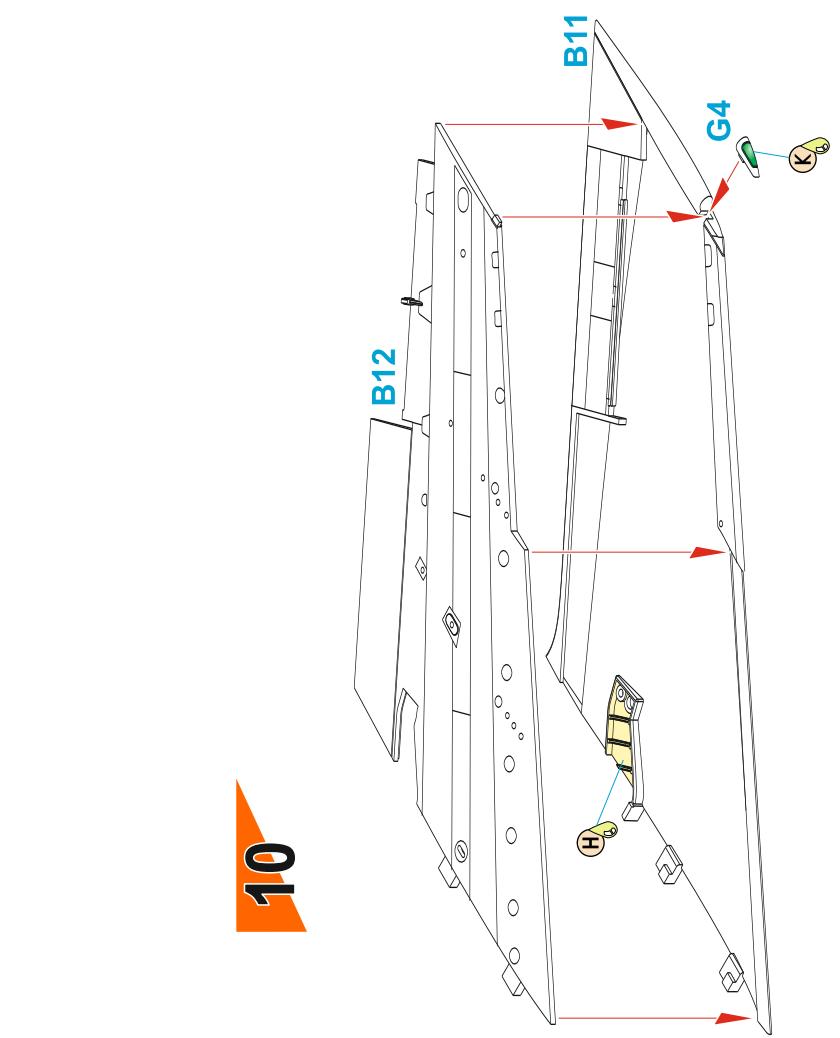


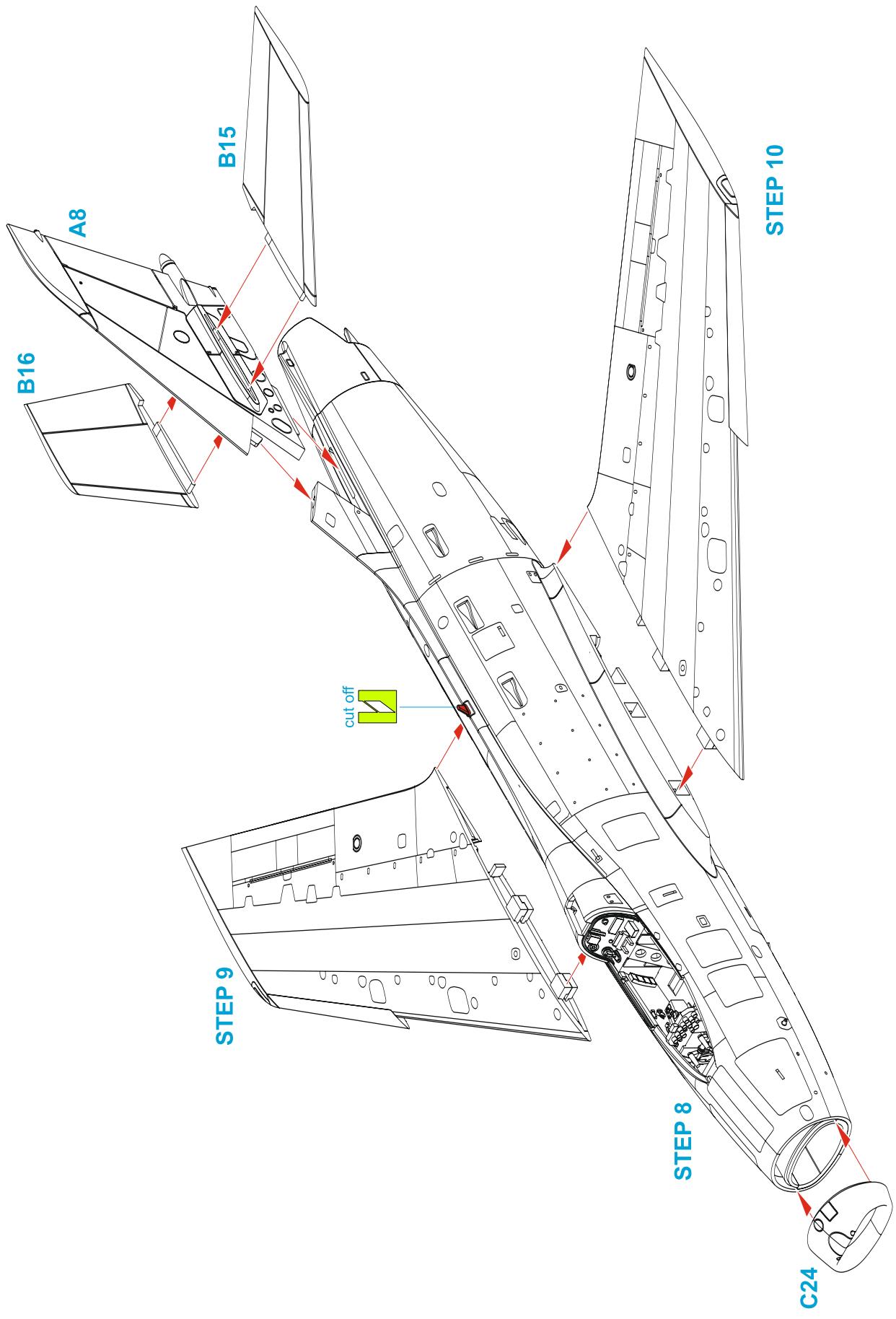
SYMBOLS

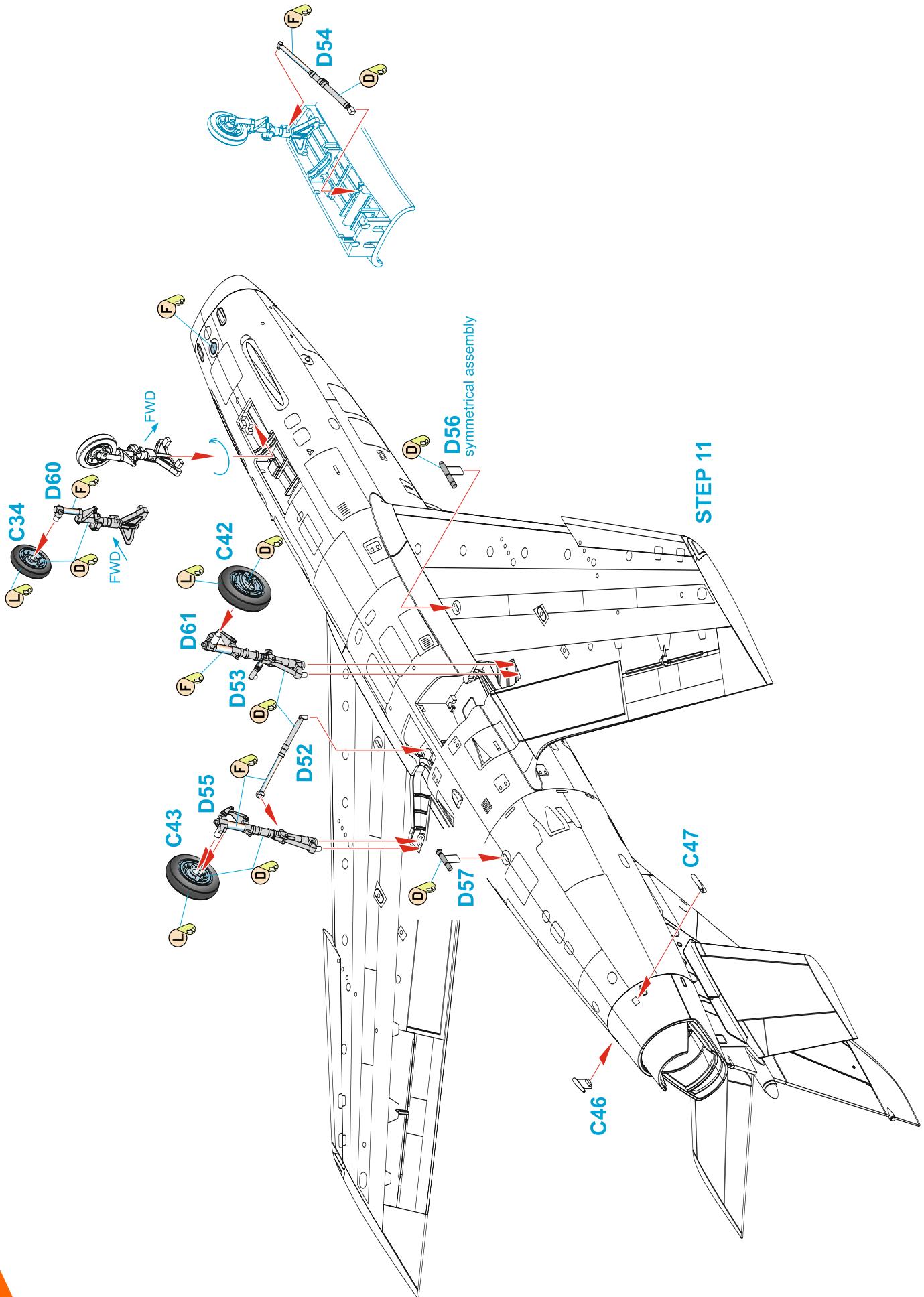






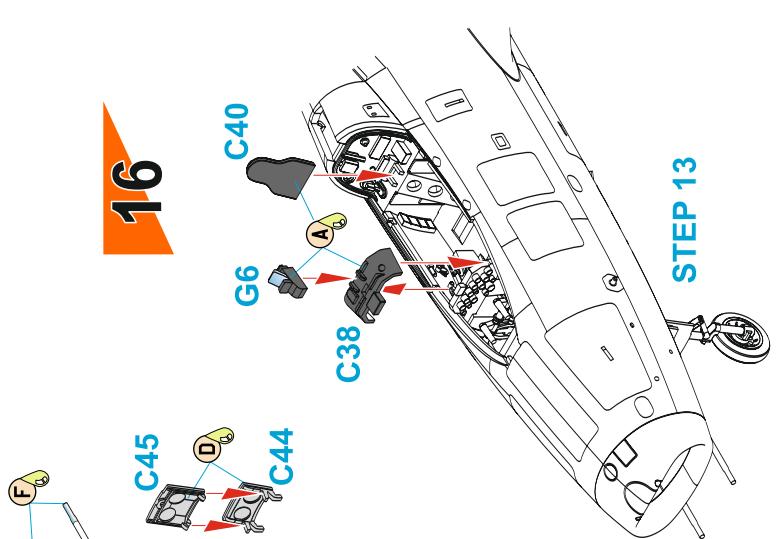
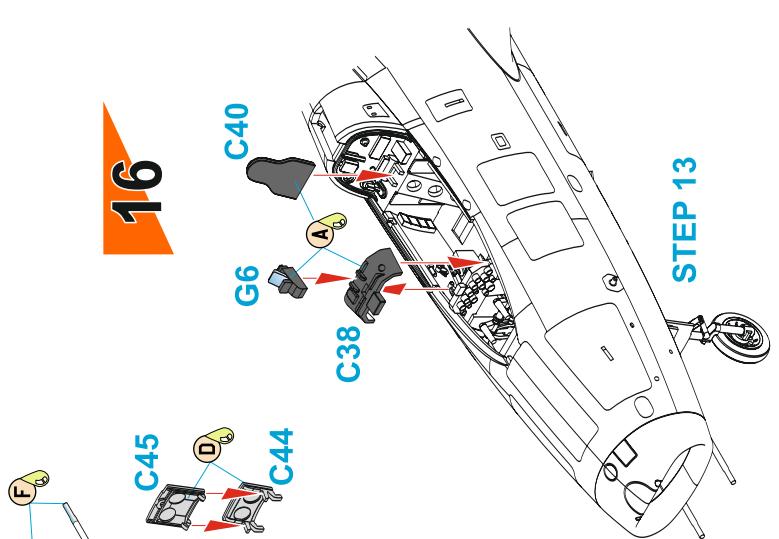
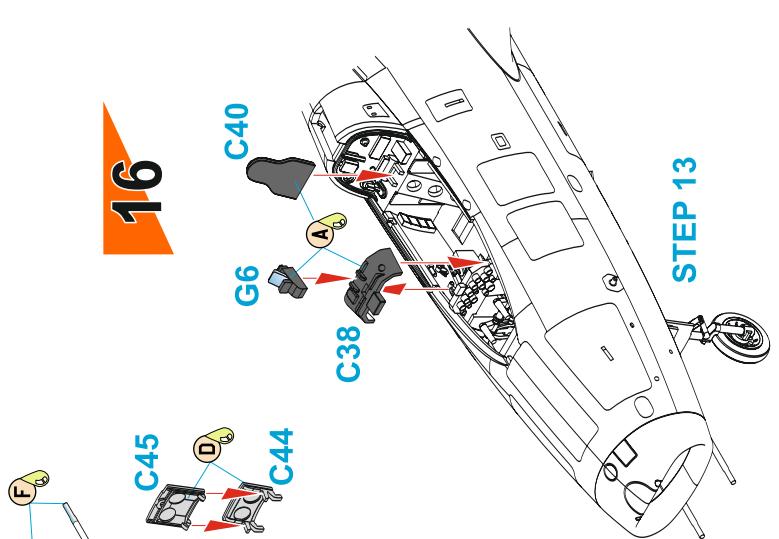
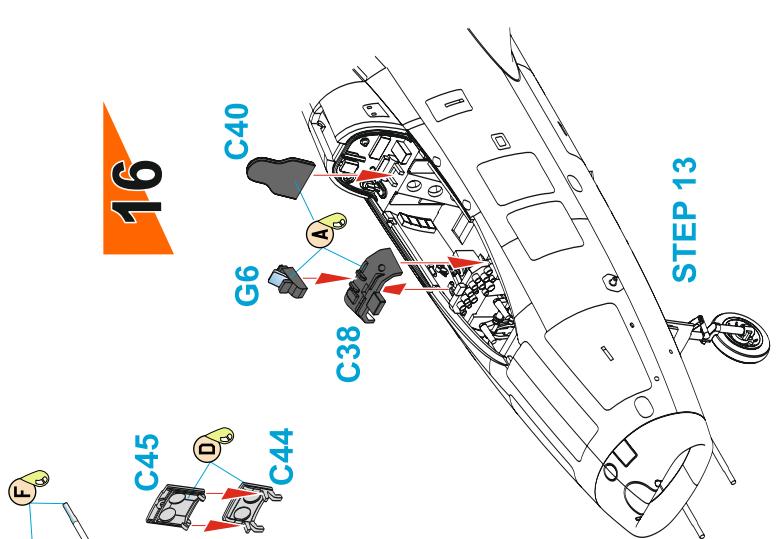
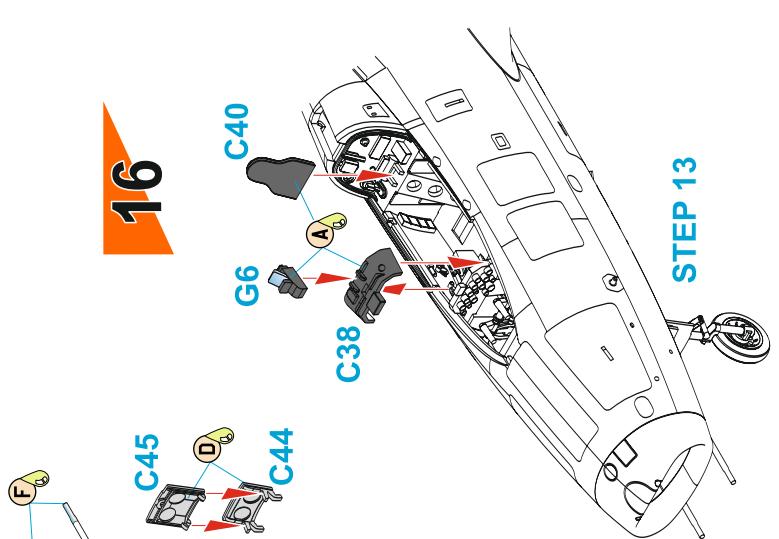
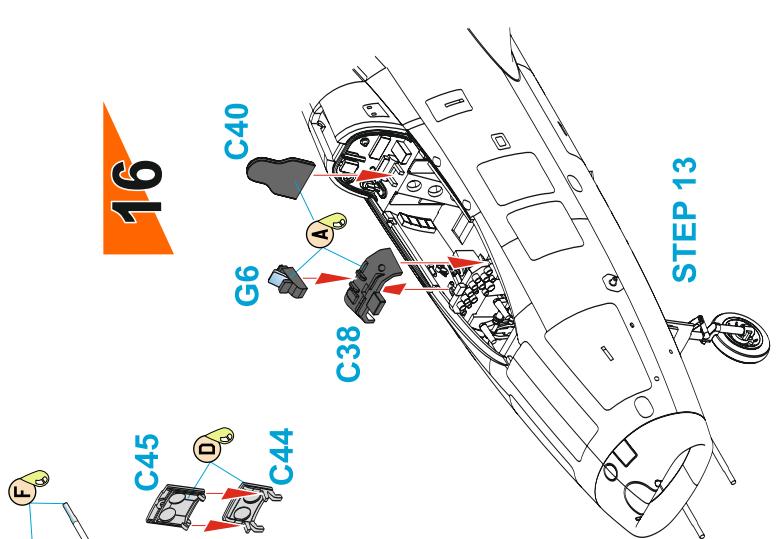
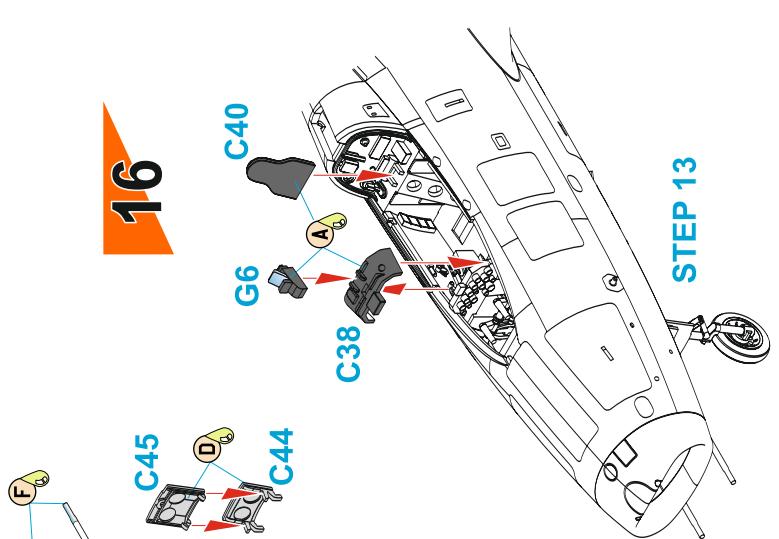
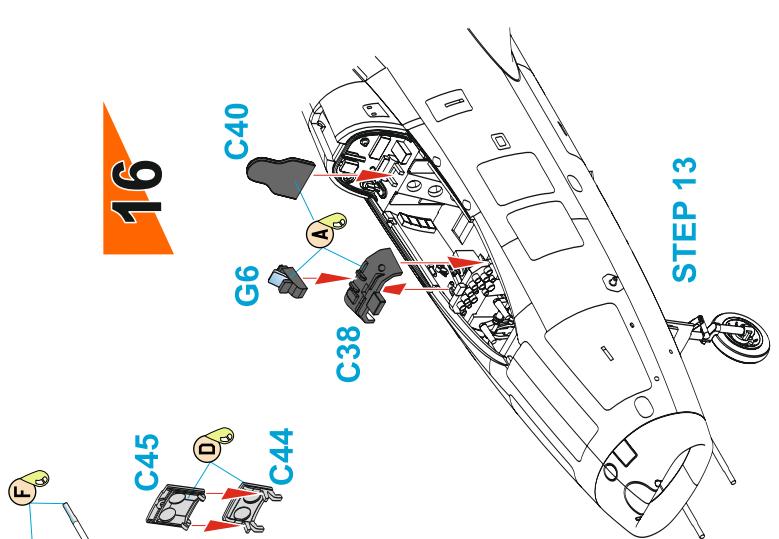
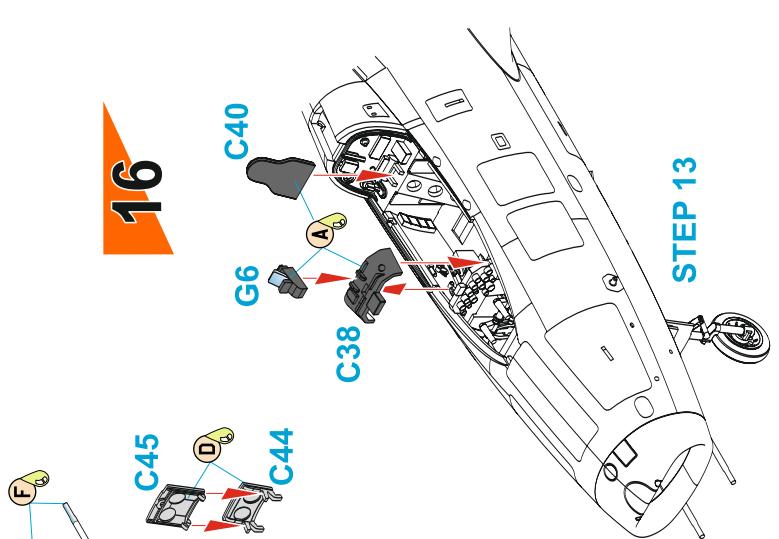
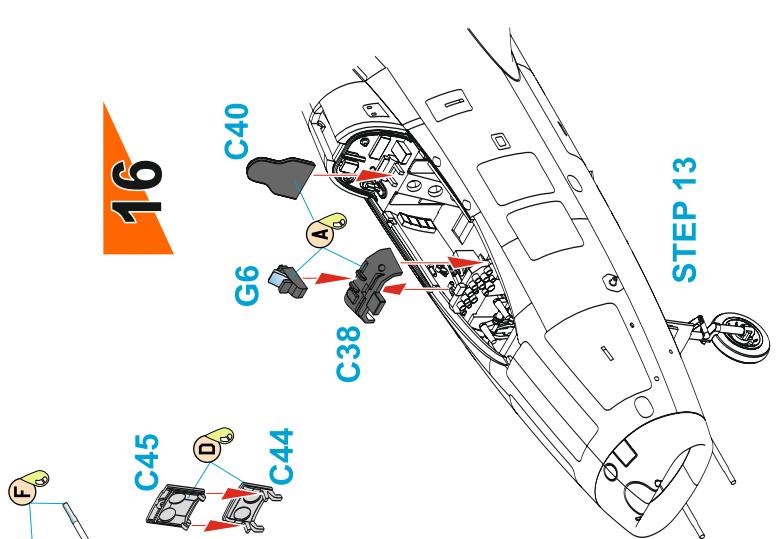
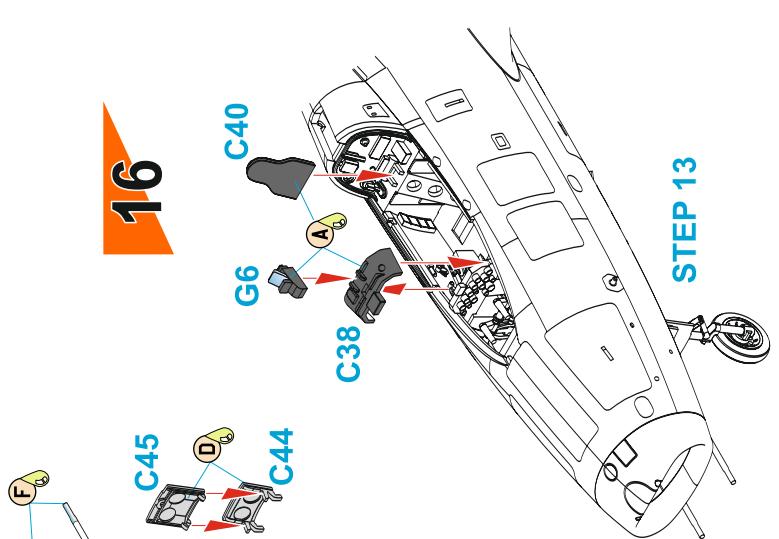
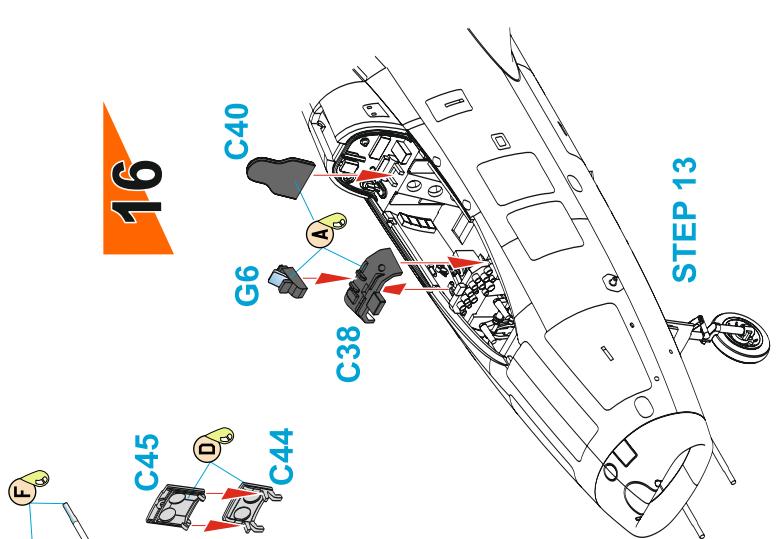
