

# SE.5a Night Fighter

eduard

BRITISH WWI FIGHTER

1/48 SCALE PLASTIC KIT

ProfIPACK  
edition

#82133



## INTRO

The Royal Aircraft Factory SE.5a is credited with being one of the fastest and deadliest aircraft of World War I. But the story of this 'Spitfire of Great War', as it is sometimes referred to, is not so straightforward. The SE. 5 (Scout Experimental 5) was designed by Henry Folland, John Kenworthy and Frank Goodden as a fighter powered by the new 150 hp V8 Hispano-Suiza 8Aa engine. As the rotary engines neared their limitations, in-line liquid cooled engines were supposed to be a more promising way to fly faster and higher. The first prototype of the new fighter made its maiden flight on November 22nd, 1916 and began a somewhat intricate journey from miserable testing to combat proven glory. The new engine was troublesome and the wing design of the plane had glitches. The first two prototypes were lost in crashes, with chief test pilot at the Royal Aircraft Factory and one of the aircraft's designers, Major F. W. Goodden, losing his life on January 28th, 1917. The problems were partly solved thanks to modifications adopted on the third prototype, thus creating the first production variant of the new fighter.

The SE.5 entered service with No. 56 Sqn RFC, during April 1917. The squadron was home to several famous aces. One of them, Albert Ball, was instrumental in honing the SE.5 into a formidable airplane. The new fighter was received with mixed emotions because of its unusually high seat position, large windscreen and armament layout that was composed of fuselage mounted 0.303 Vickers and upper wing mounted 0.303 Lewis machine guns. Ball, together with his mechanic, worked during the nights to address smaller as well as bigger glitches of the new design and most of the changes they made to the design were adopted for all SE.5s at squadron level. The large windscreen was dispensed with and the pilots lowered their seats to a more normal position. But, they always prayed for good visibility from the cockpit. The changes made by No. 56 Sqn were shortly adopted for production. The final few SE.5 aircraft built in July 1917 were fitted with a more powerful 200 hp Hispano-Suiza 8Ab engine, effectively setting the SE.5a standard. Production of the SE.5 ended after only 77 examples being built. The SE.5a was then produced in high quantities by six manufacturers: Vickers (2164), Austin Motors (1650), Air Navigation and Engineering Company (560), Wolsley Motors Limited (431), Martinside (258) and Royal Aircraft Factory (200). The American Curtiss Aeroplane and Motor Company built one example, as production of some 1000 aircraft was considered there. The US Army Squadrons of the American Expeditionary Force were among those receiving the SE.5a, and the Curtiss supplies would equip them. But the armistice ended this plan.

The SE.5a is frequently compared to another famous WWI fighter, the Sopwith Camel, the last formidable British fighter with a rotary engine. Because of the different engine construction philosophy, the two fighters were very different aircraft. The Camel was highly maneuverable thanks to the centre of gravity pushed very far forward and also because of the sheer inertia of the rotating engine, which made it very fast in a right turn. But the Camel was an unforgiving airplane, dangerous to less experienced pilots. The SE.5a, although very fast, was to the contrary a very stable and forgiving fighter. It was not as agile as the Camel, but still agile enough. And above 10,000 ft it was clearly superior not only to the Camel, but also to most enemy aircraft. Furthermore, the armament of one fixed, fuselage mounted Vickers machine gun, supplemented by a Lewis machine gun affixed to the top of the upper wing made it possible for pilots to attack a high-flying enemy, sneaking up beneath it unobserved. Some pilots questioned this armament arrangement, with two fixed Vickers suggested as a better solution, but early problems with the Constantinesco synchronizing gear spoke against it. In the end, the SE.5 was the first fighter with two machine guns. The Camel entered the field later in 1917. For SE.5a pilots, it was quite easy to pull down the wing mounted Lewis machine gun for reloading, but changing the drum and pushing the weapon back into firing position was a different story. The slipstream could even ram the removed drum into the pilot's face. But, pilots learned how to get the best from the SE.5a, the best of them leading the way. Apart from the aforementioned Albert Ball, there was, for example, James McCudden, a former sapper and air mechanic, later an ace with 57 kills, who used his skills to optimise the engine of his SE.5a for use in high level solo patrols against high-flying Rumpler observers. While 17,000 ft was the ceiling for the usual SE.5a, McCudden was capable of sorties of up to the 20,000 ft level. Another of the more famous men of the RFC, Edward C. Mannock, developed tactics which allowed extraction of the best of the SE.5a's qualities.

### Hisso and Viper

Problems with both supply and reliability of the 200hp Hispano-Suiza (nicknamed 'Hisso') engines troubled the SE.5a throughout its service career. As a result, there were a number of engine modifications installed in the SE.5a, both from the French supplier of the Hispano-Suiza, as well as from the British Wolsley firm, whose engines were usually further developments of Hispano-Suiza designs. With the earlier geared engines, the prop shaft was driven by a reduction gear and the propeller rotated counter clockwise (from the pilots perspective). The later direct drive engines had the propeller rotating clockwise. As Hispano Suiza supplied most of the early engines, the nickname 'Hisso' was used for all the planes with the geared engine, whether it came from Hispano-Suiza or Wolsley. For later production, the more reliable direct drive Wolsley Viper became the standard engine and aircraft so equipped were nicknamed 'Viper', again without distinction between suppliers. After the armistice a great sale of army surplus was held, and many planes were offered to the public, including the SE.5a. The price of one airworthy plane was 5 £, which translates to some 1,500 £ at today's values. Some retired pilots, who never flew the SE.5a during the war, brought one just to make one test flight, returning the plane with a discount. Such was the reputation of the SE.5a, enticing the pilots to try them, even if it did cost them a sizeable amount of money! Many of SE.5as were actually sold and were used in air races and also for 'Sky-Writing' purposes in advertising.

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 započítím stavby si pečlivě prostudujte stavební návod. Při používání barev a lepidel pracujte v době 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. SYMBOL \* INSTRUKTION SINNBILDEN \* SYMBOLES \* 記号の説明

OPTIONAL  
VOLBABEND  
OHNOUTOPEN HOLE  
VYVRTAT OTVORSYMETRICAL ASSEMBLY  
SYMETRICKÁ MONTÁŽREMOVE  
ODRÁZNOUTREVERSE SIDE  
OTOČITAPPLY EDUARD MASK  
AND PAINT  
POUŽIT EDUARD MASK  
NABARVIT

PARTS



DÍLY



TEILE

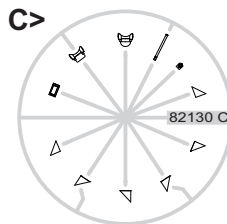
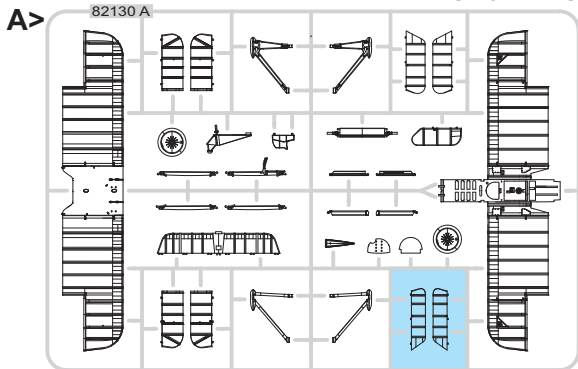
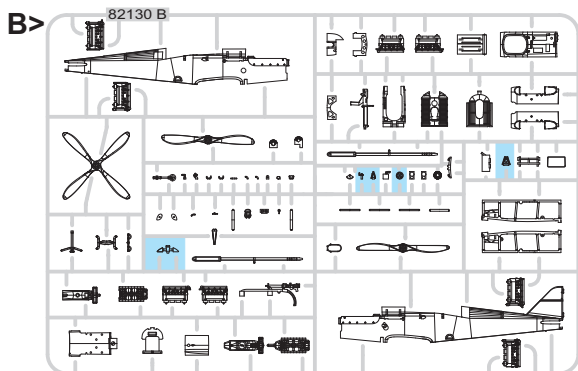
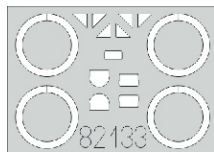
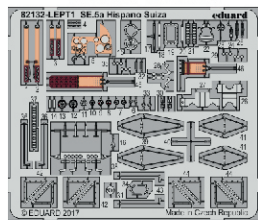


PIÈCES



部品

## PLASTIC PARTS

eduard  
MASKPE- PHOTO ETCHED  
DETAIL PARTSeduard  
BRASSIN

## RP - RESIN PARTS



R29

R30

R32  
2 pcs.

