

# Avia B.534 IV. serie

# eduard

1/48 Scale Plastic Model Kit

**ProfiPACK**  
edition



item No. 8192

The Avia B.534 is a symbol of the pre-war Czechoslovak Air Force. It was already obsolete at the time of its creation, yet the hopes of the Czechoslovak people were pinned on it during the Munich Crisis.

At the end of 1929, designers Pavel Beneš and Miroslav Hajn left Avia company and their position was taken by František Novotný and Robert Nebesář. After the creation of the successful line of aerobatic specials, František Novotný started to design a new fighter powered by Hispano Suiza 12Nbr engine rated at 478 kW. The result was the B.34 which design concept Mr. Novotný had gained experience in during his stay with the British Hawker company. This was reflected in the fuselage structure made of metal tubes with bolted and riveted joints instead of welds. This ensured a higher level of resilience and reparability. The rear fuselage was covered by canvas, while the nose was streamlined using metal-sheet panels. The prototype made its maiden flight on February 2, 1932, and several shortcomings immediately became apparent. The aircraft was also rather cumbersome in the air. Rather out of mercy, the Ministry of Defense (MNO) eventually placed an order with Avia to build 12 examples, delivered in the summer of 1934.

#### Power wins

Already at the time when the designers were solving the problems with the B.34, Avia managed to negotiate the supply of a modern HS 12Ydrs engine with a maximum output of 632 kW. This engine was intended as the standard powerplant for the aircraft of Czechoslovak Air Force. As it was based on B.34 design, the first prototype of the new aircraft was designated B.34.2, which was later changed to B.534.1.

This first prototype made its maiden flight on May 25, 1933, and underwent several modifications during subsequent trials. At the VTLU (Military Technical Aviation Institute) it was then tested by army pilots and compared with competing prototypes Letov Š.231 and Praga E.44, as well as with the standard fighter type of the time, the Avia Ba.33.

All three factories that sought to supply the new fighter aircraft entered biplanes of mixed design due to the overly conservative preferences of the MNO, but only Avia had the use of powerful HS 12Ydrs engine (of the same power as the Ydrs version). Competition was fierce and the mighty Škoda (owner of Avia) blocked the delivery of the powerful HS 12Y series engine to competing Praga company. Praga's designer Jaroslav Šlechta drew his E.44 fighter for this engine, but in the end, he had to settle for a power unit of only 478 kW, which was 154 kW less than the Avia B.534. But even choosing of the E.44 with the more powerful engine would not change the fact that the MNO would still have bought for its Air Force an aircraft of an obsolete concept.

#### Four versions plus one more

The Avia B.534 won the competition and the MNO awarded the factory with an order for 147 examples of B.534. Aircraft Nos. 2 to 101 were delivered in the so-called 1st version, i.e., with an open cockpit and armed with two machine guns of 7.92 mm caliber in the nose. Up to the aircraft No. 48, there were also two guns in the lower wing, but these were usually removed during service. The Air Force received the first B.534s in the fall of 1935. In the service, a design flaw soon became apparent, as the too thin light metal alloy sheet covering the leading edge tended to tear apart when the pilot was pulling out of a dive. The loss of control of the aircraft and even complete destruction of the wing was imminent. Three pilots

paid with this flaw with their lives before Avia began to remedy the design issue. The B.534 received four machine guns in the fuselage starting from the No. 102 aircraft. The installation necessitated enlargement of the bulges on the fuselage sides covering the machine gun receivers and ammunition feeders. In 1936, the MNO ordered 46 more B.534s (Nos. 148-173). This was the so-called 3rd version or series, which differed from the previous by changing the air supply to the compressor. While the earlier versions had one small inlet on each side of the nose, it was now replaced by a larger and single one located under the nose just behind the propeller cone. Wheel covers were also added. The units took delivery of these aircraft in March and April 1937.

The next and last major modification to the B.534 greatly altered the appearance of the aircraft. This was due to the installation of a cockpit canopy, which necessitated a higher rear fuselage's ridge. The cockpit was heated by air taken from the water cooler. A new Letov Hd-43 metal propeller was also introduced. Such a modified aircraft (from No. 174) are referred to as the 4th version or series and were delivered from April 1937. The growing threat from Nazi Germany forced the MNO to eventually order a total of 271 aircraft of this design (up to No. 445). Starting from aircraft No. 194, the B.534 also received a tailwheel instead of a tailskid, navigation lights were added to the vertical fin and to lower wing, and additional equipment for night flying (instrument panel lighting and fittings on the wing for the bomb illumination carrier) was also added.

Thanks to the HS 12Ydrs engine with hollow shaft, the Avia Bk.534 armed with Hispano 402 cannon of 20 mm caliber was created. The number of machine guns was reduced to two. Firstly, fifty-four of Bk.534 were ordered, and just before the Munich crisis another 60 were added to the "shopping list". Due to the MNO's insistence on changing the cannon type for the Oerlikon FFS-20, which required design changes, the Bk.534s never flew with the gun. In fact, the problem could not be solved until the occupation and instead of the cannon, a third machine gun was installed.

#### In the service

The Avia B-534 formed the backbone of the Czechoslovak fighter air force, but they were not allowed to take off against enemy do defend the homeland. After the occupation of Czechoslovakia by Germany, all aircraft were confiscated with the exception of those in Slovakia. These formed the fascist Slovak State Air Force and fought alongside the Luftwaffe against Poland and the USSR. Slovak B.534 pilots achieved several kills, the first one on July 29, 1941, when the 12th Squadron fought a group of Soviet P-40s. Three more kills were recorded on September 7 and 8. Already on the Allied side, Slovak B-534s fought during the Slovak National Uprising in 1944, with at least four operating as part of the Combined Squadron. There František Cyprich achieved the last known kill with a biplane in WWII. The victim of his attack was a Hungarian Ju 52/3m.

The Luftwaffe tried various modifications on the B.534, such as a bubble cockpit canopy, installation of a tailhook for landing on an aircraft carrier or fitting a towing device for DFS 230A gliders. Standard aircraft were used for training. A total of 77 B-534s were sold by Germany to Bulgaria (76 of 4th Series and one of 2nd Series with bubble canopy). There they served under the name Dogan, but did not record any combat, let alone a kill.

ATTENTION



UPOZORNĚNÍ



ACHTUNG



ATTENTION



注意



Carefully read instruction sheet before assembling. When you use glue or paint, do not use near open flame and use in well ventilated room. Keep out of reach of small children. Children must not be allowed to suck any part, or pull vinyl bag over the head.



Před započatím stavby si pečlivě prostudujte stavební návod. Při používání barev a lepidel pracujte v dobře větrané místnosti. Lepidla ani barvy nepoužívejte v blízkosti otevřeného ohně. Model není určen malým dětem, mohlo by dojít k požití drobných dílů.

INSTRUCTION SIGNS \* INSTR. SYMBOLS \* INSTRUKTION SINNBILDEN \* SYMBOLES \* 記号の説明

OPTIONAL  
VOLBABEND  
OHNOUSAND  
BROUSITOPEN HOLE  
VYVRTAT OTVORSYMETRICAL ASSEMBLY  
SYMETRICKÁ MONTÁŽREMOVE  
ODRÍZNOUTREVERSE SIDE  
OTOČITAPPLY EDUARD MASK  
AND PAINT  
POUŽIT EDUARD MASK  
NABARVIT

PARTS



DÍLY



TEILE

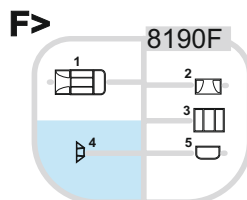
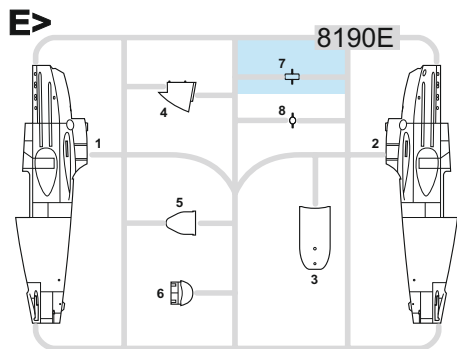
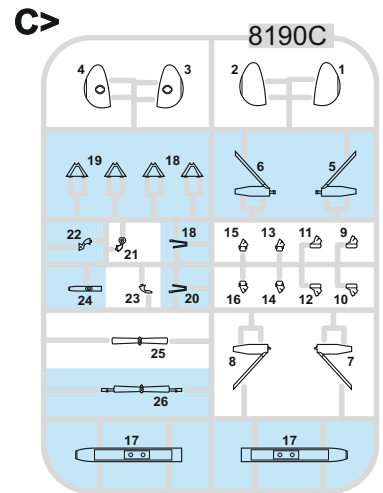
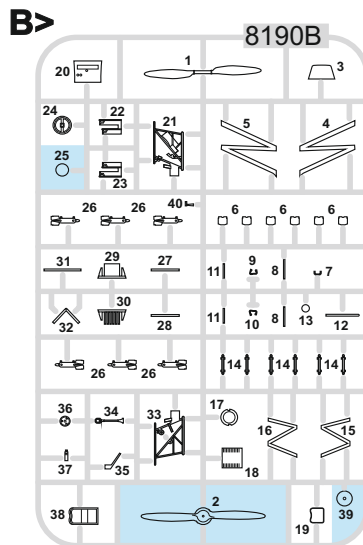
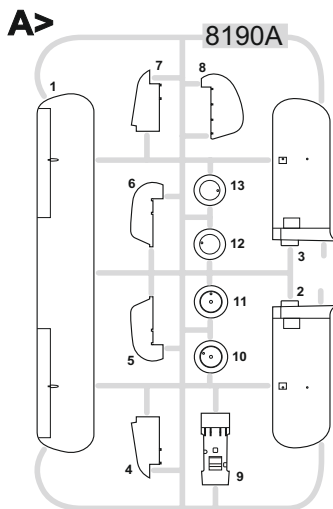
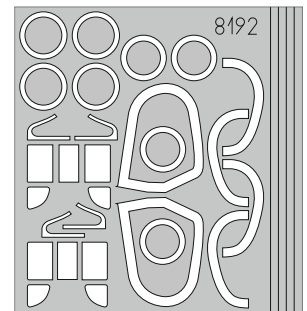
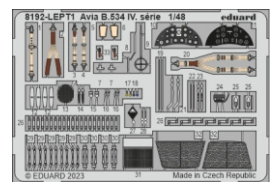


