

I-16 Type 10

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1/48 Scale Plastic Model Kit

ProfiPACK
edition



item No. 8148

Nimble and highly maneuverable monoplane with retractable undercarriage was quite a revelation in the early 30's and Polikarpov's I-16 was the best fighter aircraft of the time.

One of the most popular and best known Soviet aircraft ever built was born in 1933. On the last day of that year, on December 31, the famous Soviet aviator Valery Chkalov conducted the maiden flight of the new CKB-12 prototype. It was very modern and revolutionary design at the time with cantilever monoplane concept with closed canopy and retractable undercarriage. Its compact dimensions were result of the design philosophy of Nikolay Polikarpov, who intended to put all the mass of the aircraft as close to the center of gravity as possible to achieve unbeatable maneuverability. The prototype was powered by Shvetsov M-22 engine (a license built Bristol Jupiter) rated at 358 kW (480 hp) instead of the anticipated Shvetsov M-25 engine offering 559 kW (750 hp), which was a Soviet license-built Wright R-1820 Cyclone. Although the prototype was a bit underpowered, Chkalov was amazed with its flight capabilities and especially its sensitivity of control and maneuverability. In the second prototype, imported Wright Cyclone engine was installed, and the aircraft performance improved.

A new breed of fighter aircraft

After necessary improvements, serial production was ordered at Zavod 39 in Moscow and at Zavod 21 in Gorki under the designation I-16. These aircraft were equipped with the M-22 engine because the new M-25 was not yet available, and no weapons were installed. Maximum speed of these I-16s was 362 km/h at sea level and 346 km/h at 3,000 m. Fifty aircraft were manufactured at Zavod 39, known as I-16 without any additional designation. Zavod 21 produced the first batch of I-16s, though with some difficulties, because three other aircraft types were on their production lines. For this reason, I-16s from this factory were marked as Type 4. In late summer 1934, the first aircraft reached VVS (Soviet Air Force) units. Reception of the new aircraft was reserved, to put it gently. The flight characteristics were very different from the biplanes then in service. The controls were overly sensitive for average pilots and the landing speed too high as the aircraft was not fitted with landing flaps. Instead, downward deflection of the ailerons was to act as flaps on landing, but it wasn't effective enough. Accident rates soared to unacceptable levels and some units were unable to achieve operational status. At this time, five NII VVS (Air Force Research Institute) pilots, Kokkinaki, Suprun, Preman, Evseev and Shevchenko, made a tour of air bases. With their red painted I-16s, they demonstrated the aircraft's performance.

In late Spring 1935, M-25 engine was finally available in sufficient quantities. The engine received a new Watter type cowling, giving the I-16 its characteristic shape. The flight characteristics were unchanged, but the performance significantly improved. The maximum speed rose to 390 km/h at sea level and 445 km/h at 3,000m. The aircraft was now armed with two 7,62 mm ShKAS machine guns mounted in the wings. By January 1936, the Type 5 replaced the Type 4 on the production lines at Zavod 21. Still a fresh newcomer, the I-16s Type 5 soon got the chance to show their stuff in the Spanish Civil War.

Until 1938, the Type 5 remained the main version, marginally updated to the Type 6, but it is not certain if this was an official

designation. Besides Spain, the I-16 Type 5 saw combat over China, where these aircraft were sent along with Soviet crews. The development then proceeded with versions Type 10, Type 17, Type 24 and finally Type 29. In total, some 9,450 Polikarpovs I-16 of all versions were produced, most of them, to the tune of 8,495, by Zavod 21 at Gorki.

In the Spanish skies

The first I-16s, the Types 5 and 6, appeared in Spanish skies in November 1936. Republican government bought 422 I-16s from the Soviet Union, but only about 293 aircraft were delivered to the Spanish hands due to the various issues. The I-16s experienced their baptism of fire on November 13, 1936, when twelve I-16s (Types 5 and 6) intercepted a Nationalist bombing raid on Madrid. The I-16s immediately began dominating the enemy He 51s, Ar 68s or Cr.32 biplanes. But the situation changed with arrival of the Messerschmitt Bf 109. Combat experience showed the I-16's weaknesses, as several aircraft were lost after structural failure of the wing, while the Mediterranean climate required more efficient oil radiators and dust shortened the life of the engines. The armament of only two 7.62 mm (0.30 in) machine guns (three ones in the Type 6) was insufficient in combat with modern bombers. This led to the arrival of the four-gun Type 10. The total number of I-16s delivered to Spain in 1936-1938 amounted to 276. By the end of the war on April 1, 1939, some 187 "Ratas", as the I-16 was nicknamed, were lost in Spain. After the Nationalist's victory, 22 captured "Ratas" were assigned to Grupo 28. Their number had increased to 52 later. The first 22 captured I-16s acted as Grupo 1W, then the designation of group changed to Grupo 28 de Caza (Fighter Group). The group was based at air station San-Juan on the island of Majorca. By the autumn of 1940 all the I-16s had been transferred to Sevilla where they joined Grupo 26. On August 15, 1953, Miguel Entrena flew the last serviceable I-16 for the last time and terminated the interesting career of the "Rata" in the Spanish sky

This kit: I-16 Type 10

By 1937, initial troubles were forgotten, and improved Type 10 was introduced, sporting several significant changes. First, the M-25V rated at 560 kW (750 hp) engine was installed. The wing was re-designed to accommodate landing flaps. Two 7,62 mm ShKAS machine guns were added on top of the engine, with two corresponding fairings on the engine cowling. The cockpit was improved, and the sliding canopy was completely redesigned, with an all-glass single piece windshield. The canopy of the cockpit was deleted, as pilots usually leaved it opened anyway due to the poor quality of plexiglass. Maximum speed reached 390 km/h at sea level and 438 km/h at 3,200 m. Production of Type 10 started at Gorki in March 1938. These aircraft were used both in Spain and China and fought against the Japanese over Khalkin-Gol and Khasan Lake. They saw action in the Winter War against Finland and also fought in Poland in the Autumn of 1939. In June 1941, when the USSR was attacked by Germany and the Great Patriotic War began, the I-16 Type 10 remained, along with other I-16 versions, the main aircraft of VVS fighter units.



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
VOLBA



BEND
OHNOUT



SAND
BROUSIT



OPEN HOLE
VYVRTAT OTVOR



SYMETRICAL ASSEMBLY
SYMETRICKÁ MONTÁŽ



REMOVE
ODŘÍZNOUT



REVERSE SIDE
OTOČIT



APPLY EDUARD MASK
AND PAINT
POUŽIT EDUARD MASK
NABARVIT

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

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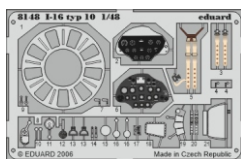
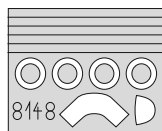


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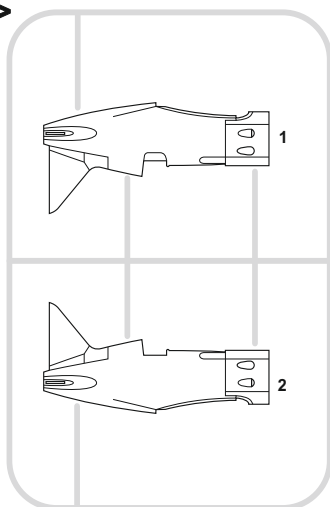


