Bf 109K-4

eduard

1/48 Scale Plastic Model Kit



WEEKEND edition

No other aircraft is as intimately connected with the rise and fall of the German Luftwaffe in the course of the WWII as the Messerschmitt Bf 109. A very progressive design at the time of its invention, it had plenty of room for further development.

The history of the Bf 109 begins with the requirement L.A. 1432/33 issued by Reich Ministry of Aviation (RLM) in late March 1933. It called for the development of a single-engined monoplane fighter. Proposals were submitted by Focke-Wulf, Arado, Heinkel, and Bayerische Flugzeugwerke. The design bureau of the latter company was led by its technical director Willy Messerschmitt, who was riding a wave of popularity based on the success of his liaison aircraft, the Bf 108. Messerschmitt's goal was to create an aircraft with the best possible performance for the specified weight and size. Over the following months, several prototypes were built that served first and foremost in development flights and further modifications. The aircraft was relatively small, and compared to the prevailing trends of the time, sported several quite revolutionary features such as low wing design, retractable landing gear, wing with a thin airfoil, wing slats, landing flaps, weapons firing through the propeller hub, and so on. Even the enclosed cockpit and [the method of] (not needed) the airframe structure design were not usual just four years prior to the beginning of the Second World War. At its conception, the Bf 109 was a very promising asset despite some powerplant troubles. These were solved by the introduction of the DB 601. This engine, together with its extrapolated development DB 605, is umbilically connected to the success of the Bf 109. These two-row, twelve-cylinder inverted $\ensuremath{\text{V}}$ engines powered several tenths of thousands of Bf 109s in over 25 versions and variants.

From Spanish War to the Reich Defence

The first combat use of Bf 109 occurred during Spanish Civil War, where three developmental Bf 109s were deployed in December 1936. The main reason of revealing the modern fighter to the world was guite down-to-earth: To validate its abilities in modern aerial combat. Shortly thereafter, production aircraft in the form of the Bf 109B-1 began to reach 2.J/88, the Legion Condor. The desire of Germany to demonstrate its aerial prowess to potential foes was advanced further in international sport meets. The triumph attained in Zurich in the summer of 1937 was complemented several months later by grabbing the speed record of 379.63 mph (610.95 km/h). In very short order, the progressive developments represented by the C, D and E versions appeared. Despite this, the delivery of the aircraft to combat units did not sustain the rate desired by military brass. Even by August 1938 the Bf 109 accounted for less than half of the 643 front line fighters in service. The next months saw an increase in these rates. By the time of the invasion of Poland (which saw the participation of only a little more than 200 aircraft) the Luftwaffe possessed the best fighter produced in continental Europe. So the fighter wing of the Luftwaffe entered the Polish campaign, the Blitzkrieg against the West, and the Battle for France with both a qualitative and quantitative advantage. With one foot in the door that was the English Channel, the Luftwaffe embarked on the attacks on Britain in the summer months of 1940. Here, the first weakness of the Bf 109 emerged: The inability to carry drop tanks that would have enabled the type to effectively escort bombers to England. This was one of the factors responsible for the defeat of the Luftwaffe in the Battle of Britain. Experience gained in 1940 led to the development of

the F (Friedrich) version prior to the spring of 1941 followed by late production variants of Bf 109G (Gustav) and K (Kurfürst). Even if it was clear that the development of the Bf 109 had reached its limits by the end of the war, the aircraft was still able to keep pace with the foes that it encountered.

Postwar service

The disappearance of the Bf 109 from the skies over Europe was not spelled out by the end of the war. Several examples stayed in Swiss service up to 1949 and many flew in the air force of Czechoslovakia in both original form with a DB 605 powerplant and as an aircraft built out of necessity with surplus Jumo 211s. The latter type also served as the first fighter to fight for the independence of the newly formed state of Israel. Finland retired the type as recently as 1954, and Spain did not retire its HA-1109-1112, re-engined Bf 109s, until 1967. The legendary low-wing fighter of Professor Willy Messerschmitt survived the state that developed it.

The kit: Bf 109K-4

Based on the conclusions of a meeting at the RLM on August 9, 1943, preparatory work was underway on the design of the Bf 109K-1 and K-3, equipped with a pressurized cockpit, and the Bf 109K-2, a standard fighter aircraft, powered by the DB 605D or DB 605AS $\,$ engine, armed with a MK 108 engine mounted cannon of 30 mm caliber and two 13 mm MG 131 machine guns. After another series of meetings, there was a reassessment of priorities in the development and production of new aircraft. The final concept of the new type was approved in June 1944. The Bf 109K-4 was to be powered by a 1,775 hp DB 605D engine, armed with a 30 mm MK 108 cannon and two 13 mm MG 131 machine guns. A number of components associated with the engine installation were carried over from the Bf 109G-10 out of the Regensburg factory, including the large Fö 987 oil cooler and the engine cowling. The use of non-deficit (Ersatz) materials was still considered, but the original idea of an all-wooden wing was abandoned, and the wing remained all-metal. Only the tail and some other parts were made of wood, some of the longerons of the fuselage were made of steel. A significant change in the wing was the strengthening of the landing gear, the introduction of mechanical landing gear position indicators on the upper surface of the wing and above all the retractable outboard landing gear covers. These covers were closed by the wheel exerting pressure on a mechanical lever when retracted. The tires were sized at 690 × 190 mm, which necessitated the creation of large oblong bulges above the landing gear well, the same as the WNF/Diana production Bf 109G-10/U4 and some Erla production aircraft. The left wing contained space for the GM-1 pressure bottles that some machines were equipped with. However, the standard equipment was the MW 50 system, the placement of which in the fuselage was adjusted so that the container no longer extended into the rear wall of the cockpit. The radio equipment was identical to the G-10, but the wire antenna in most aircraft did not have a mast on the cockpit canopy or behind it but was led directly into the fuselage on top of the second fuselage segment.