R33

R34

-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



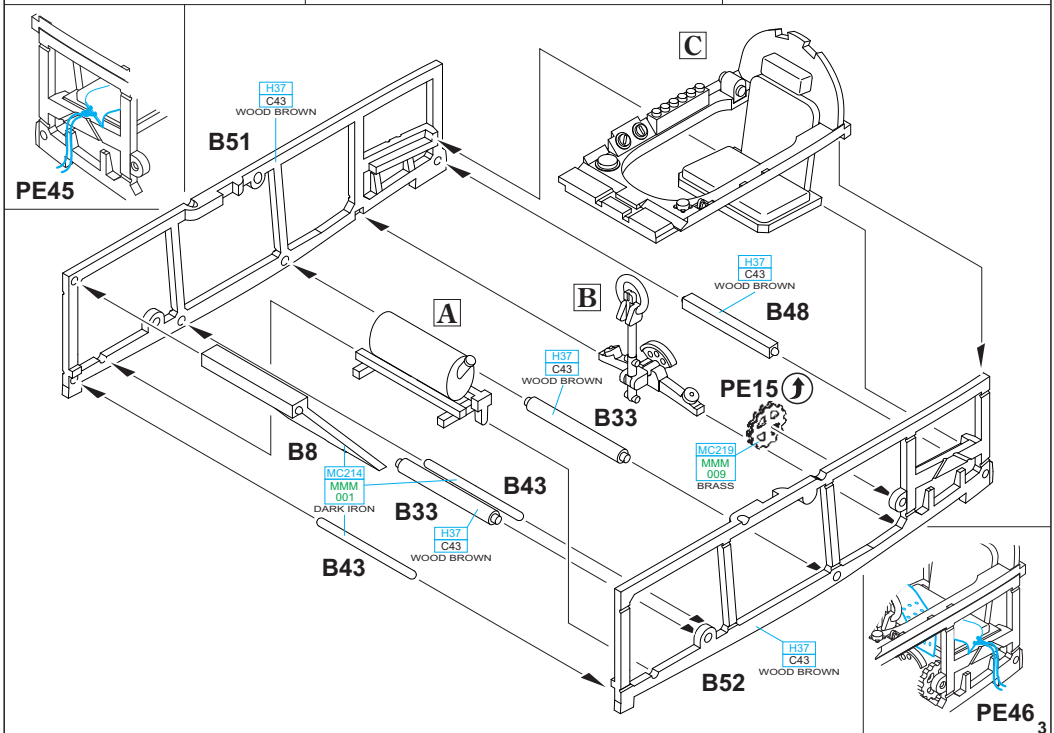
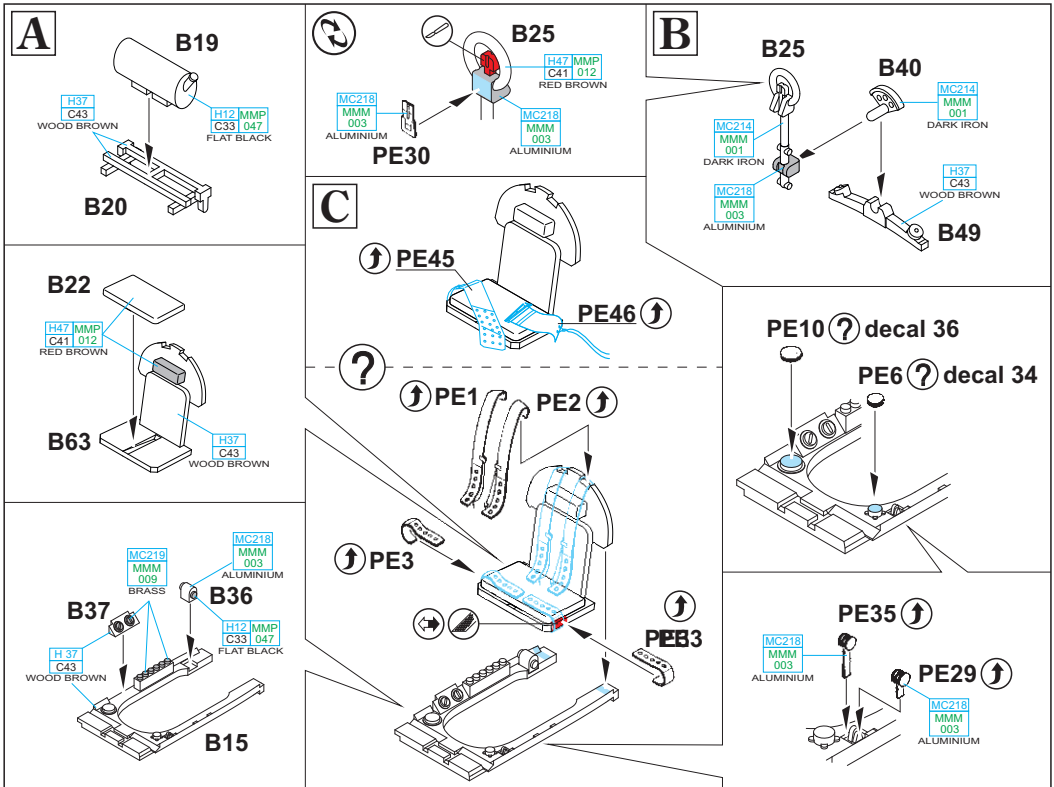
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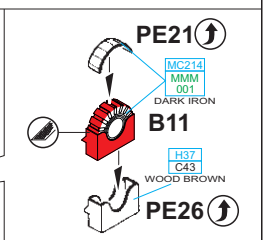
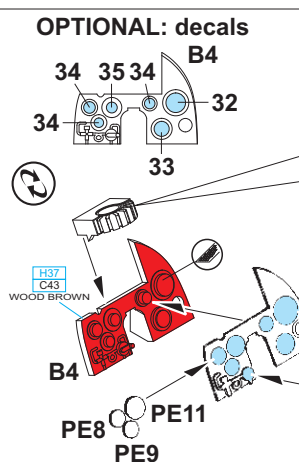
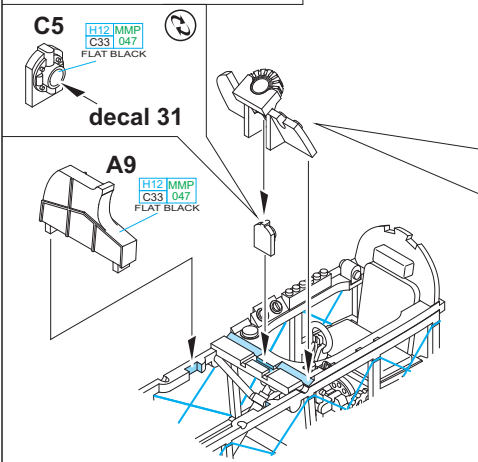
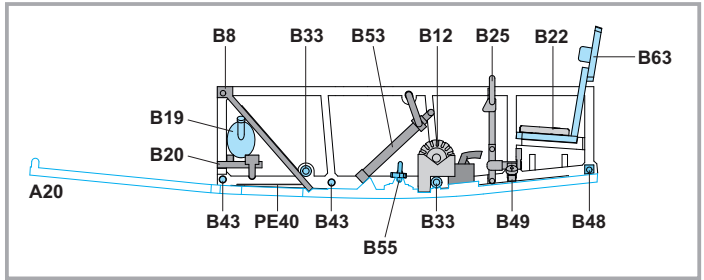
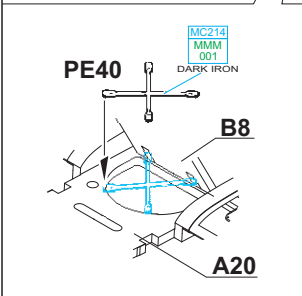
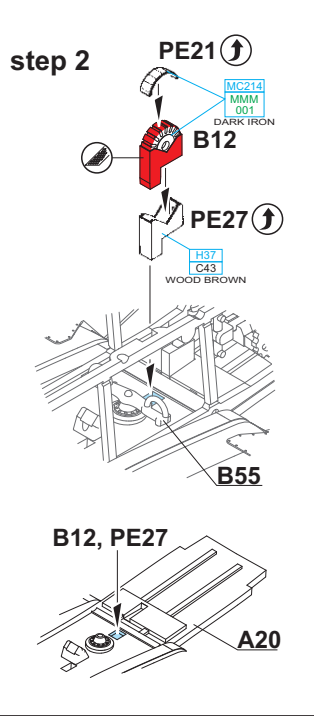
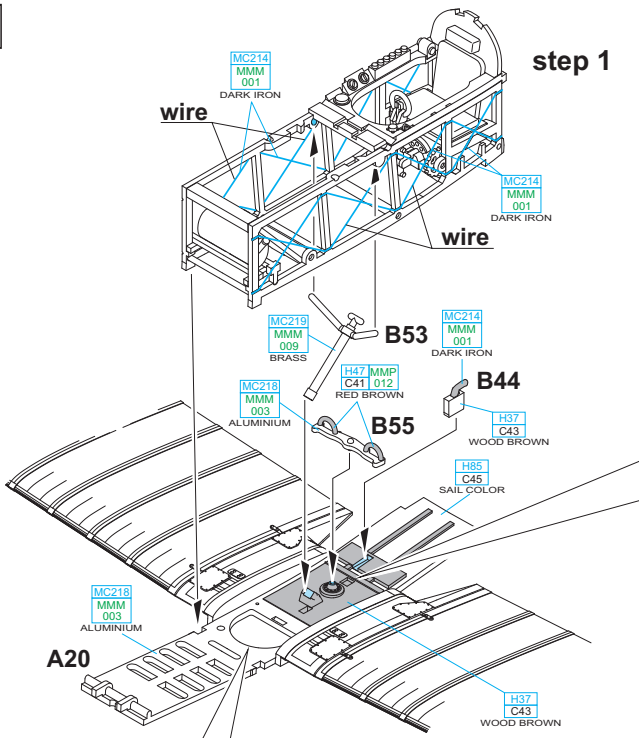
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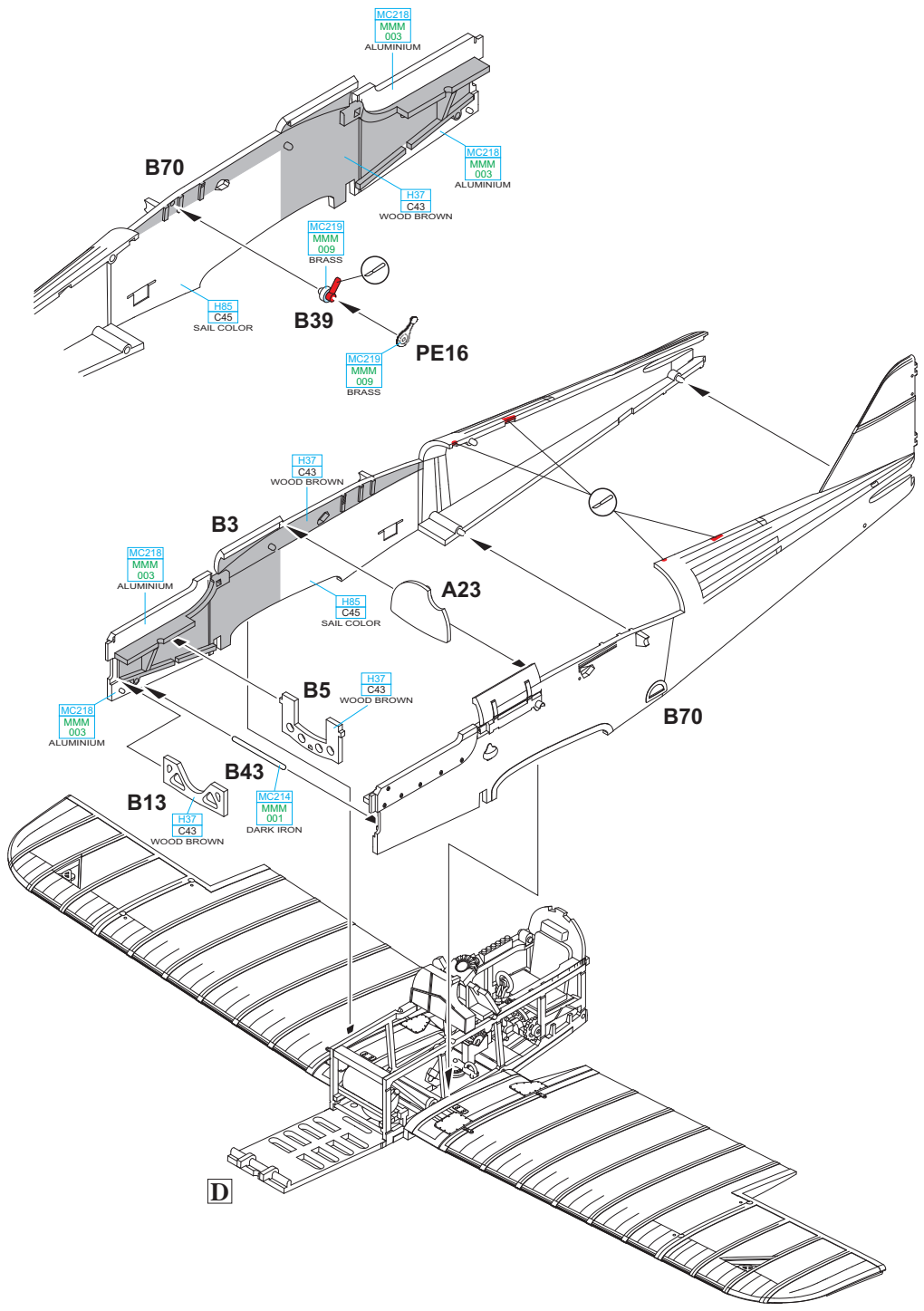
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AQUEOUS	Mr.COLOR	PAINTS	
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[H12]	C33	[MMP-047]	FLAT BLACK
[H37]	C43		WOOD BROWN
[H47]	C41	[MMP-012]	RED BROWN
[H51]	C11	[MMP-063]	LIGHT GULL GRAY
[H65]	C18	[MMP-088]	BLACK GREEN
[H85]	C45		SAIL COLOR

