

## 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

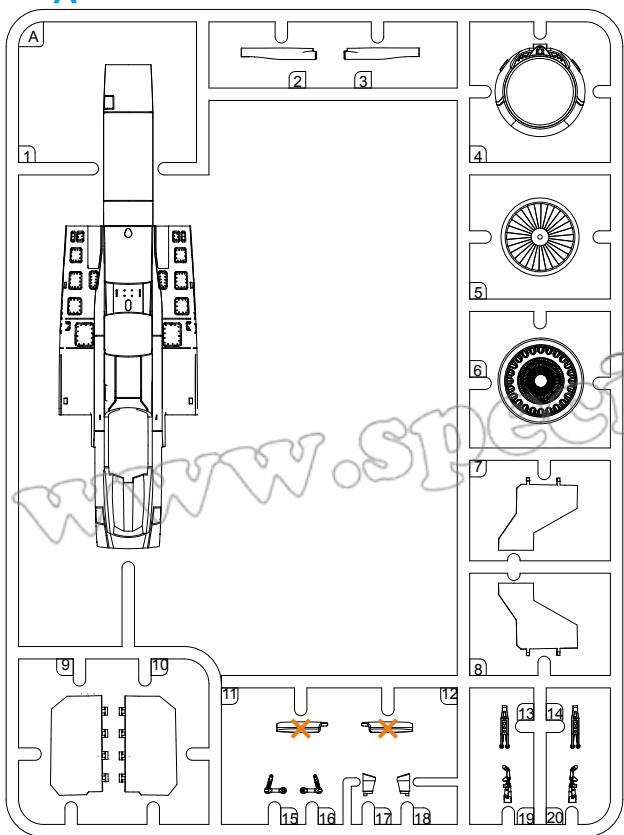
SAAB 37 Viggen je letoun, který předběhl svou dobu. Neortodoxní řešení, zvolená jeho konstruktéry, nejen umožnily Viggenu splnit požadavky na něj kladené, ale v některých parametrech je předčit. Švédské letectvo objednalo Viggen v několika verzích, s tím, že základní provedení letounu tvořilo univerzální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

První ze sedmi stavěných prototypů vzlétl 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 dvojitých delta křídel přispívalo k vynikajícím vlastnostem Viggenu při startech a přistáních na malých přistávacích plochách. Pro lepší manipulaci s letouny po přistání umístění do hangáru či jejich lepšímu zamaskování při operacích z nestandardních ploch dostal Viggen sklopnu 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 přidi, 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 nepatrém 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 Viggenny v roce 2007. Export Viggenu se nezdál, většinou z politických důvodů. Mezi největší zájemce patřila např. Indie, ale zájem projevovaly i skandinávské země či Japonsko.

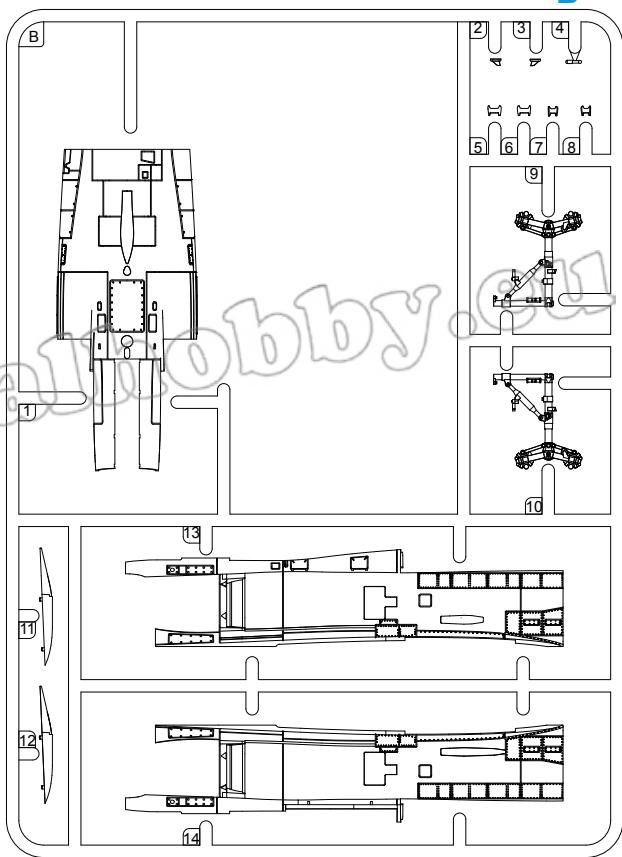
Délka: 16,30 m, rozpětí: 10,60 m, max. rychlosť: 2145 km/h, dolet standardní: 1000 km/maximální: 2000 km, dostup: 18 300 m, rychlosť stoupání: 100 m/s