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

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

OPTIONAL VOLBA



OHNOUT



BROUSIT



OPEN HOLE VYVRTAT OTVOR SYMETRICAL ASSEMBLY SYMETRICKÁ MONTÁŽ



ODŘÍZNOUT

REVERSE SIDE OTOČIT

(2)

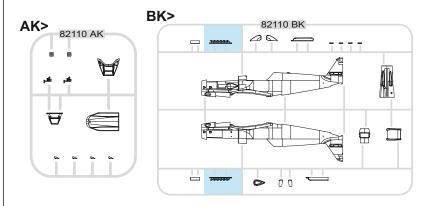


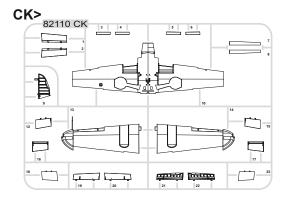
APPLY EDUARD MASK AND PAINT POUŽÍT EDUARD MASK NABARVIT

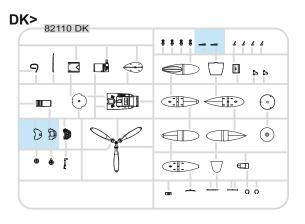
PLEASE CHECK THE LATEST VERSION OF THE INSTRUCTIONS ON www.eduard.com

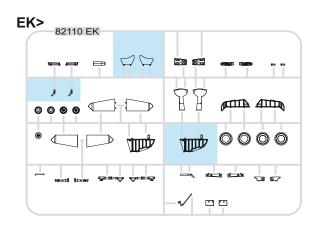
PARTS * DÍLY * TEILE * PIÈCES * 部品

PLASTIC PARTS







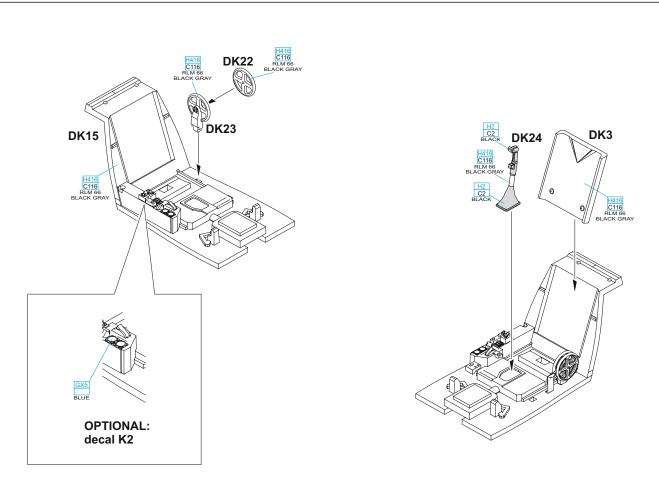


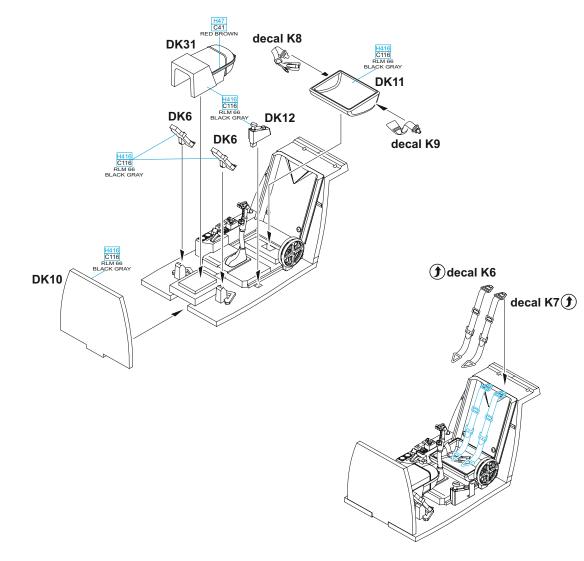
-Parts not for use. -Teile werden nicht verwendet. -Pièces à ne pas utiliser. -Tyto díly nepoužívejte při stavbě. - 使用しない部品

