# Spitfire Mk.Vb OVERLORD

eduard

## 1/48 Scale Plastic Model Kit

item # 84200

WEEKEND edition

**The Supermarine Spitfire is so iconic, that virtually everyone can recognize it. The service of this elegant fighter spanned remarkable 13 years. It entered the service at the end of biplane era and remained on frontline duty until the jet age.**

By the early 30s the RAF was looking for replacement of its ageing Hawker Fury biplane fighters. The need of considerably faster aircraft was obvious, as the racing monoplane floatplanes of that time reached about twice the speed of the Fury. One of the most successful designers of the racing floatplanes was Reginald J. Mitchell. His Supermarine S.6B raised the world speed record to 407 mph (655 km/h) on 20 September 1931 and British Air Ministry, under influence of such achievement, issued the specification F.7/30 in October 1931. Although it called for modern pursuit airplane capable of at least 250 mph (400 km/h), seven out of eight entries were biplanes. The only monoplane proposal was Mitchel´s Supermarine 224, but the design with a gull wing, fixed undercarriage and Rolls-Royce Goshawk engine was a disappointment because of the lack of speed and poor rate of climb. After that the RAF chose the Gloster Gladiator biplane as the winner.

**Early work**

The fiasco with Type 224 did not prevent Mitchell from further work. He persuaded the Supermarine company to fund the work on completely new design Type 300 using brand new Rolls-Royce PV12 engine, later known as the Merlin. The Air Ministry expressed interest and issued specification F.37/34 on 28 December 1934 to fund the prototype armed with four wing mounted guns. But by early April 1935 Mitchell received the detail of specification F10/35, calling for eight guns. The change was made on cost of bomb provision removal and reduction of the capacity of the fuel tanks to sixty six gallons. The decision caused the so called "short legs" of the Spitfire, meaning a lack of range and endurance.

The Supermarine Type 300 made its maiden flight on 5 March 1936, initial contract to produce 310 Spitfires was signed in June 1936 and the first unit to receive the new fighter was No. 19 Squadron at Duxford in August 1938.

**Searching for performance**

The Spitfire's development was an ongoing process from very early stage of its service and incorporated many changes. From the early Mk.I and Mk.II the development reached the point, where a more substantial performance step was required.

After trials with the Merlin XX engine, installed in the prototype of the Spitfire Mk.III, Rolls-Royce offered a viable and quick solution in late 1940, the concurrently developed and simpler to manufacture Merlin RM5S engine (later designated Merlin 45). It featured one -stage single-speed compressor optimized for high altitudes. Its output at 17,700 ft (5,400 m) was 1,210 hp (902 kW). The Merlin 45 was the same size as the Merlin III powering the Mk.I Spitfires, and its design allowed the Merlin III to be upgraded to the Merlin 45 by changing the supercharger. This facilitated the simple installation into the freshly built Spitfire Mk.I and Mk.II airframes and the conversion of the already manufactured aircraft as well.

First two converted Spitfires were test-flown at Boscombe Down, where a maximum speed of 593 kph at 20,000 ft (6,100 m) was recorded during the flight tests. The trials also brought out the problems with the De Havilland constant-speed propeller as oil of its control system was freezing at high altitudes. There were troubles with Mk.II oil cooler as well as it was not efficient enough for the more powerful engine. Even though this was considered an interim solution, as the Spitfire Mk.III production was still being planned, the order for new Spitfires was placed, or, better said, the program for converting Spitfires Mk.I and Mk.II into Spitfires Mk.V was ordered. Finally, 6464 Spitfires Mk.V of all variants were manufactured.

**This kit: Spitfire Mk.Vb early**

In the middle of March 1941, Spitfire X4922 built in Eastleigh at Spitfire Mk.I assembly line, arrived at Boscombe Down. It already featured Merlin 45 and was test-flown on February 7. During the trials it was fully armed and equipped and reached the maximum speed of 374,7 mph (603 kph). In Eastleigh, in the second half of February, a total of 23 Spitfire Mk.I airframes, mostly version Mk.Ib, received Merlin 45, thus becoming the first Spitfires Mk.Vb armed with four .303 machine guns and two 20mm cannons. This mark was the most produced, while there were only 94 of eight wing .303 machine guns Spitfires Mk.Ia produced. The Mk.Vc had usually the same armament as the Mk.Vb although with possibility to be armed with four 20mm cannons.

Besides the engine, the equipment of these aircraft corresponded to Spitfire Mk.I standard including the smaller oil cooler with U-shaped intake which was the cause of higher oil temperature of the first Spitfires Mk.V and posed a certain risk of engine overheating.

During the two and half years of Spitfire Mk.V production, the airframe was gradually developed. Already at the beginning of manufacture they featured thicker armor in comparison to Mk.I and Mk.II. The oil cooler was soon replaced with a larger one featuring a circular intake which was retroactively installed on the first batch of Spitfires Mk.V, converted from Mk.I and Mk.II, and became one of the features distinguishing Spitfires Mk.V.

## 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 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 dojít k požití drobných dílů.

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

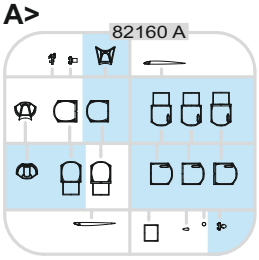
OPTIONAL VOLBA | BEND OHNOUT | SAND BROUSIT | OPEN HOLE VYVRTAT OTVOR | SYMETRICAL ASSEMBLY SYMETRICKÁ MONTÁŽ | REMOVE ODŘÍZNOUT | REVERSE SIDE OTOČIT | APPLY EDUARD MASK AND PAINT POUŽÍT EDUARD MASK NABARVIT

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

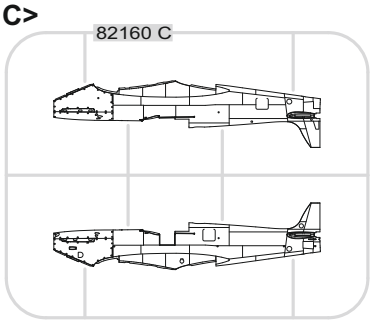
## PARTS ✶ DÍLY ✶ TEILE ✶ PIÈCES ✶ 部品

### PLASTIC PARTS

A>




C>

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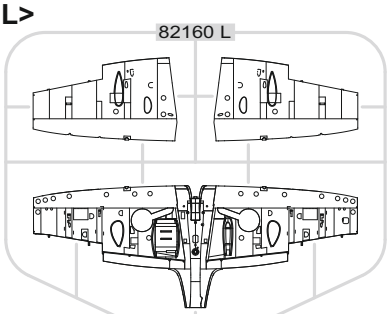
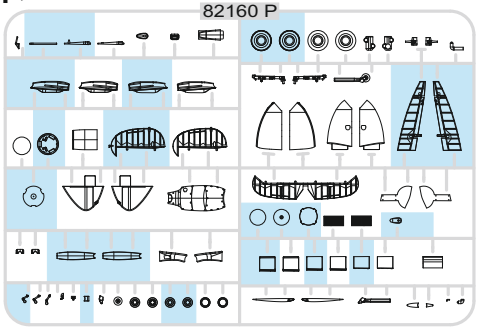



M>




P>

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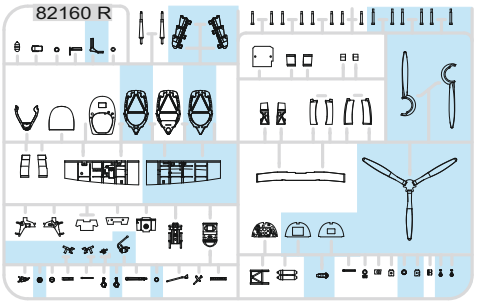


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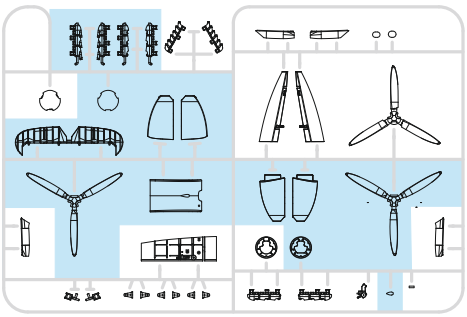
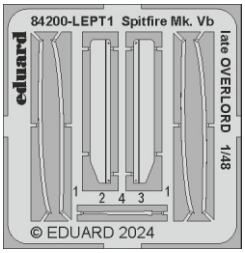


### PE - PHOTO ETCHED DETAIL PARTS

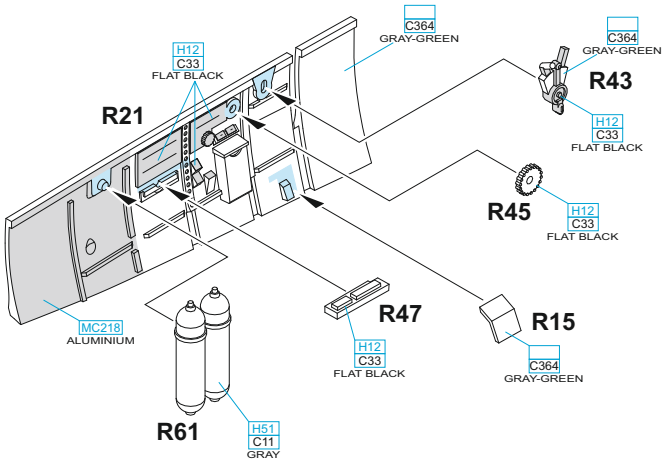


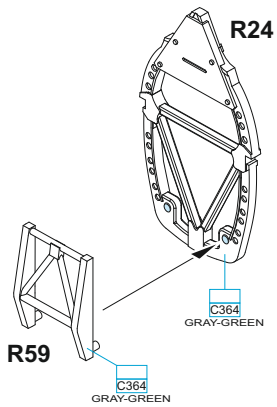

-Parts not for use. -Teile werden nicht verwendet. -Pièces à ne pas utiliser. -Tyto díly nepoužívejte při stavbě. - 使用しない部品

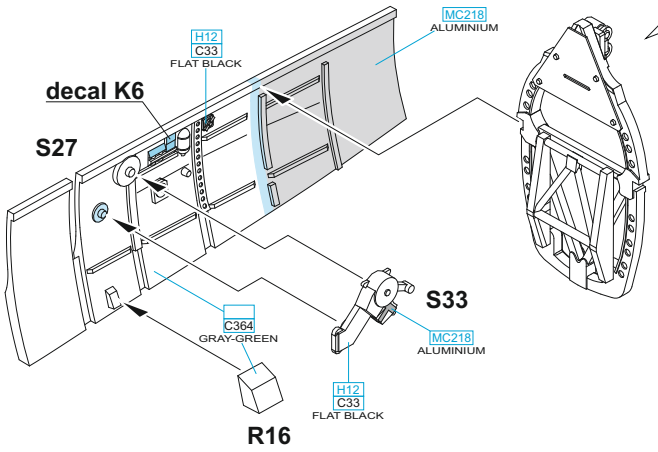
## COLOURS ✶ BARVY ✶ FARBEN ✶ PEINTURE ✶ 色

