

## INTRO

The story of the Tempest is nothing more than an attempt to address the shortcomings of Hawker Typhoon, which prevented it from being a successful fighter. The main problem of the Typhoon was the thick wing with NACA 22 profile, offering lot of inner space for fuel and armament, but building drag rapidly with rising speed. Not surprisingly was the wing at the core of the changes on the way to the new fighter. The resulting design was originally supposed to retain the Typhoon name as the Mark II, but it became obvious, the result would be a new plane, so the name was changed to the Tempest, following the traditional path of Hawker to use the "wind" names for its fighters.

### Series of changes

The new wing was 5 in (12,7 cm) thinner at the root and also the planform changed in comparison with Typhoon wing to more elliptical shape. As the new wing did not offer enough space for fuel, additional 76 gal (288 l) fuel tank had to be installed in the fuselage. The space for it was found between the firewall and the oil tank, but, consequently, it was necessary to move the engine forward by 21 in (53,4 cm). Due to that, the tail surfaces, both the stabilizer as well as elevator, had to be enlarged, also the undercarriage was rebuilt. So, yes, it was a new plane, although it kept the Typhoon engine, which was a very complex issue by itself. With quite ambitious goals regarding the performance of Tempest, new units were considered instead of troubled Napier Sabre II powering the Typhoon. But the things went different way...

### Back to the roots

Early contract was placed for two prototypes based on the Typhoon airframes powered by Sabre IV, but due to delays, only the HM599 was fitted with it, while HM595 used old Sabre II. The two prototypes also differed in radiator layout as the HM595 retained the distinctive chin radiator of Typhoon, while HM599 undergo radical change as Sydney Camm, Hawker chief designer, wanted to streamline the design. The radiator moved to the leading edge of the inner wing sections on both sides and the sleek nose got some resemblance to the Spitfire. The wing-mounted radiators layout worked well aerodynamically, but the Sabre IV evinced multiple problems and also the complexity of the wing assembly with integrated radiators was of some concern.

There were only two other units powerful enough for use with the Tempest instead of Sabre IV: the R&R Griffon and radial Bristol Centaurus IV. As the new name Tempest was definitely chosen, different marks were assigned to each engine variant and four more prototypes were ordered. The Mk.I was to be powered by the Sabre IV (HM599), the Mk.II by the Centaurus IV (LA602 and LA607), the Mk.III by the R&R Griffon IIB (LA610) and the Mk.IV by the Griffon 61 (LA614). Finally, the Mk.V (HM595) used slightly improved version of the Sabre II (IIB) producing 2,400 hp (1790 kW), thus 200 hp (147 kW) more than previous version. Although it was meant as a stopgap solution until Sabre IV engines would be available, it finally emerged as the main variant of the Tempest, because Centaurus was too late, Sabre Mk.IV still troubled by glitches and integration of the Griffon into the Typhoon airframe proved to be more demanding than expected. So Mk.III ended with first and only prototype, while Mk.IV was never built.

### Legend is born

The HM595 prototype with Sabre II flew for the first time on September 2nd, 1942, fitted with car door canopy, as the bubble canopy was in development at the time. Streamlined HM599 with Sabre IV performed its maiden flight on February 24th, 1943. It was reasonably faster than HM595, but the solution of problems would take too much time. The easiest way to get the Tempest into the service was to proceed with Mk.V.

The first production Tempest Mk.V made its maiden flight on June 21st, 1943, already fitted with bubble canopy. Armed with four 20 mm Hispano Mk.II cannon (200 rounds per barrel) achieved a top speed of 432 mph (695 km/h) at 18,400 feet (5,600 m), up to 45 mph (72 km/h) more than Bf 109 of Fw 190 (depending on mark). After the first production batch, the Hispano Mk.V cannons were installed, differentiating it from the first batch by barrels fully covered by the wing.

The first squadron to receive Tempests was No. 486 in January 1944. Together with No. 3 Squadron it became operational in April 1944. With addition of No. 56 Squadron the first Tempest Wing was formed at Newchurch, Kent, under the command of W/Cdr Roland Prosper „Bee“ Beamont.

### Fighting everything

After the period of operations over the France following the D-Day, the Tempest Wing was tasked to fight the V-1 Flying Bombs travelling low at speed of some 400 mph (640 km/h). The Tempest Mk.V was never effective high level fighter due to the nature of its engine, but at the middle and low levels was superior to virtually everything. And some 640 destroyed V-1s during the short period between June and August 1944 speak by themselves, as the rest of RAF scored some 160 of them during the period.

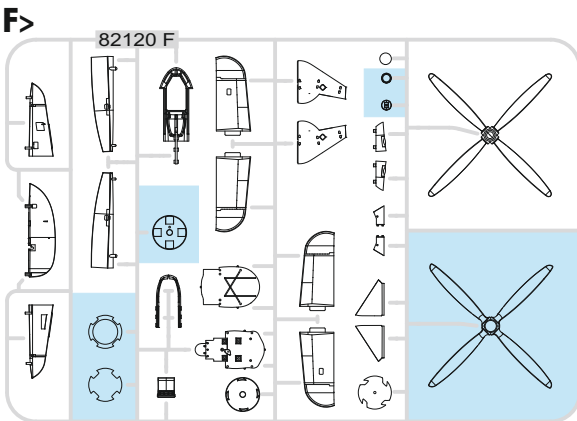
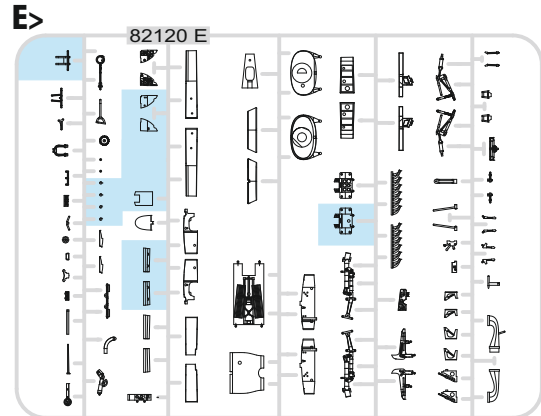
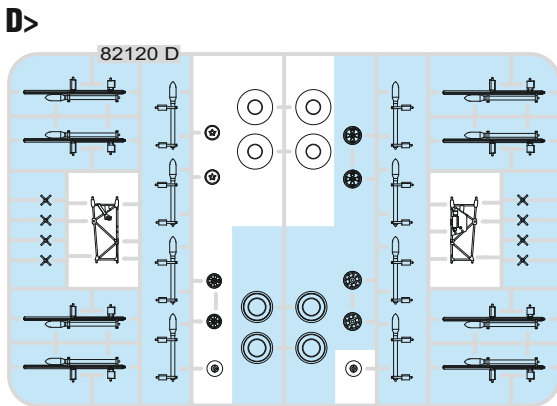
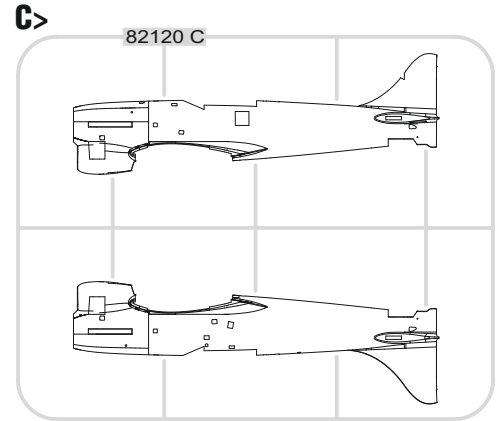
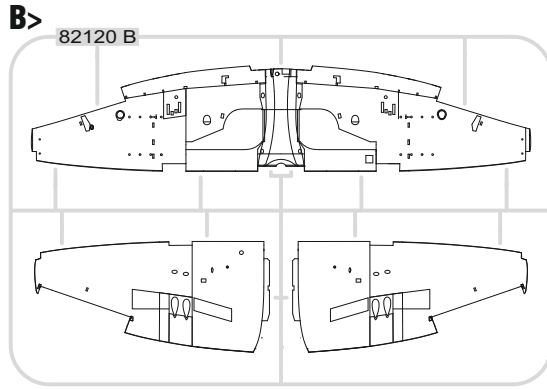
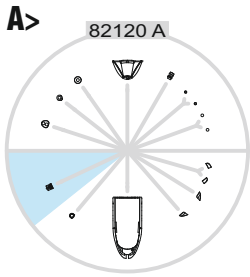
After the V-1 bombing campaign ceased, the Tempest Squadrons returned to the common tasks. At the time, seven Tempest squadrons were flying air-to-air combats and claimed 240 kills (some 20 of them Me 262 jets). Most successful Tempest ace, D. C. Fairbanks (US) recorded 11 kills flying Mk.V „Terror of Rheine“. Second with nine kills came W. E. Schrader (NZ) with nine and J. J. Payton with six kills emerged as third overall. The most famous Tempest Pilot the Free French Pierre Clostermann added four kills to his tally of 11 (some sources state 18 kills, the precise number is unknown).

Tempest was formidable fighter, fast, tough, with powerful weapons. Thanks to the excellent low altitude performance, the strafing attacks were also quite common, usually during the „search and destroy“ rides. Apart of cannons, the provision of two 1000 lb (450 kg) bombs or eight 60 lb (27 kg) rockets added to the destructive force.

### To the end of an era

Two more variants of the Tempest would enter production later on, but both were too late to see WW II service. The Tempest Mk.II powered by the Centaurus V used some experience gained by examining the engine cowling of captured Fw 190s. The Tempest VI used the Sabre V engine, and was used only by five RAF squadrons based in the Middle East. Of the Tempest Mk.V 1,401 were produced. After the war Tempest V continued in service with British Air Force of Occupation (BAFO) squadrons until replaced by Tempest Mk.II.

# PLASTIC PARTS



GUNZE	MISSION MODELS	
H4	C4	MMP-007 YELLOW
H8	C8	SILVER
H11	C62	MMP-001 FLAT WHITE
H12	C33	MMP-047 FLAT BLACK
H74	C362	MMP-093 SKY
H77	C137	MMP-047 TIRE BLACK
H90	C47	CLEAR RED
H94	C138	CLEAR GREEN
H330	C361	MMP-077 DARK GREEN
H335	C363	MMP-094 MEDIUM SEAGRAY
	C362	MMP-093 OCEAN GRAY
	C364	MMP-079 AIRCRAFT GRAY-GREEN

