

# IAR. 81C - Great Air Battles of 1944



Cat. No. 72570  
Scale 1/72

3d design: Radu Brînzan  
Research: IBG Crew



IBG Models would like to thank Mr. Horia Stoica and Mr. Michał Skawiński for the great help in recreating colour schemes for this model kit.

## IAR.80 and 81 series

The legendary IAR.80 and 81 was the only Romanian fighter of domestic design to take part in World War II, often facing superior opponents and still being capable to hold its own thanks to the skills and courage of its pilots. The turns of war made for a very interesting operational career, with the airplane having the opportunity to fight all the major air forces in the theatre: USAAF, Soviet VVS, German Luftwaffe and the aviation of Hungary.

In the service of Aeronautica Regală Română, the third largest air force on the Eastern Front, the aircraft proved to be a very capable and dangerous weapon and became the symbol of the aviation of the Kingdom of Romania, remaining in service well after the end of hostilities - until the mid-1950s. In more than three years of combat, pilots flying the IAR.80 and 81 scored 539 confirmed and 90 unconfirmed victories over aircraft in the air and destroyed another 168 enemy machines on the ground.

The success of this design was possible thanks to the previous experience of IAR. designers with cantilever, low-wing monoplanes and the transfer of the all-metal airplane construction technology after the purchase of the P.11F license from Poland (see IBG Models set No. 72521). IAR.80 sleek lines bear resemblance to the Hughes H-1 racer, which might have been one of the distant inspirations, nevertheless the airframe was designed from scratch by Romanian engineers, who used only the heavily-modified rear fuselage and smaller parts from PZL P.24E fighter, licence-produced at IAR.

The entire production run included 450 numbered airframes (with the last two being lost during USAAF bombardment of IAR factory at Braşov). In addition to the pure fighter airplane (IAR.80), the series included a fighter-bomber with dive bombing capability (I.A.R.81). It is worth to note that both during the production and in service, the airplanes underwent continuous improvement, resulting in a number of versions that visibly differed in fuselage length, wingspan, armament and other details. More on the differences between them can be found in the eBook downloadable from our website: <http://www.ibgmodels.com/resources-2/>

## IAR.81C

The most numerous of all the versions (150 airframes built), the definitive IAR.81C was armed with two MG151/20 Mauser cannons with a respectable number of 350 rounds and two FN Browning machine guns. It was originally built as a fighter-bomber with a dive-bombing capability, nevertheless in most cases the swing-arm was removed from the belly and the airplane was used as an air-defence and frontline fighter. The long fuselage and wide-span wings gave it a distinctive look compared to earlier IAR.80s, which was further emphasised by the air filter installed under the cowling. This version was the backbone of the IAR fleet defending Romania from USAAF bombers in the bloody year of 1944.



**Element assembled in previous step**  
Element złożony we wcześniejszym etapie



**Version to choose**  
Wersja do wyboru



**Make your own**  
Wykonaj samodzielnie



**Paint colour**  
Kolor farby



**Element after assembly in current step**  
Element po złożeniu w aktualnym etapie



**Sub-assembly in step**  
Kolejne kroki w etapie



**Decal**  
Kalkomania

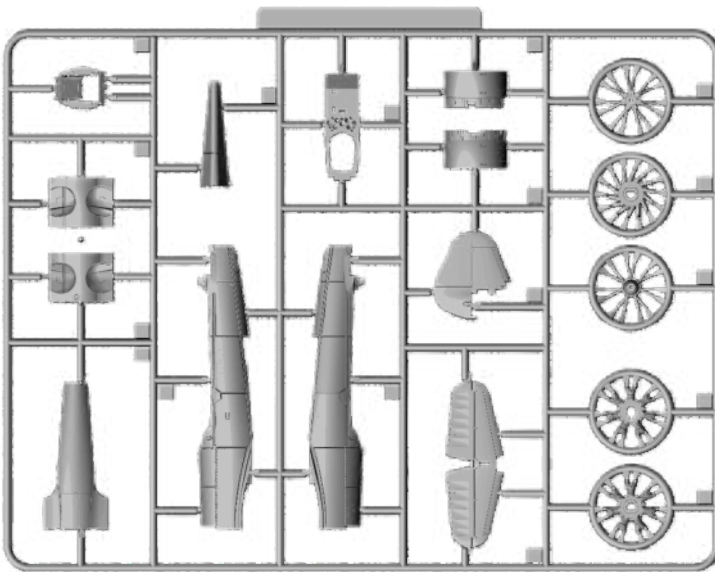
**Please read instructions before assembly. Follow the sequence of assembly presented in instructions. Glue and paint not included.**  
Przed montażem przeczytać instrukcję. Przestrzegać kolejności montażu podanego w instrukcji. Klej i farby nie wchodzą w skład zestawu.

**IBG Models**  
ul. Benedykta Hertza 2  
04-603 Warszawa  
Poland

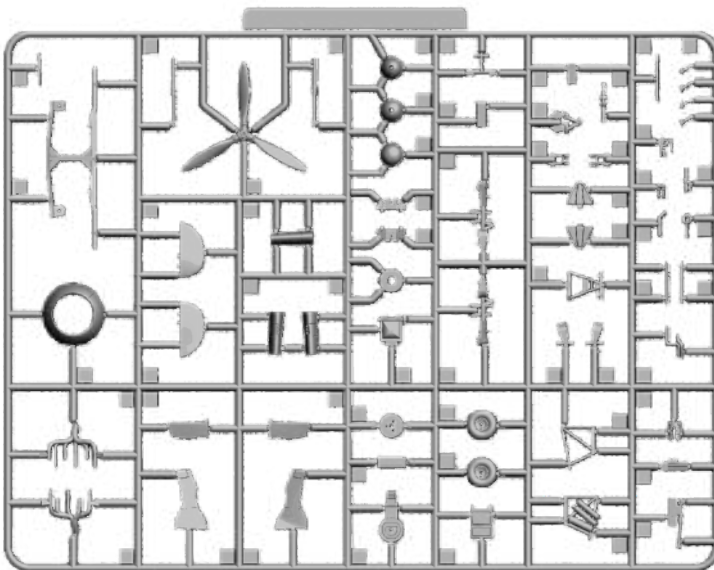
tel +48 22 8159150  
fax +48 22 8159151  
ibgsc@ibg.com.pl  
www.ibg.com.pl  
www.ibgmodels.com

**Elements of the model kit**  
*Elementy modelu*

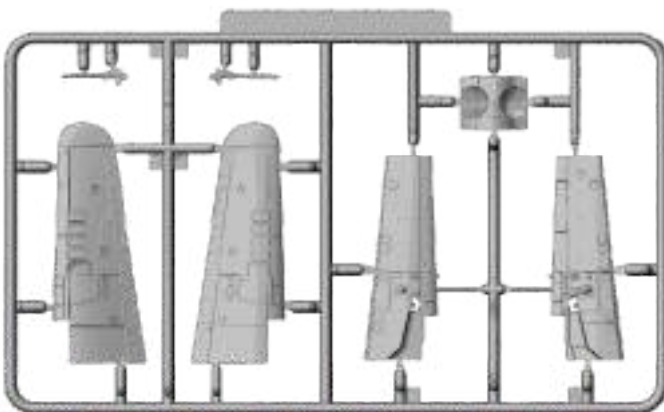
**Frame B1 / Ramka B1**



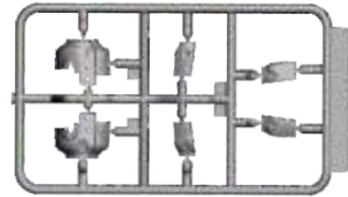
**Frame B2 / Ramka B2**



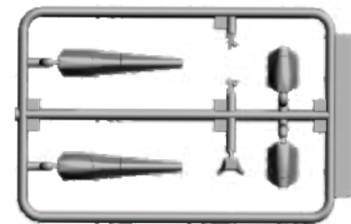
**Frame J / Ramka J**



**Frame D / Ramka D**



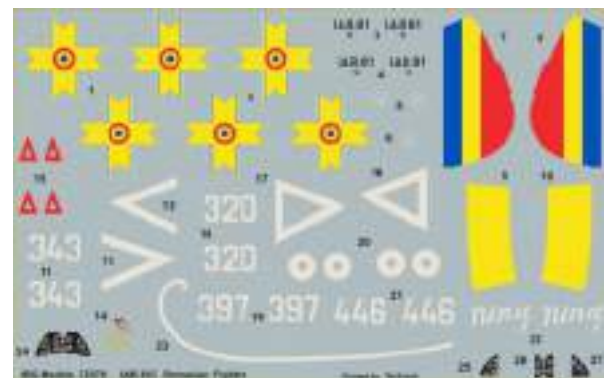
**Frame A transparent /  
Ramka A przezroczysta**



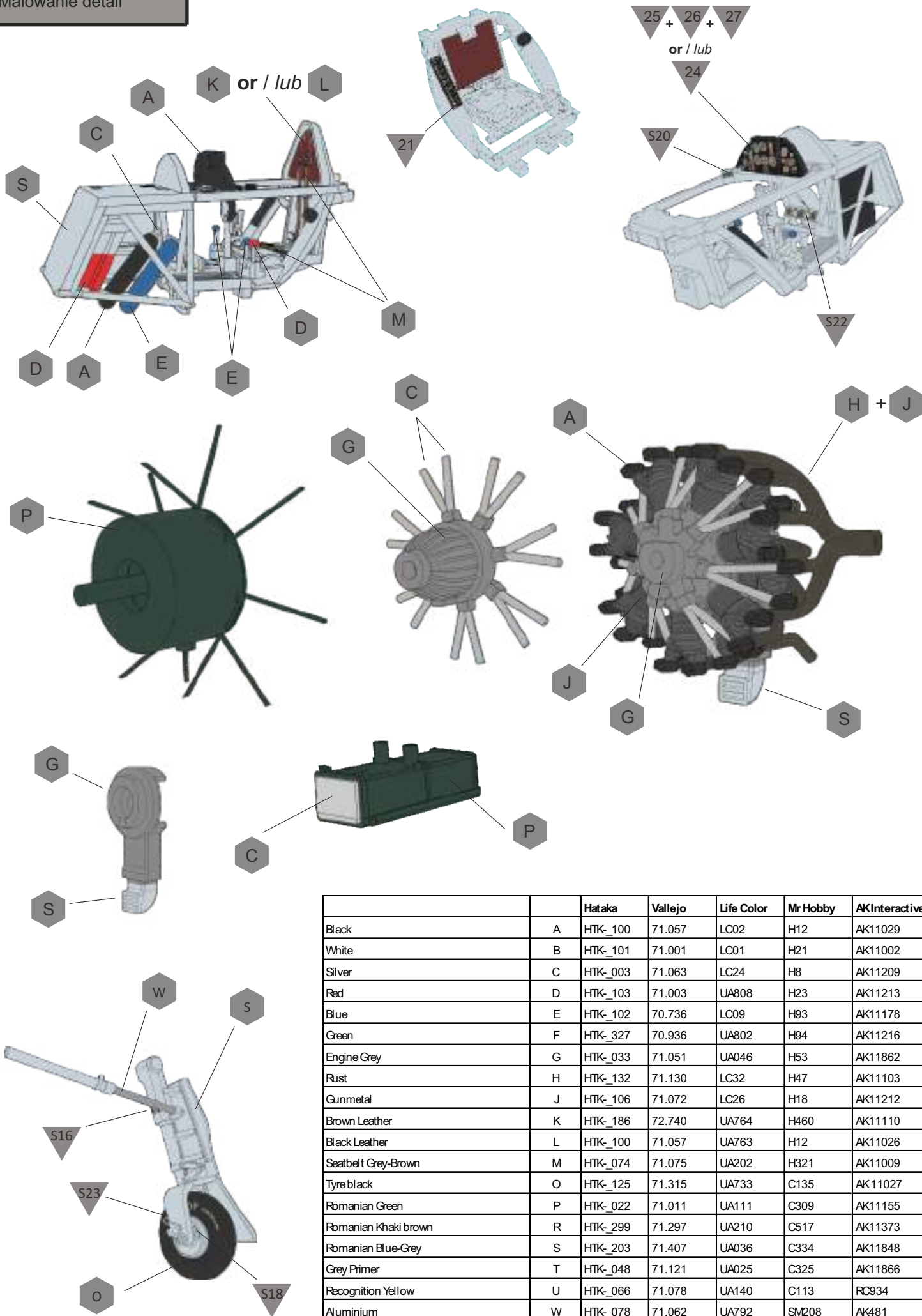
**Photo-etched Parts  
Elementy Fototarwione**



