



JA-37 Viggen 'Fighter Version'

History

EN

The SAAB 37 Viggen was an aircraft ahead of its time. Its designers used an unorthodox construction which enabled the plane to meet all requirements which had been laid on it and in some parameters even surpass them. The Swedish Air Force ordered several various versions of the Viggen jet fighter, its basic design formed an universal platform which, using a specialized equipment, enabled the plane to be used for different roles.

The first of seven prototypes took off for its maiden flight on February 8, 1967 with E. Dalsröm at the controls. The aircraft was powered by Volvo RM8 turbofan, a licence-built variant of Pratt & Whitney JT8D with an afterburner and thrust-reverser which, in addition to a double-delta wing design, enhanced the aircraft's performance during the take-offs and landings on short airstrips. The tailfin was designed as foldable to make it easier to store in hangars, it also helped with handling the aircraft after the landing and with hiding at the emergency airstrips. The avionics of the type was one of the best in the world in the time, Viggen was the first type to be equipped with a computer with integrated circuits.

The first version of the Viggen which saw service with the Flygvapnet was the AJ 37 strike fighter, followed consequently by the SK 37 two-seat trainer, SF 37 reconnaissance version with cameras in redesigned nose section and anti-shipping SH 37 with different avionics and equipped with anti-shipping weapons. Ten years after the first version of the SAAB had entered service, a second generation of the Viggen came into being, which was the JA 37 fighter version. More modern avionics was used and also a more powerful engine in a slightly longer fuselage. The earlier versions became to be equipped with the modernised avionics too and this way the AJS 37, respectively ASFS and ASHS 37 versions were created. Some of the two seat airframes were converted to the SK 37 E electronic warfare trainers.

The last of the Viggens were phased out in 2007. Mainly for political reasons, no Viggen has ever been exported to another countries, although India, Japan and Scandinavian countries showed some interest in the type.

Length: 16,30 m, Wingspan: 10,60 m, Max. speed: 2145 km/h, Standard Range: 1000 km/ Max. Range: 2000 km, Ceiling: 18 300 m, Rate of Climb: 100 m/s

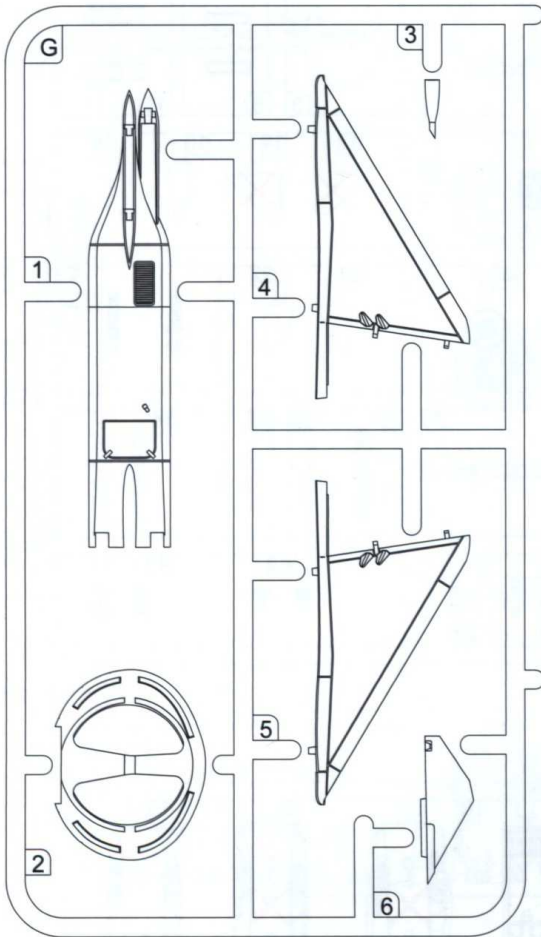
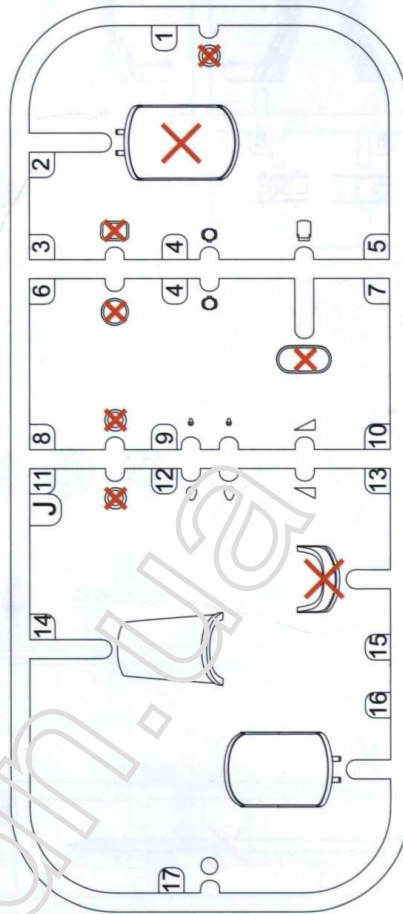
Historie

CZ

SAAB 37 Viggen je letoun, který předběhl svou dobu. Neortodoxní řešení, zvolená jeho konstruktéry, nejen umožnily Viggenu splnit požadavky na něj kladené, ale v některých parametrech je předčil. Švédské letectvo objednalo Viggen v několika verzích, s tím, že základní provedení letounu tvořilo univerzální platformu, která doplněná o speciální vybavení umožňovala použití v několika rolích.

První ze sedmi stavěných prototypů vzletl 8. února 1967, řízen pilotem E. Dalsrömem. Pohon zajišťoval motor Volvo RM8, licenční civilní motor Pratt & Whitney JT8D doplněný o přídavné spalování a obraceče tahu. To, stejně jako koncepce dvojíh delta křídel přispívalo k vynikajícím vlastnostem Viggenu při startech a přistáních na malých přistávacích plochách. Pro lepší manipulaci s letouny po přistání umístění do hangárů či jejich lepšímu zamaskování při operacích z nestandardních ploch dostal Viggen sklopnou svislou ocasní plochu. Elektronické vybavení bylo ve své době jedno z nejlepších na světě, Viggen byl první stroj se zabudovaným počítačem s integrovanými obvody. Do výzbroje švédského letectva byla jako první zařazena verze AJ 37 Viggen, kterou postupně následovaly verze SK 37 - dvoumístný cvičný stíhací letoun, SF 37 - průzkumná verze s fotografickými přístroji v upravené přídě, SH 37 - protilodní verze s odlišným elektronickým vybavením a protilodní výzbrojí. Po cca deseti letech od zařazení první verze byla vyrobena druhá generace Viggenu, stíhací verze JA 37. Ta dostala modernizované elektronické vybavení a silnější motor v nepatrně prodlouženém trupu. Modernější elektronické vybavení dostaly i starší verze, přestavbou vznikaly stroje AJS 37, případně ASFS a ASHS 37. Část dvoumístných cvičných strojů byla přestavěna na verzi pro výcvik elektronického boje SK 37E. Švédské letectvo vyřadilo poslední Viggenu v roce 2007. Export Viggenu se nezdařil, většinou z politických důvodů. Mezi největší zájemce patřila např. Indie, ale zájem projevovaly i skandinávské země či Japonsko.

Délka: 16,30 m, rozpětí: 10,60 m, max. rychlost: 2145 km/h, dolet standardní: 1000 km/maximální: 2000 km, dostup: 18 300 m, rychlost stoupání: 100 m/s

G**J (CLEAR PARTS)**

X not to be used

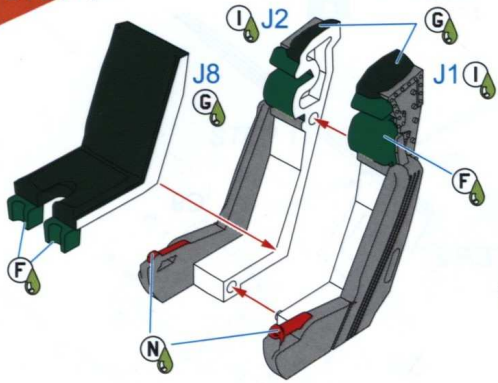
Barvy GUNZE GUNZE Colour No.

A Black / černá	H12/C33	K Light Green / sv. zelená	H58/C27
B Tire Black / černá pnev.	H77/C137	L Tan / sv. hnědá	H310/C310
C Steel / ocel	H18/C28	M Red Brown / červeno hnědá	H47/C41
D Aluminium / hliník	MC218	N Red / červená	H3/C3
E Burnt Iron / opálený kov	H76/C61	O Yellow / žlutá	H4/C4
F Bright Green / zelená	H26/C66	P Dark Grey / tmavě šedá	H306/C306
G Light Green / sv. zelená	H319	Q Light Gull Grey / světle šedá	H51/C11
H Light Grey / sv. šedá	H338	R Clear Blue / čirá modrá	H93/C50
I Grey / šedá	H308	S Clear Red / čirá červená	H90/C47
J Dark Green / tm. zelená	H309/C309		

