

P-40N Warhawk Instructions / Návod



Na konci třicátých let, po odeznění hospodářské krize, se v USA rozhořela soutěž o to, která z leteckých firem dodá armádnímu letectvu standardní stíhačku. Firma Curtiss v této soutěži uspěla se svým P-36 Hawk s hvězdicovým motorem. Dodávala jej nejen USAAC (od roku 1941 USAAF), ale hlavně zákazníkům v Evropě, kde v roce 1939 vypukla druhá světová válka. V roce 1937 byl v USA homologován od roku 1929 vyvíjený řadový motor Allison V-1710 řady C. Snaha o jeho vyzkoušení vedla k stavbě pokusné série letounů Curtiss YP-37 a také ke stavbě nového letounu XP-40. Oba typy vycházely konstrukčně z P-36. XP-40 poprvé vzletl 14. října 1938. Po úpravách se zúčastnil v lednu 1939 porovnávací soutěže nových stíhacích typů a tu vyhrál. S motorem Allison V-1710 řady C byly postupně vyráběny verze P-40, P-40B a P-40C. Britové, kteří zakoupili více letounů než letectvo USA, označovaly tyto stroje jménem Tomahawk Mk.IA a Mk.IB.

Firma Allison vyvinula v roce 1939 novou verzi motoru V-1710, řady F. Motor byl použit v nové curtissově stíhačce XP-46. Ta ale nenabídla vyšší výkony než P-40B/C. Vzhledem k potřebě stíhacích letounů byl ale objednána nová verze P-40 s novou verzí motoru. Dostala označení P-40D Warhawk (u Britů Kittyhawk Mk.I). Prvních 43 strojů neslo v křídle 4 kulomety, další vyráběné jich nesly šest. Jen v drobnostech se lišila verze P-40E vyzbrojená standardně šesti kulomety (britské označení Kittyhawk Mk.IA). V bojích se brzy ukázalo, že P-40D/E s motory V-1710 s jednostupňovým kompresorem mají špatné výškové vlastnosti. Válčná potřeba dalších stíhaček bez nutnosti přerušit výrobu vedla k vývoji dalších verzí se silnějšími verzemi motoru V-1710 a verzí s britským motorem R&R Merlin. Merlin byl použit u verzí P-40F a L (britské označení Kittyhawk Mk.II). Potíže se směrovou stabilitou vedly u výrobního bloku F-5 k prodloužení trupu o 48 cm. Rostoucí potřeba Merlinů pro výkonnější Mustangy ale výrobu těchto verzí zastavila.

P-40K s motorem V-1710-73 byl vyráběn ve dvou provedeních, série K-1 až K-5 měly zvětšenou kýlovou plochu. K-10 a vyšší výrobní bloky měly prodloužený trup, podobně jako vyšší výrobní bloky P-40F. Na verzi K navázala odlehčená verze M s motorem V-1710-87. Britové obě verze označovali Kittyhawk Mk.III. Poslední sériovou verzí se stala P-40N / Kittyhawk Mk.IV. První výrobní blok měl ještě starý typ kabiny, další výrobní bloky dostaly novou kabínu s lepším výhledem z vad.

Stíhačky Warhawk/Kittyhawk se nehodily pro západoevropské bojiště. Byla nasazeny v Africe, Itálii, v Pacifiku, Číně, Indii, na Aljašce, v rámci pomoci byly dodány do Sovětského Svazu. Kromě USAAC/USAAF tyto stroje používalo RAF, SAAF, RAAF, RNZAF, RCAF a letectva dalších států po celém světě. Kořistní stroje P-40 byly bojově použity Japonskem a Finskem.

P-40D až N nebyly špičkové stíhačky, ale byly robustní a odolné a bylo jich vyrobeno velké množství. V průběhu války byly stále více používány jako stíhací bombardéry. I přesto se mnoho pilotů stalo v cockpitu P-40 esem a P-40 s namalovanou zubatou tlamou na přídi se stal jedním ze symbolů vítězství spojenců ve druhé světové válce.

rozpětí: 11,38 m, délka: 10,16 m, max. rychlost: 608 km/h (N-1), dolet: 1207 km, dostup: 9144 m



In the 1930's, when the effects of the great depression had faded away, a contest flared up in the USA between aviation companies to provide the military with a new and standard type of a fighter plane. Eventually, Curtiss company became the winner with their radial engine-equipped P-36 Hawk monoplane. Curtiss supplied not only the USAAC (to be known as the USAAF from 1941), but also their European customers who were involved in the conflict that had broken out in 1939. In 1937, after eight years of development, a new type of in-line aircraft engine was finally approved for production and service called Allison V-1710 C-series. It was decided to build a test series of Curtiss YP-37 planes and also the new XP-40 fighter type just to give this new powerplant a try. Both these types originated in the already mentioned P-36 plane. The prototype XP-40 took off for the first time on 14 October 1938 and following some improvements and adaptations, it took part in a fighter competition in January 1939 which it passed with flying colours. Production of Allison V-1710 C series engine equipped Curtiss fighter planes started, giving the P-40, P-40B and eventually the P-40C versions. The British military bought the type as well, acquiring in total much more than the US forces and named the type the Tomahawk Mk.IA and Mk.IB respectively.

In 1939, Allison developed a new version of their V-1710 power unit, the so-called F-series. It was intended to use this powerplant in the new Curtiss XP-46 fighter, which however in the end did not offer much better performance than the P-40B/C type. But as large numbers of fighter planes were needed at that time, a new version of the P-40 with this new power plant was ordered, to be known as the P-40D Warhawk and in the RAF as the Kittyhawk Mk.I. The first batch of 43 had armament of only two machine guns per wing, later machines would be fitted with three guns in each wing. The following E version, bearing six guns by standard, differed only very little from the earlier D model, in just few details. It became clear very soon that in real combat the P-40D/E's engine lacked sufficient power at higher altitudes, mainly because of its single-stage supercharger.