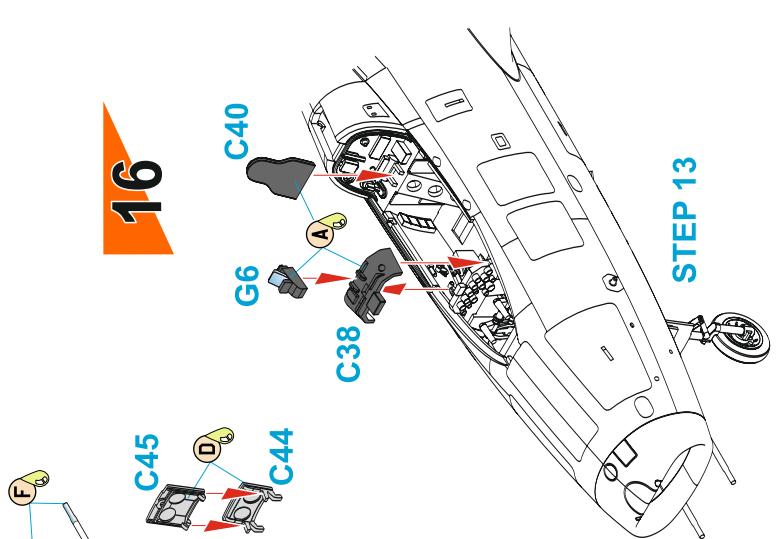
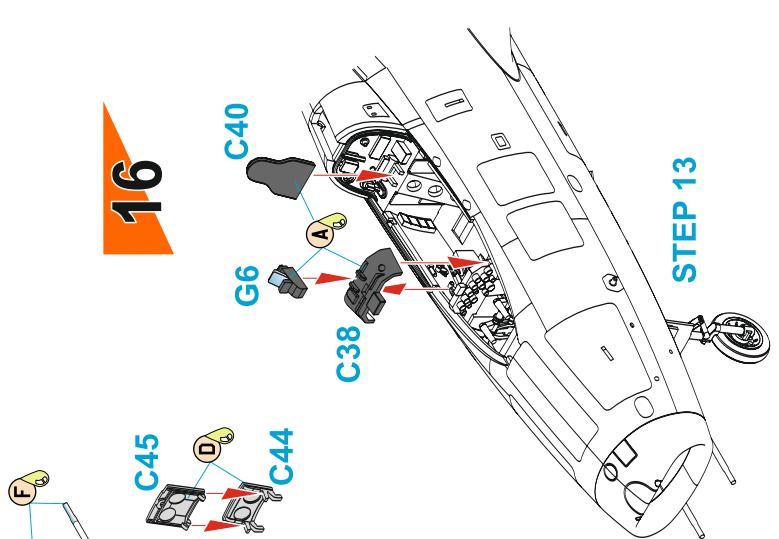
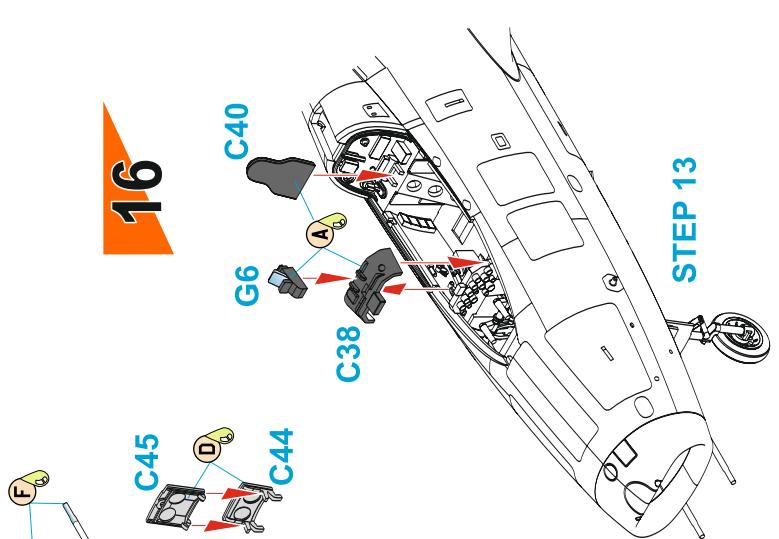
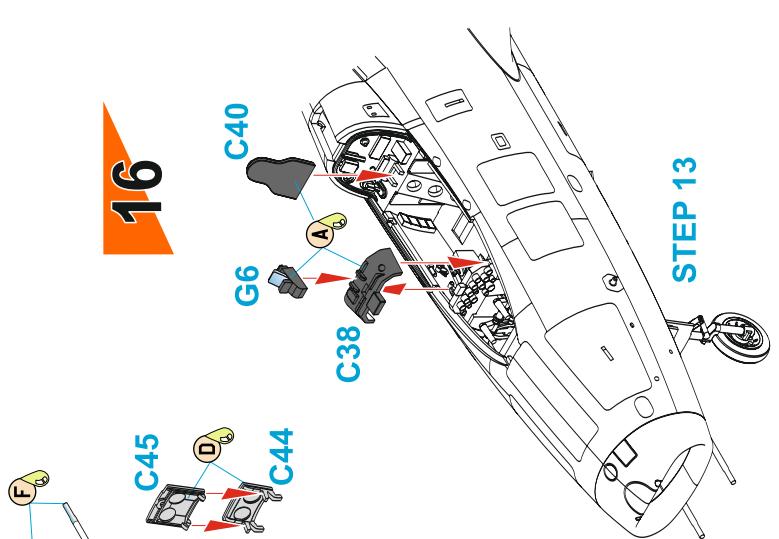
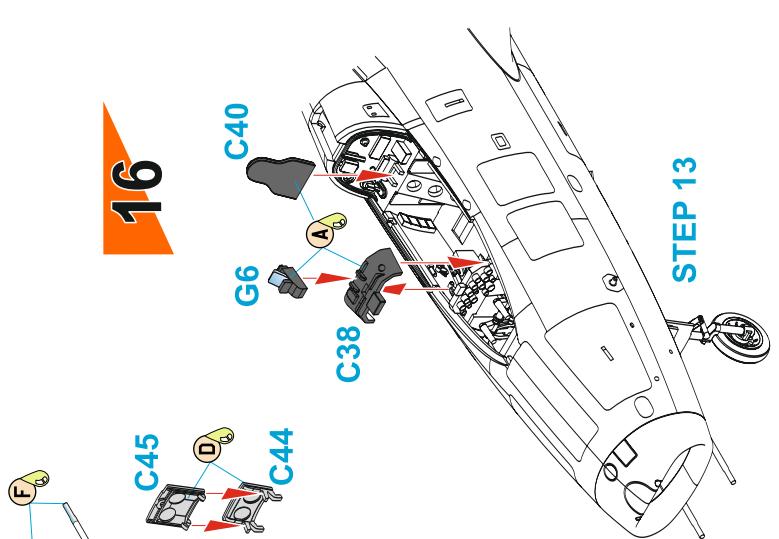
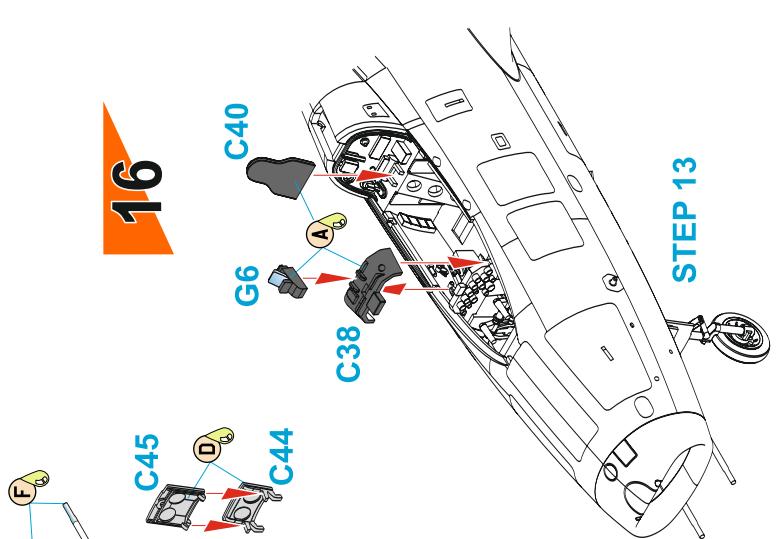
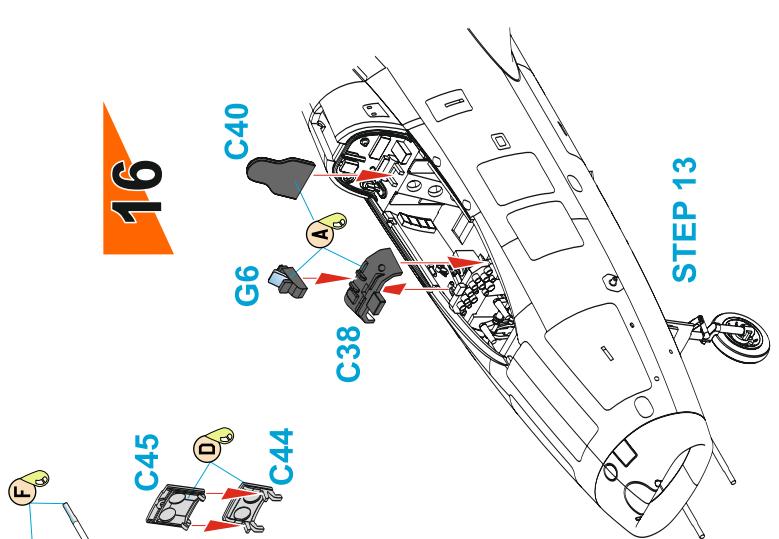
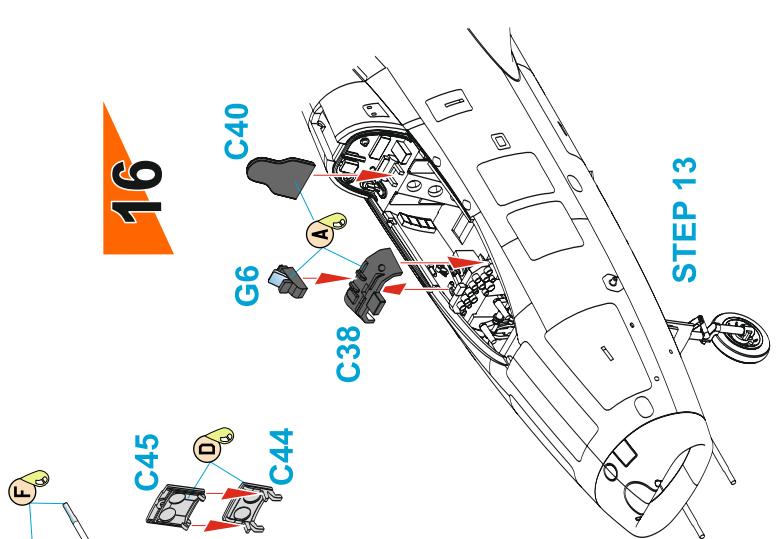
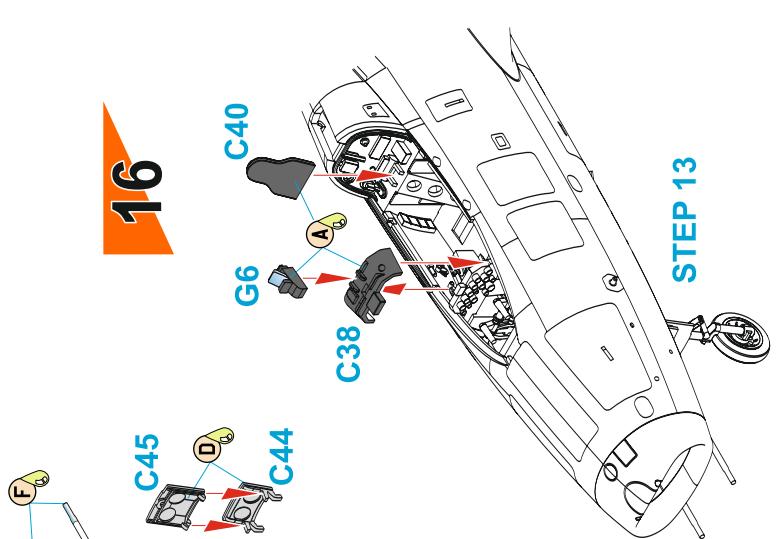
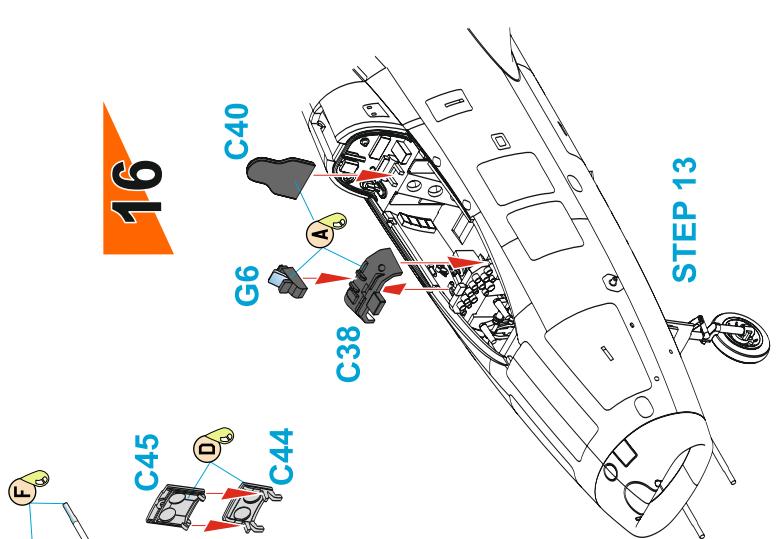
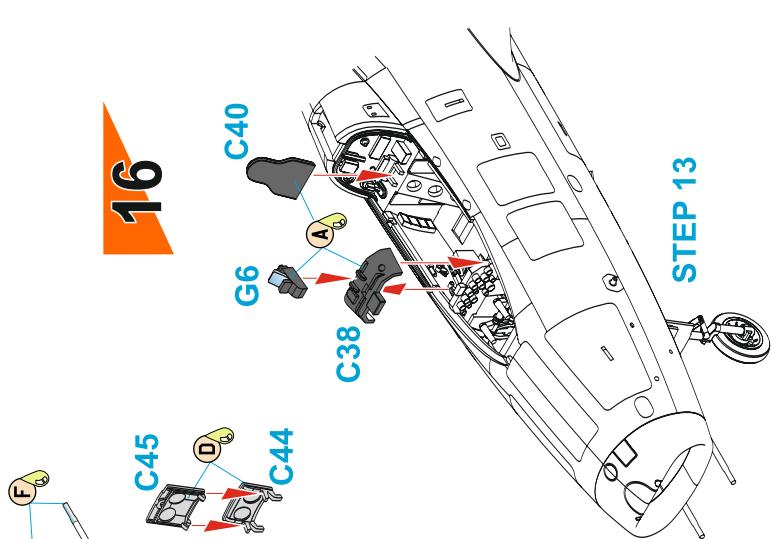
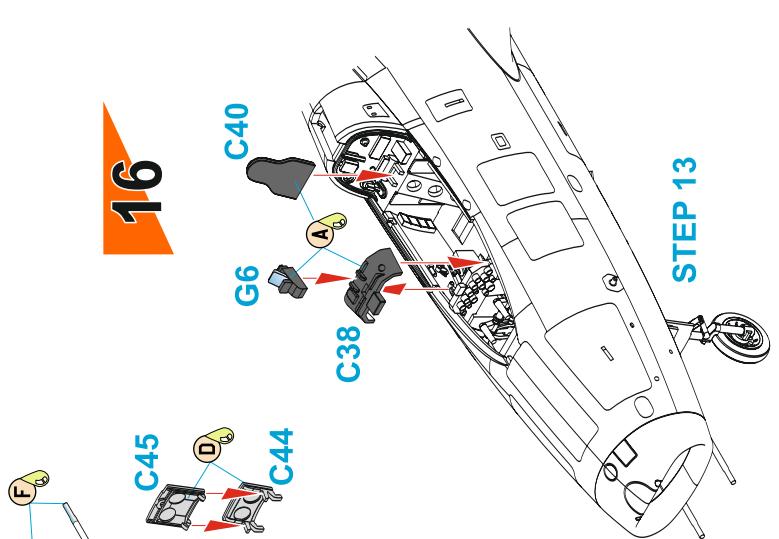
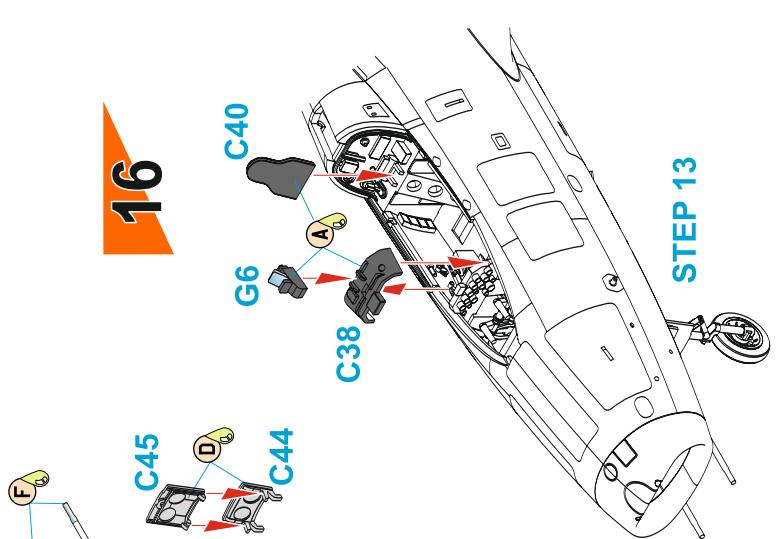
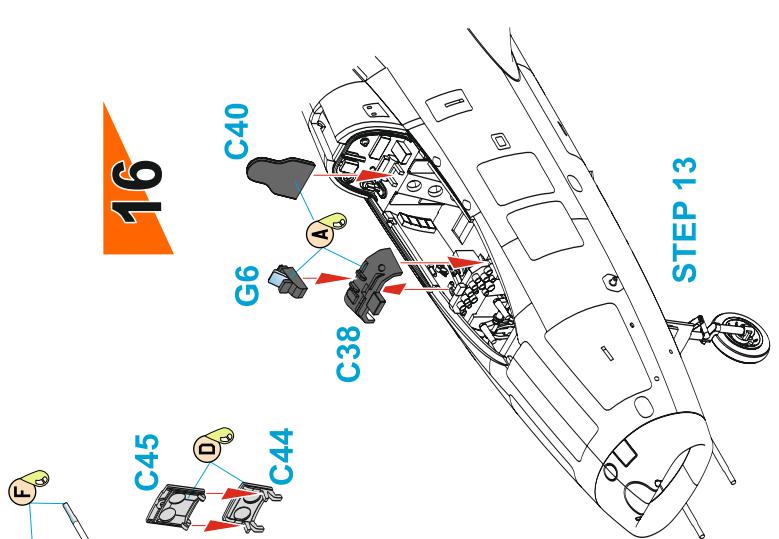
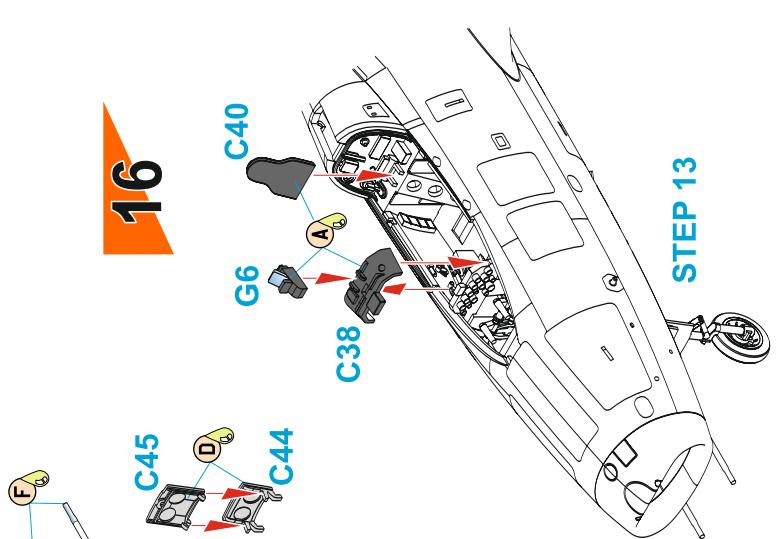
