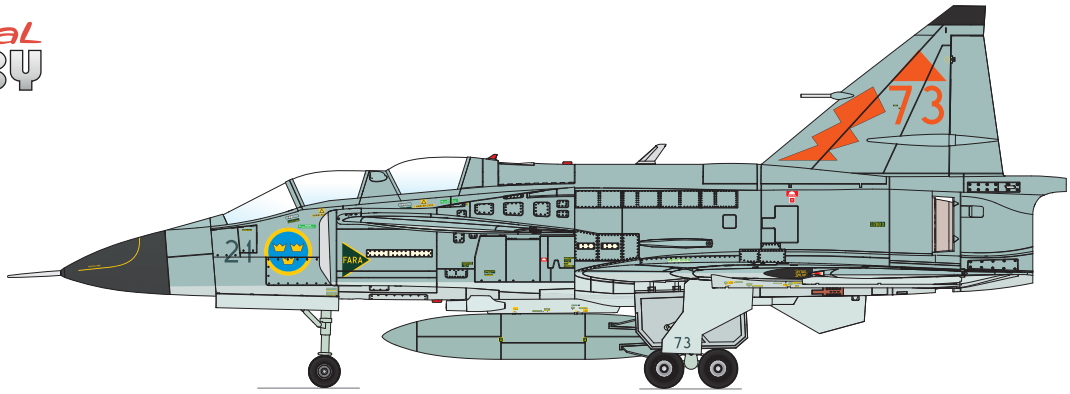
SH 48150



SAAB SK 37 Viggen

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 o 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 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 světe, 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 přídi, 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 Viggeny 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

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.

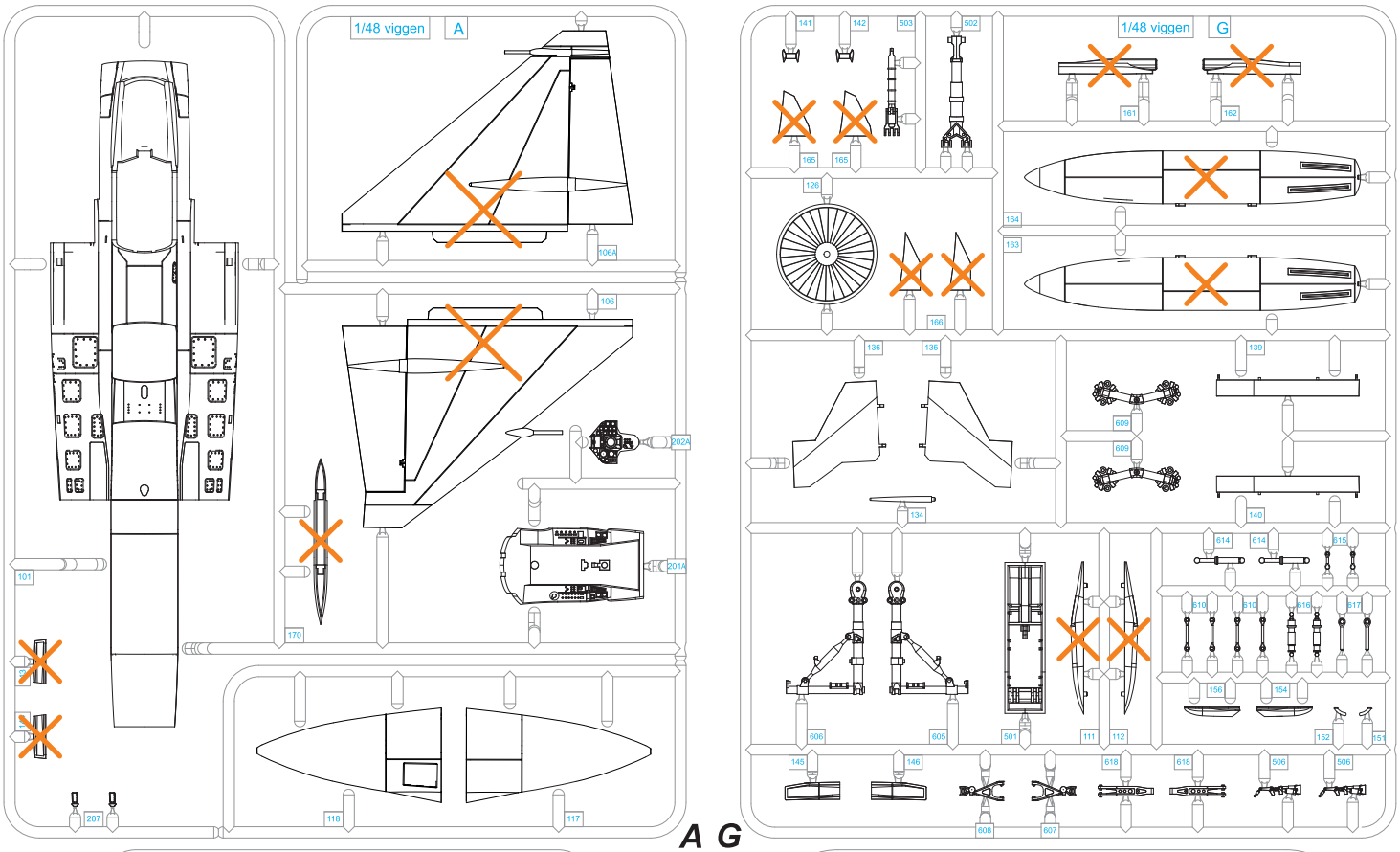
The first of seven prototypes took off for its maiden flight on February 8, 1967 with E.Dalsröm at the controls. The aircraft was powered by Volvo RM8 turbofan, a licence-built variant of Pratt & Whitney JT8D with an afterburner and thrust-reverser which, in addition to a double-delta wing design, enhanced 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.

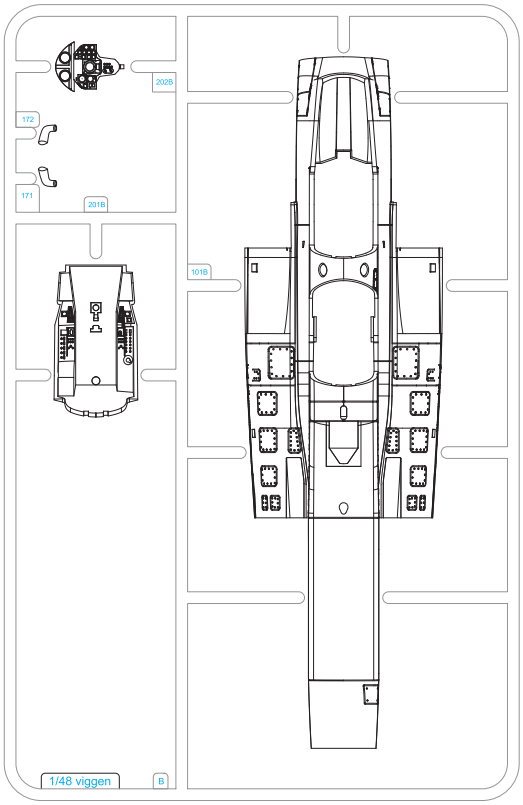
Lenght: 16,30 m, Wingspan: 10,60 m, Max. speed: 2145 km/h, Standard Range: 1000 km/ Max. Range: 2000 km, Ceiling: 18 300 m, Rate of Climb: 100 m/s

PLASTIC PARTS



A G

B M



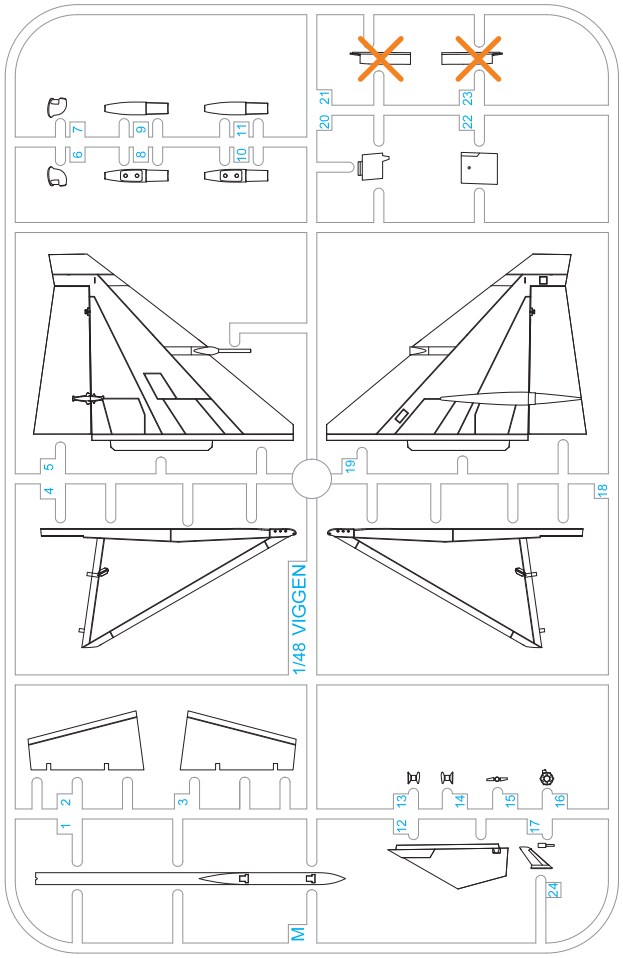
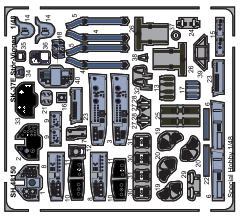


PHOTO-ETCHED PARTS (PE)

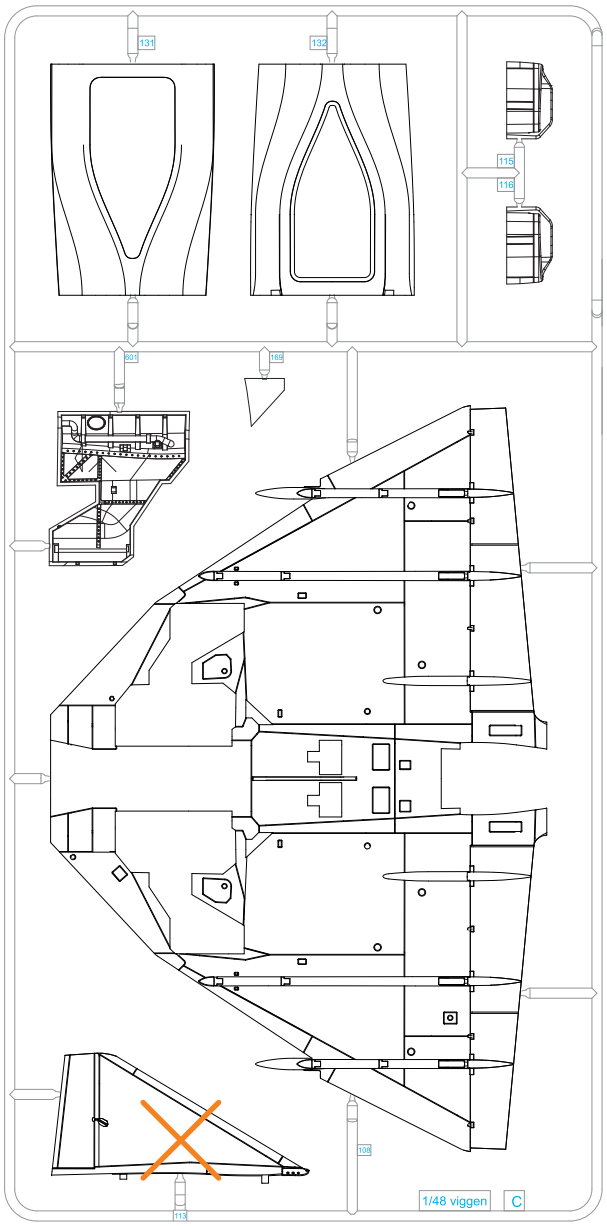


Tento díl nepoužít

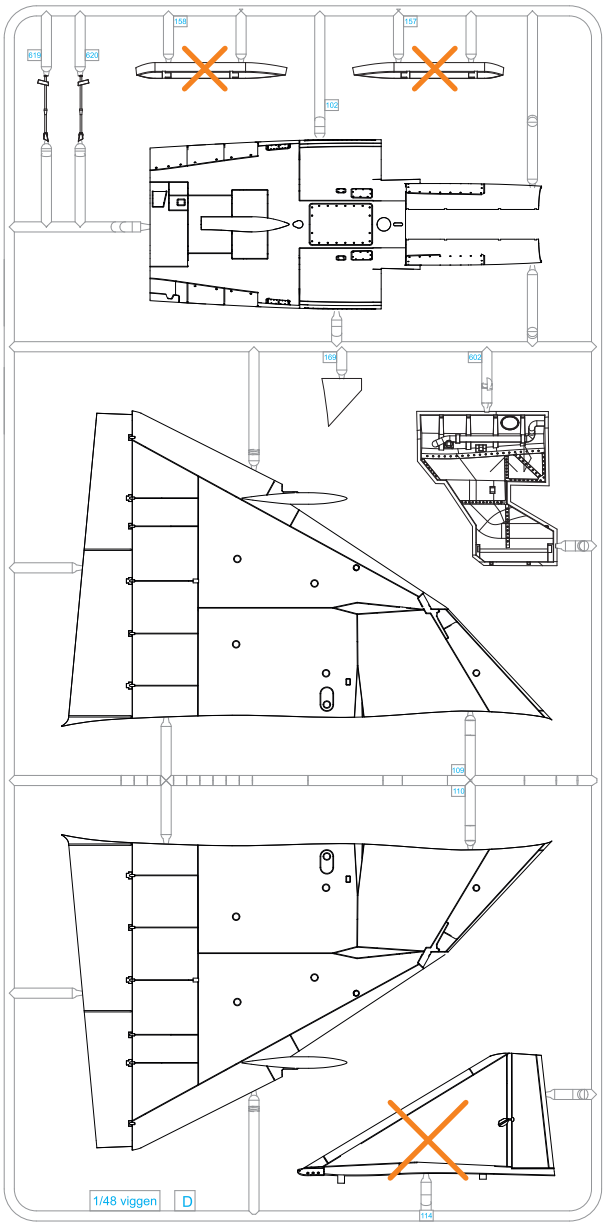
Do not use this part

SYMBOLS

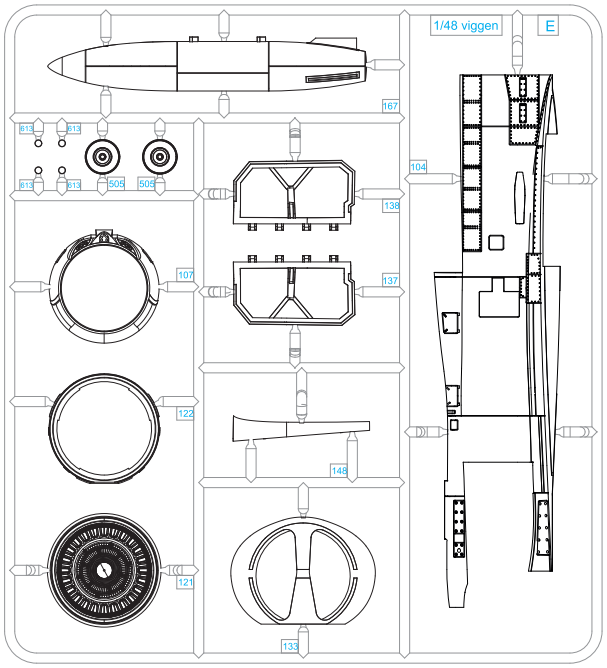
MOŽNOST VOLBY OPTIONAL NACH BELIEBEN OPTION	POUŽÍT KYANOAKRYLÁTOVÉ LEPIDLO INSTANT CYANOACRYLATE GLUE ZYANOAKRYLATKLEBER ADHÉSIF CYANOACRYLAT	OHNOUT BEND BIEGEN COURBER	ZHOTOVIT NOVĚ SCRATCH BUILD FERTIGSTELLEN ACHEVER	ŘEZAT/VRTAT CUT OFF/DRILL ENTFERNEN DETACHER	GSI colours code NATŘÍT COLOUR FARBEN PEINDRE



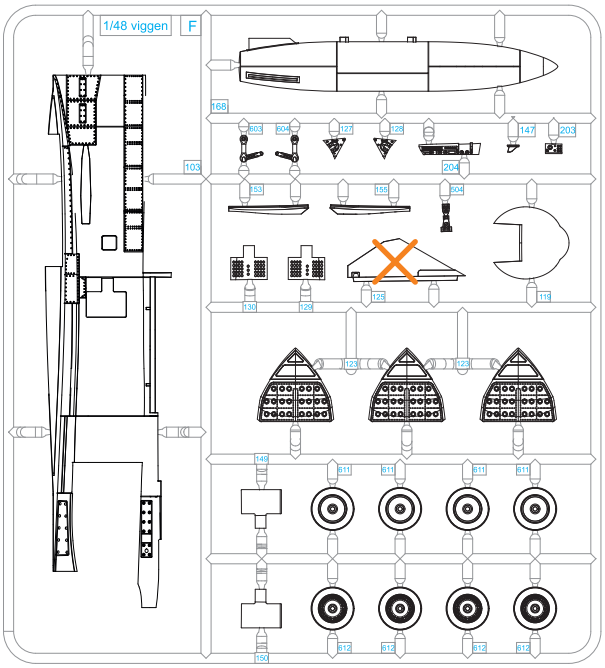
C



D



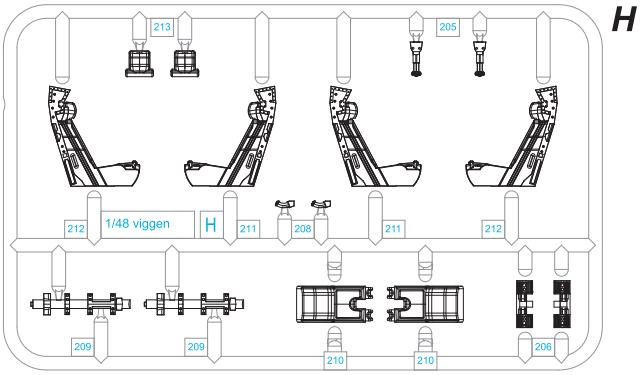
E



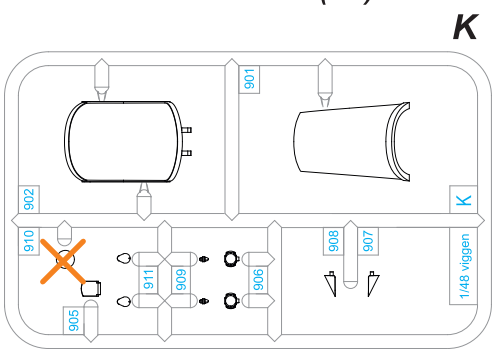
F

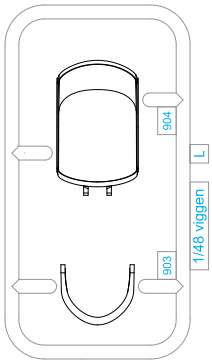
A	Červená/ RED	H3/C3	F	Opálený kov/ BURNT IRON	H76/C61	K	Tm. zelená/ DARK GREEN	H309/ C309	P	Hliník/ ALUMINIUM	SM01
B	Žlutá/ YELLOW	H4/C4	G	Černá pneum./ TIRE BLACK	H77/C137	L	Hliník/ ALUMINIUM	MC218	Q	Titan/ TITANIUM	SM05
C	Černá/ BLACK	H12/C33	H	Šedá/ GREY	H308	M	Sv. zelená/ LIGHT GREEN	H58/ C27	R	Červenohnědá/ RED BROWN	H47/ C41
D	Ocel/ STEEL	H18/C28	I	Sv. zelená/ LIGHT GREEN	H319	N	Sv. šedá/ LIGHT GREY	H308/ C308			
E	Zelená/ BRIGHT GREEN	H26/C66	J	Sv. šedá/ LIGHT GREY	H338	O	Sv. hnědá/ TAN	H310/ C310			

Barvy GUNZE/ GUNZE Colour No.