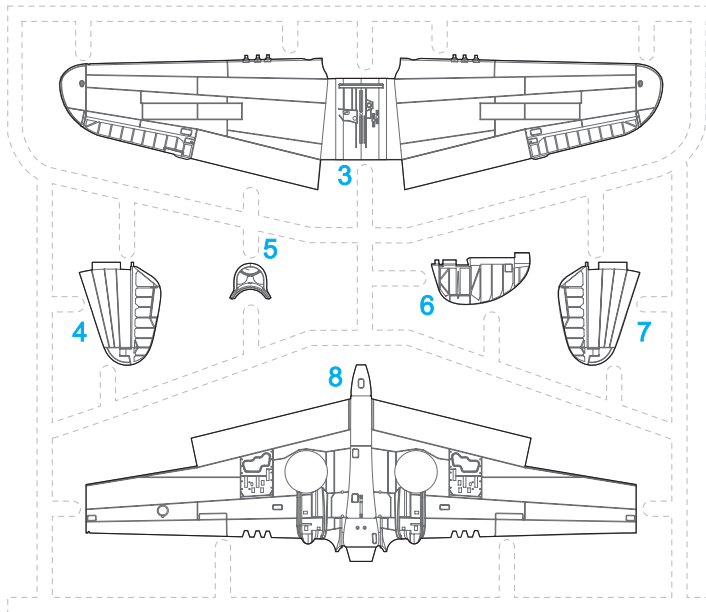
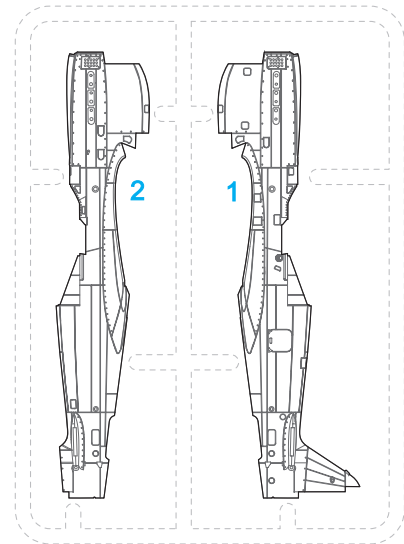
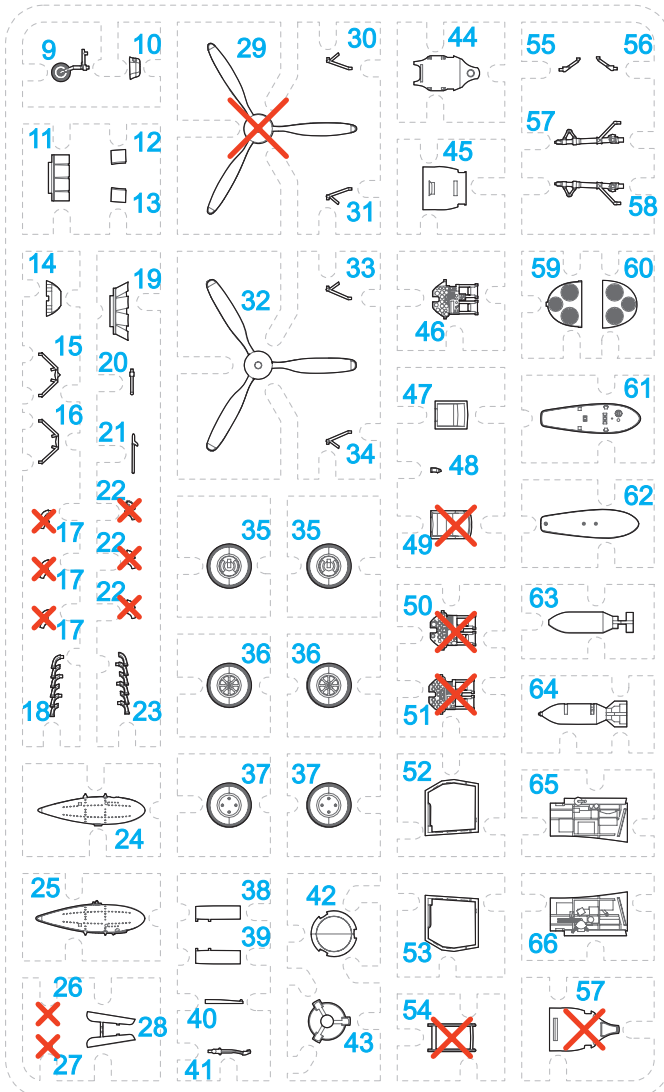
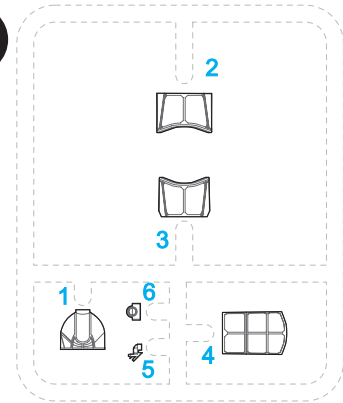
The war time necessity for still more and more fighter aircraft without interrupting the production lead the aircraft manufacturers to the development of further versions with even more powerful engines or also equipped with British R&R Merlin engines. The latter were used with the P-40F and L versions (in the UK known as the Kittyhawk Mk.II). Due to the lack of directional stability, the fuselages of F-5 production block machines were lengthened by 48cm. But as the Merlin engines were most needed for the Mustang fighters, the production of the P-40Fs and Ls did not last very long.

The P-40K was fitted with a V-1710-73 engine and was produced in two main varieties, the block K-1 to K-5 machines had larger tail fin area while the K-10 and later machines had their fuselage elongated in a similar manner to the P-40F. Following the K machines, a new and light-weight version was developed and produced, designated the P-40M and equipped with a V-1710-87 power unit. Both these versions were known as the Kittyhawk Mk.III in Britain. The final production version was the N or Kittyhawk Mk.IV. Its first production block did not look much too different from the M, later blocks differed by having the clear canopy redesigned and providing much better rearward view for the pilot.

The Warhawk / Kittyhawk fighters did not prove to be much suitable for the war over Western Europe, but fought and enjoyed quite a lot of success in Africa, over Italy, in the Pacific, China, India or Alaska and also in the skies of the Soviet Union, where they had been delivered during the Lend and Lease programme. Along the USAAC / USAAF, the type was also operated by such air forces as were the RAF, SAAF, RAAF, RNZAF or RCAF and many other forces almost all around the world. Some machines were also captured by the enemy, namely Finland and Japan and even these found their way to real combat use.

The P-40D to N fighters had never been the very top fighting machines of that time, however due to their rather robust and reliable structure they became much liked by their pilots who during the course of the war flew them rather more and more in the fighter-bomber role and even enjoyed many success in air to air engagements, achieving plenty of victories over the enemy and also reaching their acomeds quite often. It would be just fair to acknowledge the shark-mouthed P-40 fighters as one of the symbols of the Allied victory in the Second World War.

Wingspan: 11,38 m, length: 10,16 m, max speed: 608 km/h (N-1), range: 1207 km, ceiling: 9144 m

A**E****B****H****CLEAR Parts**

X = Tento díl nepoužít
Do not use this part

Barvy GUNZE/ GUNZE Colour No.

A	Curtiss Interior Green	H58/C27+a drop of 37/43
B	Hliník / ALUMINIUM	H8/C8
C	Černá / BLACK	H12/C33
D	Červená / RED	H3/C3
E	Nevýrazná olivová / OLIVE DRAB	H52/C12
F	Opálený kov / BURNT IRON	H76/C61
G	Barva pneu / TIRE BLACK	H77/C137
H	Žlutá / YELLOW	H329/C329
I	Hnědočervená / LEATHER	H47/C41
J	Červená čirá / CLEAR RED	H90/C47
K	Zelená čirá / CLEAR GREEN	H94/C138
M	Lesklá Bílá / WHITE	H1/C1
N	Dělovina / GUNMETAL	H28/C78
O	Neutr. šedá / NEUTRAL GRAY	H53/C13

