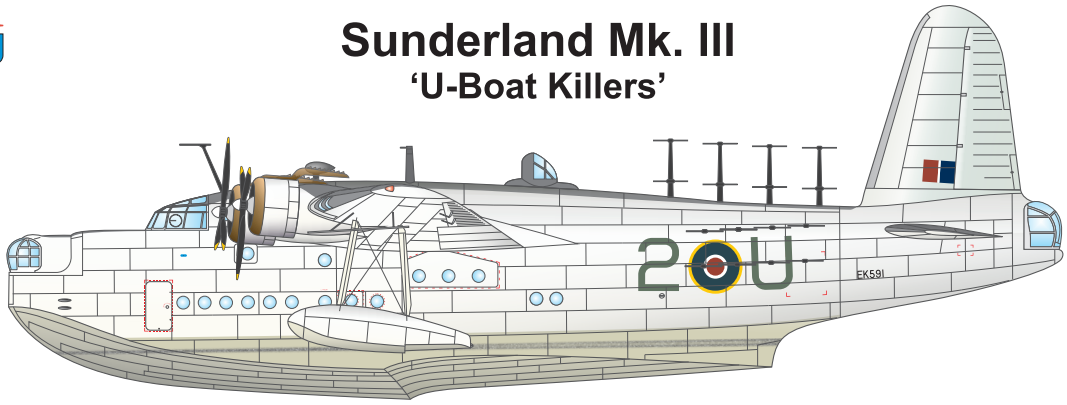
Sunderland Mk. III
‘U-Boat Killers’

SH72304
1/72



Historie CZ

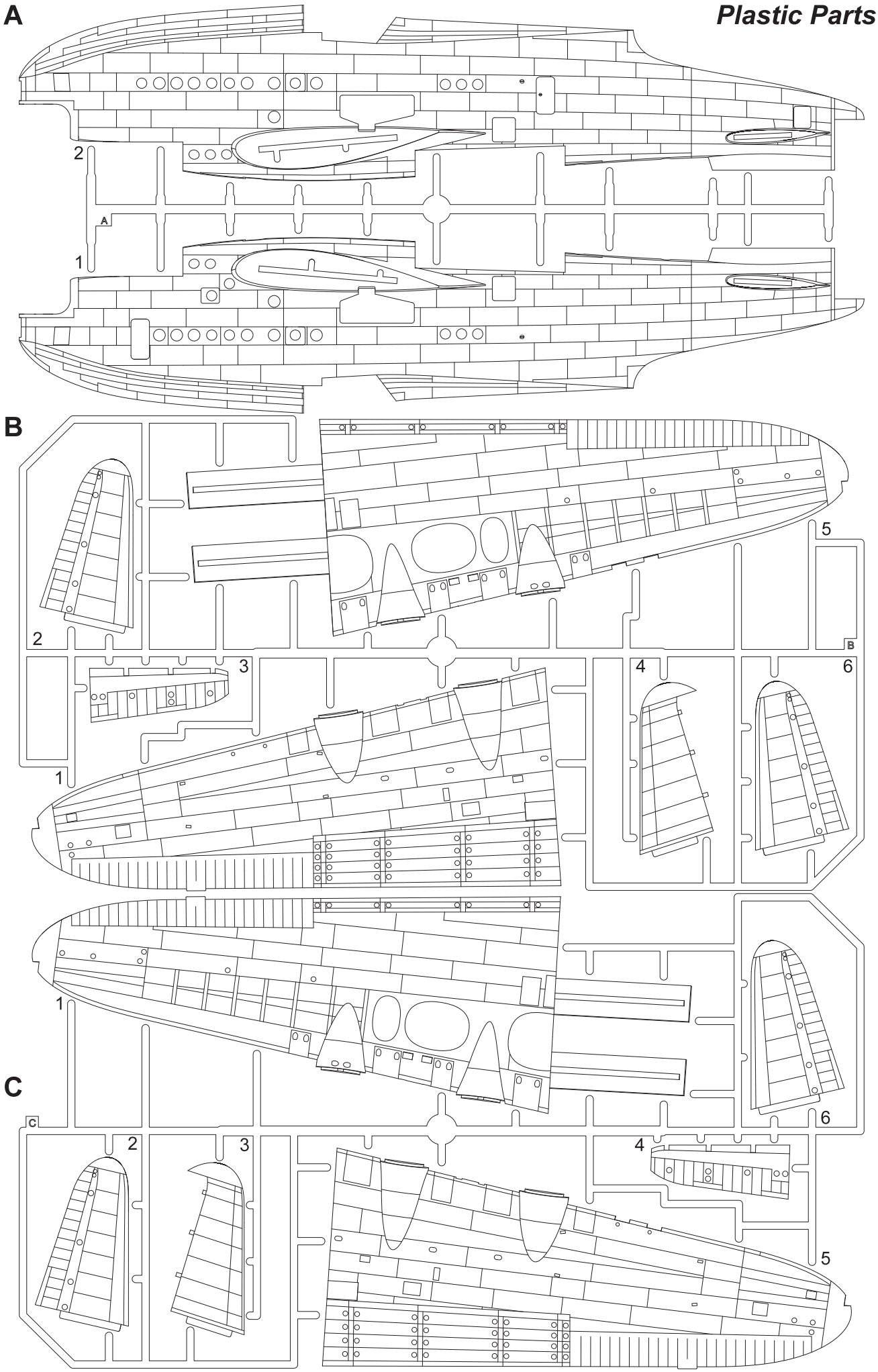
Firma Short byla jednou z největších firem, které se věnovaly vývoji a výrobě létajících člunů. Ve třicátých létech minulého století, kdy celokovové jednoplošníky začaly vytlačovat dvouplošníky, Short vyvinul několik variant civilních čtyřmotorových celokovových létajících člunů S.23, 30 a 33, souhrnně označovaných C-Class nebo Empire Class. Část z nich dostala vojenské vybavení a používaly se i bojově. Zkušenosti s výrobou a provozem těchto člunů se projevily v konstrukci stroje Short S.25. Ten byl navržen podle specifikací R.2/33, požadujících létající člun dalekého doletu určený k protiponorkovému hlídkování a k průzkumu. Čtyřmotorový celokovový stroj, jehož první prototyp vzlétl poprvé 16. října 1937 dostal pojmenování Sunderland Mk.I. Sunderlandy Mk.I byly vybaveny motory Pegasus Mk.XXII, střeleckými věžemi v přídi a zádi a otevíratelnými střelišti na hřbetě trupu. Bylo jich vyrobeno 90 ks, část z nich u firmy Blackburn. Verze Sunderland Mk.II dostala hřbetní střeleckou věž a silnější motory Pegasus Mk.XVIII. Společná výroba u Shortu a Blackburnu dal vzniknout 43 kusům této verze. Na některých kusech této verze byly použity první verze radarů se stromečkovitými anténami ASV Mk.II. Zkušenosti z bojišť vedly k úpravám Sunderlandu. Výroba přešla na verzi Mk.III/IIIA. Trup této verze dostal nové, aerodynamicky výhodnější stupnění kýlu, ASV radar Mk.III v kapkovitém výstupku pod křídlem. Pozdější vyrobené kusy dostaly do přídě výzbroj čtyř pevných kulometů určených k boji s obsluhami protiletadlových zbraní na vynořených ponorkách. Celkem bylo vyrobeno 456 kusů trojek. Vzhledem k tomu, že zvětšená verze Sunderland Mk.IV, později přeznačená na Seaford Mk.I se nevyráběla sériově, poslední verzí Sunderlandu v sériové výrobě se stala verze Sunderland Mk.V. Dostala americké motory P&W R-1830-90B a radar ASV Mk.VIC. Výroba byla ukončena až v v červnu 1946 po vyrobení 150 kusů. Sériové Sunderlandy Mk.I dostala jako první No.230 sqn. RAF v roce 1938. Na konci války se Sunderlandy létalo dvacet squadron pod velením RAF a další squadrony pod velením spojeneckým . Bojovaly od prvního dne války až do jejího konce. Během válečných let se nesporně osvědčily. Nasazeny byly v nad oceány od Atlantiku, přes Indický oceán až po Pacifik. Spolehlivě sloužily na chladném severu v polárních oblastech, stejně jako v tropech. Vysloužily si, pro svou obrannou výzbroj , pojmenování létající dikobraz. Konec války neznamenal konec jejich služby. Sunderlandy RAF se mohou pochlubit mimo jiné účastí v Korejském konfliktu, Berlínském mostu nebo bojů s komunistickými bojůvkami v Malajsku. Kromě britského RAF létaly v řadách australského, novozélandského, norského, jihoafrického a kanadského letectva, francouzského a portugalského námořnictva. U většiny zahraničních uživatelů již během války. Poslední novozélandské Sunderlandy byly přitom vyřazeny až v roce 1967!

TTD verze Mk.V
Rozpětí: 34,39 m, délka: 26 m, max. rychlost: 343 km/h v 1900 m, operační dostup: 5457 m, dolet 3027 km, vytrvalost: 10/21 hodin při rychlosti 260/220 km/h, výzbroj: 2250 kg bomb či hlubiných bomb, 12x kulomet 7,7 mm, 2x kulomet 12,7 mm

History EN

Short Brothers were one of the largest aircraft producers to undertake the development and manufacturing of multi engine flying boats. In the 1930s, when monoplanes of all metal construction were beginning to have the upper hand over biplane aircraft designs, Short Brothers developed a couple of all metal, four engine flying boats for the civilian market - these aircraft were known as the S.23, S.30 and S.33, or generally as the C-Class or Empire Class. Some of the machines were fitted with military equipment and saw service in the force. The experience gained during the production and operational service of these boats proved to be essential for the development of their successor, the Short S.25, which was designed to Specification R.2/33 that called for a long range flying boat suitable for anti submarine patrol and reconnaissance missions. The prototype of this aeroplane first took to the air on 16 October 1937 and got the name Sunderland Mk.I. The production machines were powered by Pegasus Mk.XXII engines and had gun turrets in the bow and stern and a pair of manually operated machine guns on either side of the upper fuselage. As many as ninety of them were produced, some of them at the Blackburn plant. The following variety, the Mk.II was fitted with a dorsal gun turret and more powerful engines in the shape of the Pegasus Mk.XVIII. The Short and Blackburn plants produced in total 43 airframes of this mark, some of which were experimentally equipped with the first generation of ASV Mk.II radars with an array of tree-like antennae. Combat experience gained in the field even led to a couple more improvements which enabled the production of the Mk.III/IIIA version. The hull was reshaped at the keel step and got a much smoother profile and the machines also had a new type of ASV radar fitted under their wings, where the radar dishes were placed in large teardrop-shaped housings. Later machines were even equipped with four fixed machine guns in their nose sections, which were meant to be used against anti-aircraft defence of emerged German submarines. In total, 456 of the Sunderland Mk.III were produced. A production of an enlarged variety, known as the Sunderland Mk.IV (later renamed to Seaford Mk.I) was also planned, though it never materialised. The final version of this flying boat was the Mk.V, which was powered by American P&W R-1830-90B units, used ASV Mk.VIC radar equipment and was in production until June 1946, giving in total 150 machines. The first production Mk.I machines saw operational service with No.230 Sqn of the RAF, and by the end of the War, twenty RAF units operated the Sunderland along with a few more of the Allied forces‘. The Sunderland proved useful for the Allied war effort right from the outset of the hostilities and remained so until the end of the conflict. These flying boats were operated over the vast expanses of the Atlantic Ocean as well as the Indian Ocean and the Pacific and proved to provide reliable service in such different environments as the cold polar areas and over the tropical seas. For their heavy armament, they got the nickname the ‘Flying Porcupine’. The end of the horrible world conflict did not manage to bring the faithful service of the Sunderland to an end. These magnificent flying boats went on serving with the RAF in the Korean war, during the Berlin Airlift Operation and even fighting communist insurgents in Malaya. Besides the RAF, they flew with the Australian, New Zealandian, South African, Norwegian and Canadian air forces as well as with the French and Portuguese navies, in most cases already during the war. The last Sunderlands to fly were those operated by the RNZAF and they were struck off charge as late as 1967.

Mk.V Specification / Performance
Wingspan: 34.39 m, (112ft. 9.5in) Length: 26 m,(85 ft.3.5 in) Height 10.01m (32 ft.10.5in) Max. speed: 343kph(213 mph) Service ceiling 5457m (17900 ft.) Range at cruising speed 3027 km (1880 m) Defensive armament: 12x 7.7 mm (.303 in.) 2x 12.7 mm (.5in) machine guns. Offensive ordnance 2250 kg (4960lbs)


A
2
A
1
B
5
2
B
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1
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C
C
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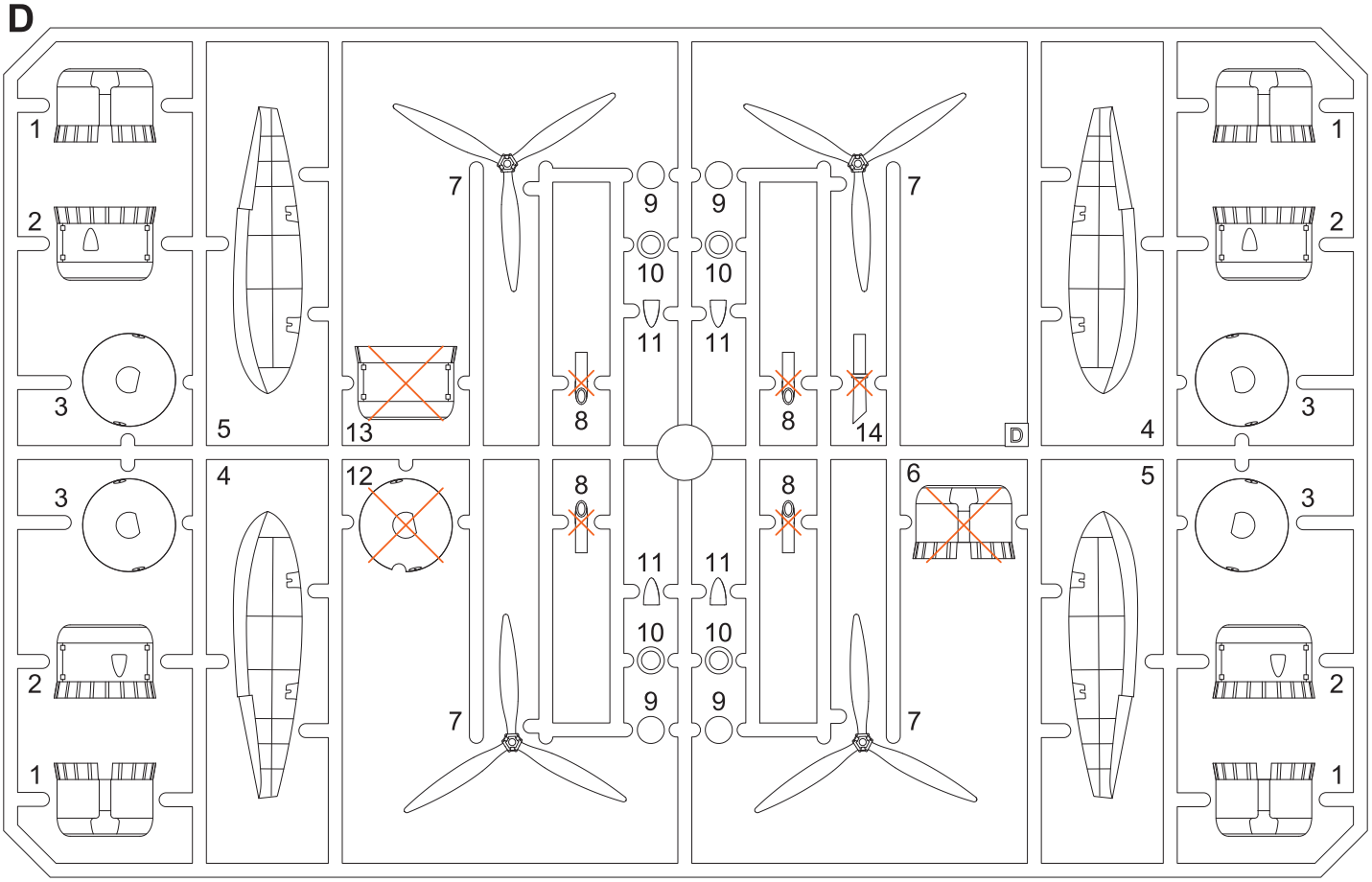
2
3
4
5