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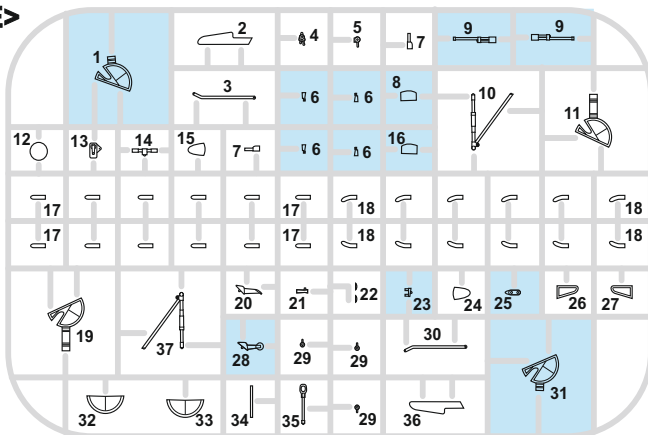
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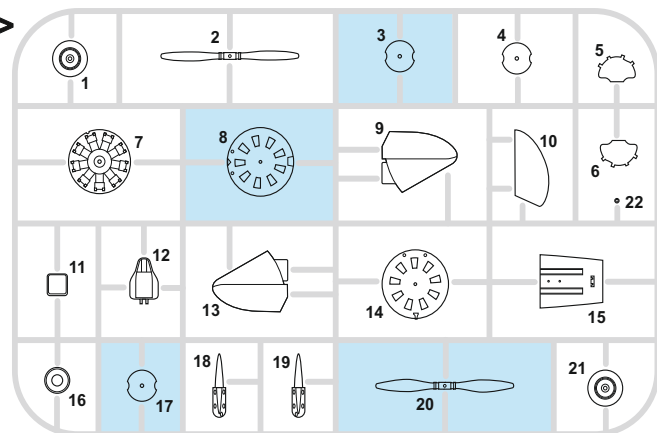
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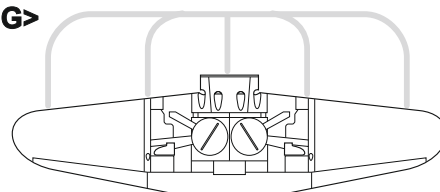
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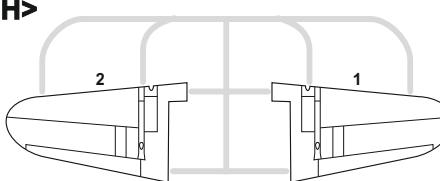
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COLOURS



BARVY



FARBEN



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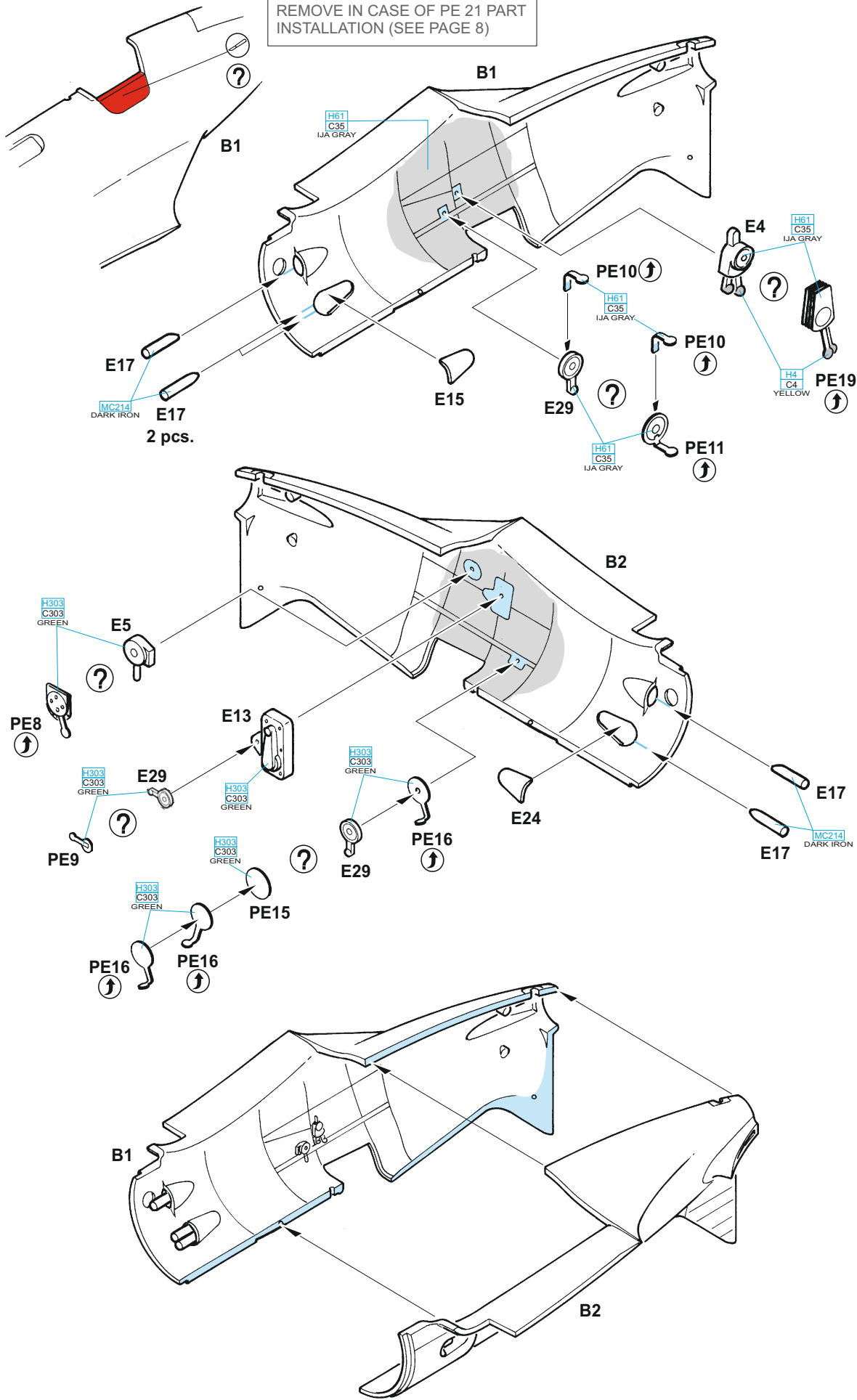