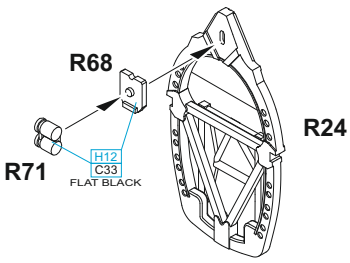
| GSi Creos (GUNZE) | | |
|---|---|---|
| AQUEOUS | Mr.COLOR | |
| H3 | C3 | RED |
| H4 | C4 | YELLOW |
| H11 | C62 | FLAT WHITE |
| H12 | C33 | FLAT BLACK |
| H33 | C81 | RUSSET |
| H51 | C11 | LIGHT GULL GRAY |
| H74 | C368 | SKY |
| H77 | C137 | TIRE BLACK |
| H84 | C42 | MAHOGANY |
| H90 | C47 | CLEAR RED |

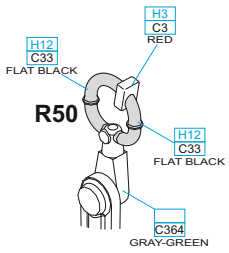
| GSi Creos (GUNZE) | | |
|---|---|---|
| AQUEOUS | Mr.COLOR | |
| H94 | C138 | CLEAR GREEN |
| H330 | C361 | DARK GREEN |
| H335 | C363 | MEDIUM SEAGRAY |
| | C362 | OCEAN GRAY |
| | C364 | AIRCRAFT GRAY-GREEN |
| Mr.METAL COLOR | | |
| MC214 | | DARK IRON |
| MC218 | | ALUMINIUM |
| Mr.COLOR SUPER METALLIC | | |
| SM201 | | SUPER FINE SILVER |

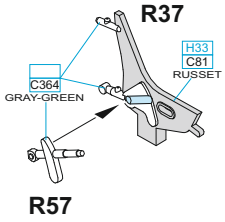

C364
GRAY-GREEN
H12
C33
FLAT BLACK
R21
C364
GRAY-GREEN
R43
H12
C33
FLAT BLACK
R45
H12
C33
FLAT BLACK
MC218
ALUMINIUM
R47
H12
C33
FLAT BLACK
R15
C364
GRAY-GREEN
R61
H51
C11
GRAY

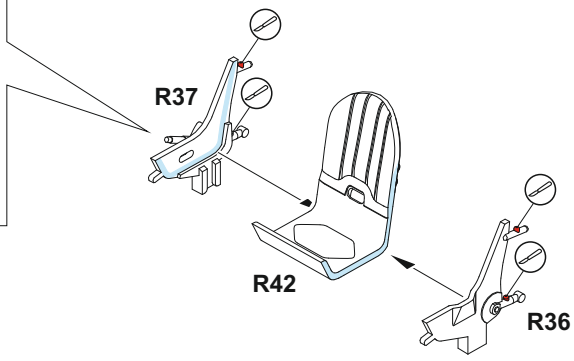

R24
C364
GRAY-GREEN
R59
C364
GRAY-GREEN


MC218
ALUMINIUM
H12
C33
FLAT BLACK
decal K6
S27
S33
C364
GRAY-GREEN
MC218
ALUMINIUM
H12
C33
FLAT BLACK
R16

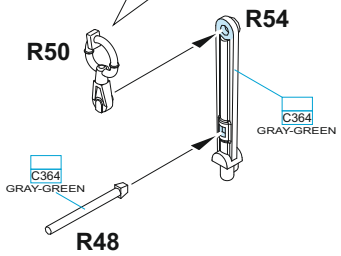

R68
R24
R71
H12
C33
FLAT BLACK


H3
C3
RED
H12
C33
FLAT BLACK
R50
H12
C33
FLAT BLACK
C364
GRAY-GREEN

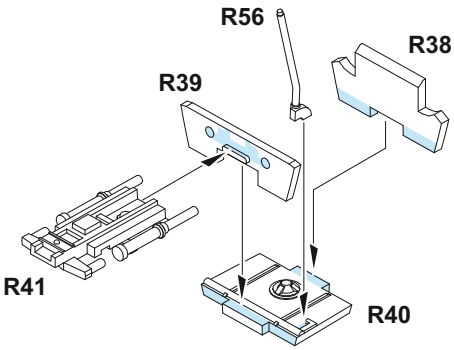

R37
H33
C81
RUSSET
C364
GRAY-GREEN
R57


R37
R42
R36

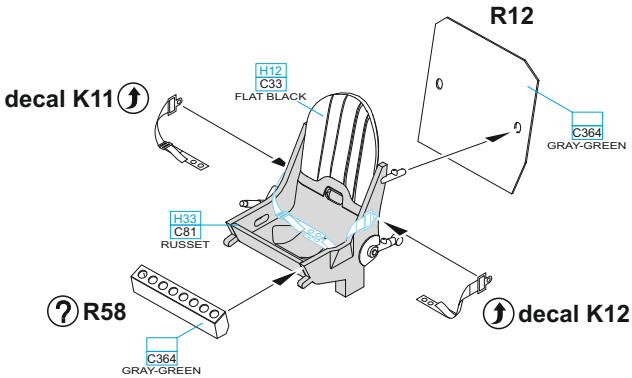
A

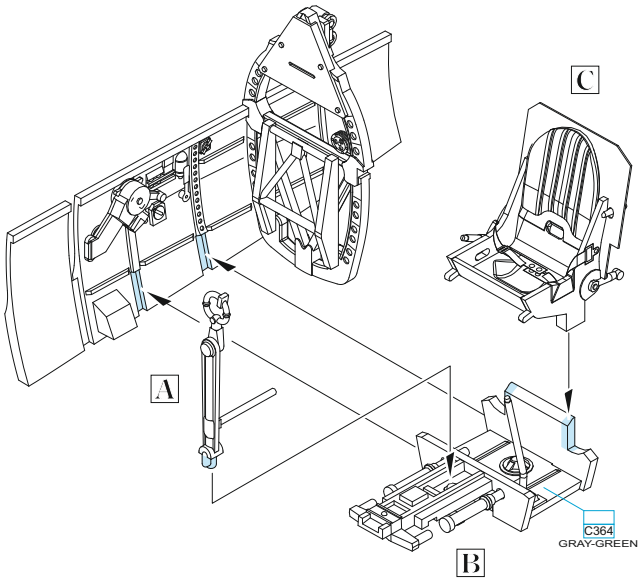

R50
R54
C364
GRAY-GREEN
C364
GRAY-GREEN
R48

B

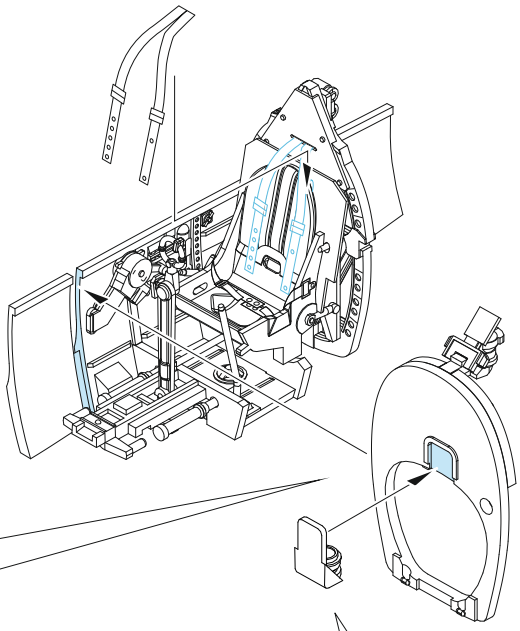

R56
R38
R39
R41
R40

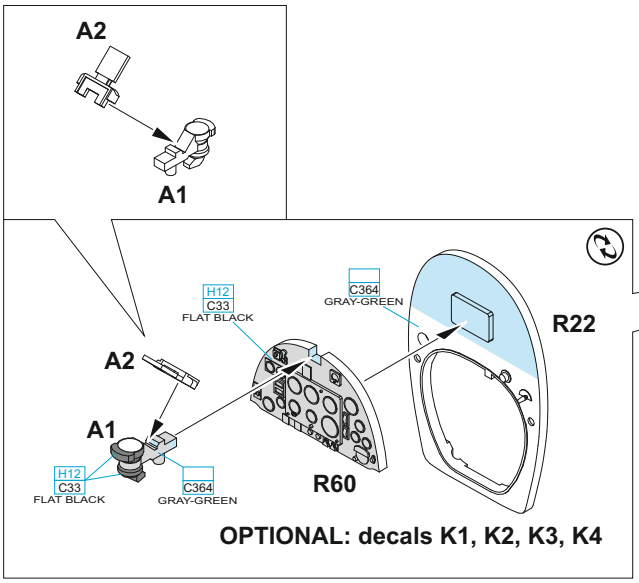
C

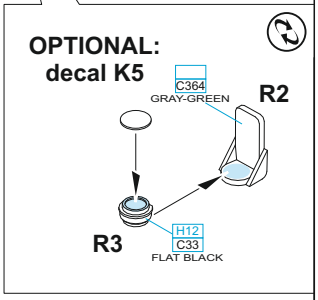

R12
decal K11
H12
C33
FLAT BLACK
C364
GRAY-GREEN
H33
C81
RUSSET
R58
decal K12
C364
GRAY-GREEN


C
A
B
C364
GRAY-GREEN

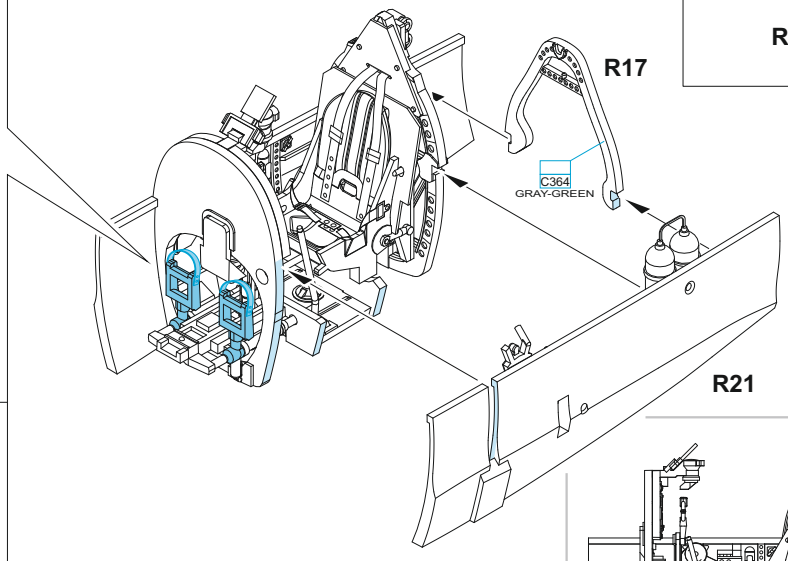
decal K10

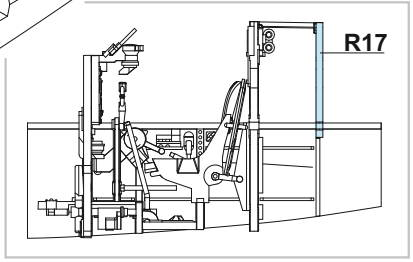


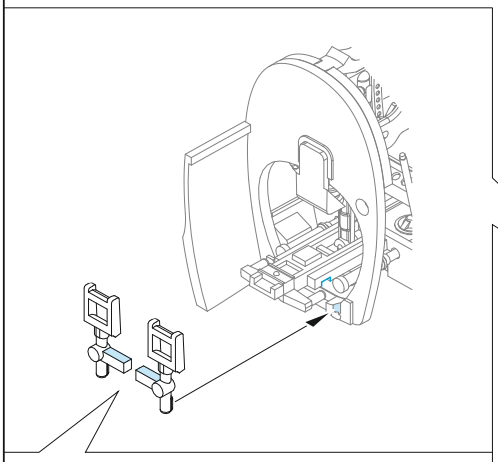

A2
A1
H12
C33
FLAT BLACK
C364
GRAY-GREEN
R22
A2
A1
H12
C33
FLAT BLACK
C364
GRAY-GREEN
R60
OPTIONAL: decals K1, K2, K3, K4


