

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.

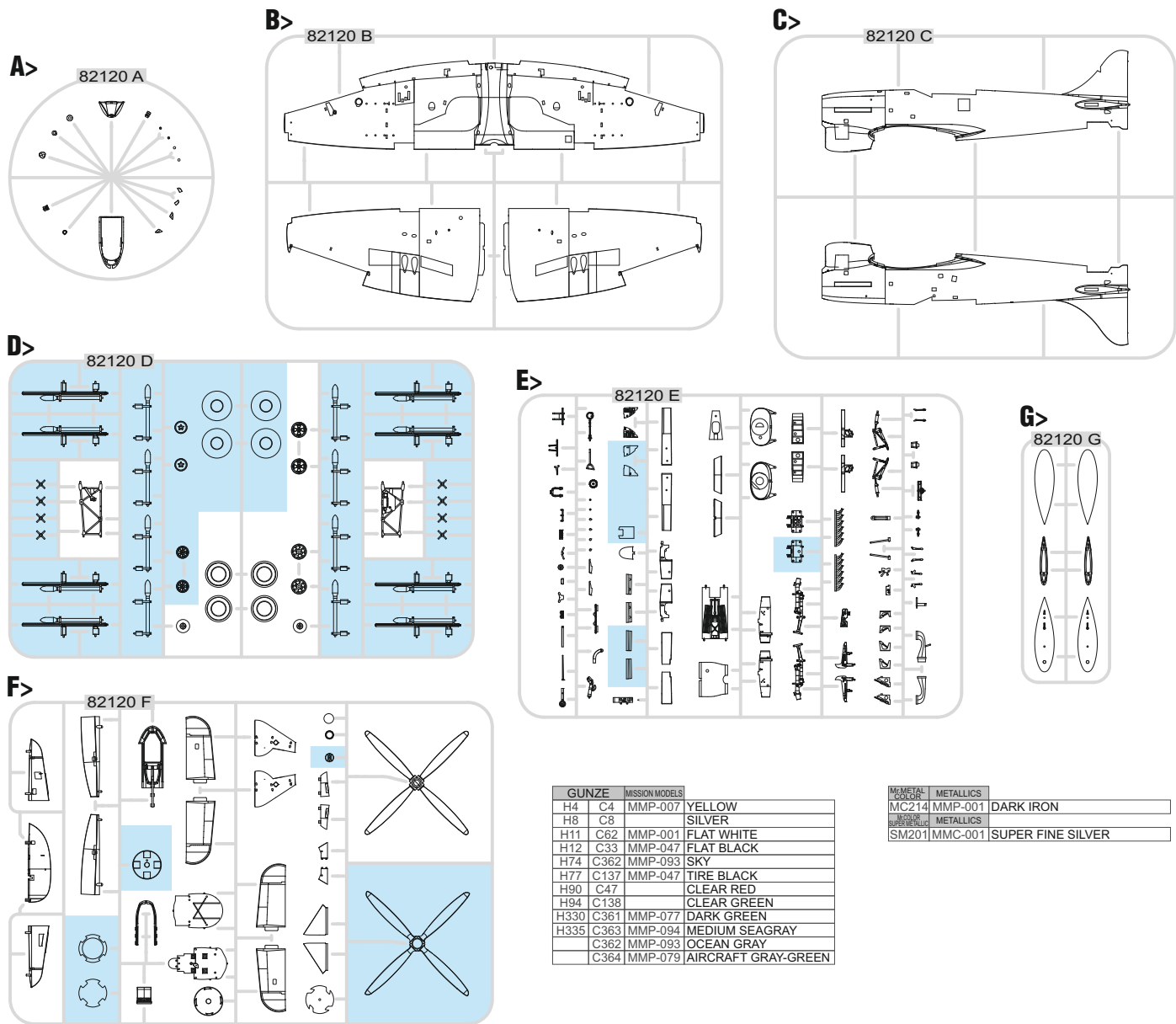
After the V-1 bombing campaign ceased, the Tempest Squadrons returned to the common tasks. At the time, seven Tempest squadrons were flying air-to-air combats and claimed 240 kills (some 20 of them Me 262 jets). Most successful Tempest ace, D. C. Fairbanks (US) recorded 11 kills flying Mk.V „Terror of 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



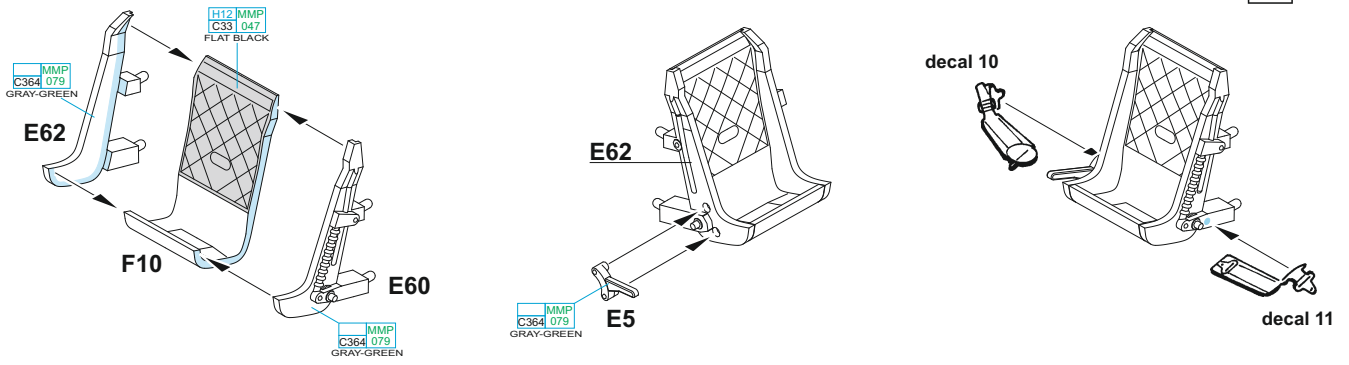
ATTENTION * UPOZORNĚNÍ * ACHTUNG * ATTENTION

- (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.

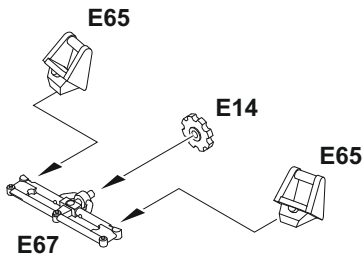
INSTRUCTION SIGNS * INSTR. SYMBOLY * INSTRUKTION SINNBILDEN * SYMBOLES

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

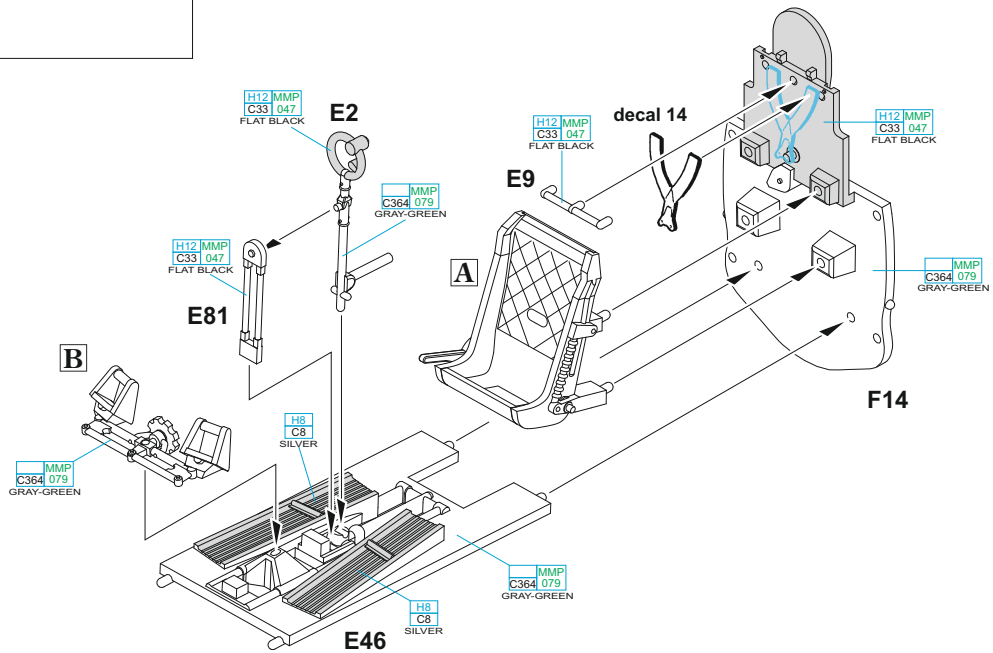
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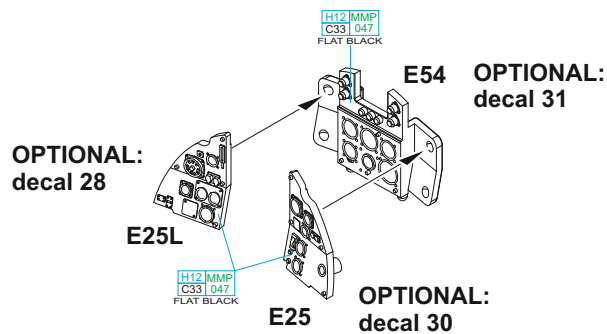
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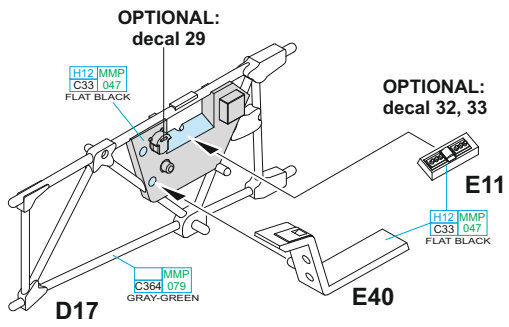
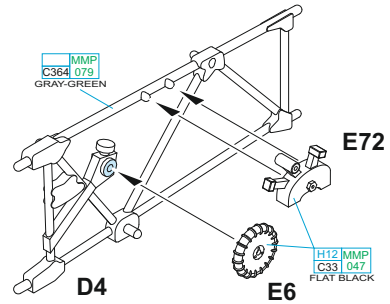
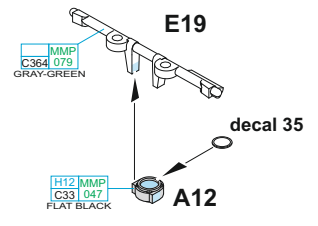
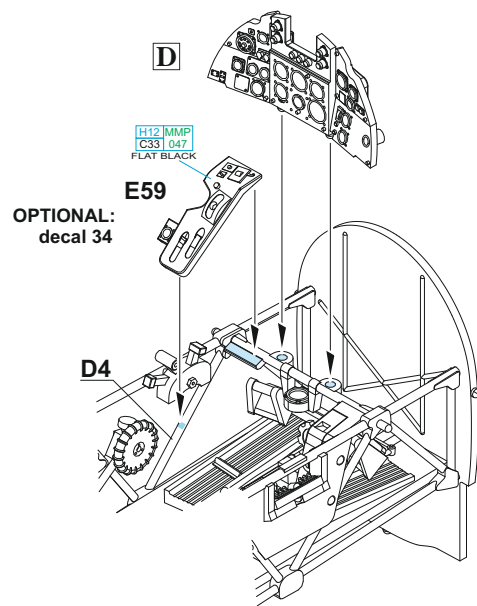
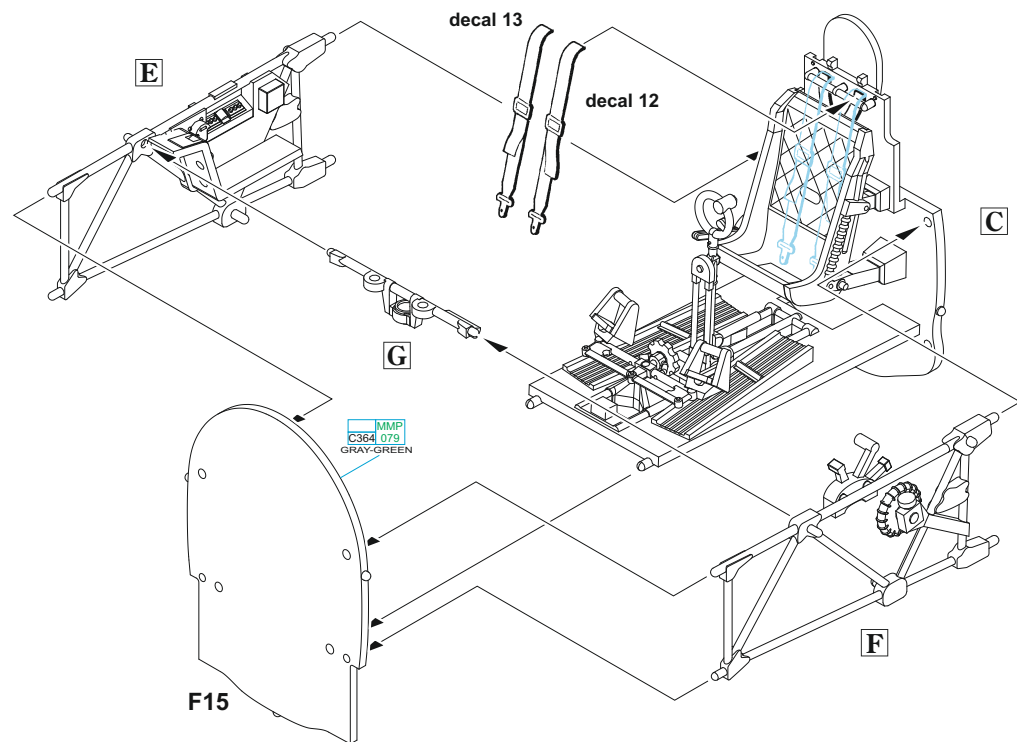