SYMBOLS

MOŽNOST VOLBY
OPTIONAL
NACH BELIEBEN
OPTION



POUŽÍT KYANOAKRYLÁTOVÉ LEPIDLO
INSTANT CYANOACRYLATE GLUE
ZYANOAKRYLÁTKLEBER
ADHÉSIF CYANOACRYLAT



OHNOUT
BEND
BIEGEN
COURBER



ZHOTOVIT NOVĚ
SCRATCH BUILD
FERTIGSTELLEN
ACHEVER

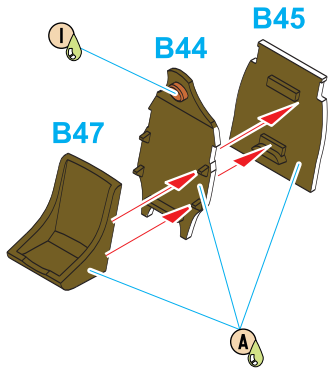


ŘEZAT/VRTAT
CUT OFF/DRILL
ENTFERNEN
DETACHER

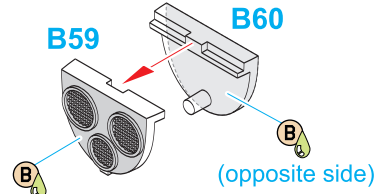