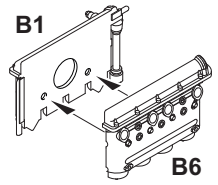
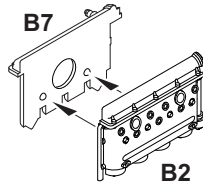
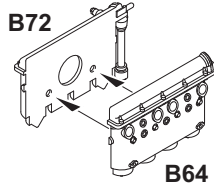
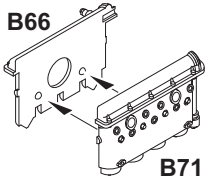
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Mr.METAL COLOR		METALLICS	
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D

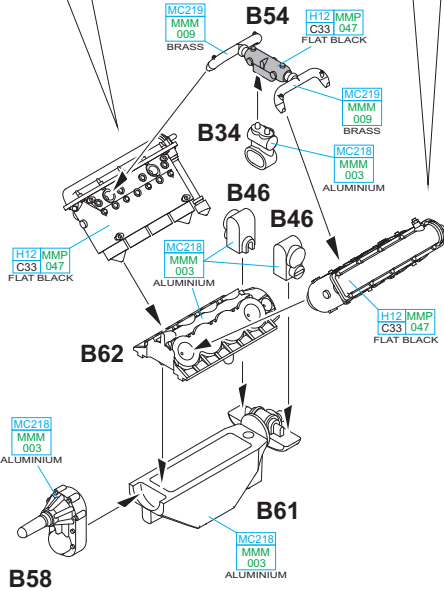




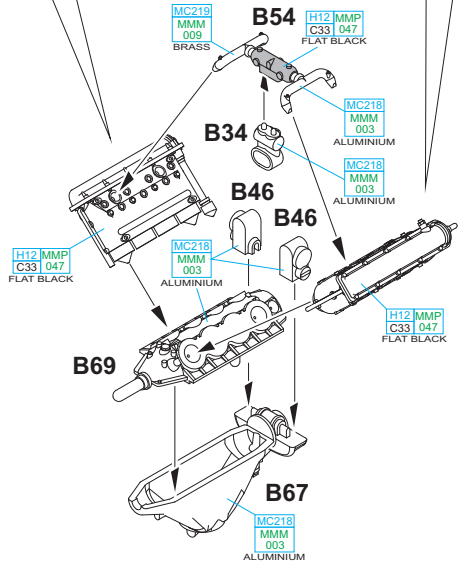


**E**

**MARKINGS A, C, D**

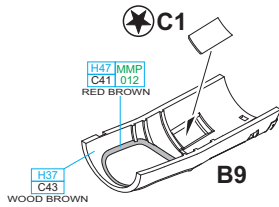


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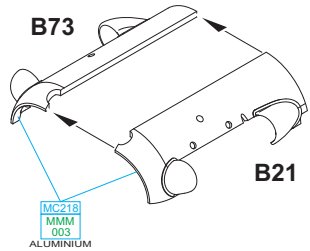
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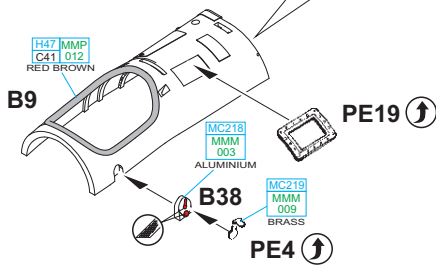