## PARTS LIST 1/3

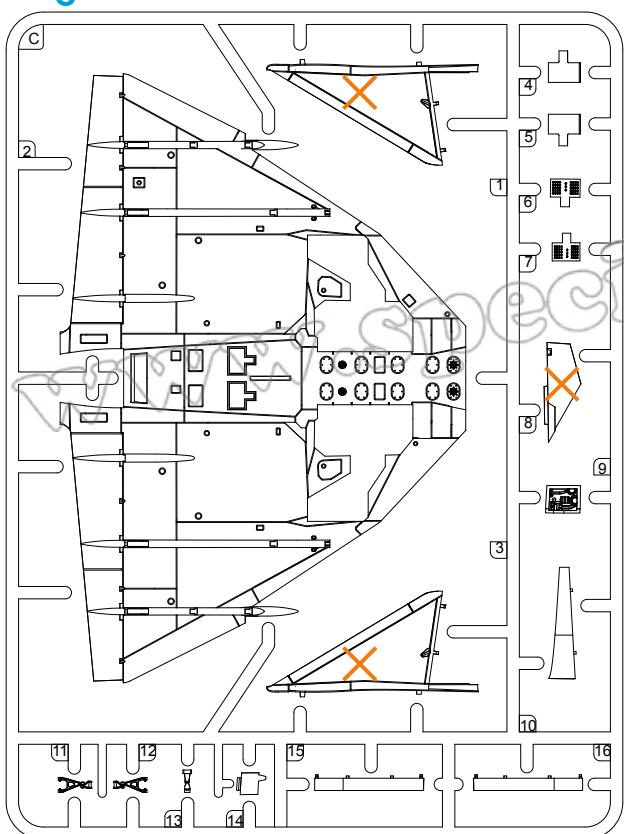
**A**



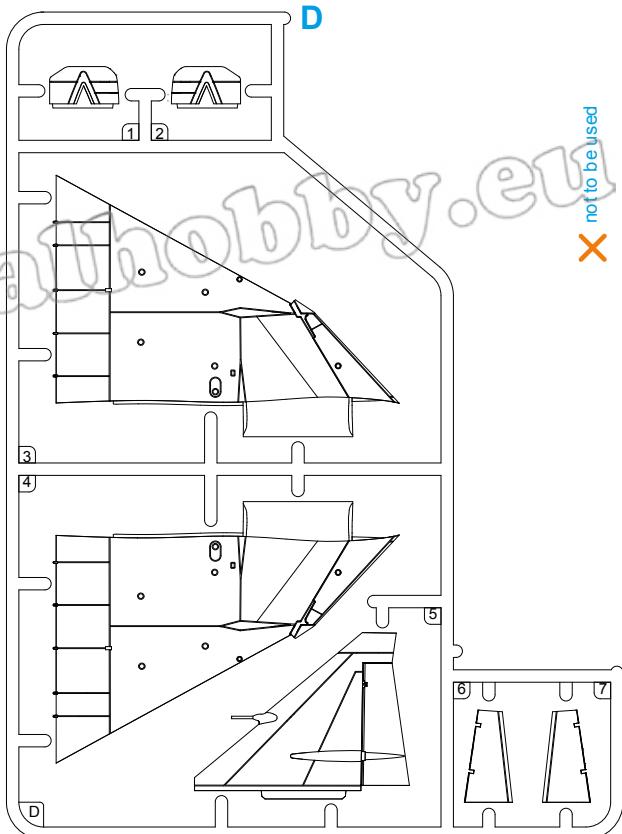
**B**



**C**



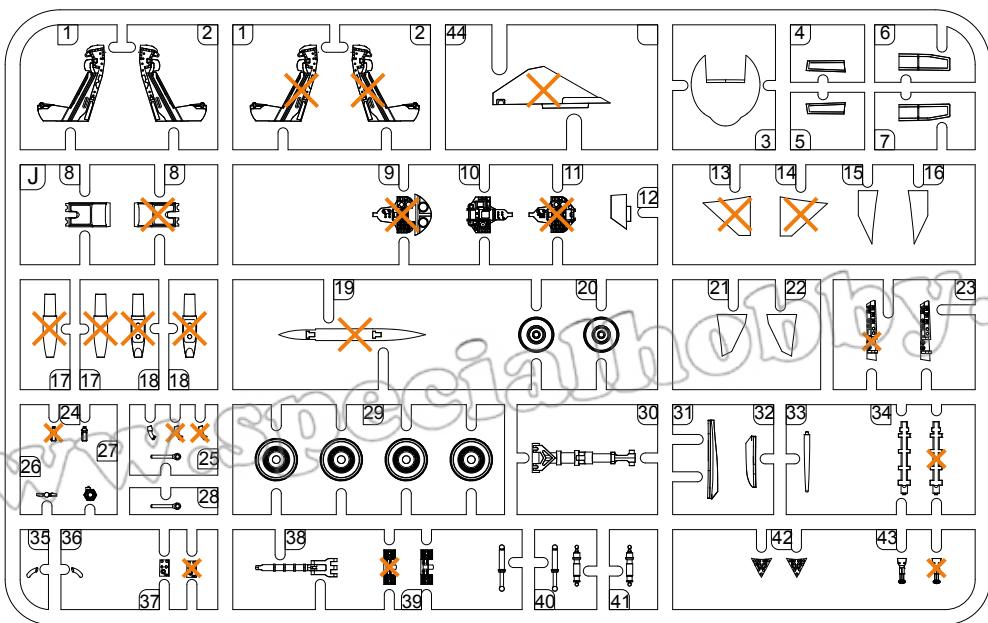
**D**



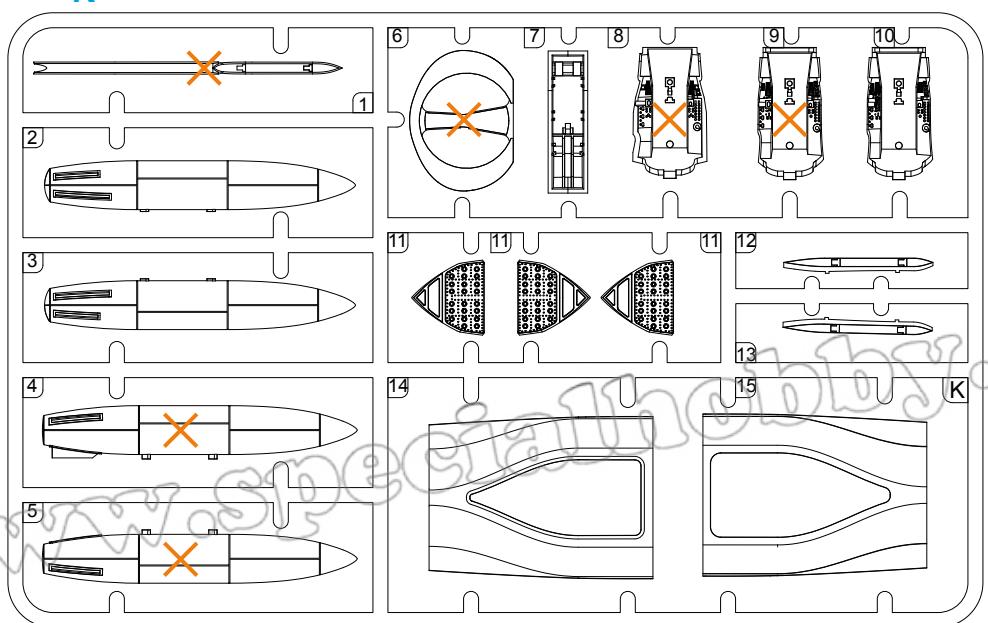
not to be used  
X

## PARTS LIST 2/3

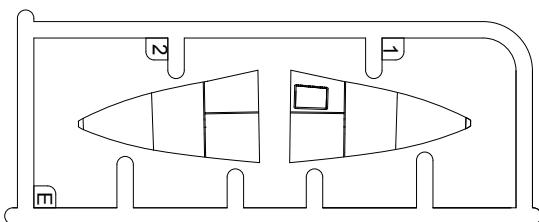
J



K



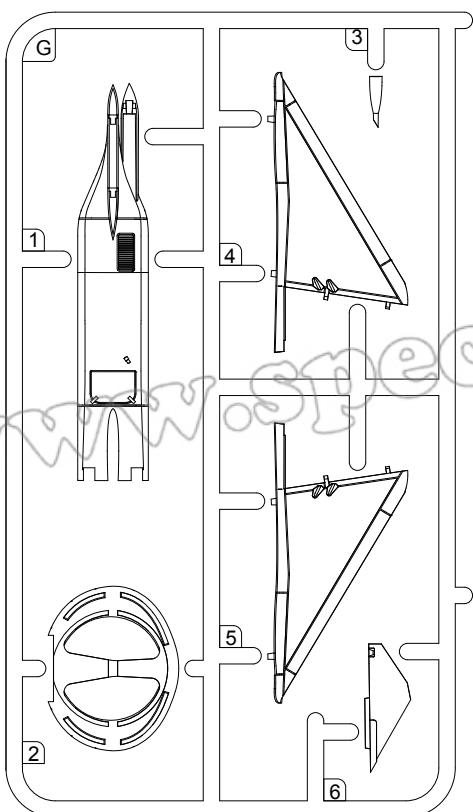
E



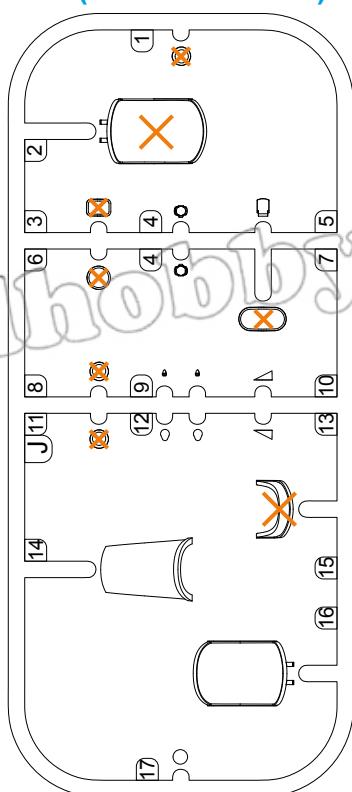
not to be used

## PARTS LIST 3/3

**G**



**J (CLEAR PARTS)**



✗ 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 pneu.	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		

OPTIONAL  
MOŽNOST VOLBY  
NACH BELIEBEN  
OPTION

INSTANT CYANOACRYLATE GLUE  
