

K32001 1/32 Spitfire Mk.Ia (Mid)

The legendary Supermarine Type 300 "Spitfire" is undoubtedly one of the most famous, and perhaps the most beautiful, aircraft of all time. Designed from 1934 under the guidance of Supermarine Aviation Works' chief designer Reginald Mitchell, Joseph Smith and "Alf" Faddy, the 990hp Rolls-Royce Merlin "C" powered prototype first flew on 5 March 1936. It was immediately obvious that it was something very special and an initial production order was placed in early June 1936 for 310 aircraft. Numerous delays at Supermarine and many of the approximately 150 sub-contractors ensured that the first production Spitfire was not completed until mid-May 1938 and the final aircraft from the order was only delivered in September 1939.

Early production Spitfire Mk.I in the K9### & L10## serial number range (completed between May 1938 and September 1939), were initially powered by a 1030hp Rolls-Royce Merlin II engine and featured a 2-blade fixed pitch propeller, 8 Browning .303" machine guns, triple ejector nozzle outlet exhaust manifolds, a tall un-tapered aerial mast and a rear fuselage adorned with lapped panels with raised rivets for ease of construction. The main planes and front of the fuselage were flush riveted and puttied and sanded smooth for improved performance. Numerous improvements were introduced throughout production, most of which were eventually retrofitted to earlier aircraft which included gun heating, Rolls-Royce Merlin III engine, 3-blade dual-pitch DeHavilland propeller, exhaust manifolds of simplified construction, a taller canopy hood for improved visibility, armoured windscreen glass and protective plating over the upper fuel tank which necessitated shortening the engine cowlings slightly.

Mid production Mk.Ia in the N3### & P9### serial number range (completed between September 1939 and April 1940), saw the introduction of an improved lever-operated "dual position" cockpit door catch, reflector gun sight, tapered aerial post and a voltage regulator positioned behind the pilot's headrest. Selected aircraft received a constant speed Rotol RX5/1 propeller and the temporary installation of the TR.1133 VHF radio, which did not require an external aerial wire.

Late production Mk.Ia in the R6###, R7### & X4### serial number range (completed between May 1940 and April 1941) and AR2## (from July 1941 to January 1942) saw the introduction of constant speed DeHavilland propellers and armour plates behind the pilot's seat & headrest (which were retrofitted to earlier production aircraft) as well as engine driven undercarriage retraction. Other incremental changes were introduced such as a composite "plastic" seat, fire-proof bulkhead, revised "raised rivet" radio access door, station keeping lights in the fuel tank plating, re-installation of the TR.1133 VHF radio and saw the elimination of the gauge for the top fuel tank, fuel pressure gauge, priming cock and front parachute flare tube. Some Mk.I were armed with 2 Hispano 20mm cannons and were designated the Spitfire Mk.Ib (at which time the 8 gun armed aircraft was re-designated the Mk.Ia). The cannons proved to be so unreliable that the Mk.Ib was withdrawn from service until improvements had been made in late 1940. Numerous engine, airframe and armament improvements were made to the Spitfire before production ceased in 1948, by which time over 22000 had been produced in 2-dozen variants with the most notable being the 1030hp Mk.I, 1470hp Mk.V, 1720hp Mk.IX, 2035hp Mk.XIV, the photo-reconnaissance Mk.XI and the navalised Seafire Mk.III.

Spitfire Mk.I colour schemes are surprisingly varied and complicated. Interior areas were primed with light grey before being painted aluminium, except for the cockpit between frames 8 & 11 which was painted in a colour described as "Supermarine green" and "apple green". Note that this is different from the paler, greyer, "Grey Green" (of which various colour mixes have additionally been noted) used on later production Spitfires built by other manufacturers. Major internal components supplied by sub-contractors could be delivered in various shades of grey-green or aluminium or even black.

The underside paint finish varied greatly throughout Mk.I production and service, initially being painted aluminium until late April 1939 when the port side was painted Night (black) and the starboard white (split along the centreline). Then from late February 1940, supposedly all "white" except for the port main plane (only) which was Night, although photographic evidence indicates that the undersides of the nose, rear fuselage and tailplane were usually painted with aluminium. From June 1940 the undersides were supposed to be painted "Sky Type S...duck egg bluish green" but sky grey and sky blue also appear to have been used and then from November 1940 the port main plane (only) was again finished in Night. Aircraft were re-painted in various interpretations of these specifications in the field as time and supplies of paint (including local mixes) allowed, which ensured that a wide variety of finishes were possible.

Contemporary photos confirm different shades of Dark Earth and Dark Green (even on the same airframe) which were applied with a hard demarcation line. Spitfire Mk.I camouflage was applied in 2 designs, the A and B schemes which were mirrors of each other. Spitfire sub-assemblies were usually supplied pre-painted so a single aircraft could exhibit a variety of shades, and sometimes the camouflage pattern would not match perfectly from one sub-assembly/component to the next. Additionally, extensive weathering and re-painting also helped ensure that a wide variety of tonal differences could be seen. The fabric covered rudder, elevator and ailerons were undercoated in red-brown dope before being painted and frequently appear paler than the adjacent camouflaged metal parts. Therefore, unfortunately, there is no "one true" Dark Earth, Dark Green, Sky Type S or interior grey-green paint colour suitable for all Spitfire Mk.I models so, while we have tried our best with our paint suggestions, there is no doubt many will disagree with us. Which is OK.

Dedicated to my dad who would have bloody loved this. Richard Alexander 2022

Wingspan:	Length:	Max Weight:	Max Speed:	
36ft 10in (11.23m)	29ft 11in (9.12m)	6155 lb (2792kg)	350mph (563kph)	
No Manufactured:	Production:	Engine:	Ceiling:	Armament:
(Mk.I) 1556 (total all marks including Seafires) 22685	(Mk.I) July 1936 to January 1942	(Mid) 1030hp Rolls-Royce Merlin III	33000ft (10060m)	8x .303" (7.7mm) Browning machine guns

References:

Supermarine factory engineering drawings – Pilot's Notes Spitfire I Aeroplane Merlin II or III Engine, Air Publication 1565A 1940, "Spitfire I & II" Aircraft Schedule of Spare Parts, Air Publication 1565A-B v3 1939 - Supermarine Spitfire Mk I in RAF Service, 1936 to the Battle of Britain, Wingleader Photo Archive #1 2020 – The Spitfire Story, Alfred Price, Jane's Publishing 1982 - Spitfire The History, Eric B. Morgan and Edward Shacklady, Key Publishing 1987 – Spitfire notes (various), Edgar Brooks - The Imperial War Museums – Australian War Memorial Museum – Mark Postlethwaite – Colin Owers – bbm.org.uk - www.nationalarchives.gov.uk - www.airhistory.org.uk – Private Collections.

The following additionally provided photos for publication in this instruction booklet, for which we are incredibly grateful:
 ww2images.com – Air Force Museum of New Zealand – The Biggin Hill Trust – Private Collectors (various).

K32001 1/32 Spitfire Mk.Ia (Mid)

Warning: Choking hazard. Keep small parts and plastic bags away from children. Use glue/cement and paint in a well-ventilated area. Always wear protective eyewear when cutting and protective mask when painting, gluing and sanding. Do not breathe in dust. Beware of sharp edges.

Assembly: Read all the instructions carefully 3 times before starting assembly. Yes, even if you are very experienced. Use glue/cement intended for plastic models. Assemble metal and resin parts (if included) with Cyanoacrylate (CA) or epoxy glue. Select a marking option before starting assembly and note the optional parts required on your instructions.



Optional Detail can be ignored if you don't feel comfortable doing it. It is not 100% necessary to complete your model. For rigging long control cables and aerial wire we recommend stretchy elastic type material like "EZ Line" etc and thin metal or plastic for short control cables and rods etc.

Painting: Only use paint **designed and suitable** for plastic model kitsets. If in doubt, test on scrap plastic **from this model** before using.

Decals: Cut out each decal only as required. **Soak in warm water for around 15 seconds.** Help avoid "silvering" by not over-soaking and washing off the decal glue. Slide decal off backing paper on to smooth painted surface of model and move into position using a fine paint brush and/or tweezers. It can be helpful to apply a small drop of water mixed with PVA glue to the area where decals are being applied to make them easier to maneuver into position and help avoid silvering. If necessary, use decal setting and solvent solutions but only after first testing on spare decals **from this model**. Alternatively, **carefully** use a hair dryer or very hot water (applied with a brush) to soften and conform decals to surface details. Do not overheat because you will damage your model.

Hints & Tips: Please visit www.kotare-models.com for any additional hints and tips to help you get the best result from your model.

I	Construction Step	25	Decal		Paint Colour		Attention	i	Optional Display
A23	Part Number		Remove		Drill		Choose		Glue for metal
ABC	Options		Do Not Cement		Fill		Optional Detail		Other Side

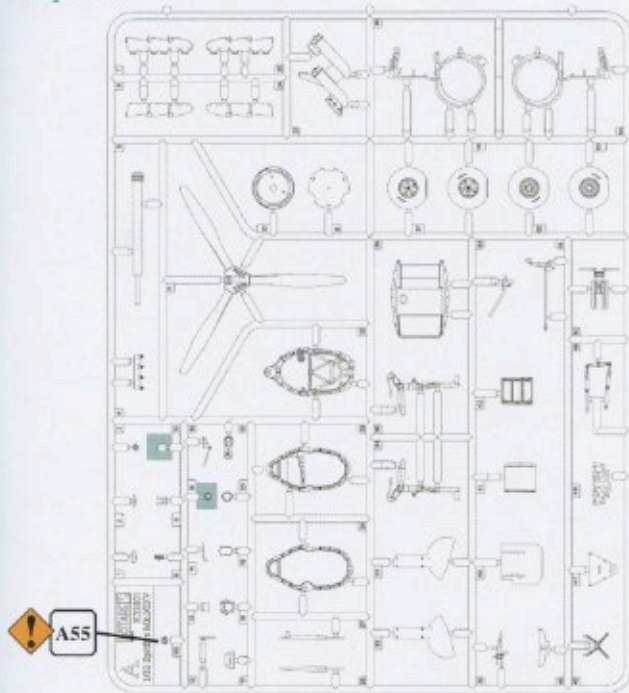
Colour*	Tamiya	Humbrol	FS/BS**
a Supermarine interior green – matt	XF71(x2) + X28(x1)	120	FS34272
b Interior grey green – matt	XF76	240	FS34424
c Brass – metallic	X31	54	–
d Night – matt	XF85	67(x1) + 33(x1)	FS37070/BS642
e Aluminium paint - metallic	XF16	27001	–
f Gun metal/exhaust black – semi gloss	X10	27004	–
g Rubber – matt	XF69	66	–
h Beige linen – matt	XF57	121	FS30475
i Dark earth (dark) – matt	XF52(x1) + XF90(x1)	29	FS30118/BS450
j Dark earth (pale) – matt	XF49(x1) + XF92(x1)	26	–
k Dark green (dark) – matt	XF81	116	FS34079/BS241
l Dark green (pale) – matt	XF89	117	FS34159
m White – matt	XF2	34	–
n Sky duck egg blue local mix – matt	XF2(x10) + XF18(x1)	130(x10) + 96(x1)	FS35550
o Sky Type S duck egg blueish green – matt	XF21	90	FS34533
p Red – gloss	X7	19	FS11400
q Yellow – matt	XF3(x10) + X6(x1)	24	FS33538
r Dark red brown – semi gloss	XF79	70	–
s Frosted opaque lens – semi gloss	X16(x1) + XF2(x1)	11(x1) + 34(x1)	–
u Chrome - metallic	X11	27002	–
v Black – matt	XF1	33	–
w Light grey - matt	XF25	87	FS35237
x Clear orange - gloss	X26	1322	–
y Dark green - gloss	X5	3	–

* Colours matched to the best of our ability.

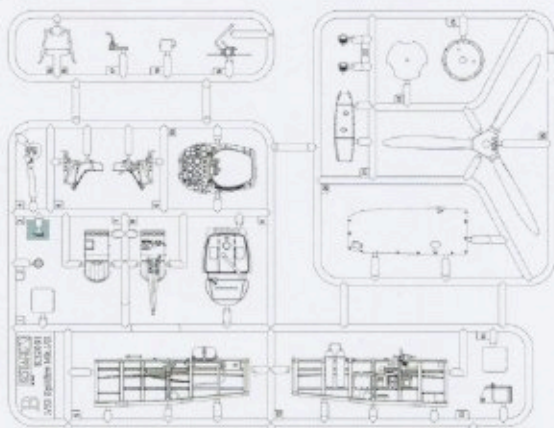
** FS = Federal Standard. BS = British Standard.

Note: Apply clear varnish to achieve the desired gloss, semi-gloss and matt finish.

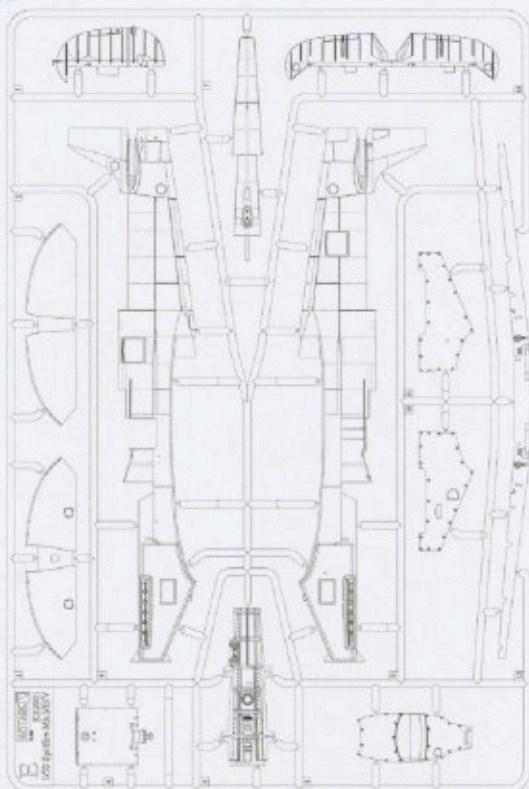
A parts



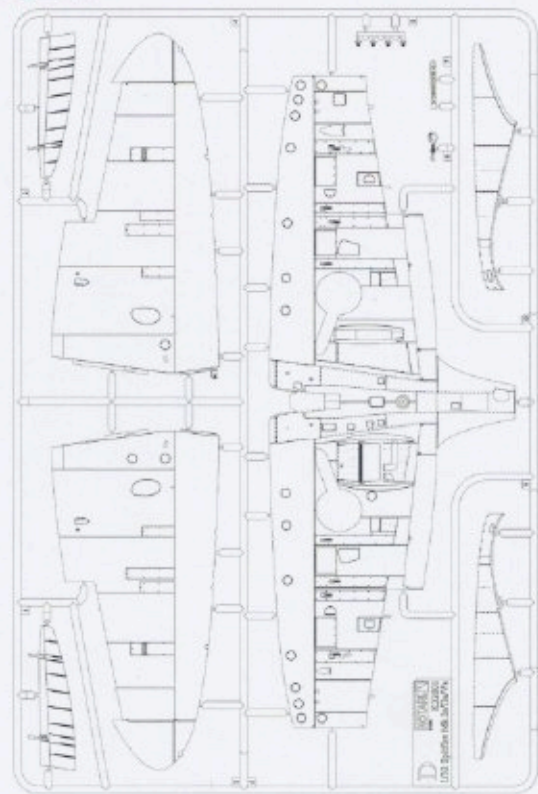
B parts



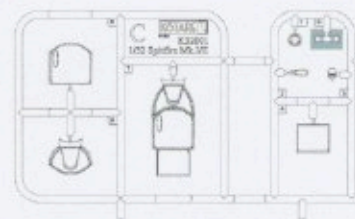
E parts




D parts

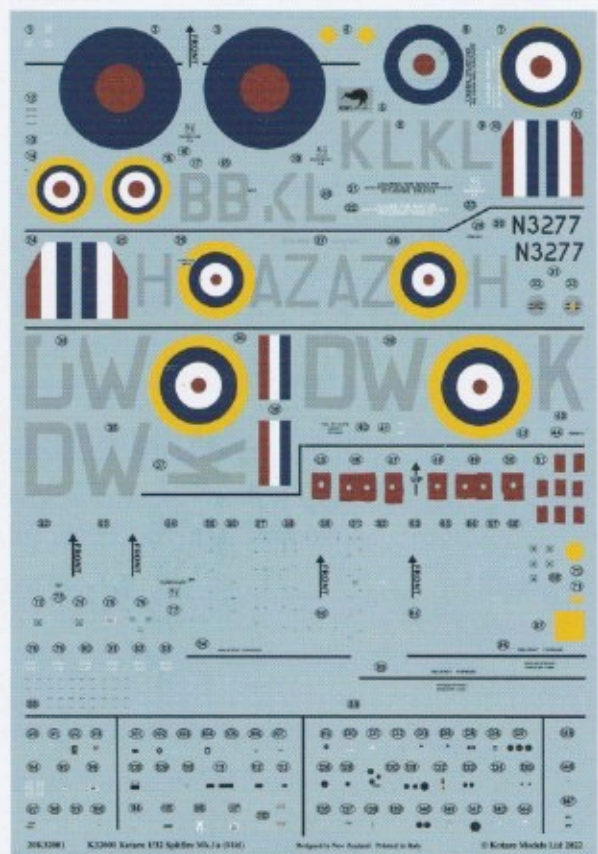


C parts



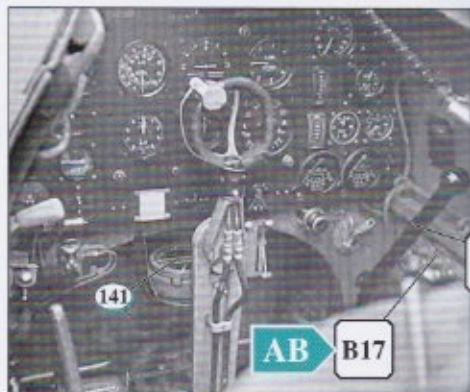
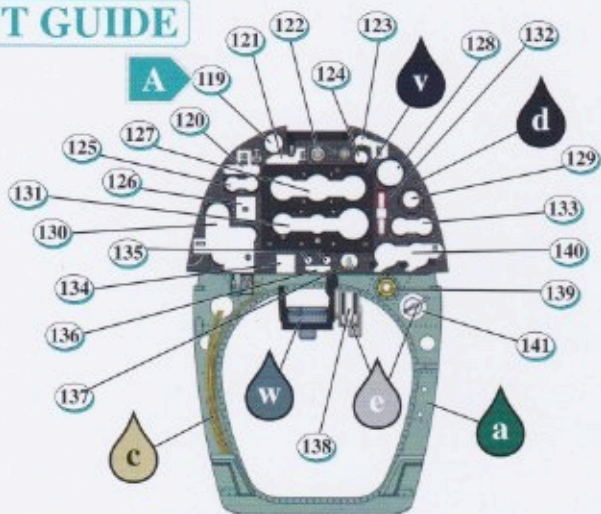
 = Not used

Decals



1 COCKPIT

PAINT GUIDE

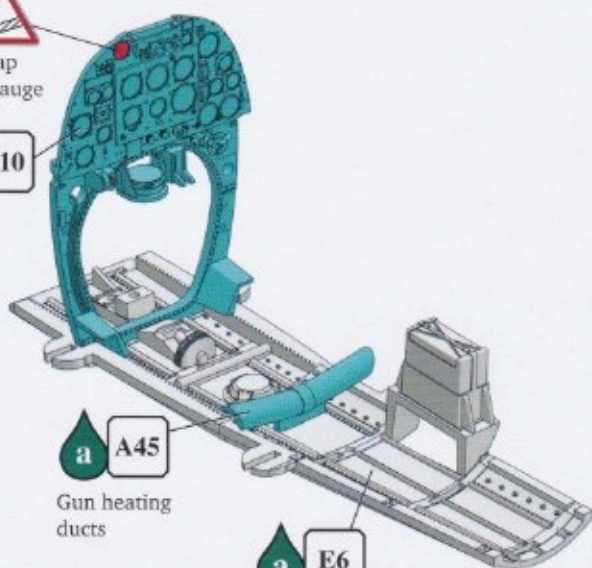


Instrument panel detail from an early production 609 Squadron K9### or L10## serial number Spitfire Mk.Ia showing detail also applicable to mid-production Mk.Ia. Note the spare filaments **B17** for the reflector sight in the low position also applicable to N3180 **A** & N3277 **B** and the undercarriage hand pump **B19**.