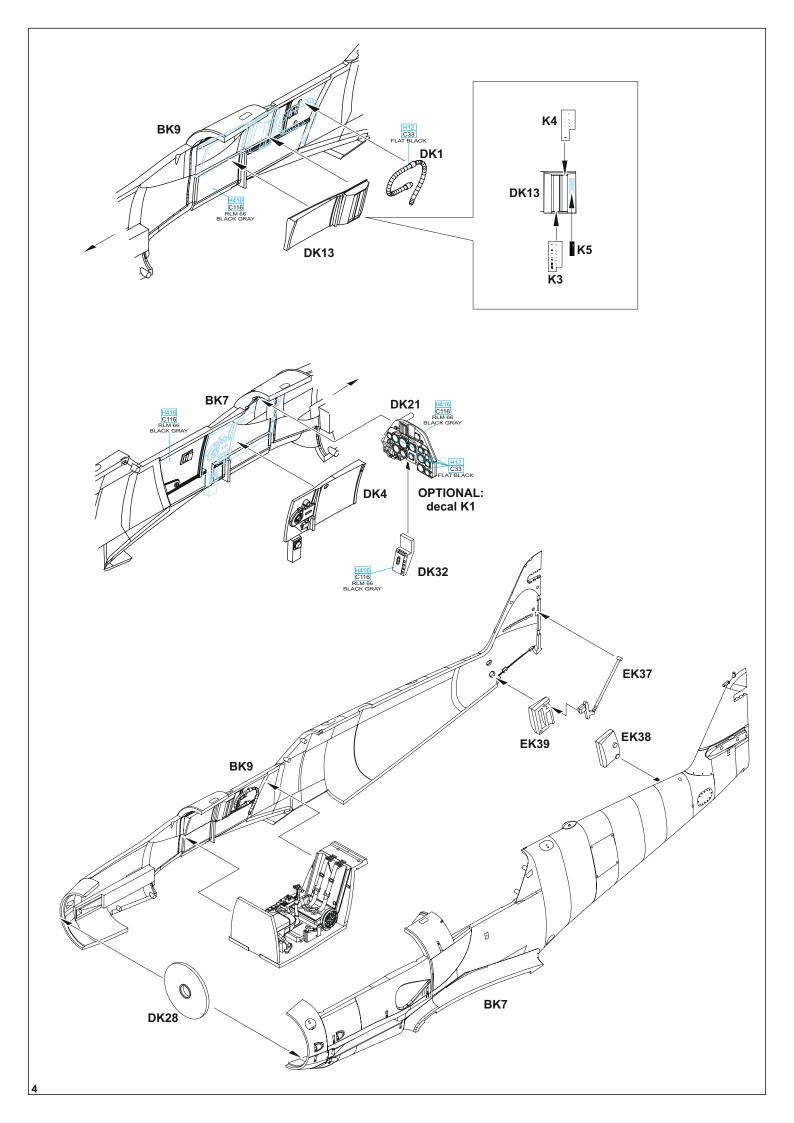
COLOURS * BARVY * FARBEN * PEINTURE * 色

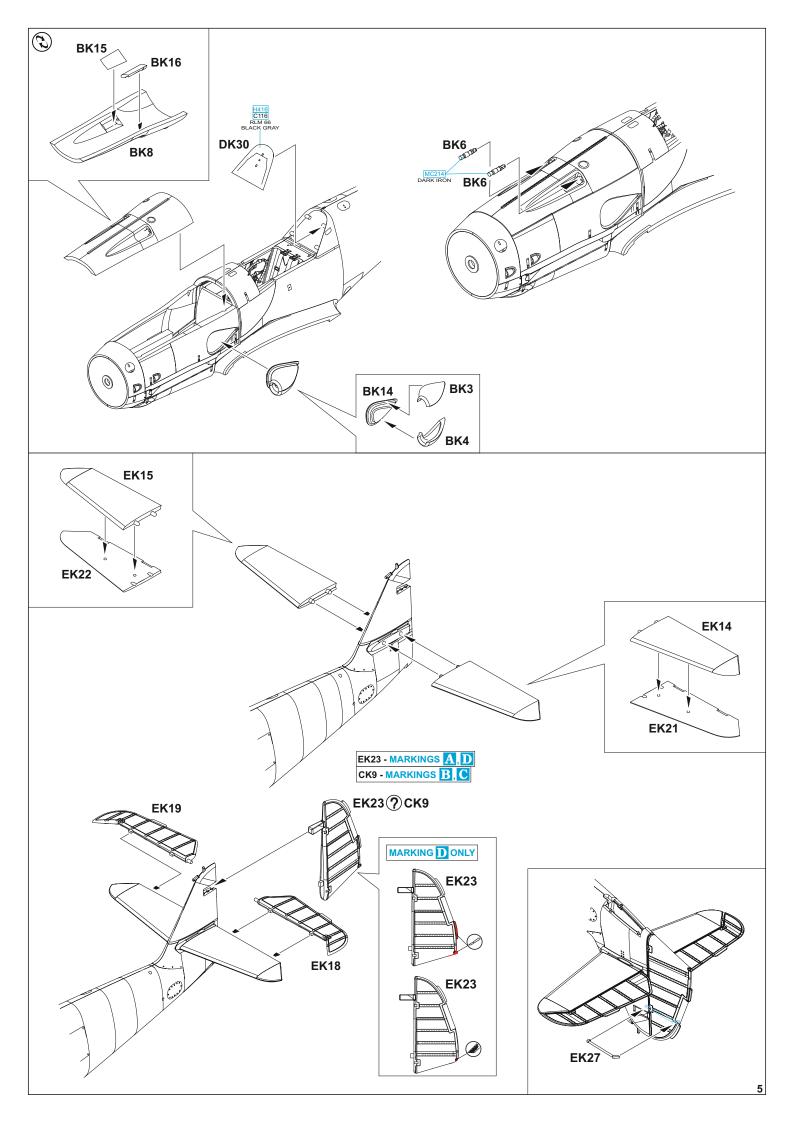
GSi Creos (GUNZE)]
AQUEOUS	Mr.COLOR	1
H2	C2	BLACK
H5	C5	BLUE
H11	C62	FLAT WHITE
H12	C33	FLAT BLACK
H47	C41	RED BROWN
H65	C18	RLM70 BLACK GREEN
H68	C36	RLM74 DARK GRAY
H69	C37	RLM75 GRAY
H70	C60	RLM02 GRAY
H74	C26	SKY
H77	C137	TIRE BLACK
H90	C47	CLEAR RED
H94	C138	CLEAR GREEN