POUŽÍT KYANOAKRYLÁTOVÉ LEPIDLO  
ZYANOAKRYLATKLEBER  
ADHÉSIF CYANOACRYLAT

### SYMBOLS

BEND  
OHNOUT  
BIEGEN  
COURBER

SCRATCH BUILD  
ZHOTOVIT NOVÉ  
FERTIGSTELLEN  
ACHEVER

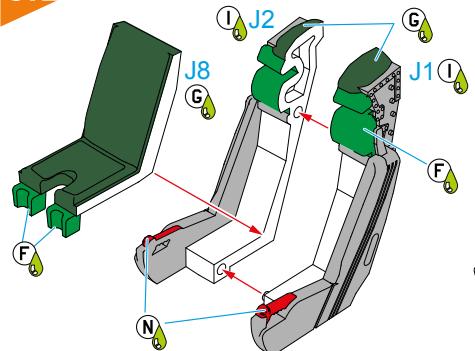


CUT OFF/DRILL  
ŘEZAT/VRTAT  
ENTFERNEN  
DETACHER

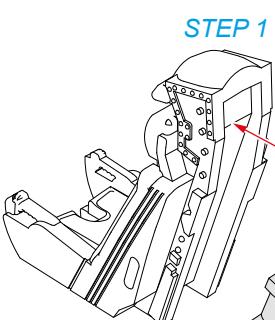
GSI  
colours code

COLOUR  
NATŘIT  
FARBEN  
PEINDRE

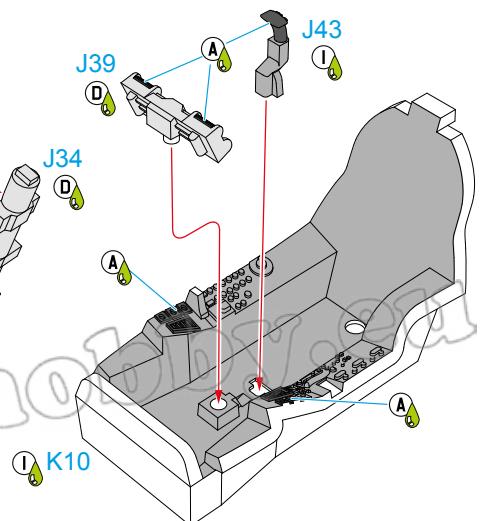
**STEP 1**



**STEP 2**



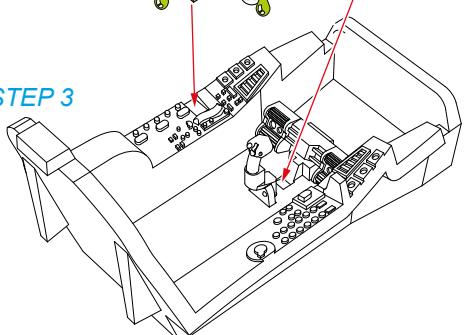
**STEP 3**



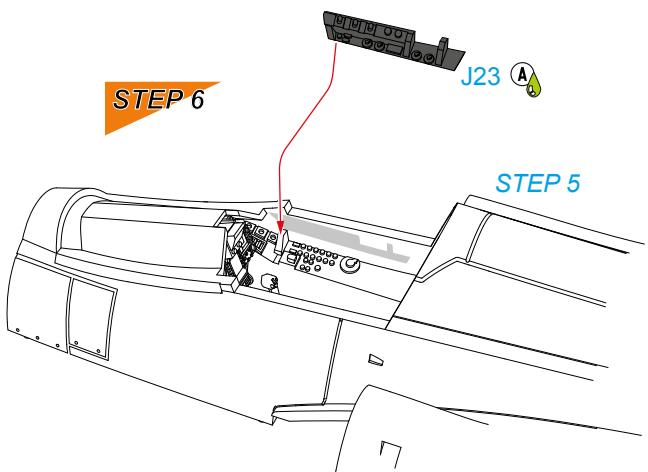
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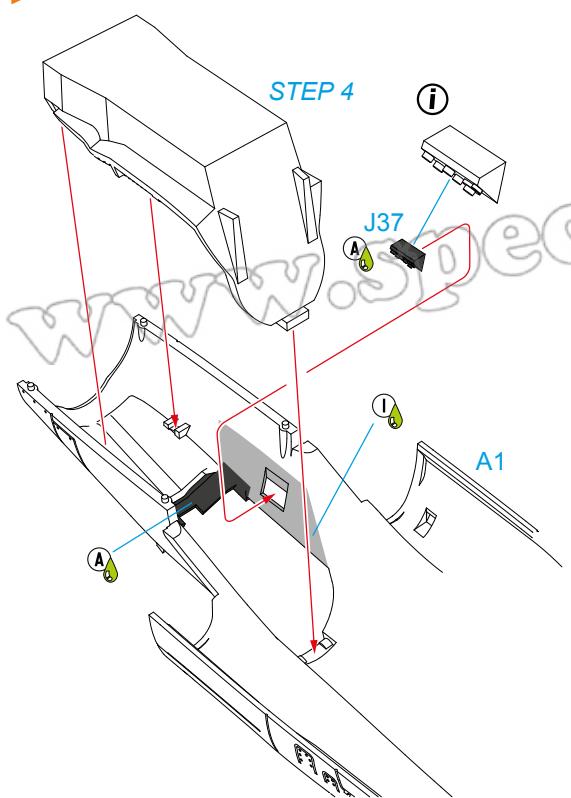
**STEP 3**