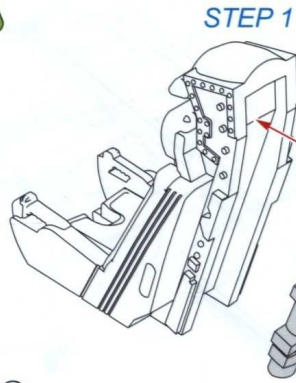
SYMBOLS

OPTIONAL MOŽNOST VOLBY NACH BELIEBEN OPTION	INSTANT CYANOACRYLATE GLUE POUŽÍT KYANOAKRYLÁTOVÉ LEPIDLO ZYANOAKRYLÁTKLEBER ADHÉSIF CYANOACRYLAT	BEND OHNOUT BIEGEN COURBER	SCRATCH BUILD ZHOTOVIT NOVÉ FERTIGSTELLEN ACHEVER	CUT OFF/DRILL ŘEZAT/VRTAT ENTFERNEN DETACHER	GSI COLOUR NATRÍT FARBEN PEINDRE
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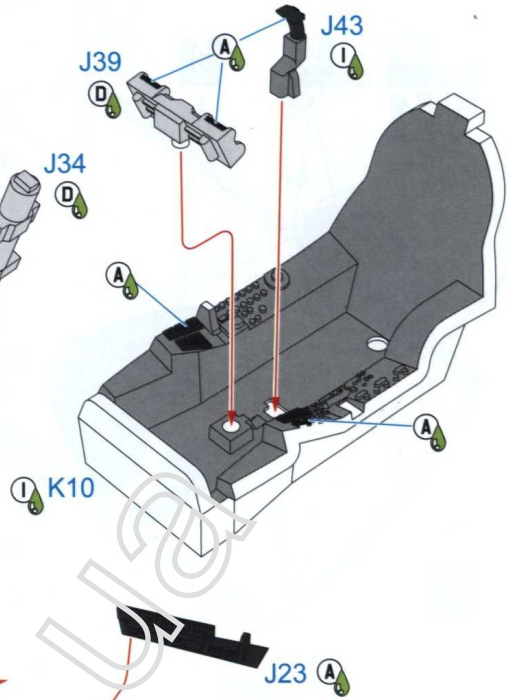
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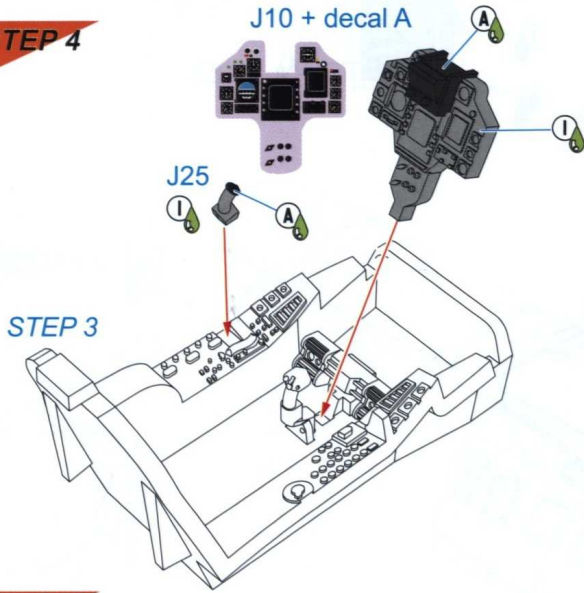
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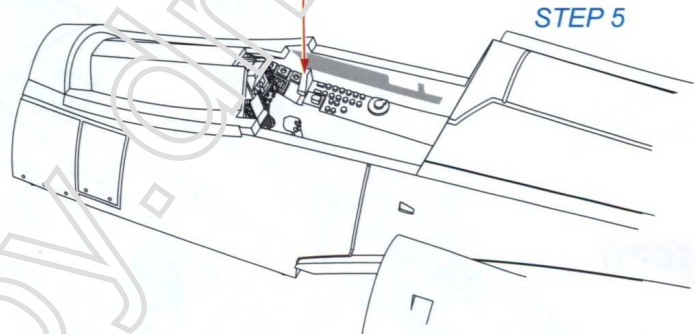
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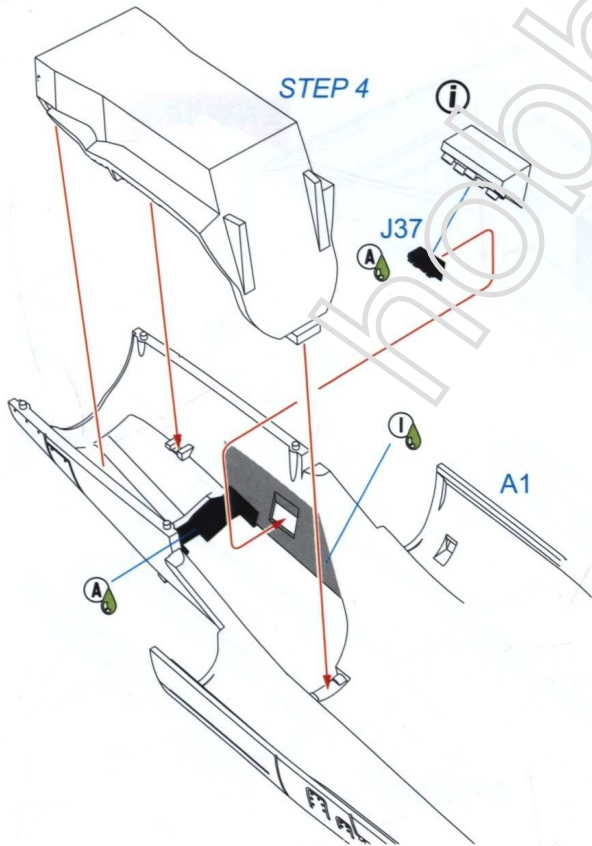
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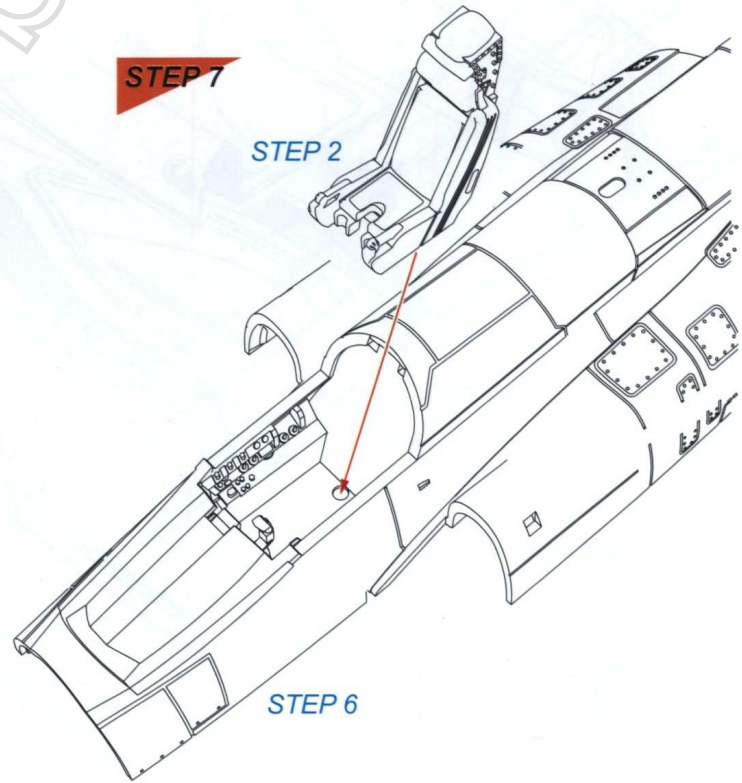
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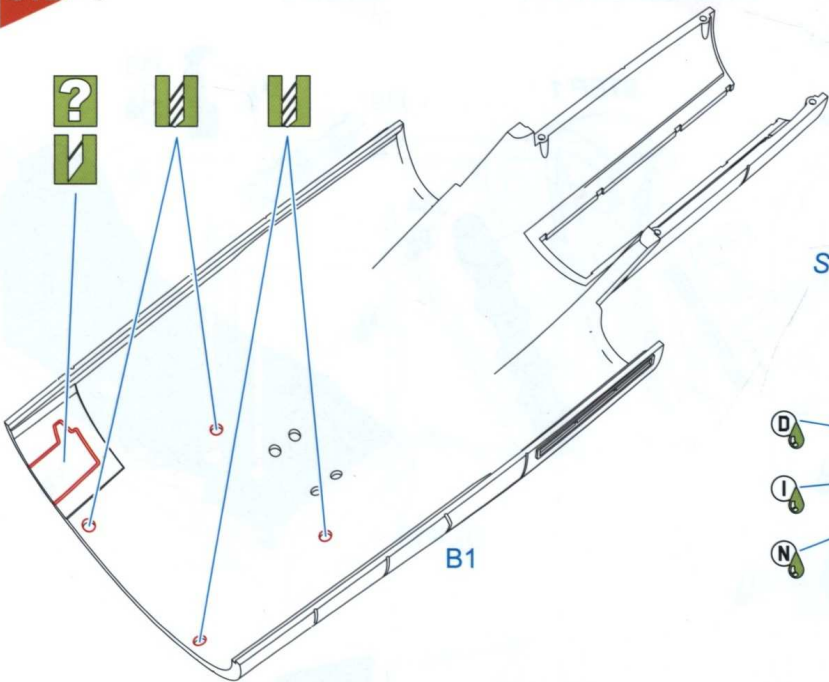
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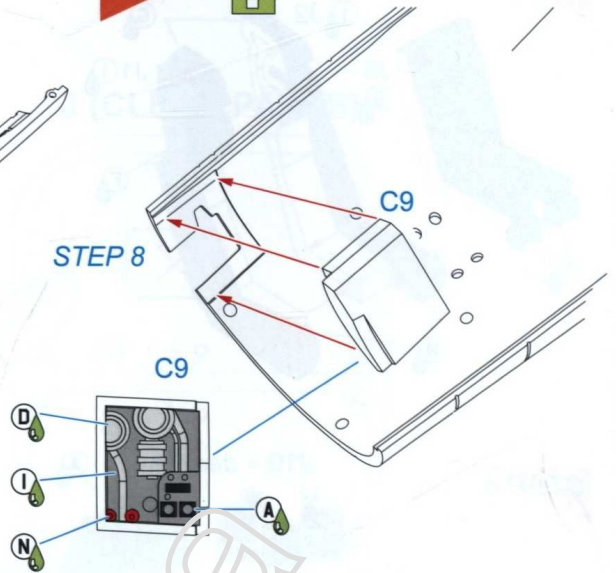
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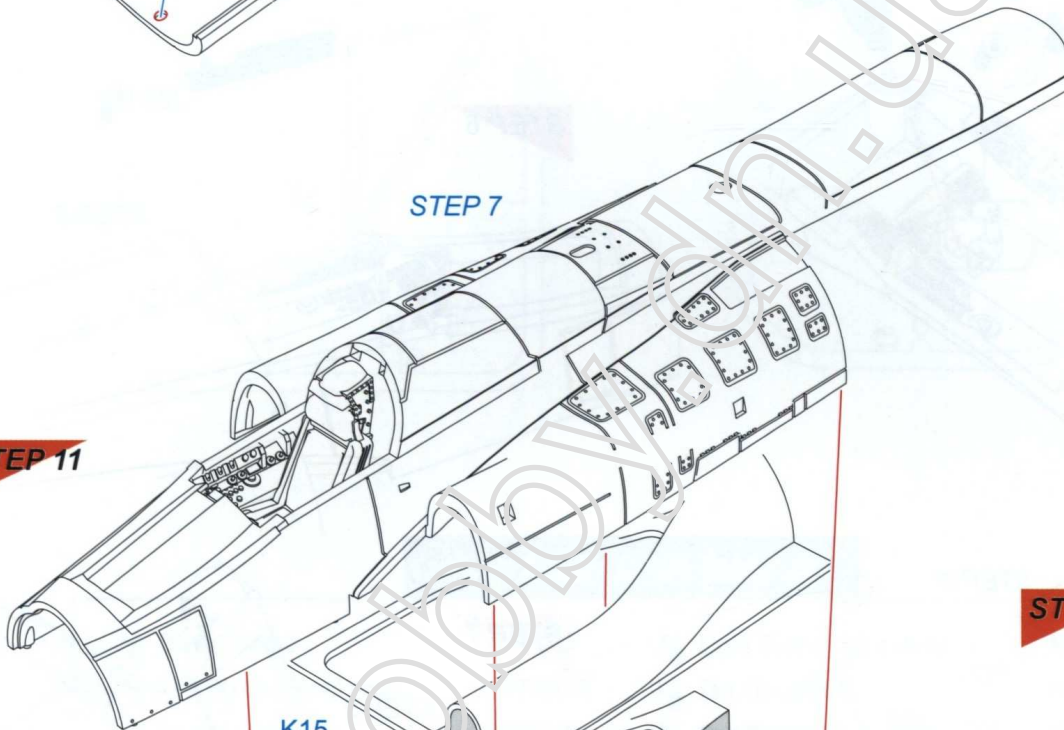
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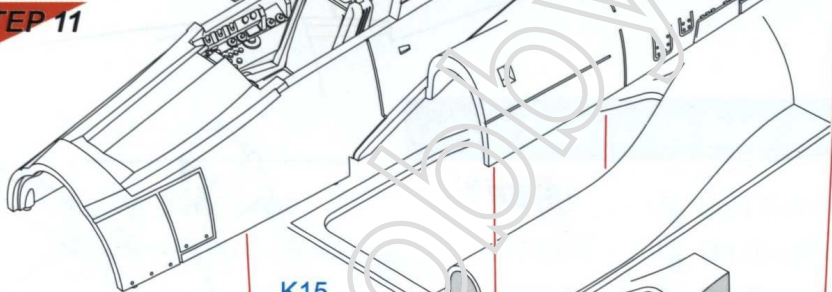
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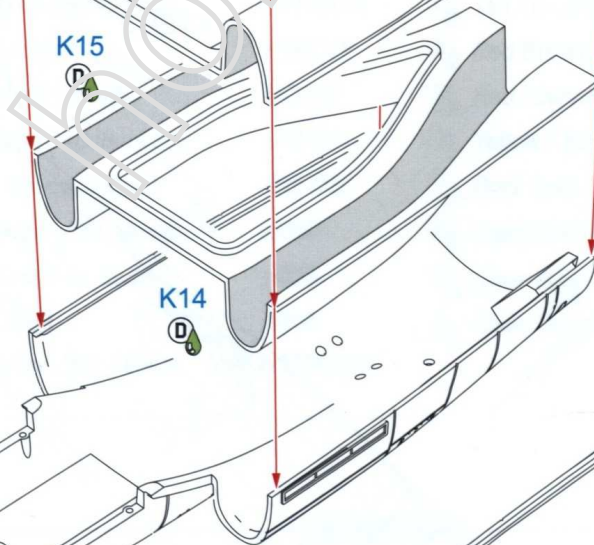
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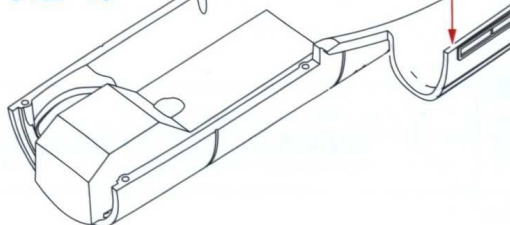
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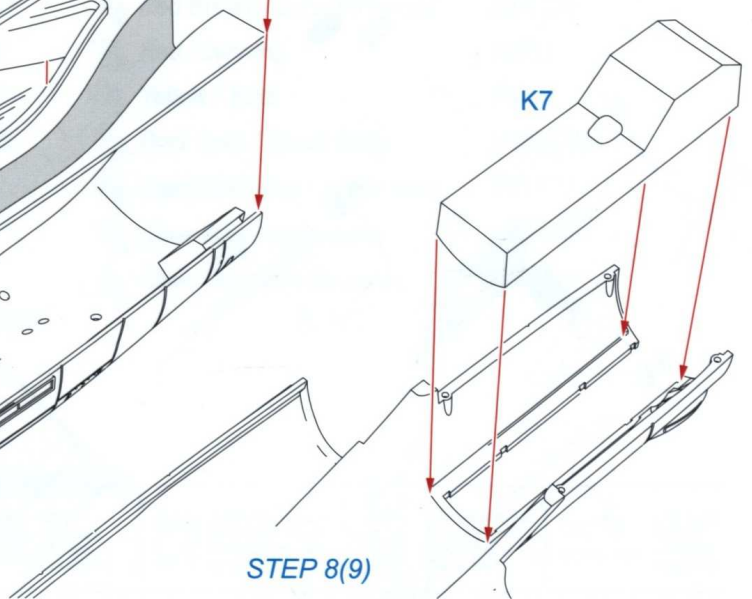