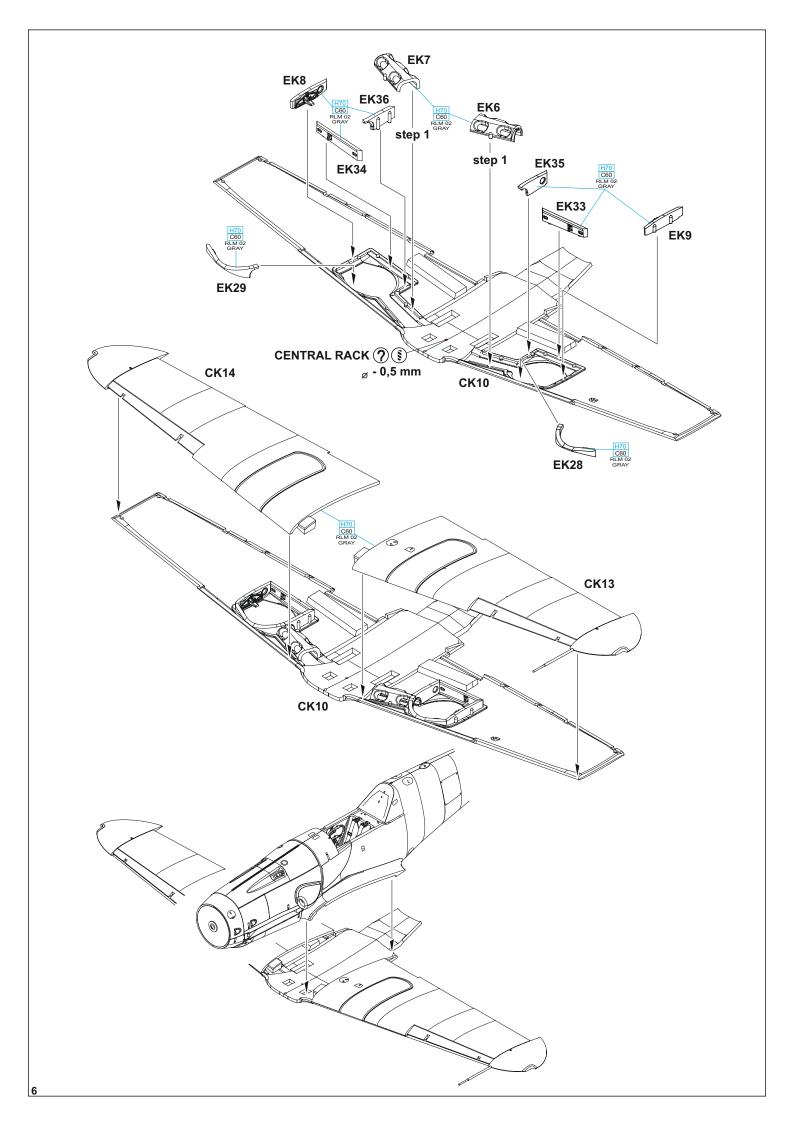
GSi Creos (GUNZE)		7
AQUEOUS	Mr.COLOR	1
H319	C319	LIGHT GREEN
H324	C324	LIGHT GRAY
H414	C114	RLM23 RED
H416	C116	RLM66 BLACK GRAY
H417	C117	RLM76 LIGHT BLUE
Mr.METAL COLOR		
MC214		DARK IRON
Mr.COLOR SUPER METALLIC		
SM201		SUPER CHROME
Mr.COLOR GX		
GX05		SUSIE BLUE

