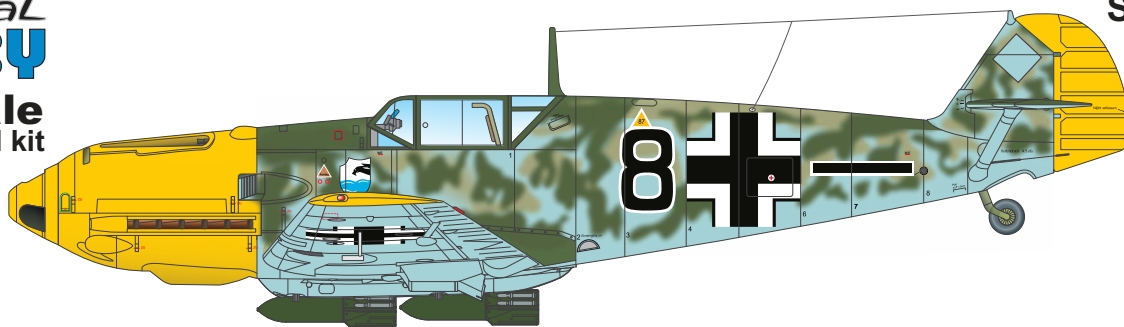




Messerschmitt Bf 109E-1/B 'Hit and Run Raiders'



In the 1930s, a real revolution was introduced to the aviation by the means of an all metal, cantilever low wing monoplane design. At first, multi engine bomber machines appeared, outperforming fighter biplanes of the time not just by the speed they were capable of. Therefore, the aviation designers had to start thinking of a similar concept for their new type of a fighter plane, too. At almost the same time, the first fighter monoplanes began to emerge from the drawing boards in the Soviet Union, France, UK, USA as well as in Germany, where the Nazis came to power and feverish started to arm and to build the new Luftwaffe. In 1936, the Messerschmitt Bf 109 was accepted to the military as a new standard fighter plane. The initial versions of the Bf 109 A, B, C and D were fitted with various versions of the Jumo 210 powerplant and their early flight tests and baptism of fire took place in Spain during the Civil War. Until 1938 when such aircraft as the Spitfire, MS-406 and the P-36 Hawk entered the military service, the 109s had arguably remained the top fighter planes in the world. But by then, Hawker Hurricanes had already seen a year of active duty. Compared with all these mentioned types, however, the early Jumo-powered Bf 109s had the disadvantage of lighter armament and less powerful engines.

Both the Luftwaffe and the Messerschmitt management were well aware of the disadvantage and decided to mate the existing airframe with a new type of powerplant. The V-13 and V-14 prototypes were test flown having been fitted with a DB 600 engine. The new type of engine also brought a new, three-blade propeller, the wing had been reworked as well as the cooling systems, the nose section received a new, more streamlined shape. The new engines proved unreliable and not fit for service, so the military focused on the more modern DB 601 powerplant instead. The first test flights of prototypes V-13, V-15 and V-15a promptly showed that what an excellent fighter aircraft had been born. The plane was designated the Bf 109E and became colloquially known as the Emil. Following the E-0 test and evaluation batch, the production started in December 1938, giving simultaneously, almost right from the start, two different versions. The Bf 109E-1 was lightly armed, having just four machine guns, whilst the E-3 featured mixed armament of two machine guns in the fuselage and two 20 mm MG FF cannon carried in the wing. When the war broke out in September 1939, both the early engine-fitted versions and the Emils fought over Poland and Western Europe during so-called Sitzkrieg. Aerial combats against French fighters only brought about even faster transfer of the early machines to training units. In the spring of 1940, the Luftwaffe commenced the attack on Denmark, Norway, France and the Benelux countries equipped only with Emils. Because of well the thought through tactics and excellent performance of the new Bf 109Es and twin-engined Bf 110s, the Luftwaffe enjoyed overwhelming air dominance. Of all west-european fighter machines, only the French Dewoitine D.520 and British Spitfire could match the German Emils. The Attack on the West ended in crushing victory of the Luftwaffe. It was not only until the Battle of Britain that the first serious weak point of the Bf 109E was revealed, ie their rather short legs. The combat experience gained during the war influenced the development of newer versions. The E-4B ground attack version was fitted with a belly bomb rack, while the E-7 to have been fitted with a rack capable of carrying a fuel tank. These two new features begun to be installed retrospectively to earlier-built machines too. Some of the Emils got more powerful DB 601N engine with the GM-1 nitrous oxide injection system and could be recognized by having a letter N or Z added to their type number. A version adapted for harsh tropical conditions was also introduced into production. Produced, or at least tested was a small number of the E-5, E-6, E-8 and E-9 versions, the 109 E was also used as a basis for a long-span wing, carrier borne Bf 109T type. The production of the Bf 109E lasted until the autumn of 1941 when they begun to be replaced with a reworked and more modern Bf 109F type. The Bf 109E, however, enjoyed aerial supremacy for a rather long time. They were nothing less than a very dangerous opponent to the Allied pilots both in Africa, over Malta and over the Eastern Front too and remained so well until 1942 when the more modern 109 versions and also the Fw190 gradually begun to take their place. A fighting machine capable of such performance as was the Emil attracted militaries of other countries too. The Bf 109 E-3a export version was introduced to the air forces of Switzerland, Spain, Yugoslavia, Rumania as well as Bulgaria. Testing examples were bought and flown by Italy, Japan and the Soviet Union. During the course of the war, more surplus ex-Luftwaffe machines were delivered to Slovakia, Croatia and Rumania.

Specifications and performance of the Bf 109E-4: span: 9.90 m, length: 8.76 m, max. speed: 560 km/h at 4,440 m, range: 560 km, ceiling: 11,000 m, armament: 2x MG 17 7.9 mm machine guns, 2x 20 mm MG FF cannon.



Třicátá léta minulého století přinesla do letectví revoluci. Tou revoluční změnou byl celokovový samonosný dolnoplošník. Nejprve se objevily vícemotorové stroje. Rychlostí a dalšími výkony deklasovaly nové bombardéry stíhací letouny té doby, dvouplošníky. A proto se konstruktéři zaměřili na nový typ stíhacího letounu. V prakticky stejné době byly první stíhací dolnoplošníky zkonstruovány v SSSR, ve Francii, Velké Británii, USA a Německu. V Německu, kde se k moci dostali v roce 1933 nacisté, se horečně zbrojilo a budovala se nová Luftwaffe. V roce 1936 byl jako nový standardní stíhací letoun vybrán Messerschmitt Bf 109. První verze Bf 109 A, B, C a D byly poháněny různými verzemi motoru Jumo 210. Otestovány a bojově nasazeny byly ve Španělsku. Až do roku 1938 šlo o patrně nejlepší stíhačky na světě. V tomto roce byly do bojové služby zařazeny letouny jako Spitfire, MS-406 či P-36 Hawk. Hawker Hurricane byl již rok v činné službě. Proti těmto letounům byly Bf 109 s motory Jumo handicapovány nízkým výkonem motorů a slabou výzbrojí.