PIÈCES



部品

## PLASTIC PARTS

eduard  
MASKPE - PHOTO ETCHED  
DETAIL PARTS

-Parts not for use. -Teile werden nicht verwendet. -Pièces à ne pas utiliser. -Tyto díly nepoužívejte při stavbě. -使用しない部品

COLOURS



BARVY



FARBEN



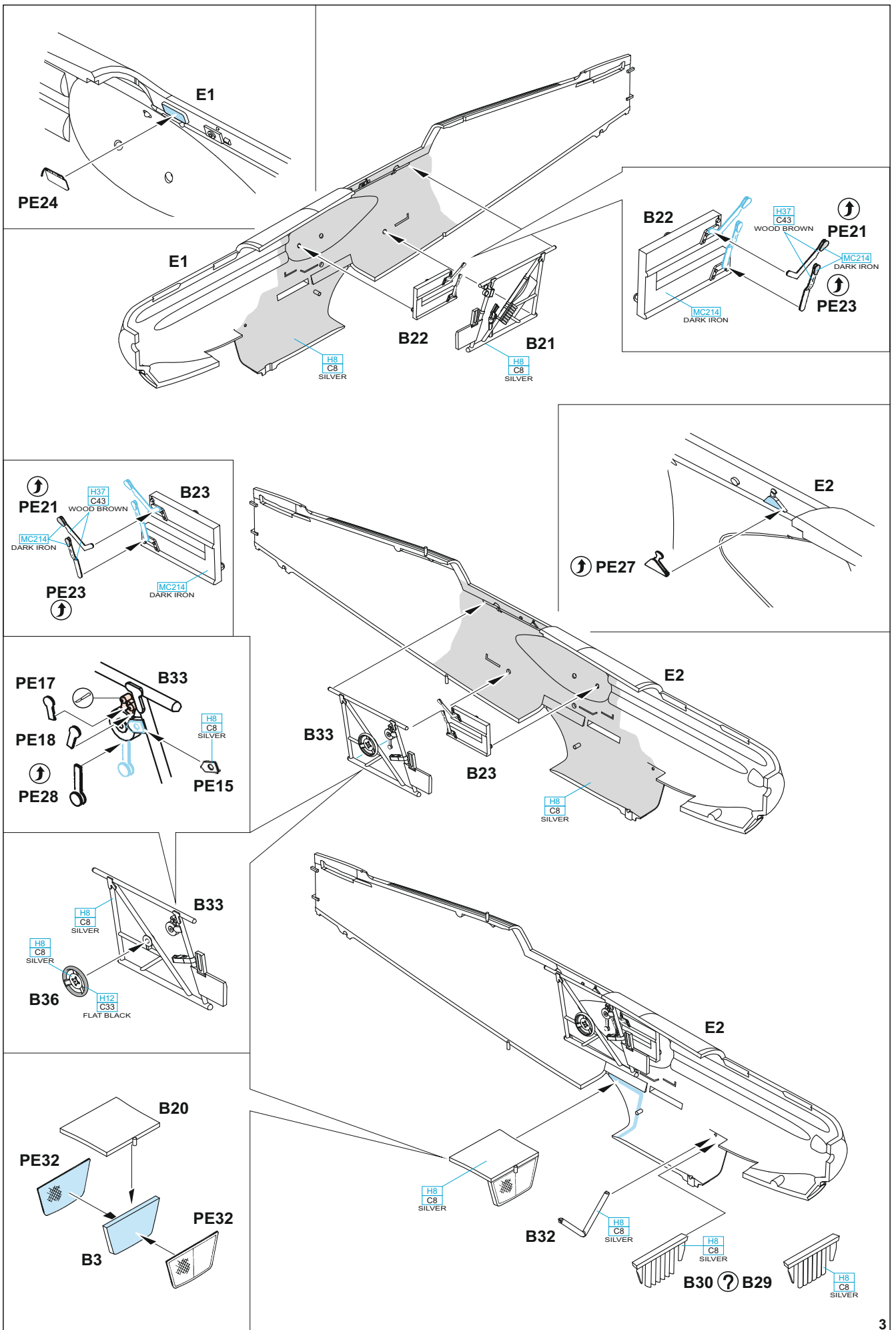
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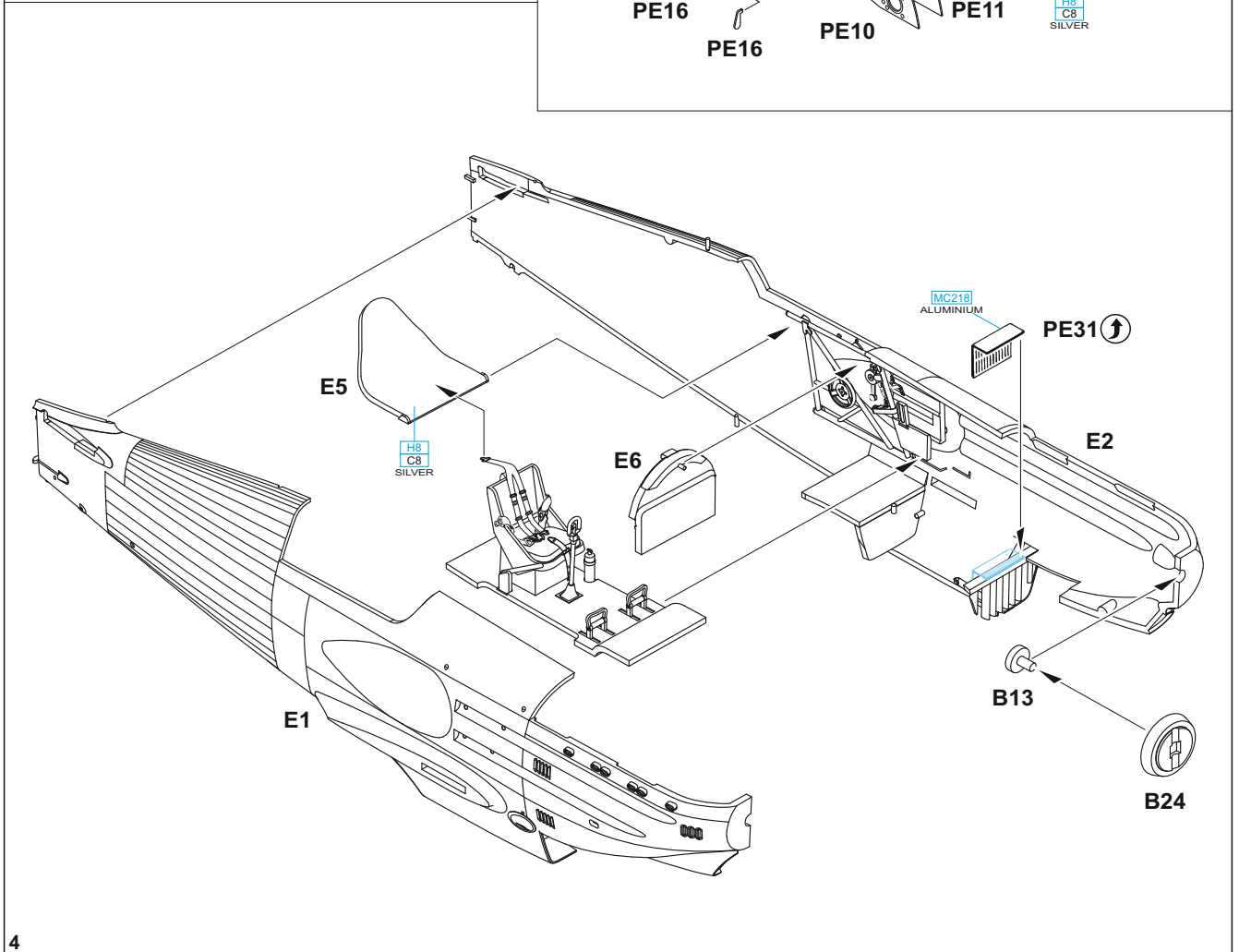
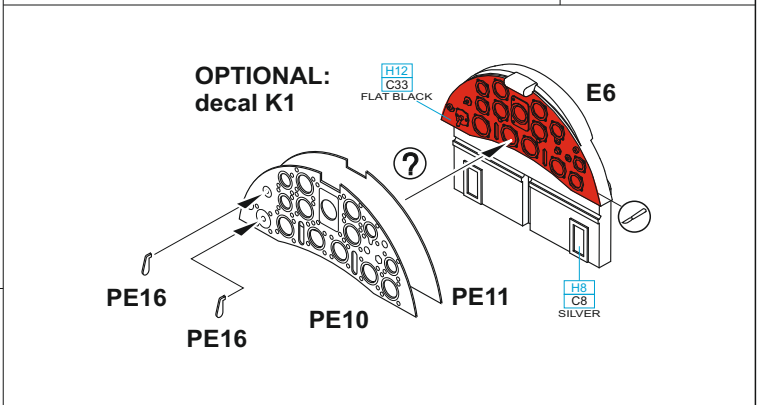
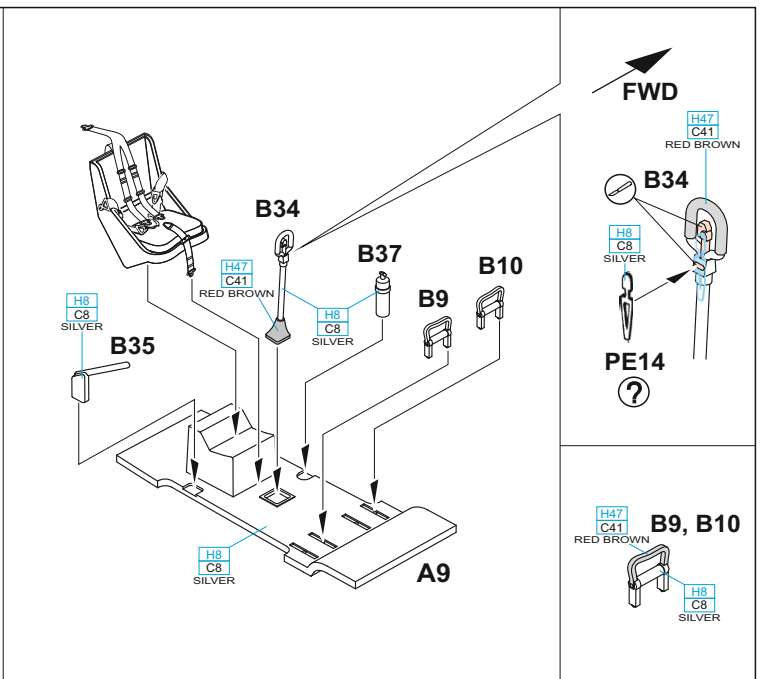
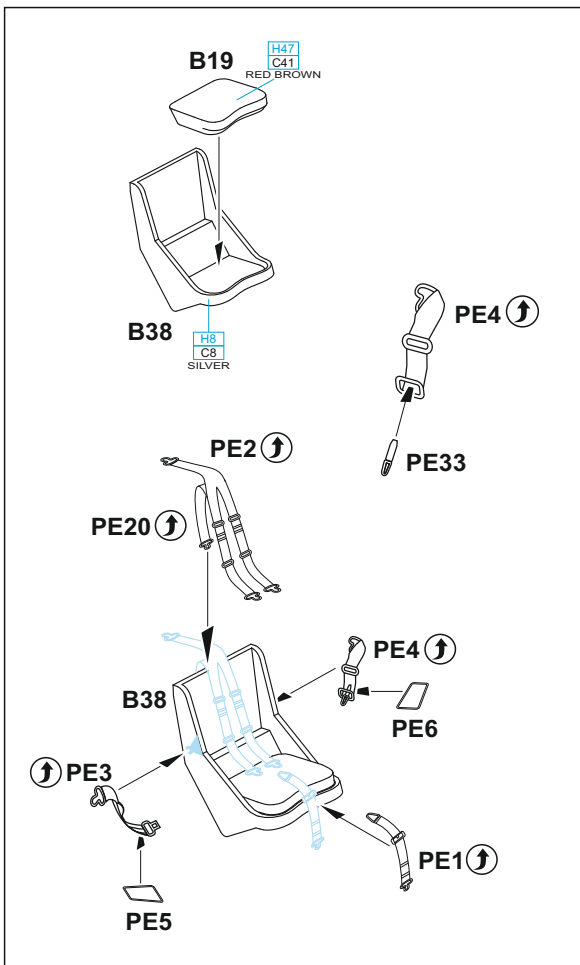