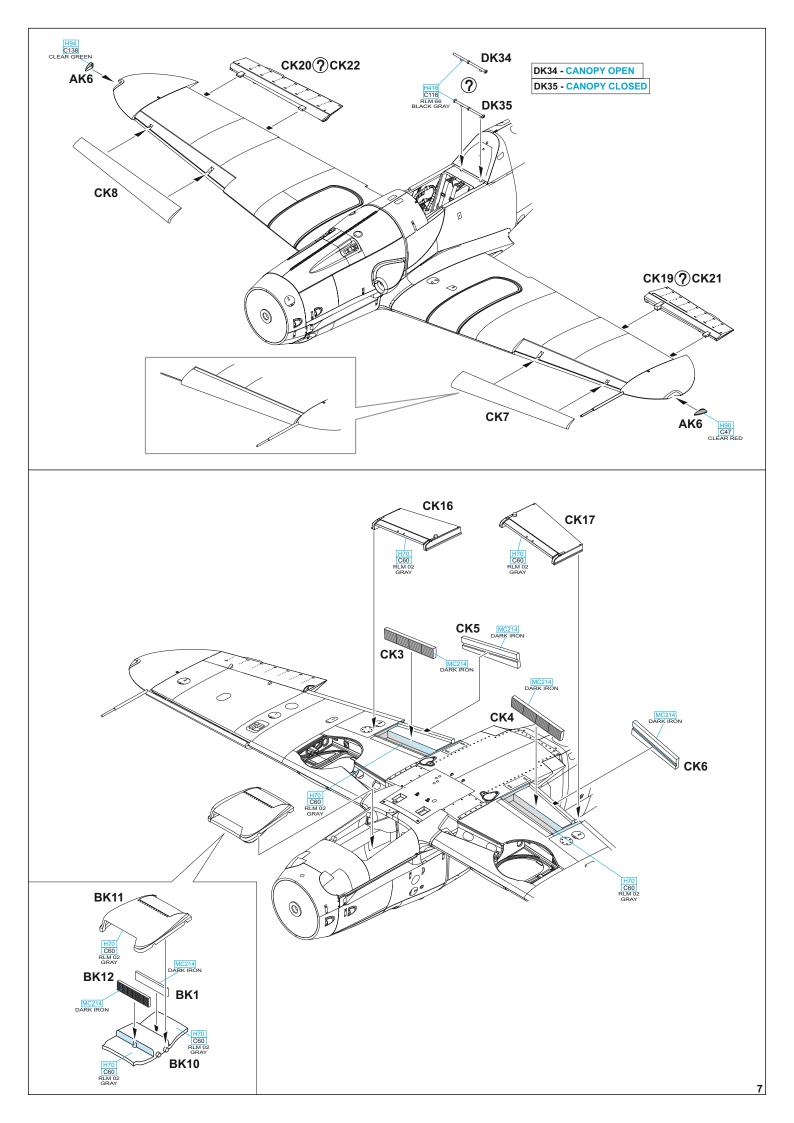


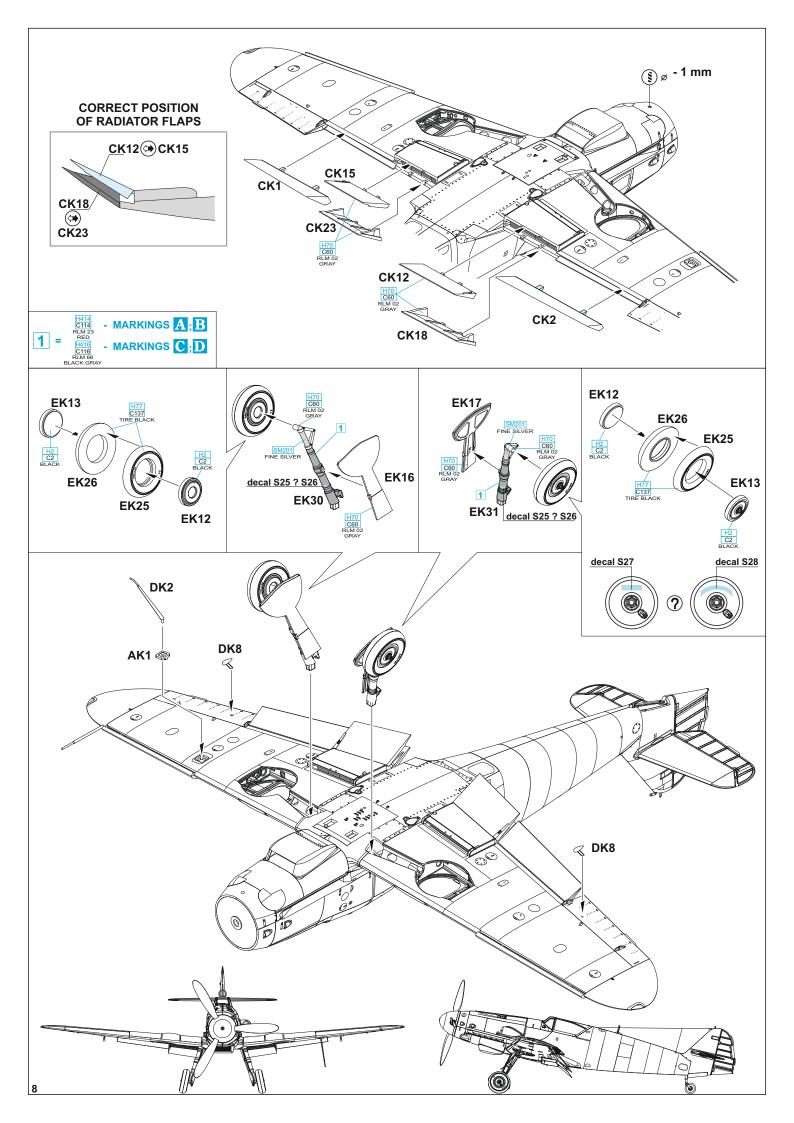


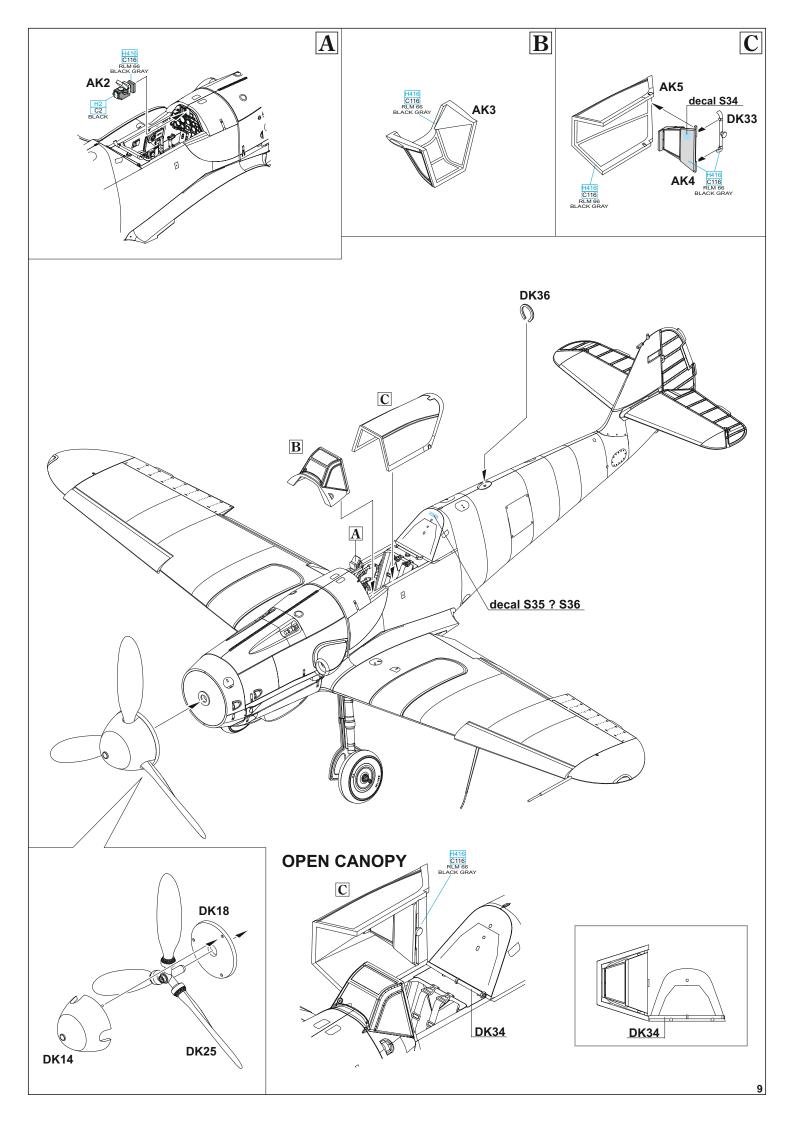


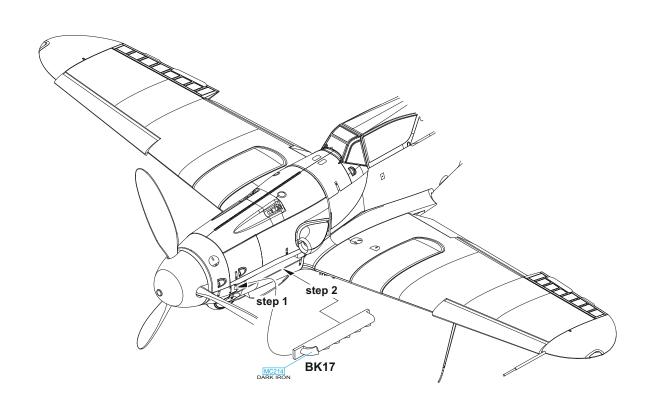


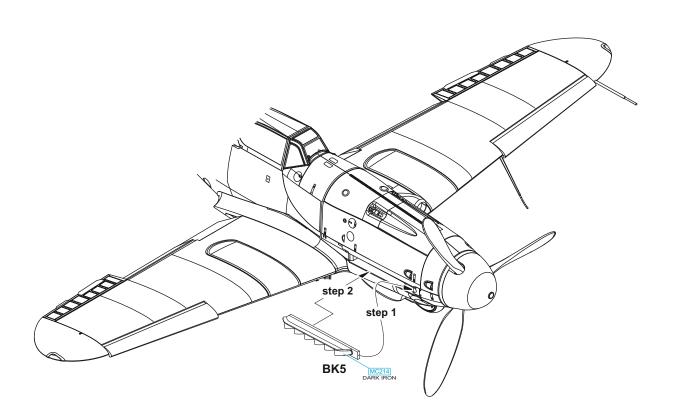


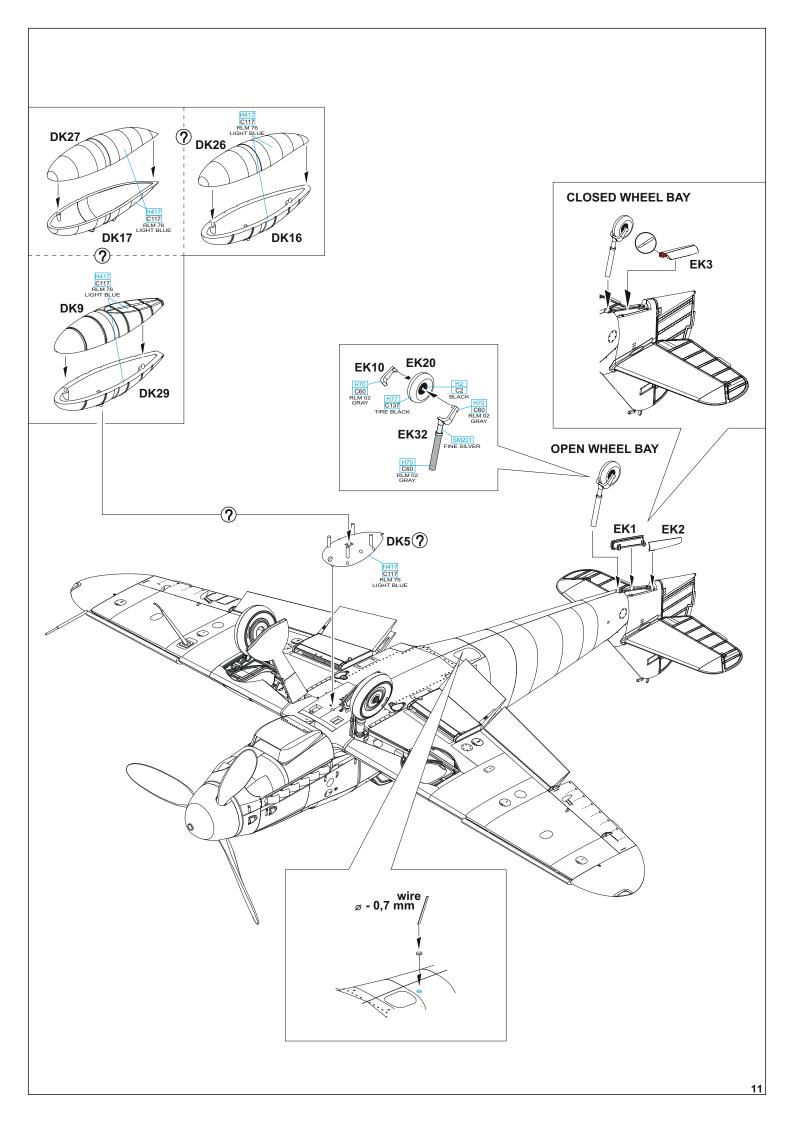






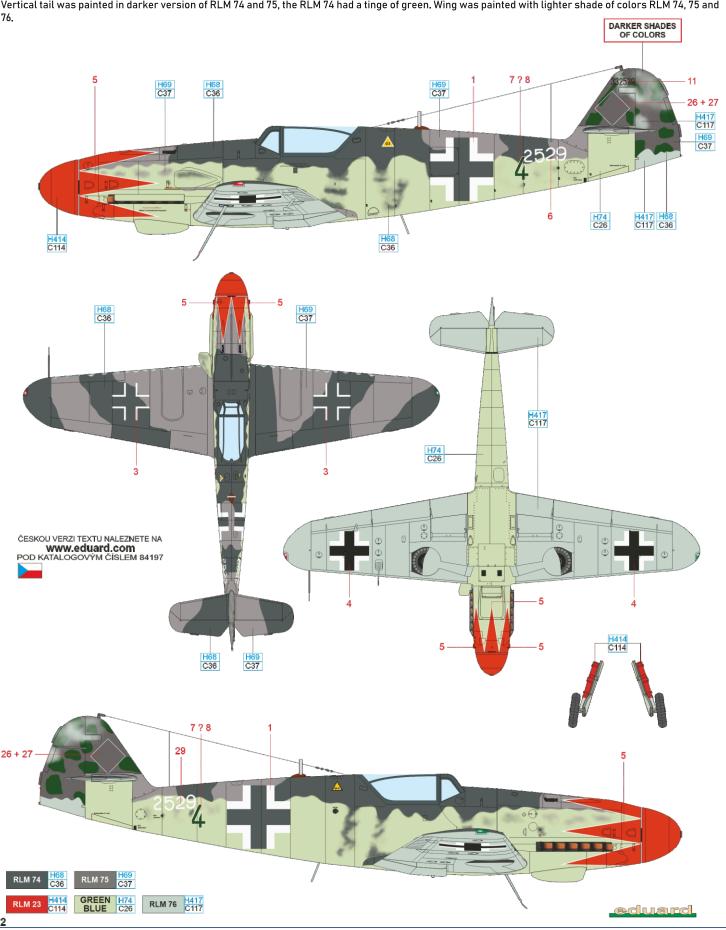






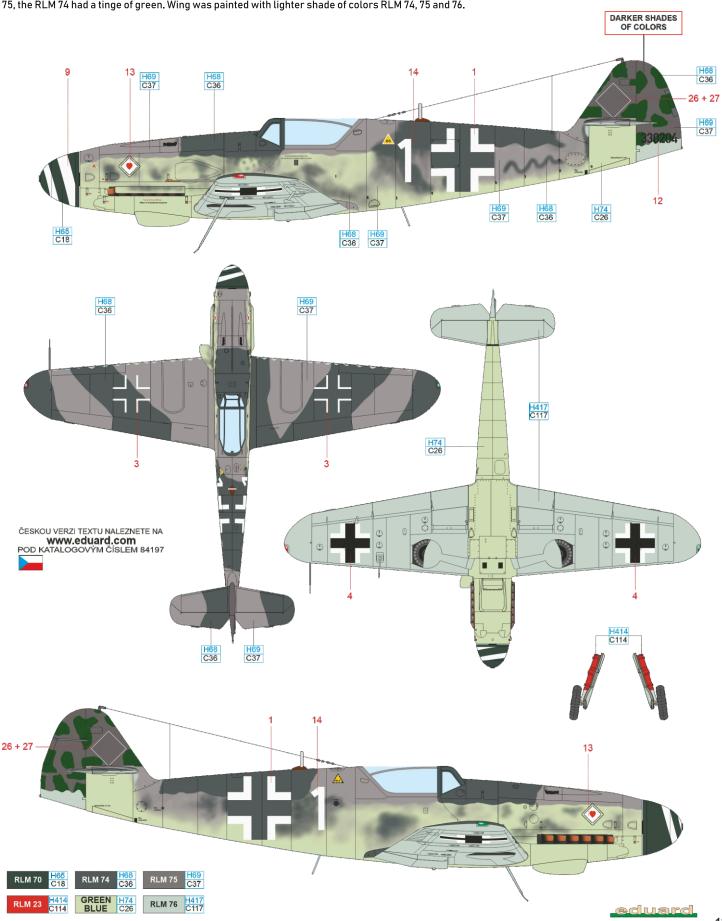
🛕 WNr. 332529, Stab JG 52, Deutsch Brod, Protectorate of Bohemia and Moravia, May 1945

At the end of the war, at least three Bf 109s with a tulip pattern on the nose were found at the Deutsch Brod base (Havlíčkův Brod today). The surviving