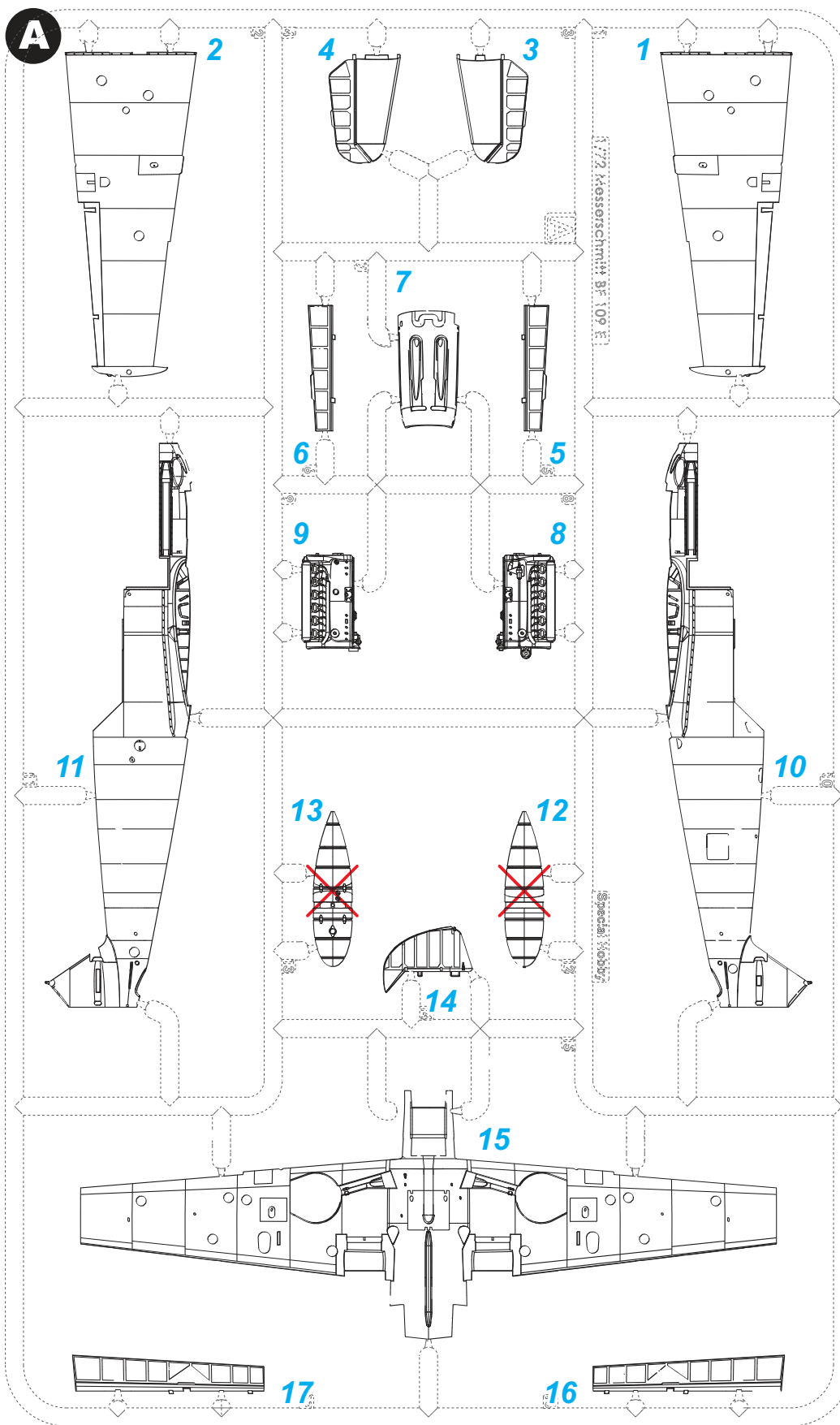
Těto skutečnosti si byly velení Luftwaffe a vedení firmy Messerschmitt vědomy. Bf 109 měl dostat nový motor. Bf 109E-1 byla lehce vyzbrojená verze se čtyřmi kulomety, Bf 109E-3 byla těžce vyzbrojená verze, která měla místo křídelních kulometů namontovány kanóny MG FF ráže 20 mm. Od září 1939 bojovaly nové Bf 109E, společně se staršími verzemi Bf 109, nad Polskem a západní Evropou při tzv. válce v sedě. Soubor s francouzskými stíhačkami přesun Bf 109 s motory Jumo k výcviku. Na jaře 1940 zahájila Luftwaffe útok na Dánsko, Norsko a země Beneluxu a Francii jen s Bf 109E. Luftwaffe měla díky propracované taktice a skvělým výkonům svých Bf 109E (a dvumotorových Bf 110) drtivou převahu. Ze západoevropských letounů se Bf 109E vyrovnávaly výkonově jen francouzské Dewoitine D.520 a britské Spitfire Mk.I. Útok na západ skončil drtivým vítězstvím Luftwaffe. Až Bitva o Británii odhalila slabinu prvních verzí Bf 109E, krátký dolet. Válečné zkušenosti se promítly do vývoje dalších verzí. Bitevní varianta E-4B byla vybavena podtrupovým pumovým závěsníkem. Verze E-7 jako první dostala pod trup závěsník na přídavnou nádrž. Na tento standart se zpětně upravovaly i starší verze. Do části strojů byl montován výkonější motor DB 601N nebo vstříkovací oxidu dusného GM-1. Tyto verze dostaly za označení verze lomítko a písmeno N nebo Z. Vyráběna byla i tropikalizovaná verze. V malém množství byly vyráběny nebo alespoň testovány verze E-5, E-6, E-8a E-9. Bf 109E se stal také základem námořní verze Bf 109T s křídlem o velkém rozpětí. Výroba verzí Bf 109E běžela až do podzimu 1941. Pak byly ve výrobě nahrazeny další velmi přepracovanou verzí, Messerschmittem Bf 109F.

Výkonovou převahu si Bf 109E udržely poměrně dlouho. V Africe, nad Maltou i na Východní frontě představovaly nebezpečného protivníka až do roku 1942. Postupně je ve výzbroji Luftwaffe nahrazovaly jak novější verze stodevíték, tak nově Fw 190.

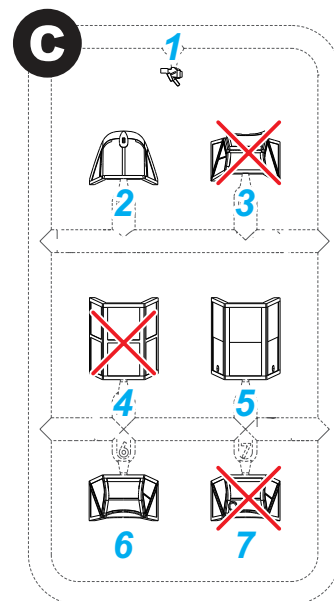
Tak výkony letoun, jako byl Bf 109E přilákal také zahraniční zájemce. Exportní stroje Bf 109E-3 a zakoupilo a zařadilo do výzbroje Španělsko, Švýcarsko, Jugoslávie, Rumunsko, Bulharsko. Testovací kusy zakoupily Itálie, Japonsko a Sovětský svaz. V průběhu války další stroje ze zásob Luftwaffe dostalo Slovensko, Chorvatsko a Rumunsko.

TTD Bf 109E-4: rozpětí: 9,90m, délka: 8,76 m, max. rychlost: 560 km/h ve výšce 4 440 m, dolet: 560 km, dostup: 11 000 m, výzbroj: 2x kulomet MG 17 7,9 mm, 2x kanón MG FF ráže 20.

Parts List

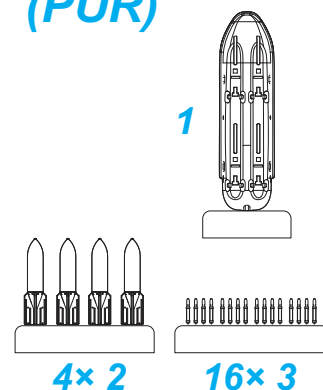


Clear Parts



1 X Not used

PUR Parts (PUR)



Barvy GUNZE/ GUNZE Colour No.

A	Gray RLM02 / šedá	H70/C60
B	Black Gray / černošedá	H416/C116
C	Metal / barva kovu	H8/C8
D	Burnt Iron / opálený kov	H76/C61
E	Black / černá	H12/C33
F	Gloss Black / lesklá černá	H2/C2
G	Tyre black / barva pneu	H77/C137
H	Dark Iron / tmavý kov	MC214
I	Leather / hnědočervená	H47/C41
J	Black Green / černozeleňá	H65/C18
	Dark Green RLM71 / tm. zelená	H64/C17

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



NATŘÍT
COLOUR
FARBEN
PEINDRE

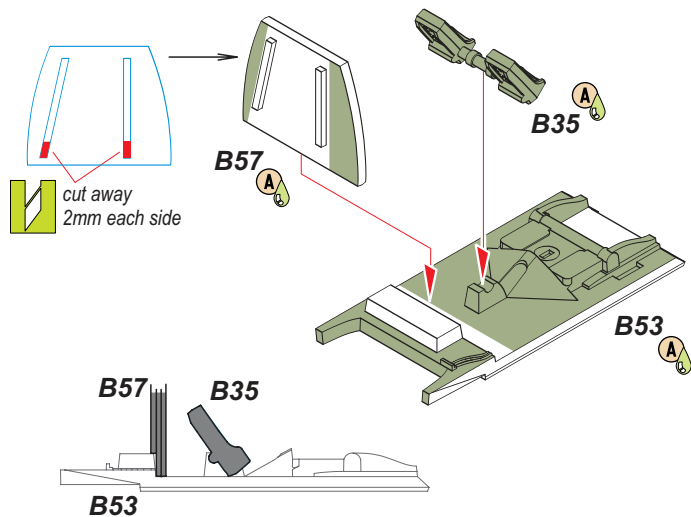
B

The puzzle pieces are arranged in a 6x3 grid. The components and their corresponding numbers are as follows:

