

Bf 110G-4

eduard

GERMAN WWII NIGHTFIGHTER

1/72 SCALE PLASTIC KIT

ProfiPACK
edition

#7094



INTRO

The first pages of history for the famous Zerstörer Bf 110 were written at the end of 1934, when C-Amt RLM (the technical branch of the Reich's Air Ministry) issued a specification for a two seat, twin engined aircraft to fulfill a need within the Kampferstörer category. Submitted proposals came from Focke-Wulf (Fw 57), Henschel (Hs 124) and BFW (Messerschmitt Bf 110). In the spring of 1935, the RLM changed its thinking on the spec, and cancelled the universal Kampferstörer category in favor of two specific types, the Schnellbomber and the Zerstörer. The new concept of a heavy fighter of the RLM were best satisfied by the Messerschmitt design, which wasn't really dictated as much by the original specifications. The first prototype, the Bf 110 V1, first flew May 12, 1936, and the modified second prototype V2 was submitted to the Erprobungsstelle in Rechlin on January 14, 1937. Four development aircraft, A-01 to A-04, powered by JUMO 210Da engines, were delivered at the beginning of 1938. A production run of 45 Bf 110Bs began in July, powered by JUMO 210Ga engines, delivering some 500kW (680hp). At the end of 1938, the production line for the high performance DB 601 finally got going, and these were mounted into the first major Bf 110 version, the Bf 110C. The Bf 110C, as was the case with the Bf 110B, was armed with two MG FF cannon, mounted in the fuselage below the cockpit floor, four MG 17 machine guns mounted in the nose and one rear firing MG 15 machine gun manned by the gunner/radio operator. There was a crew of two. The Luftwaffe received a total of 169 Bf 110Cs by September 1939. The first combat experience of the type in Norway and France uncovered a small operational radius, unsuitable for an escort fighter. The first attempt to remedy the shortcoming came in the form of a large, underfuselage conformal type external fuel tank, called the Dackelbauch. The Bf 110C-3, adapted to carry this tank, were redesignated D-0. Results were not entirely satisfactory with the D version, and so there was a reconstruction of the fuel system, after which aircraft of the D version carried two drop tanks under the wings, and a small oil tank under the fuselage. The Bf 110D also standardized a longer fuselage, by way of an extension at the rear carrying a life raft and other emergency survival gear. This was a feature also evident on some subsequent Bf 110Es, which were equipped with bomb racks under the fuselage and wings. The majority of Bf 110Es were powered by the DB 601N engines. The following Bf 110F received the DB 601F engines housed in reshaped nacelles, with newer, more rounded spinners, aerodynamic features taken from the Bf 109F. Upgrading efforts were noted in the armament as well, where the MG FF were replaced by MG 151s. Significant changes came with the Bf 110G, powered by new DB 605 engines. The rear firing MG 81Z double gun appeared on the G-2, and with the G-4 came the replacement of four forward firing machine guns with two 30mm MK 108 cannon. The G-4 also saw larger rudders mounted. The Bf 110 went through not only technical changes throughout its career, but also through a development of its operational use. It entered the war as a heavy escort and attack fighter. By the time of the Battle of Britain, it became apparent that the aircraft, in the role of escort fighter, had been pushing the envelope of its capabilities. On the contrary, as a defensive weapon against British bombers, the Bf 110 made an extremely good showing of itself, and remained a deadly foe through to the end of the war. The placement of RAF bombing operations within nighttime hours from 1941 brought the Bf 110 into the realm of nightfighting on the Western Front. On the Eastern Front, they excelled as fast fighter bombers. Their earlier role as a day attack fighter was still fulfilled not only on the Eastern Front (where they were employed throughout the war successfully even as the originally envisioned escort fighter), but also on the Western Front into the depths of the summer of 1944, where the role was abandoned primarily, and finally. As a nightfighter in the G-4 version, thanks to a heavy forward firing armament and radar, they soldiered on literally until the very end of the war. As such, it was the nightfighter role that would prove to be the most significant for the Bf 110 during the course of the Second World War.

The Bf 110G-4 Version

The evolution of the Bf 110 line was to continue in 1941 with the introduction of the Me 210, a result of the development of the original design coupled with combat experience. Major ongoing problems with the prototypes and unspectacular results in combat halted production of Me 210 at under 300. The role of the heavy fighter and fighter-bomber for the Luftwaffe would need to continue to be served by the Bf 110, calling for a list of changes and modifications. The installation of the newly developed DB 605 engines (1470hp at higher performance) allowed for the development of the stronger and aerodynamically refined 'G' version, represented in combat by the G-2 and G-4. Although the G-2 variant found its role especially as a heavy day defender, the domain of the G-4 was that of the night fighter. The nocturnal air war over Germany in 1943 saw the RAF targeting German industry and logistical centres, The night fighter was a distinctive piece of equipment that found widespread use on both sides. The droning of RAF Lancs and Halifaxes was an almost nightly ritual over German cities, factories and harbors. Night fighting Mosquitoes were tasked with dispatching German defenders before they could intercept their bigger brothers. The Luftwaffe countered with a sophisticated system of radars and central facilities connected to the night fighters bases in a ground control intercept network. Night air combat was very different from that of daylight dog fights not only due to physical conditions, but also through the necessary development of specialized tactics. Instead of aerobic maneuvering and jockeying, it became preferred to slowly position behind the target, get in close, and hit hard. Naturally, acquiring a target in low light presented the need for entirely new approaches on its own. Aircraft during this timeframe needed new armament combinations and electronic equipment to maximize usefulness. Generally, there was no great use for single-engined developments, although there were successful evolutions of the Bf109 and Fw190 in this role. The bulk of that duty was carried out by twin engine types whose original role was either that of heavy day-fighter or, more likely, as bombers, such as the Bf 110, Ju 88, Ju 188, He 219, Me 262, and others. The Bf 110G-4 was the most prolific of all of them. The required equipment for the G-4 was an on-board radar system, mainly the FuG 202, FuG 220, FuG 212 (+SN-2) and FuG 218. Part of the basic armament was often the installation of 30 mm MK 108 cannon in the nose, and 20 mm Schräge Musik cannon (slang term for 'Jazz Music', prohibited in Germany at that time) used when the target was above and slightly ahead of the attacking fighter. Although the Luftwaffe was unable to stop the RAF raids, which steadily increased until the end of the war, the Bf 110G-4 and their crews deserve great respect for their combat success. As a nightfighter in the G-4 version, thanks to a heavy forward firing armament and radar, they soldiered on literally until the very end of the war. As such, it was the nightfighter role that would prove to be the most significant for the Bf 110 during the course of the Second World War.



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 lepidla 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
VOLBA



BEND
OHNOUT



OPEN HOLE
VYVRTAT OTVOR



SYMMETRICAL ASSEMBLY
SYMETRICKÁ MONTÁŽ



REMOVE
ODŘÍZNOUT



REVERSE SIDE
OTOČIT



APPLY EDUARD MASK
AND PAINT
POUŽÍT EDUARD MASK
NABARVIT

PARTS



DÍLY



TEILE

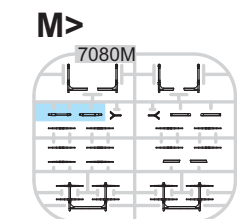
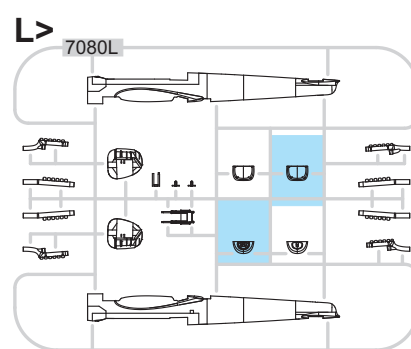
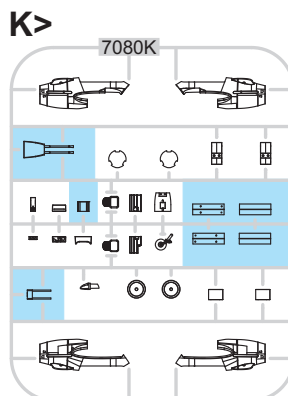
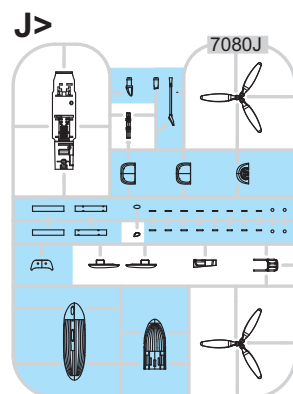
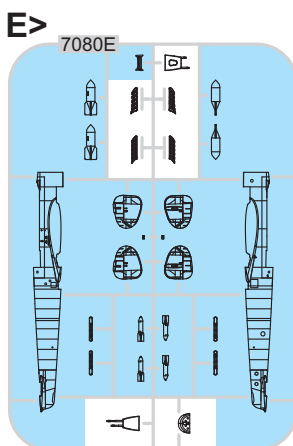
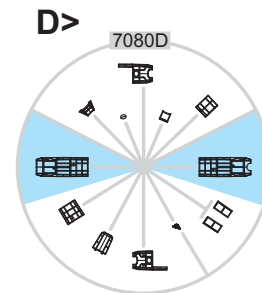
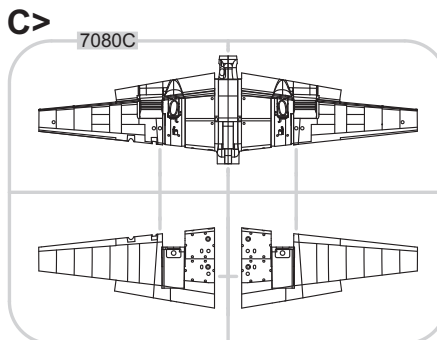
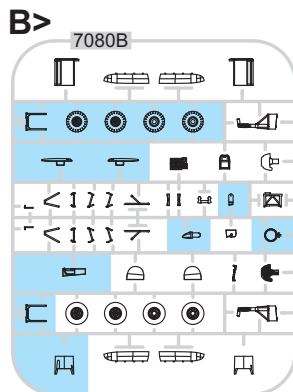
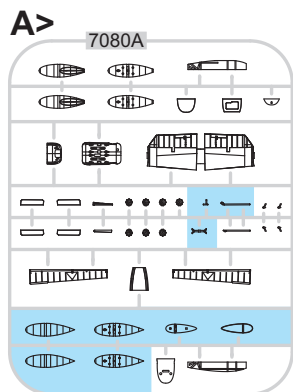