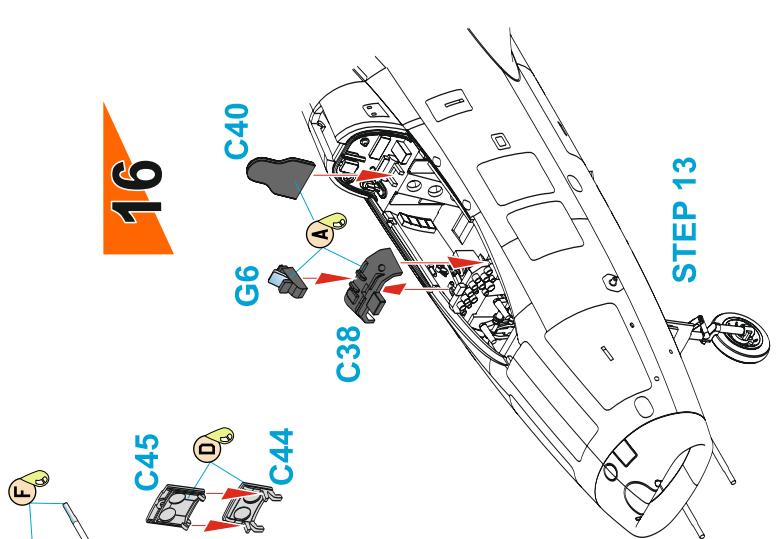
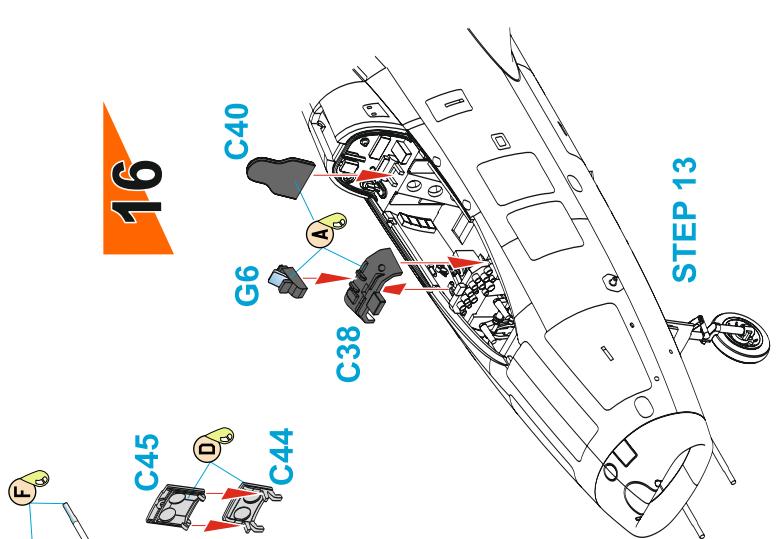
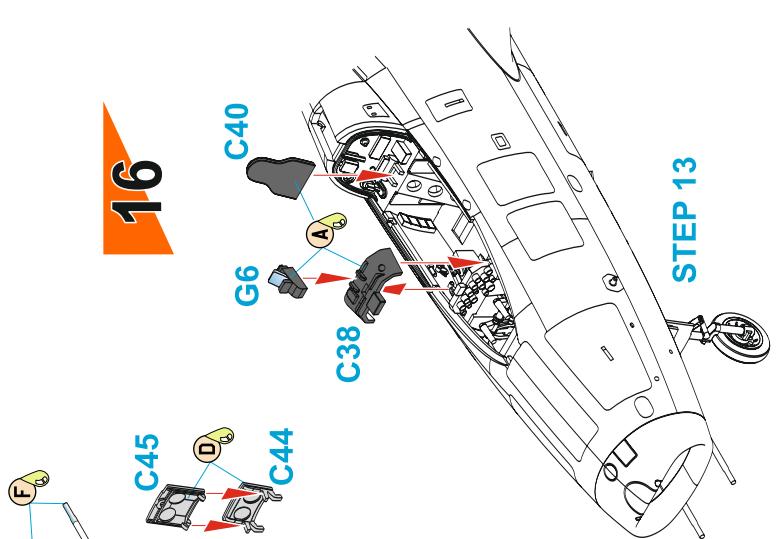
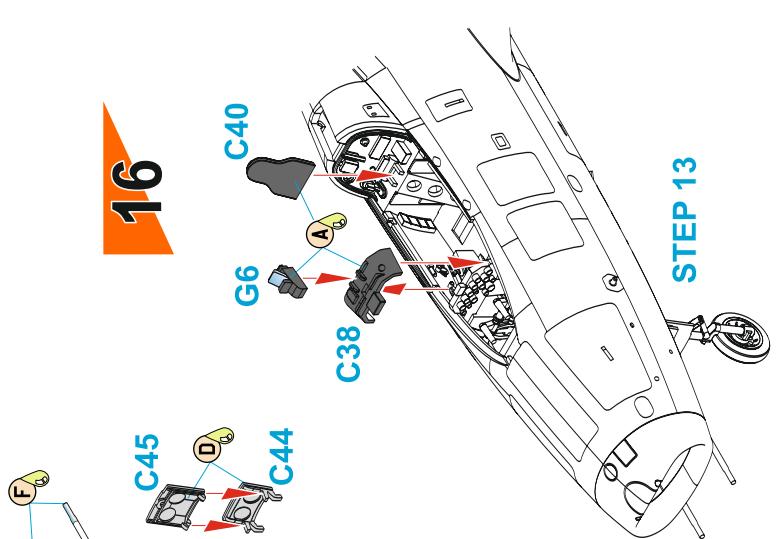
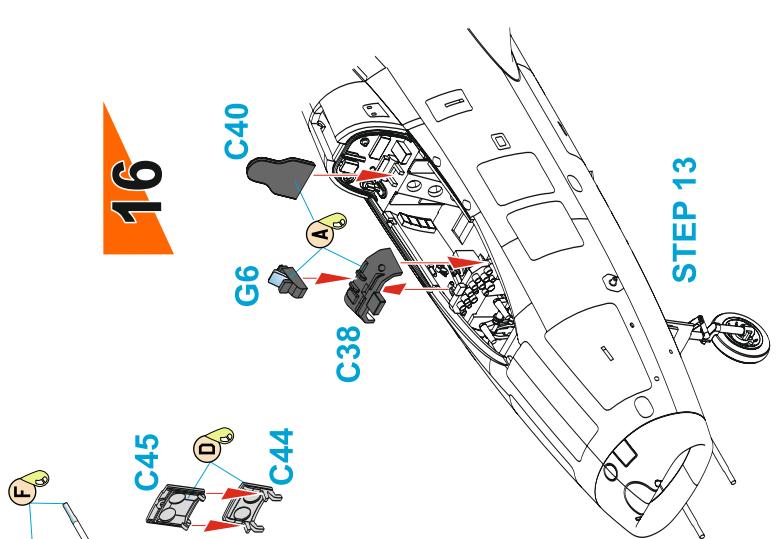
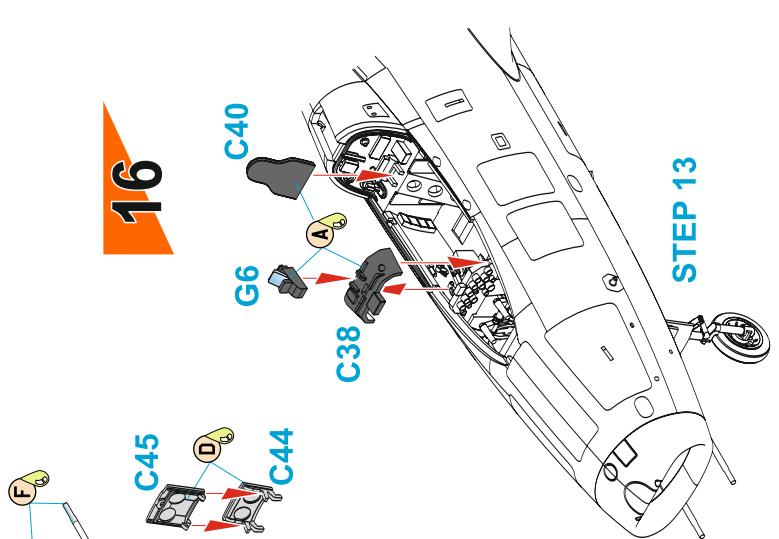
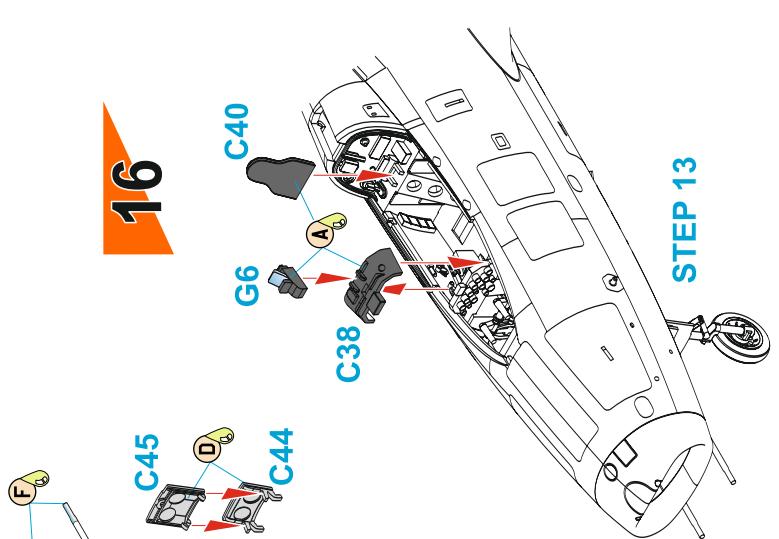
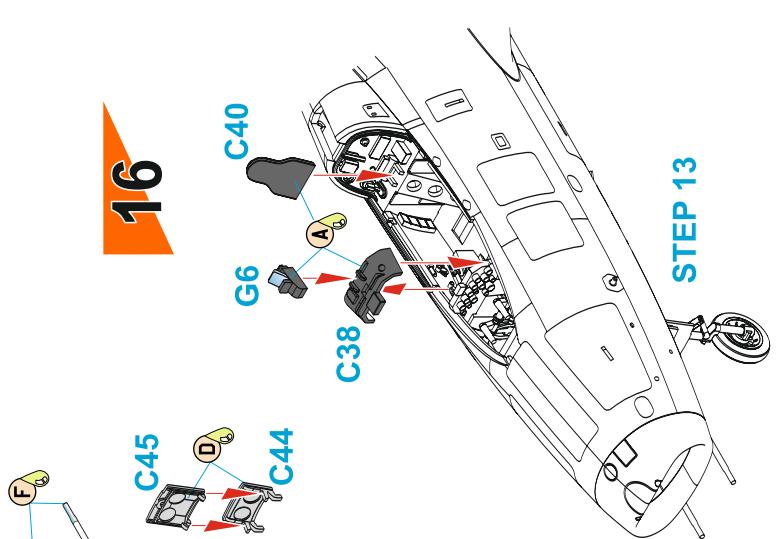
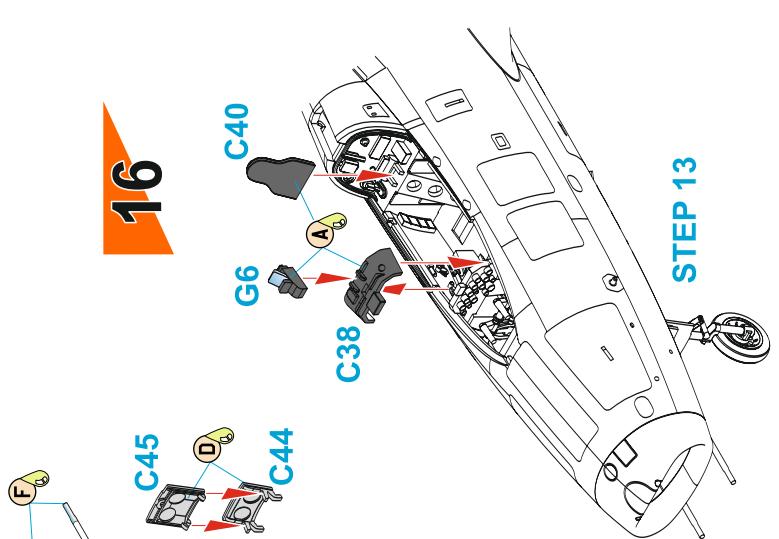
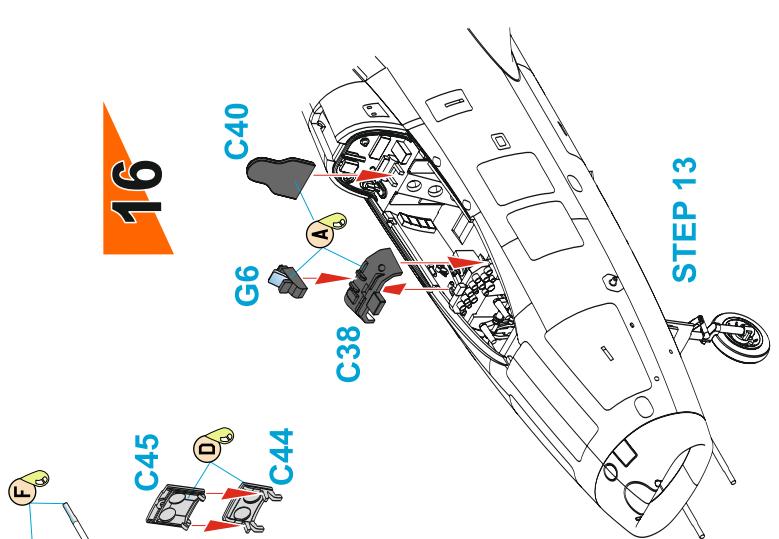
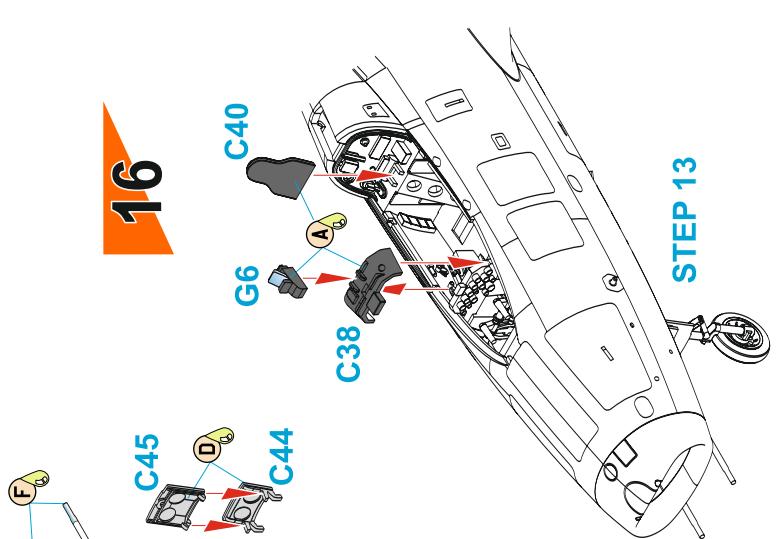
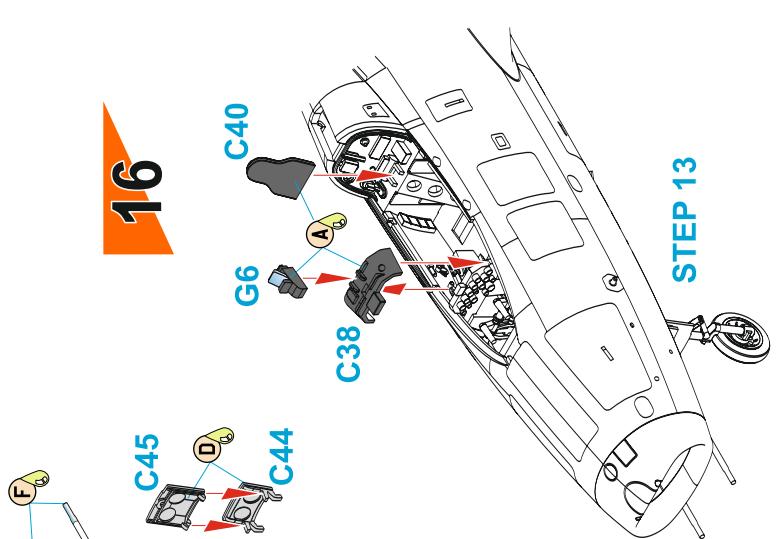
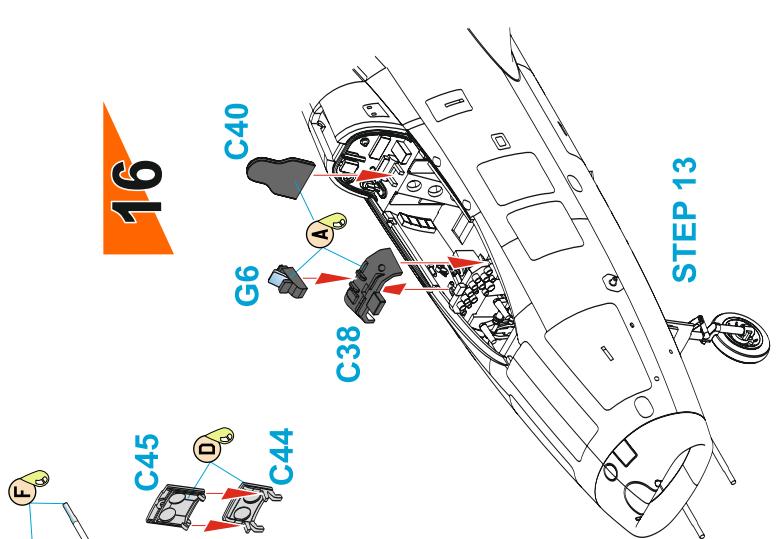
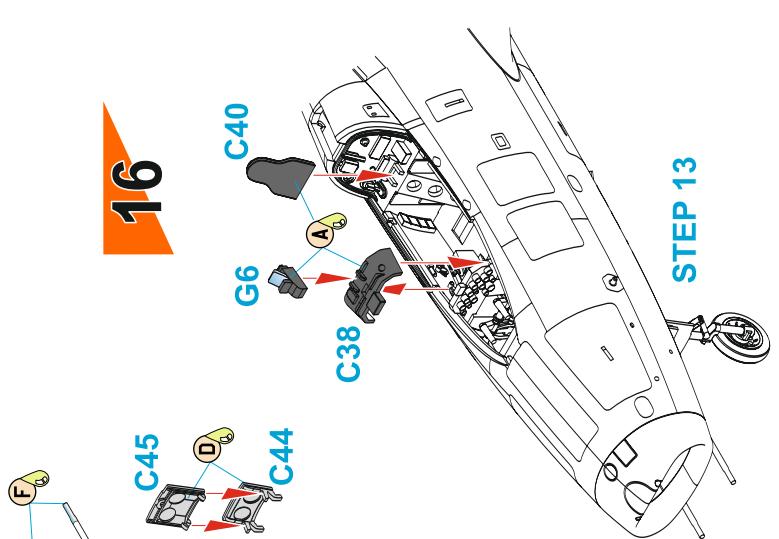
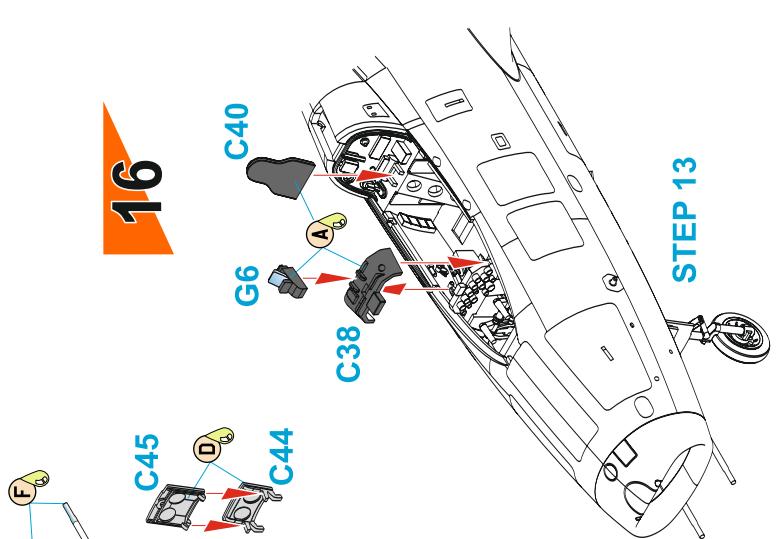
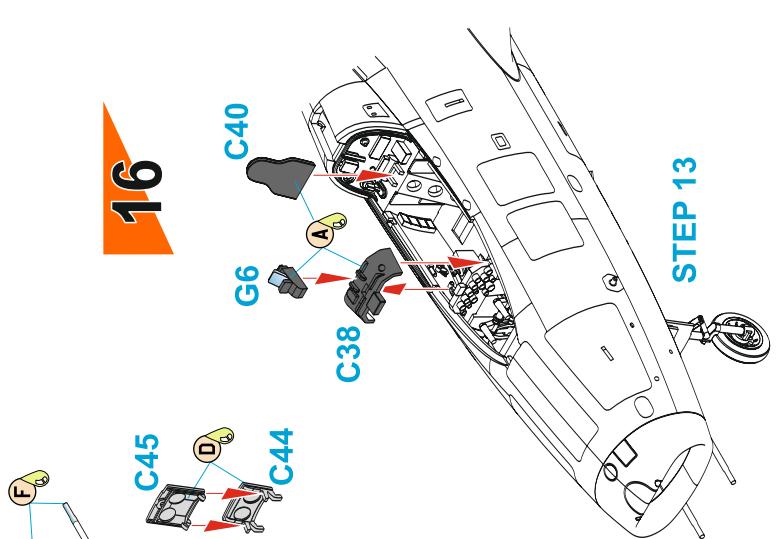