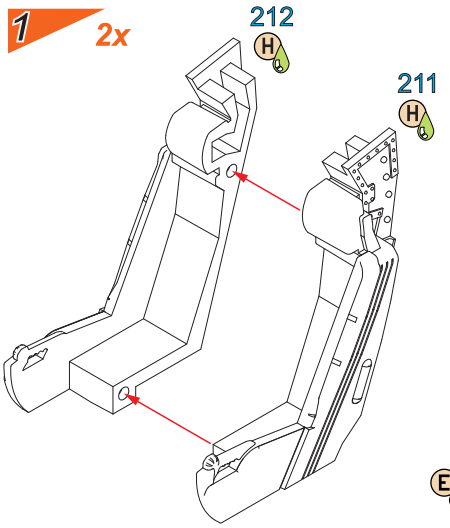


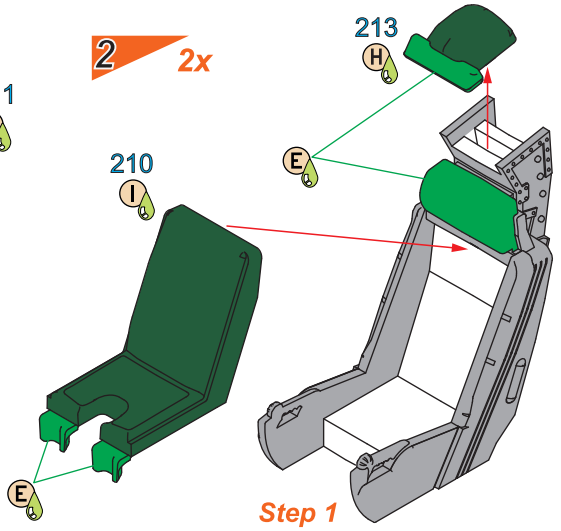
CLEAR PARTS (CP)

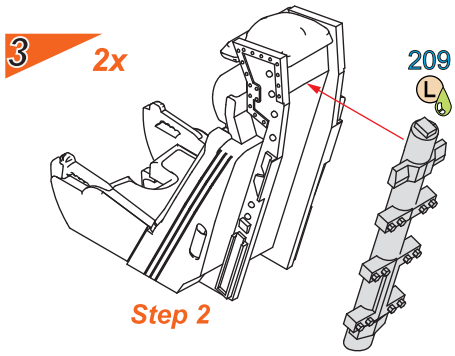


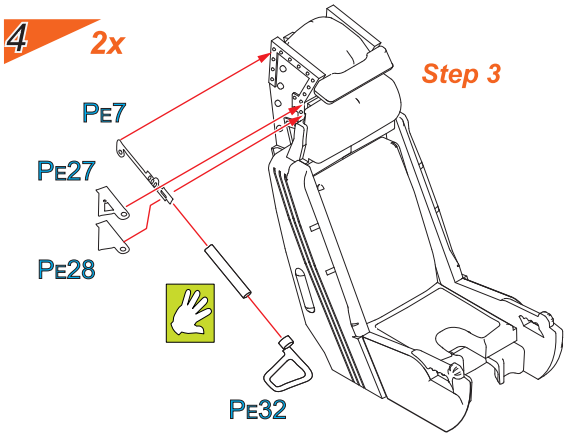


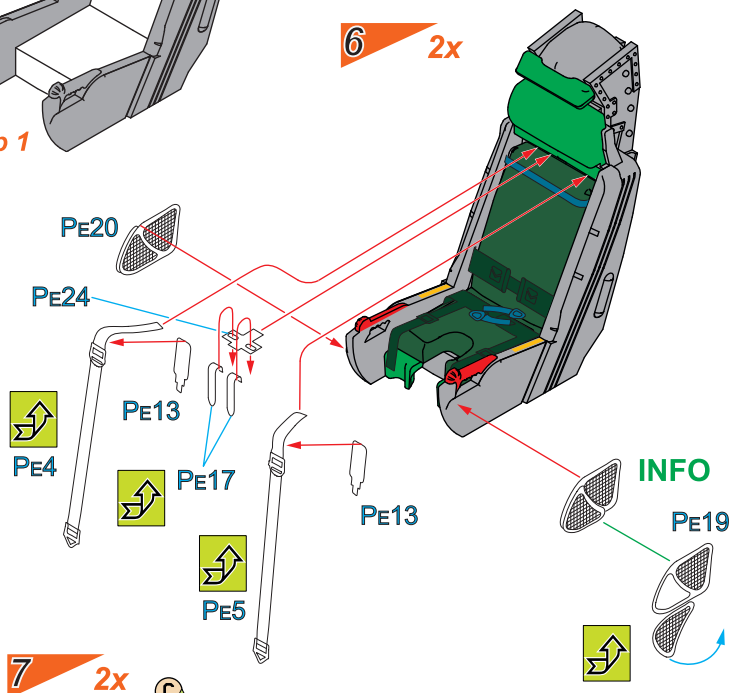
ASSEMBLY

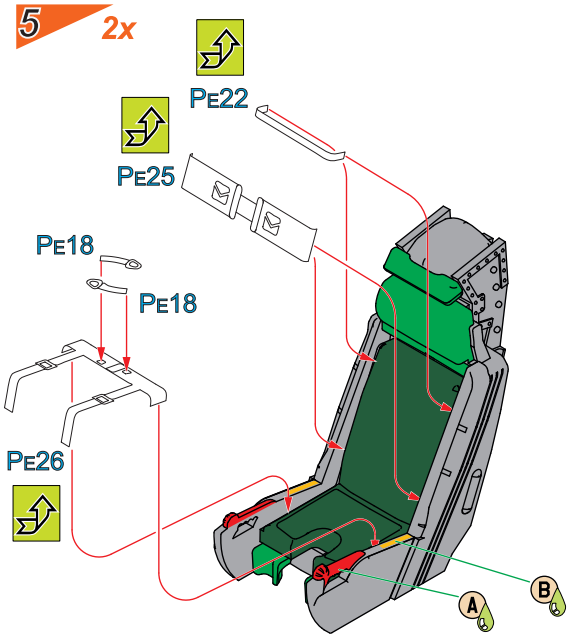


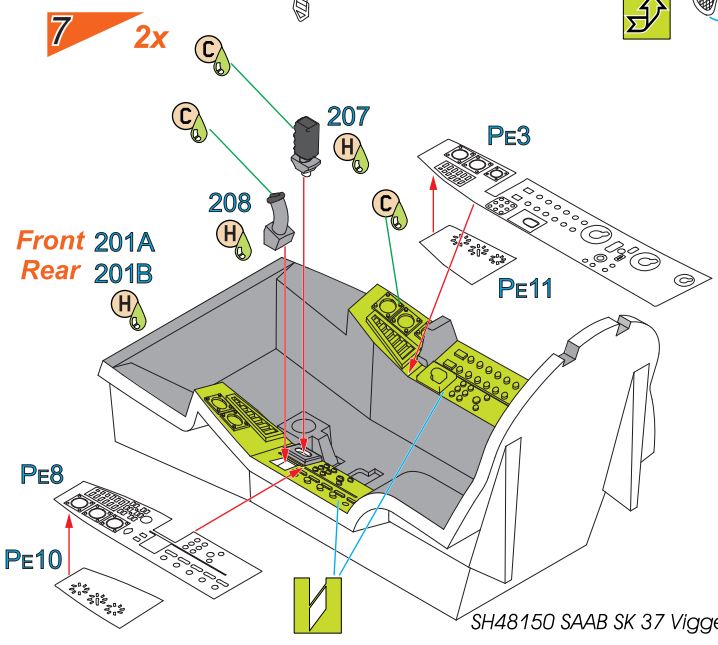


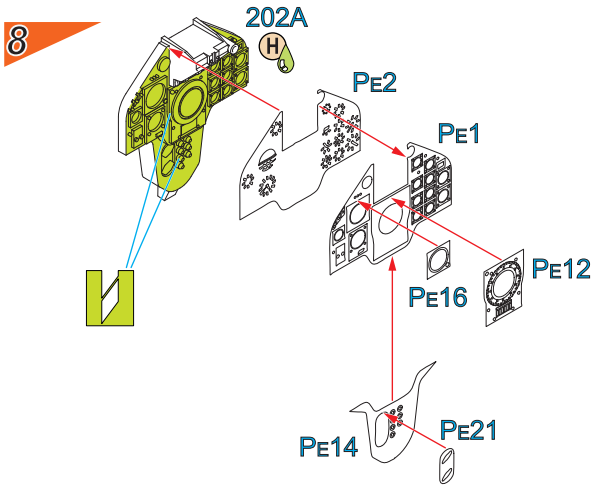


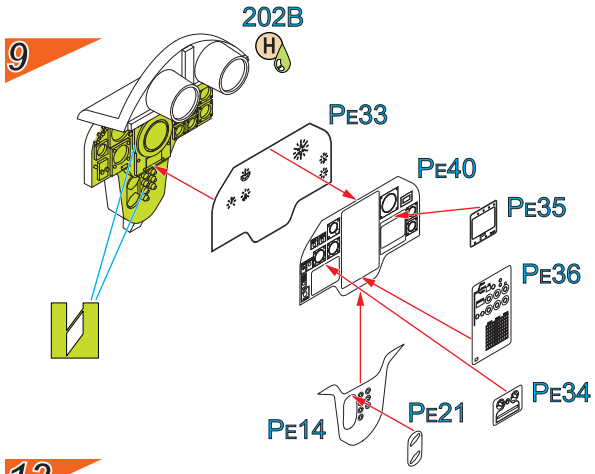


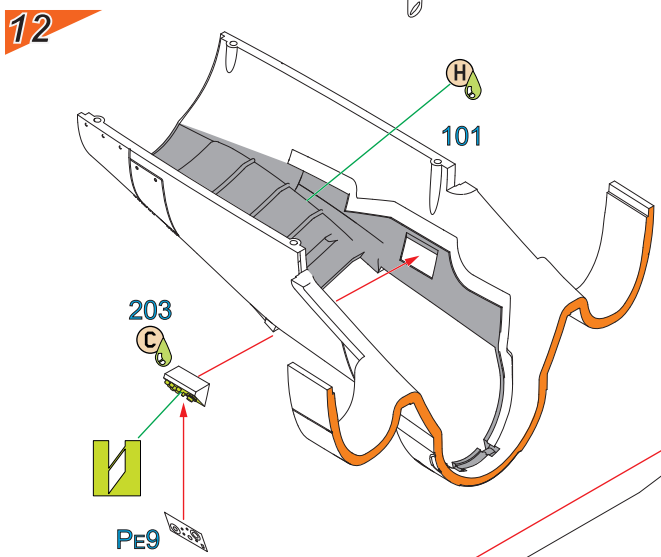




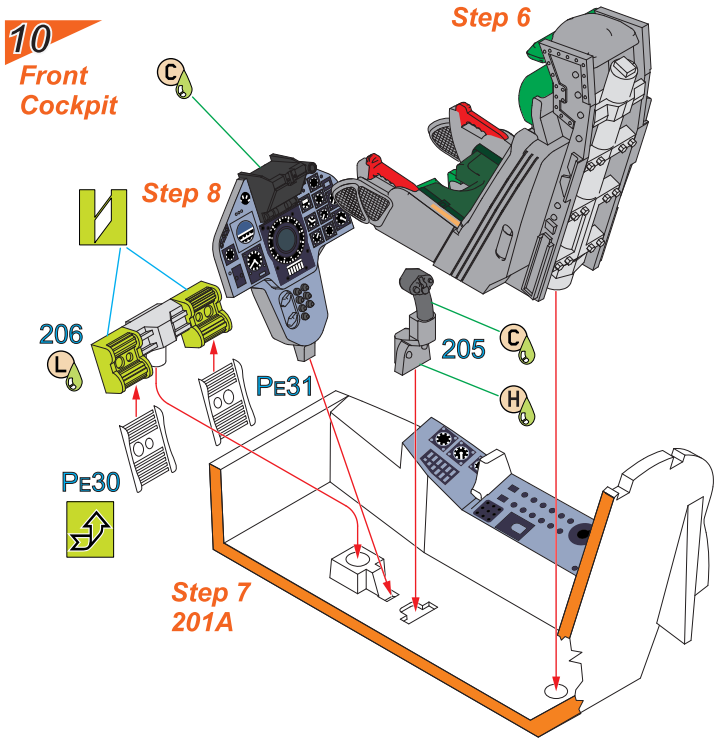


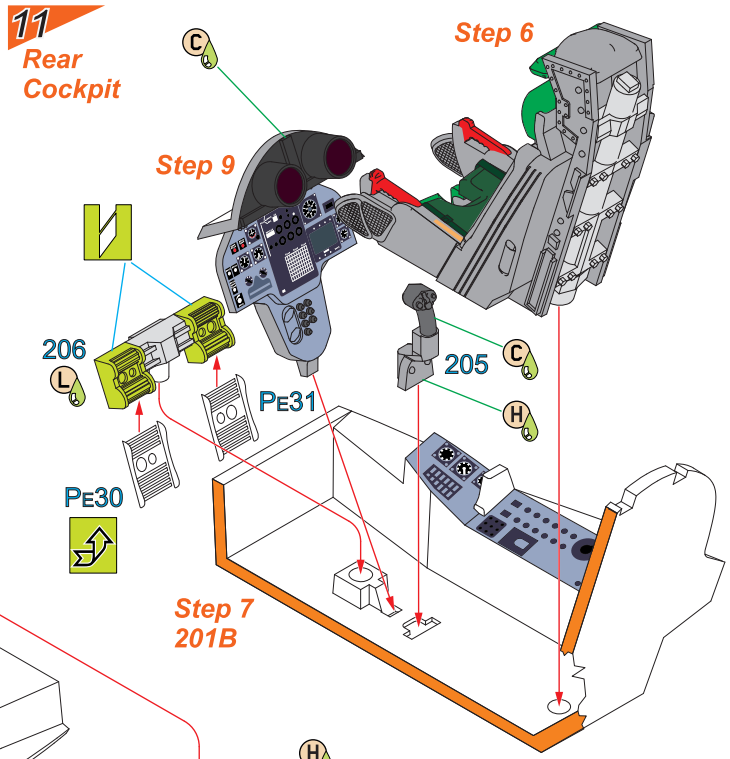


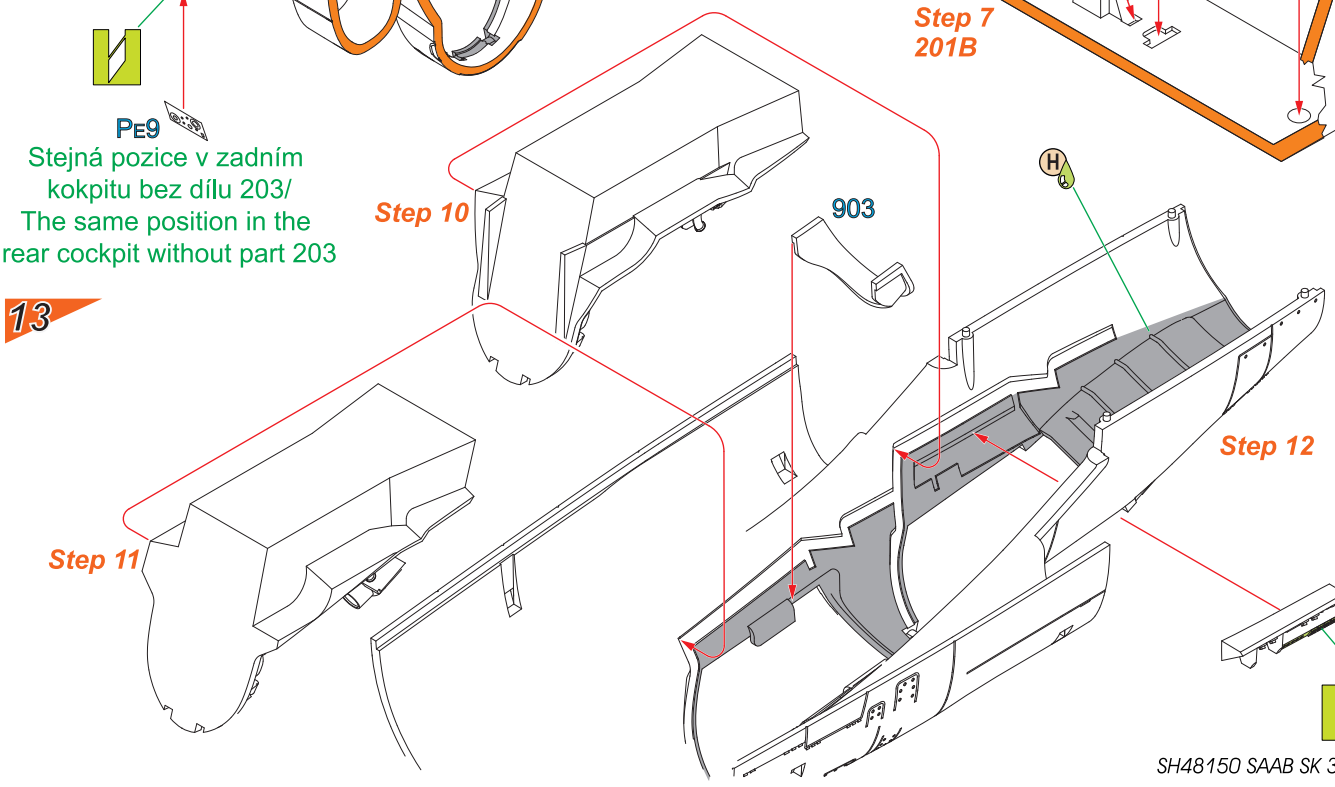


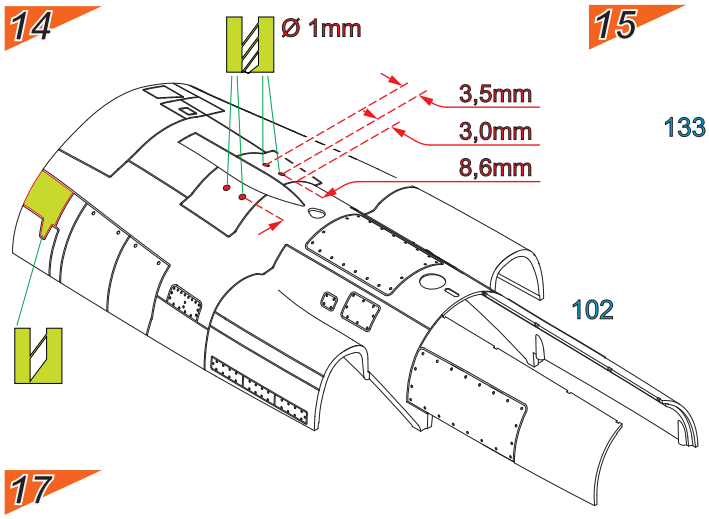


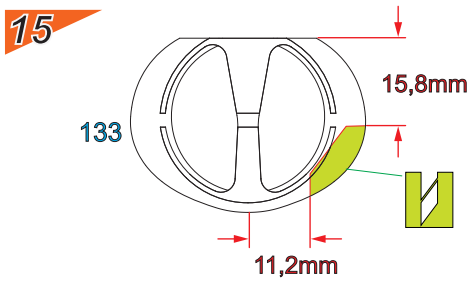
Stejná pozice v zadním kokpitu bez dílu 203/
The same position in the rear cockpit without part 203