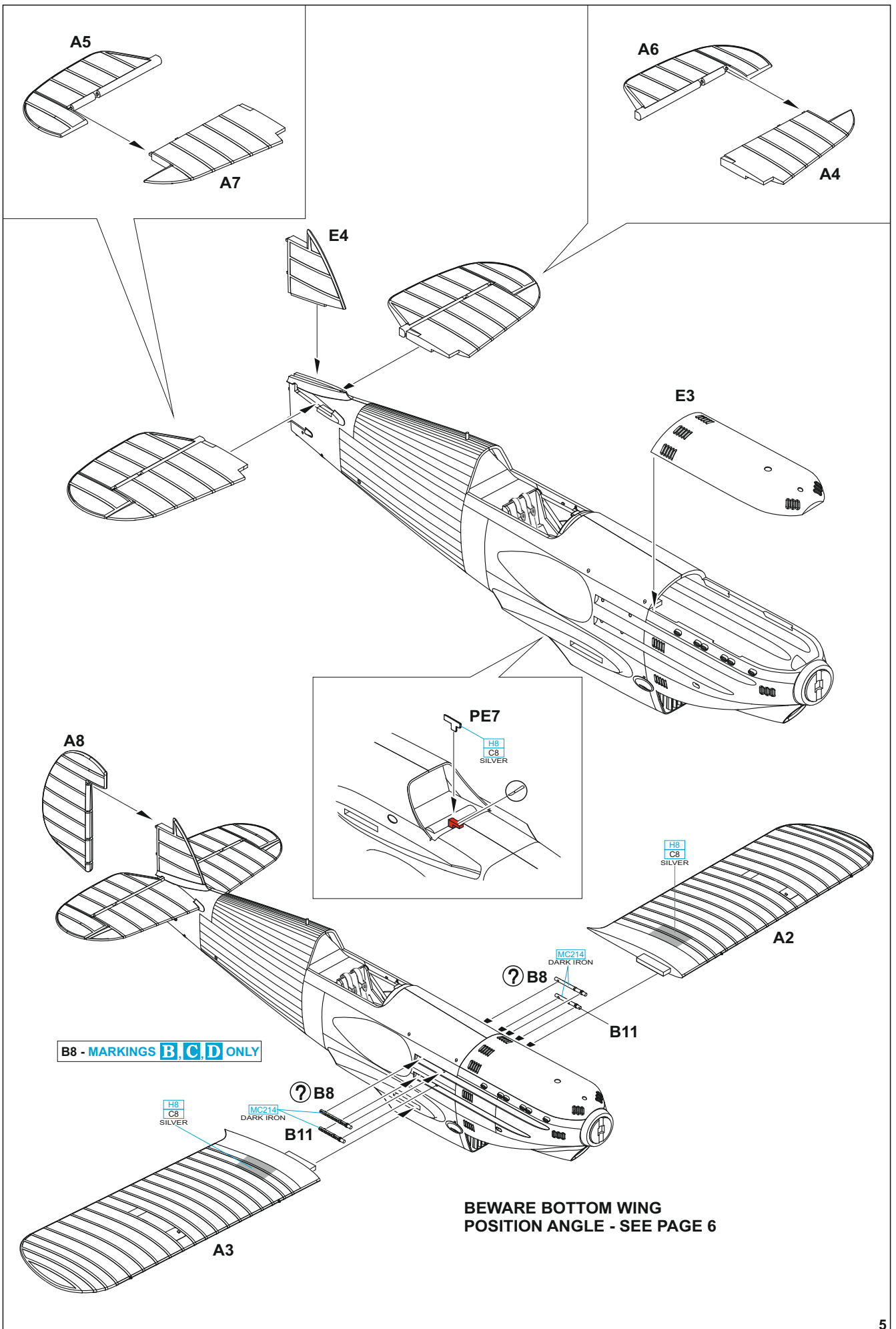
色

GSi Creos (GUNZE)		
AQUEOUS	Mr.COLOR	
<a href="#">H5</a>	<a href="#">C5</a>	BLUE
<a href="#">H6</a>	<a href="#">C6</a>	GREEN
<a href="#">H8</a>	<a href="#">C8</a>	SILVER
<a href="#">H12</a>	<a href="#">C33</a>	FLAT BLACK
<a href="#">H28</a>	<a href="#">C78</a>	METAL BLACK
<a href="#">H37</a>	<a href="#">C43</a>	WOOD BROWN
<a href="#">H47</a>	<a href="#">C41</a>	RED BROWN
<a href="#">H64</a>	<a href="#">C17</a>	RLM71 DARK GREEN

GSi Creos (GUNZE)		
AQUEOUS	Mr.COLOR	
<a href="#">H77</a>	<a href="#">C137</a>	TIRE BLACK
<a href="#">H413</a>	<a href="#">C113</a>	YELLOW
	<a href="#">C121</a>	RLM81 BROWN VIOLET
	<a href="#">C530</a>	IDF GRAY
Mr.METAL COLOR		
	<a href="#">MC214</a>	DARK IRON
	<a href="#">MC215</a>	COPPER
	<a href="#">MC218</a>	ALUMINIUM



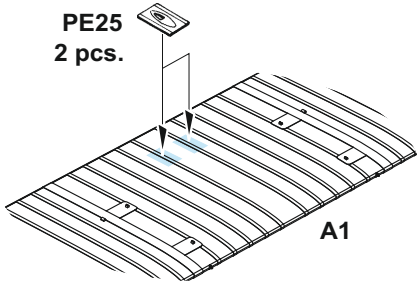




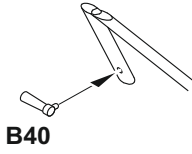


**UPPER WING  
BOTOM SURFACE**

PE25  
2 pcs.