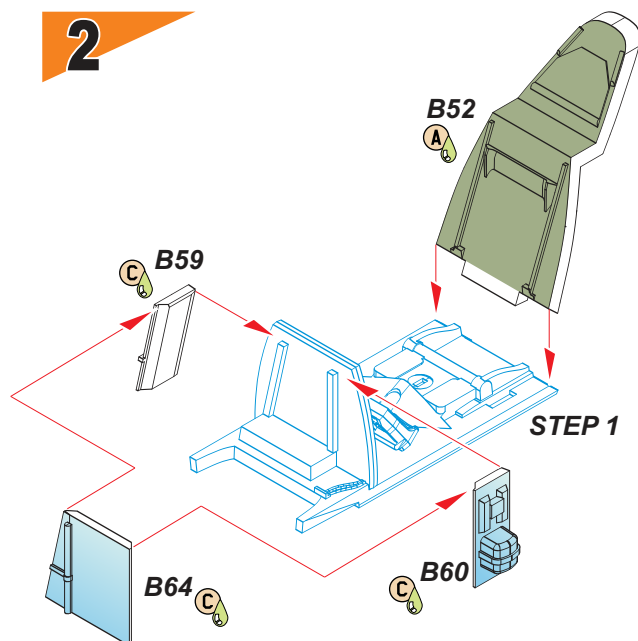
- Row 1:** Piece 9 (top left), Piece 8 (top middle), Piece 3 (top right, crossed out), Piece 7 (top right), Piece 5 (top right), Piece 6 (top right), Piece 5 (top right), Piece 4 (top right, crossed out), Piece 3 (top right, crossed out), Piece 2 (top right), Piece 1 (top right).
- Row 2:** Piece 16 (middle left), Piece 12 (middle middle), Piece 13 (middle middle), Piece 12 (middle right), Piece 11 (middle right), Piece 10 (middle right).
- Row 3:** Piece 17 (bottom left), Piece 15 (bottom middle), Piece 14 (bottom middle), Piece 18 (bottom right), Piece 19 (bottom right).
- Row 4:** Piece 22 (middle left), Piece 21 (middle middle), Piece 20 (middle right), Piece 23 (middle right), Piece 24 (middle right), Piece 23 (middle right).
- Row 5:** Piece 23 (bottom left), Piece 27 (bottom middle, crossed out), Piece 28 (bottom middle), Piece 26 (bottom right, crossed out), Piece 25 (bottom right).
- Row 6:** Piece 29 (middle left), Piece 30 (middle middle), Piece 32 (middle right, crossed out), Piece 30 (middle right), Piece 31 (middle right), Piece 30 (middle right).
- Row 7:** Piece 33 (bottom left), Piece 34 (bottom middle), Piece 35 (bottom right), Piece 36 (bottom right), Piece 37 (bottom right), Piece 38 (bottom right).
- Row 8:** Piece 41 (middle left), Piece 40 (middle middle), Piece 39 (middle right, crossed out), Piece 47 (middle right), Piece 46 (middle right), Piece 45 (middle right, crossed out), Piece 44 (middle right, crossed out), Piece 43 (middle right).
- Row 9:** Piece 42 (bottom left), Piece 49 (bottom middle), Piece 48 (bottom middle), Piece 53 (bottom right), Piece 52 (bottom right), Piece 51 (bottom right), Piece 50 (bottom right).
- Row 10:** Piece 49 (middle left), Piece 42 (middle middle), Piece 47 (middle right), Piece 46 (middle right), Piece 45 (middle right, crossed out), Piece 44 (middle right, crossed out), Piece 43 (middle right).
- Row 11:** Piece 55 (bottom left), Piece 54 (bottom middle), Piece 53 (bottom middle), Piece 52 (bottom middle), Piece 51 (bottom middle), Piece 50 (bottom middle), Piece 49 (bottom middle).
- Row 12:** Piece 55 (middle left), Piece 54 (middle middle), Piece 53 (middle right), Piece 52 (middle right), Piece 51 (middle right), Piece 50 (middle right), Piece 49 (middle right).
- Row 13:** Piece 65 (bottom left), Piece 64 (bottom middle), Piece 60 (bottom middle), Piece 59 (bottom middle), Piece 62 (bottom right), Piece 63 (bottom right, crossed out), Piece 61 (bottom right), Piece 58 (bottom right).
- Row 14:** Piece 65 (middle left), Piece 64 (middle middle), Piece 60 (middle right), Piece 59 (middle right), Piece 62 (middle right), Piece 63 (middle right, crossed out), Piece 61 (middle right), Piece 58 (middle right).