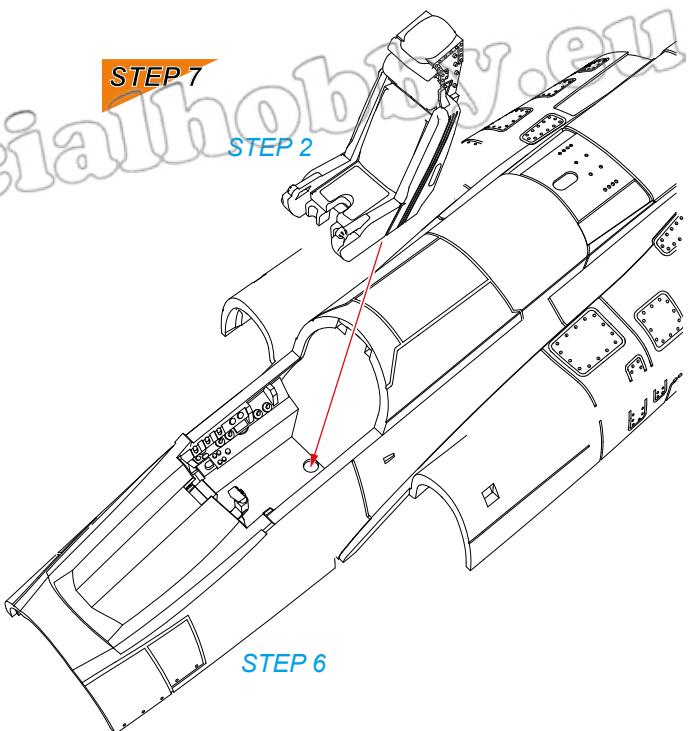
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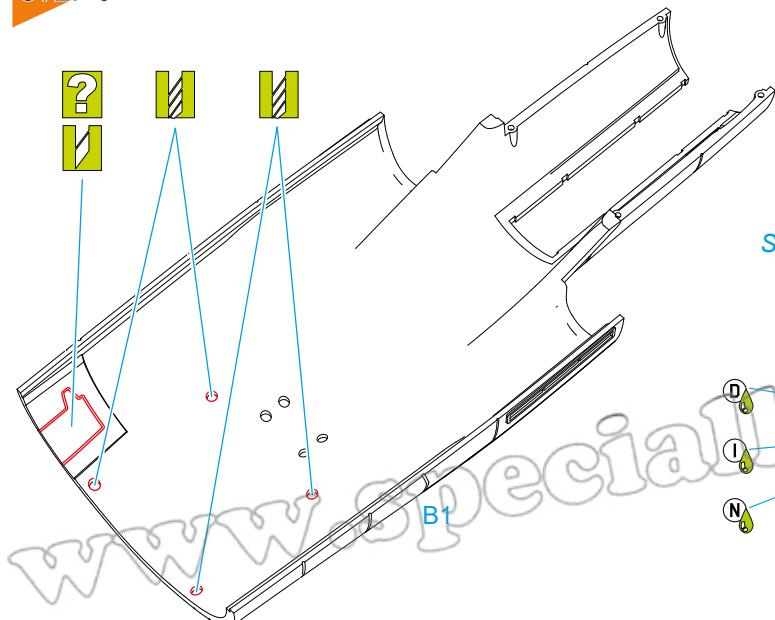
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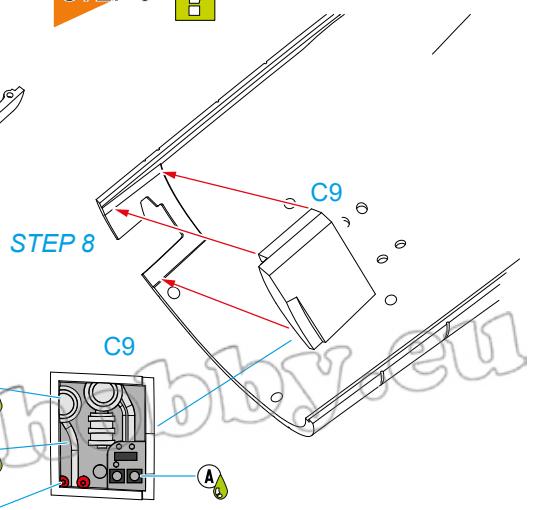
**STEP 7**



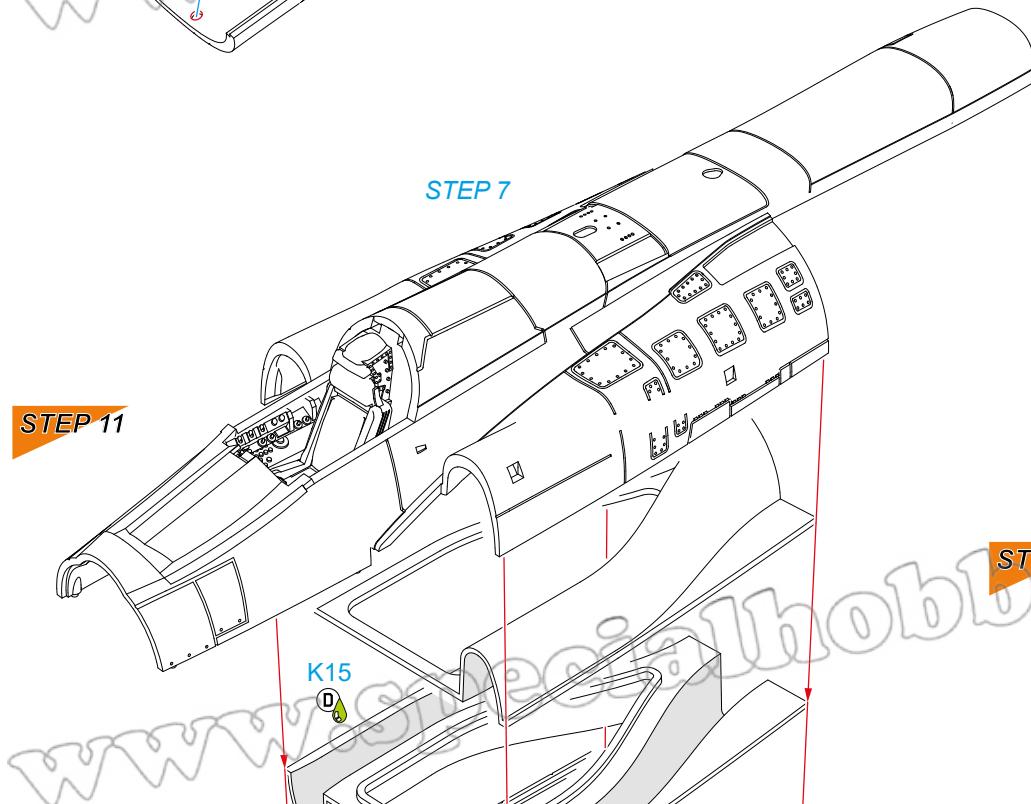
**STEP 8**



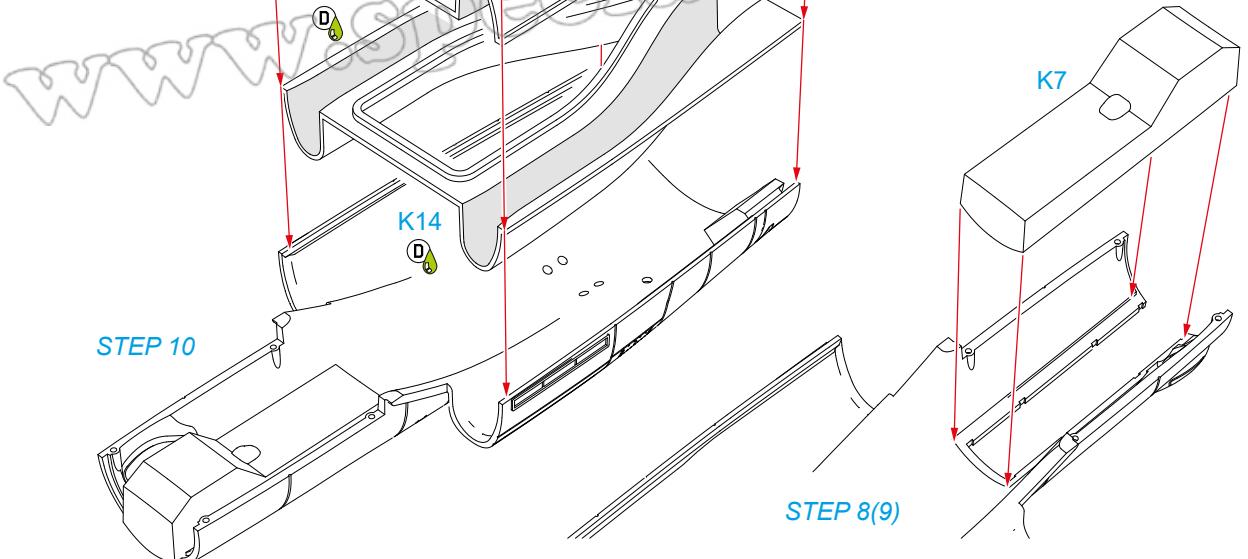
**STEP 9** ?