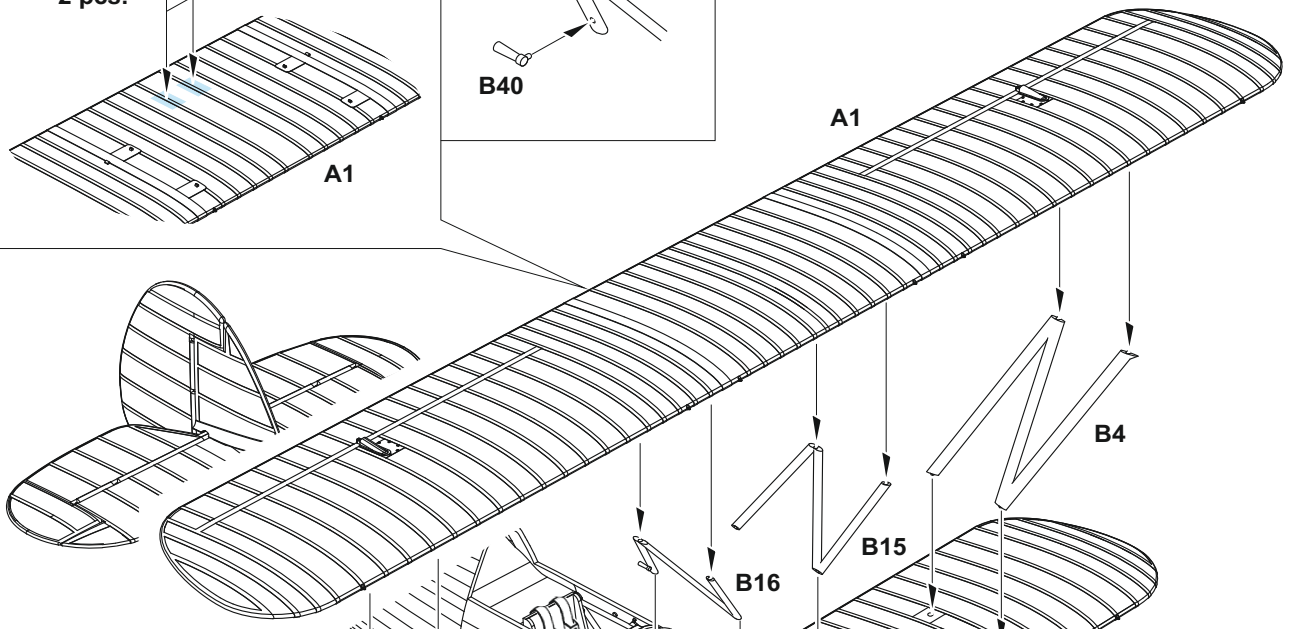


B16



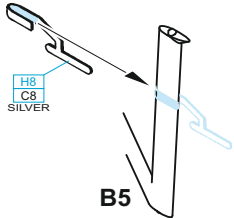
**BEWARE CORRECT STRUT POSITION!**

A1



B4

PE8 ↗



B5

H8  
C8  
SILVER

PE30 ↗



H8  
C8  
SILVER

PE12 ↗ ↻ 2 pcs.

PE30 ↗

H8  
C8  
SILVER

? F3 ↗

F1 ↗

H8  
C8  
SILVER

H8  
C8  
SILVER

H47  
C41  
RED BROWN

E8 ↗

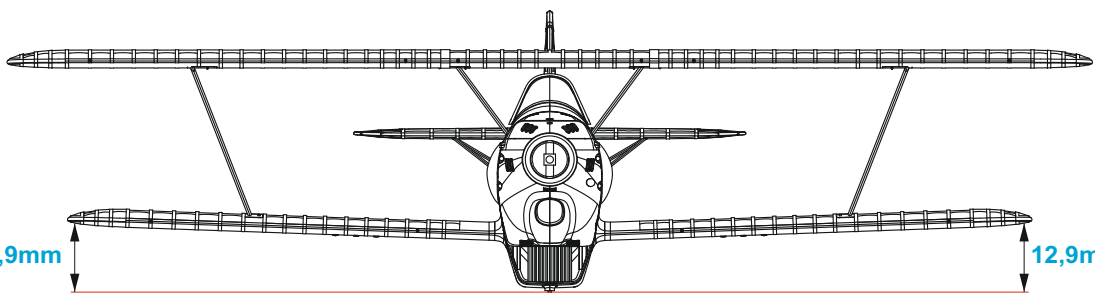
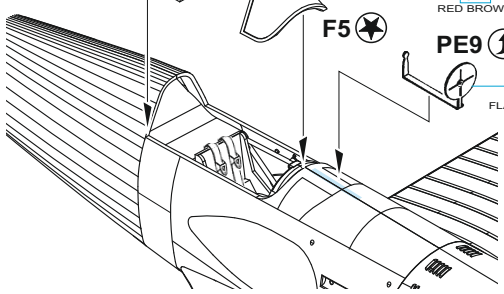
H12  
C33  
FLAT BLACK