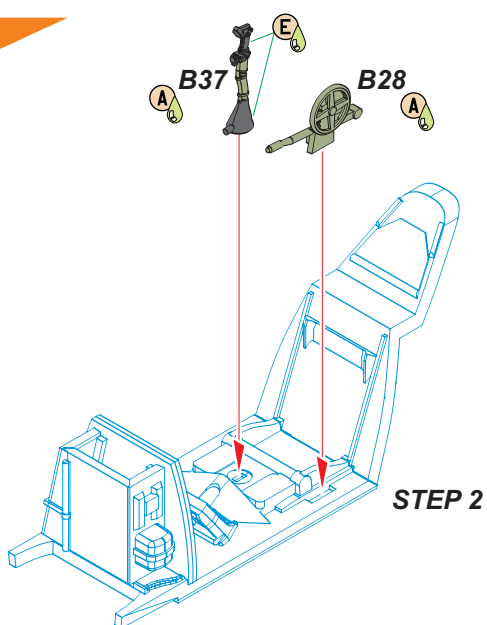
1



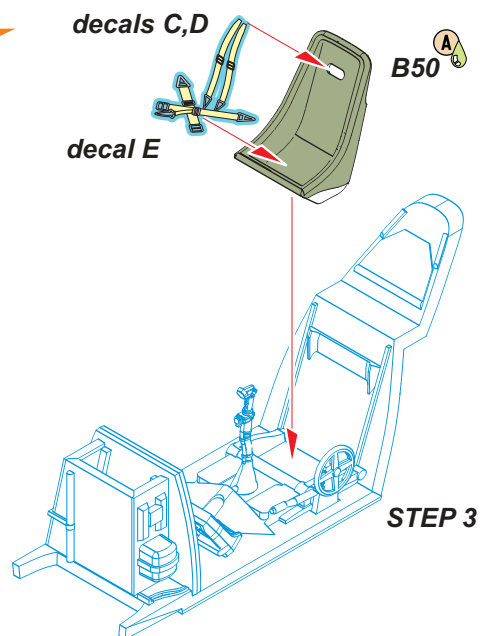
2



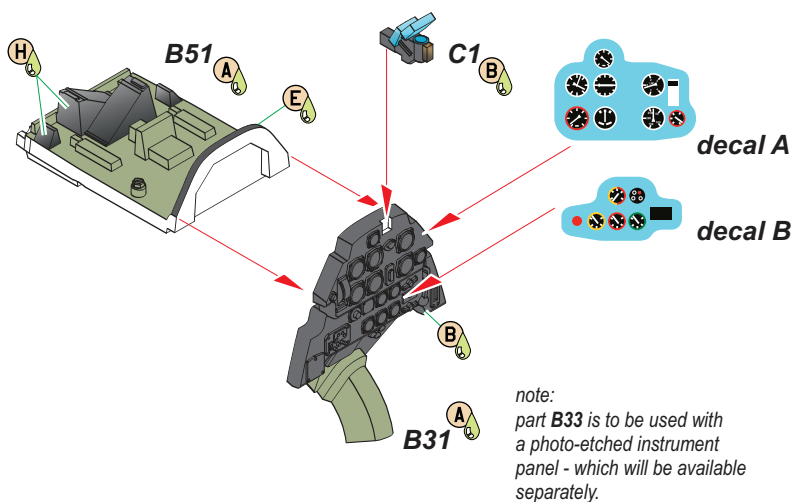
3



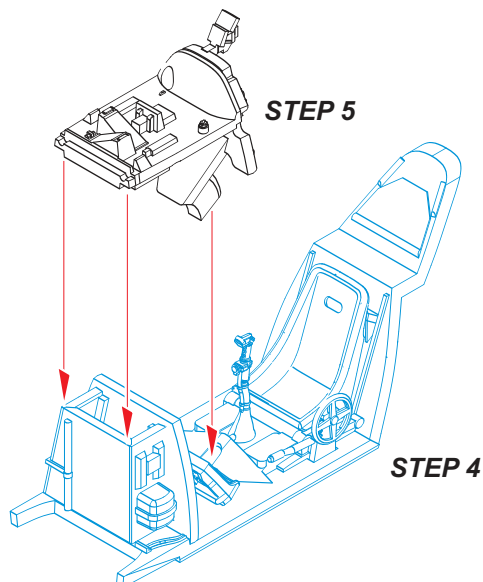
4

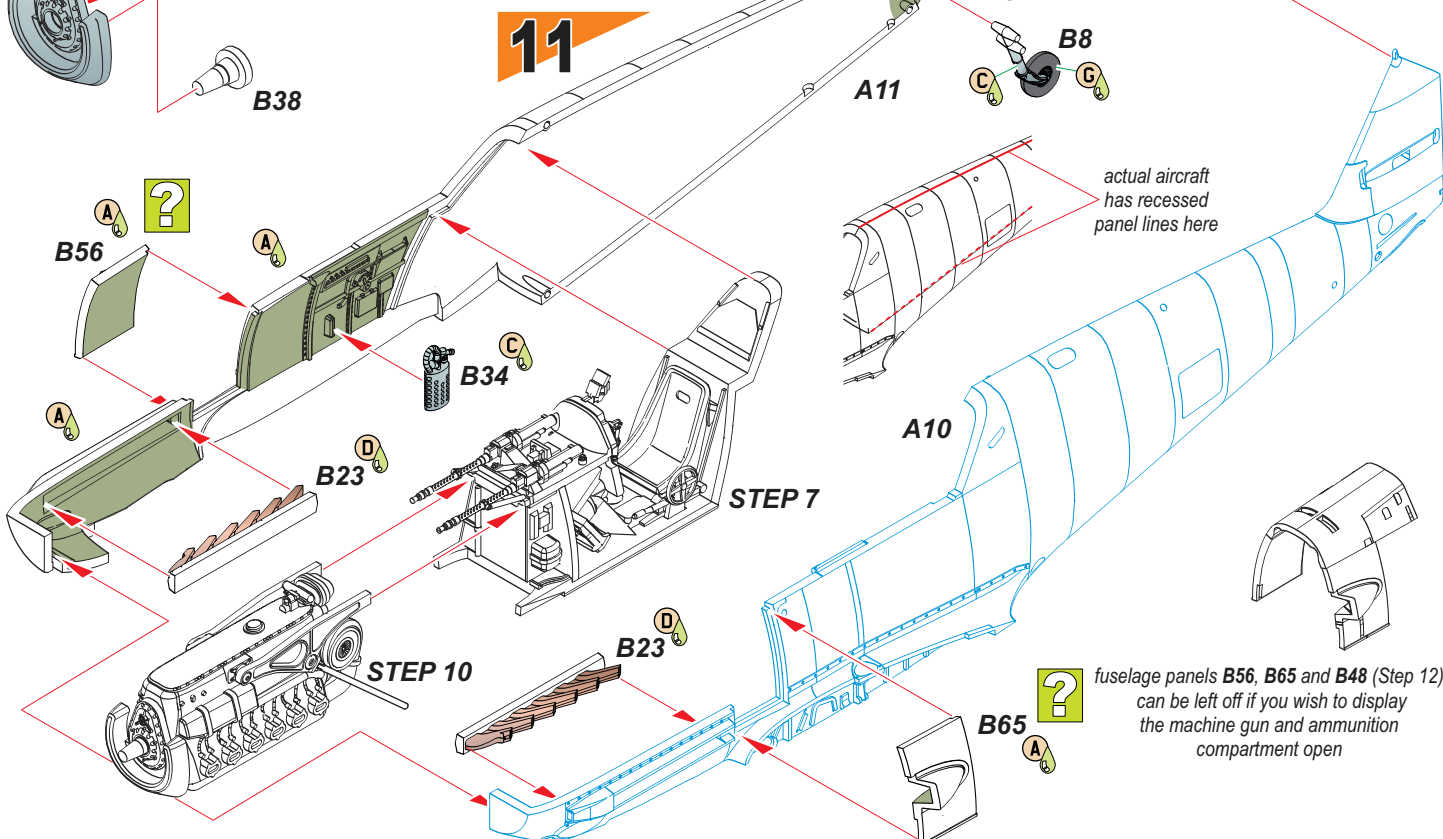
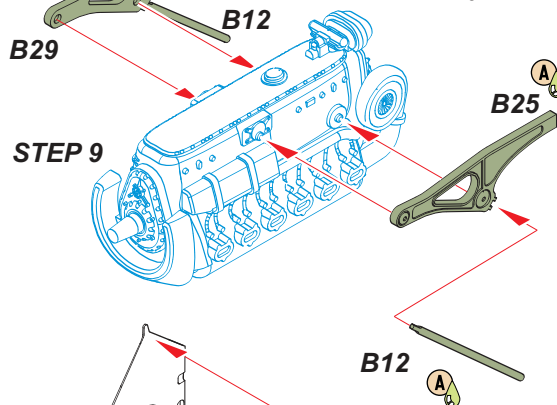
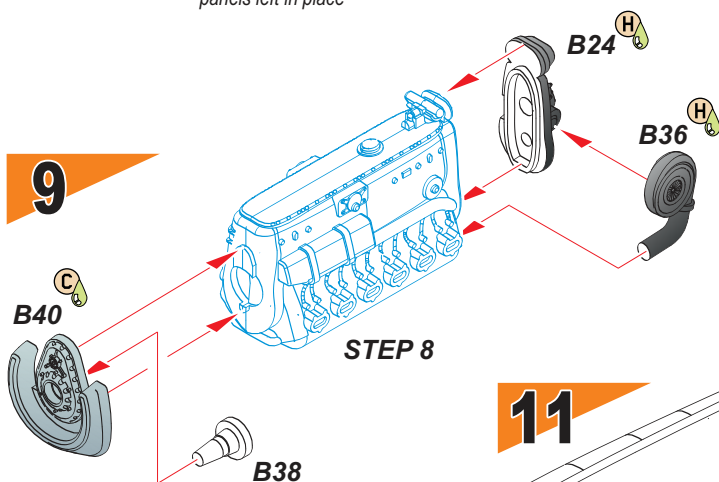
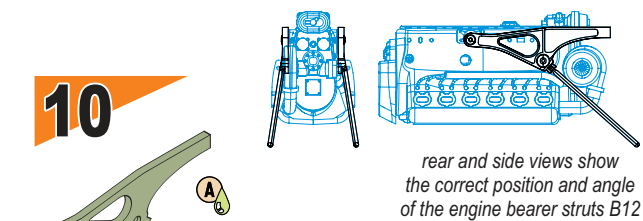
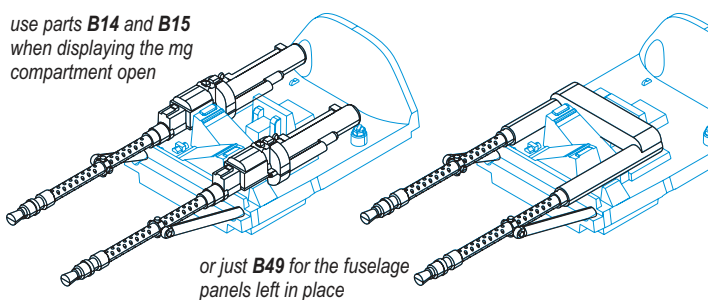
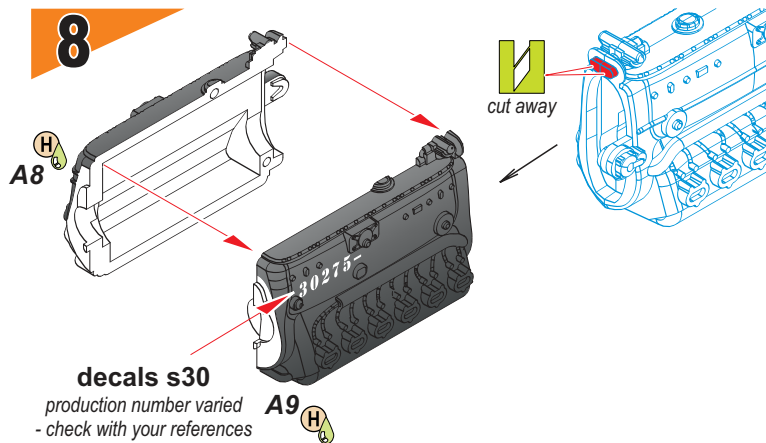
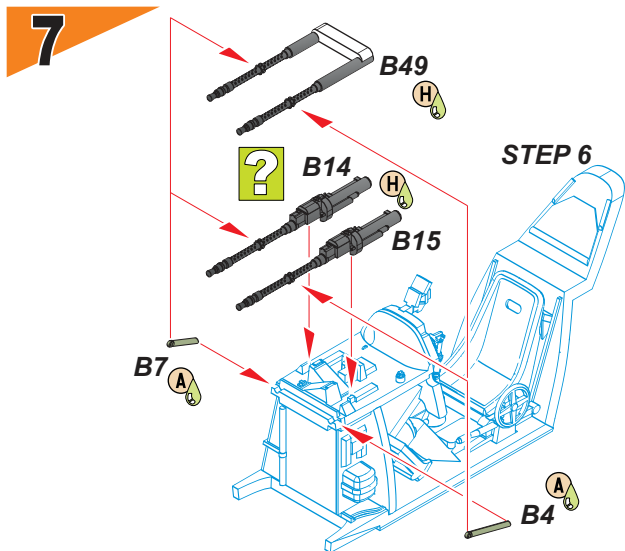