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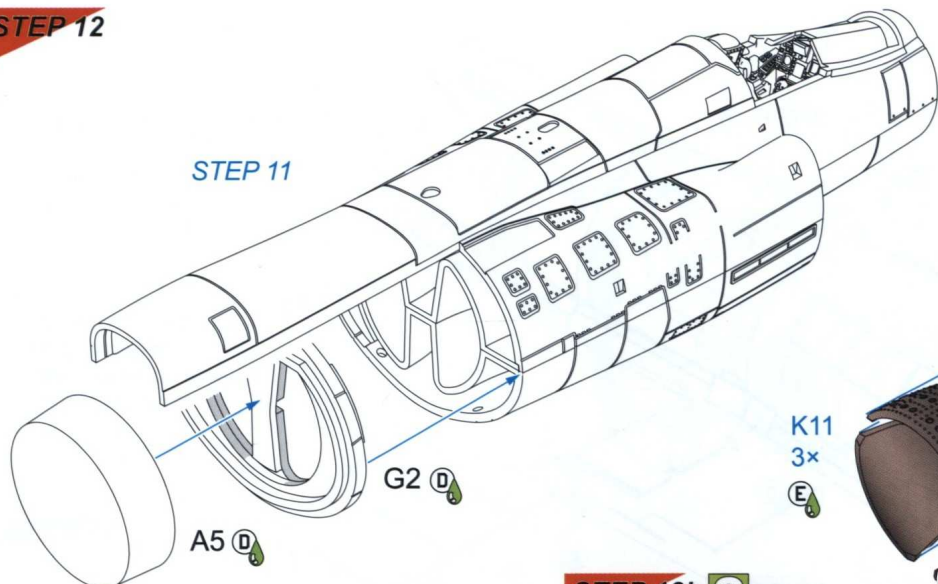
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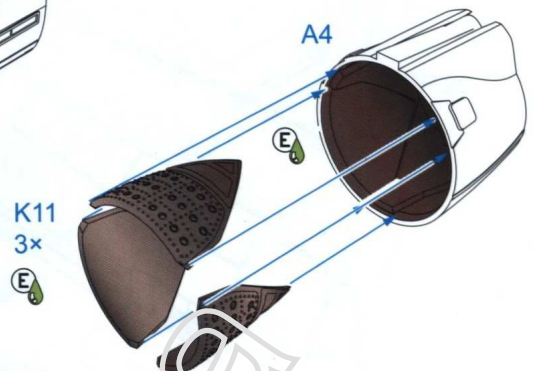
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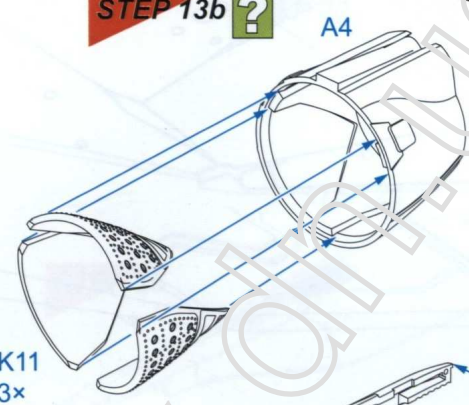
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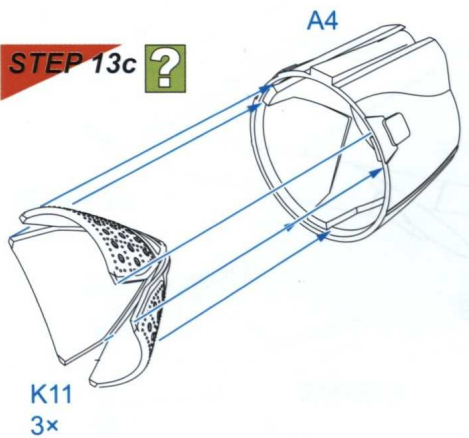
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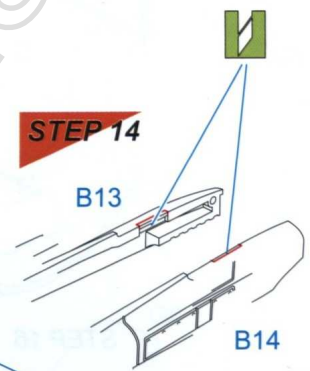
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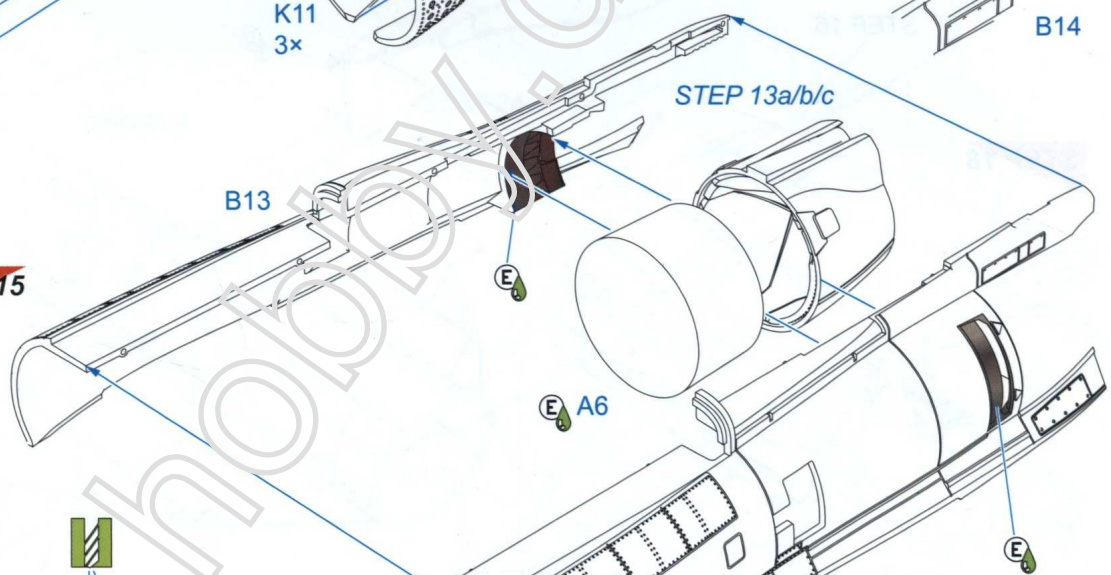
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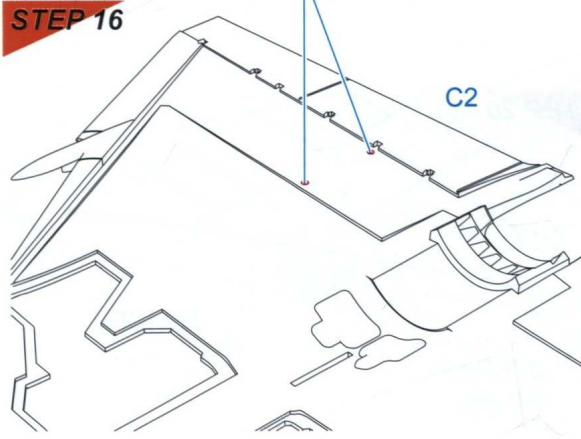
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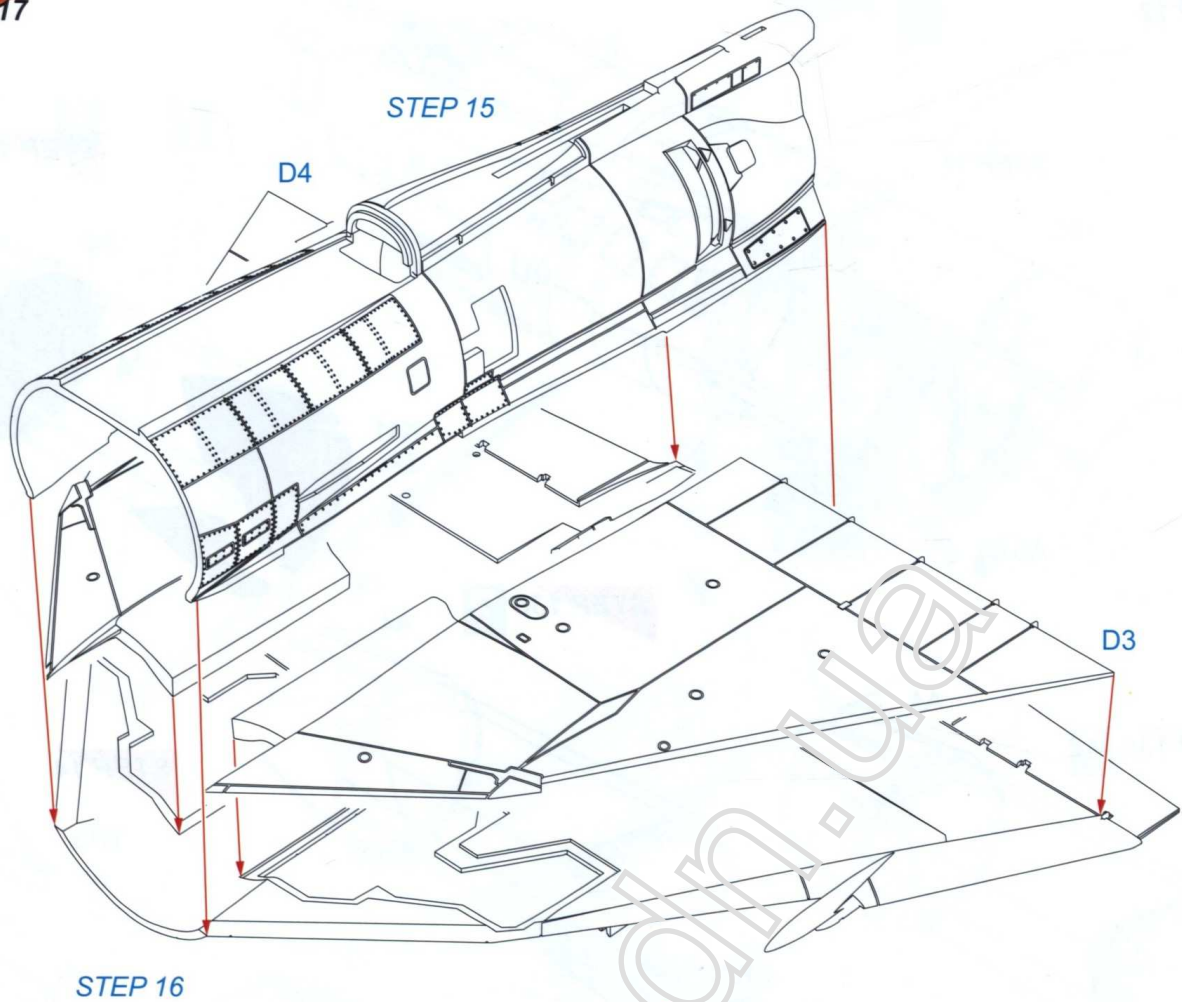
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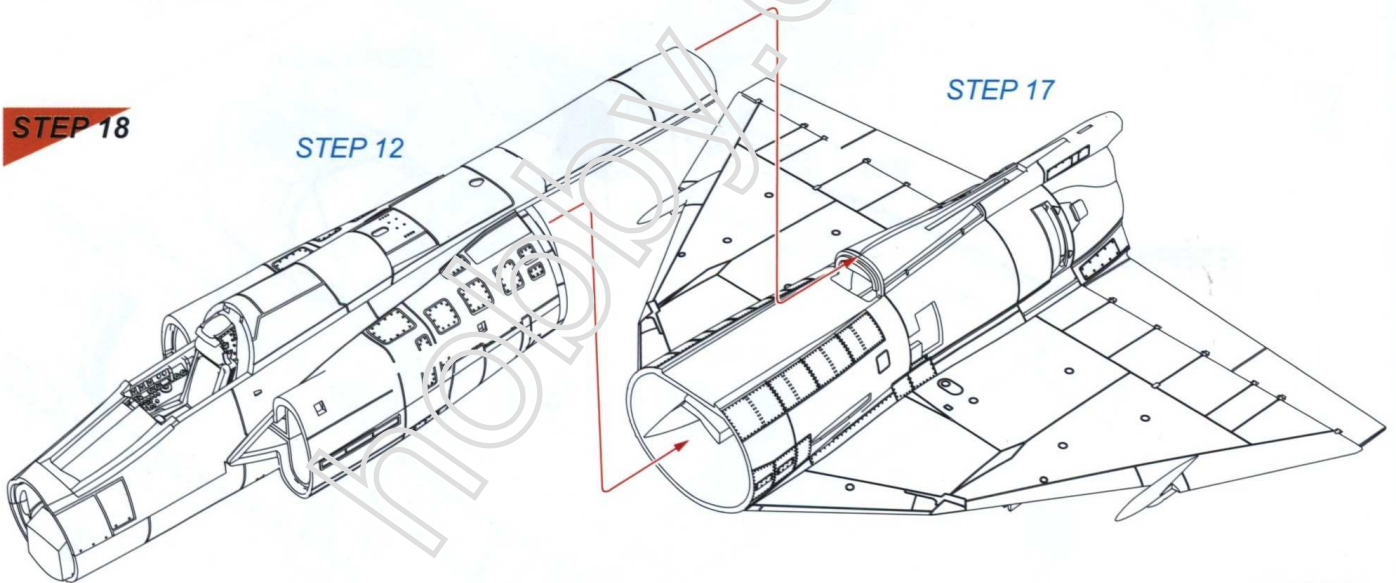
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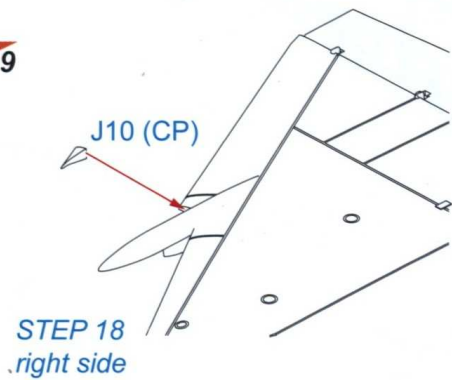
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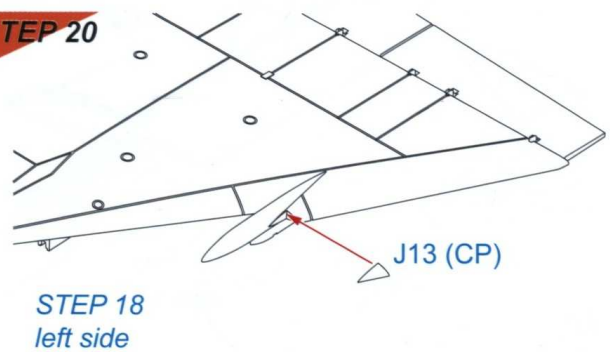
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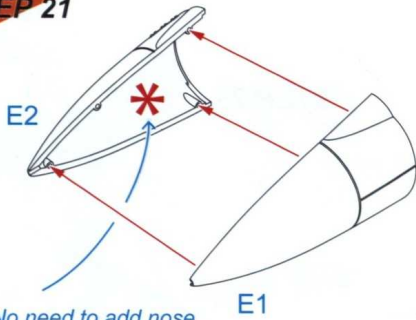
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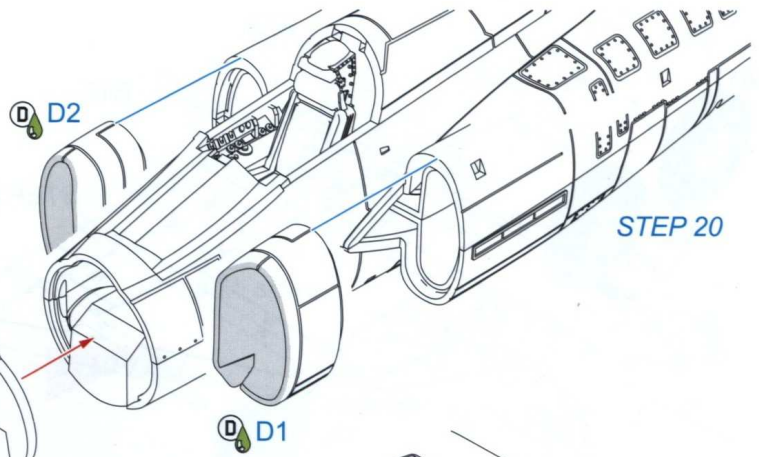
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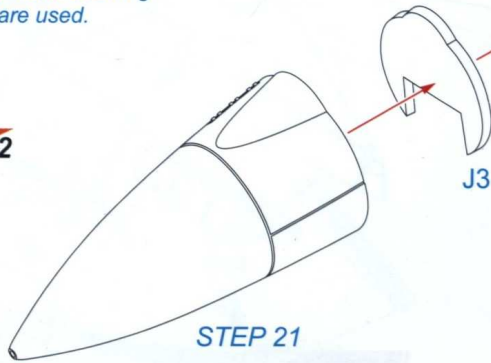
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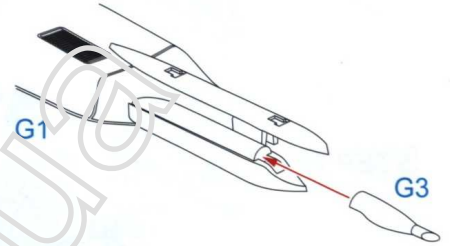
No need to add nose ballast unless aftermarket underwing stores are used.