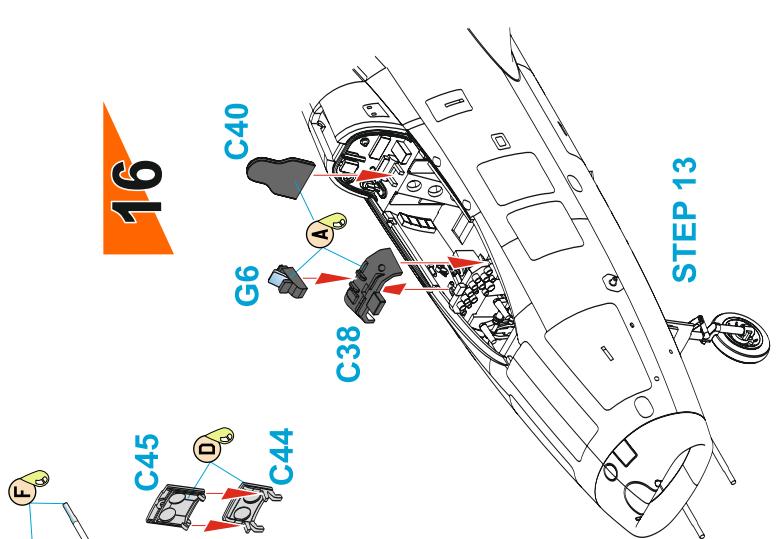
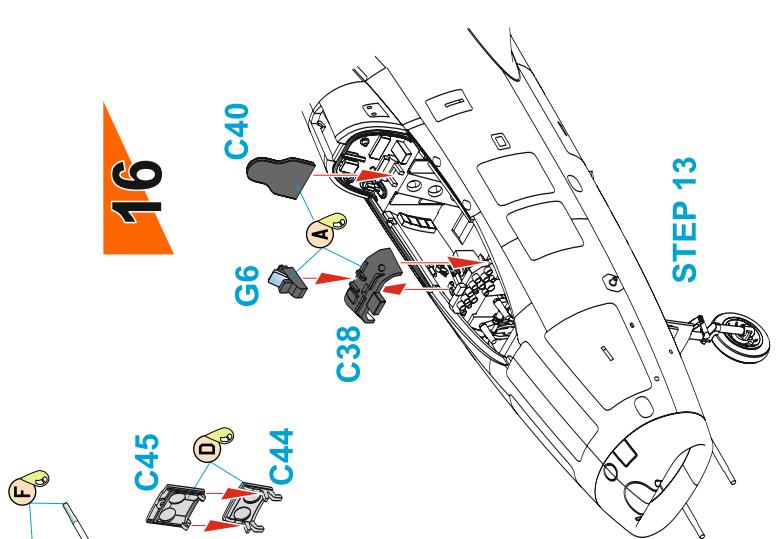
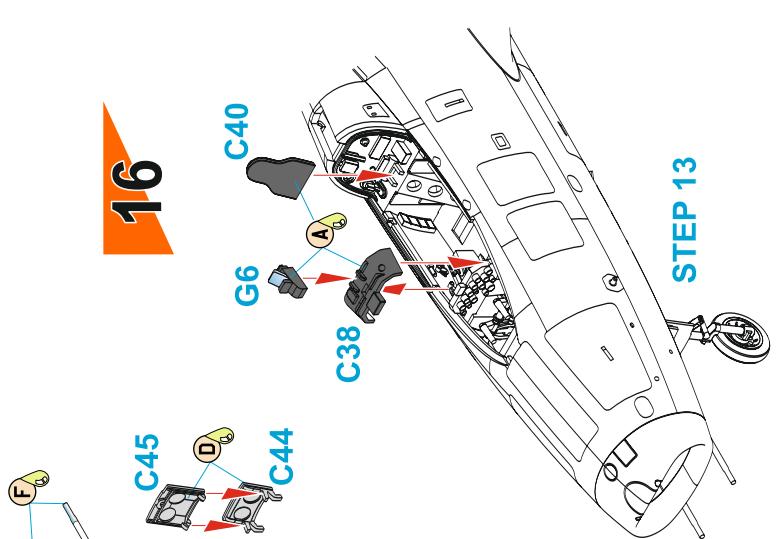
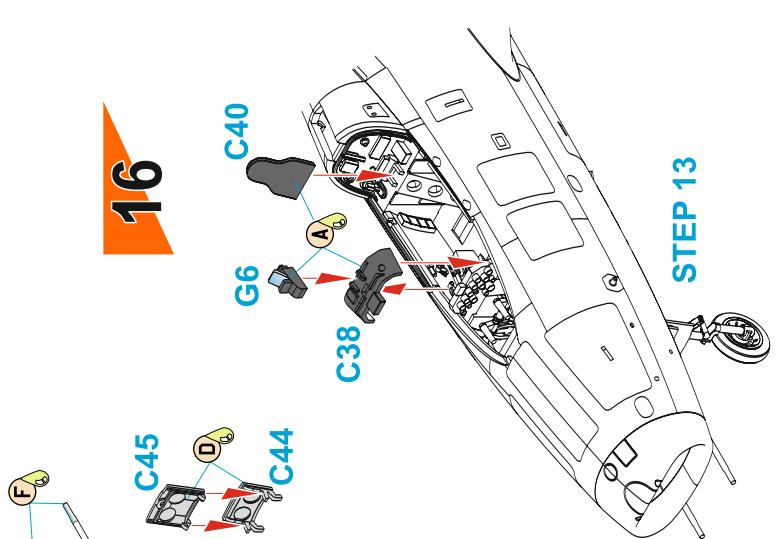
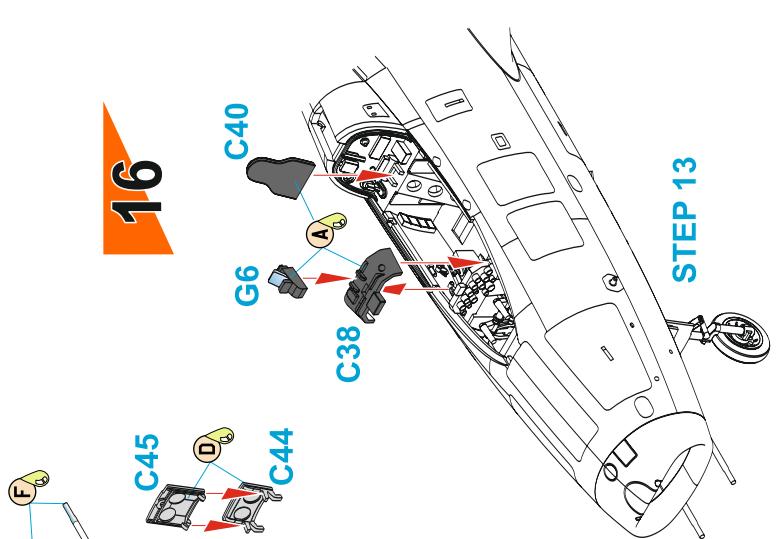
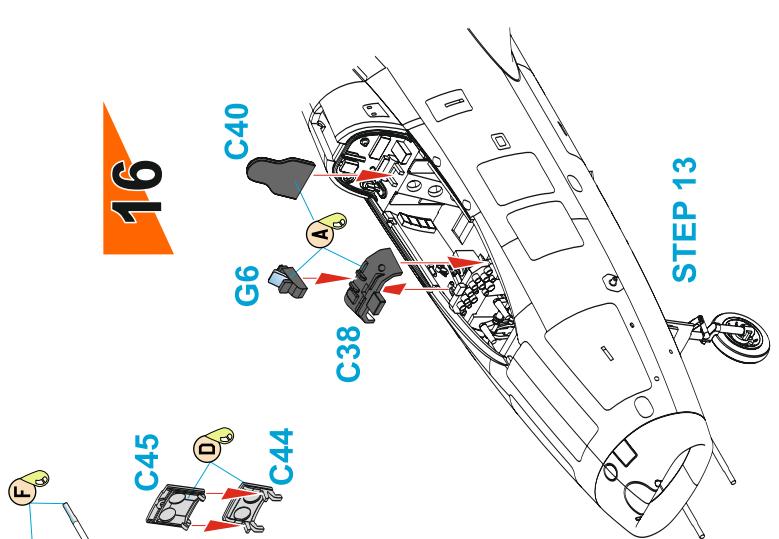
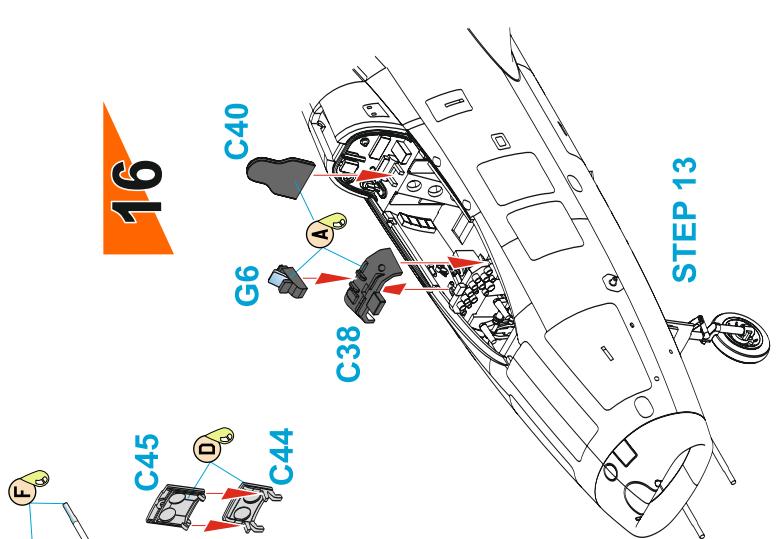
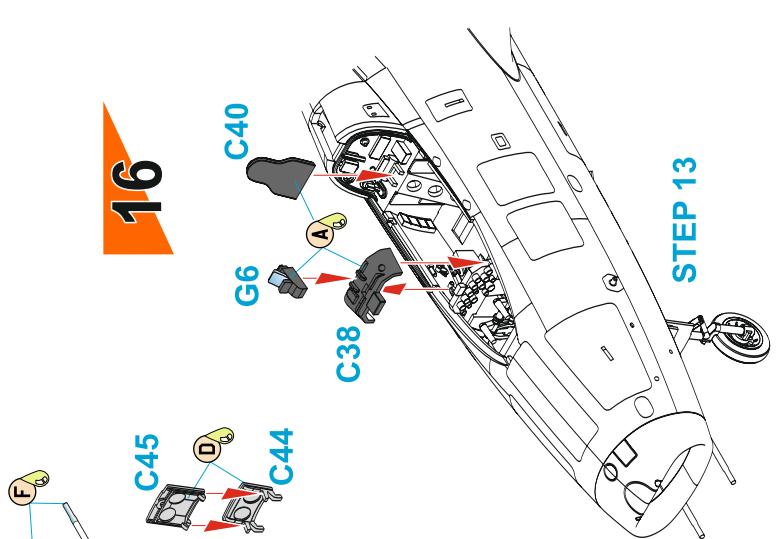
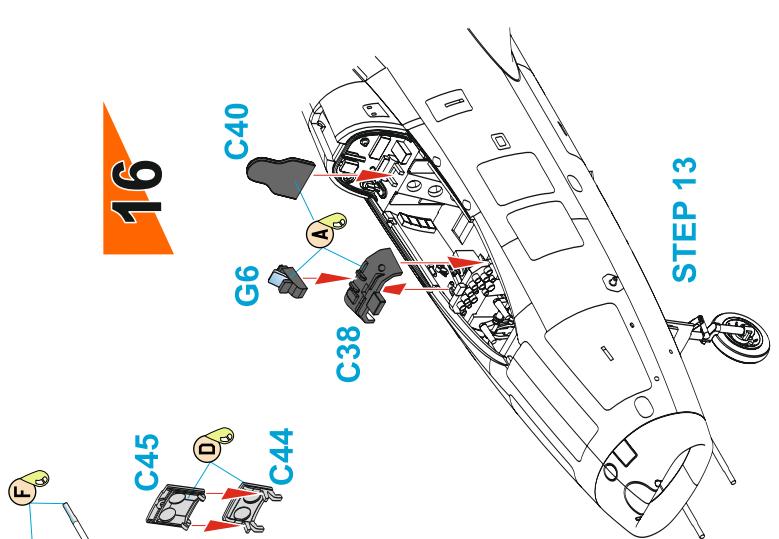
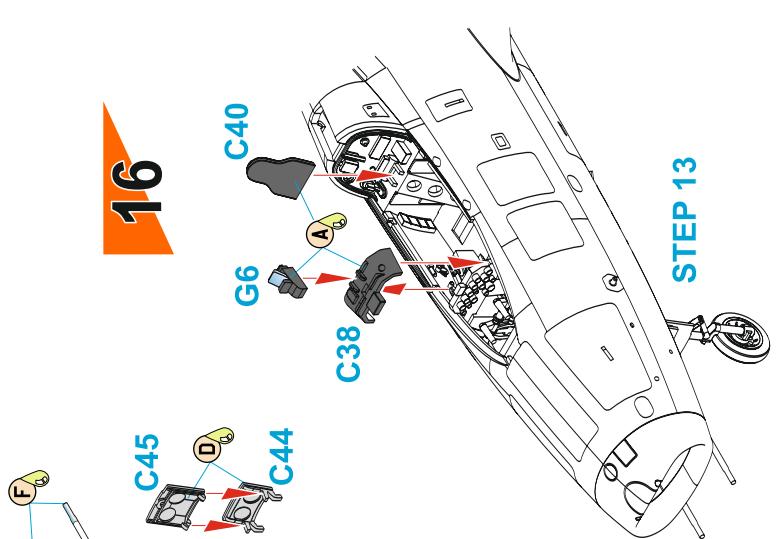
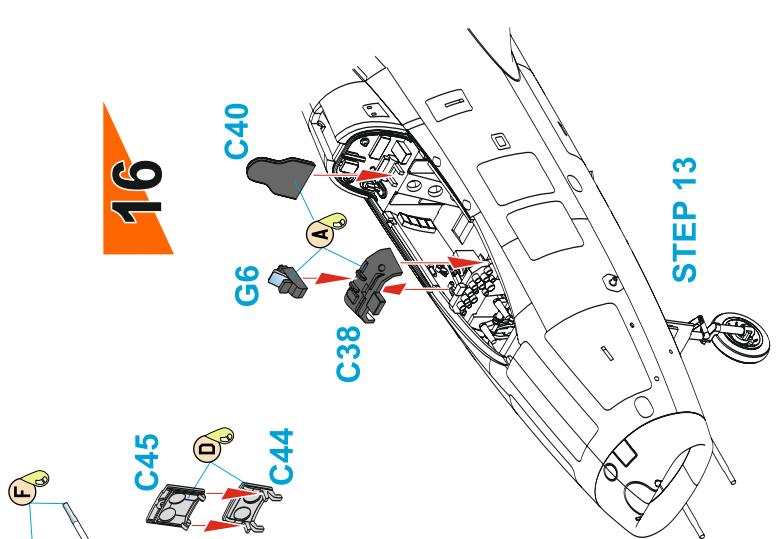
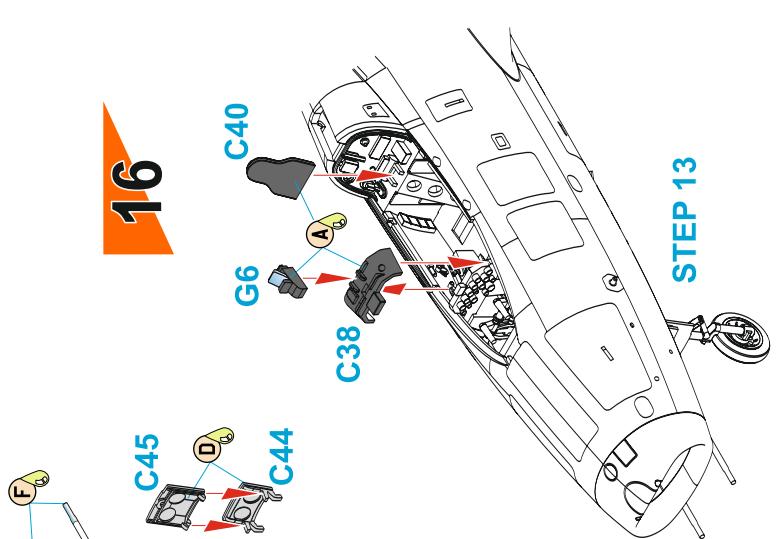
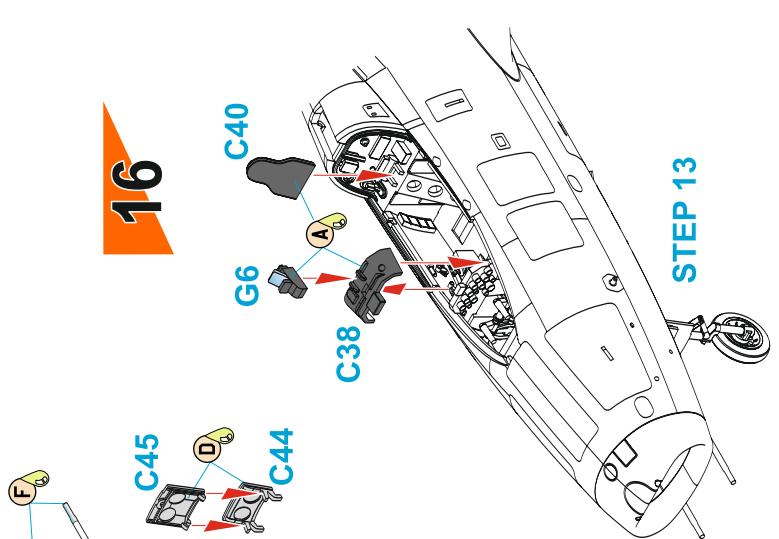
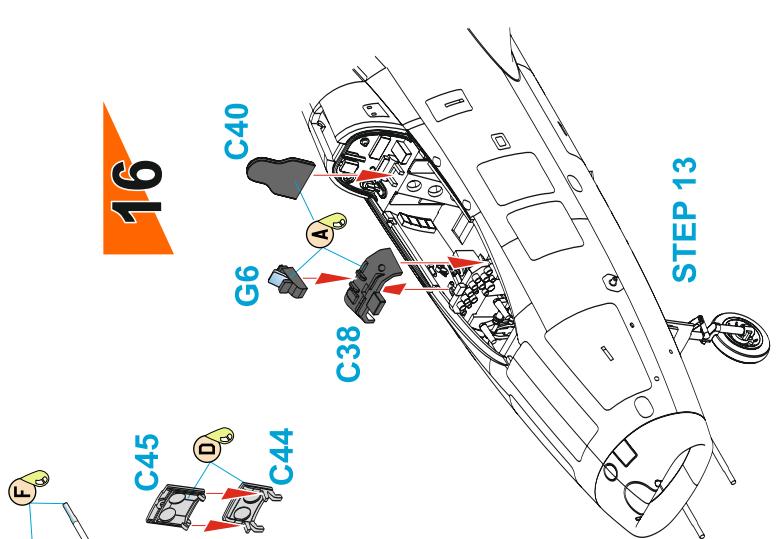
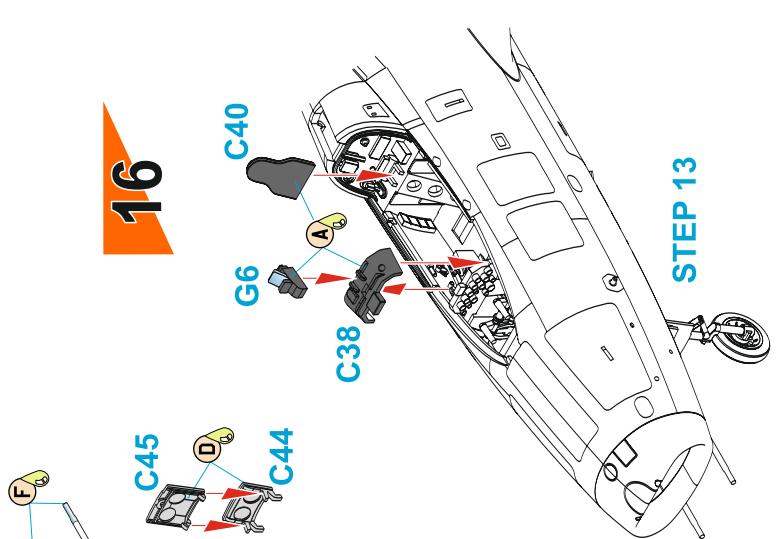