NATRÍT
COLOUR
FARBEN
PEINDRE

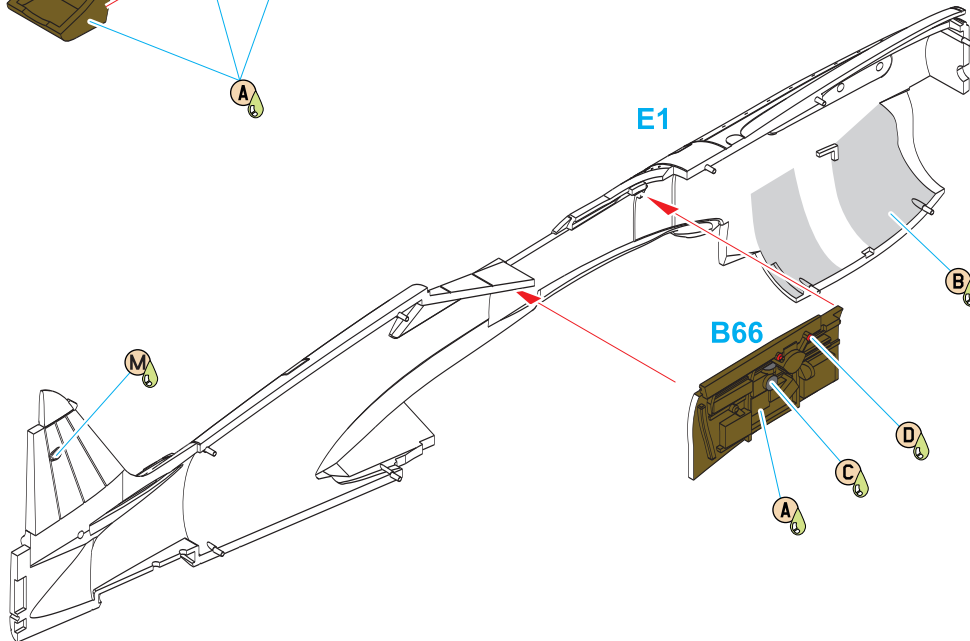
1



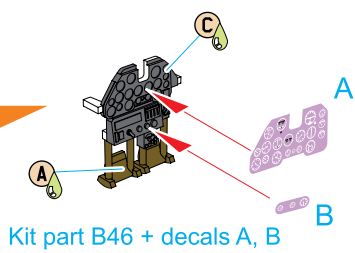
2



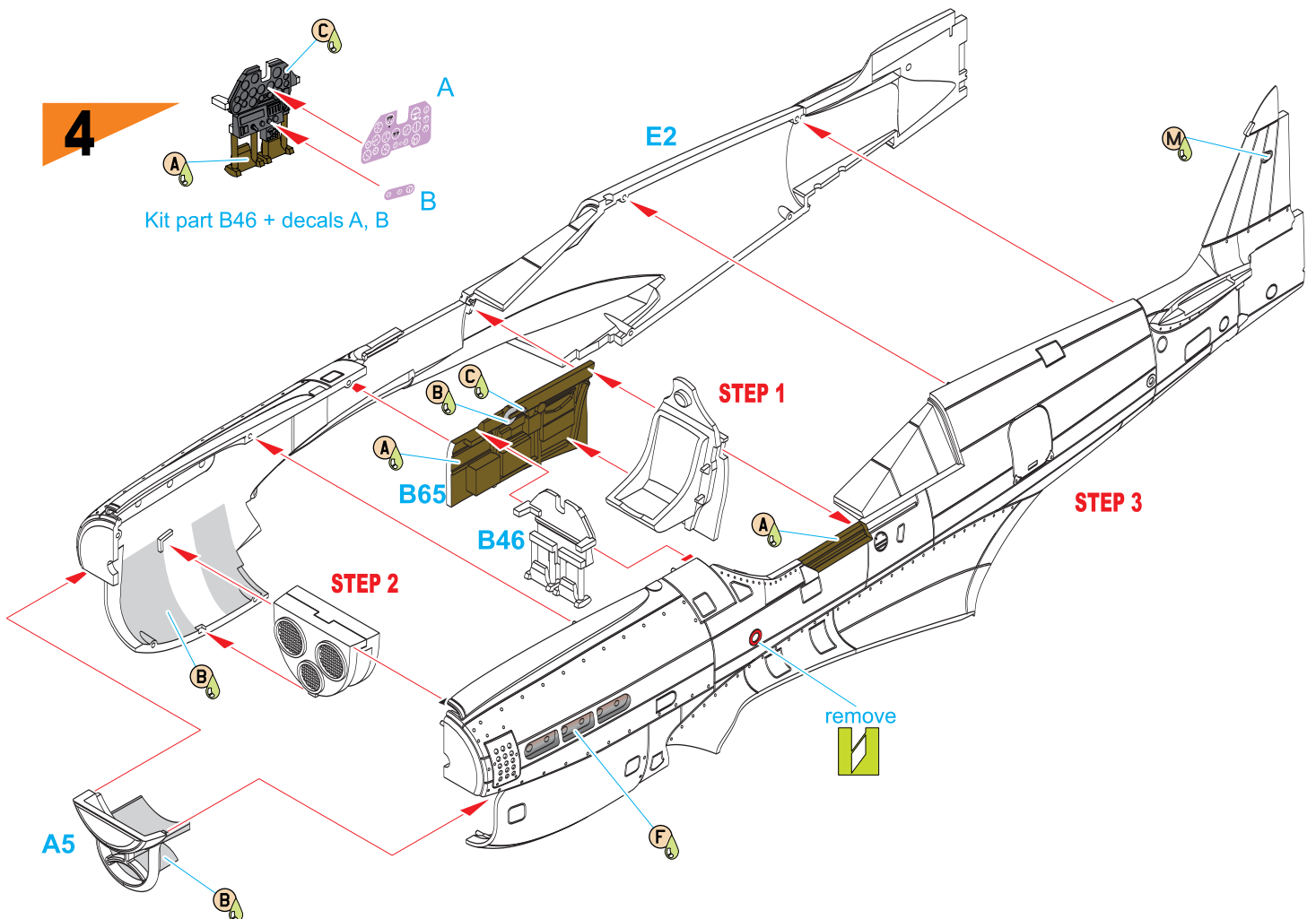
3



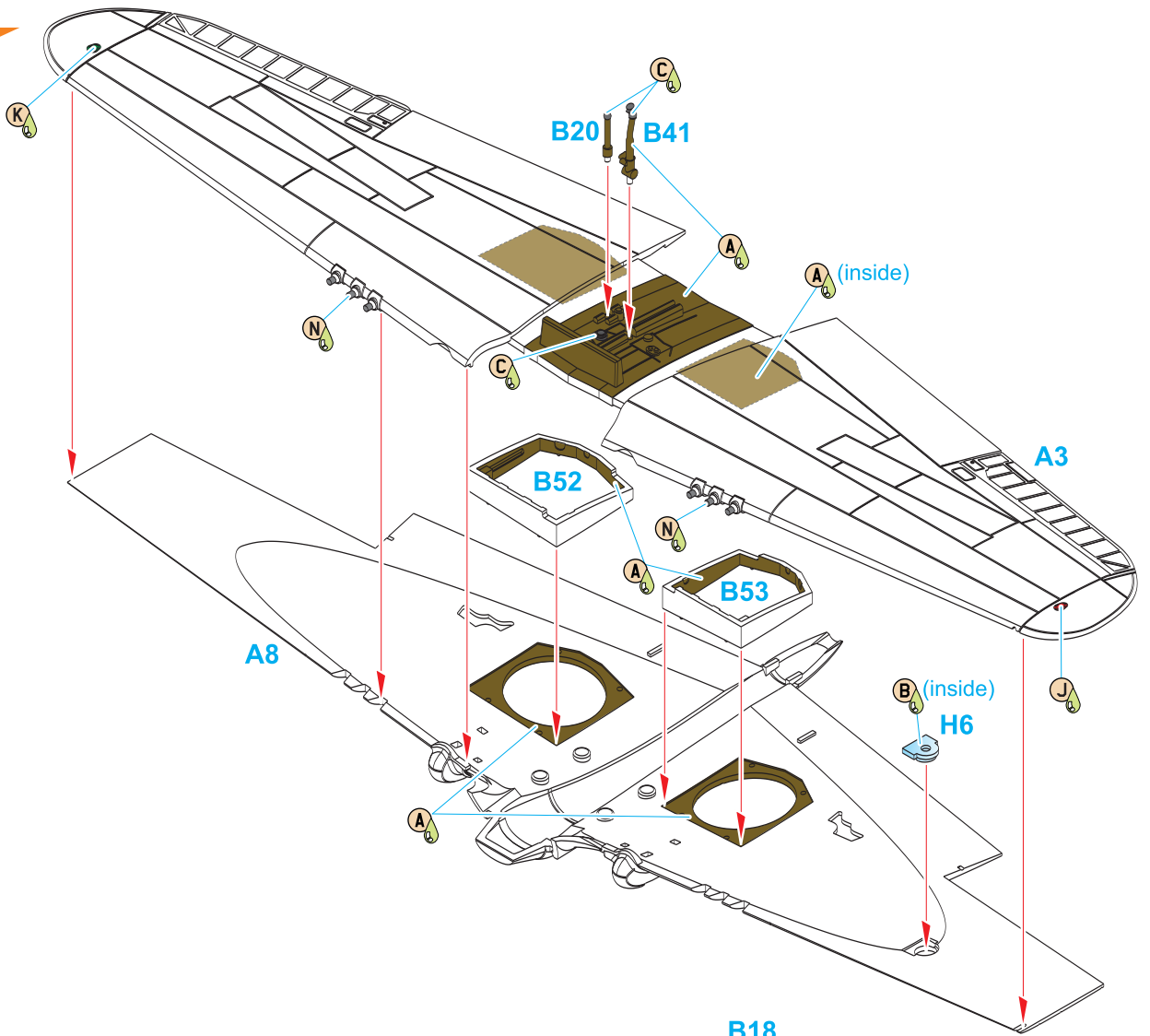
4



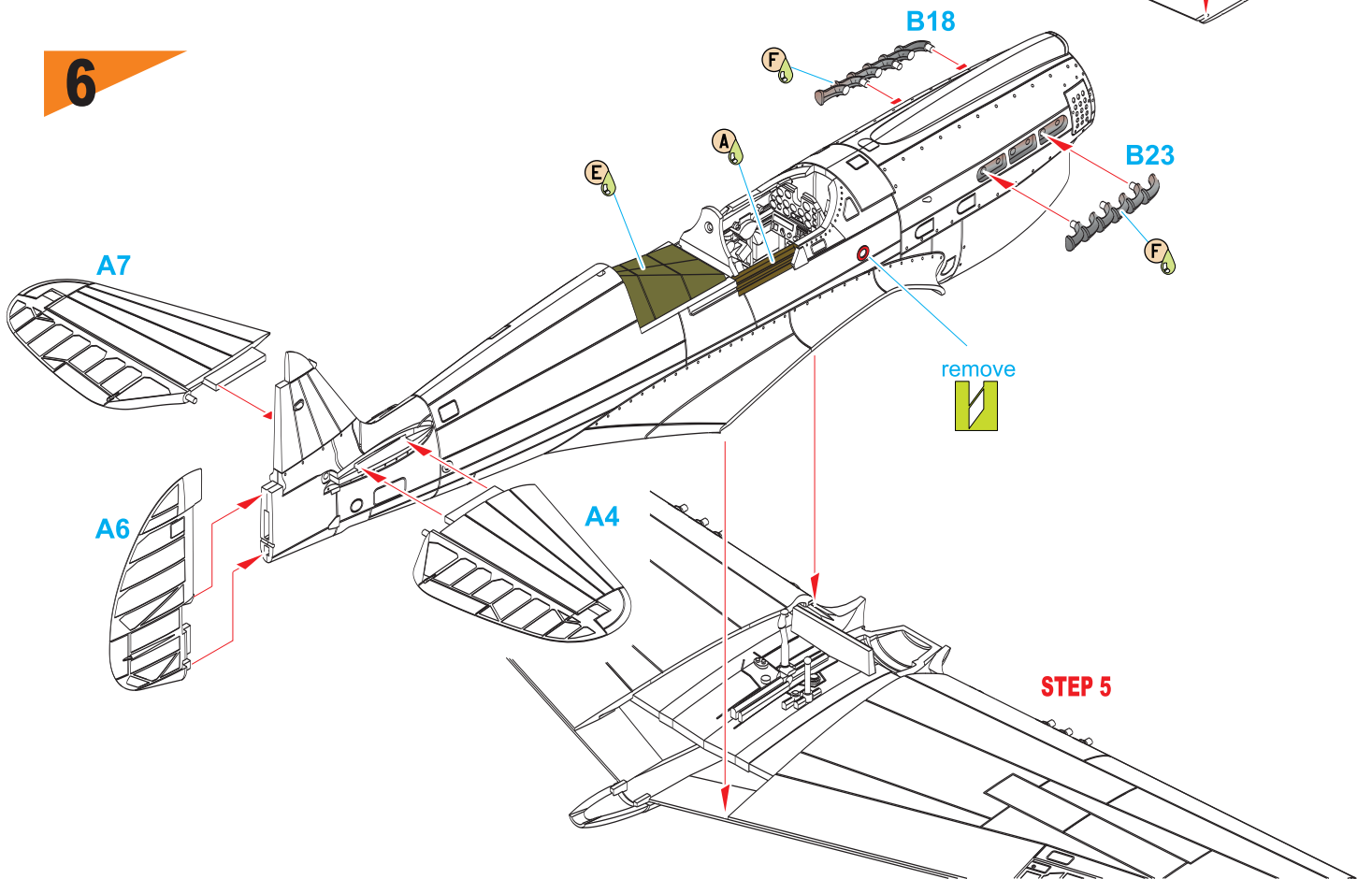
Kit part B46 + decals A, B



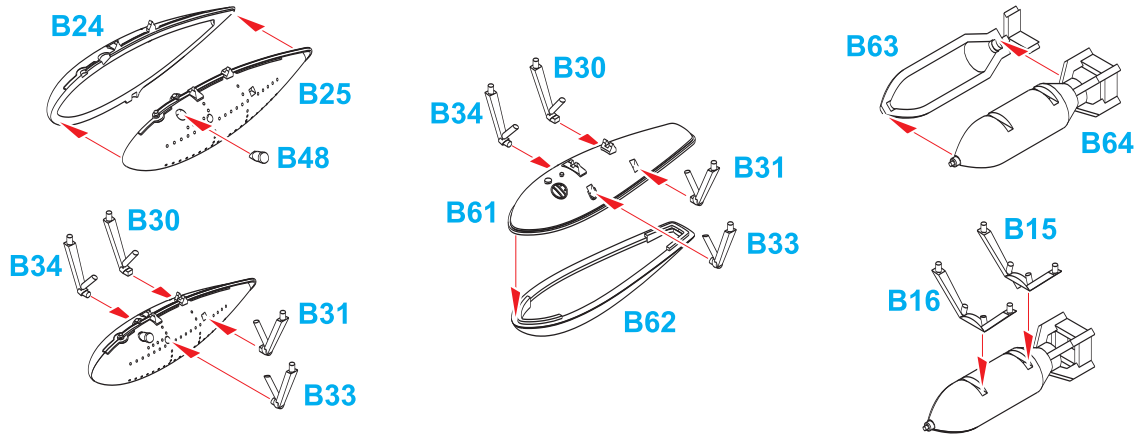
5



6



9



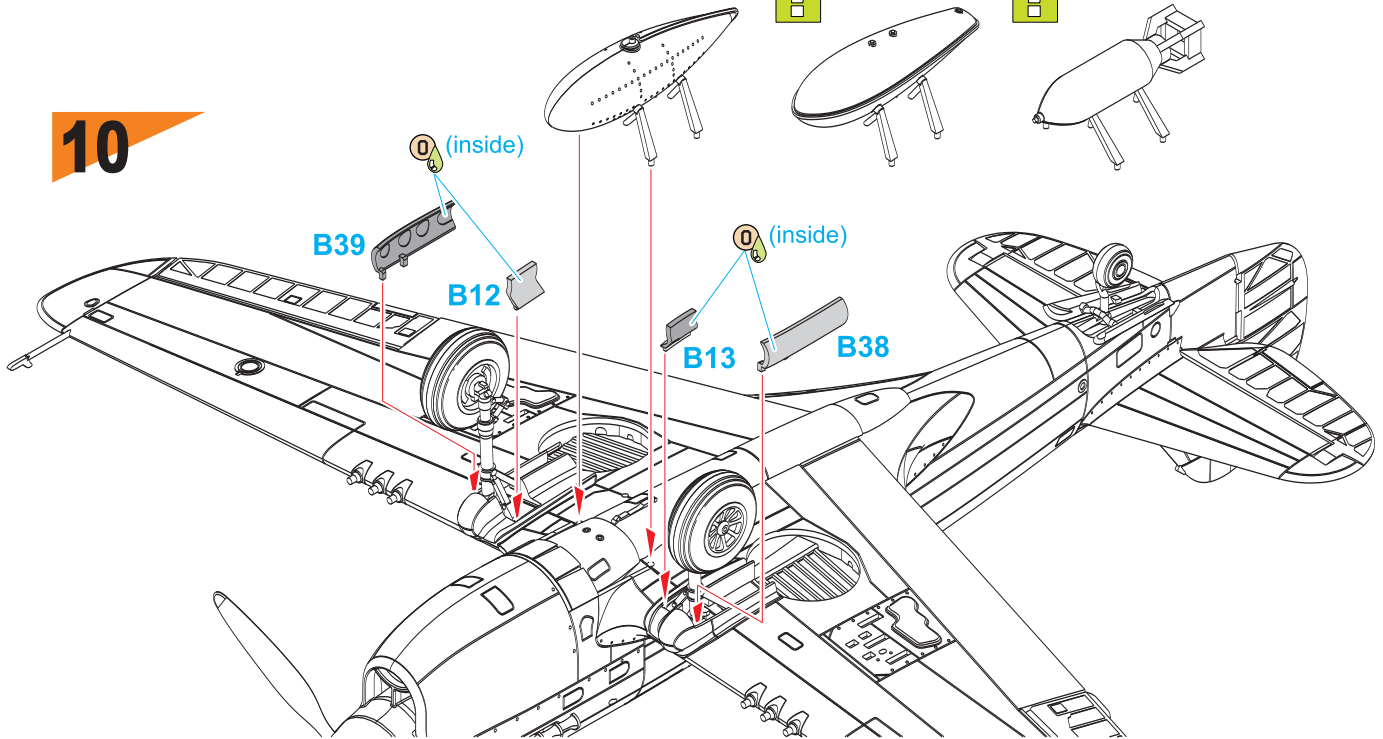