**Decals / Kalkomanie**

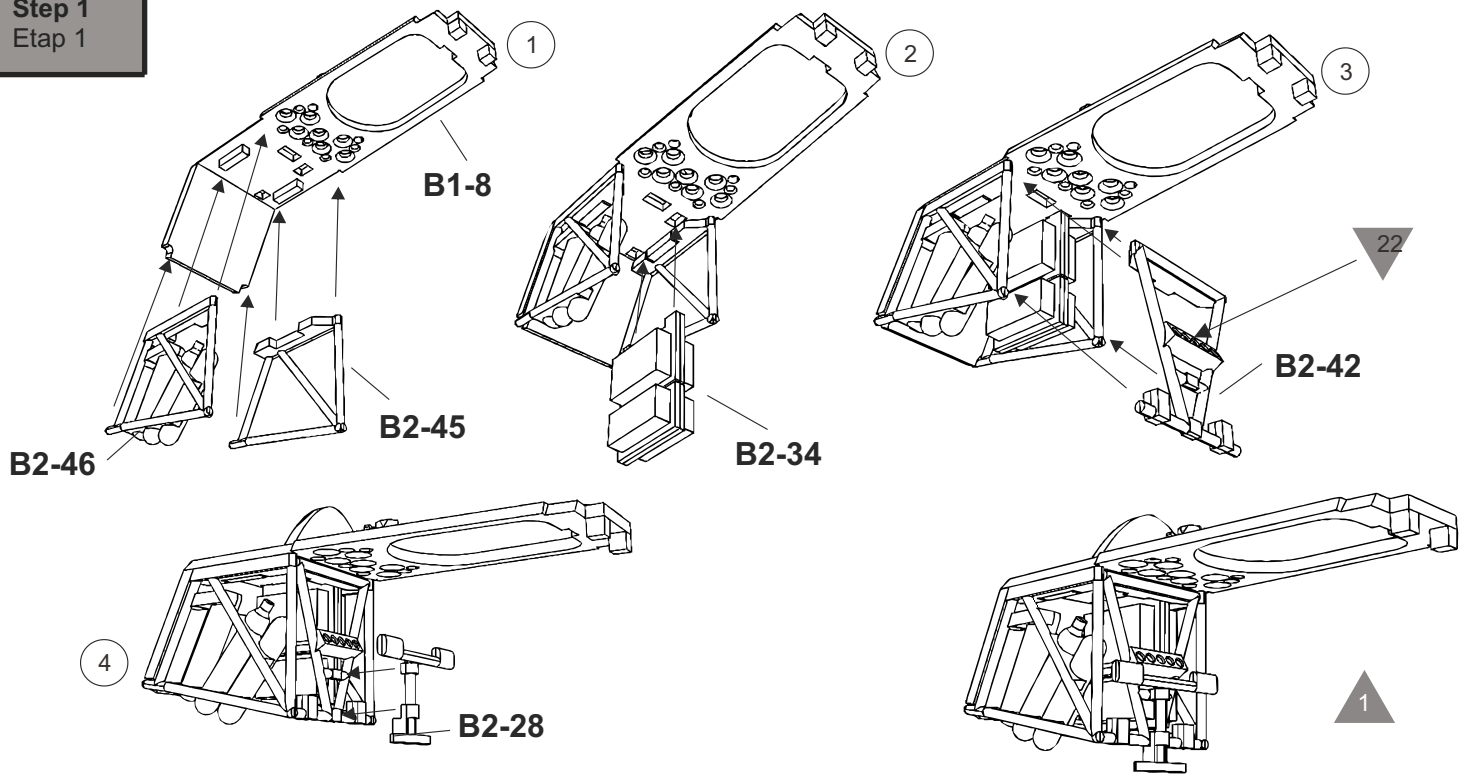


**Detail painting**  
Malowanie detali

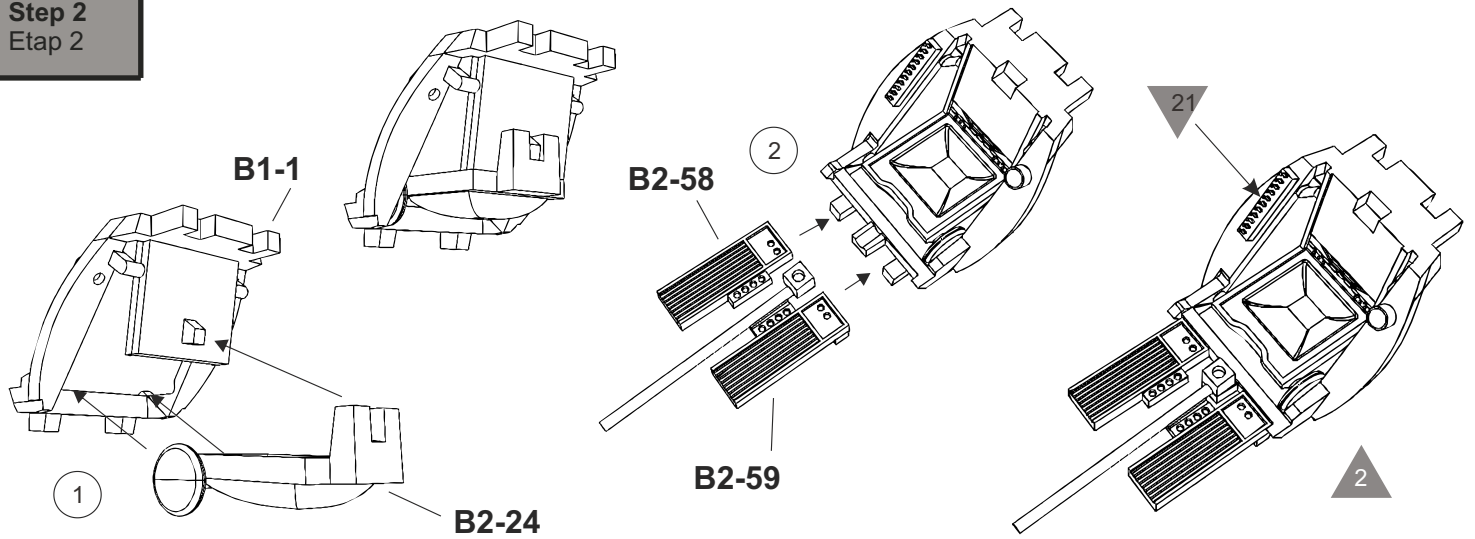


		Hataka	Vallejo	Life Color	Mr Hobby	AKInteractive
Black	A	HTK_100	71.057	LC02	H12	AK11029
White	B	HTK_101	71.001	LC01	H21	AK11002
Silver	C	HTK_003	71.063	LC24	H8	AK11209
Red	D	HTK_103	71.003	UA808	H23	AK11213
Blue	E	HTK_102	70.736	LC09	H93	AK11178
Green	F	HTK_327	70.936	UA802	H94	AK11216
Engine Grey	G	HTK_033	71.051	UA046	H53	AK11862
Rust	H	HTK_132	71.130	LC32	H47	AK11103
Gunmetal	J	HTK_106	71.072	LC26	H18	AK11212
Brown Leather	K	HTK_186	72.740	UA764	H460	AK11110
Black Leather	L	HTK_100	71.057	UA763	H12	AK11026
Seatbelt Grey-Brown	M	HTK_074	71.075	UA202	H321	AK11009
Tyre black	O	HTK_125	71.315	UA733	C135	AK11027
Romanian Green	P	HTK_022	71.011	UA111	C309	AK11155
Romanian Khaki brown	R	HTK_299	71.297	UA210	C517	AK11373
Romanian Blue-Grey	S	HTK_203	71.407	UA036	C334	AK11848
Grey Primer	T	HTK_048	71.121	UA025	C325	AK11866
Recognition Yellow	U	HTK_066	71.078	UA140	C113	RC934
Aluminium	W	HTK_078	71.062	UA792	SM208	AK481
RLM70 Black Green	X	HTK_015	71.021	UA501	H065	AK11821