F2 ↗

H8  
C8  
SILVER

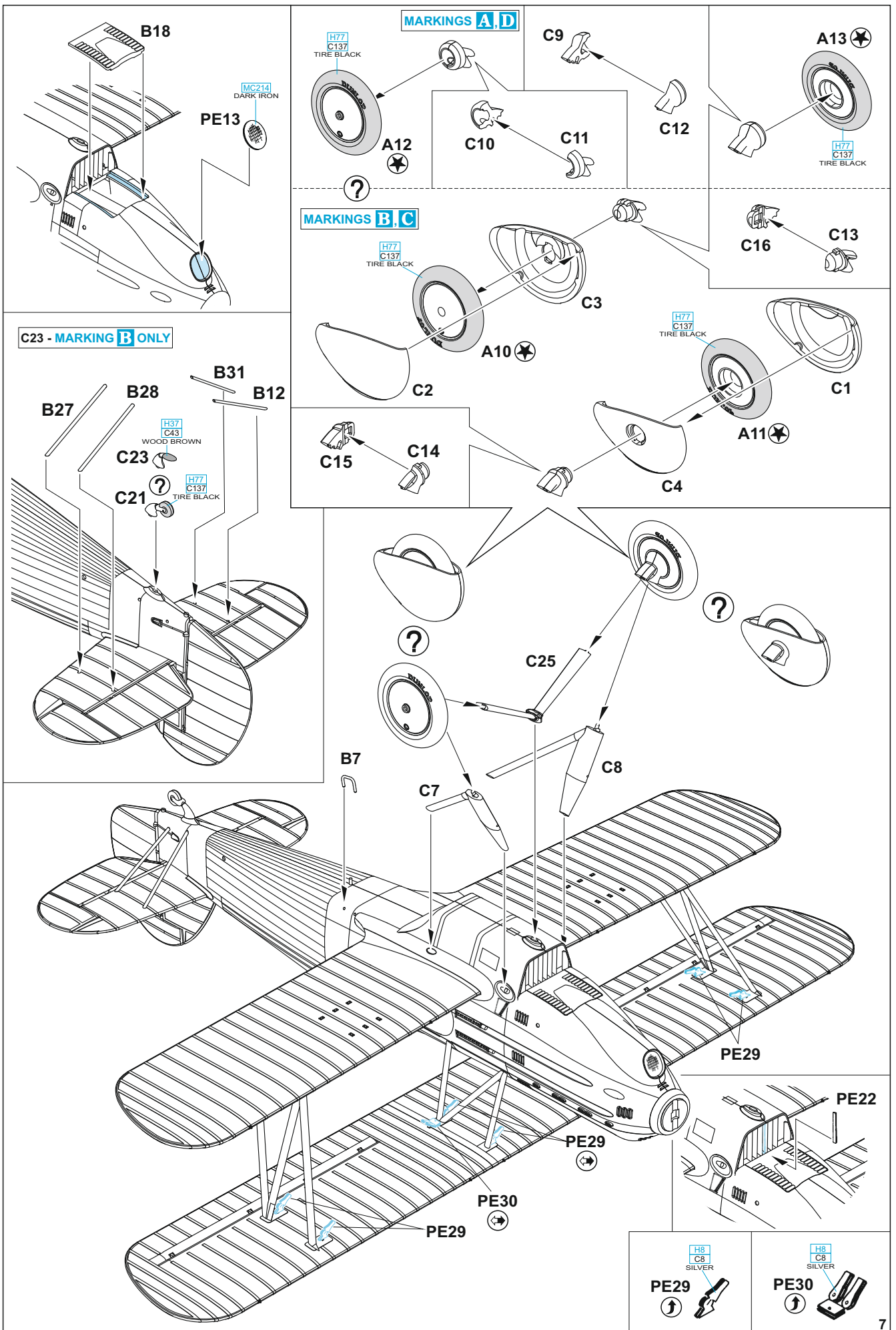
E8 ↗

H47  
C41  
RED BROWN

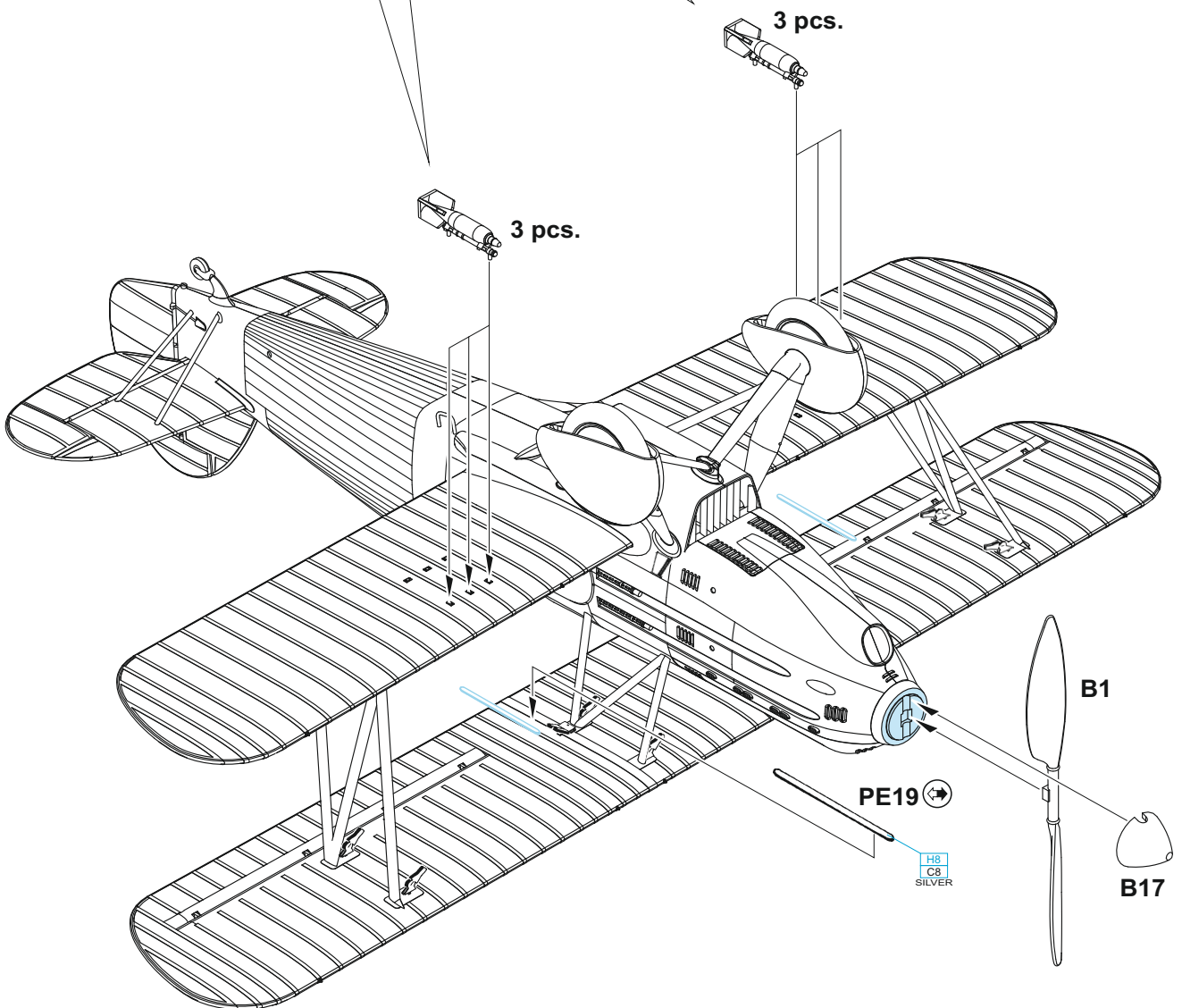
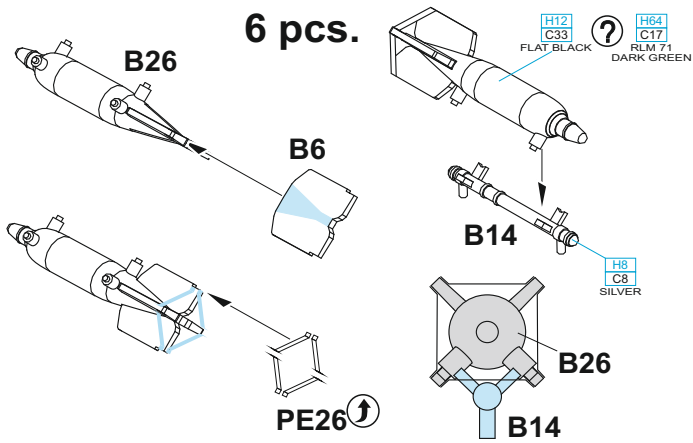


12,9mm

12,9mm

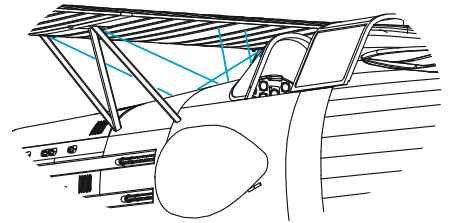
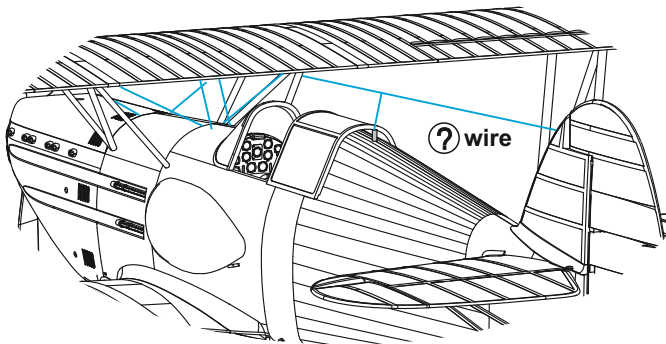
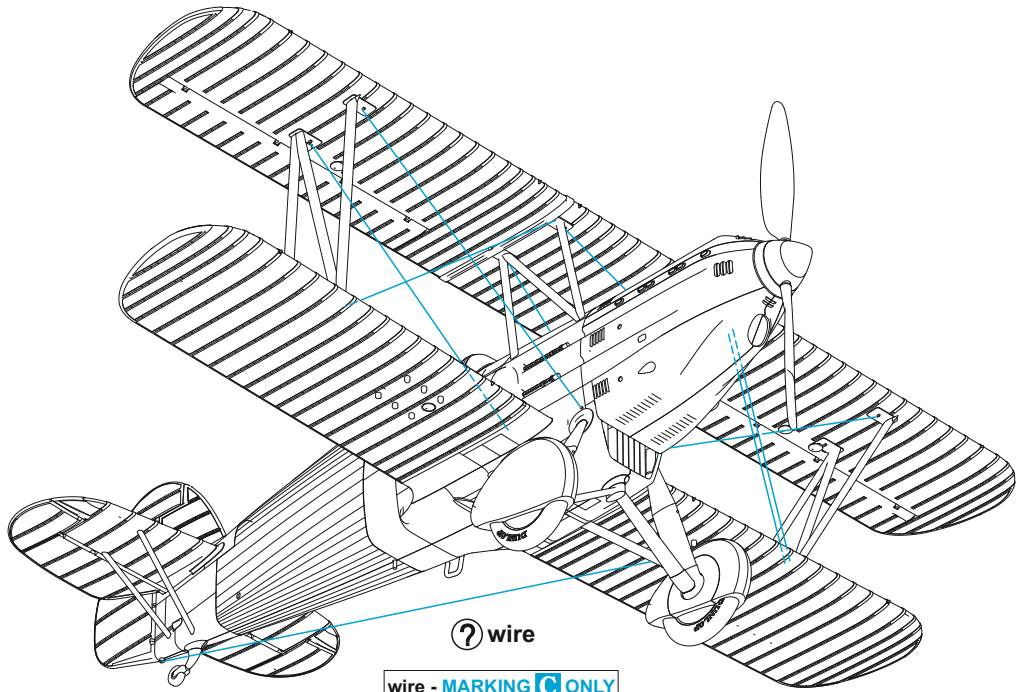