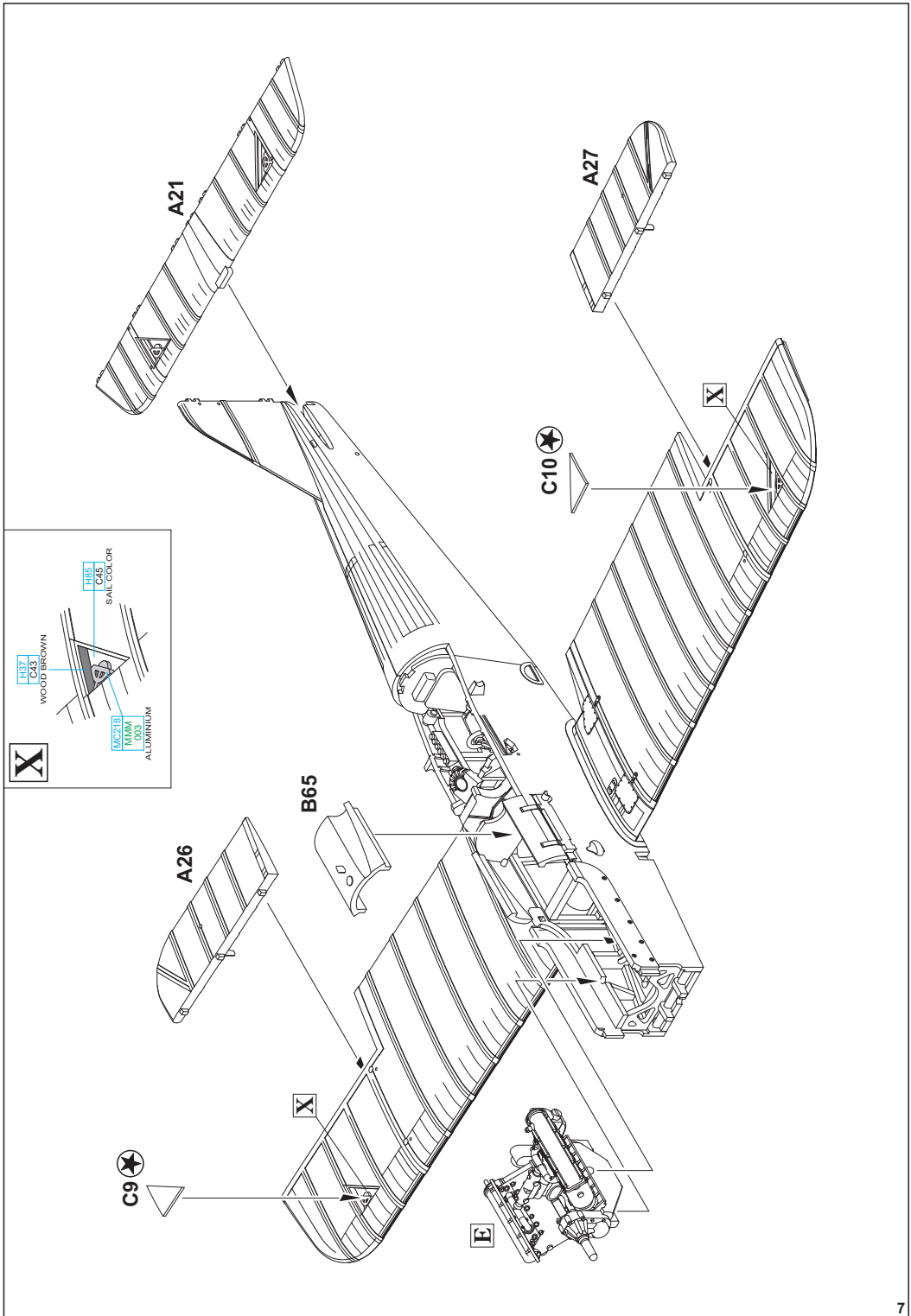
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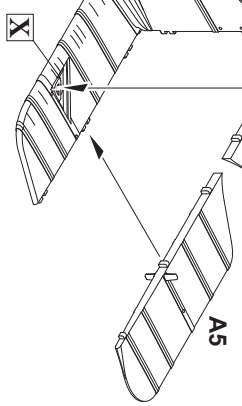
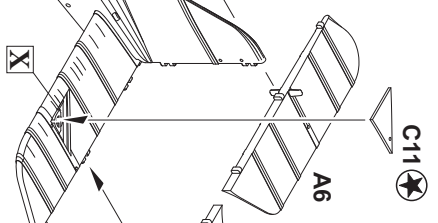
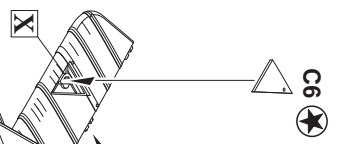
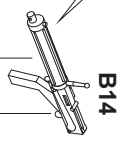
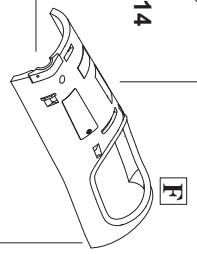
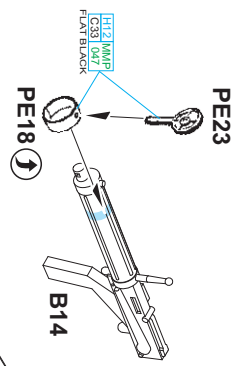
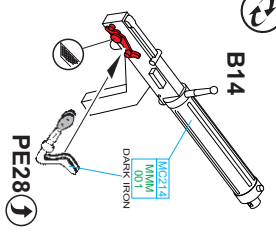
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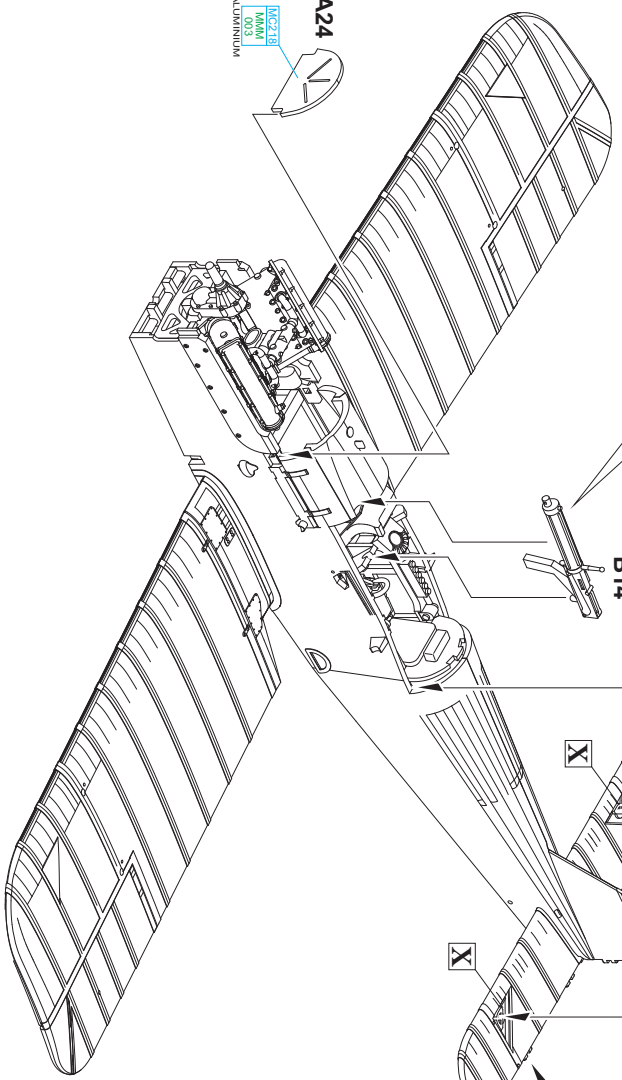