OPTIONAL:
decal K5
C364
GRAY-GREEN
R2
R3
H12
C33
FLAT BLACK

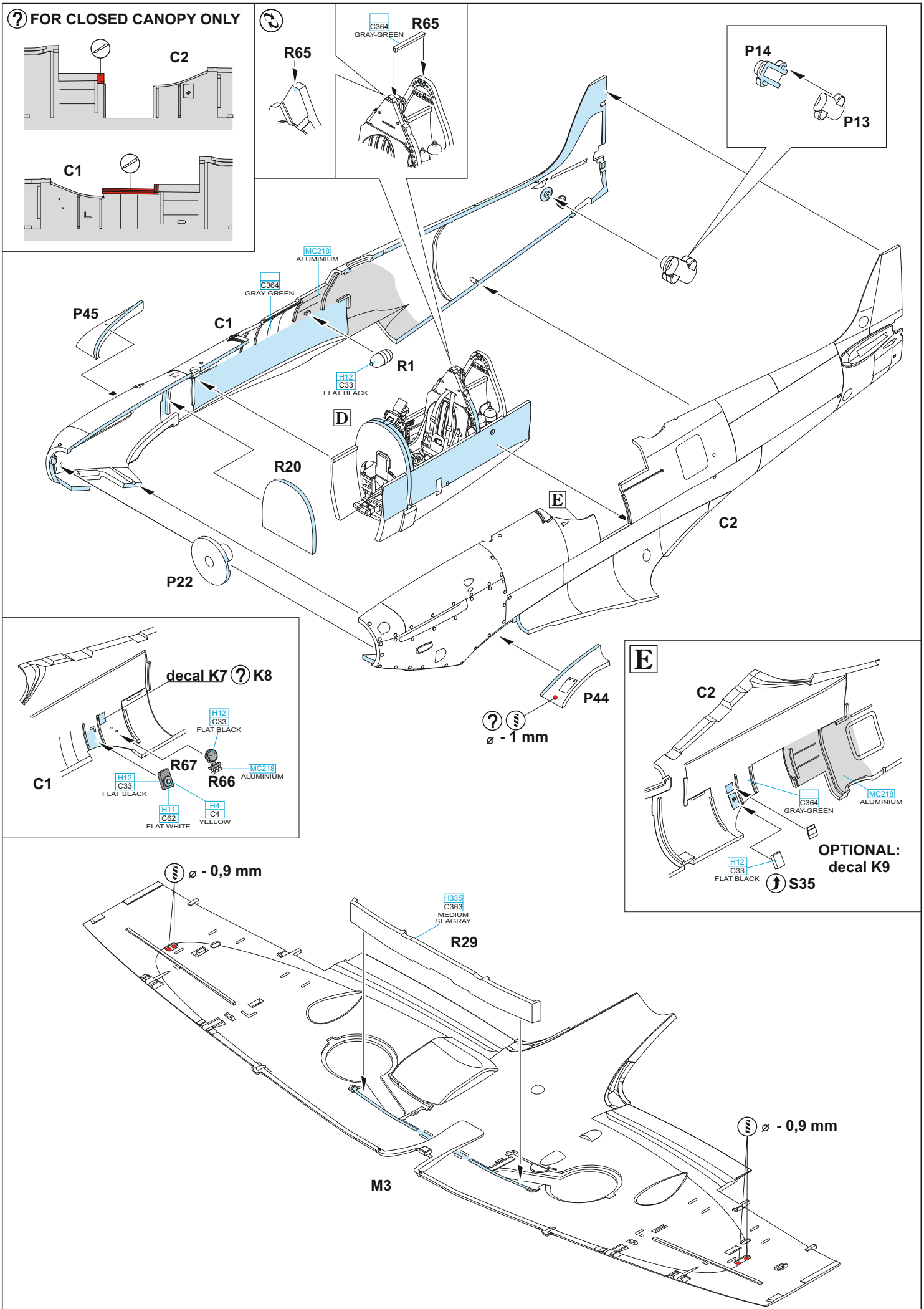
D

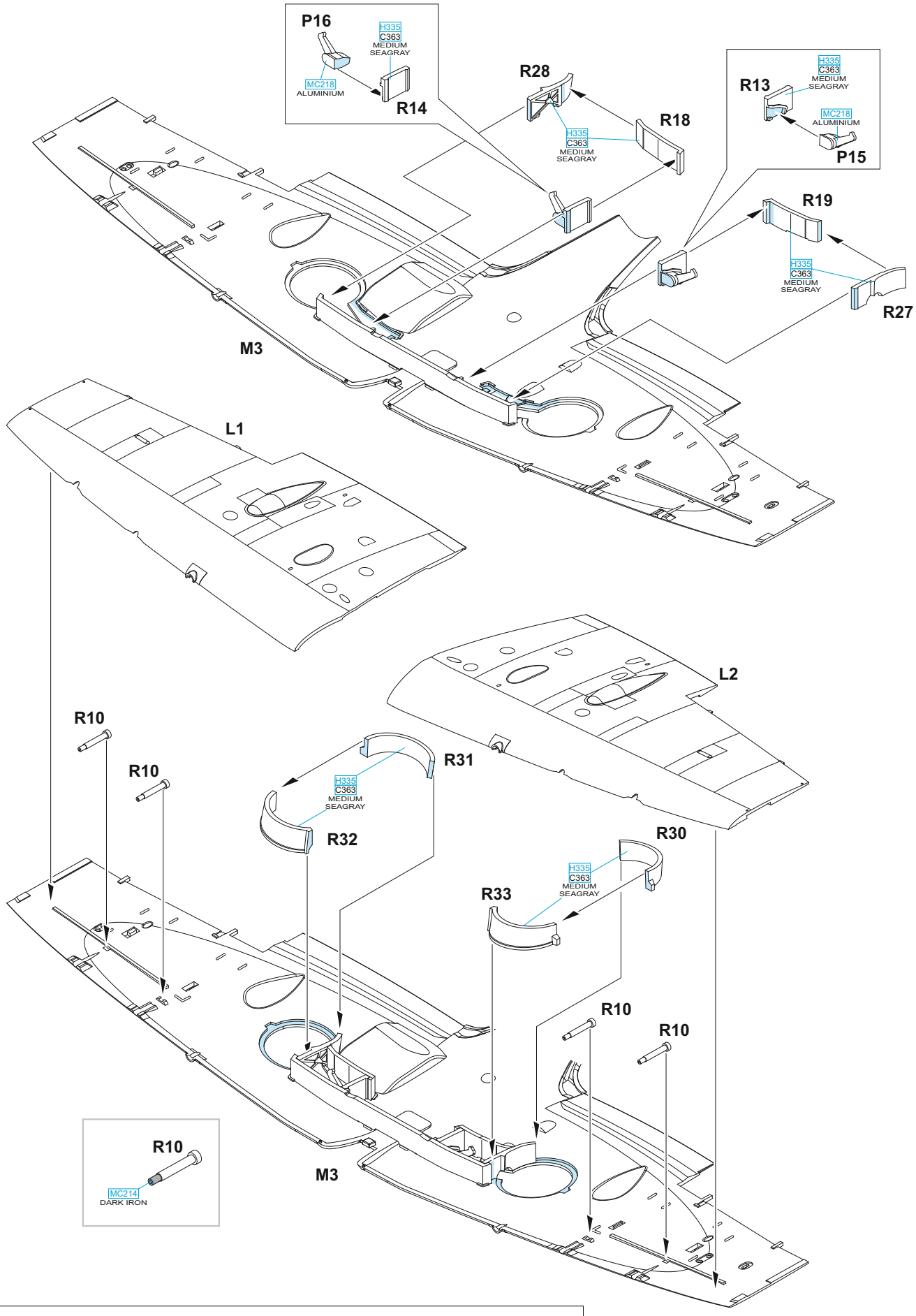

R17
C364
GRAY-GREEN
R21

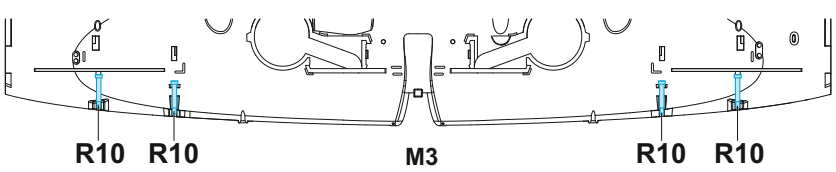

R17

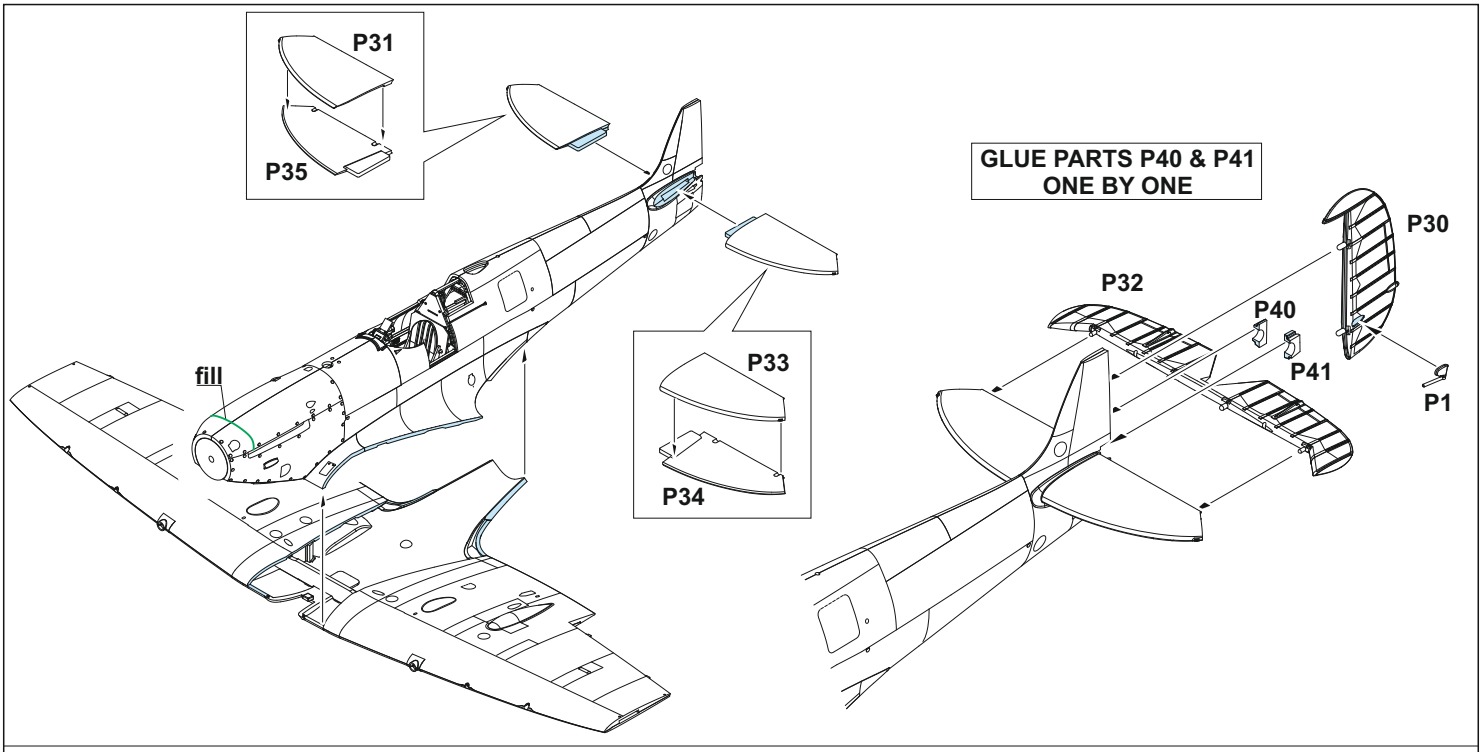


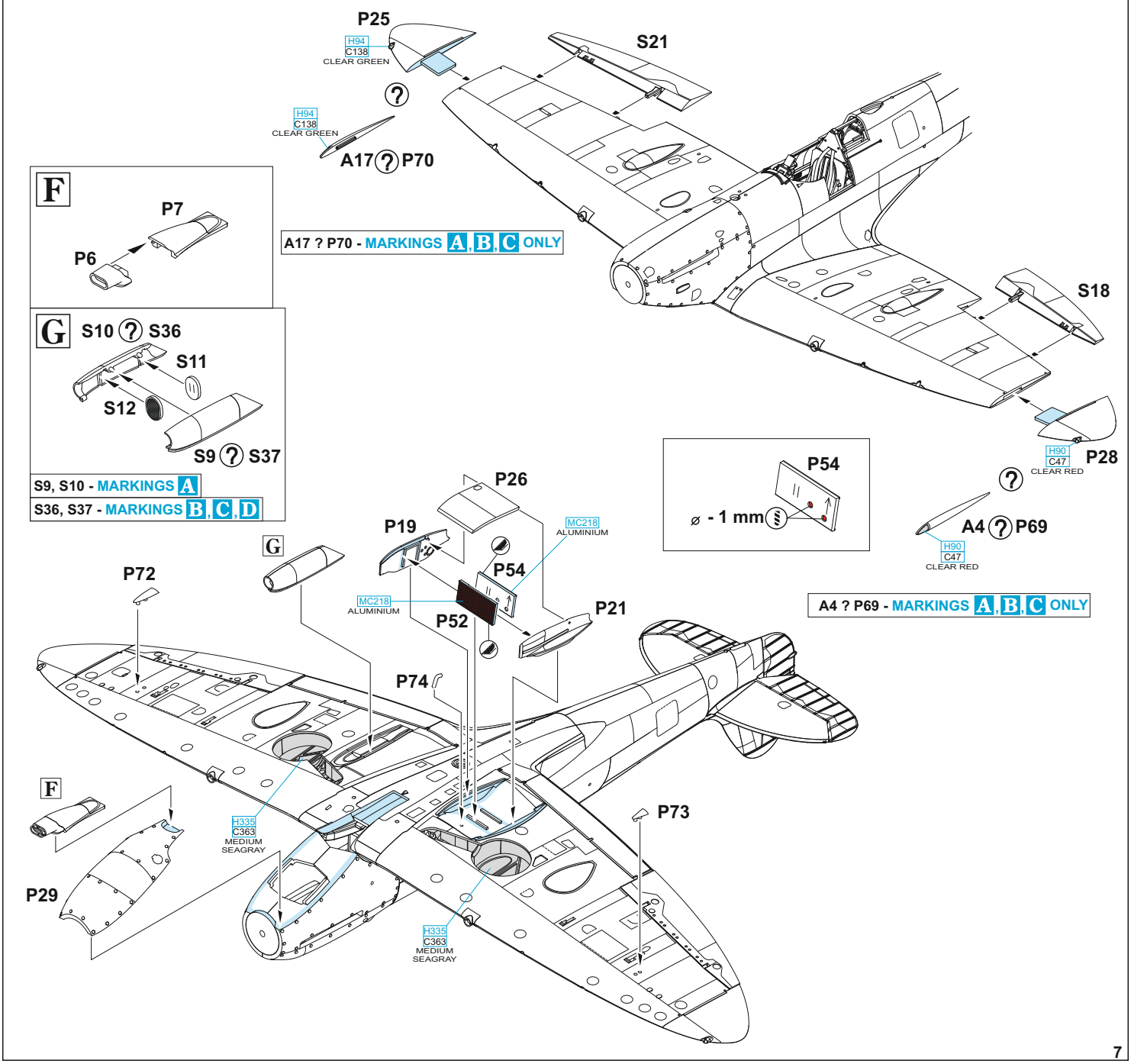

C364
GRAY-GREEN
S25
C364
GRAY-GREEN
S24

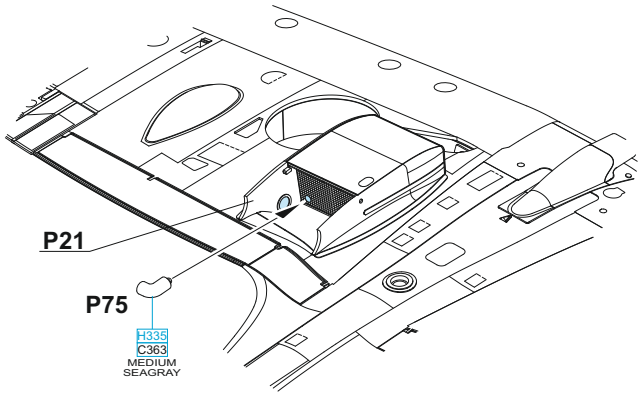

FOR CLOSED CANOPY ONLY
C2
C1
R65
C364
GRAY-GREEN
R65
P14
P13
MC218
ALUMINIUM
C364
GRAY-GREEN
P45
C1
R1
H12
C33
FLAT BLACK
D
R20
E
C2
P22
P44
⌀ - 1 mm
decal K7 K8
H12
C33
FLAT BLACK
R67
R66
MC218
ALUMINIUM
C1
H12
C33
FLAT BLACK
H11
C62
FLAT WHITE
H4
C4
YELLOW
E
C2
C364
GRAY-GREEN
MC218
ALUMINIUM
OPTIONAL:
decal K9
H12
C33
FLAT BLACK
S35
⌀ - 0,9 mm
H335
C363
MEDIUM
SEAGRAY
R29
M3
⌀ - 0,9 mm

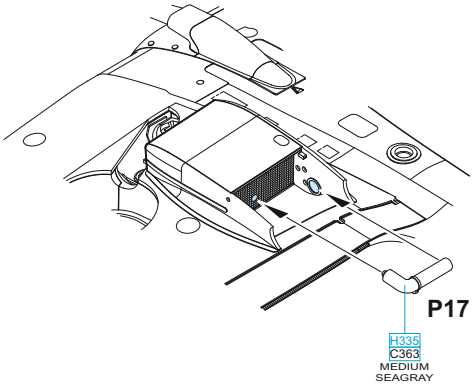

P16
H335
C363
MEDIUM
SEAGRAY
MC218
ALUMINIUM