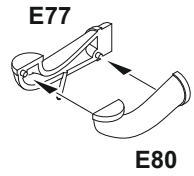
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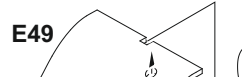
D



E**F****G****H**

I

MMP
C364 079
GRAY-GREEN



MMP
C364 079
GRAY-GREEN

E21

H8
C8
SILVER

E43

E42

F33

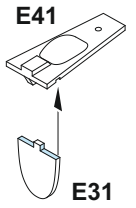
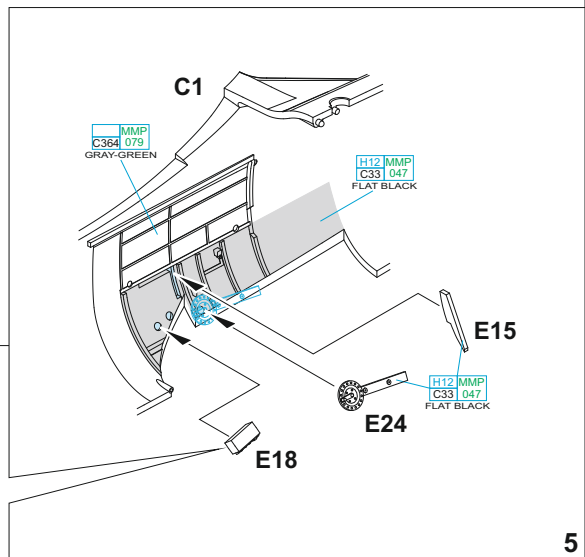
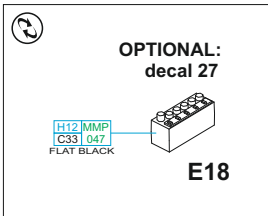
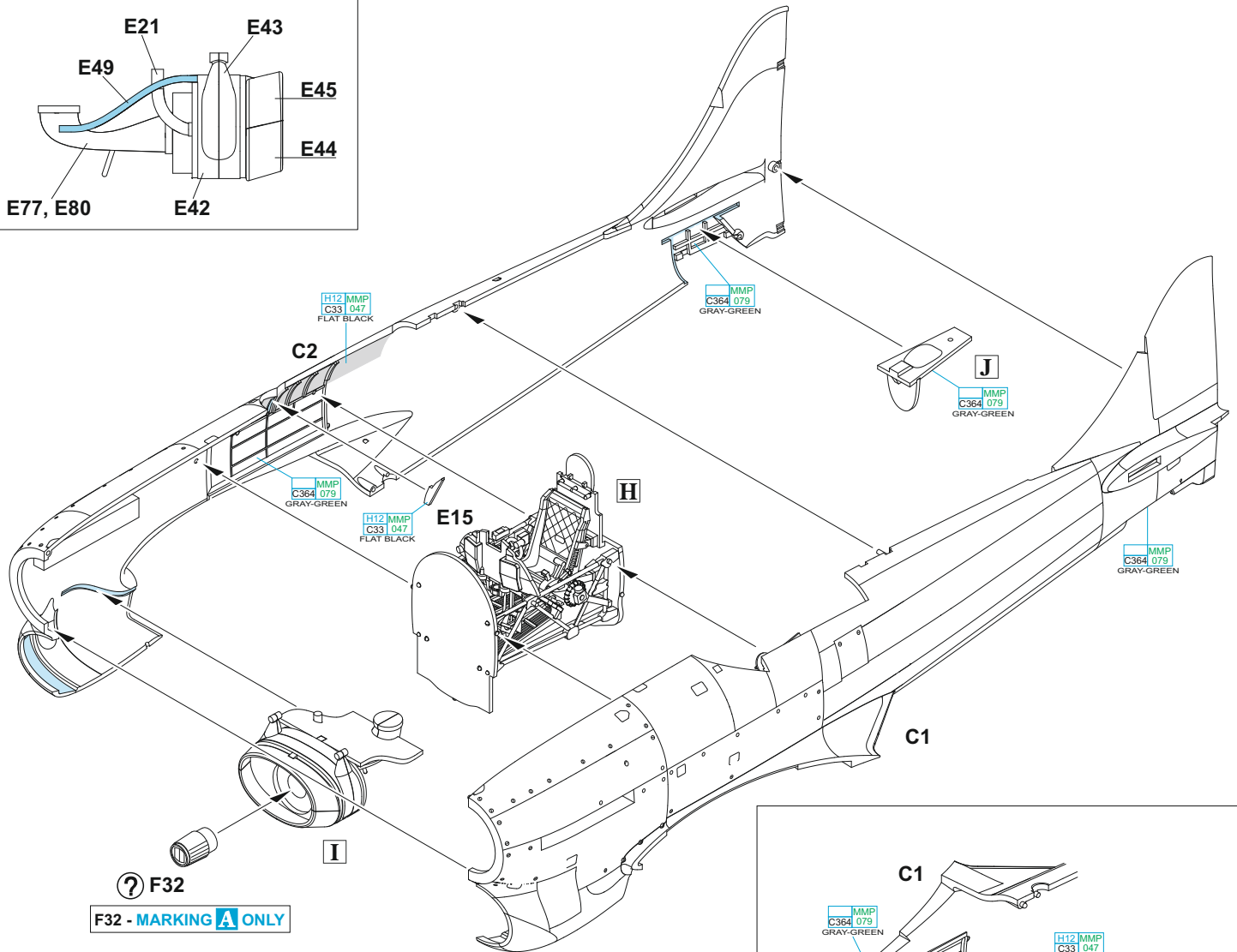
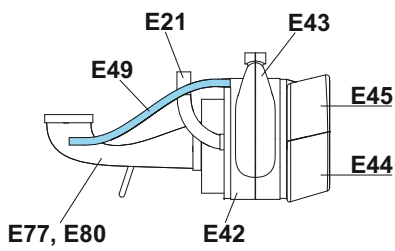
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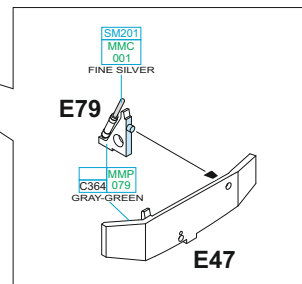
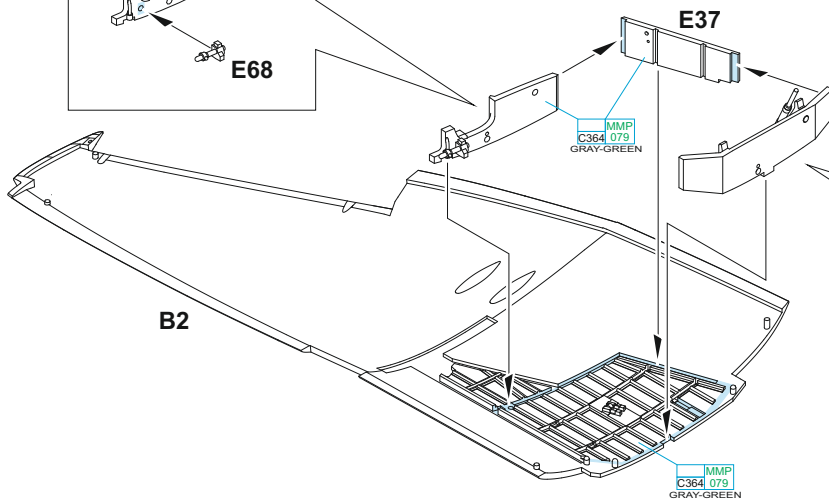
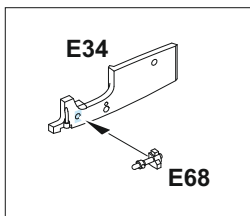
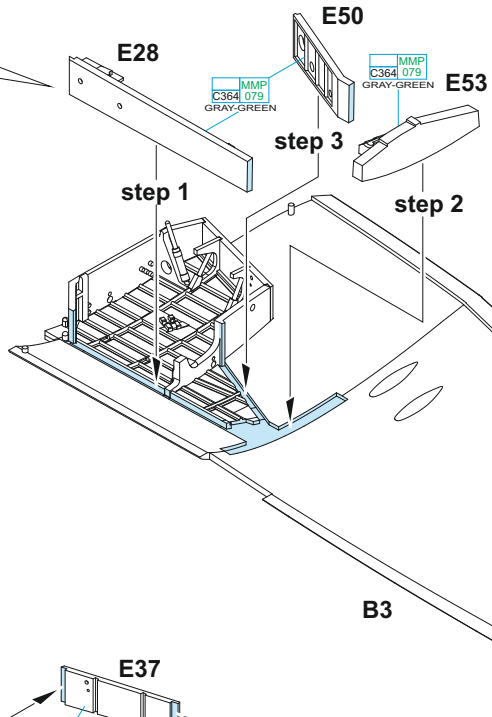
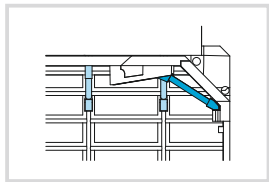
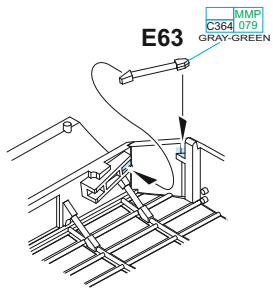
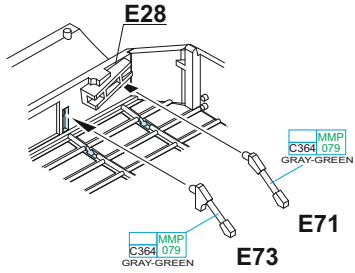
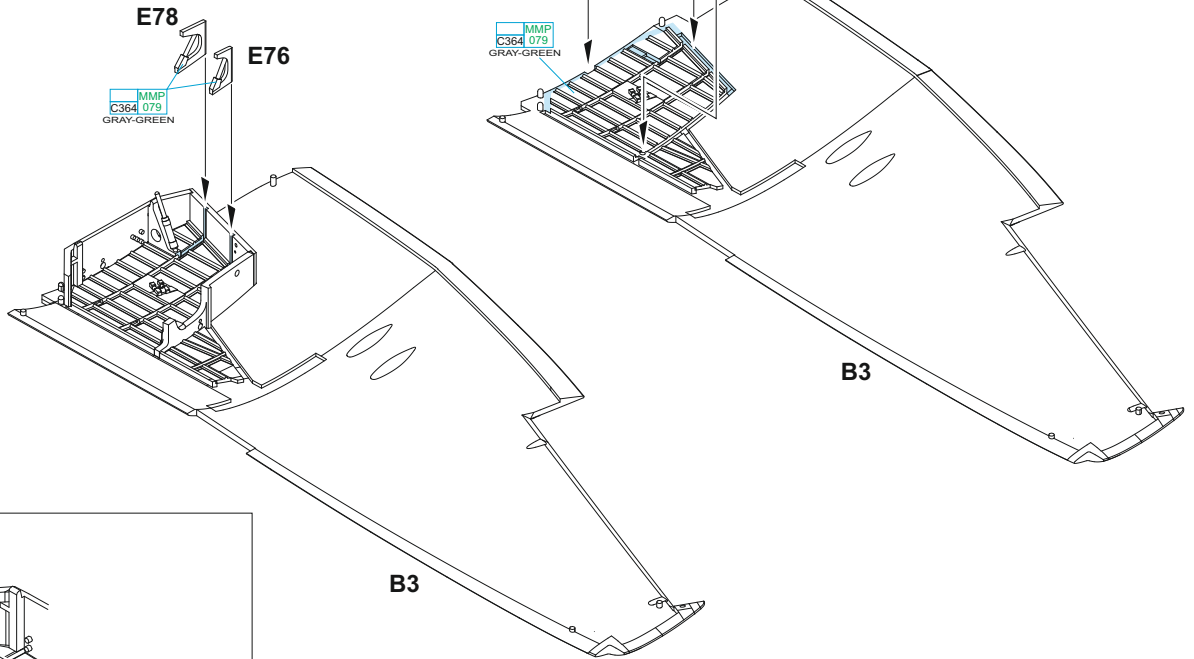
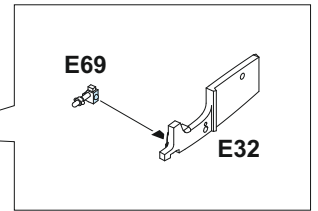
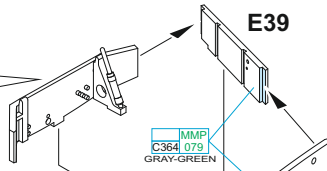
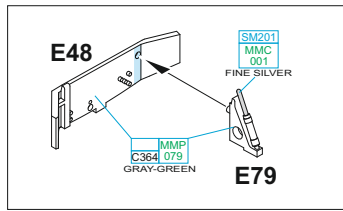
step 2

