



L-4 Cub

'European Cubs in Post-War Service'

1/48

CZ

Piper J-3 Cub neboli L-4 Grasshopper je jednou z legend amerického i světového letectví. Jeho vznik je spojen s firmou Taylor Aircraft Company a jejím majitelem G. C. Taylorem. Ten zkonstruoval v roce 1930 malý hornoplošník Taylor E-2 Cub trubkové konstrukce, potažený plátnem a s otevřenou kabinou. Jedním z investorů firmy byl William T. Piper. Ten odkoupil Taylorův podíl, firmu přejmenoval na Piper Aircraft a do firmy přivedl konstruktéra Waltera Jamouneaua. W. Jamouneau letoun E-2 upravil do podoby se zakrytou kabinou. Letoun dostal označení J-2 a začal se vyrábět sériově. Převzal i pojmenování Cub. Ve výrobě ho později nahradila mírně vylepšená verze J-3. Ta, vyráběna s alternativními motory Continental, Franklin, Lycoming či Lenape, představovala létající alternativu Fordovy plechové Lízy (Ford T). Blížící se válka zapojila Cuby i do výcviku pilotů v rámci Civilian Pilot Training Program. J-3 se stal standardním letounem tohoto programu. Udává se, že 80% amerických pilotů vycvičených během druhé světové války zahájilo výcvik v kabině J-3/L-4 Cub. Ještě před zapojením USA do války USAAF a US Army otestovalo civilní J-3 (společně s konkurenčními letouny Taylorcraft a Aeronanca), během několika vojenských cvičení v roce 1941. Vzhledem k tomu, že velké a těžké stroje kategorie Observer jako O-47 nedokázaly plnit dobře úlohy na ně kladené, jako byly spojovací lety spojené s přistáním na neupravených plochách a řízení dělostřelecké palby, objednálo USAAF vývoj a výrobu typu O-49 Vigilant. Vývoj tohoto letounu se ale opožďoval. US Army, proti vůli USAAF, prosadilo zařazení všech tří typů do výzbroje jako Taylorcraft O-57, Aeronanca O-58 a Piper O-59. Později byly tyto letouny převedeny do kategorie Liaison. Pipery dostali nové označení L-4 a 'bojové' jméno Grasshopper. Dle vojenských požadavků byly upraveny montáží radiostanice a dalšího vybavení. Prosklení kabiny bylo protaženo dozadu, aby se zlepšil výhled ze zadní sedačky. L-4 zcela zastínil své konkurenty. Vyráběn byl postupně ve mnoha verzích, nejmasovější byly L-4B, L-4H a L-4J. Bojovou premiéru si typ L-4 odbyl při angloamerickém vyloštění v Africe, kde řídil dělostřeleckou palbu těžkých lodí. Od té doby byl na evropském bojišti intenzivně používán k plnění různých úkolů, od řízení dělostřelecké palby, spojovacích letů, průzkumu až po úspěšné útoky na tanky amatérsky podvěšenými Bazookami. L-4 přitom prošly i vyloštěním v Itálii a Normandii a kromě USAAF a US Army je na evropském bojišti používali Svobodní Francouzi a Brazílský expediční sbor. Podobně úspěšně byly L-4 nasazeny v Pacifiku, nejen v rámci USAAF, ale i US NAVY a Marines. Vzhledem k přírodním podmínkám byly zejména v Pacifiku L-4 vybavovány 'Brodie' hákem. Ten umožňoval start a přistání na natažené lano bez toho, aby se letoun dotkl země. Několik kusů L-4 použilo v Pacifiku RAAF a letectvo Holandské Východní Indie. Ve výzbroji USAAF vydržely L-4 až do války v Koreji, kdy je nahradily letouny O-19. Po skončení druhé světové války byla obnovena výroba pro civilní zákazníky, zároveň se Pipery z válečných přebytků rozšířily do mnoha vojenských letectev a k civilním uživatelům po celém světě. Mnohé létají dosud.

rozpětí: 10,73 m, délka: 6,78 m, max. rychlost: 140 km/h, cestovní rychlost: 120 km/h, operační dostup: 3505 m, dolet: 418 km

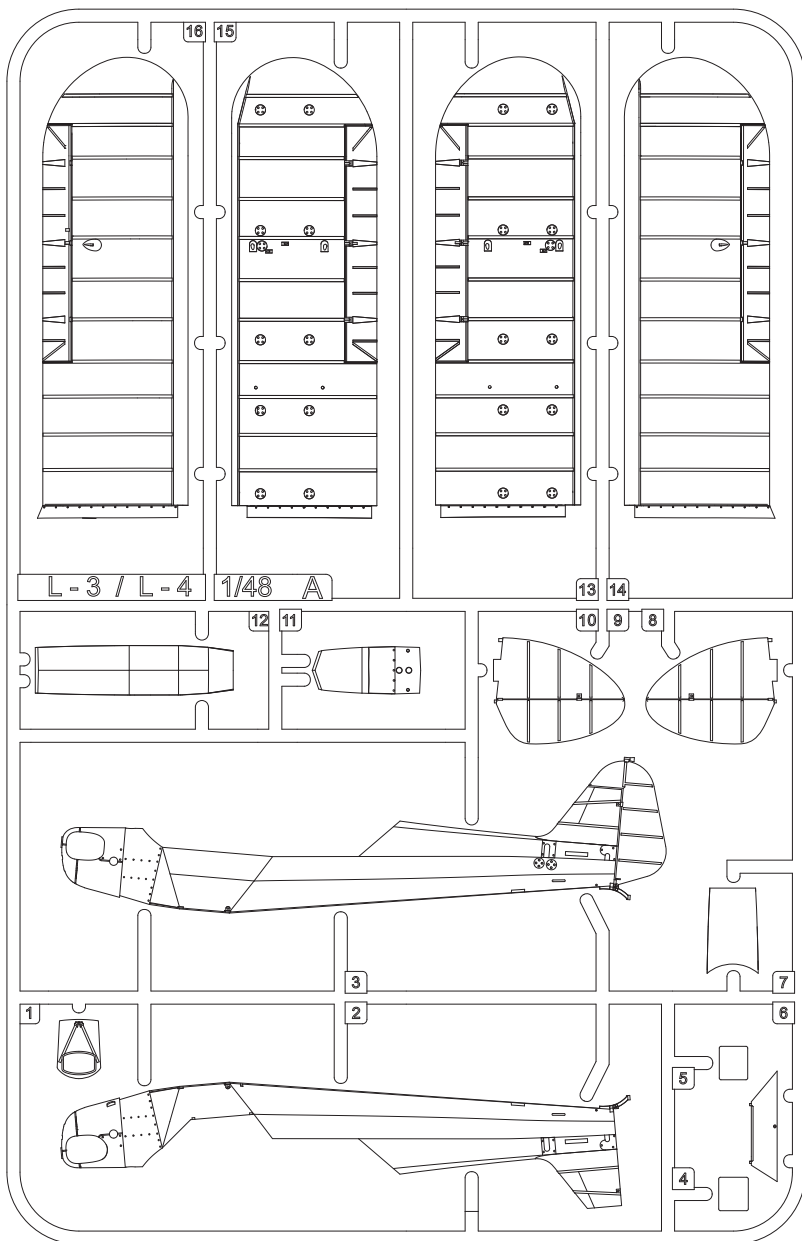
EN

The Piper J-3 Cub also known as the L-4 Grasshopper is one of the iconic aircraft of US and world aviation. Its story is unmistakably connected with the Taylor Aircraft Company owned by G.C. Taylor, who in 1930 built a small high wing monoplane with tubular airframe covered with fabric and open cockpit which was known as the Taylor E-2 Cub. One of the company's investors was also William T. Piper who eventually purchased Taylor's share and renamed the company to Piper Aircraft. The company's new designer Walter Jamouneau took the E-2 design and made a few changes resulting in an airframe now with an enclosed cockpit. The new type begun to be series produced as the J-2 and was also known under the old name Cub. Later, a slightly improved version J-3 emerged and was produced with various engines such as Continental, Franklin, Lycoming or Lenape and became a flying counterpart of Ford's Tin Lizzie (the Ford T). The coming war made the Cubs join in pilot training under the Civilian Pilot Training Program, the J-3 type becoming the standard type of the programme and reportedly about 80% of US aviators who got their training during the war years started their flying career in the cockpit of a J-3 or L-4 Cub. In 1941, still before the USA entered the war, both the USAAF and US Army tested the J-3 along with rival types from Taylorcraft and Aeronca in a series of military exercises. It soon showed that rather large and heavy Observer category types as the O-47 were not able to meet the requirements, they failed mainly in take offs and landings on unpaved airfields as well as in directing the artillery fire, so the USAAF ordered a new O-49 Vigilant type to be developed and produced. The development of the type was getting behind though. The US Army, against the will of the USAAF, demanded that all three types were introduced into service as the Taylorcraft O-57, Aeronca O-58 and the Piper O-59. The aircraft later joined the Liaison category and were renamed with the L letter, the Pipers then becoming the L-4 with 'combat' name Grasshopper and by the request from the military, they were also adapted to carry a wireless set and a few more equipment. The canopy glazing was elongated and stretched more rearwards to improve the view from the rear seat. The resulting L-4 type completely surpassed all its competitors and was subsequently produced in many various versions of which the most mass-produced were the L-4B, L-4H and L-4J. The L-4 type saw its combat premiere during the Anglo-American landing in Africa directing the artillery fire from Allied heavy warships. And since then, the L-4 went on to being massively used by the Allies over Europe in many roles, from directing the artillery fire, liaison tasks, reconnaissance or even to successfully attacking the enemy's armoured vehicles with bazookas launched from makeshift-made racks. The L-4 saw the landings in Italy and Normandy, and besides by the USAAF and US Army they were also operated in Europe by the Free French and Brazilian Expeditionary Force. And the type saw equally successful deployment in the Pacific, too - not only by the USAAF, they were also used by the US Navy and Marines. Due to the natural conditions, the L-4s were mainly in the Pacific fitted with a Brodie-type hook which enabled them to take to the air and land on a wire stretched between a couple of posts, without touching the ground. Several L-4s were also operated by the Dutch East Indies Air Force and the RAAF. The L-4 had remained in active service until the Korea War when they were replaced by the O-19. After the end of WW2, the production of the Piper aircraft for the civilian market was renewed, but surplus ex-military machines were also available both for the military and civil operators around the world. And many of them continue to fly even in the present days.

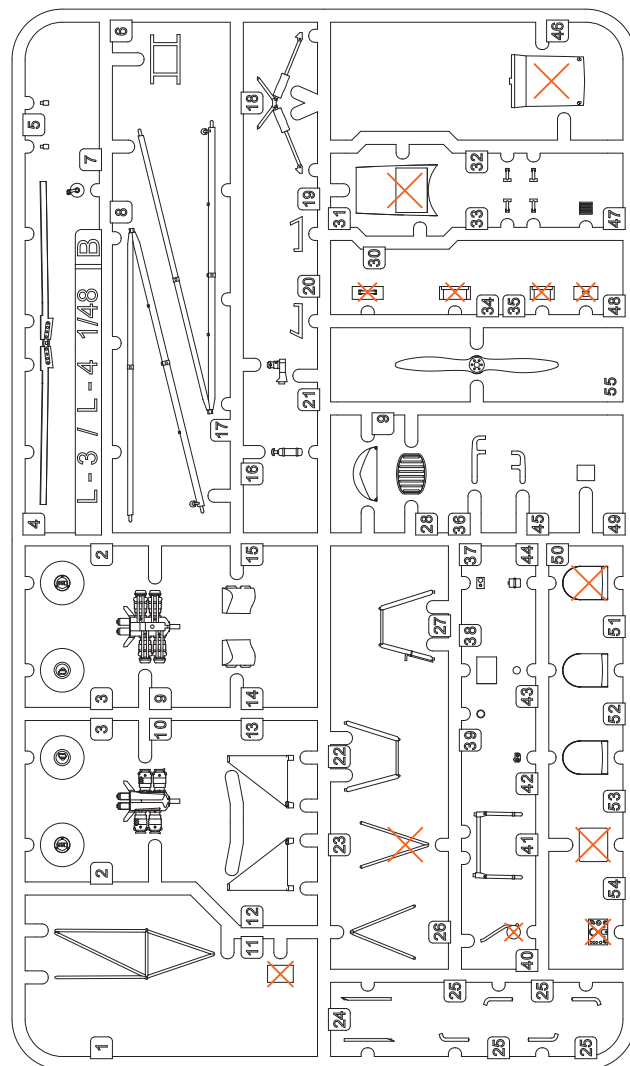
Span: 10.73 m, length: 6.78 m, max. speed: 140 km/h, cruise speed: 120 km/h, operation ceiling: 3,505 m, range: 418 km

Plastic Parts

A



B

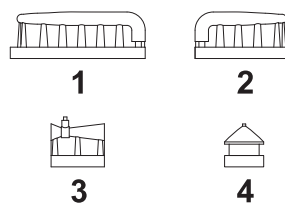


Barvy GUNZE/ GUNZE Colour No.

| | | |
|----------|--------------------------|------------|
| A | Černá / Black | H2 / C2 |
| B | Barva pneu / Tire Black | H77 / C137 |
| C | Hliník / Aluminium | H8 / C8 |
| D | Opálený kov / Burnt Iron | H76 / C61 |
| E | Mosaz / Brass | MC219 |
| F | Barva plátna / Tan | H27 / C44 |
| G | Šedá / Gray | H52 / C12 |
| H | Červená / Red | H3 / C3 |