engine cowling bears a grey paint and red tulip marking. These were apparently the machines of the Stab JG 52, commanded by Kommodore Hermann Graf, who had the same markings in 1943 with JG 50. When Oberst Graf became CO of JG 52 in October 1944, he introduced the same markings to his Stab planes, including the green fuselage numbers. Graf brought two wingmen to his Stab, Lt. Anton Resch and Oblt. Heinrich Füllgrabe (67 victories; KC holder), who was killed in January 1945 on the "green 2". By the end of the war, Resch had scored most of the victories of Stab JG 52, so it is possible that he also flew 332529. He was awarded the Knight's Cross in early April 1945 and achieved a total of 91 victories during 210 combat sorties. The fuselage number was probably green, but the decal also offers a black variant. Fuselage was painted in RLM 74 and RLM 75 with yellow-grey version of RLM 76. Vertical tail was painted in darker version of RLM 74 and 75, the RLM 74 had a tinge of green. Wing was painted with lighter shade of colors RLM 74, 75 and



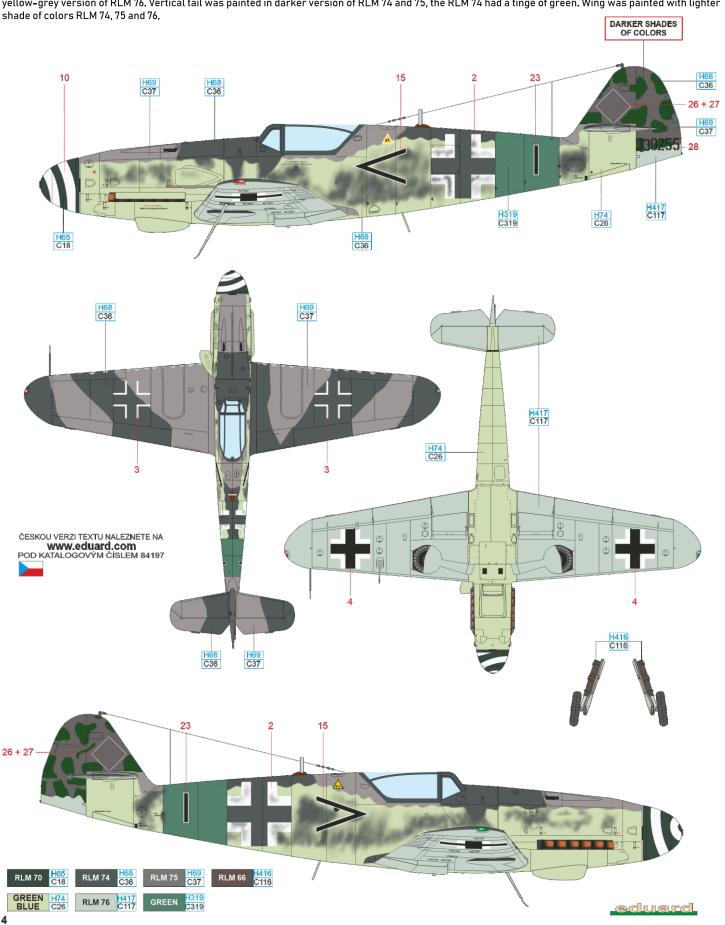
WNr. 330204, Hptm. Franz Mentzel, 9./JG 77, Neuruppin, Germany, November 1944