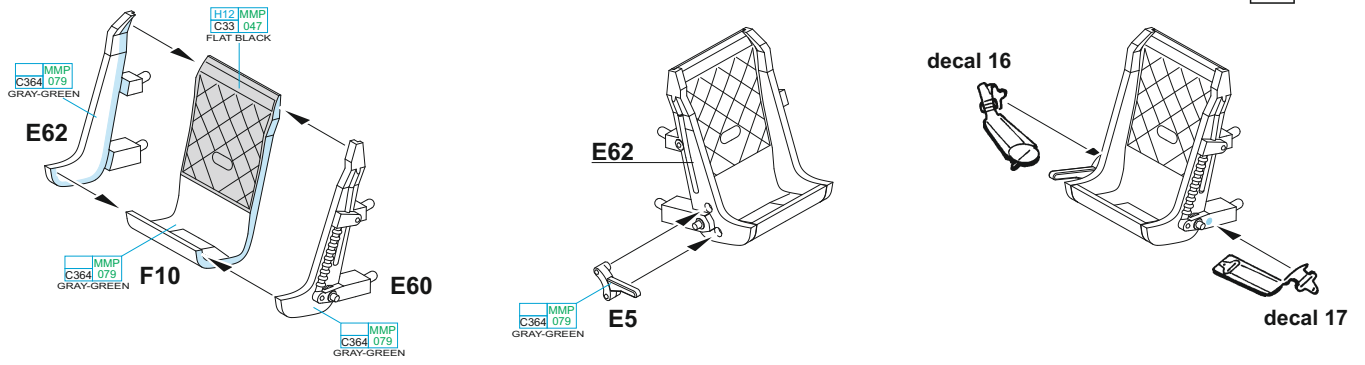
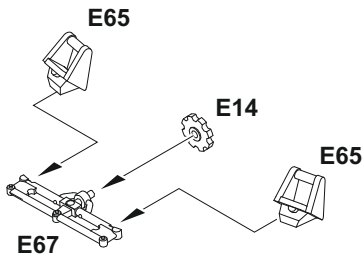
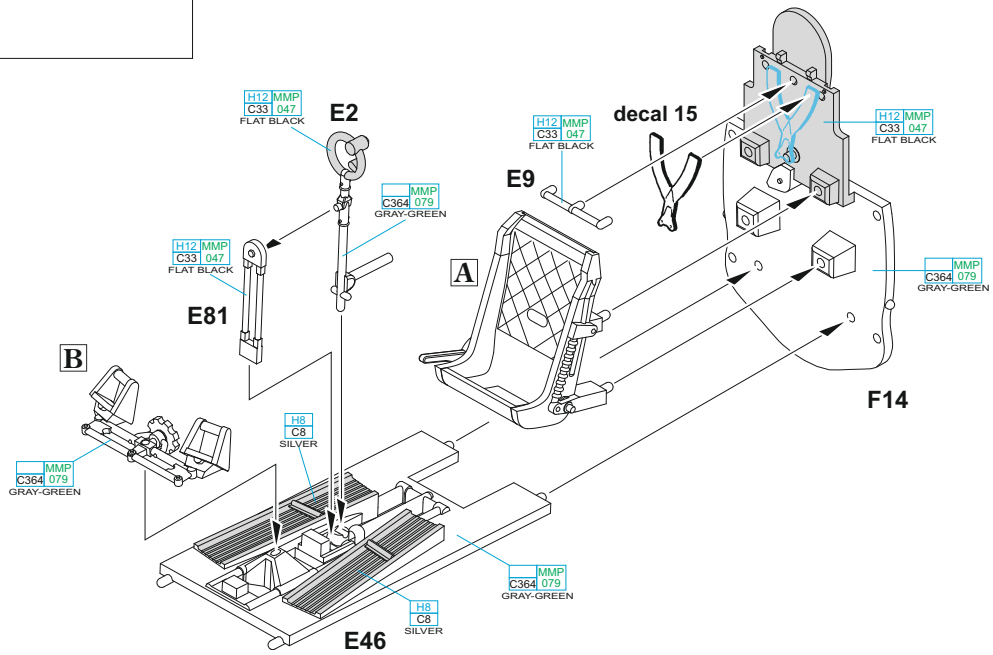
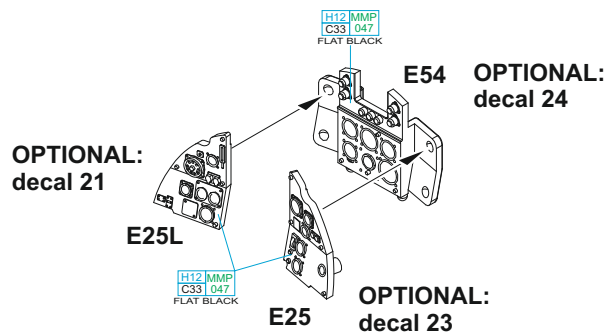
METAL COLOUR	METALLICS	
MC214	MMP-001	DARK IRON
SM201	MMC-001	SUPER FINE SILVER

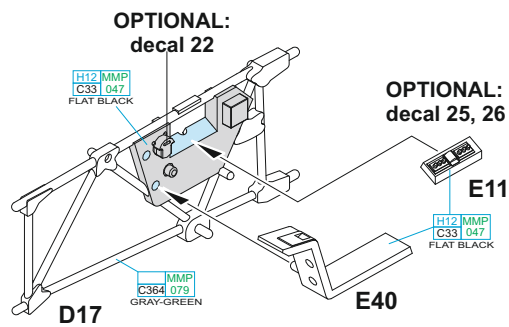
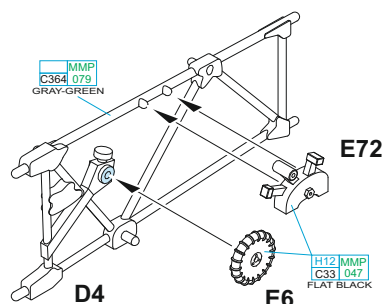
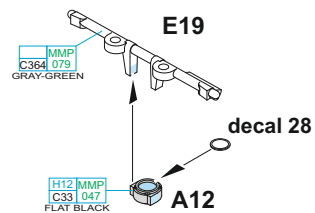
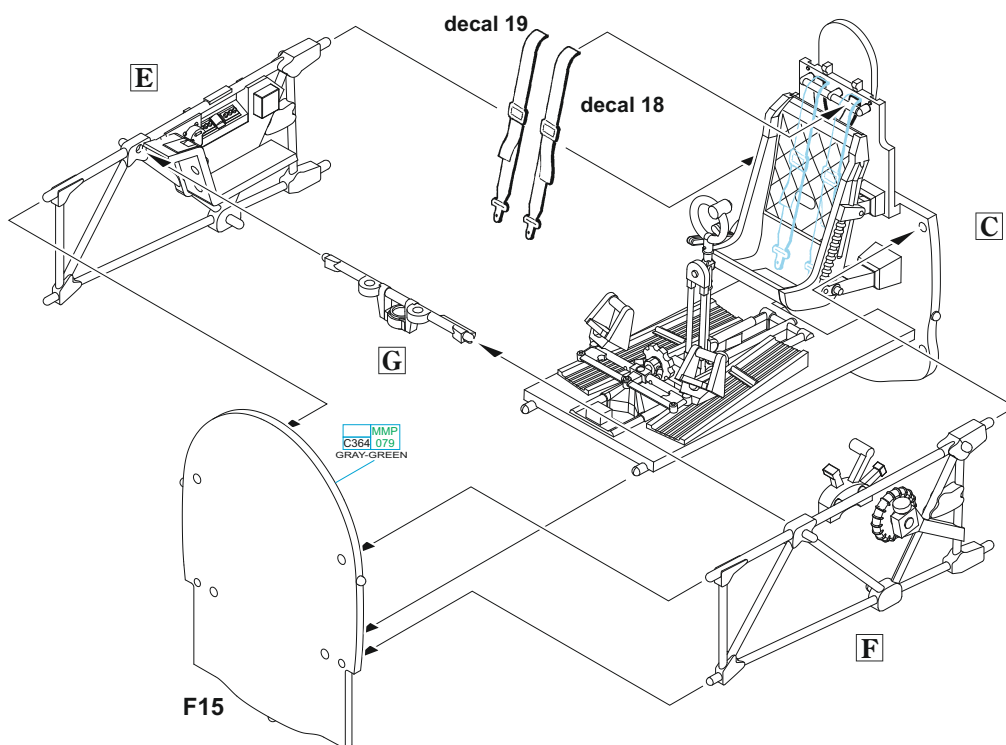
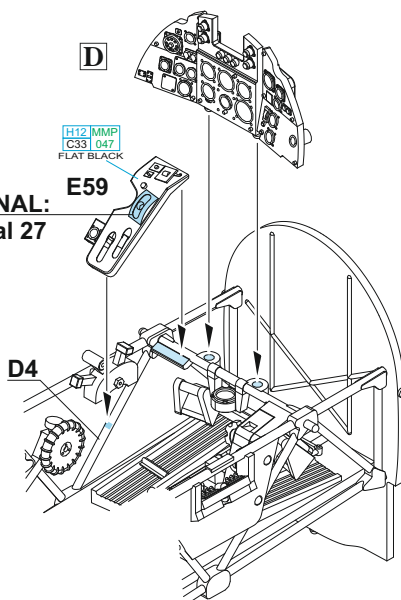
## ATTENTION \* UPOZORNĚNÍ \* ACHTUNG \* ATTENTION

- (GB)** 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.
- (CZ)** 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.
- (D)** Vor dem Zusammenbau die Bauanleitung gut durchlesen. Kleber und Farben nicht in der Nähe von offenem Feuer verwenden und für eine ausreichende Belüftung sorgen. Den Bausatz von kleinen Kindern fernhalten. Vermeiden Sie, dass Kinder Bauteile in den Mund nehmen oder sich Plastiktüten über den Kopf ziehen.
- (F)** Lire soigneusement la fiche d'instructions avant d'assembler. Ne pas utiliser de colle ou de peinture à proximité d'une flamme nue, et aérer la pièce de temps en temps. Garder hors de portée des enfants en bas âge. Ne pas laisser les enfants mettre en bouche ou sucer les pièces, ou passer un sachet vinyl sur la tête.