option



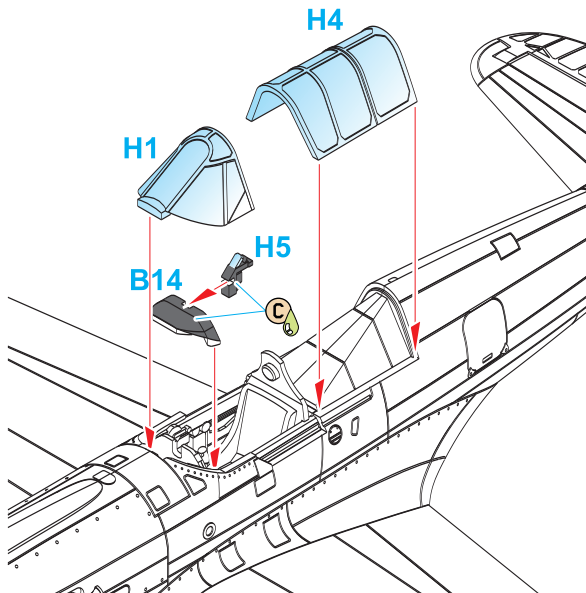
option



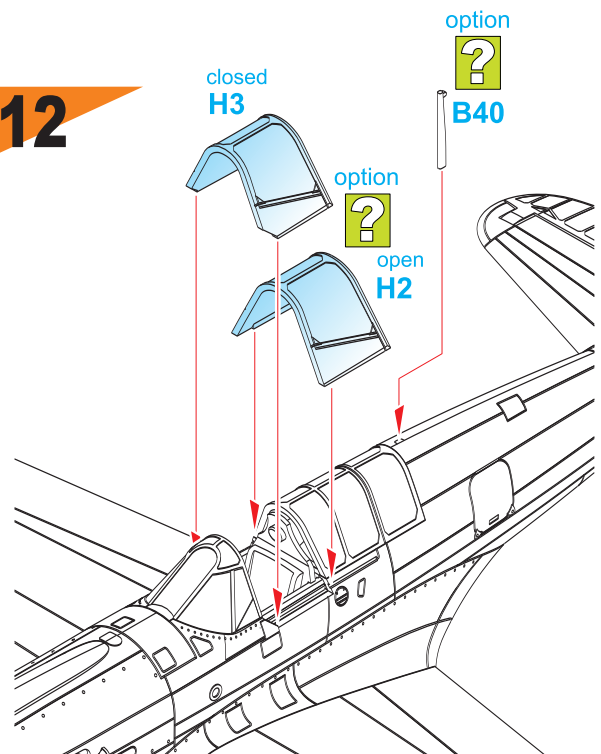
10



11



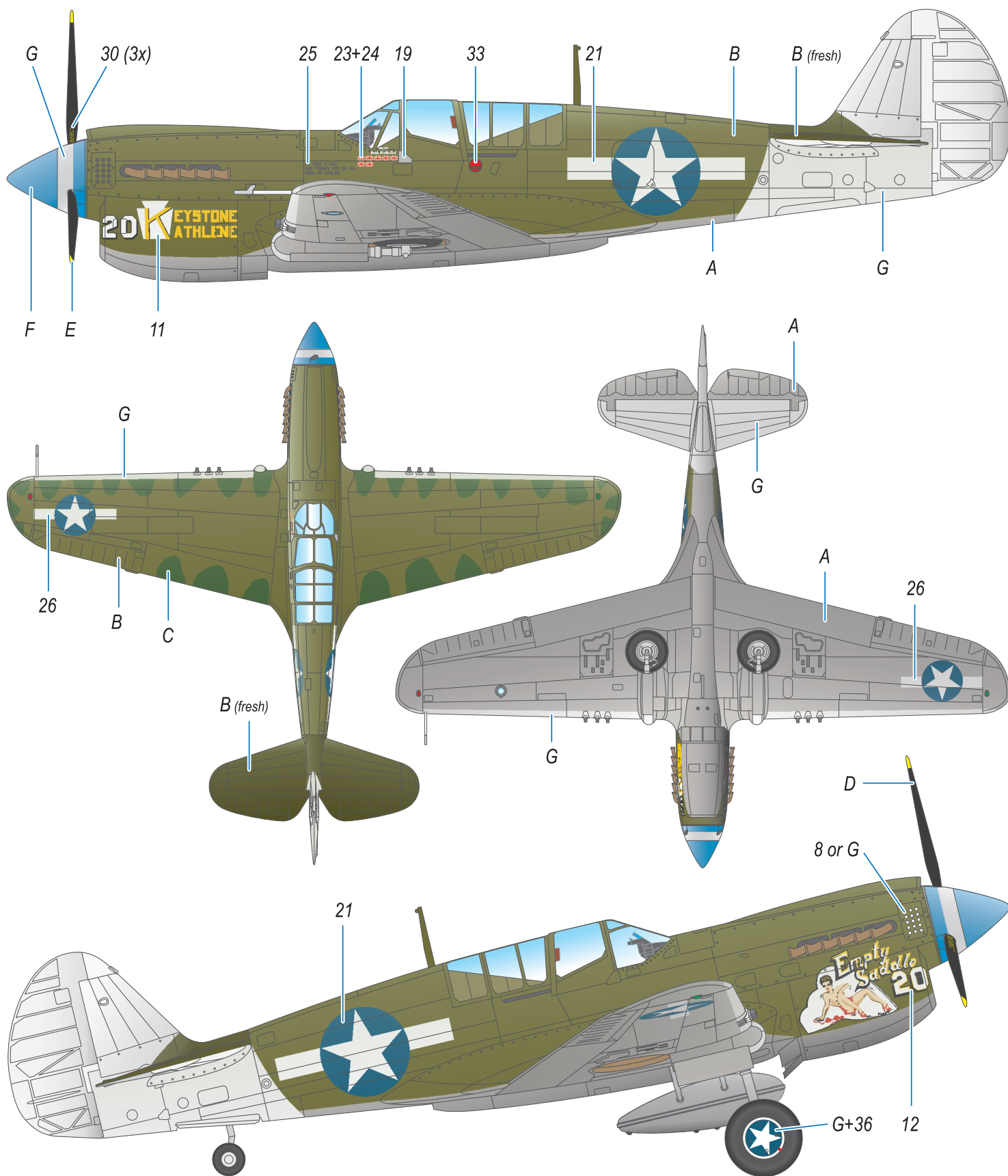
12










Curtiss P-40N-5, s/n unknown, white #20, 49FG, 7FS, Gusap, New Guinea, 1944. On the port side, the machine wore name Keystone Kathlene, on the opposite side painting of a girl and title Empty Saddle. Number 20 was a personal mount of the 7FS's CO, Maj. Arland Stanton (8 victories).

Curtiss P-40N-5, s/n neznámé, bílá 20, 49.FG, 7.FS, základna Gusap, Nová Guinea, 1944. Stroj nesl z levé strany pojmenování Keystone Kathleen a z pravé strany kresbu dívky s nápisem Empty Saddle. Bílá dvacet byla osobním letoun Maj. Arlanda Stantonova (osm vítězství), velitele 7.FS.