5



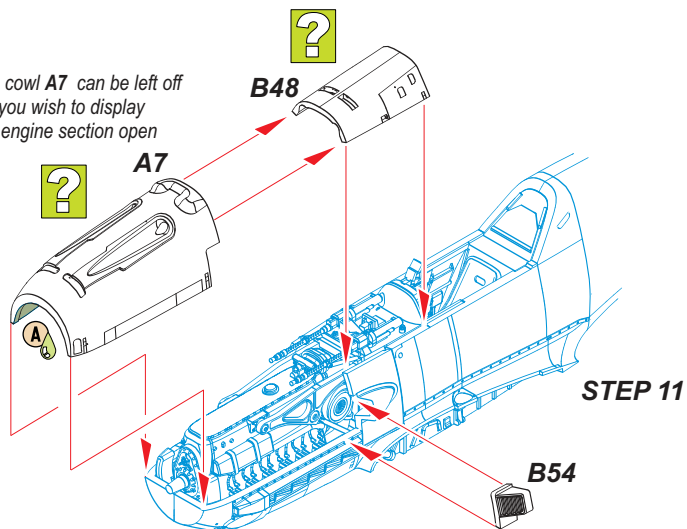
6



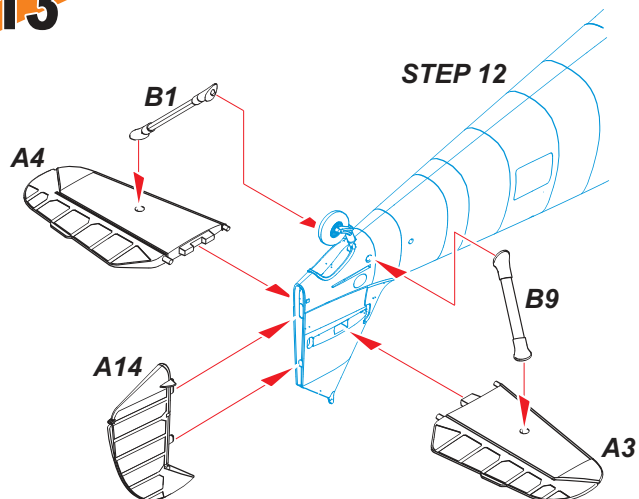


12

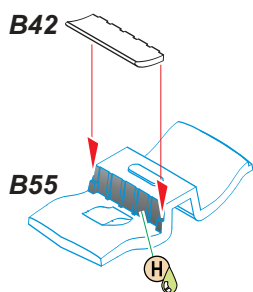
engine cowl A7 can be left off if you wish to display the engine section open