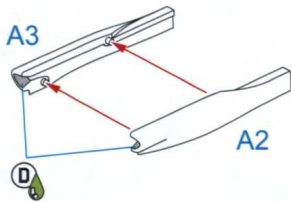
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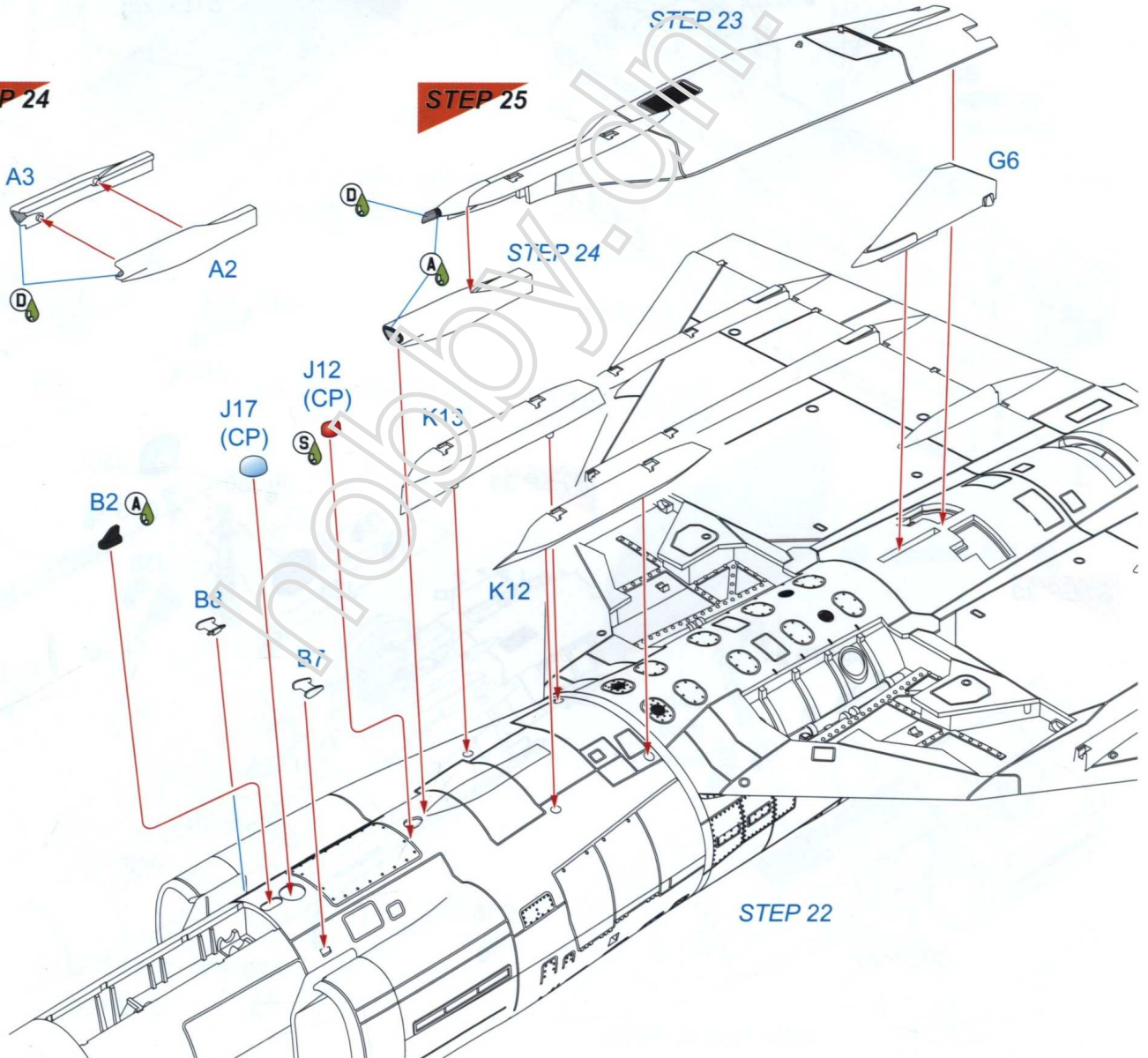
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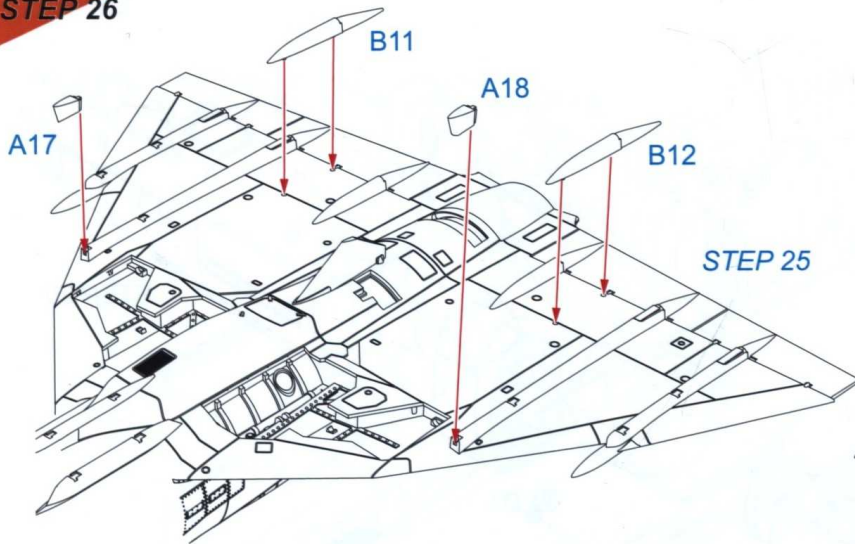
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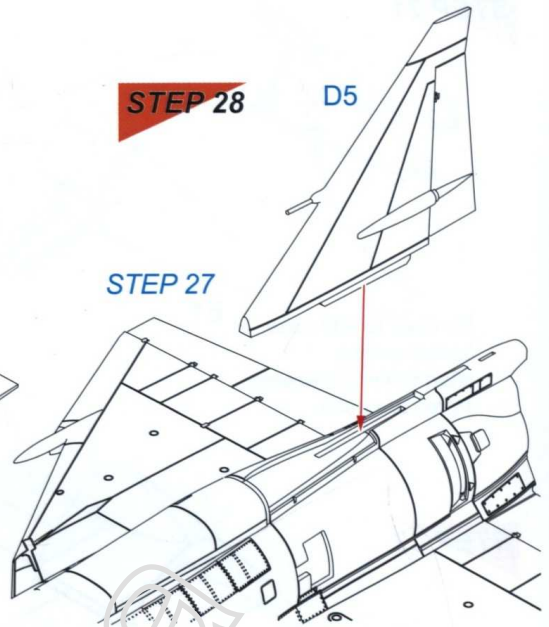
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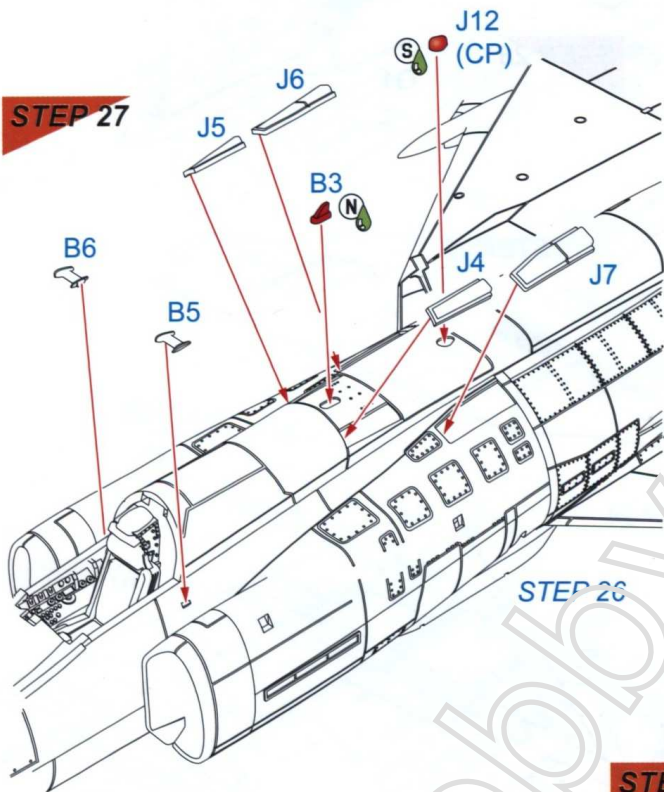
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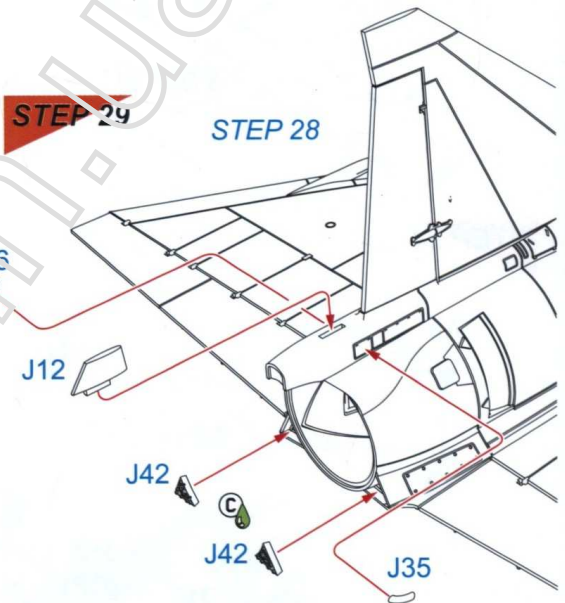
STEP 28