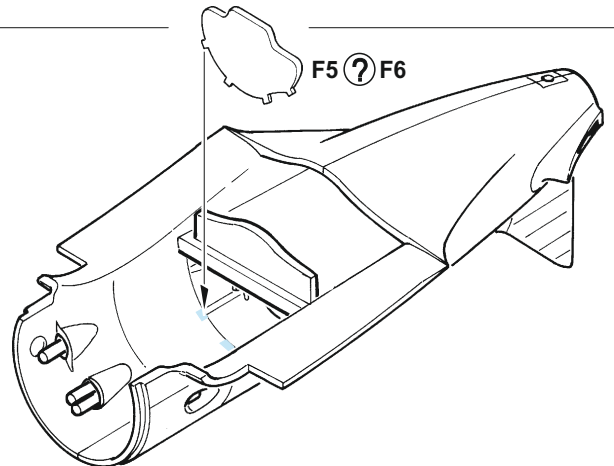
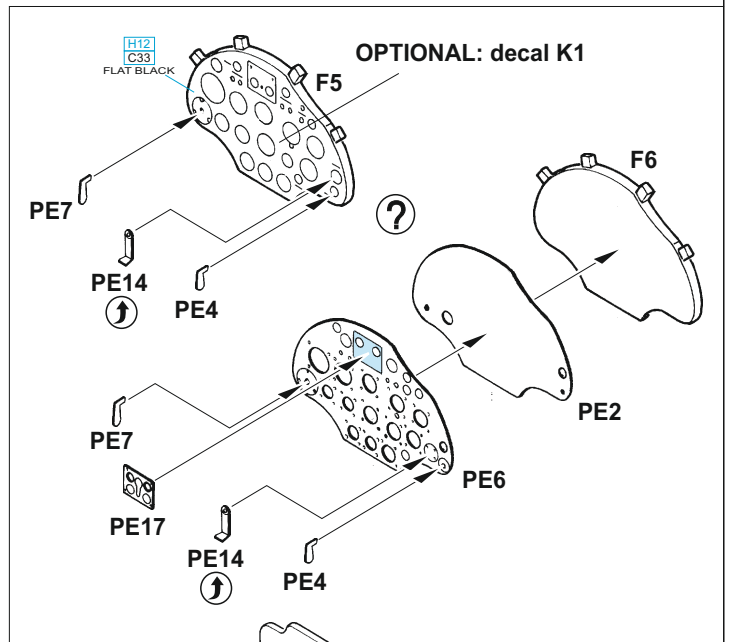
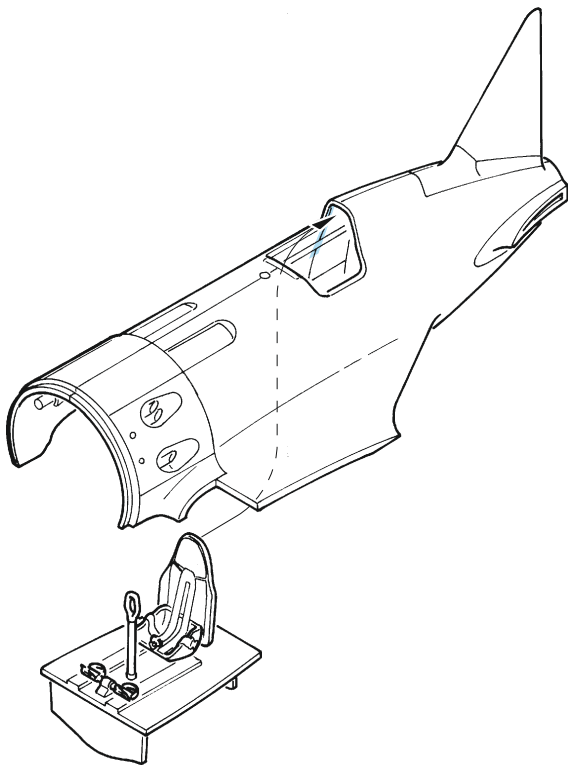
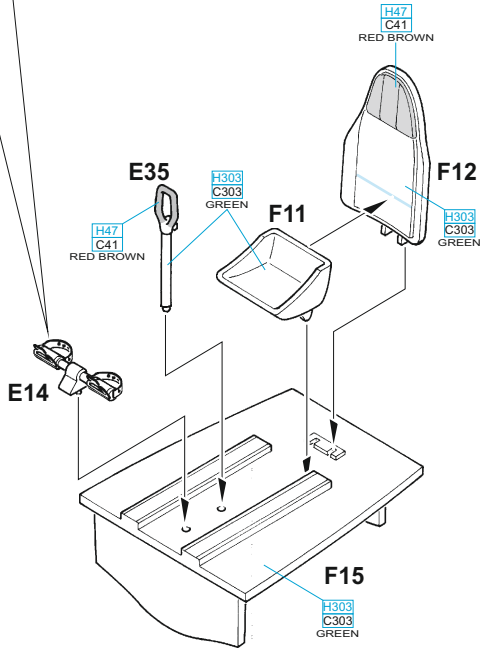
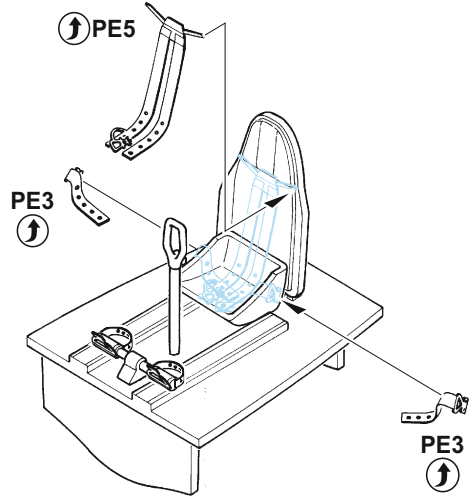
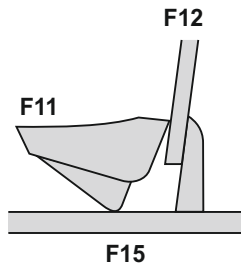
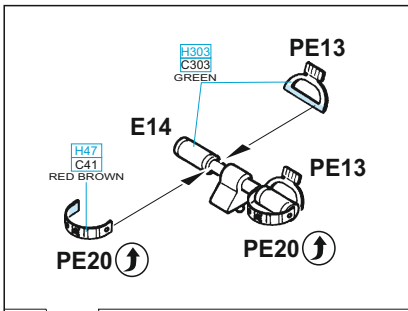
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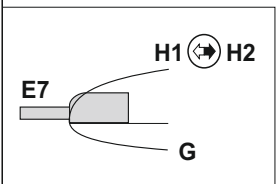