R14
R28
R18
H335
C363
MEDIUM
SEAGRAY
R13
H335
C363
MEDIUM
SEAGRAY
MC218
ALUMINIUM
P15
R19
H335
C363
MEDIUM
SEAGRAY
R27
M3
L1
L2
R10
R10
R31
H335
C363
MEDIUM
SEAGRAY
R32
R30
H335
C363
MEDIUM
SEAGRAY
R33
R10
R10
R10
MC214
DARK IRON
M3

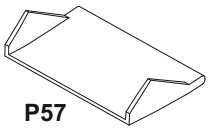

R10
R10
M3
R10
R10

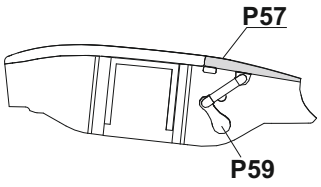

P31
P35
fill
P33
P34
GLUE PARTS P40 & P41
ONE BY ONE
P30
P32
P40
P41
P1

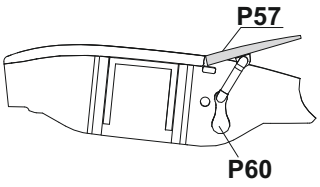

P25
H94
C138
CLEAR GREEN
?
H94
C138
CLEAR GREEN
A17 ? P70
S21
F
P7
P6
A17 ? P70 - MARKINGS A, B, C ONLY
S18
G
S10 ? S36
S11
S12
S9 ? S37
S9, S10 - MARKINGS A
S36, S37 - MARKINGS B, C, D
H90
C47
CLEAR RED
P28
P54
⌀ - 1 mm
?
A4 ? P69
H90
C47
CLEAR RED
A4 ? P69 - MARKINGS A, B, C ONLY
P26
P19
MC218
ALUMINIUM
G
P54
MC218
ALUMINIUM
P52
P21
P72
P74
F
P29
H335
C363
MEDIUM
SEAGRAY
P73
H335
C363
MEDIUM
SEAGRAY