X Tento díl nepoužít
Do not use this part

PUR Parts (PUR)



Clear Parts

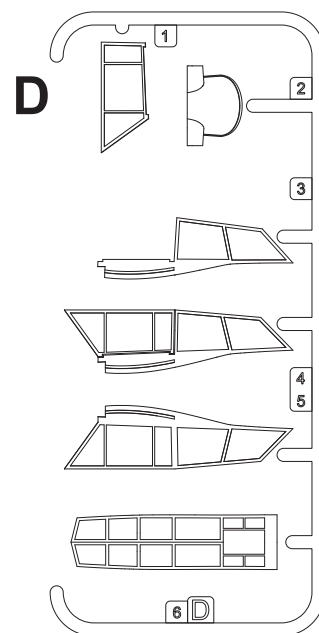
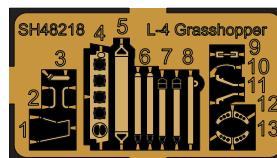


Photo-Etched Parts (PP)



Film



SYMBOLS

? MOŽNOST VOLBY
OPTIONAL
NACH BELIEBEN
OPTION

👉 POUŽÍT KYANOAKRYLÁTOVÉ LEPIDLO
INSTANT CYANOACRYLATE GLUE
ZYANOAKRYLÁTKLEBER
COLLE CYANOACRYLAT

↶ OHNOUT
BEND
BIEGEN
COURBER

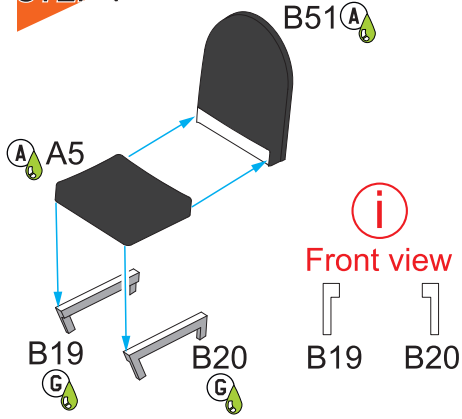
👤 ZHOVIŠTVOVÉ NOVÉ
SCRATCH BUILD
FERTIGSTELLEN
ACHEVER

✂ ŘEZAT/VRTAT
CUT OFF/DRILL
ENTFERNEN
DETACHER

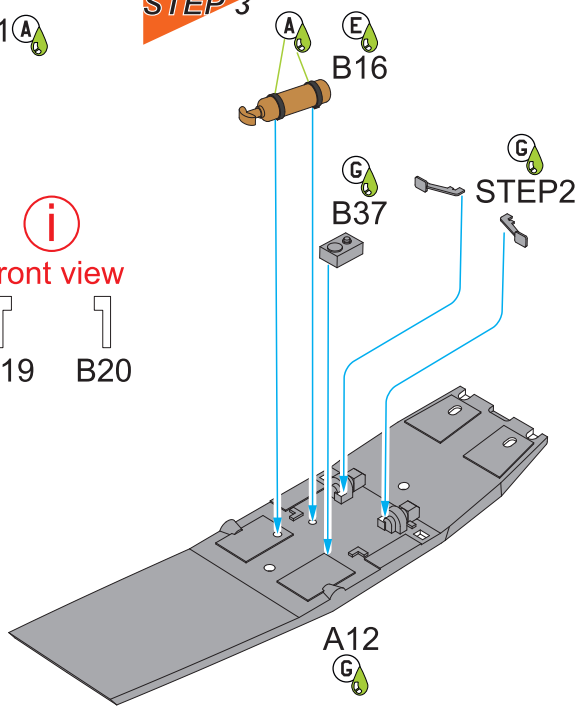
A
GSI
colour code

👉 NÁTŘIT
COLOUR
FARBEN
PEINDRE

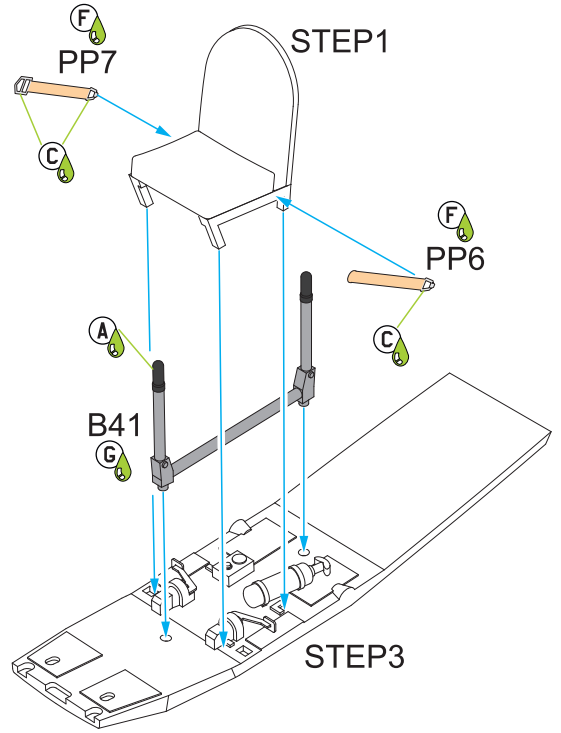
STEP 1



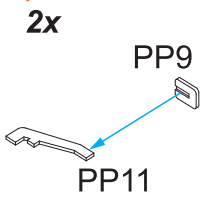
STEP 3