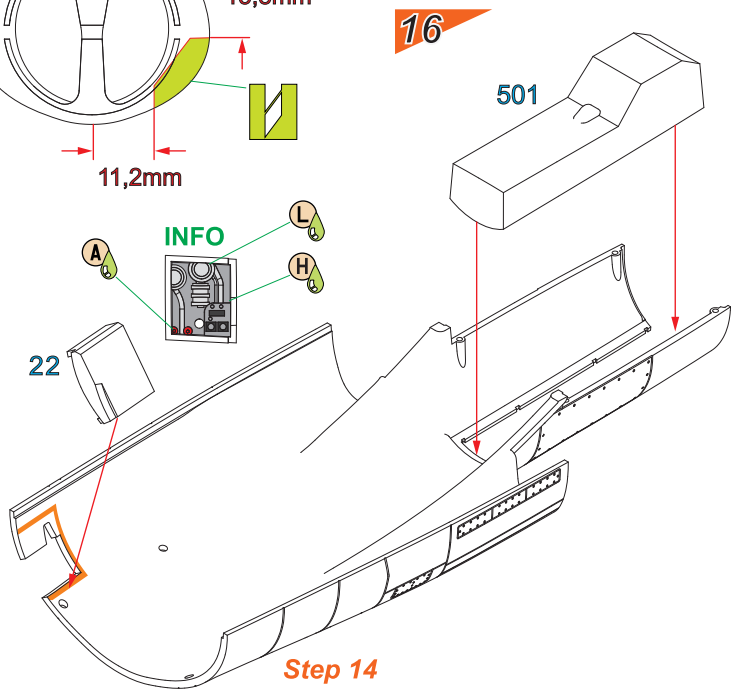


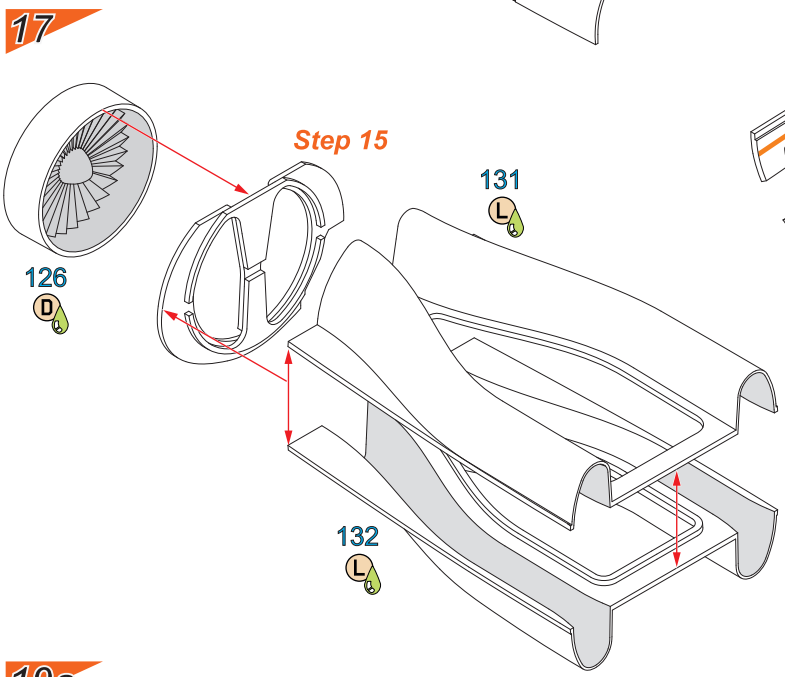


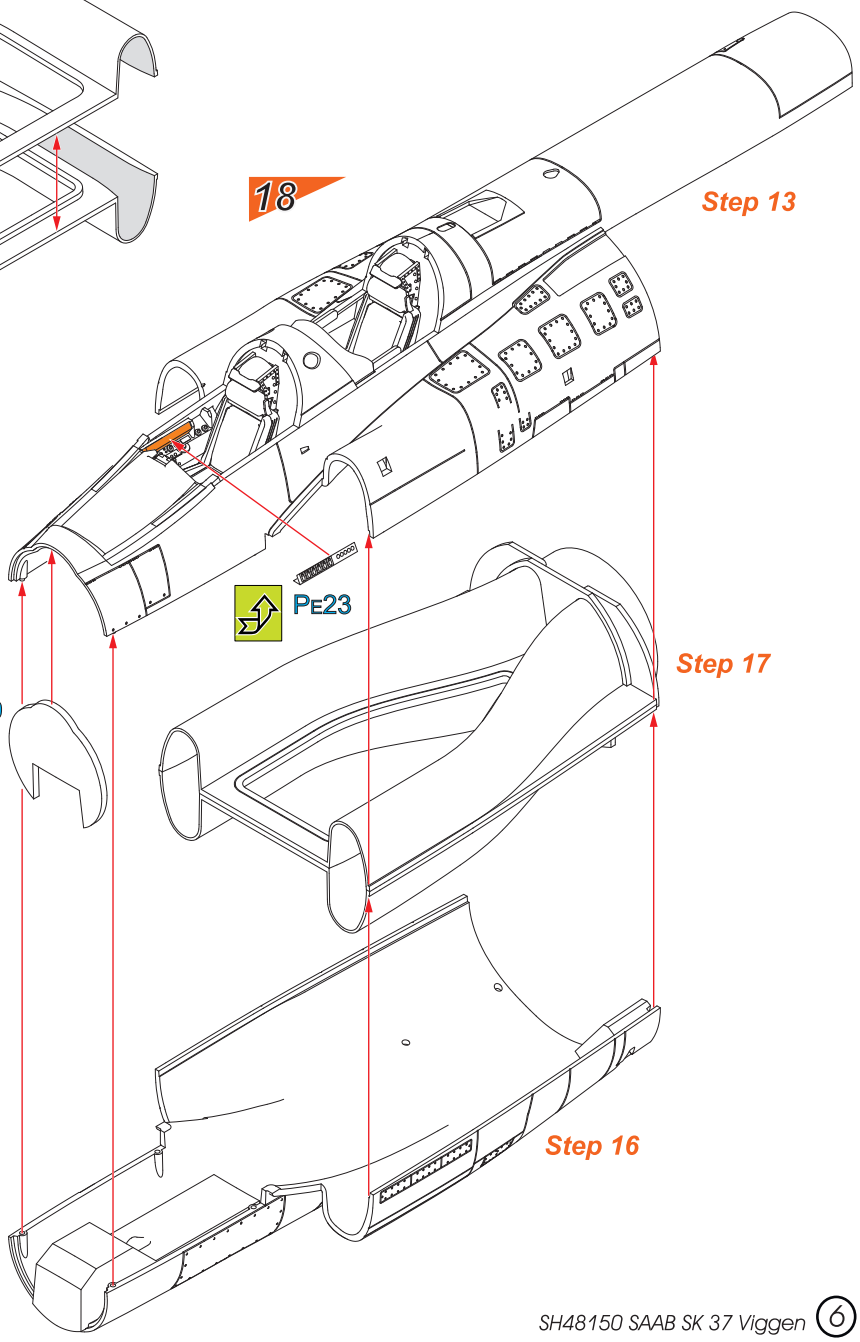


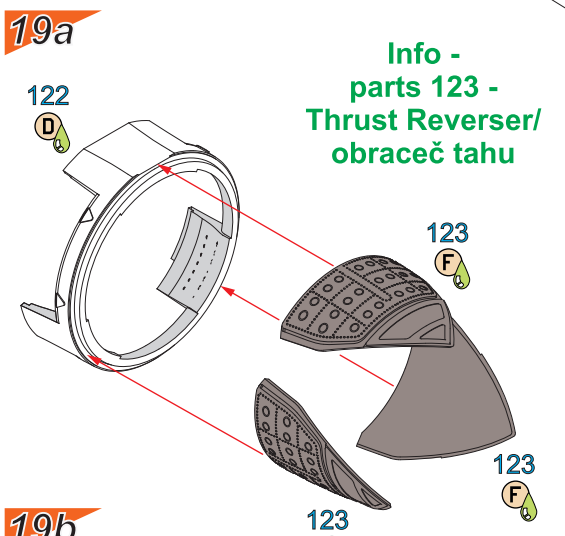

14
Ø 1mm
3,5mm
3,0mm
8,6mm
102

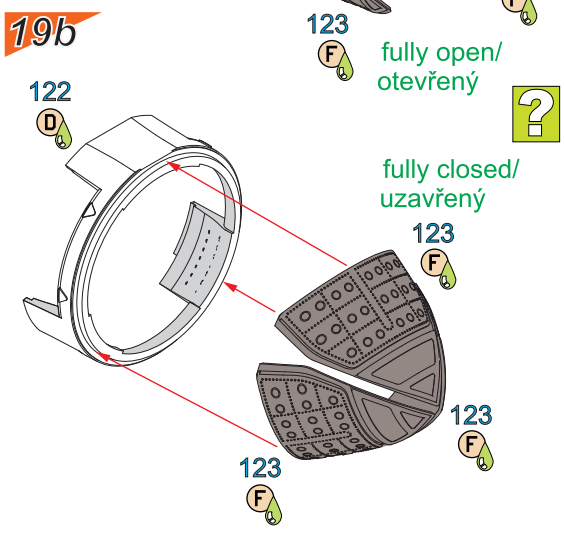

15
15,8mm
133
11,2mm


16
501
INFO
A
L
H
22
Step 14


17
Step 15
131
L
126
D
132
L


18
Step 13
PE23
119
Step 17
Step 16


19a
Info -
parts 123 -
Thrust Reverser/
obraceč tahu
122
D
123
F
123
F
123
F


19b
122
D
fully open/
otevřený
fully closed/
uzavřený
123
F
123
F
123
F

19c

121 F

122 D

123 F

123 F

123 F

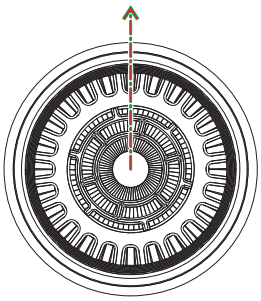
normal position
on ground/
běžná poloha
při stání na zemi
a poklesu tlaku

?

20

107 F

INFO
121-orientation



21

104

Step 20

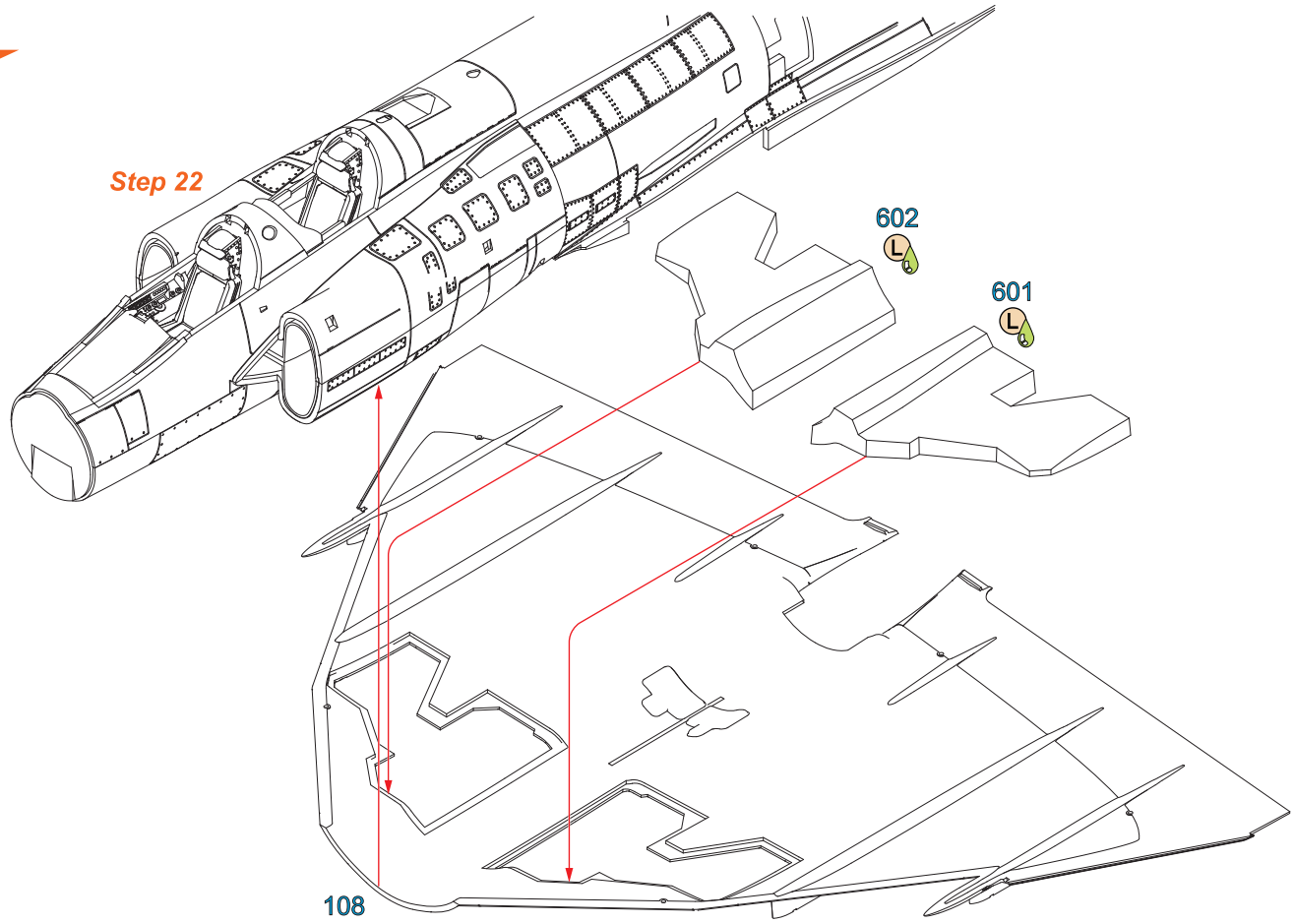
103

22

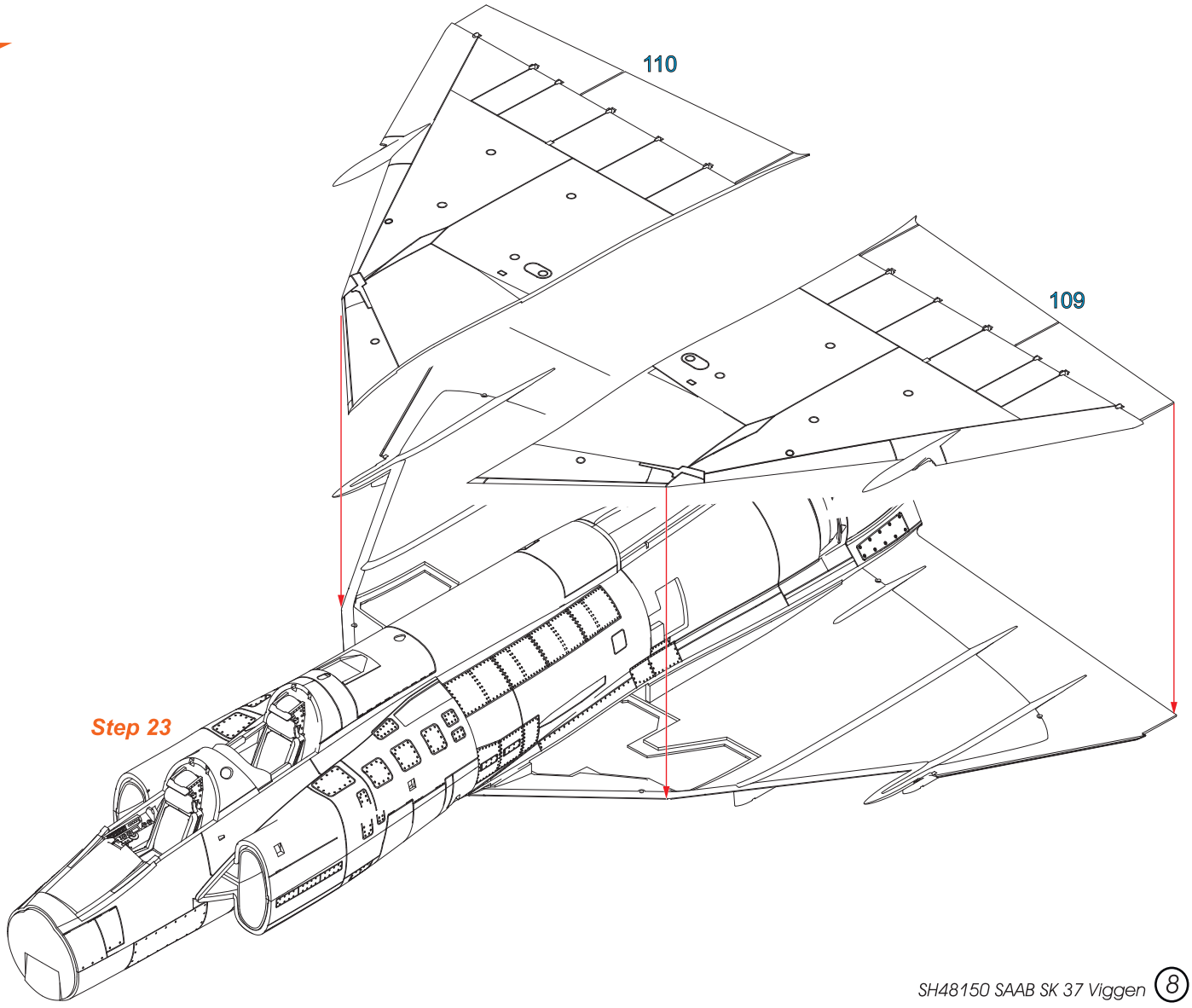
Step 18

Step 21

23



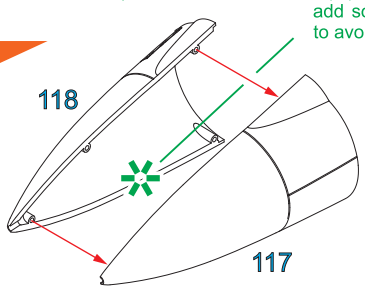
24



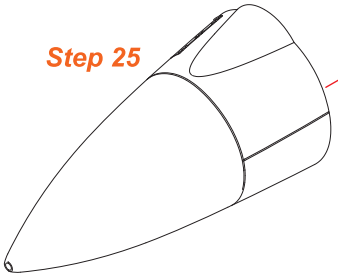
Model by měl stát bez dovážení na svém podvozku, nicméně chcete-li na něj přidat dodatečnou výzbroj, bude dobré přidat zátěž do špičky trupu, aby model nebyl „těžký na ocas" a nepadal na zadní část..