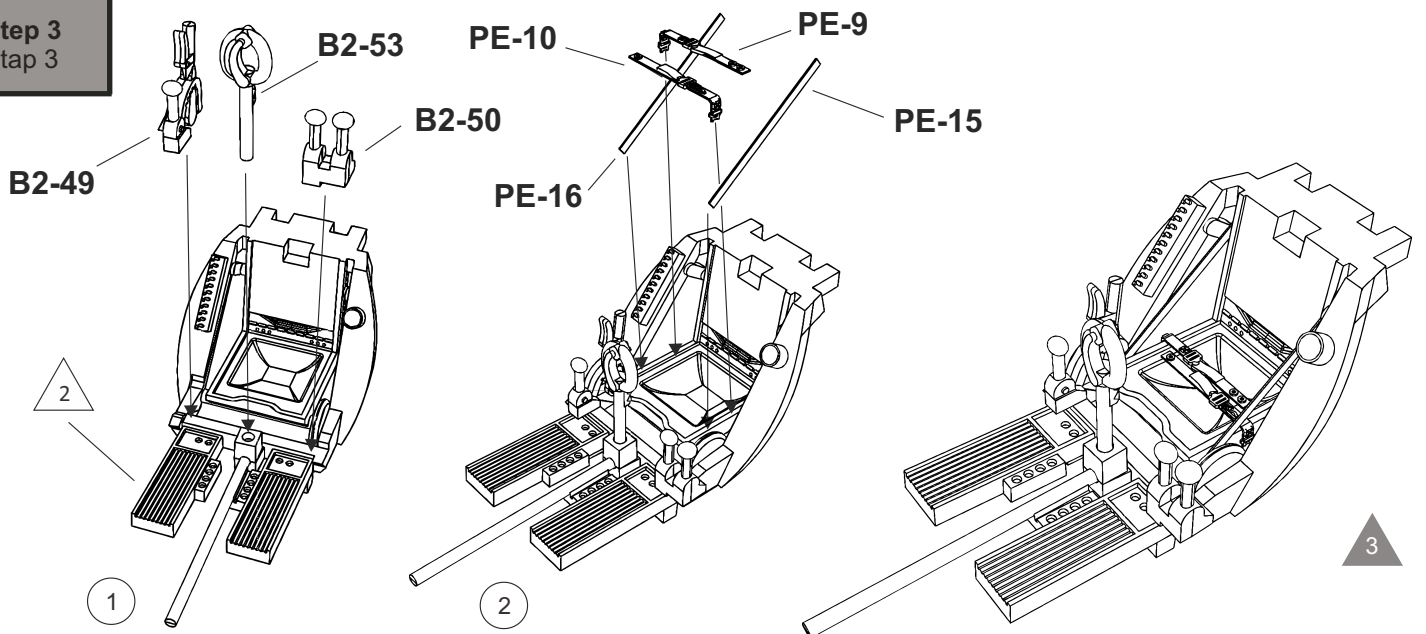
Step 1  
Etap 1



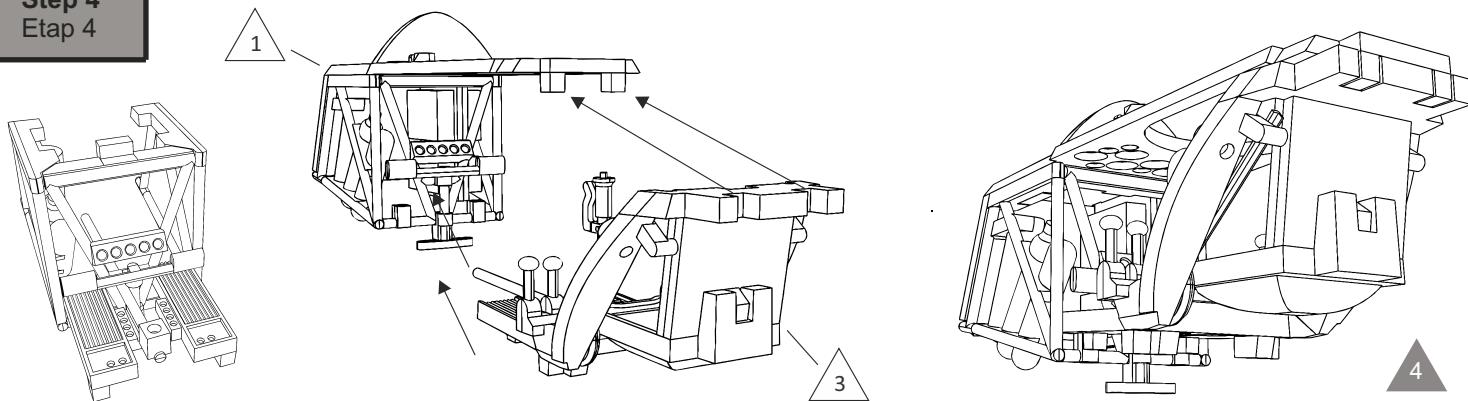
Step 2  
Etap 2



Step 3  
Etap 3

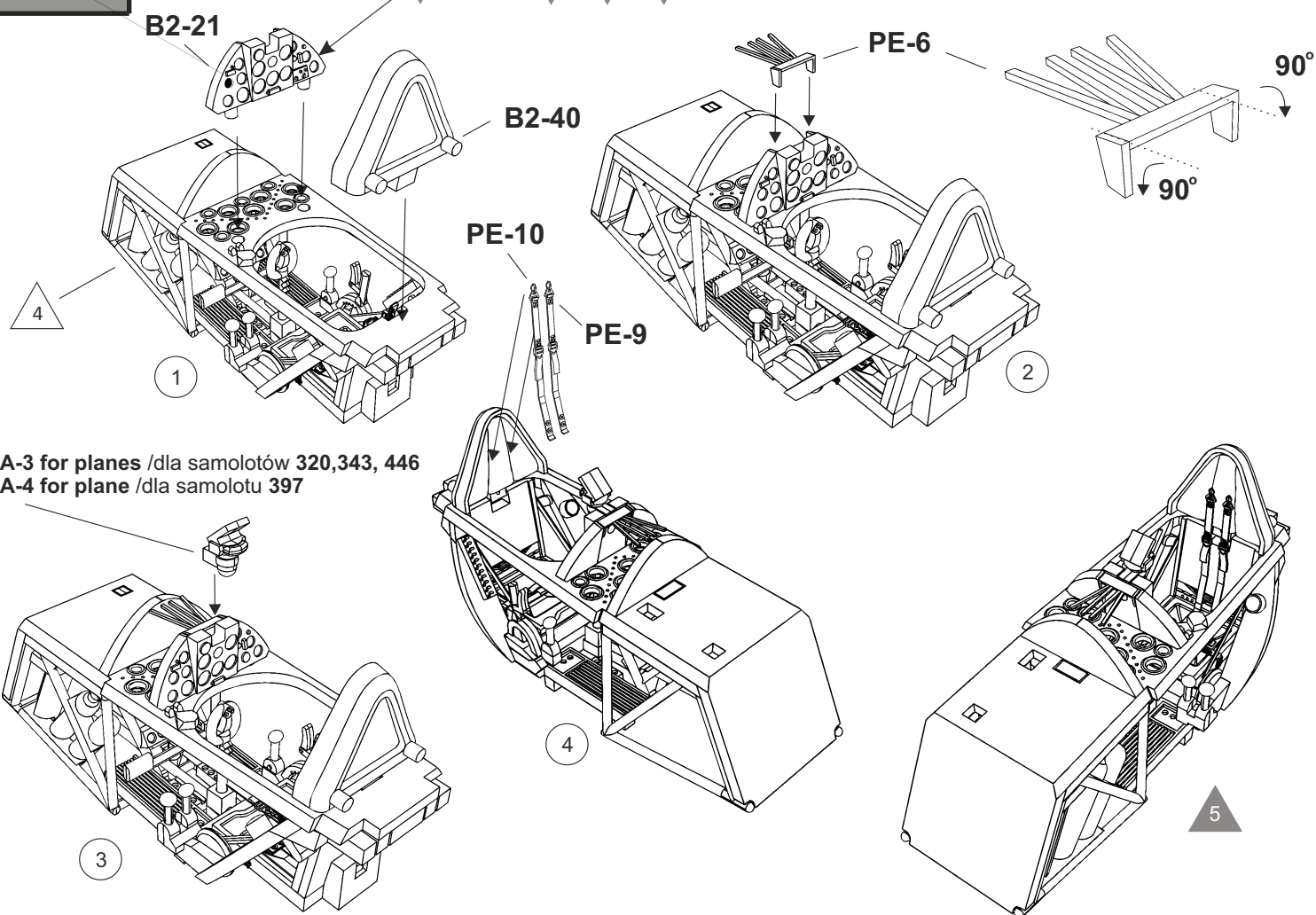


**Step 4**  
Etap 4



**Step 5**  
Etap 5

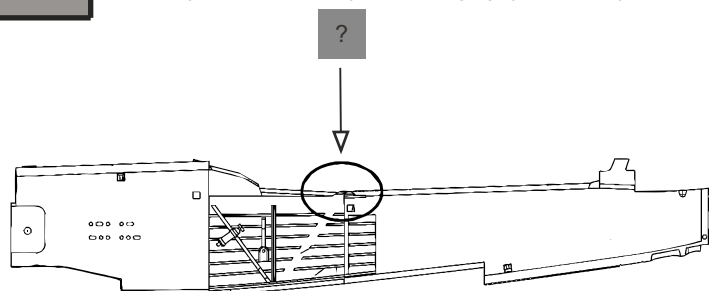
16 or / lub 17 + 18 + 19



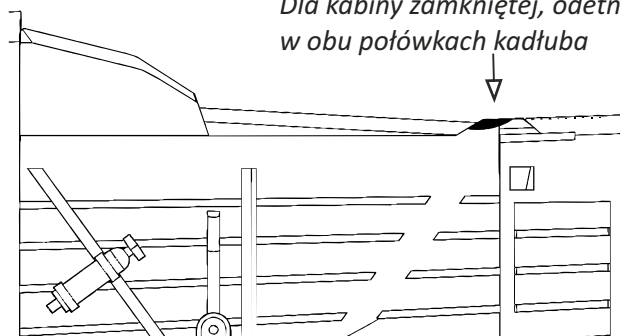
A-3 for planes / dla samolotów 320,343, 446  
A-4 for plane / dla samolotu 397

**Step 6**  
Etap 6

For closed canopy only, see step 15a  
Tylko dla kabiny zamkniętej, patrz etap 15a

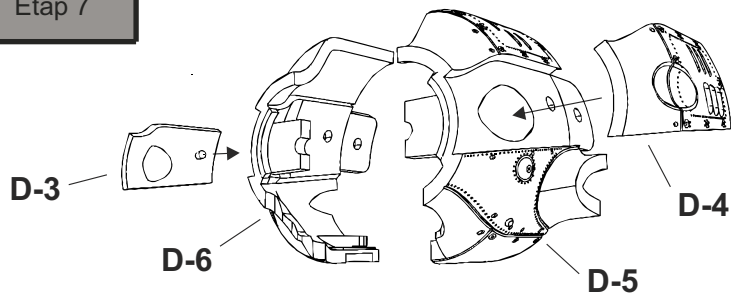


For closed canopy cut off on both fuselage sides  
Dla kabiny zamkniętej, odetnij w obu połówkach kadłuba

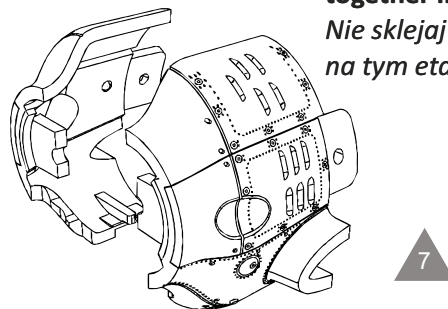


For open canopy (step 15b), please ignore step 6  
Dla kabiny zotwartej (etap 15b), zignoruj etap 6

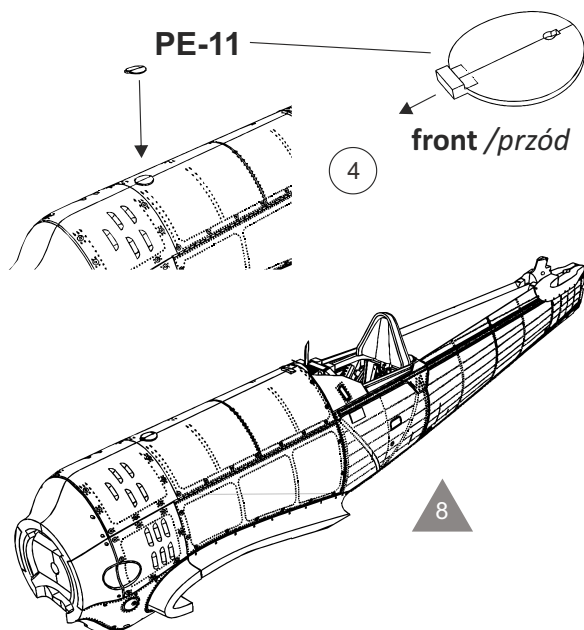
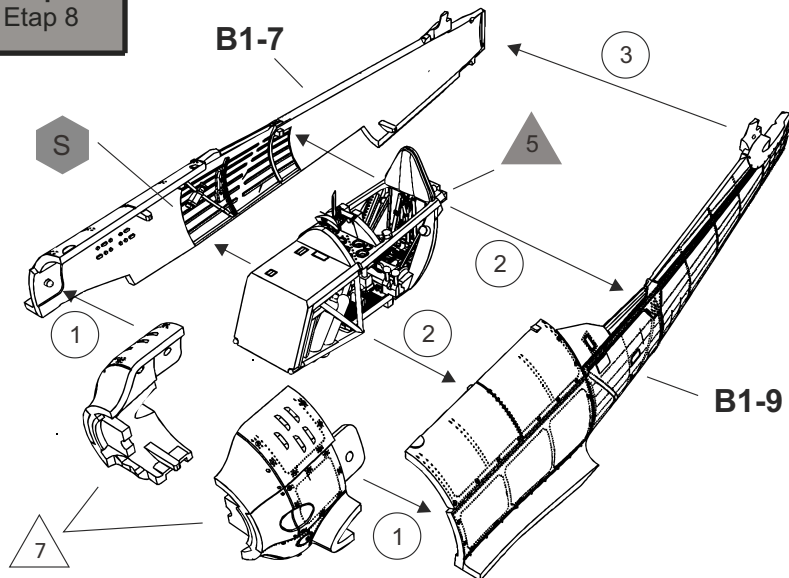
Step 7  
Etap 7



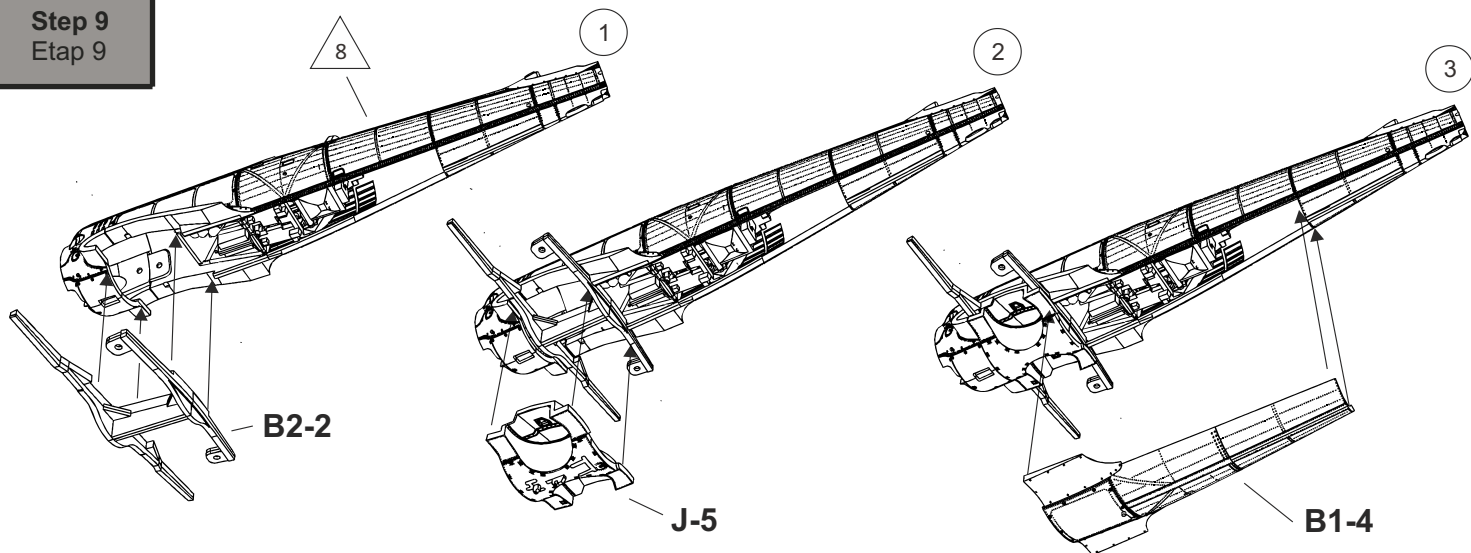
Do not glue the halves together in this step  
Nie sklejaj połówek na tym etapie