In October 1944, III./JG 77 became the first Luftwaffe fighter unit to be completely re-equipped with the Bf 109K-4. They received 68 of these aircraft. Its commander was the experienced JG 77 veteran Major Armin Köhler (40 victories, KC). Its 9. Staffel was newly established in November 1944 and the commander was appointed Hptm. Franz Mentzel (also referred to as Menzel). At the beginning of the war, he flew the Bf 110 in I./ZG 2 and was captured during the French campaign. Later he served also in JG 5 and in several flight schools. His last (eighth?) aerial victory was an Il-2 shot down in combat over Silesia on February 3, 1945. During Operation Bodenplatte, III./JG 77 lost 11 aircraft and pilots. One of the lost Bf 109s was Mentzel's 330204, its pilot Lt. Herbert Abendroth was captured. At the end of the war this unit fought in Upper Silesia, based at Beneschau in the Hlučín region (today Dolní Benešov, Czech Republic). Fuselage was painted in RLM 74 and RLM 75 with yellow-grey version of RLM 76. Vertical tail was painted in darker version of RLM 74 and 75, the RLM 74 had a tinge of green. Wing was painted with lighter shade of colors RLM 74, 75 and 76.



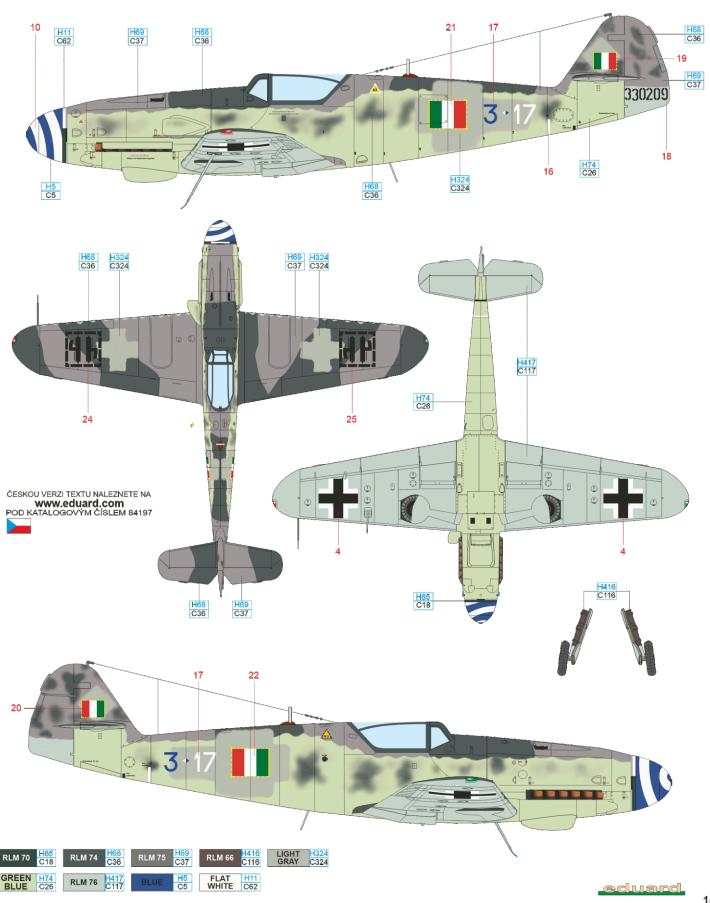
WNr. 330255, Stab III./JG 27, Wunstorf, Germany, May 1945

The commander of III./JG 27 from October 1944 until the end of the war was Austrian Hptm. Dr. Peter Werfft (26 victories). During the same month his unit received Bf 109K-4s. From February 1945 his deputy was C0 of 12./JG 27, Oblt. Emil Clade (27 victories). While serving in Africa with II./JG 27, Clade and his Schwarm attacked a lone low-flying Bristol Bombay transport from No. 216 Sqn RAF on August 7, 1942 in the Allied rear. He managed to shoot it down and on the ground the machine was destroyed by Uffz. Schneider, who was awarded the victory. The commander of the British Eighth Army, Lt. Gen. W. H. E. Gott, was killed on board. In his place was appointed Lt. Gen. Montgomery, for whom Gott's death became a major milestone in his career. Clade led 12./JG 27 from November 1944 during the fighting in western Germany until its disbandment in early April 1945. In the last month of the war, he commanded L./JG 27. After the war, he worked as an airline pilot, took up sport flying, and published a memoir in 1996. Fuselage was painted in RLM 74 and RLM 75 with shade of colors RLM 76. Vertical tail was painted in darker version of RLM 74 and 75, the RLM 74 had a tinge of green. Wing was painted with lighter shade of colors RLM 76. Vertical tail was painted in darker version of RLM 75 and 76.



WNr. 330209, 3° Squadriglia, 1° Gruppo Caccia, Lonate Pozzolo, Italy, March 1945

This aircraft, manufactured in February 1945, was one of six Bf 109K-4s received by the Aeronautica Nazionale Repubblicana in Northern Italy. During February it was assigned to 3° Squadriglia "Arciere", which was part of I° Gruppo Caccia "Asso di Bastoni" under the command of Maggiore Adriano Visconti (10 victories). Unit's Bf 109K-4s took part in aerial combat on April 10, 1945. In the early morning hours, three Bf 109s from I° Gr. C. were sent against four P-47s from the 65th FS, 57th FG, which were conducting a weather reconnaissance in the Milan-Lago di Como area. In the aerial combat a Bf 109G-14/AS "1-7", flown by M.llo Veronesi, and a Bf 109K-4 "3-14", flown by S. Ten Gallori, were damaged. One P-47 was reported damaged by M.llo Forlani. The American pilots did not claim any victories. In late April, the I° Gr. C. moved to Malpensa. Fuselage was painted in RLM 74 and RLM 75 with yellow-grey version of RLM 76. Vertical tail was painted in darker version of RLM 74 and 75, the RLM 74 had a tinge of green. Wing was painted with lighter shade of colors RLM 74, 75 and 76.



STENCILING POSITIONS