PIÈCES

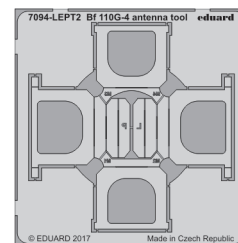


部品

PLASTIC PARTS



PE - 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



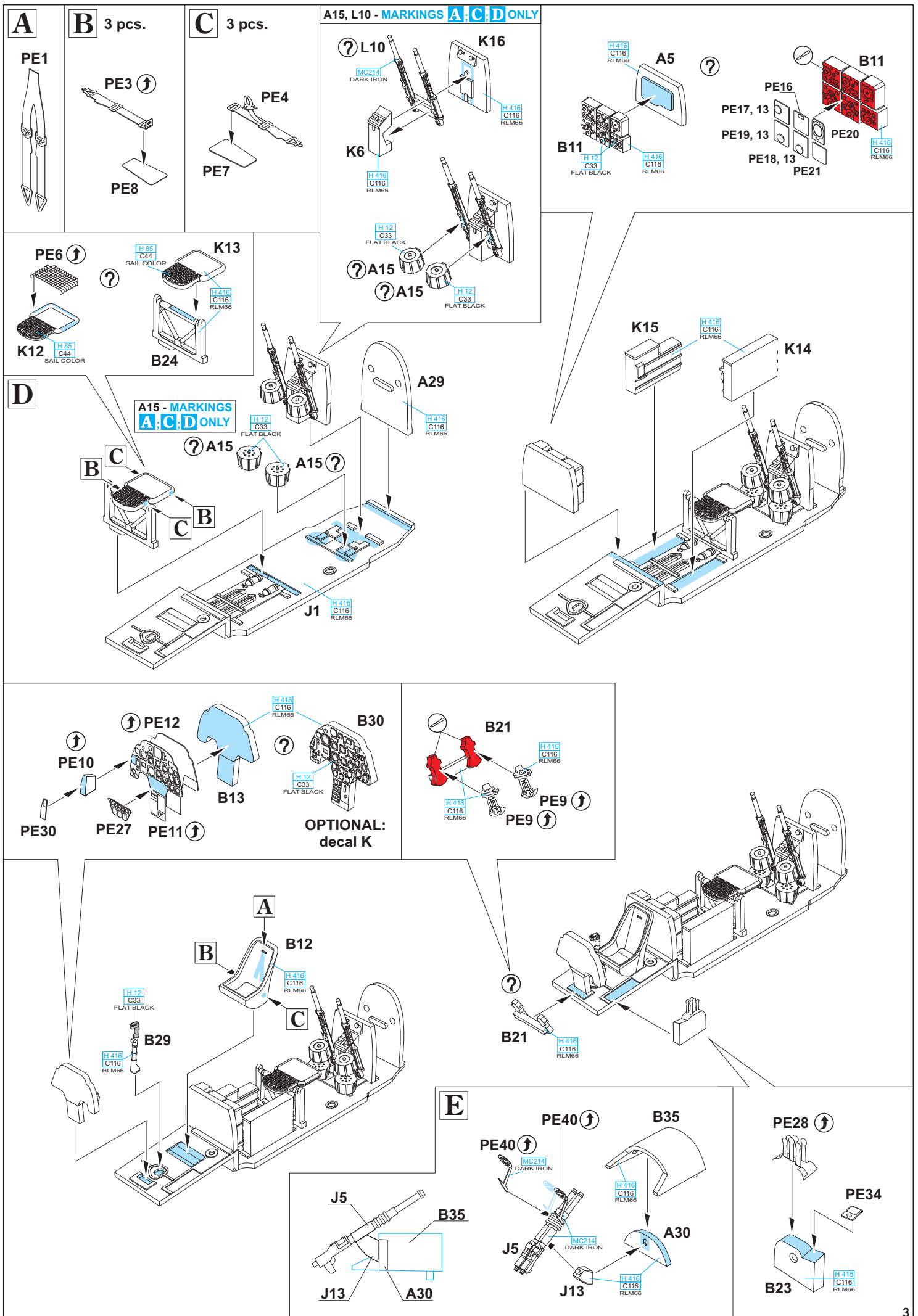
PEINTURE

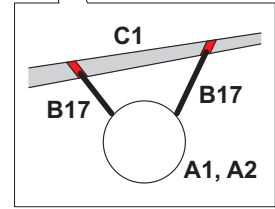
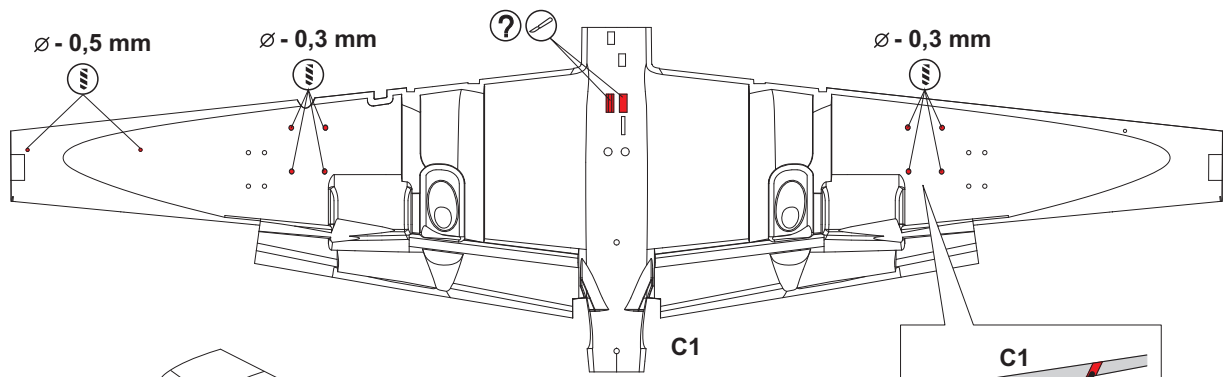


色

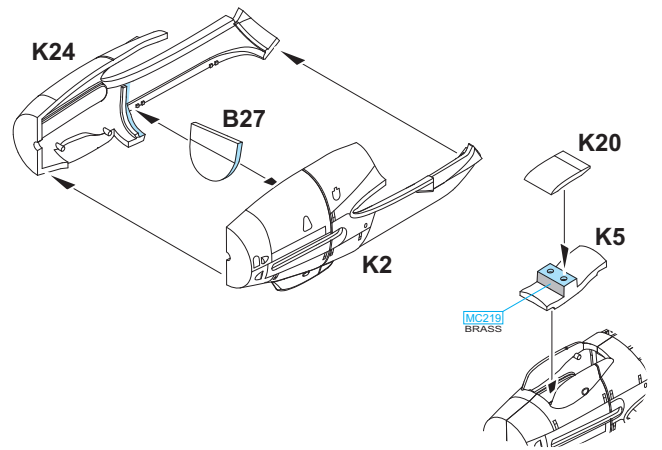
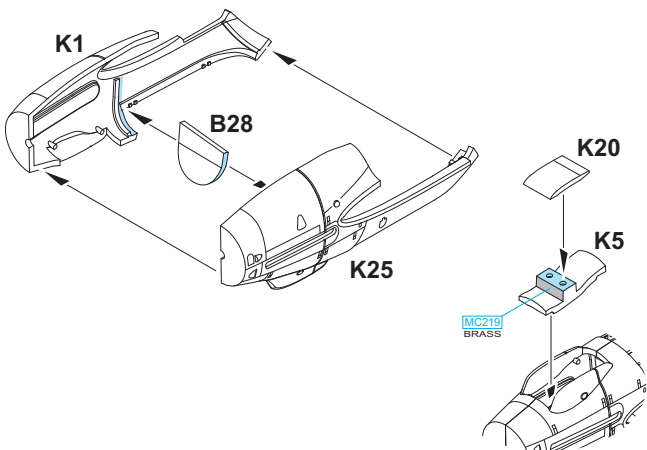
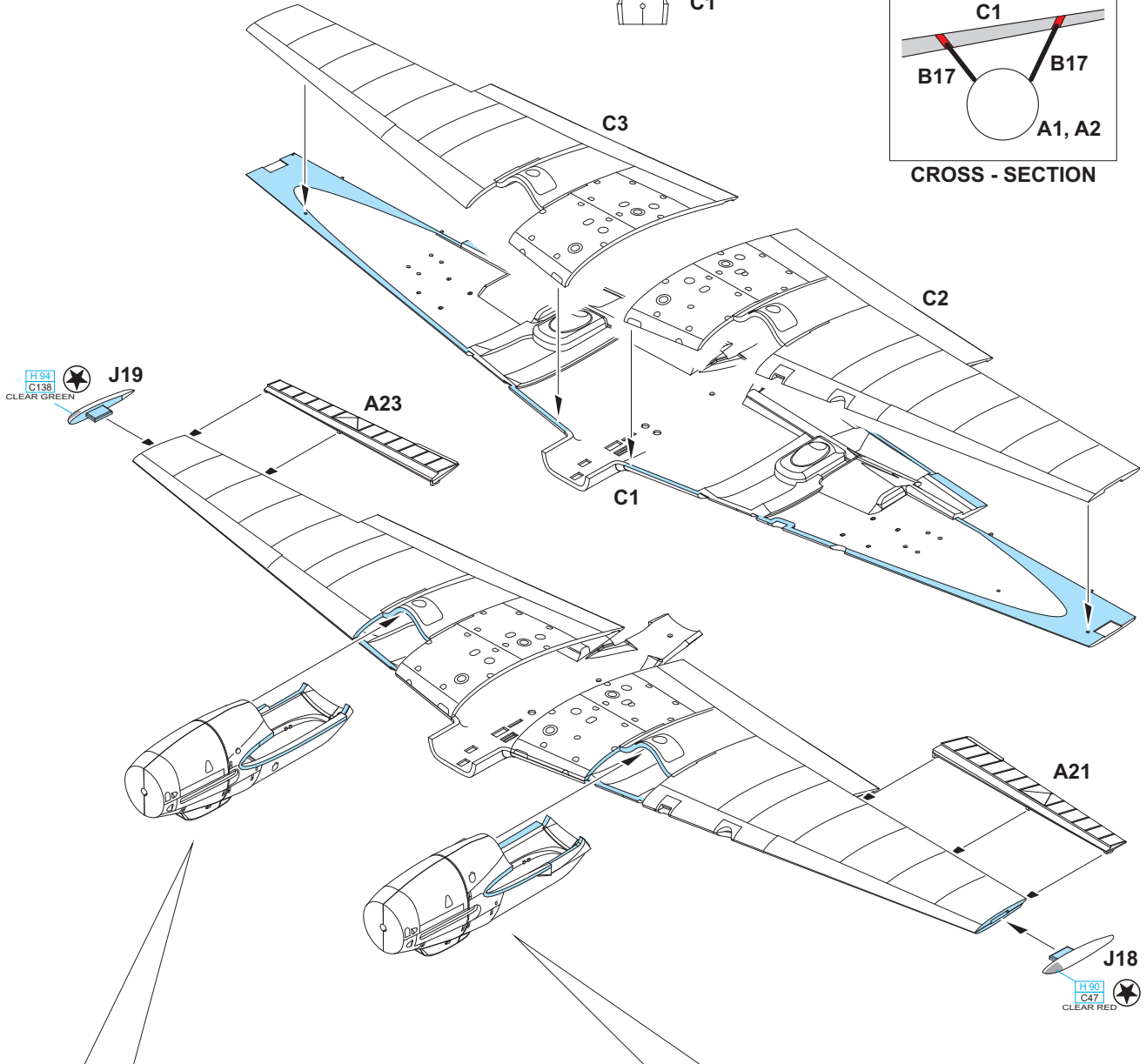
GSI Creos (GUNZE)			
AQUEOUS	Mr.COLOR		
H 2	C 2	BLACK	
H 11	C 62	FLAT WHITE	
H 12	C 33	FLAT BLACK	
H 33	C 81	RUSSET	
H 37	C 43	WOOD BROWN	
H 47	C 41	RED BROWN	
H 65	C 18	BLACK GREEN	RLM70
H 68	C 36	GRAY	RLM74
H 69	C 37	GRAY	RLM75
H 70	C 60	GRAY	RLM02