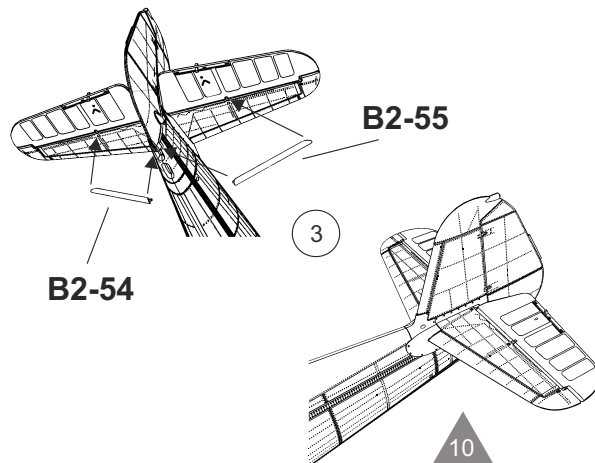
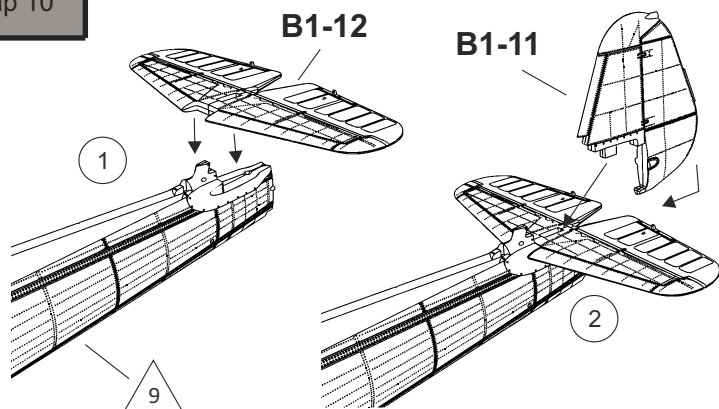
Step 8  
Etap 8