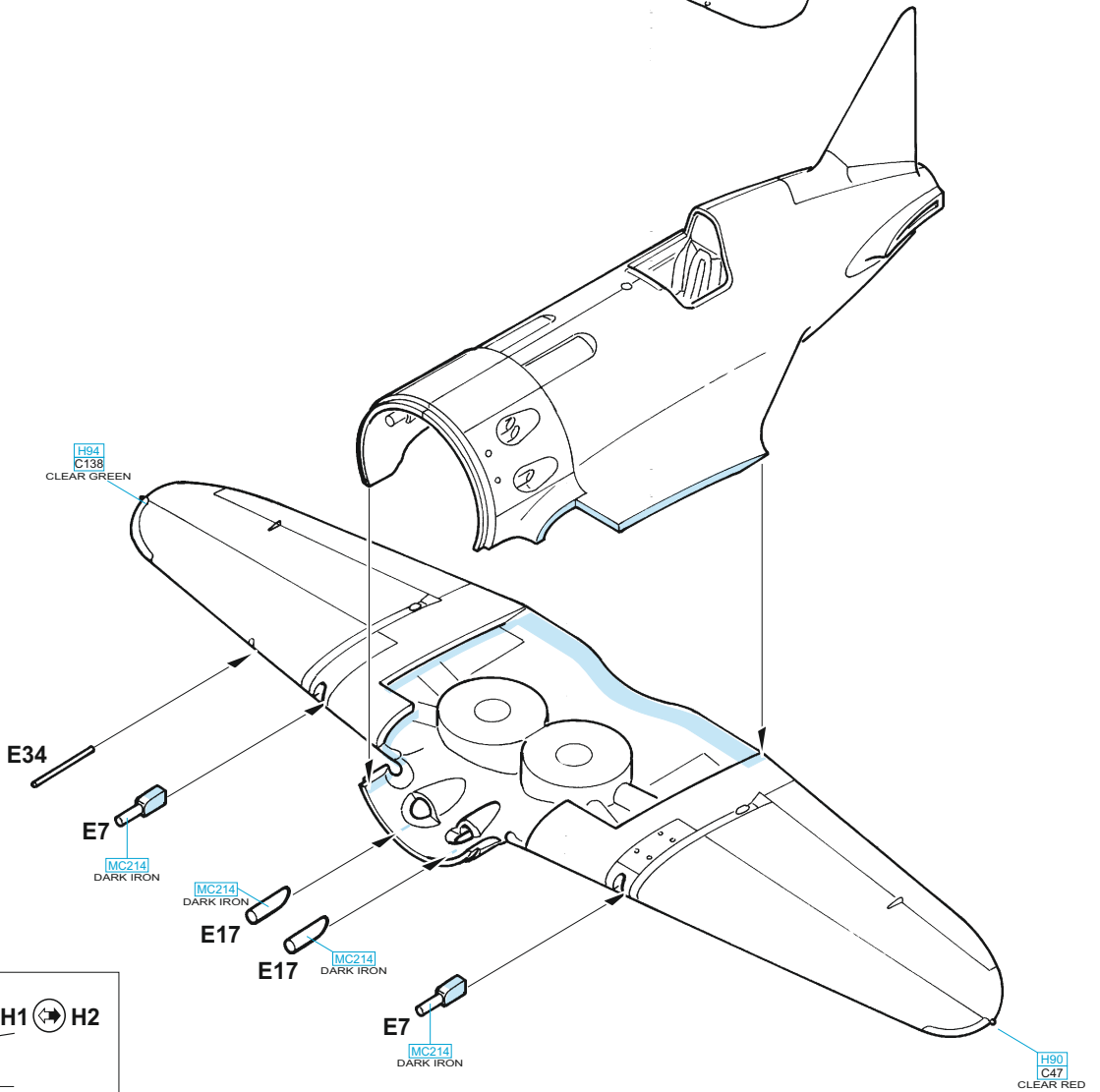
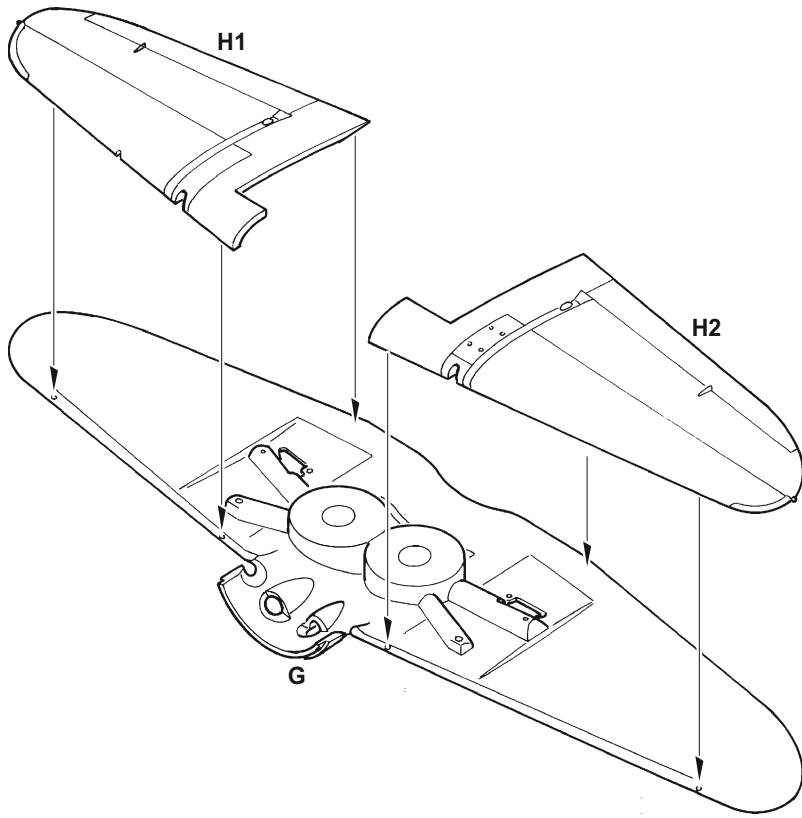
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AQUEOUS	Mr.COLOR	
H2	C2	BLACK
H3	C3	RED
H4	C4	YELLOW
H11	C62	FLAT WHITE
H12	C33	FLAT BLACK
H47	C41	RED BROWN
H57	C73	AIRCRAFT GRAY
H61	C35	IJA GRAY
H67	C115	RLM65 LIGHT BLUE
H77	C137	TIRE BLACK
H90	C47	CLEAR RED
H94	C138	CLEAR GREEN