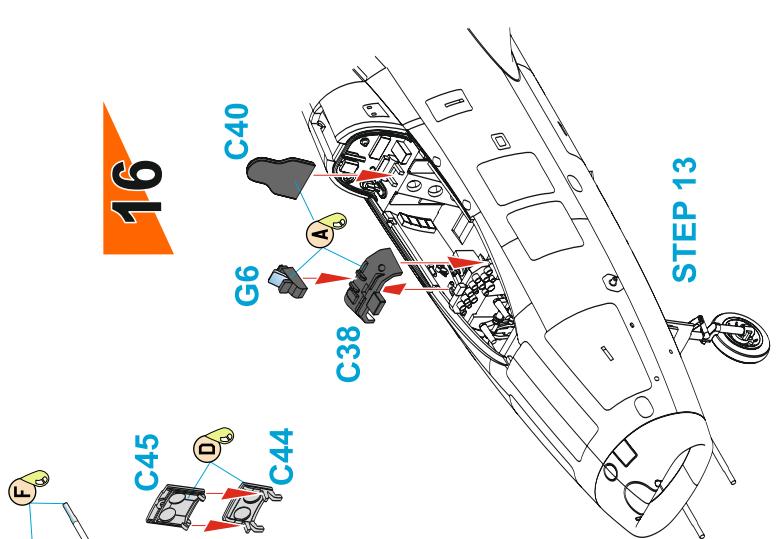
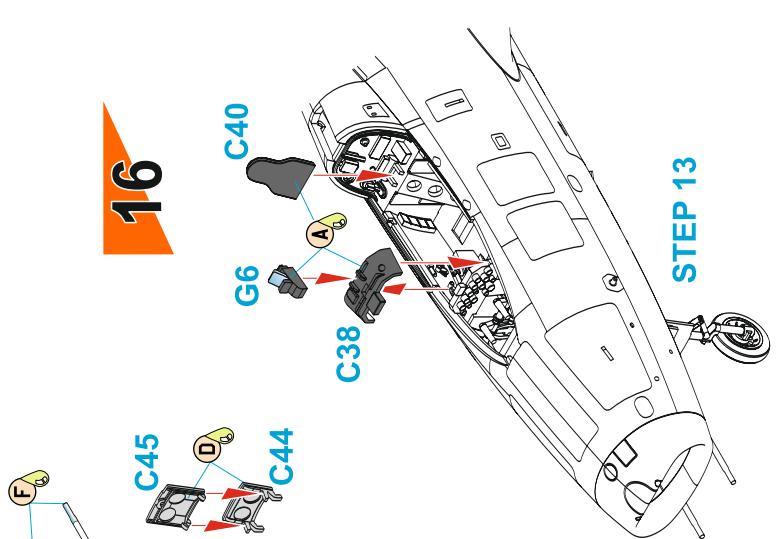
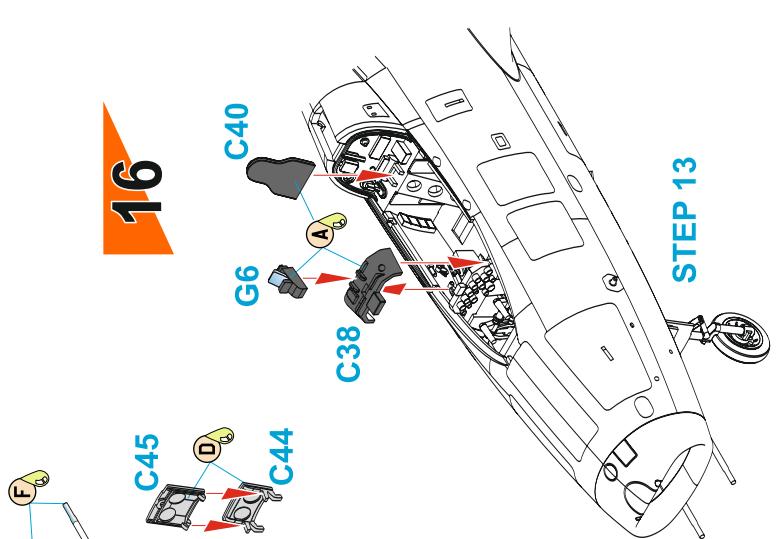
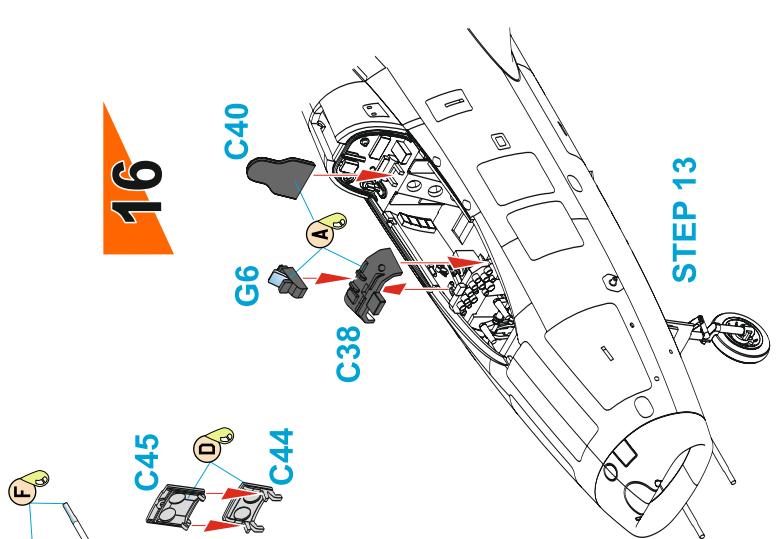
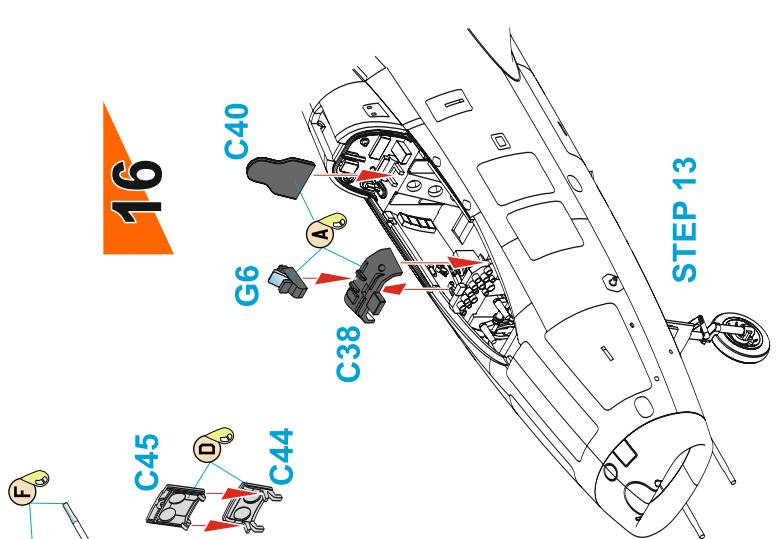
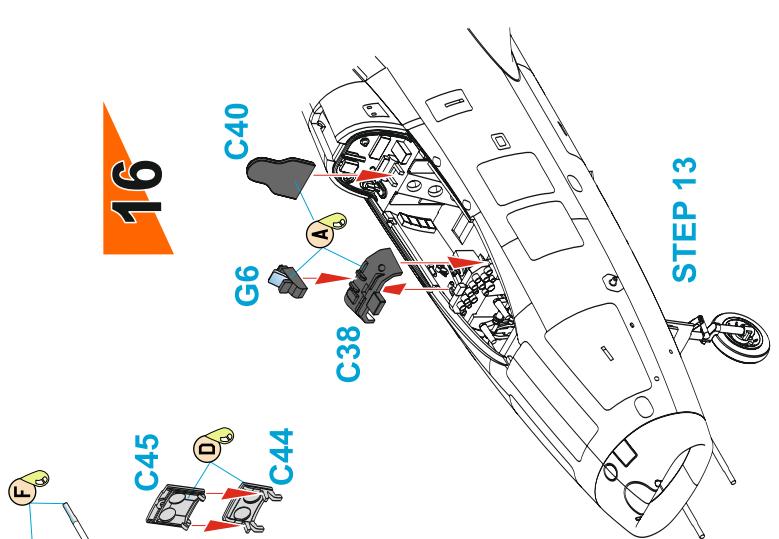
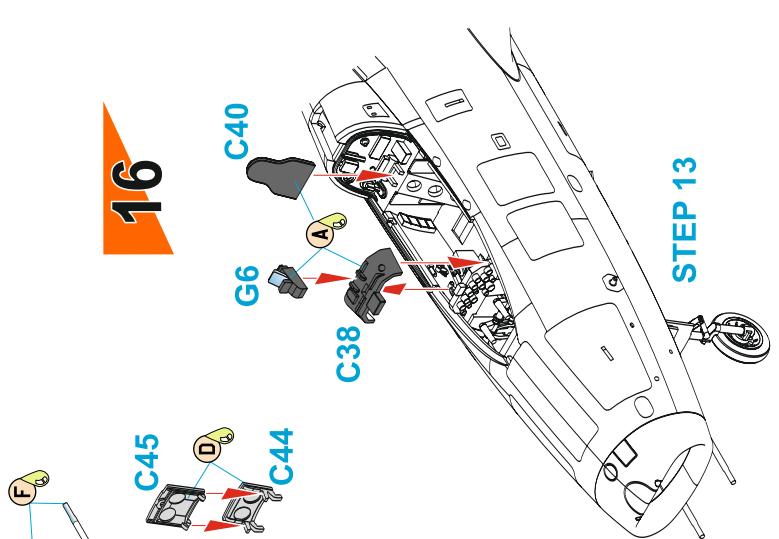
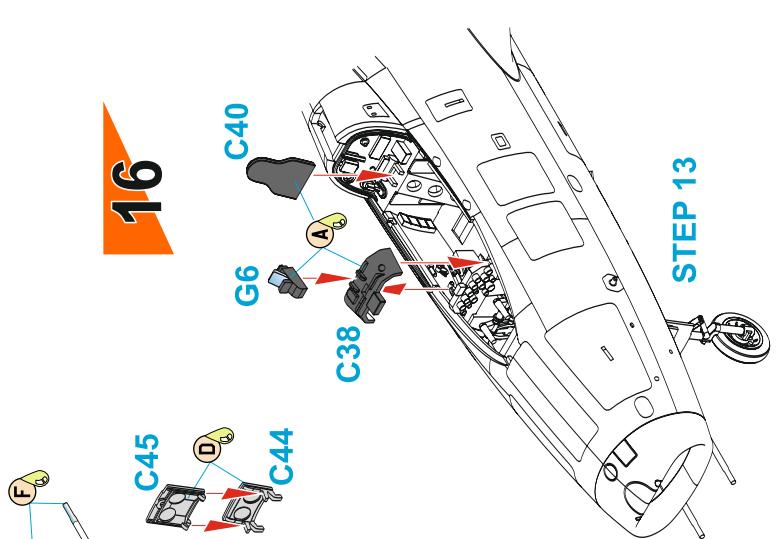
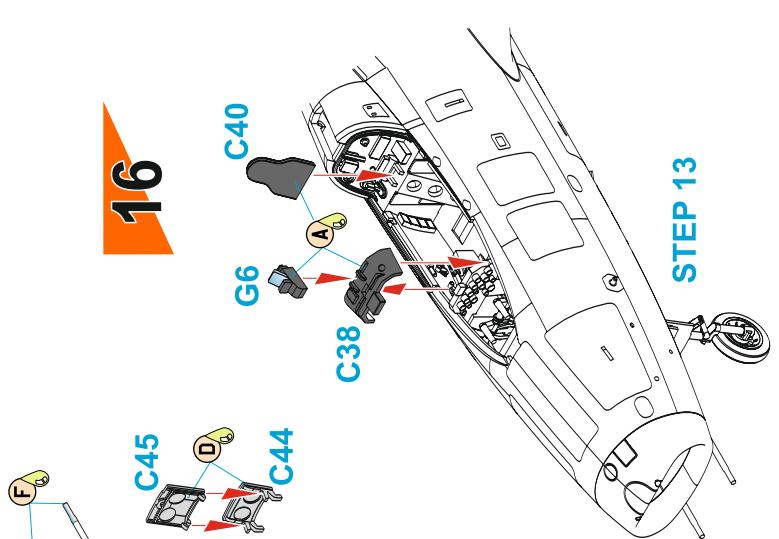
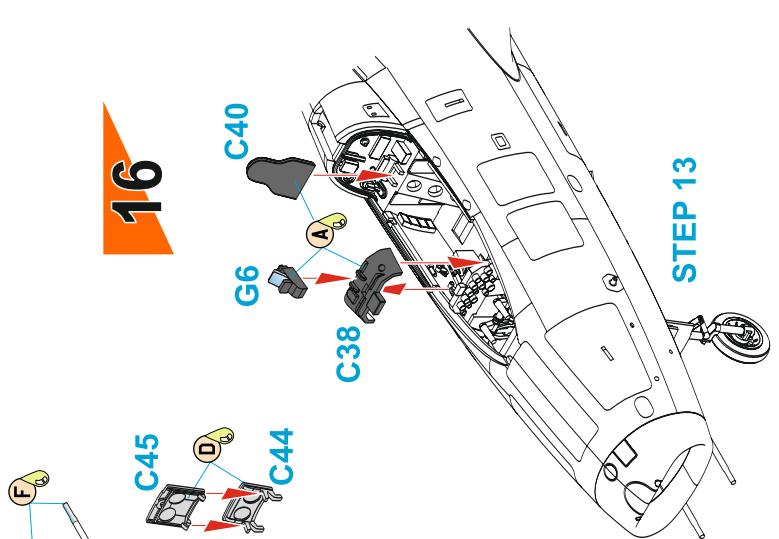
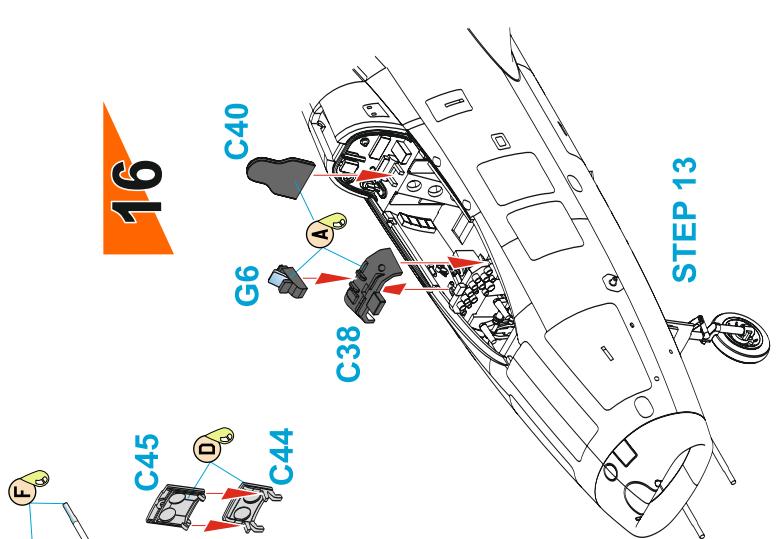
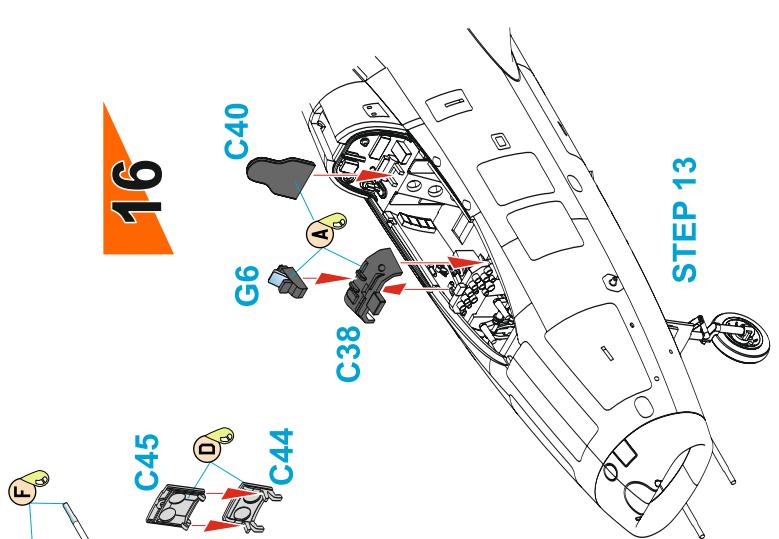
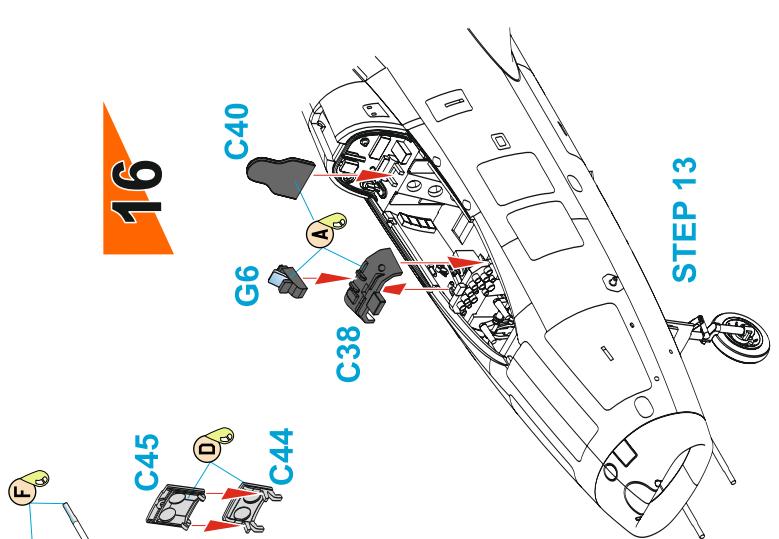
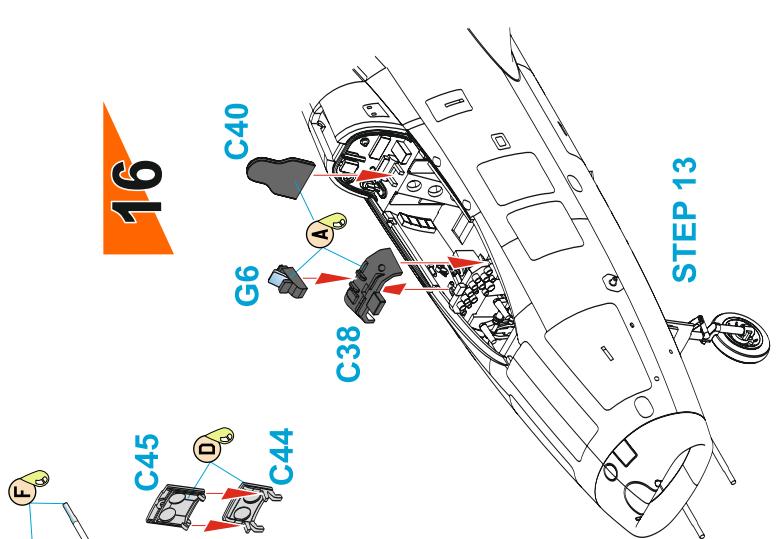
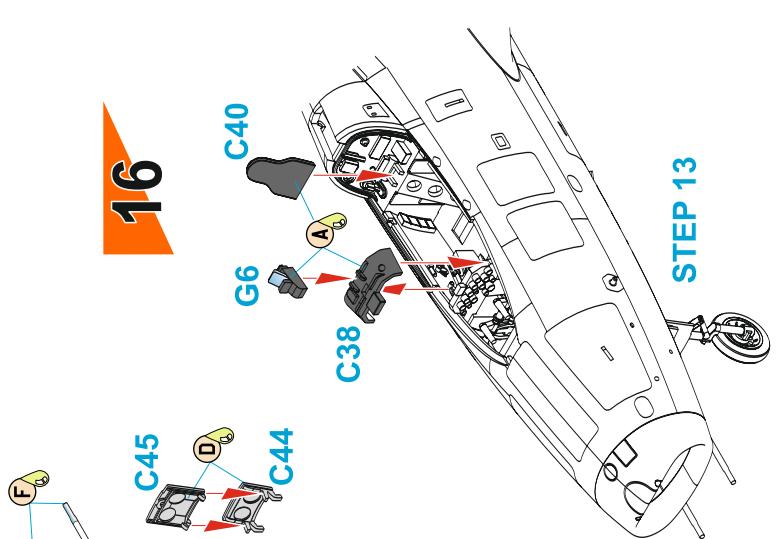