STEP 27

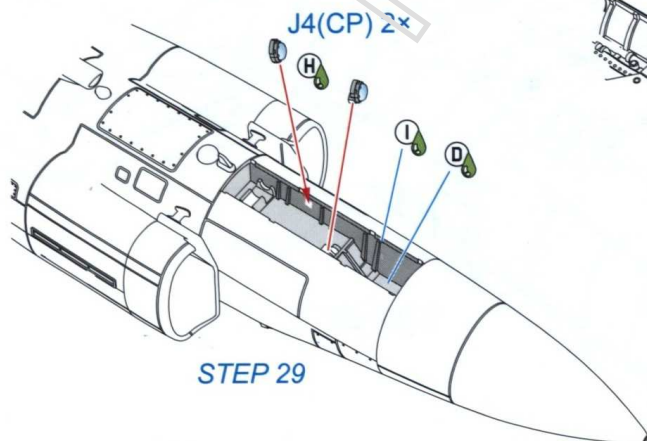


STEP 29

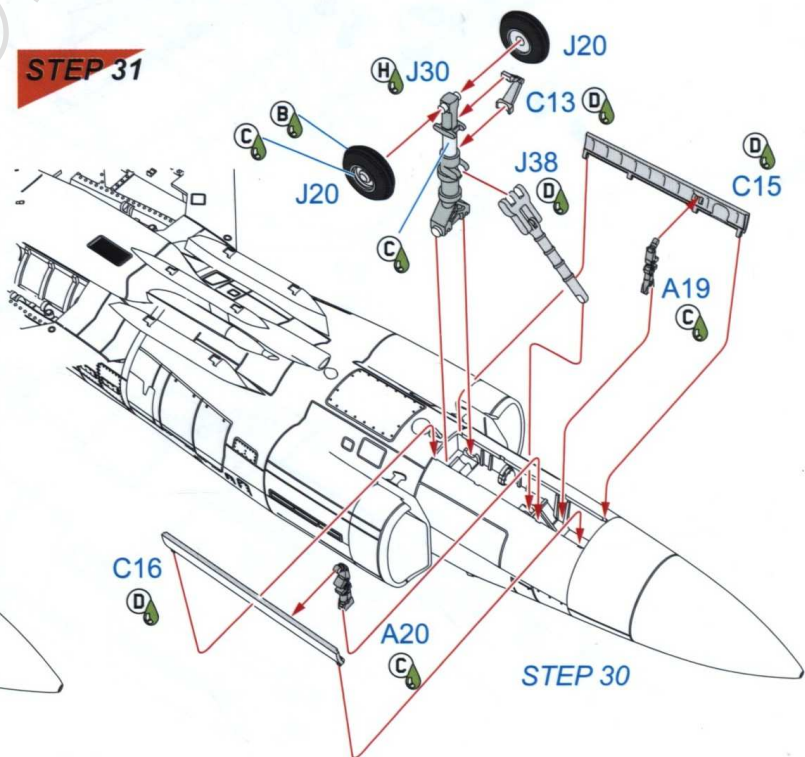


STEP 28

STEP 30

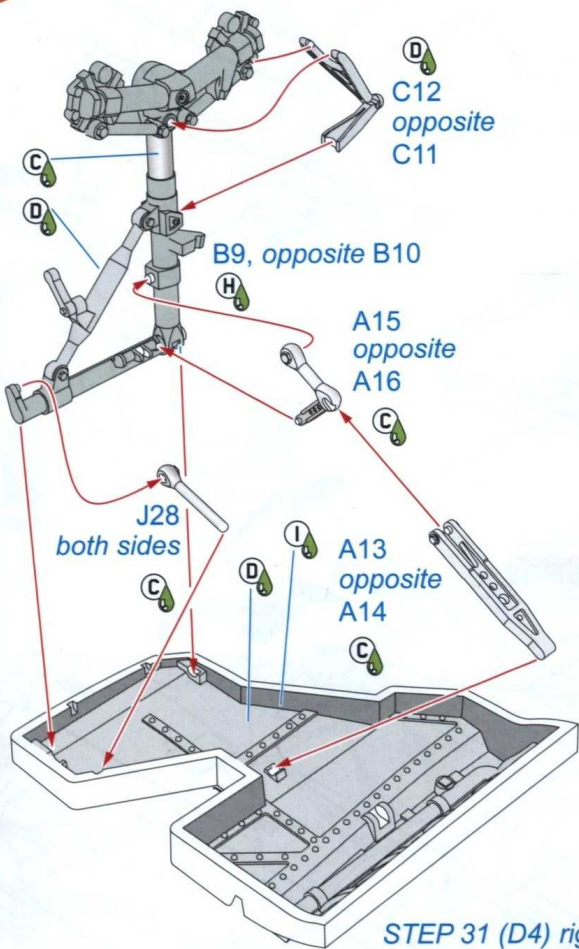


STEP 31

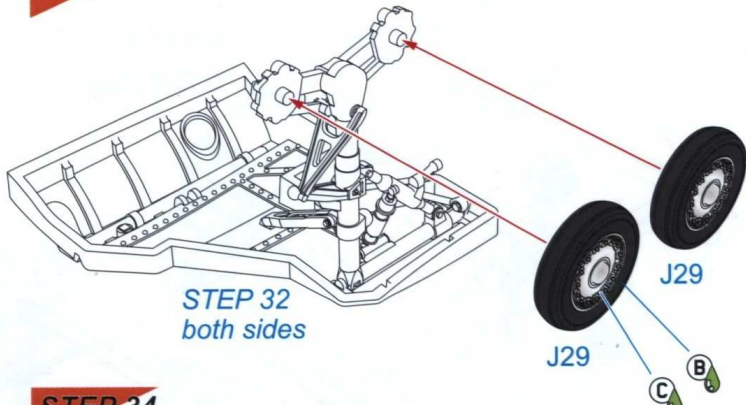


STEP 30

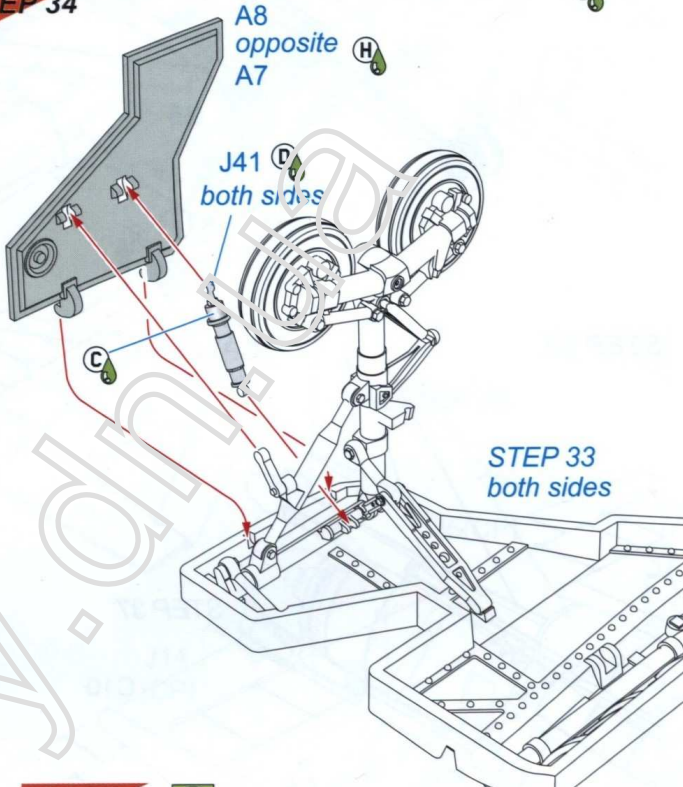
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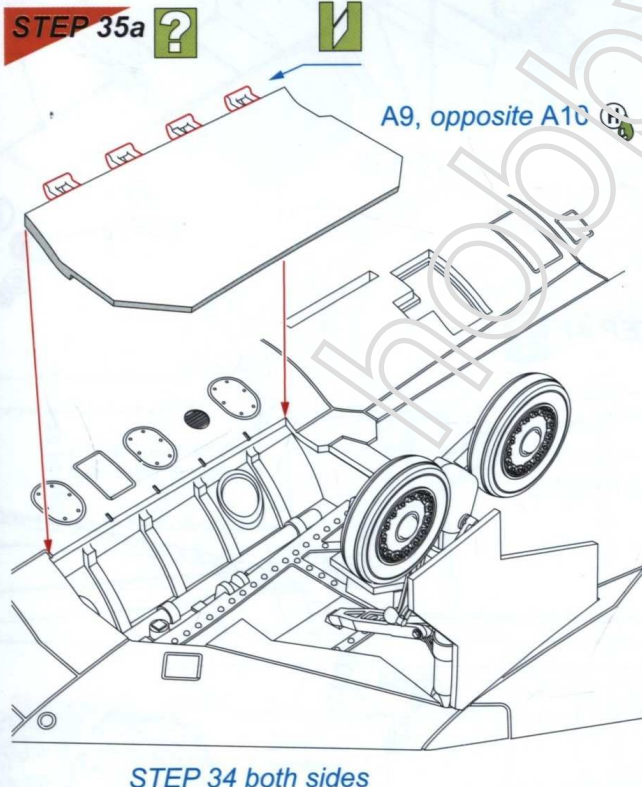
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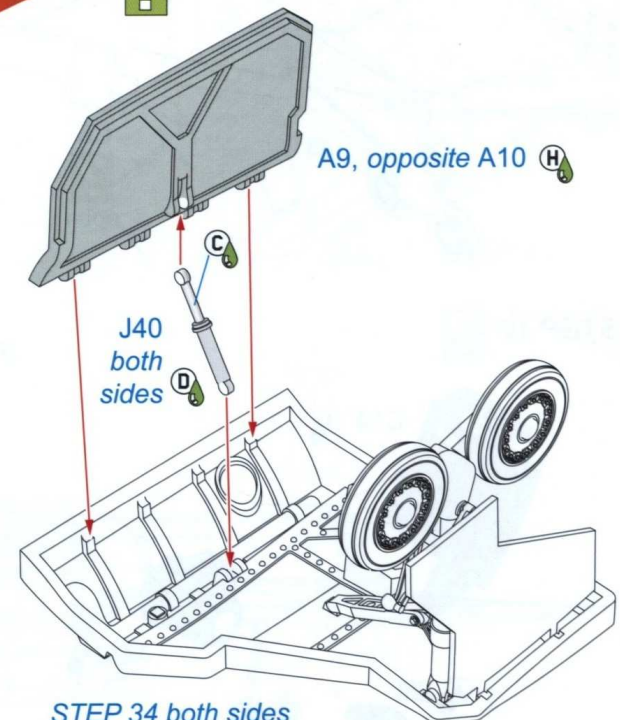
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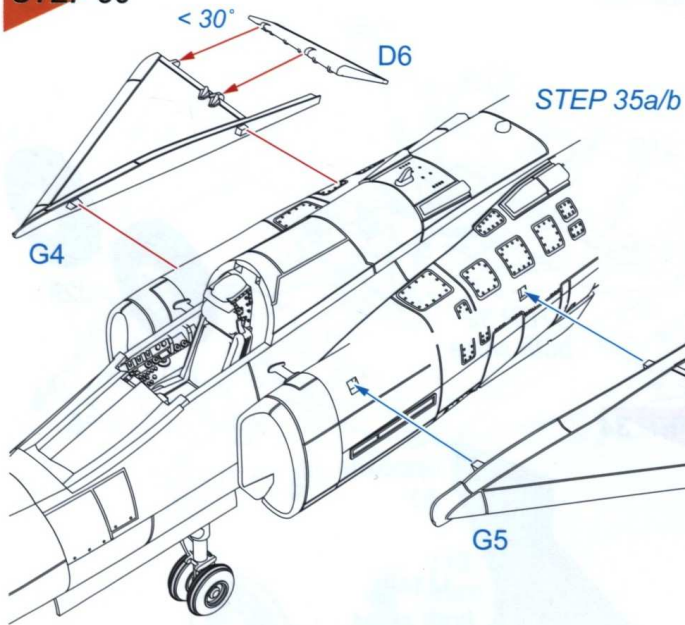
STEP 35a ?



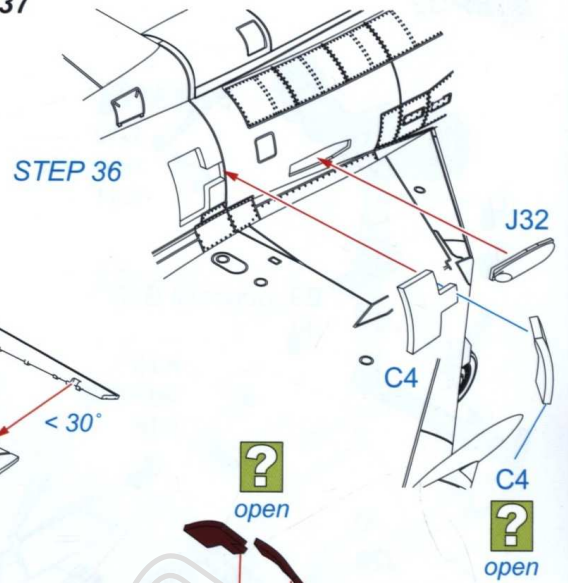
STEP 35b ?



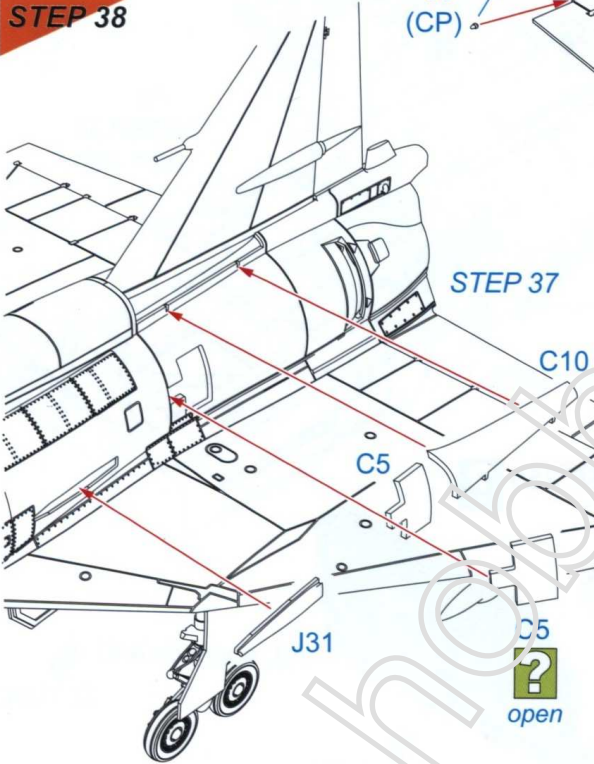
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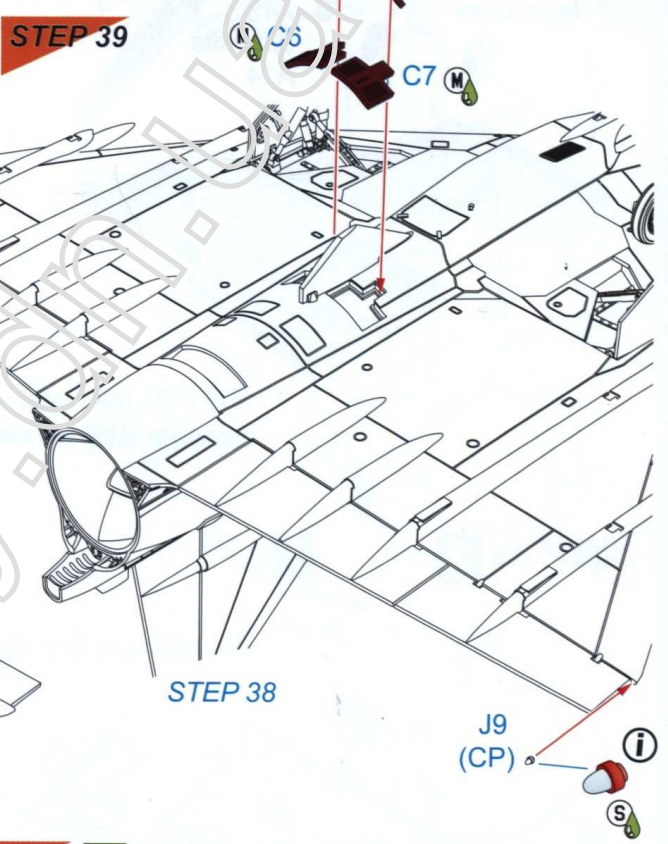
STEP 37