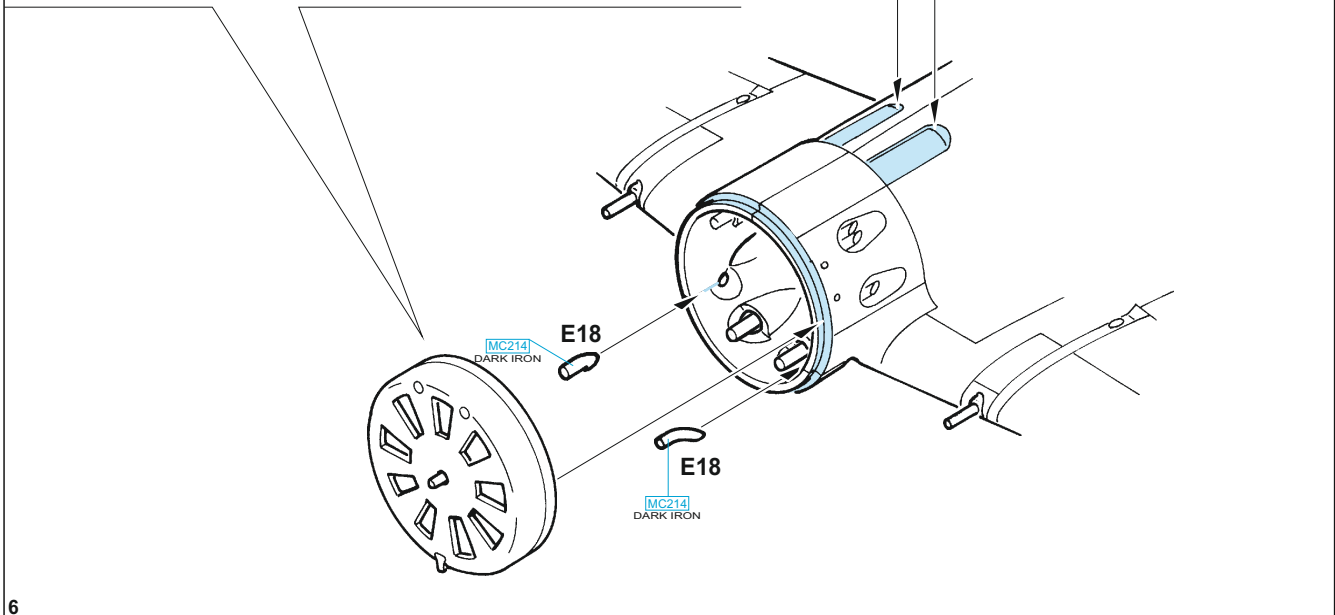
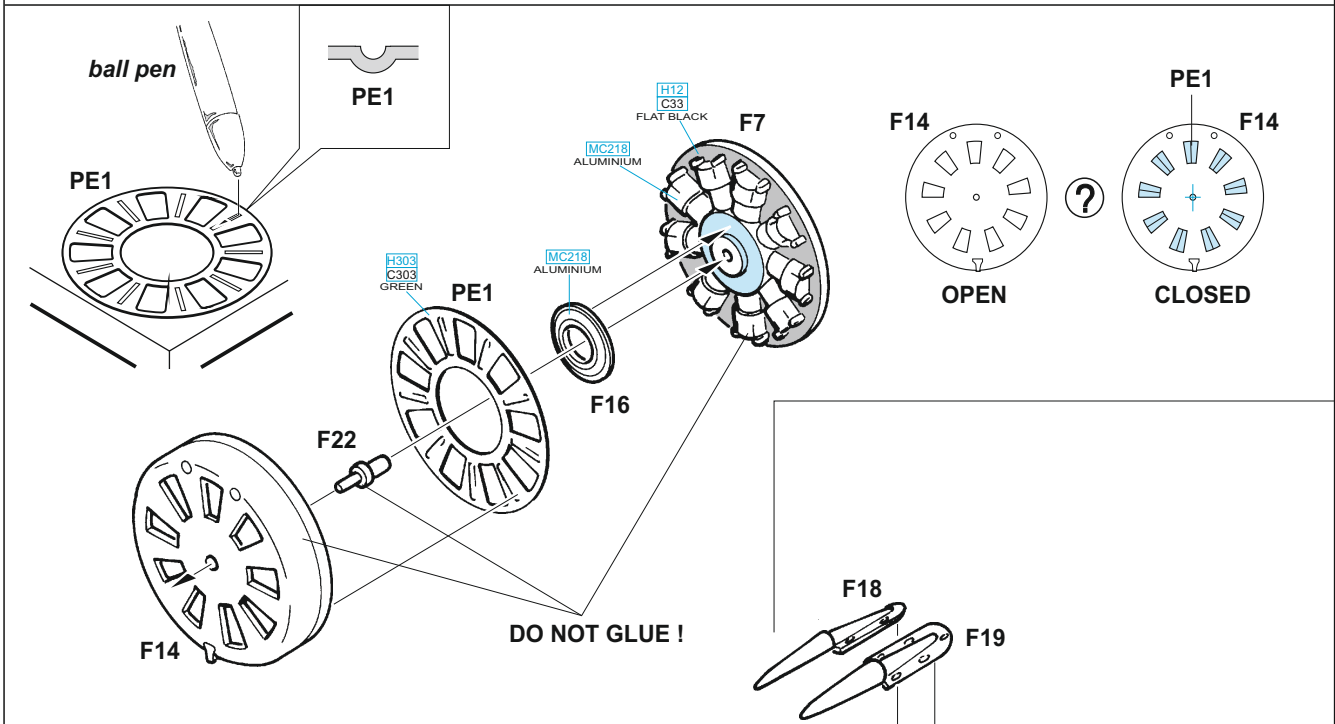
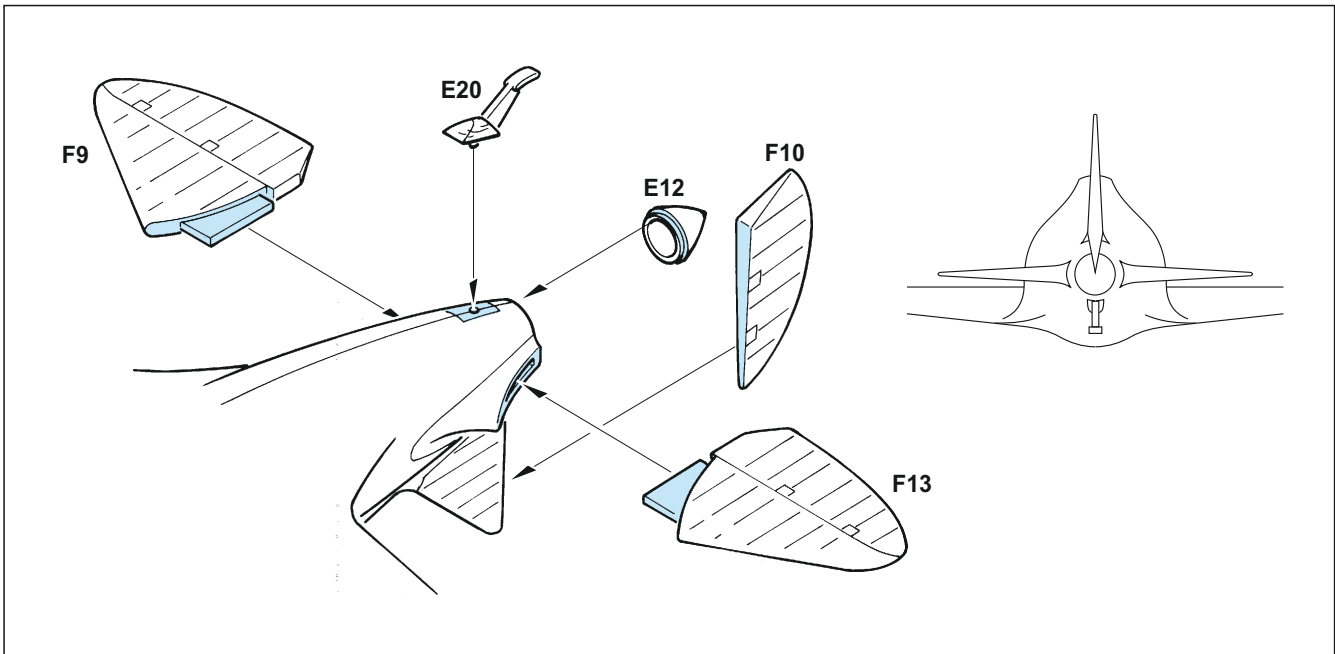
GSI Creos (GUNZE)		
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H302	C302	GREEN
H303	C303	GREEN
H317	C317	GRAY
H320	C320	DARK GREEN
	C74	AIR RUPERIORITY BLUE
	C136	RUSSIAN GREEN
Mr.METAL COLOR		
	MC214	DARK IRON
	MC218	ALUMINIUM
Mr.COLOR SUPER METALLIC		
	SM204	SUPER STAINLESS 2
	SM206	SUPER CHROME SILVER 2