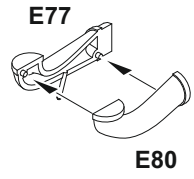
## INSTRUCTION SIGNS \* INSTR. SYMBOLY \* INSTRUKTION SINNBILDEN \* SYMBOLES

- (?)** 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

**A****B****C****D**

**E****F****G****H****OPTIONAL:**  
decal 27

**I**



E80

MMP  
C364 079  
GRAY-GREEN

E49

E43

H8  
C8  
SILVER

step 1

E45

step 2

H335MMP  
C363 094  
MEDIUM SEAGRAY

E44

F33

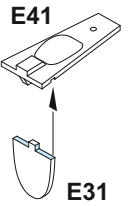
E42

H8  
C8  
SILVER

E21

MMP  
C364 079  
GRAY-GREEN

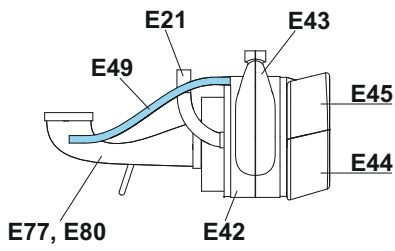
**J**



E41

E31

**CROSS SECTION**



E21

E43

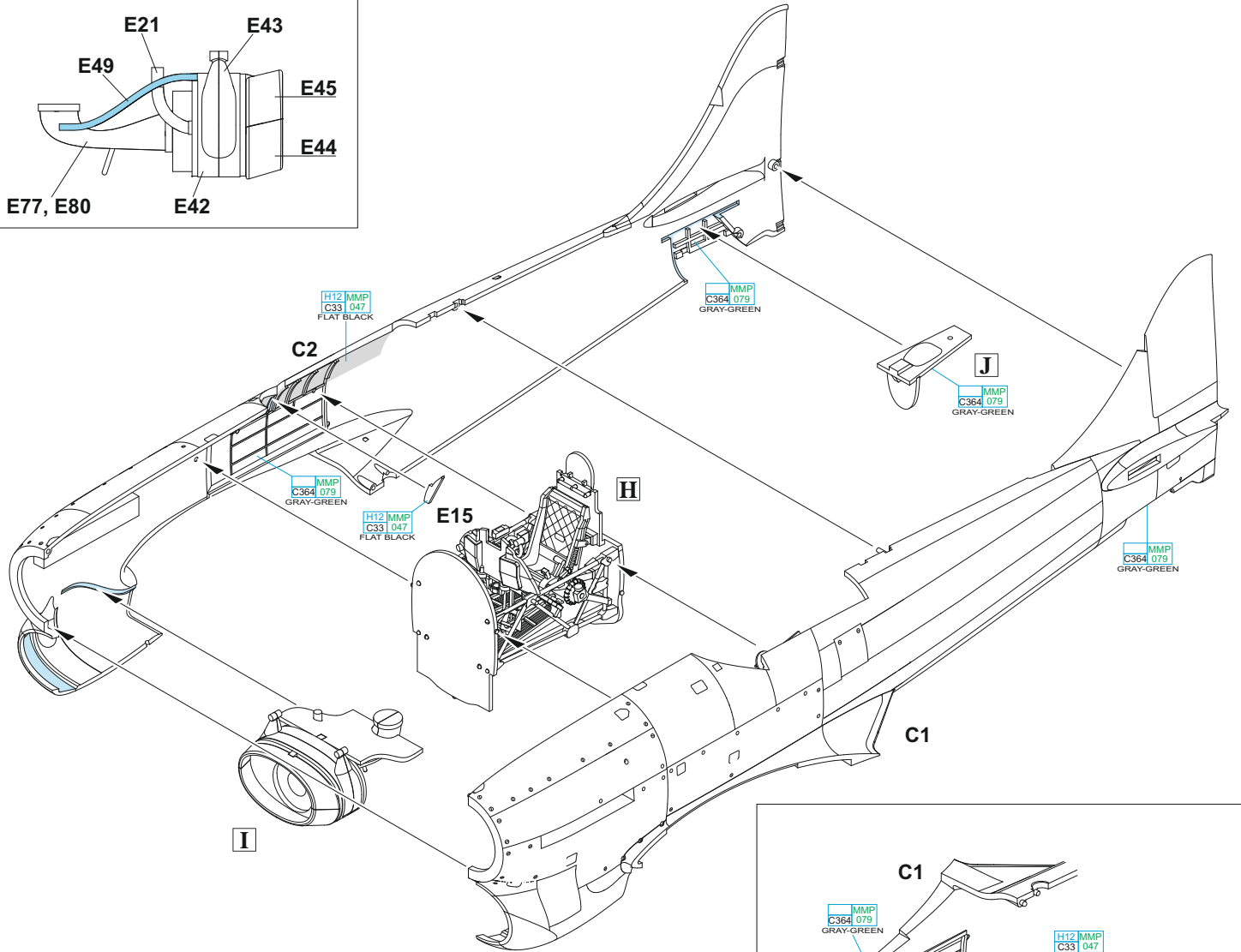
E49

E45

E44

E77, E80

E42



H12 MMP  
C331 047  
FLAT BLACK

C2

MMP  
C364 079  
GRAY-GREEN

**J**

MMP  
C364 079  
GRAY-GREEN

MMP  
C364 079  
GRAY-GREEN

H12 MMP  
C331 047  
FLAT BLACK

E15

**H**

MMP  
C364 079  
GRAY-GREEN

C1

**I**

C1

MMP  
C364 079  
GRAY-GREEN

H12 MMP  
C331 047  
FLAT BLACK

E15

H12 MMP  
C331 047  
FLAT BLACK

E24

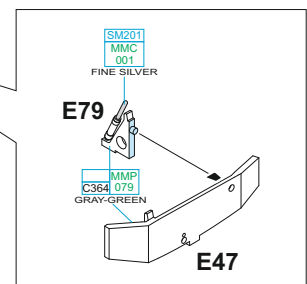
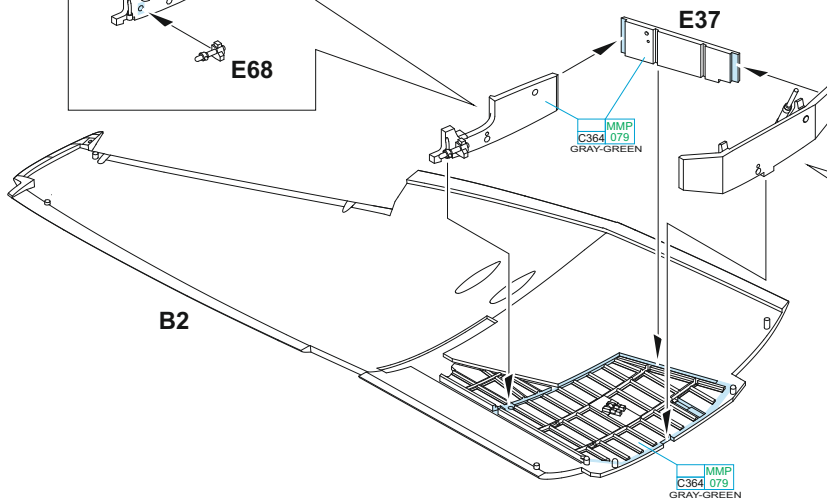
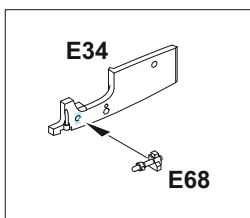
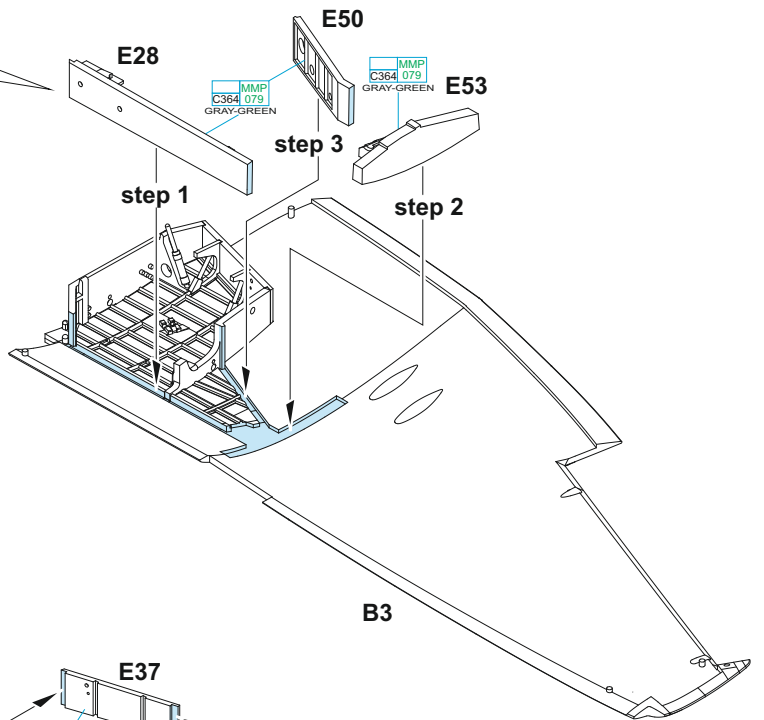
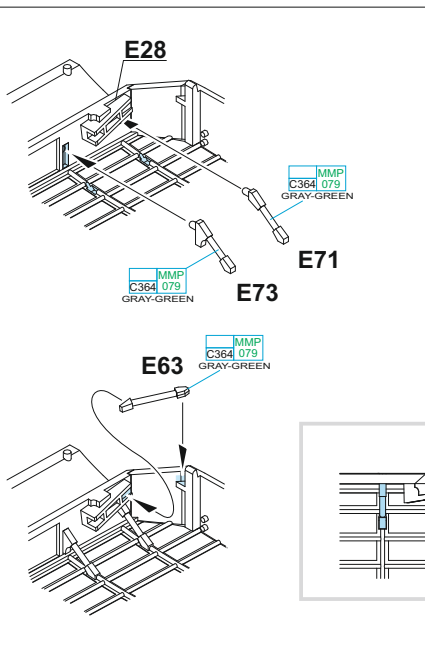
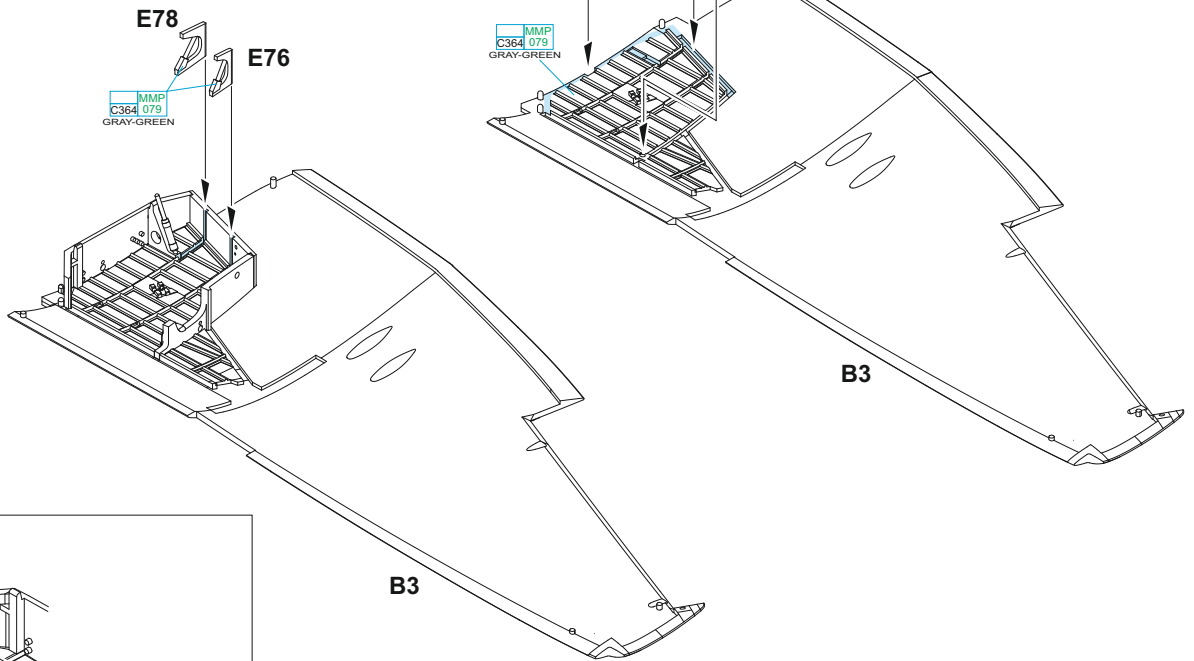
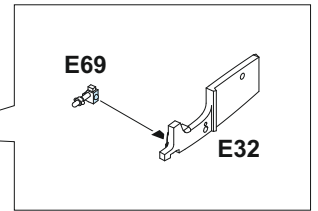
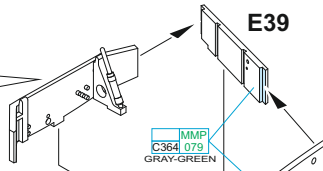
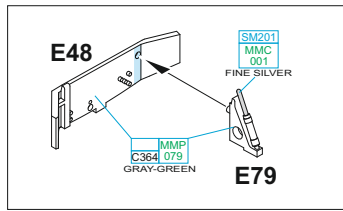
E18