STEP 38



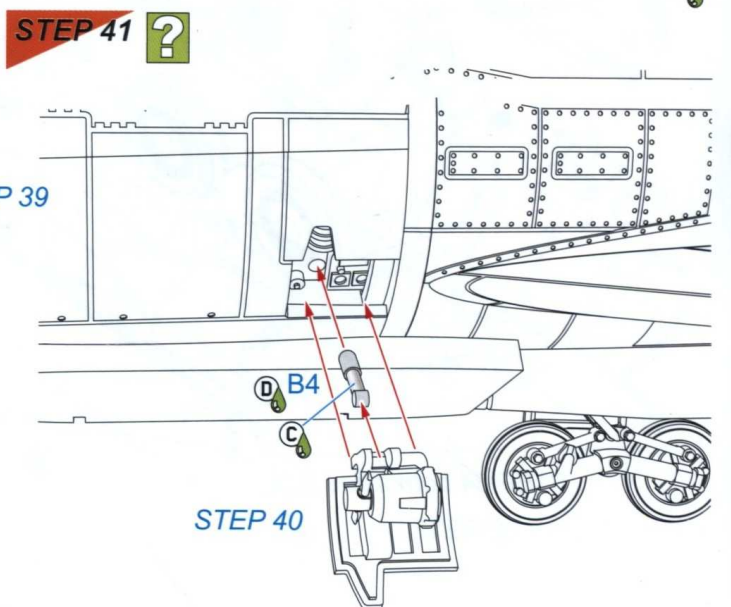
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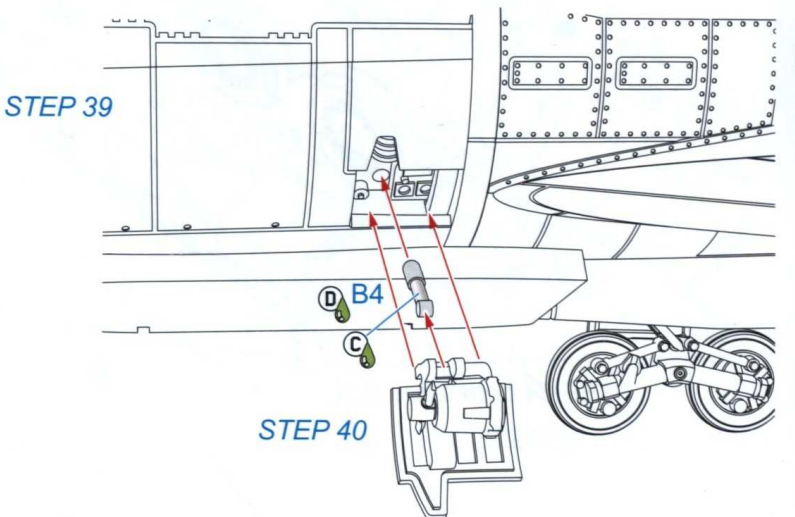
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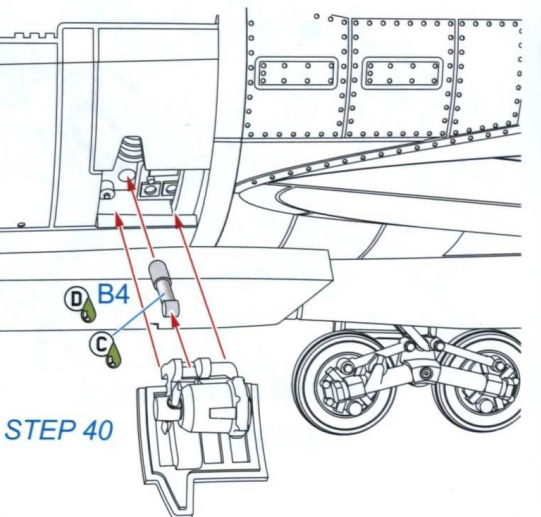
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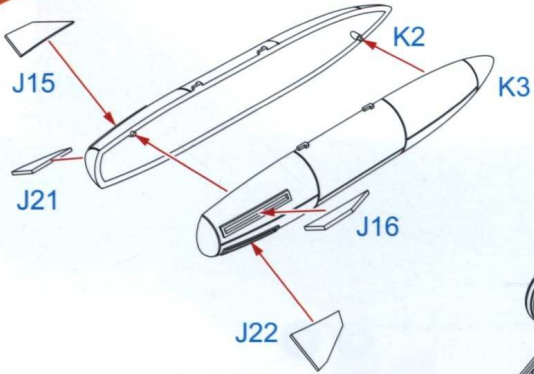
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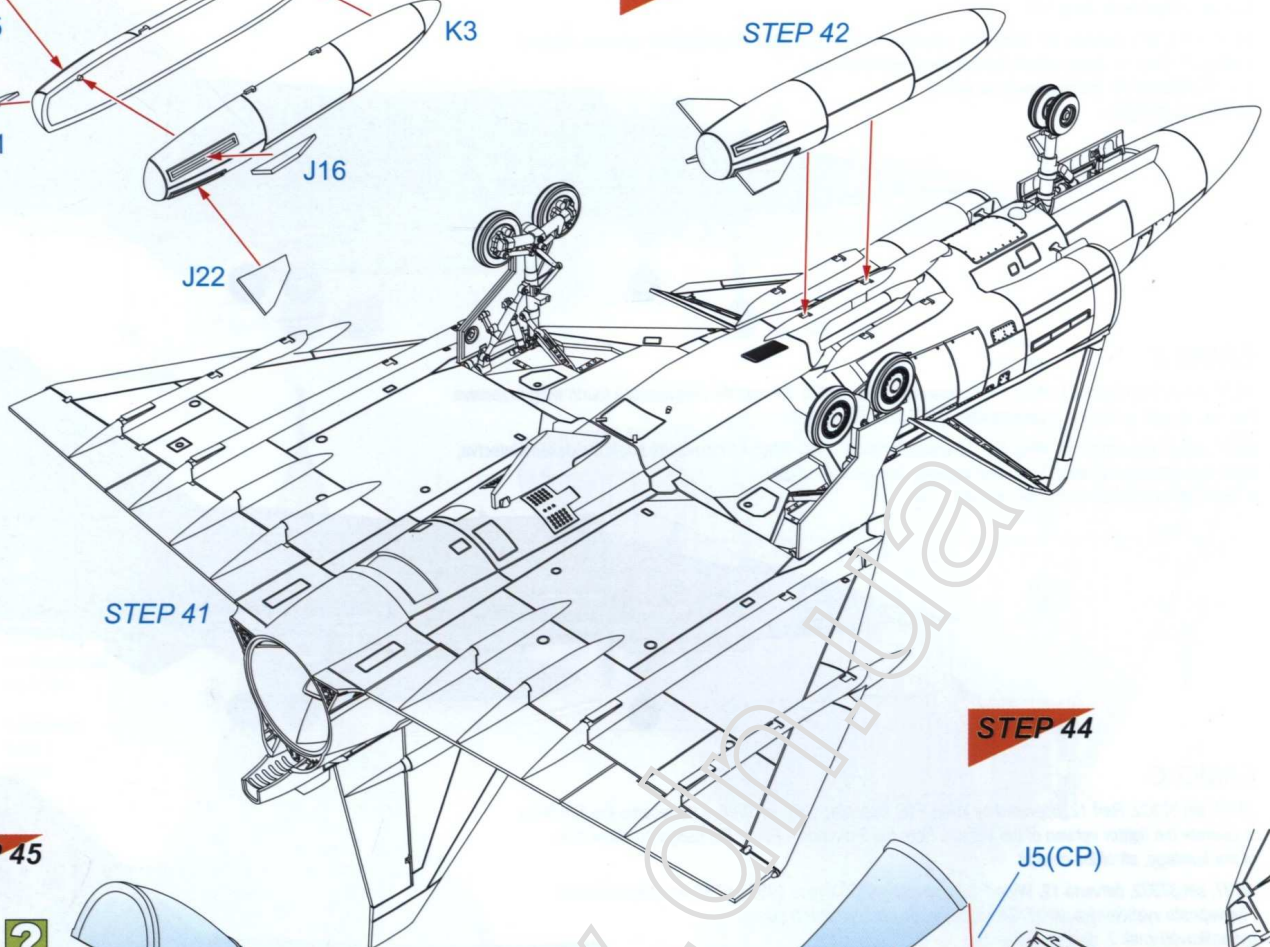
STEP 40



STEP 42

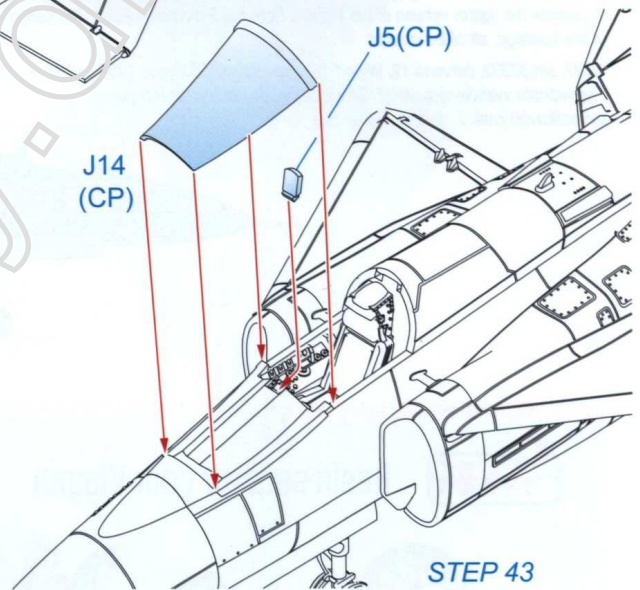
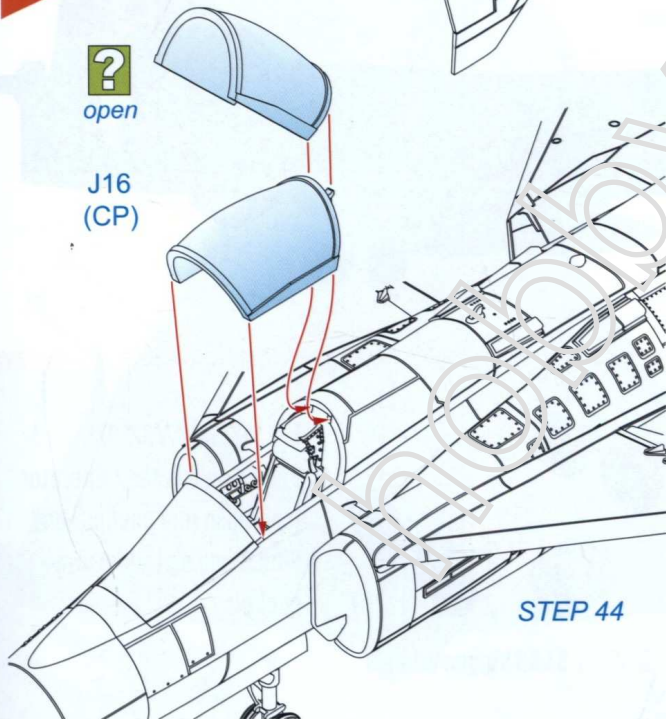


STEP 43

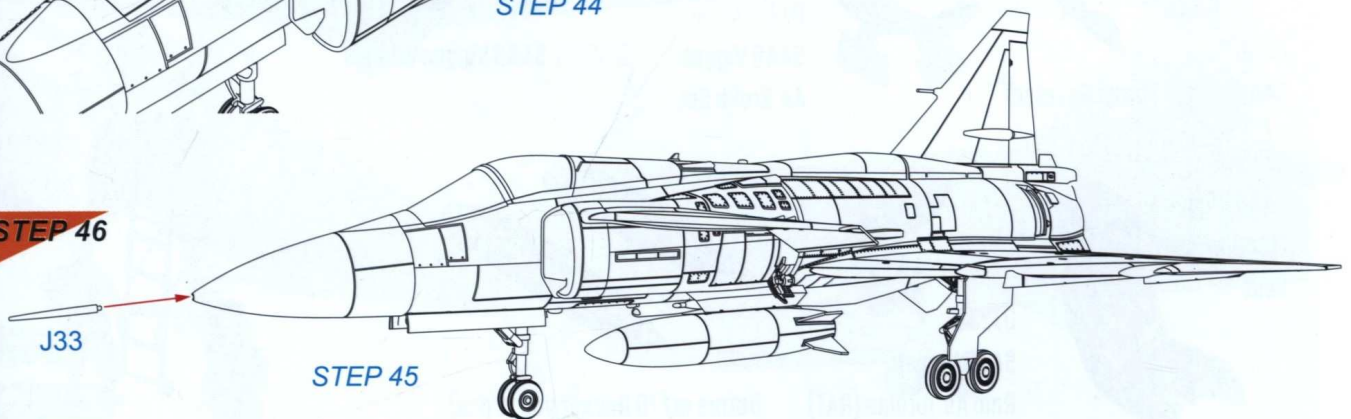


STEP 44

STEP 45



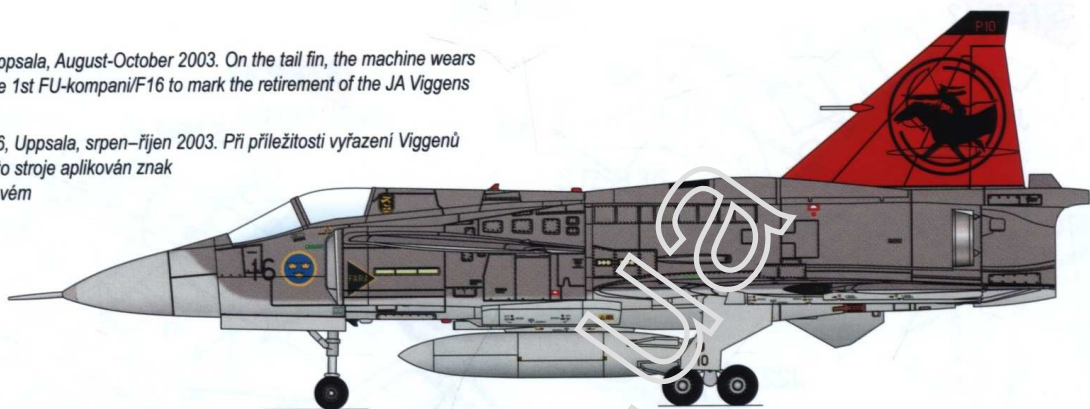
STEP 46



CAMO. A

JA 37, s/n 37410, Red 10, Wing F16, Uppsala, August-October 2003. On the tail fin, the machine wears the famous Mustang Indian badge of the 1st FU-kompani/F16 to mark the retirement of the JA Viggens from the service with Wing F16.

JA 37, s/n 37410, červená 10, Wing F16, Uppsala, srpen–říjen 2003. Při příležitosti vyřazení Viggenu z Wingu F16 byl na ocasní plochu tohoto stroje aplikován znak 1. FU-kompani/F16, indián jedoucí na svém věmém mustangovi.



CAMO. B

JA 37, s/n 37386, Black 54, Wing F4, Östersund-Frösön, 1986. F4 was the Flygvapnet's fourth wing to receive the Jakt-Viggen in 1983 (1st Division) and 1985 (2nd Division).

JA 37, s/n 37386, černá 54, Wing F4, Östersund-Frösön, 1986. Wing F4 bylo čtvrté křídlo švédského letectva, které bylo přezbrojeno na stíhací verzi Viggenu, konkrétně 1. divize v roce 1983 a 2. divize o dva roky později.