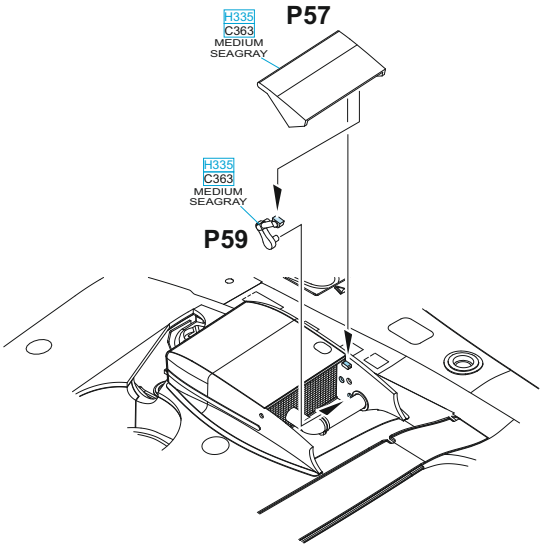


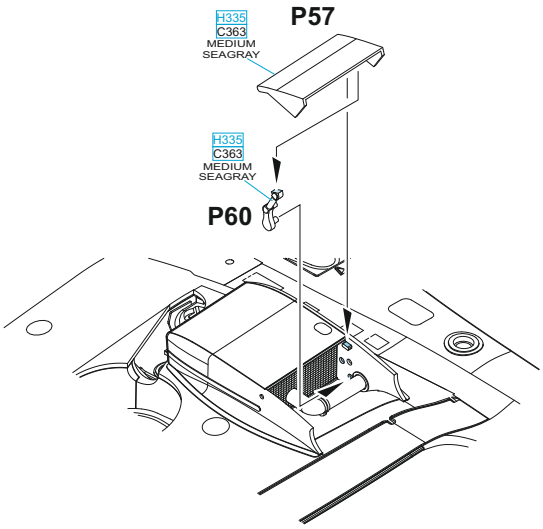



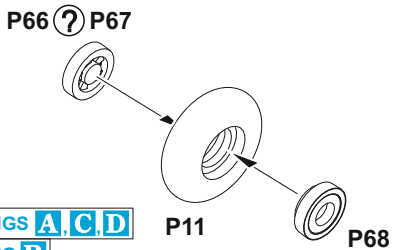



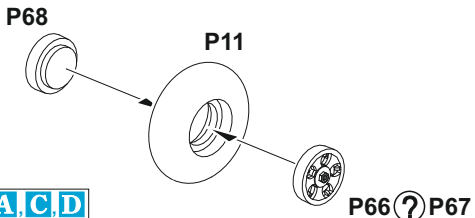



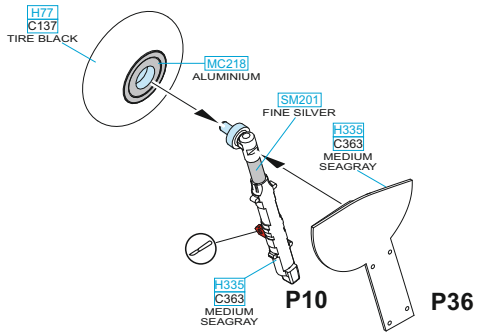




P66 - MARKINGS A, C, D
P67 - MARKING B




P66 - MARKINGS A, C, D
P67 - MARKING B

H

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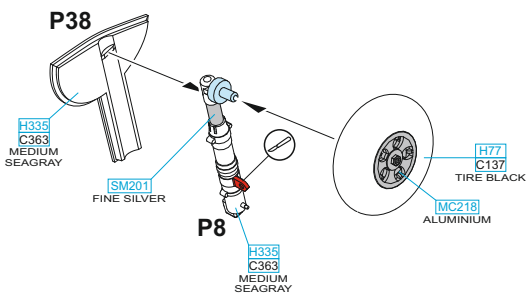
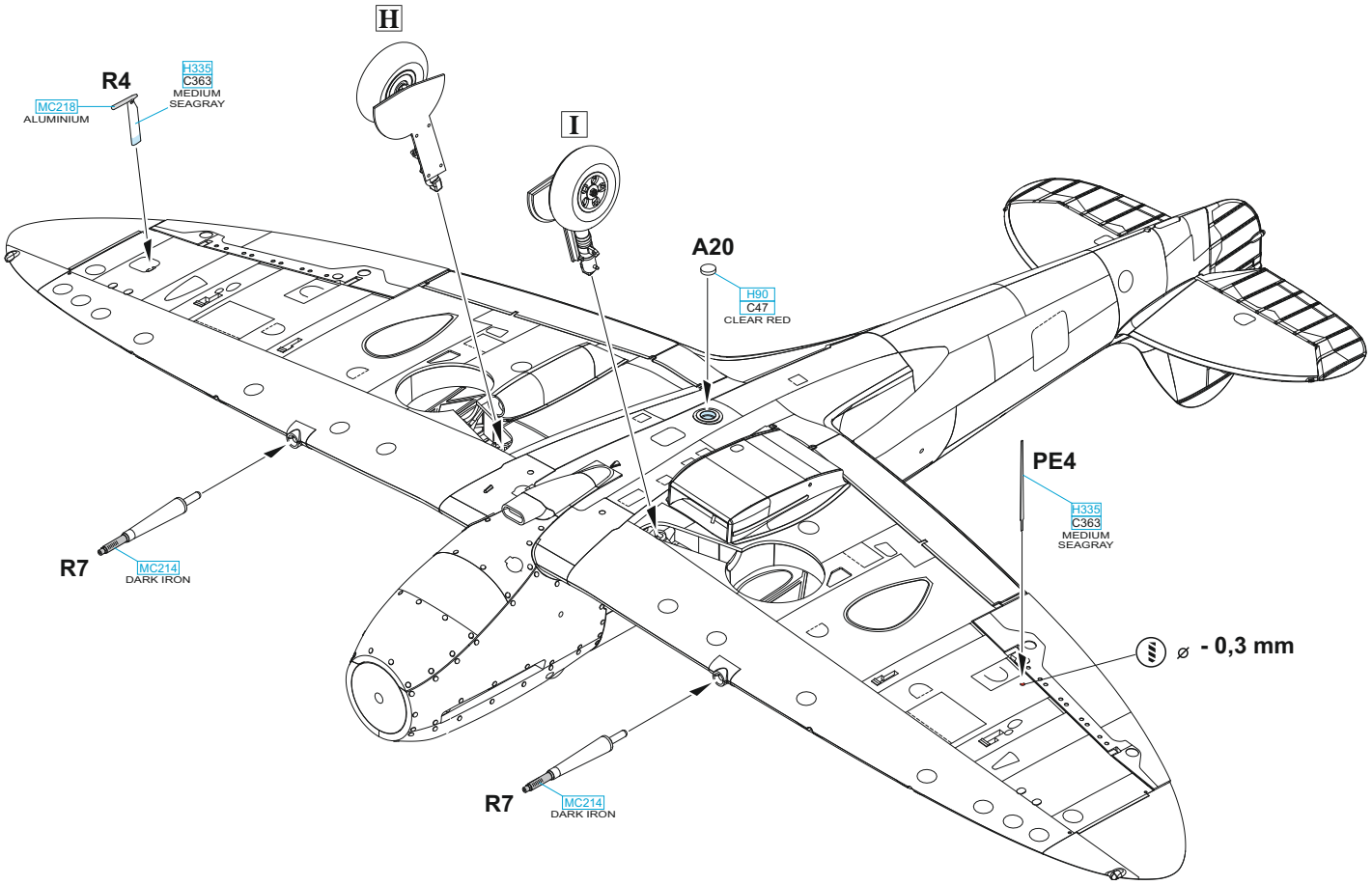
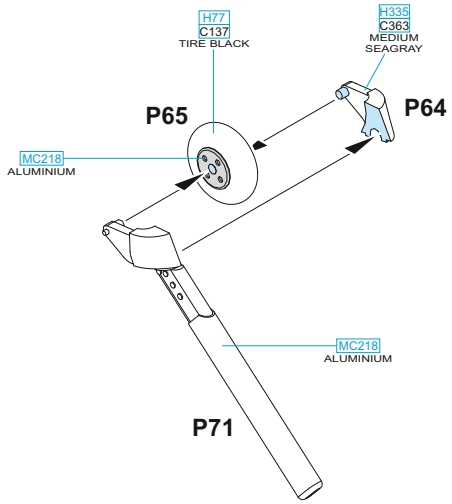
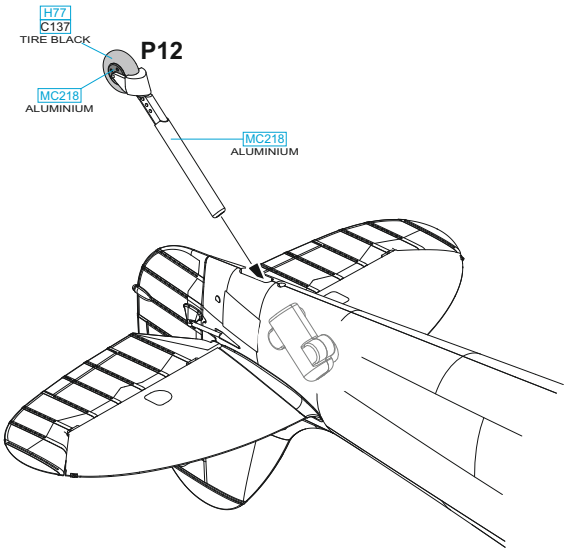
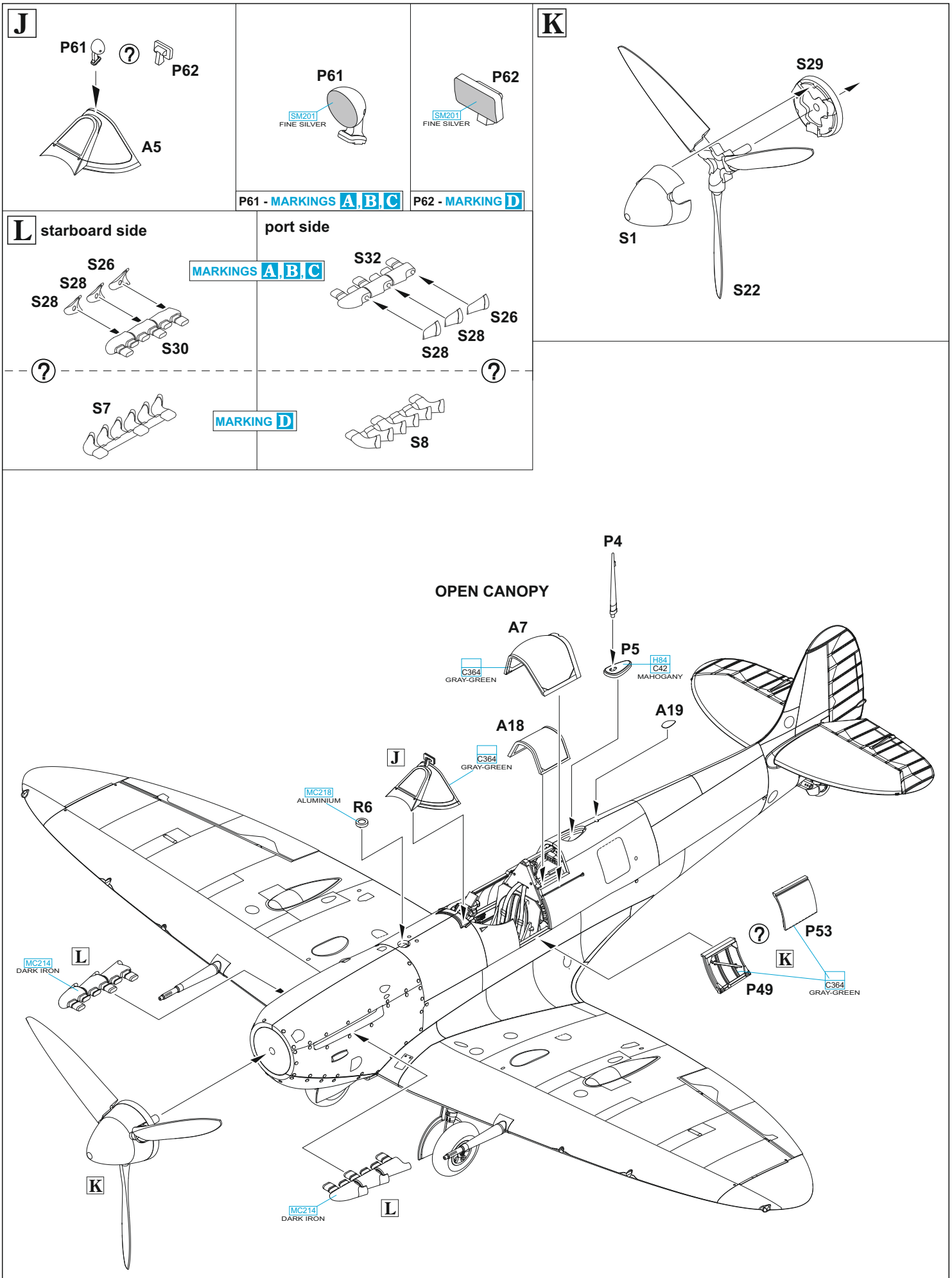



H
I
R4
H335
C363
MEDIUM
SEAGRAY
MC218
ALUMINIUM
A20
H90
C47
CLEAR RED
PE4
H335
C363
MEDIUM
SEAGRAY
R7
MC214
DARK IRON
⌀ - 0,3 mm
R7
MC214
DARK IRON

