

# P-39K/L Airacobra

eduard

1/48 Scale Plastic Model Kit

**WEEKEND**  
edition



item No. 8463

The Bell P-39 Airacobra was one of the best fighter aircraft the USAAF had at their disposal when entering the war. Although overshadowed by the P-51 or P-47 later, it was remarkable fighter, when used properly.

The P-39 Airacobra was developed by the Bell Aircraft Corporation in Buffalo, New York in the late 30's as an answer to the 1937 specification for a new high-altitude and heavily armed pursuit aircraft. The turbocharged Allison engine was intended to power the aircraft, which was required to reach at least 360 mph (580 km/h) at altitude, climbing to the 20,000 ft (6,100 m) in six minutes. These demands were very challenging, and the Bell design team decided to take innovative approach with the engine mounted in the middle of the fuselage at the centre of gravity. The propeller was driven through an outboard reduction gear by an extension shaft running under the cockpit floor. It also had unusual tricycle undercarriage and car-door entry to the cockpit.

#### Blow to the concept

The first XP-39 prototype conducted its maiden flight on April 6, 1939 in Dayton and reached maximum speed of 390 mph (628 km/h) at 20,000 ft (6100 m). It took only five minutes to reach that height and doing so, the new design surpassed the original demands, but did not reach the proposal by Bell, stating 400 mph would be achieved. The prototype was powered by the Allison V-1710-17 fitted with turbocharger according to the original specifications, rated at 1150 hp. The XP-39 proved also good manoeuvrability thanks its innovative concept of airframe, with its engine located in the centre of gravity. The concept also allowed a long slim nose well suited for installation of a powerful weaponry. The USAAF ordered a test series of twelve YP-39s on April 27, but before the series was finished the project had been significantly changed. Because of troubles with proper turbocharger installation, the original engine was replaced by a less powerful Allison V-1710-37 using just one-stage, one-speed mechanical supercharger. The engine thus developed just 1090 hp and, more to it, it was losing its power gradually at the higher levels. This was a major blow to the promising fighter.

The YP-39 had a propeller-axis Oldsmobile T-9 cal. 37 mm cannon, two .50 calibre (12.7 mm) machine guns and two .30 calibre (7.62 mm) machine guns mounted in the nose. The pilot seat got armour and the weight of the aircraft rose to 3160 kg against 2820 kg of the XP-39 prototype. Due to it the maximum speed fell to 366 mph (590 km/h) and climbing to 6100 m took 7.5 min now.

Although the excellent prototype flight performances were decreased, the USAAF kept its interest and ordered 80 production P-39s marked as the C variant. The first 20 aircraft of the order were supplied as standard P-39C, while the remaining 60 were finished as P-39Ds, with the two .30 calibre (7.62 mm) machine guns moved to the wings and two more .30 calibre (7.62 mm) machine guns added to the same location. The USAAF received its first P-39Ds in February 1941, and the next order for 344 P-39Ds was placed subsequently.

#### RAF disappointment

The British RAF ordered 675 P-39s in April 1940. British Airacobra Mk.IIs were produced as the P-39D standard, but with the engine-axis cannon replaced with a British Hispano M1 20mm cannon, while the wing machine guns were replaced with 7.7 mm Brownings. The first Airacobra Mk.IIs were delivered in July 1941, but the RAF was disappointed, as it was found they were not suitable for service in the European war theatre due to their less than average performance at high altitude. In October 1941 four Mk.IIs were tested by No. 601 Squadron in the ground attack role over occupied France, but Airacobra did not perform well in this role as well, so P-39s were withdrawn from service with RAF and 212 of them were sent to Soviet Union.

#### Evolution of the Airacobra

When the USA entered the war, the USAAF confiscated 179 Airacobras from the British order on the production line. They were re-designated P-400 and served in the Pacific. All P-400s had 12 exhaust pipes on each side of the engine, which was major difference from the P-39D series. The next production block, also with 12 exhaust pipes, were 229 aircraft of the P-39F series, followed by the P-39K series (210 aircraft), P-39L (250 aircraft), P-39M (240 aircraft) and P-39N (2095 aircraft). All these variants were very similar, using various engines, propellers, and other equipment. The final version of the Bell's innovative design was the P-39Q with the Allison V-1710-85 engine, rated at 1420 hp. The installation of two .50 calibre (12.7 mm) machine guns in underwing pods instead of the four .30 calibre (7.62 mm) wing mounted ones was the main difference to the previous marks.

#### Eastern success

Most of the 4905 "Q" series aircraft were sent to Soviet Union, where they were used with great success, as the aerial combat took place at lower altitudes, so the absence of turbocharger was not so harmful to the aircraft's performance. Production of P-39Q was ceased in August 1944, after the final Airacobra, number 9558, had been finished. The USAAF employed Airacobras extensively until August 1944, when they were withdrawn from frontline service. The USAAF was using the largest quantity of Airacobras (2105 of all types) during February 1944. They served in the Pacific theatre, as well as in North Africa and Italy.

In total 4758 Airacobras were sent to Russia, where they were very popular also for their solid metal airframe and heavy weapons, gaining the nickname "Groznaya boyevaya mashina" (frightening combat machine). The French Air Force used 165 Airacobras, and P-39s served also with the Australian RAAF, with the Italian AF and, also with the Portuguese AF. After the war, several Airacobras were employed in civilian service and used for air races.

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. SYMBOL \* INSTRUKTION SINNBILDEN \* SYMBOLES \* 記号の説明

OPTIONAL  
VOLBABEND  
OHNOUTSAND  
BROUSITOPEN HOLE  
VYVRTAT OTVORSYMETRICAL ASSEMBLY  
SYMETRICKÁ MONTÁŽREMOVE  
ODŘÍZNOUTREVERSE SIDE  
OTOČITAPPLY EDUARD MASK  
AND PAINT  
POUŽIT EDUARD MASK  
NABARVITPLEASE, CHECK THE LATEST VERSION OF THE INSTRUCTIONS ON [www.eduard.com](http://www.eduard.com)

PARTS



DÍLY



TEILE

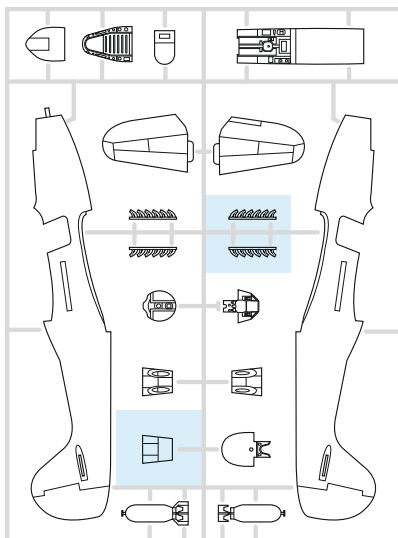


PIÈCES



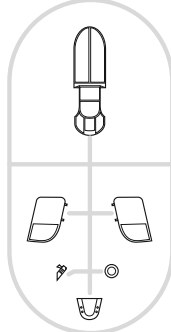
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A&gt;