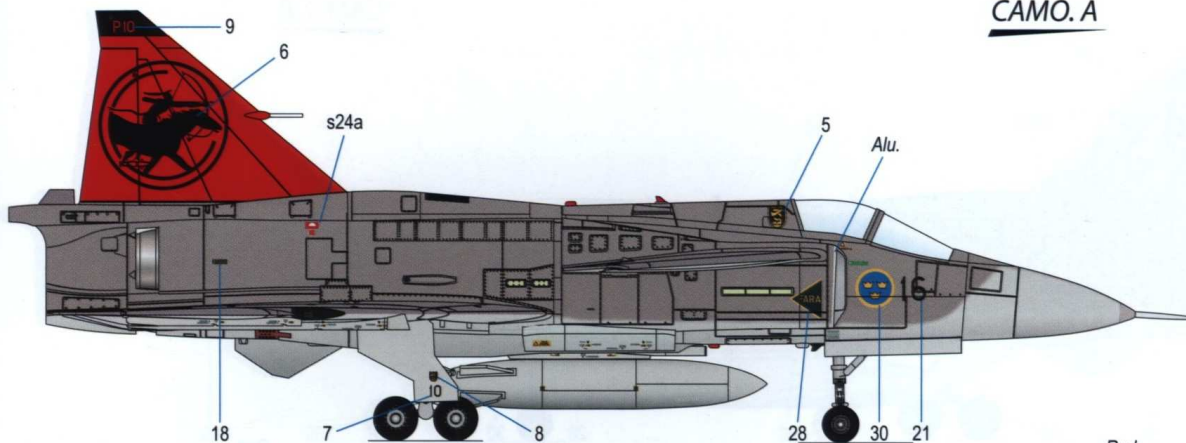








CAMO. C

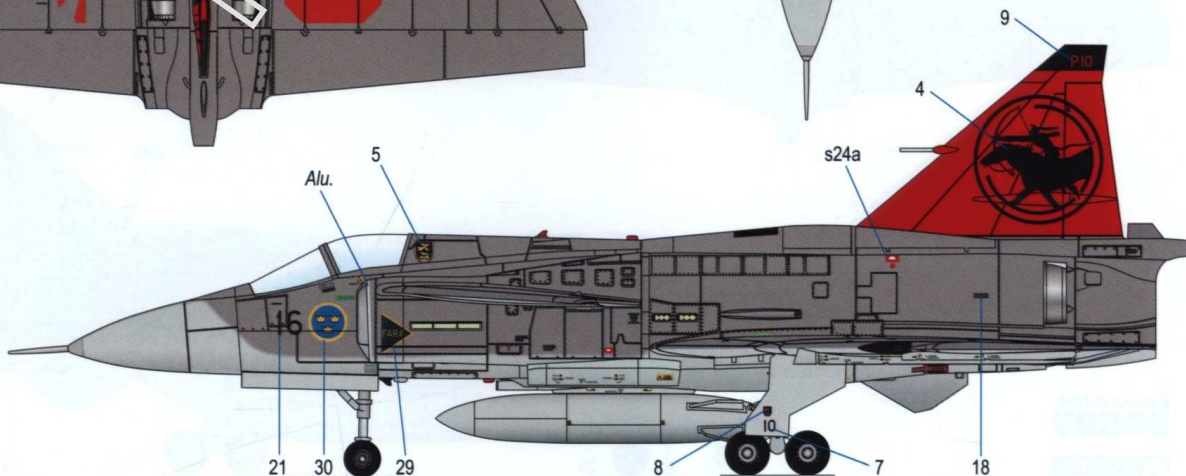
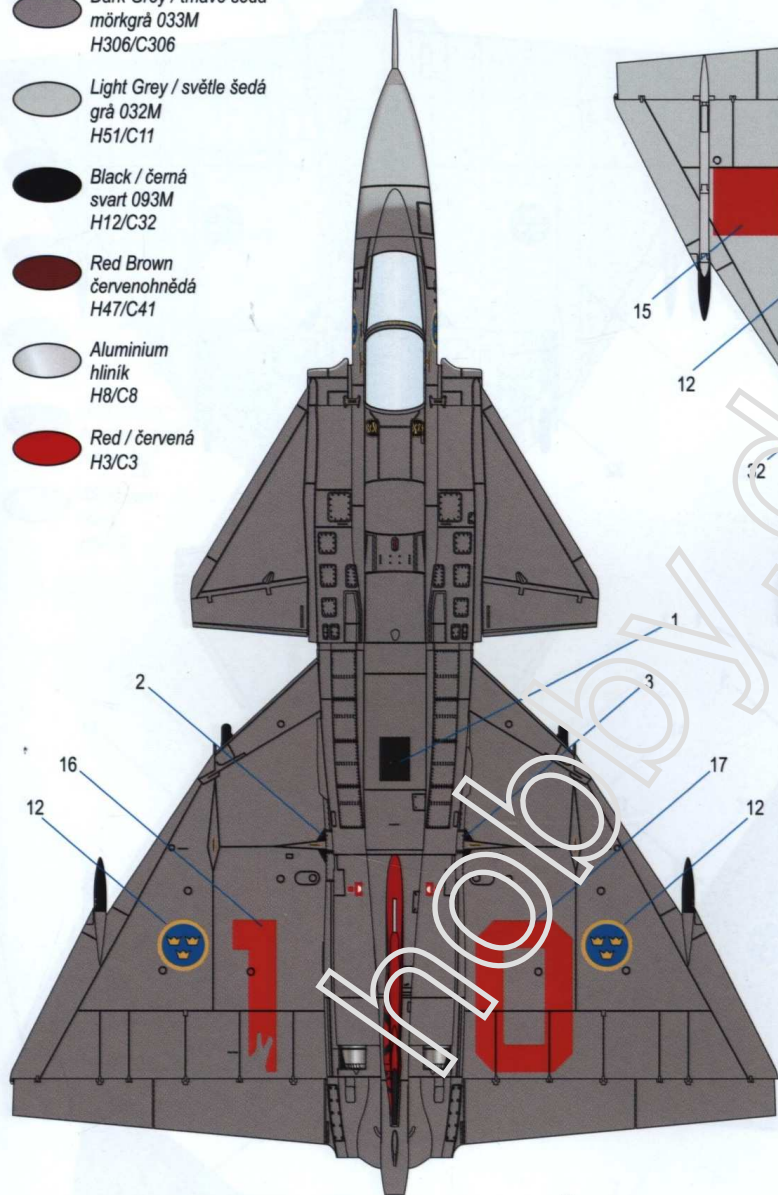
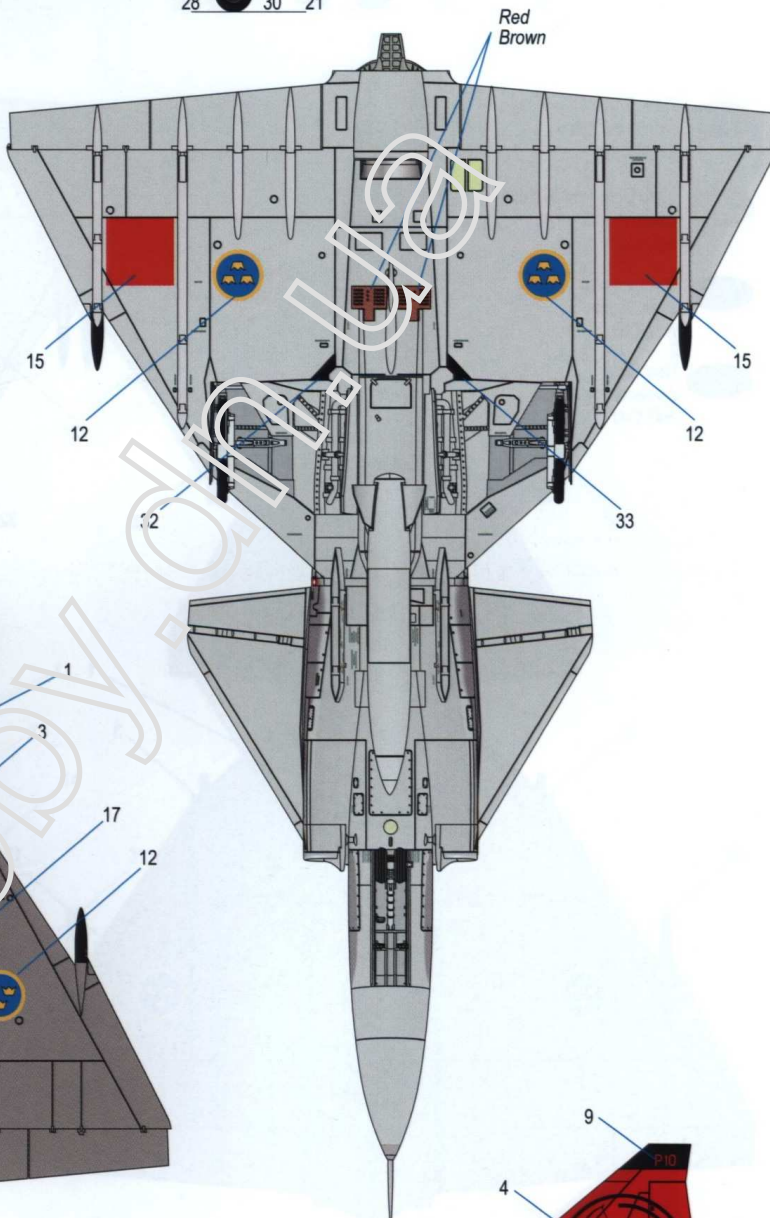
JA 37, s/n 37332, Red 12, operated by Wing F16, Uppsala, 1992. In 1960, F16 became the fifth Wing to operate the fighter version of the Viggen. Note the 2. division - Petter Blå badge on either side of the fuselage, aft of the cockpit.

JA 37, s/n 37332, červená 12, Wing F16, Uppsala, 1992. V roce 1966 se F16 stal pátým křídlem Flygvapnetu vyzbrojeným JA-37. Za kokpitem, pro obou stranách trupu byl aplikován znak 2. divize – Petter Blå.