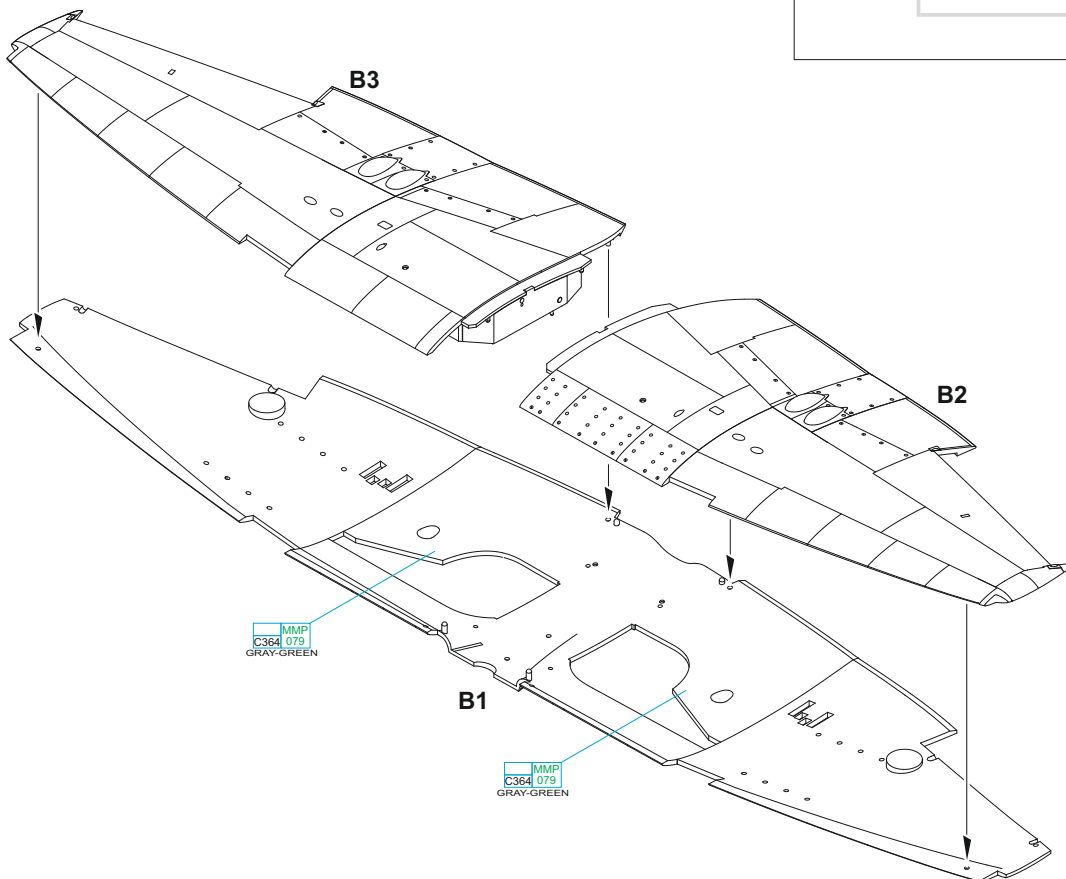
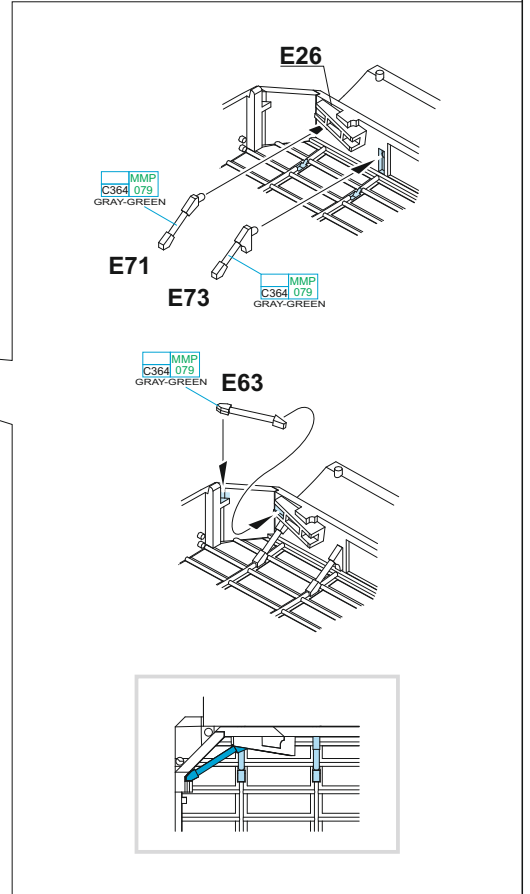
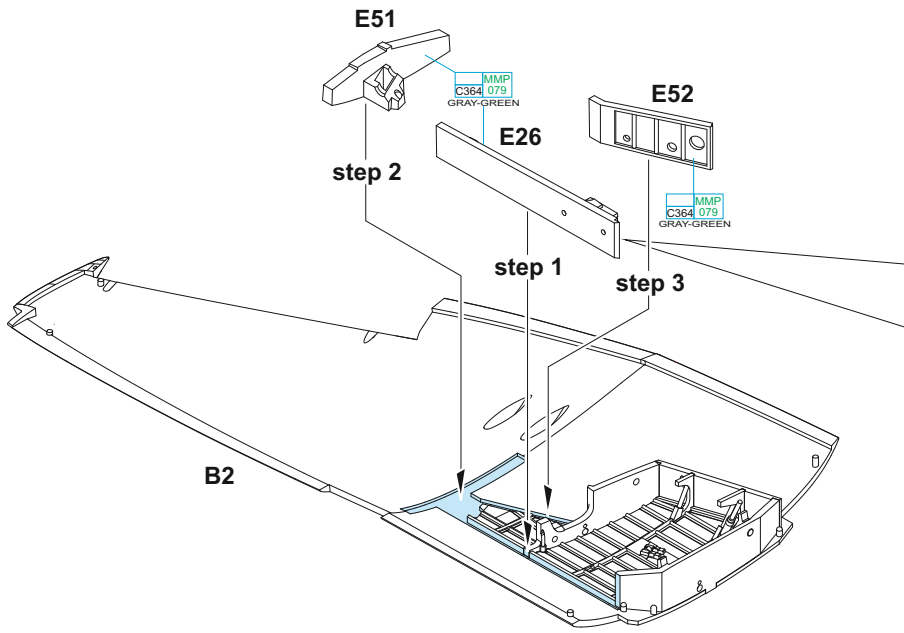
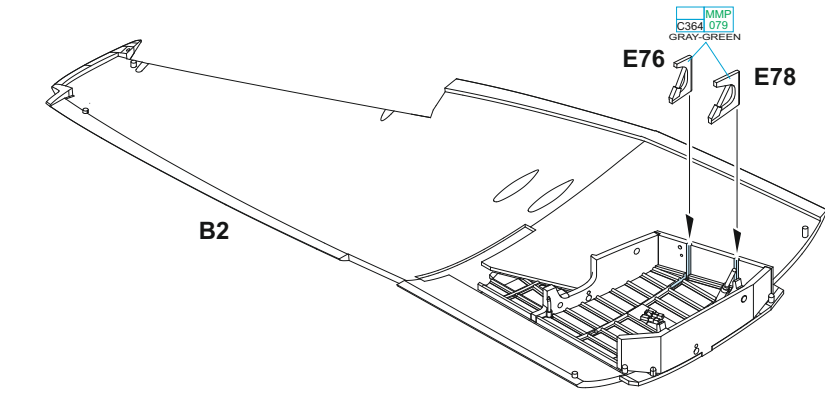


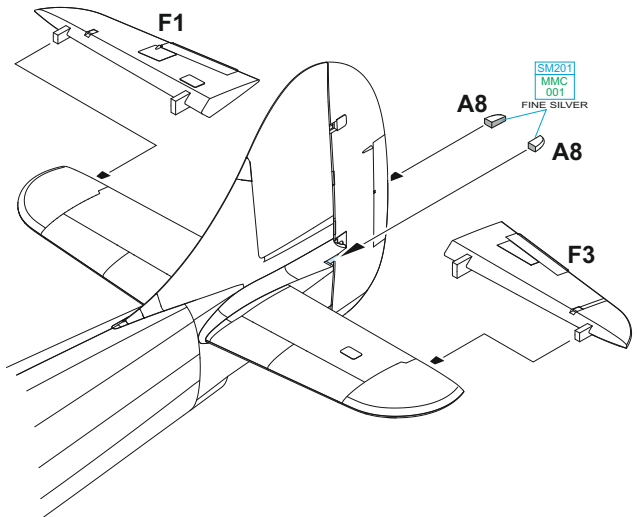
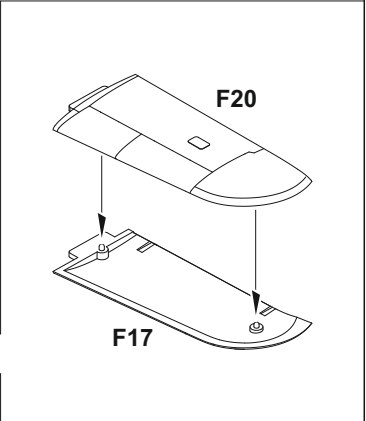
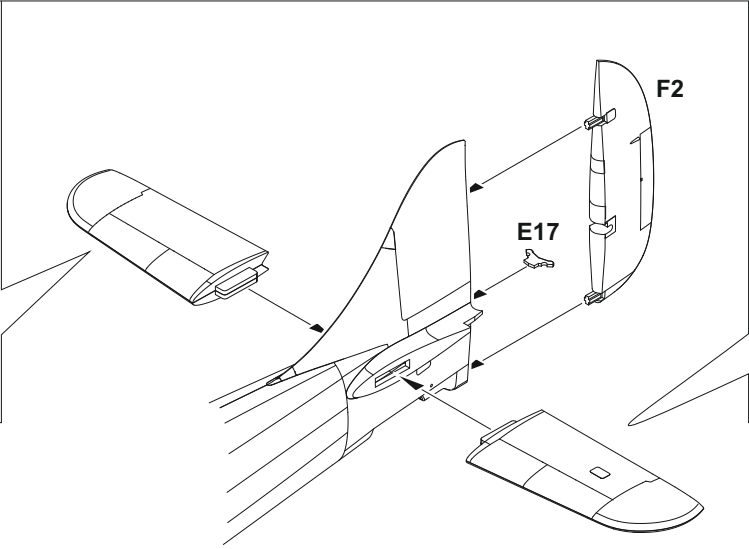
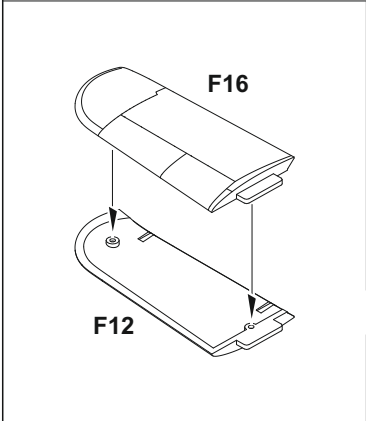
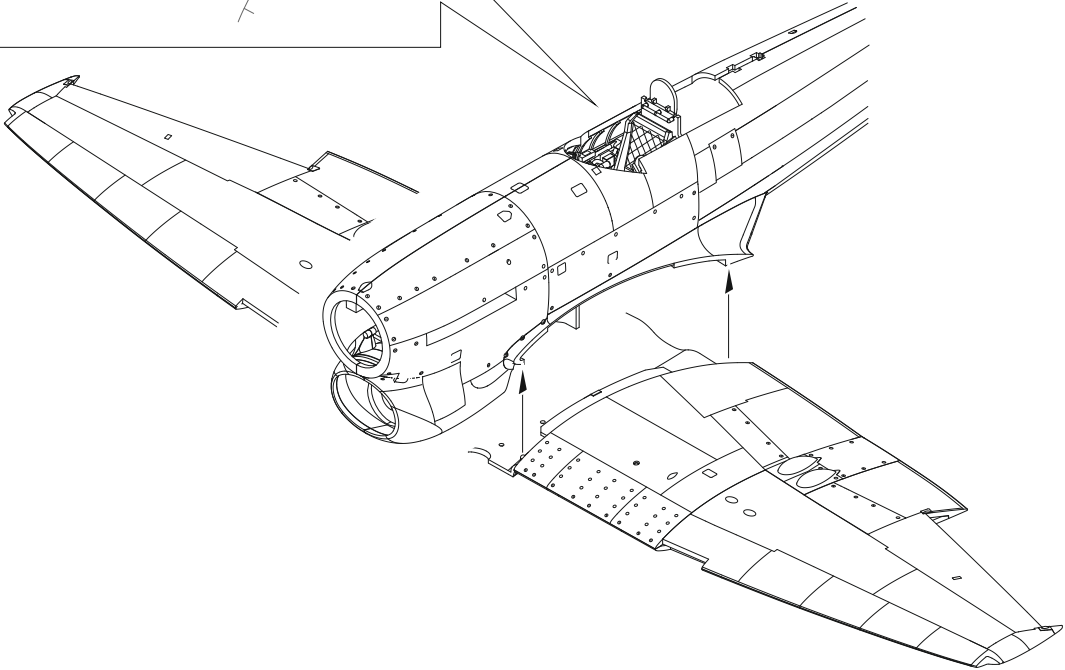
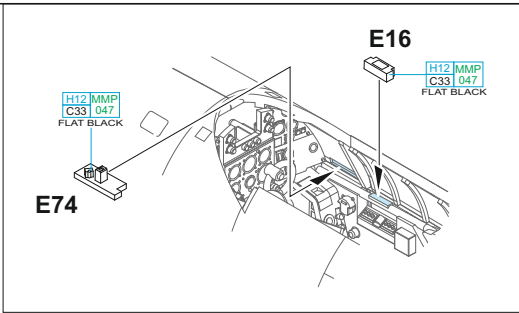
**OPTIONAL:  
decal 20**