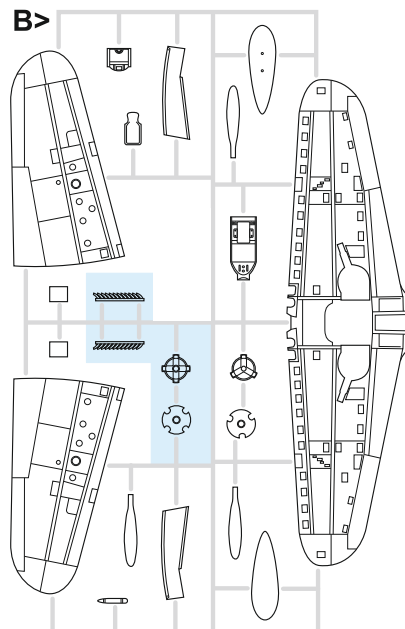


PLASTIC PARTS

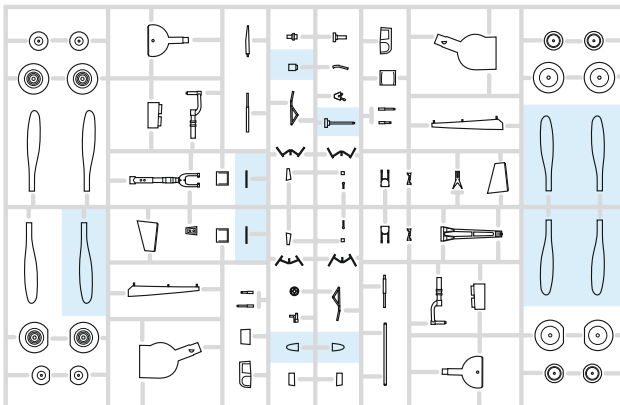
CLEAR PARTS&gt;



B&gt;



C&gt;



D&gt;



-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



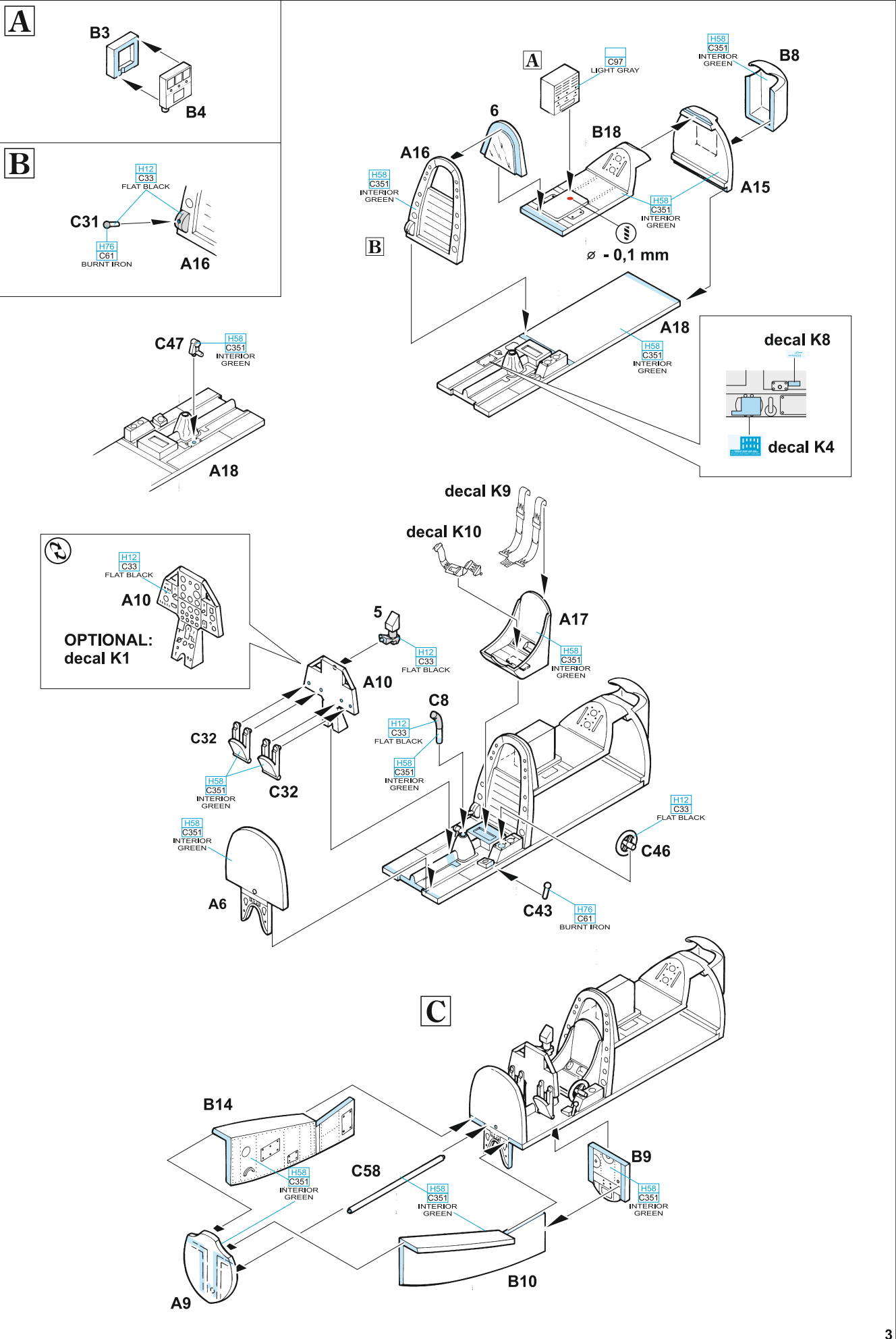
PEINTURE

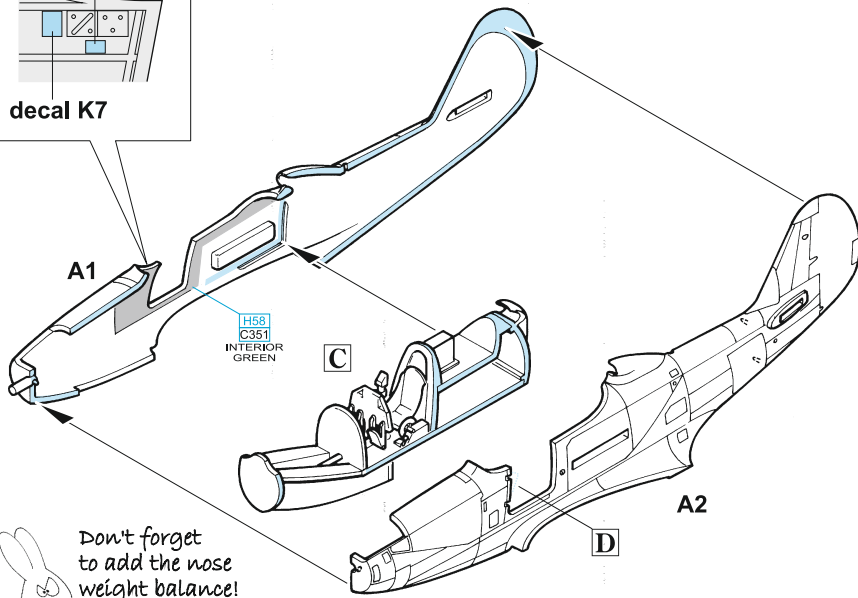
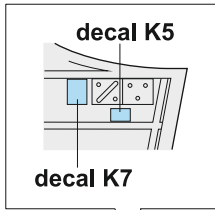