BC

Drill out flap indicator gauge

d & **a** **B10**
Frame 8 & instrument board



a **A45**
Gun heating ducts

a **E6**

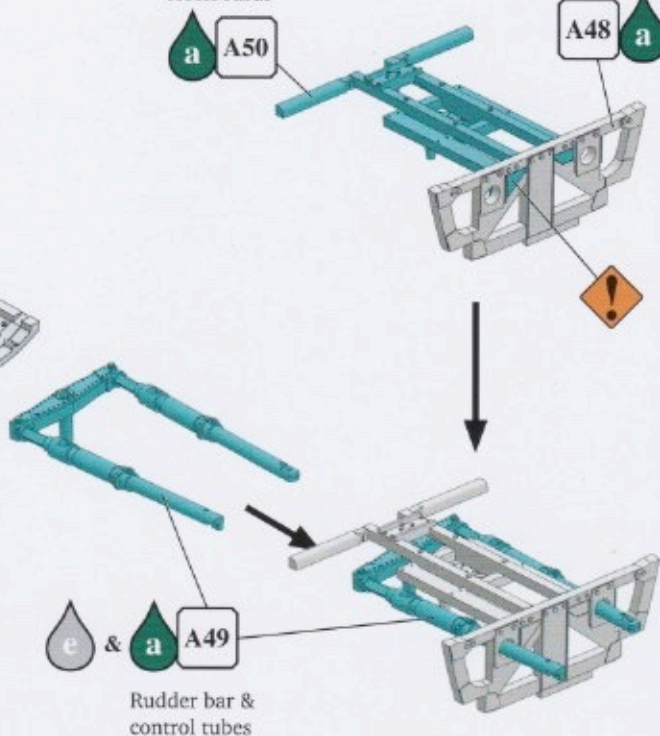
Fuselage bottom interior & accumulator (battery)

Heelboards

a **A50**

Frame 9

A48 **a**

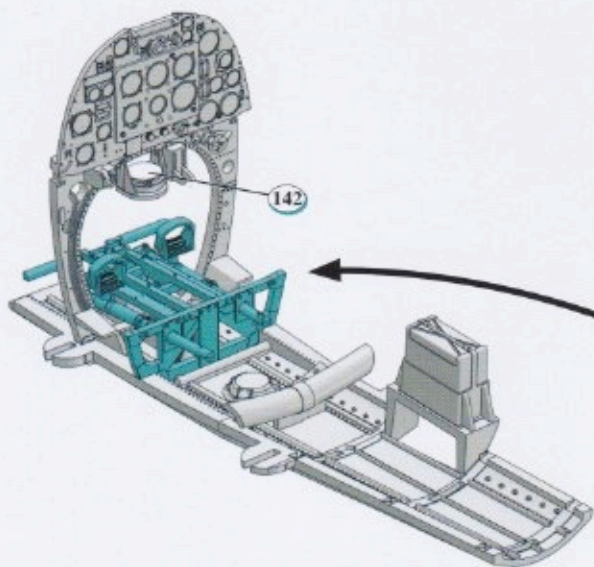


e & **a** **A49**

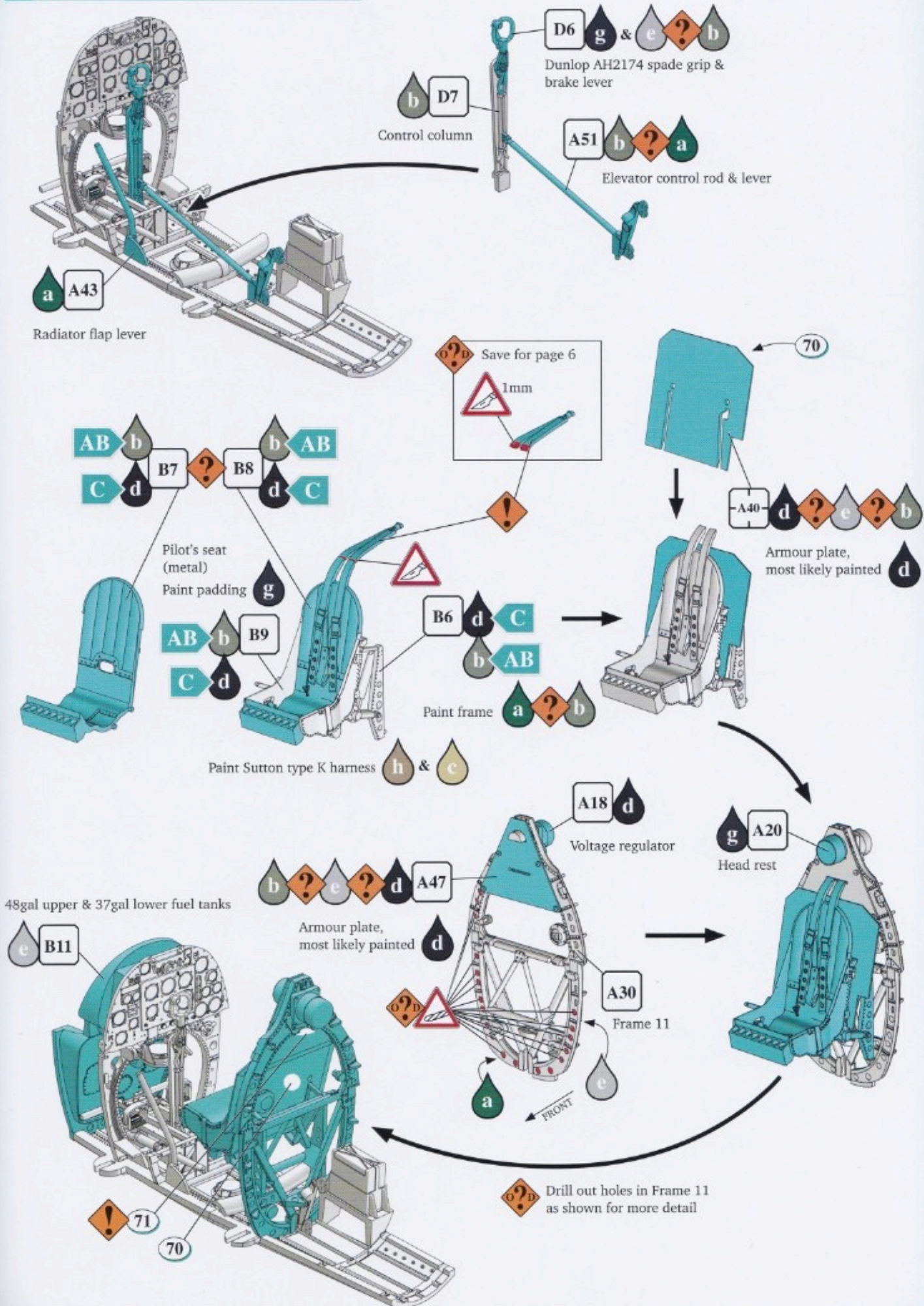
Rudder bar & control tubes

Rudder pedals

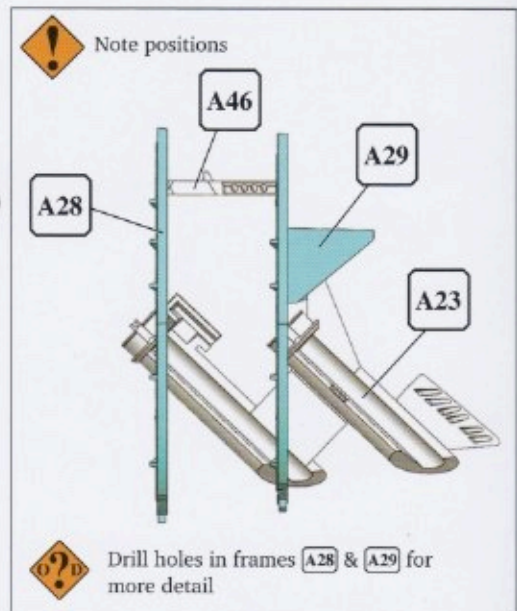
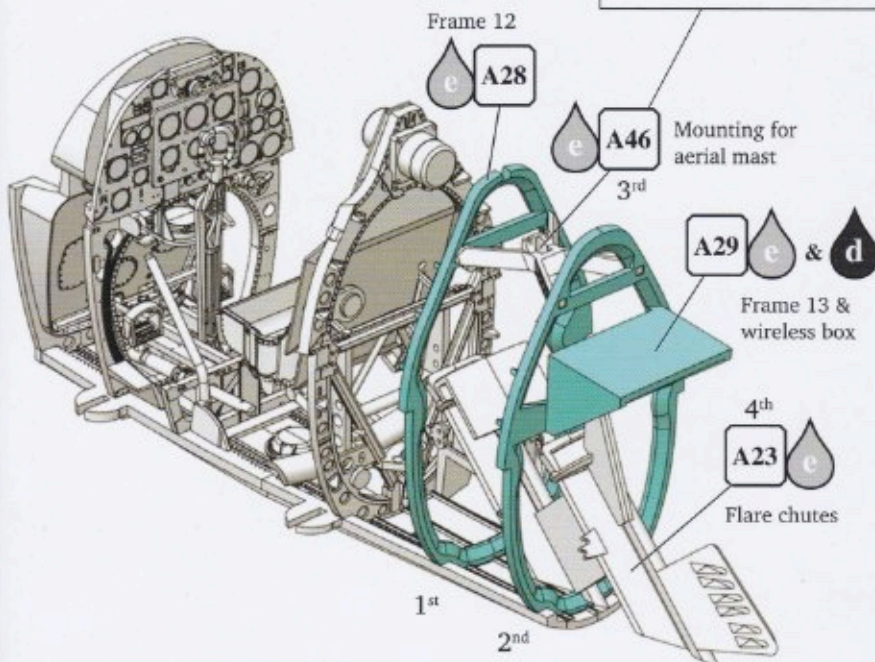
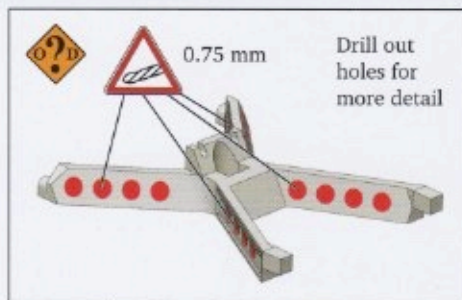
h & **e** **B22**



2 COCKPIT CONTINUED

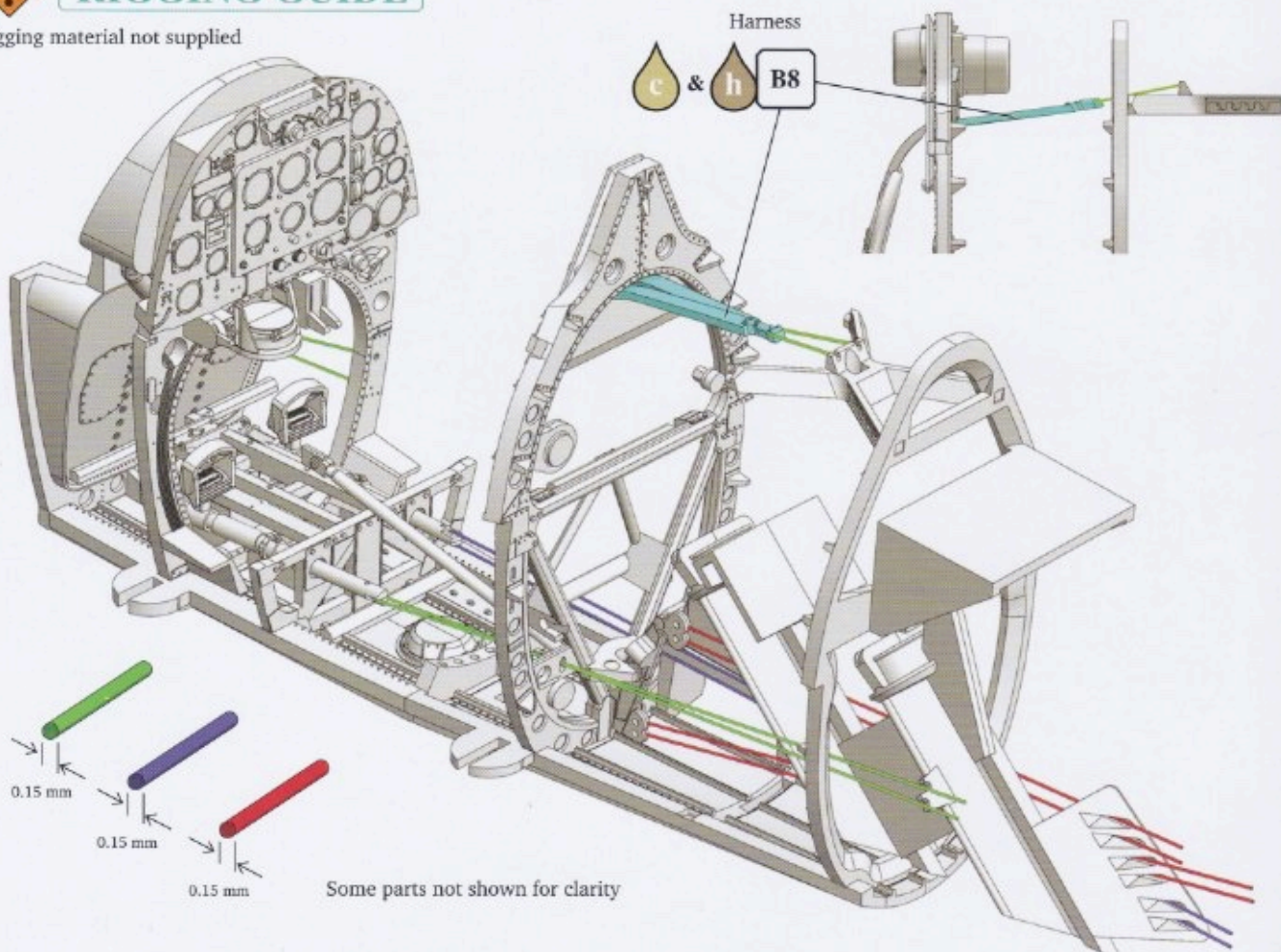


3 COCKPIT CONTINUED

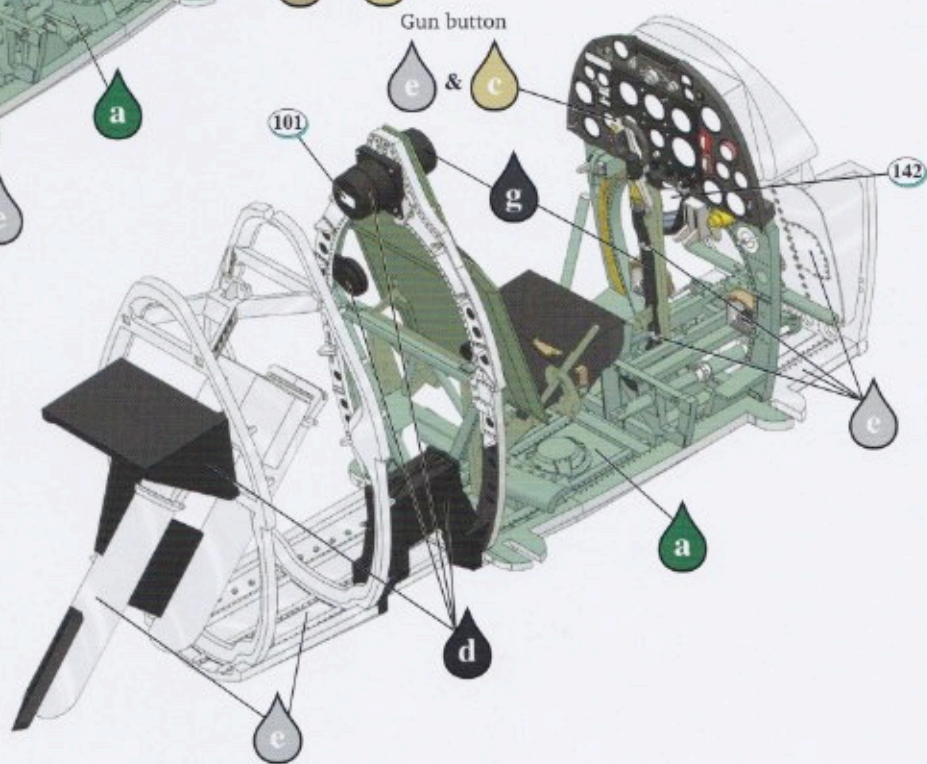
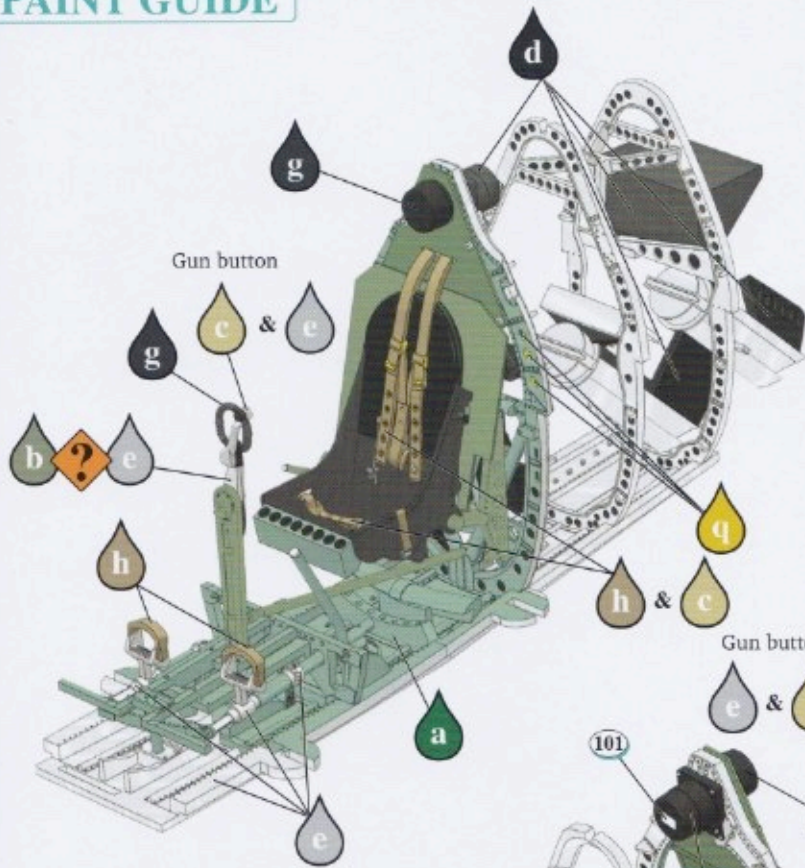


RIGGING GUIDE

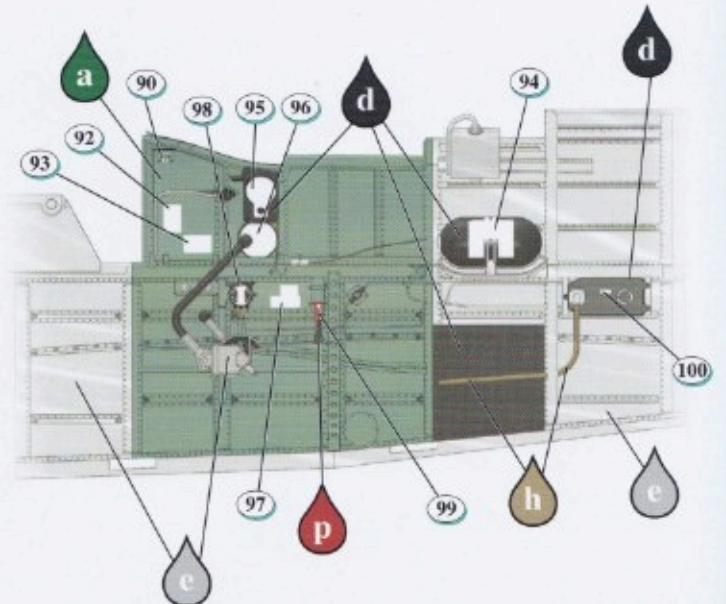
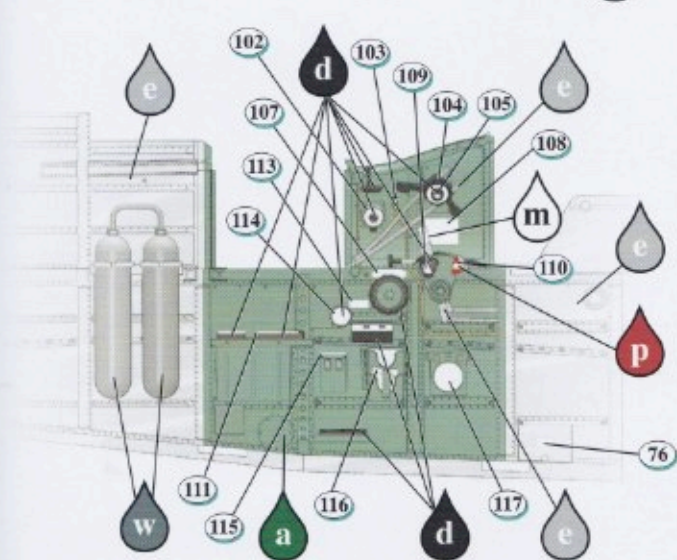
Rigging material not supplied



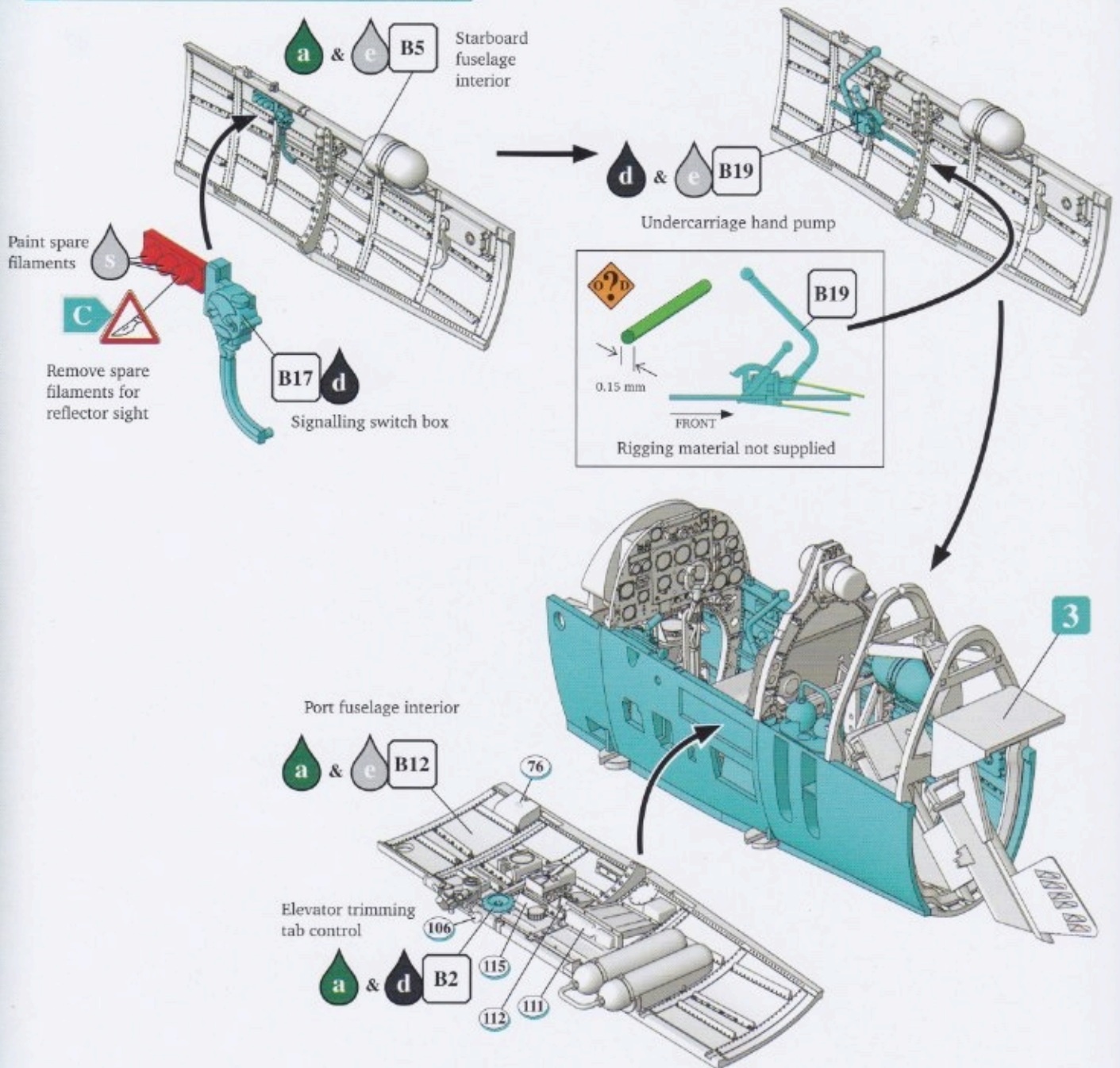
PAINT GUIDE



Mid-production 234 Squadron Spitfire Mk.Ia N3277 **B** shortly after capture. Compare the appearance of the relatively clean front bottom cowling with the heavily stained oil tank behind. When the undersides of the main planes were repainted in a sky mix at 234 Squadron, the wheels, wheel wells, struts and insides of the undercarriage doors remained in their factory Night and white finish.