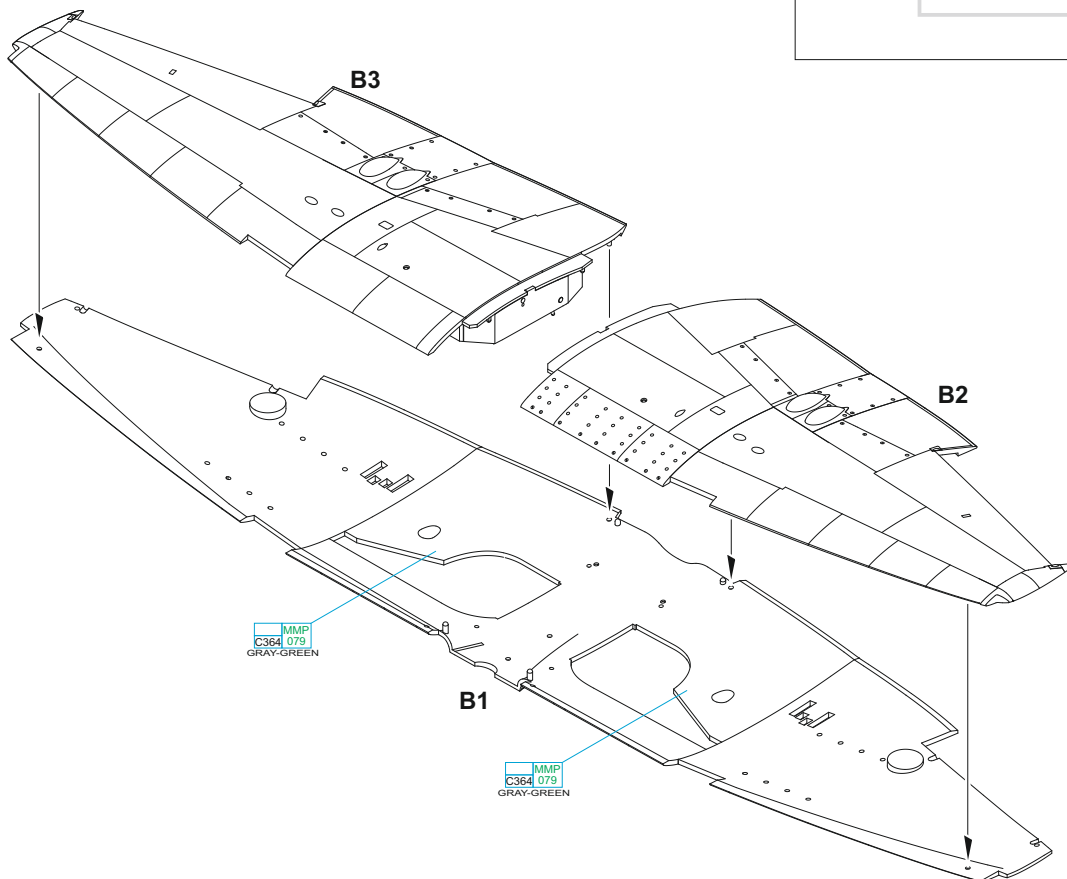
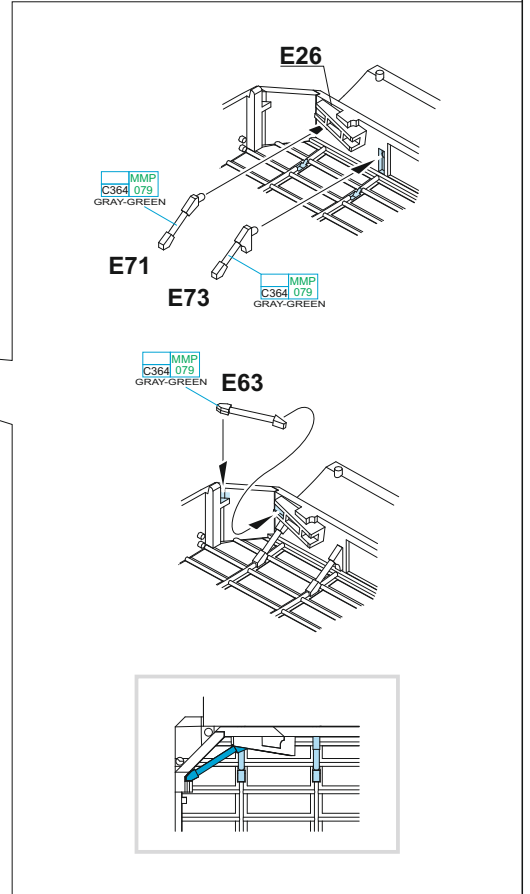
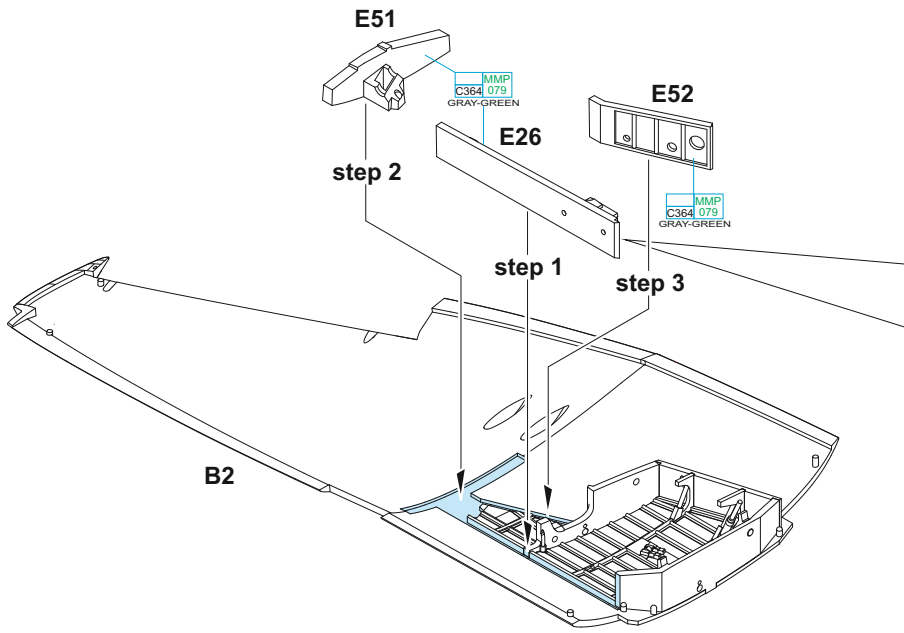
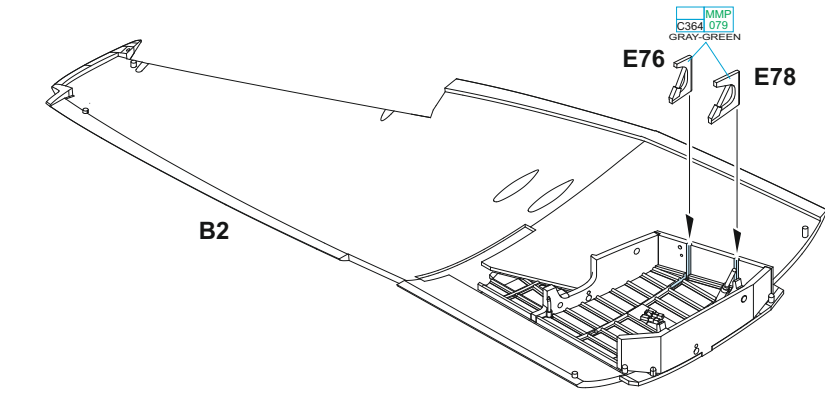
E45