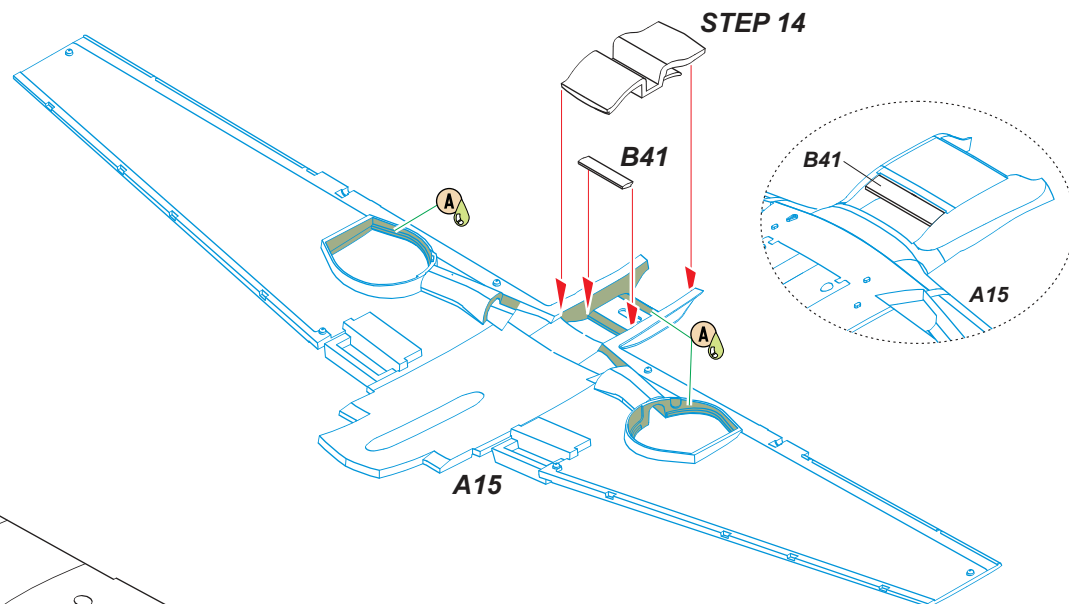
13



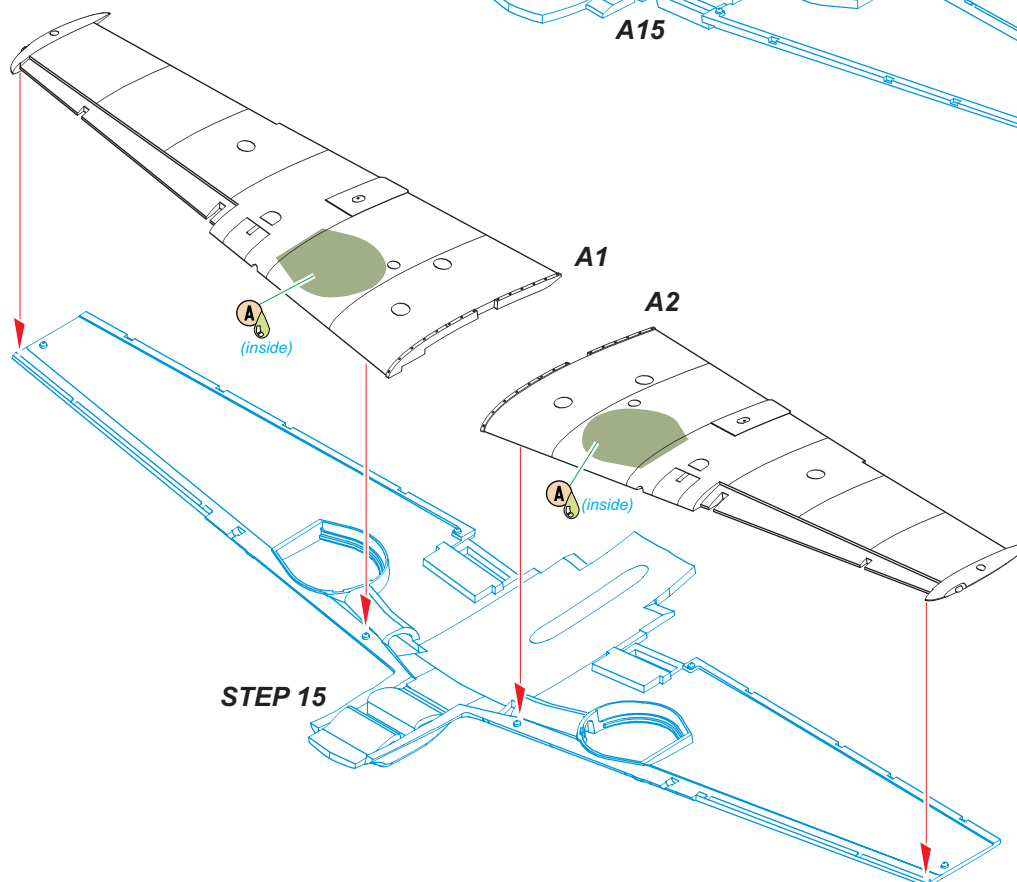
14



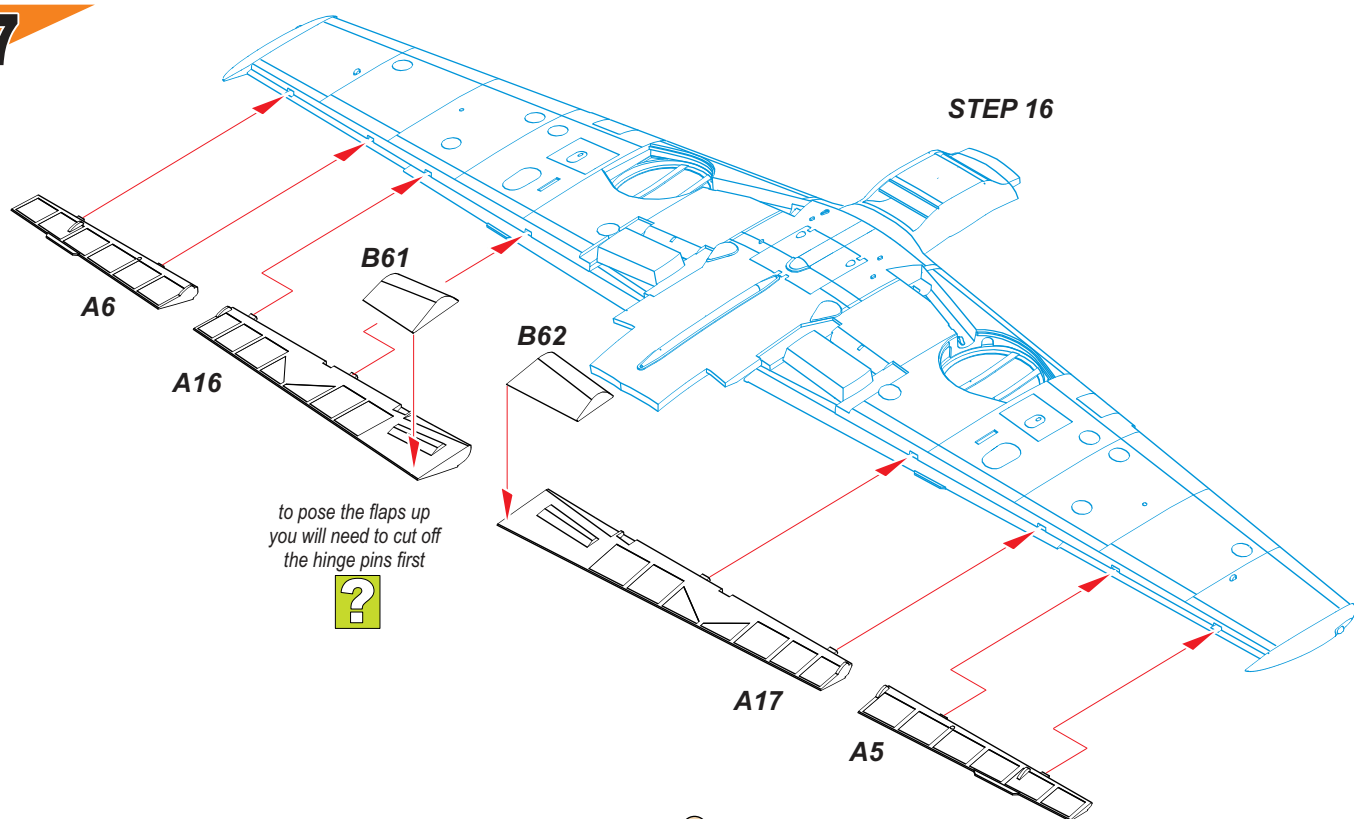
15



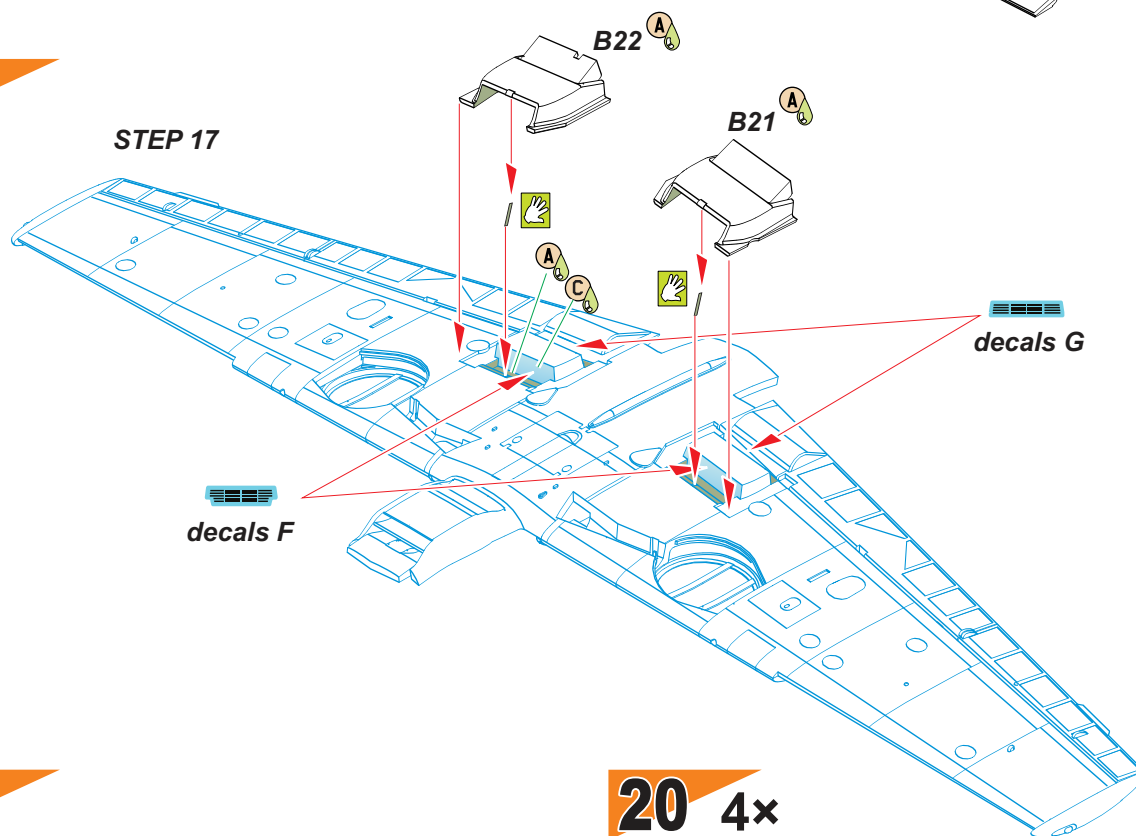
16



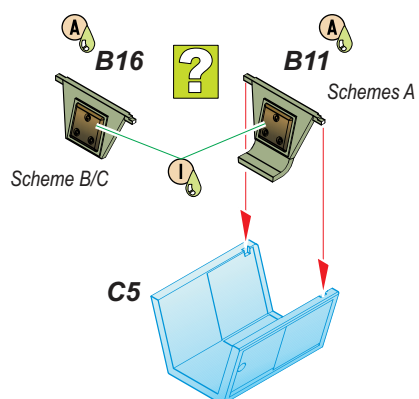
17



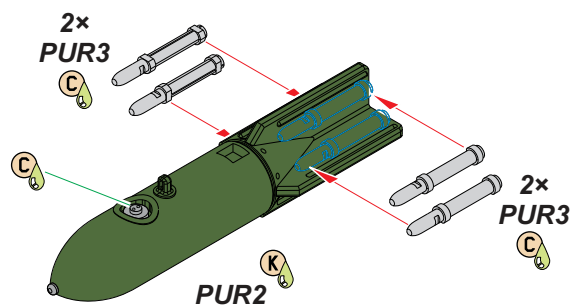
18



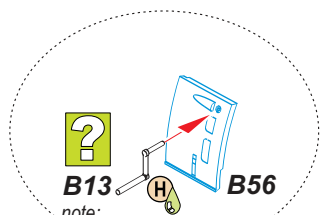
19



20 4x



21



B13

B56

note:

hand crank is optional, glue it in its place only when the model has been finished and painted