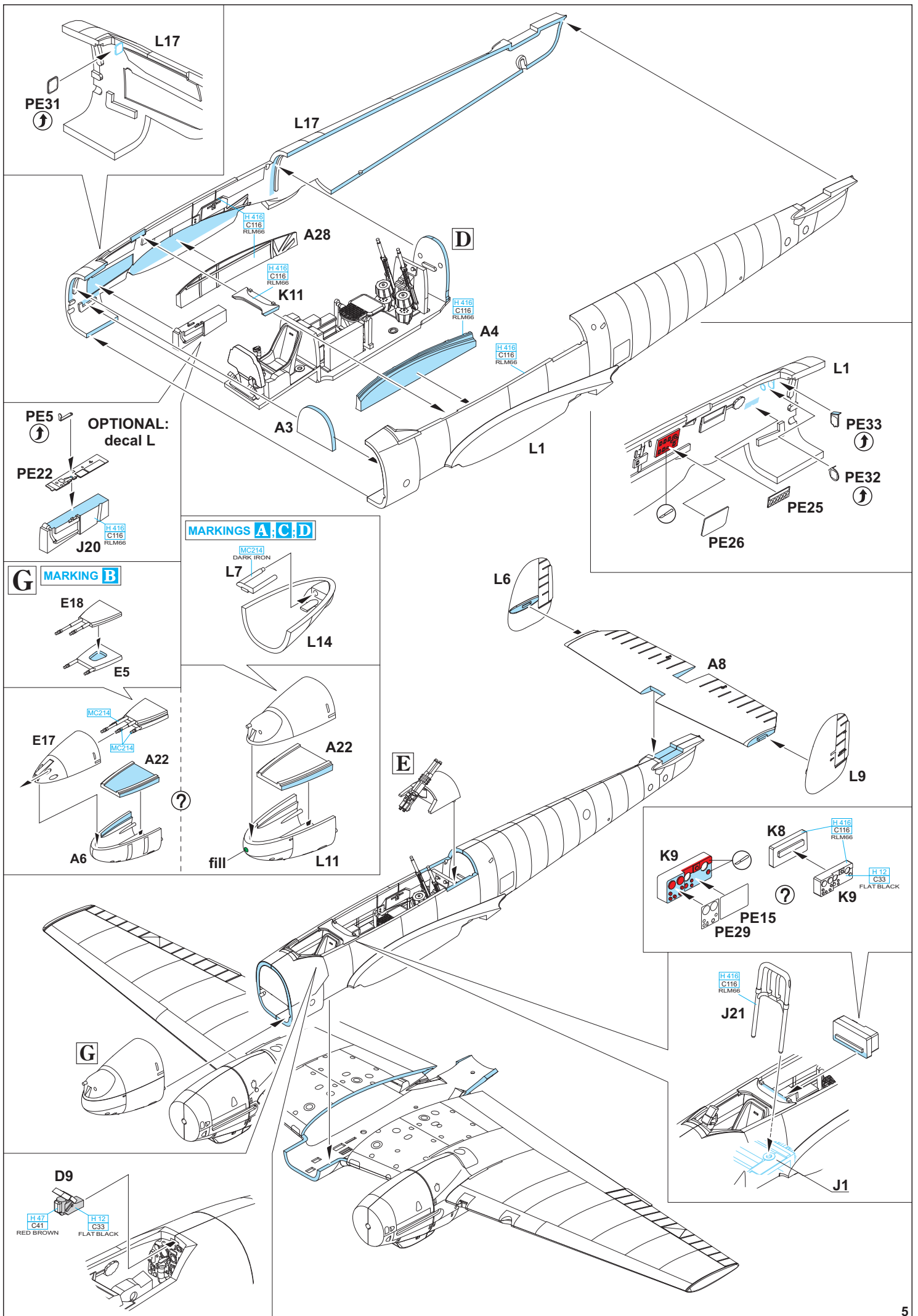
AQUEOUS	Mr.COLOR		
H 77	C 137	TIRE BLACK	
H 85	C 44	SAIL COLOR	
H 90	C 47	CLEAR RED	
H 94	C 138	CLEAR GREEN	
H 414	C 114	RED	RLM23
H 416	C 116	BLACK GRAY	RLM66
H 417	C 117	LIGHT BLUE	RLM76
Mr.METAL COLOR			
MC 214		DARK IRON	
MC 219		BRASS	

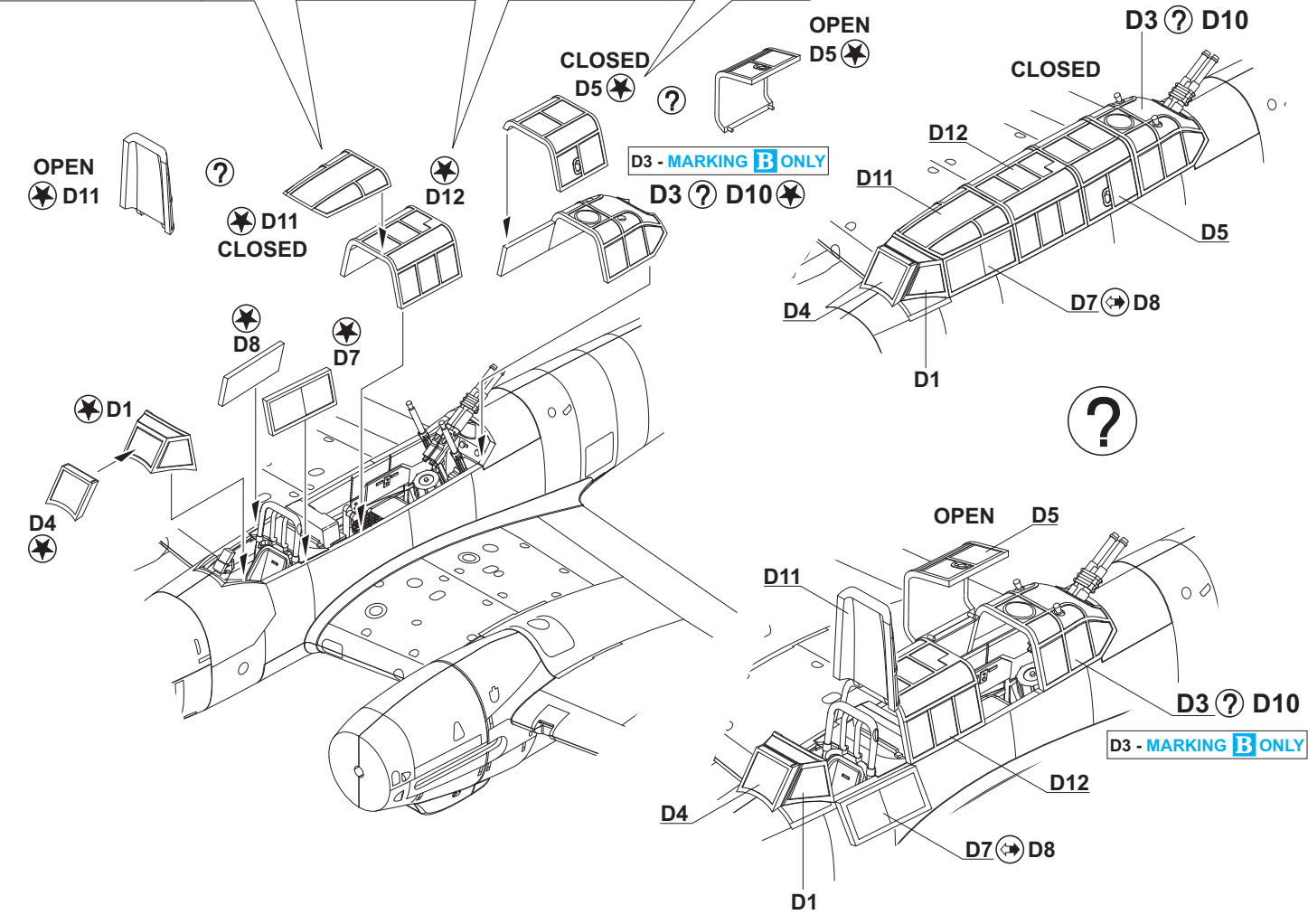
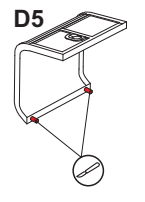
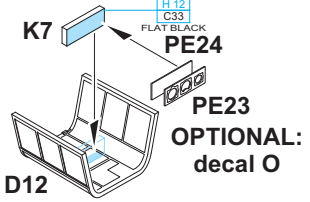
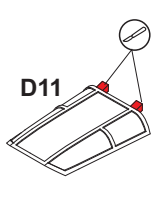
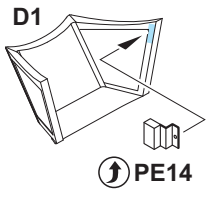
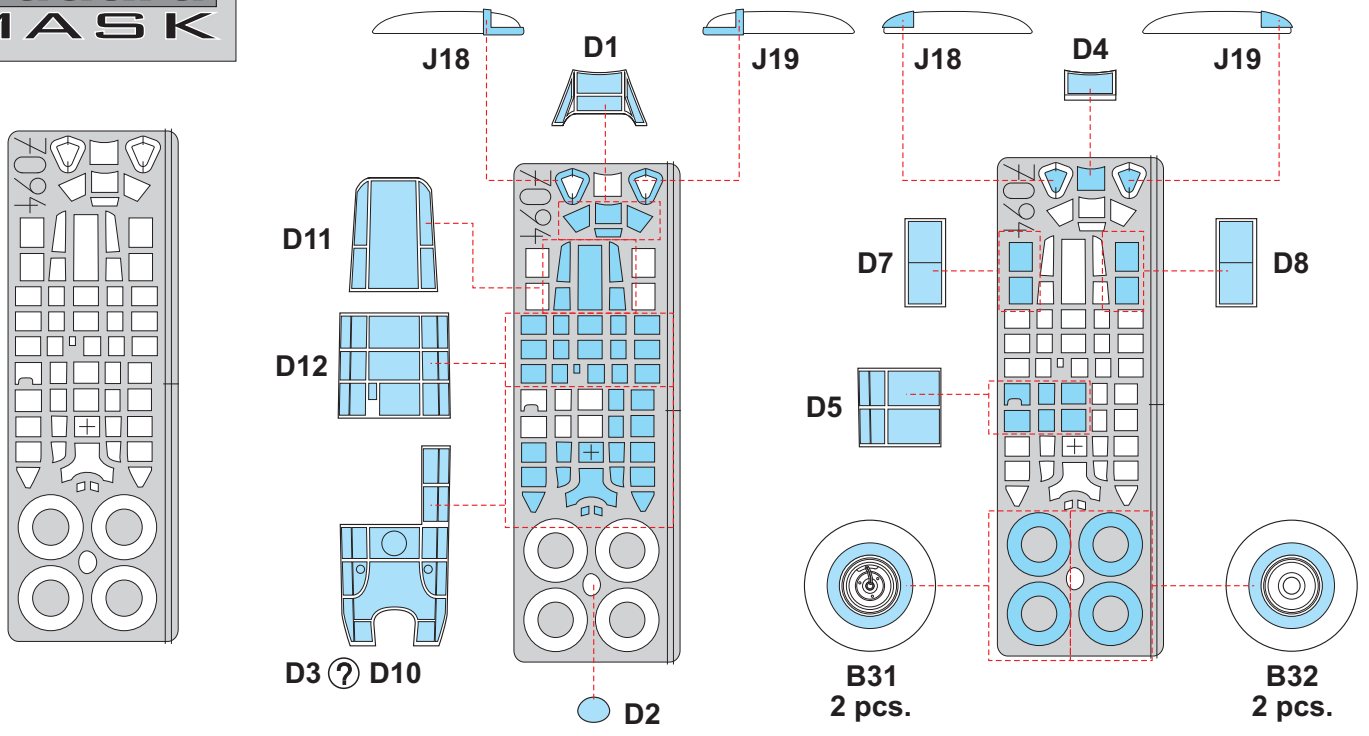