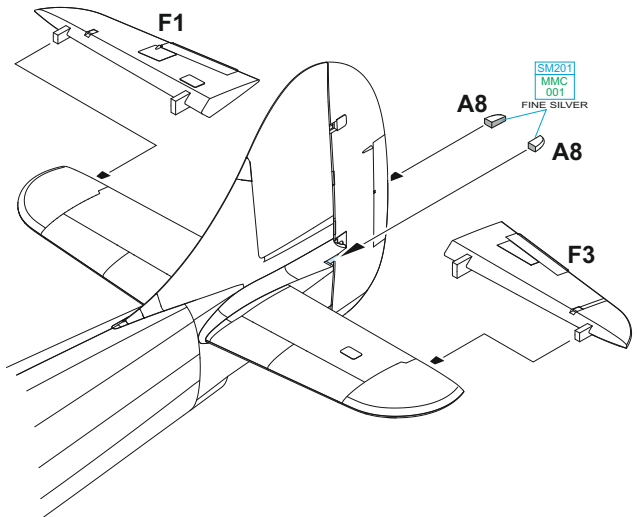
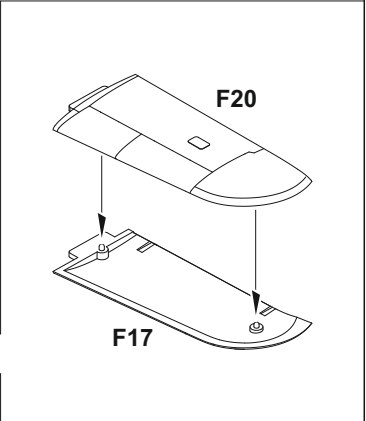
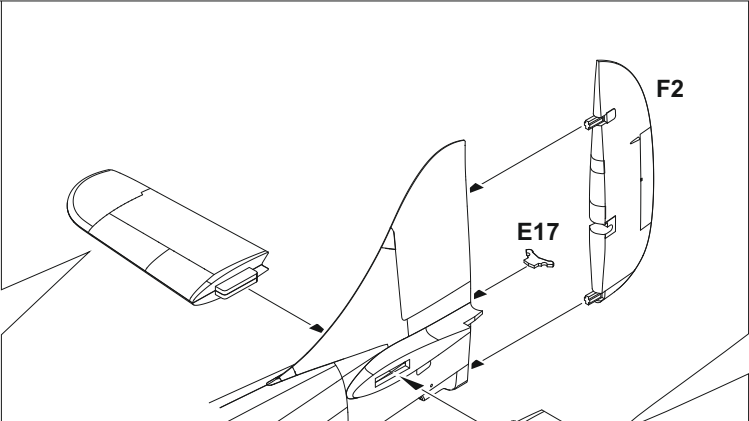
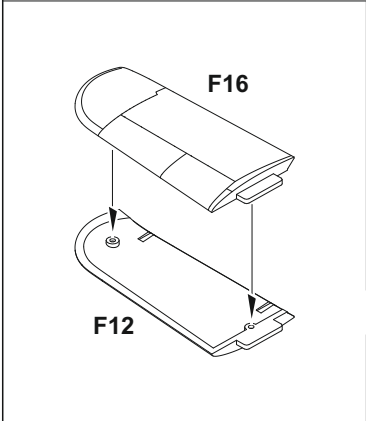
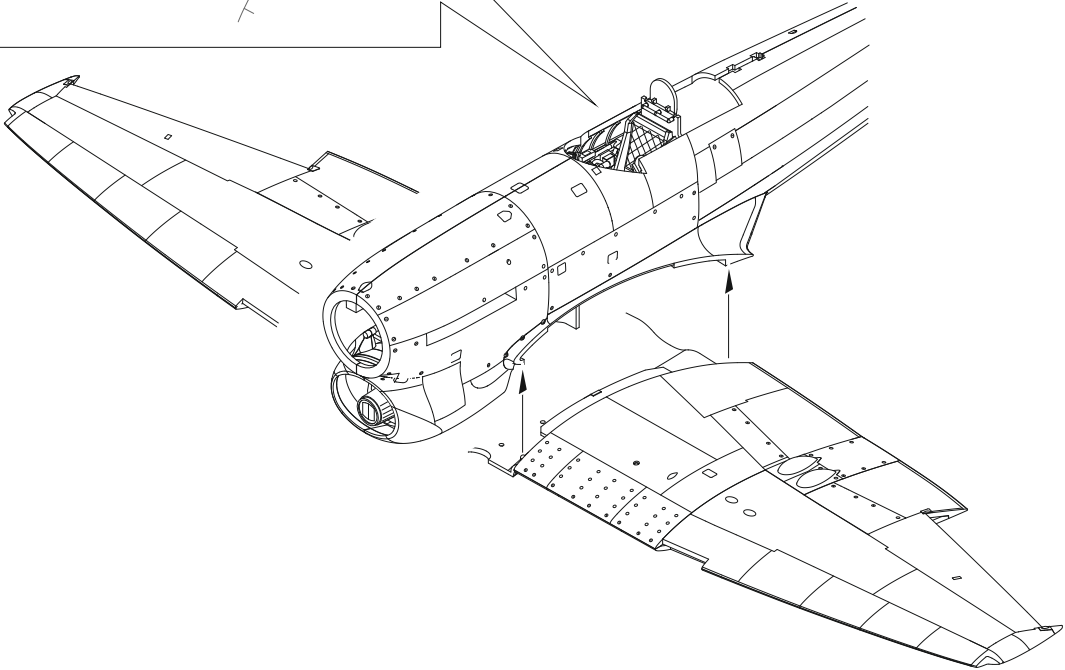
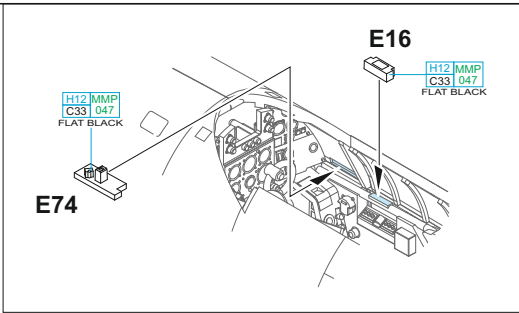
UNDERSURFACE
COLOR