4 COCKPIT COMPLETED

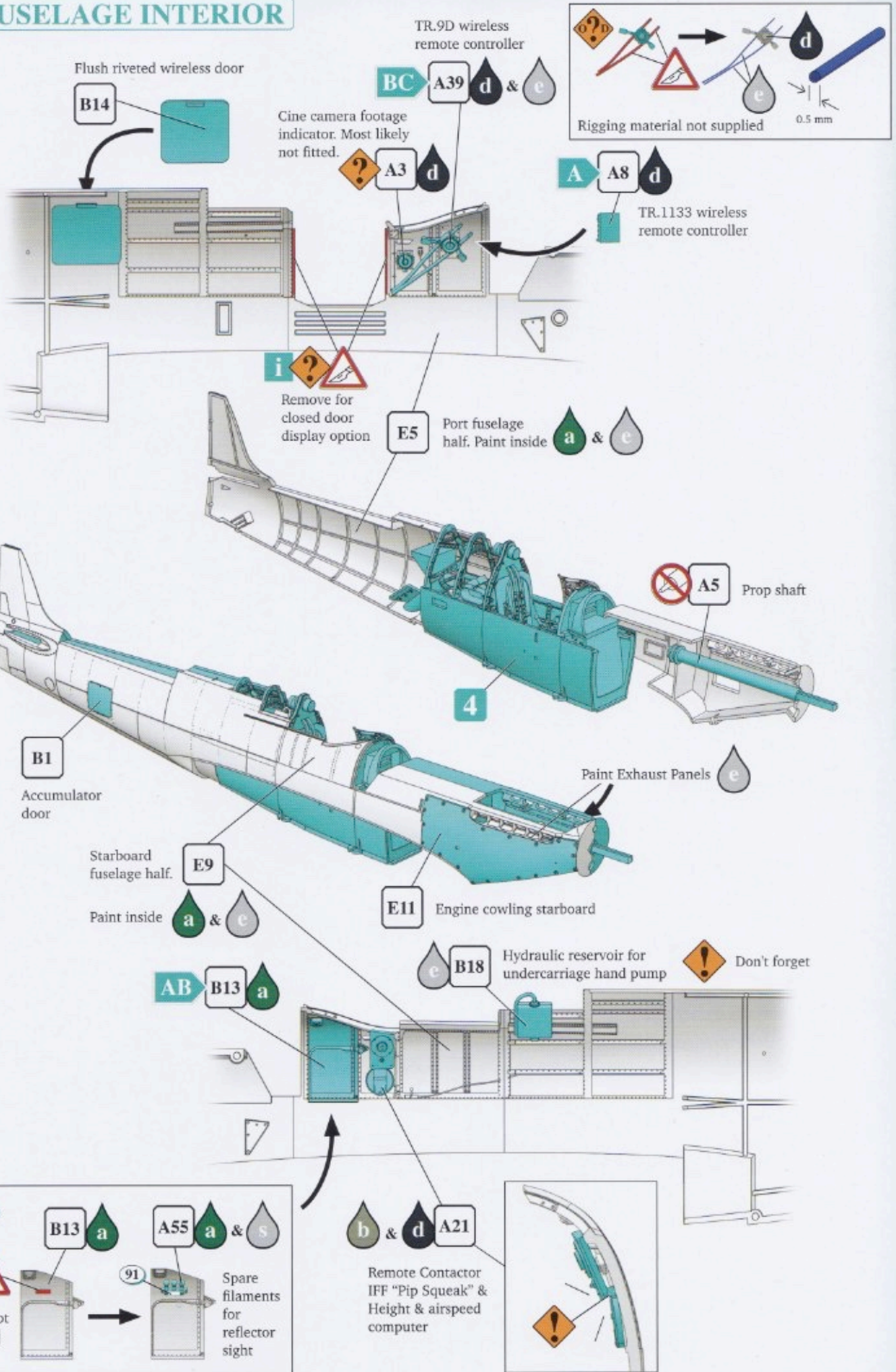


Mid-production Spitfire Mk.Ia N3072 was completed in October 1939 and initially served with 54 Squadron between 18 November and 18 December 1940 when it was transferred to 611 Squadron where it is seen here in January 1940. Note the aluminium painted area inside the cockpit behind Frame 11 **A30**, undercarriage hydraulic reservoir **B18** and various shades of Dark Green paint used. Armour plates **A40** & **A47** would be installed from May 1940. The low position of the voltage regulator **A18** was a feature of aircraft from the 1st half of this production order.

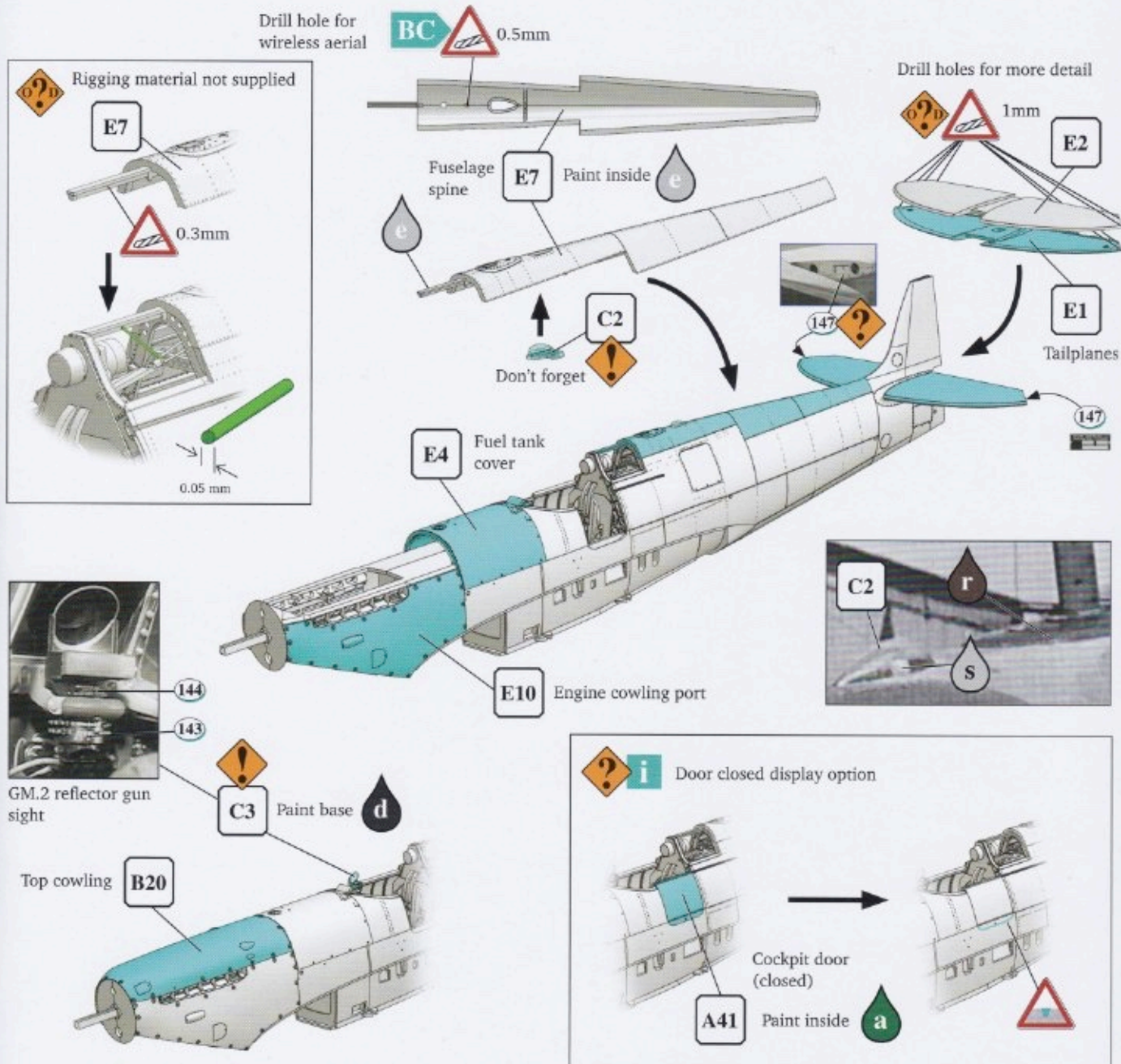


An unidentified mid-production 610 Squadron Spitfire Mk.Ia in the P9### serial number range, reportedly photographed on 29 July 1940. Note the thickness of the yellow ring around the fuselage roundel and locally applied "Sky Type S" mix patchily repainted under the main planes. The "Sky Type S" colour mix that 610 Squadron used was quite susceptible to discolouration when wiping around the gun port openings. Also note the Trolley Accumulator in the foreground.