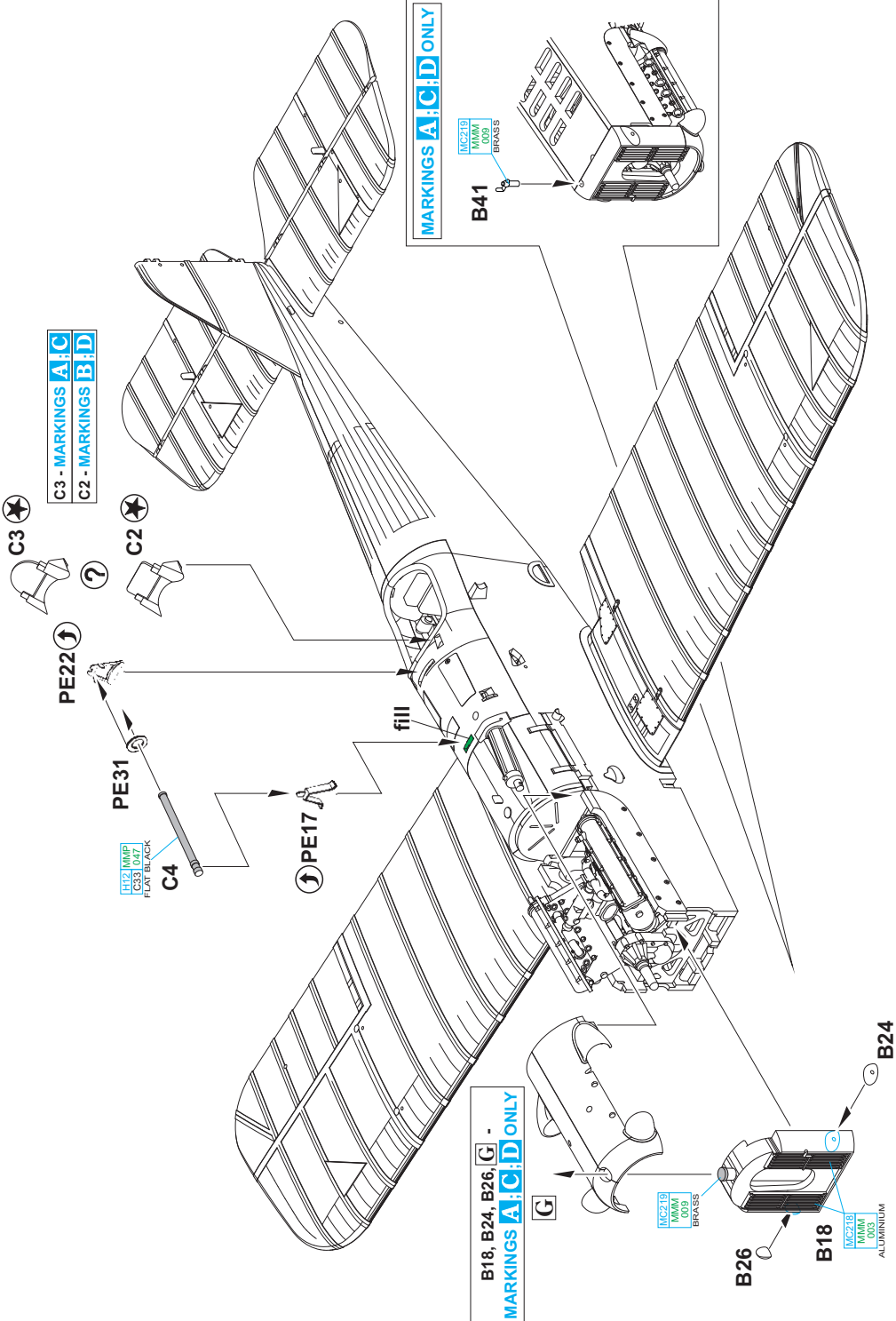




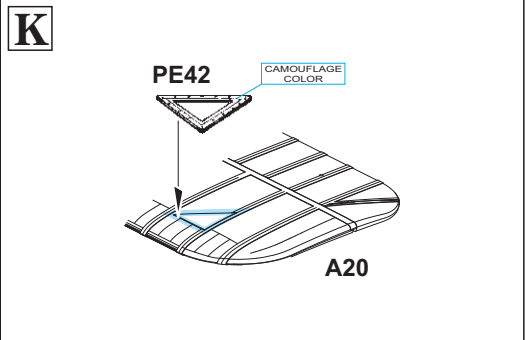
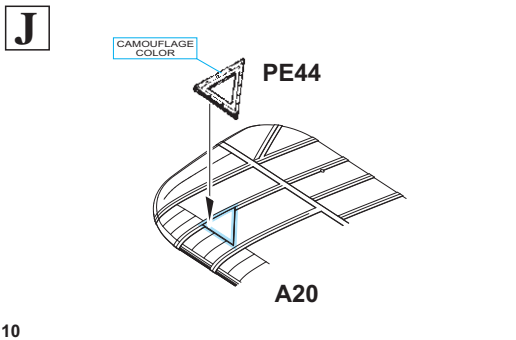
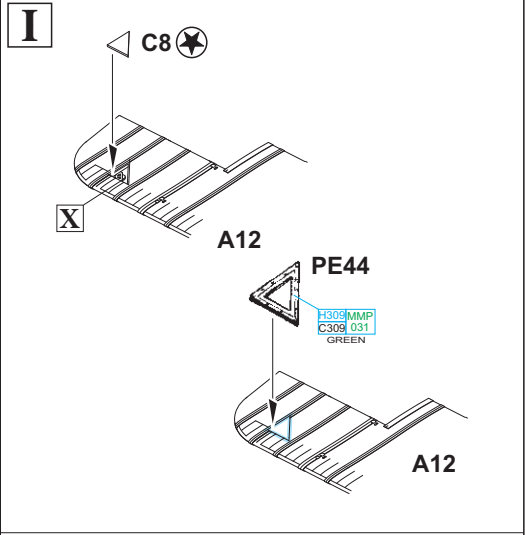
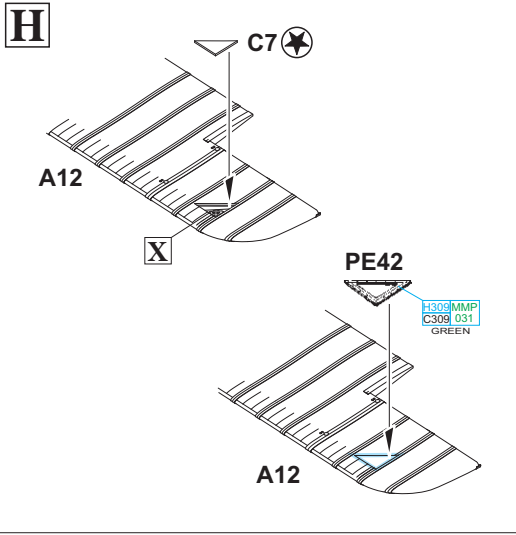
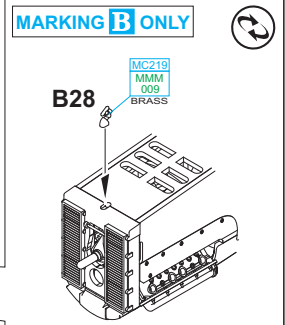
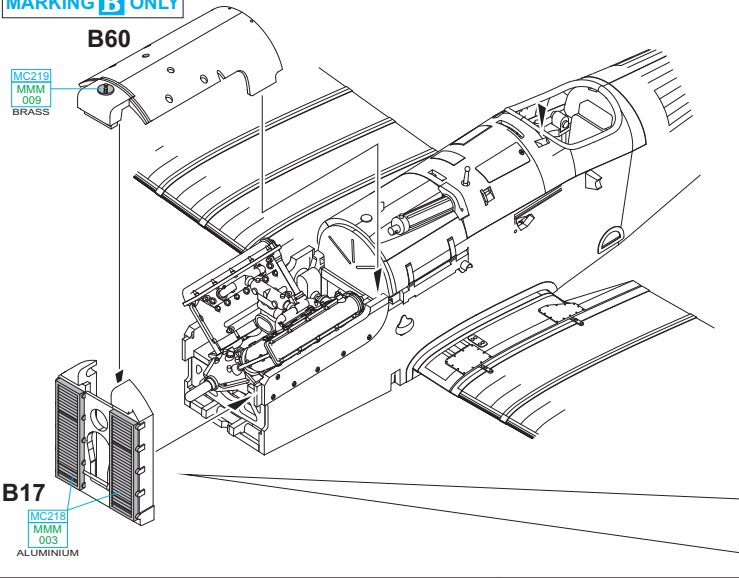
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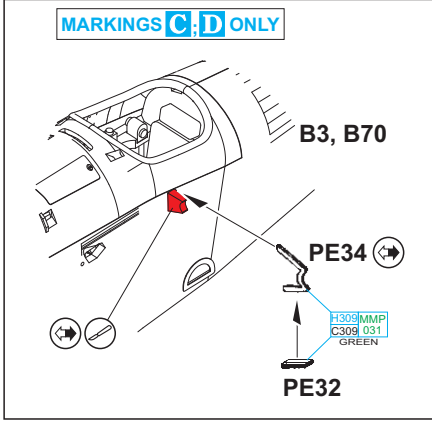
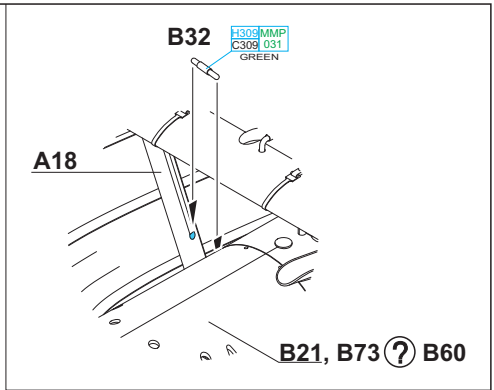
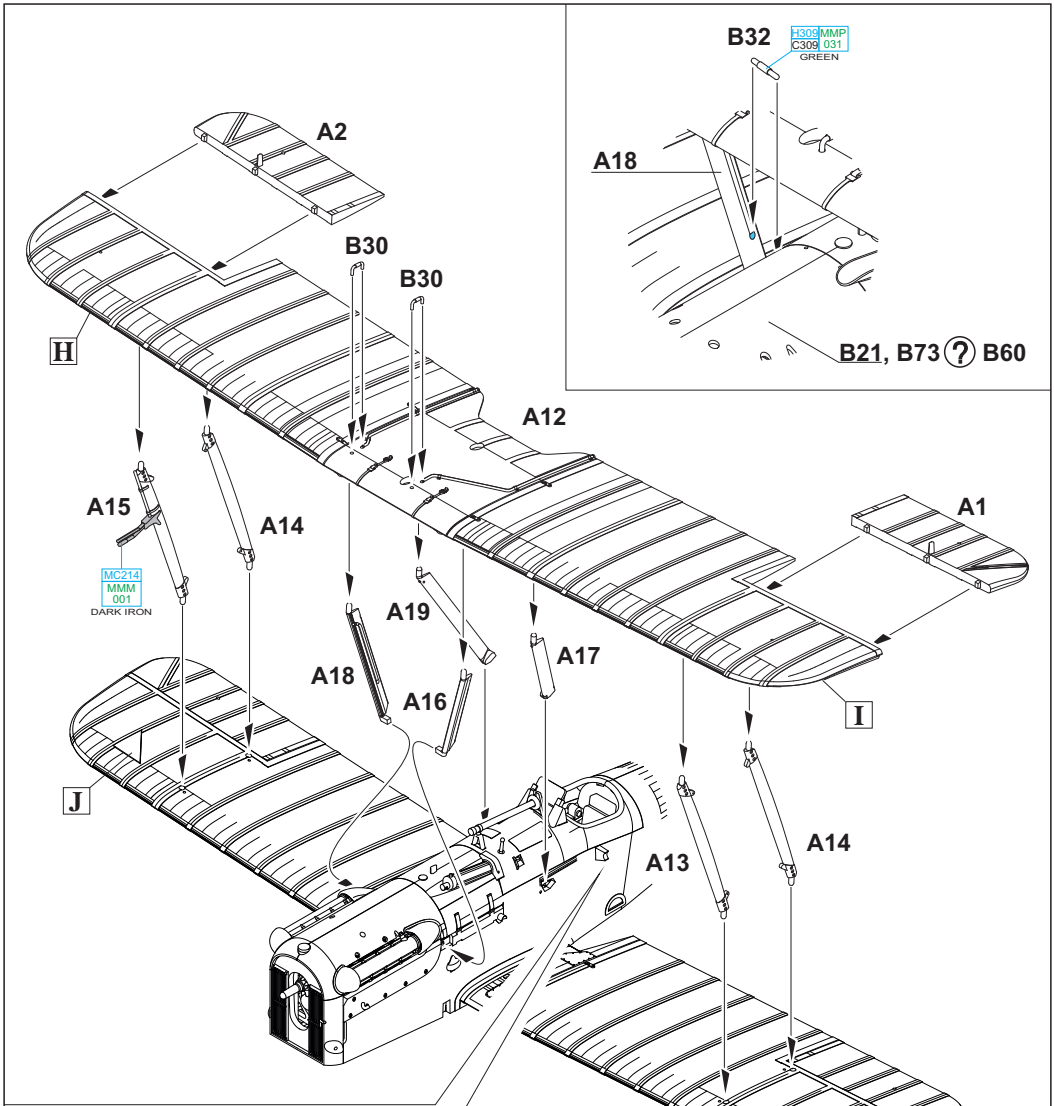
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003  
ALUMINIUM



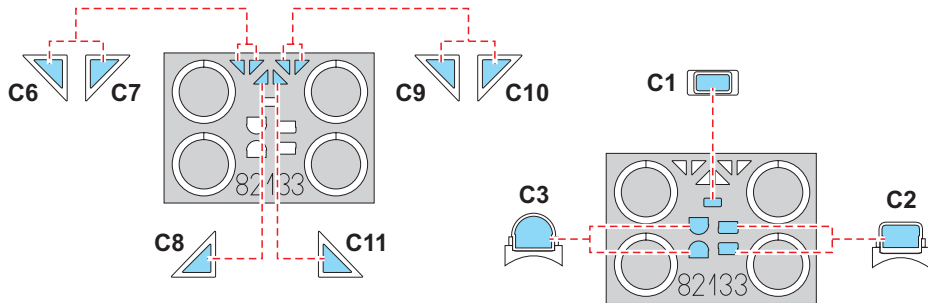
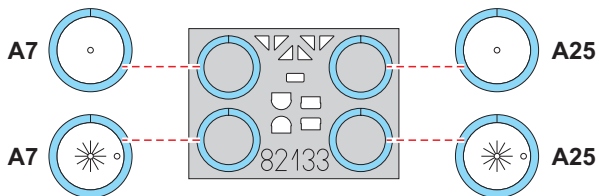