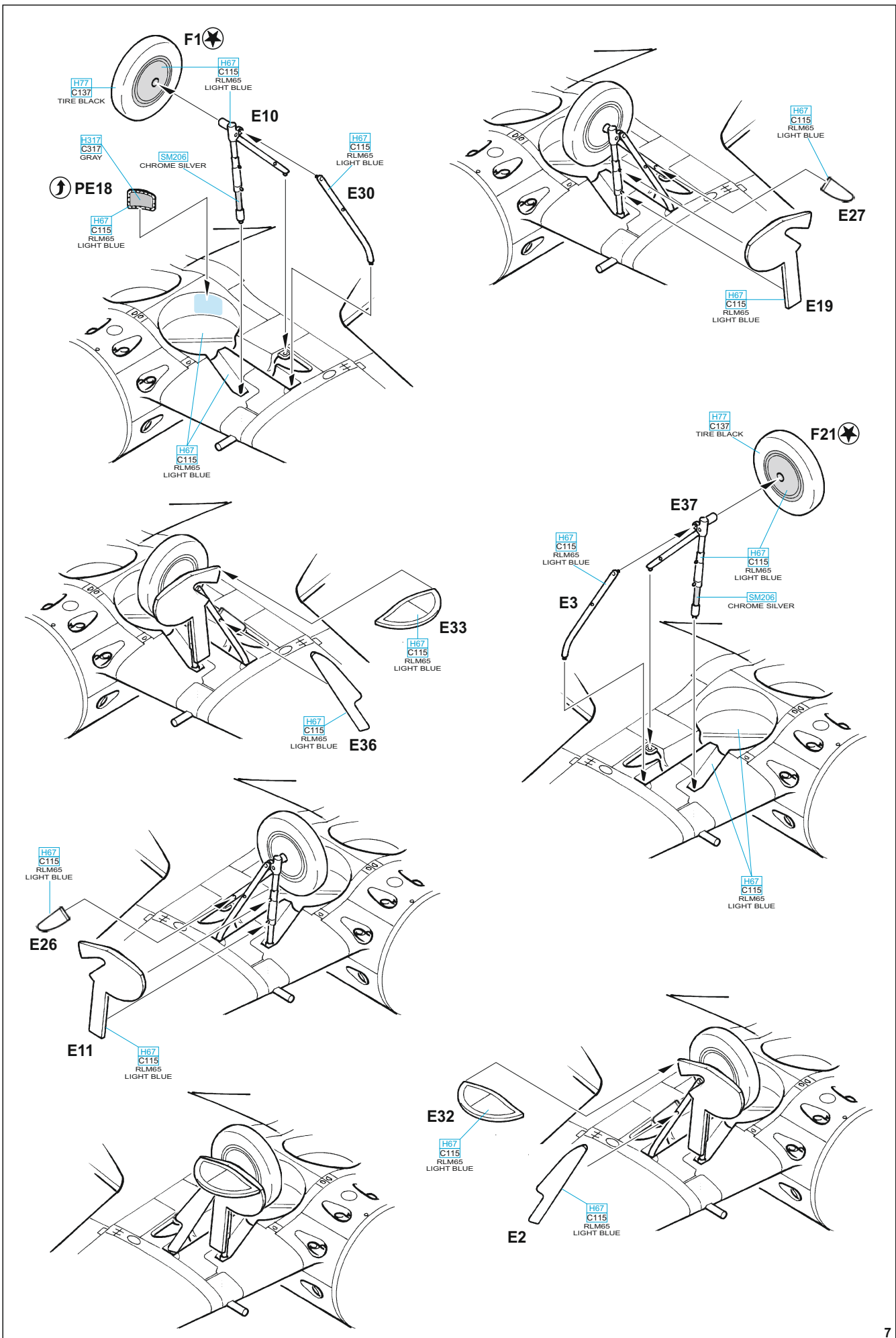
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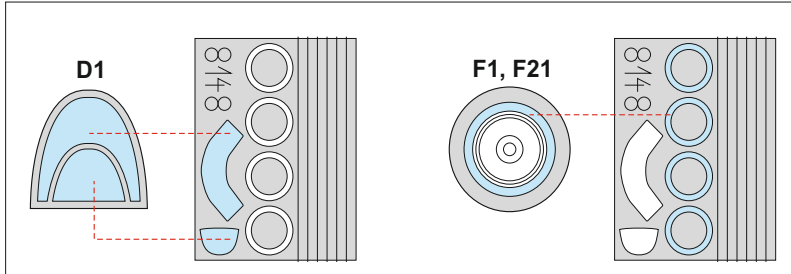
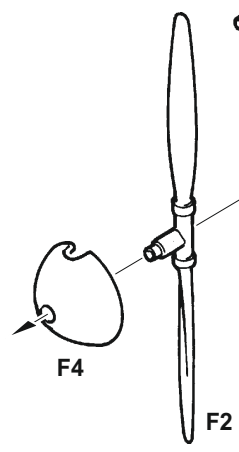
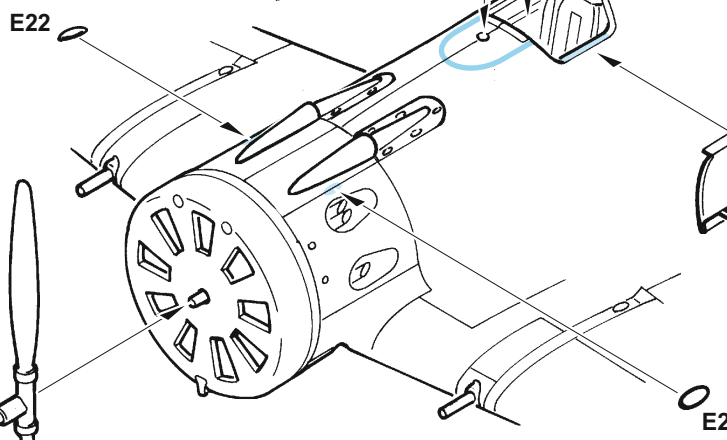
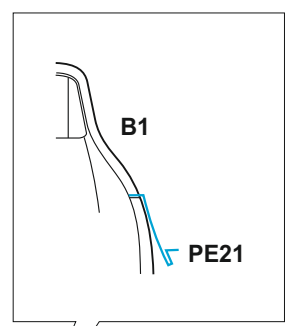
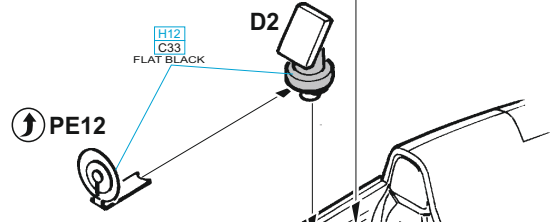
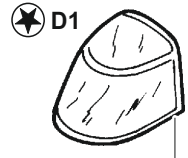
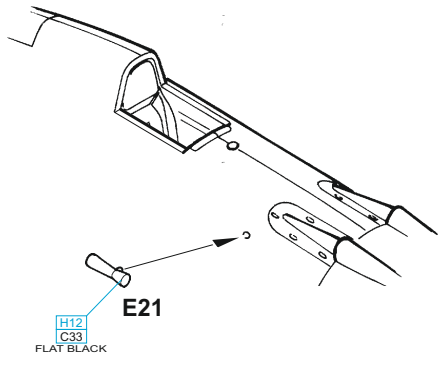
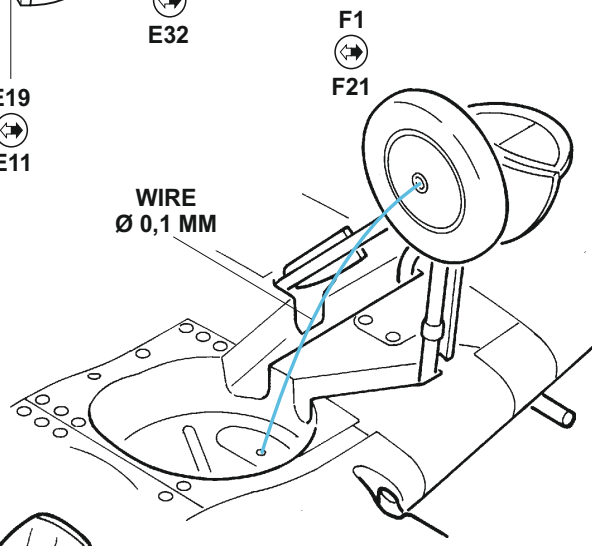
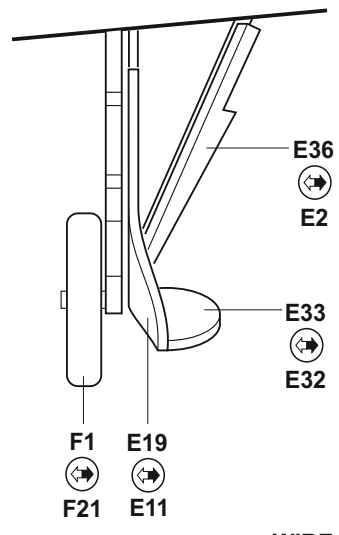
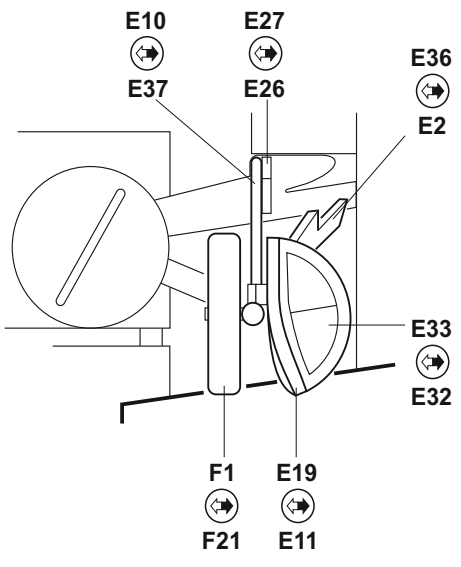