CAMO. A

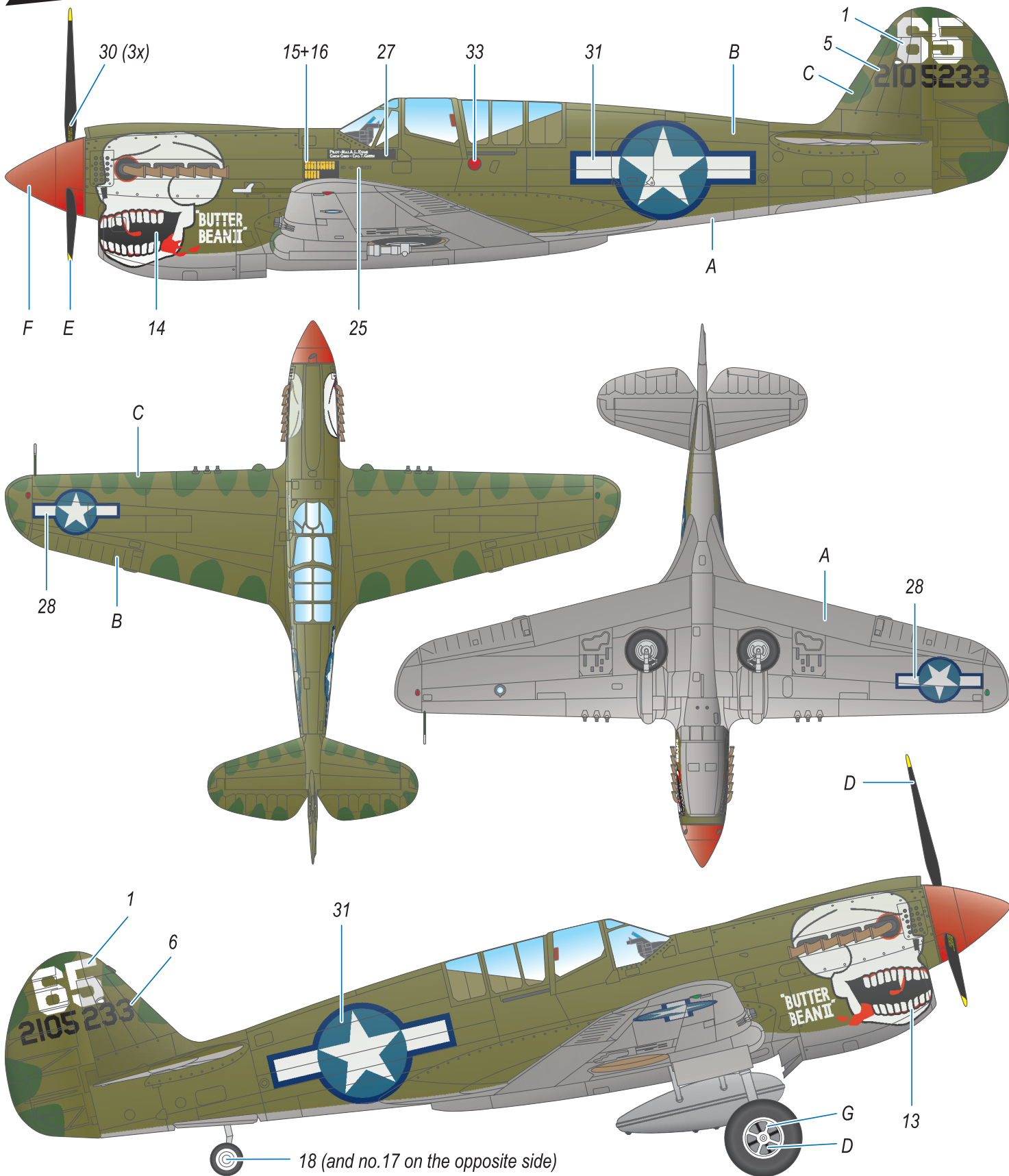






- | | | | | | | |
|--|--|---|---|--|--|--|
| A  neutrální šedá
Neutral Gray
H53/C13 | B  nevýrazná olivová
Olive Drab
H52/C12 | C  střední zelená
Medium Green
H302/C302 | D  černá
Black
H12/C33 | E  žlutá
Yellow
H329/C329 | F  středně modrá
Mid Blue
H15/C65 | G  špinavě bílá
Off White
H21/C69 |
|--|--|---|---|--|--|--|

Curtiss P-40N-5, s/n 42-105233, white #65, named 'Butter Bean II', 80FG, 89FS, Nagaghuli, Assam, India, 1944. Under the windshield, the plane wore a scoreboard with bomb symbols for fighter-bomber missions flown. The mainwheel hubs were white with four black spokes. The tail wheel hub also white with a whitewall tyre.

Curtiss P-40N-5, s/n 42105233, bílá 65, "Butter Bean II", 80. FG, 89 FS, základna Nagaghuli, Assam, Indie, 1944. Letoun byl ozdoben symboly odlétaných stíhacích-bombardovacích misí pod kabinou a čtyřmi bílými žebry na černých discích kol.

CAMO. B

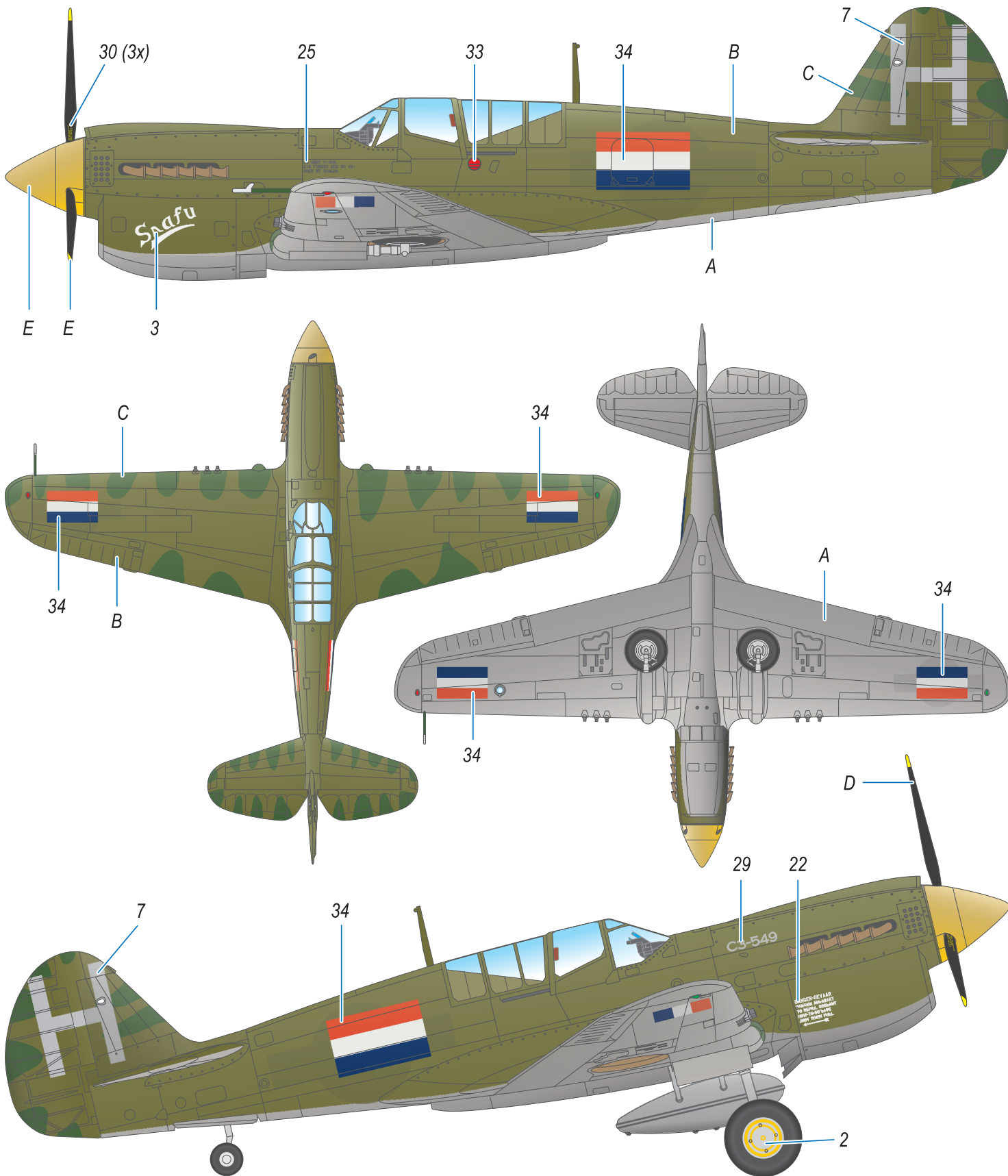


- | | | | | | | |
|--|--|---|---|--|---|--|
| A  <i>neutrální šedá</i>
Neutral Gray
H53/C13 | B  <i>nevýrazná olivová</i>
Olive Drab
H52/C12 | C  <i>střední zelená</i>
Medium Green
H302/C302 | D  <i>černá</i>
Black
H12/C33 | E  <i>žlutá</i>
Yellow
H329/C329 | F  <i>červená</i>
Red
H3/C3 | G  <i>špinavě bílá</i>
Off White
H21/C69 |
|--|--|---|---|--|---|--|

Curtiss P-40N, C3-549, 'Snafu', No. 120 Sqn. ML/KNIL/RNEIAAF, 72 Air Defence Wing RAAF, Mokmer Biak, New Guinea, 1945

Curtiss P-40N, C3-549, „Snafu“, No.120 sqn ML/KNIL/RNEIAAF, 72. Air Defence Wing RAAF, Mokmer Biak, Nová Guinea, 1945.