canopy can be posed either open or closed

STEP 19

B2

C2



STEP 13

decals s16
not shown in colour
profiles, apply after
paint finish

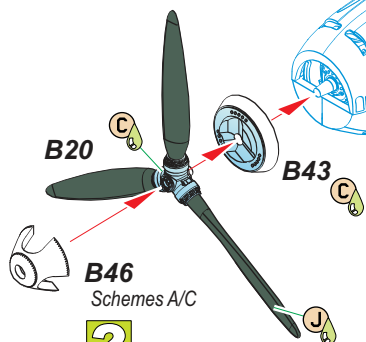
B66

to pose the slots closed,
you will need to cut off
the hinge pins first

STEP 18

22

STEP 21



B20

B43

B46
Schemes A/C



B47
Scheme B

4x STEP 20

B58

PUR1

Undersurface
colour

B17

B18

B30

B6

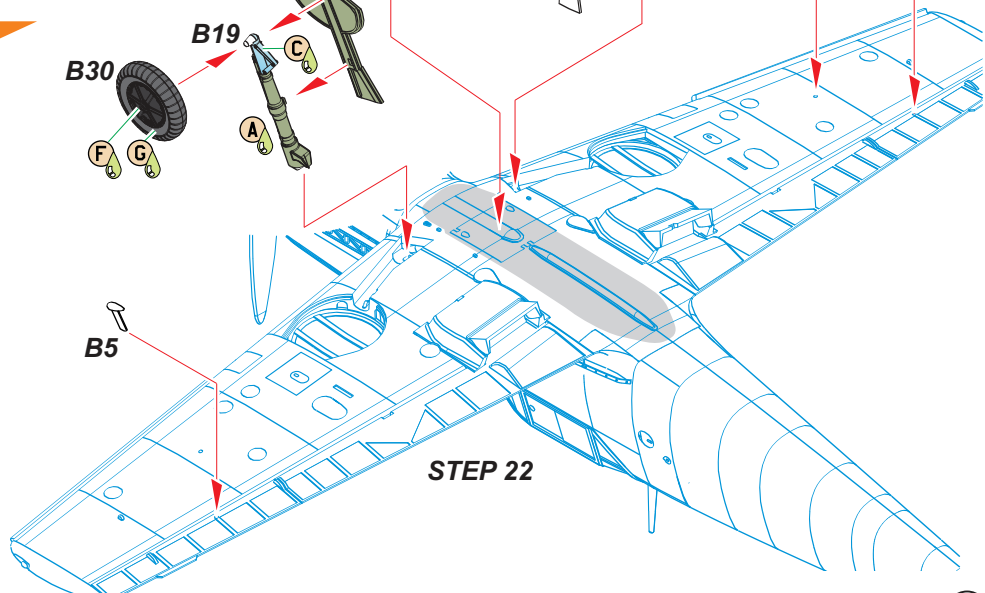
B5

B10

B19

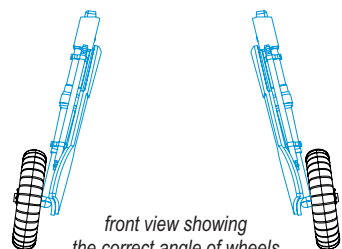
B30

23



B5

STEP 22

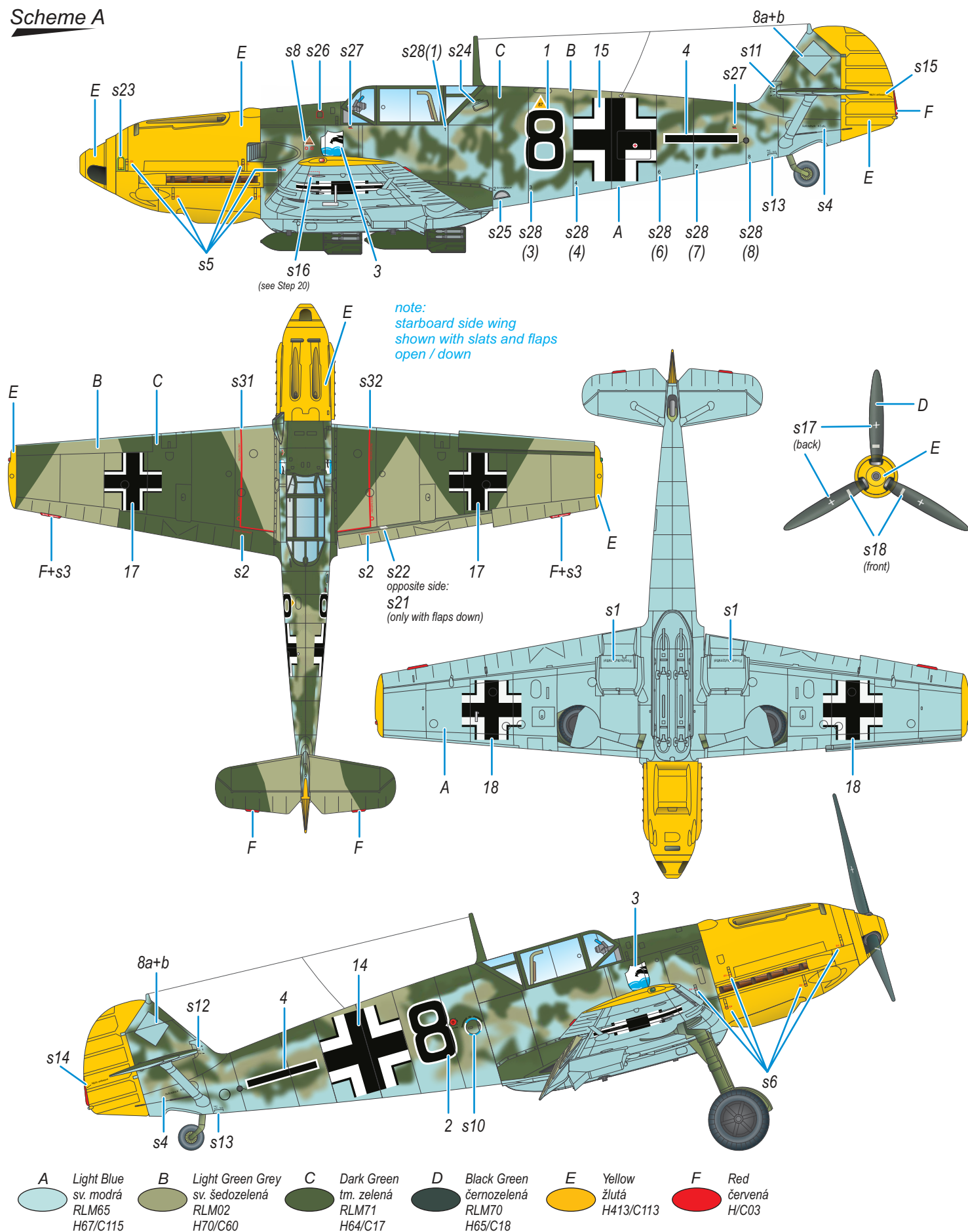


front view showing
the correct angle of wheels
on undercarriage legs

Messerschmitt Bf 109E-1/B, black 8, 5./JG 77, pilot Uffz. Heinrich Brunsmann, Almyros airfield (Feldflugplatz Almirós), mainland Greece, April 1941. On 22 April 1941 the machine was involved in a minor accident. At the time, it was fitted with a bomb rack as the 5./JG77 was a Jabo Staffel) and the later type of the canopy hood taken from a Bf 109E-4.

Messerschmitt Bf 109E-1/B, černá 8, 5./JG 77, pilot Uffz. Heinrich Brunsmann, letiště Almyros (Feldflugplatz Almirós), pevninské Řecko, duben 1941. Letoun utrpěl 22. dubna 1941 lehkou nehodu. V té době byl vybaven závěsníkem na pumy (5./JG77 byla Jabo Staffel) a novějším typem kabiny z verze Bf 109E-4.