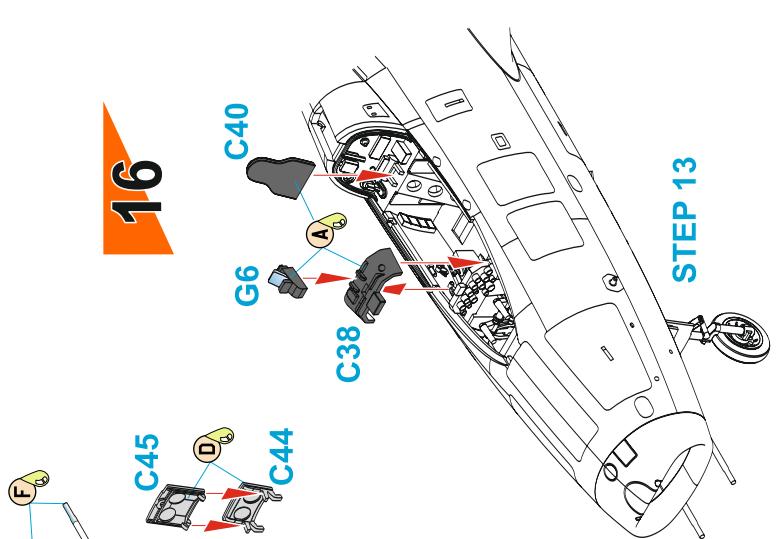
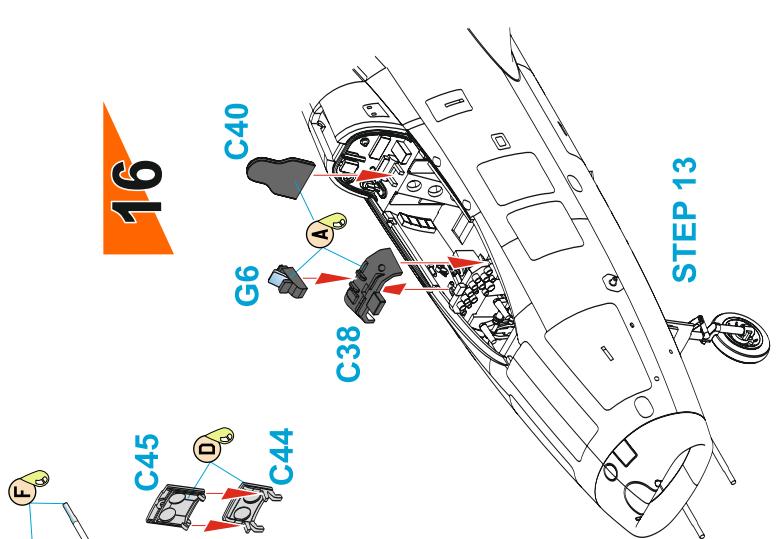
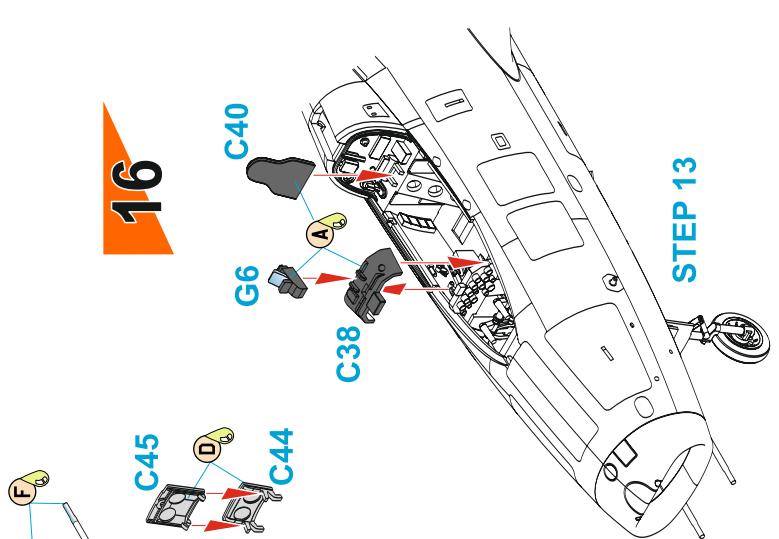
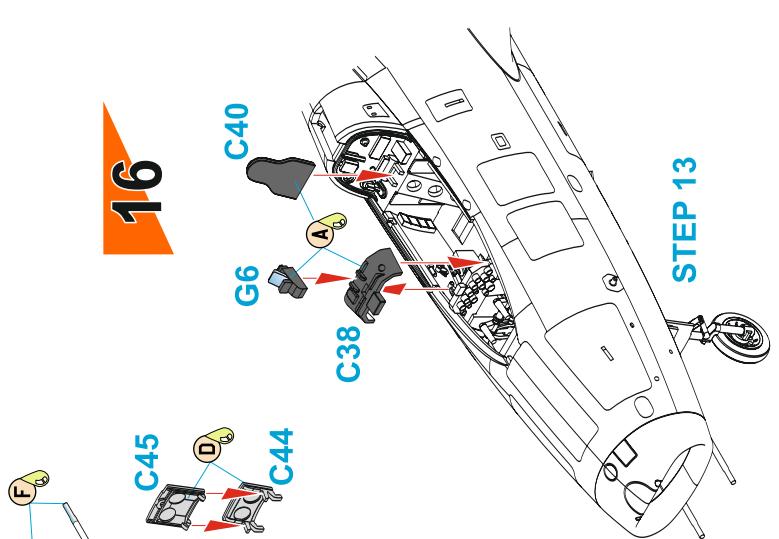
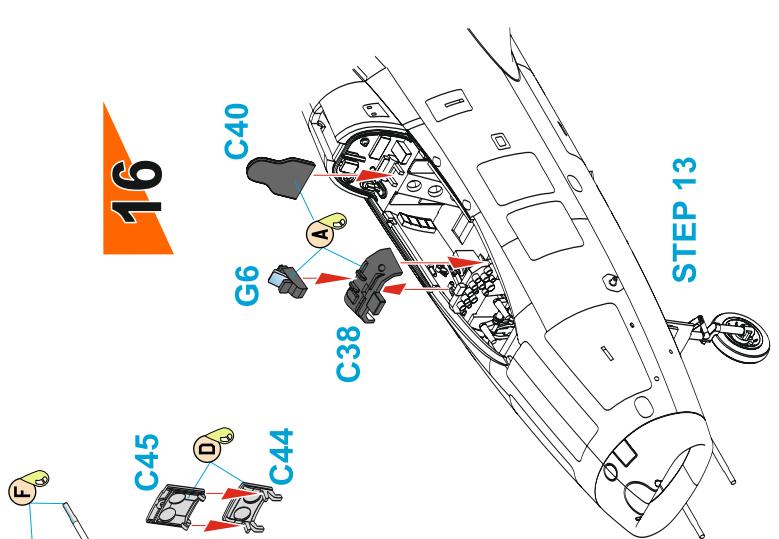
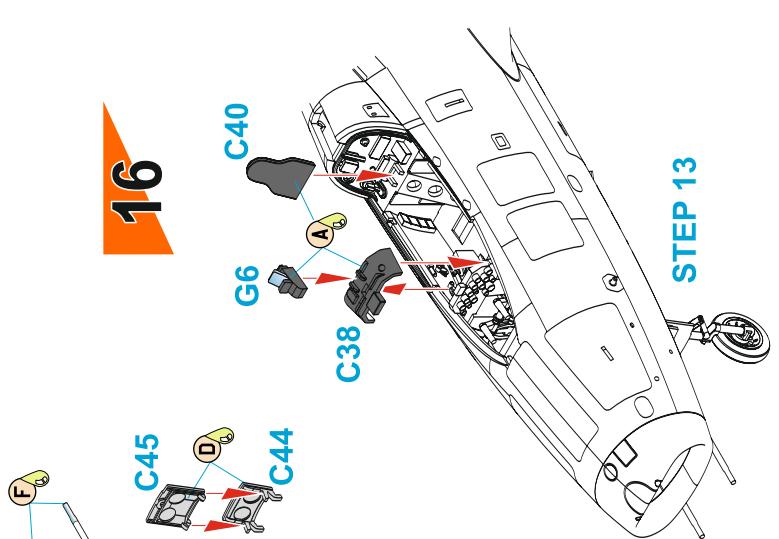
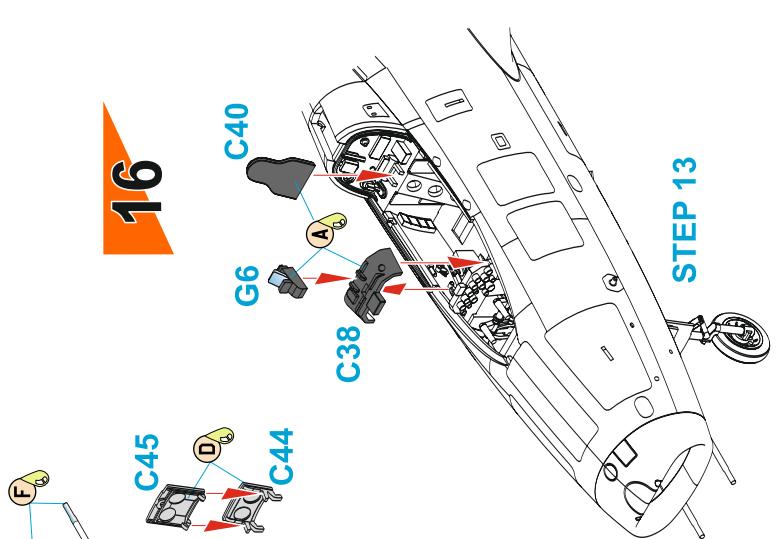
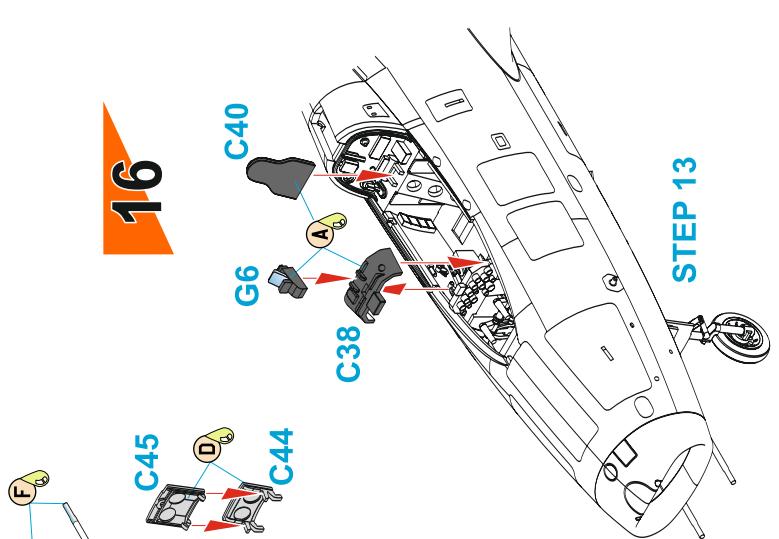
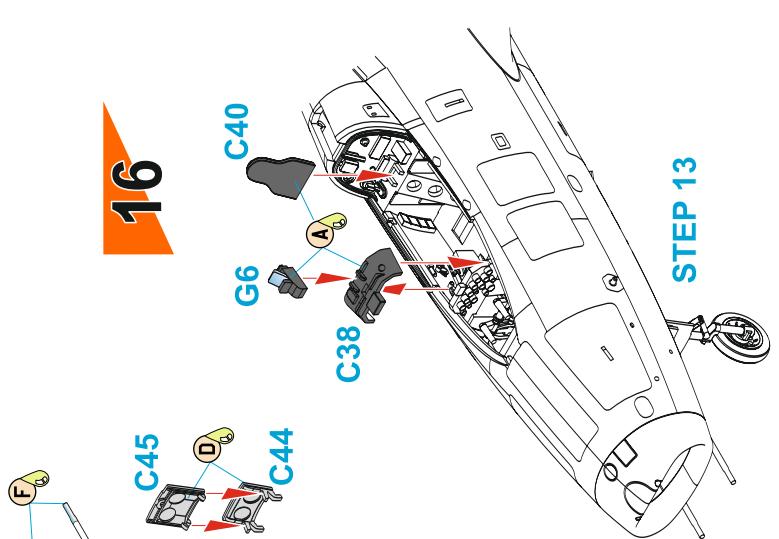
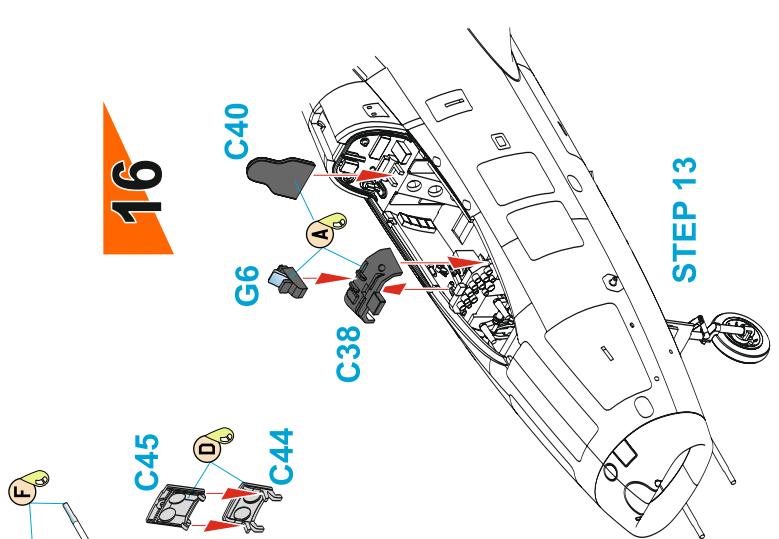
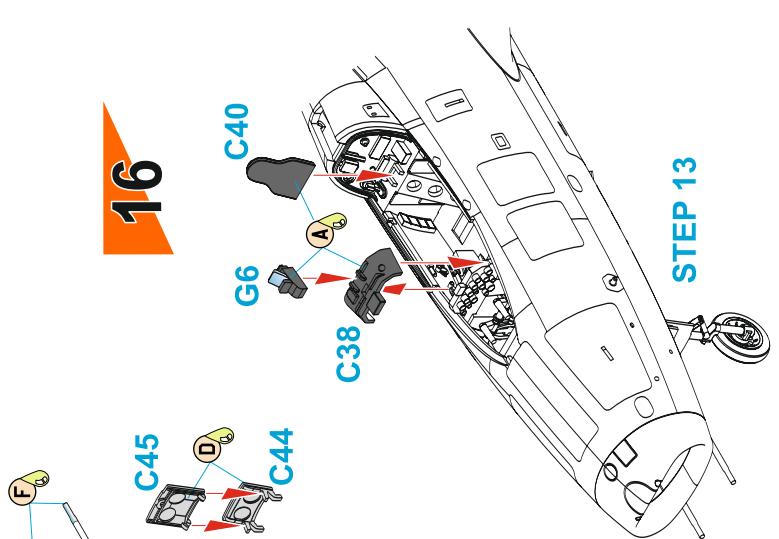
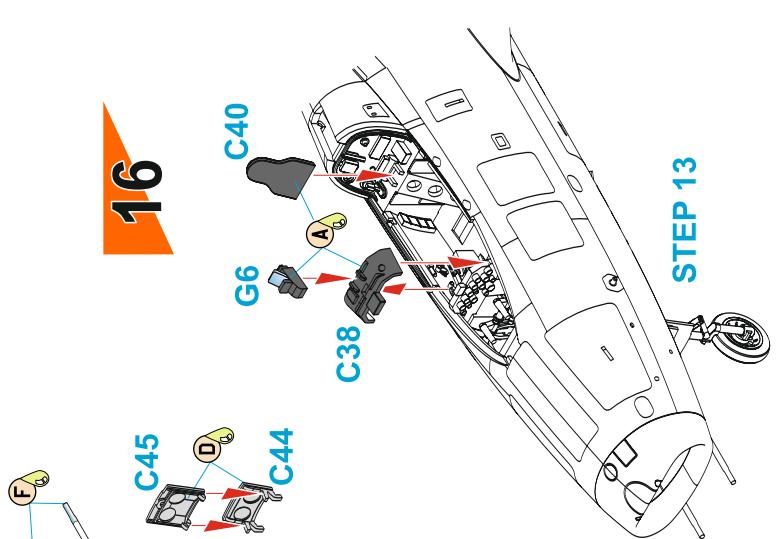
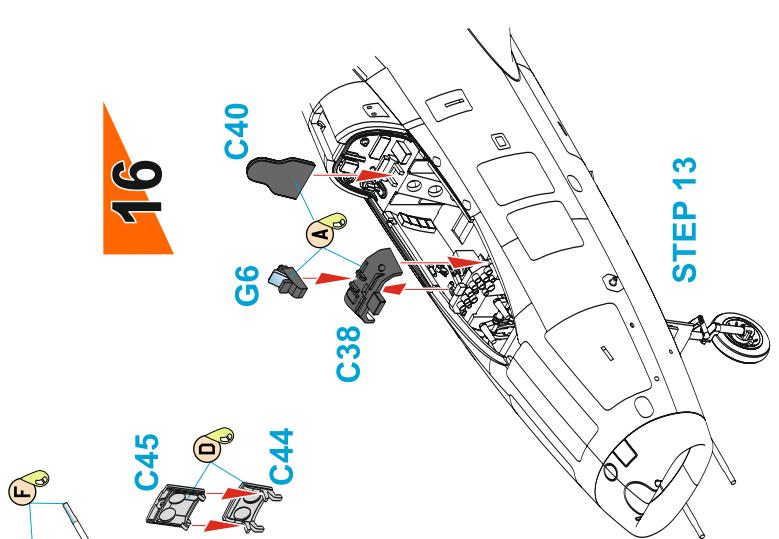
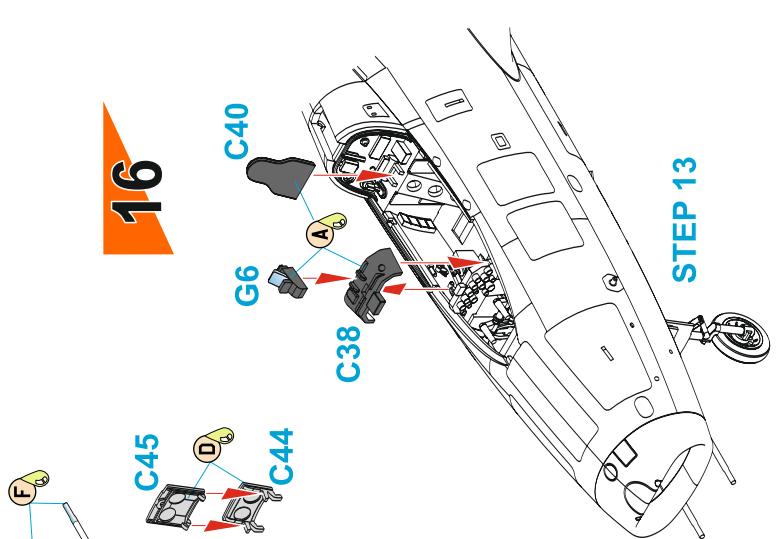
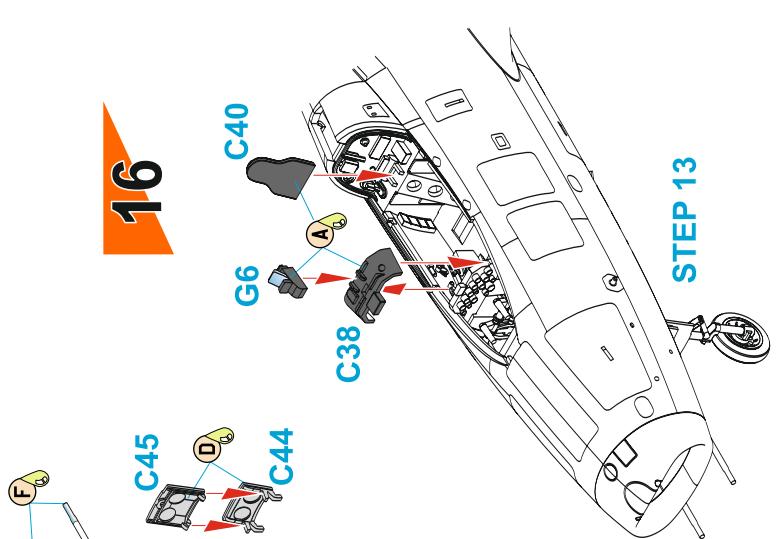
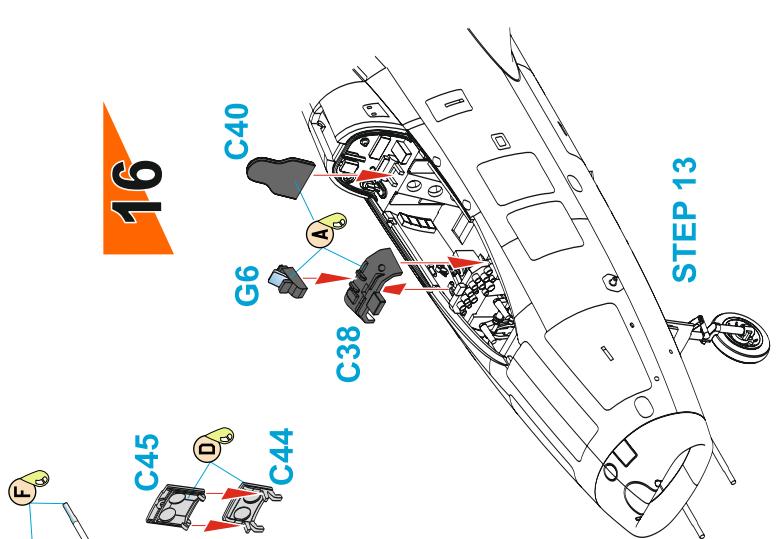