**STEP 7**



**STEP 10**



**STEP 12**

**STEP 11**

**STEP 13a** ?

A5 D

K11  
3x  
E

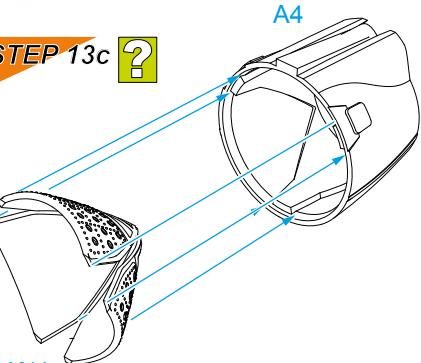
A4

E

**STEP 13b** ?

A4

**STEP 13c** ?



**STEP 14**

B13



B14

K11  
3x

**STEP 13a/b/c**

**STEP 15**

B13

E

A6

**STEP 16**

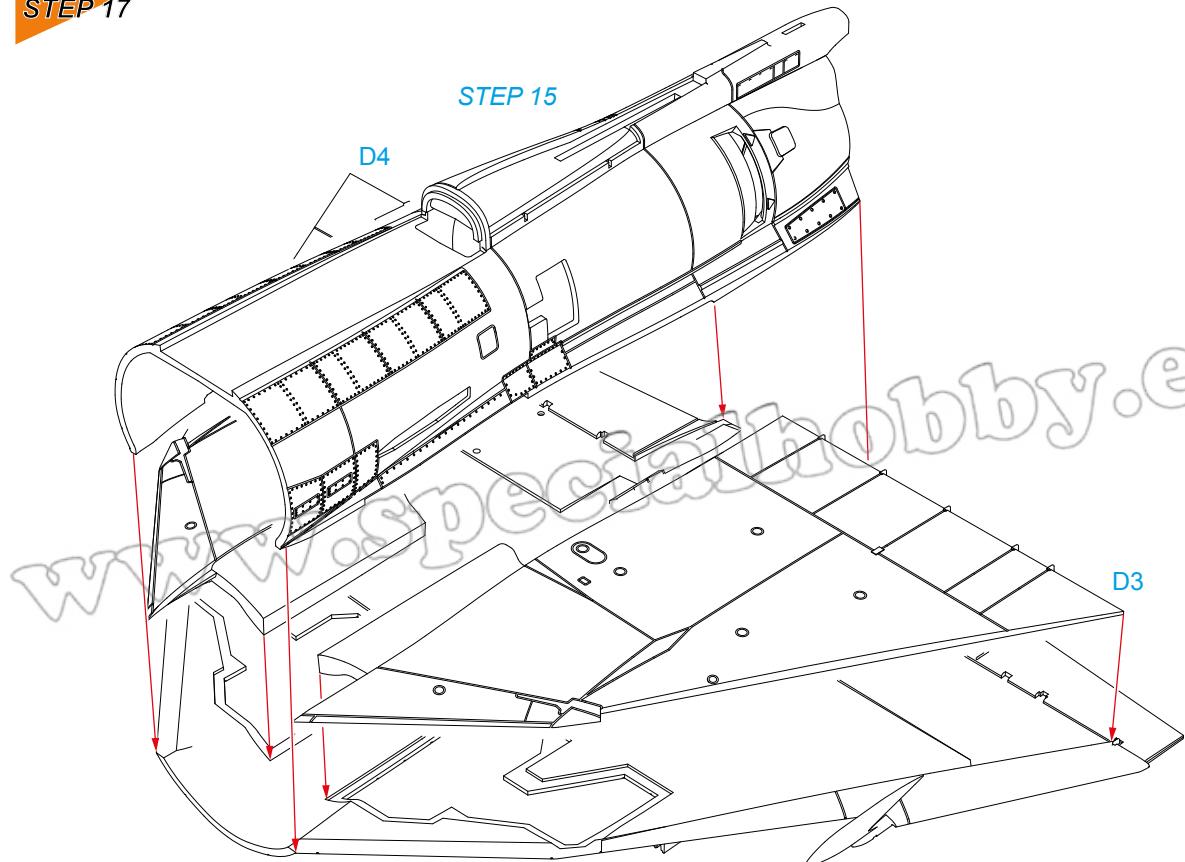
C2

B14

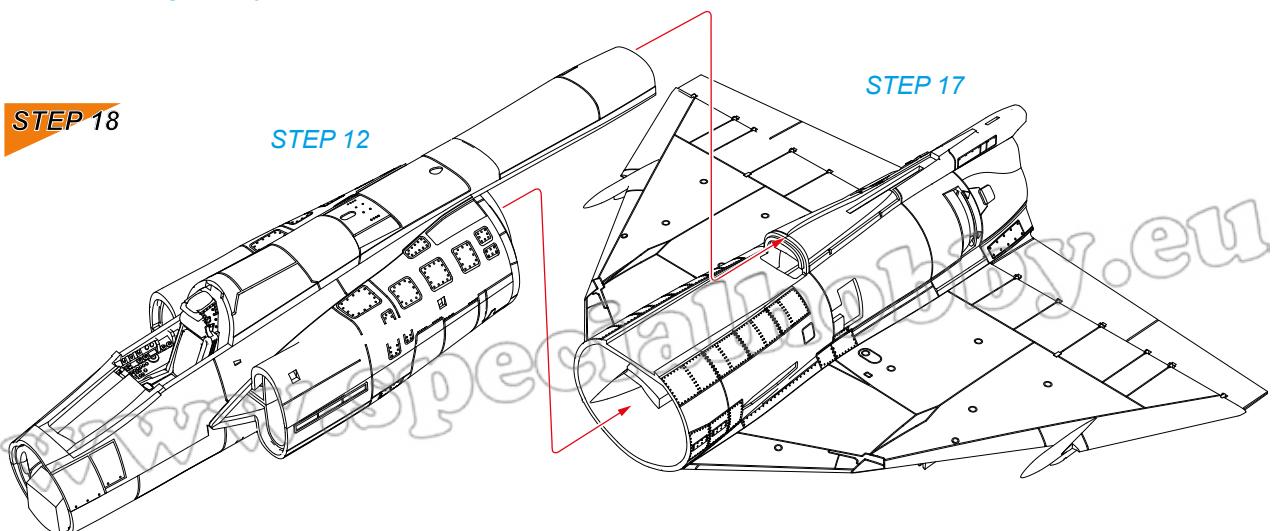
E



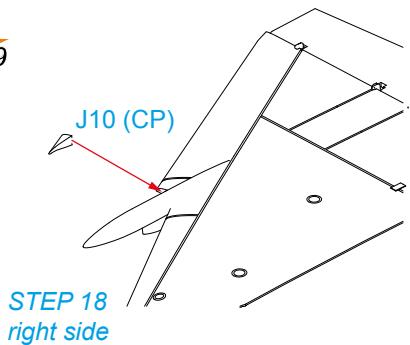
**STEP 17**



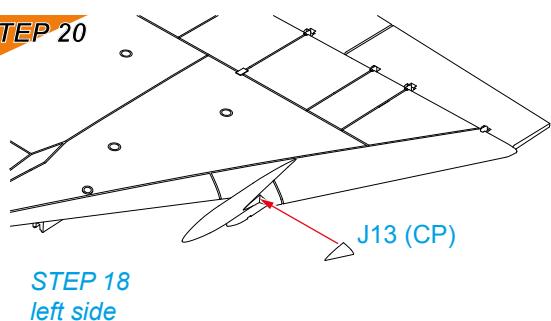
**STEP 16**

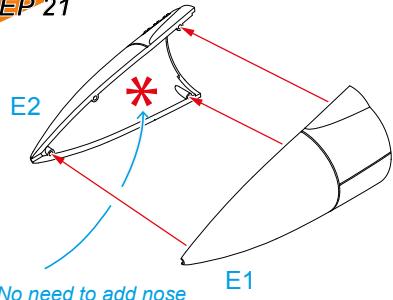


**STEP 19**

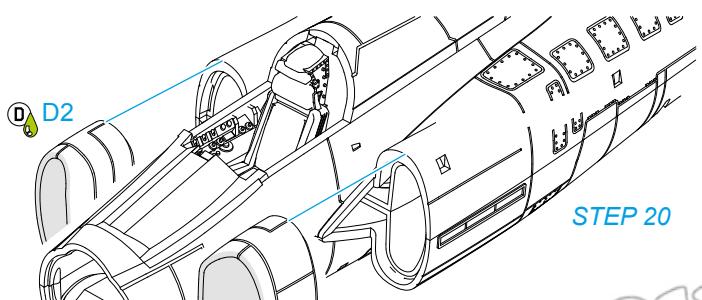


**STEP 20**

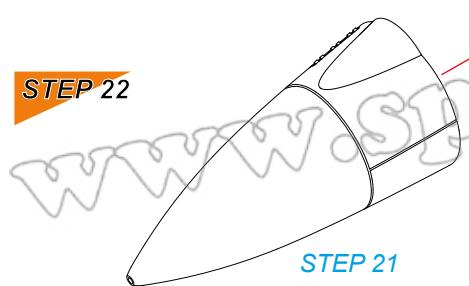


**STEP 21**

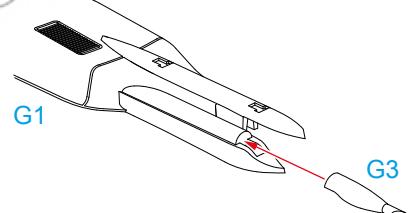
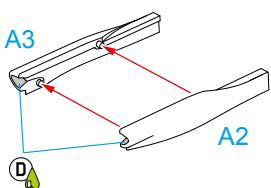
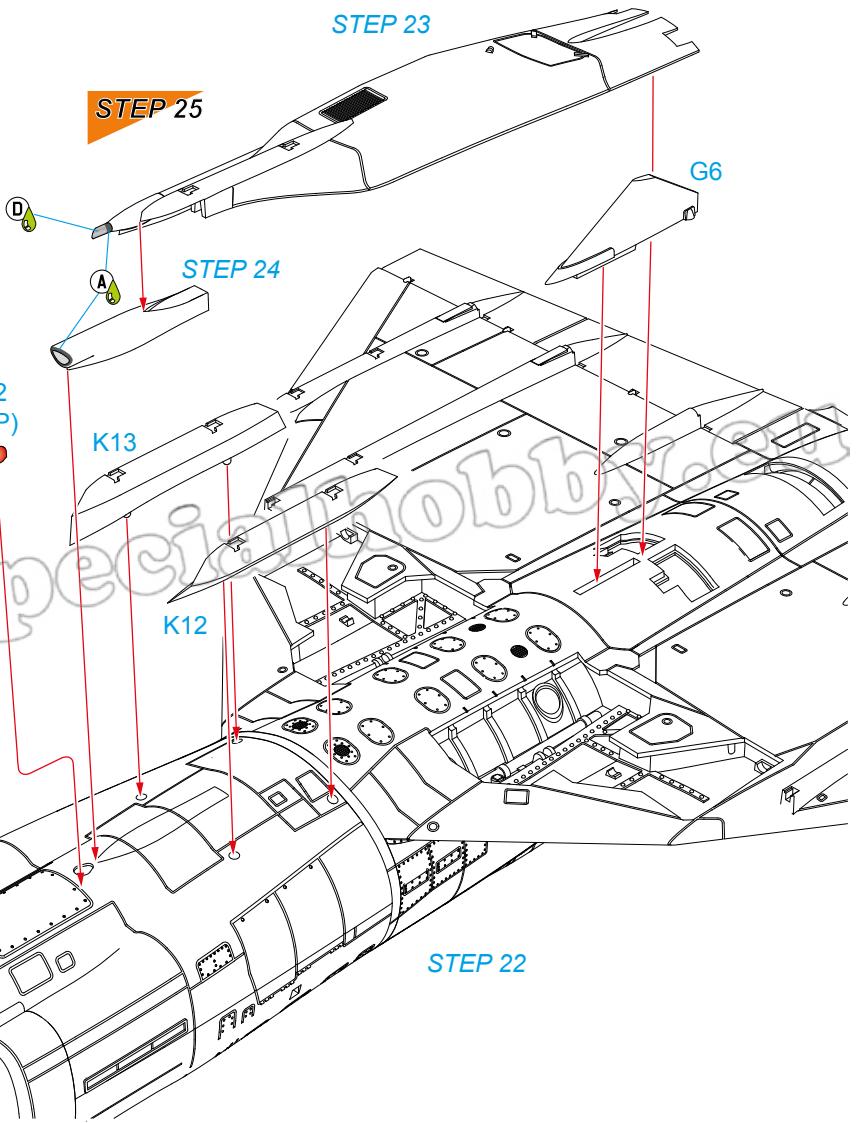
No need to add nose ballast unless aftermarket underwing stores are used.