The model is balanced to correctly stand on its main landing gear. However, if you plan to add aftermarket equipment, it is a good idea to add some ballast in the nose to avoid model becoming a tailsitter.

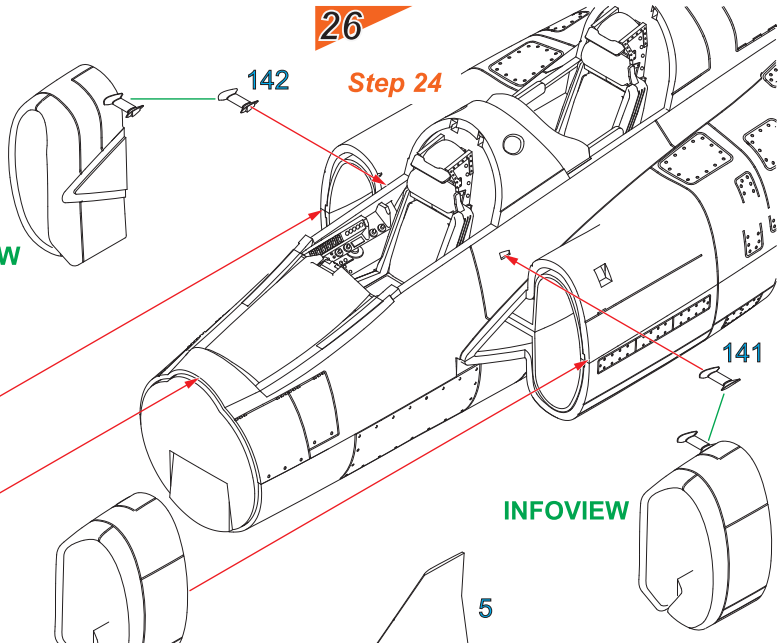
25



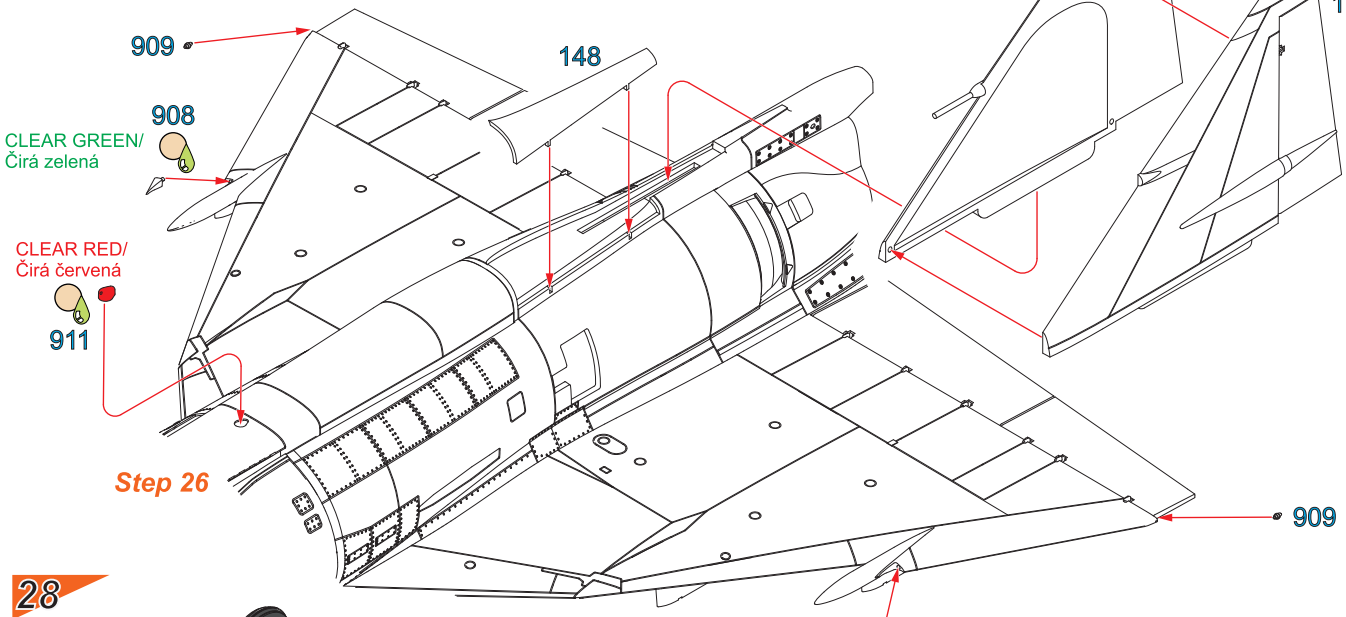
Step 25



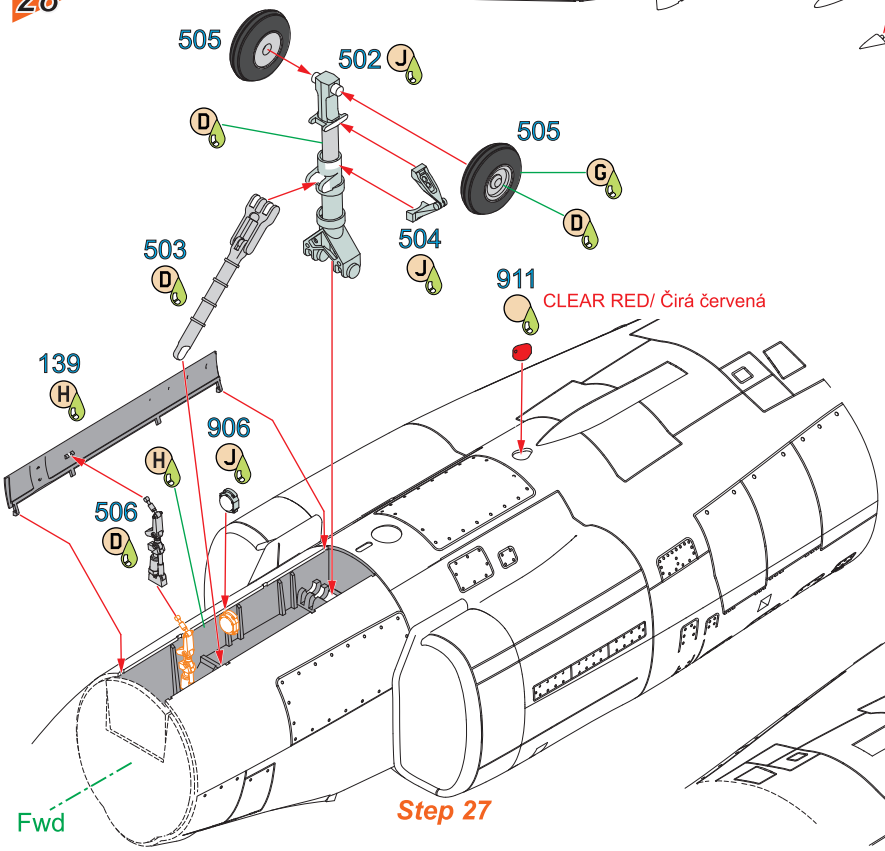
26



27



28



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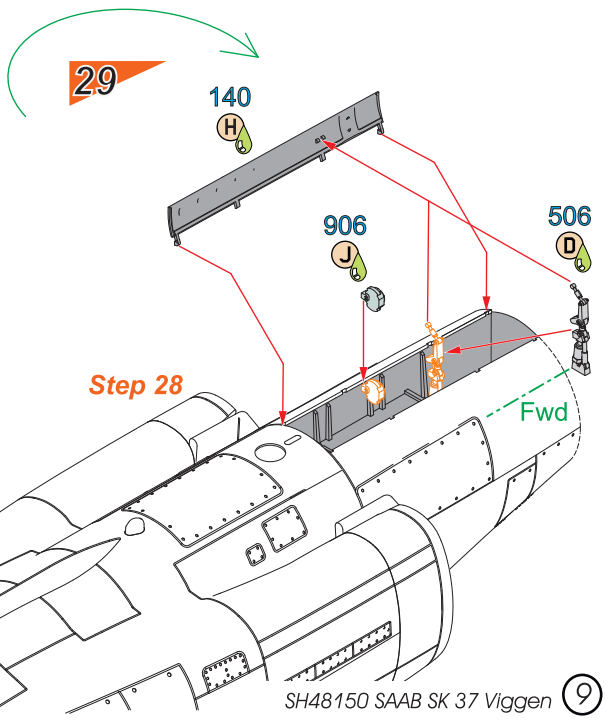
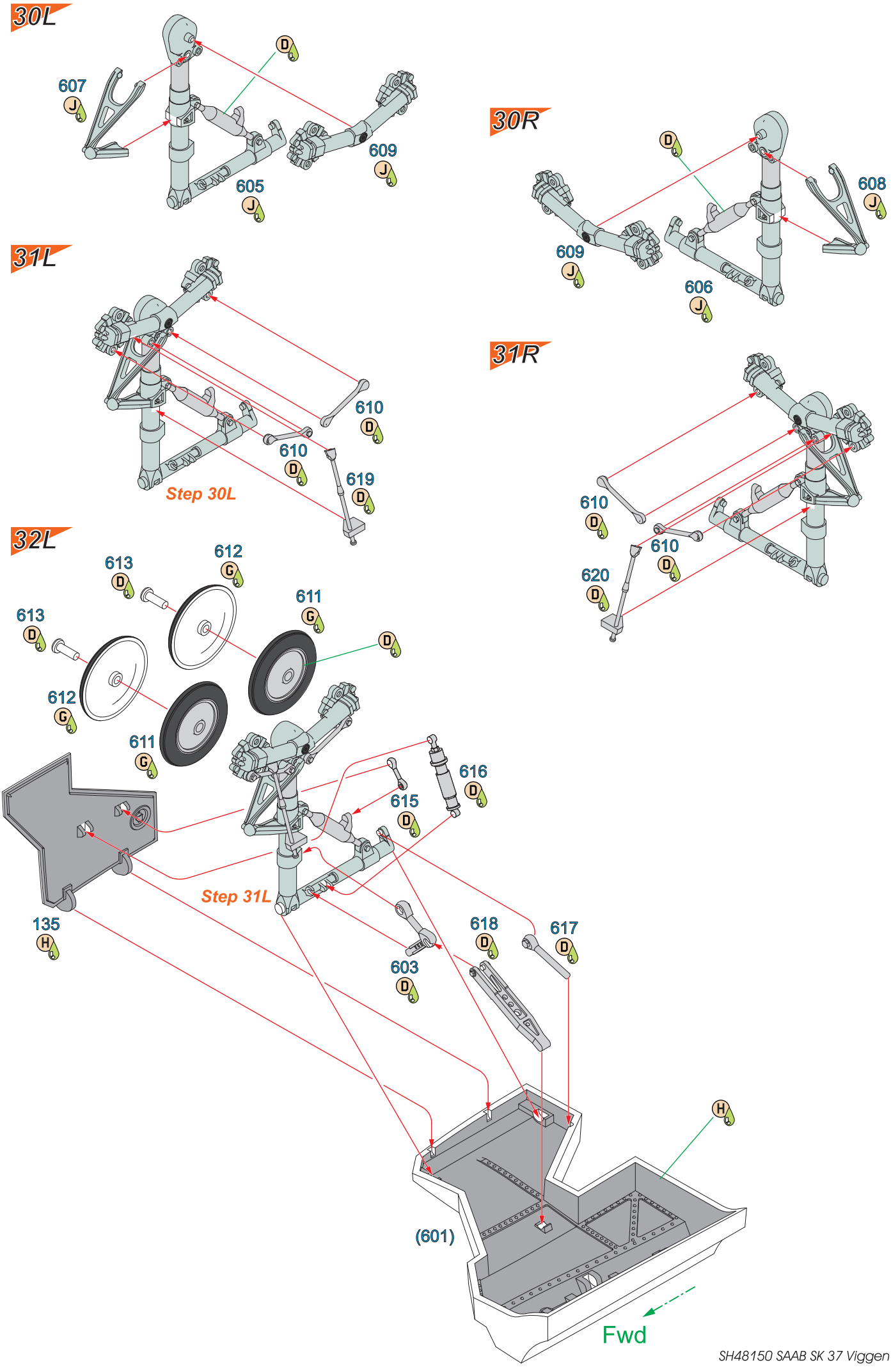
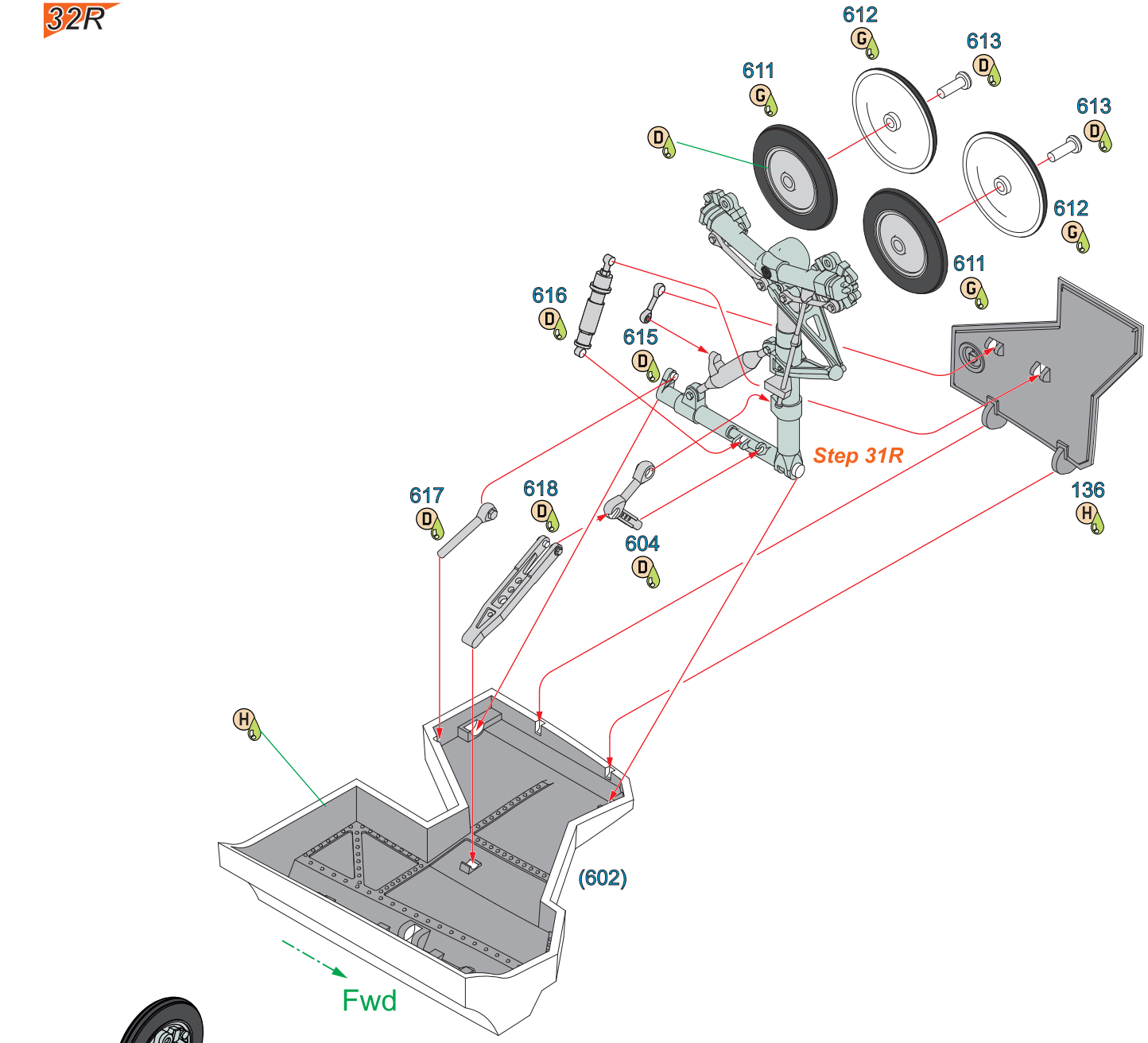
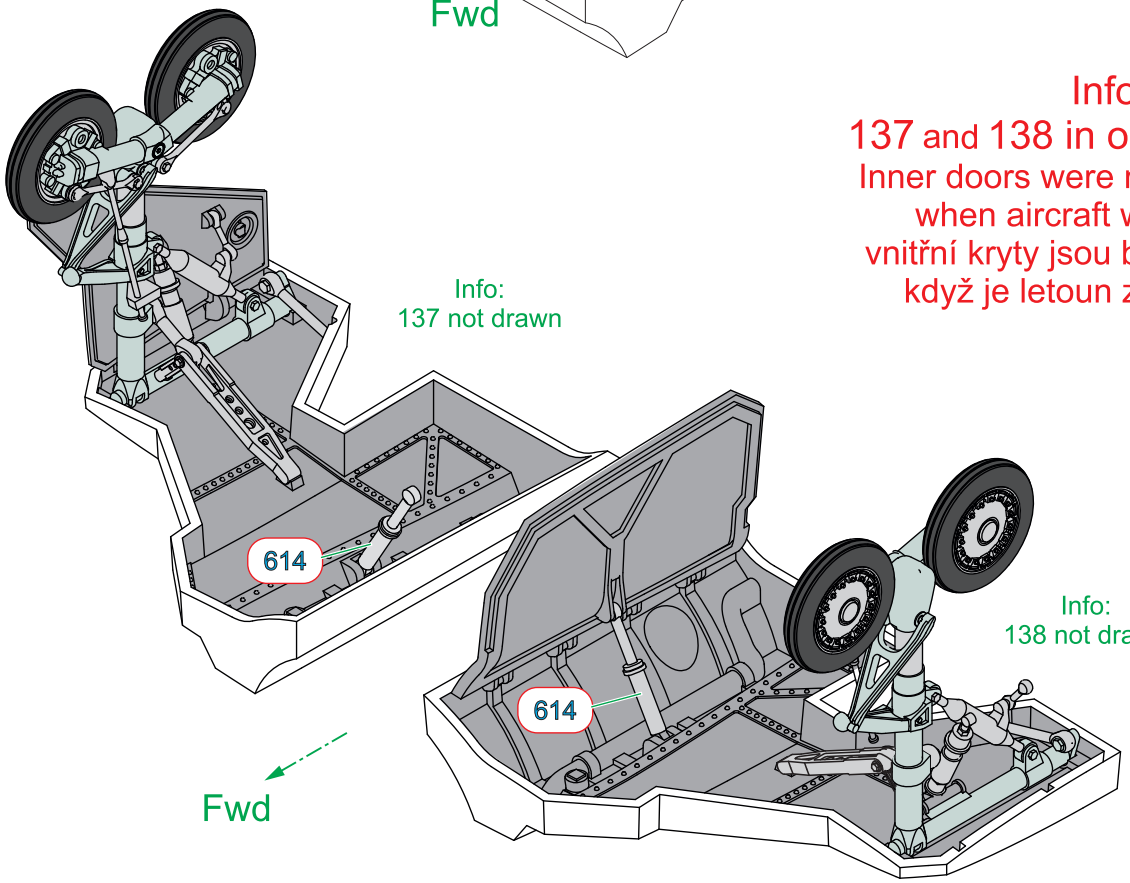
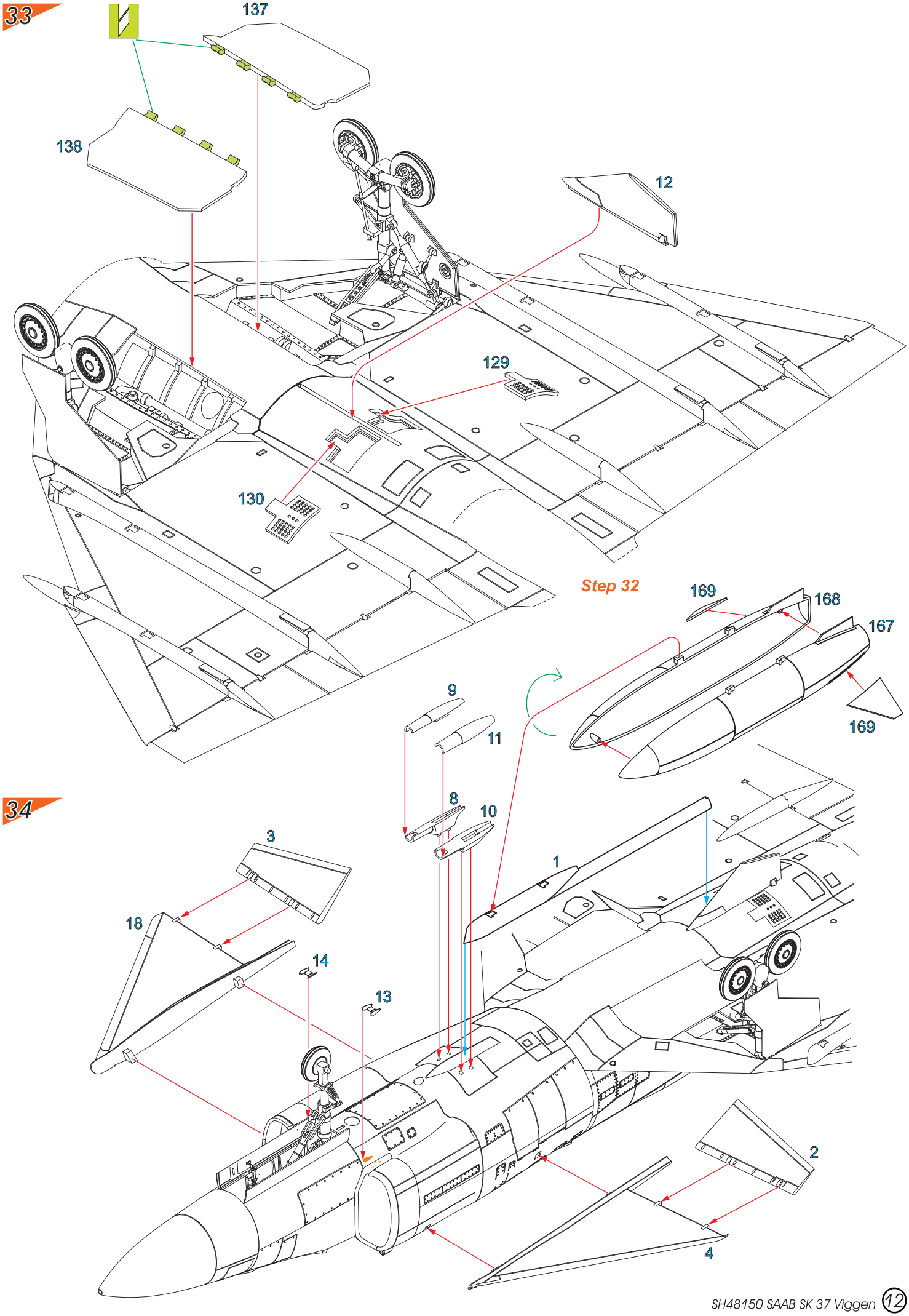