**B17, B60 - MARKING B ONLY**

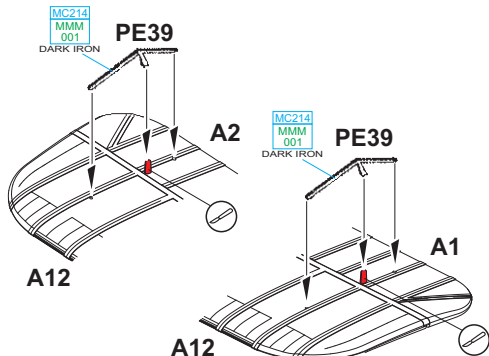
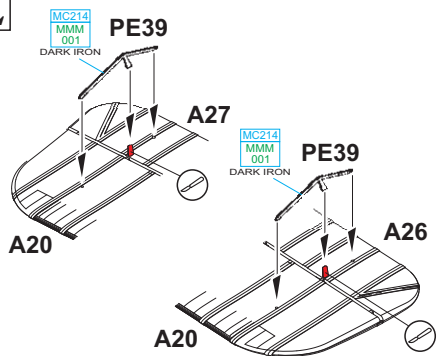




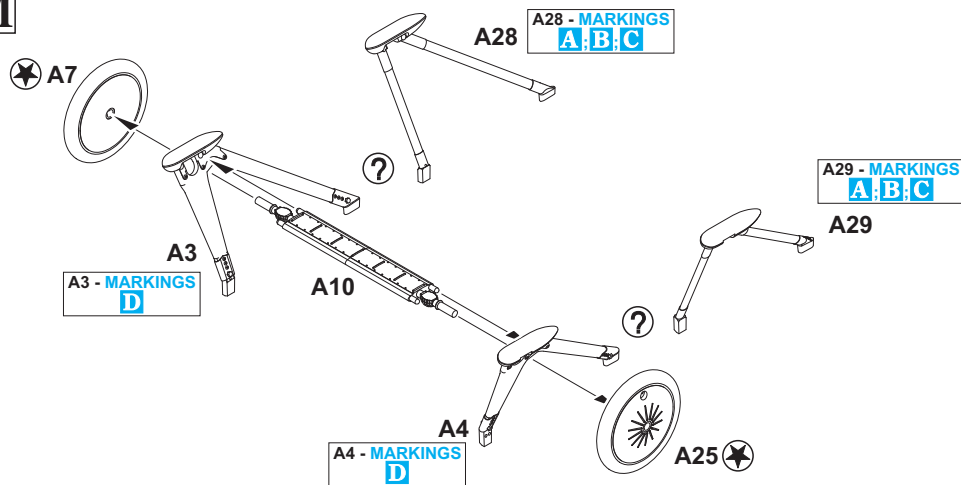
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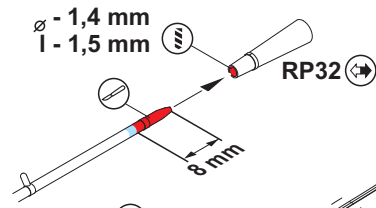
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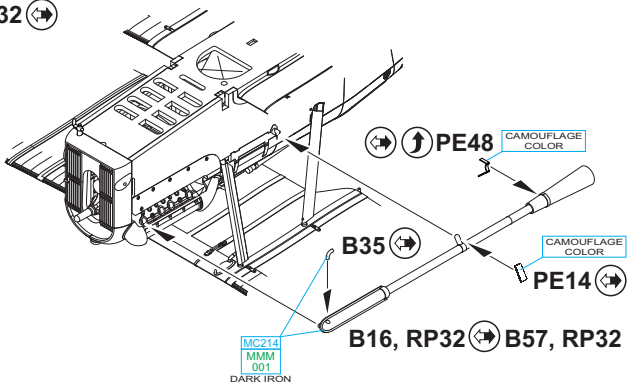
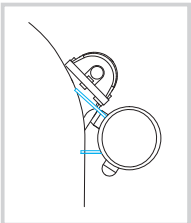
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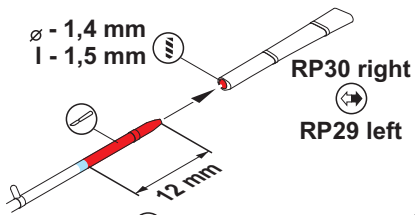
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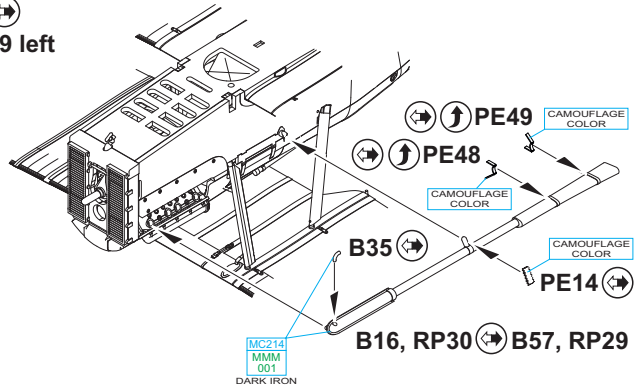
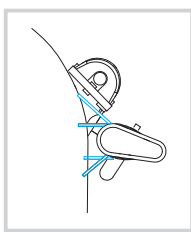
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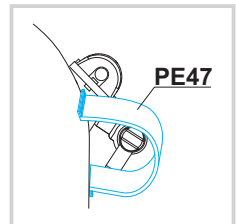
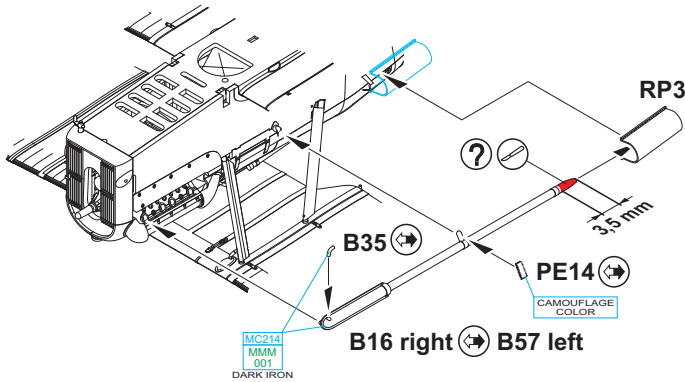
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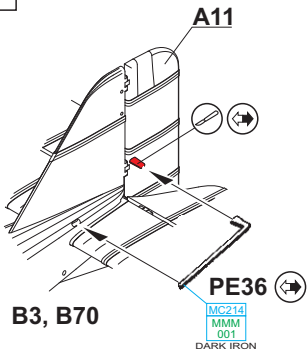
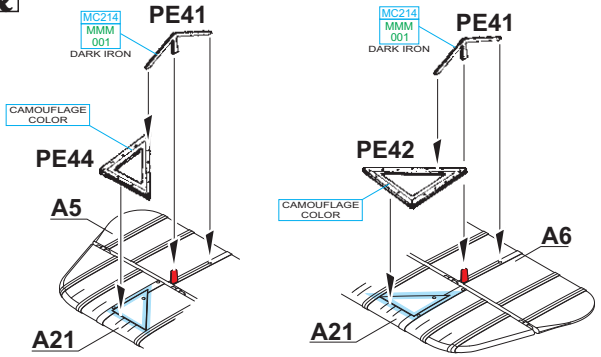
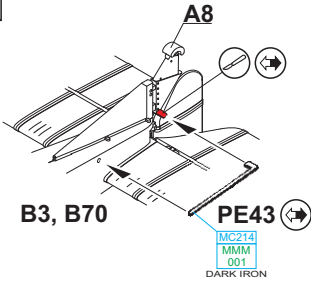
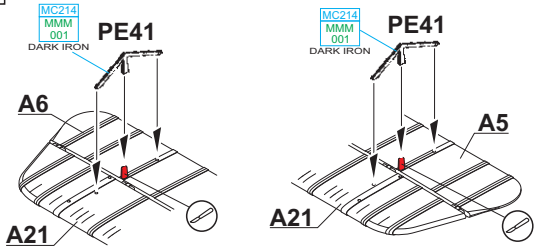
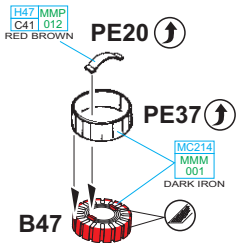
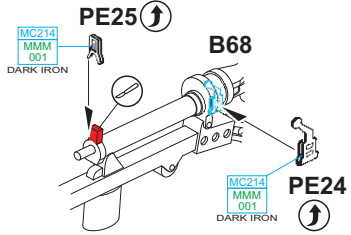
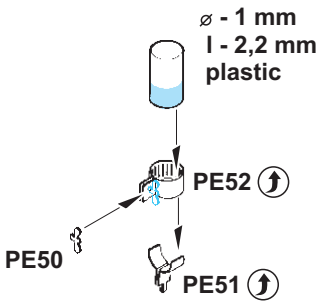
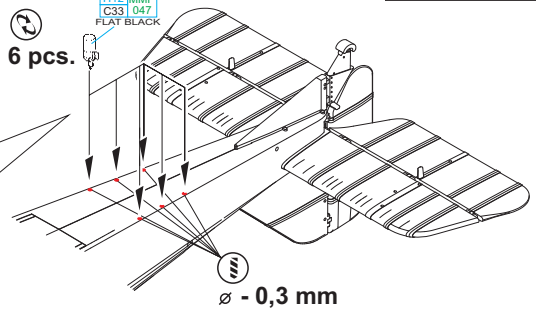
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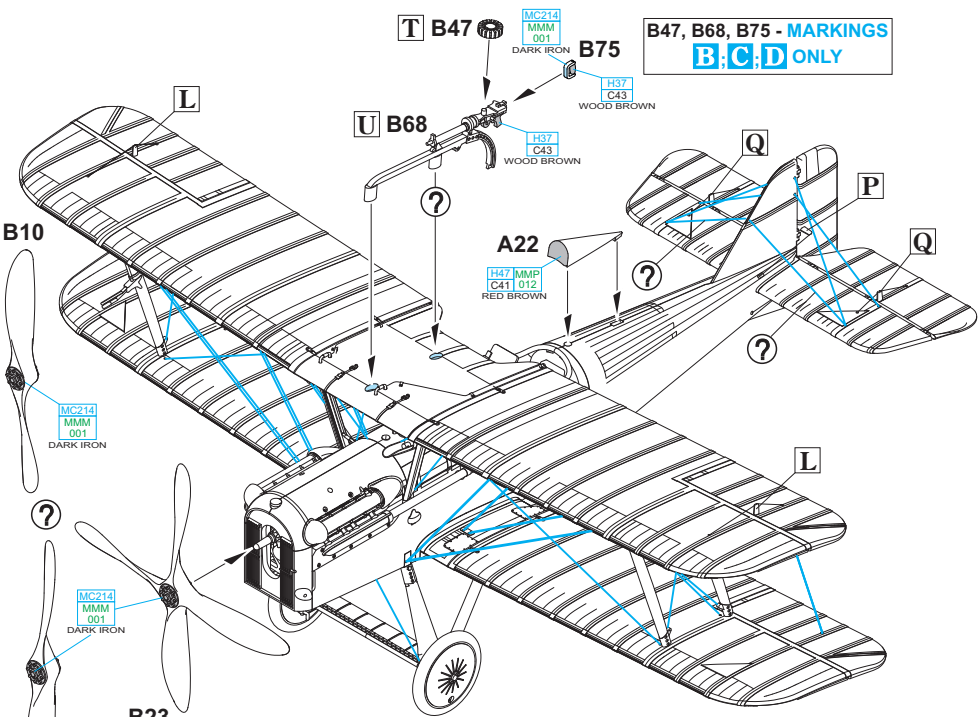