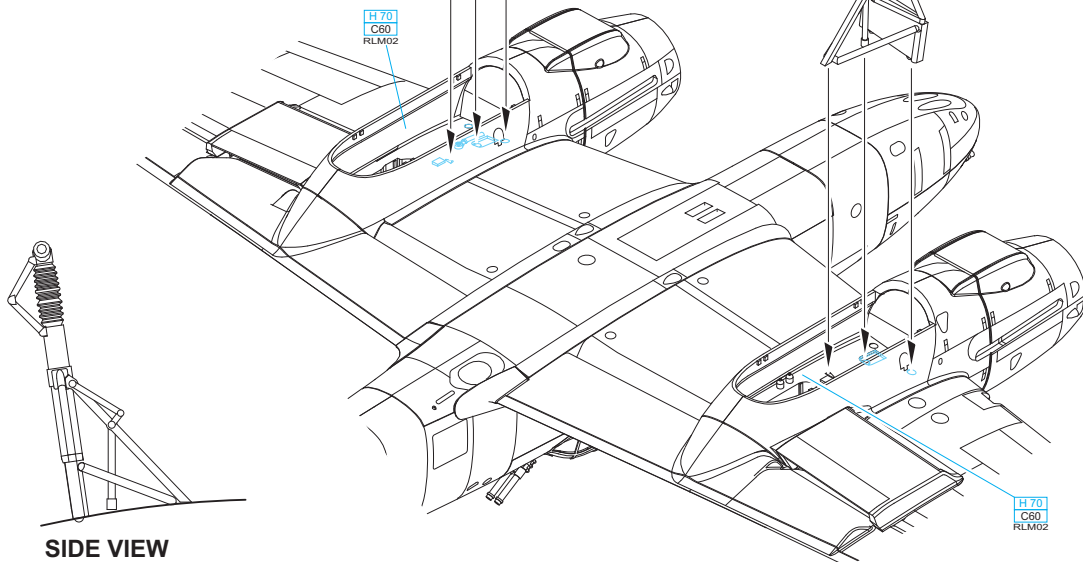
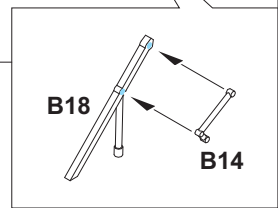
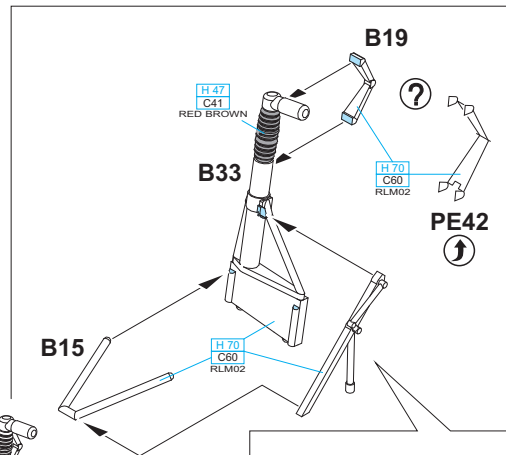
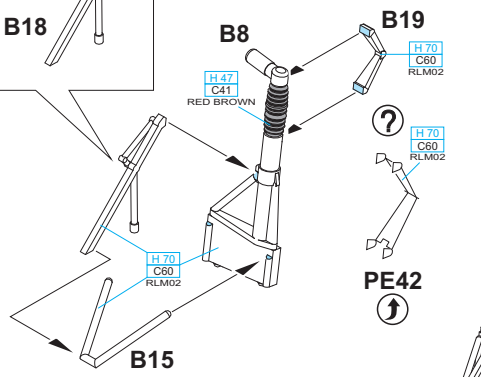
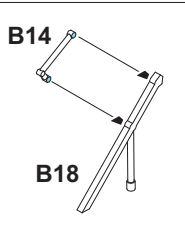
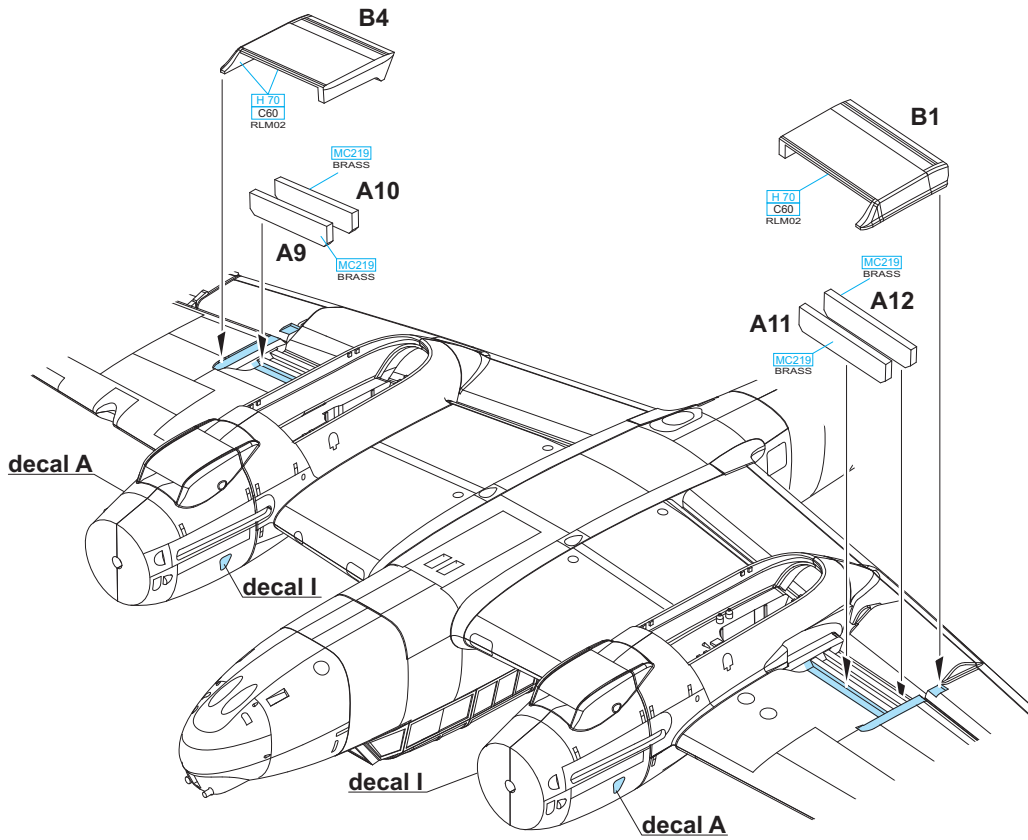