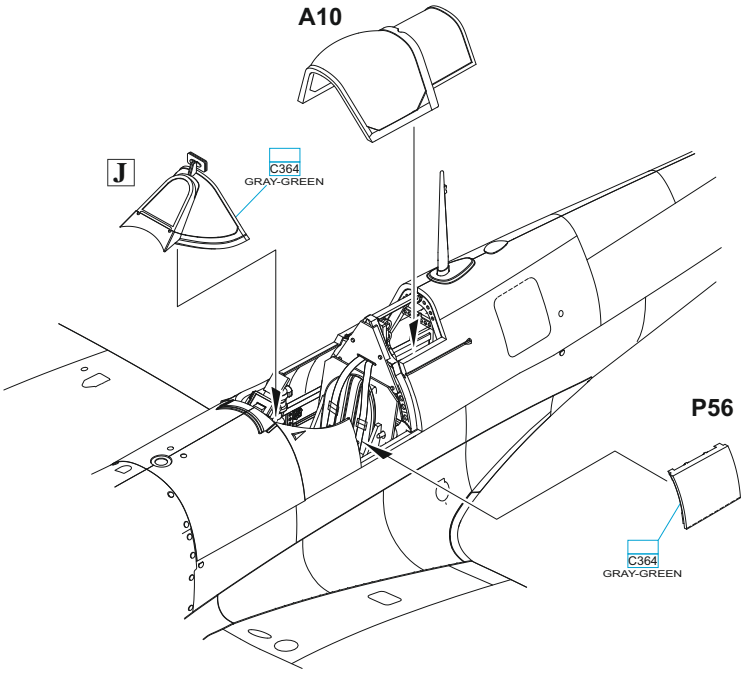

H77
C137
TIRE BLACK
H335
C363
MEDIUM
SEAGRAY
P65
P64
MC218
ALUMINIUM
MC218
ALUMINIUM
P71

?

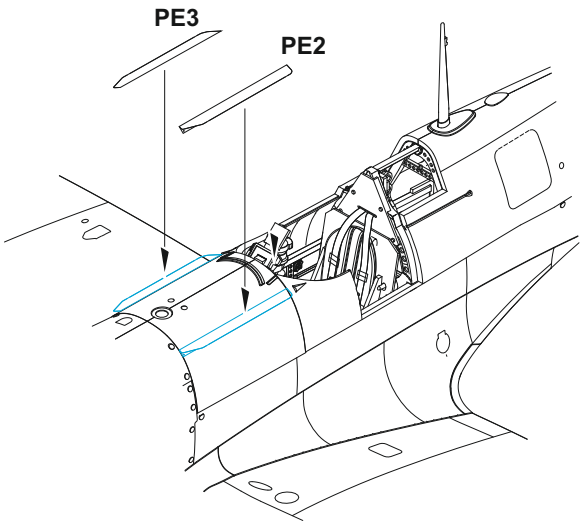

H77
C137
TIRE BLACK
P12
MC218
ALUMINIUM
MC218
ALUMINIUM


J
P61
P62
A5
P61
SM201
FINE SILVER
P62
SM201
FINE SILVER
P61 - MARKINGS A, B, C
P62 - MARKING D
K
S29
S1
S22
L starboard side
port side
MARKINGS A, B, C
S26
S28
S28
S30
S32
S26
S28
S28
S7
MARKING D
S8
P4
OPEN CANOPY
A7
C364
GRAY-GREEN
P5
H84
C42
MAHOGANY
A19
A18
J
C364
GRAY-GREEN
MC218
ALUMINIUM
R6
P53
K
P49
C364
GRAY-GREEN
MC214
DARK IRON
L
K
MC214
DARK IRON
L

## CLOSED CANOPY ?




## ? MARKING C ONLY

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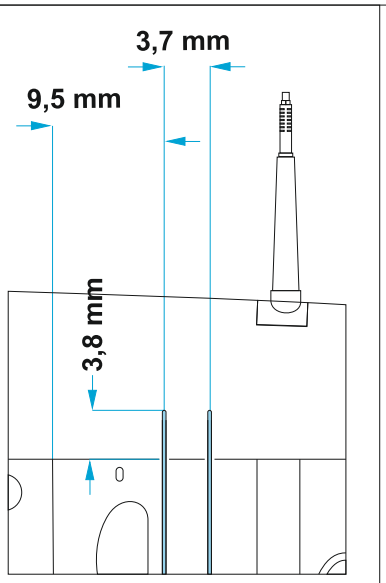
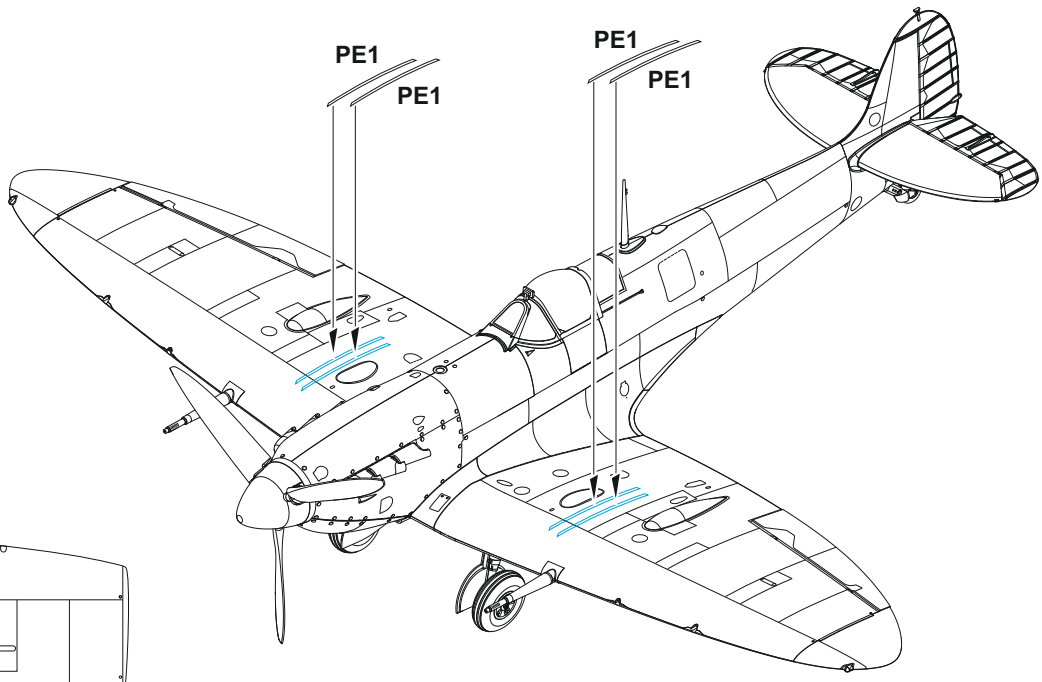
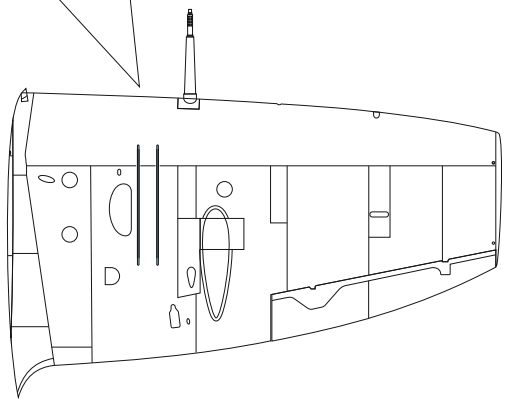
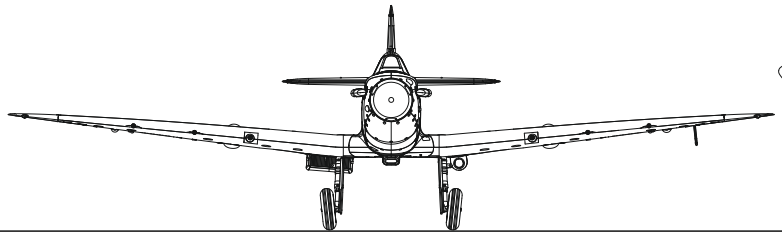
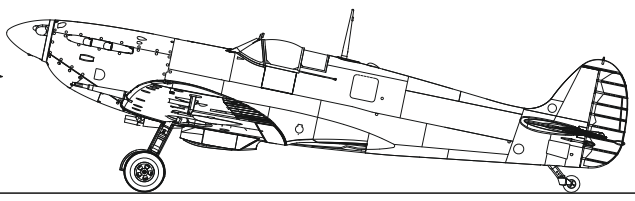