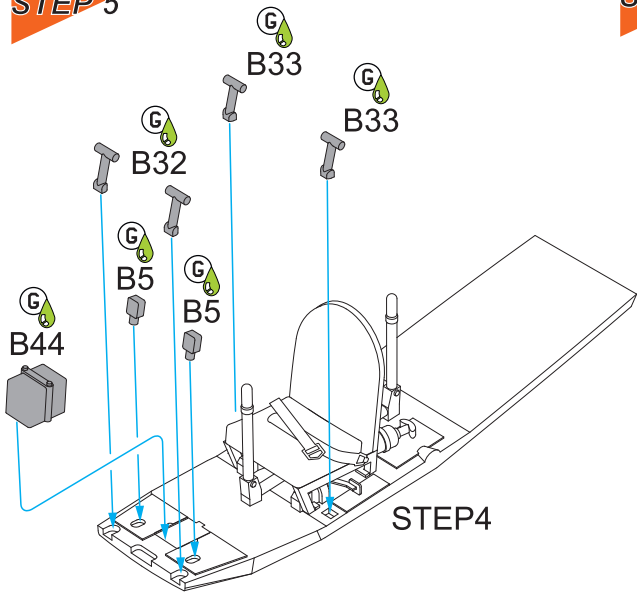
STEP 4



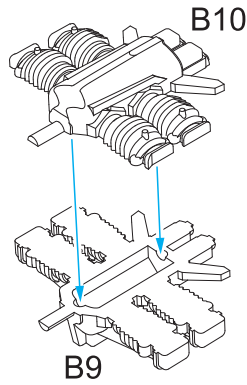
STEP 2



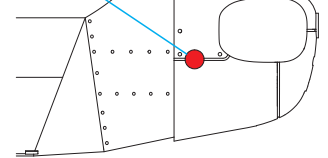
STEP 5



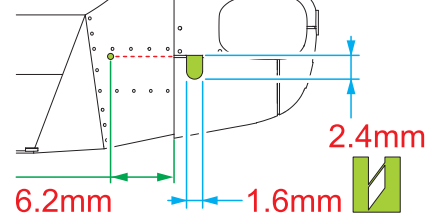
STEP 6



Fill Scheme B A2 A3



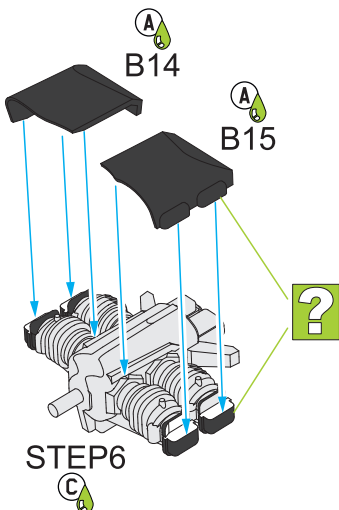
Scheme B A2 A3



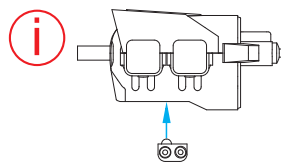
Scheme D



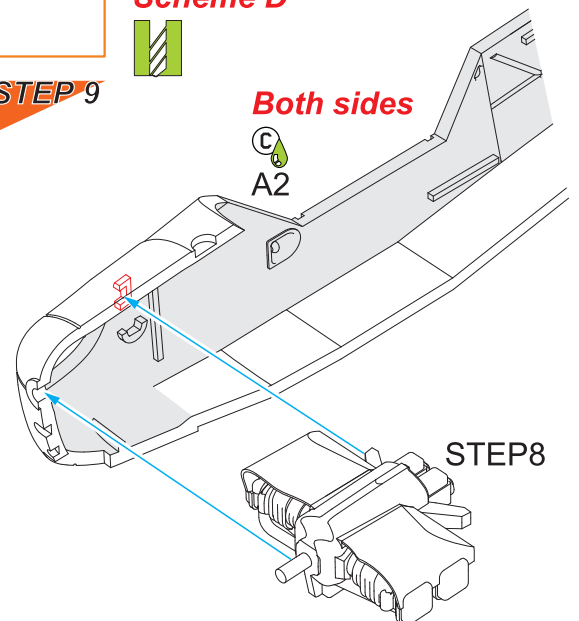
STEP 7



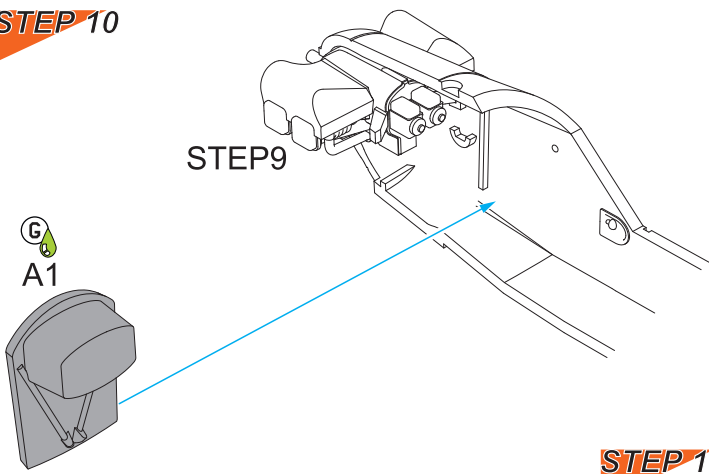
STEP 8



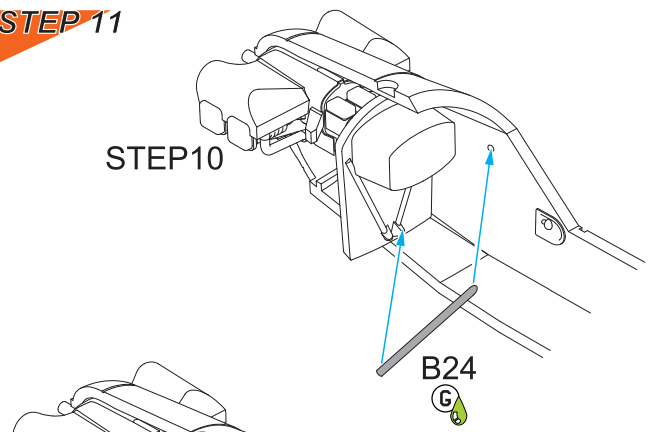
STEP 9



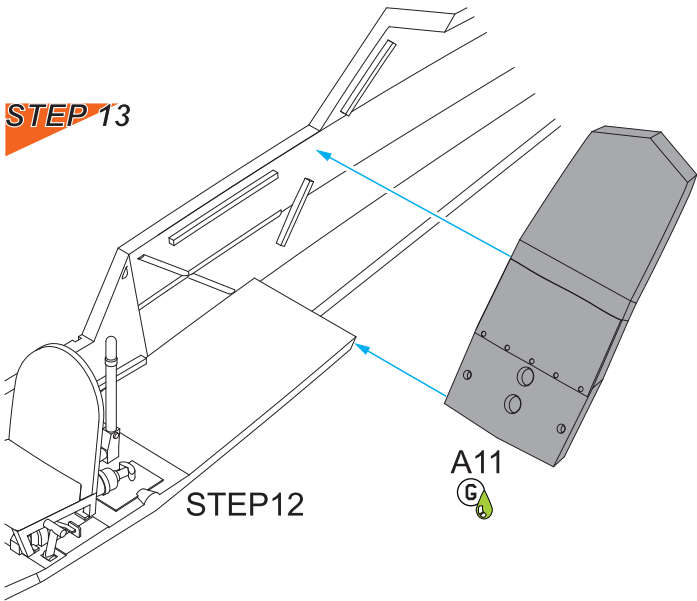
STEP 10



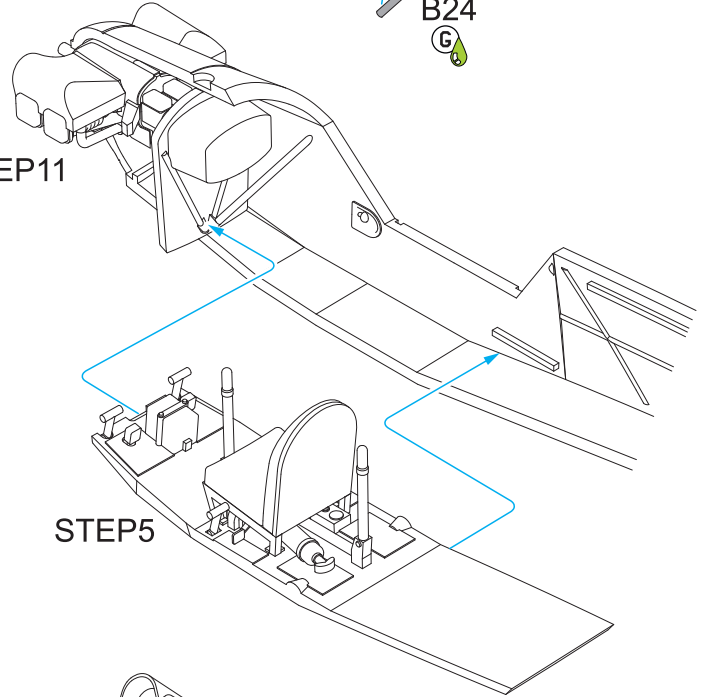
STEP 11



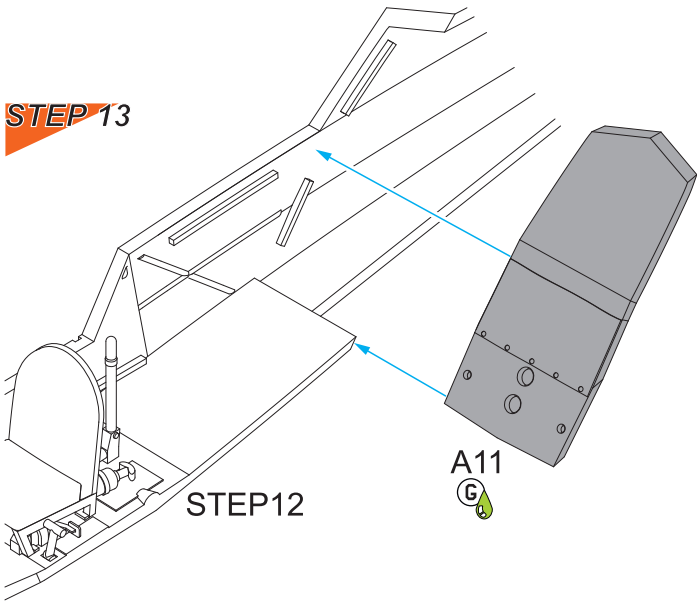
STEP 12



STEP 11

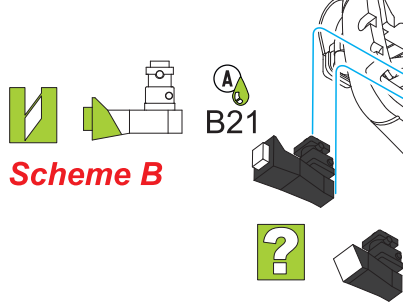


STEP 13



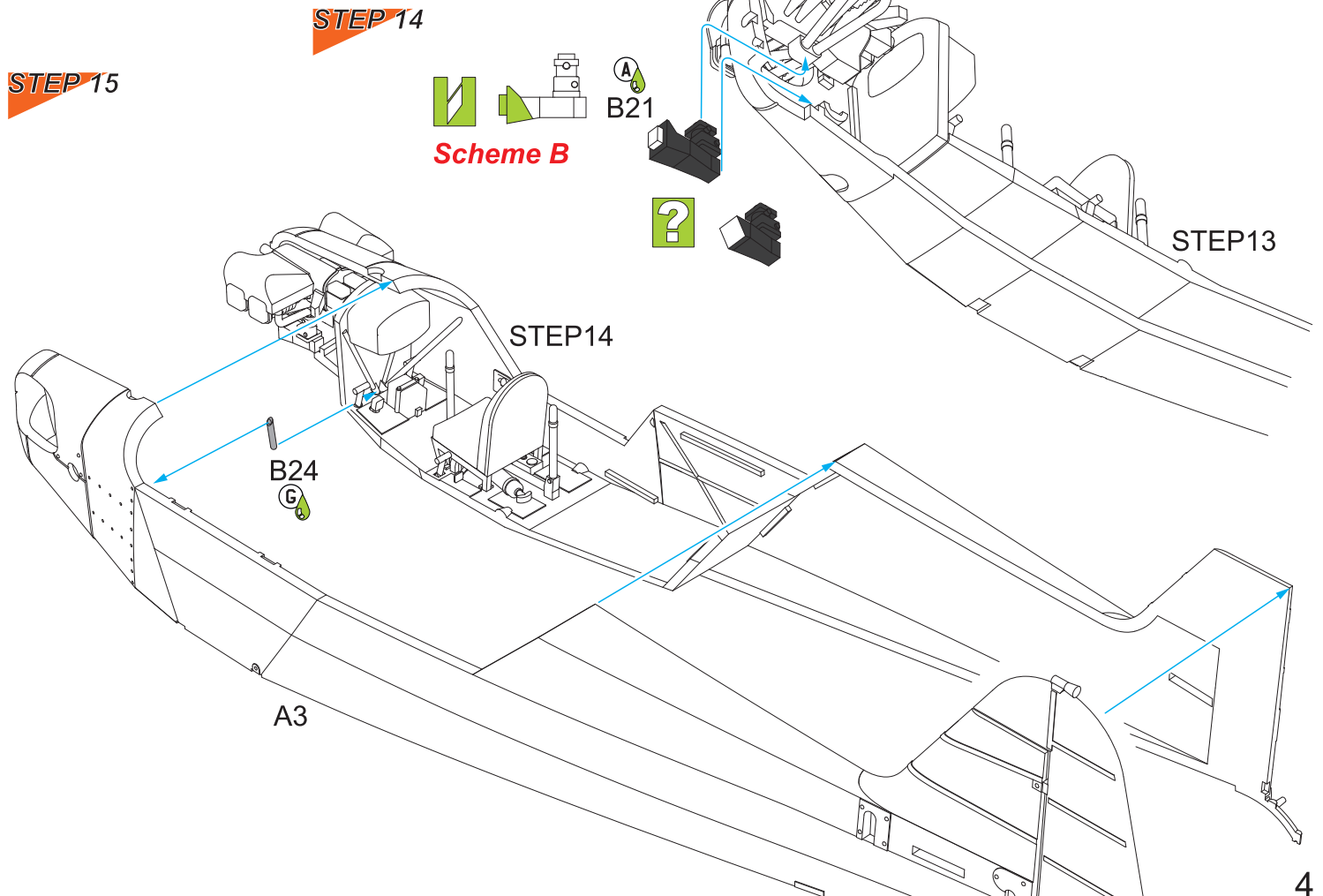