H12 MMP  
C331 047  
FLAT BLACK

E18

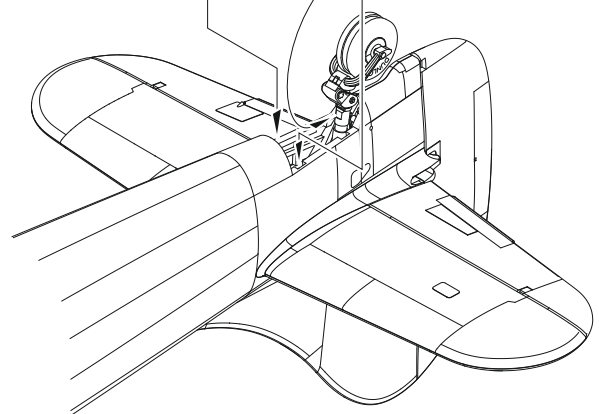
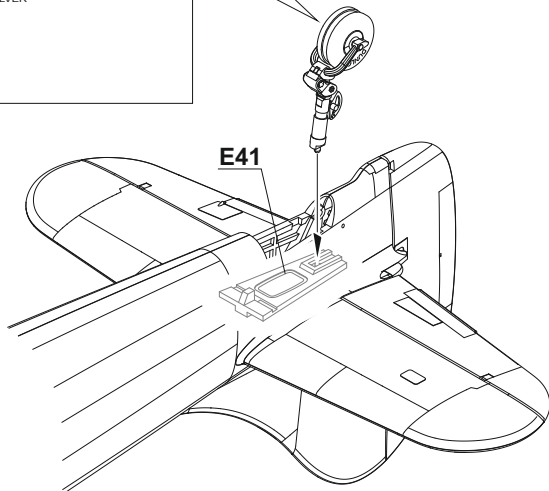
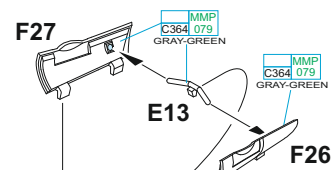
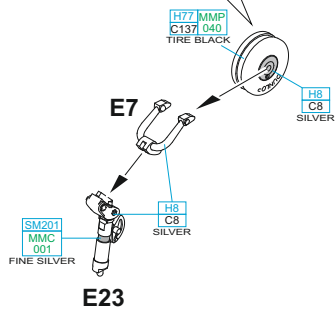
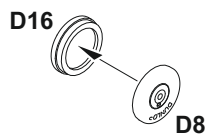
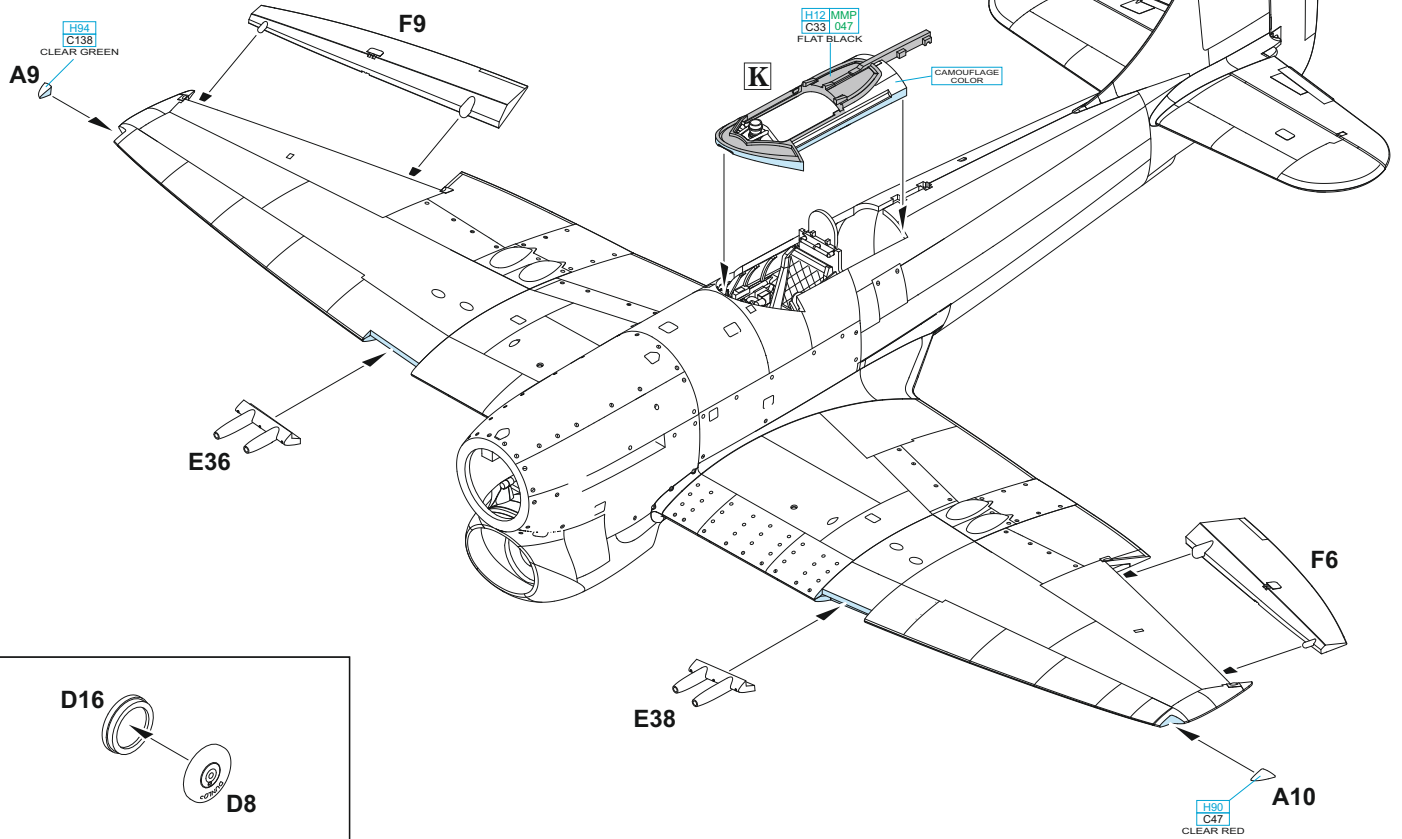
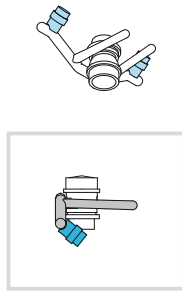
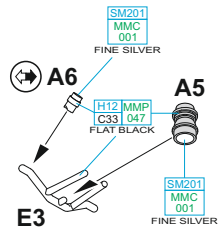
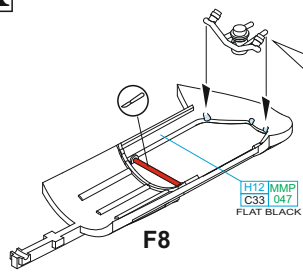


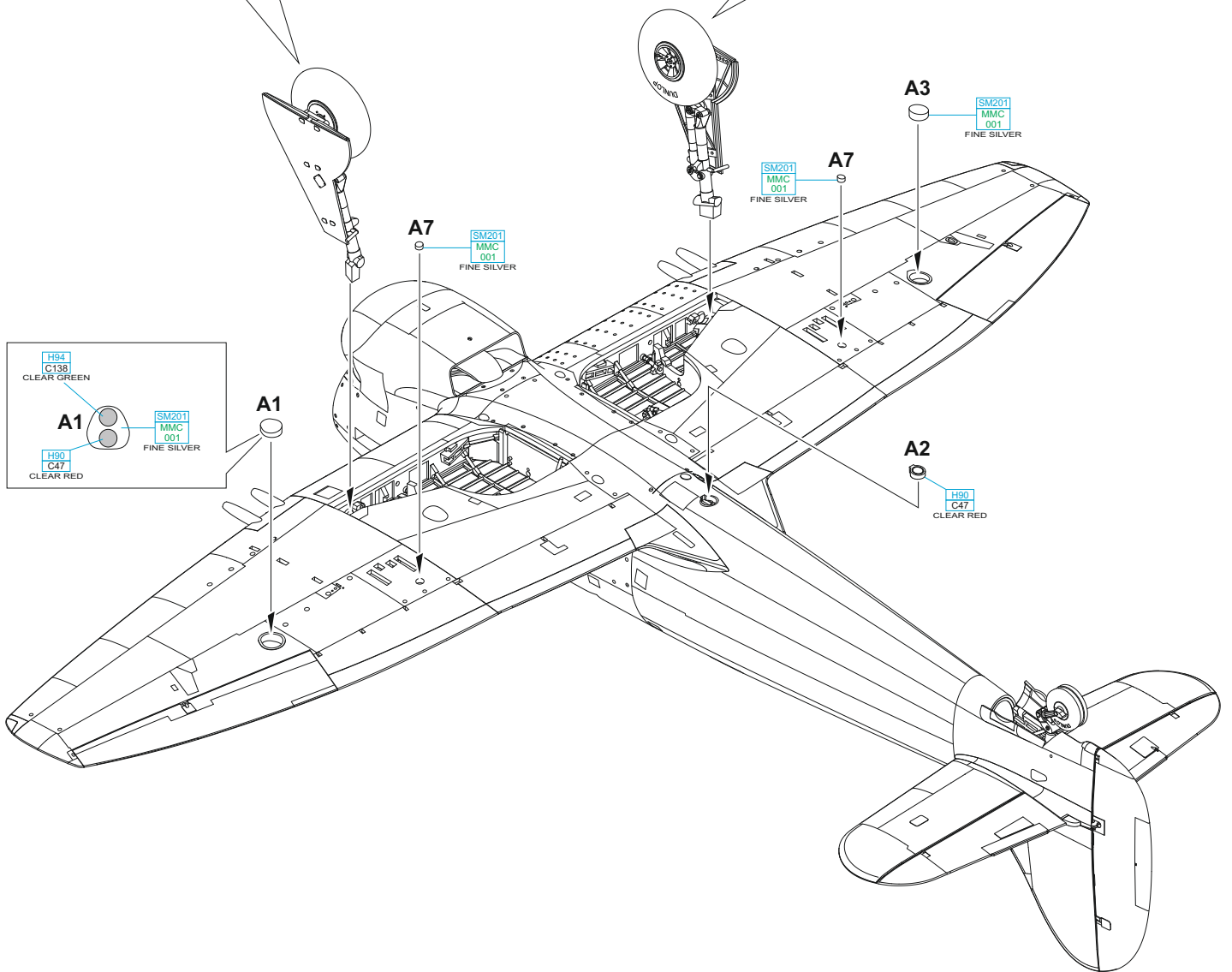
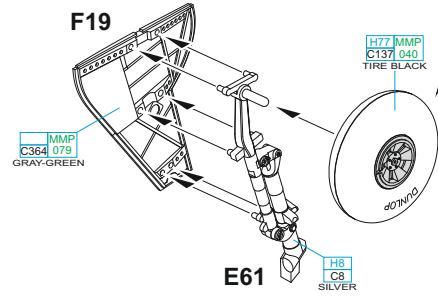
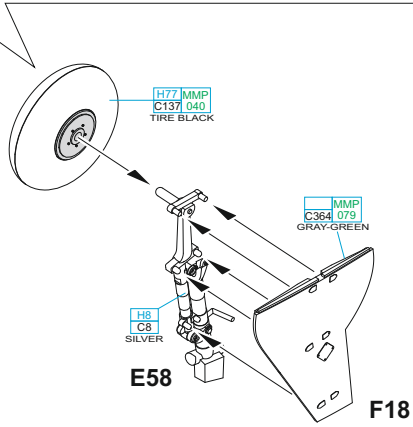
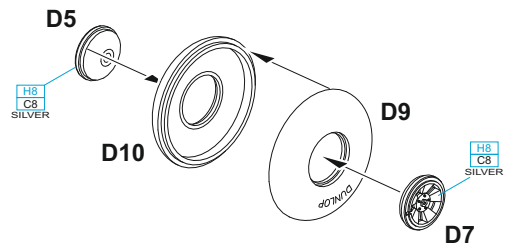
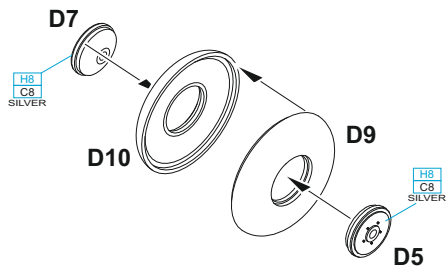