E44

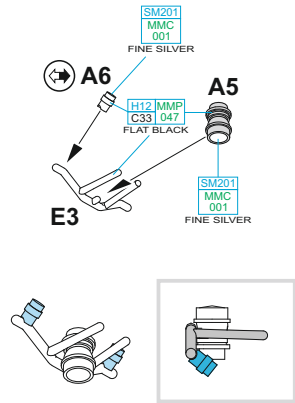
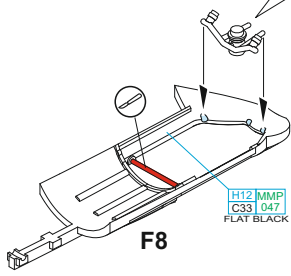
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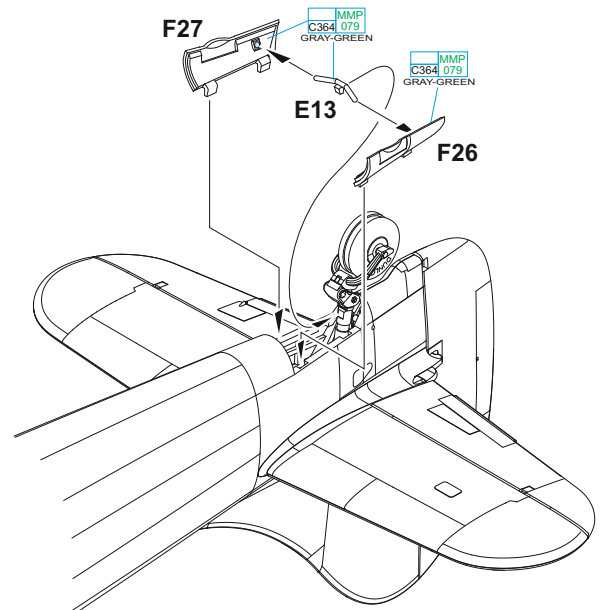
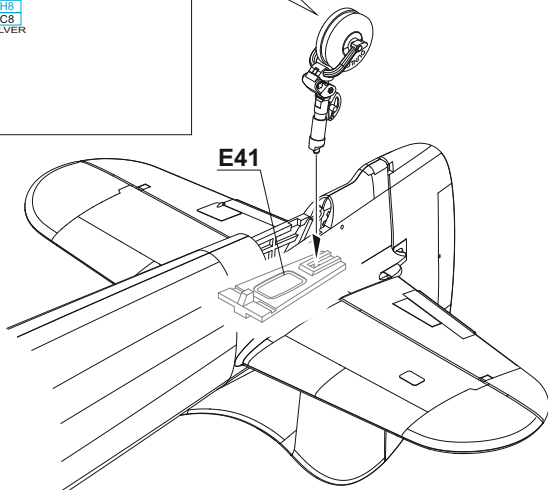
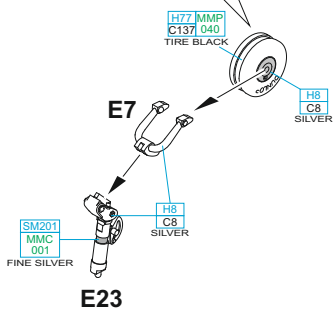
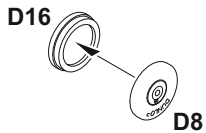
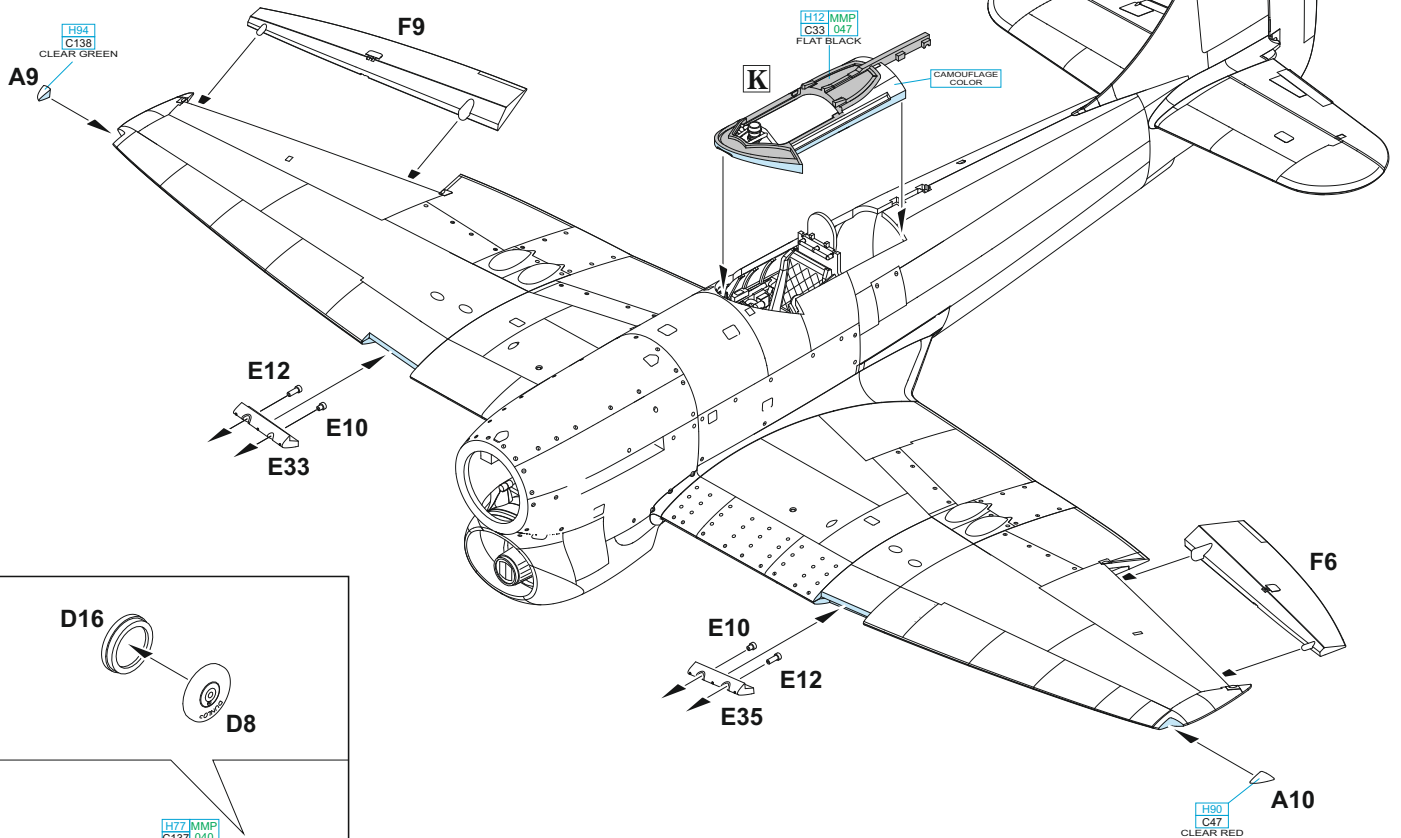
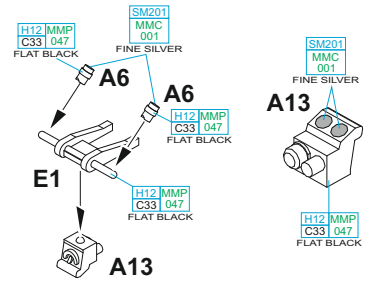
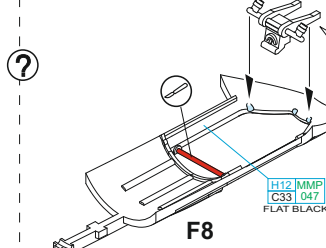


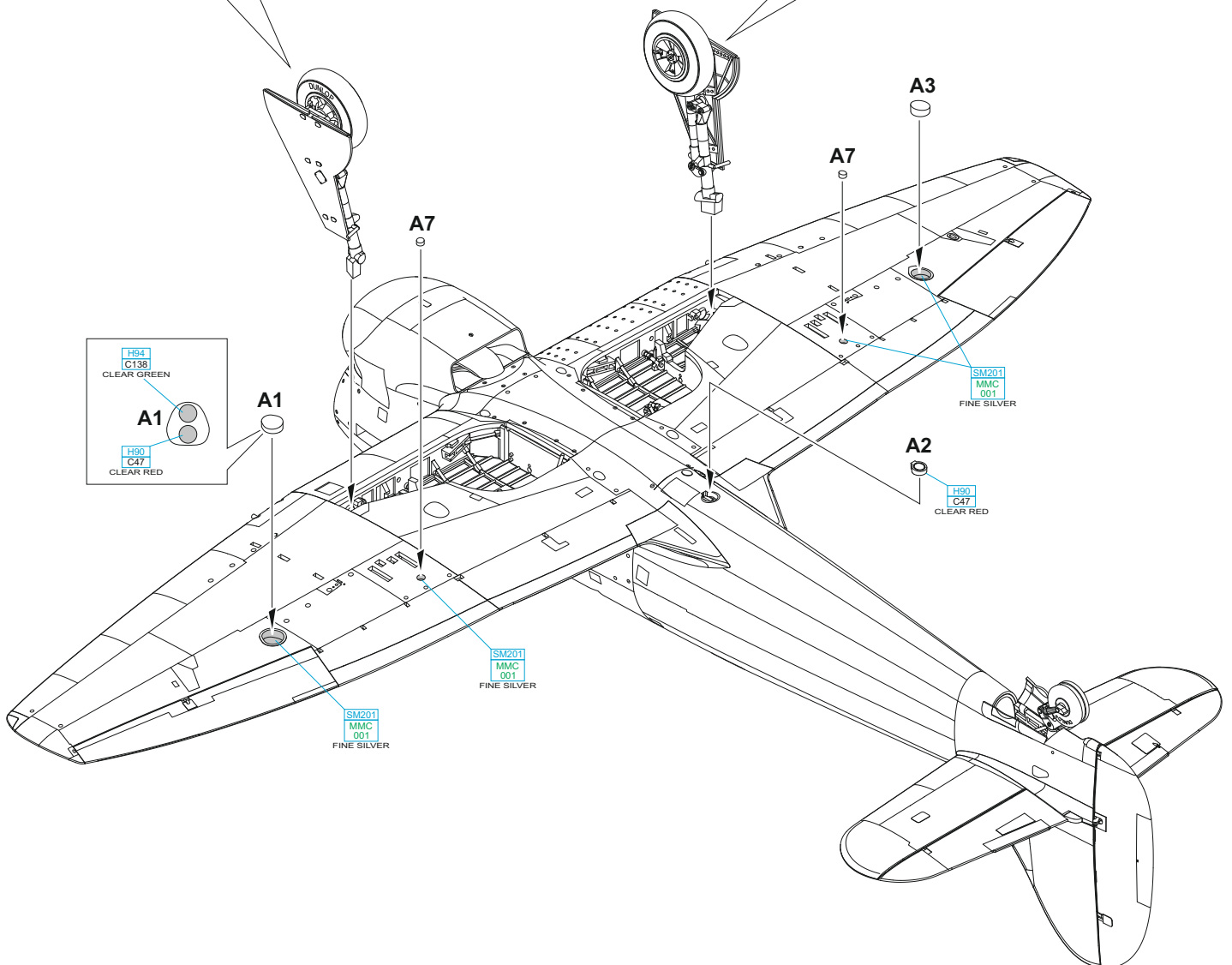
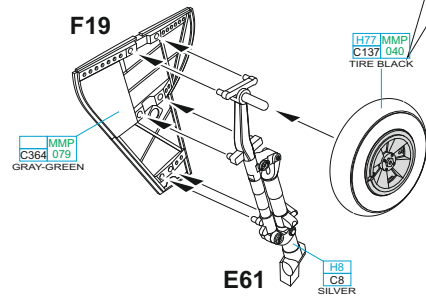
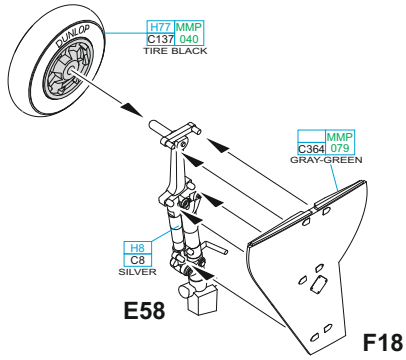
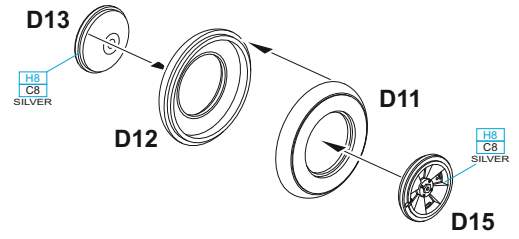
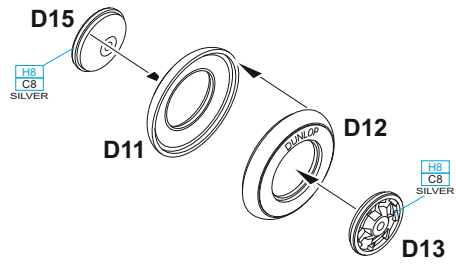