STEP 5

STEP 15

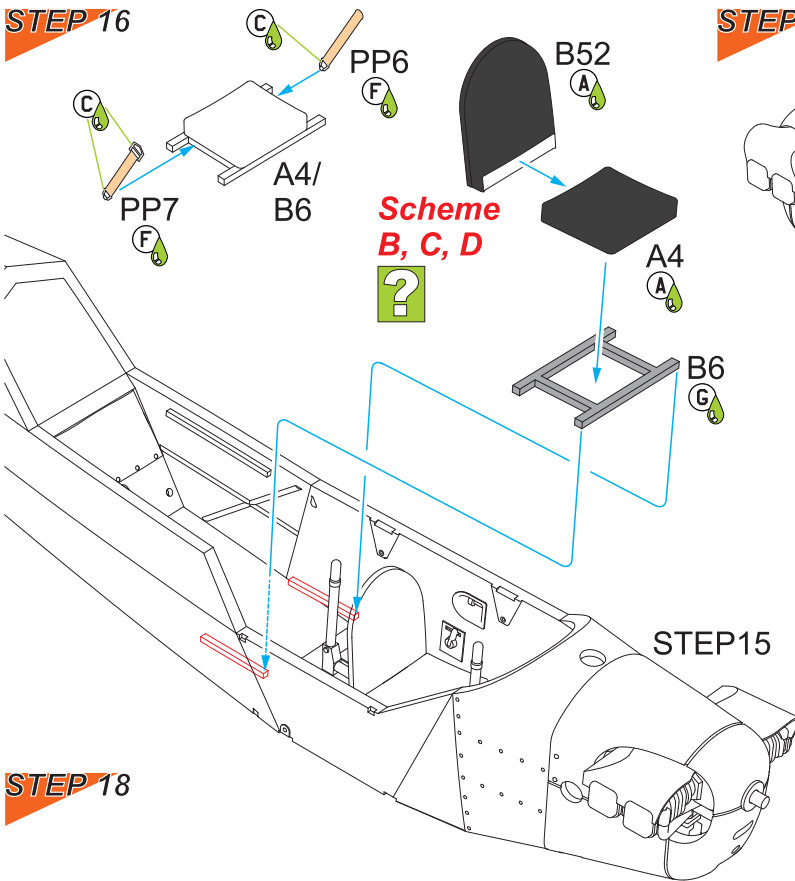


Scheme B

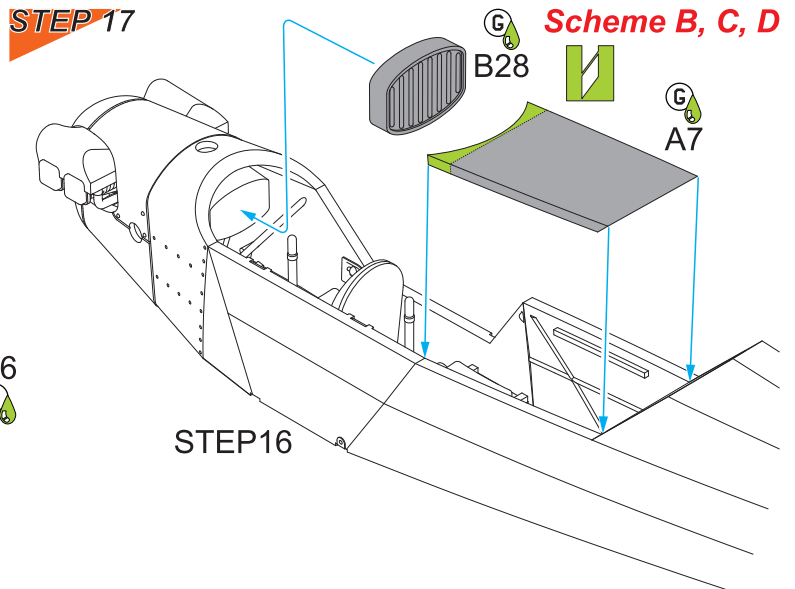
STEP 14



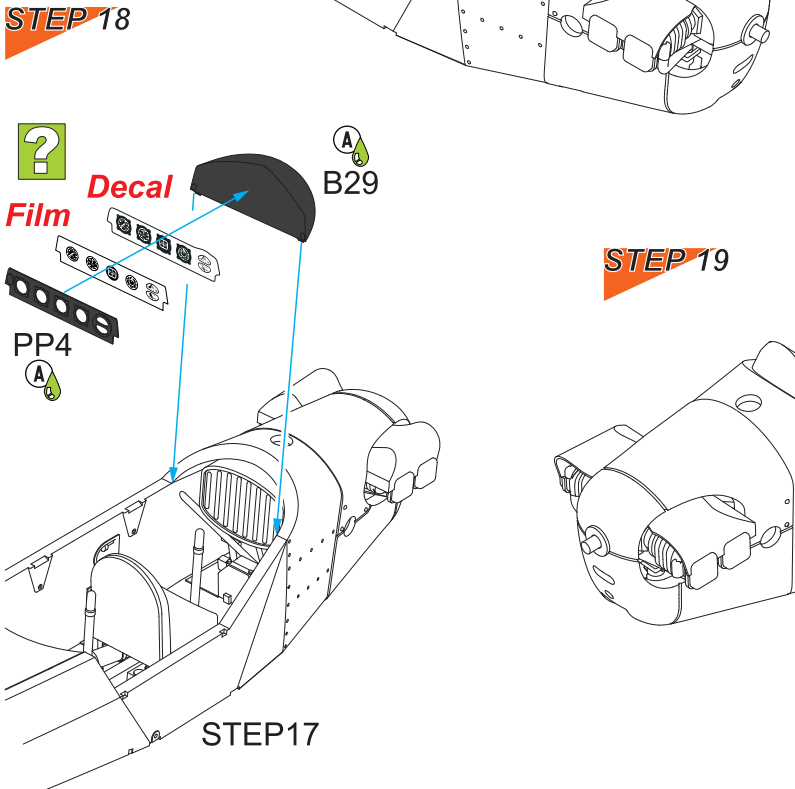
STEP 16



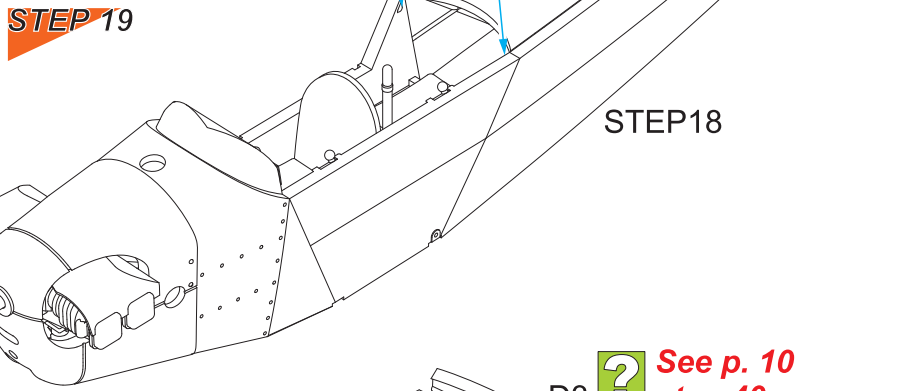
STEP 17



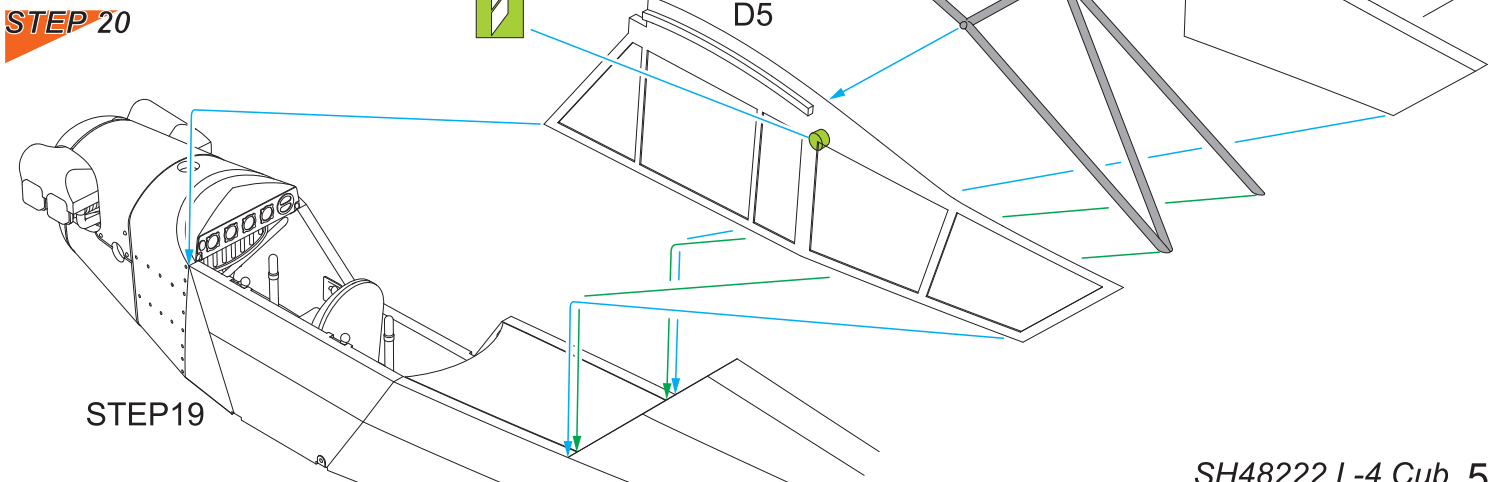
STEP 18



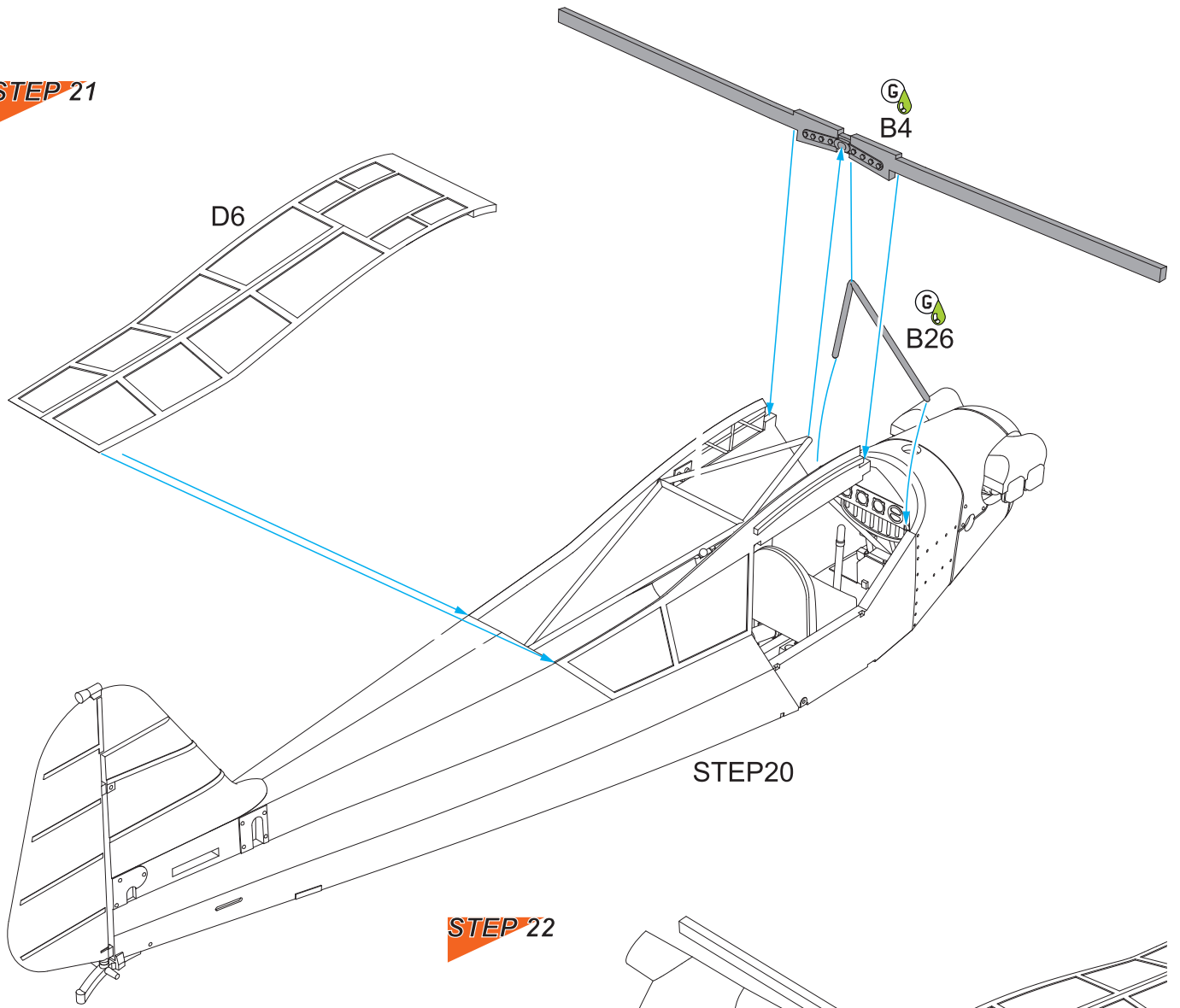
STEP 19



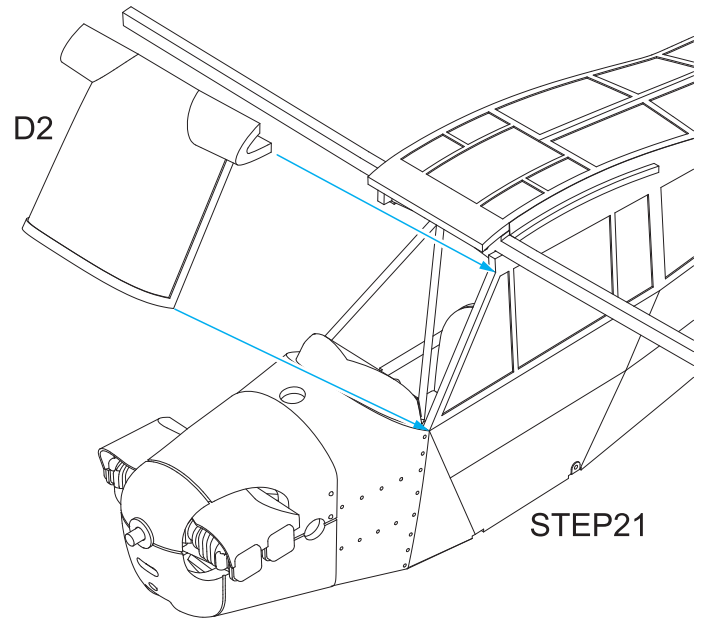
STEP 20



STEP 21

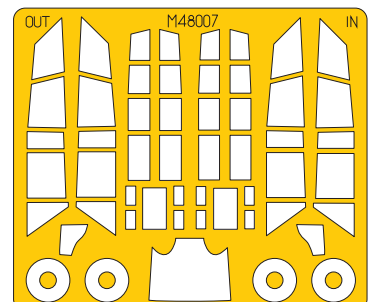
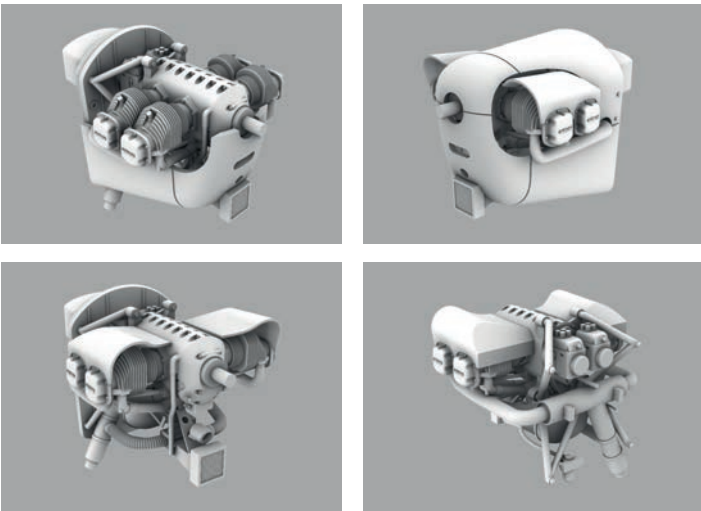


STEP 22

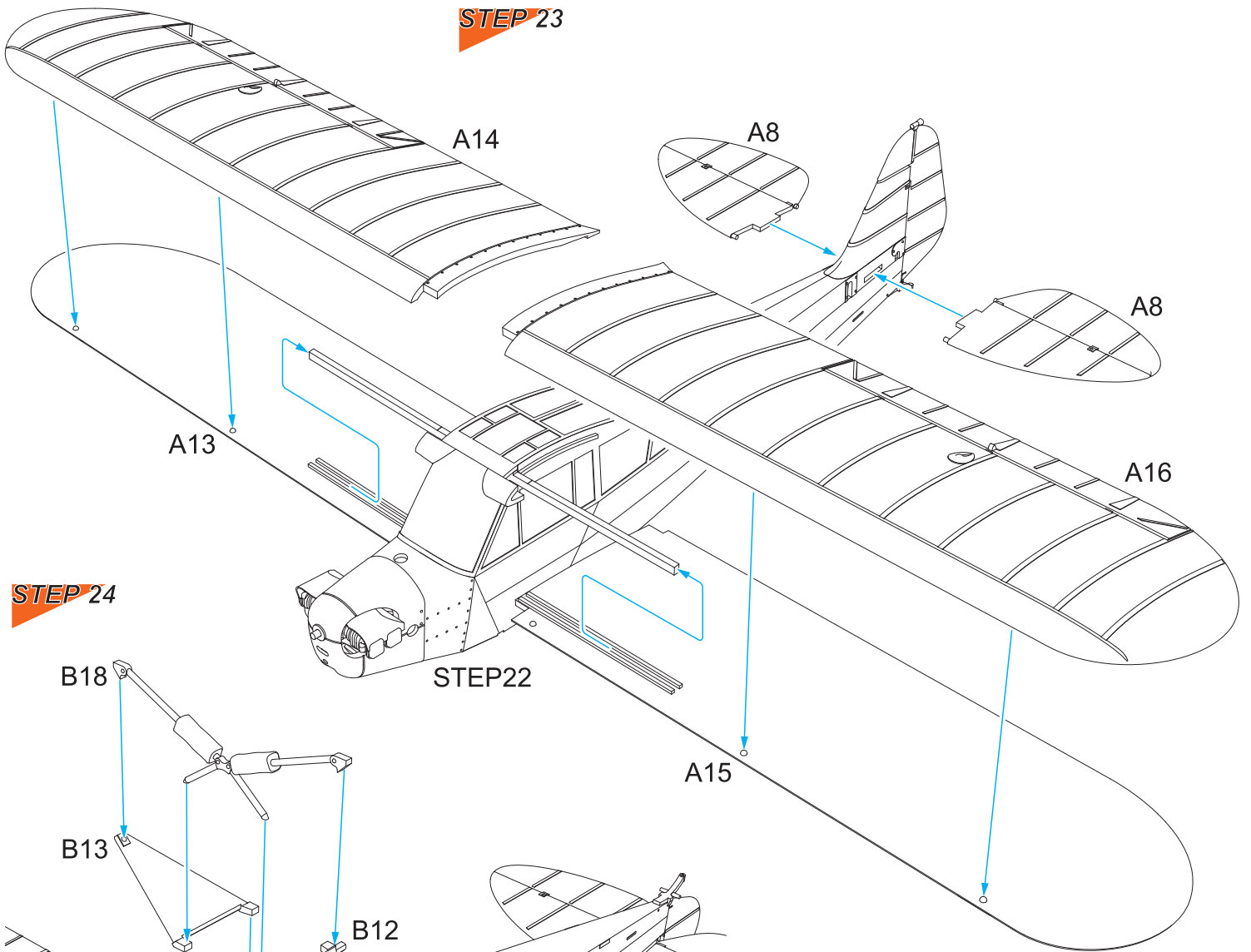


Pro zjednodušení stavby a vylepšení modelu L-4 Grasshopper nabízíme samostatně prodávané předřezané vnější i vnitřní masky M48007, 3D tištěný motor Continental O-170-3 P48002 a resinová kola CMK 4452.