? MARKING B ONLY

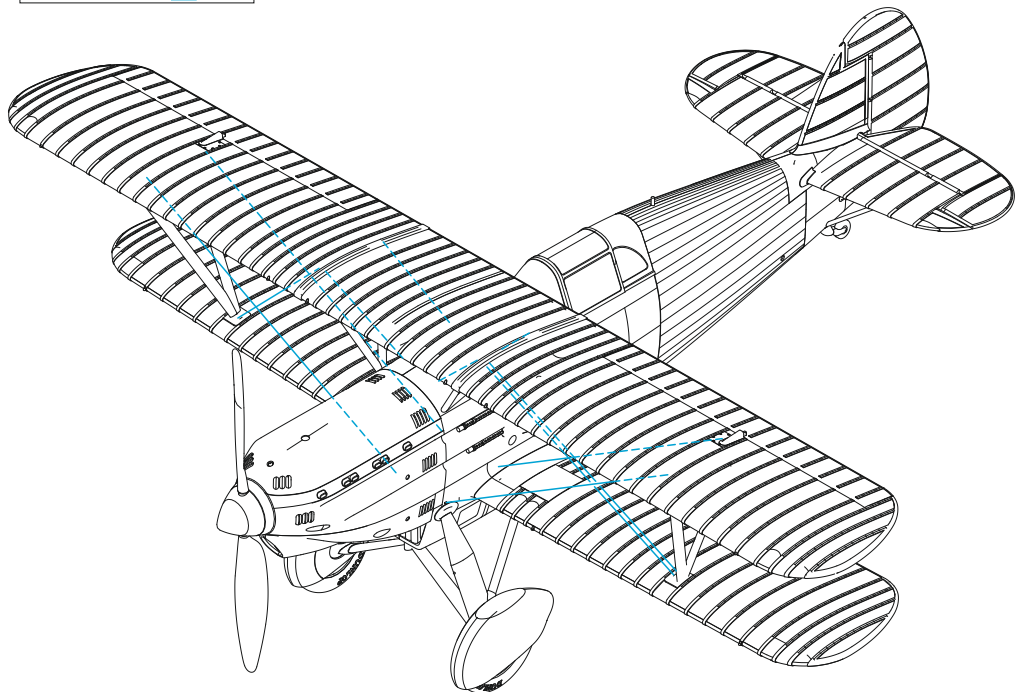


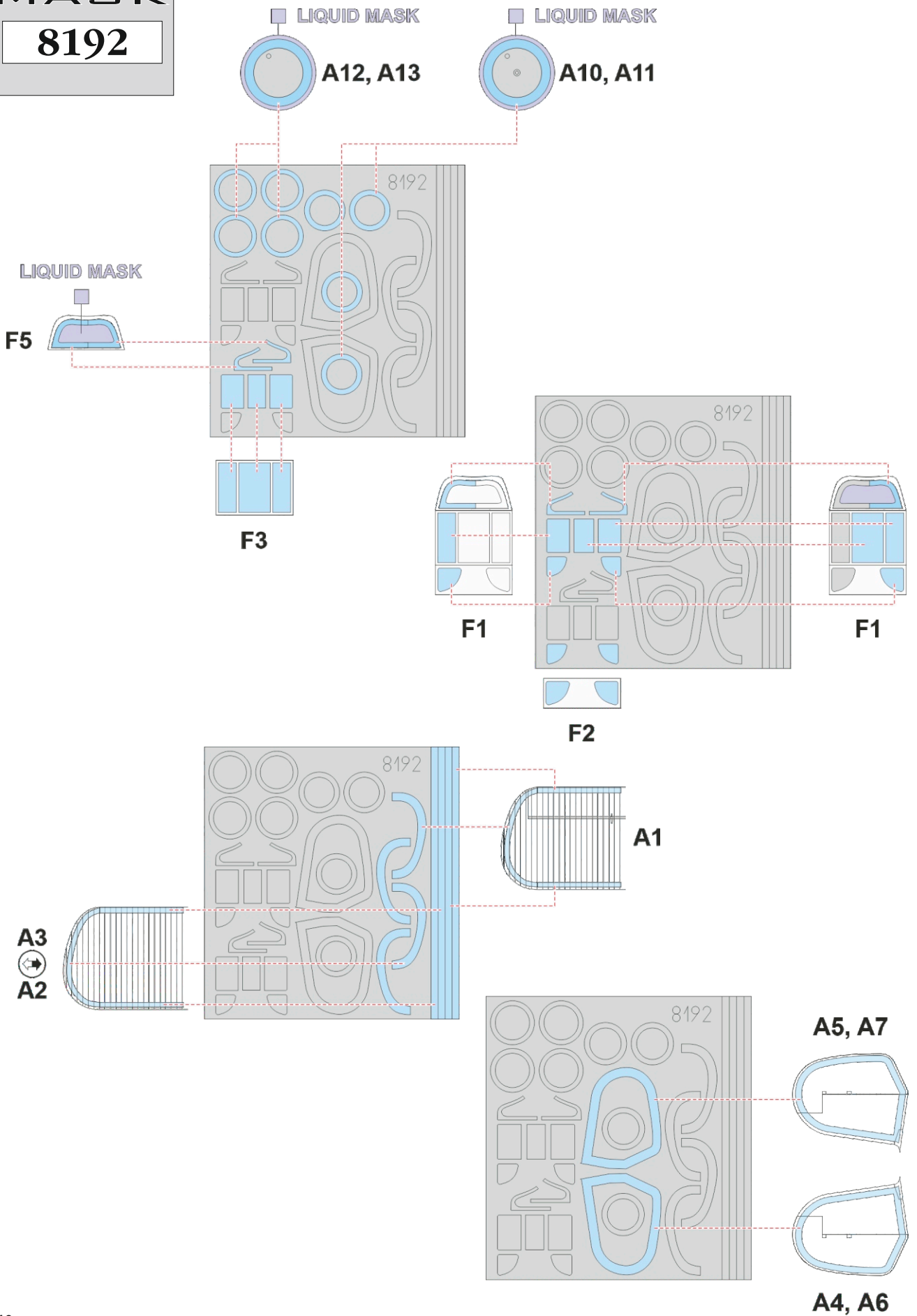


# RIGGING DIAGRAM



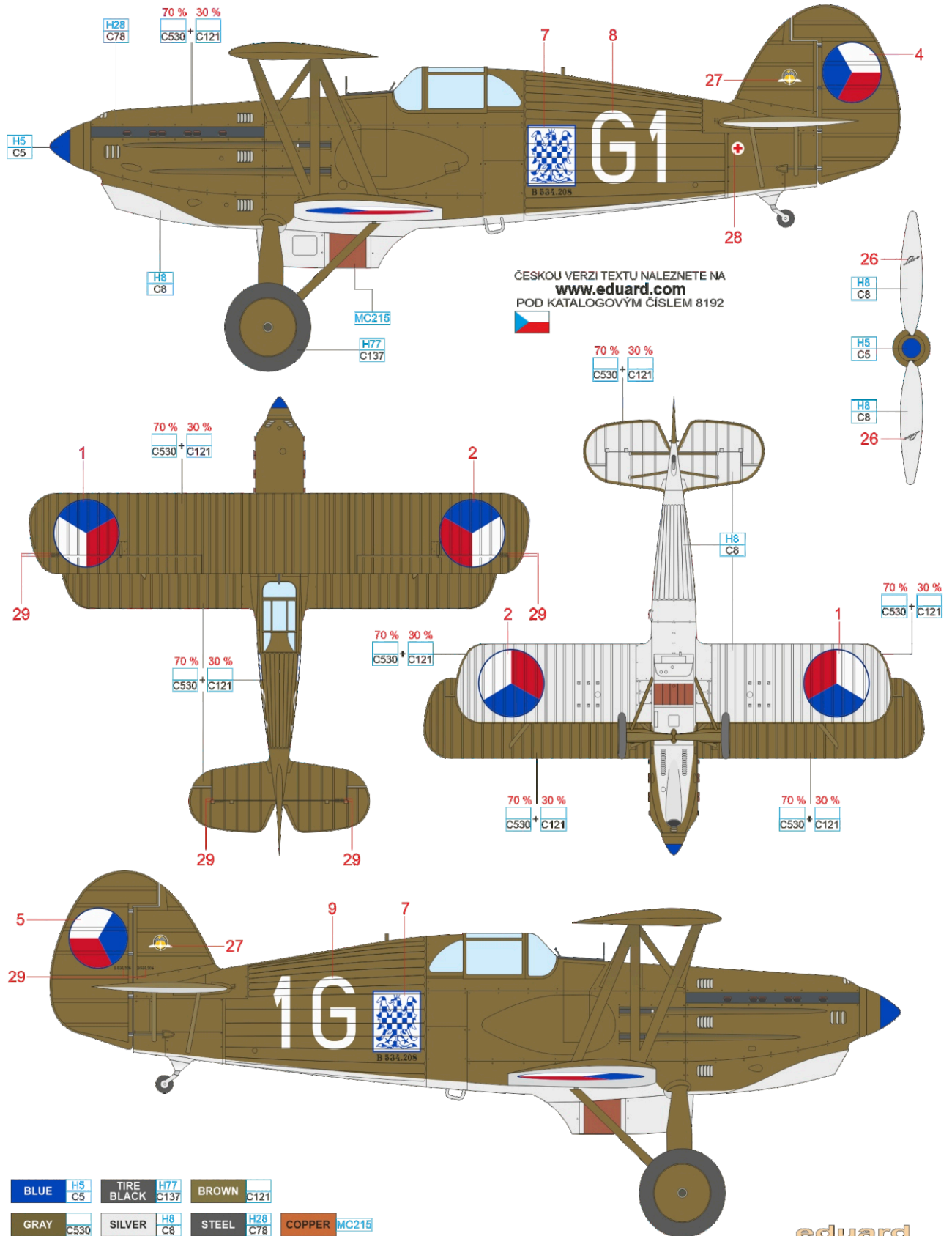
wire - MARKING A ONLY





# A B.534.208, 36<sup>th</sup> Fighter Squadron, Air Regiment 2, Olomouc Airfield, Czechoslovakia, Fall 1937

This aircraft is representative of the camouflage scheme used by Avia at the end of the Thirties, prior to the Munich Crisis. Upper surfaces are khaki, lower are silver doped, typically a matted shade. The lower surface of the upper wing is also khaki. The blue and white Moravian eagle identifies the aircraft as belonging to the Air Regiment 2, while the letter G identifies membership within the 36<sup>th</sup> Squadron, and the numeral 1 specifies the aircraft within the Squadron. The blue tipped spinner was also a squadron identifier, although this was not an official marking. This aircraft is known to have crashed on September 6, 1937, piloted by četař (Sergeant) Julius Zaoral, following a collision with another Avia B.534.35, with svobodník (Private First Class) Jaroslav Šodek at the controls.