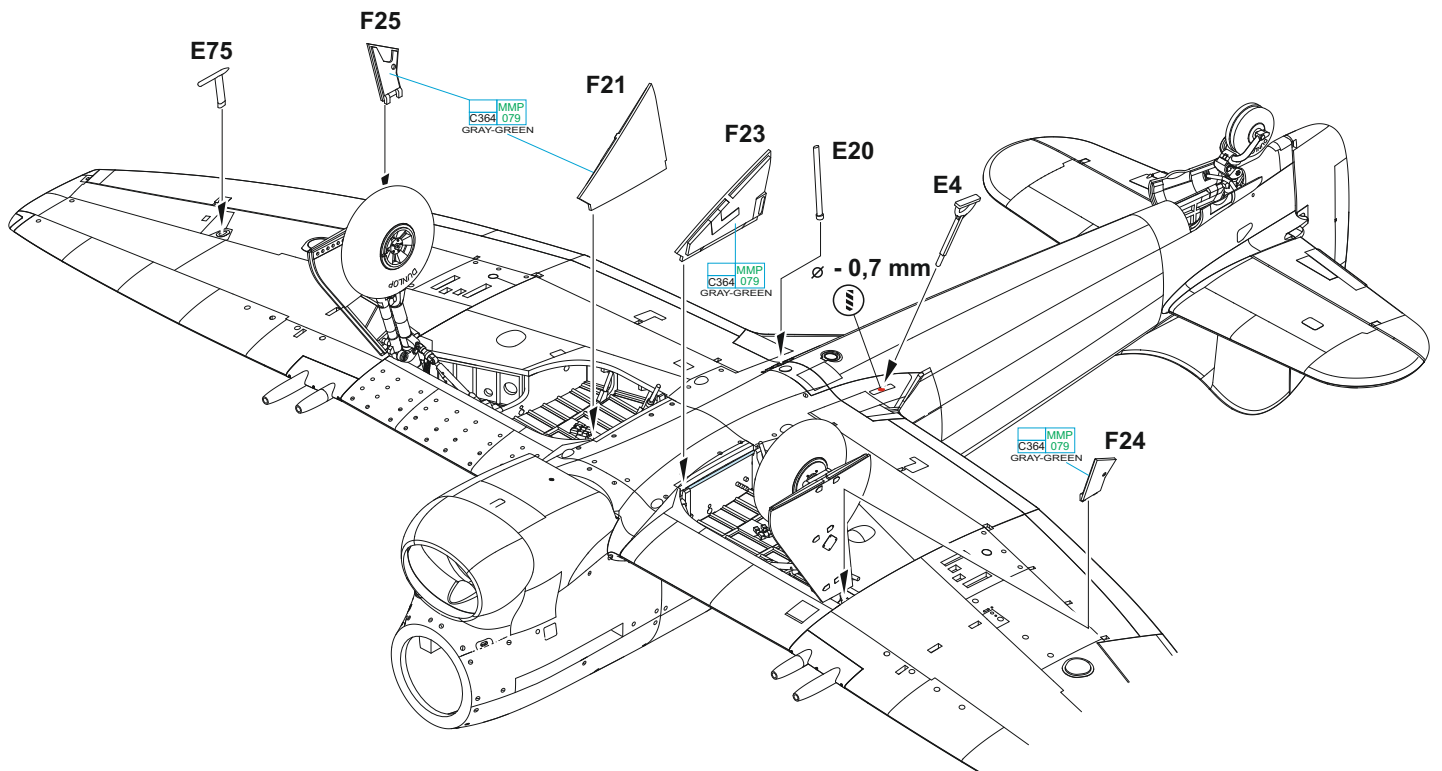
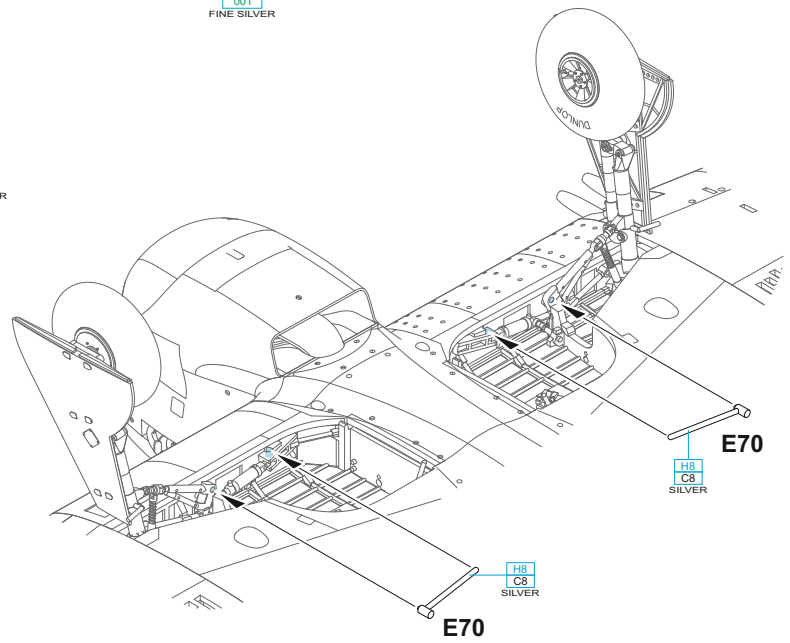
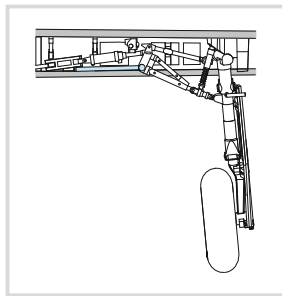
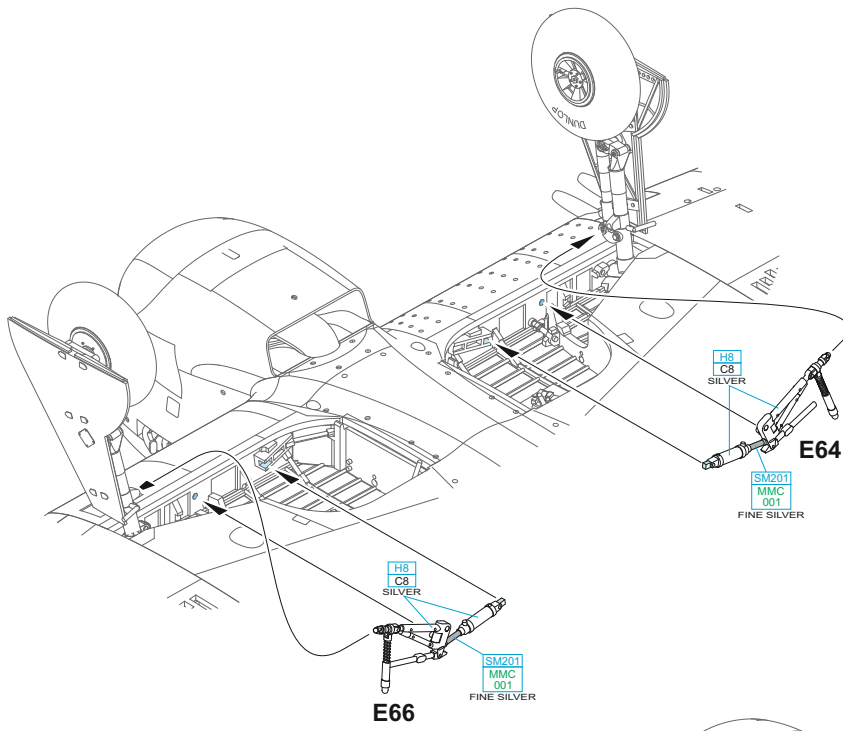




**K**







**L**

H12 MMP  
C33 047  
FLAT BLACK

**F11**

H12 MMP  
C33 047  
FLAT BLACK

**A11** ⚙

**CLOSED CANOPY**

**L**

**E22**

⚙ **A4**

H12 MMP  
C33 047  
FLAT BLACK

**DECAL S42**

**E8**

**E8**

MC214  
MMM  
001  
DARK IRON

**E55**

MC214  
MMM  
001  
DARK IRON

**E57**

?

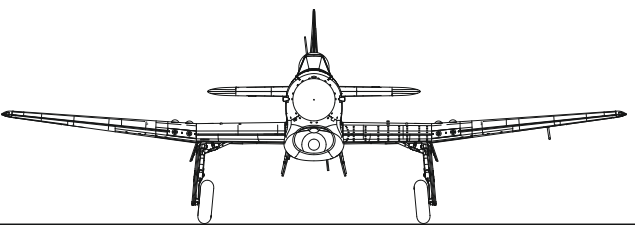
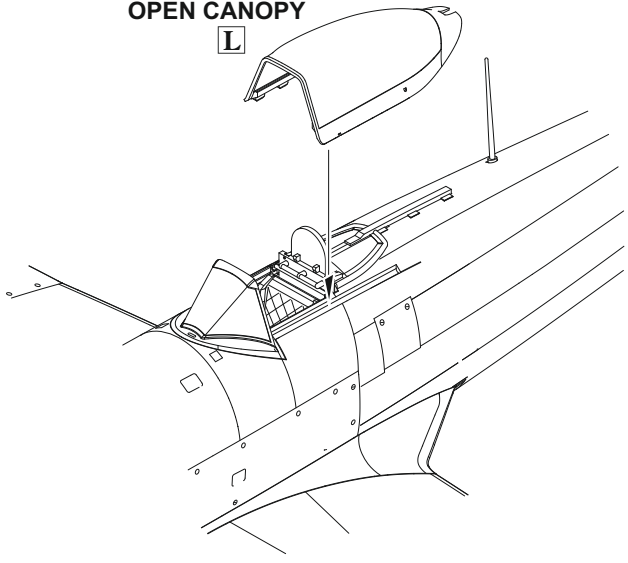
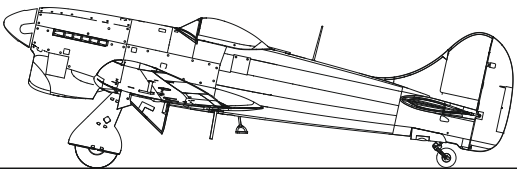
**OPEN CANOPY**