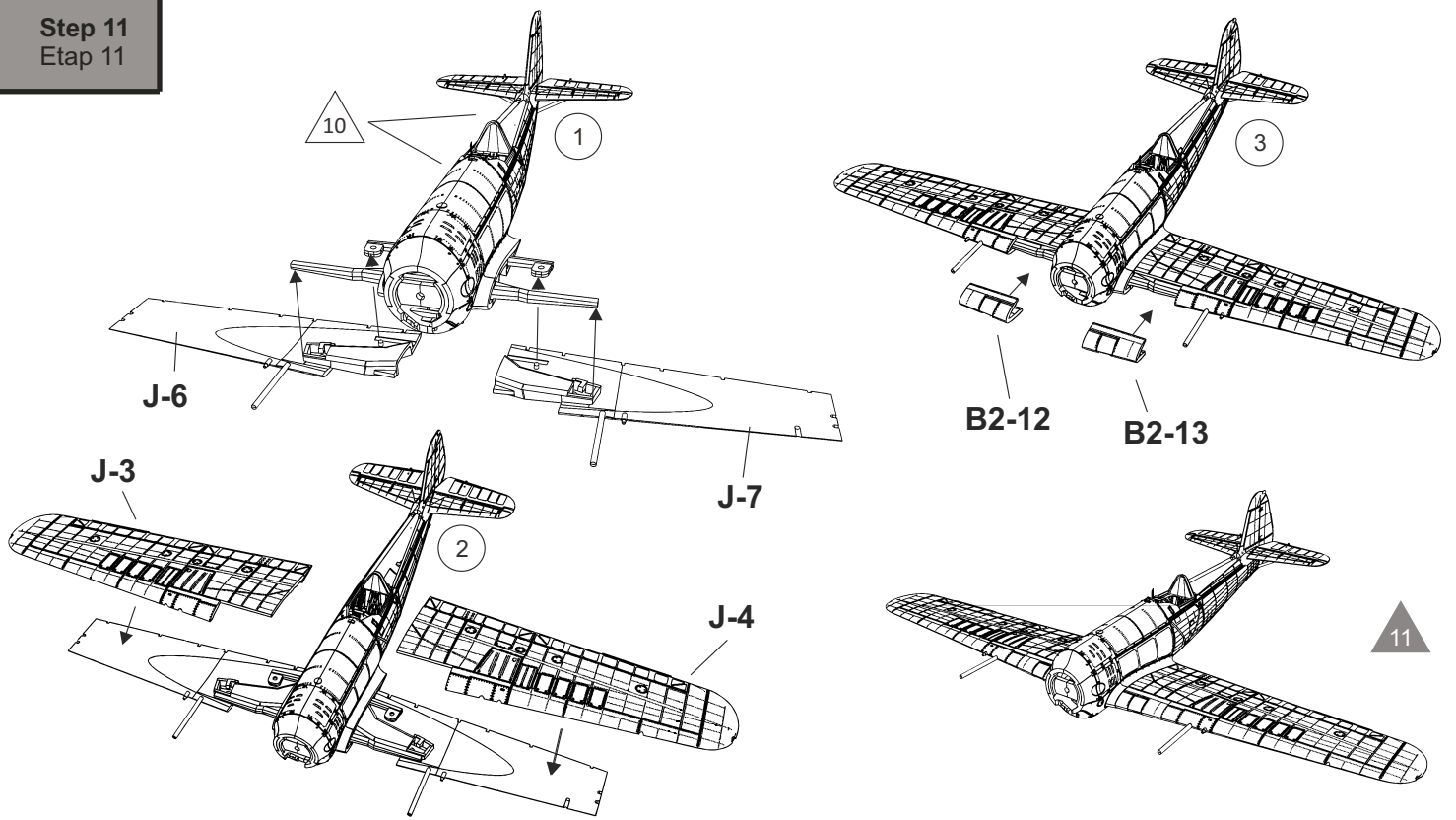
Step 9  
Etap 9



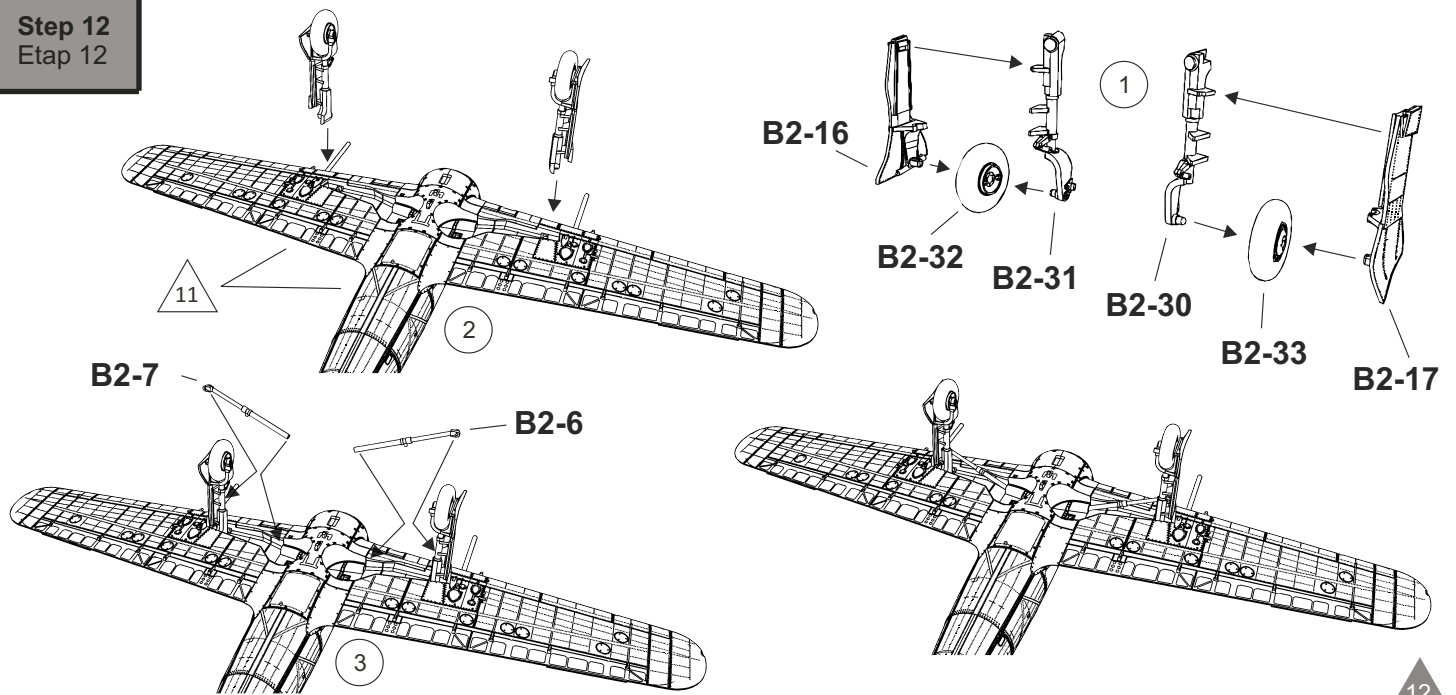
Step 10  
Etap 10



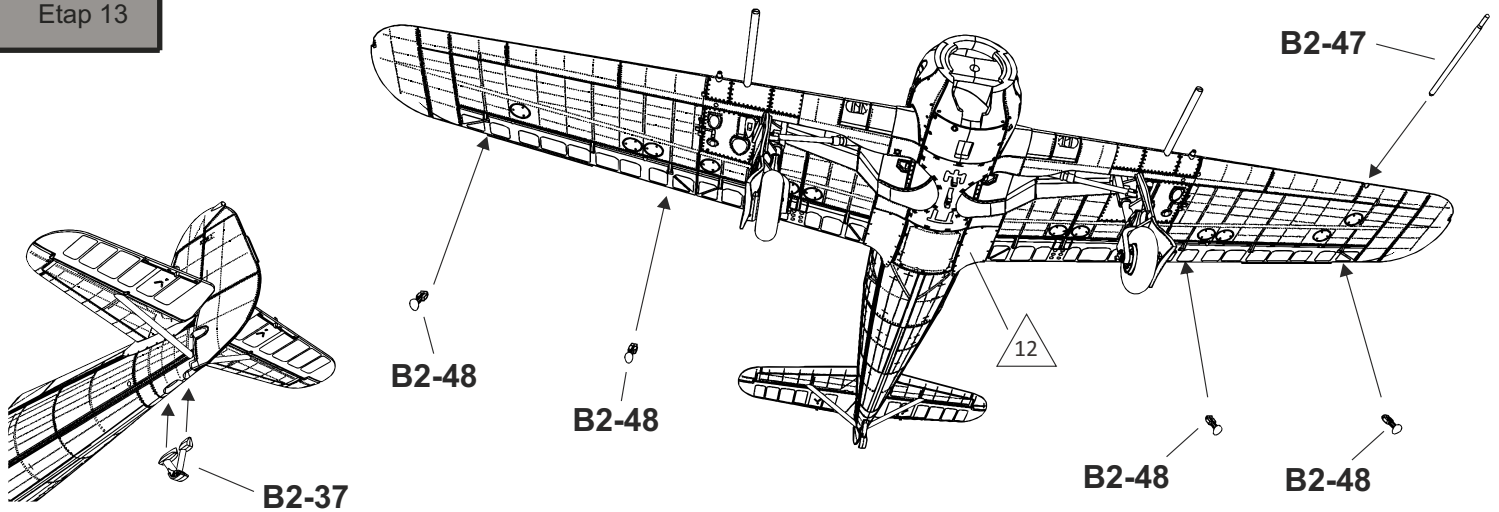
Step 11  
Etap 11



Step 12  
Etap 12

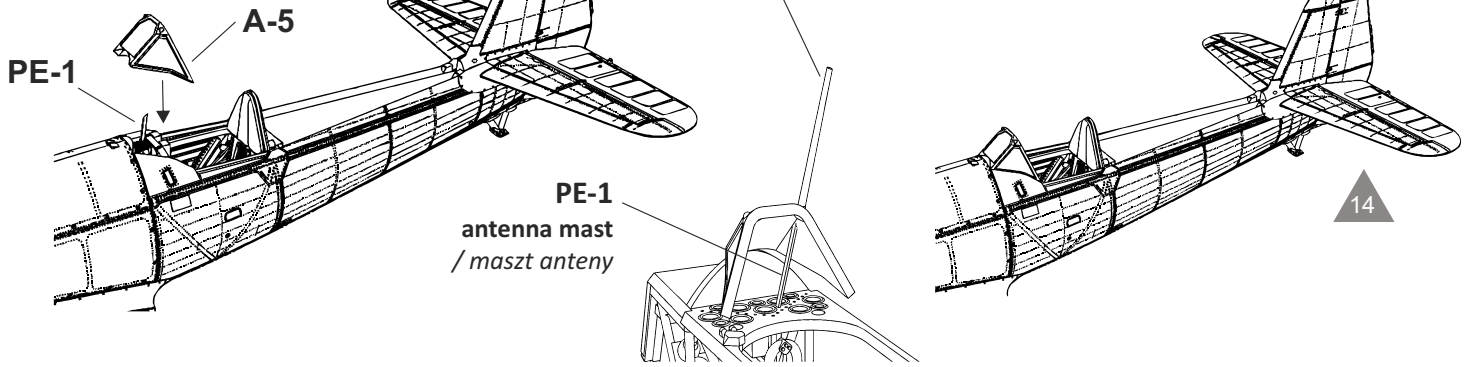


Step 13  
Etap 13



Step 14  
Etap 14

see step 22  
/ patrz krok 22



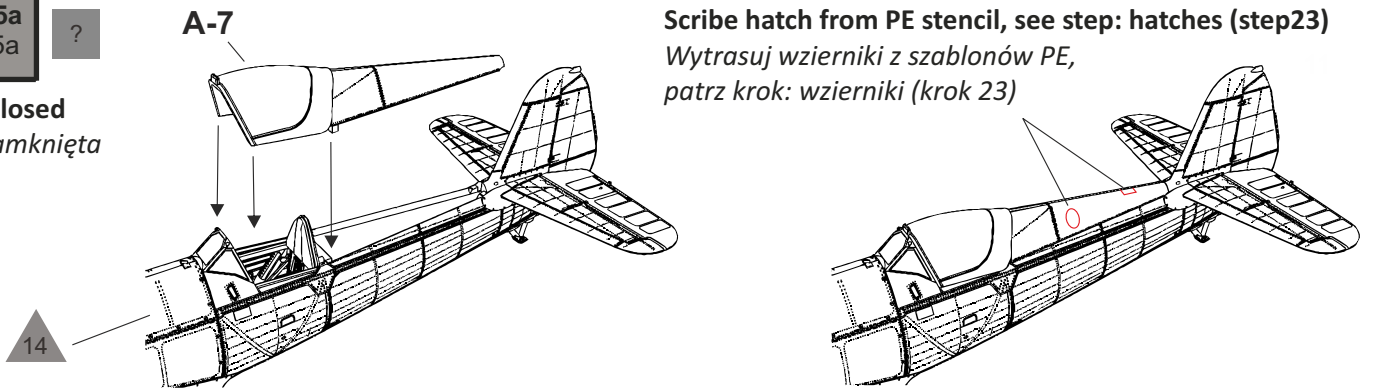
Step 15a  
Etap 15a

?

Canopy closed  
Kabina zamknięta

Scribe hatch from PE stencil, see step: hatches (step23)

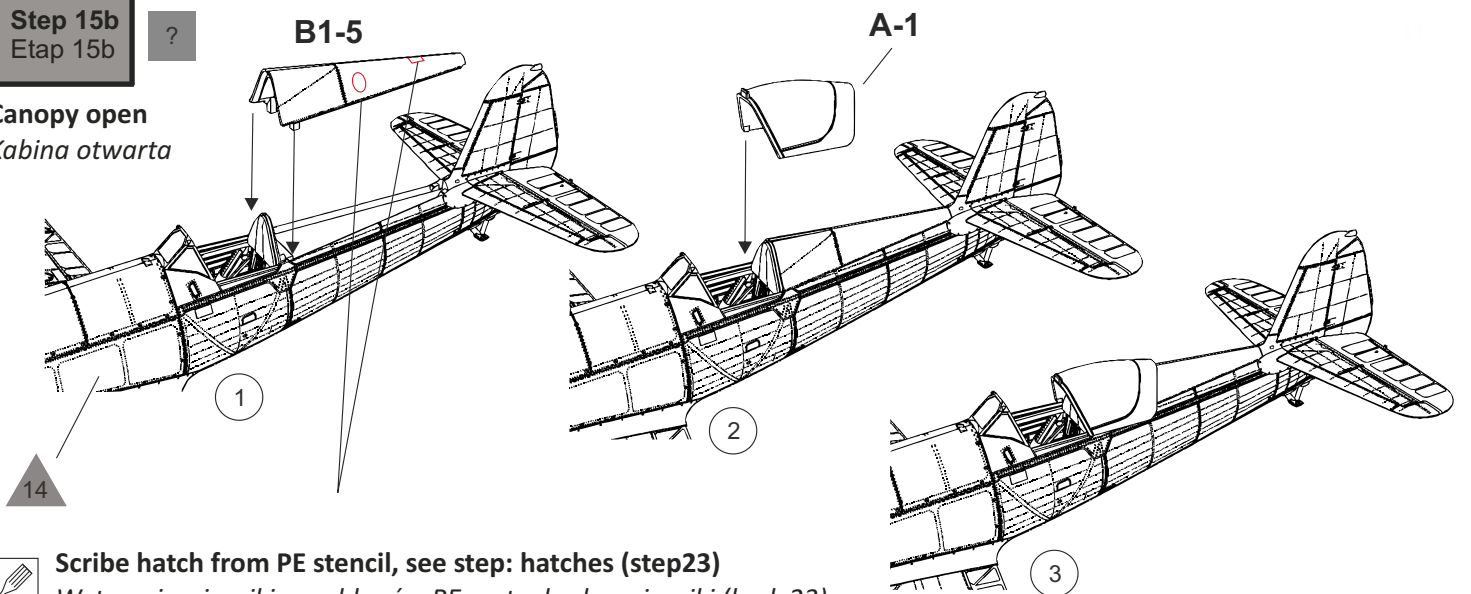
Wytrasuj wzieniki z szablonów PE, patrz krok: wzieniki (krok 23)



Step 15b  
Etap 15b

?

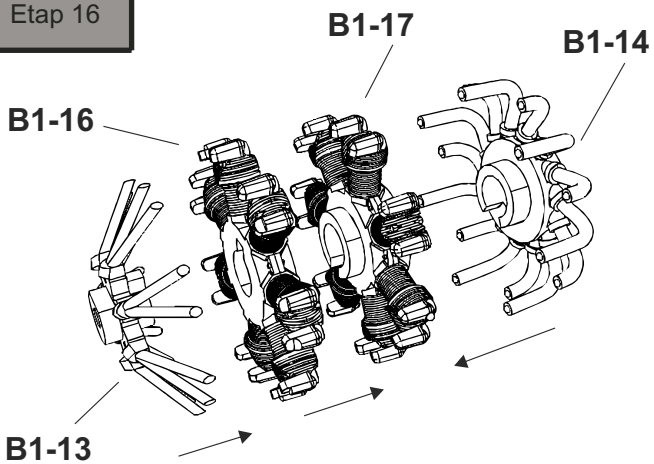
Canopy open  
Kabina otwarta



Scribe hatch from PE stencil, see step: hatches (step23)

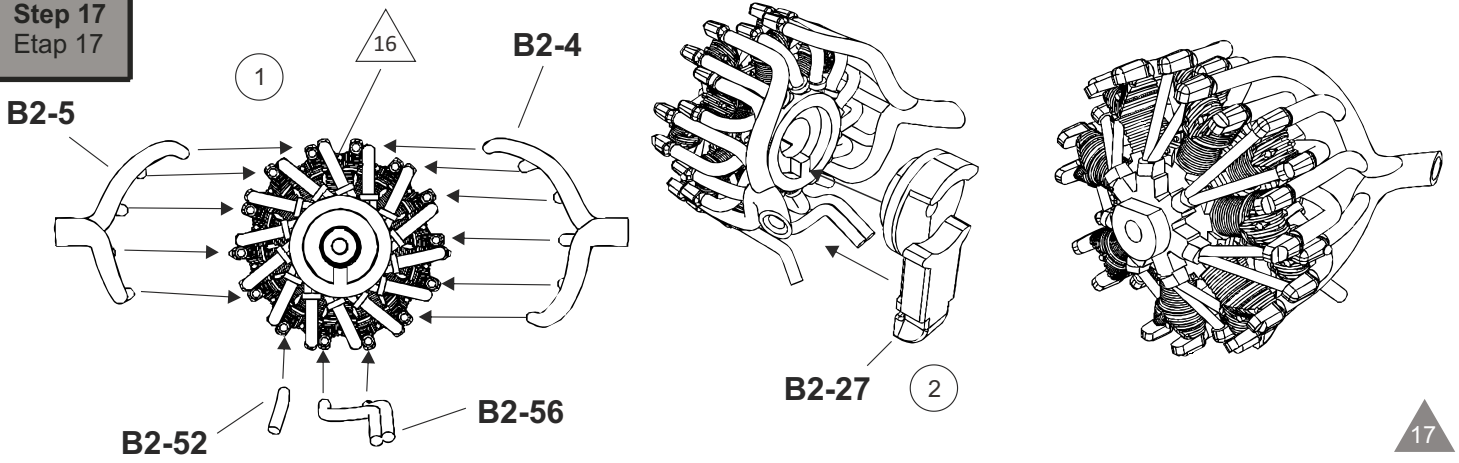
Wytrasuj wzieniki z szablonów PE, patrz krok: wzieniki (krok 23)