色

GSI Creos (GUNZE)		
AQUEOUS	Mr.COLOR	
H8	C8	SILVER
H11	C62	FLAT WHITE
H12	C33	FLAT BLACK
H15	C65	BRIGHT BLUE
H52	C12	OLIVE DRAB
H53	C13	NEUTRAL GRAY
H58	C351	INTERIOR GREEN
H67	C115	RLM65 LIGHT BLUE
H71	C21	MIDDLE STONE
H72	C369	DARK EARTH
H76	C61	BURNT IRON

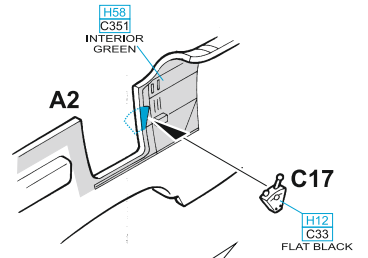
GSI Creos (GUNZE)		
AQUEOUS	Mr.COLOR	
H77	C137	TIRE BLACK
H305	C305	GRAY
H327	C327	RED
H329	C329	YELLOW
H330	C361	DARK GREEN
	C97	LIGHT GRAY
Mr.COLOR SUPER METALLIC		
	SM203	SUPER IRON
	SM206	SUPER CHROME SILVER2
	SM212	ALUMINIUM





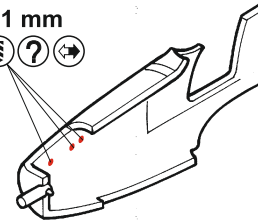
Don't forget to add the nose weight balance!