**L**

**F29**

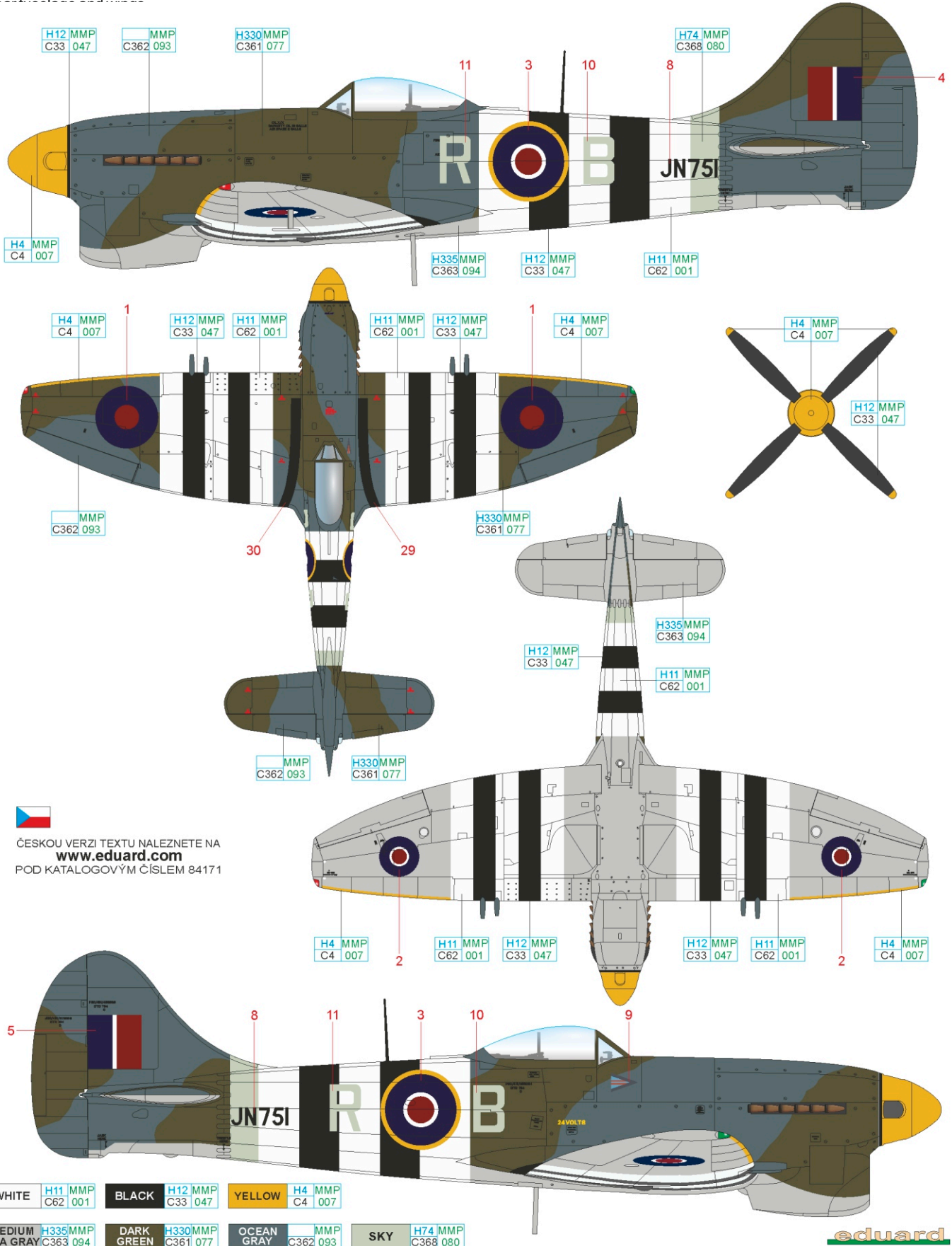
**F30**

**F28**



# A JN751, W/Cdr Roland P. Beamont DSO, DFC & bar, CO of No. 150 Wing, Newchurch, United Kingdom, June 1944

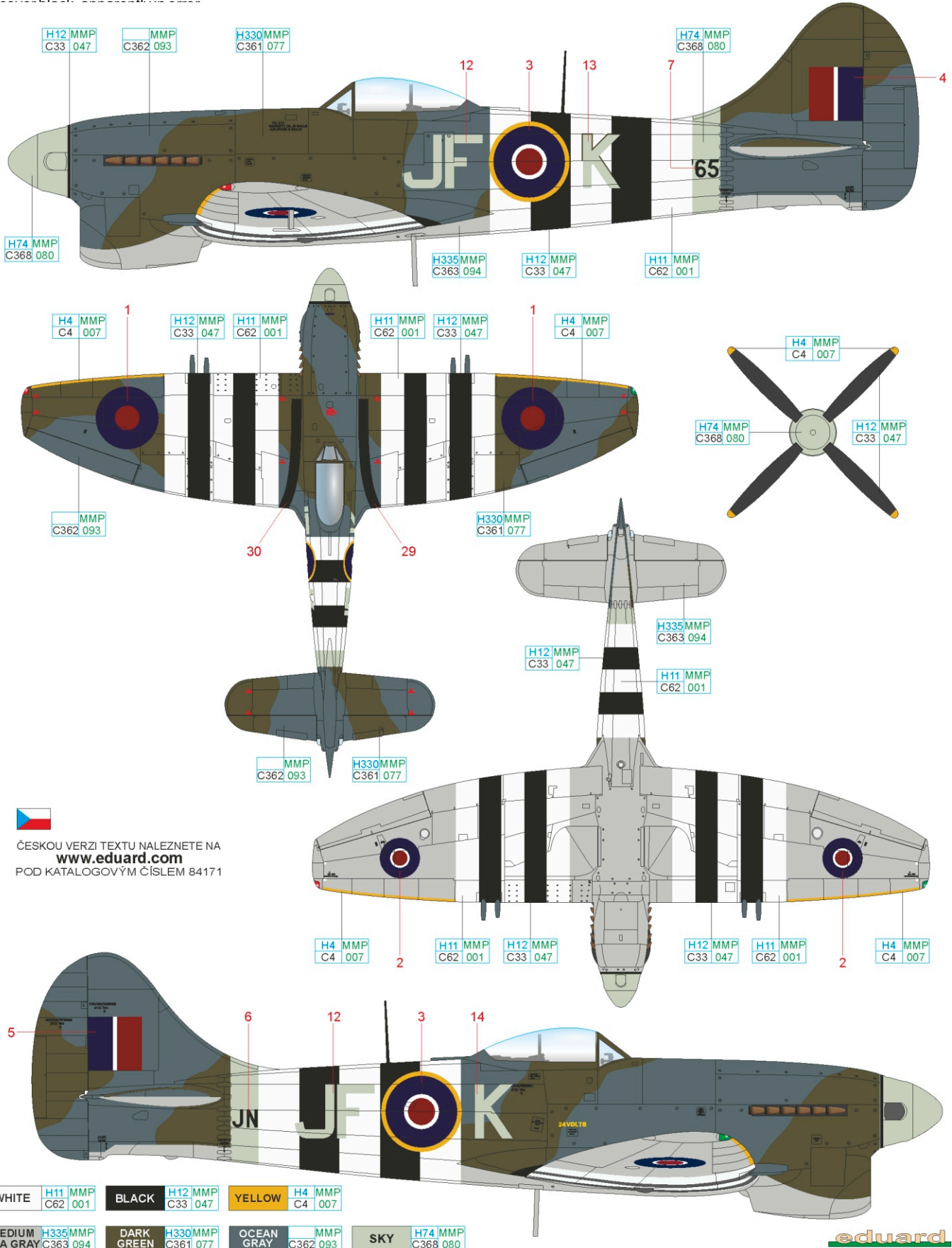
In May 1944, No. 150 Wing was deemed operational. The Tempest equipped only No. 3 and No. 486 Squadrons, while No. 56 Squadron had to wait for their new Tempests until late June 1944 and used the Spitfire Mk.IX in the interim. The task of the Tempests of No. 150 Wing at the time of the invasion was to provide air cover over the battlefield and attack enemy ground targets but from mid-June, the priority became (as the Tempest was the most suitable aircraft for the task) the protection of southern England from V-1 attacks. At the end of September 1944, the entire unit under the leadership of Beamont moved to liberated Europe. On October 12th, Beamont's machine was hit by flak and due to a damaged radiator had to put down behind enemy lines and spent the remainder of the war in captivity. Over the course of the Second World War, Beamont claimed nine kills and in July 1944 was awarded a bar to his DSO in recognition of his successful leadership of the Tempest wing which had destroyed more than 600 V-1s (32 by Beamont himself). After the war, he continued on as a test pilot and flew, among others, the Meteor, Vampire, Canberra, Lighting and the TSR-2. He retired in August 1979 and died on November 19th, 2001. Two days before the invasion of Europe, Beamont's aircraft received the prescribed 'Special Markings' - 18-inch wide black and white stripes encircling the fuselage.



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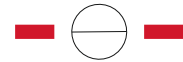
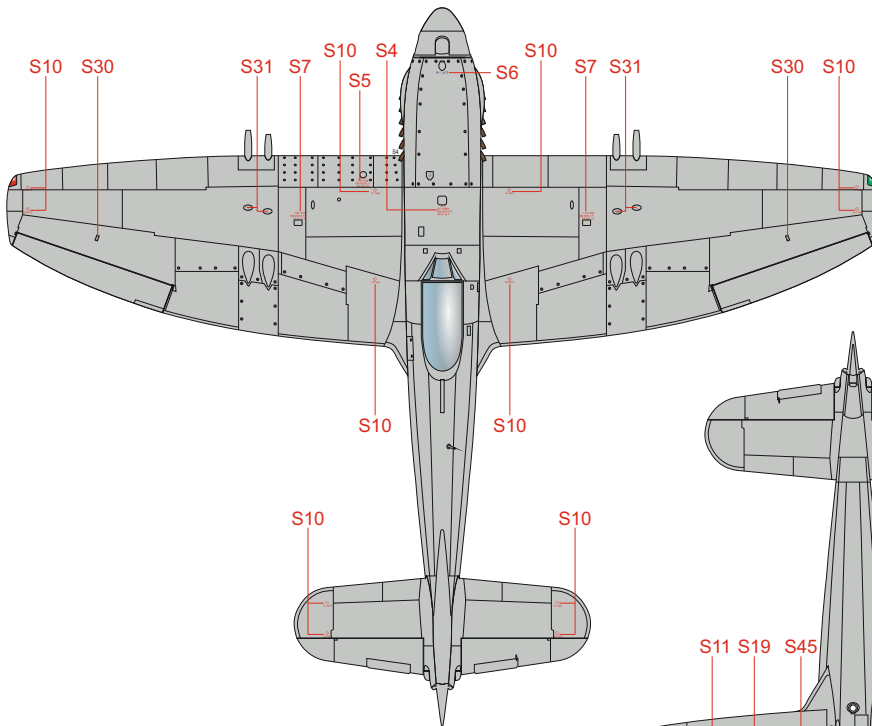
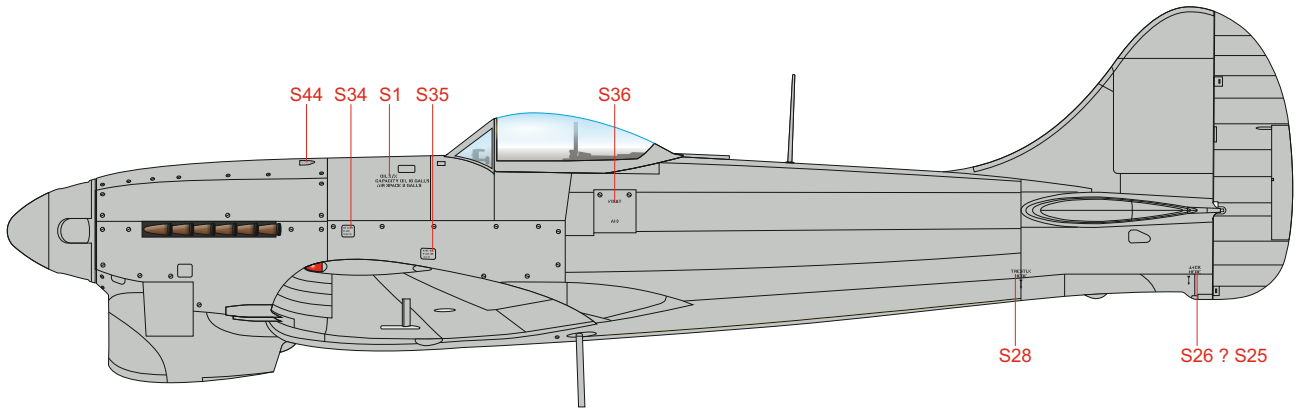
# B JN765, No. 3 Squadron, Newchurch, United Kingdom, June 1944