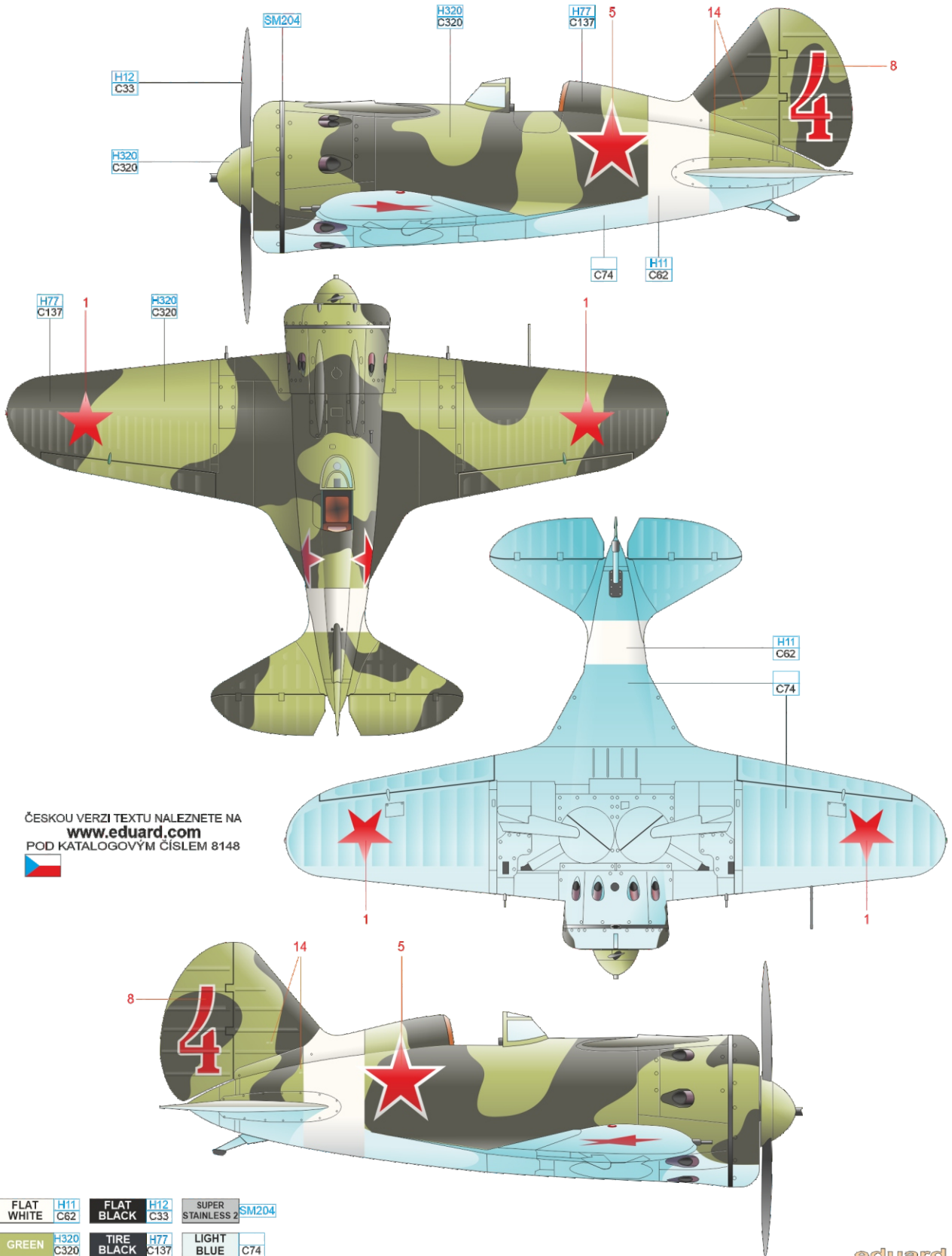






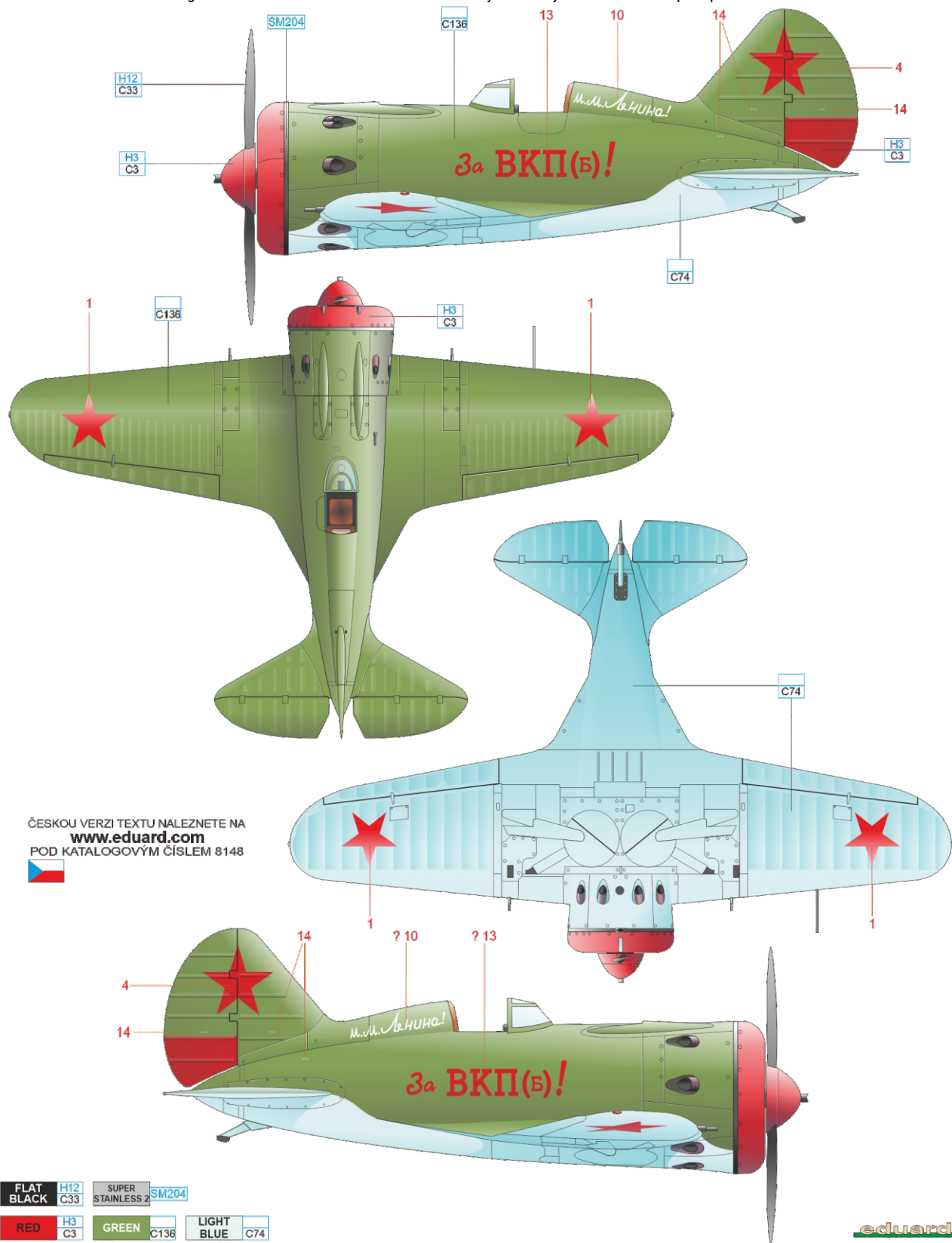
A Leningrad, the Soviet Union, 1941

Some I-16s survived in the war for a surprisingly long time. For example, this "red four", which is a somewhat mysterious aircraft. No details are known, but it is thought it served as a liaison aircraft or possibly as a training one for some unit in the northern sector of the front in 1944. The livery was typical of the first half of the Great Patriotic War. Thus, the upper surfaces were in All green and All black (AMT-6), the lower in All blue. The band in front of the tail surfaces is sometimes given as yellow, however, yellow stripes were not usually used by the Soviet air force for obvious reasons, and it is very likely that the stripe was in fact white.



B Genmjr. Ivan A. Lakeev, 46 IAP, Vasilkov, the Soviet Union, 1941

Ivan Alexeyevich Lakeev was a member of the first group of Soviet airmen to arrive in Spain in November 1936. With ten kills achieved with I-16 Type 5, he became one of the most successful fighters of the Spanish Civil War. Some sources even give 12 individual kills and another 16 in cooperation. Lakeev left Spain in August 1937 and was awarded the Gold Star of the Hero of the Soviet Union. He later fought over Khalkin-Gol, where he is credited with another kill. Some sources, however, list four kills, while others none. During the Great Patriotic War, he achieved three more individual kills and four in cooperation. Here too are discrepancies in the documents and only one kill is reported. Lakeev's I-16 Type 10 is a nice example of a personal aircraft of a high VVS officer. The typical Soviet camouflage of the early 1940s with the upper surfaces in All green and the lower in All blue was complemented by red accessories, a highly polished steel band and ideological slogans on the fuselage sides. It is uncertain whether these slogans were also on the other side of the fuselage – probably not. The aircraft was serving with 46 IAP at Vasilkov airfield. It was very carefully cared for and kept in perfect condition.