STEP 20

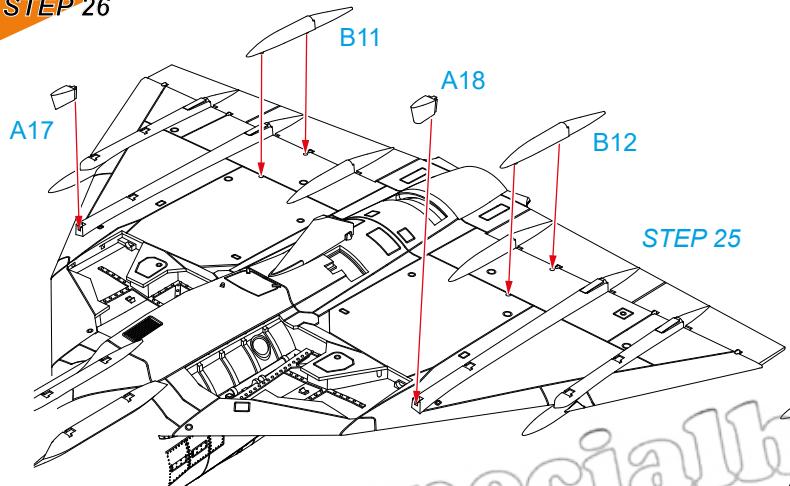
**STEP 22**

STEP 21

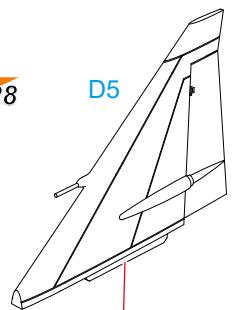
**STEP 23****STEP 24****STEP 25**

STEP 22

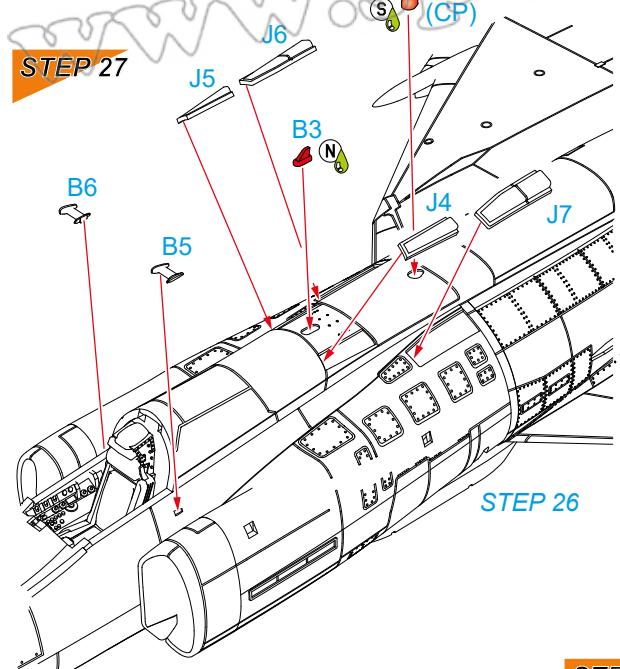
**STEP 26**



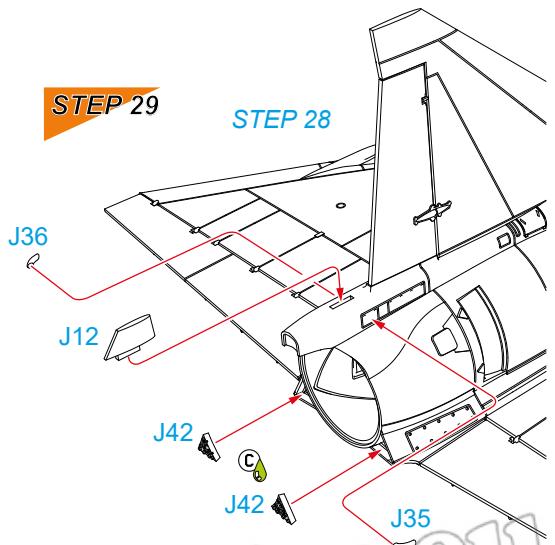
**STEP 28**



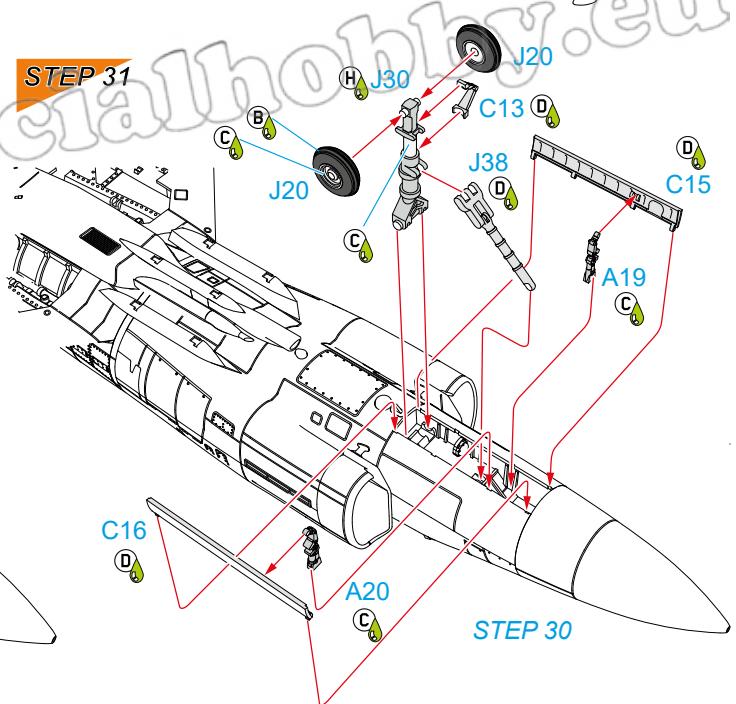
**STEP 27**



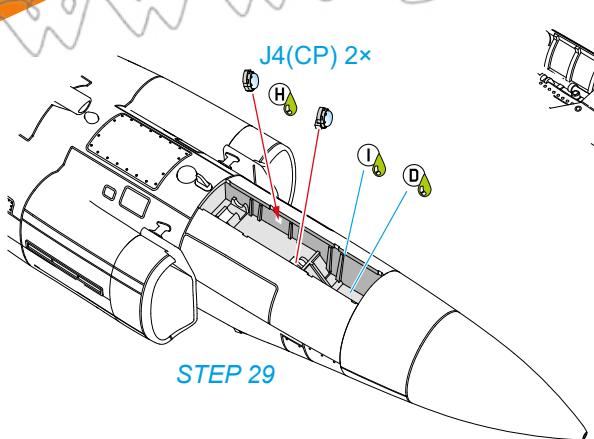
**STEP 29**



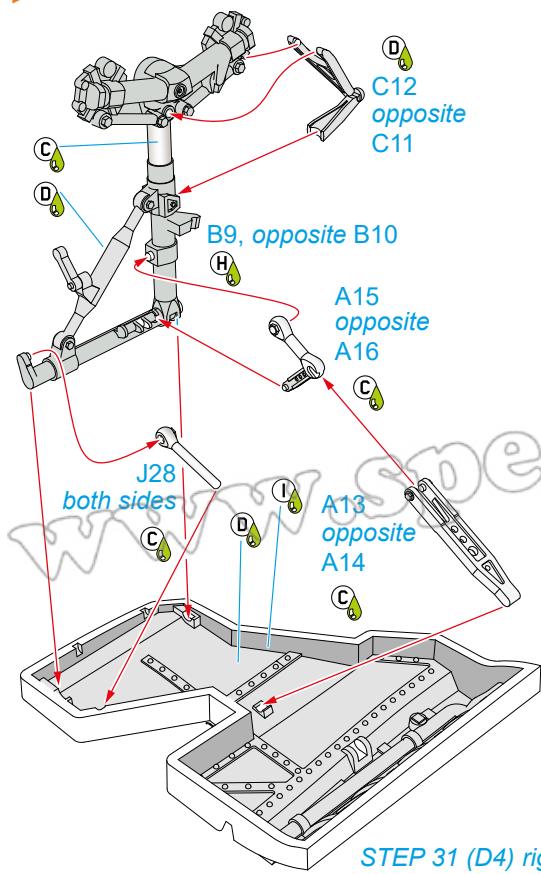
**STEP 31**



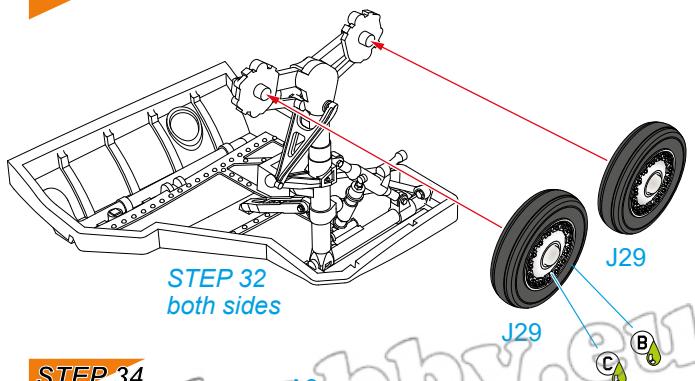
**STEP 30**



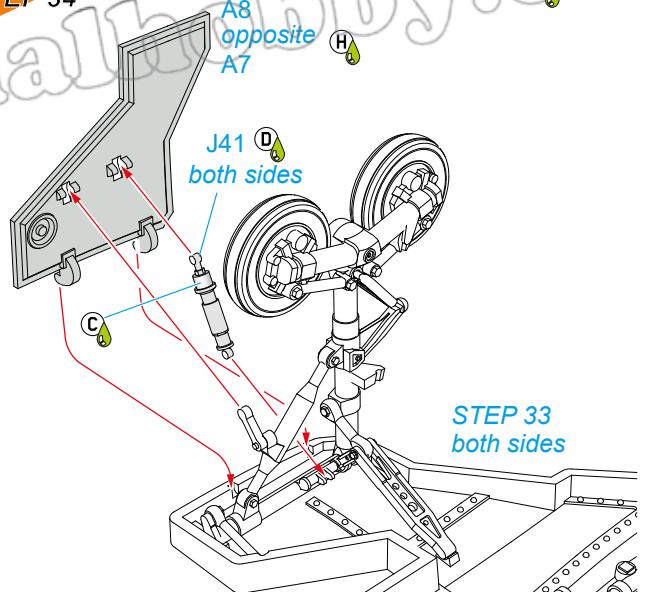
**STEP 32**



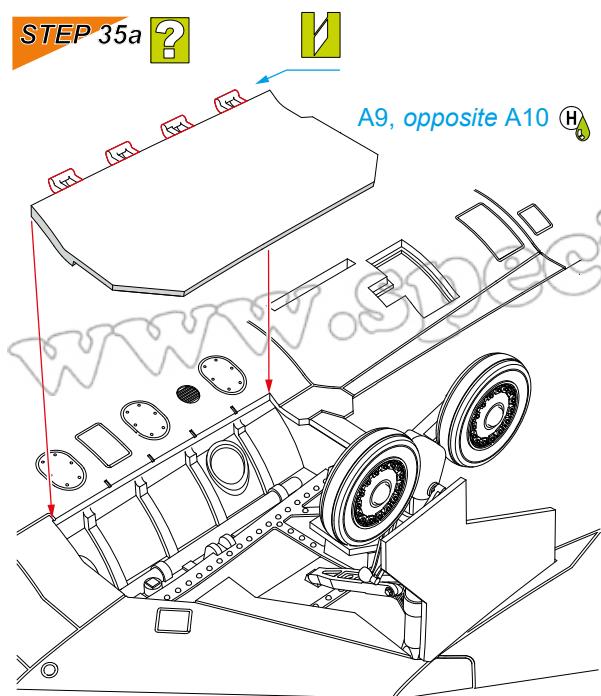
**STEP 33**



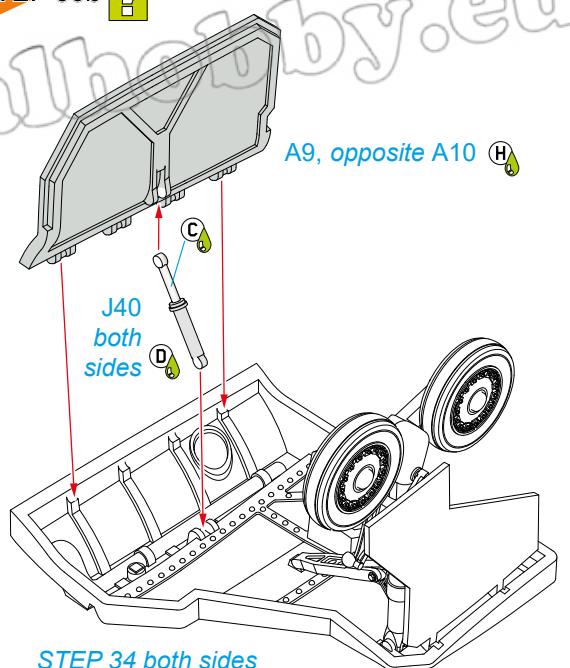
**STEP 34**



**STEP 35a** ?



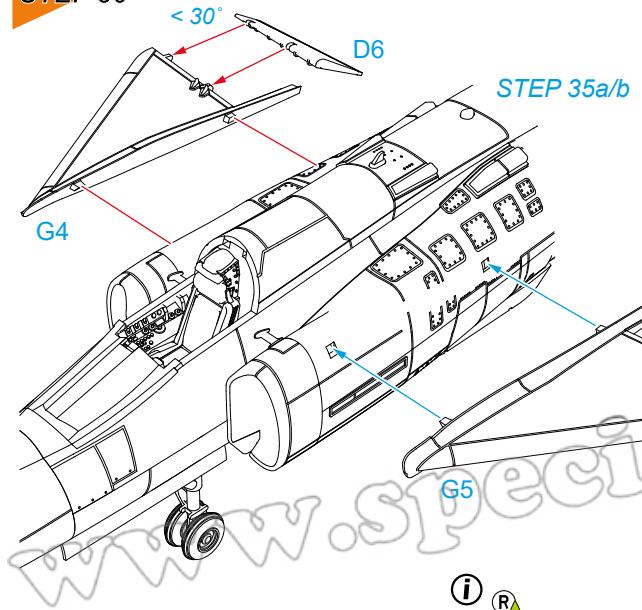
**STEP 35b** ?