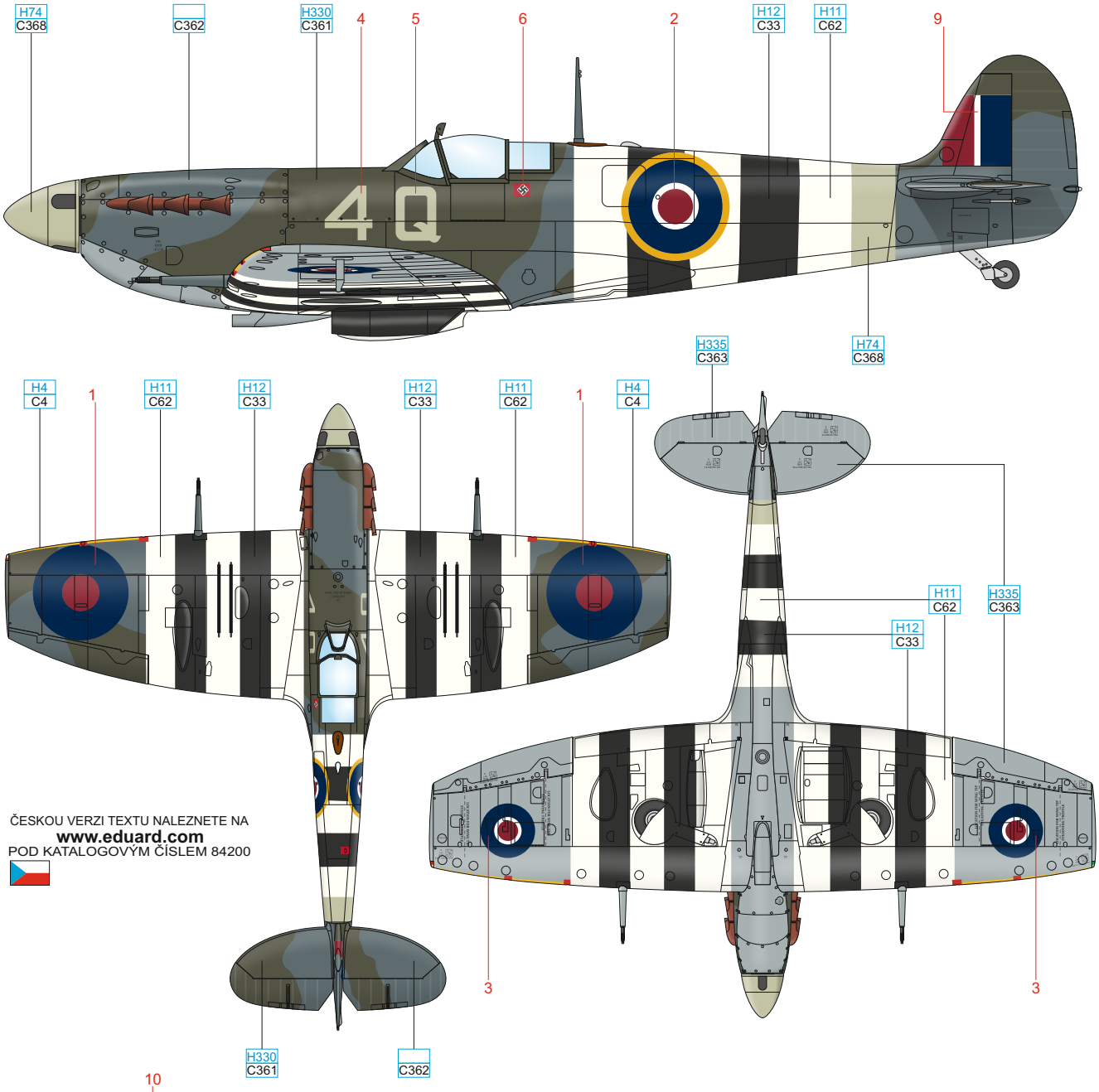







# A Slt. D. W. Barraclough, VCS-7, RAF Lee-on-Solent, Hampshire, United Kingdom, June 1944

In February 1944, the VCS-7 Cruiser Scouting Squadron was formed. It consisted of 17 pilots from several ships, who exchanged their Curtiss Seagulls and Vought Kingfishers for Spitfires Mk.V. The unit was first led by Lt. Robert W. Calland and from May 28, 1944, by Lt. Cdr. William Denton Jr. Prior to D-Day, ten squadrons, five RAF, four Royal Navy FAA (Fleet Air Arm) and VCS-7, were assembled at Lee-on-Solent to provide aerial observation for naval bombing in the Utah and Omaha beach sectors and later in the Cherbourg area. Observation missions were always flown by a pair of aircraft. The lead one acted as spotter, while the other provided escort and protected the leader from enemy attacks. The standard altitude for these missions was 6,000 ft, but bad weather often forced the pilots to operate between 1,500 and 2,000 ft. Occasionally missions were flown at even lower altitudes. From June 6 to June 26, VCS-7 conducted 209 missions over Normandy, mainly as part of the Western Naval Task Force, which was under the control of the U. S. Navy. The VCS-7 lost nine Spitfires to various causes, the main threat being the ubiquitous Flak. The squadron rarely encountered Luftwaffe aircraft, yet on June 7, Slt. D. W. Barraclought shot down a Bf 109G in aerial combat. VCS-7's last combat mission was on June 25 in the Cherbourg area, and the following day VCS-7 was disbanded. Its Spitfires bore the standard camouflage and markings of an RAF Day Fighter and invasion stripes for quick identification. They were also marked with the number 4 in front of the cockpit followed by the individual aircraft letter for the squadron.

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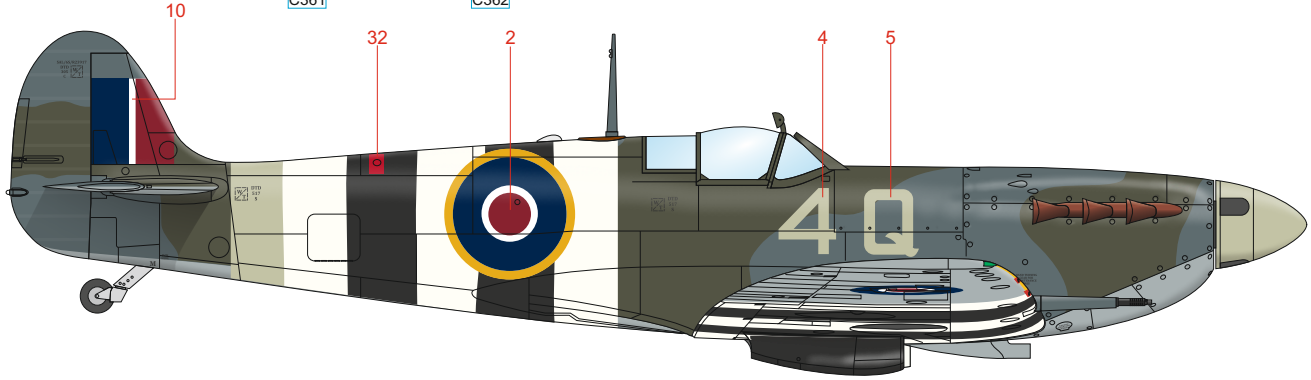
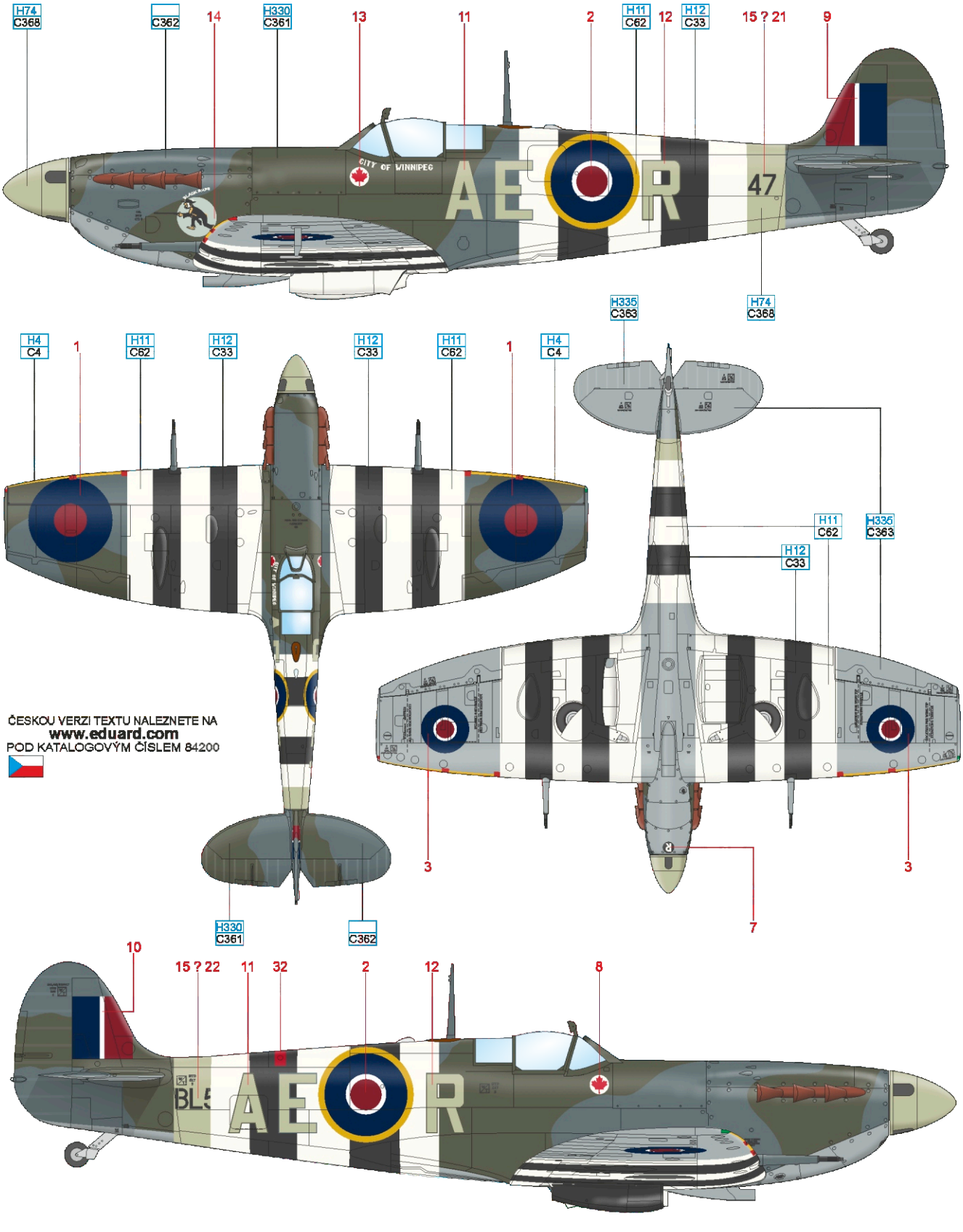



| FLAT WHITE | H11 C62 | YELLOW | H4 C4 | SKY | H74 C368 | DARK GREEN | H330 C361 | OCEAN GRAY | C362 | MEDIUM SEA GRAY | H335 C363 | FLAT BLACK | H12 C33 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

# B BL547, F/O Rick R. Richards, No. 401 Squadron, RAF Horne, Surrey, United Kingdom, June 1944

On D-Day, No. 402 Squadron had a mixture of older Mk.Vb and Mk.Vc Spitfires in its armament and was commanded by the famous ace S/Ldr G. W. Northcott. The squadron was part of No. 142 Wing, which under the command of another well-known Canadian ace, W/Cdr John Milne Checketts, operated as part of the air defense of Great Britain, albeit under 2TAF operational control in the role of fighter-bombers. No. 402 Squadron was re-equipped with Spitfires Mk.IX in July, but their time with the unit was brief. Early August 1944 saw a move to Hawkinge, where the Squadron was rearmed with the new powerful Spitfires Mk.XIV with which they immediately engaged in combat against V-1 flying bombs. In late September 1944 the squadron was transferred to 2TAF in Belgium and joined No. 125 Wing. In December it then joined No. 126 Wing RCAF, where it flew alongside the Mk.IX Spitfires. The end of the war found the unit on German soil at Wunstorf with a total score of 49.5 enemy shot down. One of the Spitfires Mk.Vb operating with No. 402 Squadron during D-Day was the one with serial number BL547 which sported the fuselage codes AE-R. It was most often flown by F/O Rick Richards who had a drawing of "Black Rufe", a character from the comic strip Li'l Abner, painted on the nose of his Spitfire. Under the cockpit, it bore the standard markings of most No. 402 Squadron Spitfires, a red Canadian leaf in a white crest with the City of Winnipeg in white lettering.