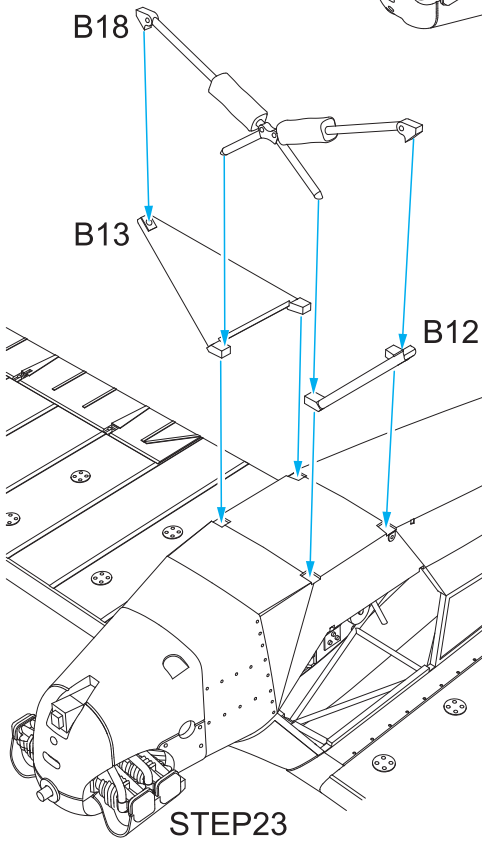
If you want to make the build easier and spruce up your L-4 Grasshopper we also offer the pre-cut Inside/Outside mask M48007, 3D printed engine Continental O-170-3 P48002 and the main wheels CMK 4452 in resin.