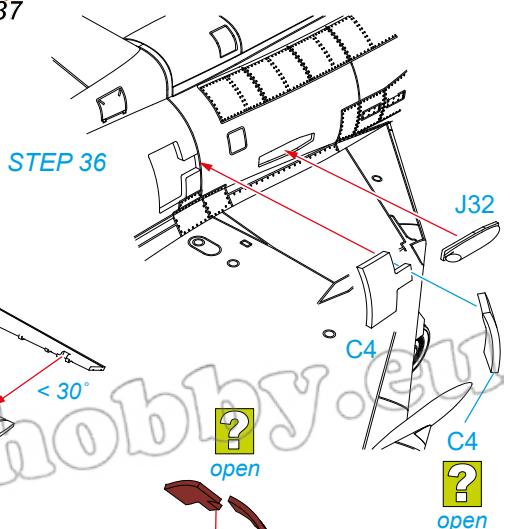
STEP 34 both sides

STEP 34 both sides

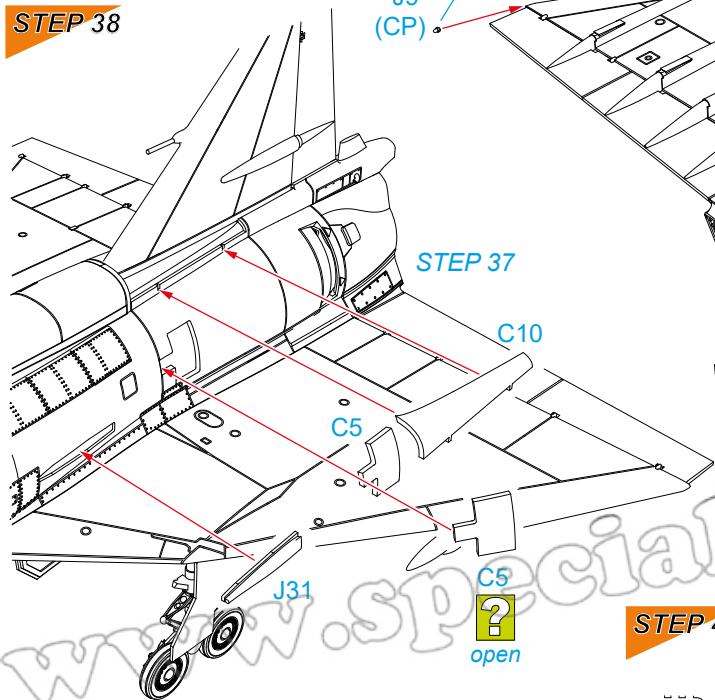
**STEP 36**



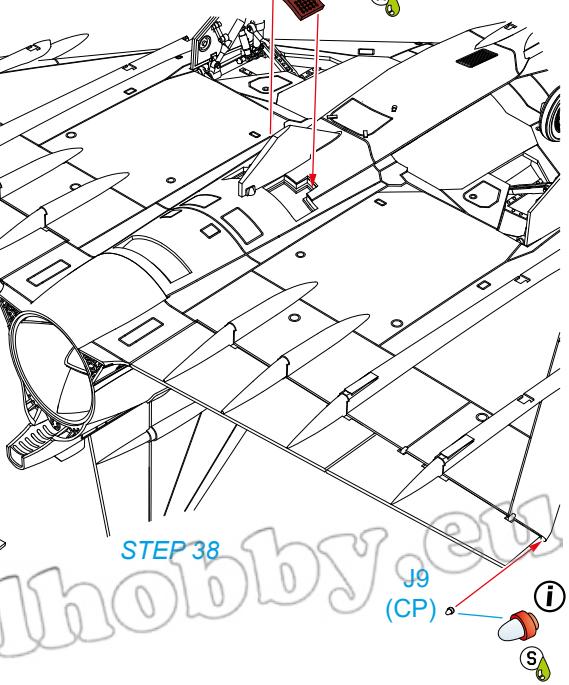
**STEP 37**



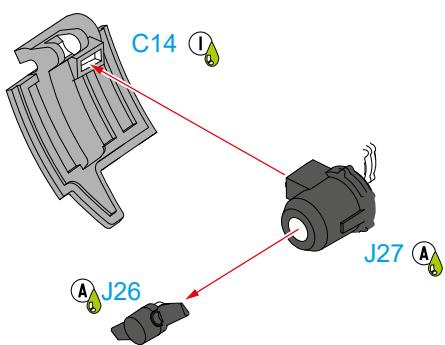
**STEP 38**



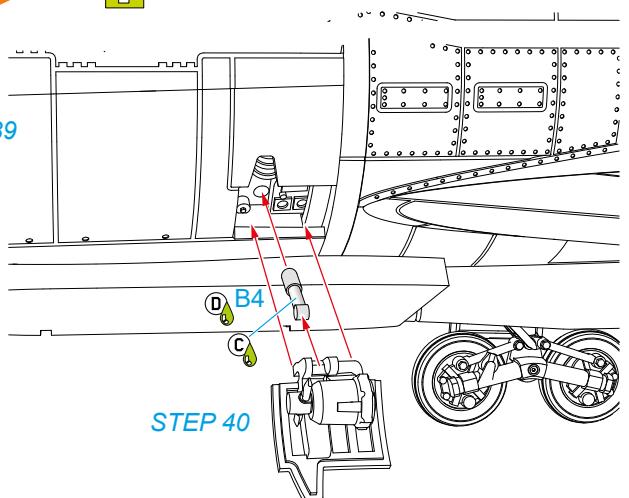
**STEP 39**



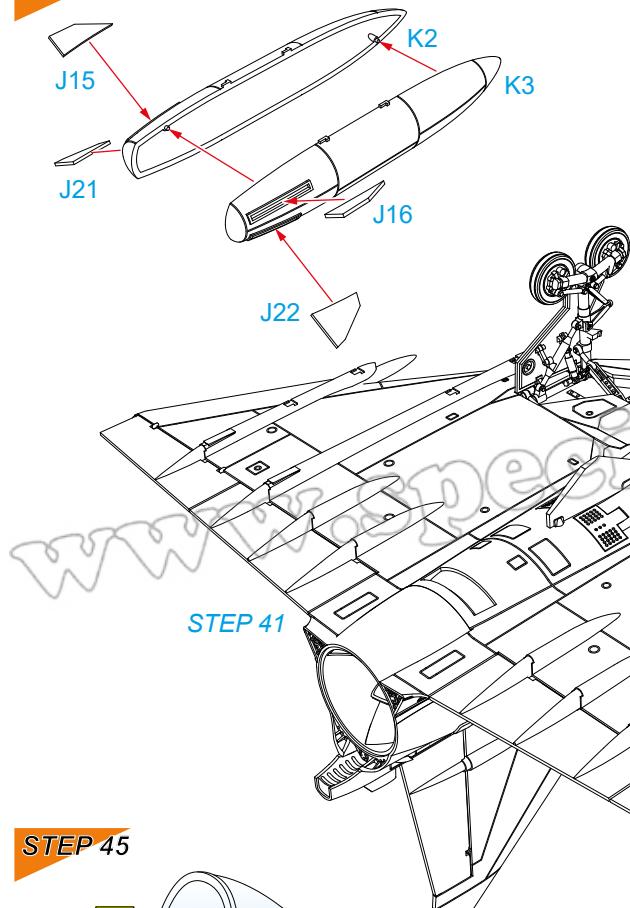
**STEP 40**



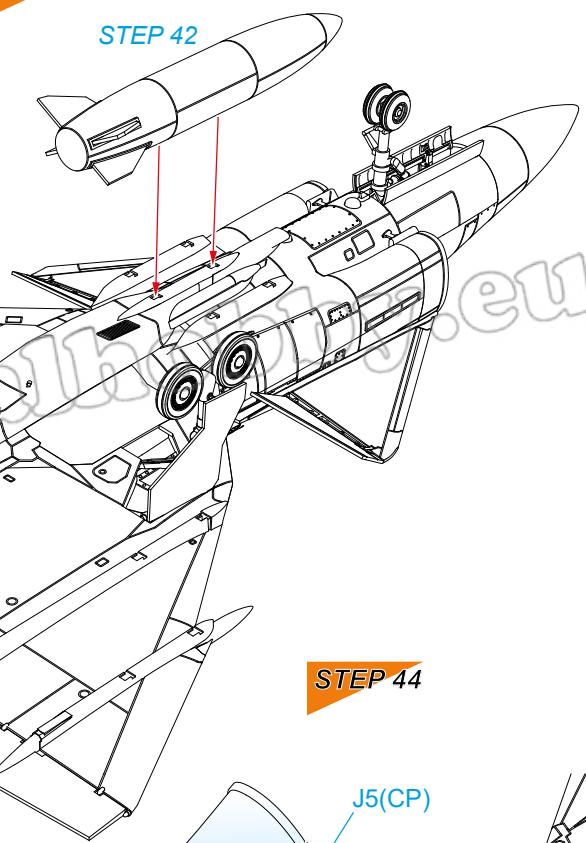
**STEP 41** ?



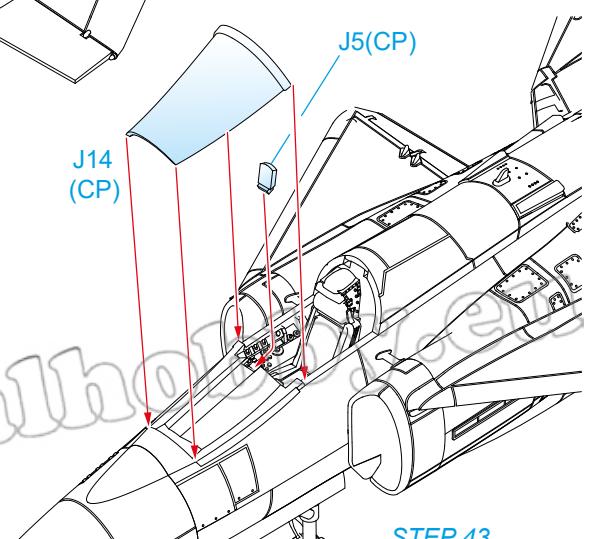
**STEP 42**



**STEP 43**



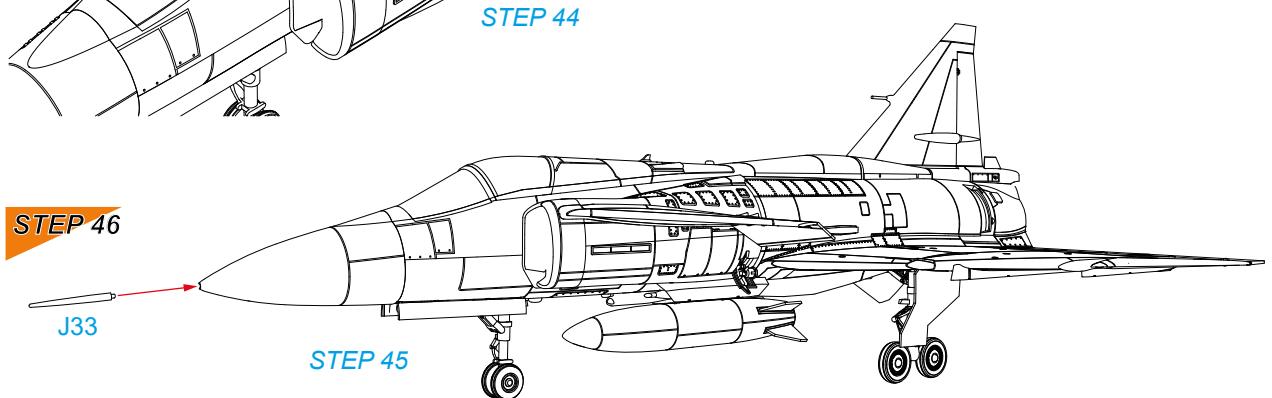
**STEP 44**



**STEP 44**



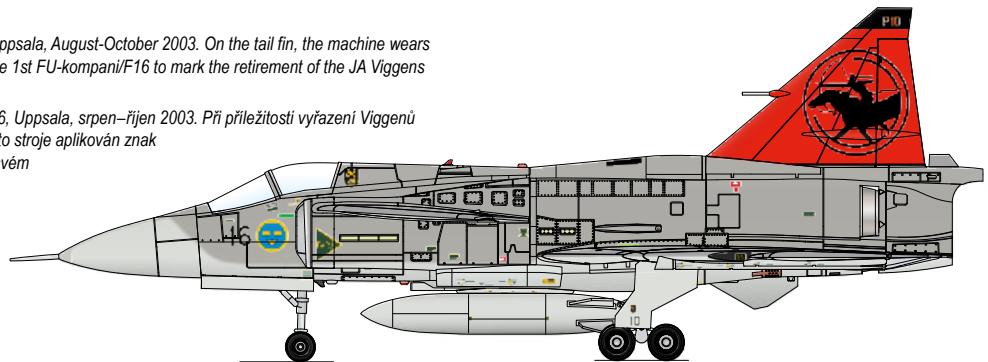
**STEP 45**



## 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.

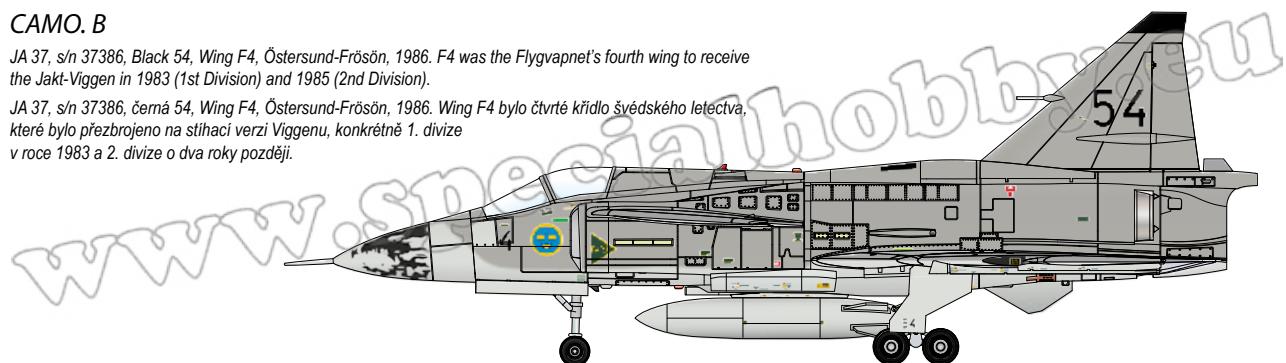
JA 37, s/n 37410, červená 10, Wing F16, Uppsala, srpen–říjen 2003. Při příležitosti vyřazení Viggenů z Wingu F16 byl na ocasní plochu tohoto stroje aplikován znak 1. FU-kompani/F16, indián jedoucí na svém věrném mustangovi.



## CAMO. B

JA 37, s/n 37386, Black 54, Wing F4, Östersund-Frösön, 1986. F4 was the Flygvapnet's fourth wing to receive the Jakta-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 1986, 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 1986 se F16 stal pátým křídlem Flygvapnu vyzbrojeným JA-37. Za kokpitem, po obou stranách trupu byl aplikován znak 2. divize – Petter Blå.