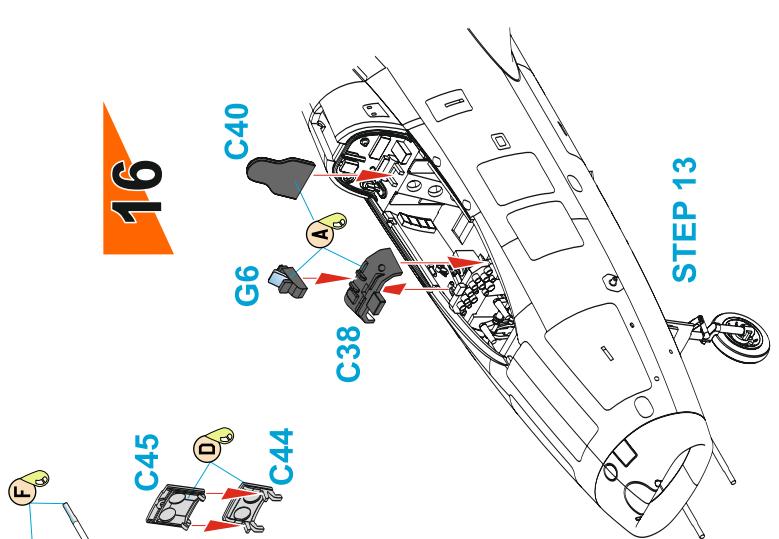
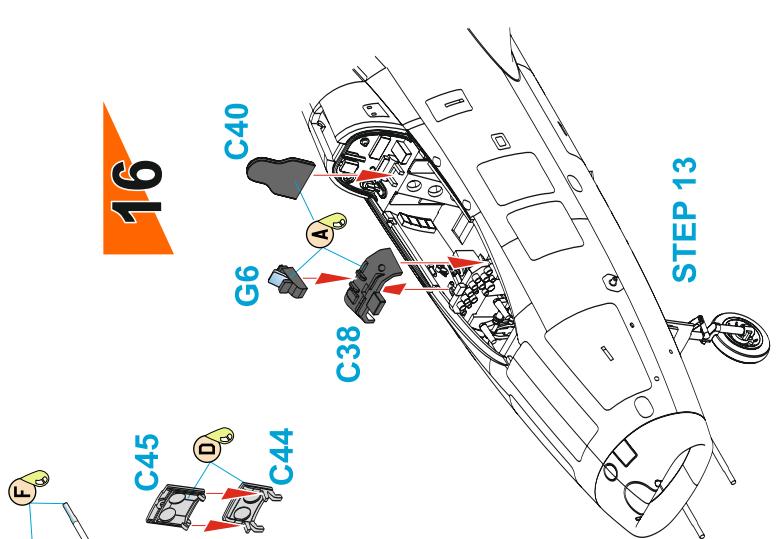
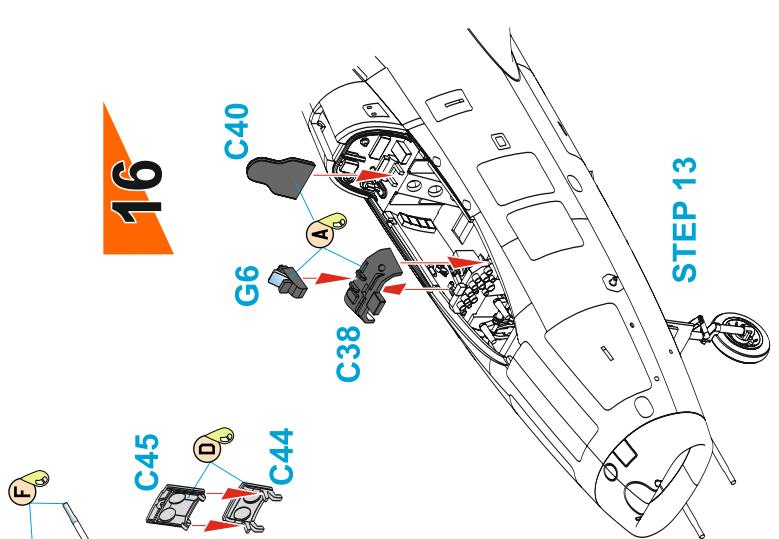
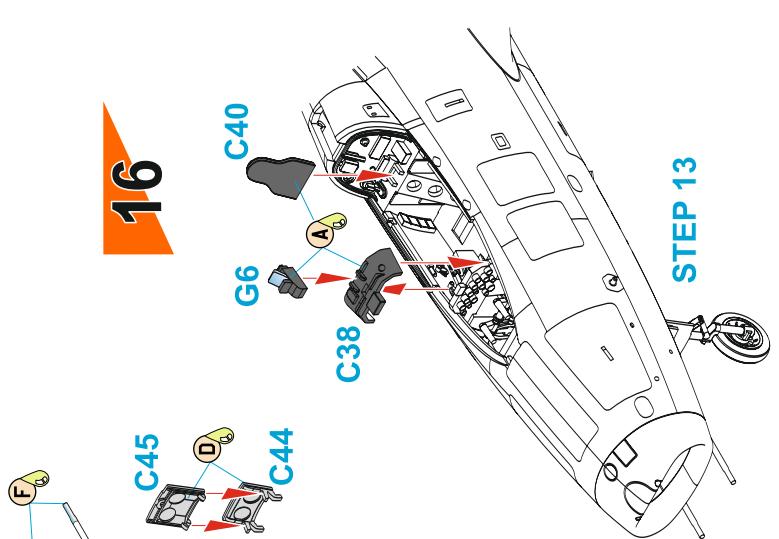
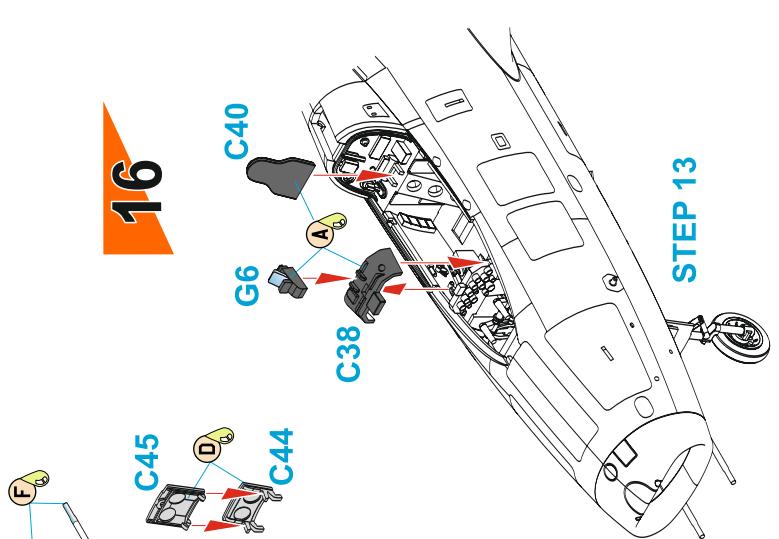
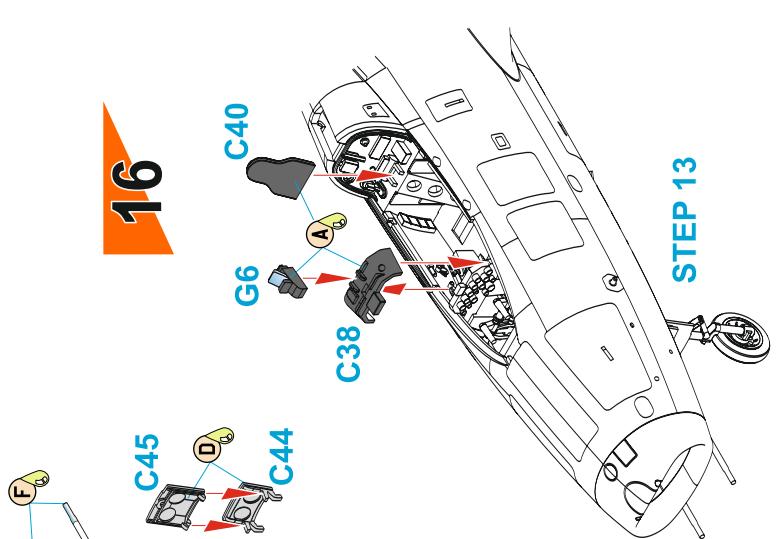
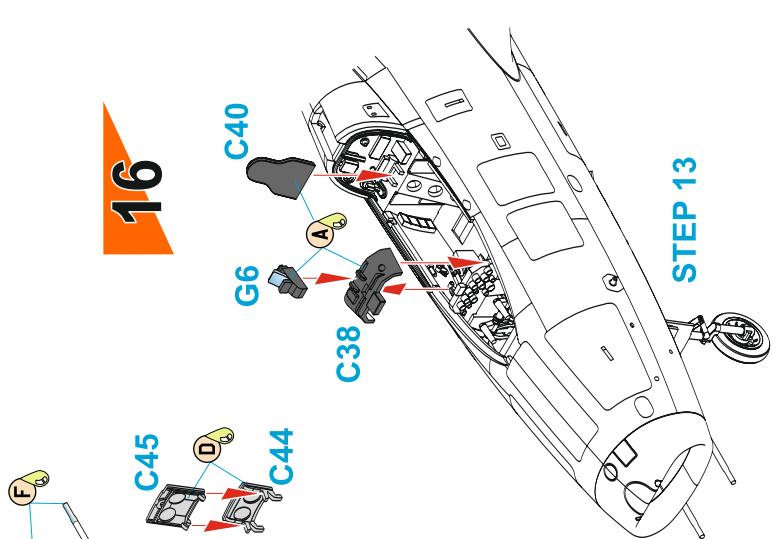
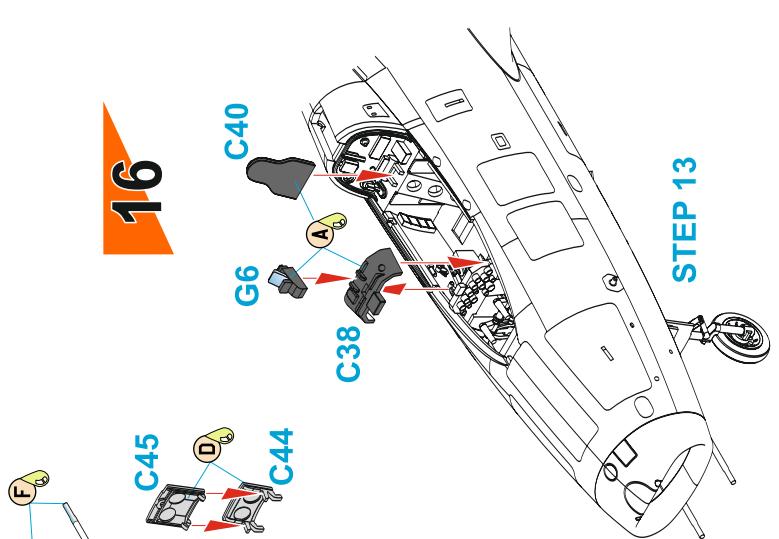
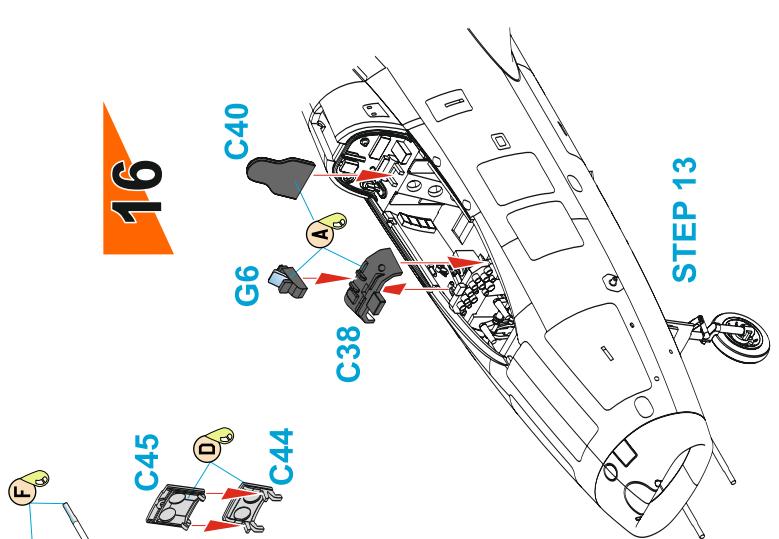
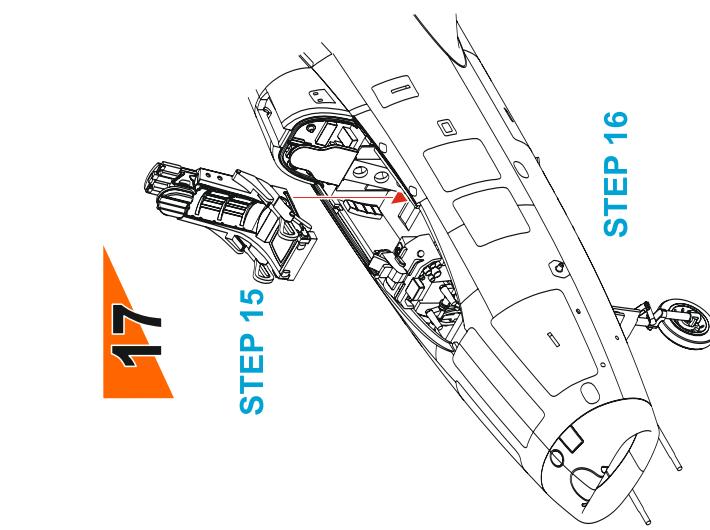
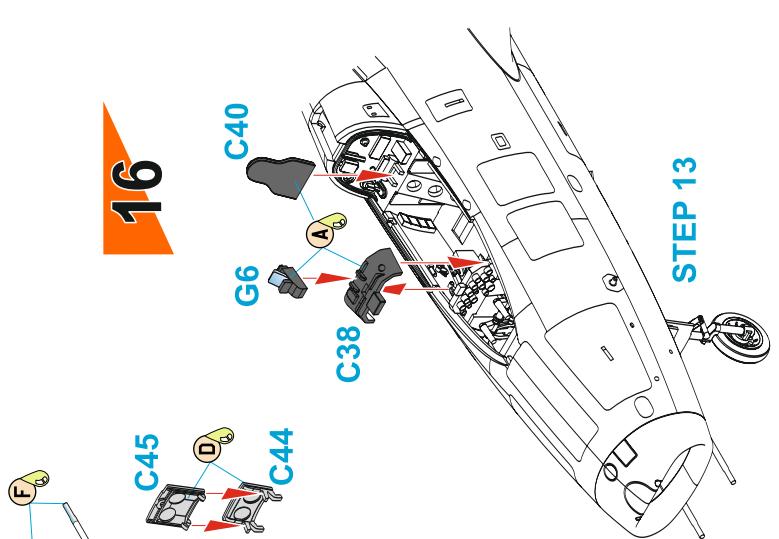
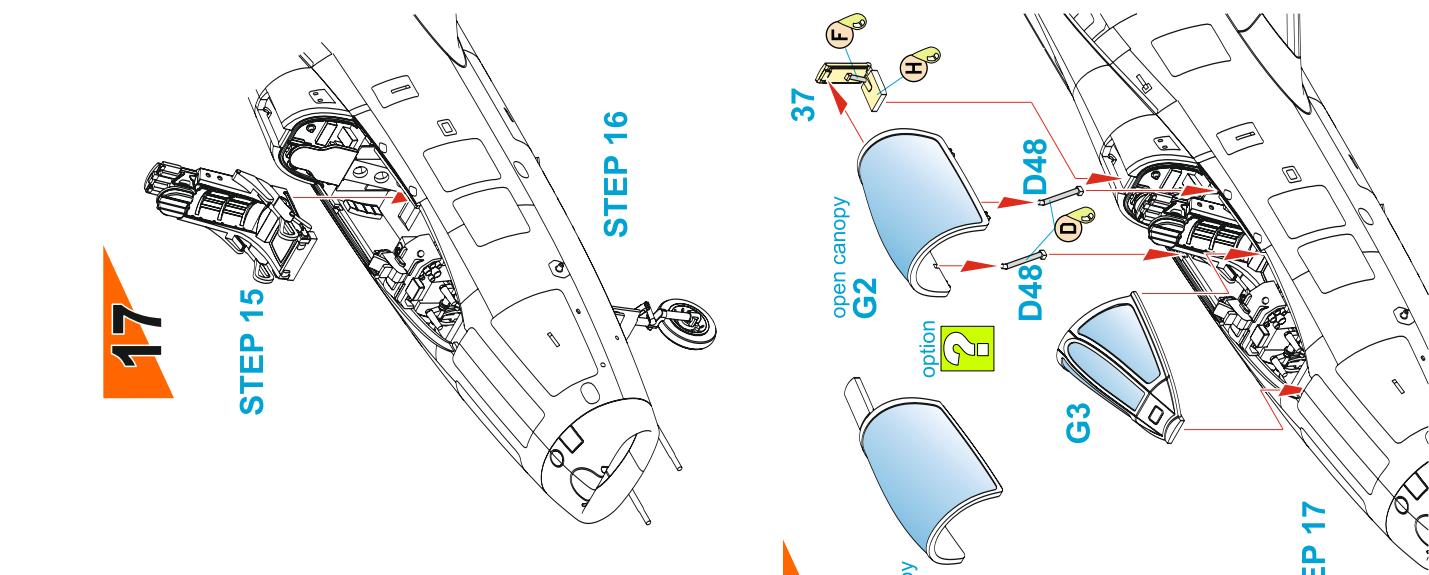
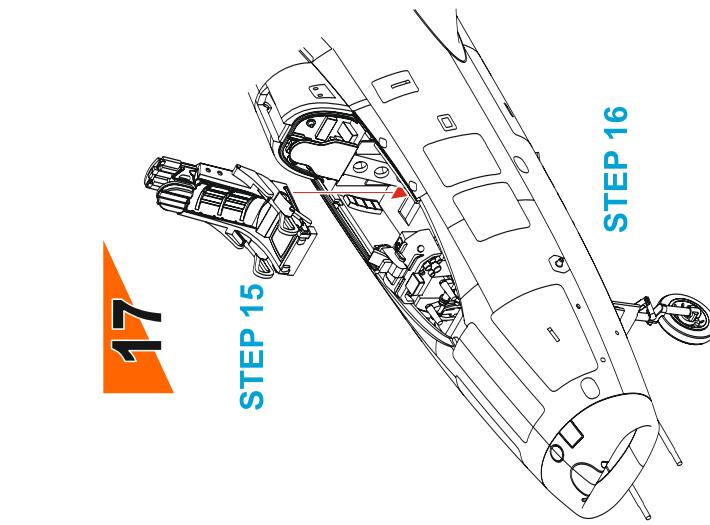
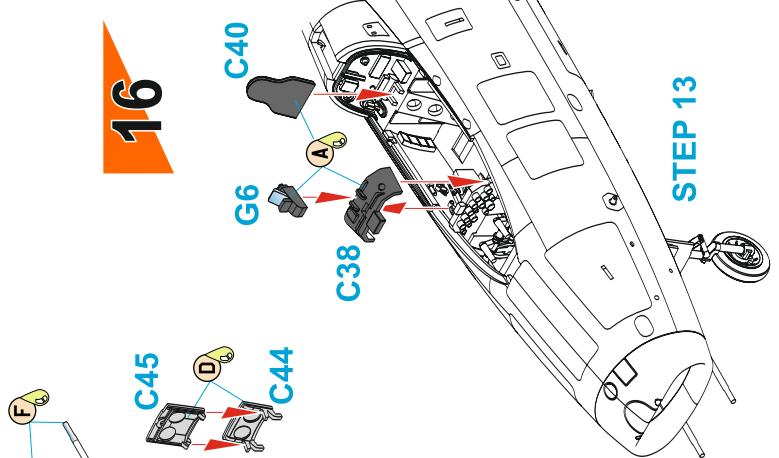
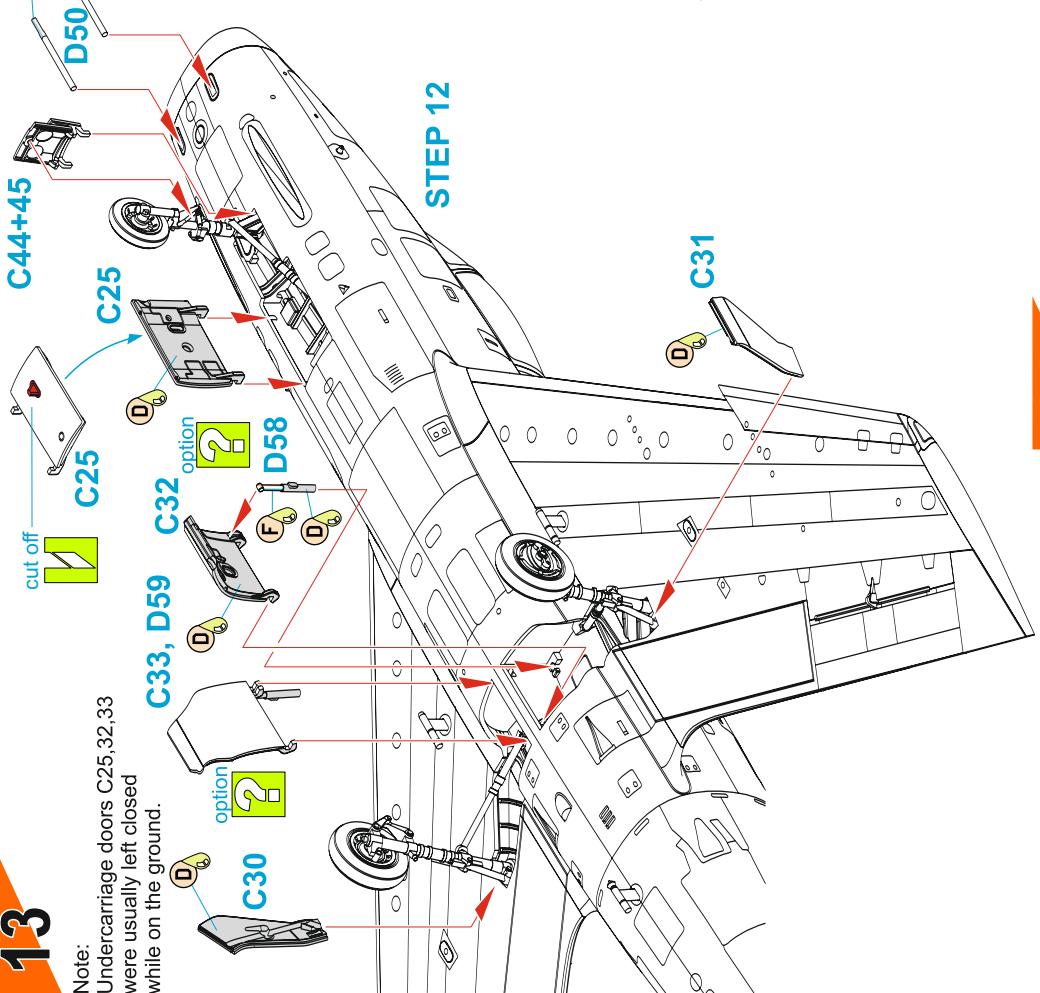