Step 16  
Etap 16





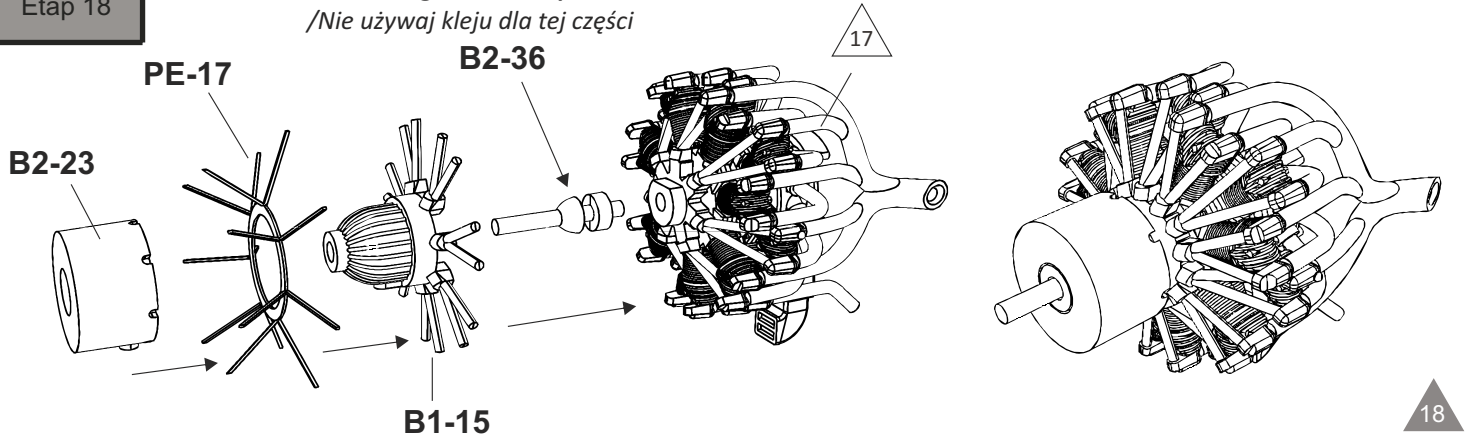
Step 17  
Etap 17



17

Step 18  
Etap 18

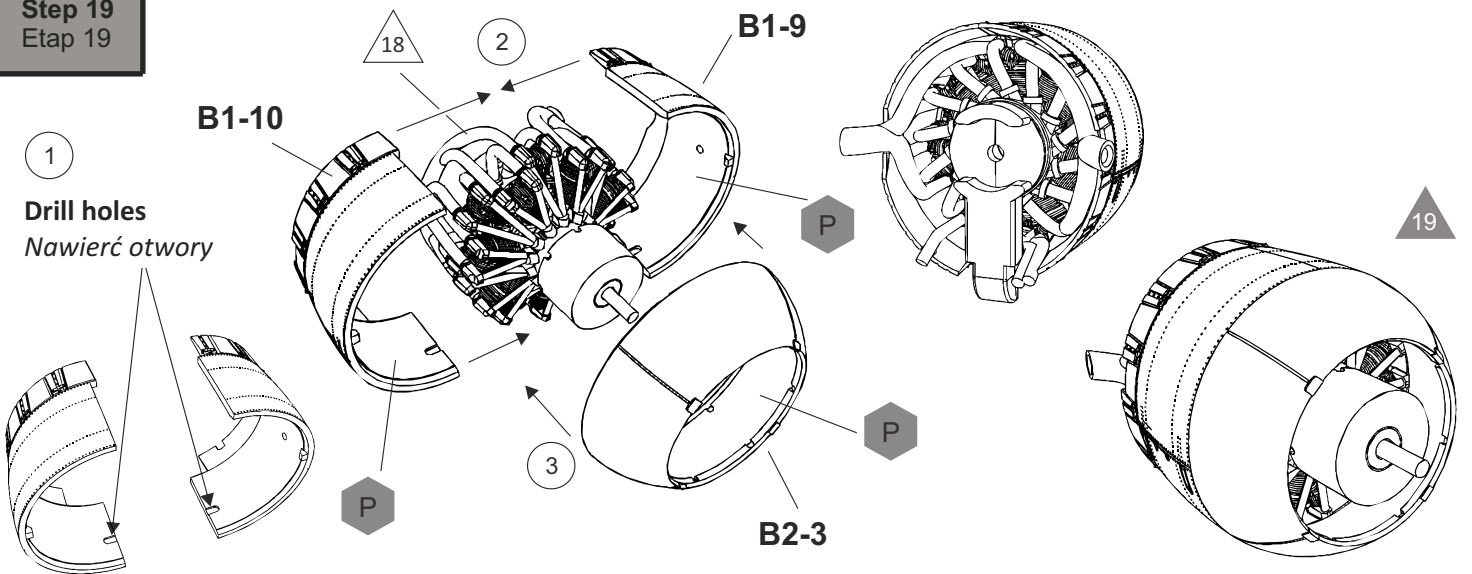
Don't use glue for this part  
*/Nie używaj kleju dla tej części*



18

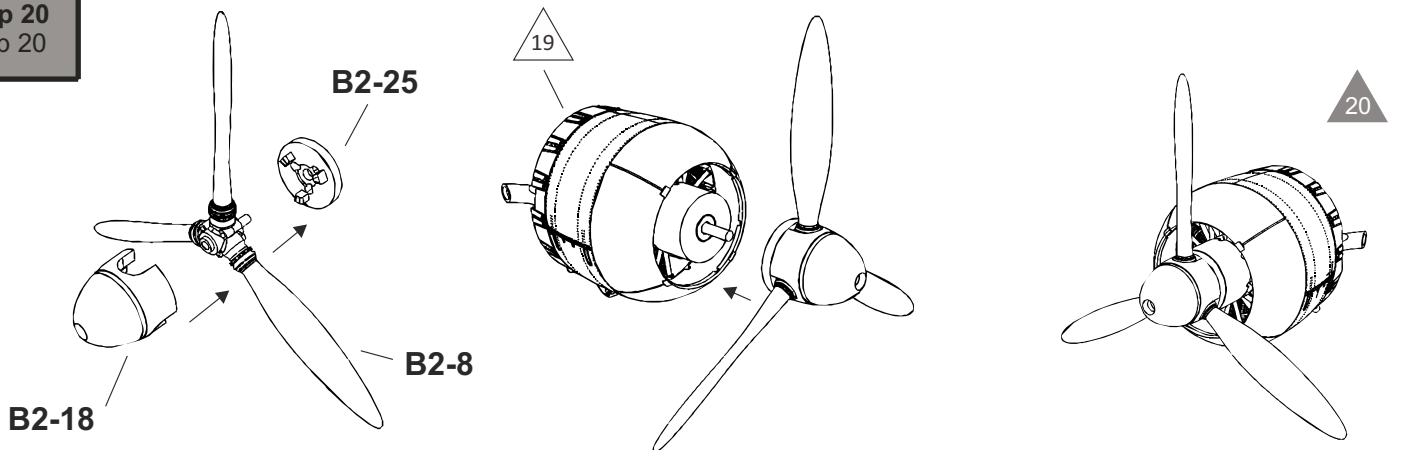
Step 19  
Etap 19

Drill holes  
*Nawierć otwory*



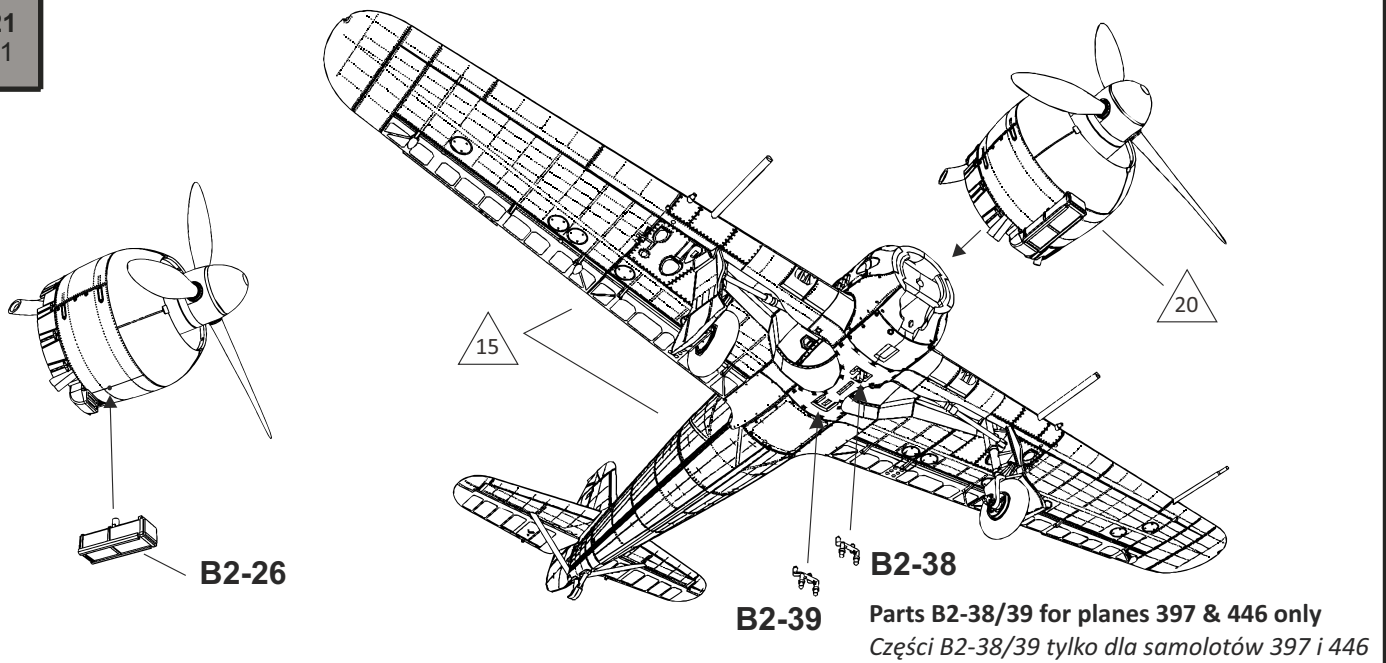
19

Step 20  
Etap 20

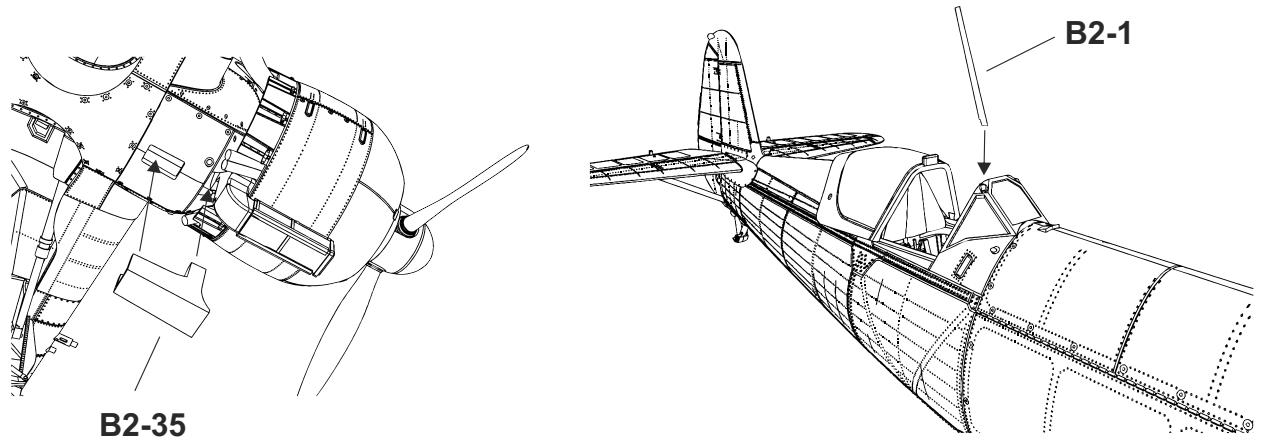


20

Step 21  
Etap 21



Step 22  
Etap 22

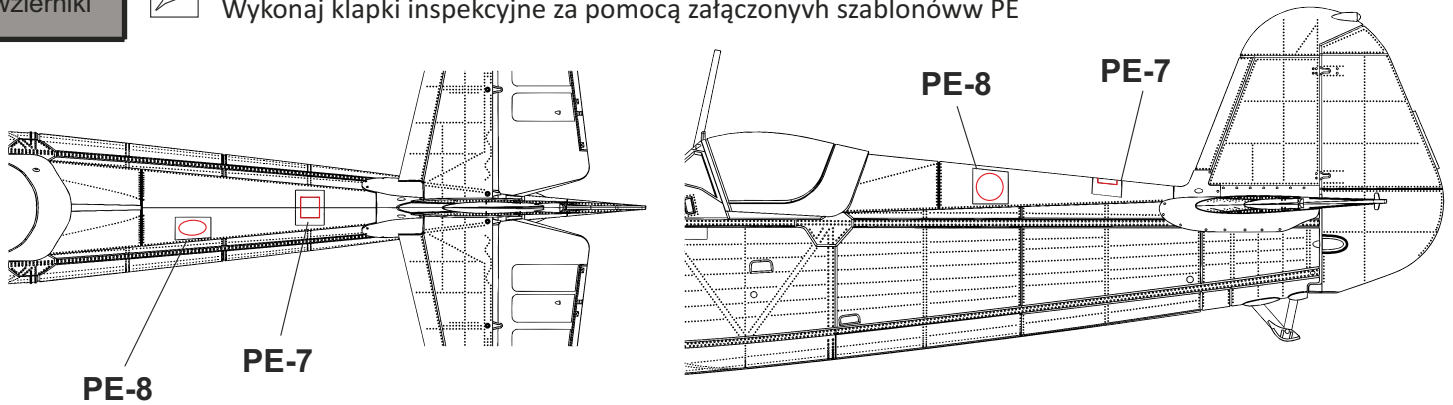


hatches  
wzierniki



Use attached PE stencil to scribe hatches, as shown

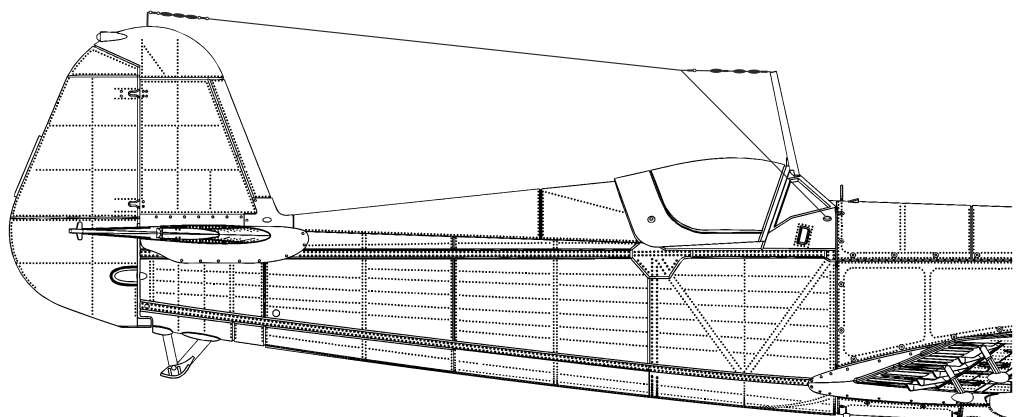
Wykonaj klapki inspekcyjne za pomocą załączonych szablonów w PE