D



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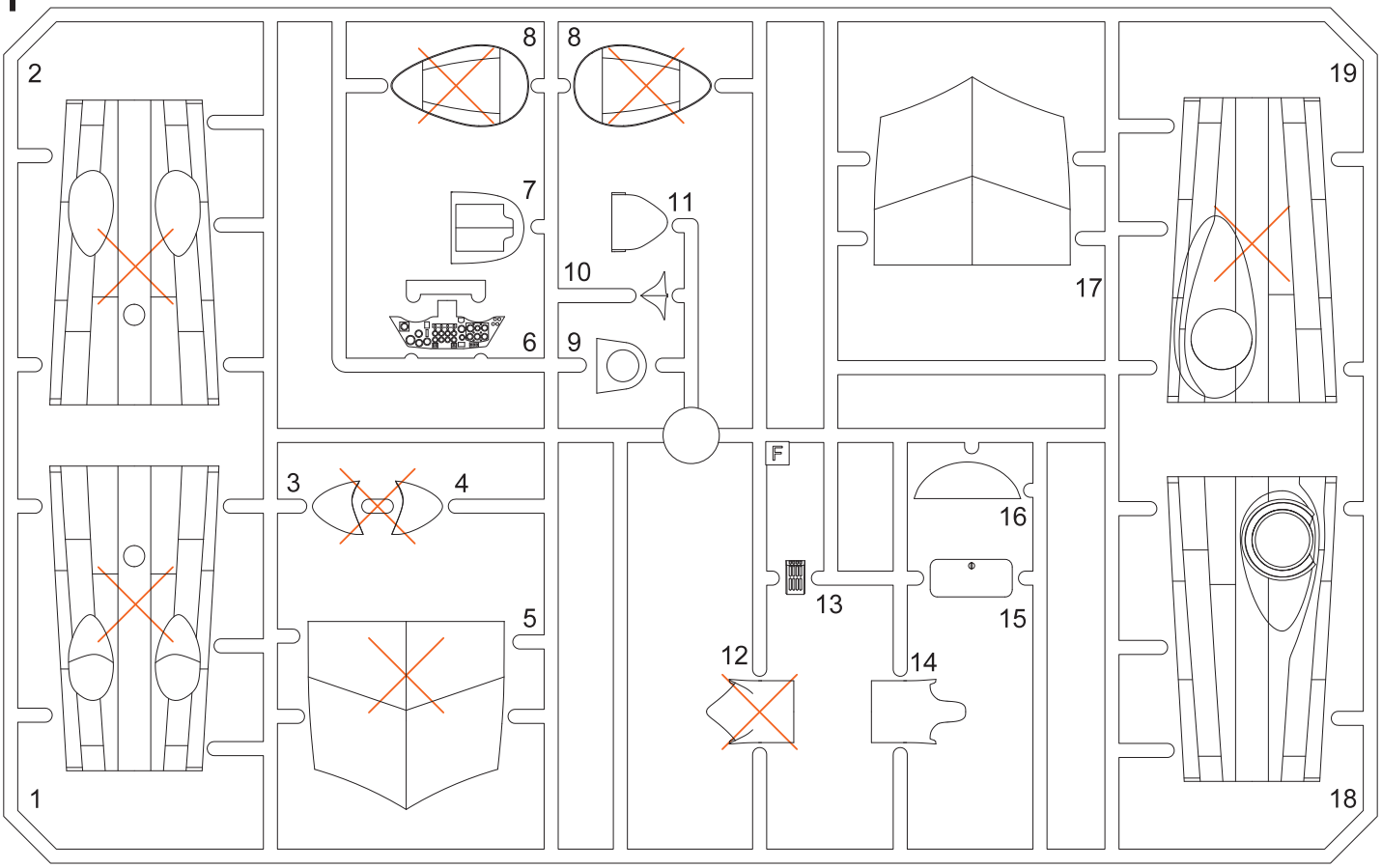
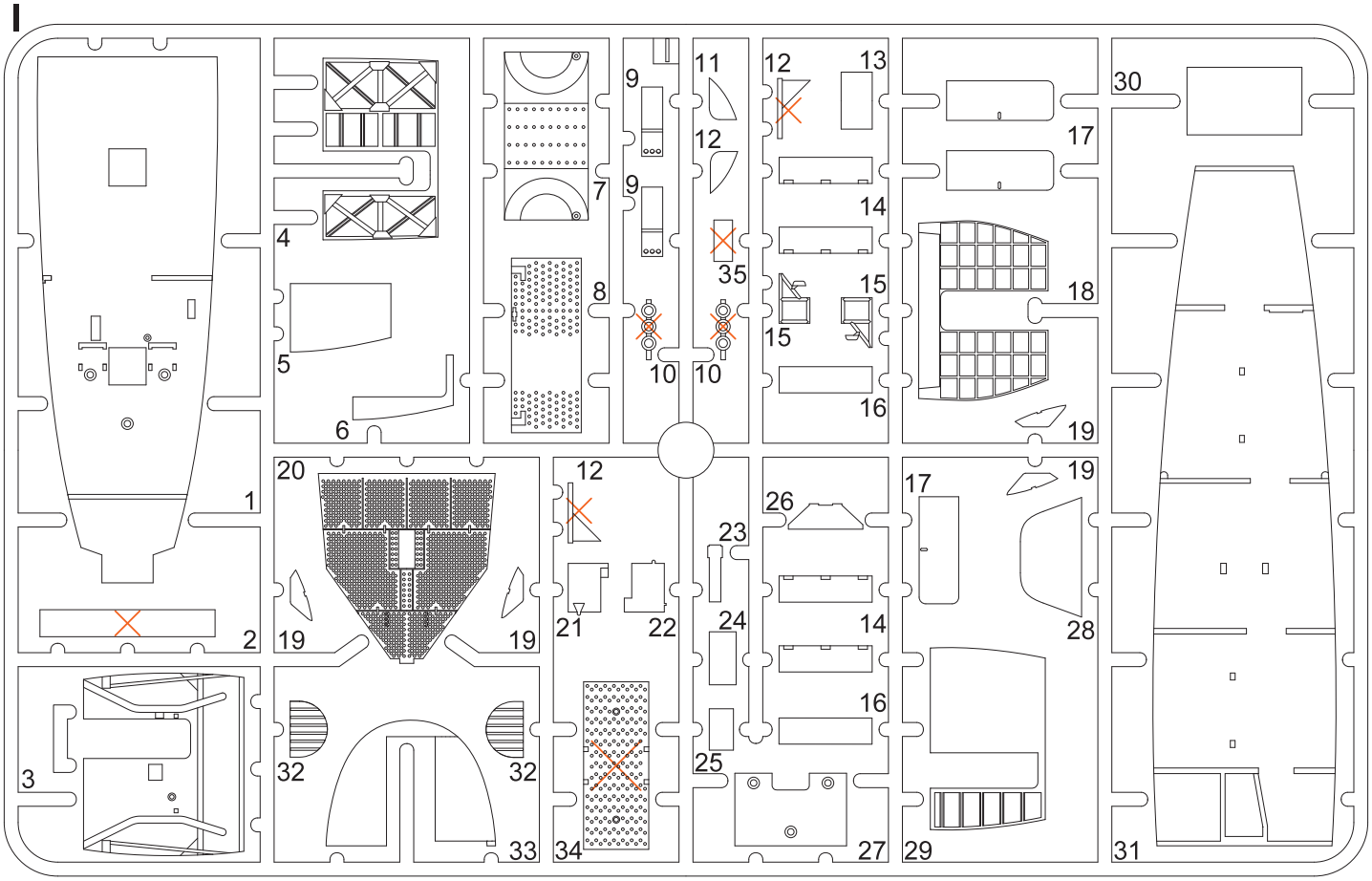


SYMBOLS

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

I



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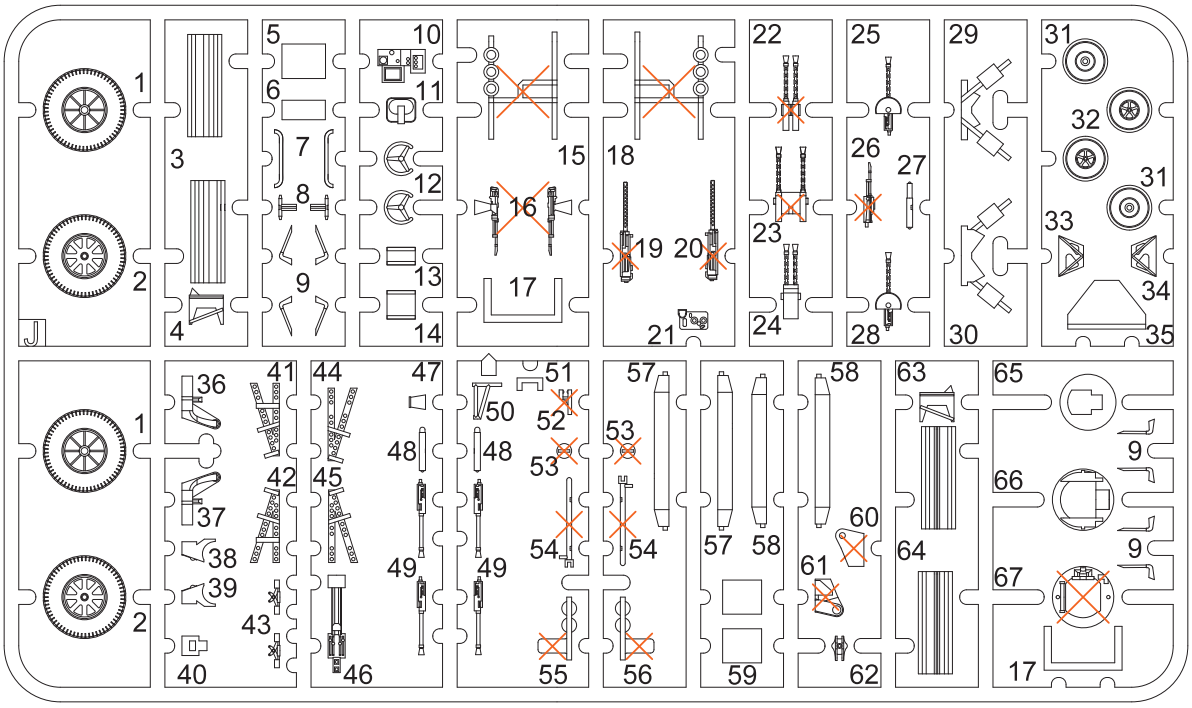
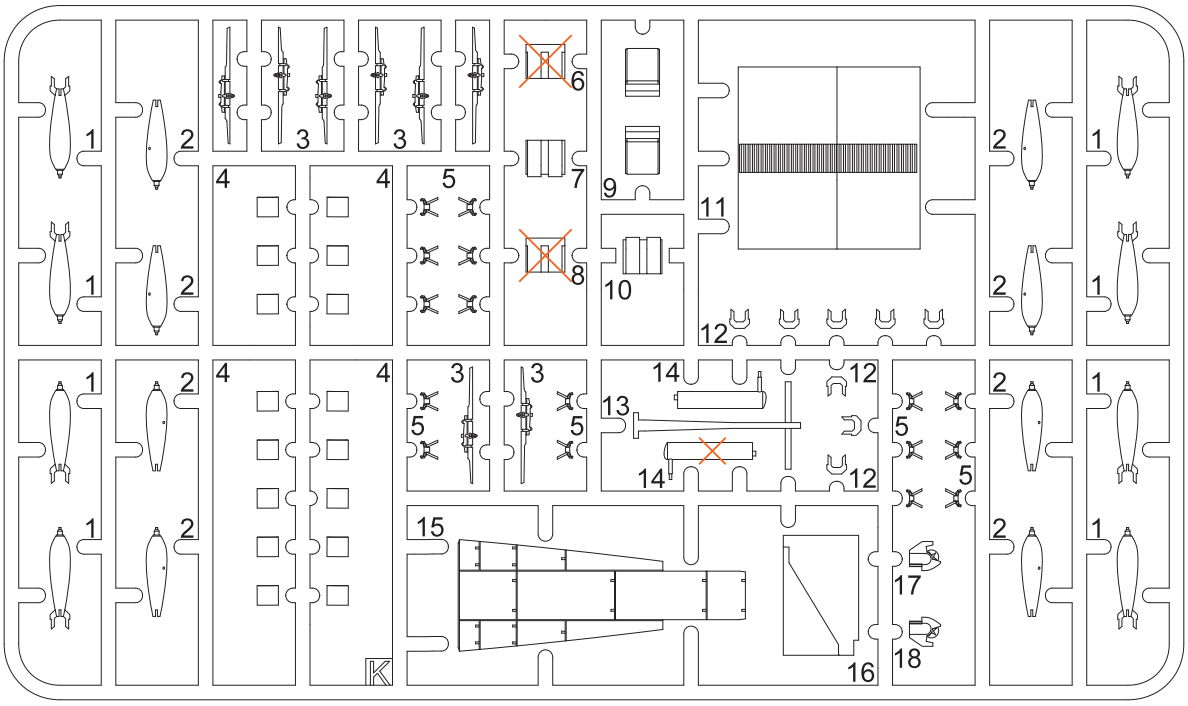


Tento díl nepoužít ✕ *Do not use this part*

Barvy GUNZE/ GUNZE Colour No.

A	*Černá/ Black*	*H12/ C33*	
B	*Barva pneu/ Tire Black*	*H77/ C137*	
C	*Tmavý kov/ Dark Iron*	*H28/ C78*	
D	*Hliník/ Aluminium*	*H8/ C8*	
E	*Inter. šedozelená/ Inter. Grey Green*	*C364*	
F	*Motorová šedá/ Engine Grey*	*H339/ C339*	
G	*Červená/ Red*	*H43/ C100*	
H	*Žlutá/ Yellow*	*H4/ C4*	
I	*Barva plátna/ Tan*	*H27/ C44*	
J	*Bílá/ White*	*H28/ C78*	
K	*Dřevo/ Wood*	*H37/ C43*	
L	*Opálený kov/ Burnt Iron*	*H76/ C61*	
M	*Barva kůže/ Red Brown*	*H17/ C29*	