CROSS - SECTION

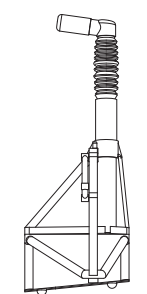




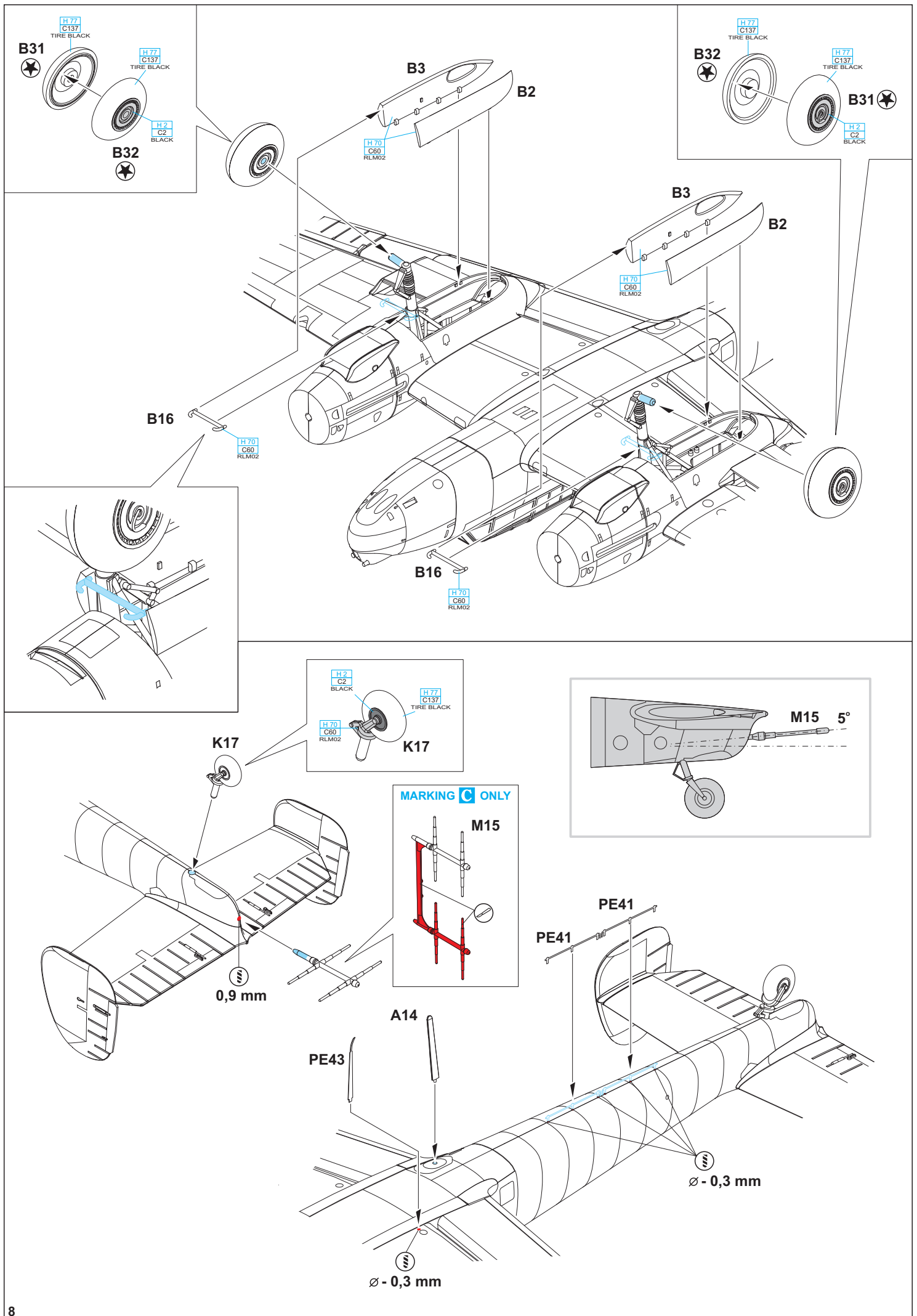


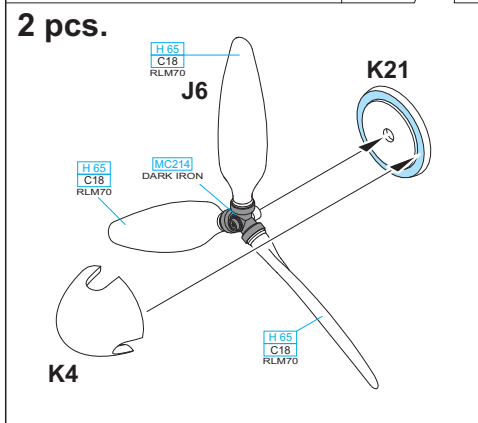
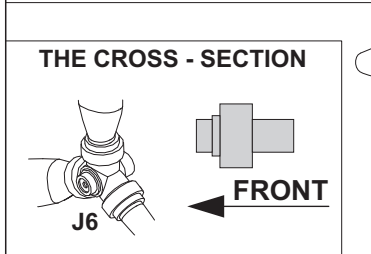
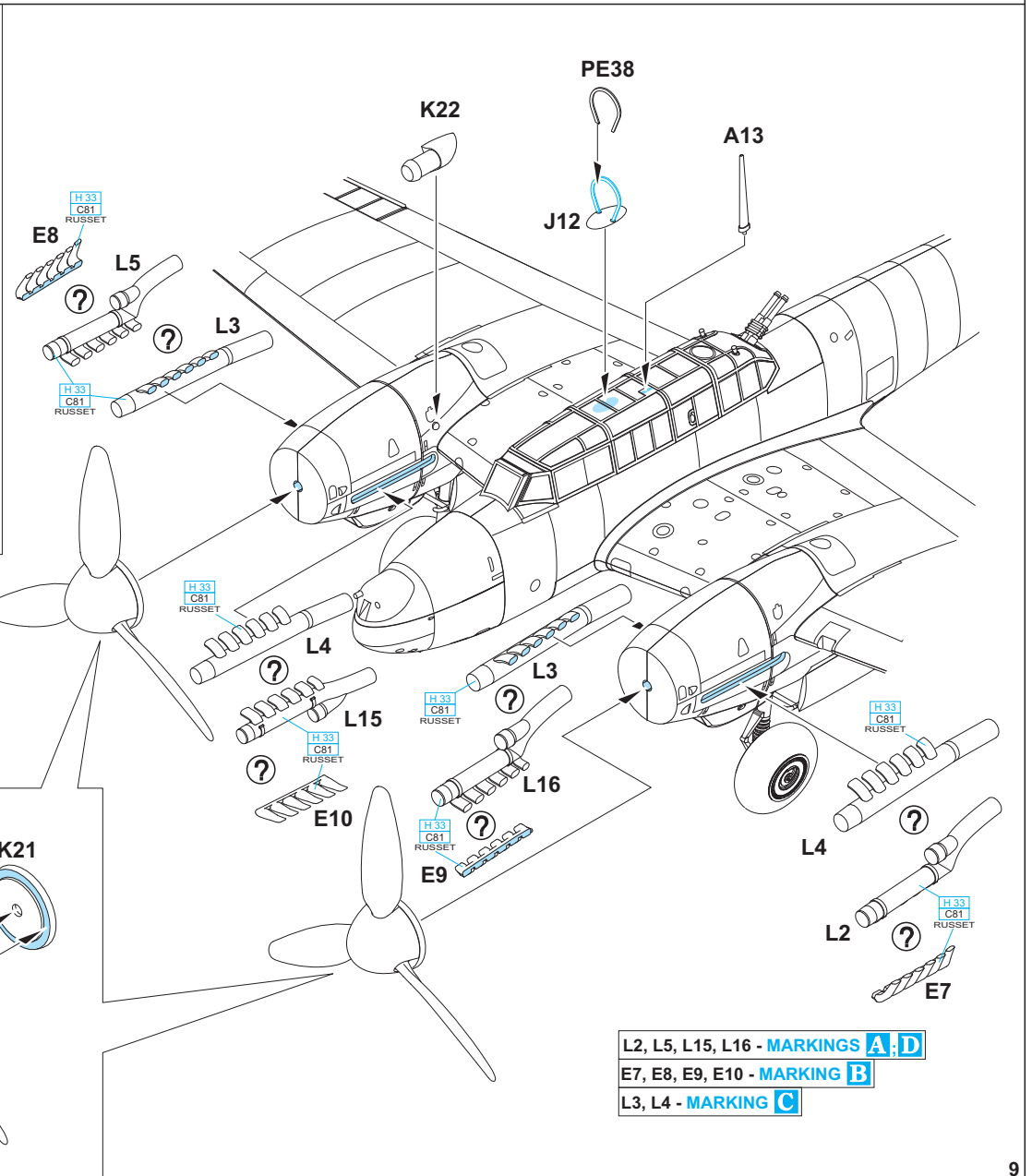
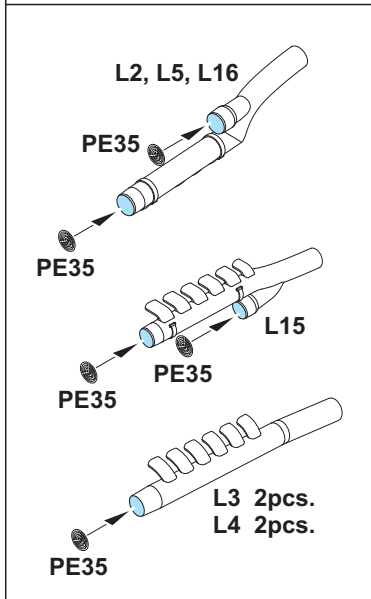
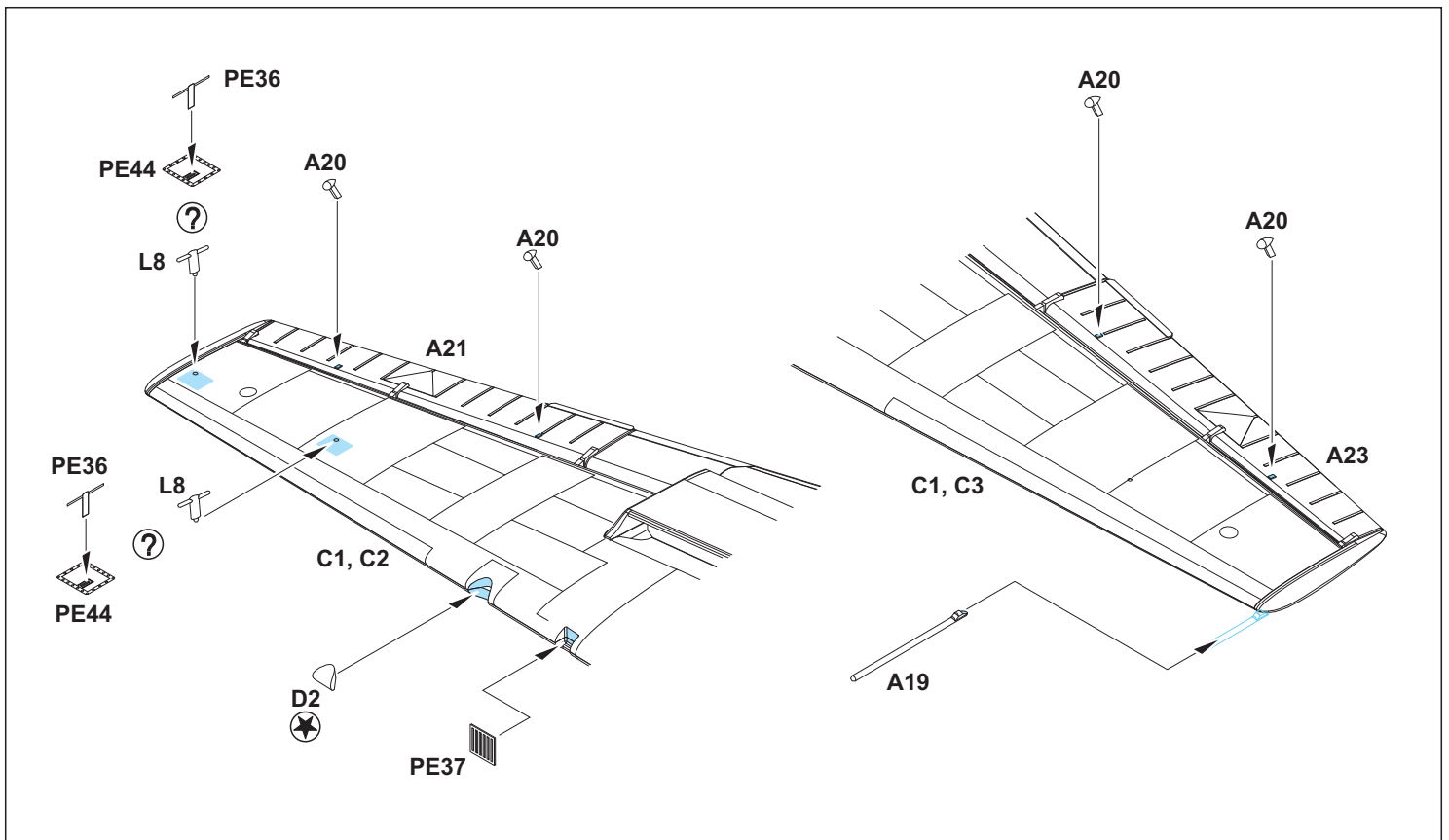