**D**

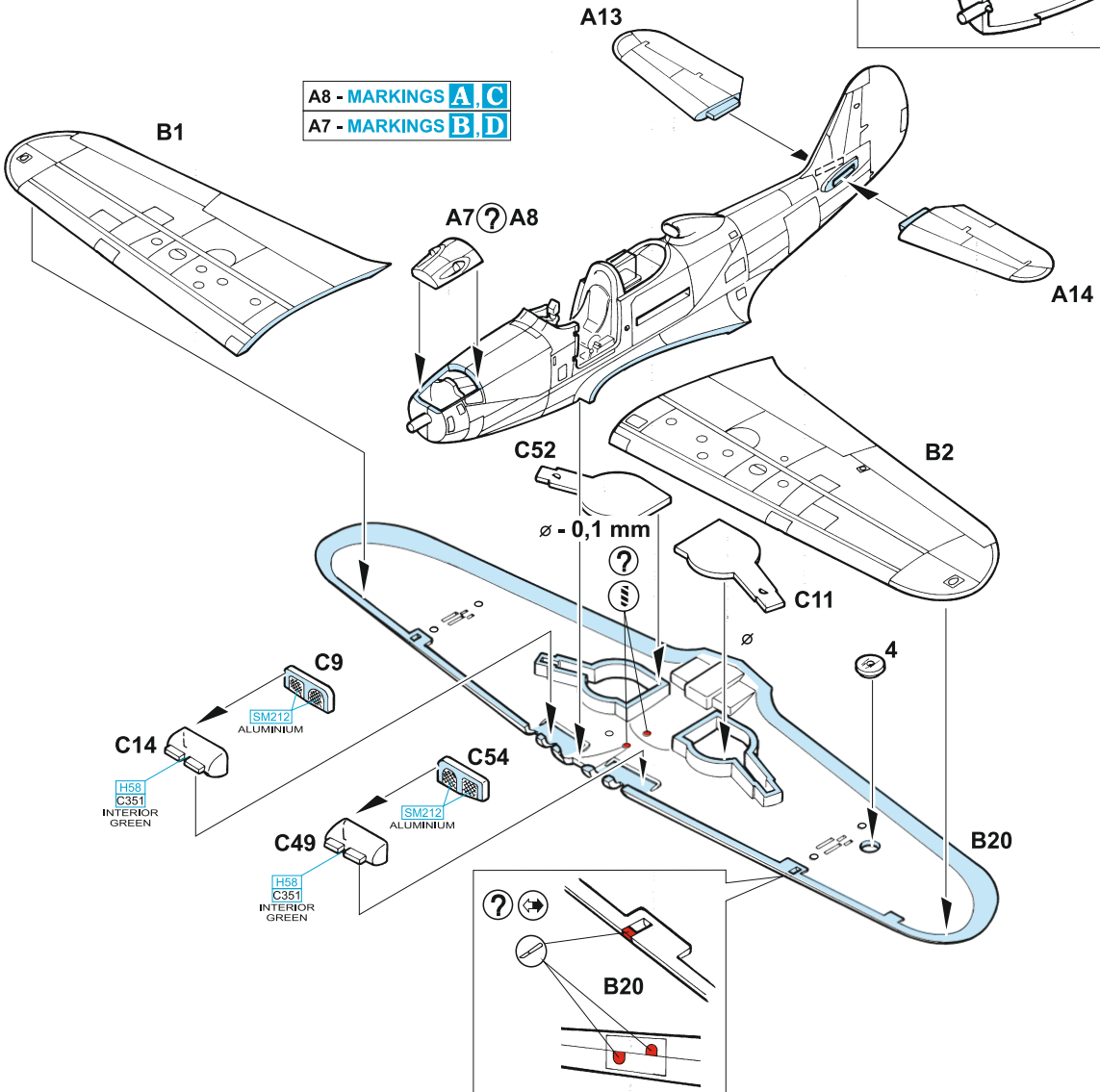


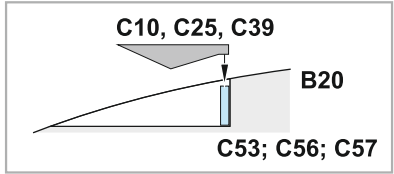
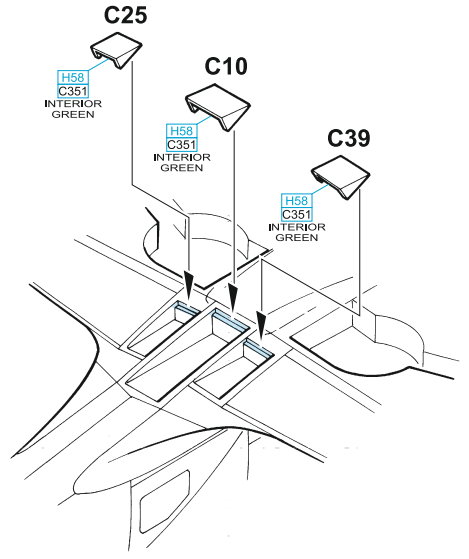
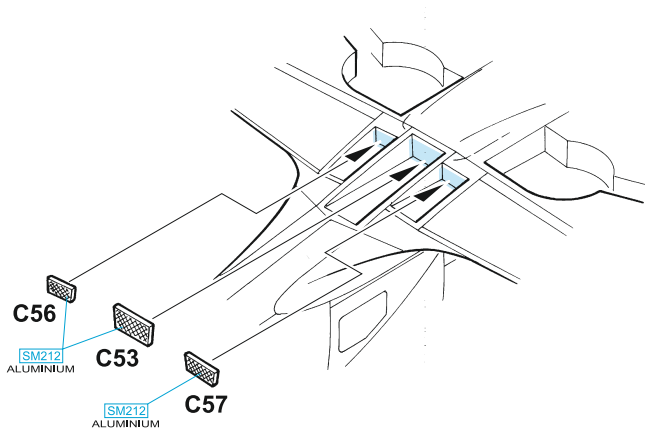
**MARKINGS B, C, D ONLY**

∅ - 0,1 mm



A8 - MARKINGS **A, C**  
A7 - MARKINGS **B, D**

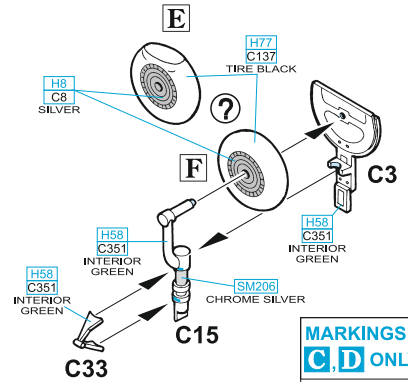
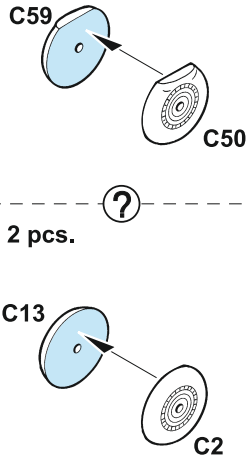
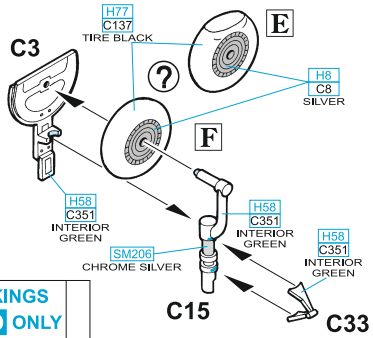




**STARBOARD**

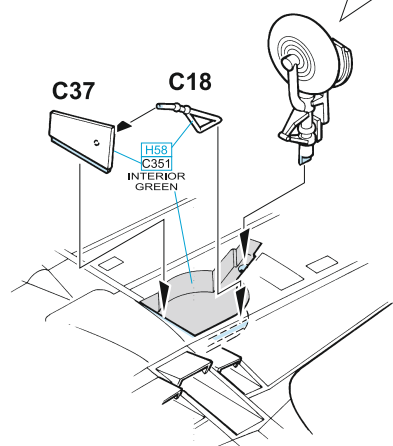
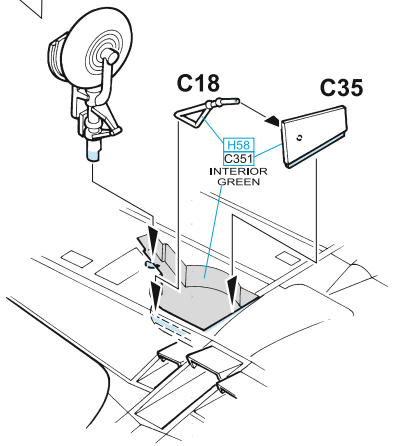
**E** 2 pcs.

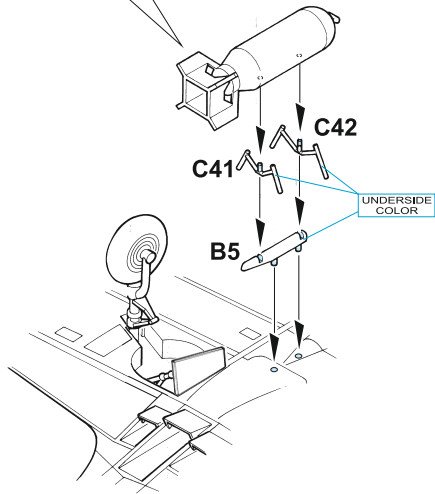
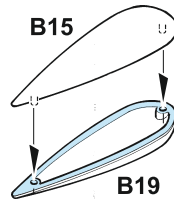
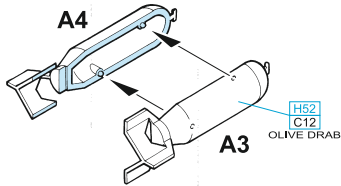
**PORTSIDE**



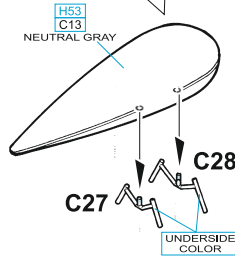
**MARKINGS C, D ONLY**

**MARKINGS C, D ONLY**

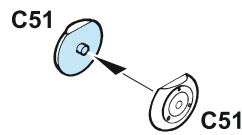




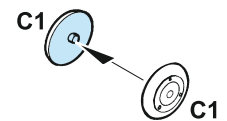
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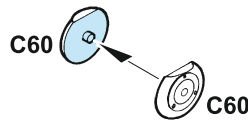
**G** MARKINGS **B, D**



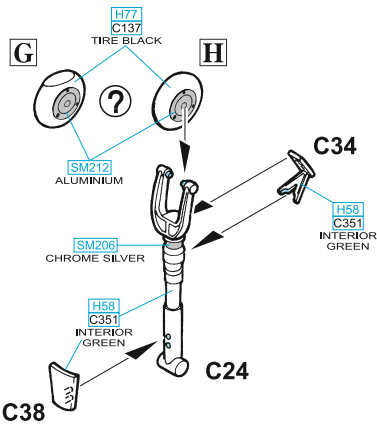
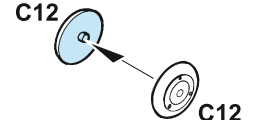
**H** MARKINGS **B, D**