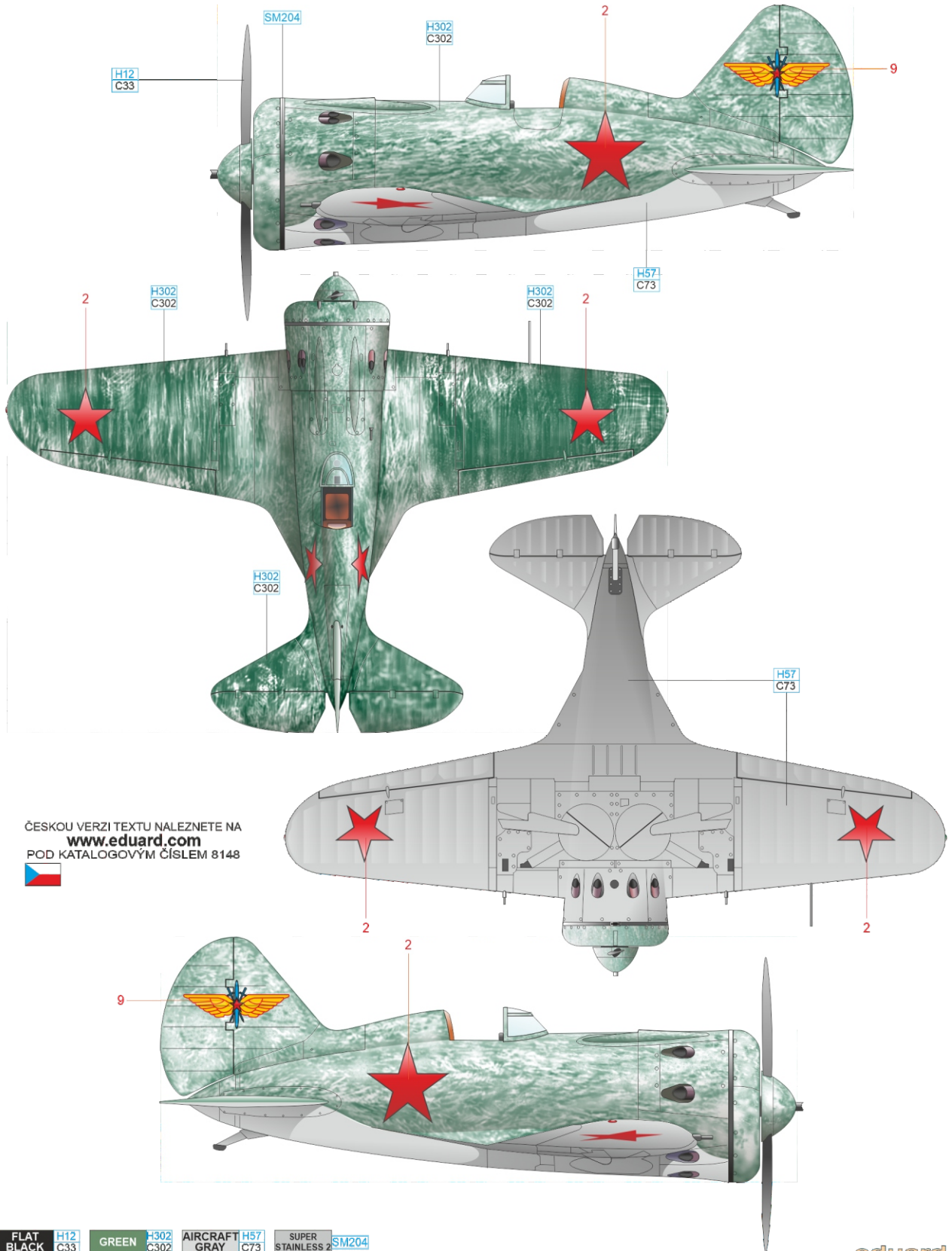


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FLAT BLACK	H12 C33	SUPER STAINLESS 2	SM204
RED	H3 C3	GREEN	C136
		LIGHT BLUE	C74

Among the many aircraft that fell into the hands of the advancing Germans during the summer of 1941 were a large number of I-16s of various versions. This one is probably the most famous one captured during Operation Barbarossa. The aircraft sported an unusual camouflage, which can best be interpreted as a brush-on green paint (probably AE-7) over the original light gray livery of AE-9. This camouflage was apparently hastily applied shortly after the surprise German attack on June 22, 1941. The VVS RKKA (Soviet military air force) emblem on the VOP was a fairly popular feature on Soviet aircraft in the early years of the Great Patriotic War.

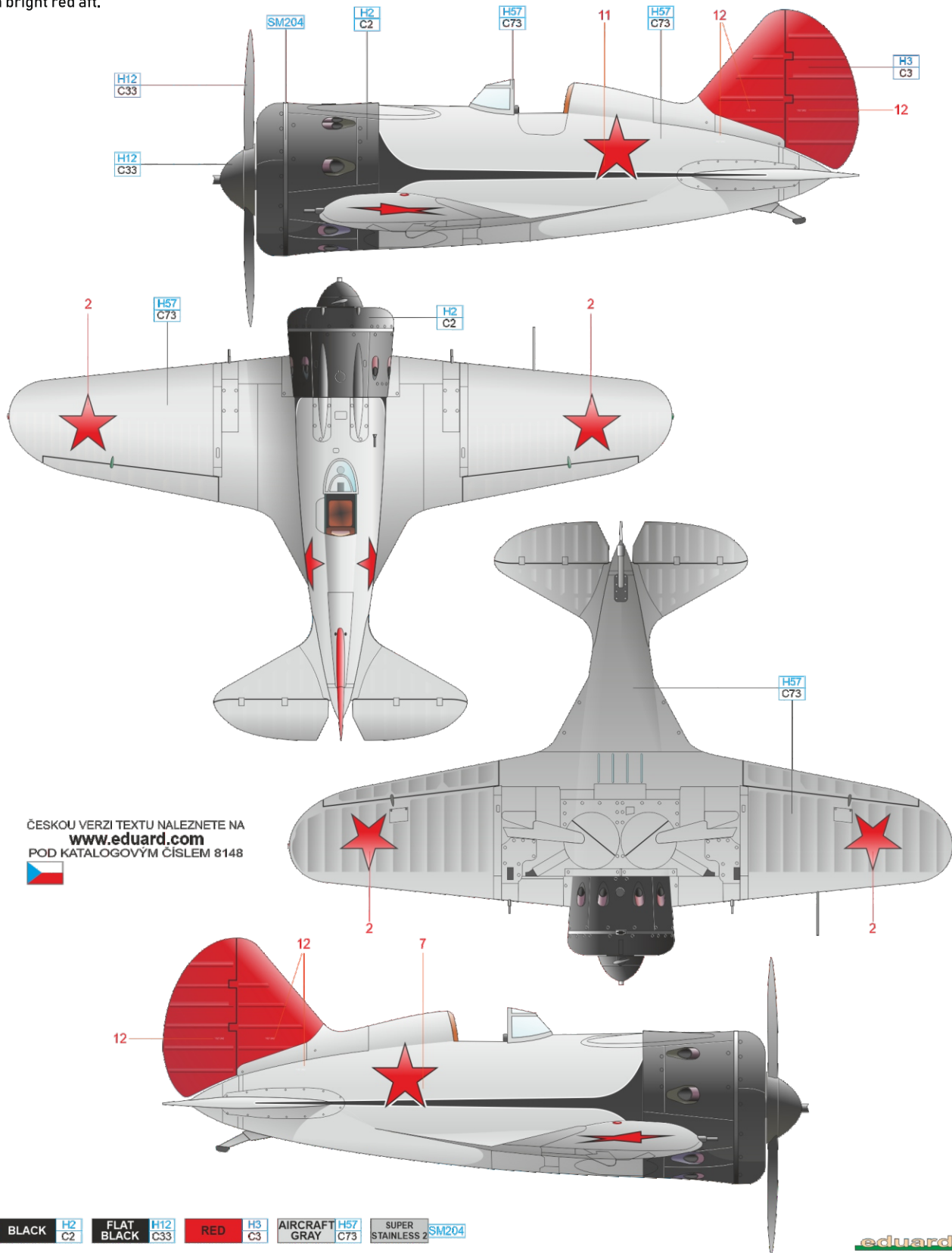


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D Maj. Mikhail N. Yakushin, the Red Five aerobatic group, the Soviet Union, 1939

The Red Five (Krasnaya Petyorka) was an aerobatic group of the Soviet military air force (VVS – Voenno vozdushnye sily), operating in 1939–1940. Today, three of its five members are known: the leader of the group, Major Mikhail Nesterovich Yakushin, Lieutenant Colonel V. Klevtsov and Captain Y. Shishkin. Mikhail Yakushin (alias Rodrigo Mateu) was the ace of the Spanish Civil War, where he shot down five enemy aircraft (three Cr.32s and two Ju 52s) and another one achieved as shared victory. Yakushin spent half a year in Spain (from May 31 to November 15, 1937) flying I-15s. In 1938 he was also serving in China. During the Great Patriotic War, he served in various command positions, ending the war with the rank of colonel as commander of the 215 Fighter Division. The aircraft of the Red Five were fully armed ones, ready for combat deployment. The paint scheme was pre-war gray AE-9 camouflage paint with a black AE-11 engine cowling and additional decorative elements – a white-lined black stripe on the fuselage (extending over and onto the leading edge of the elevator) and a bright red aft.



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BLACK H2 C2 FLAT BLACK H12 C33 RED H3 C3 AIRCRAFT GRAY H57 C73 SUPER STAINLESS 2 SM204