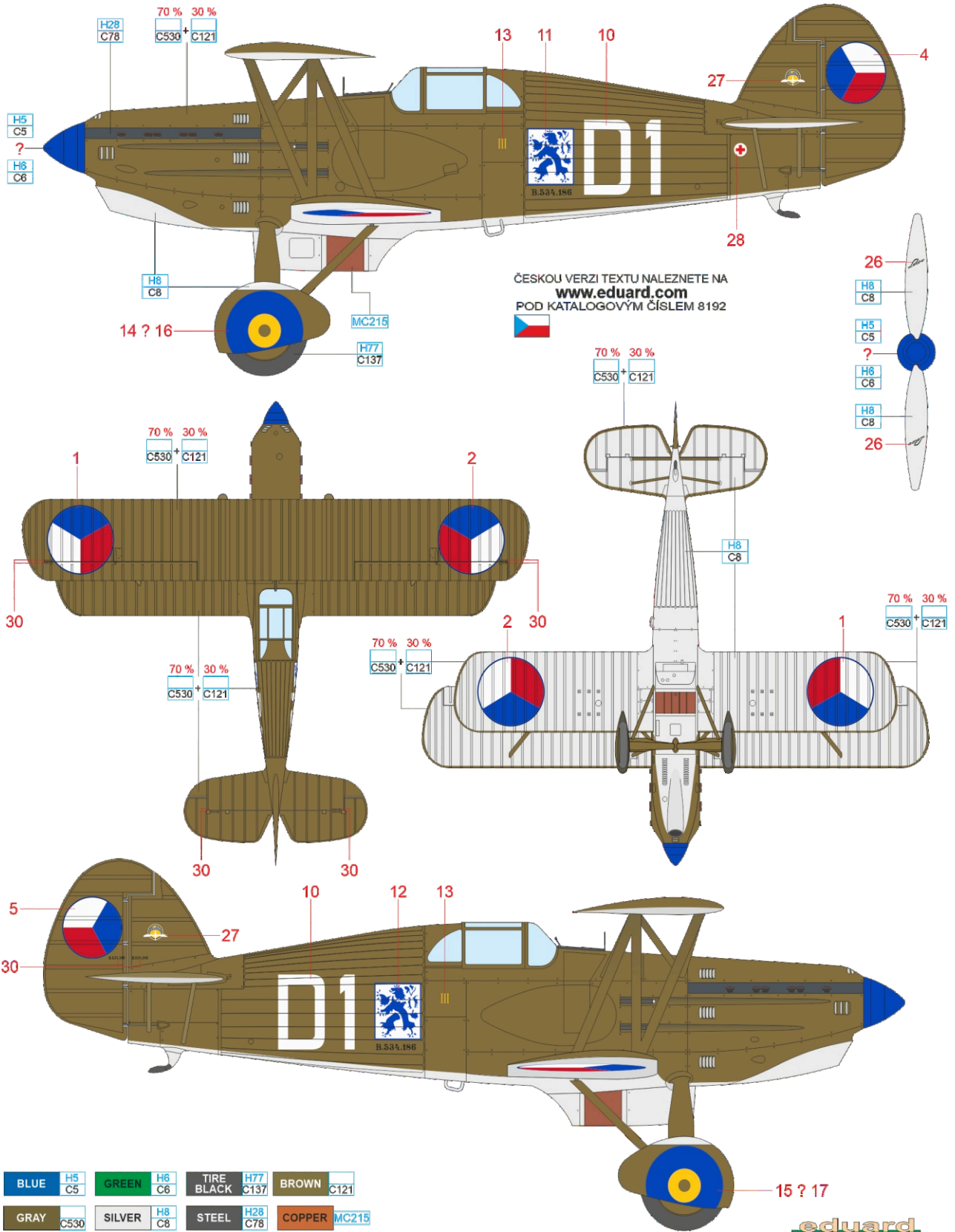


ČESKOU VERZI TEXTU NALEZNETE NA  
**www.eduard.com**  
 POD KATALOGOVÝM ČÍSLEM 8192

BLUE	H5 C5	TIRE BLACK	H77 C137	BROWN	C121
GRAY	C530	SILVER	H8 C8	STEEL	H28 C78
				COPPER	MC215

# B B.534.186, 34<sup>th</sup> Fighter Squadron, Air Regiment 4, Hradec Králové Airfield, Czechoslovakia, Summer 1937

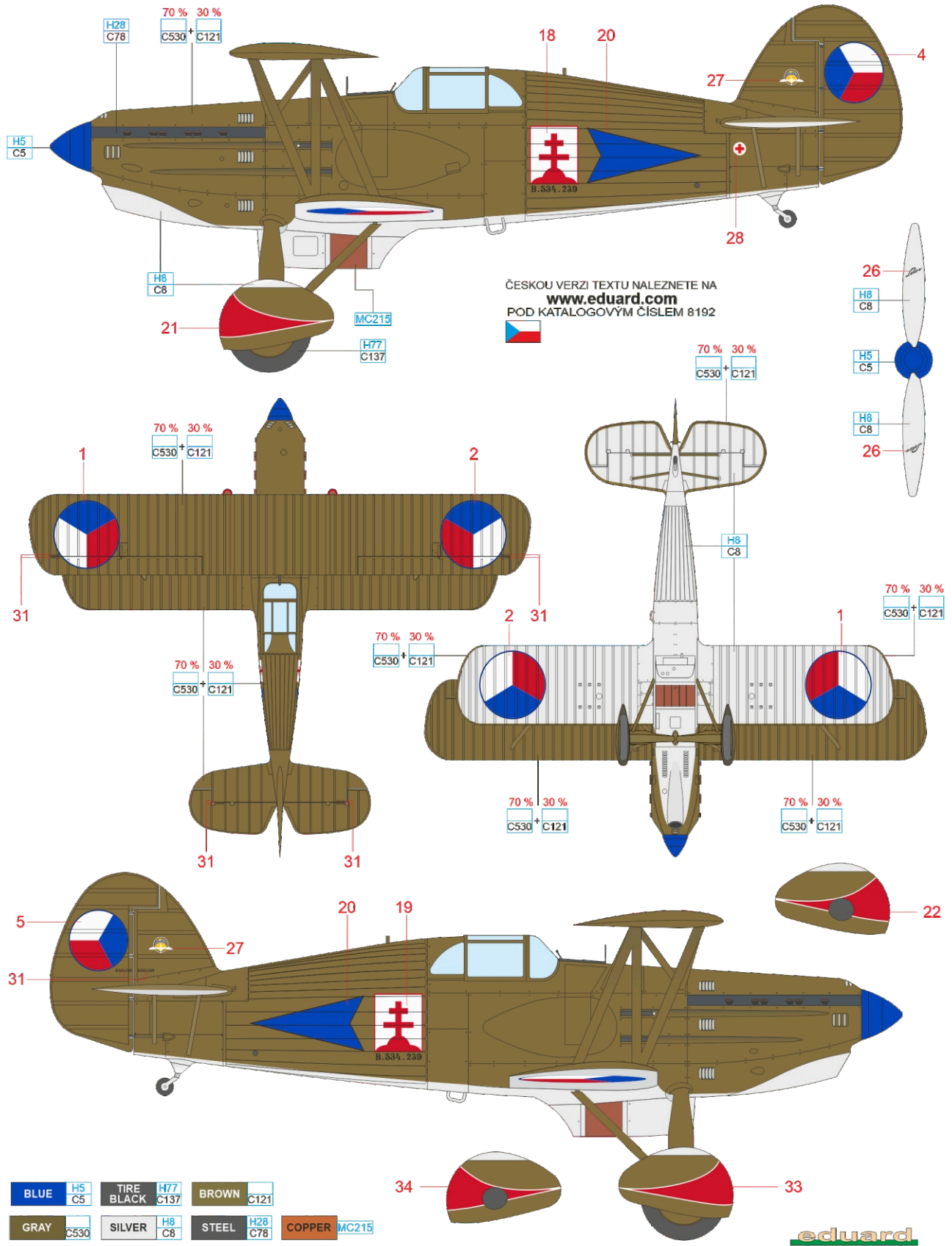
B.534s of the Air Regiment 4 are among the more striking within the pre-war Czechoslovak Air Force. The color details are not known for certain, and this arises from uncertainties regarding the remarking of squadrons at the end of the Thirties. These could have been either blue and yellow or green and yellow. The colors on the wheel spats would be consistent, and so would, likely, the lower prop bandaging. This aircraft is known from photographs likely taken during the course of 1937, when attached to 34<sup>th</sup> Fighter Squadron, which utilized blue and yellow trimming. In January 1938, she was re-designated as belonging to 50<sup>th</sup> Fighter Squadron, with the fuselage code K. Coded D, she was then attached to 42<sup>nd</sup> Squadron, which used green and yellow colors. The aircraft has a tail skid instead of a tail wheel. The lower surface of the upper wing is silver doped.