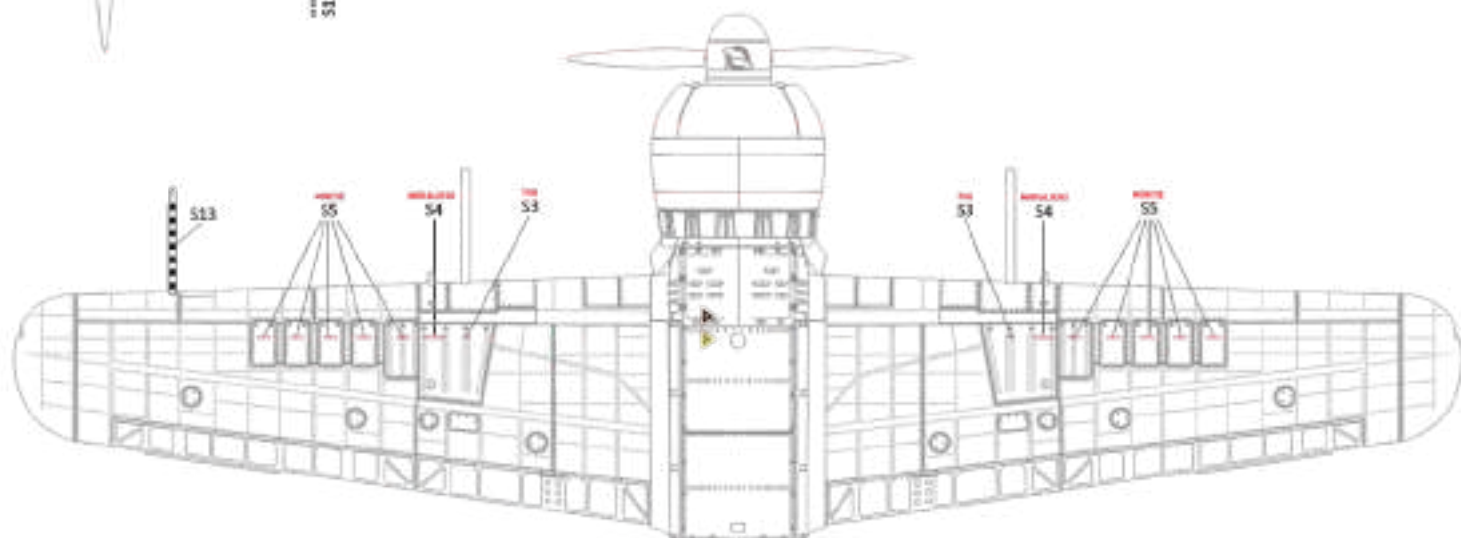
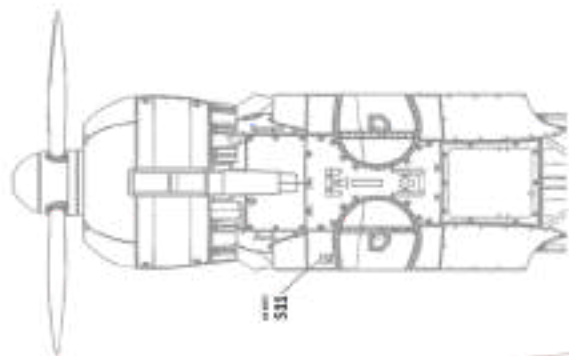
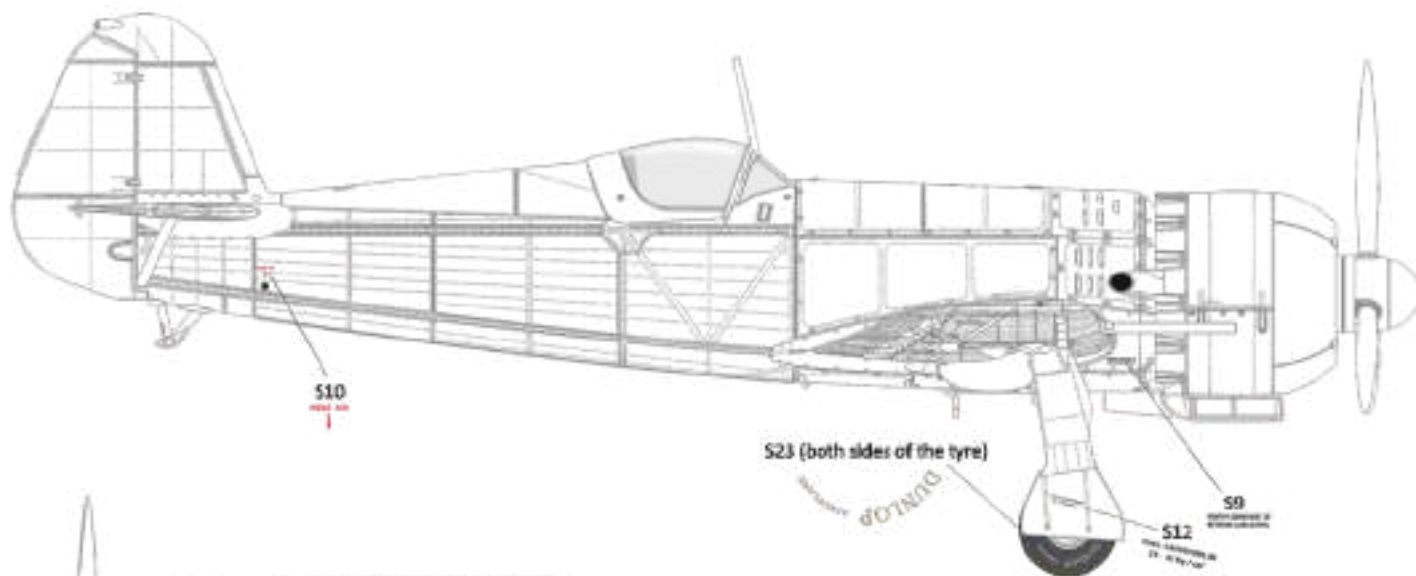
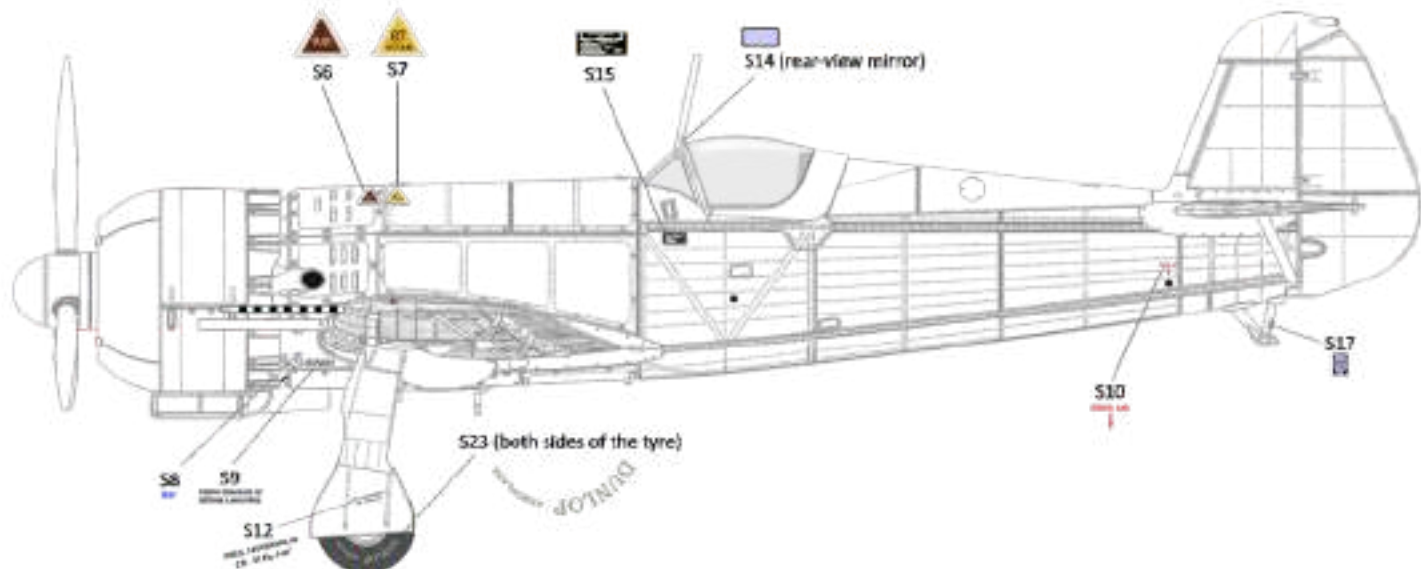