SIDE VIEW

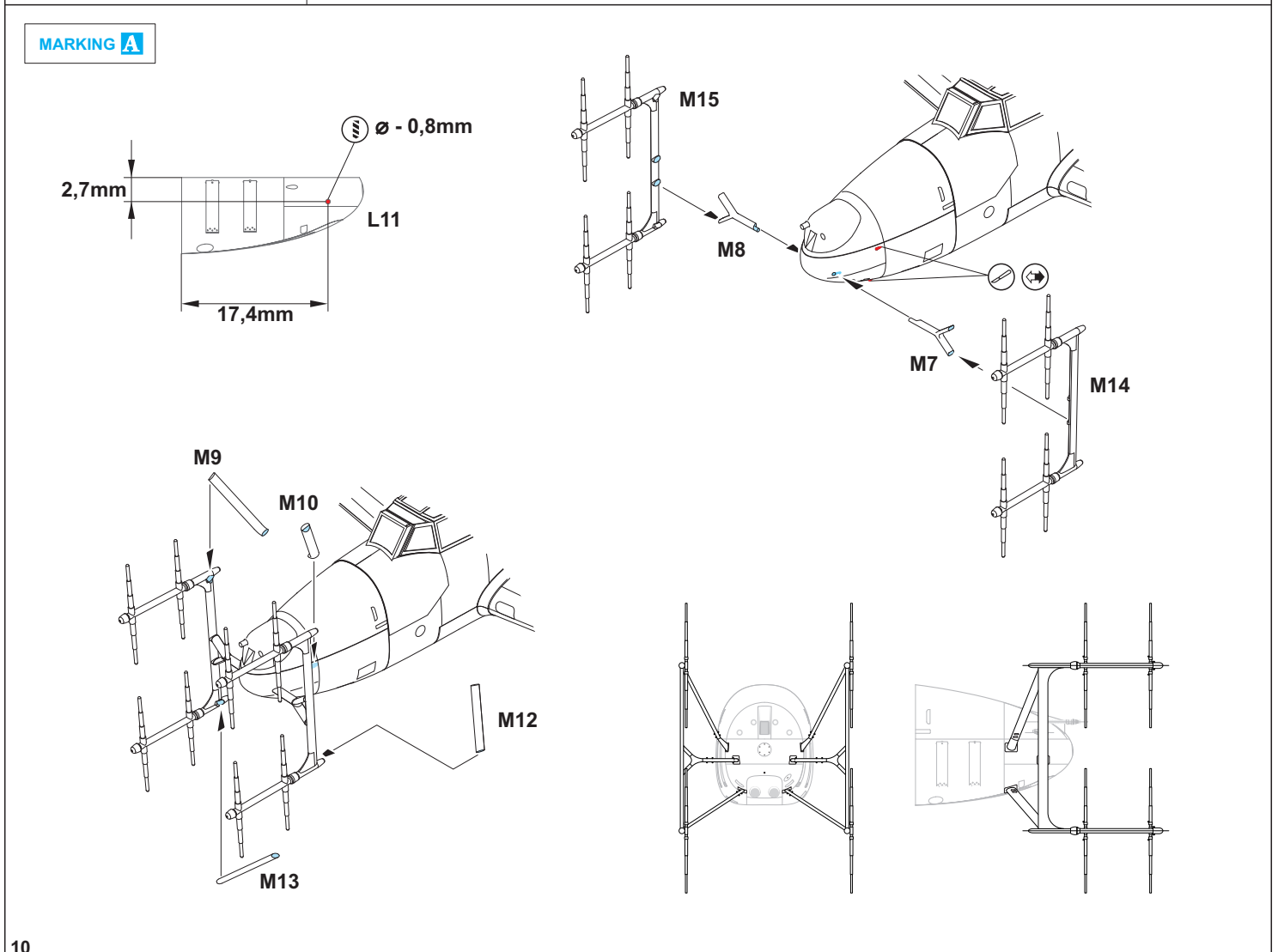
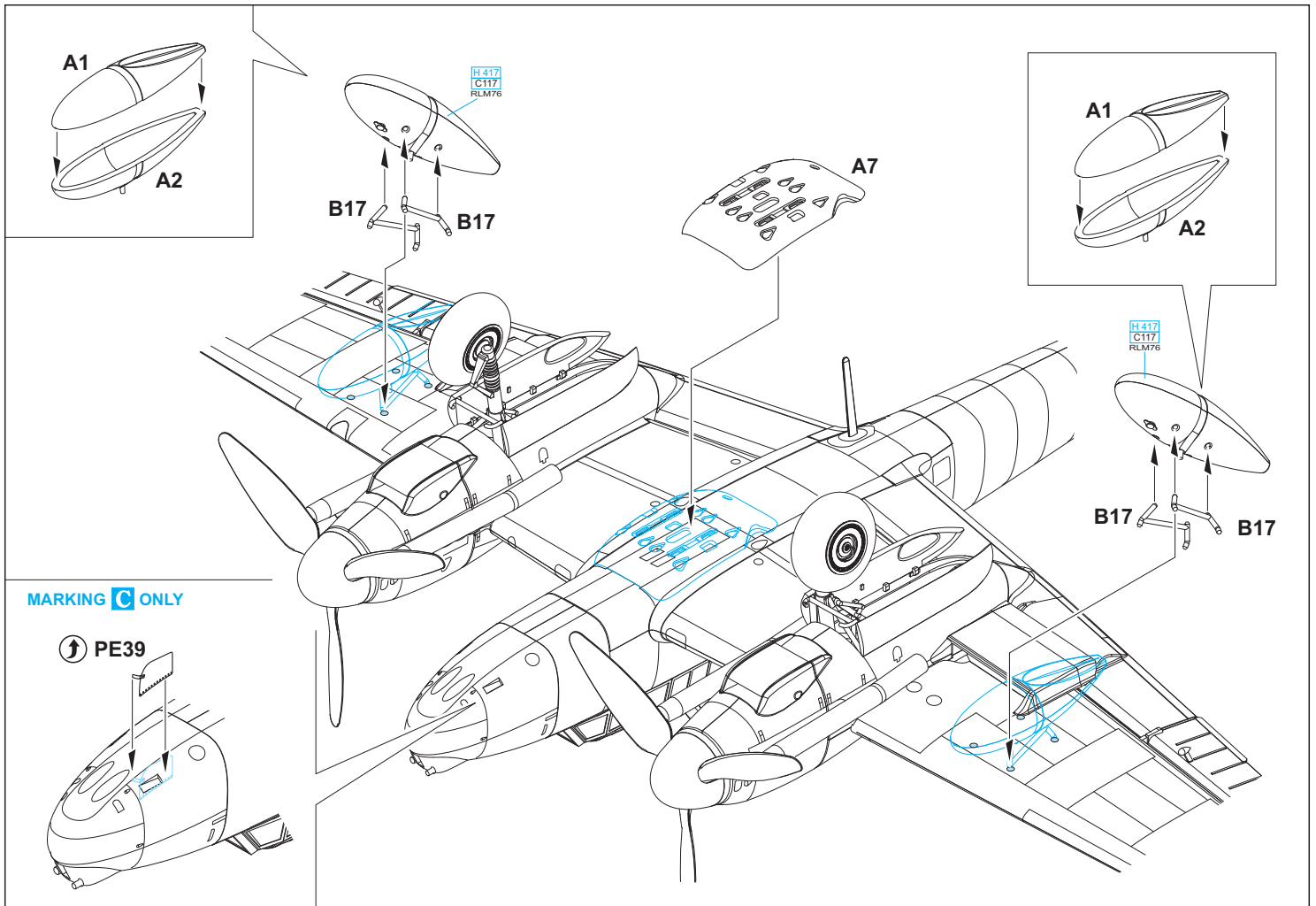


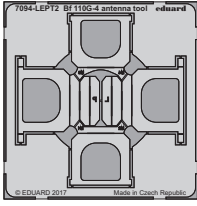
REAR VIEW



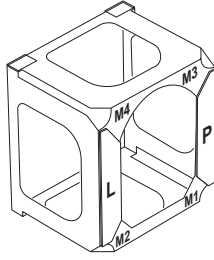


L2, L5, L15, L16 - MARKINGS **A, D**
 E7, E8, E9, E10 - MARKING **B**
 L3, L4 - MARKING **C**

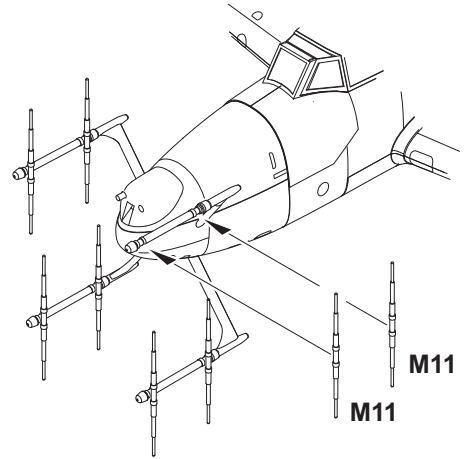
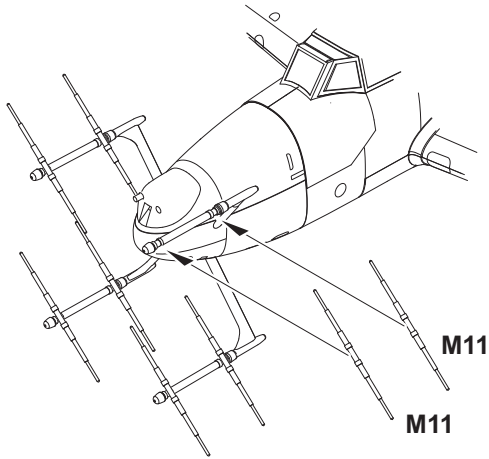
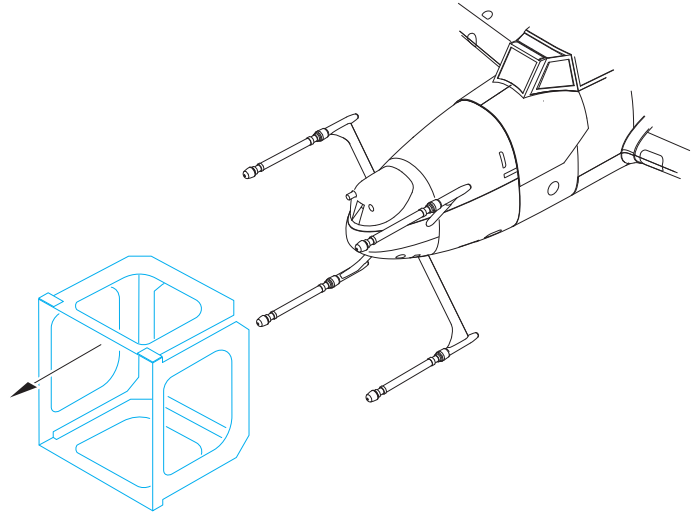
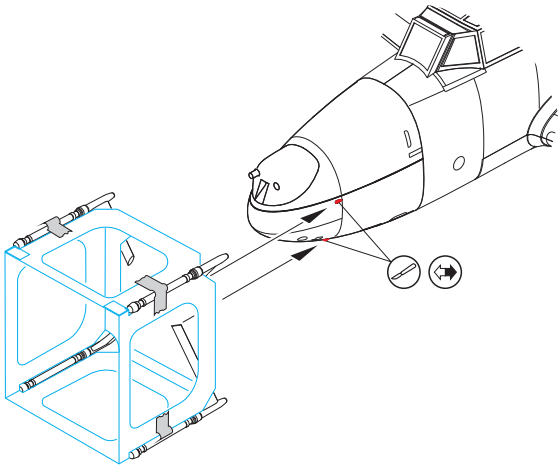
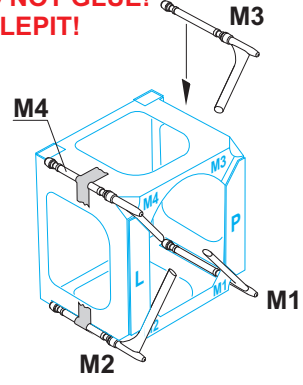




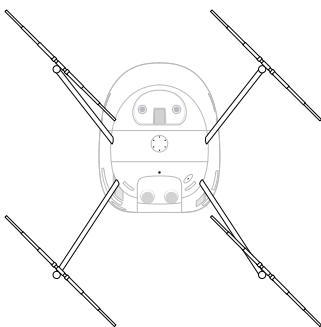
TEMPLATE



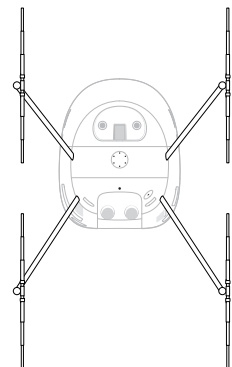
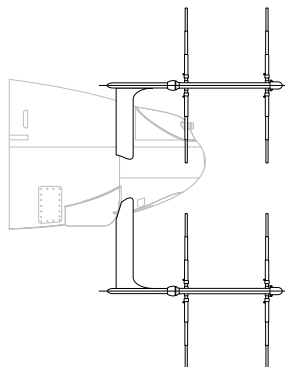
**DO NOT GLUE!
NELEPIT!**