CAMO. C

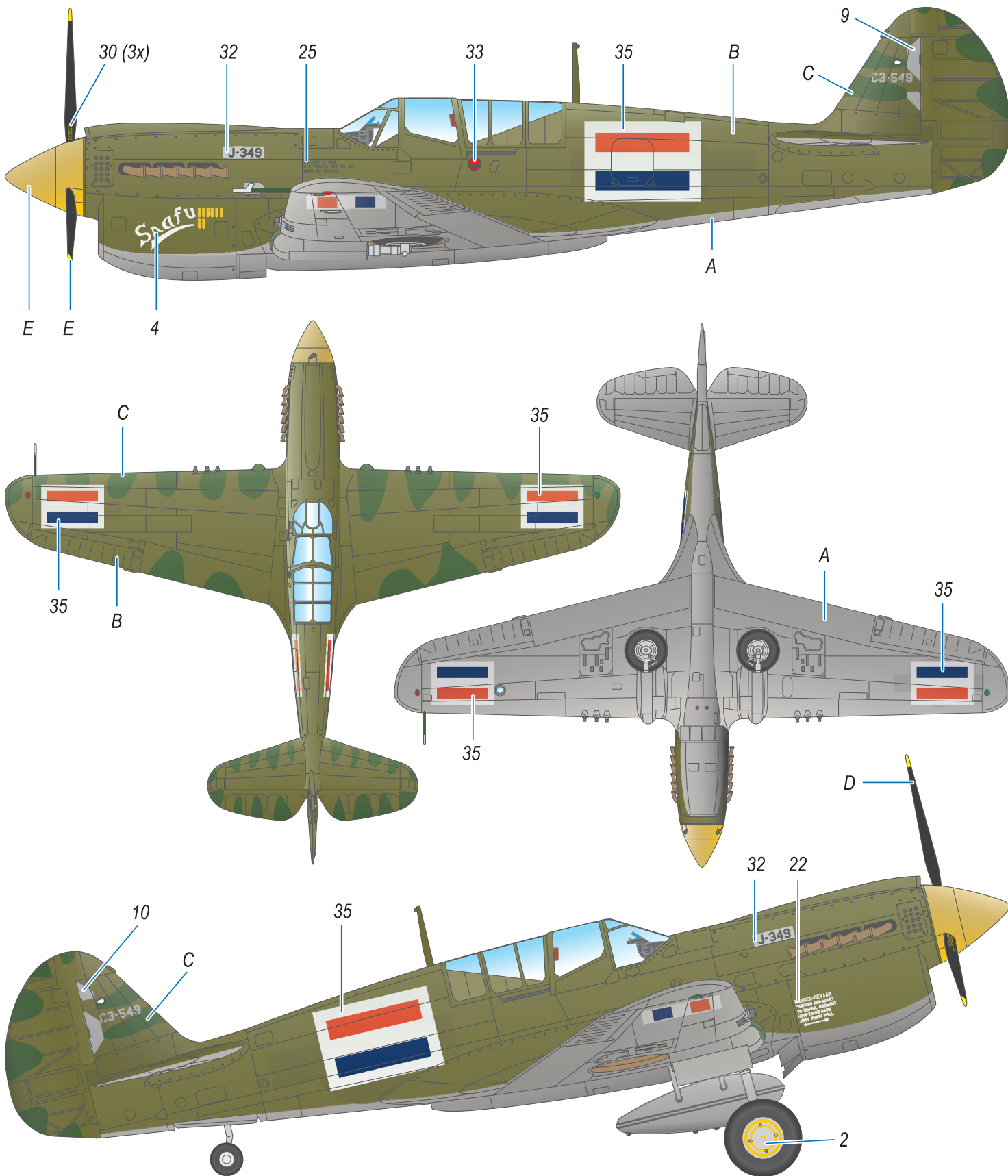


- | | | | | |
|---|--|--|--|--|
| A  | B  | C  | D  | E  |
| neutrální šedá
Neutral Gray
H53/C13 | nevýrazná olivová
Olive Drab
H52/C12 | střední zelená
Medium Green
H302/C302 | černá
Black
H12/C33 | žlutá
Yellow
H329/C329 |

Curtiss P-40N, C3-549/J-349, 'Snafu', No.120 Sqn, ML/KNIL/RNEIAAF. 2VB (Vlieg Basis) Andir, Dutch East Indies, 1947.

Curtiss P-40N, C3-549/J-349, 'Snafu', No.120 Sqn, ML/KNIL/RNEIAAF. 2VB (Vlieg Basis - letecká základna) Andir, Nizozemská východní Indie, 1947.

CAMO. D



- | | | | | |
|---|--|--|--|--|
| A  | B  | C  | D  | E  |
| neutrální šedá
Neutral Gray
H53/C13 | nevýrazná olivová
Olive Drab
H52/C12 | střední zelená
Medium Green
H302/C302 | černá
Black
H12/C33 | žlutá
Yellow
H329/C329 |

ATTRACTIVE 1/72 SCALE MODELS OFFERED BY **Special HOBBY**

SH72176



C-33/39
US Transport Plane

SH72206



TT-1 Pinto

SH72244



SF-1/FF-2
US Navy Scout Fighter and Trainer

SH72260



P-35
Silver Wings Era

SH72295



C-60 Lodestar
Pacific Transport

SH72297



FH-1 Phantom

SH72329



Delta 1D/E
Transport plane

SH72350



SB2C-5 Helldiver
The Final Version

CMK RESIN SETS FOR YOUR KIT



Q72293 1/72
P-40E/F/K/L/M
and N-1 Seat



Q72294 1/72
P-40N-5 through
N-40 Seat



Q72295 1/72
P-40 Wheels
Diamond Tread



Q72300 1/72
P-40N-5 through N-40
Seat with Belts

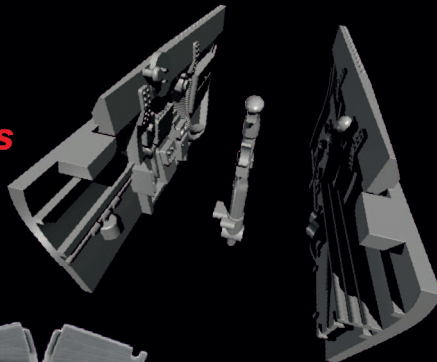


Q72303 1/72
Kittyhawk IV Seat
with Sutton Harness

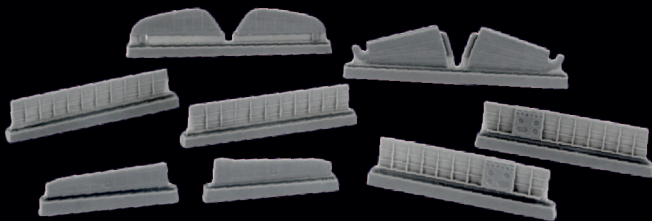


Q72296 1/72
P-40 Wheels
Block Tread

Q72301 1/72
P-40 Cockpit Sidewalls
and Control Column



Q72297 1/72
P-40 Wheels
Cross Tread



7386 1/72 P-40 Control Surfaces



Q72298 1/72
P-40 Wheels
Diamond and Hole Tread

USE CMK TOOLS AND WEATHERING PIGMENTS FOR YOUR KITS

H1010 handle for our saws
– priceless tool for resin
parts adjustment



H1011 CMK sanding stick
– four different grit
of sanding papers on
one sanding stick



Star Dust
weathering pigments

All of the above items can be found and ordered
via our official website and e-shop

WWW.SPECIALHOBBY.EU
WWW.CMKKITS.COM