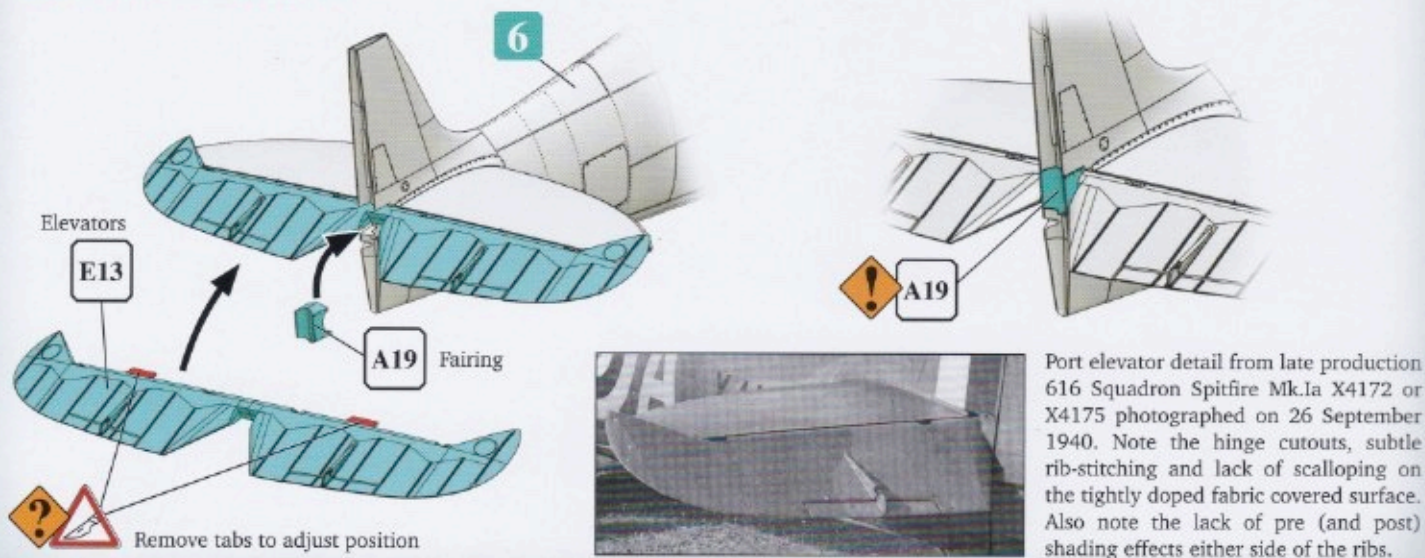
5 FUSELAGE INTERIOR



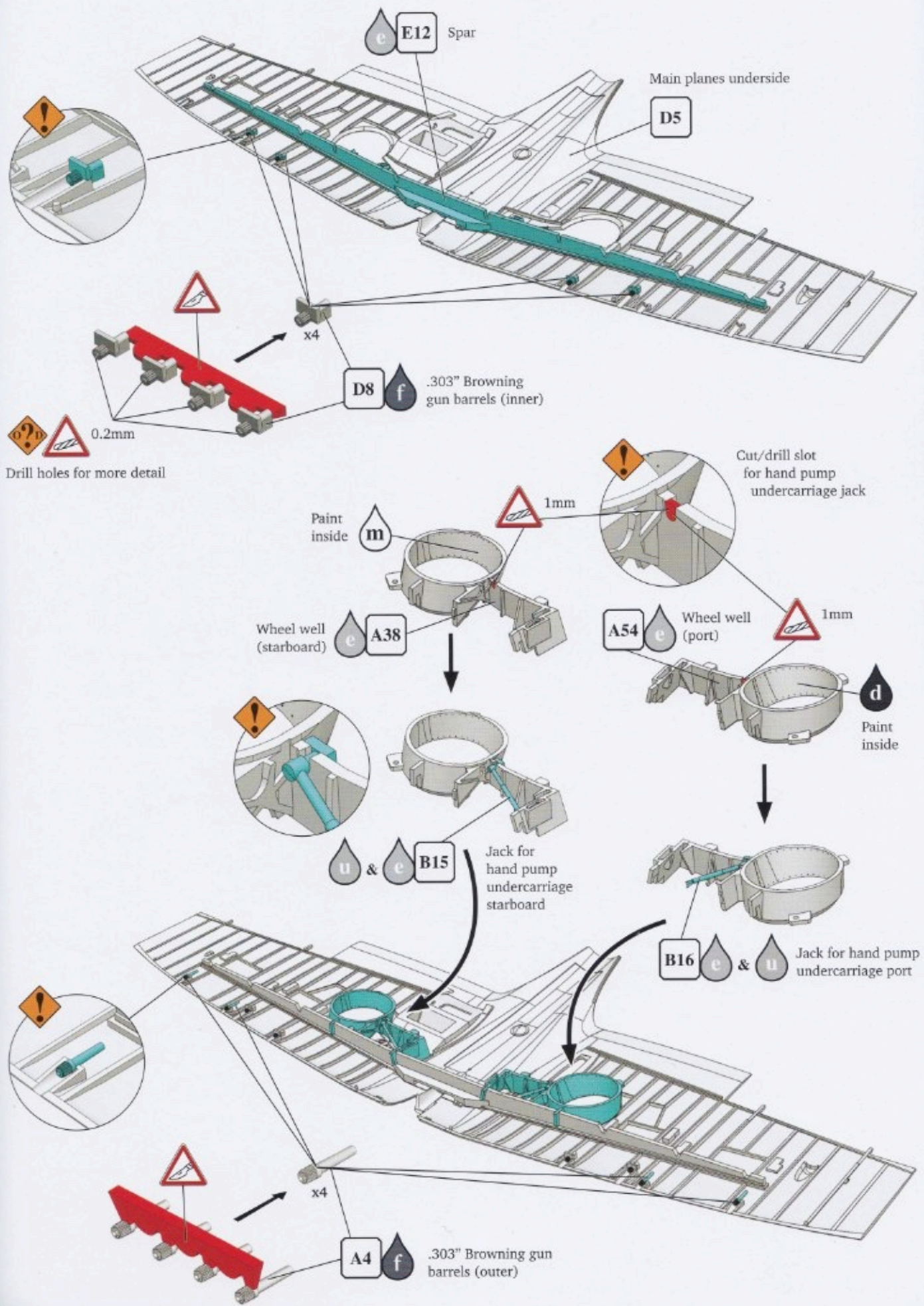
6 FUSELAGE EXTERIOR



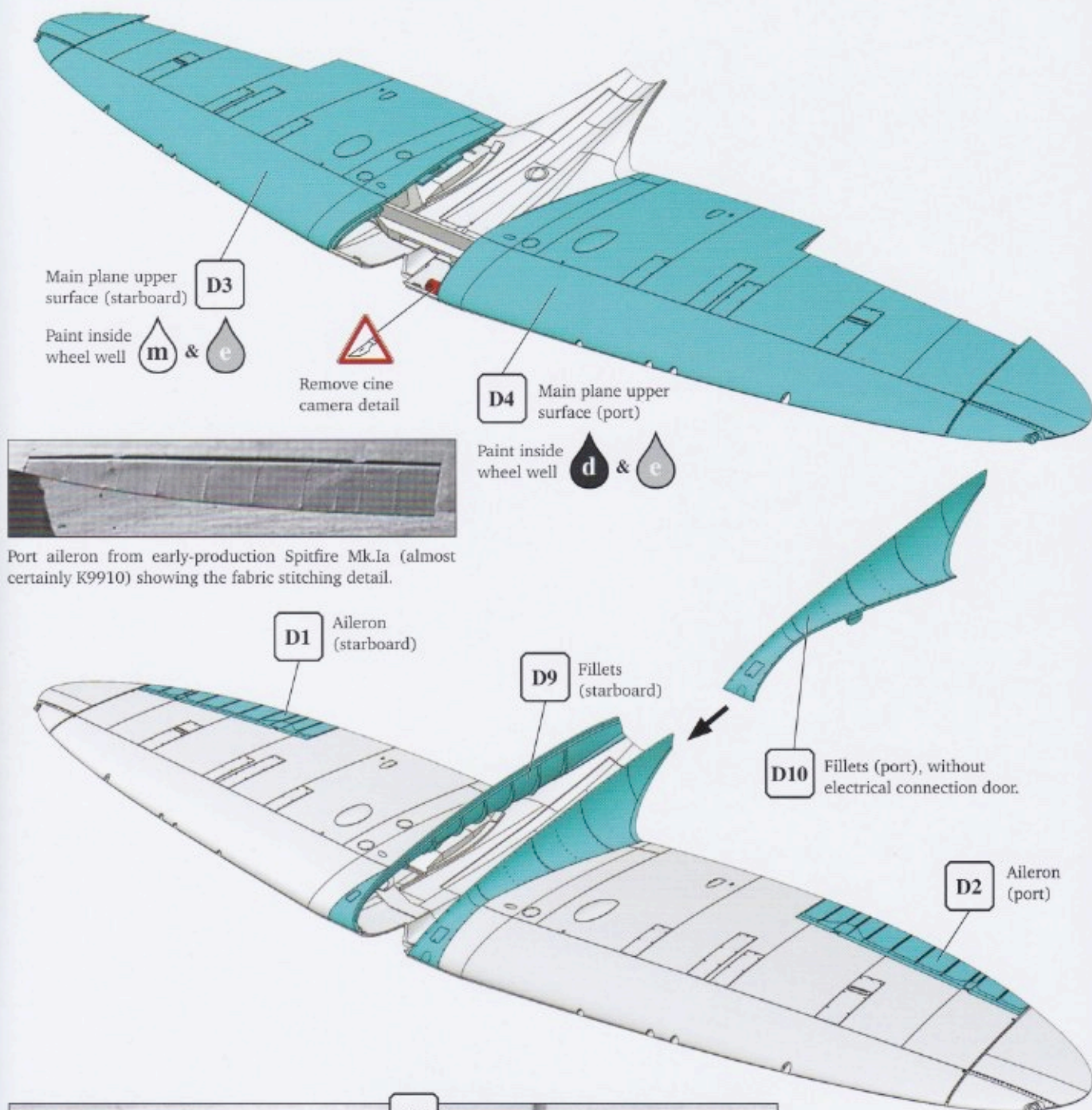
7 TAILPLANE



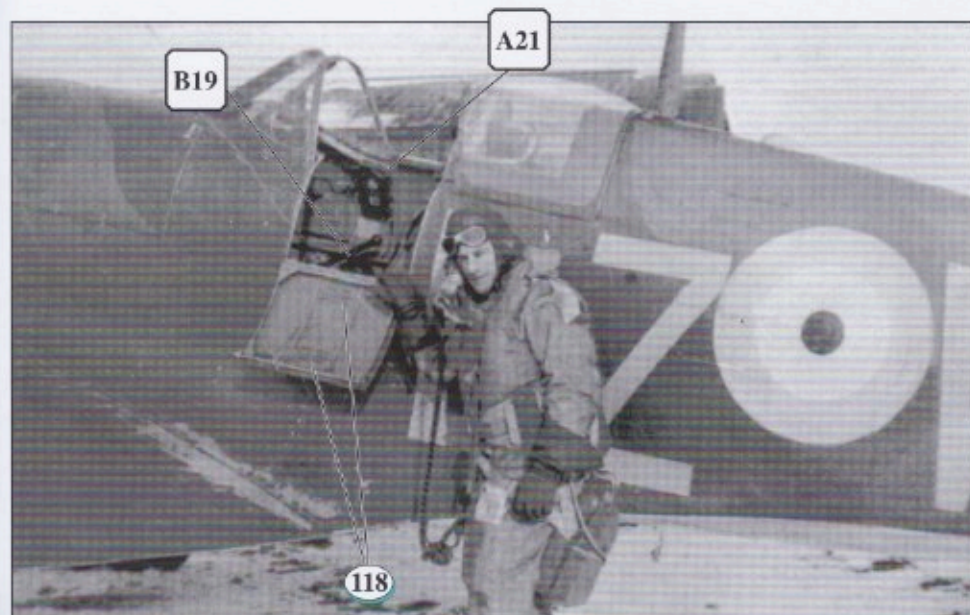
8 MAIN PLANES INTERIOR



9 MAIN PLANES EXTERIOR

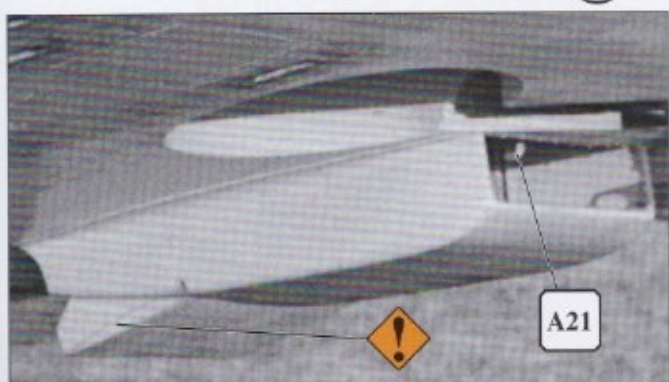
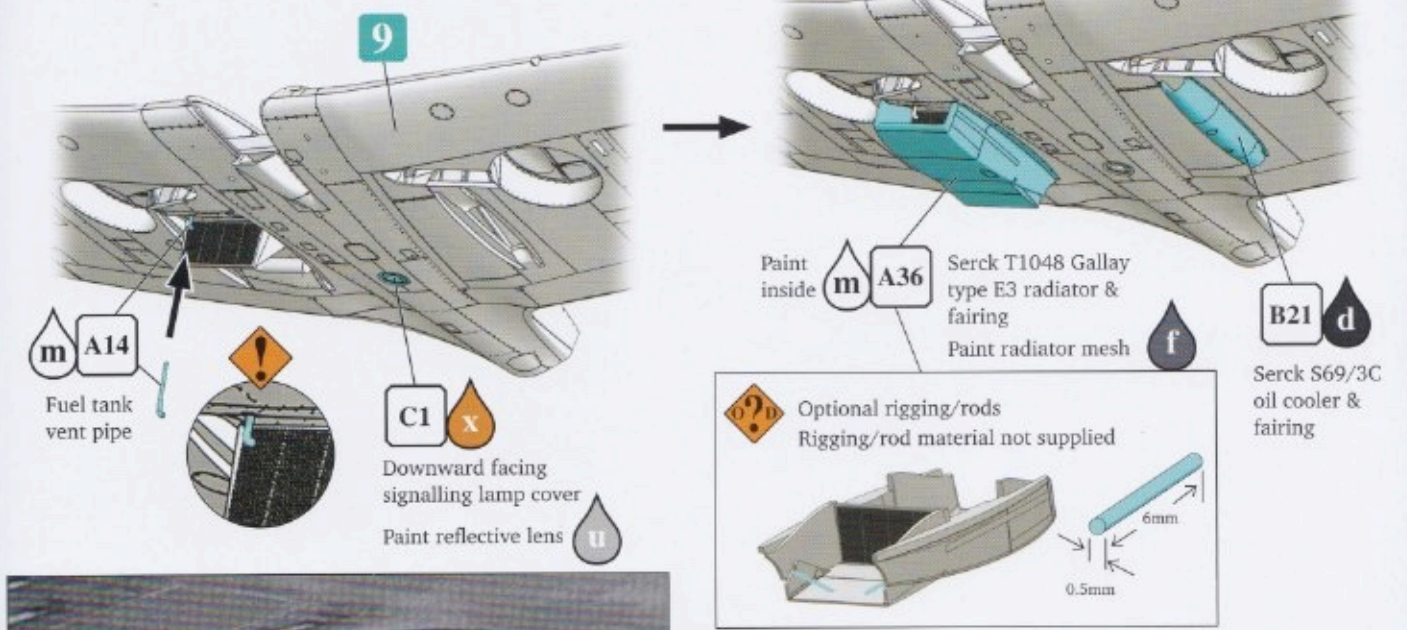


Port aileron from early-production Spitfire Mk.Ia (almost certainly K9910) showing the fabric stitching detail.



11700 miles (19000km) from home, New Zealander RJ "Jack" Hyde stands beside mid-production 66 Squadron Spitfire Mk.Ia LZ-W, probably N3041 or N3049, in a photo believed to have been taken in January 1940. N3041 & N3049 are from the same production order as N3180 **A** and were completed in September 1939 but not delivered to 66 Squadron until November and October 1939 respectively. Note the wireless remote contactor (IFF "Pip Squeak") **A21** and undercarriage hand pump **B19**. Also note the initial height of the voltage regulator **A18** as seen on aircraft from the 1st half of this order. The orthochromatic film used to take this photo has rendered the roundel blue very pale, the red very dark and reduced the contrast between the Dark Earth and Dark Green camouflage colours.

10 RADIATOR & OIL COOLER

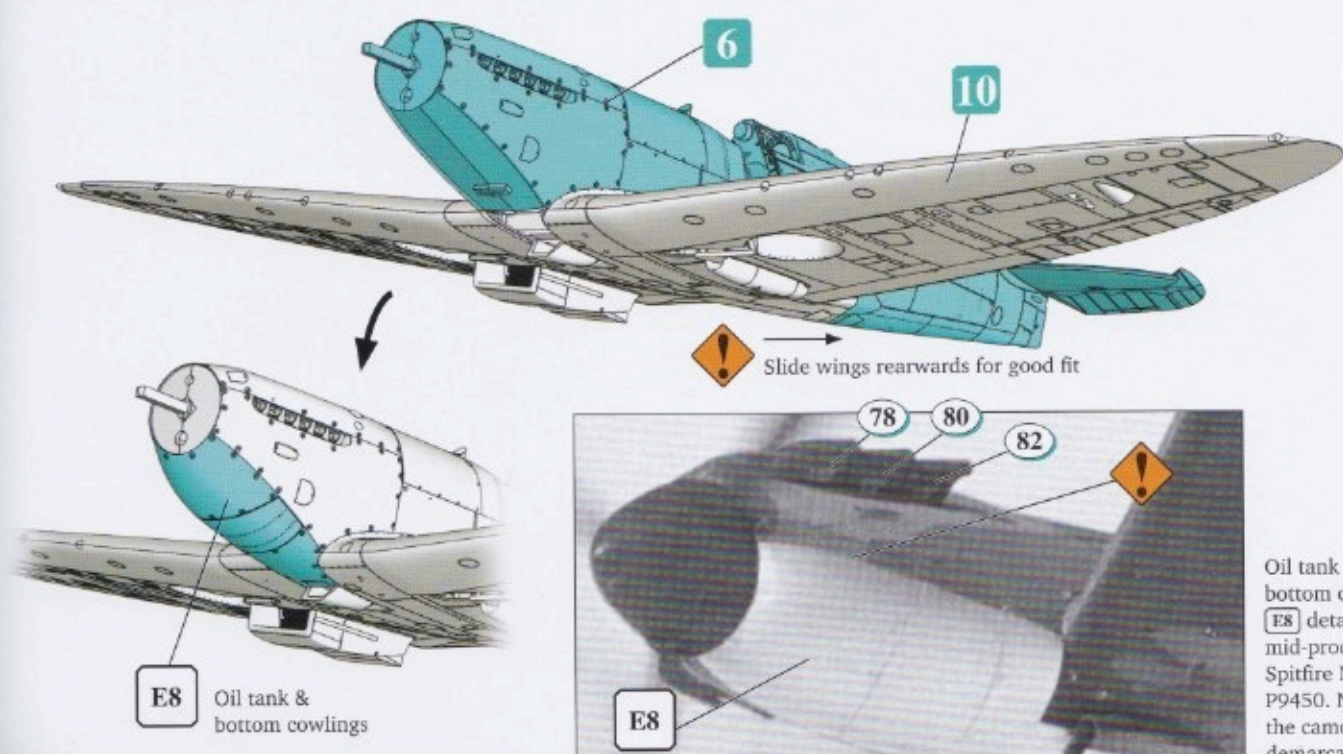


Radiator fairing detail from late production 19 Squadron Spitfire Mk.Ia X4179. Note the radiator flap detail and fuel tank vent pipe (A14). The dark edges around the empty shell & link chutes are a feature of late production X4### serial numbered Mk.Ia. Also note that the undersides, wheel wells and radiator fairing have been painted "Sky Type S" at the factory.



Rear view of the radiator and undercarriage from mid-production 54 Squadron Spitfire Mk.Ia N3180 KL-B (A). Note the small brackets faintly visible in the open radiator flap and the factory painted Night and white undercarriage.

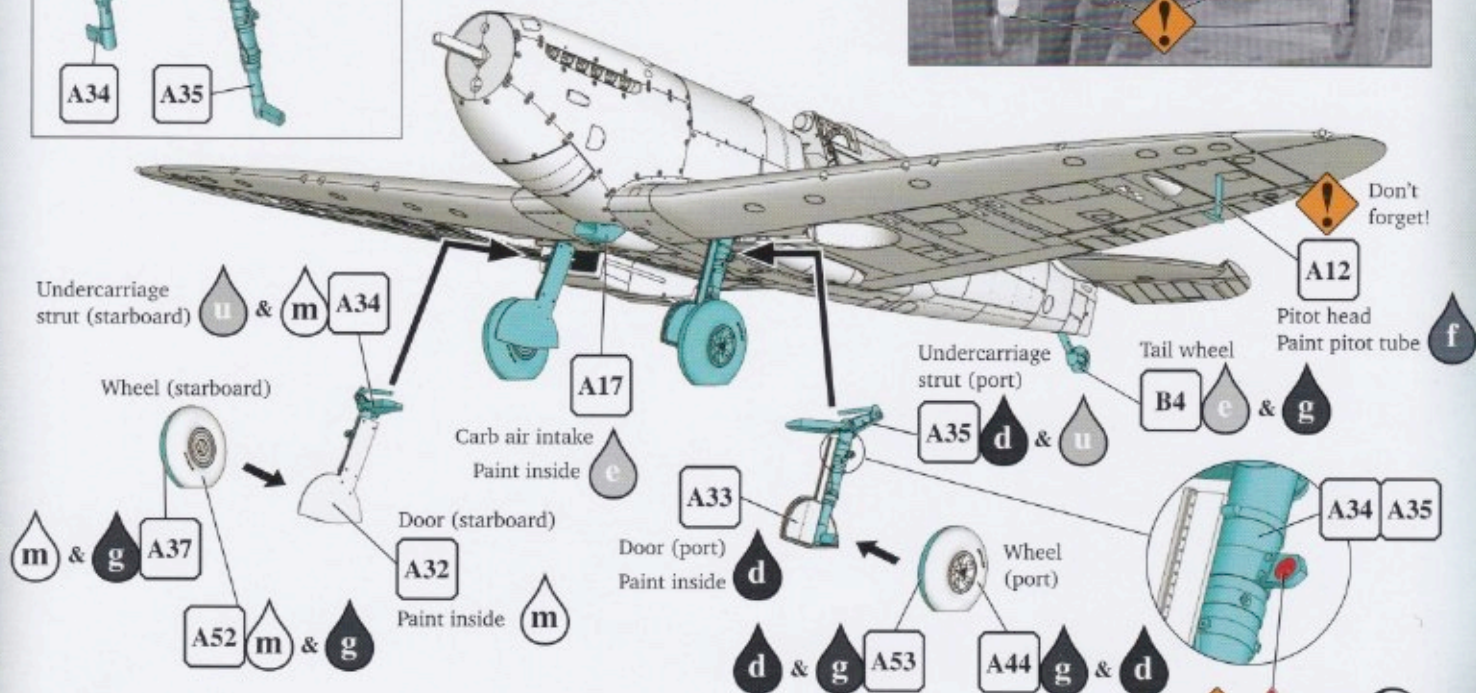
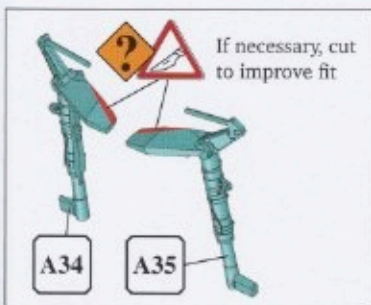
11 MAIN PLANES & FUSELAGE ASSEMBLY



Oil tank and bottom cowlings (E8) detail from mid-production Spitfire Mk.Ia P9450. Note the camouflage demarcation line.

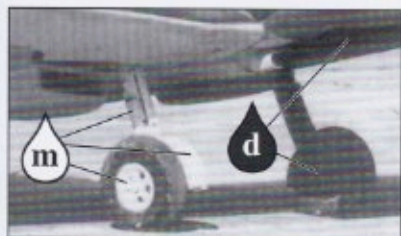
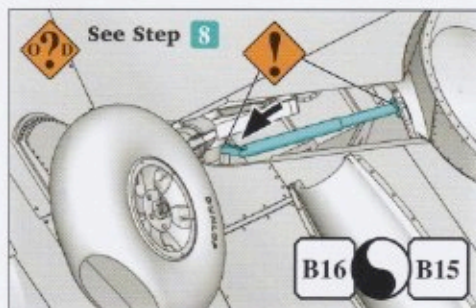
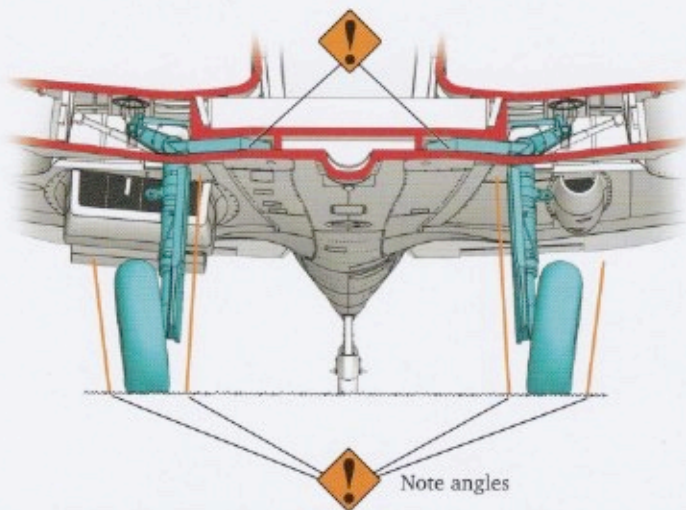
12 UNDERCARRIAGE

Undercarriage detail from late-production Spitfire Mk.Ia R6692. Note the carb air intake and uneven strut compression.



Don't forget!
A12
Pitot head
Paint pitot tube f

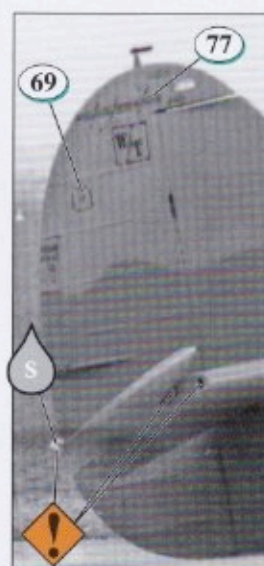
1mm
Drill out locking holes for more detail



Undercarriage from the newly completed unidentified mid production Spitfire Mk.Ia P94## seen on page 25 showing the undercarriage struts, wheel wells, wheel hubs and doors painted in the white & Night underside colours.



Port side view of the undercarriage from mid-production 19 Squadron Spitfire Mk.Ia P9386 QV-K photographed in September 1940 as seen on page 28. The undersides have been overpainted with a mix of "Sky Type S" and, as is typical of unit repainted undersides, the undercarriage struts, wheel wells, wheel hubs and insides of the doors retain their original factory applied colours of Night and white.

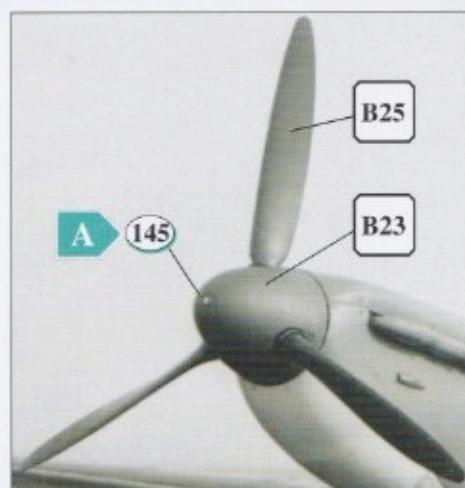


Pobjoy Aeromotor & Aircraft built rudder from early production Spitfire Mk.I K9912 photographed on 25 March 1939. Note the stenciling 77 & 69, the lightening holes in the outer rib of the tailplane and the rear light fairing.

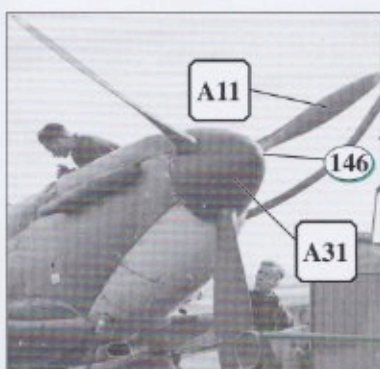
13 DETAILS

BC DeHavilland DH5/29 & DH5/39 spinner & propeller

A Rotol RX5/1 spinner & magnesium propeller



Rotol RX5/1 magnesium propeller detail from an early production Spitfire Mk.IIa, almost certainly P7508.

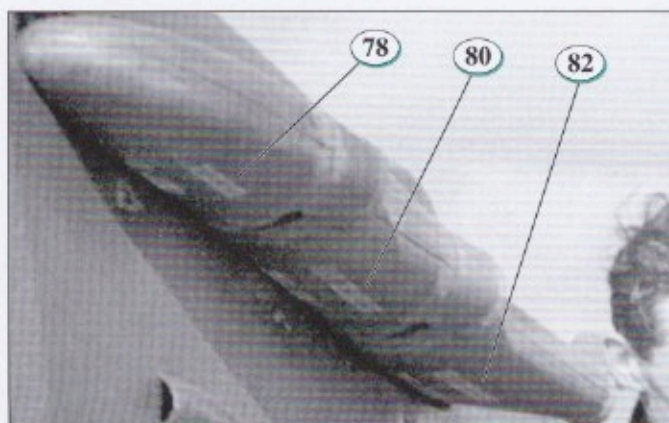


DeHavilland DH5/39 propeller detail from late production 616 Squadron Spitfire Mk.Ia X4172 or X4175.

? Cut & drill for more detail

Port triple ejector nozzle outlet exhaust manifold (A6) & (A7) detail from an unidentified 19 Squadron late production Spitfire Mk.Ia in the X4### serial number range, believed to have

been photographed on 21 September 1940. These exhaust manifolds were supplied by Rolls-Royce and were made from Inconel, an alloy that does not rust (even after 4 decades under a Calais beach)! The same style of exhaust was used on mid-production Mk.Ia, Mk.IIa/b and early production Mk.V and the Hawker Hurricane. Note the weld lines and stencil markings (78), (80) & (82).



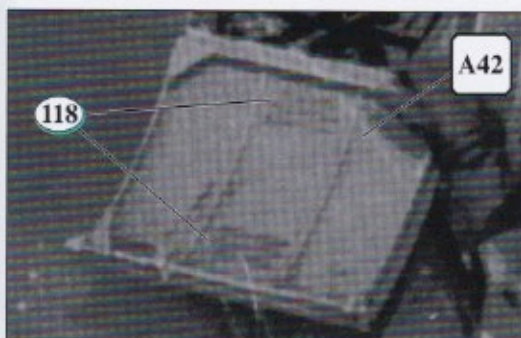
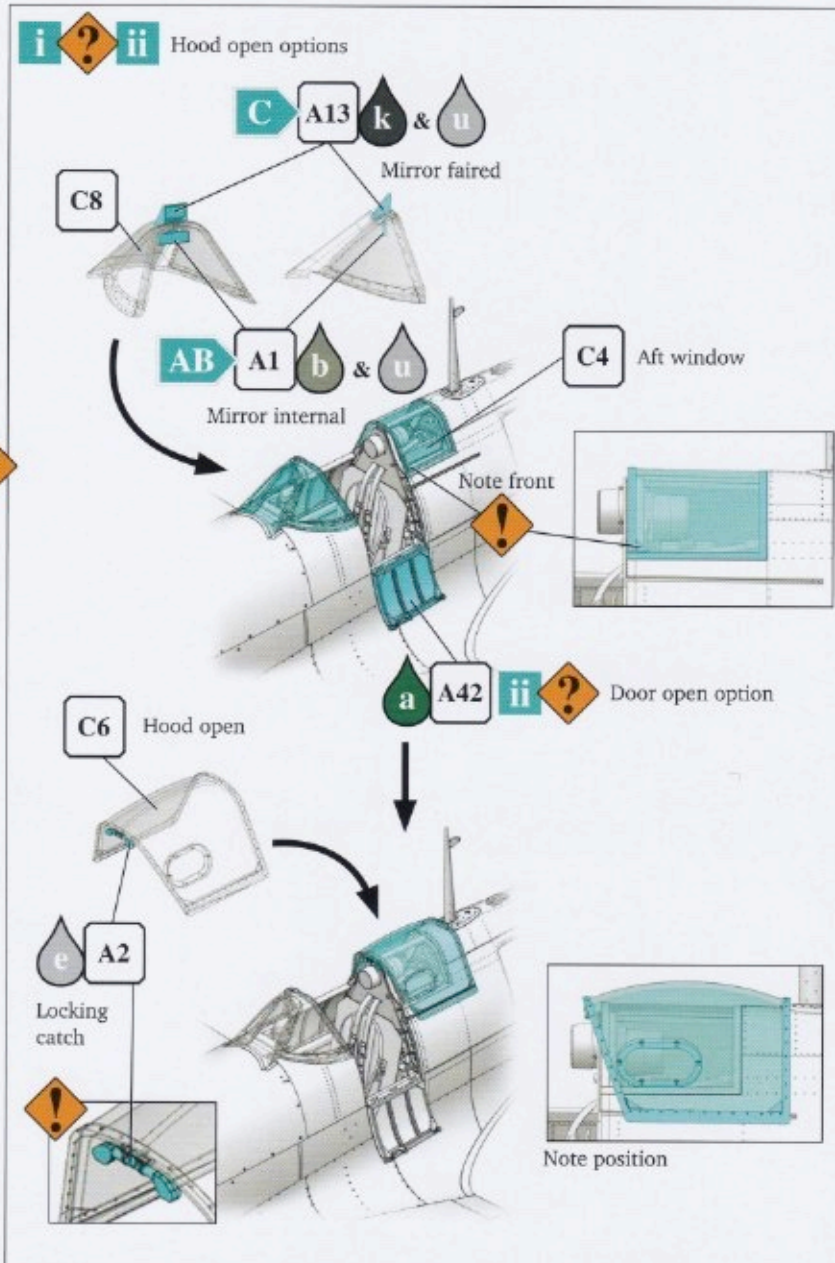
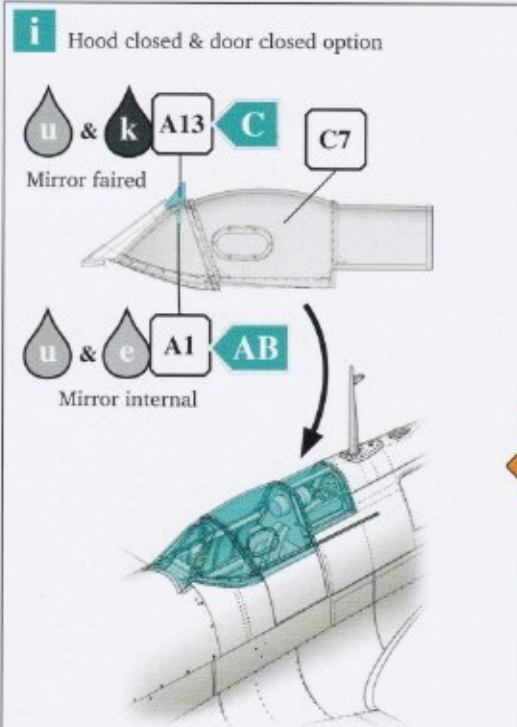
14 CANOPY