K



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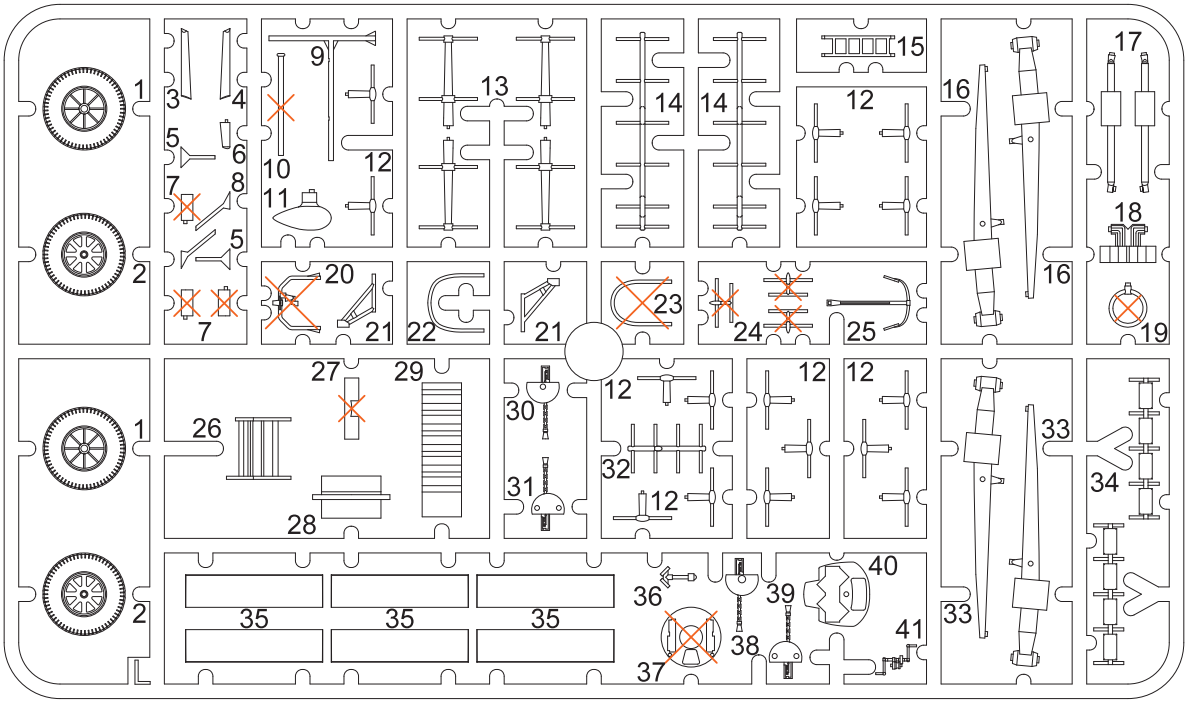
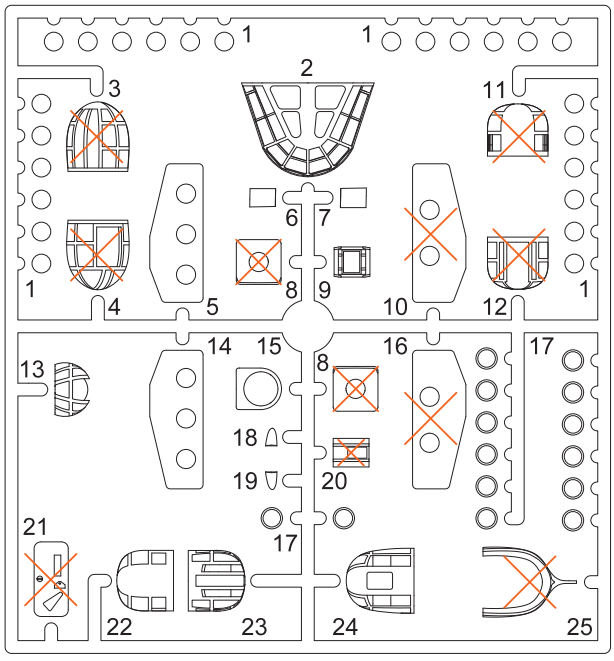


CP *(Clear Parts)*



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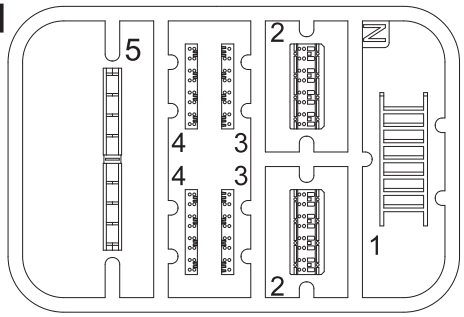
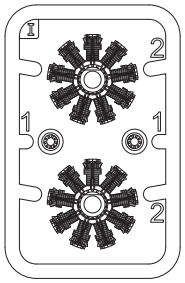
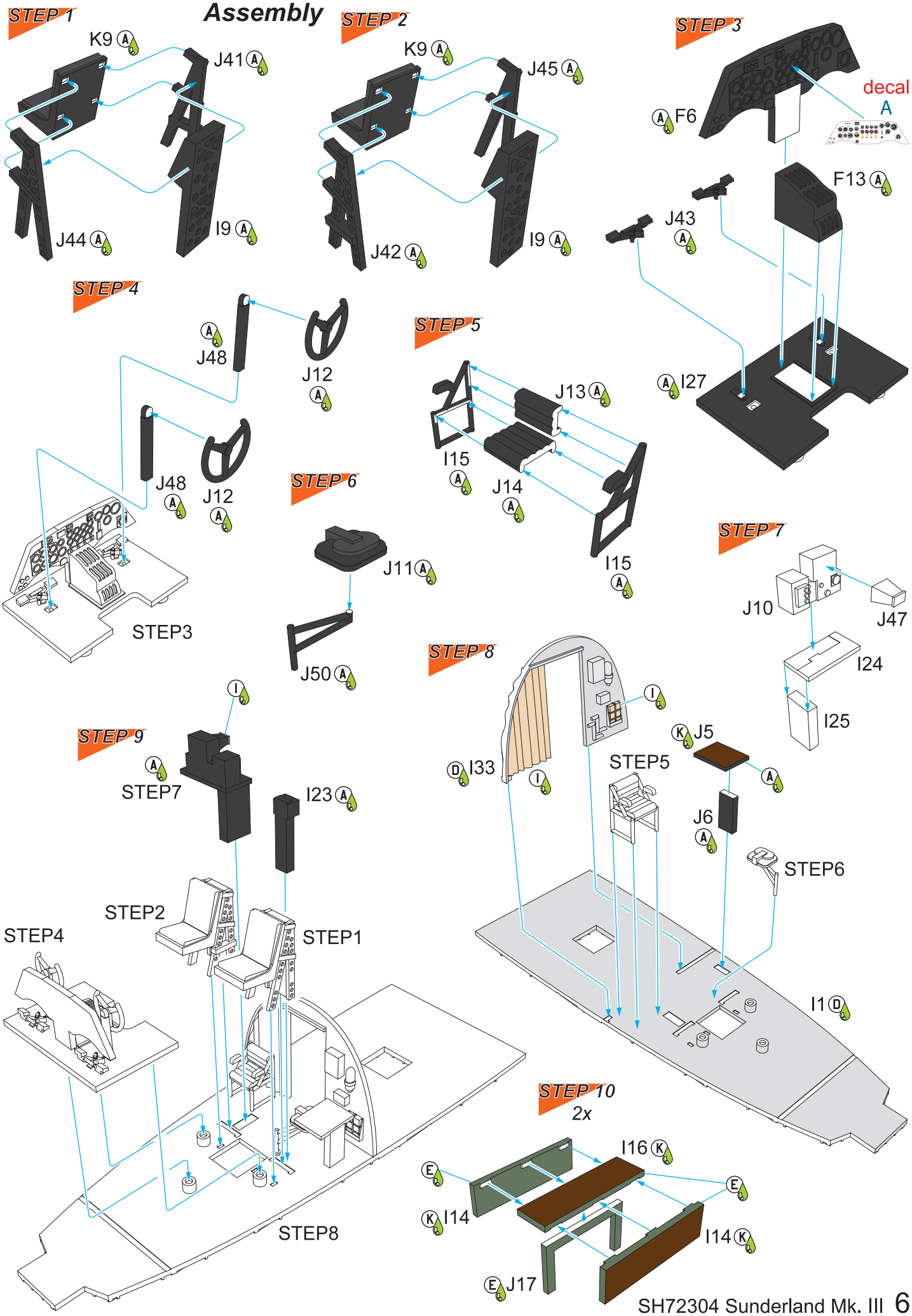


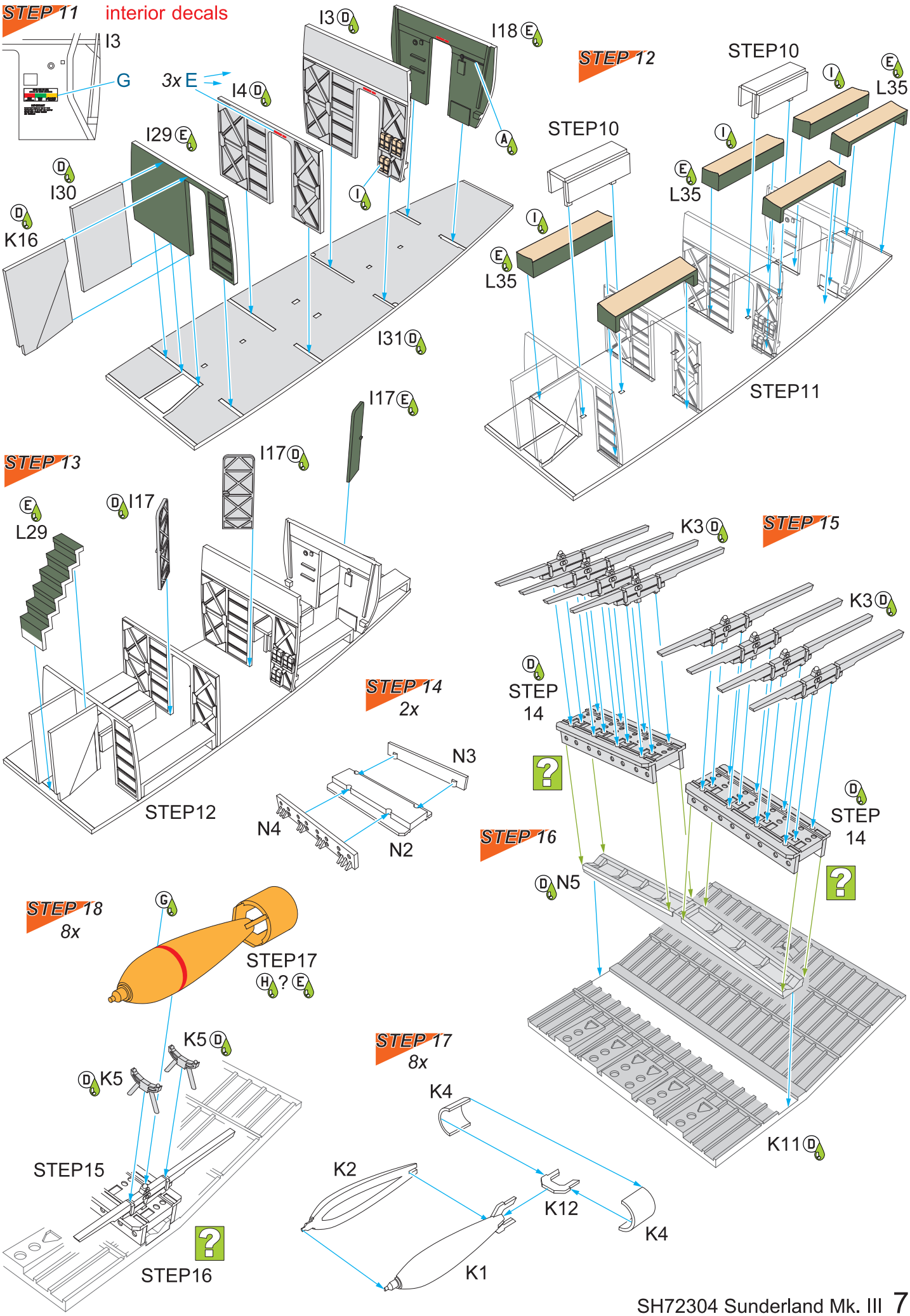
2x



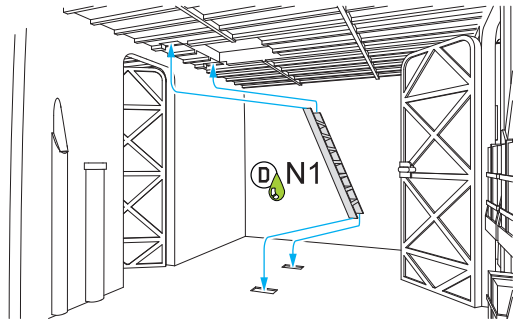
PUR 4x

Assembly


STEP 1
K9 A
J41 A
J44 A
I9 A
STEP 2
K9 A
J45 A
J42 A
I9 A
STEP 3
F6 A
decal A
F13 A
J43 A
I27 A
STEP 4
J48 A
J12 A
J48 A
J12 A
STEP3
STEP 5
J13 A
I15 A
J14 A
I15 A
STEP 6
J11 A
J50 A
STEP 7
J10
J47
I24
I25
STEP 8
I D
I33 D
I
K J5
A
STEP5
J6 A
STEP6
I1 D
STEP 9
I
A
STEP7
I23 A
STEP2
STEP4
STEP1
STEP8
STEP 10
2x
I16 K
E
E
K I14
I14 K
E J17

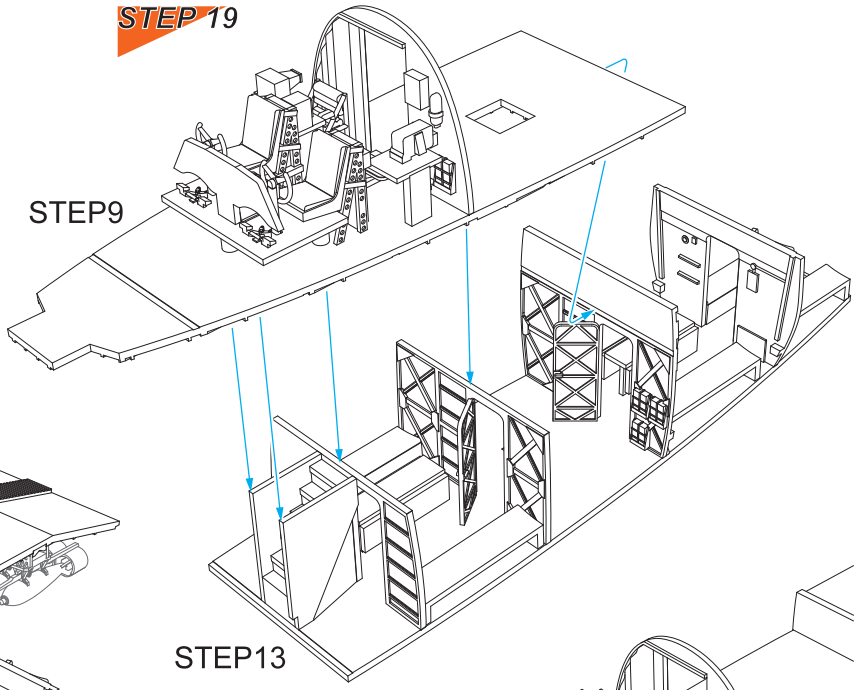

STEP 11
interior decals
I3
G
3x E
I4 D
I3 D
I18 E
I29 E
D I30
D K16
I
A
I31 D
I17 E
STEP 12
STEP10
I
E L35
STEP10
I
E L35
I
E L35
STEP11
STEP 13
I17 D
D I17
E L29
STEP12
STEP 14
2x
N3
N4
N2
K3 D
STEP 15
K3 D
D STEP 14
?
D STEP 14
STEP 16
D N5
?
K11 D
STEP 18
8x
G
STEP17
H ? E
K5 D
D K5
STEP15
?
STEP16
STEP 17
8x
K4
K2
K12
K4
K1