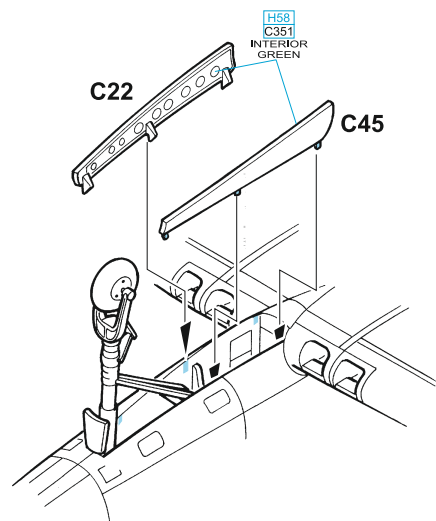
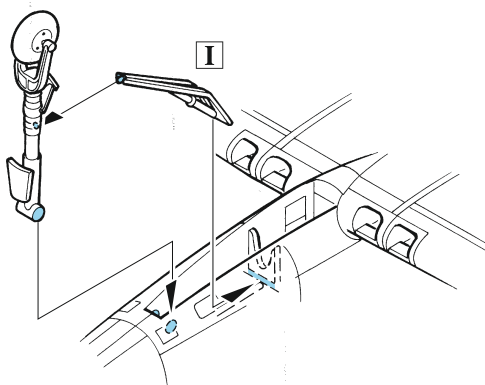
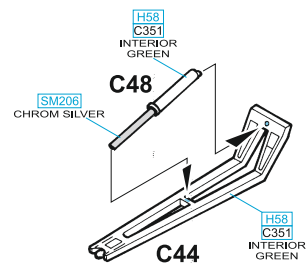
MARKINGS **A, C**