Paint inside canopy frame



to represent red rubber seals. Paint exterior canopy frames

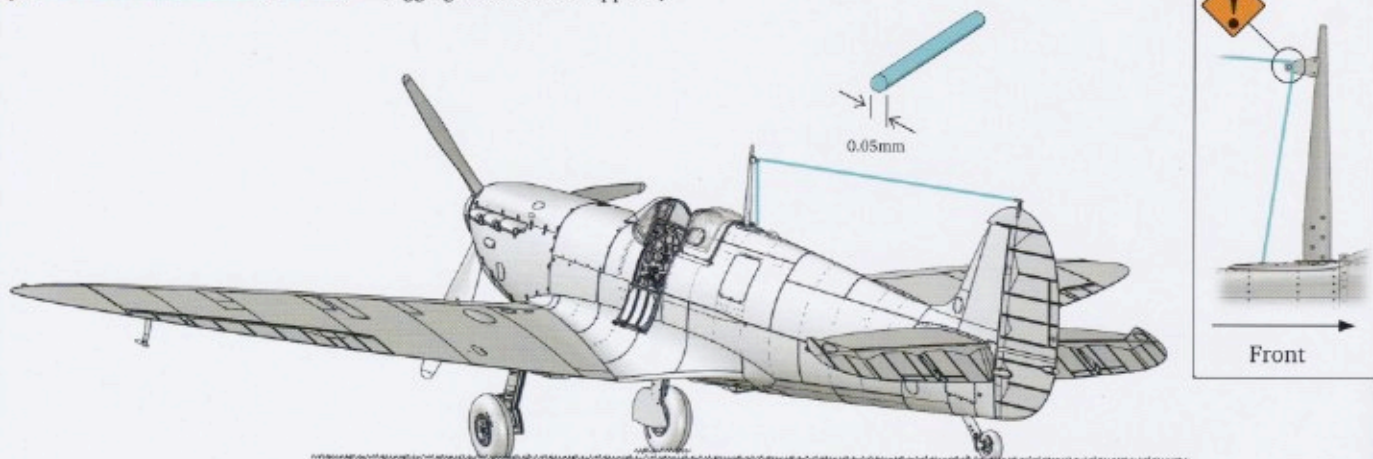


Open cockpit door **A42** from mid-production 66 Squadron Spitfire Mk.Ia N3041 or N3049 as seen on page 12. Note the lever locking mechanism introduced on this production order and Supermarine style of stencil markings **118**. Crowbars were not introduced until well into 1941.

RIGGING

BC

TR.9D wireless aerial rigging diagram (rigging material not supplied)



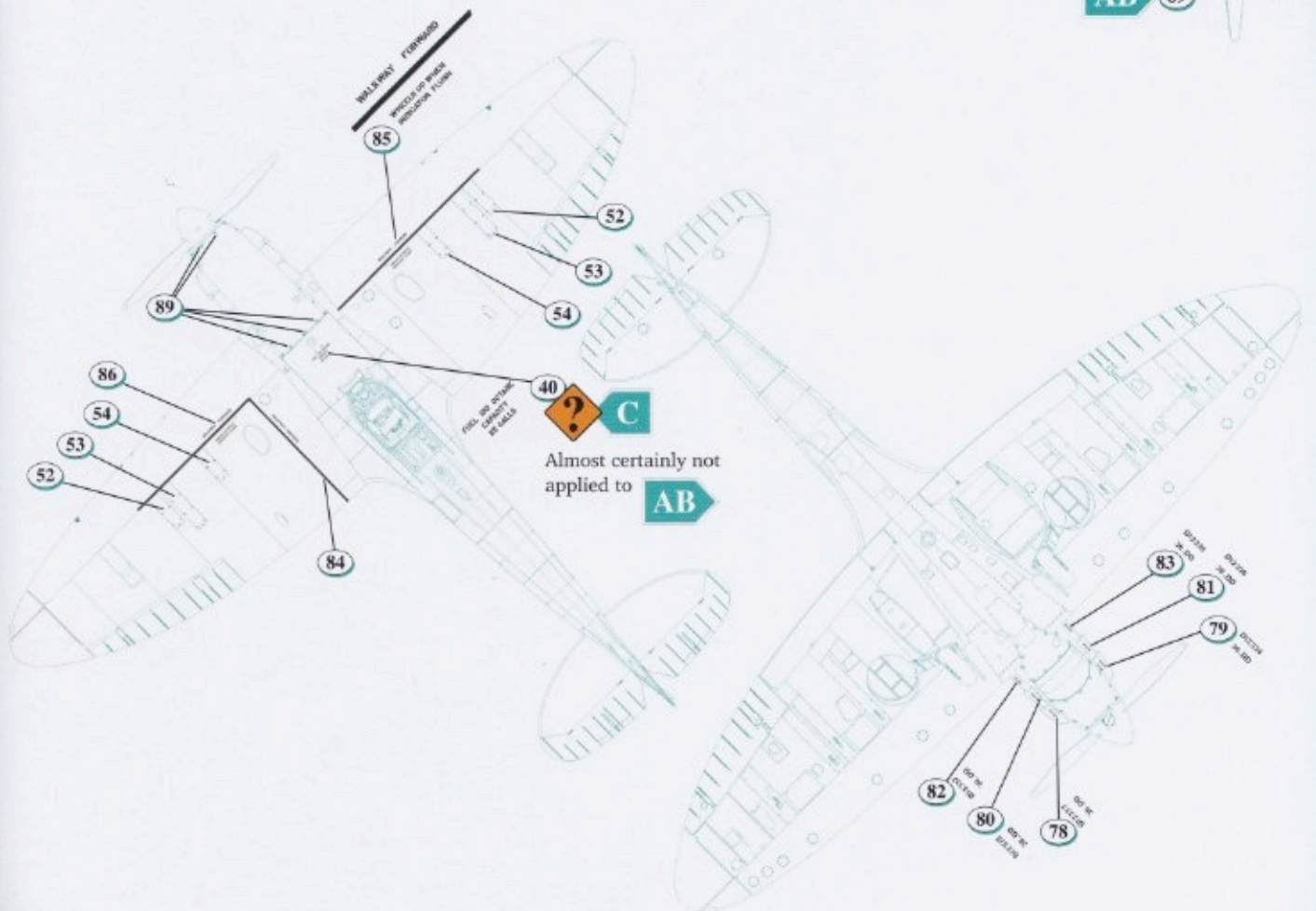
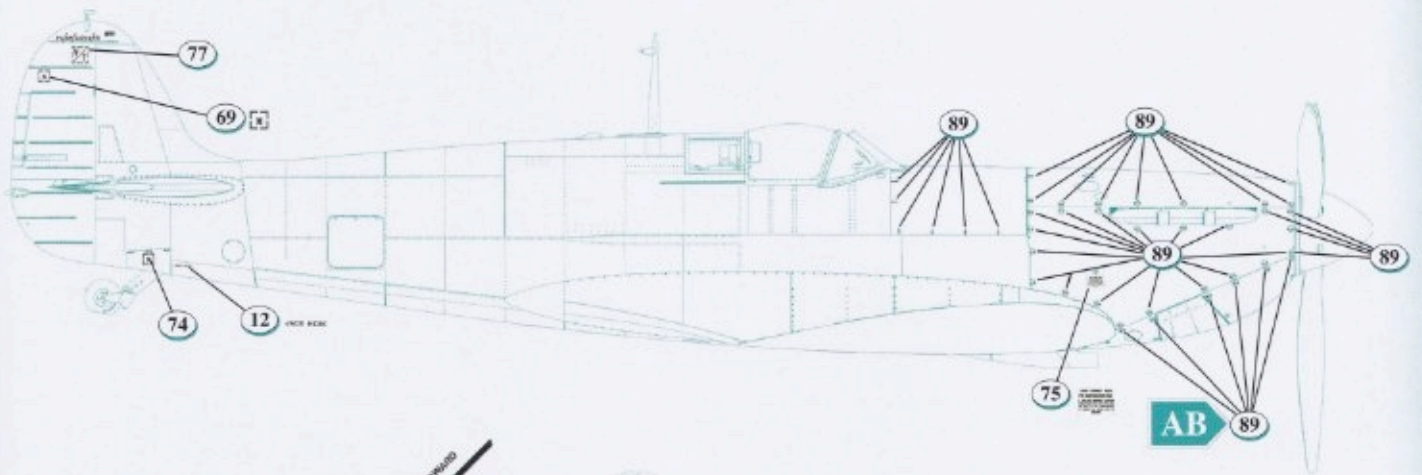
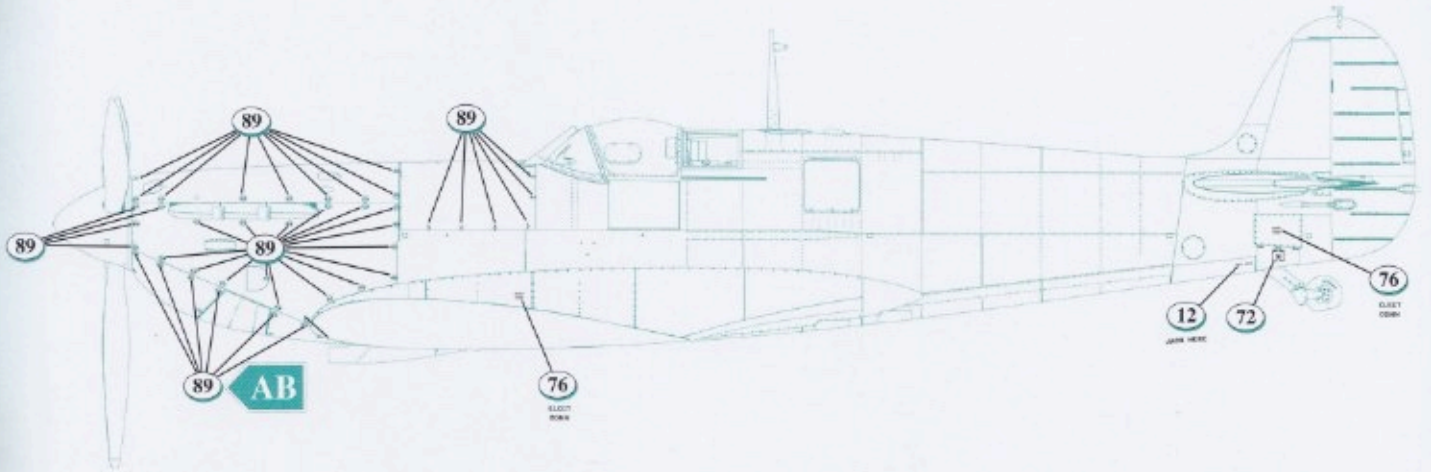
Note that IFF Mk.II aerial wires from the tailplane to the fuselage were not introduced until October 1940.



STENCIL DECALS

Apply stencil decals as shown

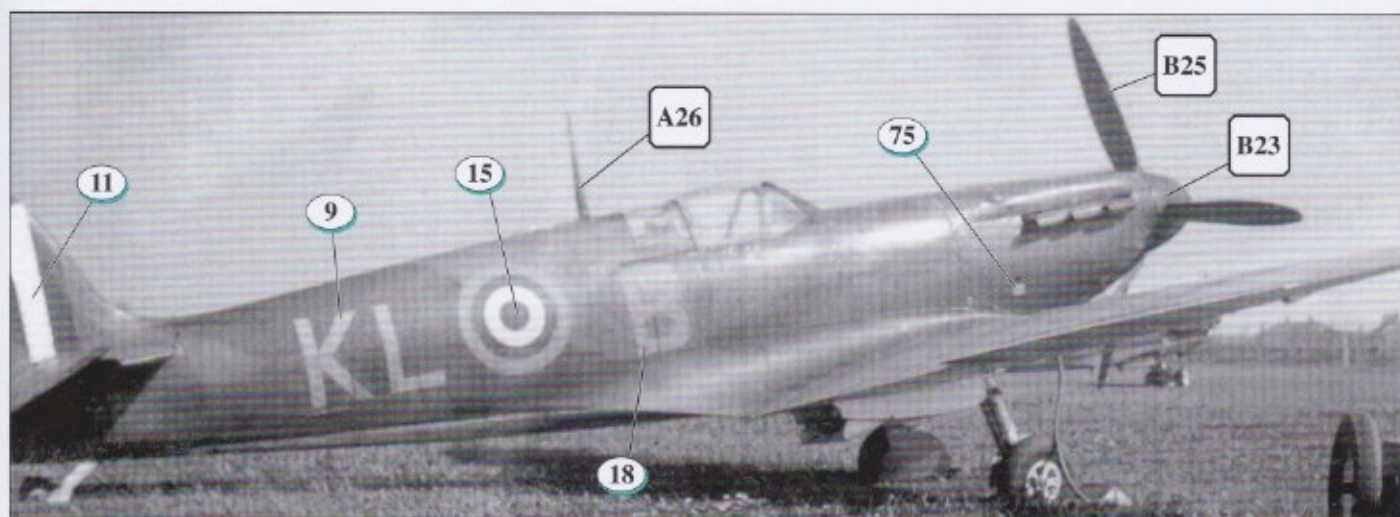
Please visit www.kotare-models.com for enlarged illustrations



A Spitfire Mk.Ia N3180 KL-B "Kiwi", AC Deere, 54 Squadron, May 1940 (22 victories)

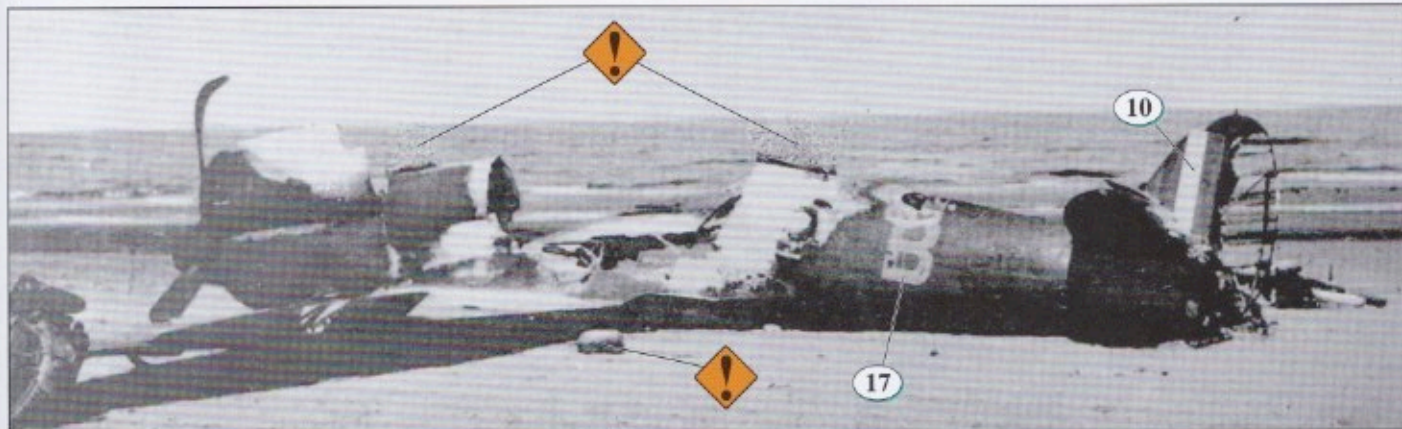
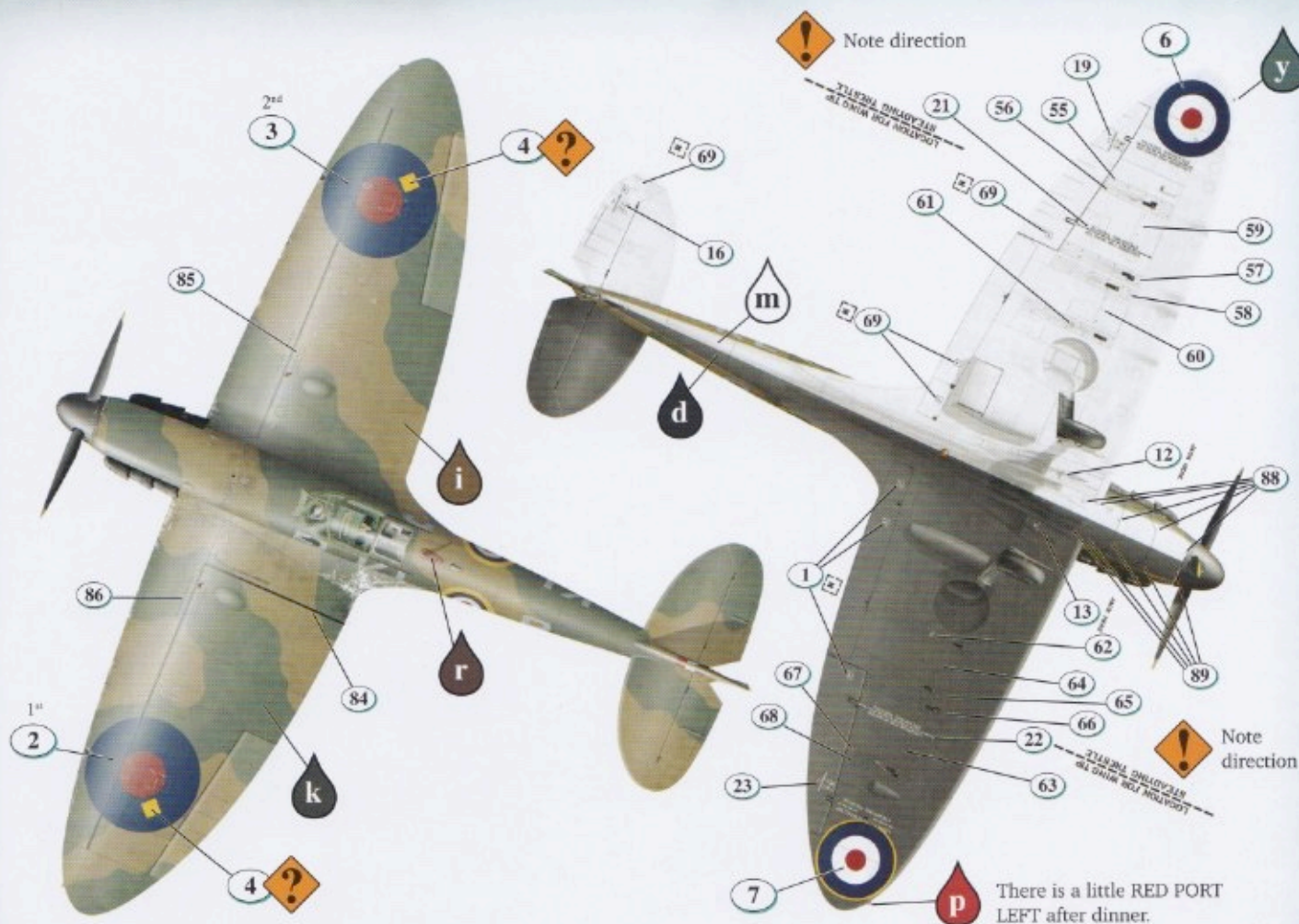


Spitfire Mk.Ia N3180 is from the 2nd production order placed with Supermarine in September 1938 for 200 aircraft (numbers N3023 to N3299) and was delivered in November 1939. At this time it was completed in the factory applied finish of Dark Earth and Dark Green on the upper surfaces (in the B camouflage scheme commonly associated with even serial-numbered aircraft at this time) with the port and starboard undersides painted Night and white respectively, with the demarcation line running along the centerline from behind the spinner to the tail wheel. National markings were restricted to A type roundels on the fuselage and B type roundels on the upper surfaces of the mainplanes. N3180 was one of several machines experimentally fitted with a TR.1133 VHF wireless and constant speed Rotol RX5/1 magnesium propeller. N3180 was flown by various 54 Squadron pilots, but most often by Alan Deere.



Spitfire Mk.Ia N3180 was delivered to 54 Squadron in January 1940 and is seen here around the time 54 Squadron started flying sorties over France & Belgium in mid-May 1940. The fin stripes and the yellow rings around the fuselage roundel were added from early May 1940. Note the 54 Squadron style of reducing the overall dimensions of the fuselage roundels before applying the thin yellow rings. Also note the style of the fin stripes, smaller size of the code letters and the overall weathered and streaky finish after 4 months service. Although not visible here, A type roundels would have been painted under the main planes at about this time as seen on other 54 Squadron aircraft flown over France from mid-May 1940. The panchromatic film and lens filter used to take this photo has rendered both the roundel blue and red very dark and somewhat reduced the contrast between the Dark Earth and Dark Green camouflage colours.