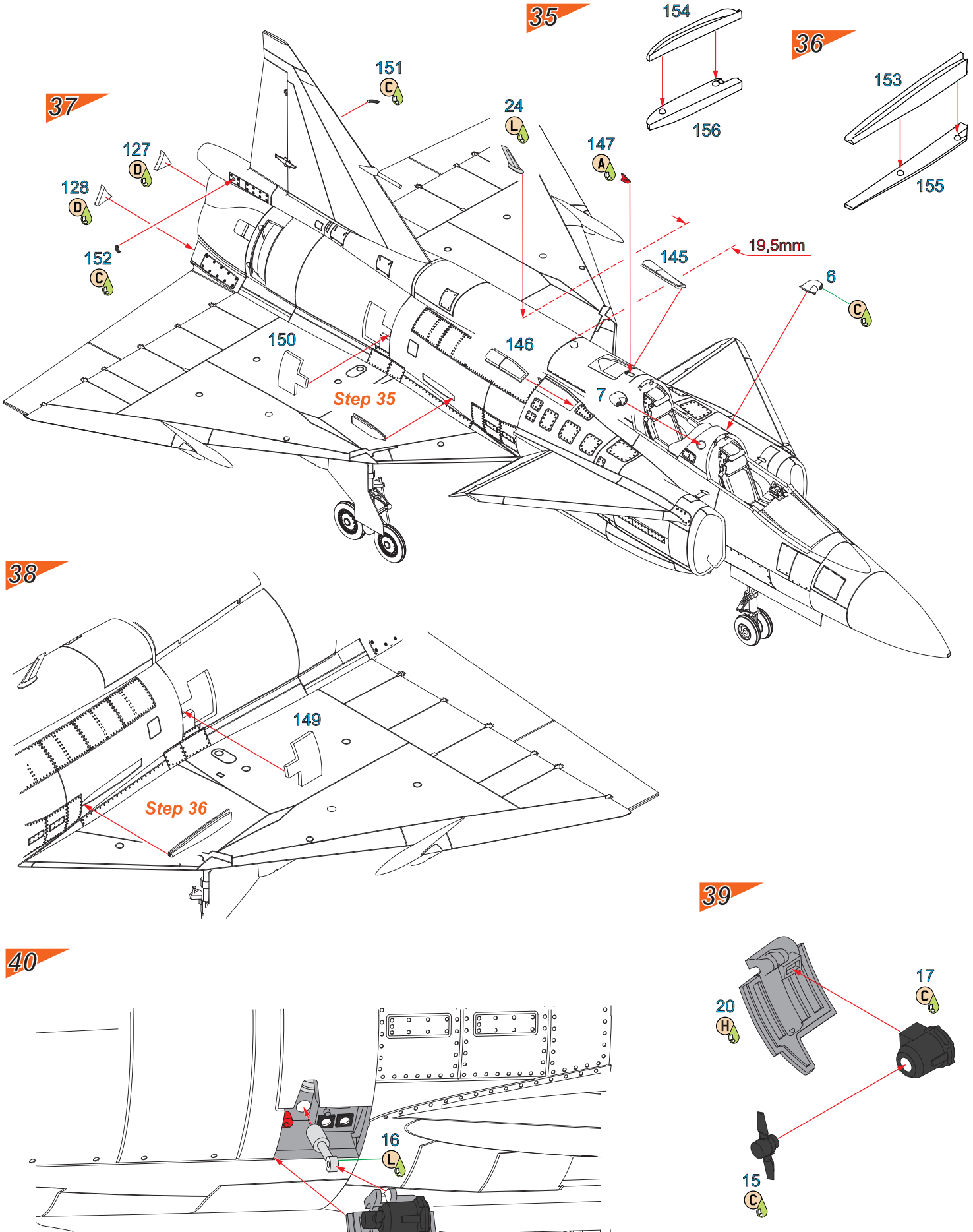

30L
607
J
D
609
J
605
J
30R
D
608
J
609
J
606
J
31L
610
D
610
D
619
D
Step 30L
31R
610
D
610
D
620
D
32L
613
D
612
G
611
G
D
613
D
612
G
611
G
616
D
615
D
Step 31L
135
H
618
D
617
D
603
D
(601)
H
Fwd



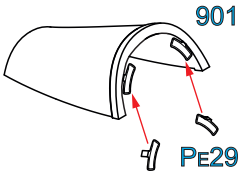
Info:
137 and 138 in open position -
Inner doors were normally closed
when aircraft was parked/
vnitřní kryty jsou běžně zavřené,
když je letoun zaparkovaný



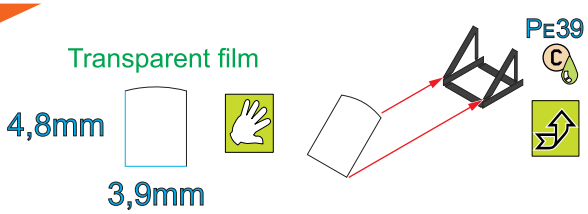

33
137
138
12
129
130
Step 32
169
168
167
169
9
11
34
8
10
3
1
18
14
13
2
4


35
154
156
36
153
155
37
151
C
24
L
147
A
127
D
128
D
152
C
145
19,5mm
6
C
150
146
7
Step 35
38
149
Step 36
39
20
H
17
C
15
C
40
16
L
Step 39

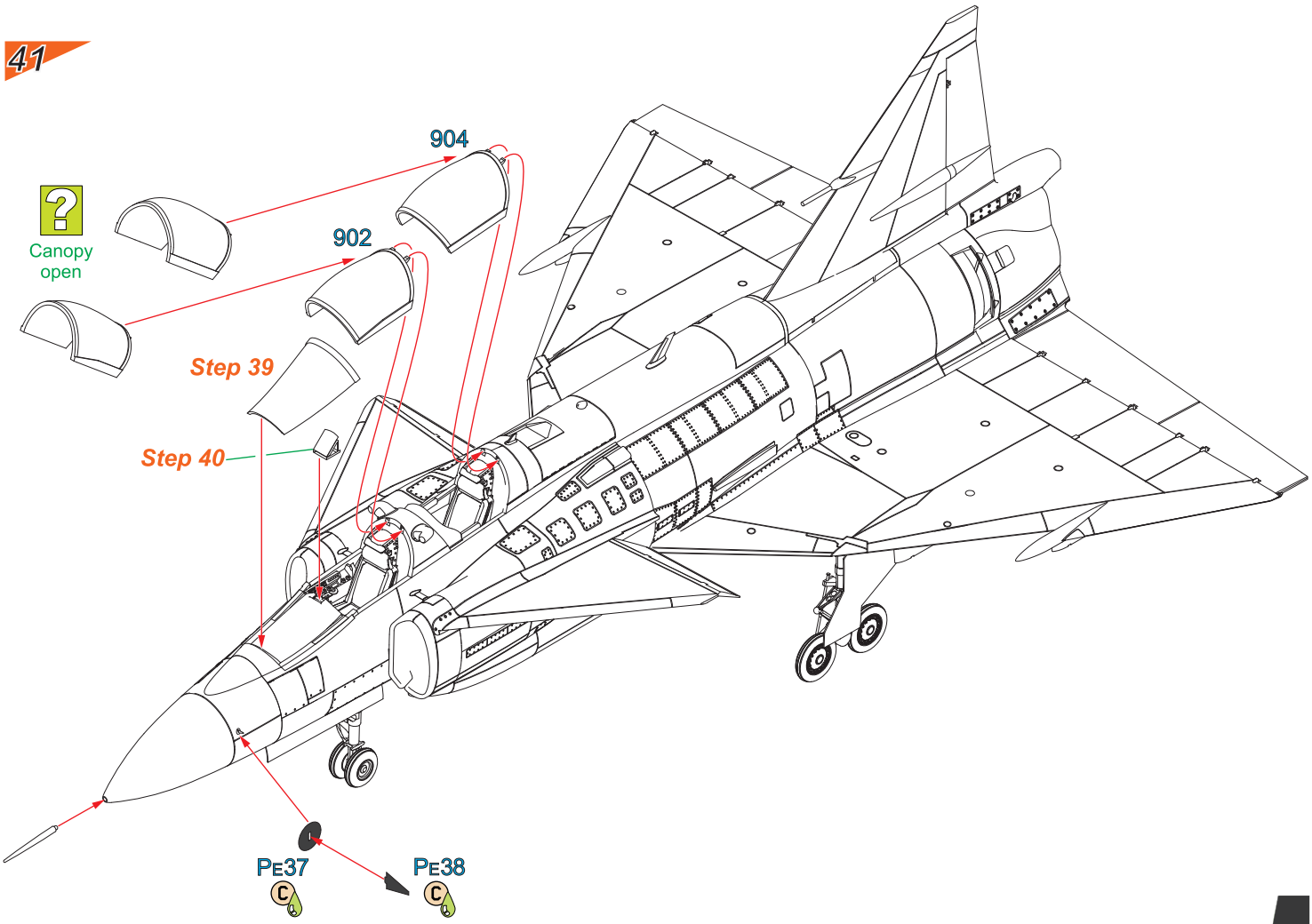
39



40



41

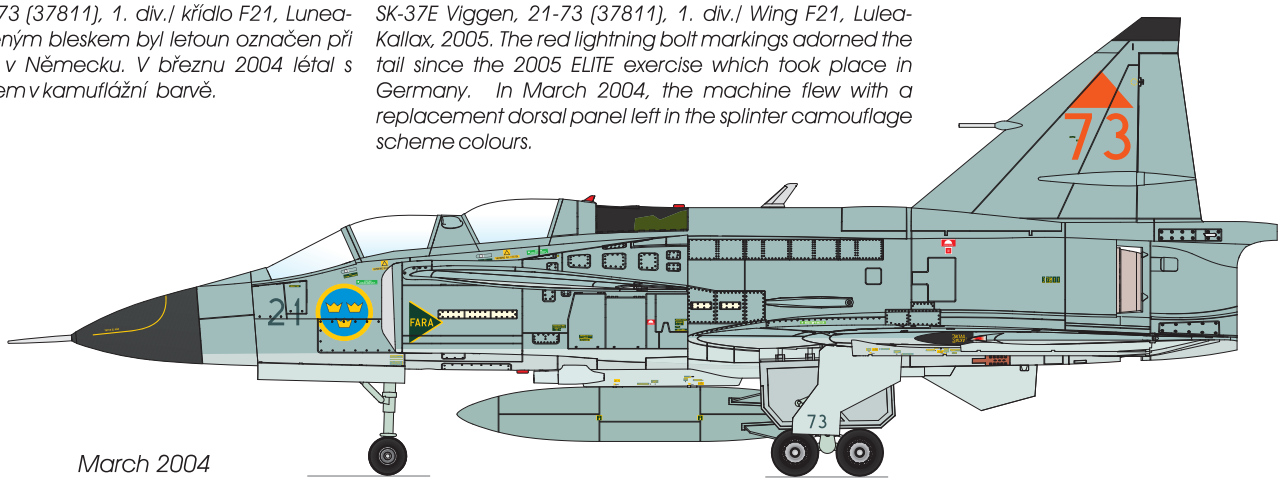


Resinové sety CMK pro vylepšení modelů Viggen.
Treat Your Viggen with these CMK Resin sets.

CMK CZECH MASTER'S KITS

SK-37E Viggen, 21-73 (37811), 1. div./ křídlo F21, Lunea-Kallax, 2005. Červeným bleskem byl letoun označen při cvičení ELITE 2005 v Německu. V březnu 2004 létal s vyměněným panelem v kamuflážní barvě.