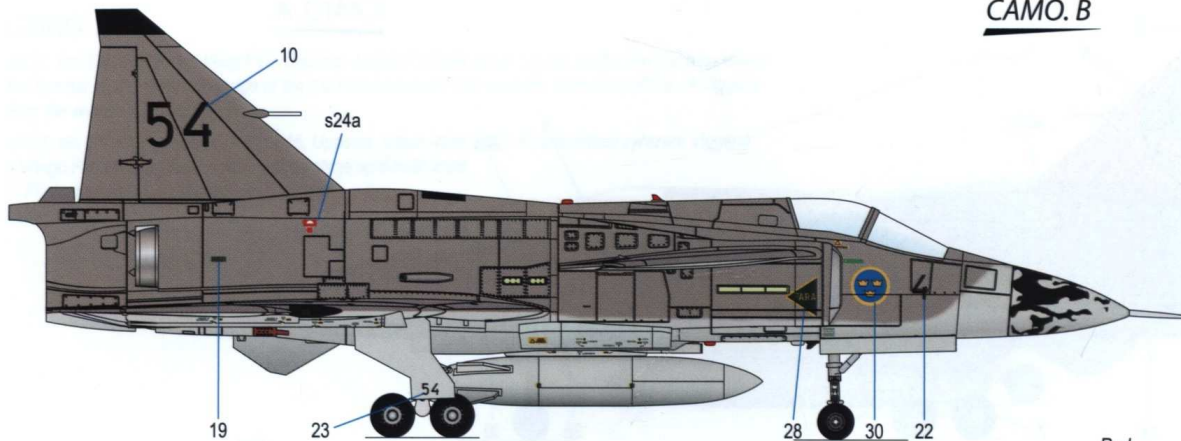




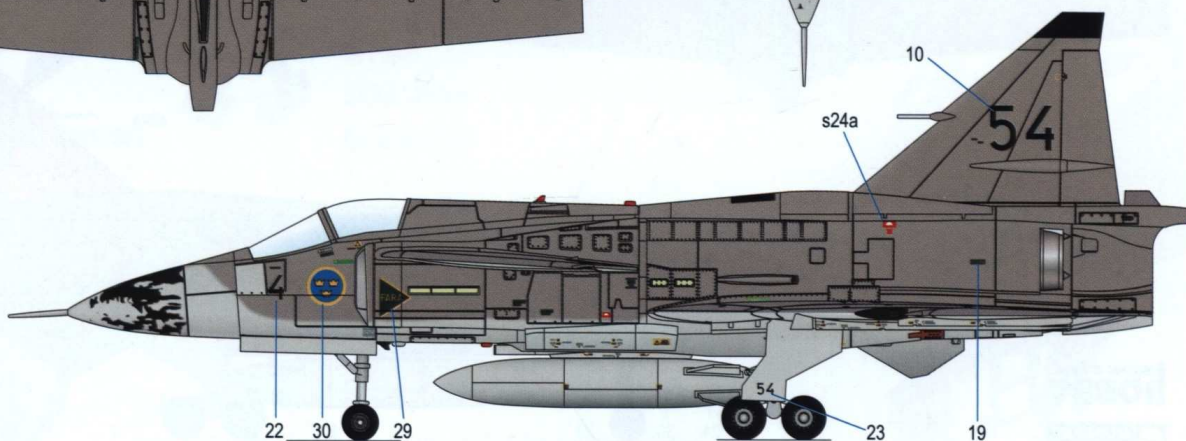
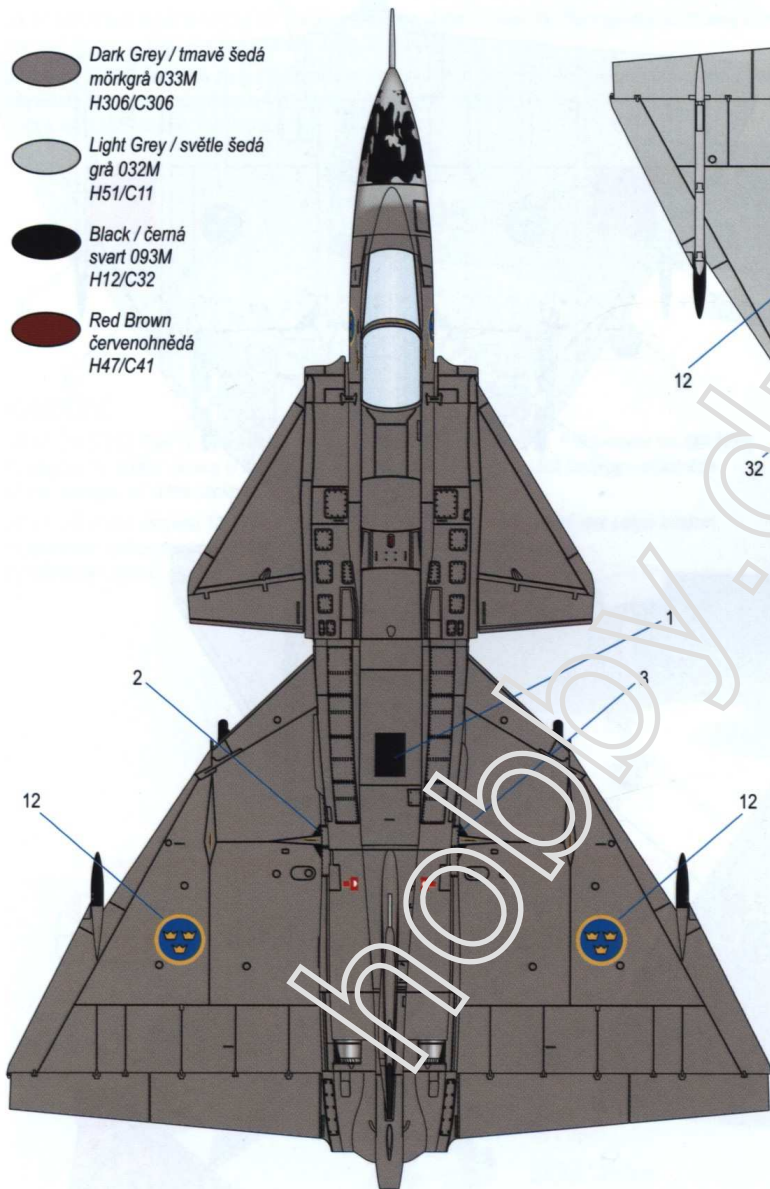
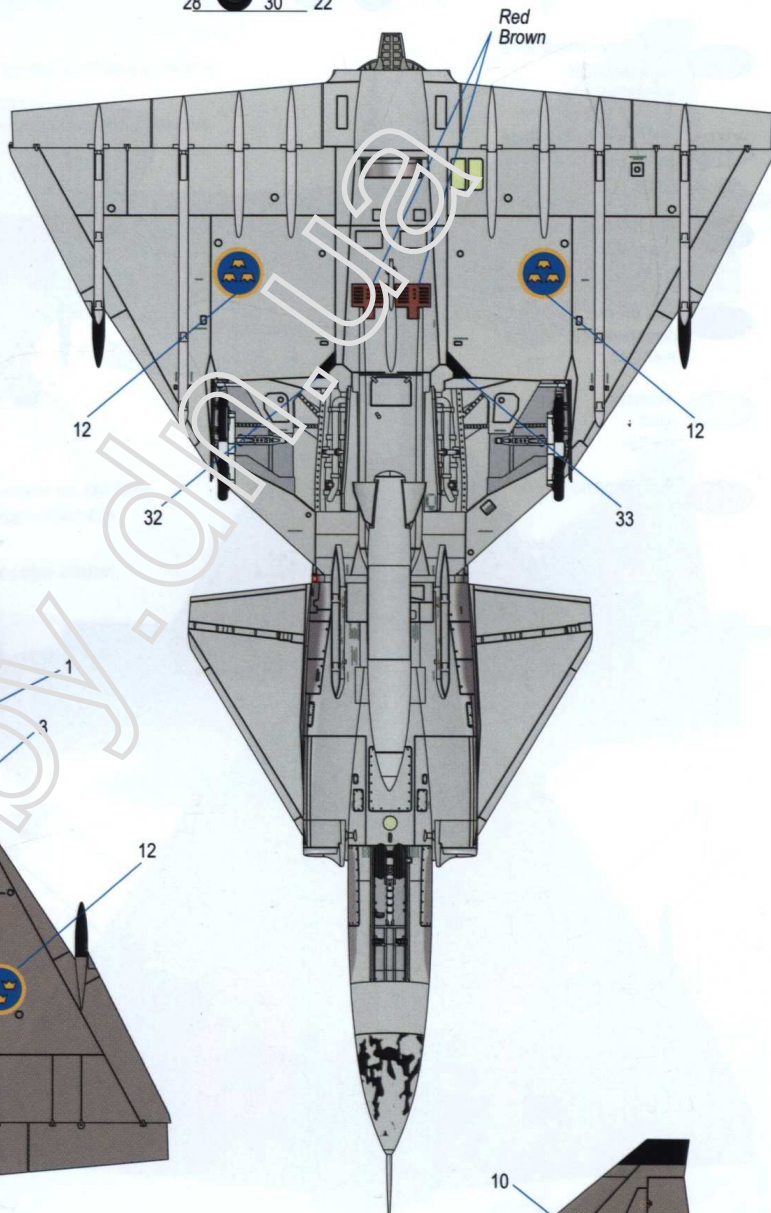
-  Dark Grey / tmavě šedá
mörkgrå 033M
H306/C306
-  Light Grey / světle šedá
grå 032M
H51/C11
-  Black / černá
svart 093M
H12/C32
-  Red Brown
červenohnědá
H47/C41
-  Aluminium
hliník
H8/C8
-  Red / červená
H3/C3

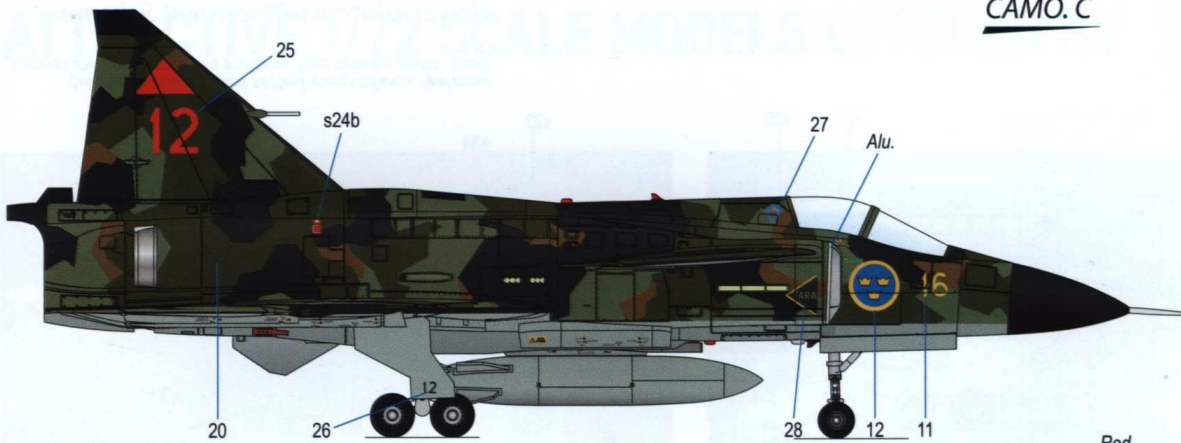


CAMO. B

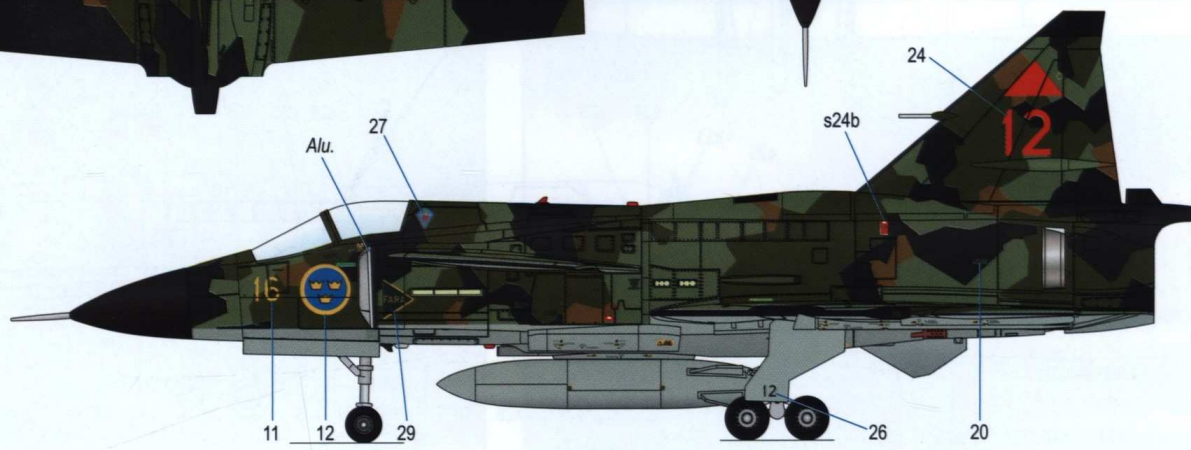
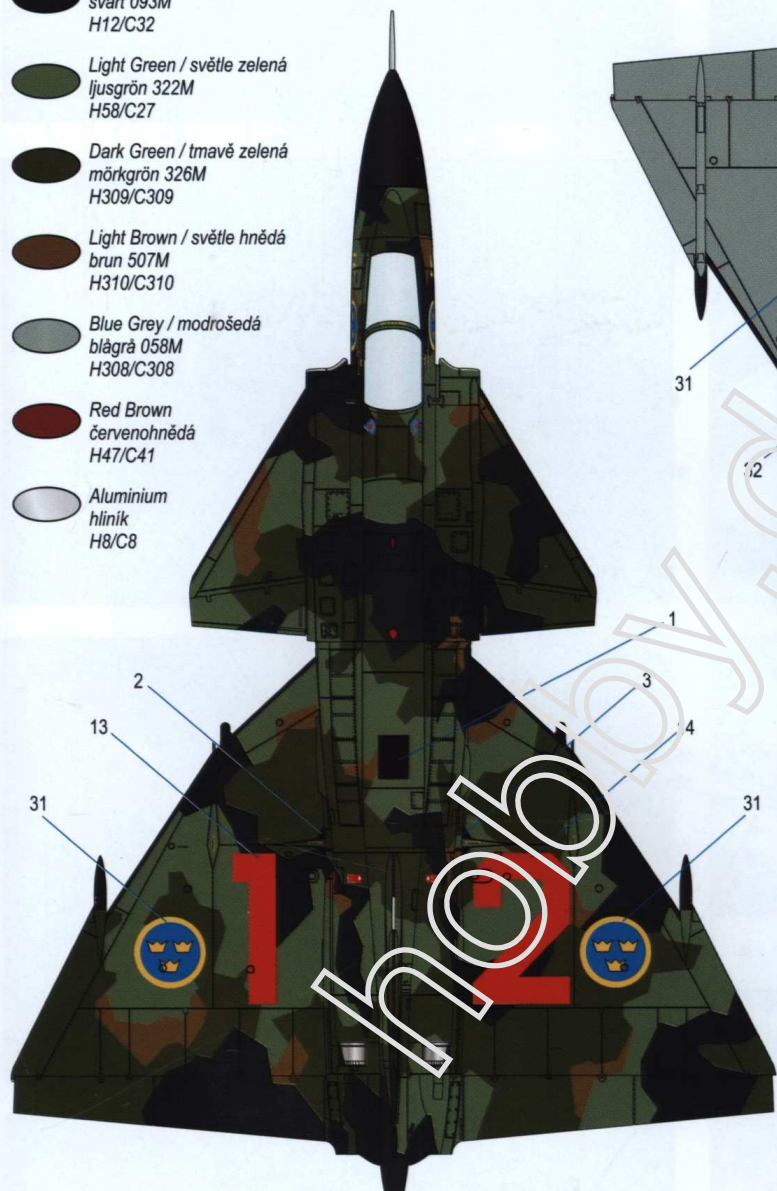
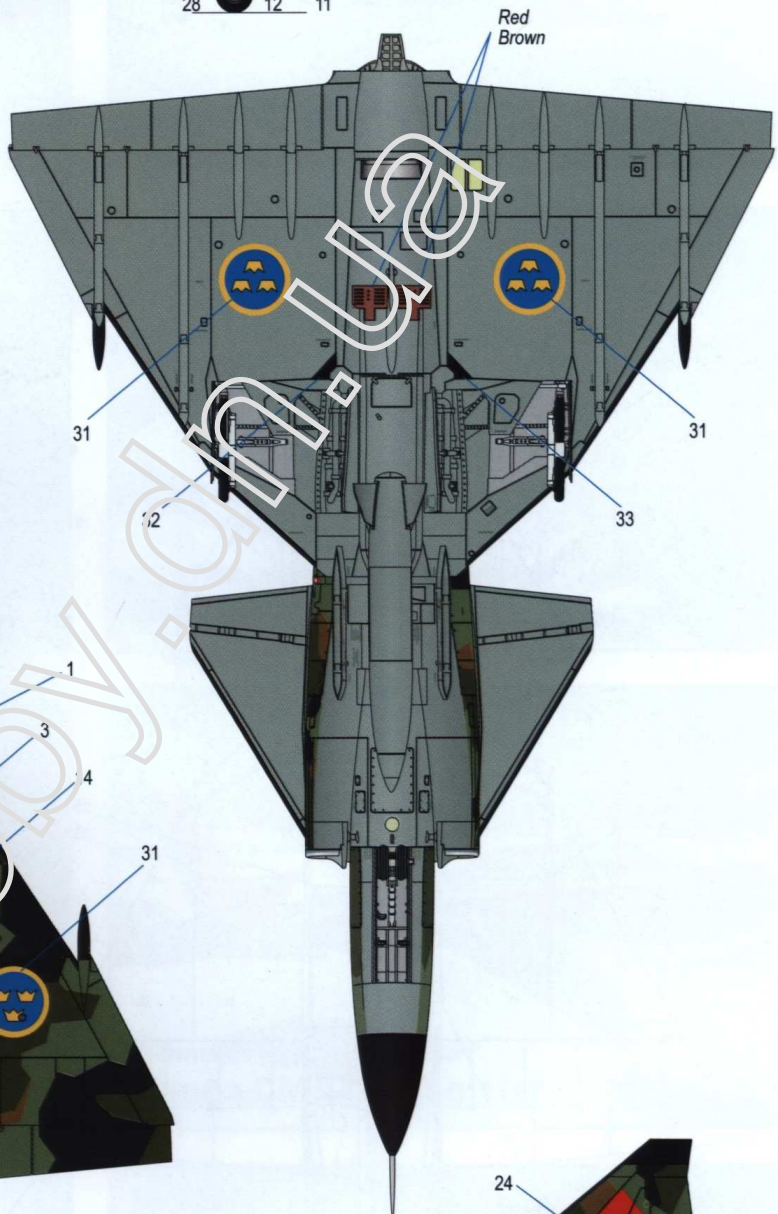


-  Dark Grey / tmavě šedá
mörkgrå 033M
H306/C306
-  Light Grey / světle šedá
grå 032M
H51/C11
-  Black / černá
svart 093M
H12/C32
-  Red Brown
červenohnědá
H47/C41





-  Black / černá svart 093M H12/C32
-  Light Green / svätile zelená ljusgrön 322M H58/C27
-  Dark Green / tmavé zelená mörkgrön 326M H309/C309
-  Light Brown / svätile hnädá brun 507M H310/C310
-  Blue Grey / modrošedá blágrá 058M H308/C308
-  Red Brown / červenohnädá H47/C41
-  Aluminium / hlínik H8/C8



Universal Stencil Placement Scheme

(note: some stencils may have not been used on your chosen machine, always check photos and marking schemes)