BLUE	H5 C5	GREEN	H6 C6	TIRE BLACK	H77 C137	BROWN	C121
GRAY	C530	SILVER	H8 C8	STEEL	H28 C78	COPPER	MC215

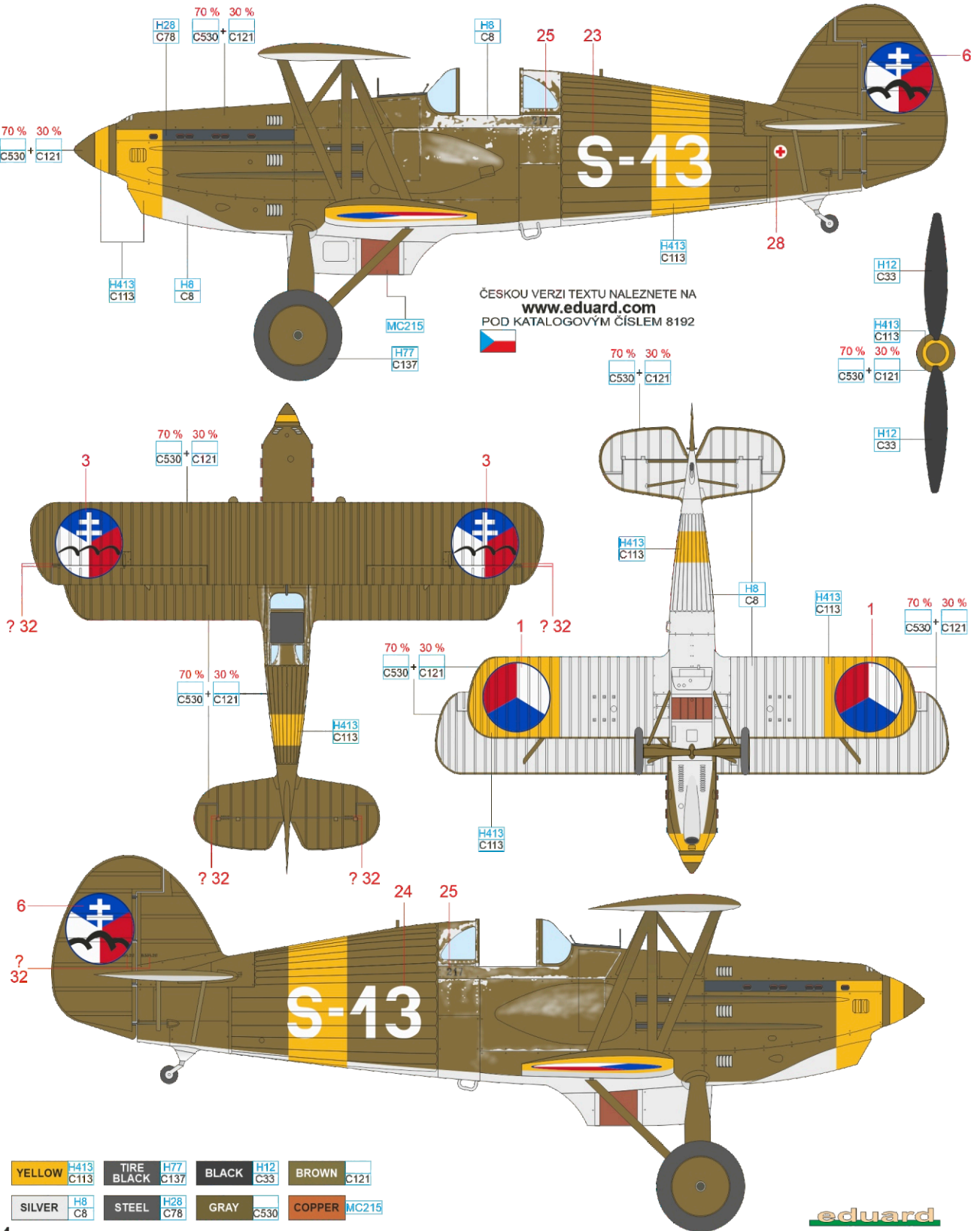
# C B.534.239, 45<sup>th</sup> Fighter Squadron, Air Regiment 3, Piešťany Airfield, Czechoslovakia, July 1938

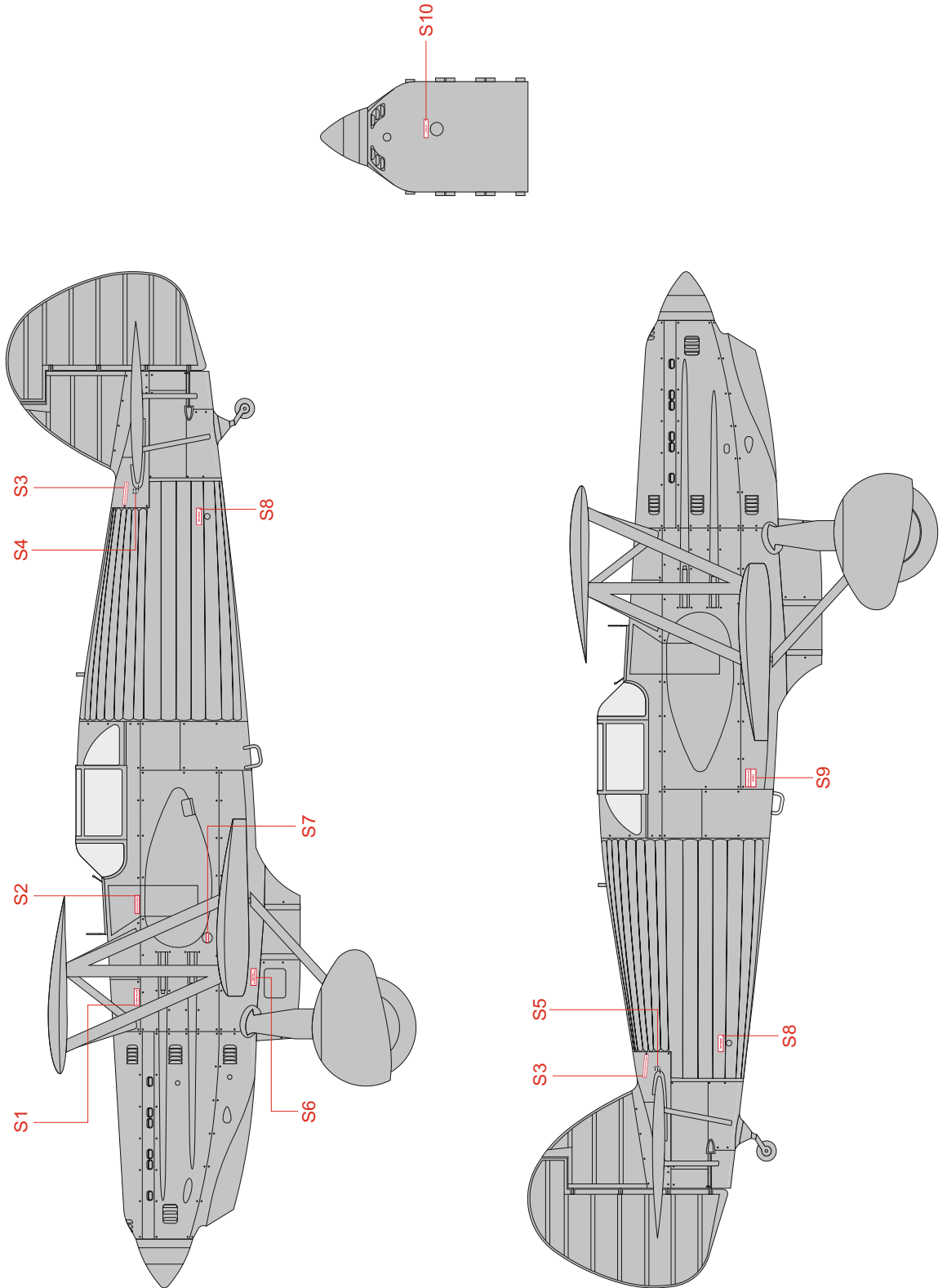
This aircraft carries the standard Czechoslovak camouflage scheme from the late Thirties. The lower surface of the upper wing is in khaki, and the spinner is yellow. The aircraft was documented on a photograph dated July 14, 1938, when it suffered light damage while flown by desátník (corporal) Baláš. At the time, these aircraft carried no squadron codes. The Air Regiment 3 was the only one that was located in Slovakia prior to the outbreak of the war. After the dissolution of Czechoslovakia, Air Regiment 3 aircraft were incorporated into the services of the newly formed Slovak Air Force. In this service, Avia B.534s took part in combat operations in Poland and later in the Soviet Union. In August 1944, the Slovak National Uprising saw the remaining Avias take part in anti-German operations.



# D B.534.217, Combined Squadron of Slovak National Uprising, Tri Duby Airfield, Slovakia, September 1944

In the fall of 1944, the Slovak National Uprising saw the use of several Avia B.534s. This specific aircraft is the only one photographically documented with the national markings used during the uprising. These were composed of the original Czechoslovak roundels with the addition of the Slovak two-pronged cross. The markings on the right wing are oriented incorrectly with the red field on the right side, i.e. directed away from the fuselage. Also, blue field pointing upwards on the rudder is wrongly oriented. It has not been conclusively determined whether or not the lower wing markings lacked the Slovak crosses. The aircraft carries the typical camouflage scheme of khaki upper surfaces and silver doped lower (gray respray of the lower surfaces for this aircraft is unlikely) and with khaki undersurface of the top wing. The aircraft was noted to have been rather heavily weathered. The tip of the spinner was either khaki or possibly also heavily weathered. Propeller blades were black on both sides. The top of the nose was likely also khaki, and not yellow. All photographic evidence suggests that the sliding portion of the canopy was missing at the time of the Slovak National Uprising.





More aircraft of Czechoslovak pilots in 1/48 scale can be found in these kits:



Cat. No. 11167



Cat. No. 11163



Cat. No. 82158



Cat. No. 82181



Cat. No. 11162



Cat. No. 84154