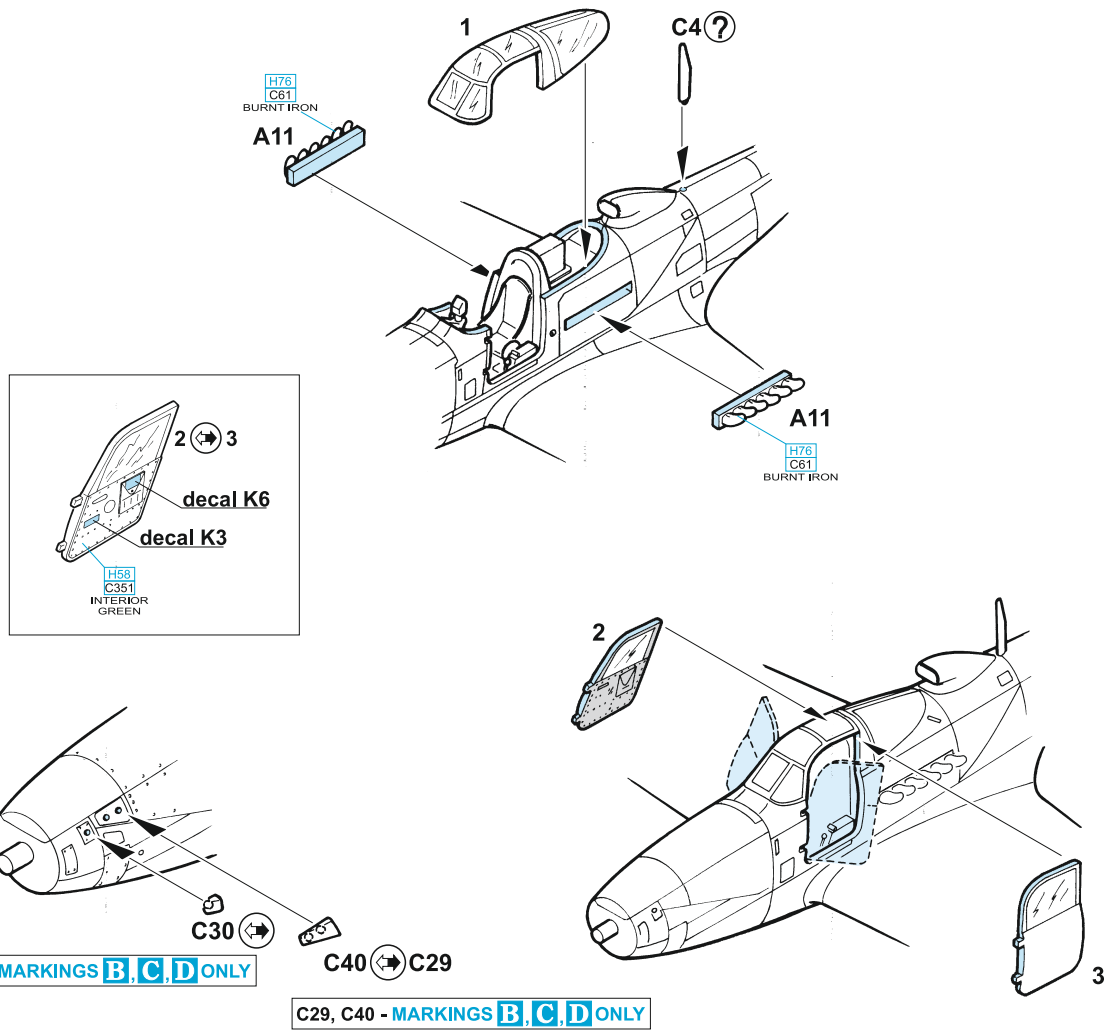
MARKINGS **A, C**



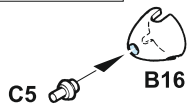
**I**



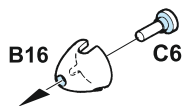
C4 - MARKINGS A, C ONLY



C5 - MARKINGS B, D

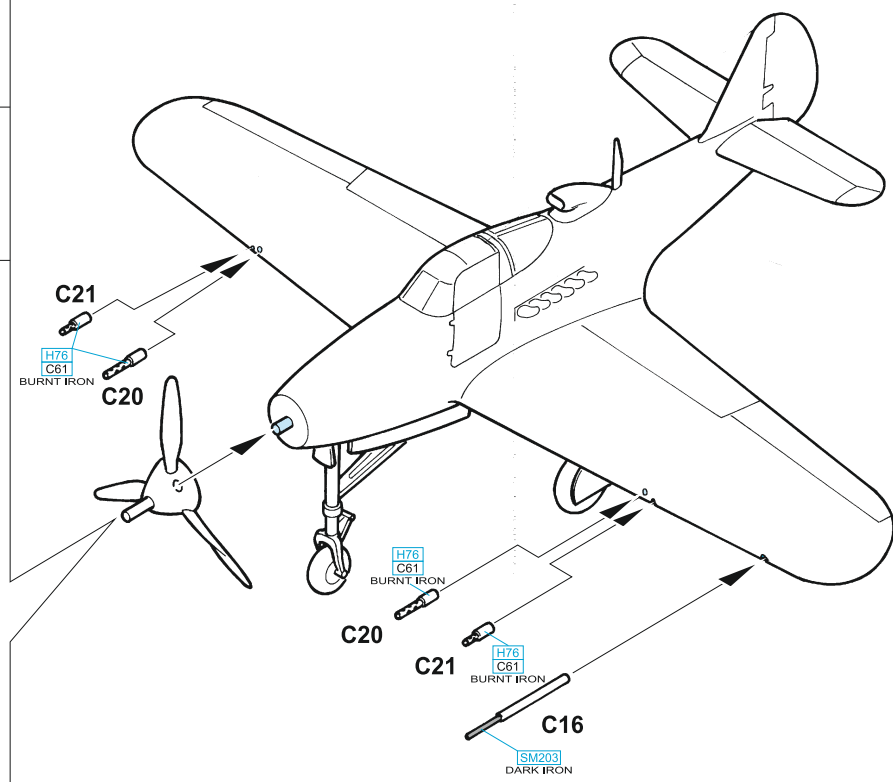
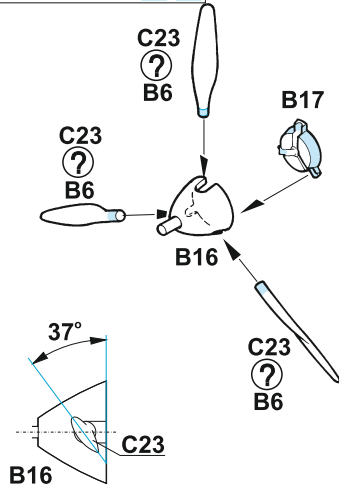


C6 - MARKINGS A, C



B6 - MARKINGS A, C

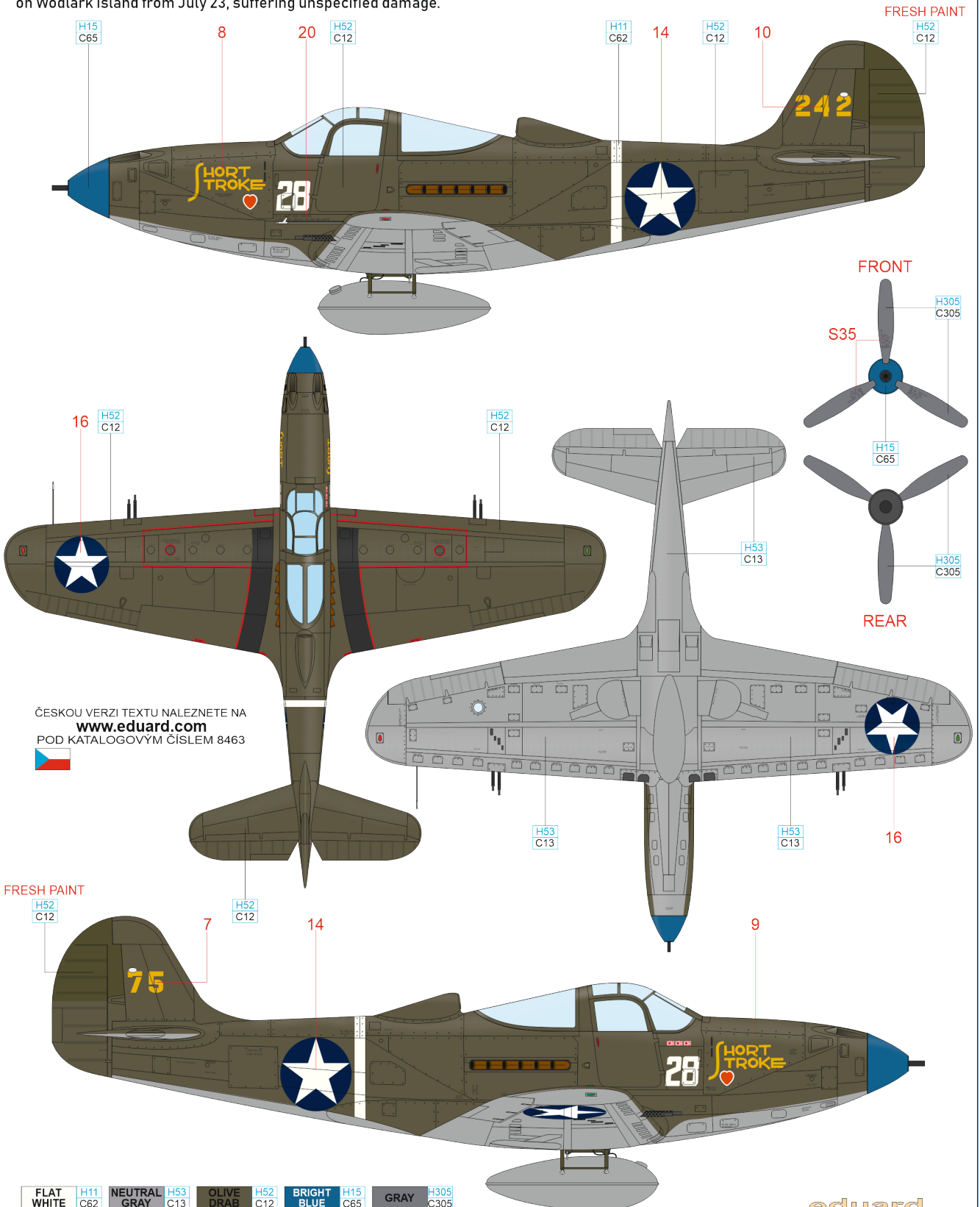
C23 - MARKINGS B, D





# B P-39K, 42-4275, 70<sup>th</sup> FS, 347<sup>th</sup> FG, Guadalcanal, spring 1943

The Airacobra named Short Stroke fought on Guadalcanal in the ranks of the 12<sup>th</sup> FS/18<sup>th</sup> FG from late 1942 and retained the squadron markings after transferring to the 70<sup>th</sup> FS. It cannot be documented whether the aircraft was assigned to a specific pilot at that time. However, one of the photographs shows Lt. Darrell R. Cosart posing with the aircraft. A small heart is also documented on another 70<sup>th</sup> FS Airacobra, apparently a Flight symbol. Although all versions of the Airacobras at Guadalcanal were used primarily for ground attacks, the victory symbols marked on the starboard side of the Short Stroke prove that they could succeed in aerial combat as well. Interestingly, the appearance of the kills was changed during service. Also documented is the replacement of the rudder from an Airacobra of D mark. The color scheme thus shows the latest known appearance of the aircraft with the serial number on the rudder already blacked out. In the summer of 1943, Short Stroke was transferred to the 67<sup>th</sup> FS, with which it provided air defense for the base built on Wodlark Island from July 23, suffering unspecified damage.