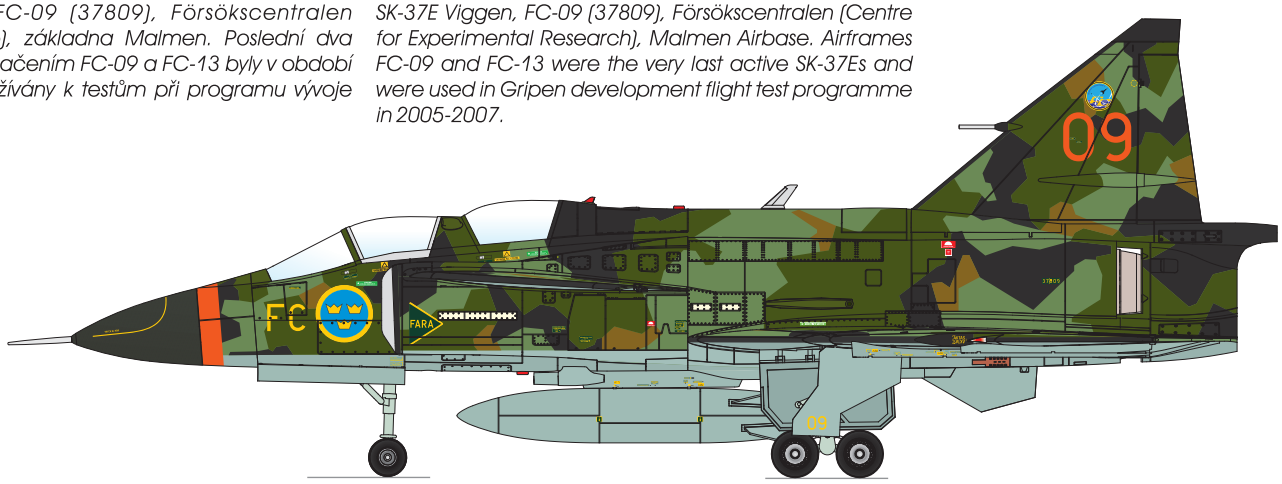
SK-37E Viggen, 21-73 (37811), 1. div./ Wing F21, Lulea-Kallax, 2005. The red lightning bolt markings adorned the tail since the 2005 ELITE exercise which took place in Germany. In March 2004, the machine flew with a replacement dorsal panel left in the splinter camouflage scheme colours.



March 2004

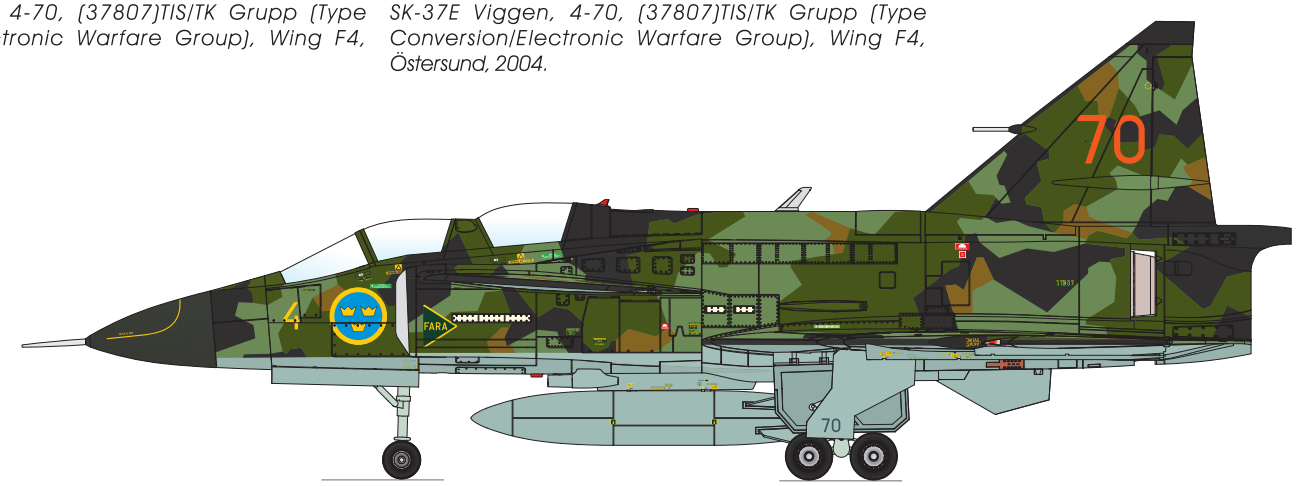
SK-37E Viggen, FC-09 (37809), Försökscentralen (testovací středisko), základna Malmen. Poslední dva létající SK-37E s označením FC-09 a FC-13 byly v období let 2005-2007 používány k testům při programu vývoje Gripenu.

SK-37E Viggen, FC-09 (37809), Försökscentralen (Centre for Experimental Research), Malmen Airbase. Airframes FC-09 and FC-13 were the very last active SK-37Es and were used in Gripen development flight test programme in 2005-2007.



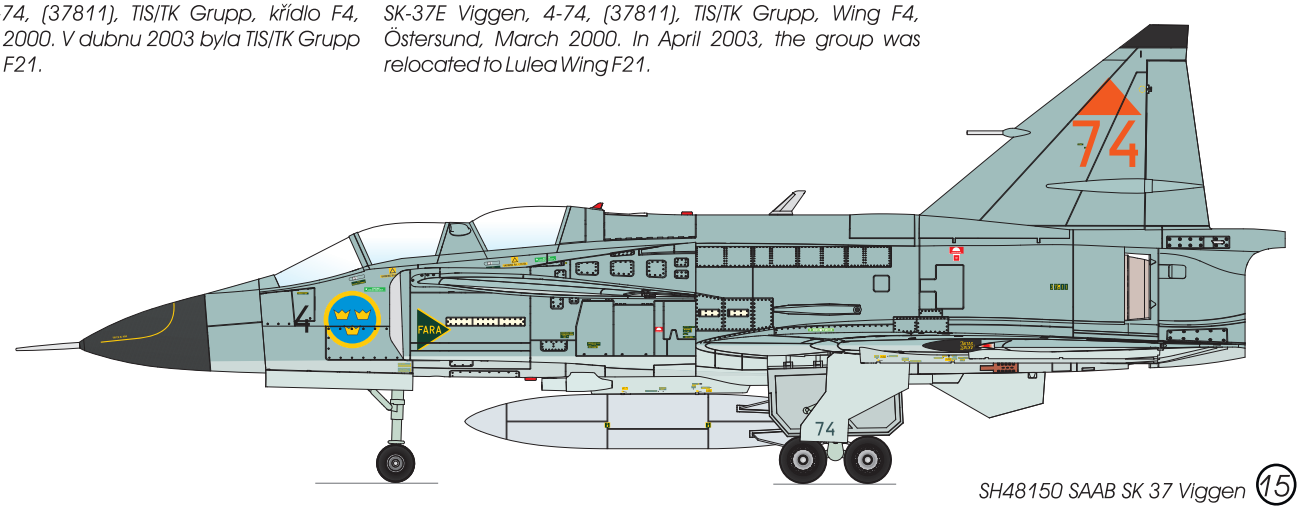
SK-37E Viggen, 4-70, (37807)TIS/TK Grupp (Type Conversion/Electronic Warfare Group), Wing F4, Östersund, 2004.

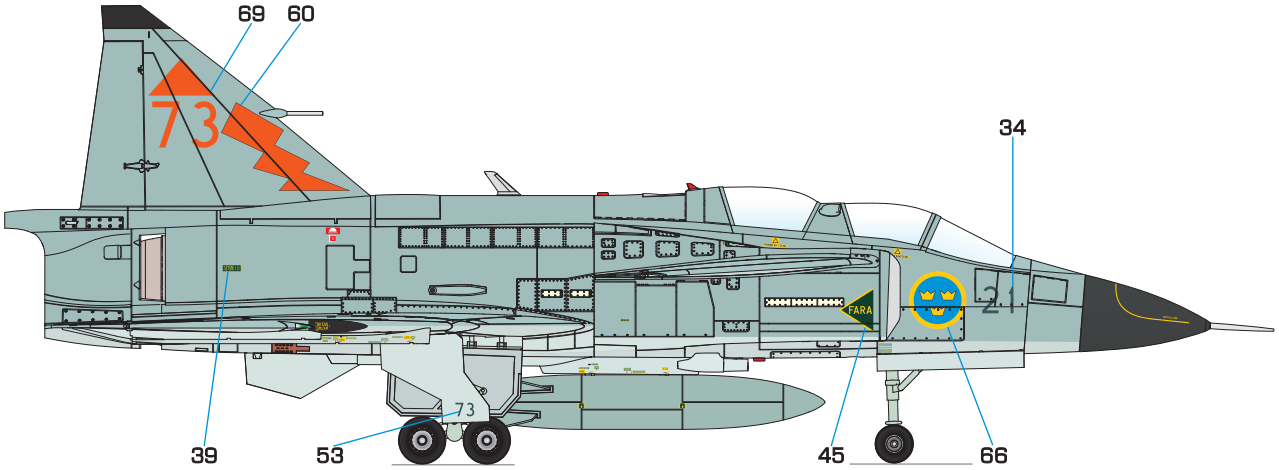
SK-37E Viggen, 4-70, (37807)TIS/TK Grupp (Type Conversion/Electronic Warfare Group), Wing F4, Östersund, 2004.



SK-37E Viggen, 4-74, (37811), TIS/TK Grupp, křídlo F4, Östersund, březen 2000. V dubnu 2003 byla TIS/TK Grupp přesunuta ke křídlu F21.

SK-37E Viggen, 4-74, (37811), TIS/TK Grupp, Wing F4, Östersund, March 2000. In April 2003, the group was relocated to Lulea Wing F21.