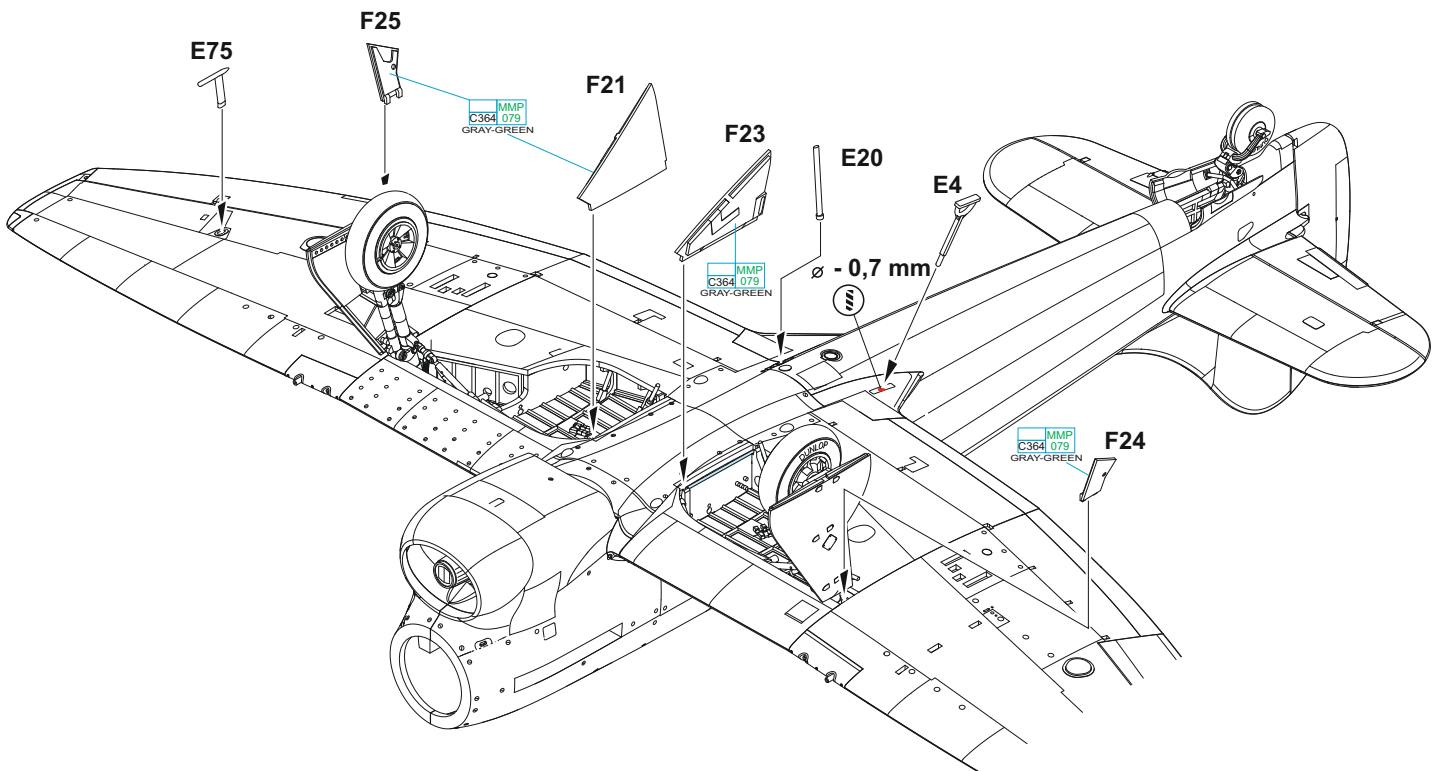
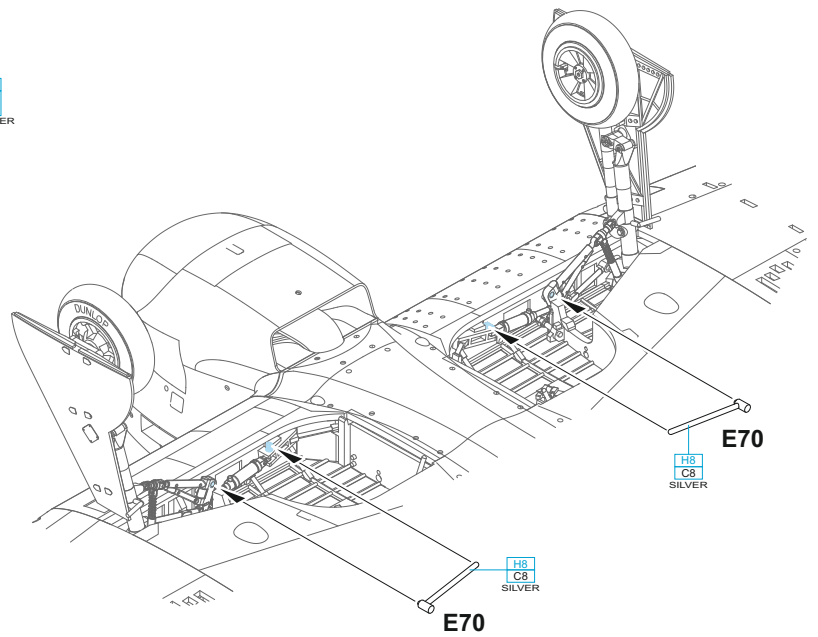
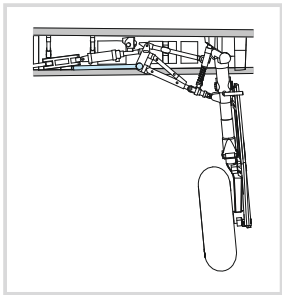
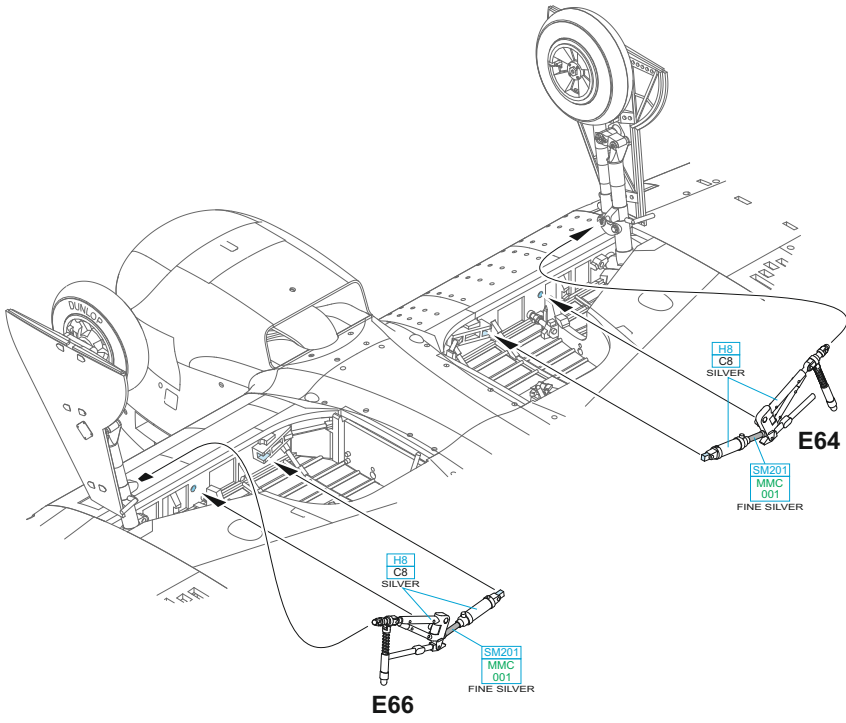
K MARKING A



MARKING B



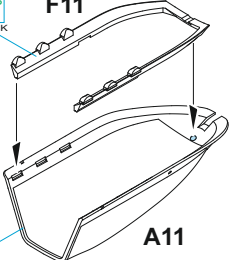




L

H12 MMP
C33 047
FLAT BLACK

F11



A11

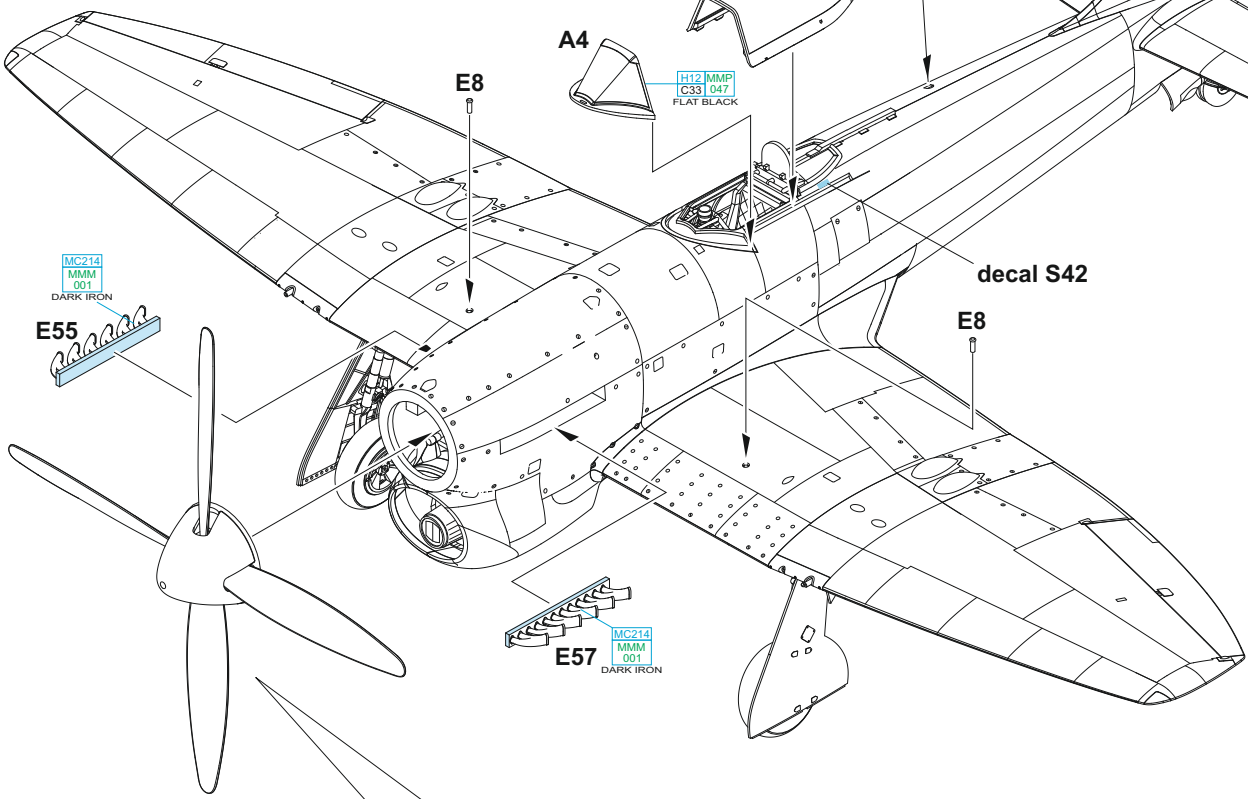
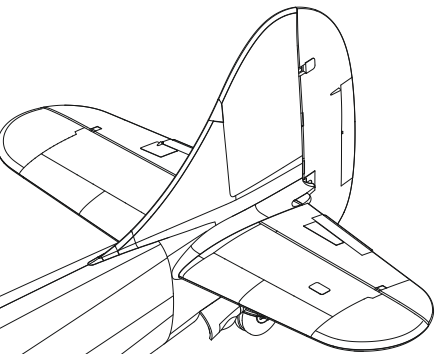
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L