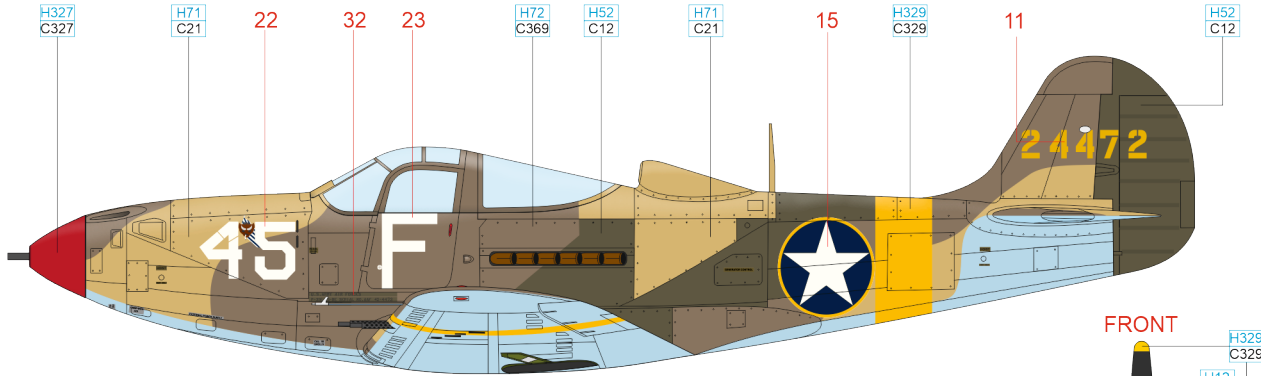
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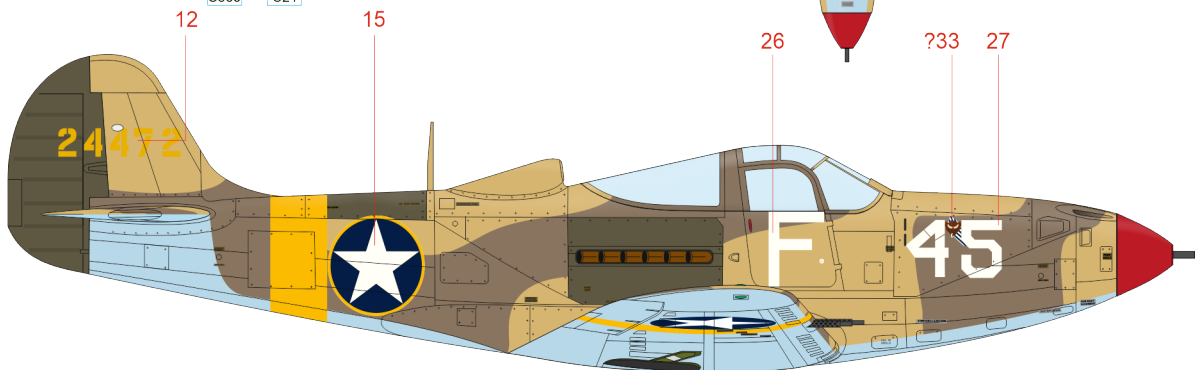
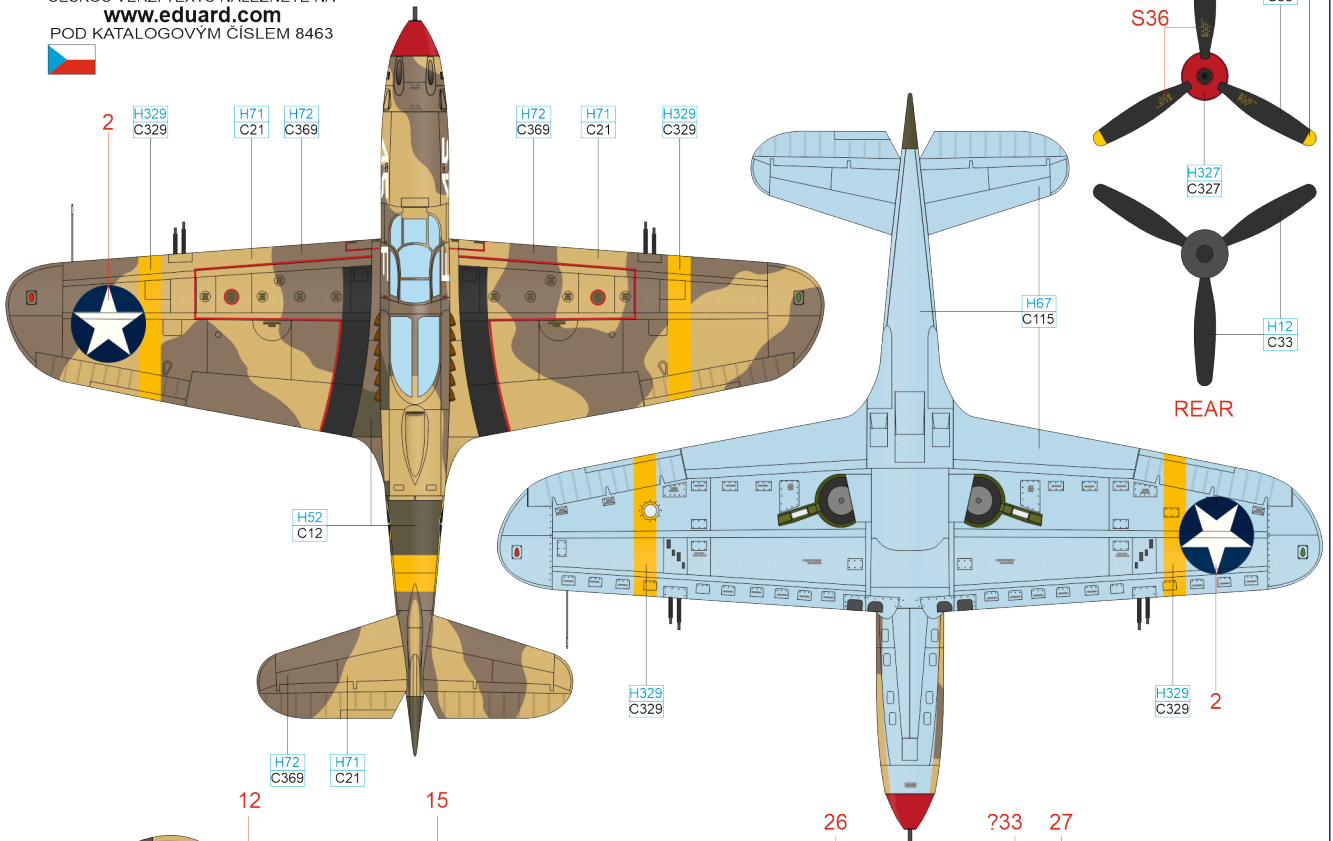
FLAT WHITE	H11 C62	NEUTRAL GRAY	H53 C13	OLIVE DRAB	H52 C12	BRIGHT BLUE	H15 C65	GRAY	H305 C305
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# C P-39L, 42-4472, 346<sup>th</sup> FS, 350<sup>th</sup> FG, Tunisia, spring 1943