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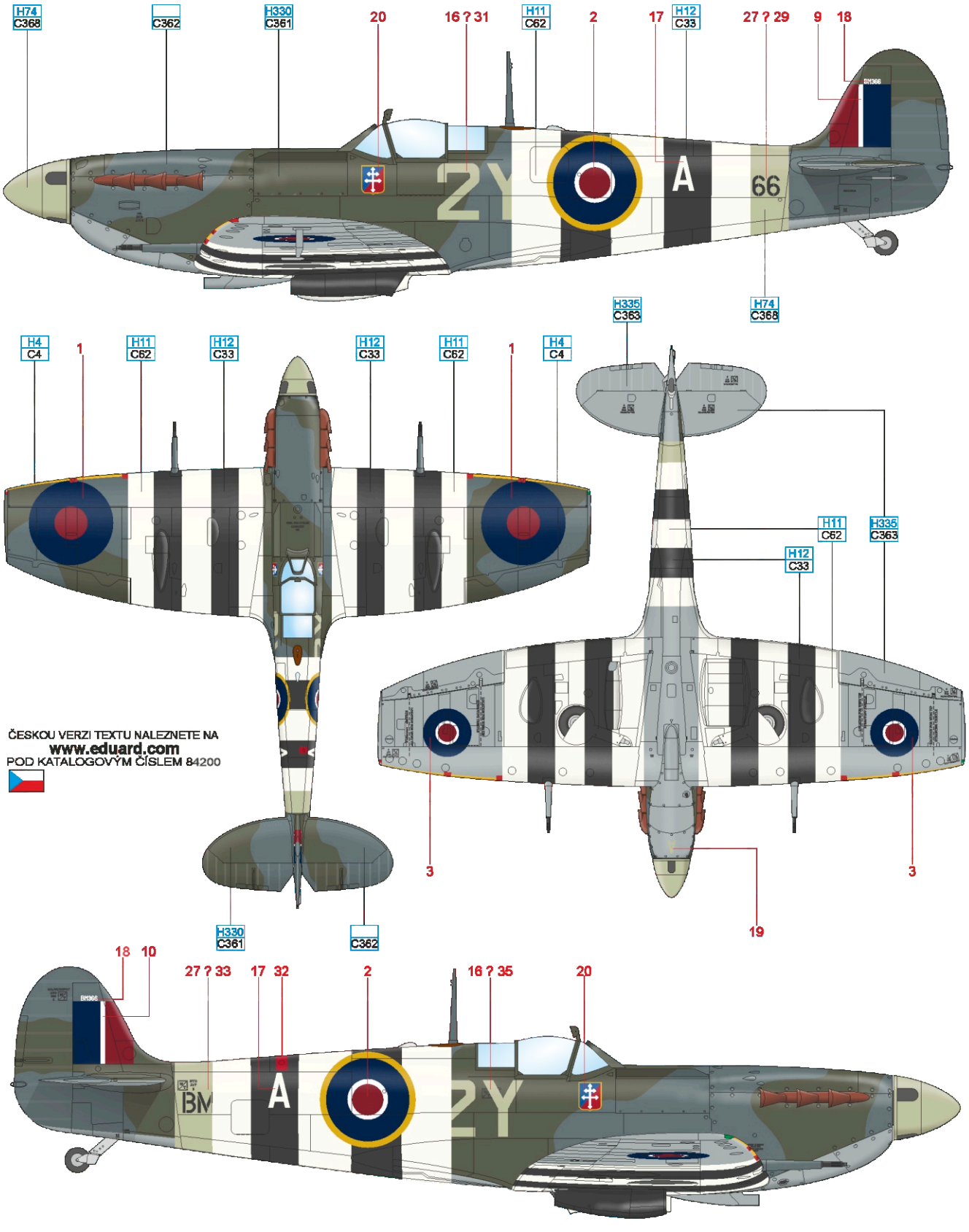
| FLAT WHITE | H11 C62 | YELLOW | H4 C4 | SKY | H74 C368 | DARK GREEN | H330 C361 | OCEAN GRAY | C362 | MEDIUM SEA GRAY | H335 C363 | FLAT BLACK | H12 C33 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

# C BM366, Cdt. J. M. Accart, No. 345 Squadron, RAF Shoreham, United Kingdom, June 1944

No. 345 Squadron was established in January 1944 and reached operational status on April 28, 1944. Due to the date of the unit's formation, it was not technically a "Free French" unit, it was a disparate grouping of French pilots in the RAF, some of whom were so-called "évadés d'Espagne", i.e. Frenchmen who had fled France by crossing the Pyrenees to join de Gaulle's FAFL and French pilots from North Africa. The unit was armed with older Mk.V Spitfires and flew patrols over the Normandy beachhead as part of No. 141 Wing (2TAF). In September 1944 it received Mk.IX Spitfires and was subsequently transferred to No. 145 Wing, where it primarily flew ground attack and escort missions. During a year of combat, No. 345 Squadron flew more than 3,000 combat sorties and destroyed 186 locomotives and more than 200 enemy vehicles. The unit's first commander was Cdt. Jean-Marie Accart, who adopted the pseudonym "Bernard" in Britain to protect his family in France. Accart achieved 12 victories, all in P-36 Hawk aircraft with the GC I/5 unit during the German invasion of France in 1940.

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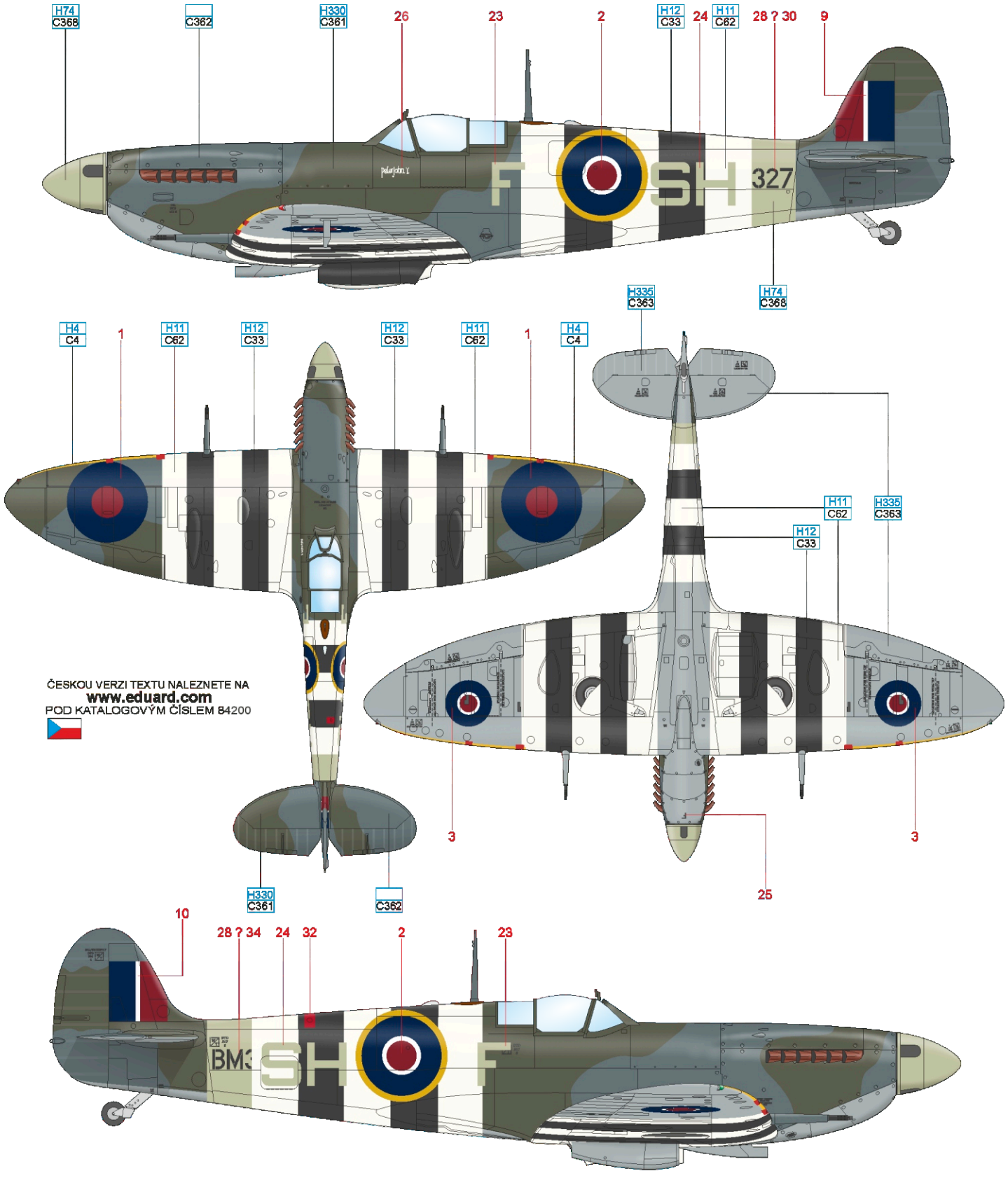
# D BM327, No. 64 Squadron, F/Lt Tony Cooper, RAF Friston, United Kingdom, June 1944

After completing his pilot training, Tony Cooper was posted as an instructor after an above average rating, initially in England, and from November 1940 to mid-1943 in Canada. In June 1943 he succeeded, after string of requests sent to the authorities, in his application to return to combat flying in the UK. He undertook a course with the Operational Training Unit at Rednal in Shropshire and was then posted to No. 64 Squadron, which at that time was flying Mk.Vb Spitfires. In the spring of 1944, he took part with the unit in many ground attacks in preparation for D-Day and on June 6, 1944, he made two combat sorties, providing fighter cover over Utah and Omaha beaches. He continued operational flying until November 1944. In total, Tony Cooper flew 3,200 hours and completed 160 operational combat sorties. He also survived five forced landings, two of them at night, two with burning aircraft and one as a result of enemy ground fire. After the war Tony returned to his home town of Lowestoft and became the fifth generation to work in the family wholesaler, WB Cooper Ltd. He lived a full life and remained active until his late 90s. He passed away on January 26, 2017, at the age of 100 years. In Tony's honor a Spitfire Mk.Vb serial number AB910 is flying with the Battle of Britain Memorial Flight (BBMF) as Tony Cooper flew it with No. 64 Squadron on D-Day in June 1944. His personal Spitfire was BM327, fuselage code SH-F, which had "Peter John 1" inscription painted under the front plate, which was the name of Tony's newborn son.




| FLAT WHITE | H11 C62 | YELLOW | H4 C4 | SKY | H74 C368 | DARK GREEN | H330 C361 | OCEAN GRAY | C362 | MEDIUM SEA GRAY | H335 C363 | FLAT BLACK | H12 C33 |
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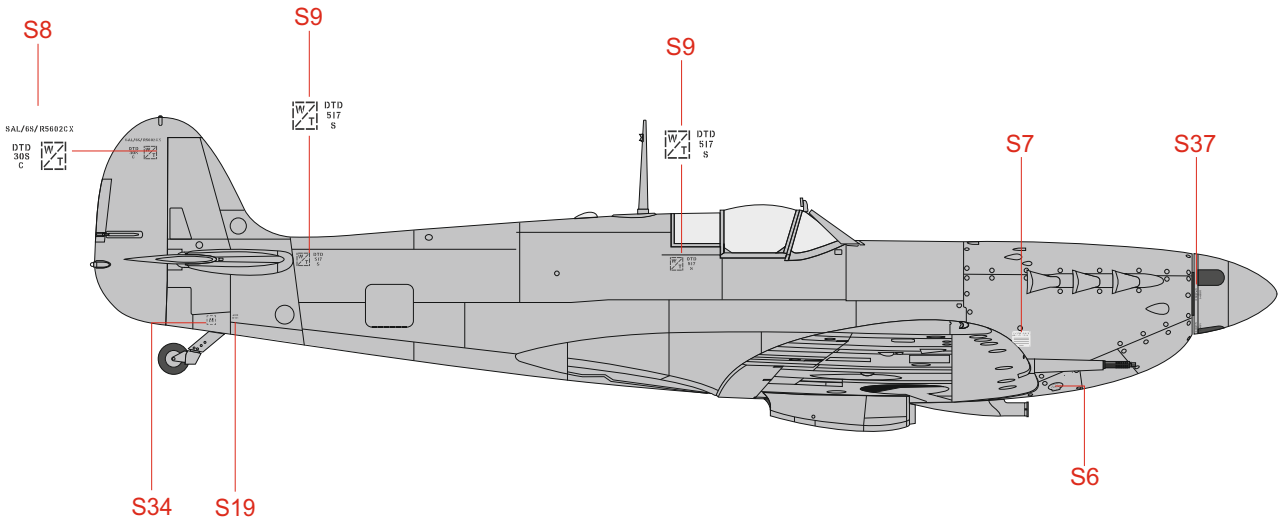


see you references for propeller stencils