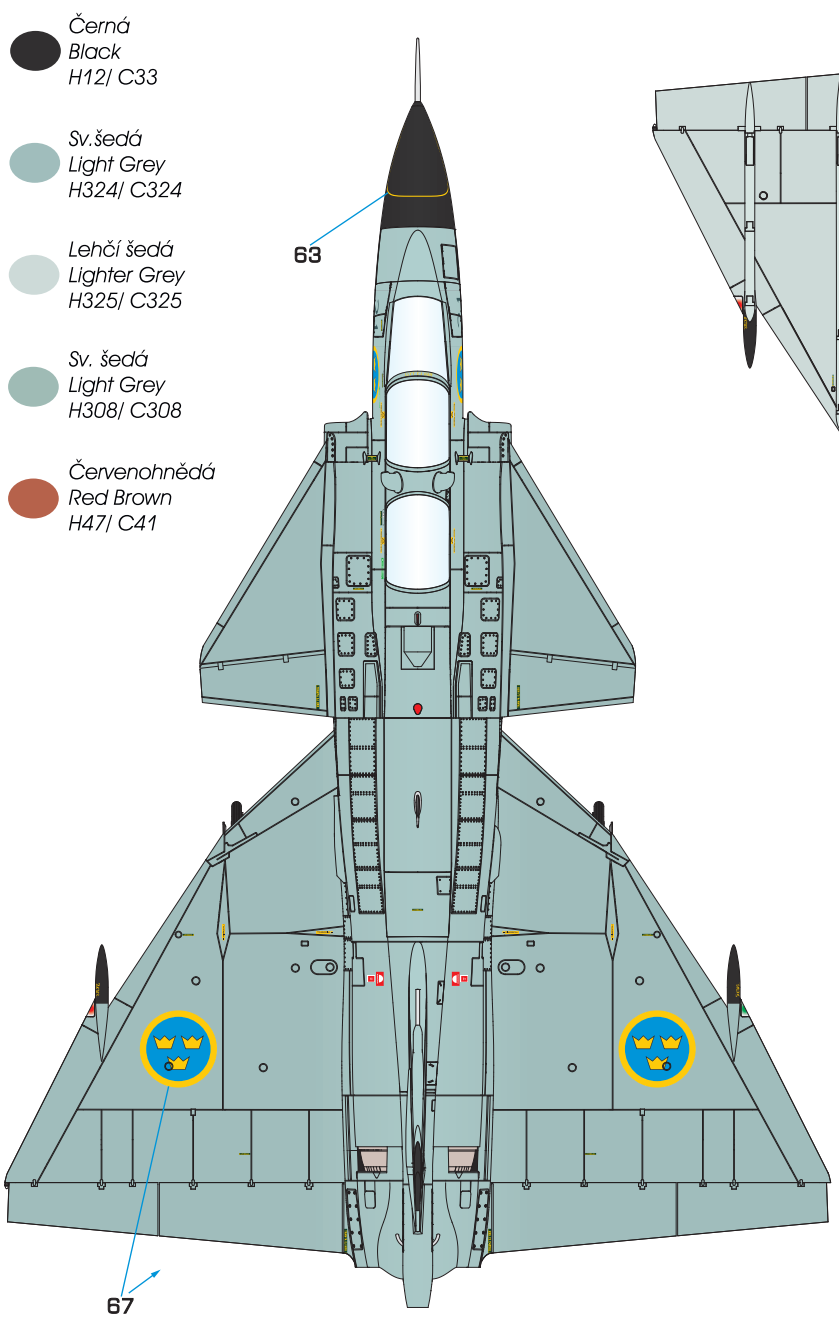
Černá
Black
H12/ C33

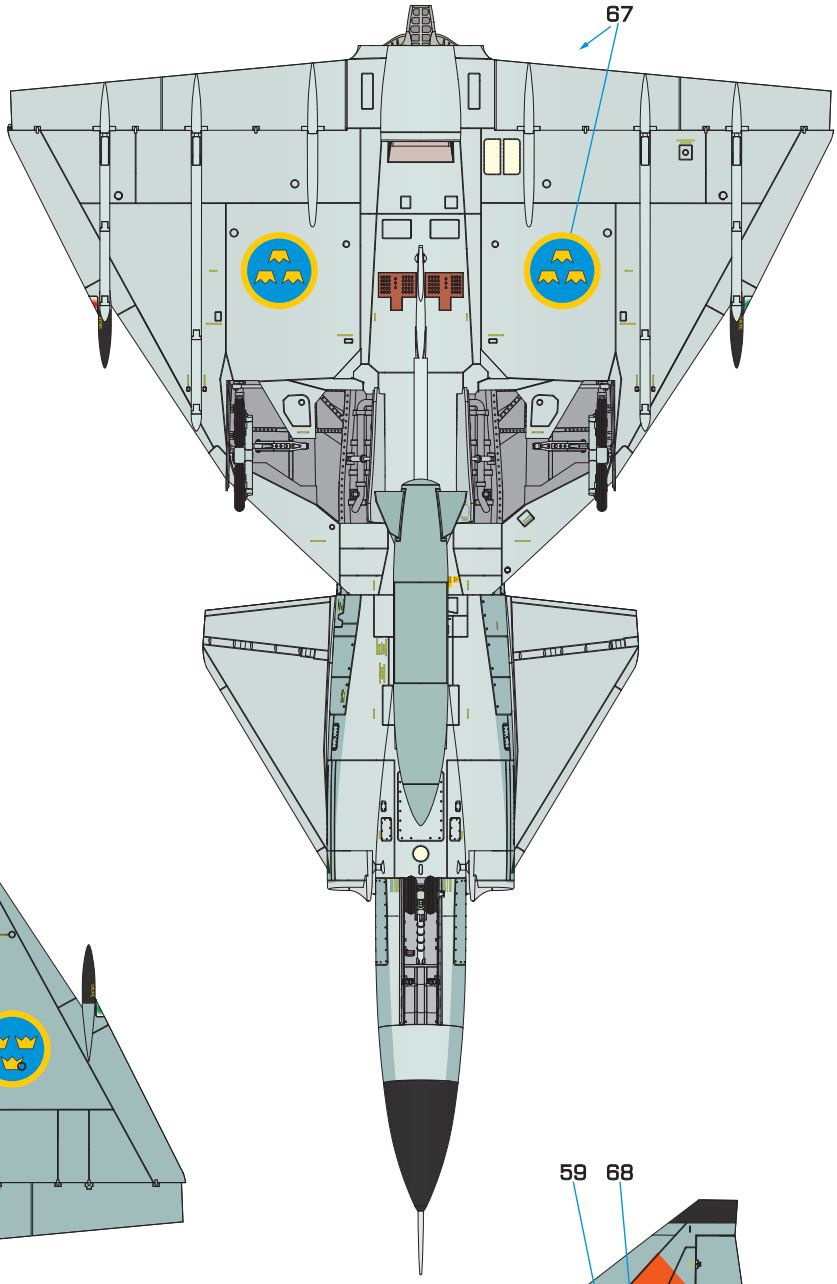
Sv.šedá
Light Grey
H324/ C324

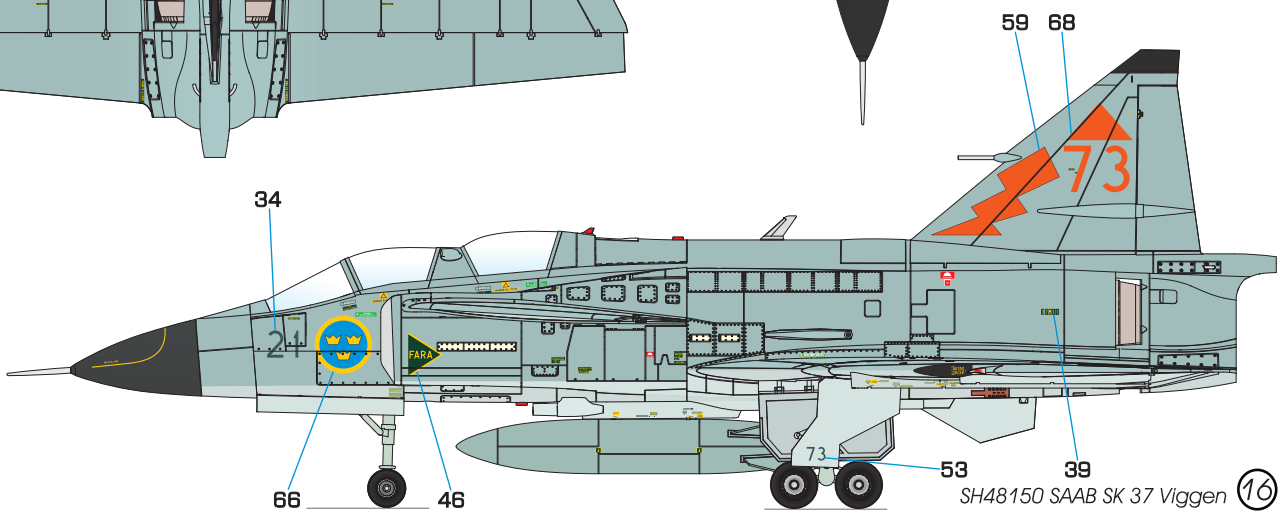
Lehčí šedá
Lighter Grey
H325/ C325

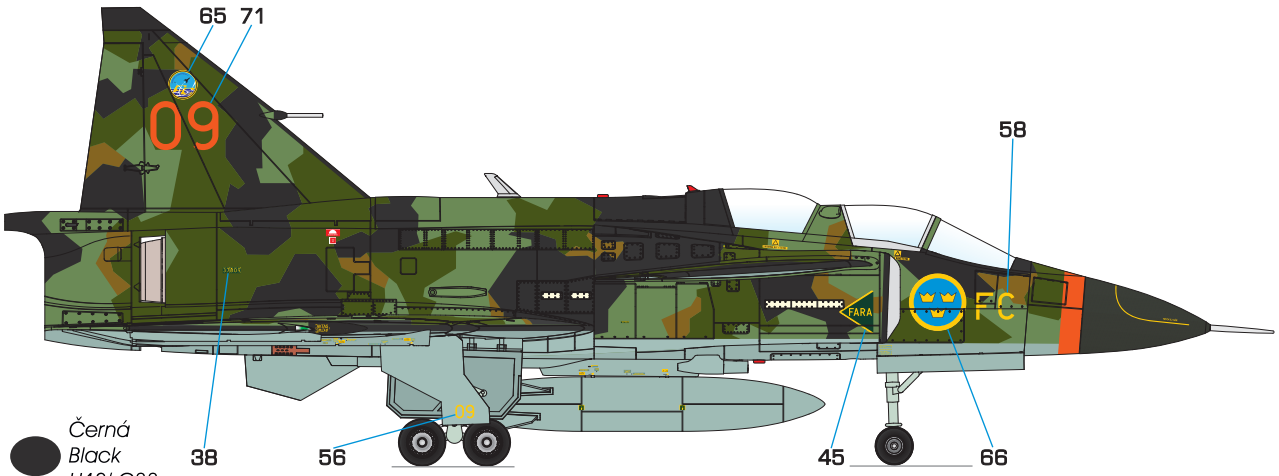
Sv. šedá
Light Grey
H308/ C308

Červenohnědá
Red Brown
H47/ C41









Černá
Black
H12/ C33

Tm. zelená
Dark Green
H309/ C309

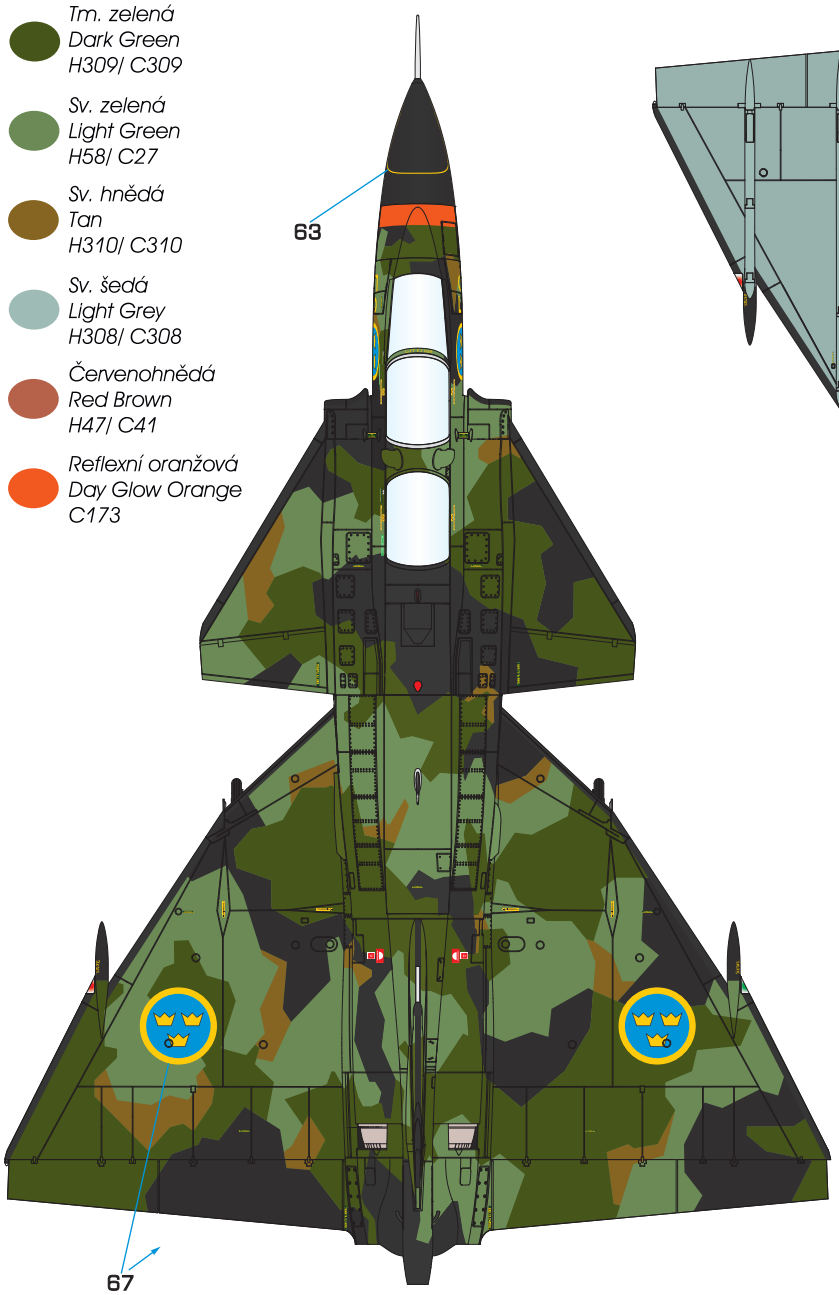
Sv. zelená
Light Green
H58/ C27

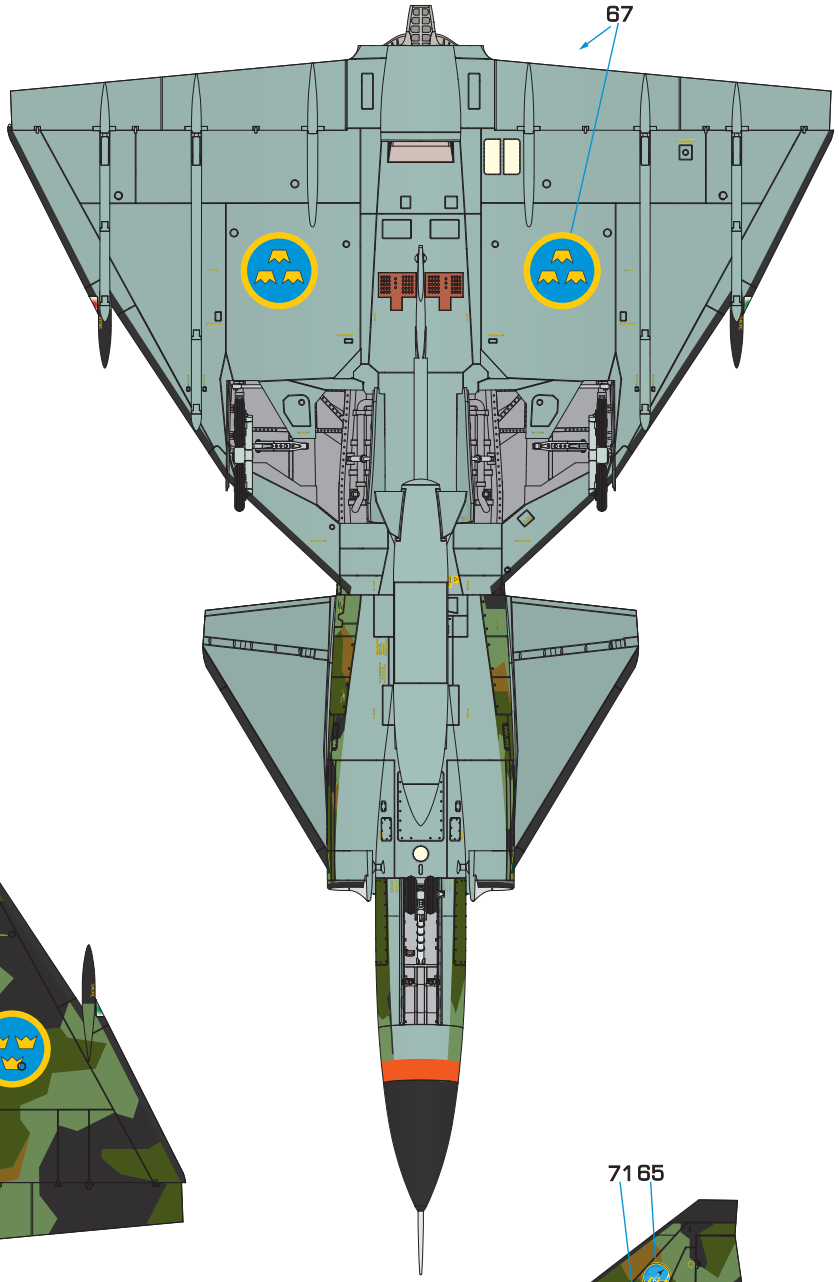
Sv. hnědá
Tan
H310/ C310

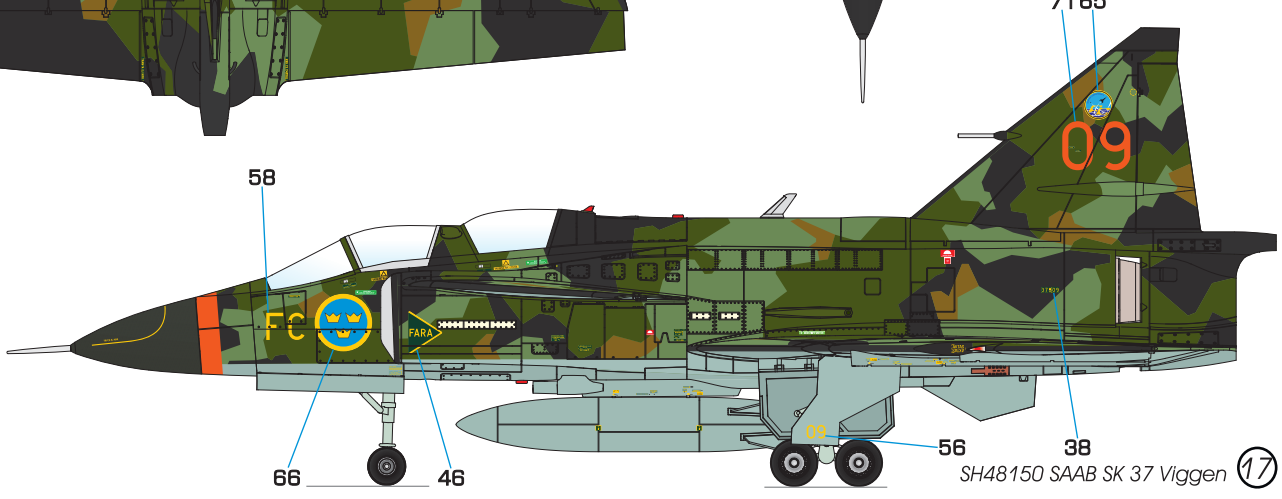
Sv. šedá
Light Grey
H308/ C308

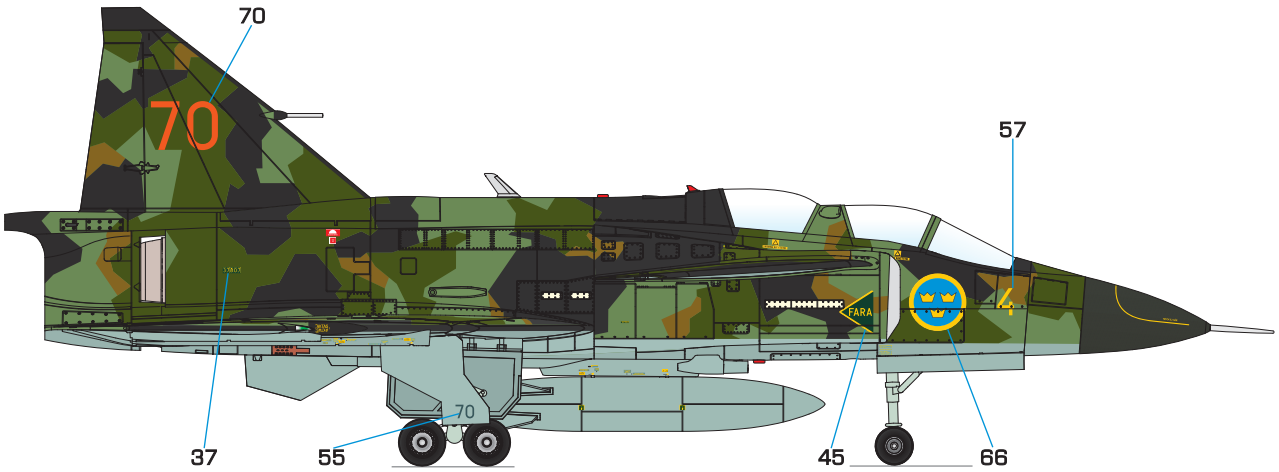
Červenohnědá
Red Brown
H47/ C41

Reflexní oranžová
Day Glow Orange
C173

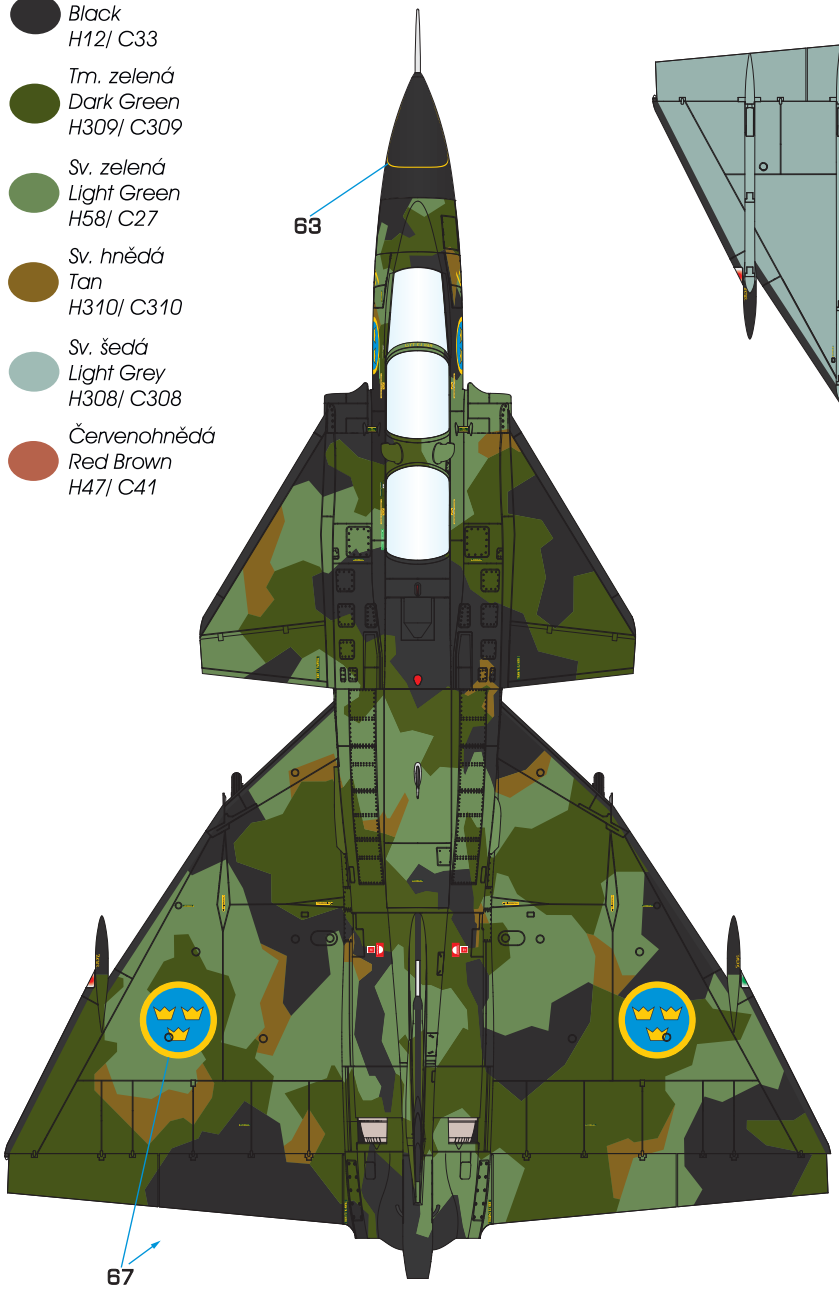


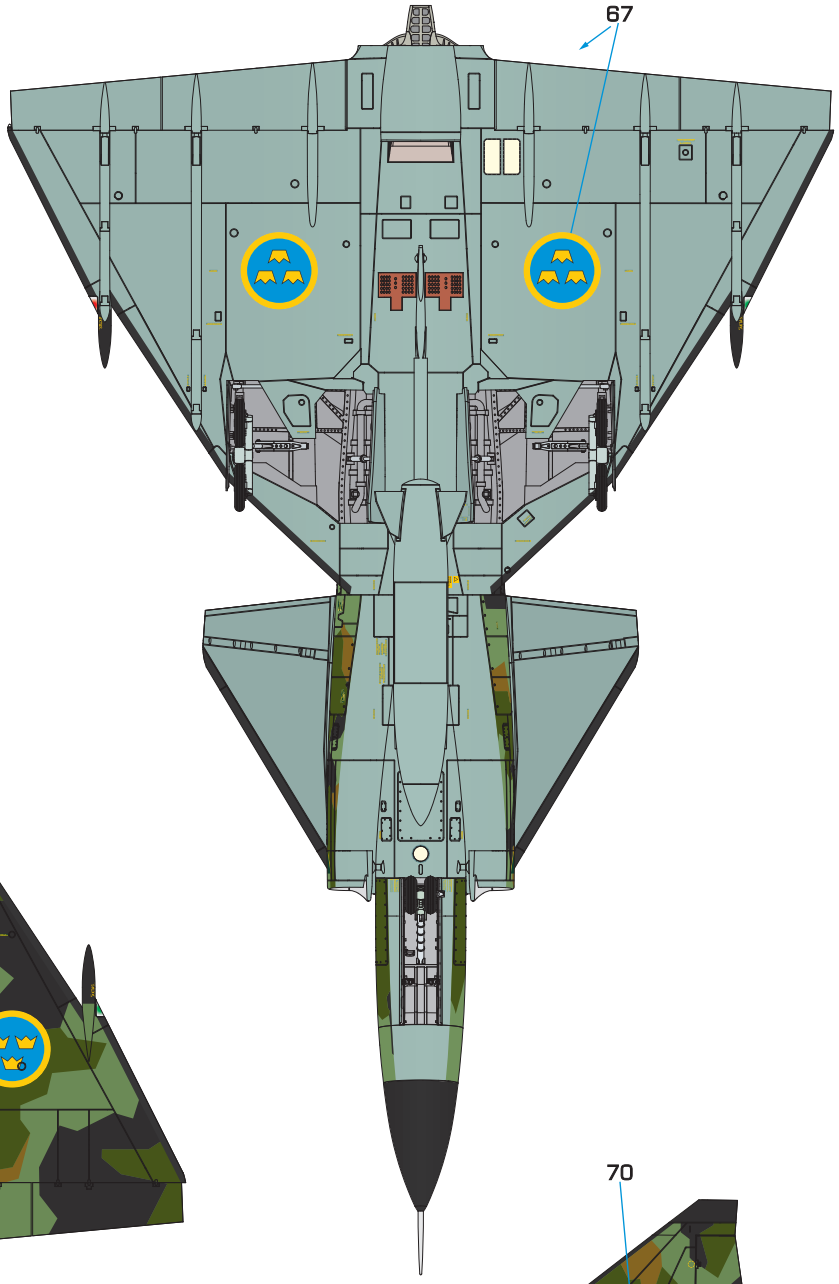


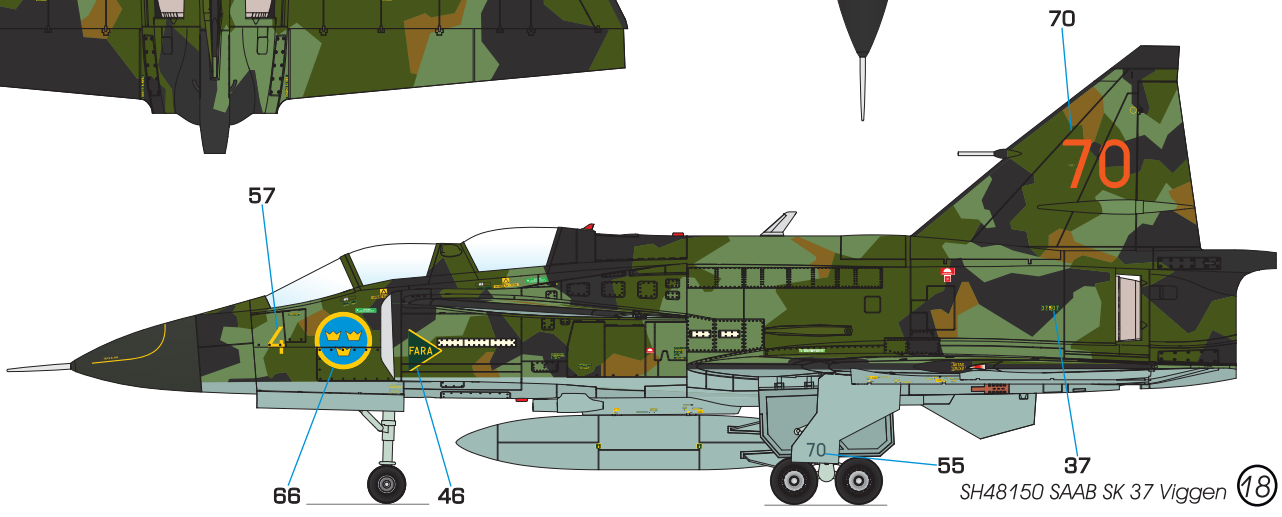


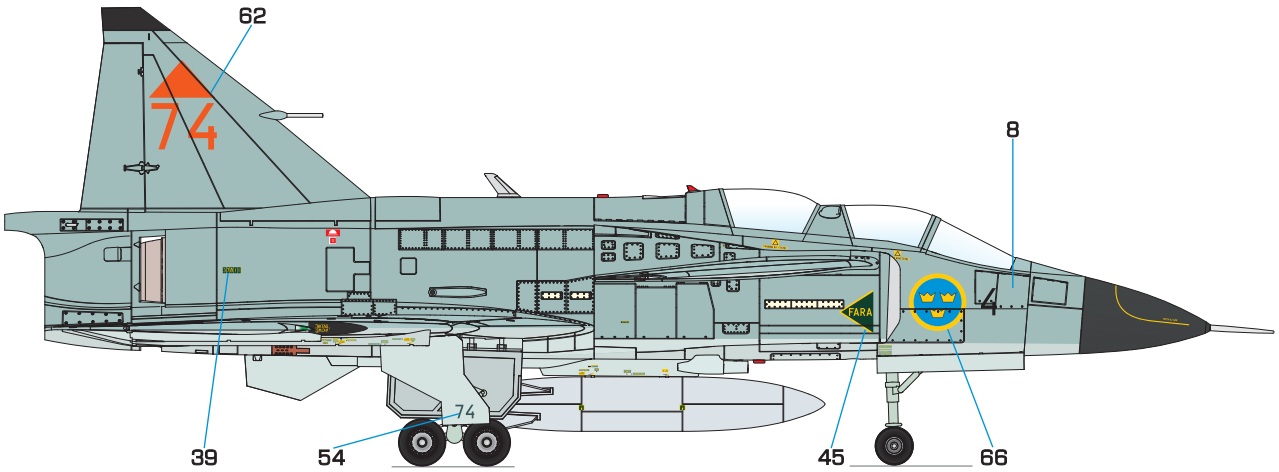


- Černá
  Black
  H12/ C33
- Tm. zelená
  Dark Green
  H309/ C309
- Sv. zelená
  Light Green