The 350<sup>th</sup> FG was activated in England with American pilots fighting as volunteers filling the ranks of the RAF. The unit was equipped with export versions of the P-39, originally ordered by France. These aircraft remained in the UK after the fall of France, where they subsequently served as a quick-fix armament solution for the new American units needed to support the upcoming invasion of North Africa. The group operated as part of the 12<sup>th</sup> AF from January 1943 until the end of the war, its pilots flying patrol and interdiction missions, protecting convoys, conducting aerial reconnaissance, and providing air support to ground forces. The aircraft shown here underwent repairs during its service, which added Olive Drab fields to the standard desert livery. These were either parts from another aircraft in Olive Drab or original parts repainted with this shade. Between numbers 4 and 5 on the nose, there was a small drawing not very clearly visible in the photo. The decal offers a reconstruction of its probable appearance.



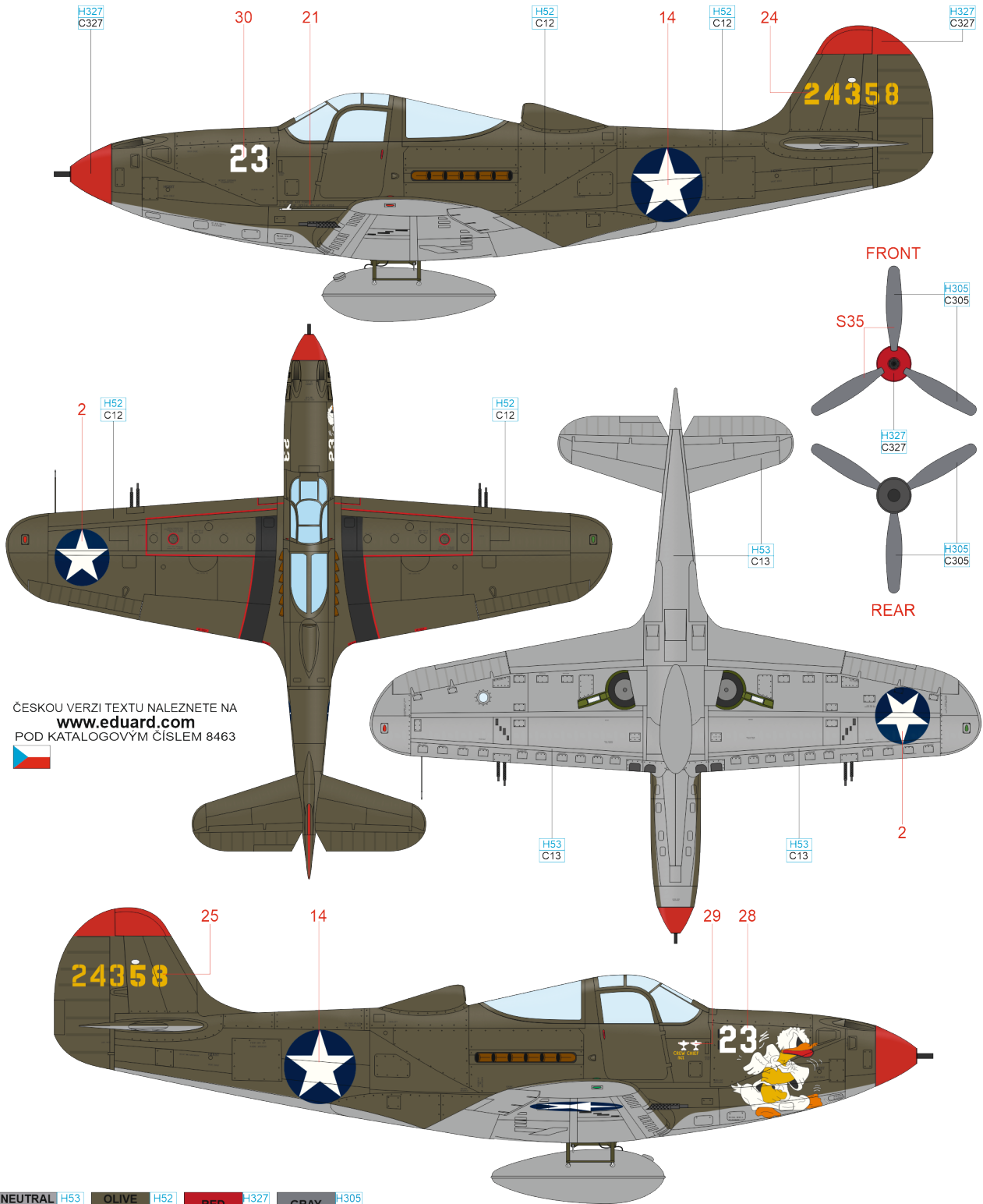
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YELLOW	H329 C329	LIGHT BLUE	H67 C115	MIDDLE STONE	H71 C21	DARK EARTH	H72 C369	OLIVE DRAB	H52 C12	RED	H327 C327	FLAT BLACK	H12 C33
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# D P-39K, 42-4358, Lt. William McDonough, 40<sup>th</sup> FS, 35<sup>th</sup> FG, Port Moresby, New Guinea, February 1943

In February 1942, William F. McDonough used, in combat over New Guinea, an Airacobra decorated on the bow with a painting of Donald Duck. The "Angry Duck" was a popular motif for other 40<sup>th</sup> FS pilots, who liked to have their pictures taken in front of it. This Airacobra served with the unit from late 1942 until at least the end of the summer of 1943, but sometime during the spring the painting of the Donald Duck was removed from the nose. His combat account was opened by Lt. McDonough in an air battle over Wau on February 6, 1943, by shooting down two Ki-43 Oscar fighters and another probably. The pilot had the confirmed kills marked on the starboard side below the cockpit in small silhouettes. However, these were eventually replaced by Japanese flags. For the successful action, the pilot was awarded the Distinguished Flying Cross (DFC) and promoted to the rank of Captain. In the spring of 1944, McDonough became the 35<sup>th</sup> FG's first Ace outside the 39<sup>th</sup> FS when he shot down one of a quartet of Tony fighters that made a surprise raid over the Gusap base on March 3, 1944. By this time, he was already a member of the 35<sup>th</sup> FG staff at the rank of Major. William McDonough was killed on April 22, 1944, just before the end of a combat tour when he had to bail out of a malfunctioning P-47 Thunderbolt and his parachute failed to open.



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NEUTRAL GRAY	H53 C13	OLIVE DRAB	H52 C12	RED	H327 C327	GRAY	H305 C305
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# P-39K/L Airacobra

# STENCILING POSITIONS

P-39K MARKINGS B,D

P-39L MARKINGS A,C