No. 3 Squadron was formed in 1912 and at the beginning of the Second World War was equipped with the Hawker Hurricane. As a component of the British Expeditionary Force it fought over Belgium and France. On returning to Great Britain, patrol duties were assigned to the unit over the Royal Navy base at Scape Flow and from April 1941, operated over southern England as a night fighter unit. In February 1943, the unit was re-equipped with the Hawker Typhoon and a year later, the Tempest. With these aircraft, the unit prepared for the invasion of Europe but was held back to defend southern England against the V-1 flying bomb. When the V-1 launch sites were over-run, it was one of the Tempest squadrons transferred to the European mainland to support advancing Allied troops all the way to the end of the war. It remained in Germany until May 1999 as part of the British Air Forces of Occupation (BAFO), 2nd TAF and RAF Germany. At the turn of the century, the unit took part in the bombings of Kosovo, Sierra Leone, Iraq, and in 2004, Afghanistan. In March 2006, the unit received the Eurofighter Typhoon. In early June 1944, No. 3 Squadron's code was changed from QO to JF which was used until August 1945. The so-called 'Invasion Stripes' were also added to aircraft serialied JN765 prior to the operation. Groundcrew painted black the bottom section of the main landing

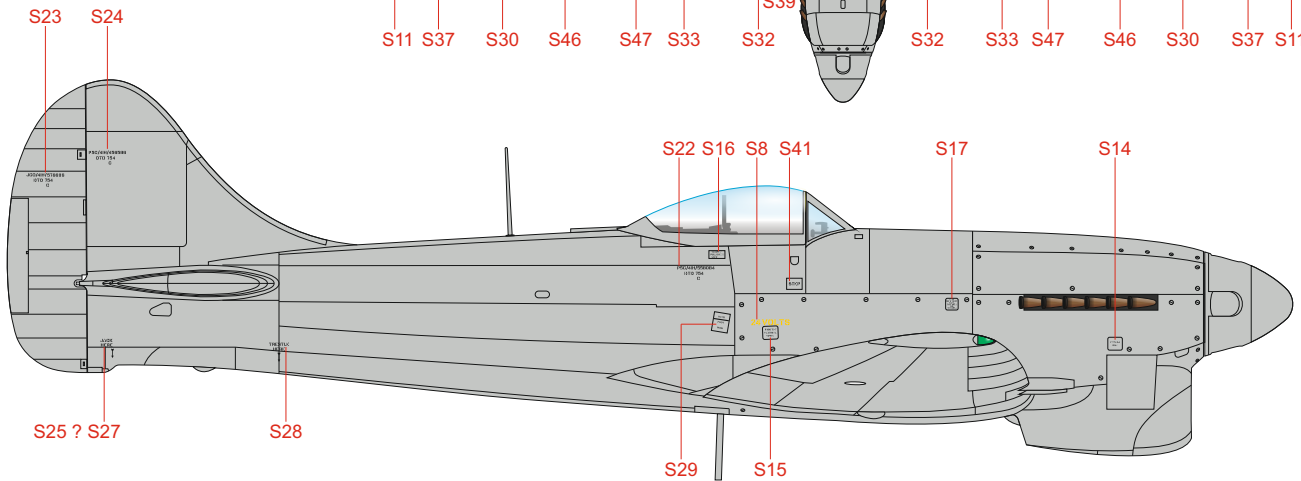
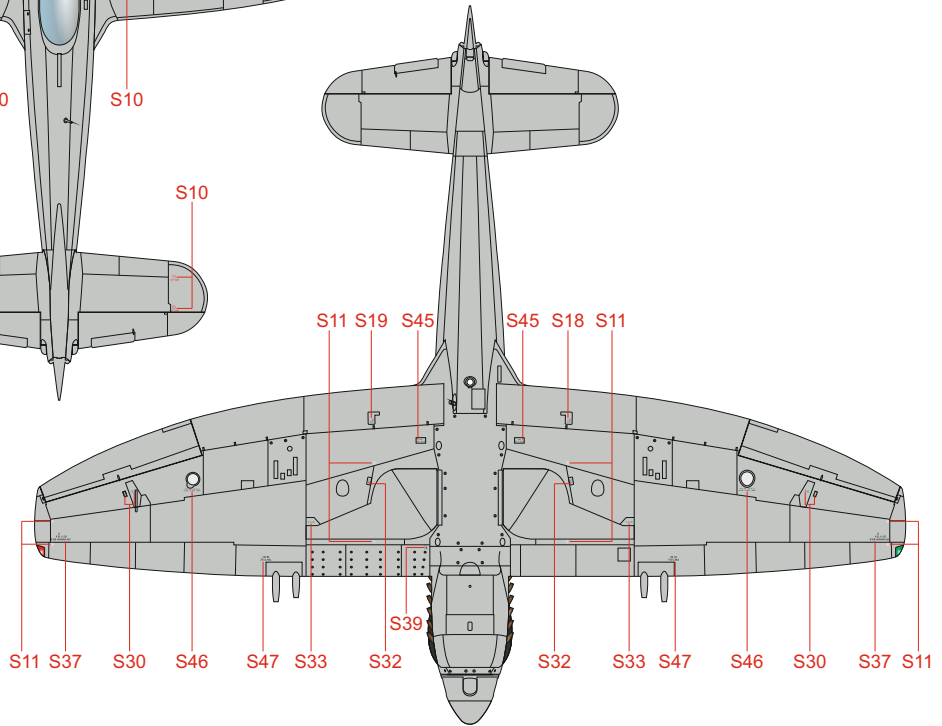
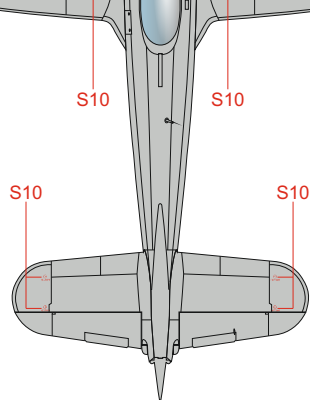


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WHITE	H11 MMP C62 001	BLACK	H12 MMP C33 047	YELLOW	H4 MMP C4 007
MEDIUM SEA GRAY	H335 MMP C363 094	DARK GREEN	H330 MMP C361 077	OCEAN GRAY	MMP C362 093
		SKY	H74 MMP C368 080		



S47 - ALL „AMAL”  
FASTENERS  
ON THE WINGS AND  
FUSELAGE

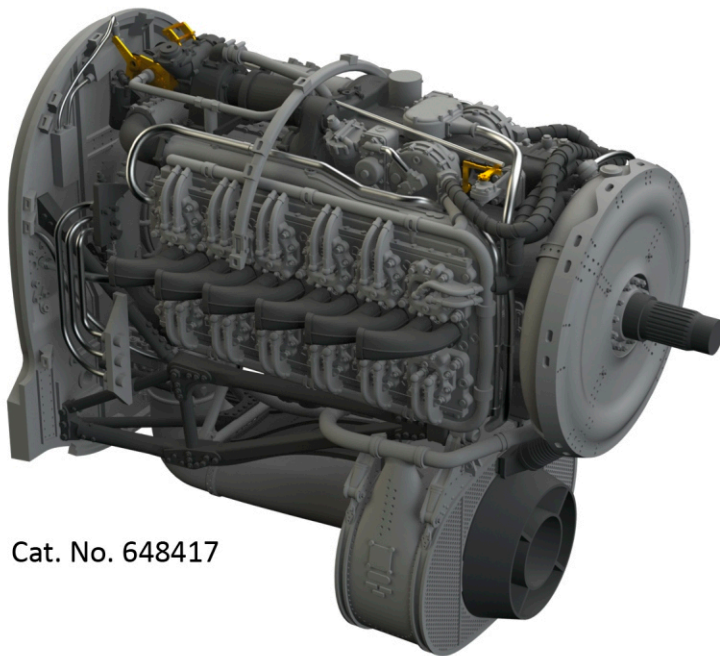


# Eduard goodies for

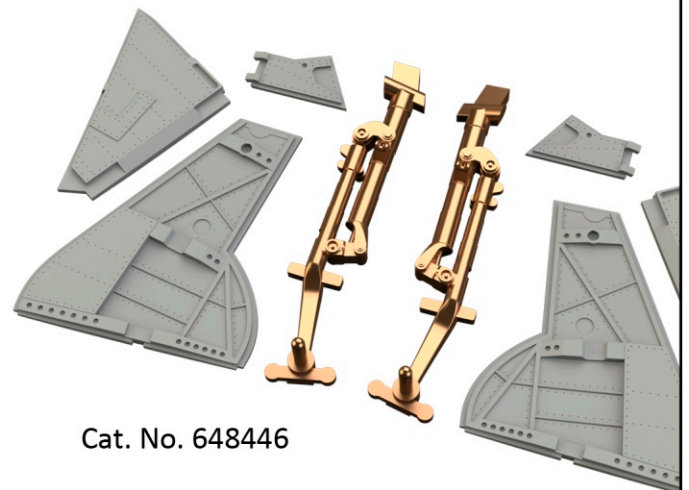
## Tempest Mk.V Series 1 1/48

- 48976 Tempest Mk.V upgrade set (PE-Set)
- 48977 Tempest Mk.V landing flaps (PE-Set)
- FE943 Tempest Mk.V seatbelts STEEL (PE-Set)
- FE1096 Tempest Mk.V series 1 Weekned (PE-Set)
- 644006 Tempest Mk.V LööK (Brassin)
- 648416 Tempest Mk.V cockpit (Brassin)
- 648417 Tempest Mk.V engine (Brassin)
- 648418 Tempest Mk.V exhaust stacks (Brassin)
- 648419 Tempest Mk.V gun bays (Brassin)
- 648420 Tempest Mk.V wheels early (Brassin)
- 648446 Tempest Mk.V undercarriage legs BRONZE (Brassin)
- 648499 Tempest Mk.V intake ring (Brassin)
- EX628 Tempest Mk.V TFace (Mask)

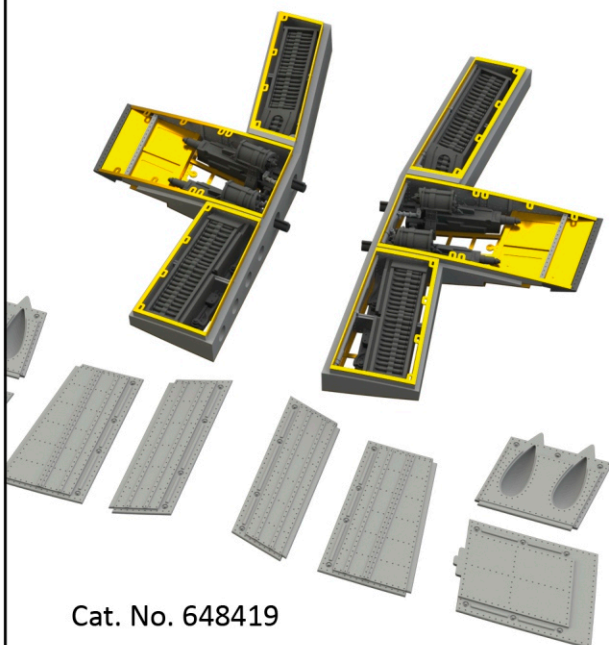
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Cat. No. 648417



Cat. No. 648446



Cat. No. 648419

Cat. No. 648416