Alan Christopher Deere was born in Westport, New Zealand in December 1917 and joined the RAF in January 1938. A few months later he was posted to 54 Squadron who began replacing their Gloster Gladiators with the Spitfire Mk.I in early 1939. Alan Deere flew Spitfire Mk.Ia N3180 KL-B "Kiwi" over 70 times from 27 February 1940, including when he was credited with his 1st 2 victories on 23 May 1940 as well as when he was shot down and forced to land on a Belgium beach on 28 May 1940 while supporting the evacuation of Dunkirk. Deere went on to command 602 Squadron from August 1941 and 403 Squadron from late April 1942 before going on to be Wing Commander at Biggin Hill from March 1943 until late September 1943. He then held numerous administrative posts until the end of the war and remained in the RAF until retiring in December 1967 with the rank of Air Commodore. Read more about Alan Deere in his 1959 autobiography "Nine Lives" and biography "Al Deere Wartime Fighter Pilot Peacetime Commander", Richard C Smith, Grub Street 2003. Alan died of cancer on 21 September 1995 aged 77 with his ashes being scattered from a Spitfire over the River Thames.



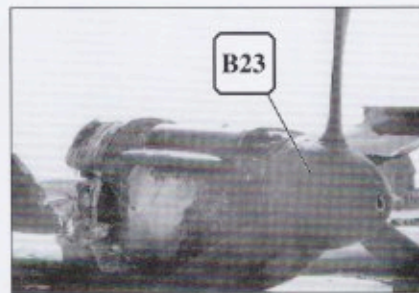
The sad burnt out remains of Deere's N3180 are the subject of this 1940 French/German souvenir postcard. Note the oxygen bottle in the foreground, the style and position of the "B" and that a couple of sightseers have been crudely edited out of the photo.



Another view of the wreckage of N3180 showing the rear fuselage and tailplane, which has had its fabric ripped off by victorious souvenir hunters. The style and size of the rudder stripes applied by 54 Squadron at this time is quite apparent.

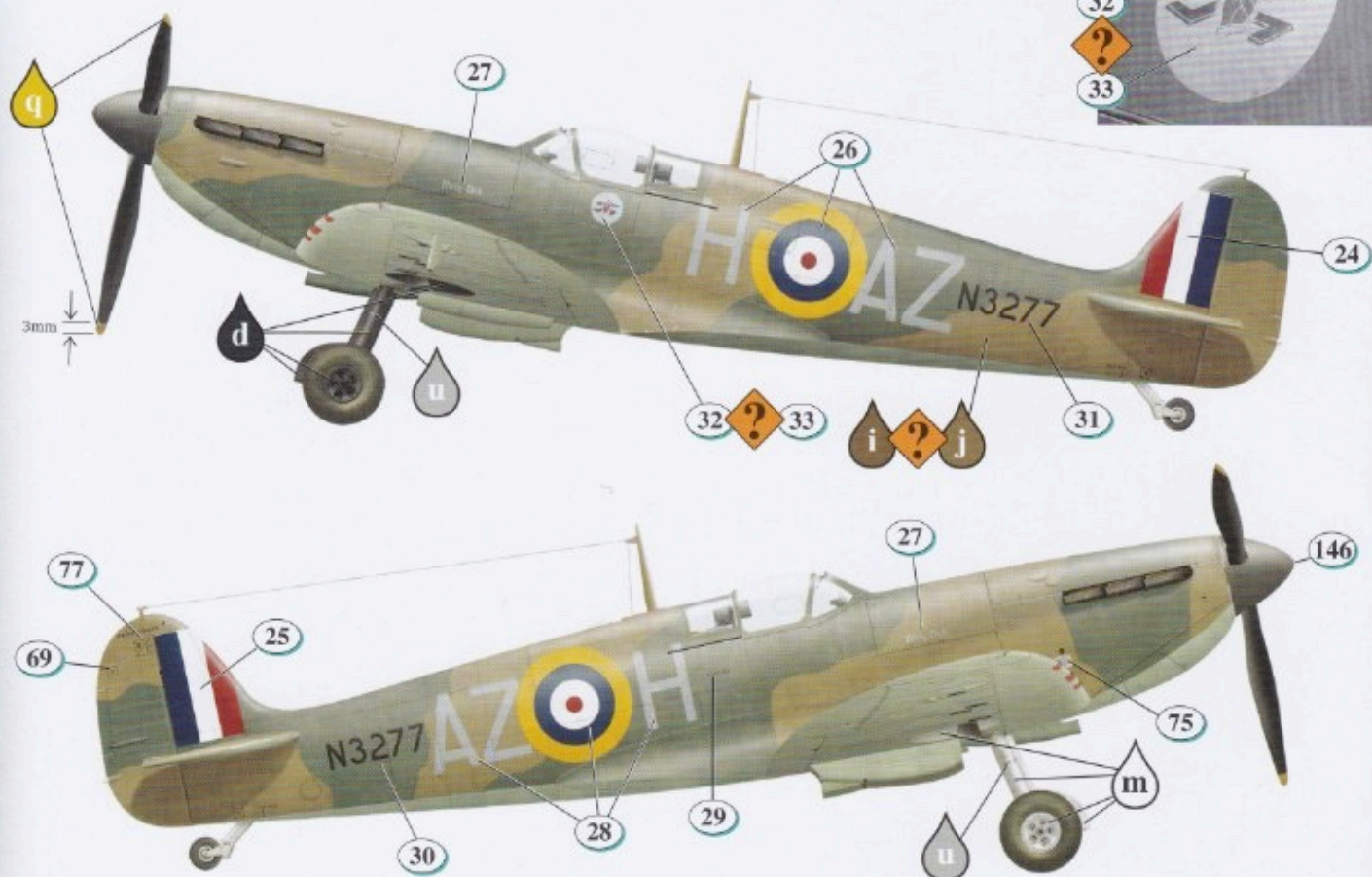


The burned out and ripped apart cockpit of N3180. Note the 48 gallon top main fuel tank, 37 gallon bottom fuel tank, remains of the 4-cell radiator core and the compressed air bottle in the foreground.



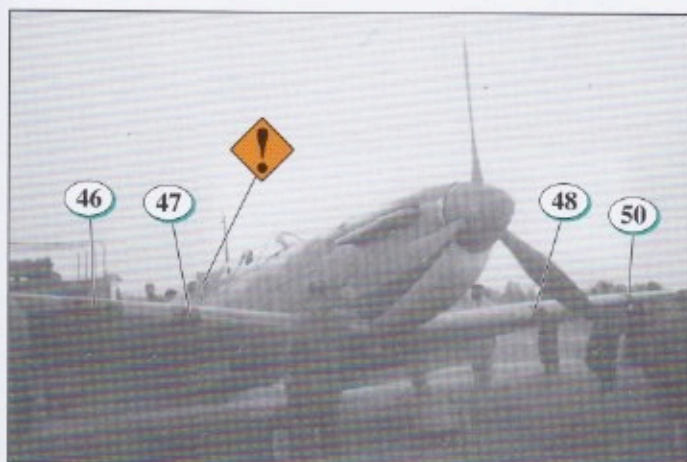
Rotoil RX5/1 propeller (B24) and spinner (B23) detail from N3180. The Rotoil badge (145) has been souvenired from the tip of the spinner.

B Spitfire Mk.Ia N3277 AZ-H "Dirty Dick", R Hardy, 234 Squadron, August 1940.

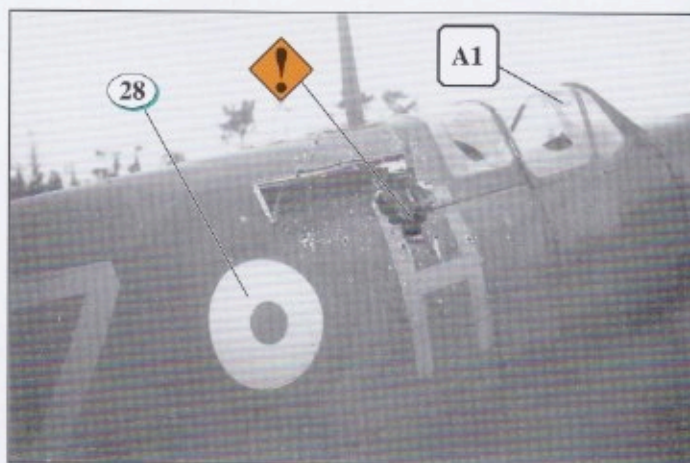


Spitfire Mk.Ia N3277 is from the same production order as **A** and was completed in January 1940. The upper surface is completed in the A camouflage scheme (commonly associated with odd serial number aircraft at this time) with white and Night main plane undersides but by this time the undersides of the nose and rear fuselage and tailplane were being painted aluminium. This is how N3277 would have appeared when it was delivered to 234 Squadron in mid-April 1940. Undersides were directed to be re-painted "Sky Type S...duck egg bluish green" after 7 June 1940. As was common on Spitfires with re-painted undersides, the insides of the undercarriage doors, struts, wheels and wheel wells remained in their factory applied white (starboard) and Night (port) colours. The outsides of the undercarriage doors were re-painted with whatever Sky Type S mixture 234 Squadron had available and had used on the rest of the undersides.

Richard Hardy joined the RAF in February 1939 and was posted to 234 Squadron in early November 1939. Hardy was flying his Spitfire Mk.Ia N3277 AZ-H "Dirty Dick" on 15 August 1940 when it was severely damaged, forcing him to land near Cherbourg, France where he was captured. Hardy spent the rest of the war in a POW camp and left the RAF in 1946. He died in September 1997.



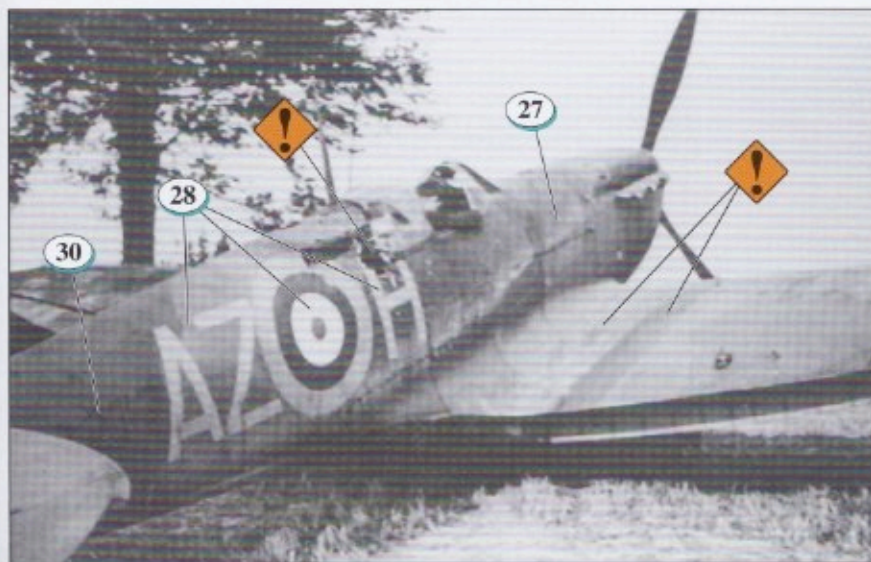
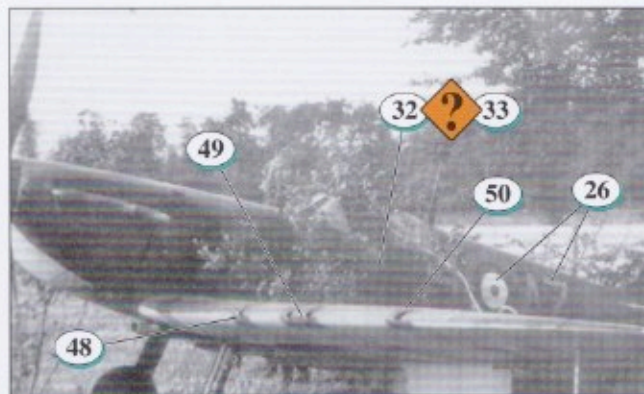
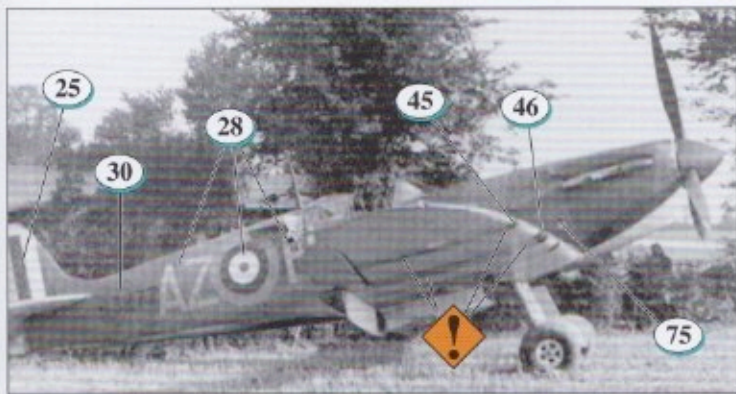
Starboard front view of N3277 after capture. Note the red paint around the gun ports (46), (47), (48) & (50), damaged fuselage and canopy hood. Also note the curved camouflage demarcation line under the nose, typical for early and mid-production aircraft.



Fuselage and canopy hood damage from N3277. Interestingly the type of film (orthochromatic?) and filter used to take this photo has rendered the red, blue, yellow, Dark Earth and Dark Green pretty much all the same tone.



p There is a little RED PORT LEFT after dinner.

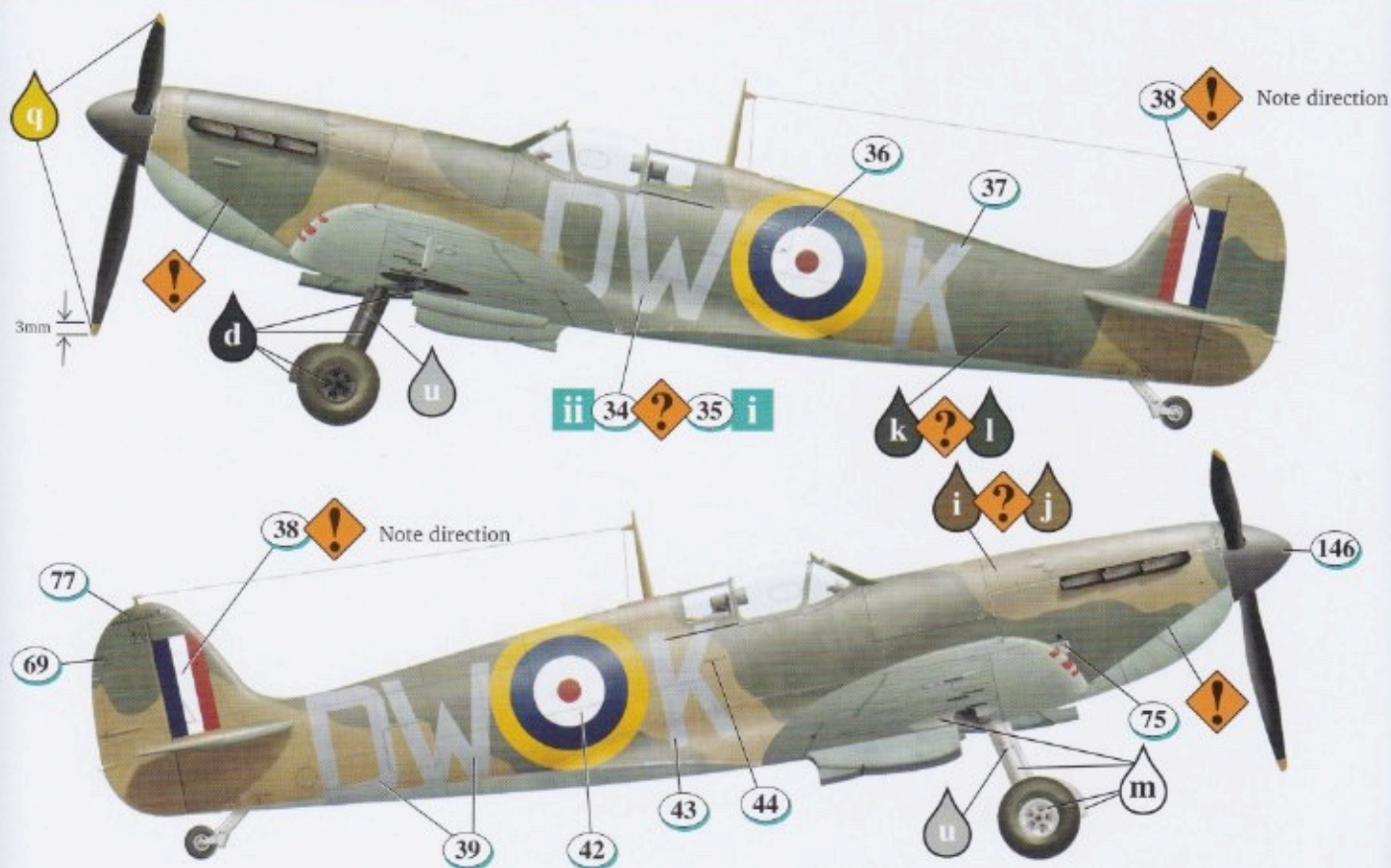


^< Starboard view of N3277 shortly after capture. Note the cordite & grease-stained underside gun access doors and more subtle staining from the gun muzzles. Unusually the flaps have been left down, possibly one last sign of defiance from the captured Hardy. N3277 was eventually patched up and repainted in German markings.

^ Port side view of N3277 partially camouflaged by its captors. Note how the 234 Squadron B(?) Flight badge on the cockpit door always appears the same tone as the medium sea grey code letters. We believe the hand detail on the badge was almost certainly red but provide an optional decal (33) with a yellow hand should you not agree.

< A poor but interesting print of N3277. Compare the appearance of the red, blue, yellow, Dark Earth and Dark Green in this photo taken on conventional panchromatic film. Note the level of weathering after 4 months service and extensively re-painted fillet and inner main plane.

C Spitfire Mk.Ia P9495 DW-K, SJ Arnfield (2 victories), DF Corfe (1 victory), J Ellis (12 victories) and P Litchfield (3 victories), 610 Squadron, June to July 1940.



Spitfire Mk.Ia P9495 is from the 3rd production order placed with Supermarine in April 1939 for 200 aircraft (numbers P9305 to P9567) and was completed in mid-April 1940. At this time, the undersides of the main planes were being painted in white and Night with the nose and rear fuselage and tailplane painted aluminium. The upper surface is completed in the B camouflage pattern scheme more commonly associated with even serial numbers. P9495 would have appeared this way when it was delivered to 610 Squadron in early June 1940, just in time for the undersides to be re-painted whatever shade of "Sky Type S...duck egg bluish green" was being used by their painters. The insides of the undercarriage doors, struts and wheel wells remain in their factory applied white (starboard) and Night (port) colours as per **B**.

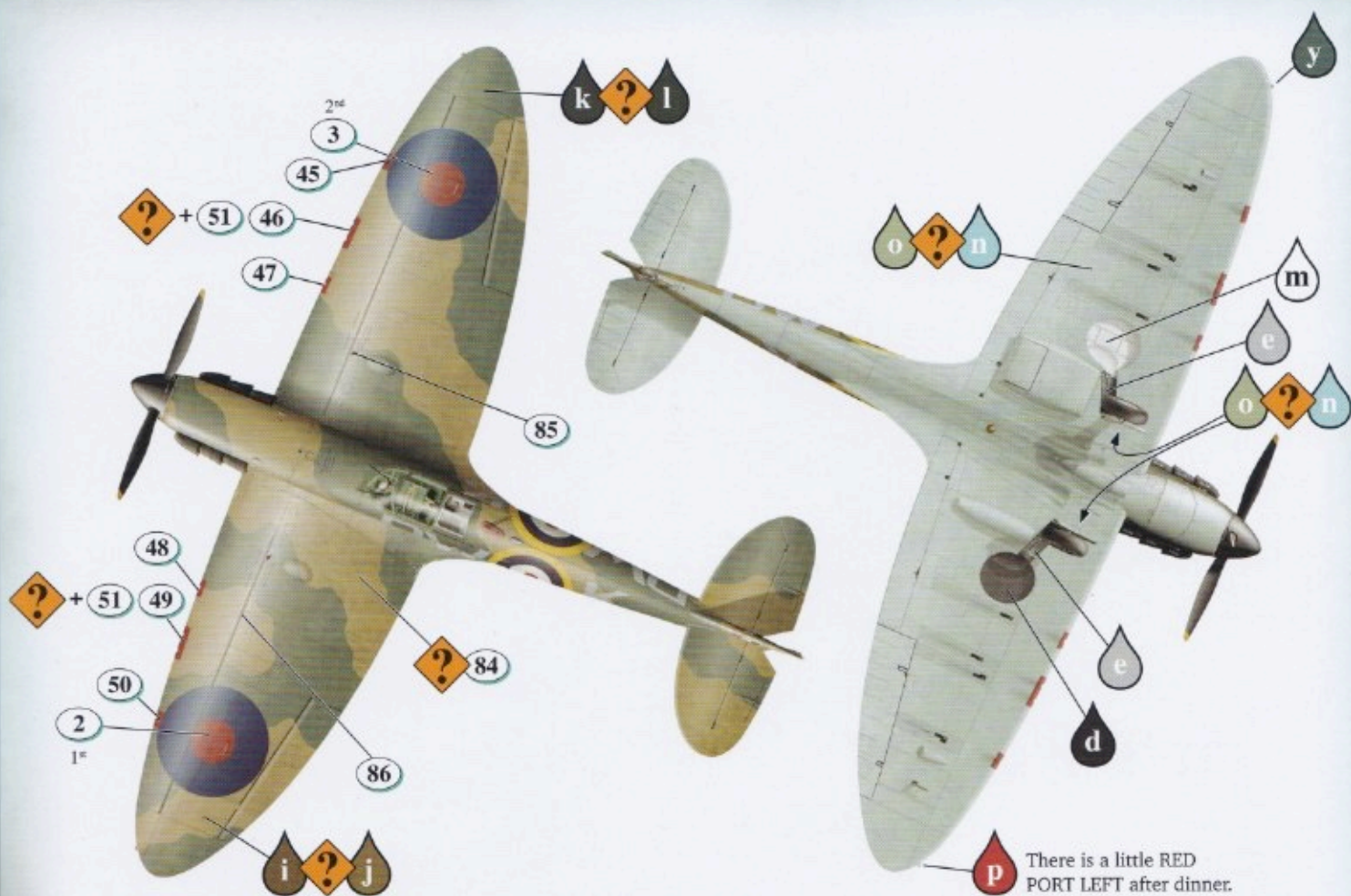


Spitfire Mk.Ia P9495 DW-K was flown by 610 Squadron pilots SJ Arnfield, P Litchfield, J Ellis and DF Corfe between early June 1940 and 12 August 1940 when it was struck off charge after being irrevocably damaged in combat.