**MARKINGS C, D**





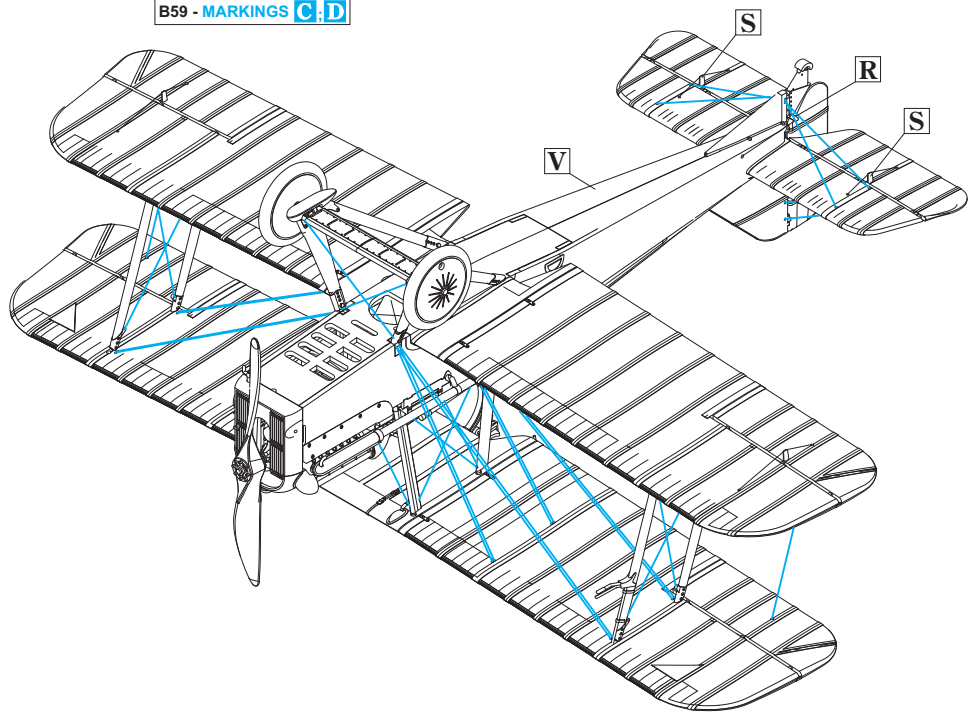
**P****Q****R****S****T****MARKINGS B;C;D ONLY****U****MARKINGS B;C;D ONLY****6 pcs.****V****MARKING B ONLY**



**B23 - MARKING A**

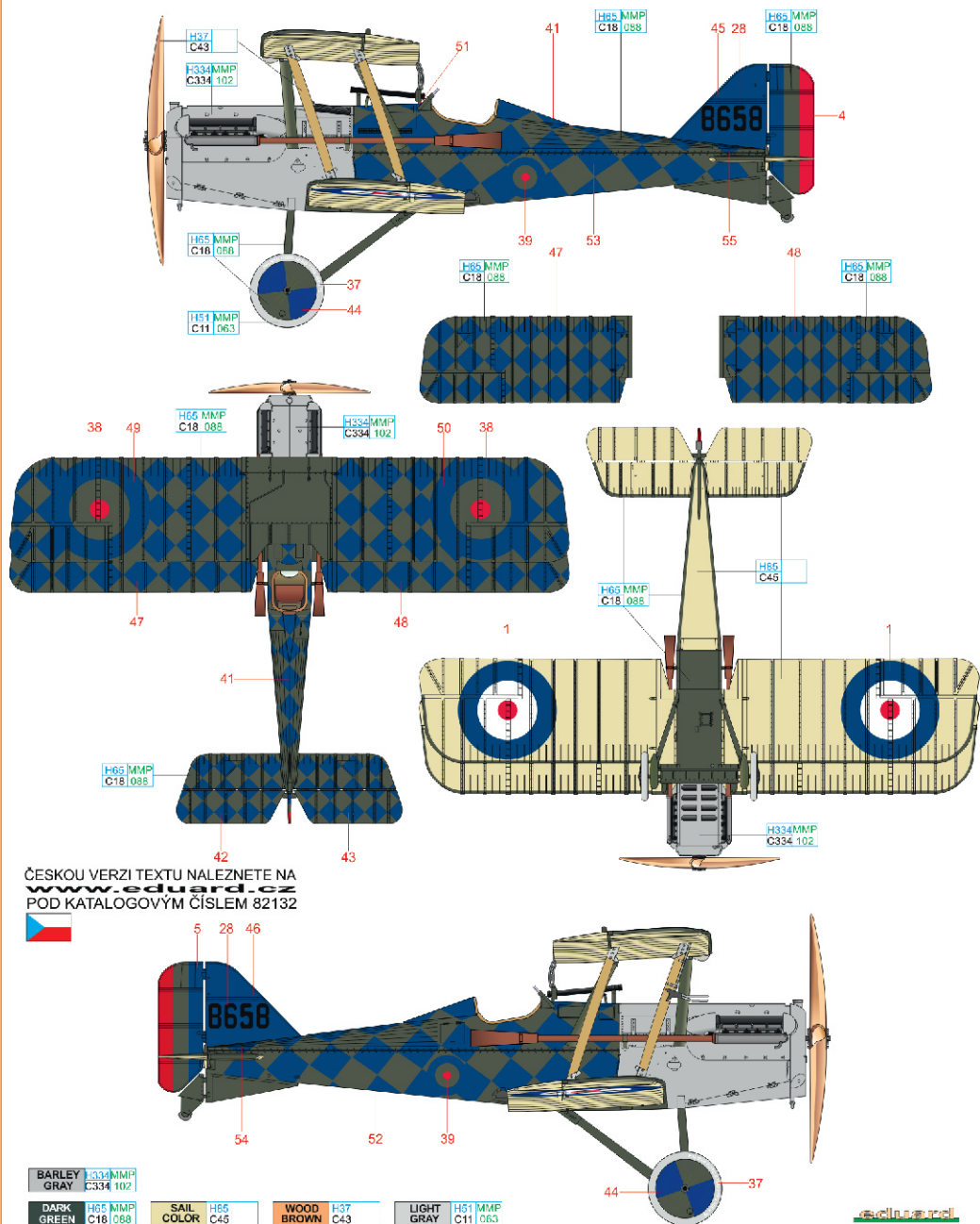
**B10 - MARKING B**

**B59 - MARKINGS C; D**



# A B658, flown by Capt. Cecil Lewis, No. 61 (Home Defence) Squadron, Rochford, United Kingdom, January 1918

Cecil Arthur Lewis was born on March 29th, 1898 and joined the RFC in 1915 and served with No.3 Squadron equipped with the Morane Parasol. Between May and June 1917, he flew SE.5as with the well known No. 56 Squadron. This was followed by stints with Home Defence units, but by the second half of 1918 he found himself back in France serving with No. 152 Squadron, as a night fighter flying the Sopwith Camel. After the war, he left the service and was one of the founders of the BBC for which he wrote, produced and served as its CEO. In 1938 he received an Oscar for his script for the film Pygmalion. At the beginning of the Second World War, he joined the RAFVR and he served in southern Europe. In 1947, he established a farm in South Africa and returned to United Kingdom in 1950. From 1956, he worked as a reporter for the Daily Mail. After retiring, he moved to the island of Korfu, where he would live out the rest of his life but never stopped writing. He died on January 27th, 1997 in London.