Resin sets for your Viggen



Q72343

SAAB Viggen Thrust Reverser

Q72344

SAAB Viggen Air Brake Set



Q72346

SAAB Viggen Ejection Seat

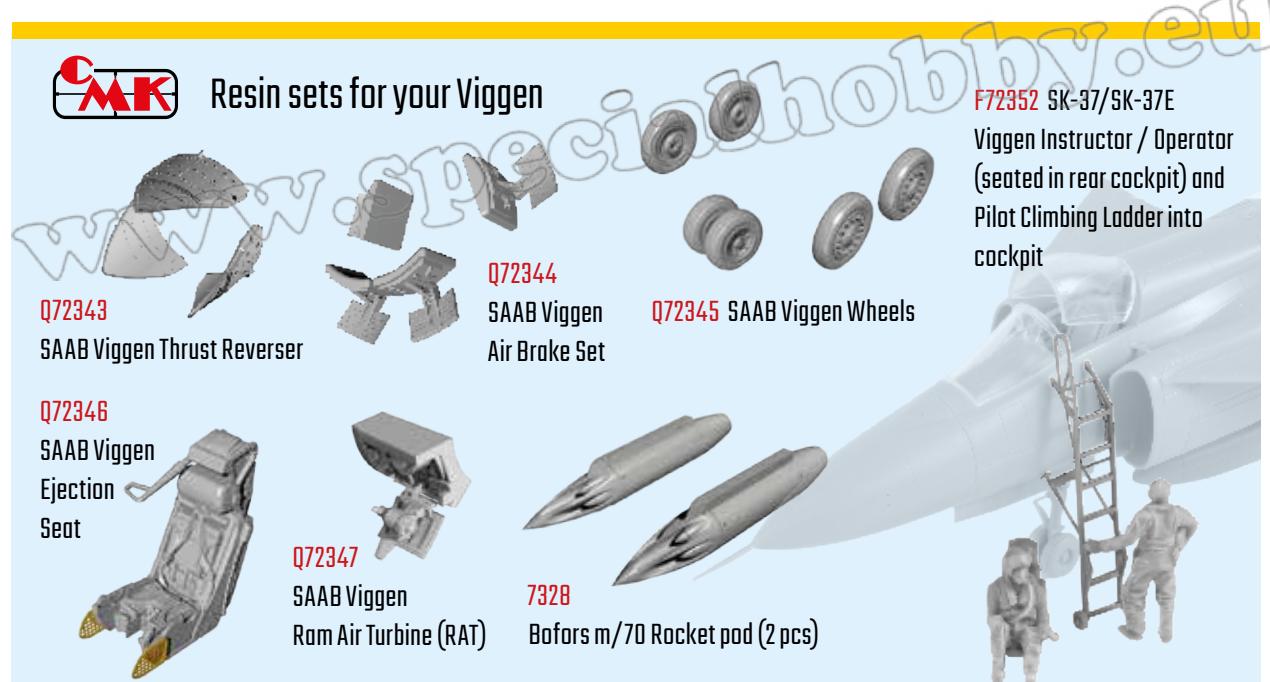
Q72347

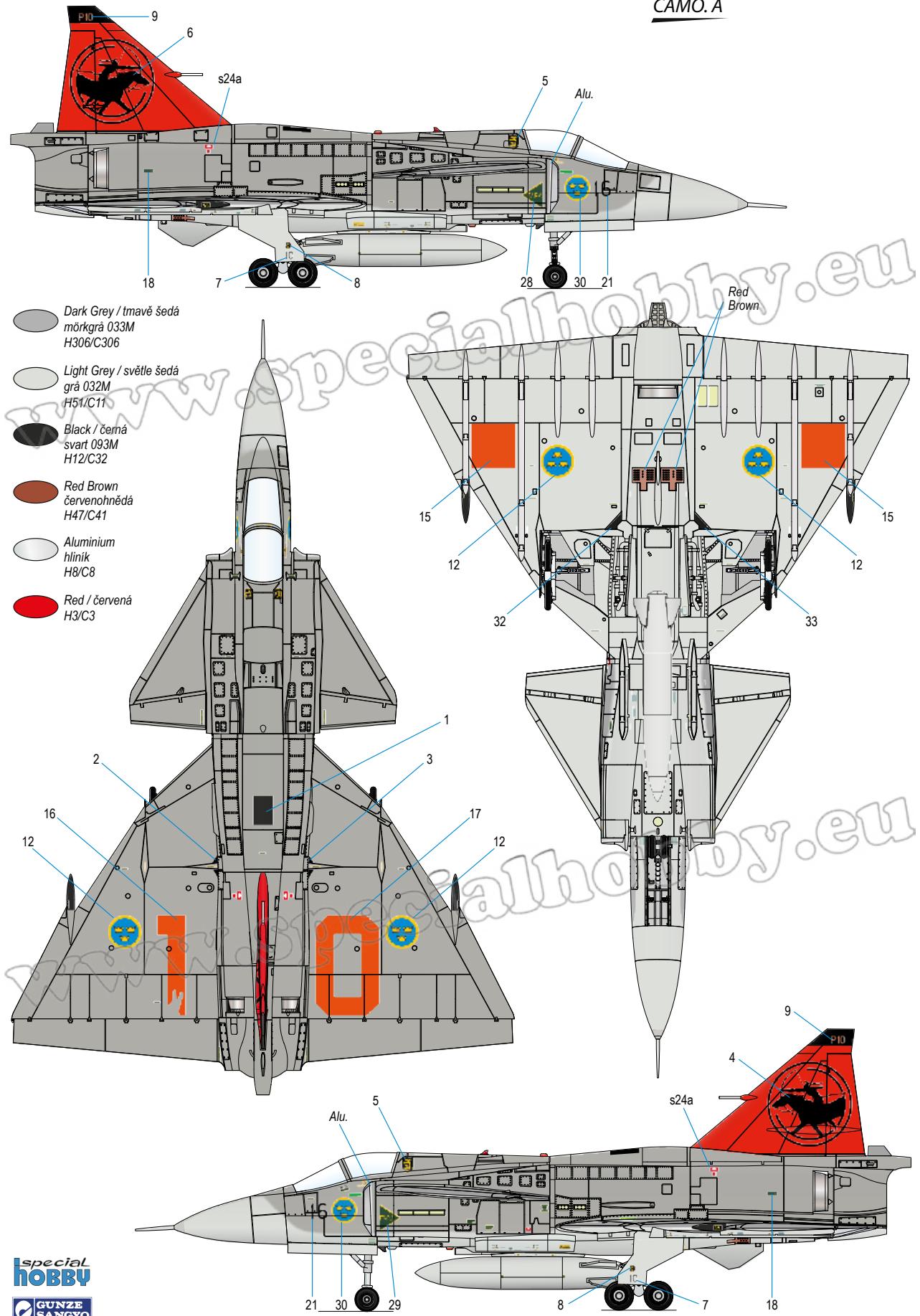
SAAB Viggen Ram Air Turbine (RAT)

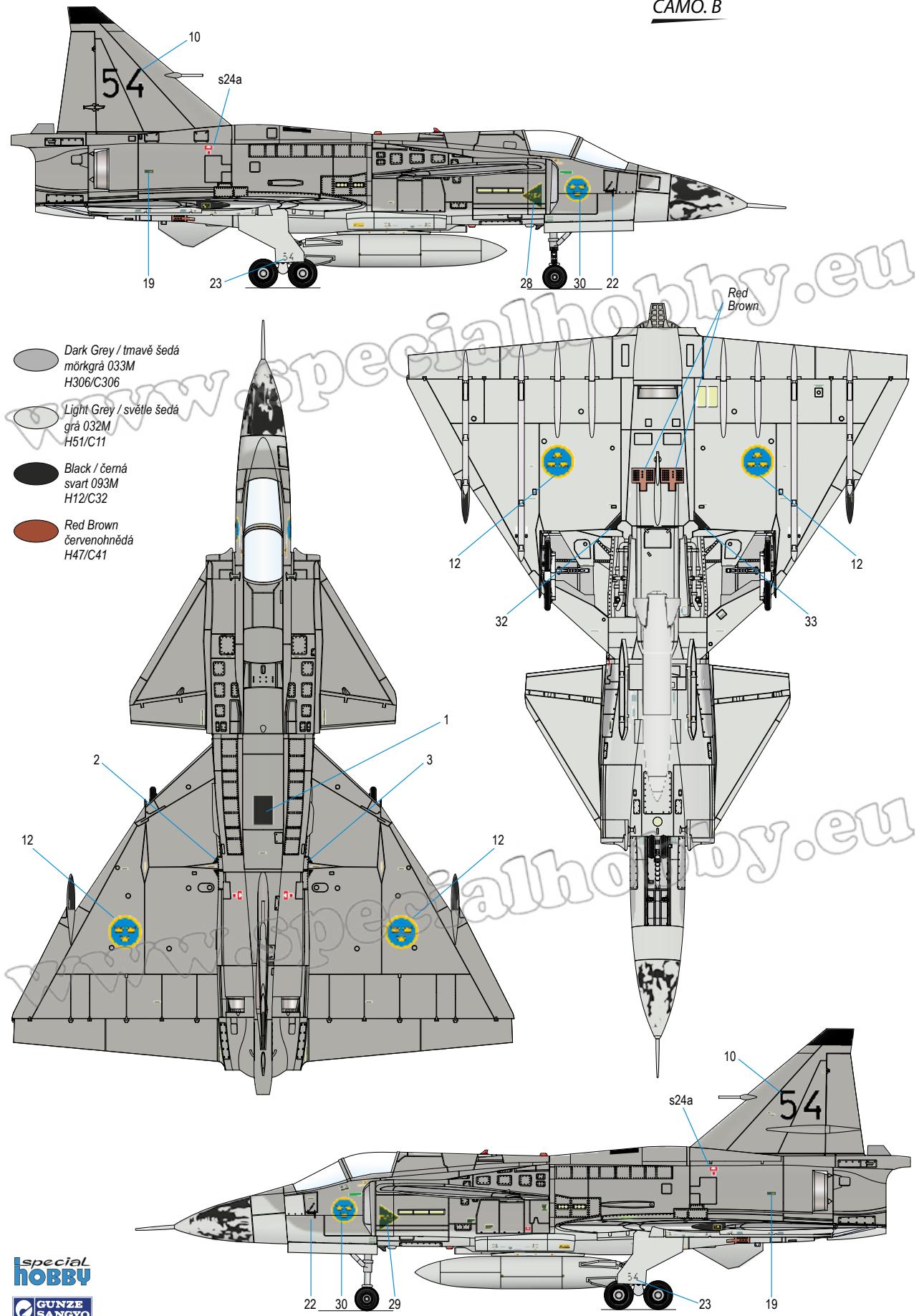


7328

Bofors m/70 Rocket pod (2 pcs)









## Universal Stencil Placement Scheme

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