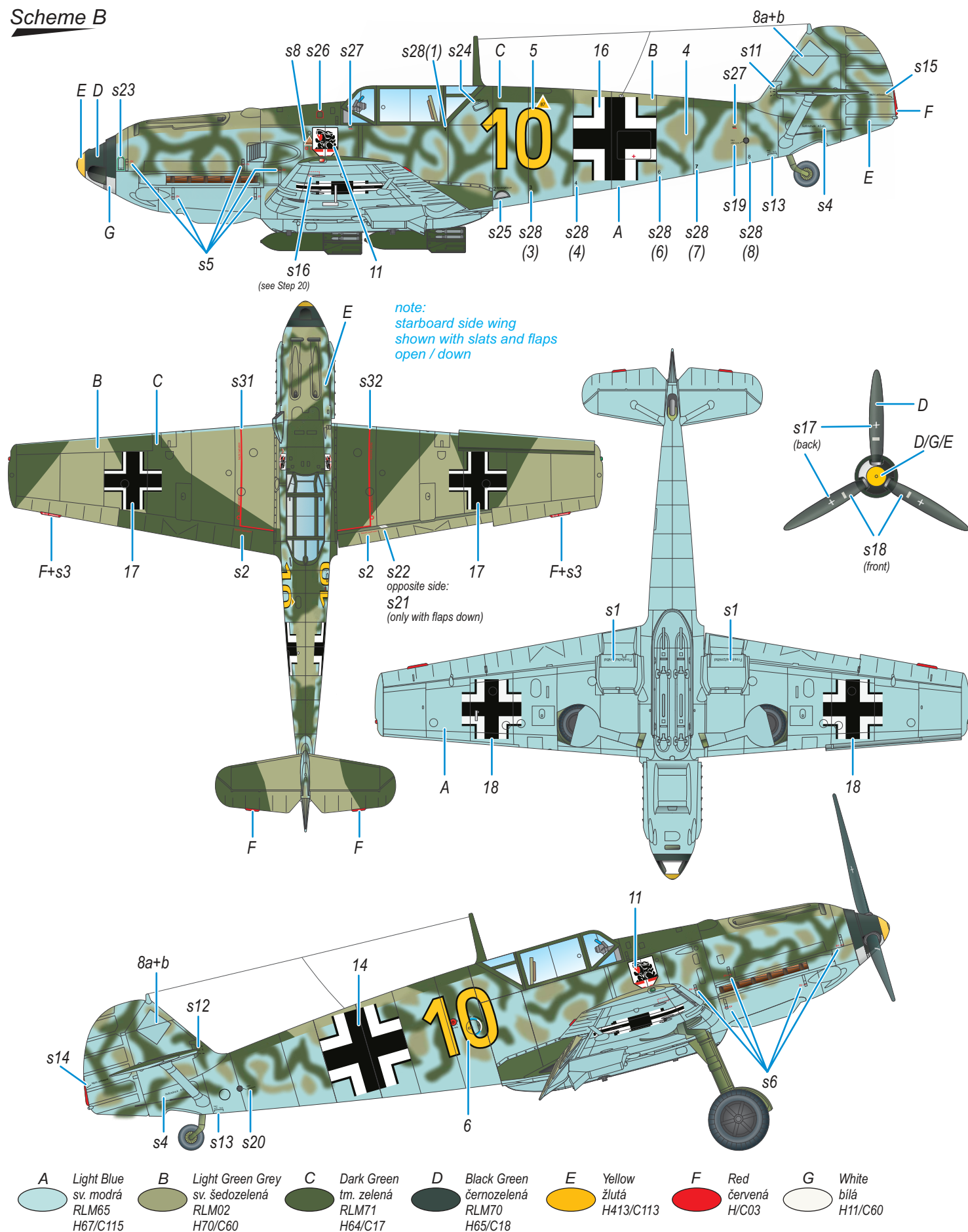
Scheme A



Messerschmitt Bf 109E-1/B, Yellow 10, II./JG 54, occupied France, October 1940.
Fitted with a bomb rack and the later style of the canopy hood of the Bf 109E-4 variety.

Messerschmitt Bf 109E-1/B, žlutá 10, II./JG 54, okupovaná Francie, říjen 1940.
Letoun byl vybaven závěsníkem na pumy a novějším typem kabiny z verze Bf 109E-4.

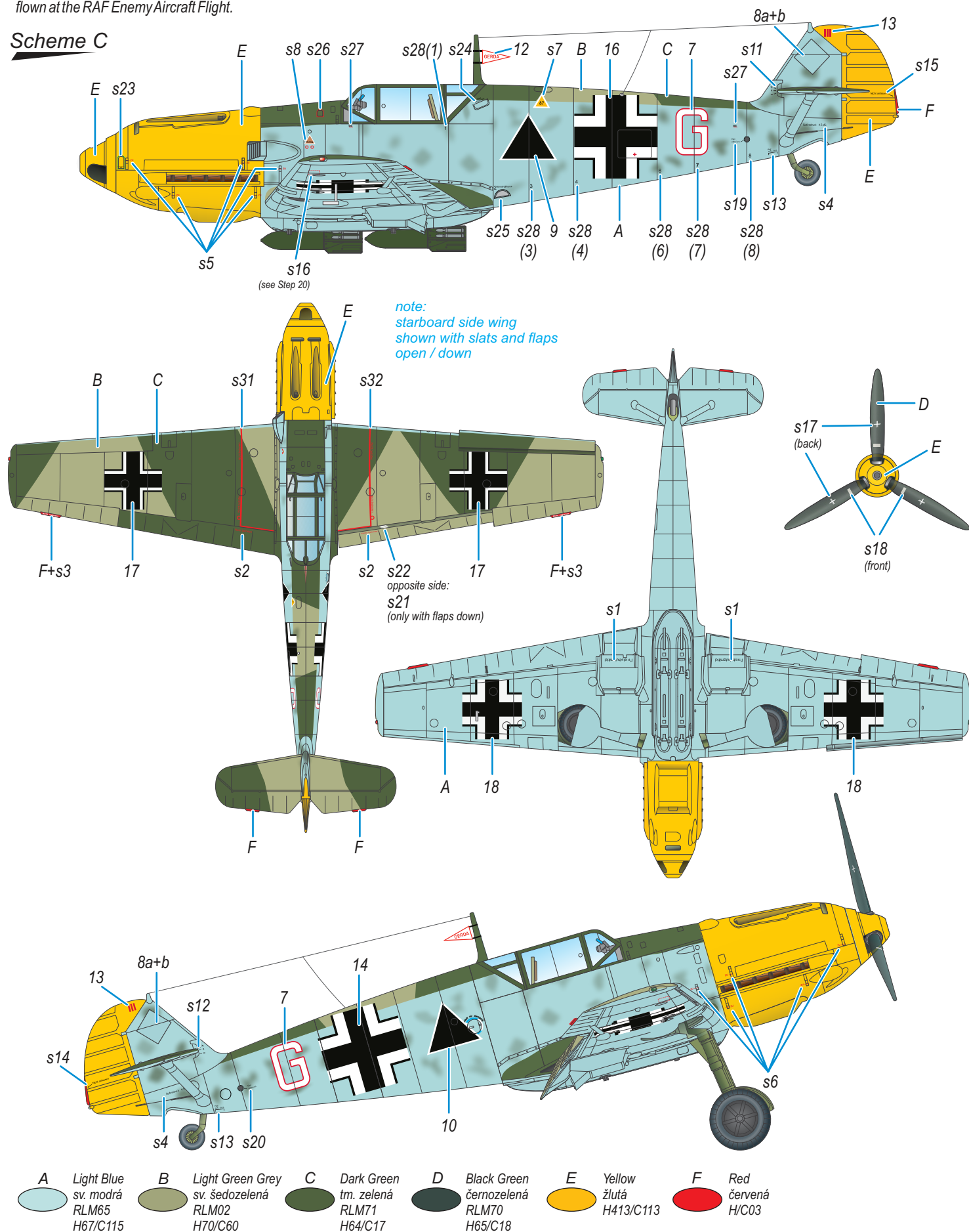
Scheme B



Messerschmitt Bf 109E-1/B, Black triangle+G, 2./JG 27, occupied France, November 1940. This one was also fitted with the bomb rack and the E-4 style of the canopy hood. On the fuselage sides, the machine bore the markings of its previous operator 4.(S)/LG and the rudder had the victory tally of one of its LG2 pilots. Uffz Paul Wacker safely landed his machine near Woodyhyde Farm due to engine failure and was captured. The empennage of this machine was later used on another captured Bf 109 with the British registration DG200 that was being test flown at the RAF Enemy Aircraft Flight.

Messerschmitt Bf 109E-1/B, černý trojúhelník+G, 2./JG 27, okupovaná Francie, listopad 1940. Letoun byl vybaven závěsníkem na pumy a novějším typem kabiny z verze Bf 109E-4. Na trupu nesl označení předchozího uživatele 4.(S)/LG2 a na kormidle SOP označení sestřelů dosažených některým z pilotů LG2. Uffz. Paul Wacker s tímto letounem přistál pro poruchu motoru nedaleko Woodyhyde Farm v Anglii a nezraněn padl do zajetí. Ocasní plochy tohoto letounu byly namontovány na Bf 109E DG200 testovaný v RAF Enemy Aircraft Flight.

Scheme C



1/72
SH72470

Junkers Ju 87D-3 Stuka 'Stuka Experten'

RECOMMENDED FOR OUR AND ACADEMY STUKA KITS

P72002

Ju 87D/G Gunner's Seat
and MG 81Z machine gun
3D Printed Parts
for Academy / SH kits



Q72409

Junkers Ju 87D/G Exhaust
for Academy and
Special Hobby Kits



F72377

Ju-87D/G
Stuka
Pilot and
Gunner



**special
MASK**

M72038

Junkers
Ju 87D/G
Stuka Mask

1/72
SH72472

Messerschmitt Bf 109E 'Slovak and Rumanian Aces'

RECOMMENDED FOR OUR MESSERSCHMITT BF 109E KITS



7455

Bf 109E
Engine



7457

Bf 109E-3/4/7
Wing Guns



7458

Bf 109E
FuG VII Radio
Equipment



7460

Bf 109E-1/5
Wing
Machine Guns



7461

ESK 2000 B
German WWII
Gun Camera



Q72390

Bf 109E
Exhausts



Q72384

Bf 109E
Wheels



Q72391

Bf 109E
Tailwheel with
Strengthened Leg



Q72389

Bf 109E
Propeller
Spinner



F72369

Bf 109E Ace
A. Galland and
Mechanic

M72009 Messerschmitt Bf 109E-4/7 Mask

M72010 Messerschmitt Bf 109E-1/3 Mask

**special
MASK**

**special
HOBBY**



facebook.com/specialhobby | WWW.SPECIALHOBBY.EU | WWW.CMKKITS.COM