Stanley John Arnfield was born on 3 October 1913 and joined the RAF in early 1930. He trained to be a pilot in 1937 and transferred to 610 Squadron in late 1938. He was flying P9495 on 12 August 1940 when it was irrevocably damaged in combat, although he was able to make a safe landing. He was credited with his 1st 2 full victories on 18 August 1940 but less than a week later was forced to bail out when he was shot down. He then served as an instructor before retraining and transferring to 166 Squadron flying Lancaster bombers from late 1943. He retired from the RAF in February 1951 and died in late September 1954 aged 41 "...as a result of war service".

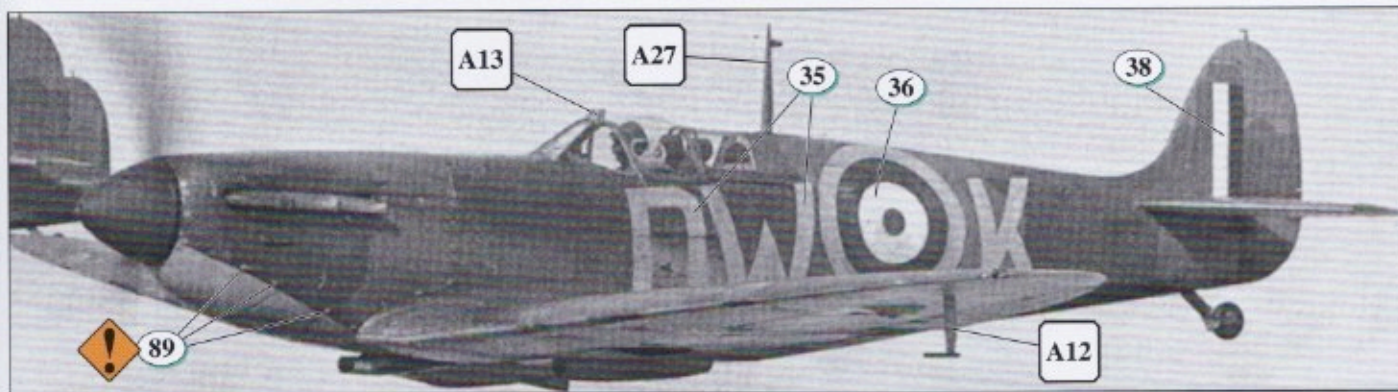
Douglas Fredrick Corfe was born on 24 August 1918 and joined the Auxiliary Air Force in 1936, initially serving as ground staff in 610 Squadron before transferring to the RAFVR and training to be a pilot in late 1938. He flew Hurricanes with 73 Squadron in mid-1940 before transferring back to 610 Squadron in late July 1940 where he was credited with his 1st victory on 14 August 1940. He transferred to 66 Squadron in early September 1940 and then 229 Squadron flying Hurricanes from April 1941. He was shot down and killed over Malta on 25 April 1942. Douglas was 23 years old.

Douglas Corfe as photographed on 29 July 1940, believed to be seated in P9495 which he flew that day. Note how dark the seat is compared with the "Supermarine green" door, indicating that it was almost certainly painted Night. Also note the mirror **A13**, 1940 era style of oxygen hose and the new, higher, position of the spare reflector sight filaments **A55** compared to N3180 **A** & N3277 **B**.



John Ellis was born on 28 February 1917 and joined the RAF in March 1936. He initially served with 66 Squadron and then 213 Squadron before transferring to 610 Squadron in September 1939. He was credited with his 1st victory on 29 May 1940 and was made commander of 610 Squadron in late July 1940. Ellis had been credited with 12 victories by the time he was made a Wing Commander in Malta in April 1943 before being shot down and captured on 13 June 1943, spending the rest of the war in POW camps. He remained in the RAF until retiring as a Group Captain in late February 1967. John died in November 2001 aged 84.

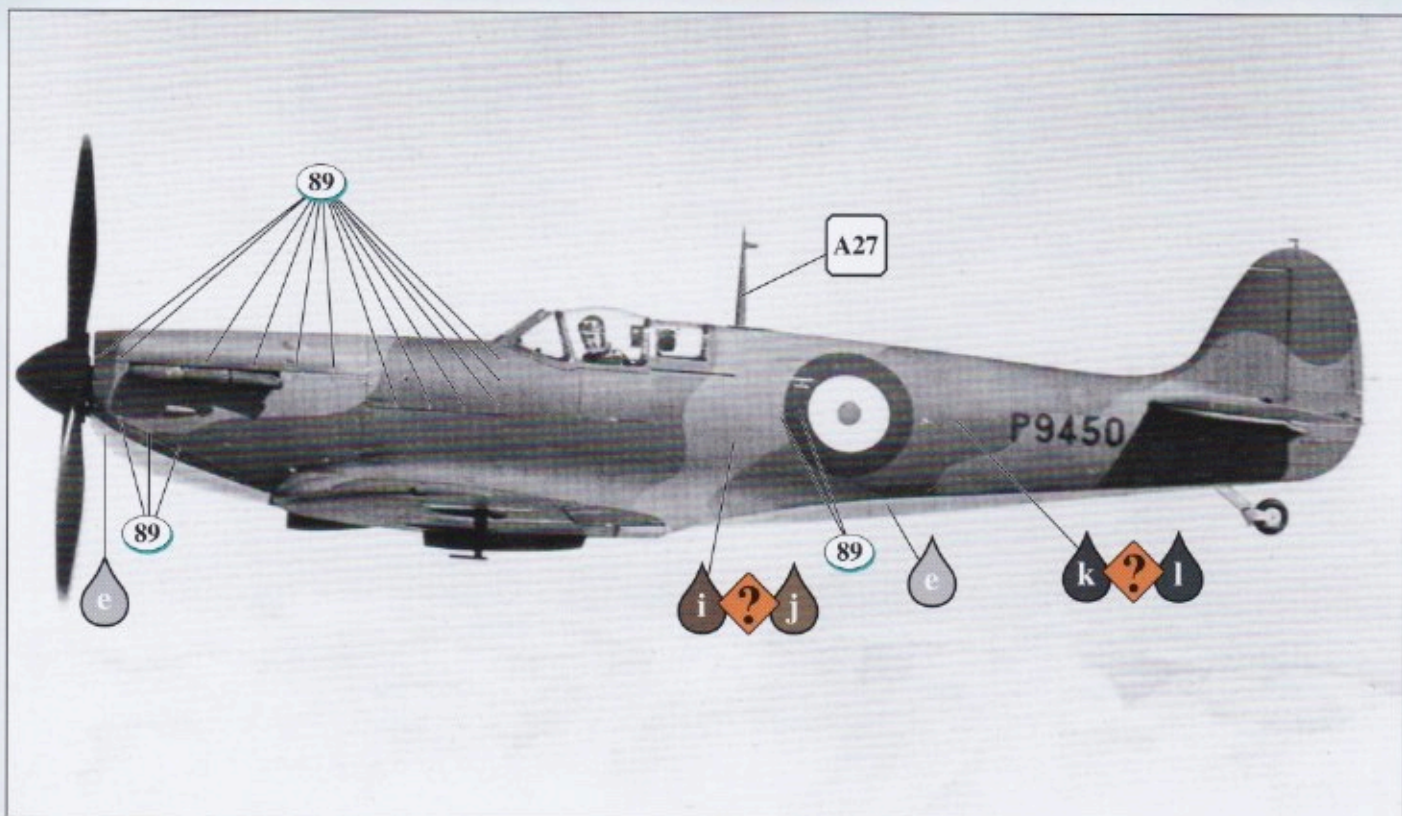
Peter Litchfield was born on 30 April 1915 and joined the Royal Air Force Volunteer Reserve (RAFVR) in December 1937. He joined 611 Squadron in late November 1939 before transferring to 610 Squadron early the following month. He was credited with his 1st victory on 27 May 1940 and had been credited with 2 more victories by the time he was shot down and killed on 18 July 1940. Peter's body was never recovered, he was 25 years old.



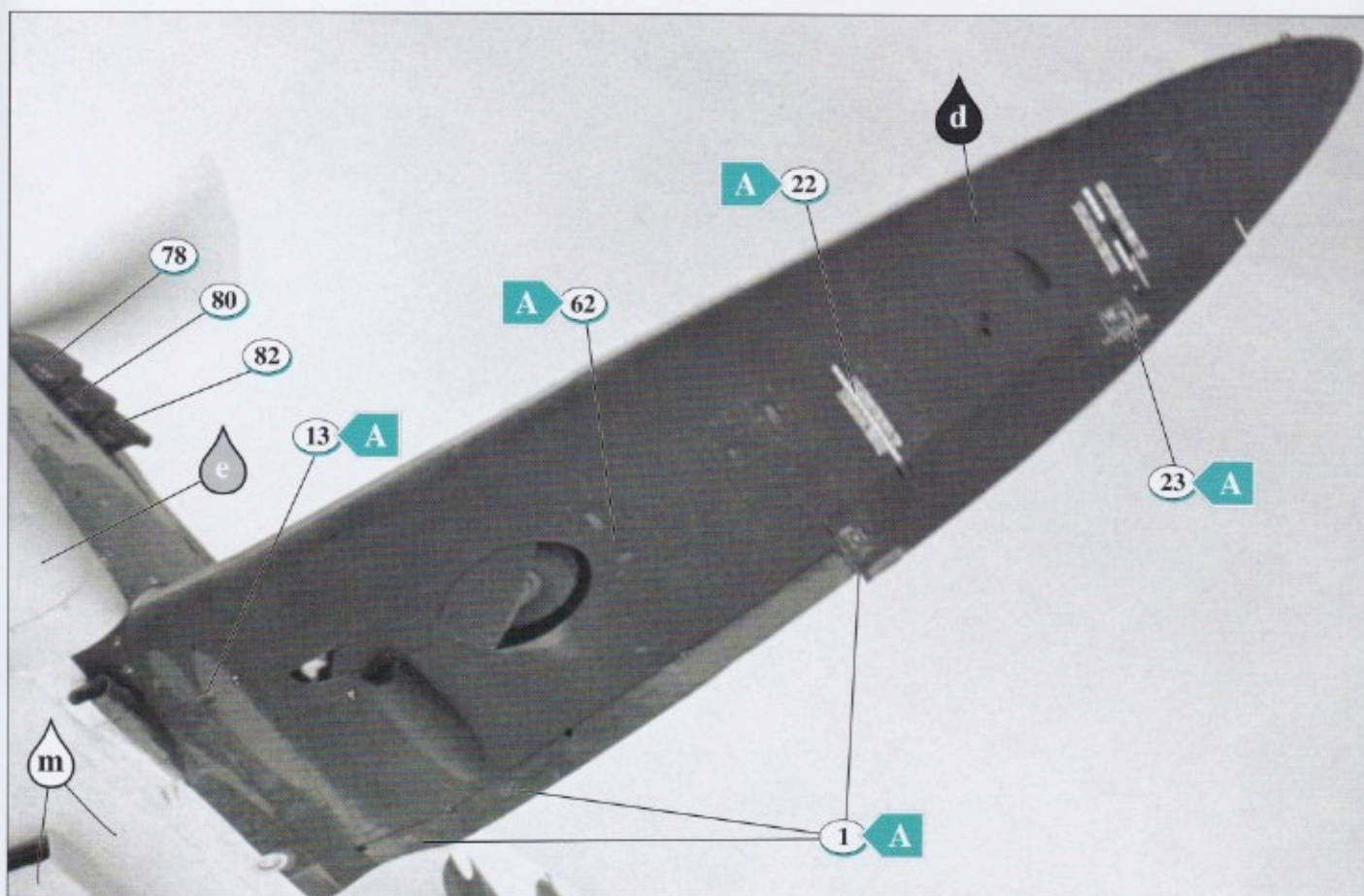
Spitfire Mk.Ia P9495 reportedly photographed on 26 June 1940 when it was being flown by SJ Arnfield. The undersides have been re-painted in a "Sky Type S" mixture at 610 Squadron who took the opportunity to extend this to cover the entire oil tank and bottom cowlings. Note the style of mirror **A13**, pitot **A12** and the slightly thinner yellow ring around the port fuselage roundel. The panchromatic film and lens filter used to take this photo has rendered both the roundel blue and red very dark and somewhat reduced the contrast between the Dark Earth and Dark Green camouflage colours.



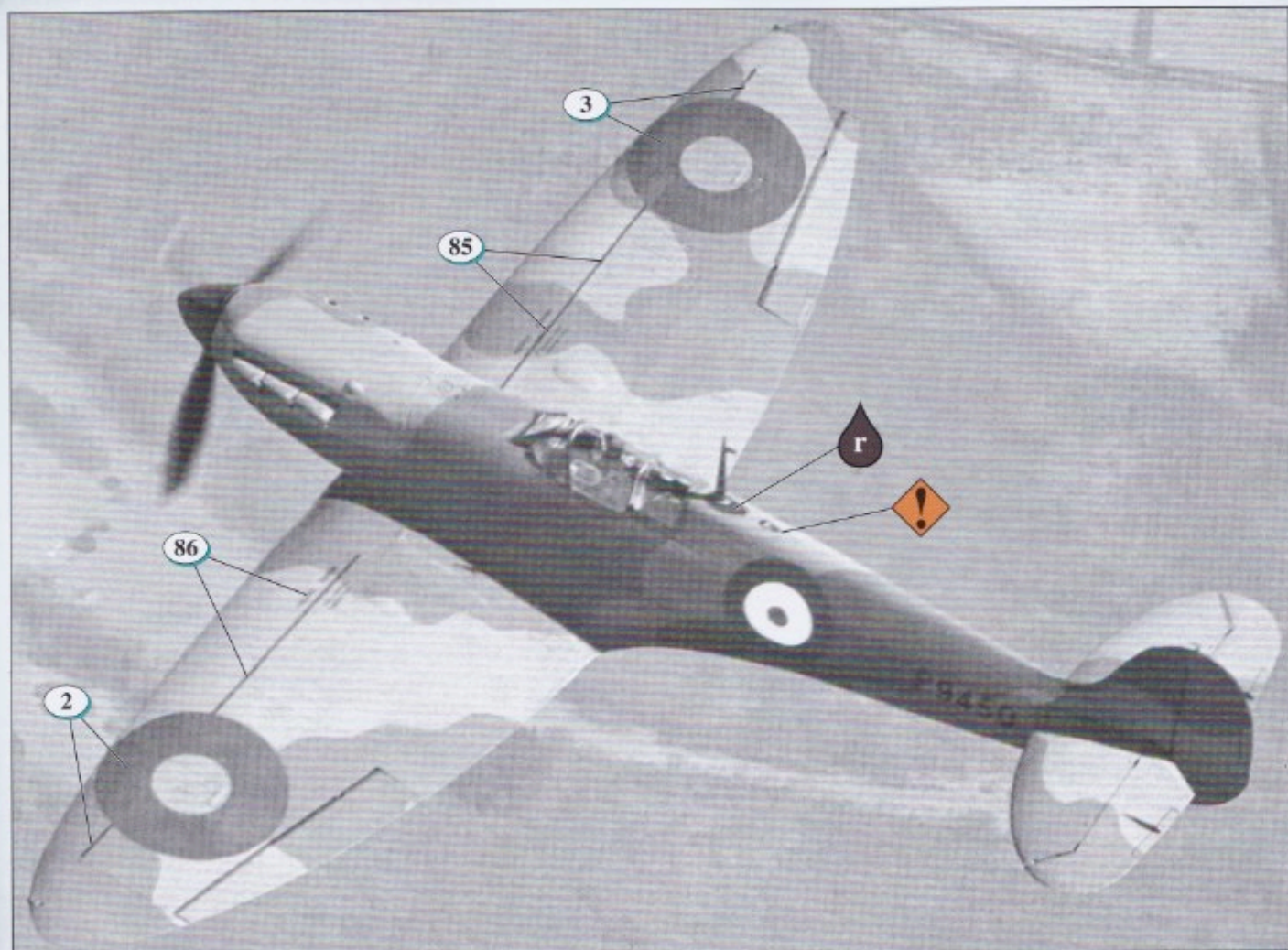
Spitfire Mk.Ia P9495 reportedly photographed at Hawkinge on 29 July 1940, a day that it was flown by DJ Corfe. The 2 dark vertical lines in front of the tailwheel are straps from Corfe's parachute resting on the port tailplane. Note the thickness of the yellow ring around the starboard fuselage roundel. The panchromatic film used to take this photo has rendered the roundel blue very dark, the red very pale and maintained the contrast between the Dark Earth and Dark Green camouflage colours.



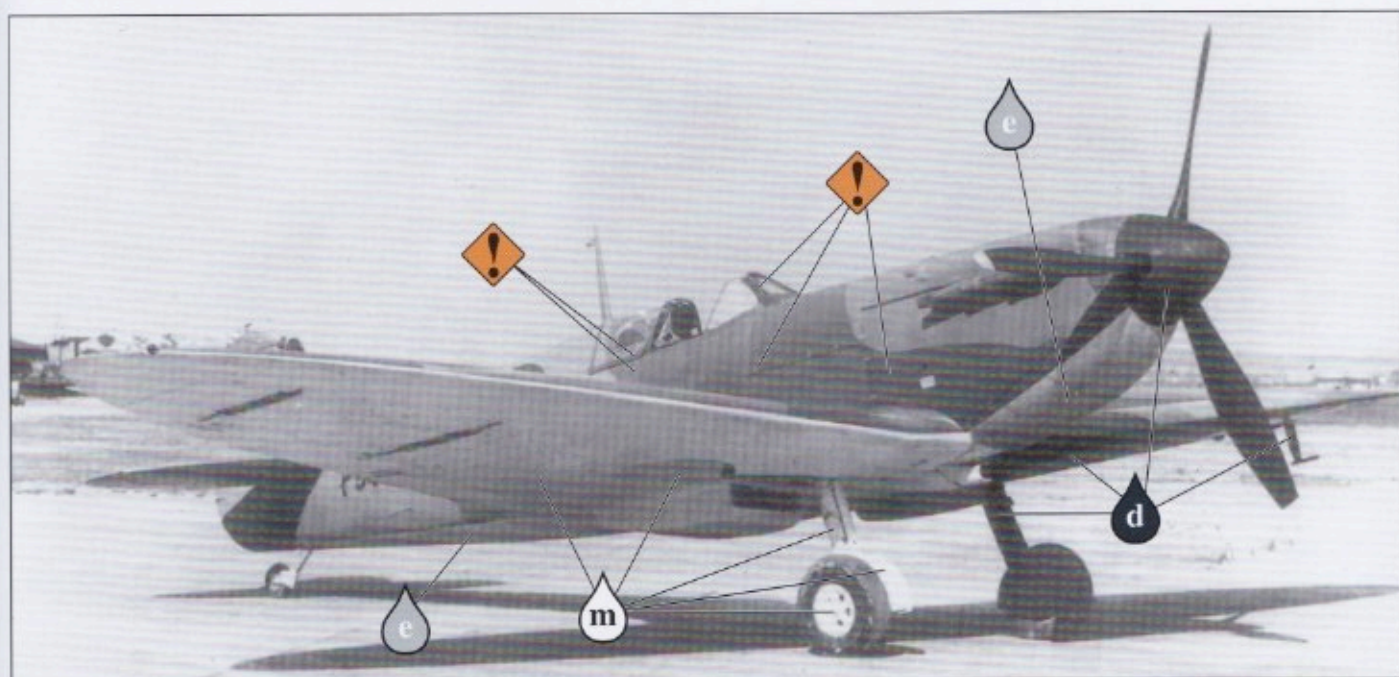
Mid production Spitfire Mk.Ia P9450 photographed shortly after completion, almost certainly during its inaugural flight on 5 April 1940. The upper surfaces are completed in the A camouflage scheme and the underside of the nose and rear fuselage are painted aluminium while the main planes were finished in white and Night. Note the white fastener alignment markings (89), unusually large gap behind the spinner and how the wireless door stencil extends slightly over the blue ring of the fuselage roundel and would be partially obscured when yellow rings were added along with the fin stripes during May 1940. Spitfire Mk.Ia P9450 went on to see 6 months service with 64 Squadron from 2 June 1940 until 5 December 1940.



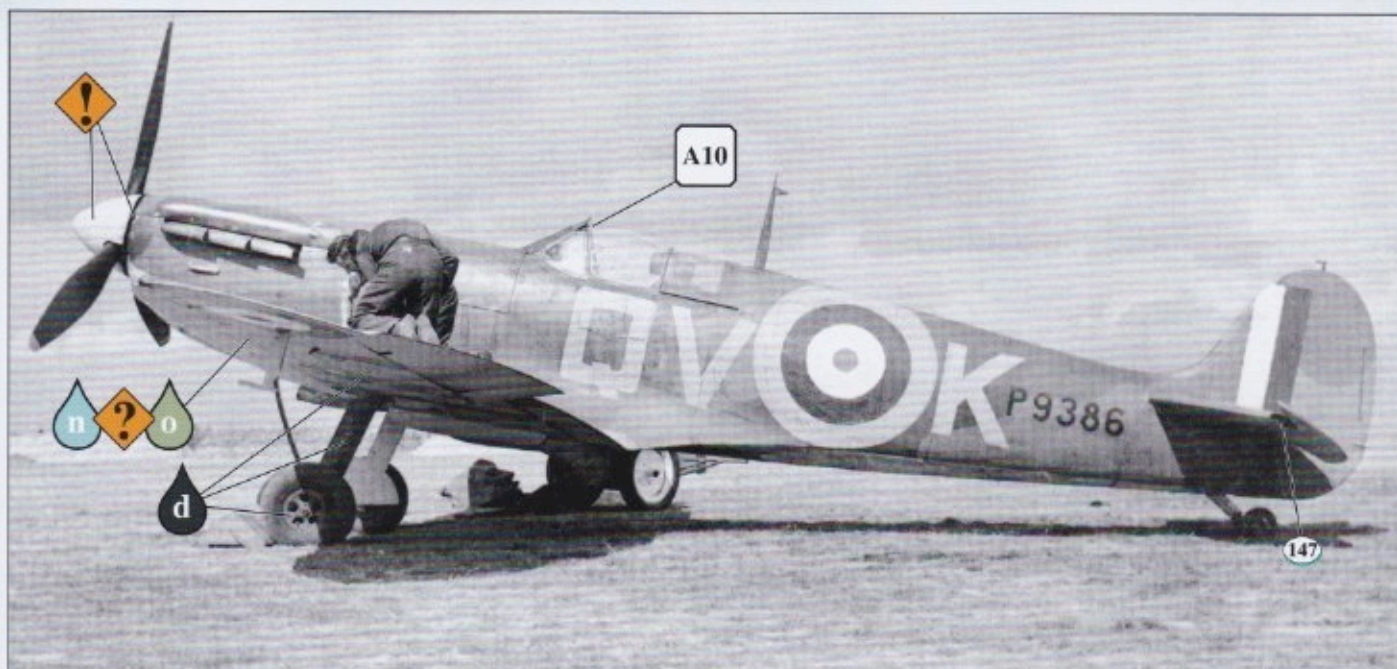
Underside view of the port main plane from mid-production Spitfire Mk.Ia P9450. Note the shiny nascent oil stains emanating primarily from the drains, Night, white & aluminium paint demarcation lines and the numerous stencil markings. Also note that museum and modern restoration/recreation Spitfire Mk.I often feature post-1940 era stencil markings, as do all currently available aftermarket decals that we have inspected as of November 2022.