E22

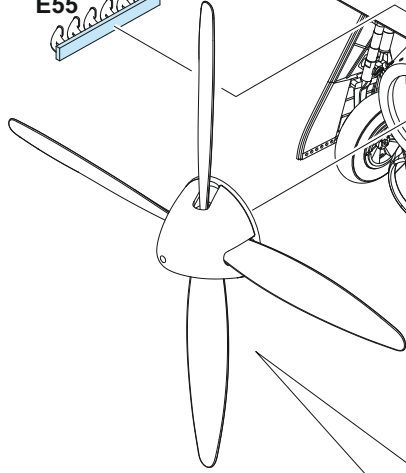
A4

H12 MMP
C33 047
FLAT BLACK



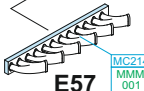
MC214
MMM
001
DARK IRON

E55



E57

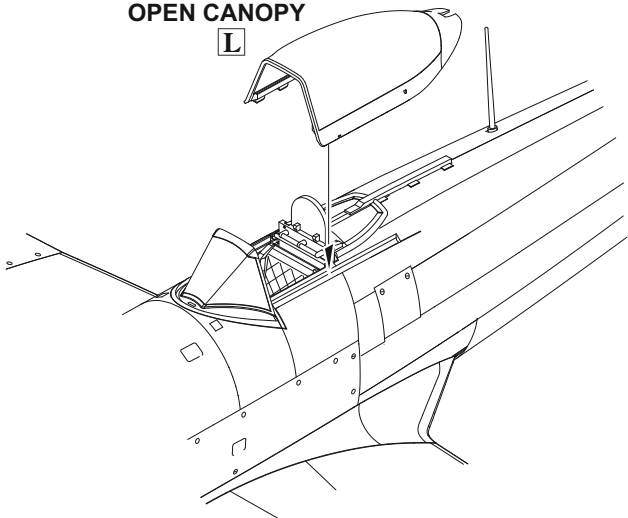
MC214
MMM
001
DARK IRON



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OPEN CANOPY

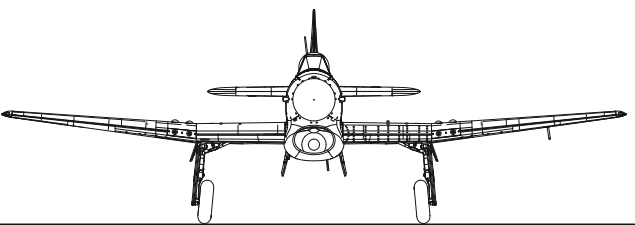
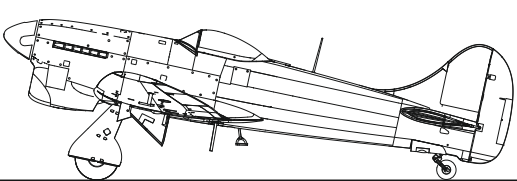
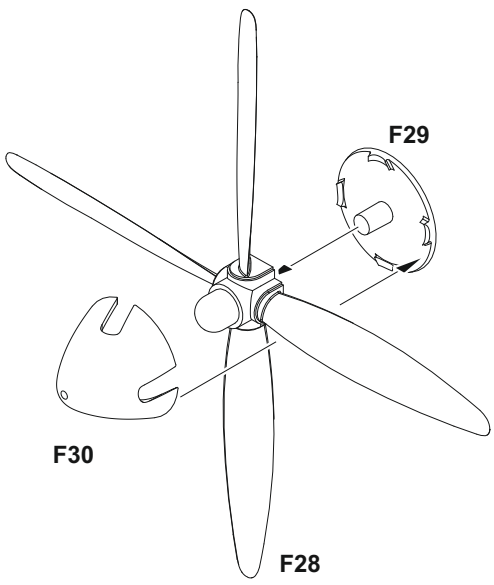
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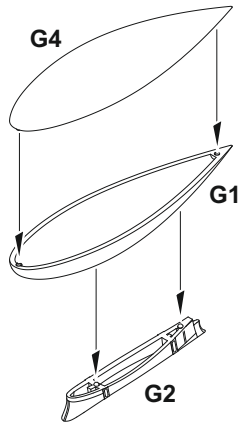
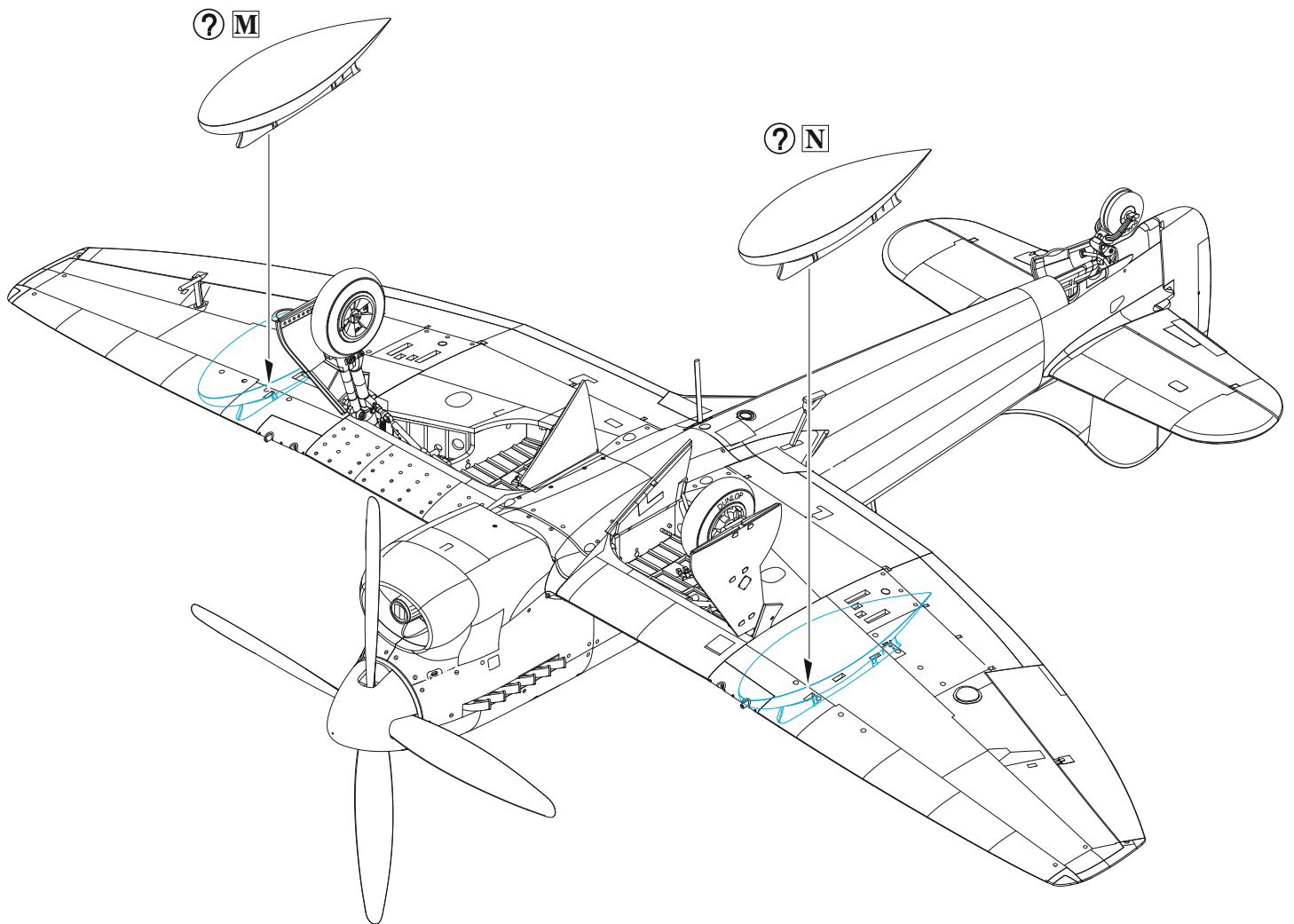
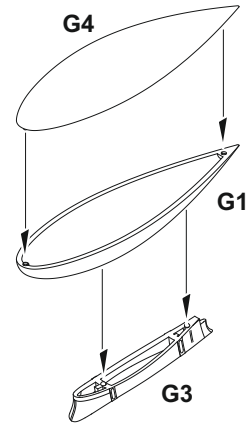