STEP 20



STEP19

STEP 19

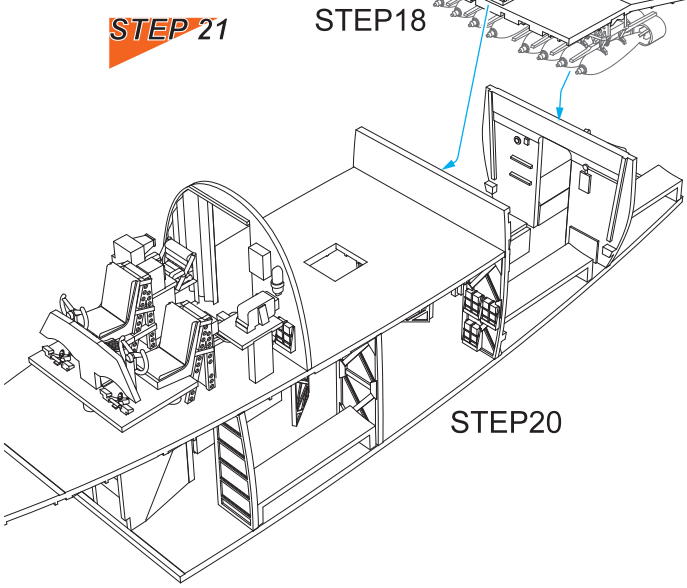


STEP13

STEP16

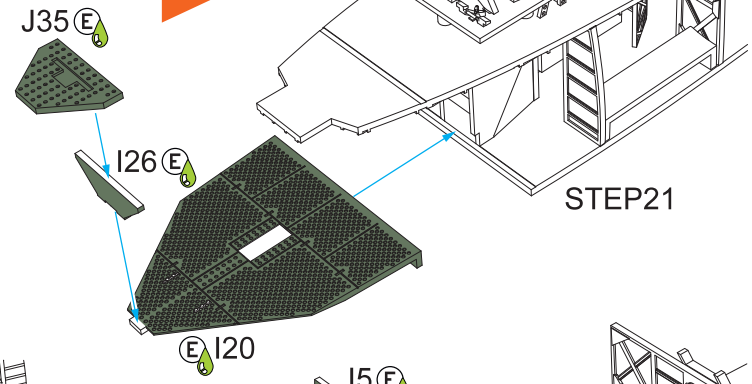
STEP18

STEP 21



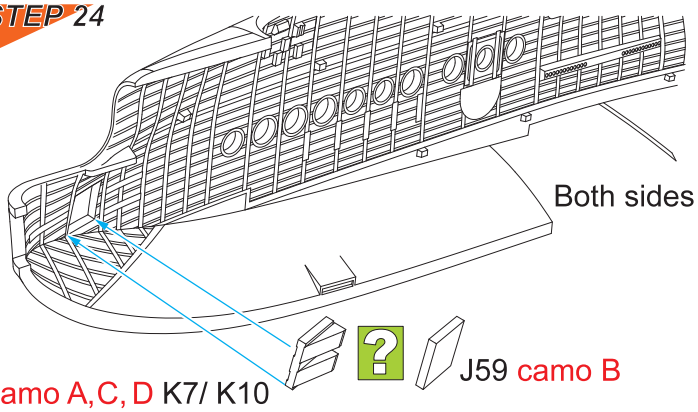
STEP20

STEP 22



STEP21

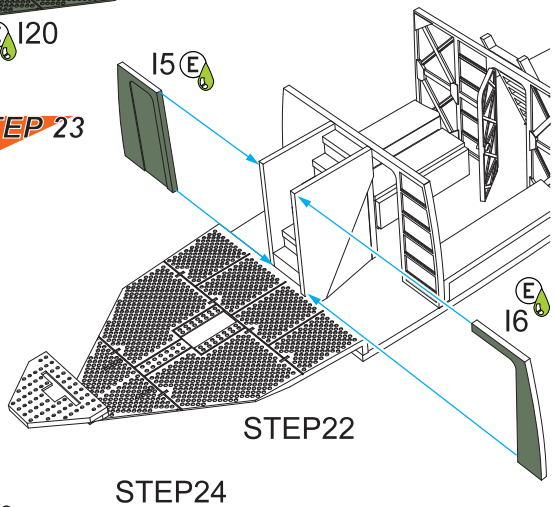
STEP 24



camo A,C, D K7/ K10

J59 camo B

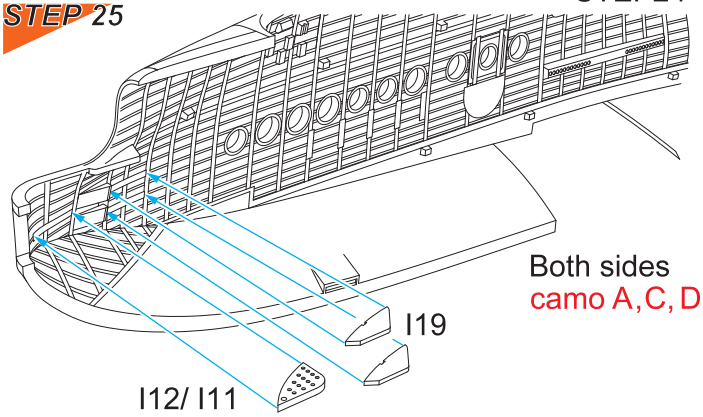
STEP 23



STEP22

STEP 25

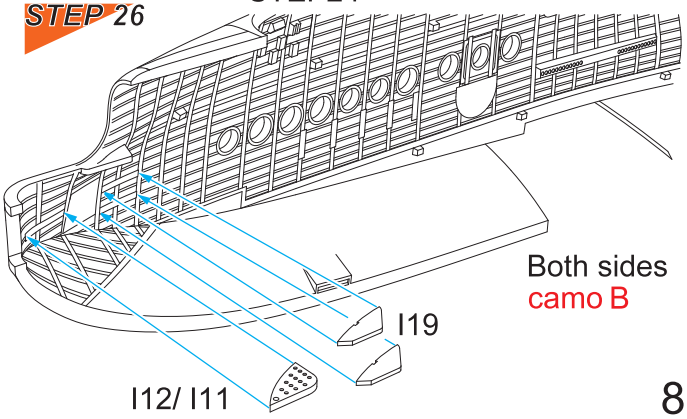
STEP24



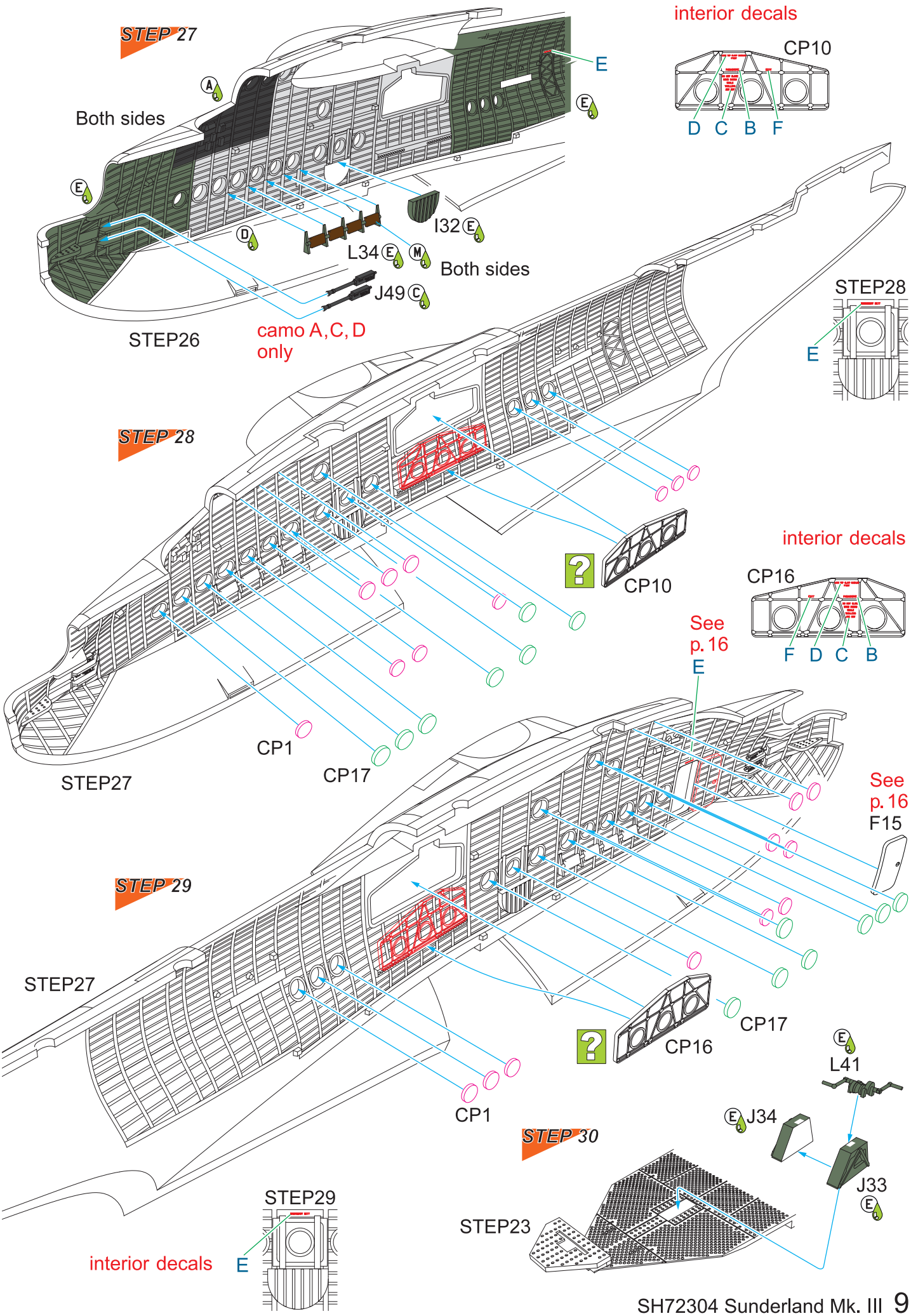
I12/ I11

STEP 26

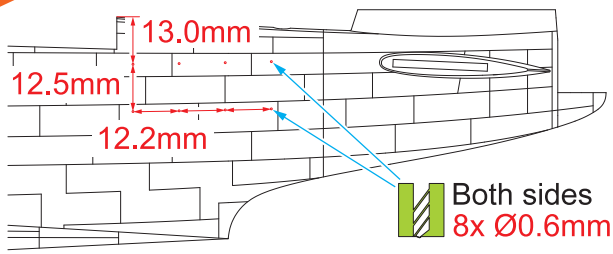
STEP24



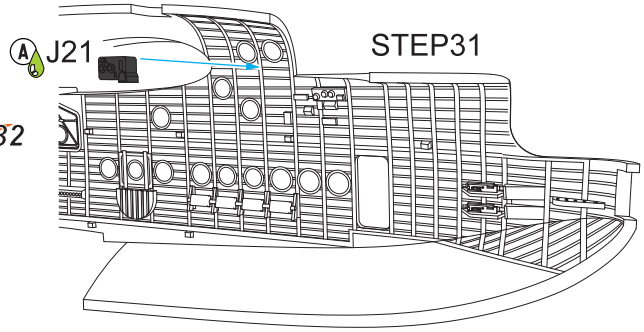
I12/ I11


STEP 27
Both sides
A
E
E
E
D
I32 E
L34 E M
Both sides
J49 C
STEP26
camo A, C, D only
interior decals
CP10
D C B F
STEP28
E
STEP 28
CP10
interior decals
CP16
F D C B
See p. 16
E
CP1
CP17
STEP27
See p. 16
F15
STEP 29
STEP27
CP17
CP16
CP1
E
L41
E J34
STEP 30
J33
E
STEP23
STEP29
interior decals
E