STEP 23



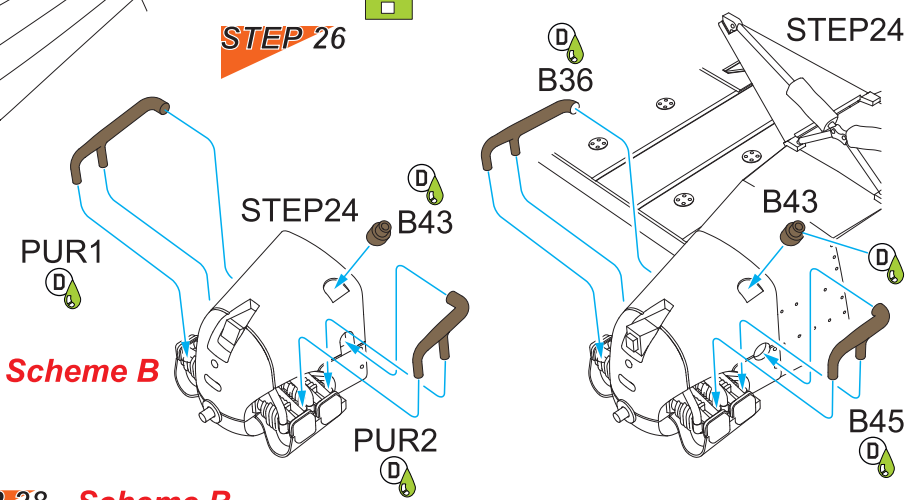
STEP 24



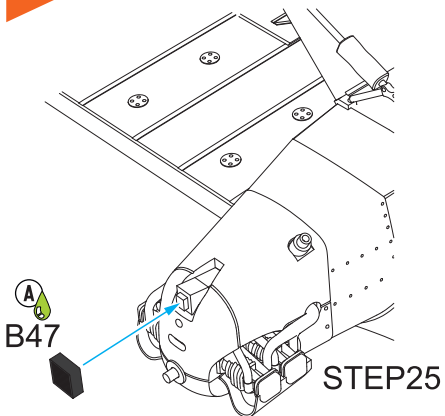
STEP 25



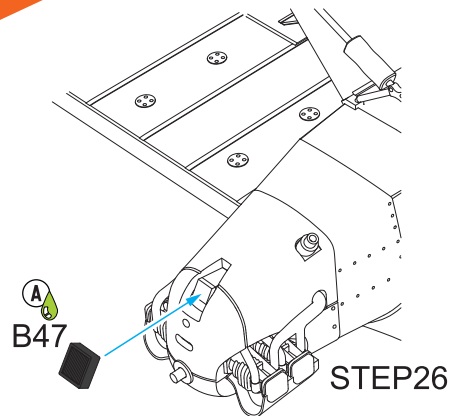
STEP 26



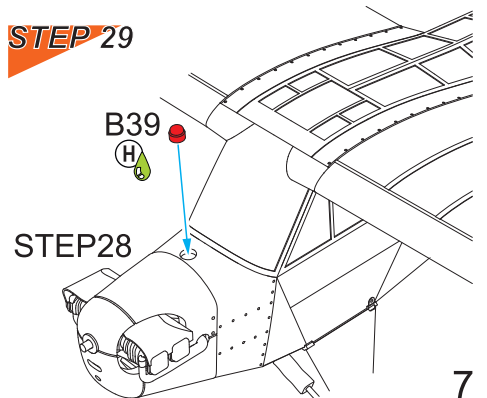
STEP 27



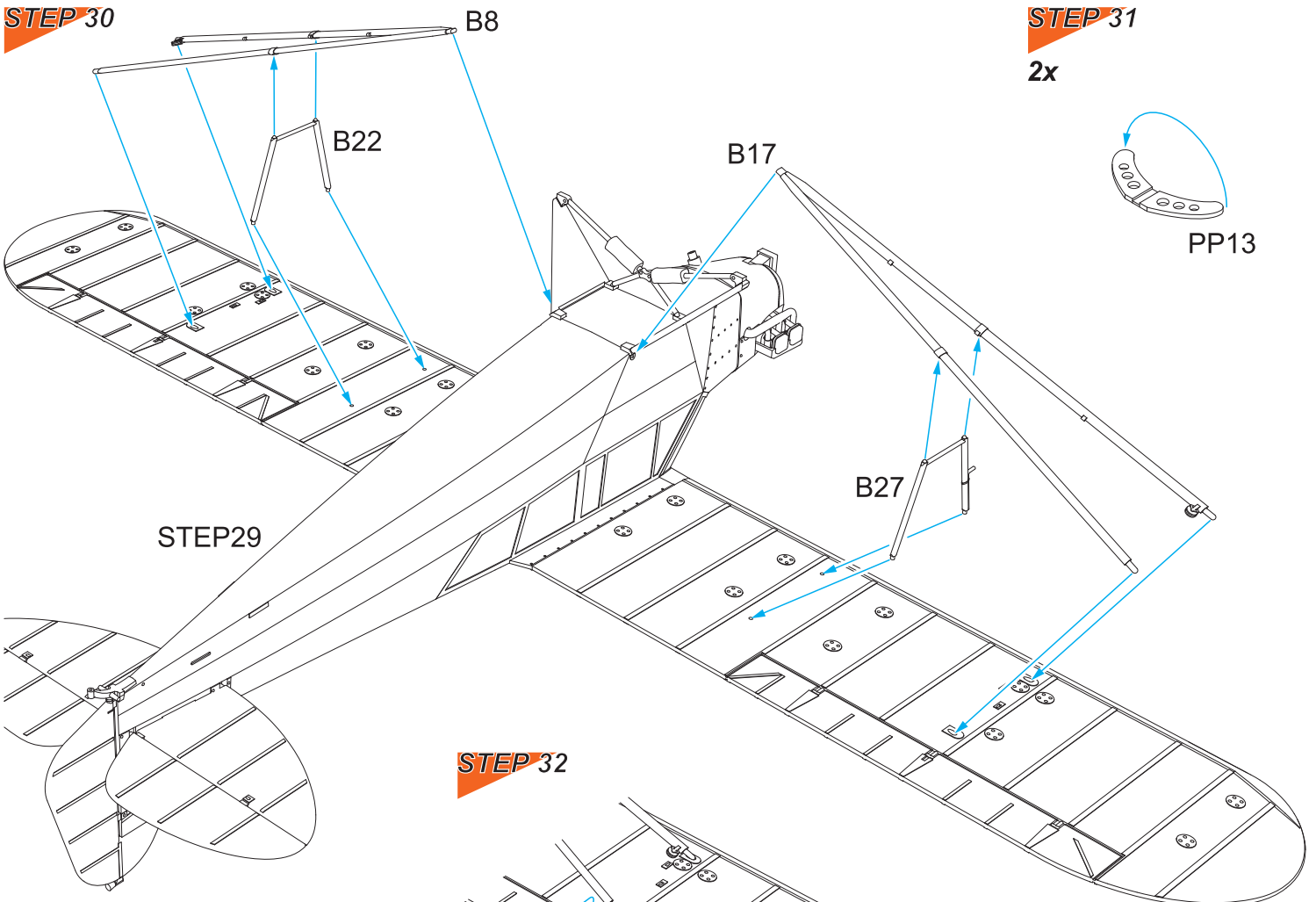
STEP 28 Scheme B



STEP 29

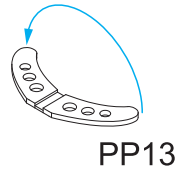


STEP 30



STEP 31

2x



STEP 32

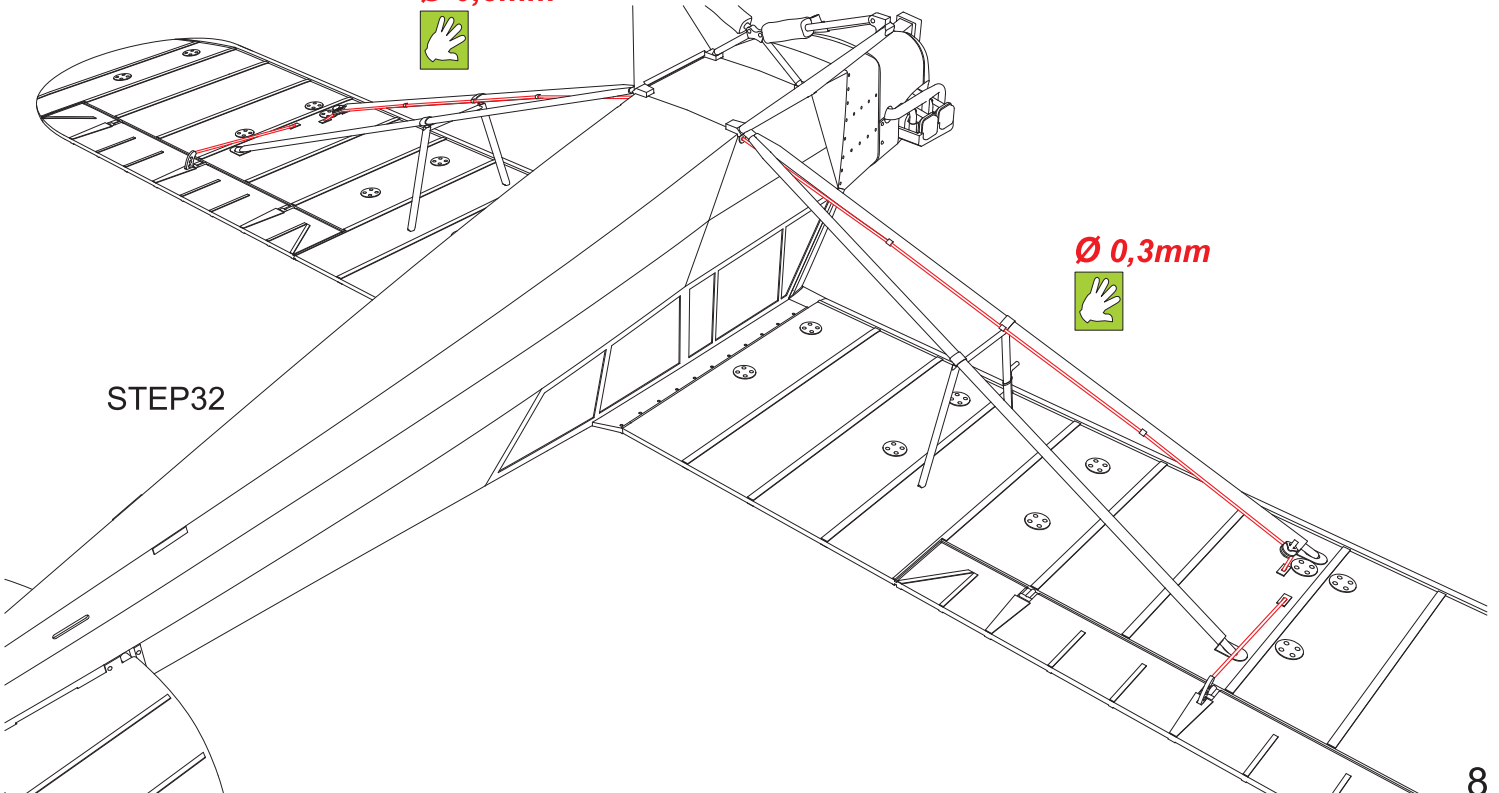
STEP31

Both sides

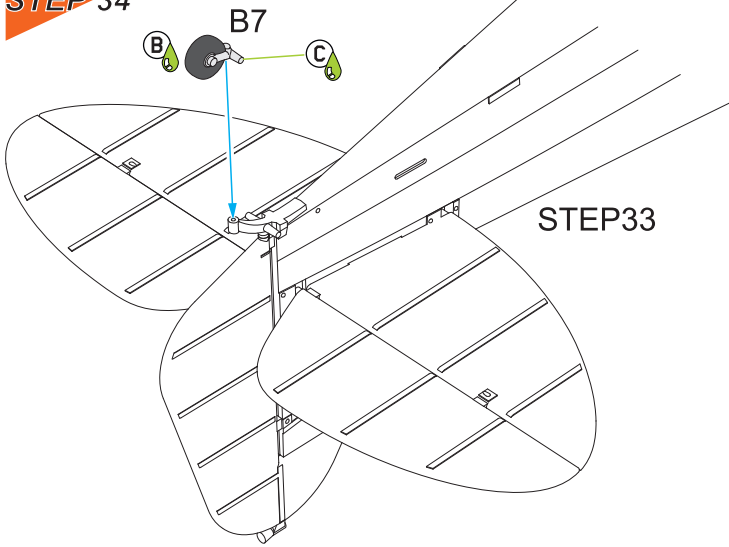
STEP30

STEP 33

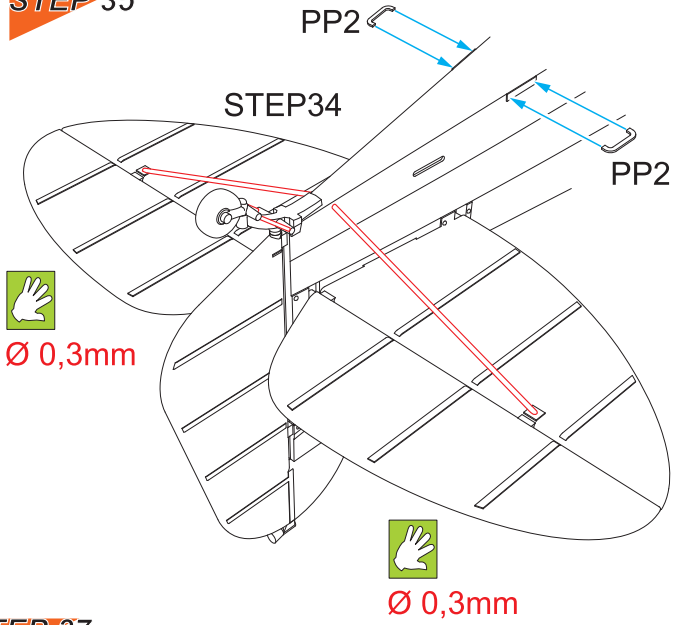
$\text{Ø } 0,3\text{mm}$



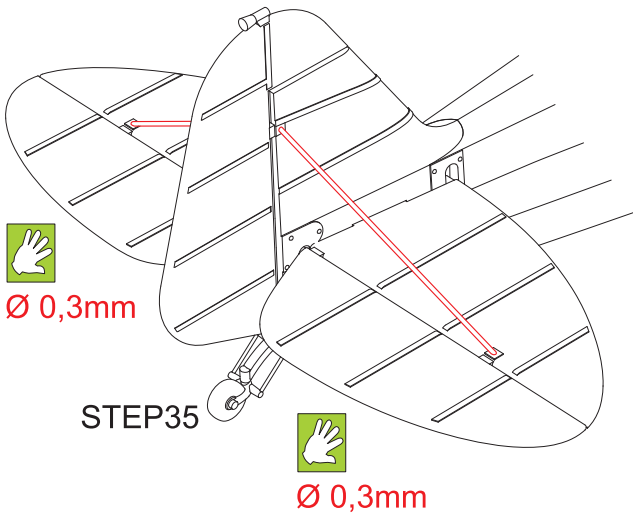
STEP 34



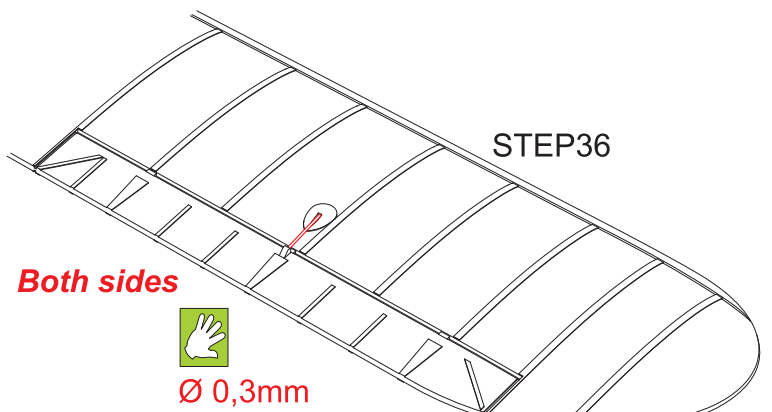
STEP 35



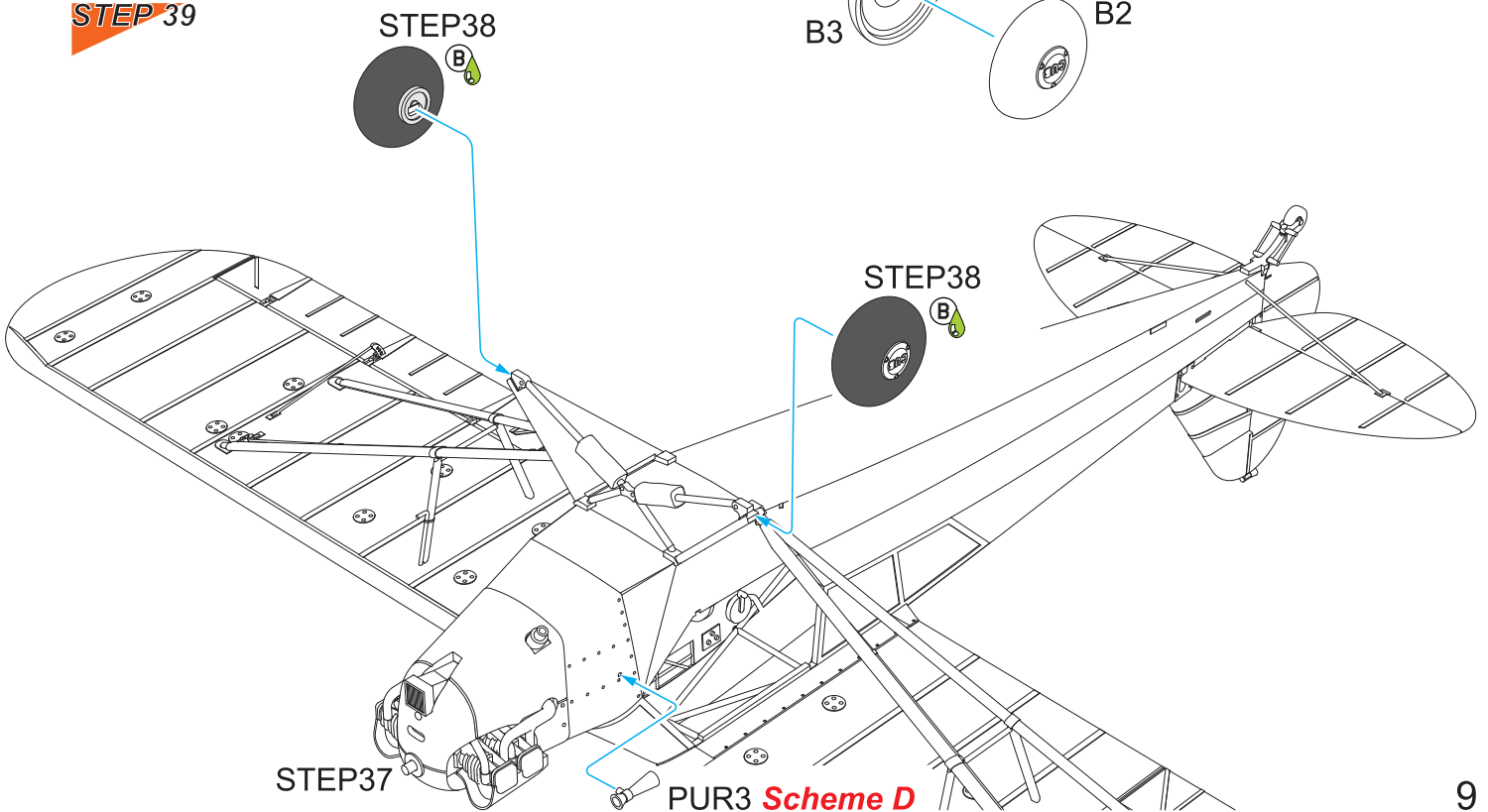
STEP 36



STEP 37

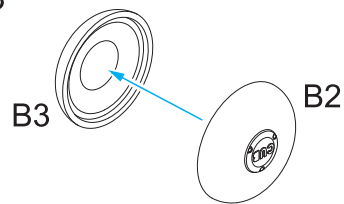


STEP 39

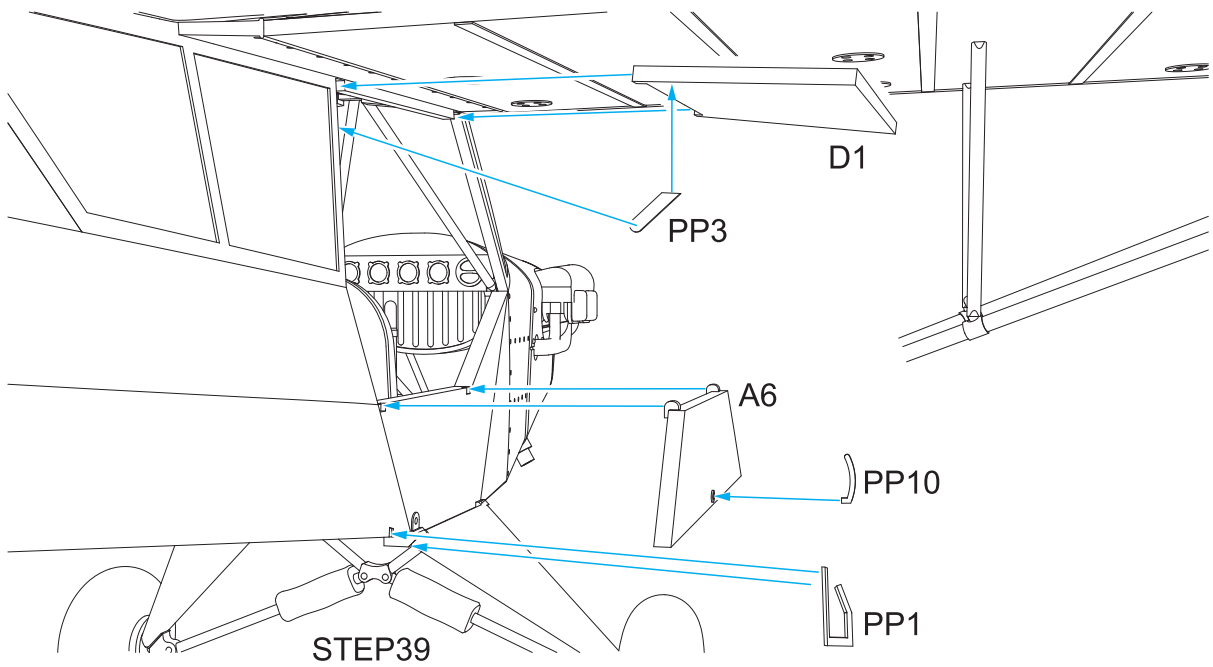


STEP 38

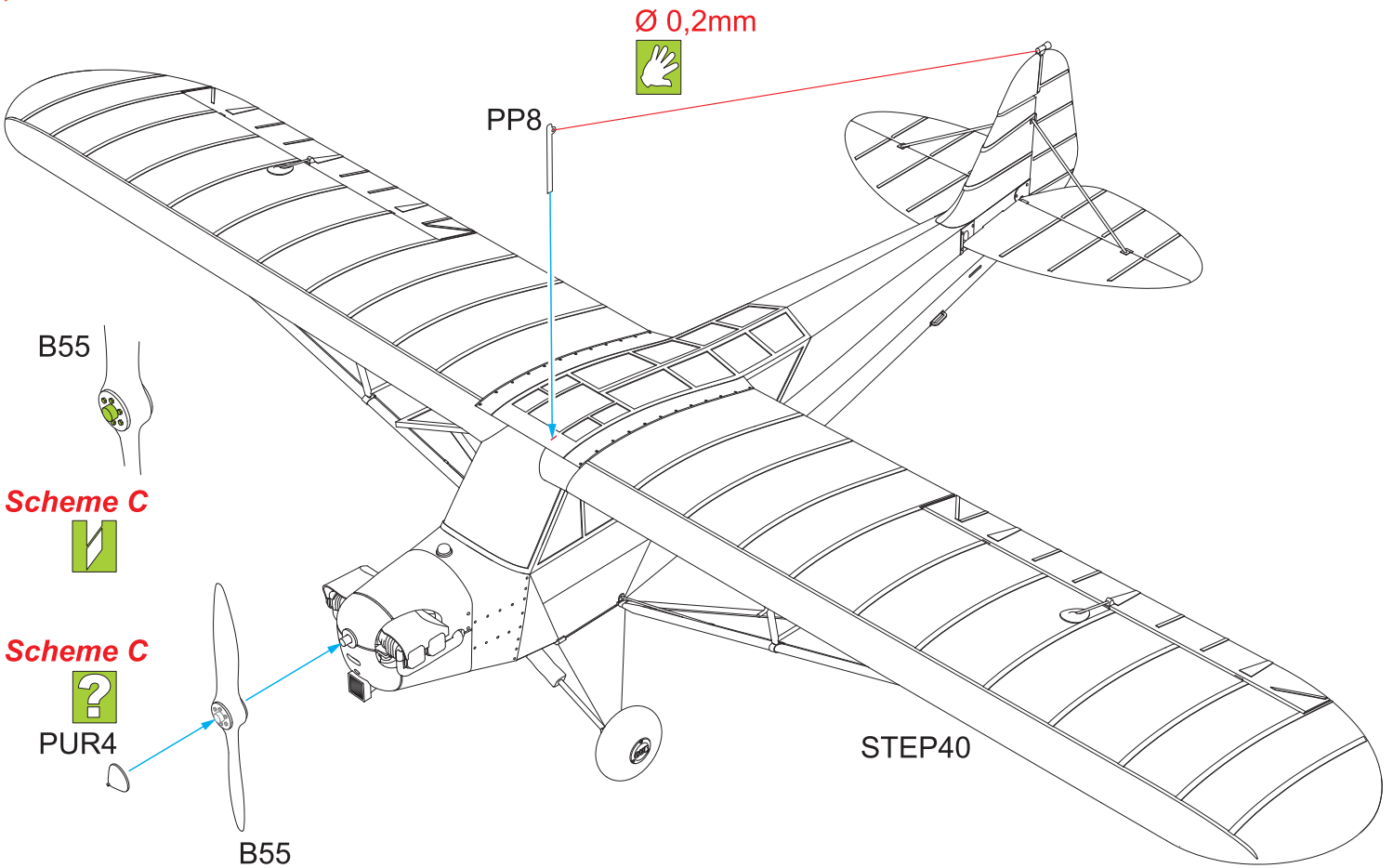
2x



STEP 40



STEP 41



Scheme C

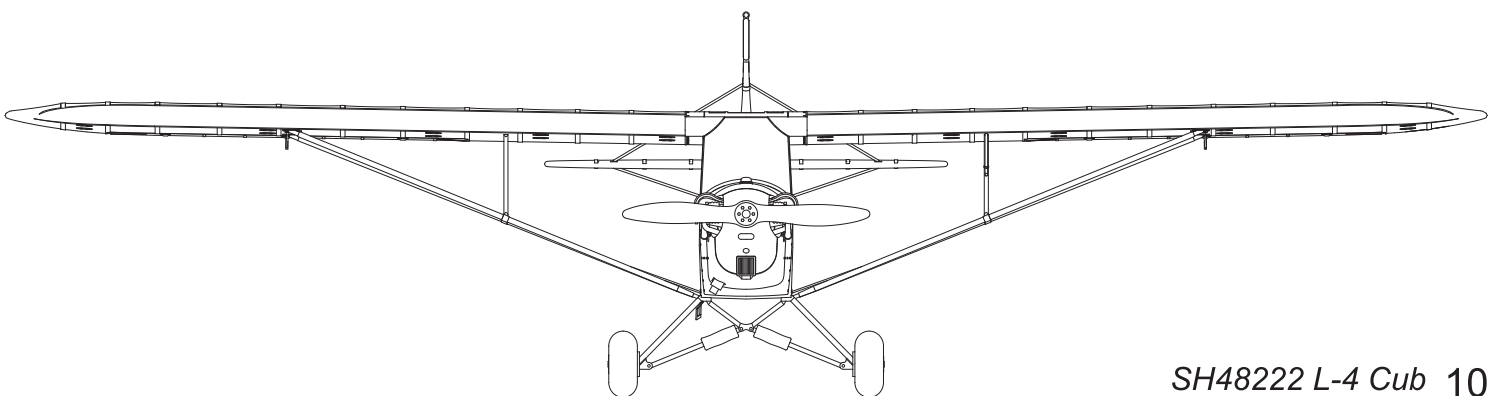


Scheme C



PUR4

B55

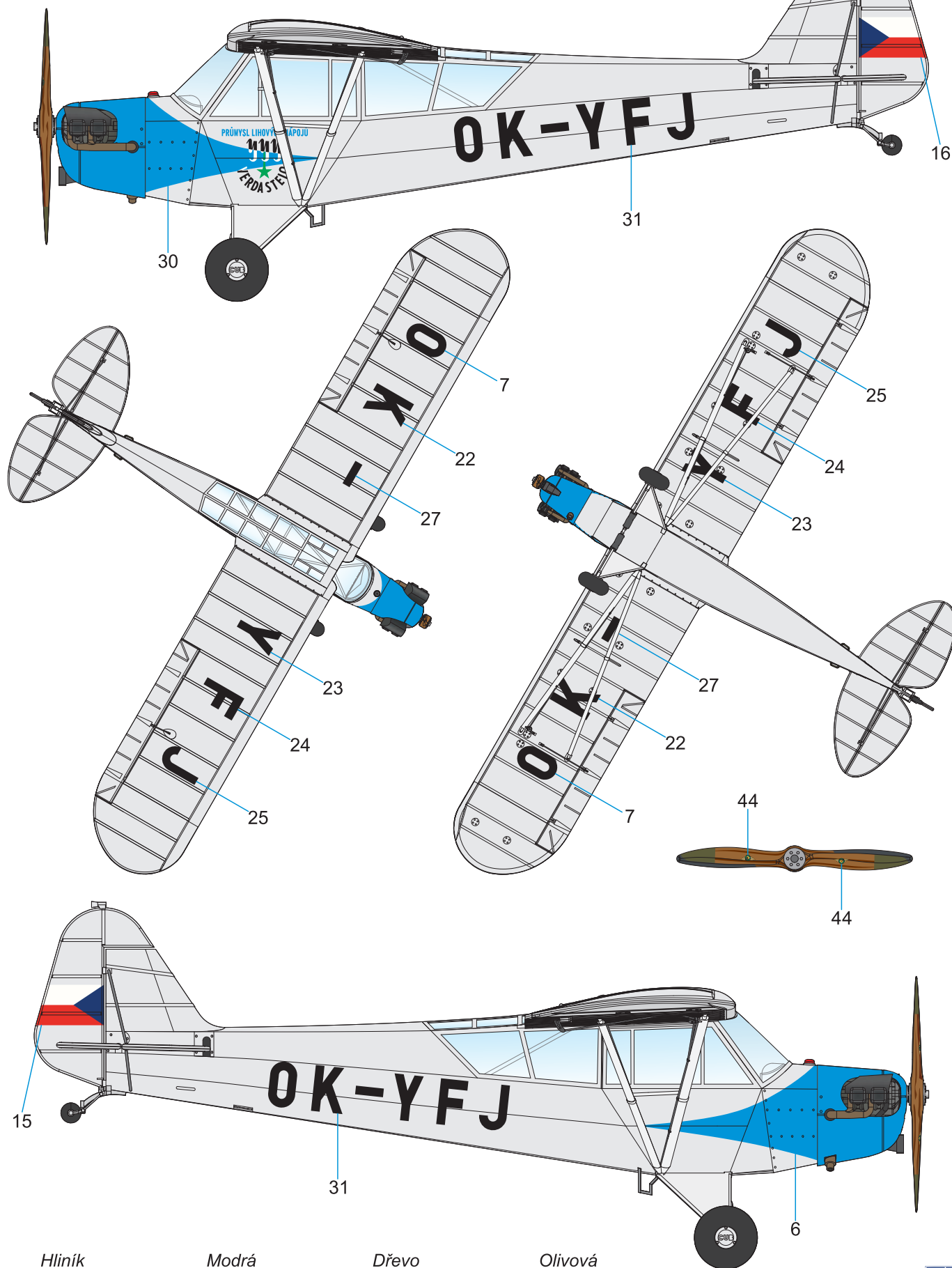


L-4J Grasshopper, OK-YFJ, v.č. 12830, ex-USAAF 44-80534, majitel J. Zítka, Rtyně v Podkrkonoší, 1947. Stroj byl dodán do ČR 22.8. 1946. Původním provozovatelem byl majitel říčanského lihovaru, letecký nadšenec a esperantista E. Dynybyl. Proto letoun nesl na boku reklamní nápis se značkou Verda Stelo (v Esperantu Zelená hvězda).