MARKING **C**

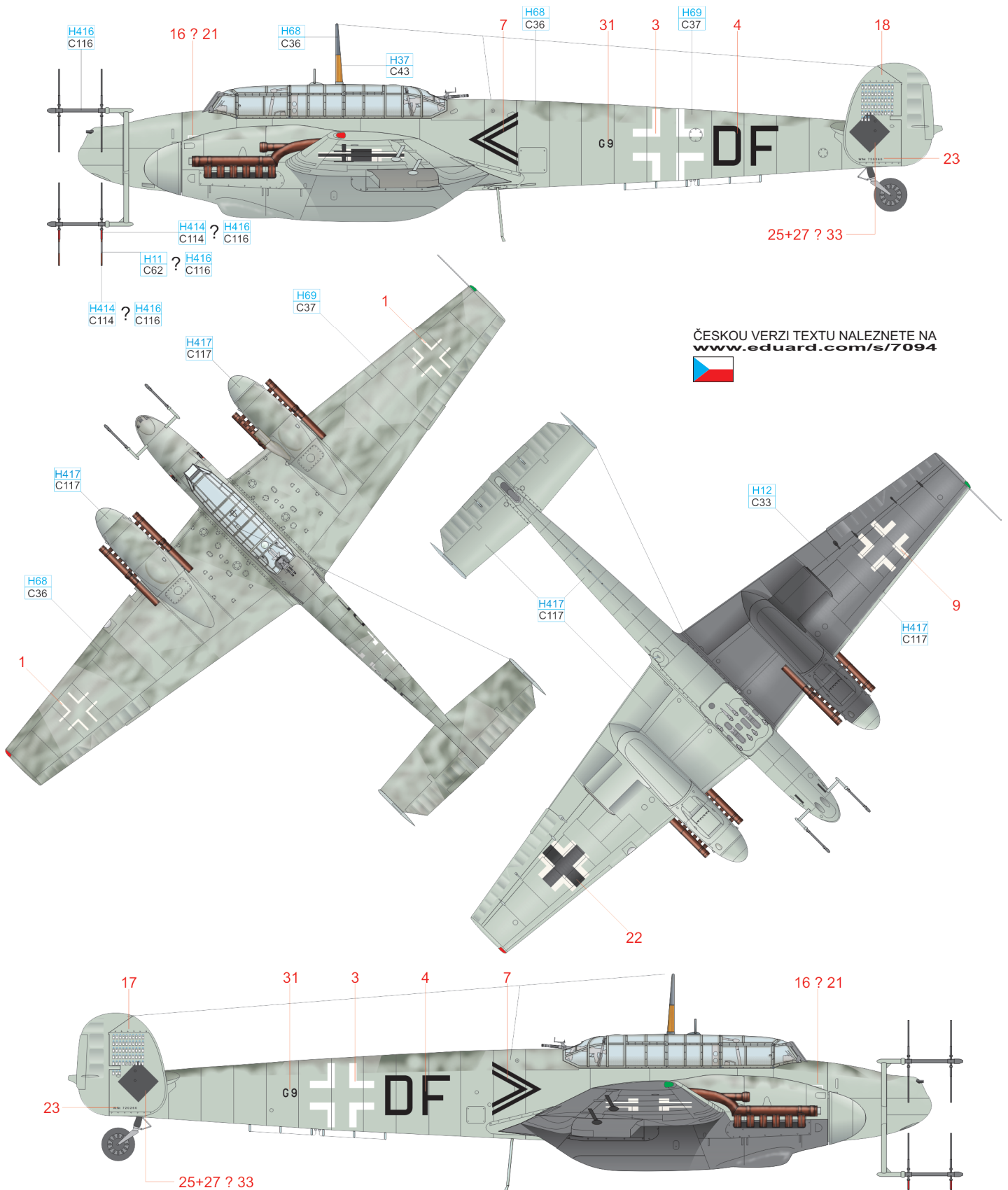


MARKING **D**



A W.Nr. 720260, Oblt. Heinz-Wolfgang Schnauffer, Stab IV./ NJG 1, St. Trond, Belgium, April 1944

Heinz Wolfgang Schnauffer, the most successful night fighter ace, served with night fighter units from the very beginning of his aviation career. He is credited with 121 victories, most of them being British four-engine bombers. He was wounded only once during WWII, and no member of his crew was ever wounded in action. Schnauffer was awarded the Knight's Cross with Oak leaves, Swords and Diamonds. Schnauffer survived the war and worked at his family winery. He died on June 15, 1950, two days after a fatal collision involving his car and a truck in Cestas, close to Bordeaux, France. Schnauffer was dubbed 'The Spook from St. Trond', and he flew this aircraft in the spring 1944 after taking command of IV. Gruppe, NJG 1. The aircraft wore the standard camouflage scheme of RLM 74/75/76 colors but the upper surfaces were oversprayed with RLM 76. The darker blotches of RLM 74 and RLM 75 were partially visible. The right wing undersurface was painted black.



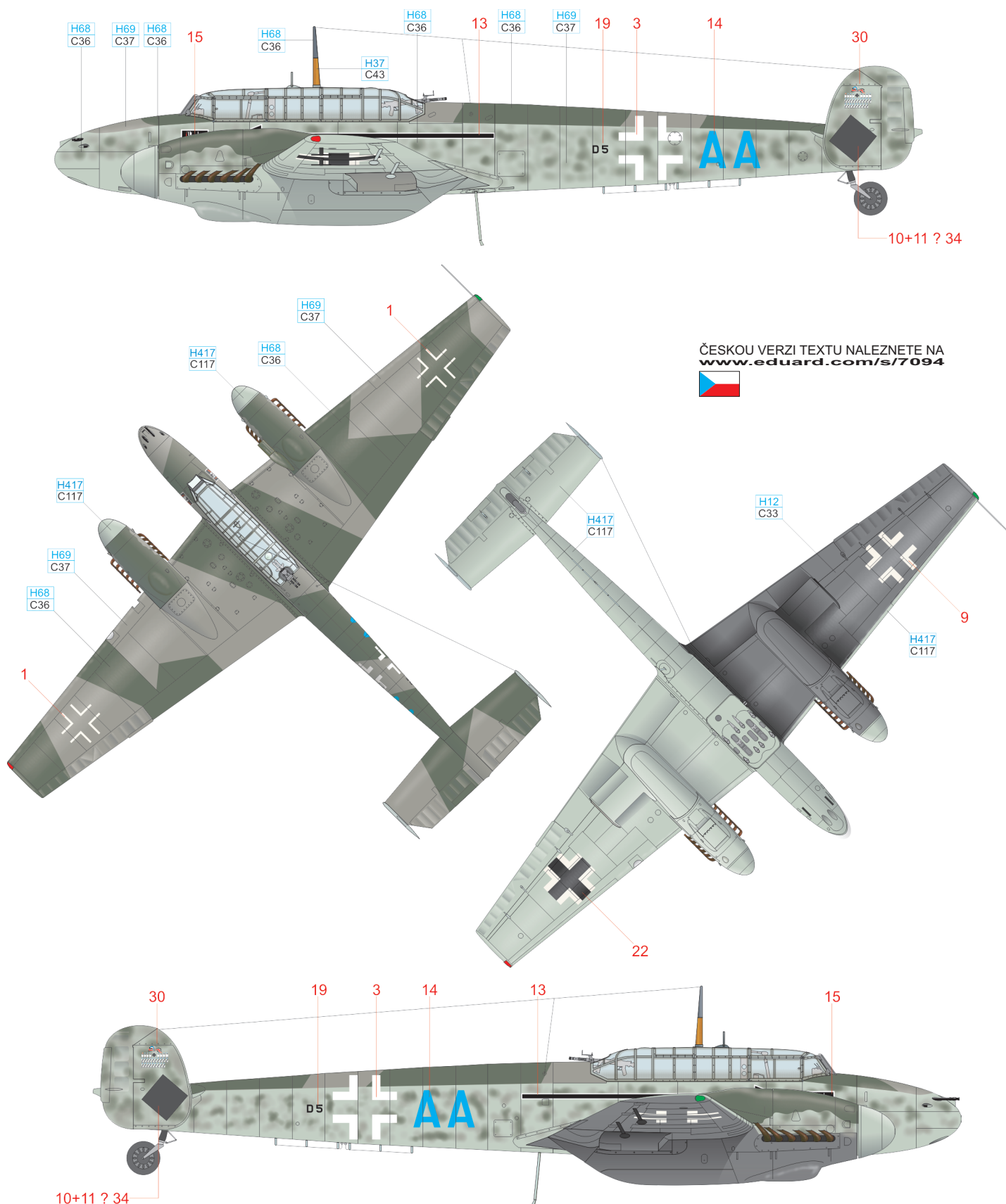
ČESKOU VERZI TEXTU NALEZNETE NA www.eduard.com/s/7094



WOOD	H37 C43	RLM 23	H414 C114	BLACK	H12 C33	WHITE	H11 C62
RLM 74	H68 C36	RLM 75	H69 C37	RLM 76	H417 C117	RLM 66	H416 C116