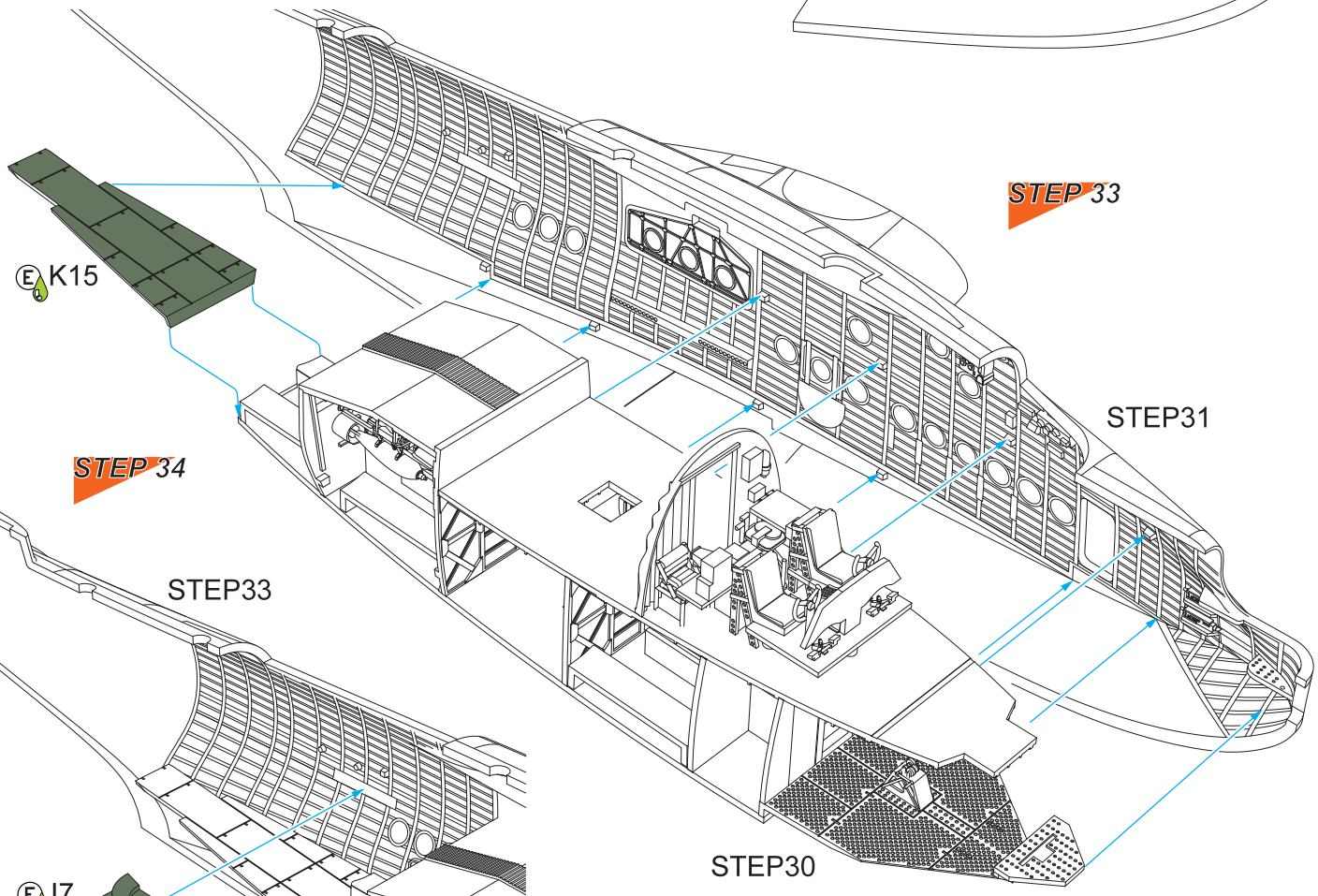
STEP 31



STEP 32

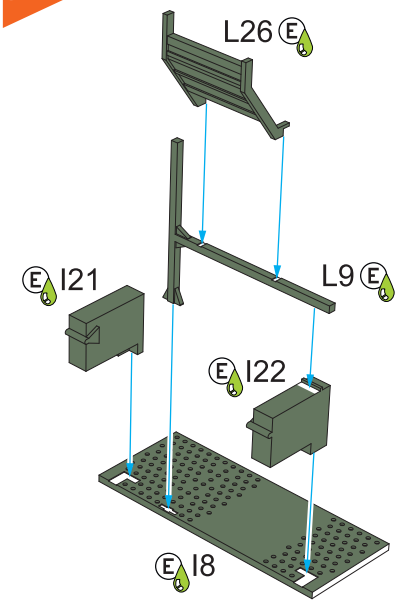


STEP 33

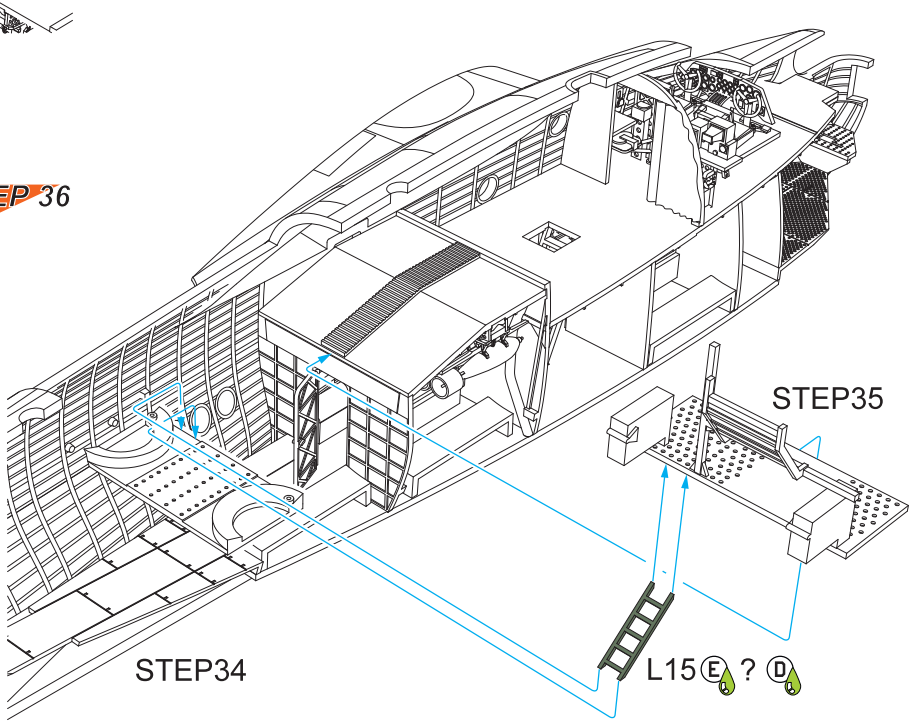


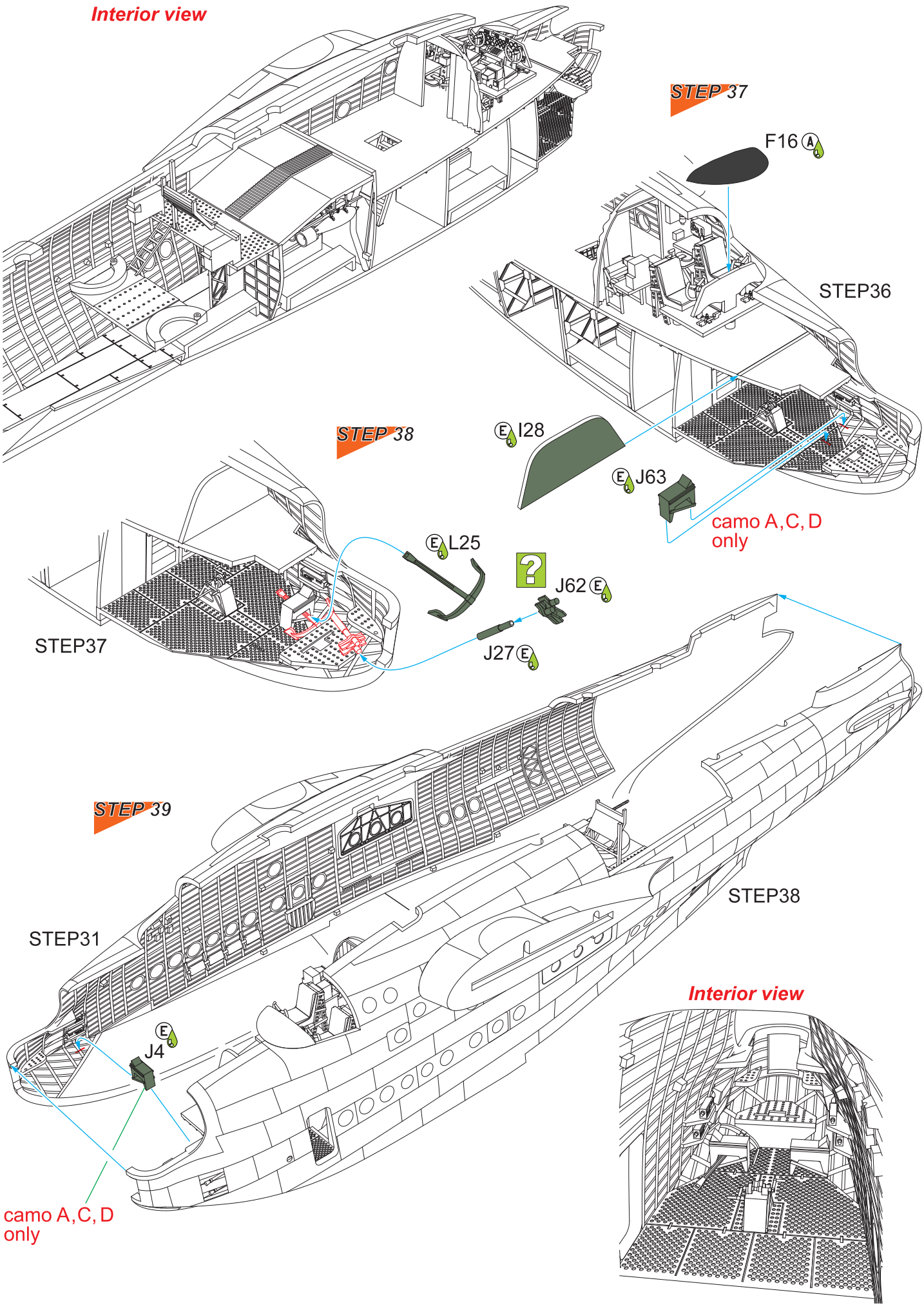
STEP 34

STEP 35



STEP 36




Interior view
STEP 37
F16 A
STEP36
STEP 38
E I28
E J63
camo A, C, D only
E L25
J62 E
J27 E
STEP37
STEP 39
STEP38
STEP31
E J4
camo A, C, D only
Interior view

STEP40

E F18

STEP39

STEP41

CP2

J46

STEP40

STEP42

F17

STEP41

STEP44

C3

B4

STEP43

C4

B3

STEP45

B2

B6

STEP44

STEP43

Test fit first,
glue in step 51!

STEP47

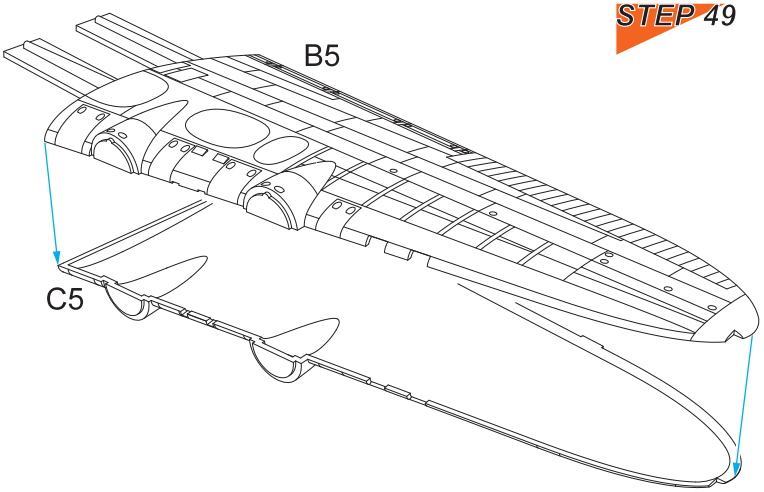
STEP46

C2

C6

STEP42

STEP 48



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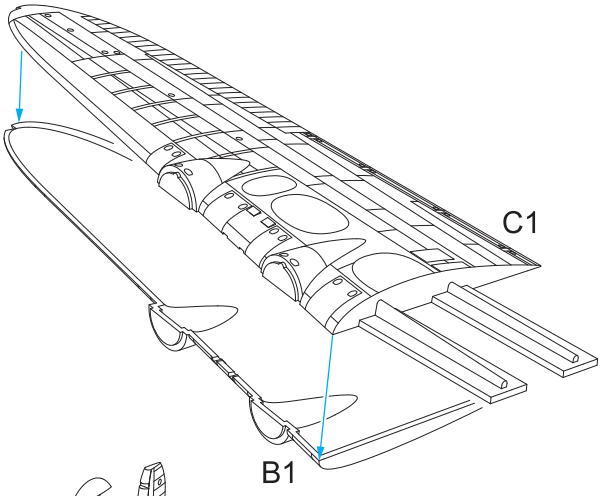
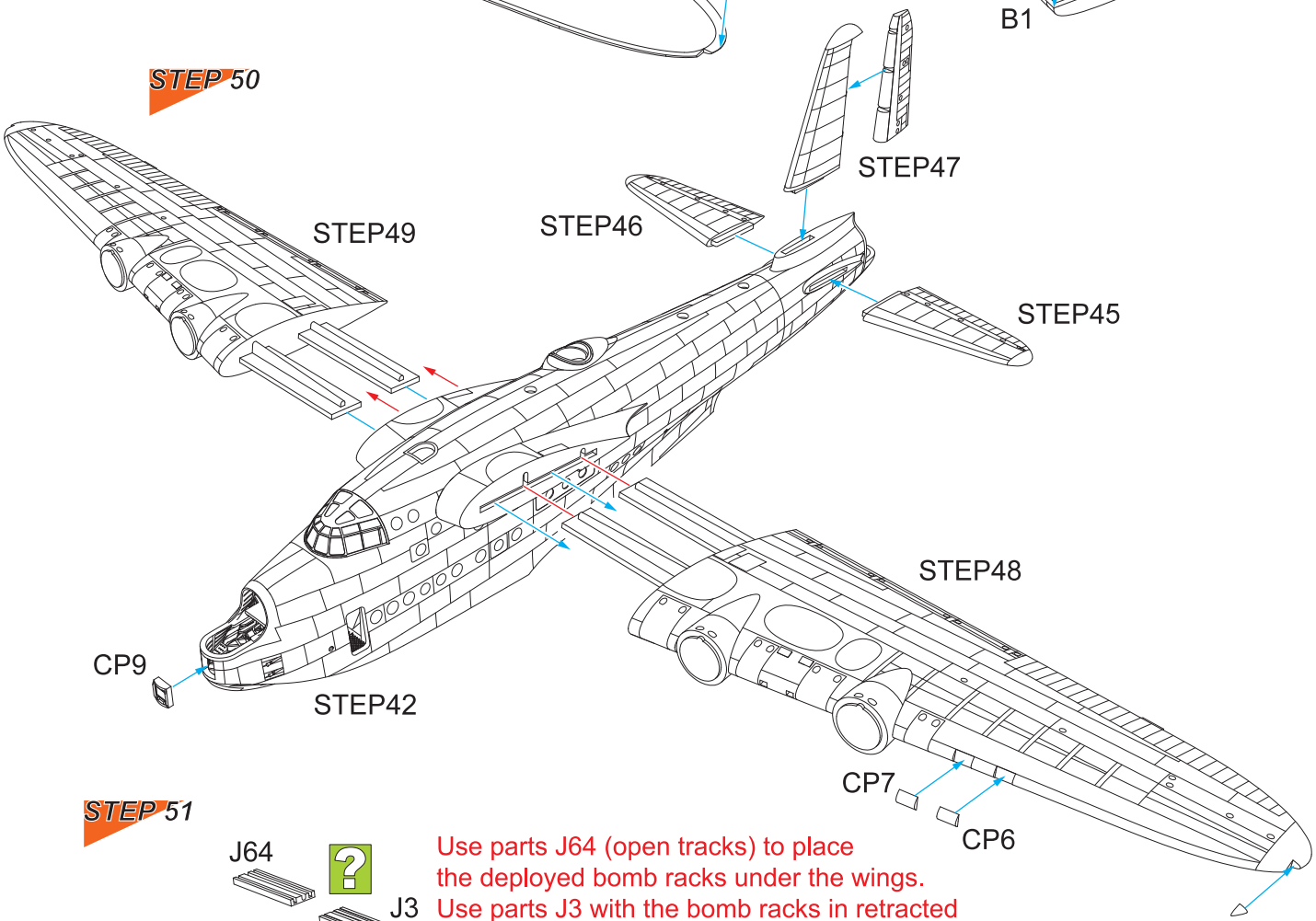
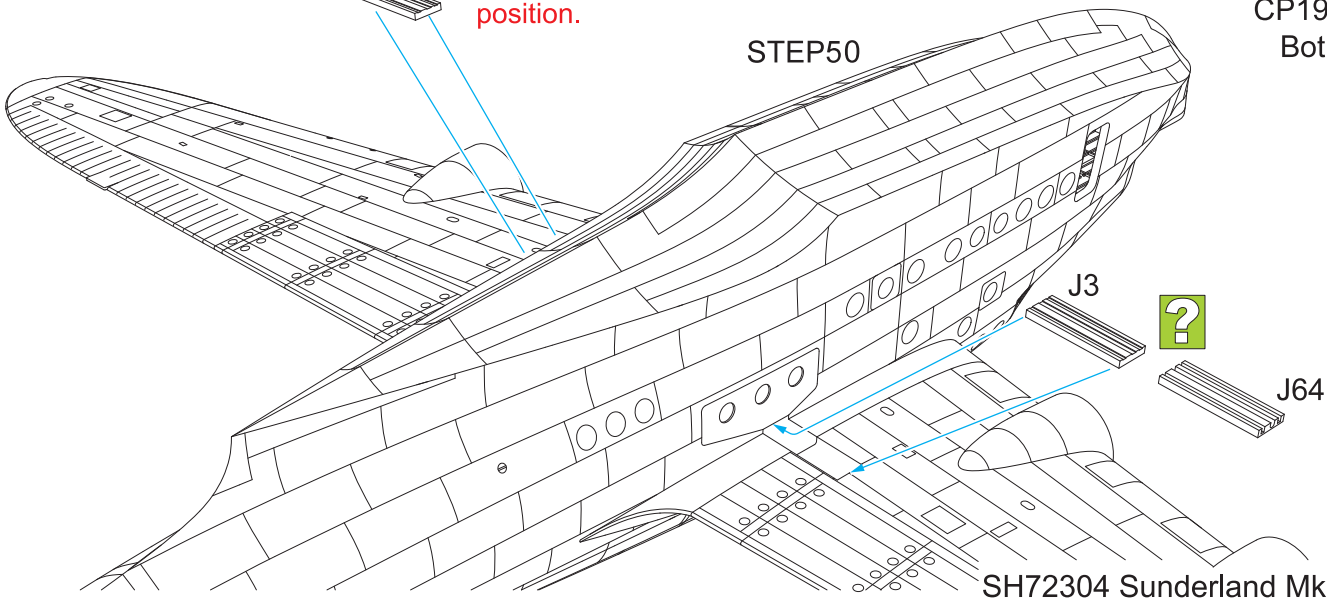