J. Zítkovi byl letoun znárodněn (tj. ukraden), stejně jako Mechanická Tkalcovna, jejímž byl vlastníkem po komunistickém převratu v únoru 1948. Novým majitelem OK-YFJ se stal Východočeský aeroklub Pardubice. V aeroklubu létal až do listopadu 1951, kdy byl podán návrh na zrušení, ale oficiálně vymazán z rejstříku byl až v roce 1957.

L-4J Grasshopper, OK-YFJ, c/n. 12830, ex-USAAF 44-80534, owned by J. Zítka, Rtyně v Podkrkonoší, Czechoslovakia, 1947. Delivered on 22 August 1946, its original operator was Emil Dynybyl, owner of the Říčany distillery, aviation enthusiast. He was also an avid Esperantist and so the aeroplane bore on its nose the Verda Stelo advertisement, which translated from Esperanto means The Green Star. After the 1948 communist coup, Zítka's distillery as well as his weaving shop were nationalised (meaning stolen). The aircraft was then owned by the East Bohemian Aeroclub in Pardubice where it remained for its it was

Scheme A



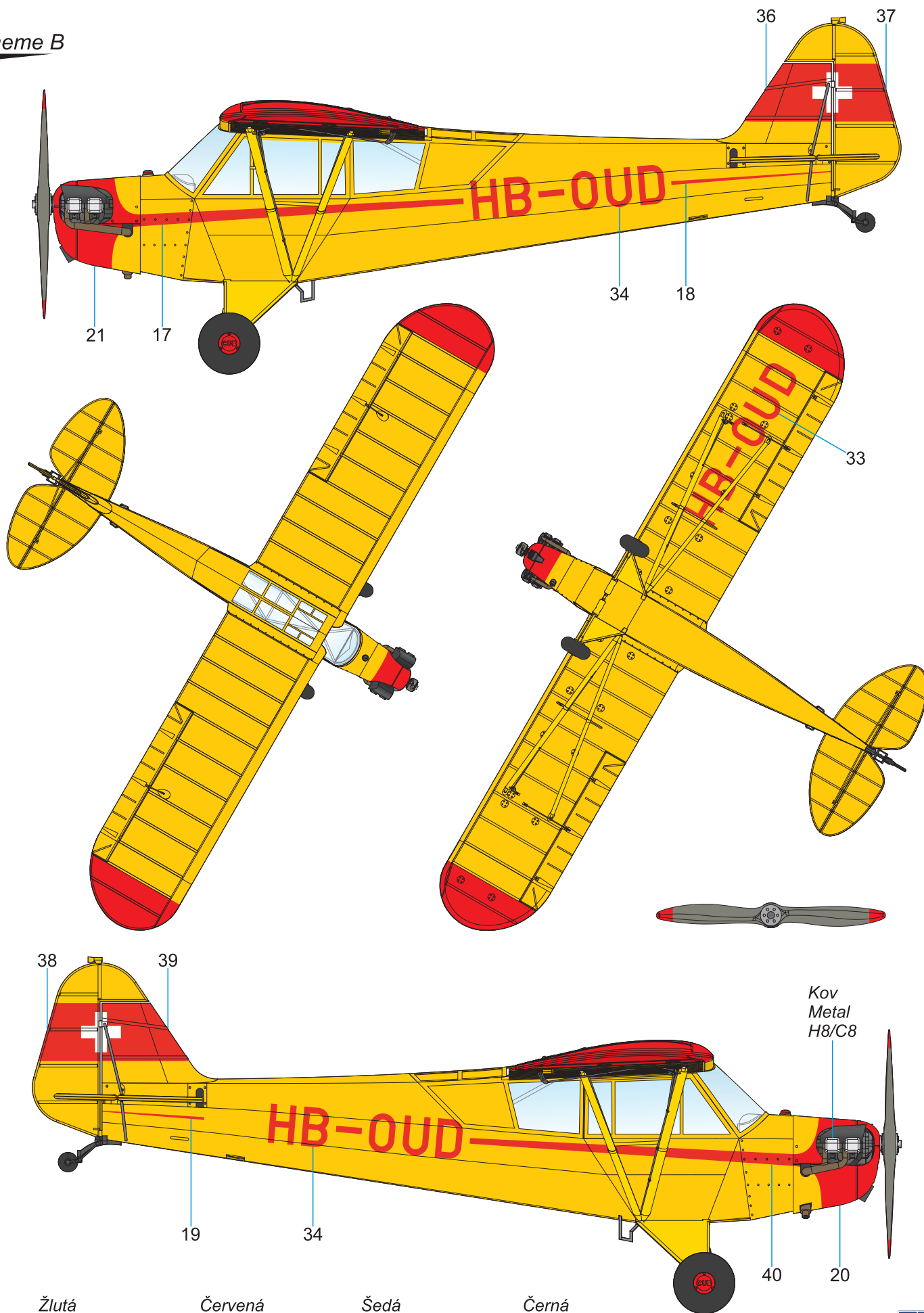
- Hliník
Aluminium
H8/C8
- Modrá
Blue
H323/C323
- Dřevo
Wood
H37/C43
- Olivová
Olive Drab
H52/C12



L-4H Grasshopper, HB-OUD, v.č. 11854, ex-USAAF 44-79558, soukromý majitel, Bern, Švýcarsko, 2004. V průběhu let byly na letounu HB-OUD měněny detaily zbarvení. Provedení výfuků a nasavače pod motorem se liší od standardu.