  H58/ C27
- Sv. hnědá
  Tan
  H310/ C310
- Sv. šedá
  Light Grey
  H308/ C308
- Červenohnědá
  Red Brown
  H47/ C41









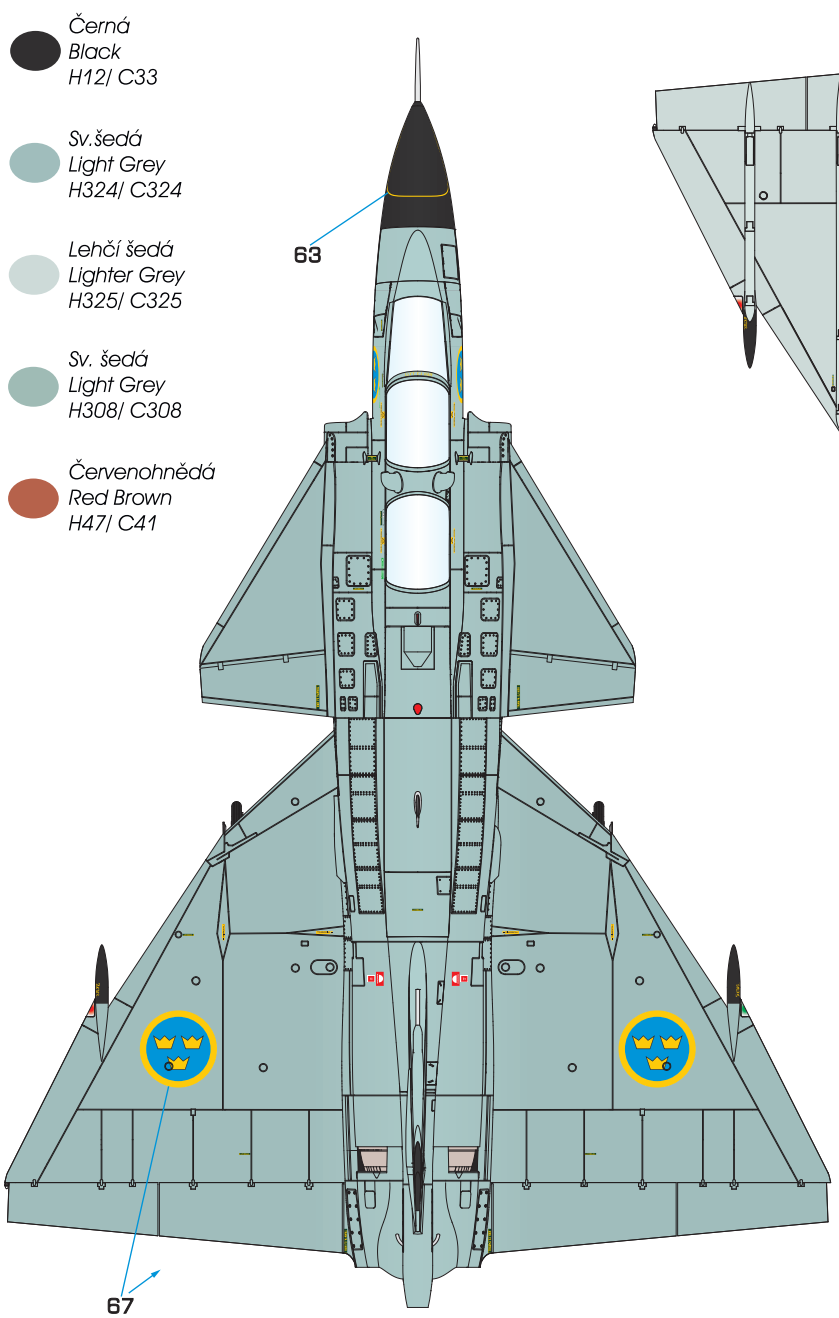
Černá
Black
H12/ C33

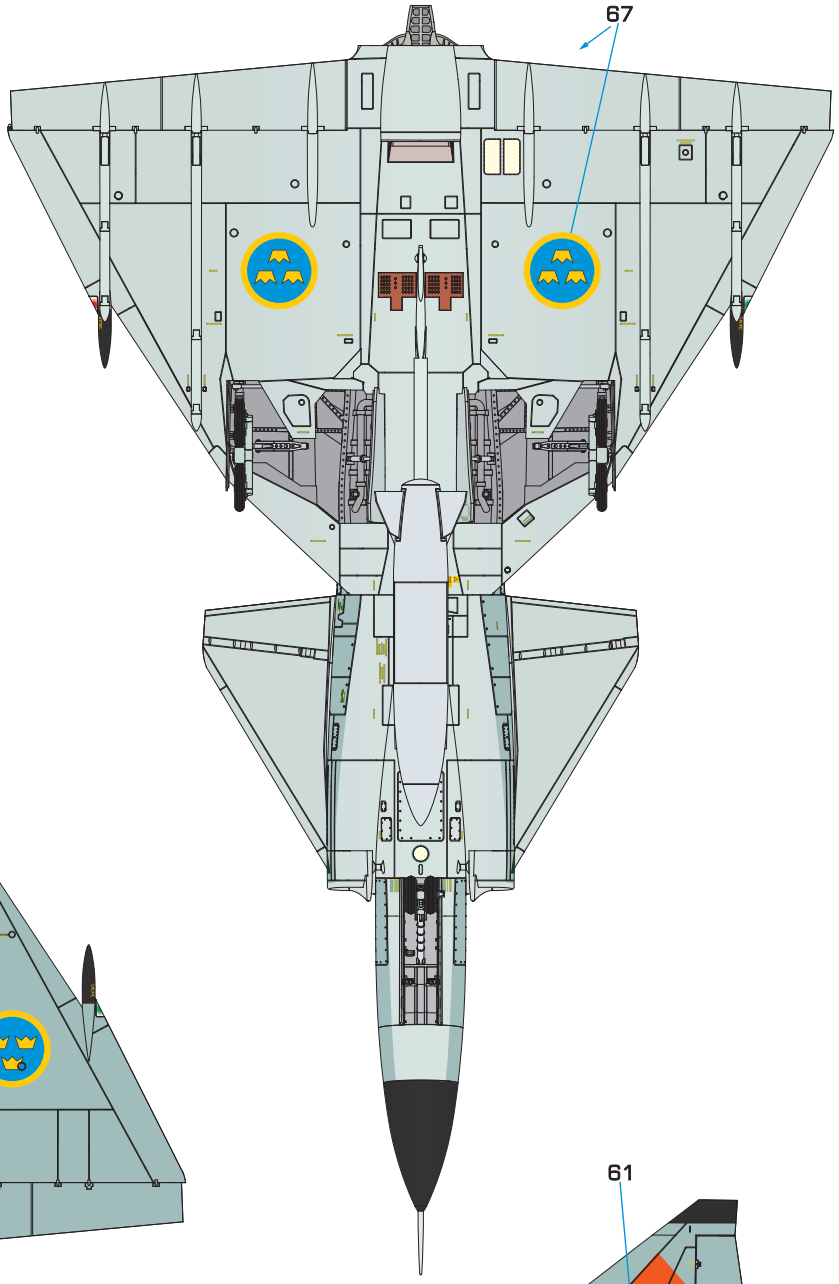
Sv.šedá
Light Grey
H324/ C324

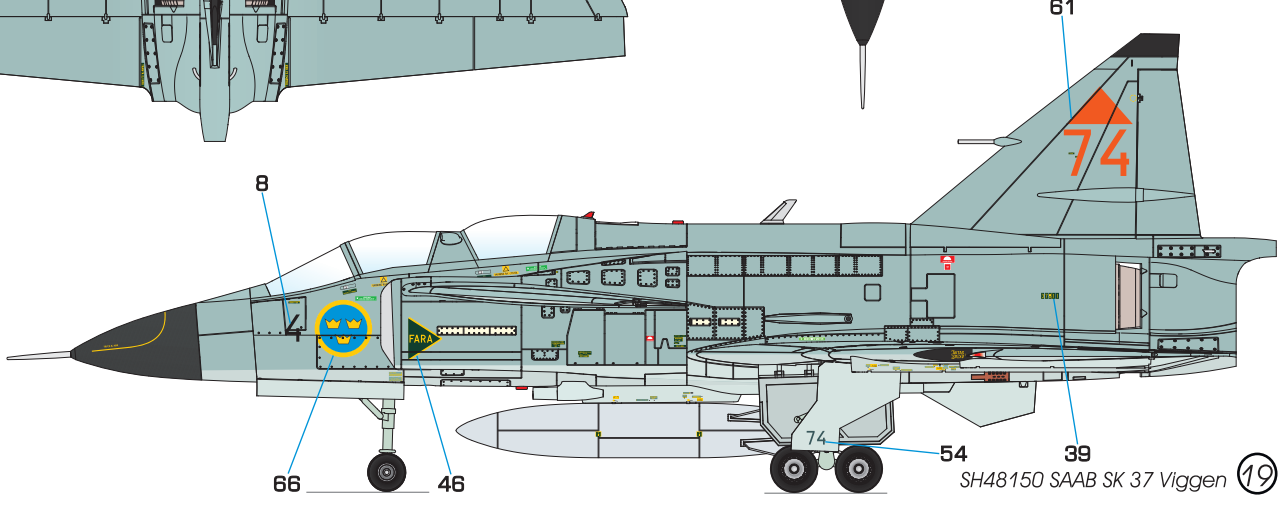
Lehčí šedá
Lighter Grey
H325/ C325

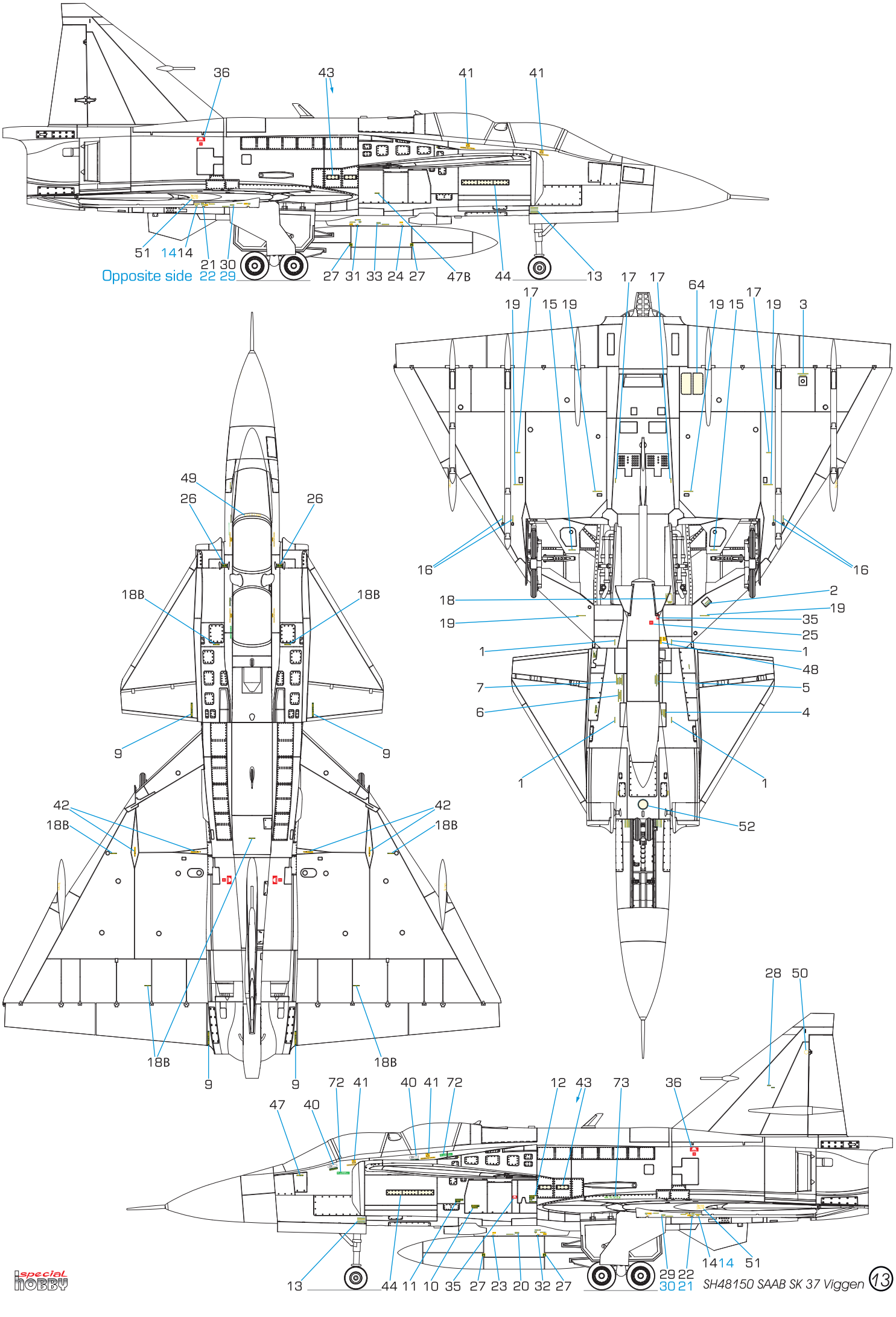
Sv. šedá
Light Grey
H308/ C308

Červenohnědá
Red Brown
H47/ C41








36
43
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14
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Opposite side
22
29
27
31
33
24
27
47B
44
13
17
17
64
19
17
15
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19
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19
3
16
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18B
18B
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18B
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18B
18B
18B
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