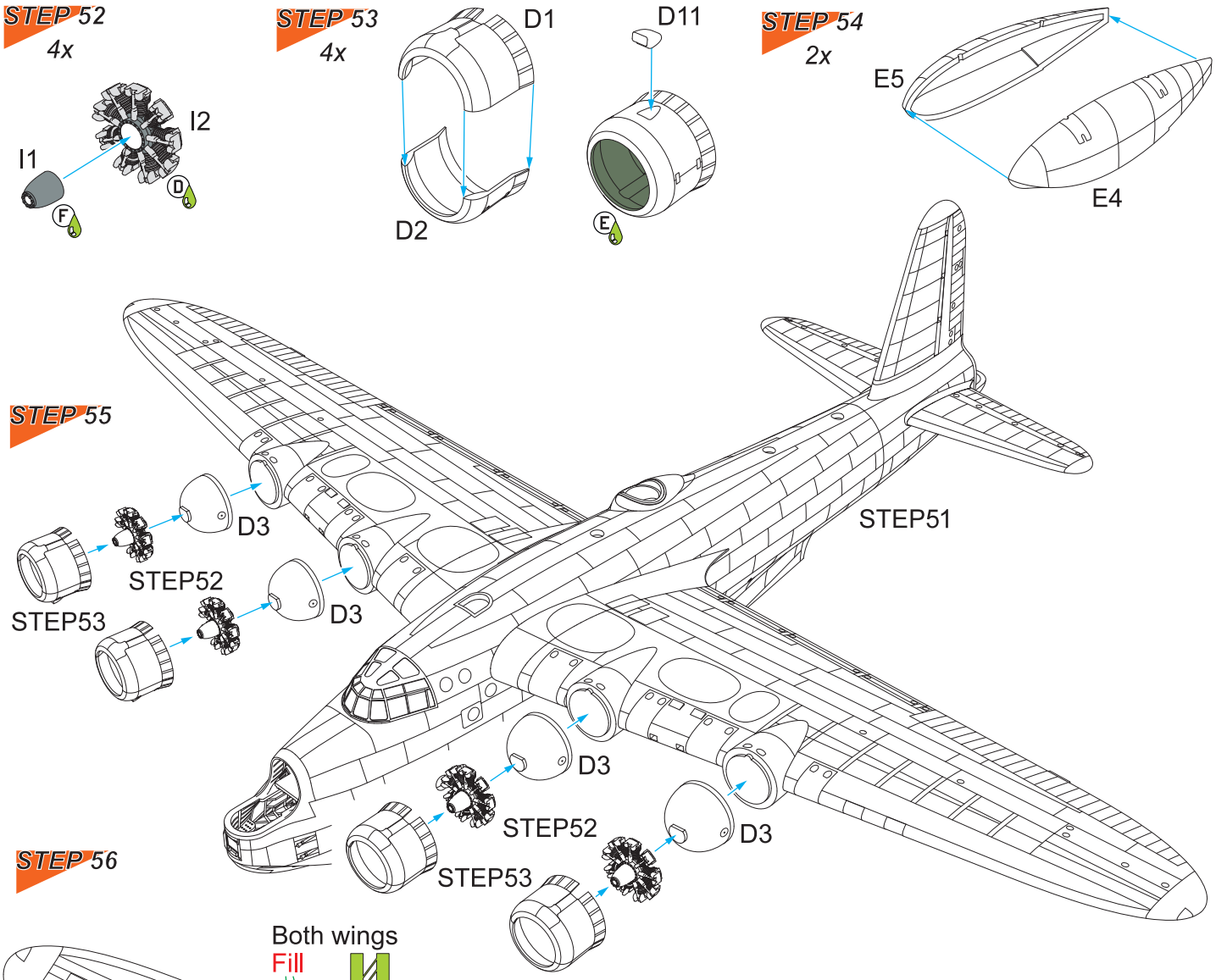
STEP 50

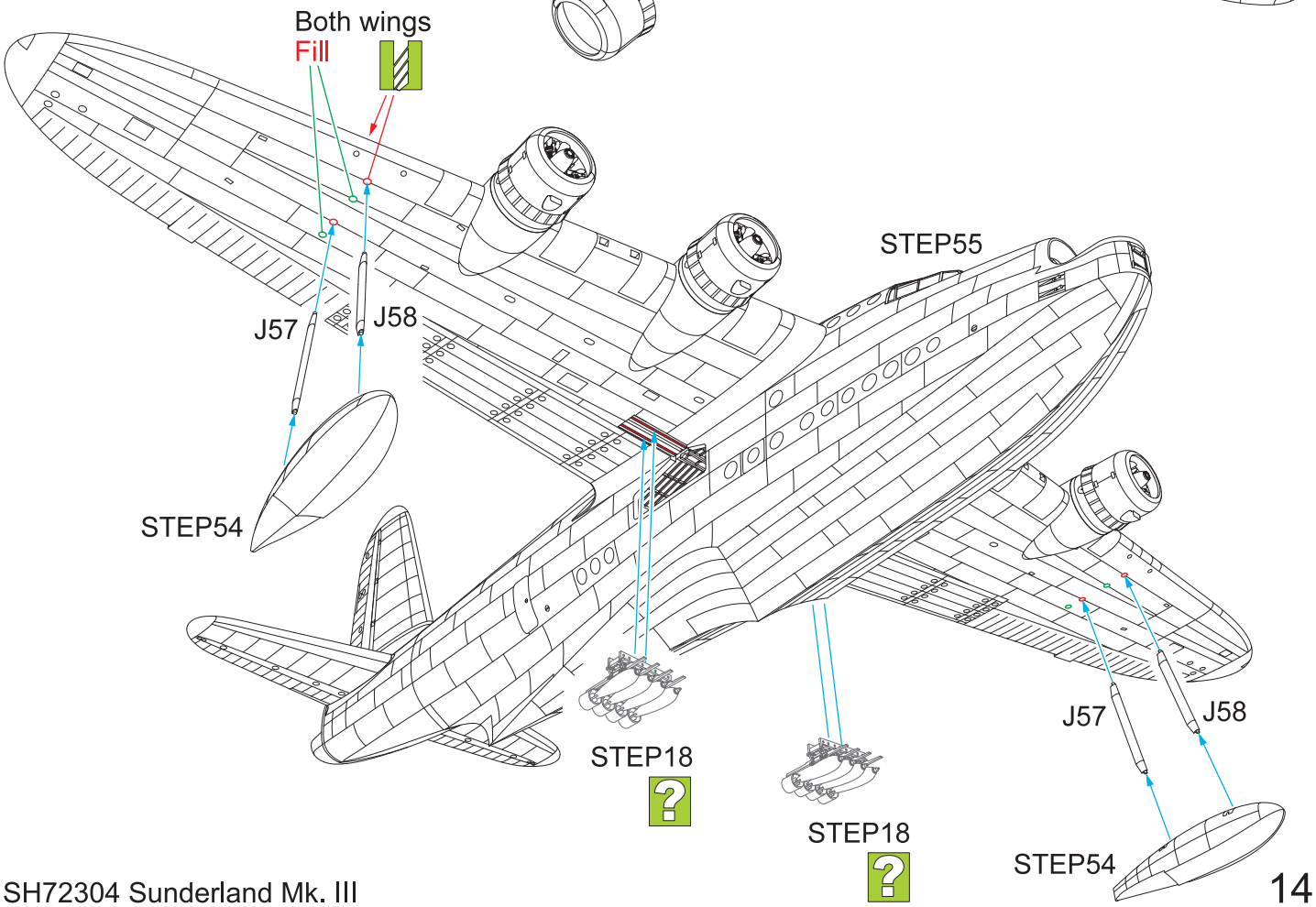


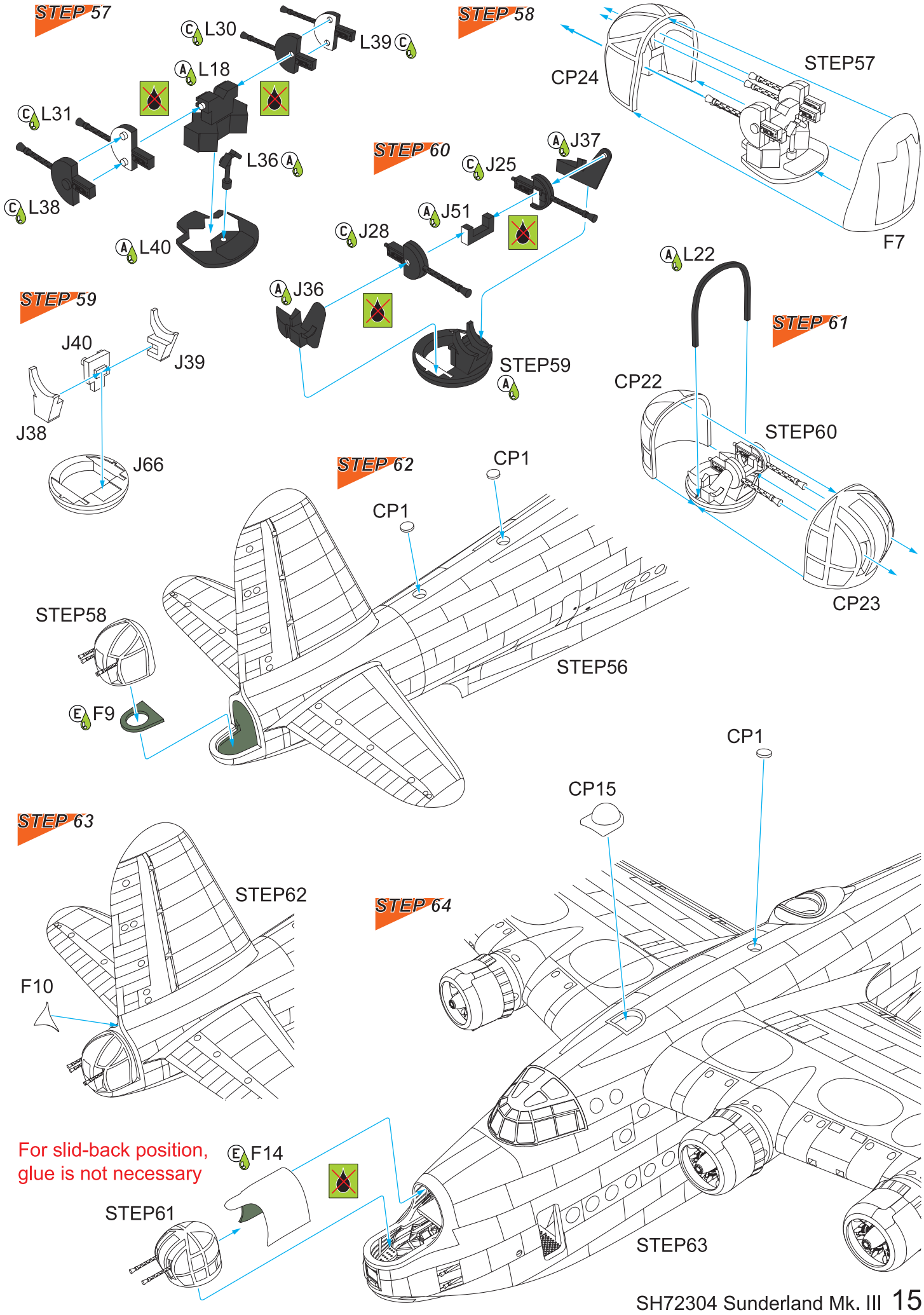
STEP 51

Use parts J64 (open tracks) to place the deployed bomb racks under the wings. Use parts J3 with the bomb racks in retracted position.

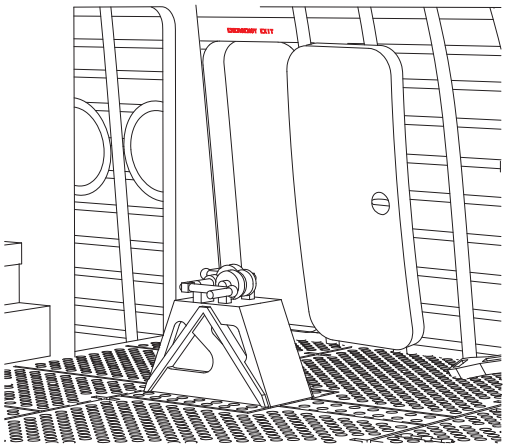



STEP 52
4x
I1
I2
F
D
STEP 53
4x
D1
D2
D11
E
STEP 54
2x
E5
E4
STEP 55
D3
STEP52
STEP53
D3
STEP51
D3
STEP52
STEP53
D3
STEP 56

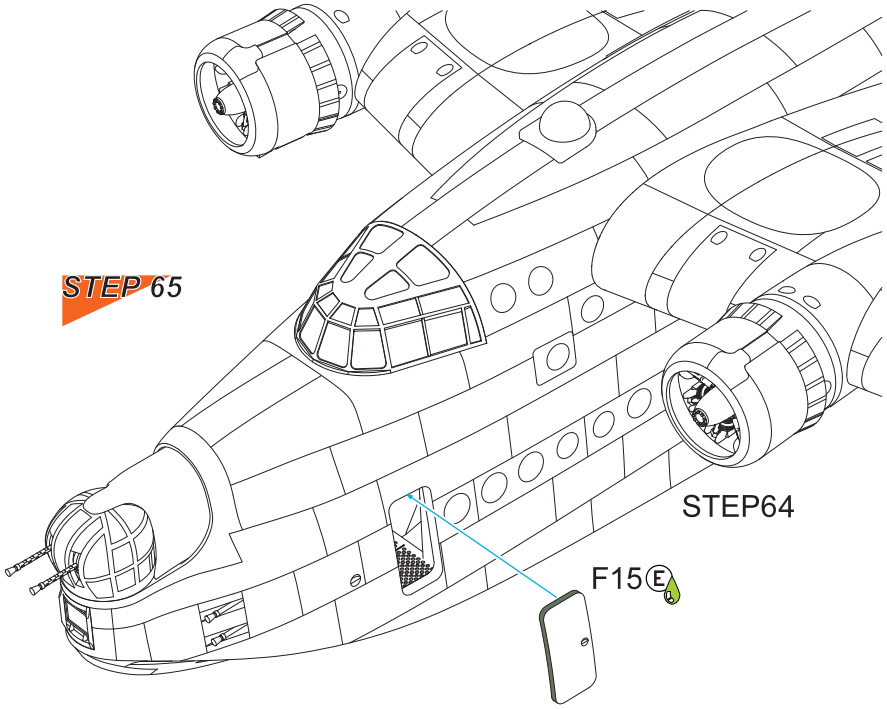

Both wings
Fill
STEP55
J57
J58
STEP54
STEP18
STEP18
J57
J58
STEP54


STEP 57
C L30
L39 C
A L18
C L31
L36 A
C L38
A L40
STEP 58
CP24
STEP57
F7
STEP 60
A J37
C J25
A J51
C J28
A J36
STEP59
A
STEP 59
J40
J39
J38
J66
A L22
STEP 61
CP22
STEP60
CP23
STEP 62
CP1
CP1
STEP58
STEP56
E F9
CP1
CP15
STEP 63
STEP62
F10
STEP 64
For slid-back position,
glue is not necessary
E F14
STEP61
STEP63