Antenna wire  
Linka anteny



Optional - make an antenna wires  
Opcjonalnie wykonaj linki anten

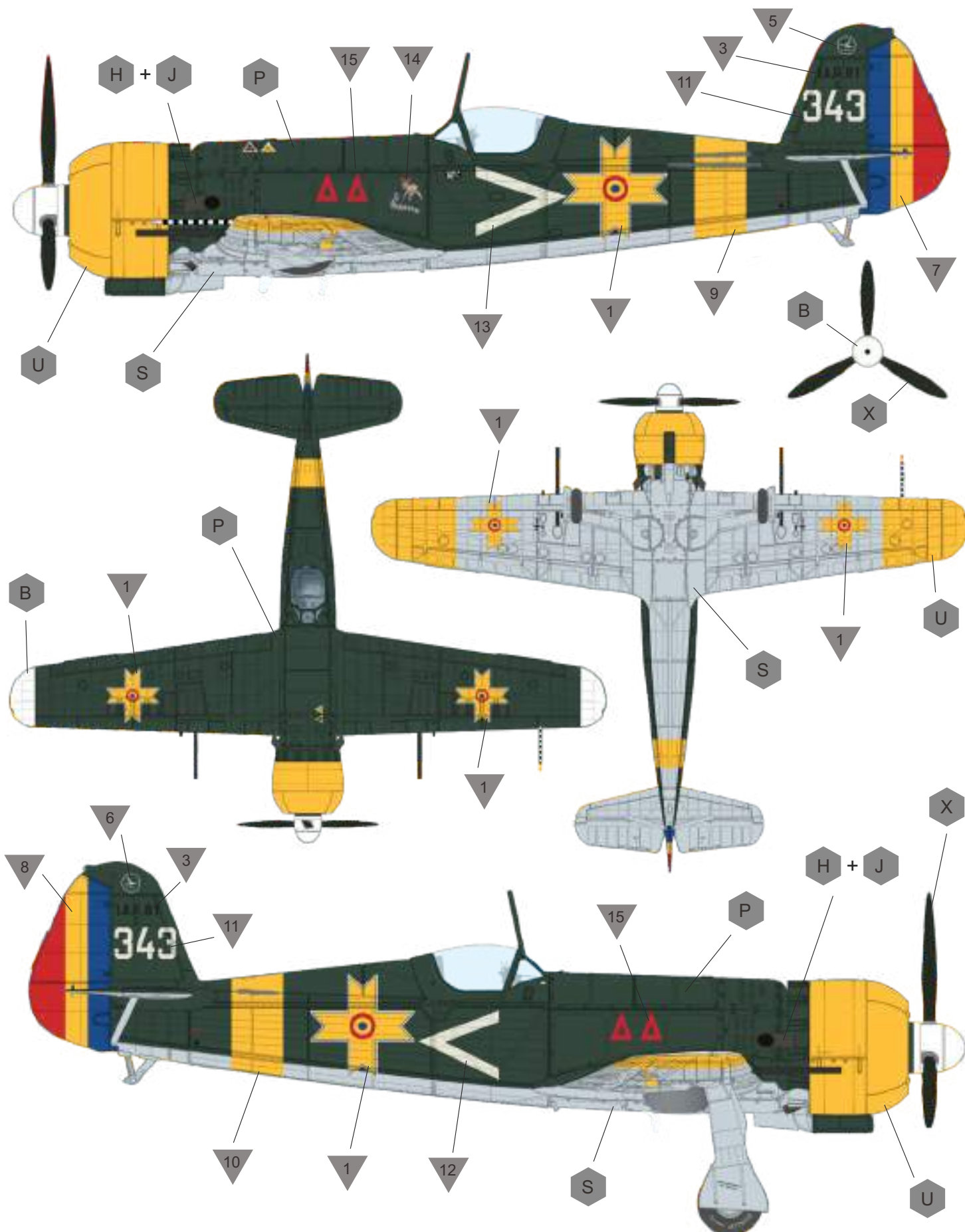




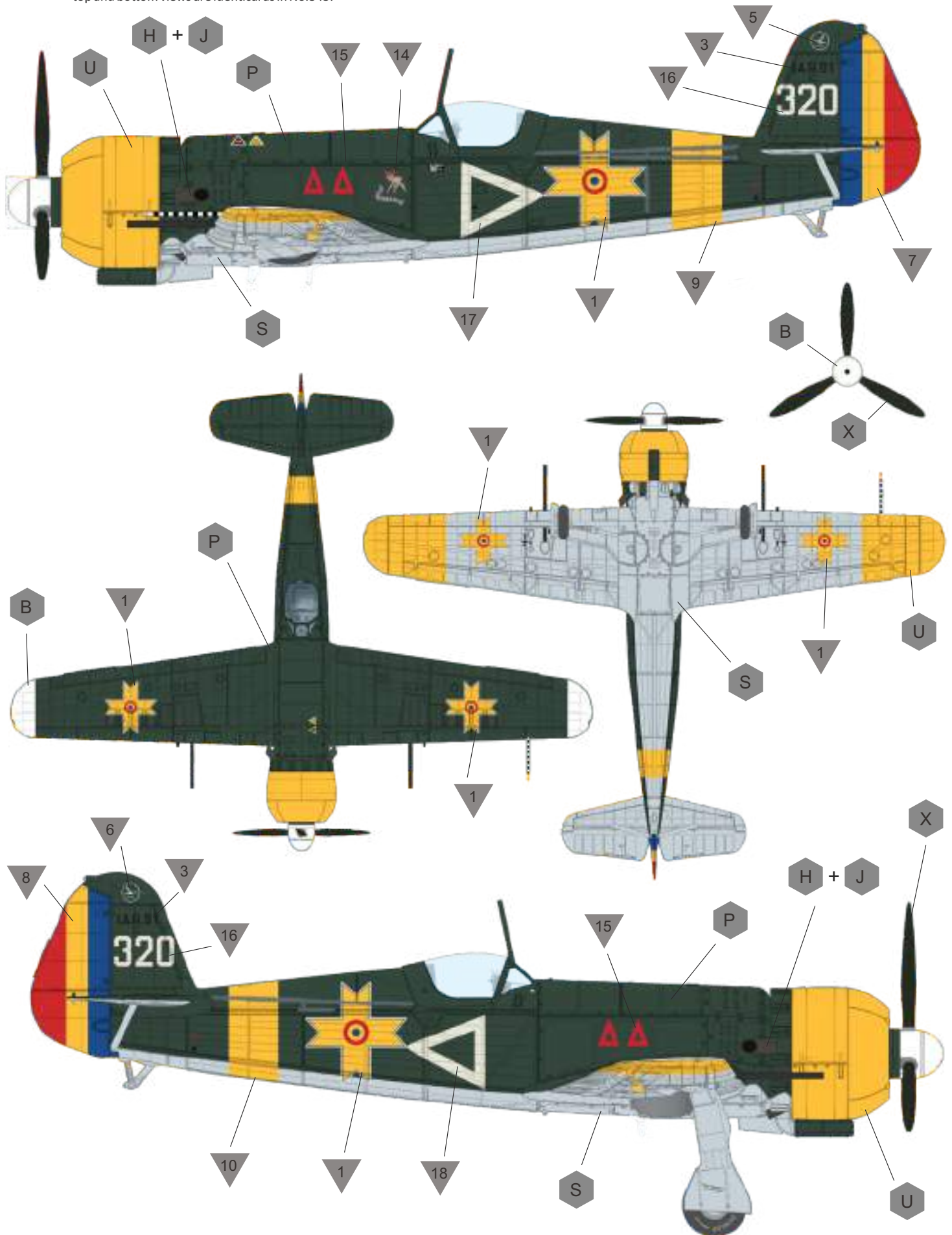
After sustaining very heavy losses during the famous attack on Ploesti oil fields on 1st August 1943, USAAF returned in force over Romania only in April 1944. This coincided with the Soviet troops approaching the borders of this country and the launch of the first Jassy-Kishinev offensive. 15th AF attacks were focused on the marshalling yards to slow down the arrival of reserves and supply to the front. On 24th April, US bombers attacked railway targets in Bucharest and Ploesti. Among many IARs and Bf 109G active that day was an airplane No. 397 flown by Slt.Av. Pavel Bucşa, who shot down one B-24 Liberator, but his airplane was in turn damaged in the intense combat, forcing him to belly-land. The airplane itself was finished in the standard camouflage scheme introduced in IAR Braşov factory at the turn of 1942 and 1943 – uniform green top and light blue-gray undersurfaces with crosses in the form characteristic to this facility. It was supplanted by quite comprehensive quick identification markings introduced back in 1941 – wingtips bottom, engine cowl, 50cm fuselage band and 1/3 of the spinner in yellow. White circles were the identification system used in Grupul 7, with two of them denoting Escadrila 57.



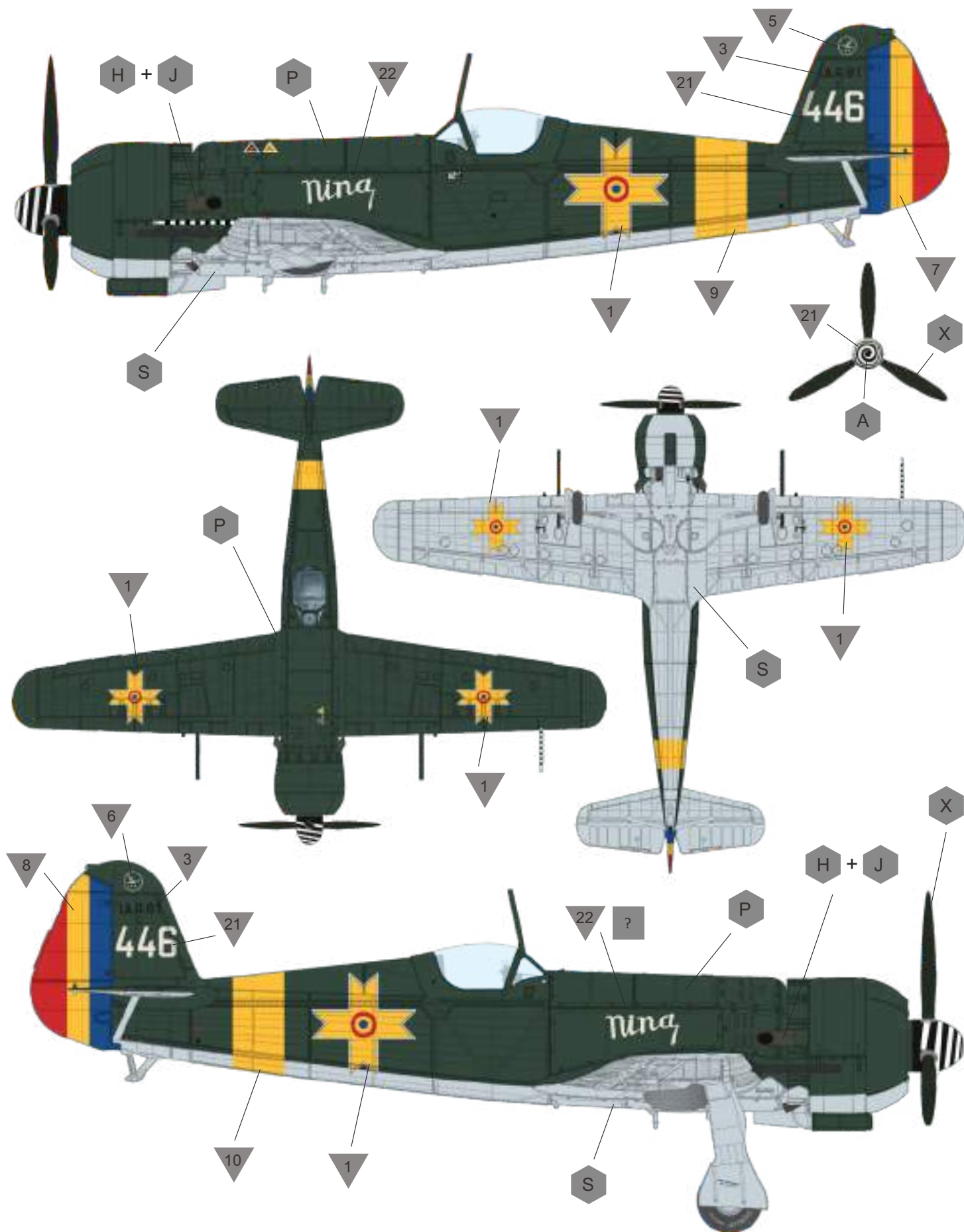
The Soviet offensive failed after heavy battles in the Târgu Frumos area and USAAF returned in late May to bombardment of Romanian oil industry. As the initial attacks by heavy bombers did not yield expected results, a plan was devised to use P-38 Lightnings for that purpose, with 82nd Fighter Group performing the role of bombers and 1st Fighter Group providing air cover in the mission that took place on 10th June 1944. En route to the target, 71st Fighter Squadron of the latter group was attacked by 23 IARs belonging to Grupul 6 Vânătoare and decimated in the low-altitude, wild dogfight. Only 2 out of 12 Lightnings returned to base. Lt.Av. Eugen Ianculescu claimed two P-38 shot down, but himself returned to base in a damaged machine. Standard camouflage and recognition markings of the period were supplanted by white spinner and wingtips top. The latter are documented in the photos taken on 11th June during visit of Gen.Cdt.Av. Gheorghe Jienescu to the Grupul 6 Vânătoare and some of the photos from late spring of 1944. Their possible purpose of that system was to facilitate the recognition of the unit in the air and/or quick re-forming after an attack.



Another pilot who was credited with two Lightnings destroyed on 10 June 1944 was Slt.Av. Mircea Dumitrescu, flying No. 320. Note the red triangles, identifying Grupul 6 Vânătoare, with two of them specifically denoting Escadrila 61. Less official emblem of Esc.61 was the Bambi and the Quails – an element based on the movie that hit the screens in US only in August 1942, when Romania was already firmly in the axis camp, but still getting through the WW2 frontlines and, as was the case with other Disney cartoons, having visible impact on creativity of Romanian pilots. Another interesting marking element was the white triangle on the fuselage, most probably indicating Escadrila commander. Please note that (as opposed to No.343) the base of the spinner was not painted white on No.320. The top and bottom views are identical as in No.343.



The airplane operated on the North-Eastern Front and flew bomber escort missions against Soviet troops in the summer 1944, just before the Second Jassy-Kishinev offensive. When the latter was launched on 20th August 1944, it brought a quick breakthrough and the front collapsed within days. Coup d'état led by King Michael of Romania deposited marshal Ion Antonescu on 23rd August and withdrew Romania from the Axis camp. As was the case with many other Luftflotte 4 machines in July and August 1944, No.446 no longer carried yellow wingtips and cowling, these markings in case of fighters were replaced by black spinner with a spiral. A beautiful, female name – Nina – was placed on the port side of the fuselage. It is not known, however, if it was applied to the starboard side also.



# ALSO AVAILABLE FROM IBG MODELS



**IBG MODELS**

**72U046 - 1:72**

Research:  
Horia Stoica &  
Michał Skawiński

**IAR.80/81 Pilot's seat with seatbelts**  
3d Printed set for late IAR.80/81 (from mid-1943)



**IBG MODELS**

**72U049 - 1:72**

Research:  
Horia Stoica &  
Michał Skawiński

**I.A.R.80/81 wheels groove pattern (used from 1942)**  
3d Printed set for the all IBG Models I.A.R. 80/81 kits



**IBG MODELS**

**72U050 - 1:72**

Research:  
Horia Stoica &  
Michał Skawiński

**I.A.R.80/81 wheels block pattern (used from 1942)**  
3d Printed set for the all IBG Models I.A.R. 80/81 kits



**IBG MODELS**

**72U047 - 1:72**

Research:  
Horia Stoica &  
Michał Skawiński

**I.A.R.80/81 Exhausts**  
3d Printed set for the all IBG Models I.A.R. 80/81 kits



**IBG MODELS**

**Fw 190D-9 Over Czech Lands**

**1:72**  
72545



**IBG MODELS**

**PZL P.24B Fighter in Bulgarian Service**

**1:72**  
72564



**IBG MODELS**

**ROMANIAN BARBAROSSA 2 in 1: P.11F and PZL 23A**

**1:72**  
72530



**IBG MODELS**

**Fw 190D-9 JABO/STURM**

**1:72**  
72544