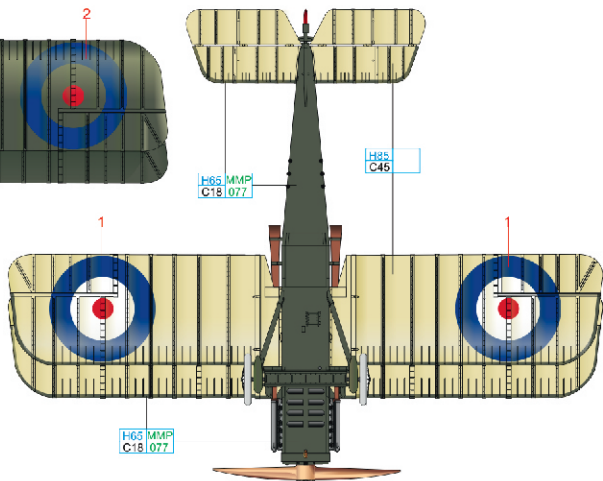
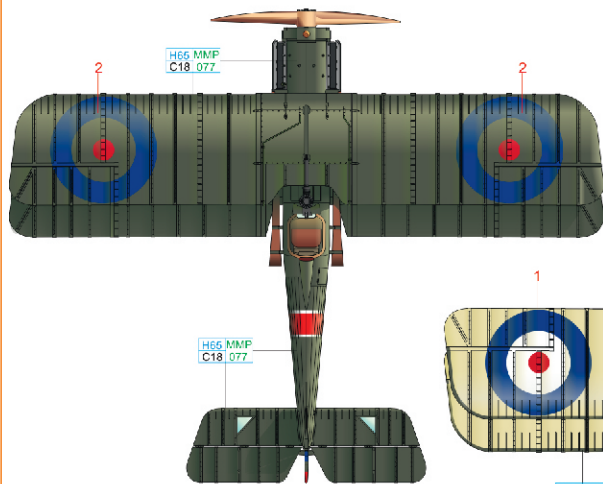
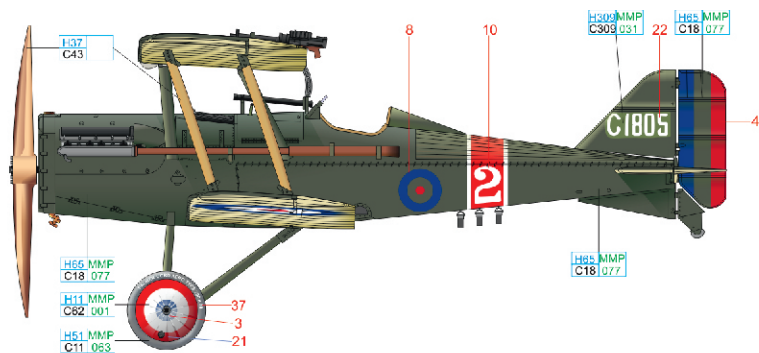


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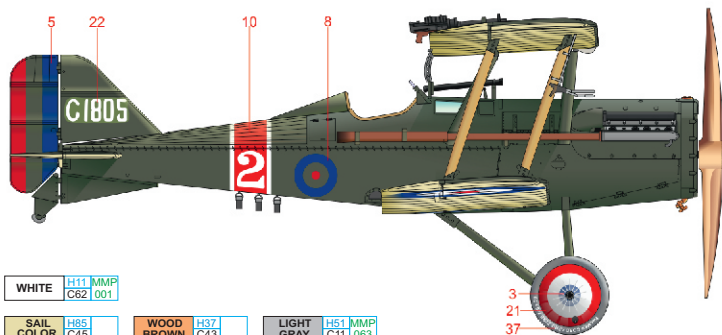


# B C1805, flown by Lt. W. R. Oulton, No. 143 (Home Defence) Squadron, Detling, United Kingdom, May 1918

No. 143 Squadron was formed on February 1st, 1918 at Throwley and was equipped with the Armstrong Whitworth F.K.8. In March of the same year, it was re-equipped with the SE.5a and moved to Detling. On the night of May 19-20, the unit took part in the interception of the first German raid by Gotha bombers on London. 'Night fighting' SE.5a aircraft were camouflaged in a special coating called NIVO (Night Invisible Varnish Orfordness), and was also applied over the white rings in the national roundels. The white band on the rudder was likely painted over with PC-10. There are six Hot flare holders below the fuselage.



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GREEN H309 MMP C309 031

WHITE H11 MMP C82 001

DARK GREEN H66 MMP C18 077

SAIL COLOR H85 C45

WOOD BROWN H37 C43

LIGHT GRAY H51 MMP C11 063

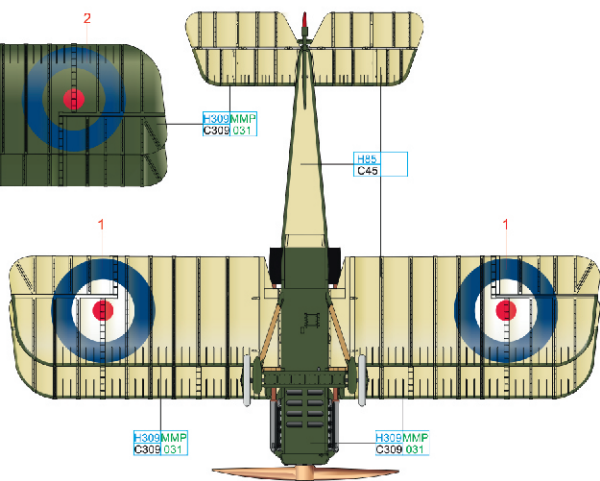
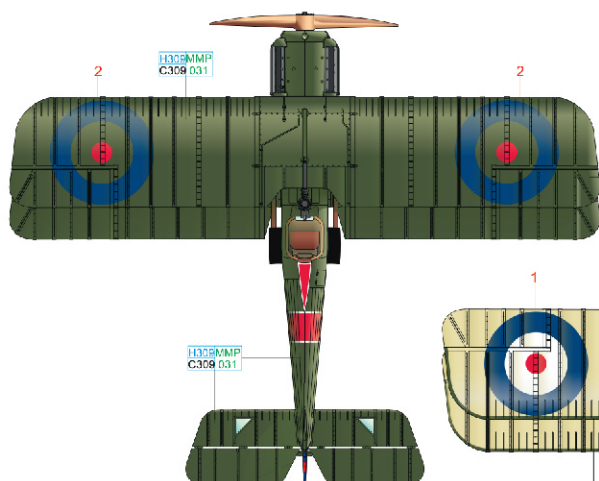
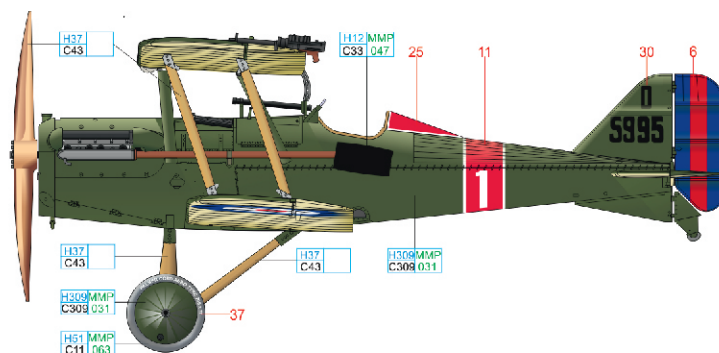
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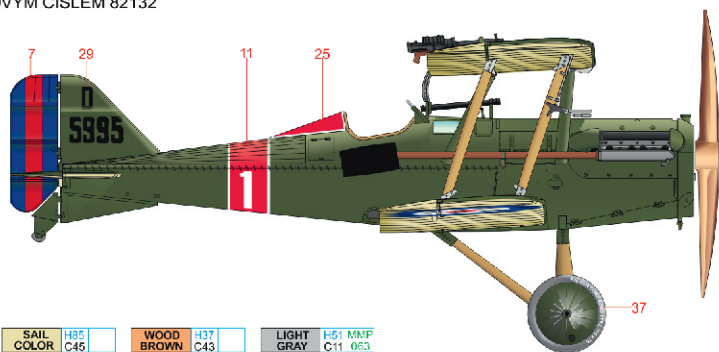


# D D5995, flown by Lt. L. Lucas, No. 50 (Home Defence) Squadron, Bekebourne, United Kingdom, summer 1918

No.50 Squadron, RFC, was formed on May 15th, 1916 in Dover and equipped with RAF BE.2 and BE.12 aircraft. Their task was to defend United Kingdom against German airship and bomber attacks. At the beginning of 1918, the unit was re-equipped with the Sopwith Camel and the SE.5a, and these were flown up to the squadron's disbandment on June 13th, 1919. The unit was reactivated in 1937 as a bomber element and remained active, with small breaks, until 1984. The aircraft is camouflaged on the upper and side surfaces in PC10 and the lower surfaces remained in the colour of canvas. The white within the national markings on the upper wings were subdued with the camouflage paint and the rudder carried nonstandard bands in blue and red. The covers on the ends of the exhaust pipes prevented blinding the pilot at night and were a field level modification.



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BLACK	H12 MMP C33 047
GREEN	H309 MMP C309 031
SAIL COLOR	H35 C45
WOOD BROWN	H37 C43
LIGHT GRAY	H51 MMP C11 053

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