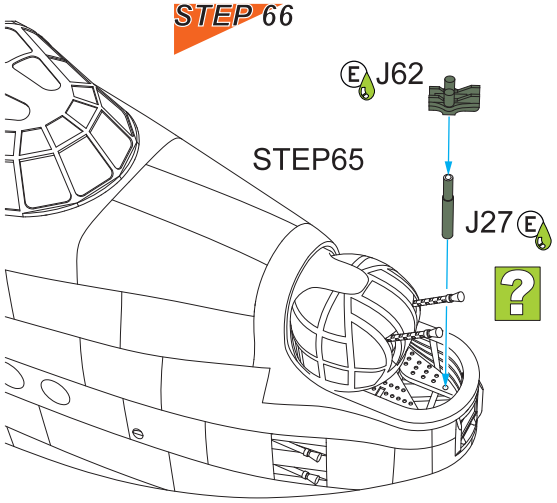
Interior view with the front door open



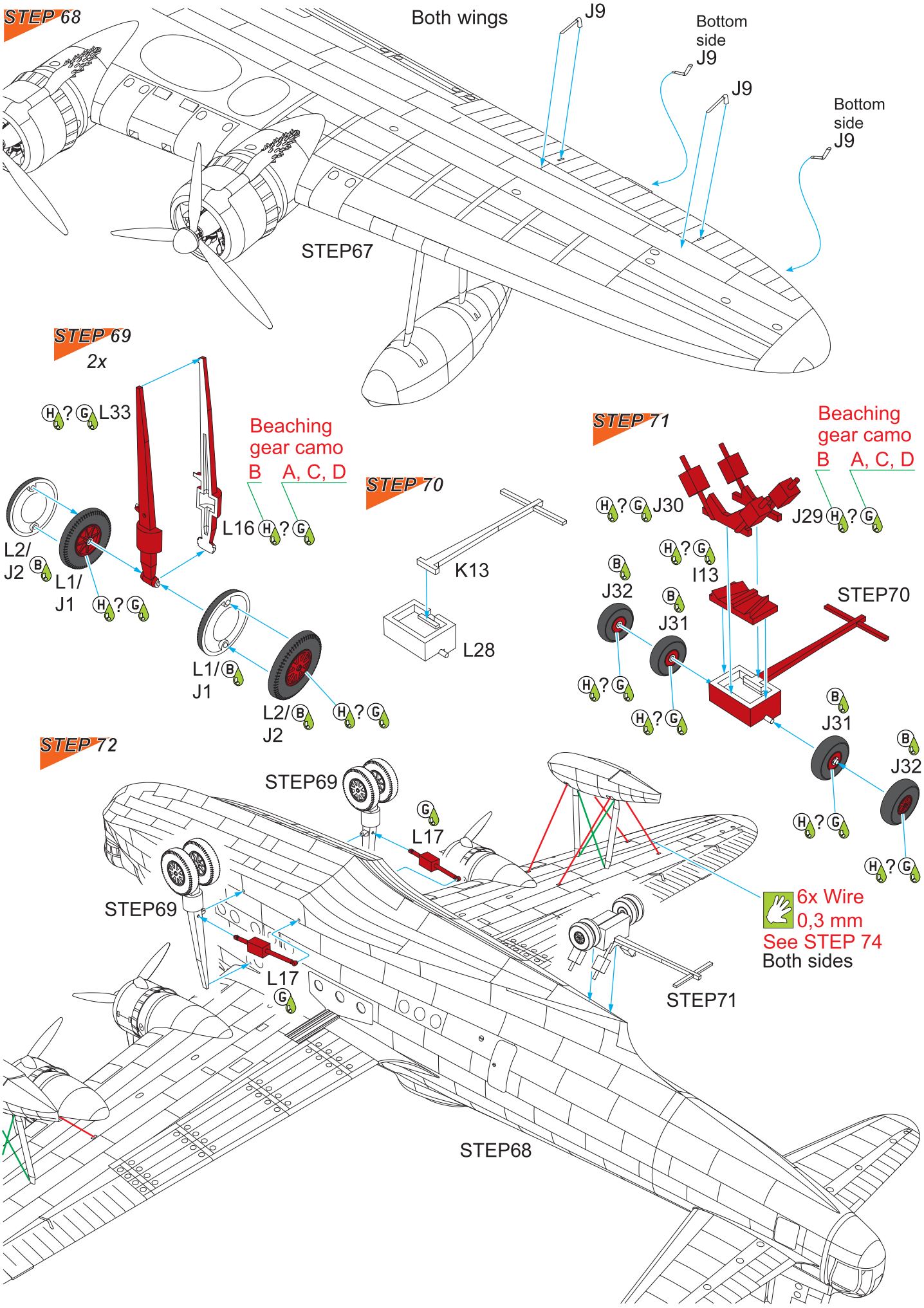
STEP 65



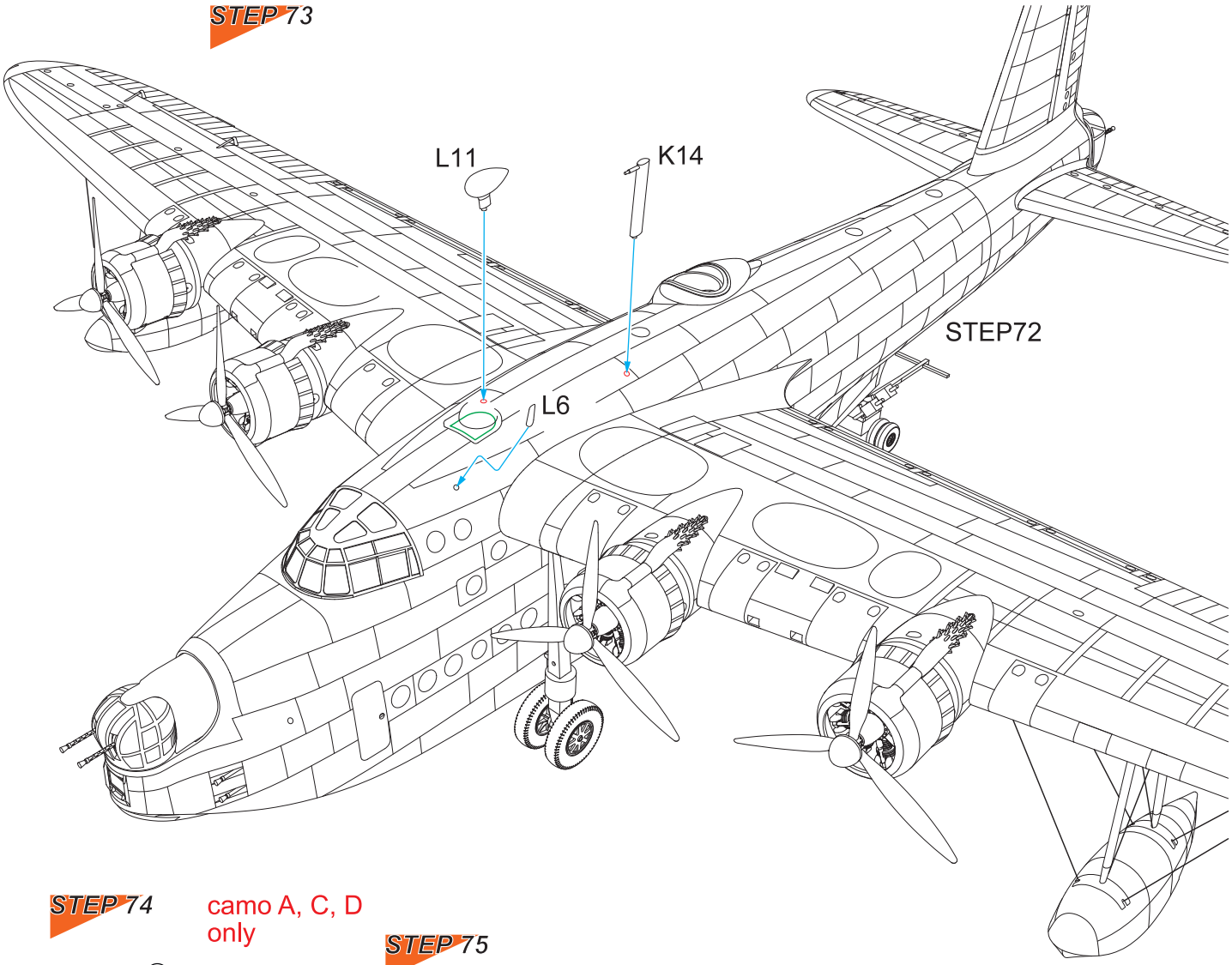
STEP 66



STEP 67

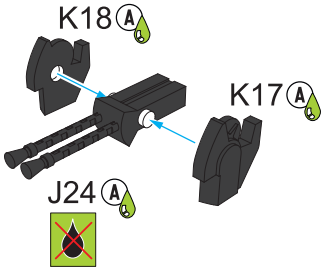

STEP 68
Both wings
J9
Bottom side
J9
J9
Bottom side
J9
STEP67
STEP 69
2x
H?G L33
Beaching gear camo
B A, C, D
L16 H?G
L2/ J2 B
L1/ J1 H?G
L1/B J1
L2/B J2 H?G
STEP 70
K13
L28
STEP 71
Beaching gear camo
B A, C, D
H?G J30
J29 H?G
H?G I13
B J32
B J31
STEP70
H?G
H?G
B J31
B J32
H?G
H?G
STEP 72
STEP69
G L17
STEP69
L17 G
6x Wire 0,3 mm
See STEP 74
Both sides
STEP71
STEP68

STEP 73

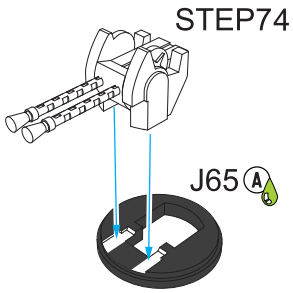


STEP 74

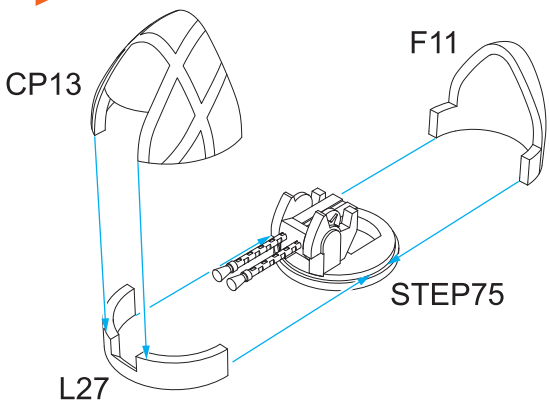
camo A, C, D only



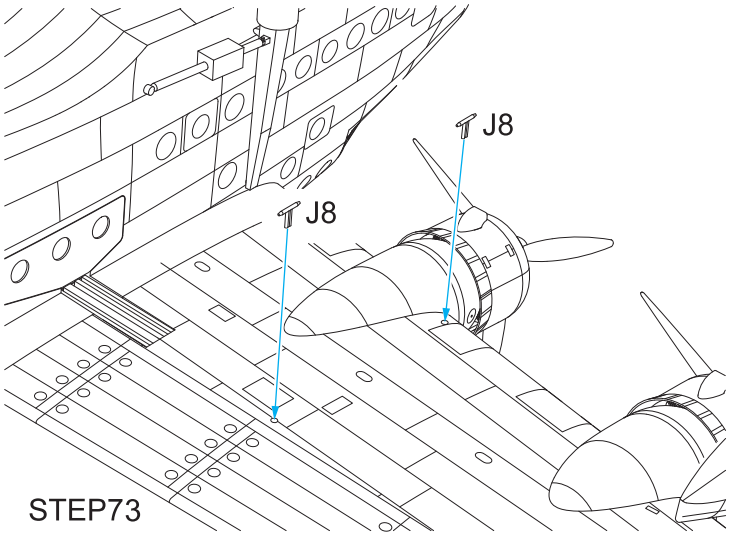
STEP 75



STEP 76

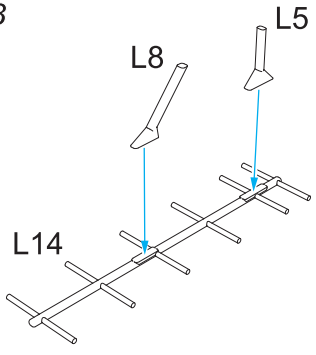


STEP 77



STEP 78

2x



STEP 79

STEP77

STEP78
Both sides

STEP 80

4x L13

STEP79

11.5mm

18.0mm

4x Ø0.6mm

STEP 81

camo B
Ø12.6mm
x 1.0mm

camo A, C, D
only STEP76

4x L12
Both sides

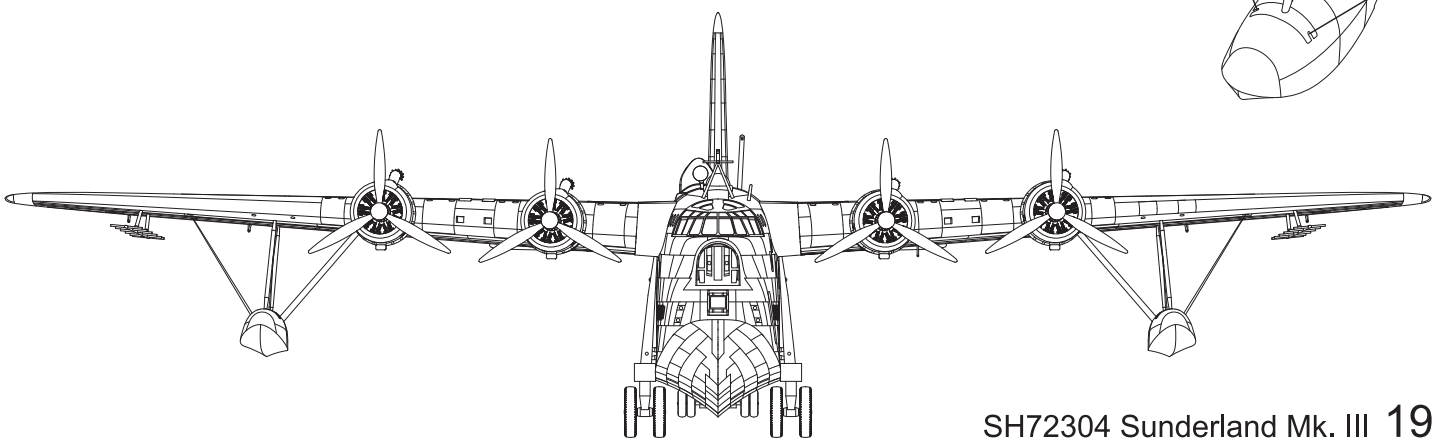
4x L12
Both sides

L32

L3

L4

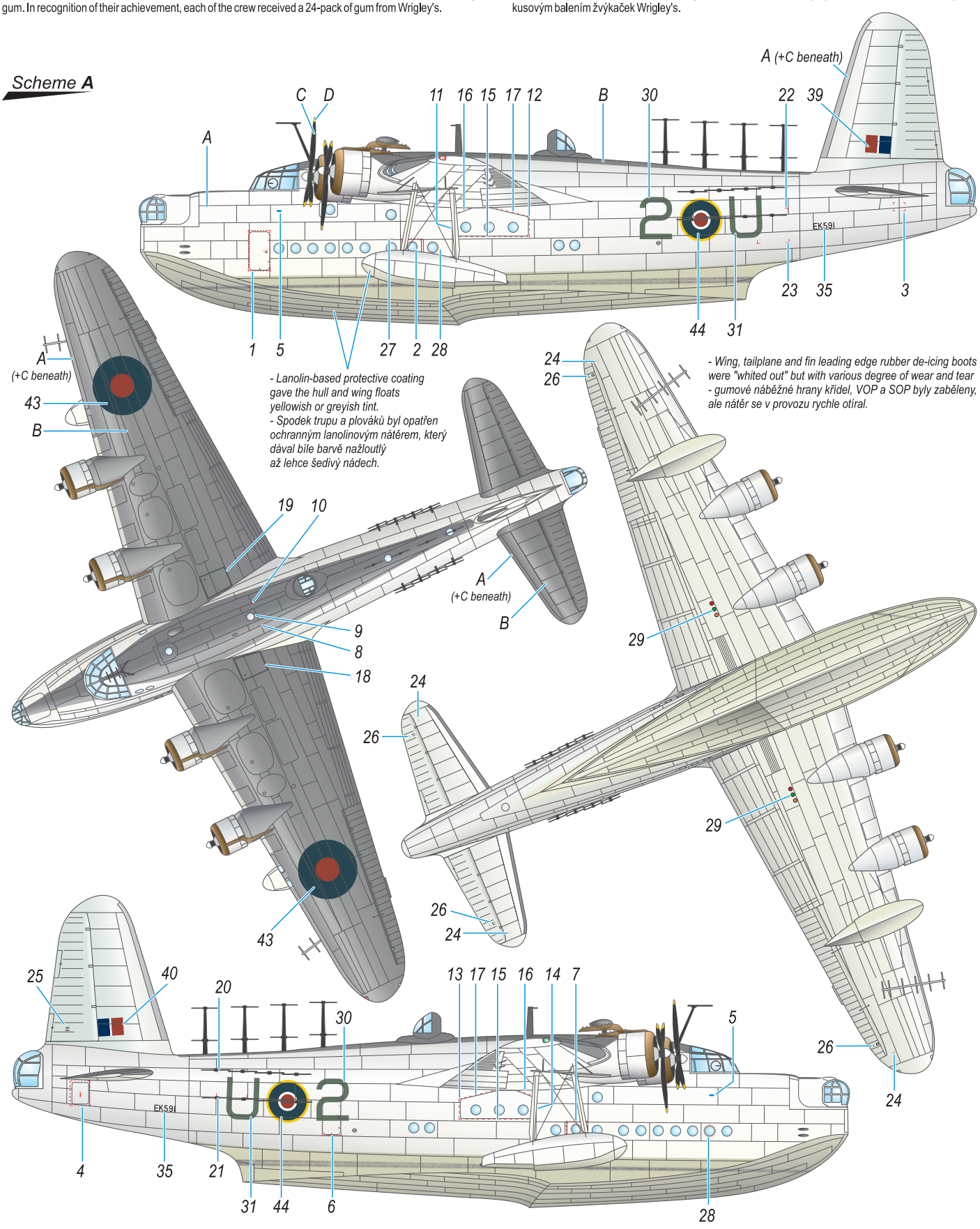
STEP80



Short Sunderland Mk.III, Blackburn built, EK591/2-U, No.422 (RCAF) Sqn. RAF, based at Castle Archdale, Northern Ireland, early to mid 1944. On 10 March, the crew of W/O Morton was sent off to patrol the area where enemy u-boats had been sighted. As the crew had only recently arrived from OTU, Morton was being screened by F/L Butler who was at the control of EK591 when U-625 submarine was spotted. The attack was successful, the submarine sunk and the crew abandoned ship, getting into one large and several small dinghies – never to be seen again, swallowed by the merciless North Atlantic. Even though the Sunderland had been hit below its waterline by a shell, the main hole was easily patched and numerous smaller holes were dealt with by the means of the crew's rations of chewing gum. In recognition of their achievement, each of the crew received a 24-pack of gum from Wrigley's.

Short Sunderland Mk.III, vyrobený firmou Blackburn, EK591/2-U, No.422 (RCAF) Sqn. RAF, základna Castle Archdale, Severní Irsko, první polovina roku 1944. Osádka W/O Mortona, čerstvě doraziví z 422.OTU, byla vyslána 10. března 1944 na bojový let pod kontrolním vedením F/L S.W. Butlera. Ten pilotoval EK591 ve chvíli, kdy byla spatřena ponorka U-625. Útok na ponorku byl úspěšný. Ponorka byla potopena. Osádka ponorky nasedla do záchranných člunů. Zatím co osádku ponorky pohltil severní Atlantik, EK591 se šťastně vrátil zpět do Castle Archdale i přes poškození flakem ve člunové části trupu. Velké otvory se podařilo ucpat snadno a malé otvory po střepinách nakonec osádka zalepila před přistáním žvýkací gumou. Každá člen osádky byl nakonec odměněn, mimo jiné, 24 kusovým balením žvýkaček Wrigley's.