L-4H Grasshopper, HB-OUD, c/n. 11854, ex-USAAF 44-79558, private owner in Bern, Switzerland, 2004. Several colour details of HB-OUD have changed over the years of its flying career. The exhausts and air intake beneath the engine differ from the factory standard.

Scheme B



- Žlutá
Yellow
H329/C329
- Červená
Red
H3/C3
- Šedá
Gray
H70/C60
- Černá
Black
H2/C2

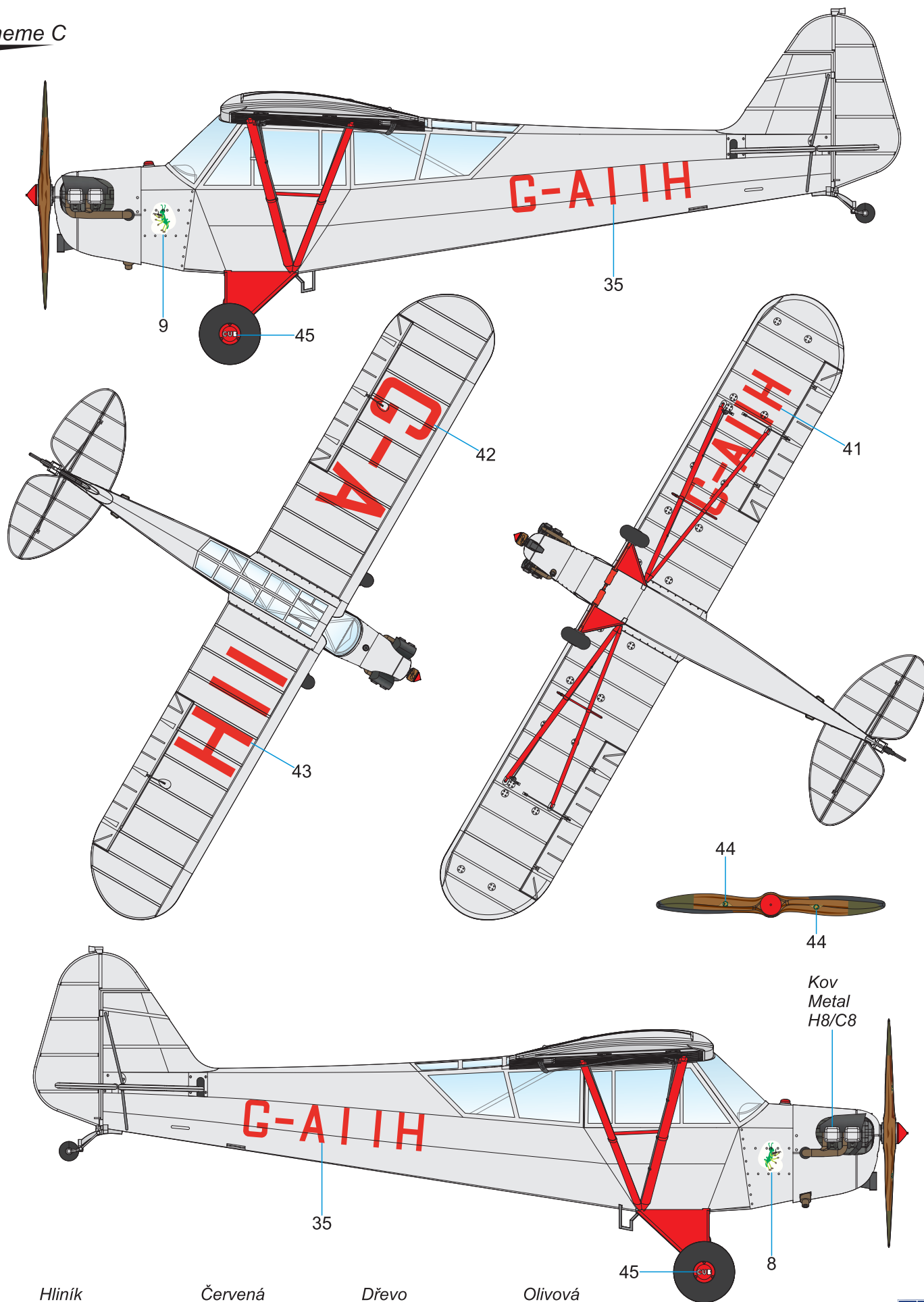
Kov
Metal
H8/C8



L-4H Grasshopper, G-AIIH, v.č. 11945, ex-USAAF 44-79649, soukromý majitel, Velká Británie, 1993. V průběhu let byly na letounu změněny detaily zbarvení, včetně velikosti a tvarů imatrikulace a kreseb před kabinou. Letoun létal ve Velké Británii od roku 1946 minimálně do roku 2006.

L-4H Grasshopper, G-AIIH, c/n. 11945, ex-USAAF 44-79649, private owner, Great Britain, 1993. The registration letters size and shape, drawings in front of the cockpit and some other colour details changed over the years. The machine was flown in Britain from 1946 until at least 2006.

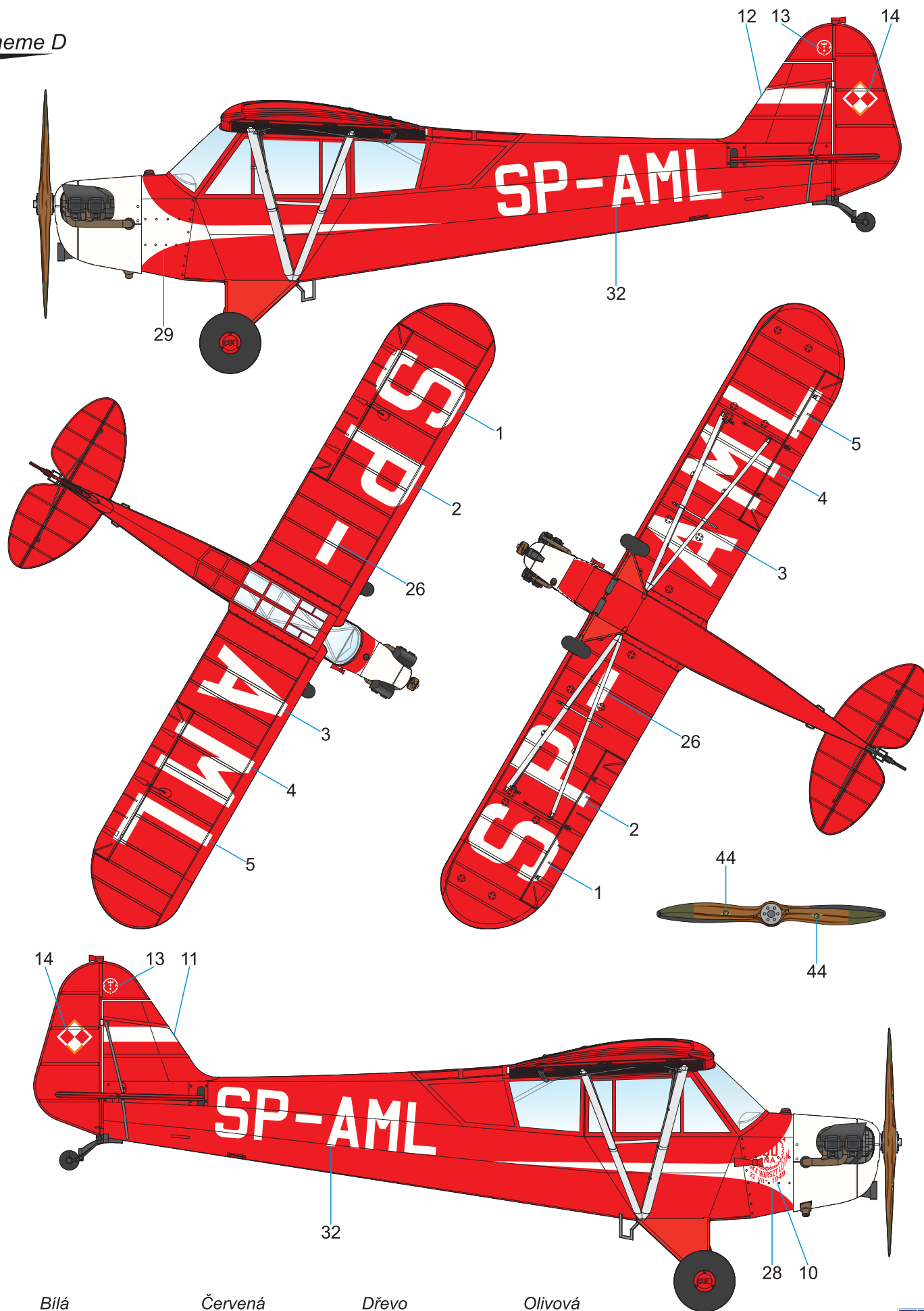
Scheme C



- | | | | | | | | |
|--|------------------------------|---|-------------------------|---|--------------------------|---|----------------------------------|
|  | Hliník Aluminium H8/C8 |  | Červená Red H3/C3 |  | Dřevo Wood H37/C43 |  | Olivová Olive Drab H52/C12 |
|--|------------------------------|---|-------------------------|---|--------------------------|---|----------------------------------|

Kov
Metal
H8/C8

Scheme D



○ Bílá
White
H1/C1

● Červená
Red
H3/C3

■ Dřevo
Wood
H37/C43

● Olivová
Olive Drab
H52/C12

ATTRACTIVE 1/48 SCALE MODELS



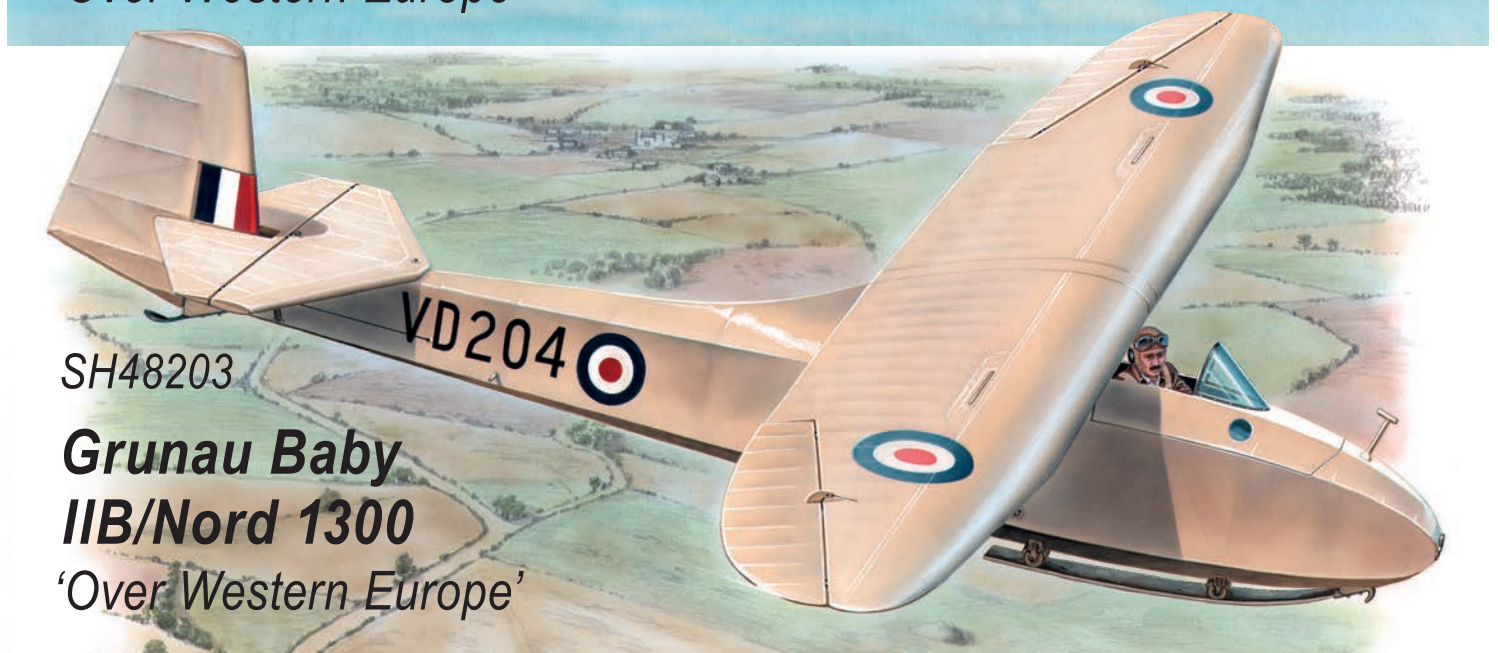
SH48195

**Supermarine
Spitfire Mk.VC**
'Overseas Jockeys'



SH48198

EoN Eton TX.1/SG-38
'Over Western Europe'



SH48203

**Grunau Baby
IIB/Nord 1300**
'Over Western Europe'

1/48
SH48217



M48008
Siebel Si 204E/Aero C-3B Bomber MASK

Special
MASK

Aero C-3B 'Czechoslovak Bomber-Trainer'

1/48
SH48167



L-39ZA/ZA ART Albatros

M48010
L-39ZA/ZA ART Albatros MASK

Special
MASK

1/48
SH48159



Airspeed Oxford Mk.I/II 'Foreign Service'