F29

F30

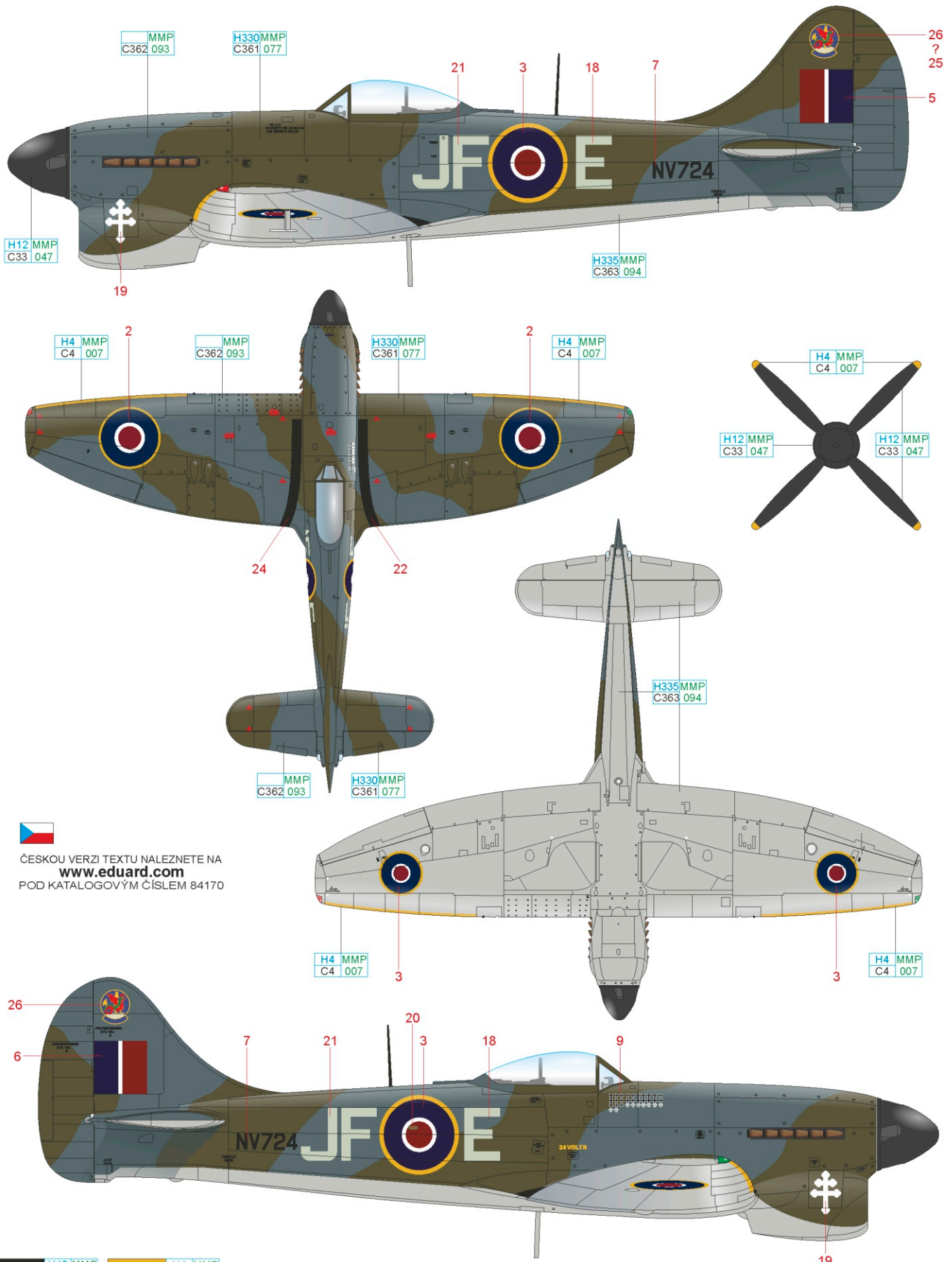
F28



M**N**

A NV724 JF-E, flown by F/Lt. Pierre Clostermann, No. 3 Squadron RAF, Kastrup, Denmark, July 1945

NV724 was the second of the two Clostermann's JF-Es. The aircraft was delivered to the 3rd RAF Squadron in early July 1945, as a replacement aircraft when the first JF-E, NV994, was damaged during a crash landing in Vaerløse airfield on July 1st. The decoration of the NV724 was similar to NV994, just white Croix de Lorraine was added to the radiator sides. The Le Grand Charles inscription under the canopy was missing on this aircraft.

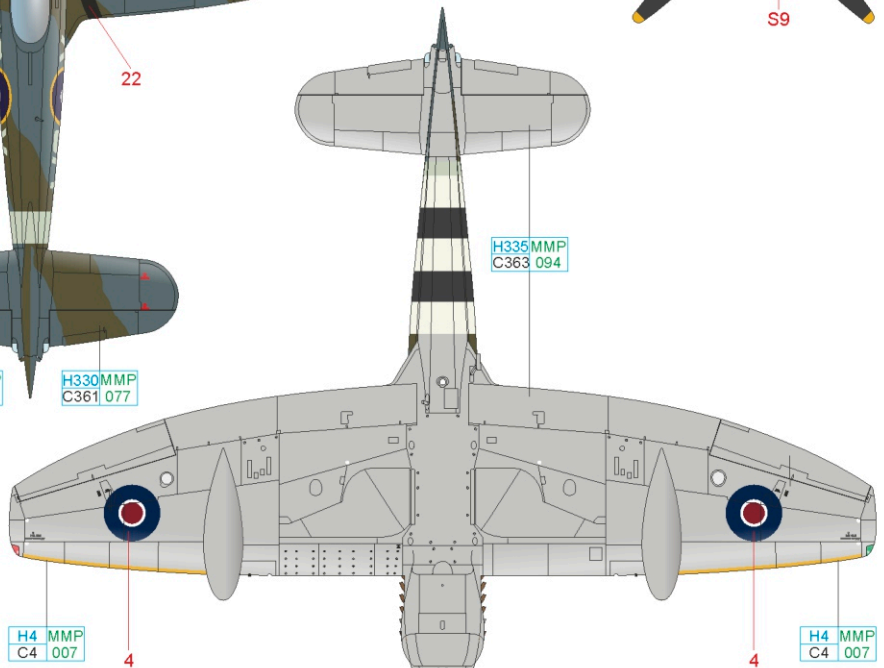
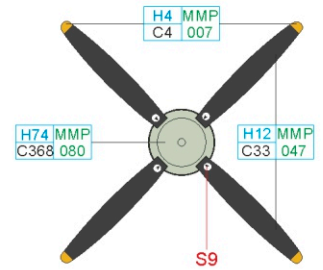
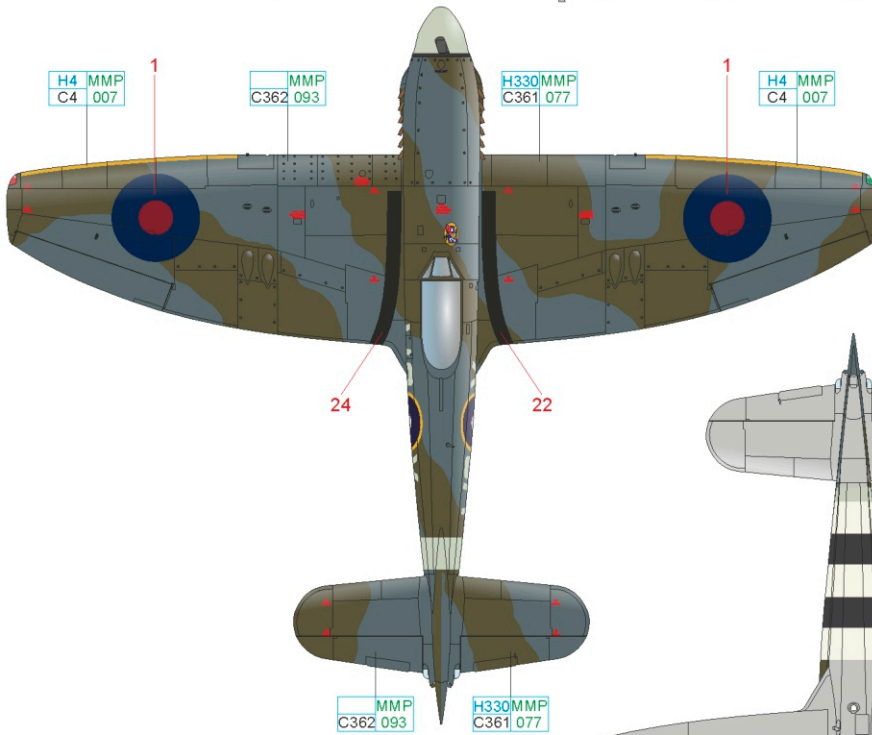
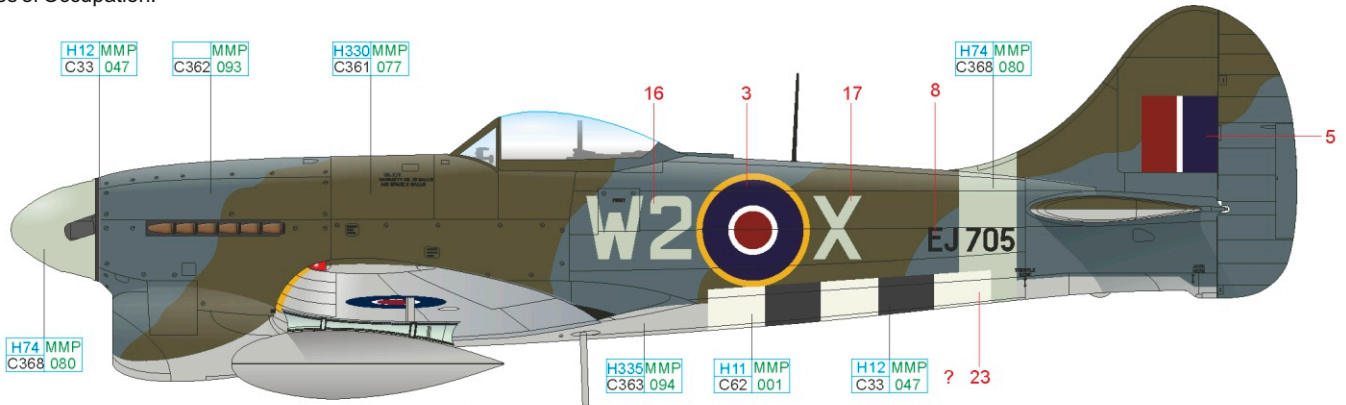


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BLACK	H12 MMP C33 047	YELLOW	H4 MMP C4 007
MEDIUM SEA GRAY	H335 MMP C363 094	DARK GREEN	H330 MMP C361 077
		OCEAN GRAY	MMP C362 093

B EJ705 W2-X, No. 80 Squadron RAF, 2nd TAF, Autumn 1944

No. 80 RAF Squadron was equipped with Tempest Mk.V in August 1944. The unit flew the anti V-1 flying bomb duties (Operation Diver) under the command of ADGB in Summer 1944. After this threat, the unit was moved on to the Continent under the command of the 2nd TAF resumed the fighter duties. EJ705 destroyed three Bf 109 and one Fw 190 during these duties and was flown by four different pilots. This plane was flown mainly by Australian pilots, so the aircraft carried a badge of kangaroo holding the Australian flag. After the war, No.80 Squadron was based in Wunsdorf by Hannover as part of British Air Forces of Occupation.



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BLACK	H12 MMP C33 047	YELLOW	H4 MMP C4 007	SKY	H74 MMP C368 080
MEDIUM SEA GRAY	H335MMP C363 094	DARK GREEN	H330MMP C361 077	OCEAN GRAY	MMP C362 093
		WHITE	H11 MMP C62 001		