Scheme A



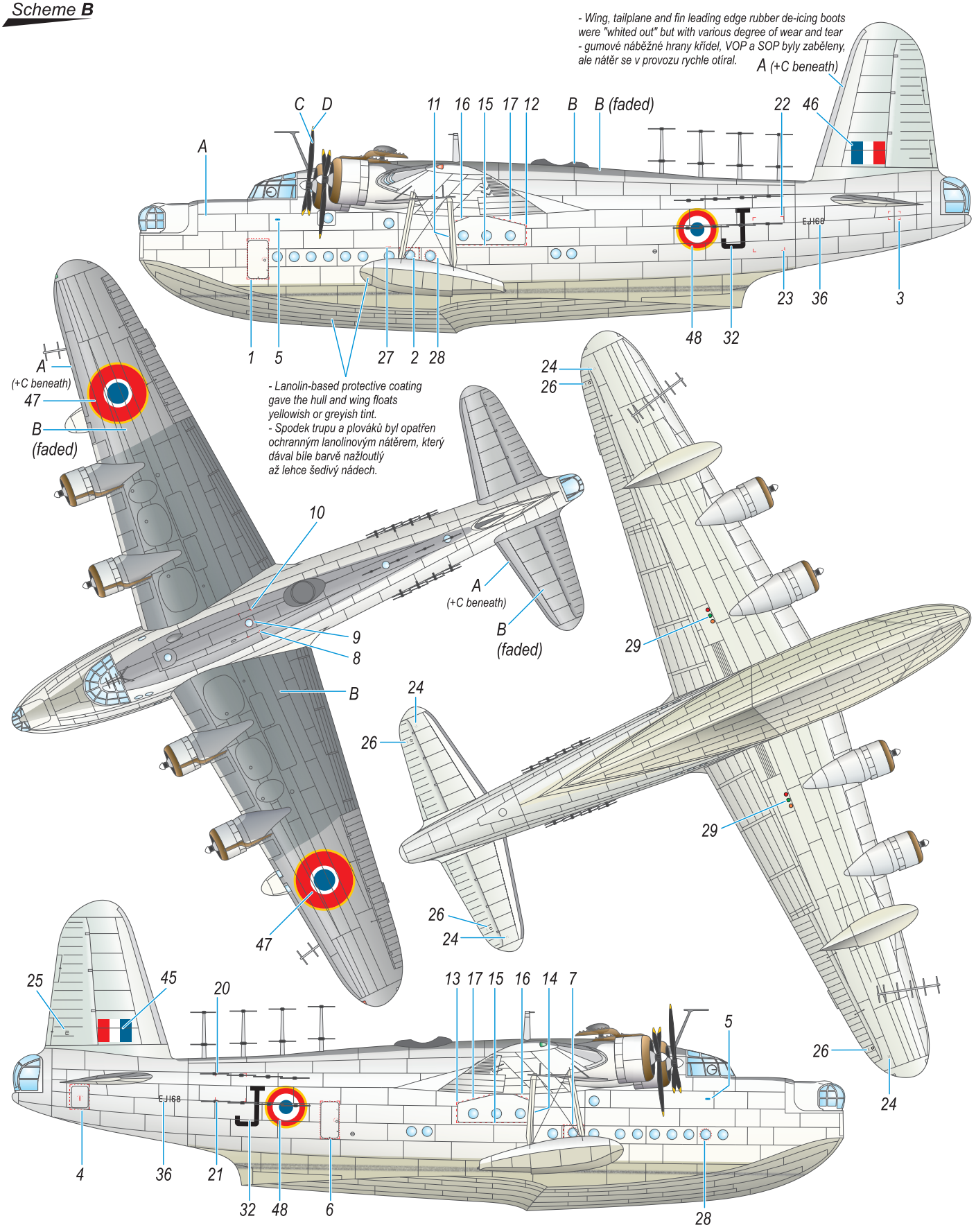
A	Flat White matná bílá H11 / C62	B	Extra Dark Sea Grey velmi tmavá mořská šedá H / C333	C	Flat Black matná černá H12 / C33	D	Yellow žlutá H / C329

SH72304 Sunderland Mk.III

Short Sunderland Mk.III, EJ168/J, No.343 (French) Sqn. RAF, Dakar, Africa, 1944.
Sunderlands of this unit usually flew with their dorsal turret removed, machine J was no exception. However, the turret fairing panels were retained.

Short Sunderland Mk.III, EJ168/J, No.343 (French) Sqn. RAF, základna Dakar, Afrika, 1944. Letoun létal, jako jiné stroje této jednotky, bez horní střelecké věže. Aerodynamické zaplechování věže přitom nebylo odstraněno.

Scheme B

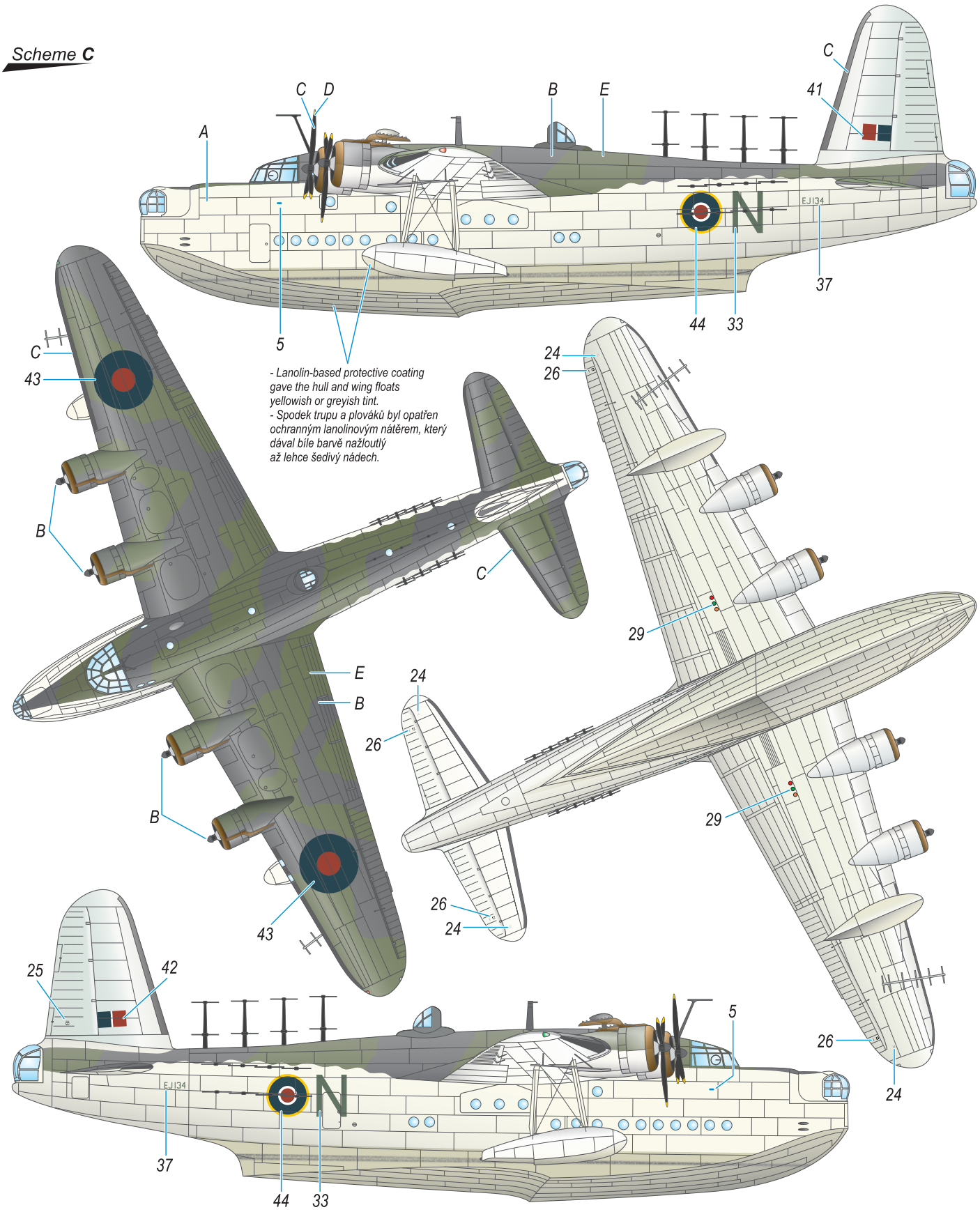


SH72304 Sunderland Mk.III

Short Sunderland Mk.III, EJ134/N, No.461 Sqn. (RAAF) RAF, Pembroke Dock, Wales, 1943. On 13 February 1943, N for 'Nuts' was attacked by two Ju 88s and two Fw 190s and was lucky to get away only being damaged. On 2 June 1943, the machine found itself under another attack from V/KG40 Junkers Ju 88s and although having shot down three of them, it did not make it home in one piece. Sgt.E.C.B. Miles had been killed during the combat and the struck Sunderland made a crash landing off Praa Sands in South Cornwall. The crew of F/L Colin B. Walker escaped from the machine and got to the shore. Abandoned EJ134 was eventually destroyed in a storm on the beach of Praa Sands.

Short Sunderland Mk.III, EJ134/N, No.461 Sqn. (RAAF) RAF, základna Pembroke Dock, Wales, 1943. N-'Nuts' vyvázl 13. února 1943 ze souboje s dvěma Junkersy Ju 88 a dvěma Focke Wulfy Fw 190 s poškozením. 2. června 1943 byl napaden osmi Junkersy Ju 88 od V/KG 40. V souboji tři z nich sestřelil. Na palubě EJ134 padl Sgt. E.C.B. Miles. Poškozený EJ134 nouzově přistál u pobřeží Praa Sands v Jižním Cornwallu. Osádka F/L Colina B. Walkera stroj opustila a uchýlila se na pevninu. Opuštěný EJ134 byl na pláži Praa Sands zničen bouří.

Scheme C



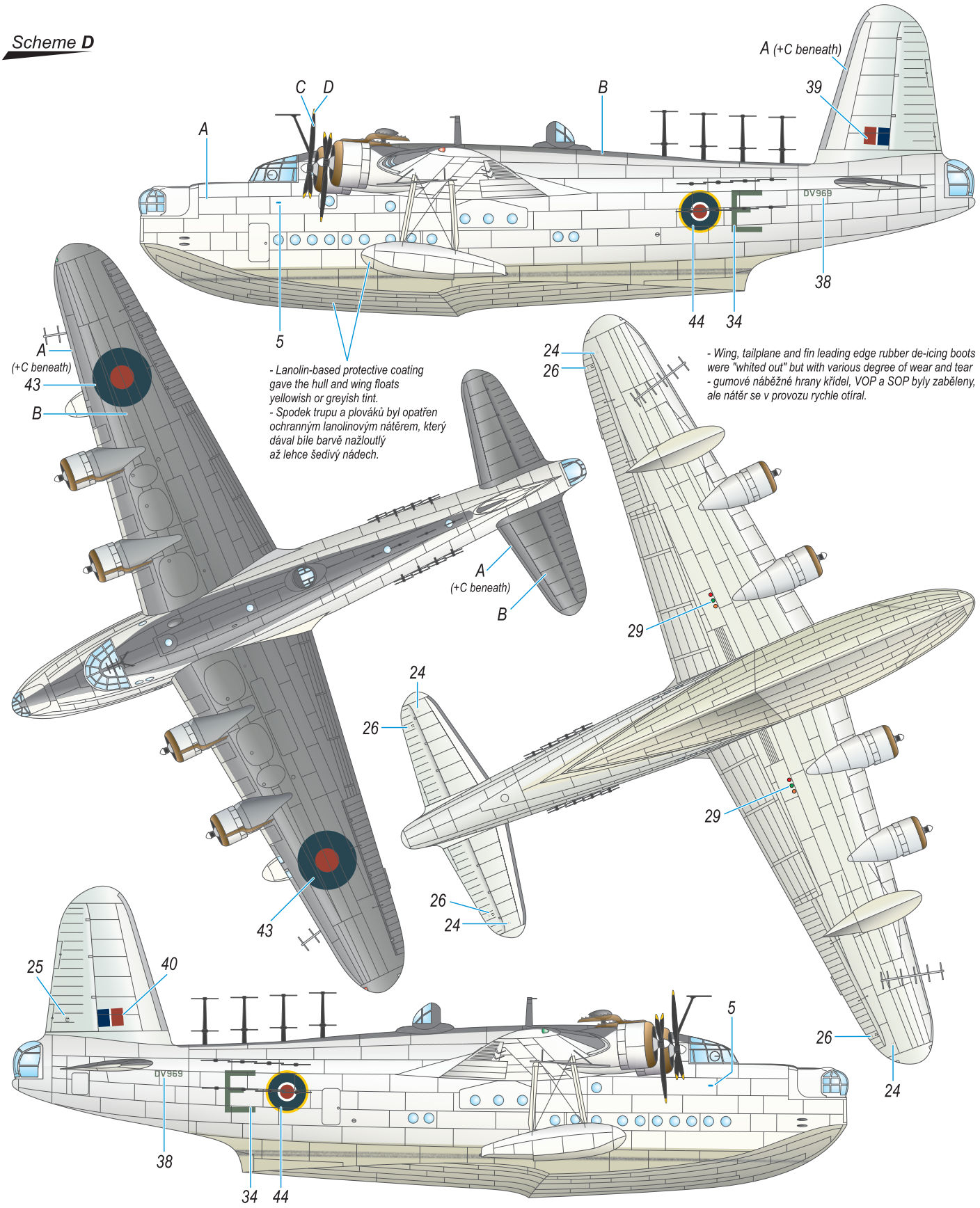
A	Flat White matná bílá H11 / C62	B	Extra Dark Sea Grey velmi tmavá mořská šedá H / C333	C	Flat Black matná černá H12 / C33	D	Yellow žlutá H / C329	E	Dark Slate Grey tmavá břidlicová šedá H78 / C38 50% H32 / C40 50%

SH72304 Sunderland Mk.III

Short Sunderland Mk.III, DV969/E, No.10 Sqn. RAAF, Pembroke, Wales, spring 1943. On 31 May 1943, the crew of F/O Mainprice managed to sink German U-boat U-563. A month later, on 27 July 1943, the machine was engaged in a fight against four Ju 88s and survived despite being hit at least 20 times by enemy fire. Eventually, her luck had ran out on 21 September 1943 when DV969 was outnumbered by Ju 88s of V/KG40 and was shot down. The entire crew of F/O A. G. Jennison, F/O A. N. Buckland, P/O A. W. Morphett Gunson, F/O A. L. Coomes, A/Sgt J. T. Law, A/Sgt S. Ch. E. Leech, F/Sgt N. D. Kerr Swinton, F/Sgt L. E. Waddington, Sgt J. D. T. Daley, F/Sgt D. Harris, F/Sgt C. S. Cameron perished in the Bay of Biscay.

Short Sunderland Mk.III, DV969/E, No.10 Sqn. RAAF, základna Pembroke, Wales, jaro 1943. 31. května 1943 tento stroj s osádkou vedenou F/O Mainpricem potopil ponorku U-563. 27. července 1943 se ubránil útoku čtyř Junkersů Ju 88, byl přitom poškozen 20 zásahy. Štěstí tento Sunderland opustilo 21. září 1943, kdy byl sestřelen přesilou Junkersů Ju 88 od V/KG 40. Celá osádka F/O A. G. Jennison, F/O A. N. Buckland, P/O A. W. Morphett Gunson, F/O A. L. Coomes, A/Sgt J. T. Law, A/Sgt S. Ch. E. Leech, F/Sgt N. D. Kerr Swinton, F/Sgt L. E. Waddington, Sgt J. D. T. Daley, F/Sgt D. Harris, F/Sgt C. S. Cameron zahynula v Biskajském zálivu.

Scheme D



A	Flat White matná bílá H11 / C62	B	Extra Dark Sea Grey velmi tmavá mořská šedá H / C333	C	Flat Black matná černá H12 / C33	D	Yellow žlutá H / C329

SH72304 Sunderland Mk.III