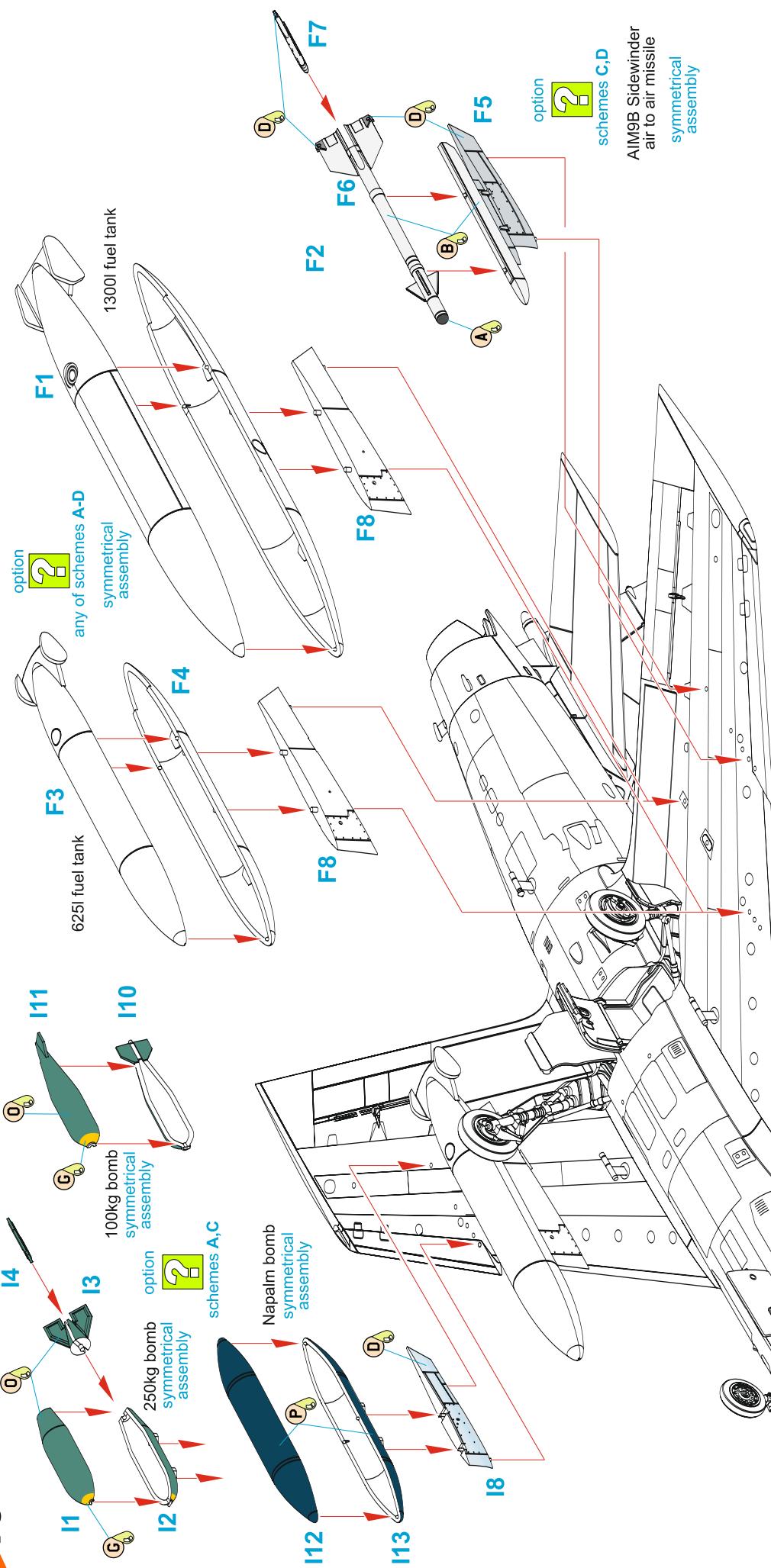
13

Note:
Undercarriage doors C25,32,33
were usually left closed
while on the ground.



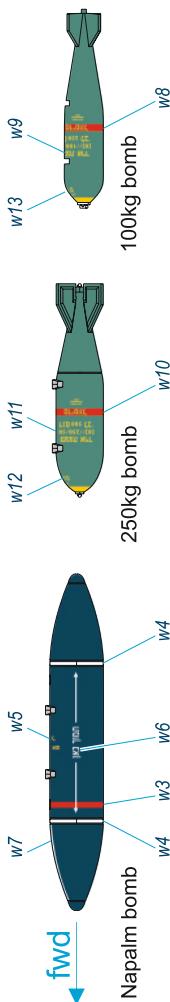
19

Note: Wing tanks and pylons were usually left in natural metal finish.



STEP 18

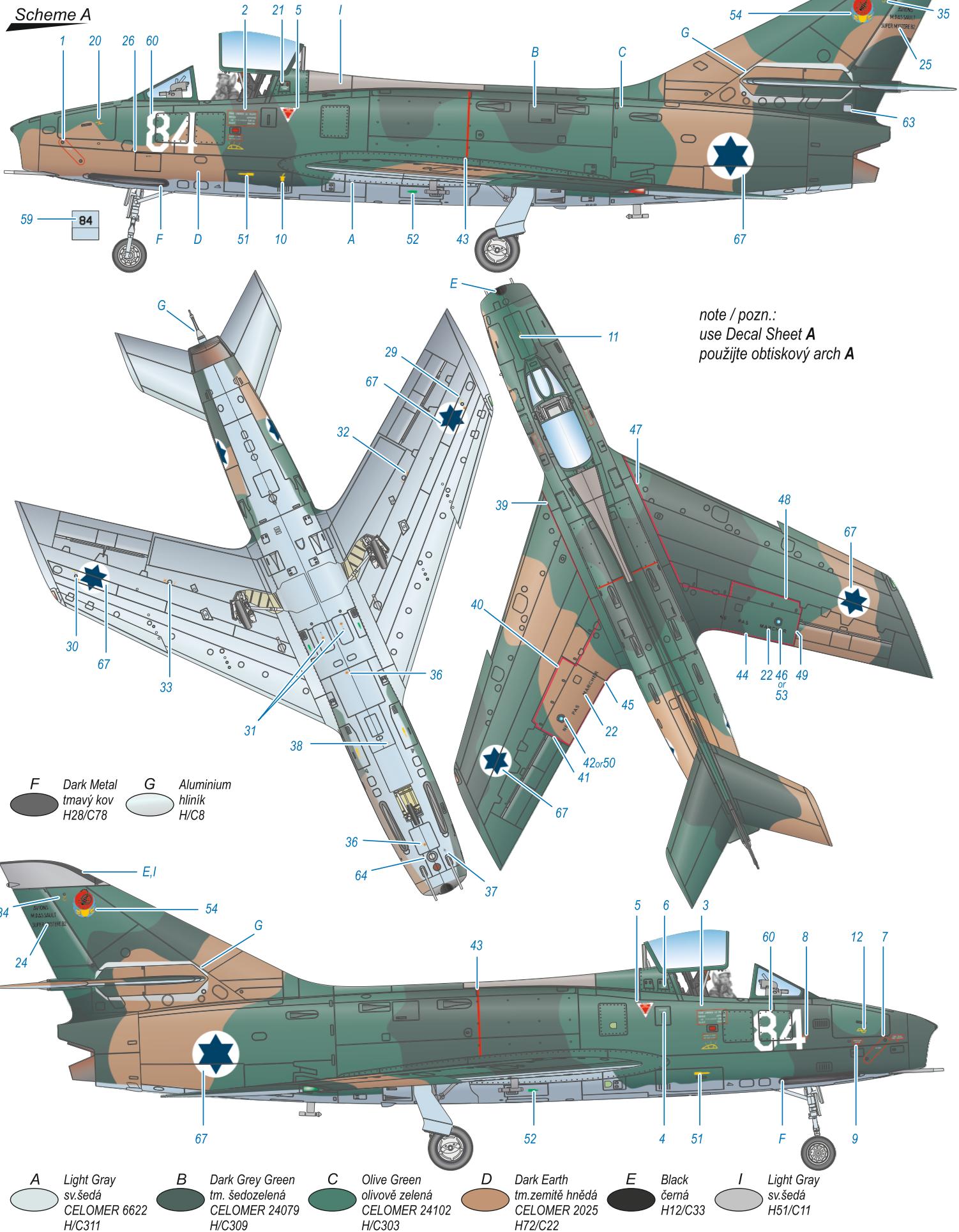
Schemes A,B; underwing stores placement scheme



SMB.2 Super Mystère, no.84, No.105 Scorpion (Ha'Akrav) Sqn, Hatzor AFB, Israel Air Force, 1971-72. This is one of six machines purchased from the French military in early 1971 which arrived in their original dark colour camouflage scheme. In November 1972, no 84 and 87 SMB2s were the last two to undergo the conversion to the Sa'ar standard at the IAI facility.

SMB.2 Super Mystère, č.84, No.105 Scorpion (Ha'Akrav) Sqn, Chacor, IAF - izraelské letectvo, 1971-72. Stroj č.84 je jedním z celkem šesti SMB.2, které Izrael dostal ze zásob francouzského letectva. Kamufláž zůstala původní, tvořená tmavšími barvami. V listopadu 1972 byly č.84 a 87 poslední dva SMB.2 odeslané do IAI ke konverzi na standard verze Sa'ar.

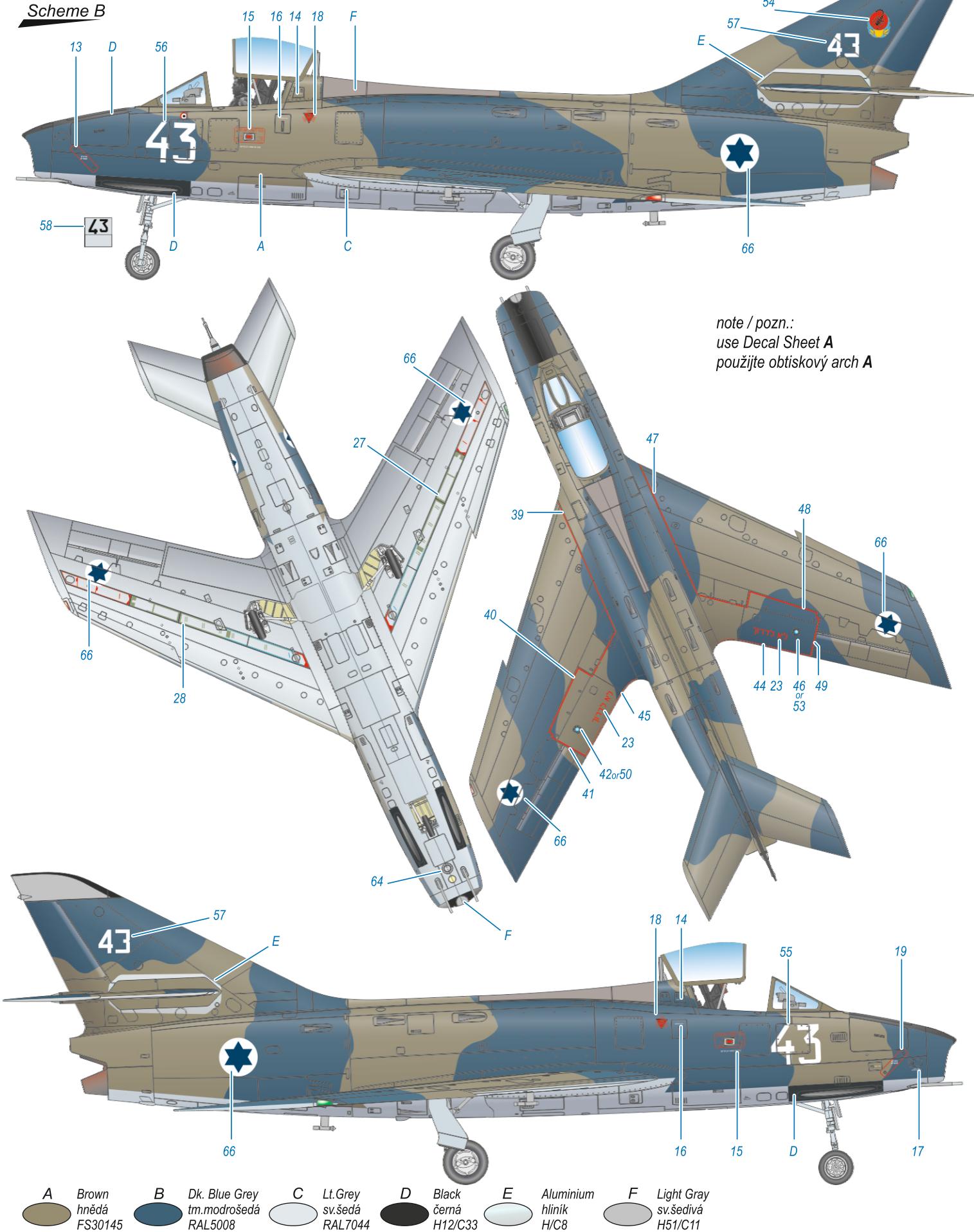
Scheme A



SMB.2 Super Mystère, no.43, No.105 Scorpion (Ha'Akrav) Sqn, Hatzor AFB, Israel Air Force, July 1967. Shortly after the Six Day War (5-10 June, 67), airframe no.43 received a single victory marking under its cockpit even though it was not eventually credited with the kill.

SMB.2 Super Mystère, č.43, No.105 Scorpion (Ha'Akrav) Sqn, Chacor, IAF - izraelské letectvo, červen 1967. Jistou dobu po Šestidenní válce (5-10. června 1967) nesl tento stroj symbol jednoho sestřelu, ačkoliv mu ve výsledku nebylo vítězství započítáno.

Scheme B



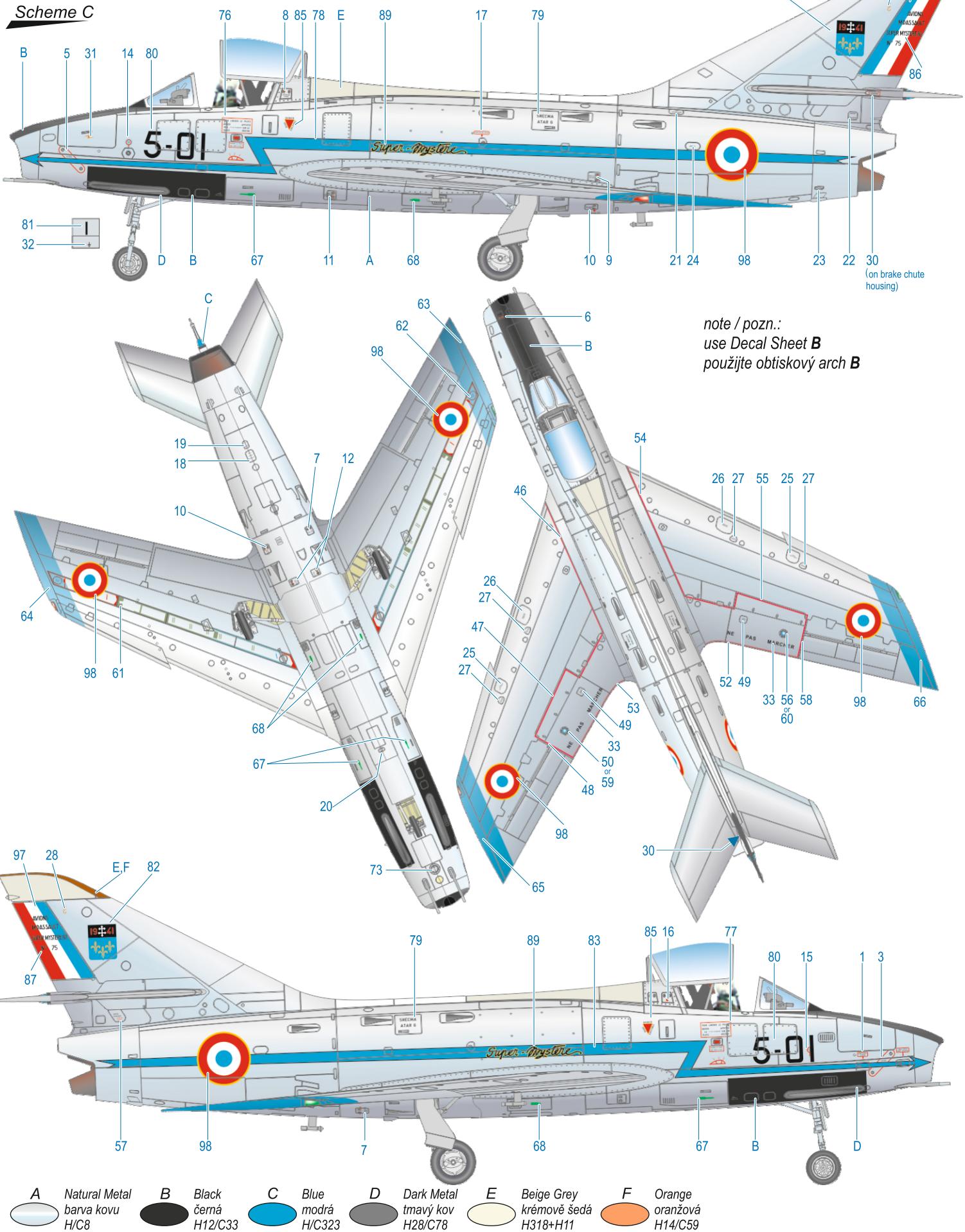
(camo colours A,B,C used to be quite glossy with hard masked demarcation)

SH72417A SMB2 Super Mystère / IAI Sa'ar

SMB.2 Super Mystère, 5-OI, c/n 75, 5^e escadre de chasse, escadron de chasse 02/005 'Ile de France', at Base Aérienne BA115 Orange-Caritat, Armée de l'Air - French Air Force, June 1963 - August 1966.

SMB.2 Super Mystère, 5-OI, výr.č. 75, 5^e escadre de chasse, escadron de chasse 02/005 'Ile de France', základna BA115 Orange-Caritat, Armée de l'Air - francouzské letectvo, červen 1963 - srpen 1966.

Scheme C



SMB.2 Super Mystère, 10-RD, c/n 67, 10^o escadre de chasse, escadron de chasse 02/010 'Seine', at Base Aérienne BA110 Creil, Armée de l'Air - French Air Force, May 1961 - September 1968.

SMB.2 Super Mystère, 10-RD, výr.č. 67, 10^o escadre de chasse, escadron de chasse 02/010 'Seine', základna BA110 Creil, Armée de l'Air - francouzské letectvo, květen 1961 - září 1968.

Scheme D