B Maj. Helmut Lent, the CO of Stab NJG 3, Stade, Germany, September 1944

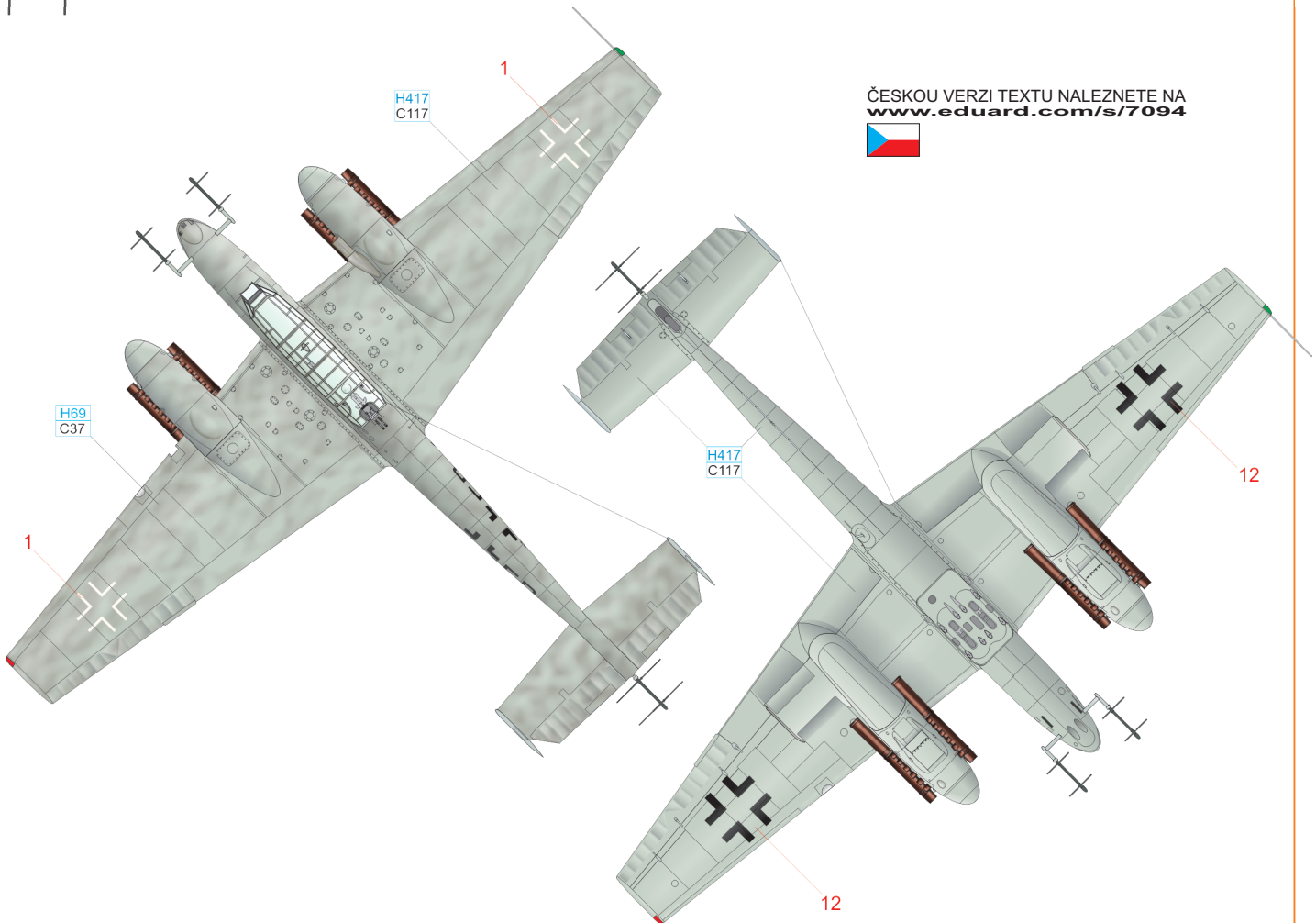
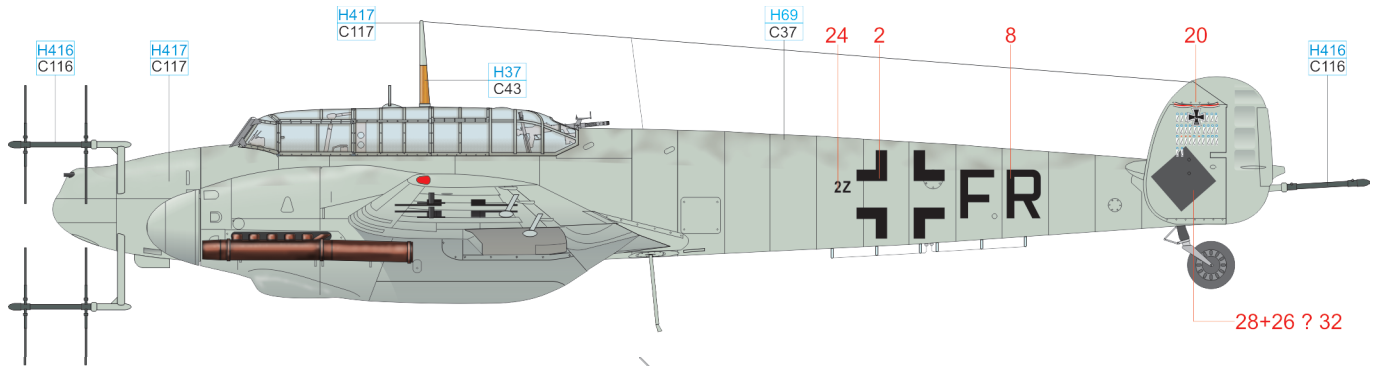
Helmut Lent joined the Luftwaffe in 1936. He enlisted as a fighter pilot and served with II./JG 141. On May 1, 1939, II./JG 141 was redesignated I./ZG 76 and equipped with Bf 110 fighters. In battles over Poland, Norway and France, Lent downed seven enemy aircraft, and 101 victories were added to his credit while serving with NJG 1, NJG 2 and NJG 3. On August 1, 1943, when he was 25 years old, Maj. Lent was appointed CO of the entire NJG 3. He led the Geschwader until October 5, 1944 when his Ju 88G-6 crashed during landing after port engine failure. The entire crew succumbed to their injuries within two days. Lent was awarded the Knight's Cross with Oak Leaves, Swords and Diamonds. Lent's Bf 110G-4 wore a standard day fighter camouflage scheme of RLM 74/75/76. The starboard wing undersurfaces were painted black. Note the Geschwader CO marking on the fuselage, quite an unusual practice for night fighter units.



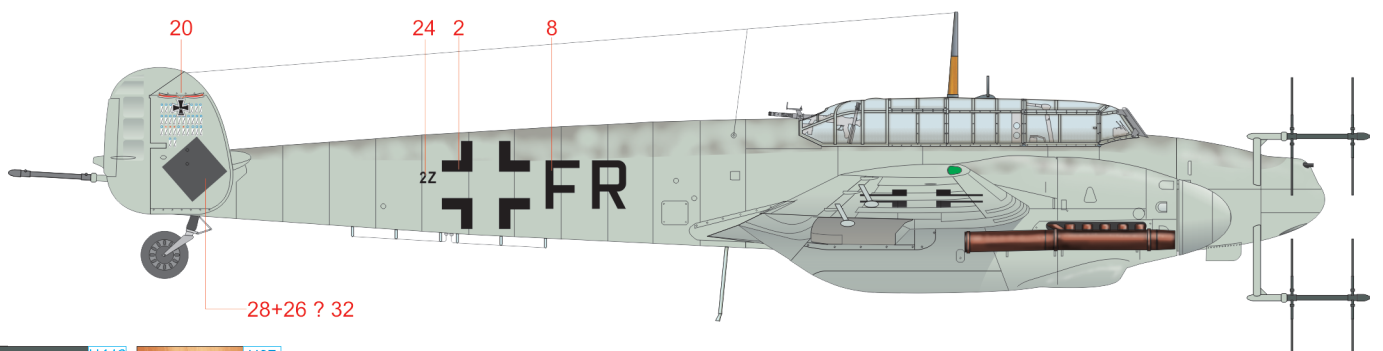
WOOD	H37 C43	BLACK	H12 C33
RLM 74	H68 C36	RLM 75	H69 C37
		RLM 76	H417 C117

C Hptm. Wilhelm Johnen, 7./NJG6, Neubiberg, Germany, 1945

Messerschmitt Bf110G-4, 7./NJG6 was among the aircraft found by the Allies in the spring of 1945 in Neubiberg. Despite wearing the codes of 7. Staffel, the aircraft in question was the personal mount of the CO of III./NJG 6, Hauptmann Wilhelm Johnen. This aircraft is not as well known as another one of the aircraft flown by Johnen, C9+EN, in which he was persuaded to conduct an emergency landing following engine damage in Switzerland, on the night of 27/28 April, 1944. The aircraft was his last, from a later series production block, and equipped with the FuG 220 SN-2d antenna system, with the dipoles angled at 45°, exhausts of the Eberspacher type, and equipped with the Schräge Musik cannon arrangement. The camouflage scheme consisted of RLM 76 on the bottom and side surfaces, and RLM 75 on upper surfaces, and equipped with the Schräge Musik cannon arrangement. The camouflage scheme consisted of RLM 76 on the bottom and side surfaces, and RLM 75 on upper surfaces. The upper surface colors were lightened with an irregular snake pattern of RLM 76, such that only traces of the original darker grey color were visible. The vertical fins carried a meticulously rendered Knight's Cross, with 32 bars denoting kills. In total, Wilhelm Johnen claimed 34 kills, the last of which was gained on the night of 15/16 March, 1945.



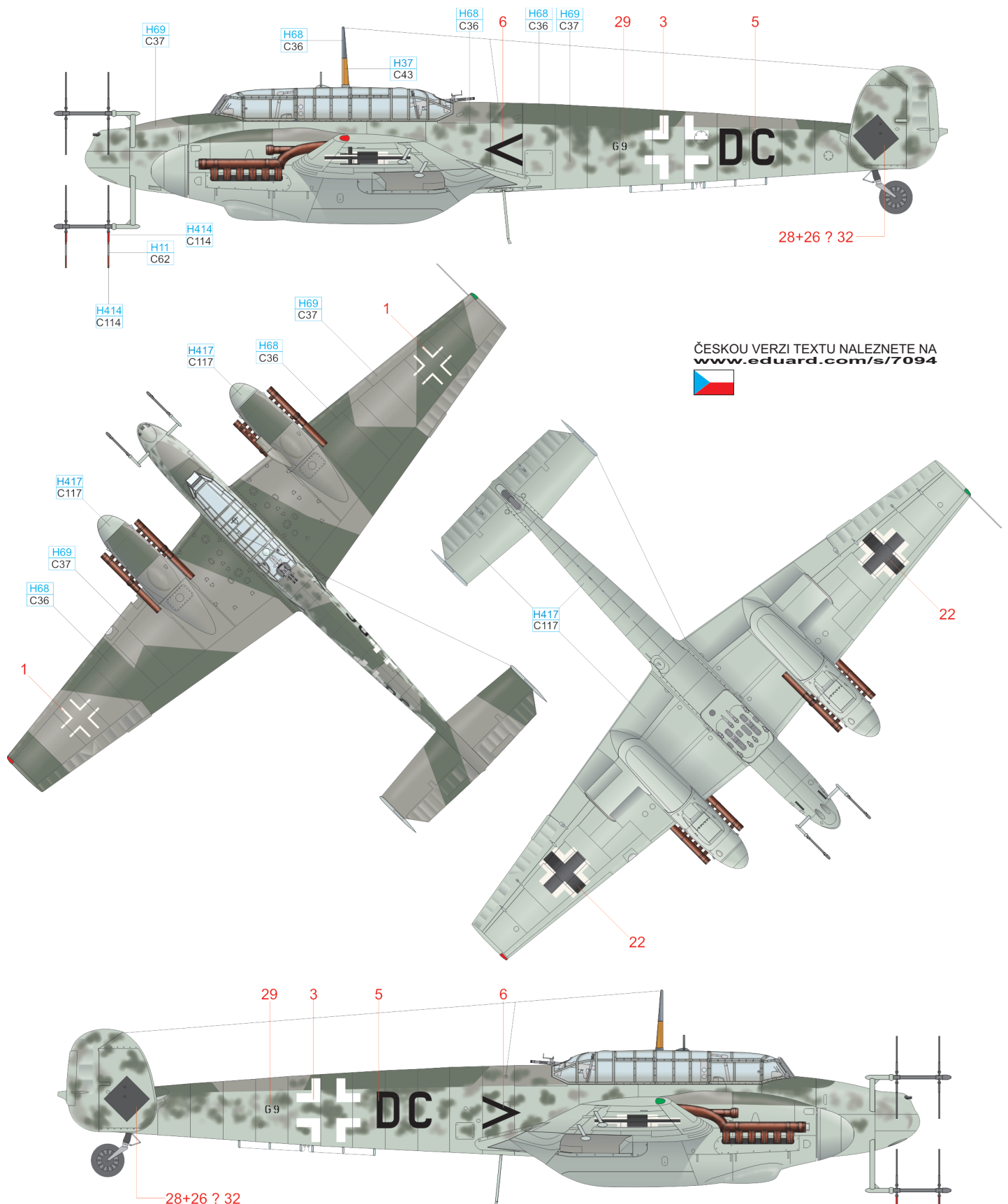
ČESKOU VERZI TEXTU NALEZNETE NA
www.eduard.com/s/7094



RLM 66	H416 C116	WOOD	H37 C43
RLM 75	H69 C37	RLM 76	H417 C117

D Stab II./NJG1, Bad Langensalza, Germany, 1945

This aircraft was equipped with FuG 220 SN-2c with vertical dipoles. The camouflage scheme consisted of irregular fields of RLM 74 and 75 on upper surfaces, and RLM 76 on lower, similar to the scheme carried by day fighters. The colors by this time already had less contrasting tones, but the scheme still consisted of three colors. Later, the use of RLM 74 on the upper surfaces was discontinued, and the aircraft began to acquire a simplified scheme of one color on the upper surfaces. G9+DC carried, besides the codes on the fuselage, also a single chevron, indicating rank within the unit. The pilot is recorded as Lt. Dr. Leo Baro.



WOOD	H37 C43	RLM 23	H414 C114	WHITE	H11 C62
RLM 74	H68 C36	RLM 75	H69 C37	RLM 76	H417 C117