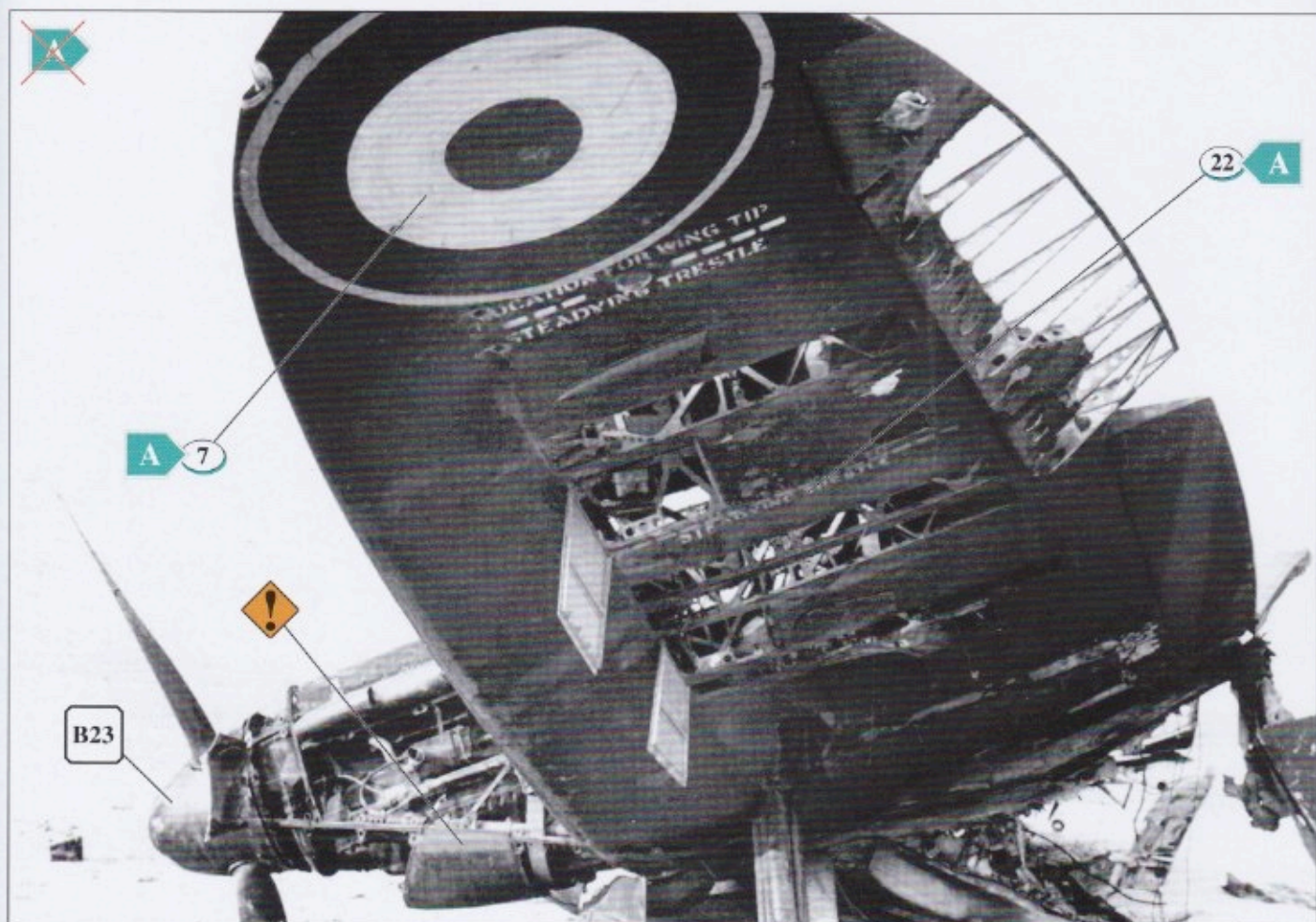
Another view of mid-production Spitfire Mk.Ia P9450 in flight. Note the style, size and position of the main plane walkway lines (85) & (86) and stencil markings. Interestingly the port inner main plane walkway line (84) has not been applied which is a feature that might also apply to P9495 (C) unless it was applied after this flight. Also note the dark red-brown "plastic" base of the aerial mast, slight variations in the Dark Earth & Dark Green paint and how the inside of the upwards facing identification light (C2) is open to the shadowy darkness of the fuselage interior.



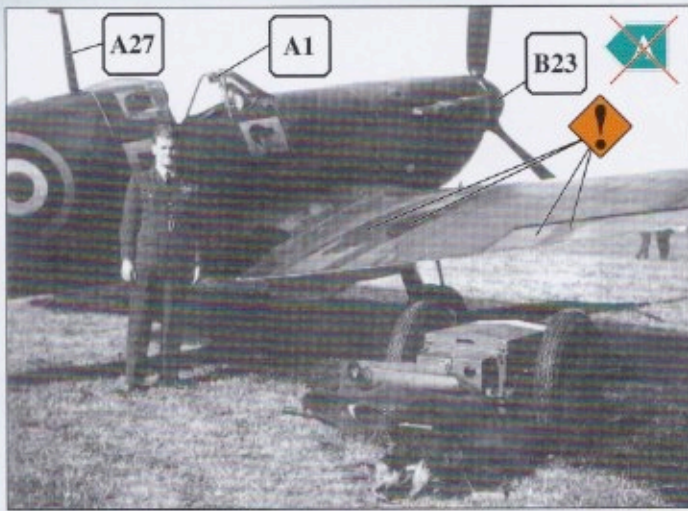
Sometimes misidentified as P9450 (above and opposite) this unidentified mid production Spitfire Mk.Ia P94## was photographed shortly after completion in March or April 1940. The upper surfaces are finished in the B camouflage scheme. At this time the undersides of the main planes were being painted white & Night with the undersides of the nose, rear fuselage and tailplane painted aluminium. Note the various shades of Dark Green used on the fuselage, fuel tank plating (E4), engine side cowling (E11) and frames of the hood (C6) & armoured windscreen (C8) as well as the ill-fitting panels which are characteristic of the hand-built nature of Spitfire construction. Also note the underwing stencil markings which are mostly the same as those seen on N3180 (A) except for the length of the inner "Location for Wing Tip Steadying Trestle" stencil. The gun ports still have factory installed spring clip metal covers fitted.



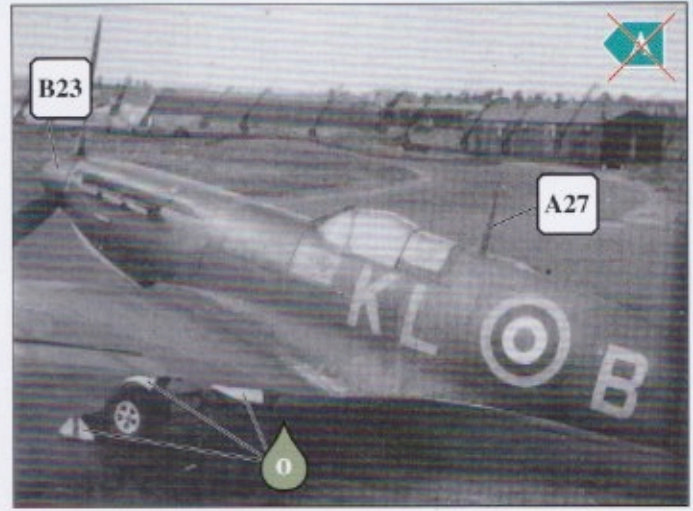
Mid production Spitfire Mk.Ia P9386 in 19 Squadron service where it was flown by BJE Lane, WJ Lawson, W Cunningham, AG Blake and FN Brinsden between 3 September 1940 and 25 September 1940. P9386 was completed in March 1940 with white and Night painted main plane undersides and aluminium painted under the nose, rear fuselage and tailplane. The upper surfaces are finished in the A camouflage scheme except for the top engine cowlings which is in the B scheme. Following an Air Ministry directive of 6 June 1940, the undersides were overpainted (by hand brushing) with "Sky Type S" (exact shade unknown but quite likely locally mixed) obliterating all factory applied stencils. Underside A type roundels were re-introduced from mid-August 1940, having previously been considered unnecessary when confined to flying over home territory. As is typical of unit repainted undersides, the undercarriage struts, wheel wells, wheel hubs and insides of the doors retain their original factory applied colours. Note the downward angle of the triple ejector nozzle outlet exhaust manifolds, style of mirror [A10] and pale painted spinner (with Night backing plate). Other less washed-out photos of P9386 confirm that the spinner was painted in a colour with a noticeably darker tone than the repainted underside, indicating that it was almost certainly painted yellow.



The burnt out wreckage of a Rotol propeller equipped Spitfire Mk.Ia, almost certainly N3103 of 54 Squadron which was abandoned on the beach by DG Gribble on 25 May 1940. Note the demarcation line of the Night on the oil tank, the crudely hand painted A1 roundel, stencil markings for the wing tip steadying trestles and that the aileron has been stripped of its linen covering by souvenir hunters.



Alan Deere, wearing his DFC ribbon awarded to him on 12 June 1940, stands beside his 54 Squadron Spitfire Mk.Ia P9390 KL-B "Kiwi II", photographed in early July 1940. P9390 was delivered to 54 Squadron in late April 1940 and Deere would go on to fly it 32 times between 1 June 1940 and 3 July 1940. Although not a particularly good print, it does show P9390's extensively stained and weathered appearance after 3 months service. Unlike N3180 **A**, the "Kiwi" emblem has been repeated on the starboard side of P9390. Note the parachute flares on the Trolley Accumulator cart in the foreground, Rotol propeller, aerial mast **A27** for the reintroduced TR.9D wireless and internal mirror **A1**.



This KL-B "Kiwi" is almost certainly late-production Spitfire Mk.Ia R6895, Alan Deere's "Kiwi III" which he flew around 30 times between 11 July 1940 and 31 August 1940 when it was destroyed by bomb damage. R6895 was completed in early July 1940 and delivered to 54 Squadron on 9 July 1940. Note the Rotol propeller, TR.9D aerial mast and factory painted "Sky Type S" port wheel and inner undercarriage door. We will cover the late-production Spitfire Mk.Ia in a future model kitset.



Product Design – Darren Mildenhall

Born and raised in Wellington, New Zealand, Darren graduated with a major in Industrial Design from the School of Design. During the degree he developed a passion for form and the aesthetic appeal of a product and how to utilise CAD software to realise and develop a concept. When not designing scale model aircraft, Darren enjoys spending time with his wife and two young children and renovating their 1920s house.



Profile Art – Ronny Bar

A former rock musician, Ronny Bar has had a lifelong interest in aircraft since growing up near the El Palomar Air Force Base in Buenos Aires. He started drawing and building models of aircraft soon after a flight in a T-34 Mentor trainer at the age of 10, Spitfires and Messerschmitt first... Camels and Fokkers later. After retiring from the R'n'R scene he returned to his early interest of aviation artwork. Visit Ronny's Facebook page at <https://www.facebook.com/pages/RONNY-BAR-Aircraft-Profiles/166538664131>.



Proprietor – Mark Robson

Mark is a practising veterinary specialist in the field of small animal internal medicine and has had a lifelong interest in scale modelling and aviation since his dad bought him his first Airfix kit when he was just 5 years old. Mark is excited to share his love of models with modellers through Kotare and hopes that they will get as much enjoyment out of these models as he does. Mark is a committed dad to two grown children and loves beaches, craft beer and music.



Decal Art – Malcolm Laird

Malcolm has been in the scale model industry since 1981, first as Falcon vacform models (www.falconmodels.co.nz, sold to Tore Martin in 1985) and from then on as Ventura Publications which produced decals and short run injection moulded kitsets. He still produces his line of Ventura decals and a range of soft cover aviation books mainly with a Kiwi flavour. Outside work he suffers the dual afflictions of restoring old Kawasaki motorcycles and trying to paint impressionist landscapes, with 'mixed' results so far. Visit Malcolm's web site at www.venturapublications.com



Box Art – Darryl Legg

Darryl was born in Cape Town, South Africa in 1975 and his interest in aircraft and passion for art inspired him from an early age. He has been a full-time professional artist since he was 20 years old and is considered to be one of the world's finest aviation artists. He currently lives in the Karoo town of Middelburg. Find out more about Darryl's work at www.aviationartsa.com



Product Manager – Richard Alexander

Richard is an award-winning modeller and has been in the model and hobby trade since the early 1990s. Richard retains his enthusiasm for ensuring your models are highly detailed and accurate while remaining as simple and enjoyable to build as possible, no matter what your skill level. If you have any questions about building your Kotare model, comments, requests or suggestions, Richard is contactable at richard@kotare-models.com.

Historic photos courtesy of ww2images.com, Air Force Museum of New Zealand, The Biggin Hill Trust and private collectors (unless credited otherwise).



Spitfire Mk.Ia N3180 "Kiwi", Alan Deere over Dunkirk, 28 May 1940 by Darryl Legg

K32001	Spitfire Mk.Ia (Mid)	Qty
00K32001A	A parts	1
00K32001B	B parts	1
00K32001C	C parts	1
00K32001D	D parts	1
00K32001E	E Parts	1
10K32001	Instructions	1
20K32001	Decals	1

If you have damaged or missing parts, please contact your Kotare retailer or email help@kotare-models.com for assistance.

www.kotare-models.com

© 2022 Kotare Models LTD, PO Box 56141, Mt Eden, Auckland 1466, New Zealand.
All rights reserved. Designed in New Zealand – Manufactured in China

A Message from the Proprietor



If you are holding a hard copy of this essay in your hands then you have probably bought one of our Spitfires, and for that I thank you, especially if you were brave enough to pre-order from our unknown company.

For over 50 years I have been fascinated by models and am pleased to say that this shows no sign of waning as I approach my 60th year. I still intend to finish all of the models in my stash, and still think I might one day win a major prize at a model show. "Yeah right" my modelling friends would say!

This is the story of my life in modelling and of the genesis of the Kotare Spitfire.

What is a "model"?

The word "model" and the concept of "modelling" is fascinating to me and unique to humans on this planet.

The idea of creating a representation or simulacrum of an object, animal, or person, has been around for thousands of years.

Without sounding too grandiose, Michelangelo's "David" is a model, as are the incredible 2.4:1 figures in the ANZAC exhibition in Te Papa in Wellington, New Zealand. If you ever get a chance to see these Weta Workshop-created giant human models please do so because the artistry cannot be conveyed in words or pictures.

Models take hundreds of forms, and the hobby we love is just one aspect of model-making. The next time someone calls you a "model geek" just say, "yes, like Michelangelo and Leonardo da Vinci".

Research has shown that children who do 3-dimensional physical hobbies become more resilient and successful adults, with better coping and problem-solving abilities. We need to provide parents with an alternative to screens and get kids gluing plastic!

When I was very young I knew I wanted to be a vet or a fighter pilot. My eyesight made the decision for me at age 11. I could not fly a Lightning but I could own, build, hold up in the air and make reheat noises with a Lightning any time I liked. There is a fascination in seeing a miniature (usually) representation of an object one can never operate, own or even see in real life.

What is a "model kitset"?

When we announced our Spitfire, I was surprised by the international comment about Richard's use of the term "model kitset".

Growing up in New Zealand, this was just normal for us, and it was intriguing to read posts from modellers around the world that they found the term unusual.

To me it's just one of those charming variations of the English language that make travel so fascinating. Different countries use a common language differently, and we in New Zealand (for reasons unknown) like "model kitset".

When you think about it, it's a precise and logical description. A beautiful Bburago car that comes ready-built is a model, but it's not a kitset. An IKEA coffee table is a kitset, but it's not a model.

Hence, you are about to build (we hope) a "model kitset". No confusion there!

A Pivotal Early Influence - My Father

My late father Duncan Robson (usually known as "Jock" or "Rob") was the reason I got into modelling and aviation in the first place.

He was a paratrooper in the British Army and met my mother Marie (an Army nurse) in Aldershot. Farnborough is close to Aldershot (where I spent the first few years of my life) and I have a memory of seeing Phantoms in afterburner taking off from an air show. My

father later denied any memory of that himself, so maybe it's a delightful false memory, but I am sticking to my story!

Regardless, a major event in my life was him presenting me with the original Airfix Wellington for my fifth birthday. Wow! I can vividly remember the gripping Roy Cross box art and the impression of complexity and detail as we examined the parts. Wisely, he did the majority of construction, but I was hooked and soon all I could think of was aeroplanes and models thereof. The local newsagent had an Airfix Stirling on a shelf up high which I craved (in my naïveté I thought it was a "Starling" until my Dad corrected me) but it was another 20 years before I owned one. It remains unbuilt!

My enthusiasm survived a transition to New Zealand. Paper-round income was carefully husbanded to fund the purchase of Airfix (mainly) and Frog kits from toy shops in town. One hot summer day I was one cent short of the combined price of an Airfix Series 1 kit AND the bus fare home so did the logical thing and walked the 5k home to make sure I had something to build that week. The sunburn was wicked!

My mother supported my hobby and with difficulty in our small provincial town sourced a Badger airbrush and compressor for my 15th birthday. This opened a door to new possibilities, and that compressor lasted 40 years before recently dying. Great value for money and thanks Mum!



My father Duncan Robson as a young man in Railway Police uniform before he joined the British Army.



Dad in his late 50s before the ravages of Parkinson's became evident.

A Saviour in Those Difficult Teenage Years

I would like to acknowledge my great friend Neil Lambess on several levels. Neil is probably the reason I remained a modeller as the teenage years hit me and the attractions of sport, dating and alcohol became seductive.

I grew up in the small town of Whangarei in Northland and for the first 10 years of my modelling life didn't know a single other modeller. Any improvements in my technique came from the pages of Scale Models which I read cover-to-cover from my local library (thanks Ray Rimell!) until I could afford a subscription.

Neil arrived at my high school when I was about 16 and quite fortuitously we realised that we were both modellers. My enthusiasm had been waning but remarkably he lived right opposite the school and a visit to his home and a viewing of his beautiful completed models and nascent "stash" stimulated me to pull out a stalled project that very night. I have never looked back.

We have remained "fierce friends" ever since and Neil became the first investor to see the potential of Kotare, for which I will be eternally grateful. Thanks Neil!

My Mentor

My friend and now-retired business manager Keith Bunyan has been a massive influence on me in my veterinary career and my hobby. He is a fount of knowledge on military and aviation history and accumulated a large collection of 1/72 kitsets. He is only now, at 83 years of age, reluctantly admitting that he is unlikely to finish 3000 models, and is thinning his collection. He has been unfailingly generous with the loan of books from his extensive library.

Keith is, like me, an eternally optimistic soul and has helped me financially on many occasions when I tell him "I have an idea". Without his help Kotare could not have happened so I say "thanks Keith; you are a legend!"

Learning About the Industry

The term "passionate" has become degraded in recent years but it is hard to think of a better word to describe how I feel about hobby and model shops.

In Auckland for decades one of my favourite places was the shop Modelair, a business that had traded since at least the 1930s. When ill-health forced the owners to sell in 2015 I thought "why not" and took the plunge.

It has been a stern lesson in how to compete with a plethora of internet-based businesses, but without Modelair Kotare would not exist because through shop ownership I have come to understand (to an extent) how the industry works.

I passionately (that word again) believe that bricks-and-mortar stores have a role to play in the internet age and will do my best to carry the flame until someone better-qualified takes Modelair into its second century of trade.

Enter Richard

I am incredibly grateful to Richard Alexander for joining me on this crazy venture.

No explanation is needed to detail his achievements with Wingnut Wings, and when news of the termination of that enterprise hit the media in 2020 I felt a wave of sadness. An inspirational New Zealand model company of the first rank was no more.

I contacted Richard almost immediately, and to my great joy he agreed to spearhead a new initiative. This was brave of him; I had no real history in the industry and some crazy ideas about what would sell.

I sent him a list of over 80 subjects in 4 scales and in his inimitable (but inexorable!) way he convinced me that not one of those subjects was a good idea. He pointed out that a Battle of Britain Spitfire was an obvious gap in the market and had not been done properly for over 50 years. Doh!

The kit you have bought is very much the creation of Richard and Darren Mildenhall and I am very excited that this amazing machine flown by a few brave men is now commemorated in plastic. I really hope that a high proportion of the kits we sell get built. In our small hobby community this is one way we can acknowledge the sacrifice made by those young pilots in 1940 and beyond.

The Creatives

Darren and the other talented people who have contributed to the Kotare Spitfire have earned my undying admiration for their hard work and skill. Malcolm, Darryl, Ronny, and Jason along with graphic designer Cheryl Smith (Macarn Design) have created a beautiful thing. Our mould-company partners in China have worked hard to meet Richard's exacting standards; he is the ringmaster of all these artistes!

I held the misconception (common to many modellers it seems)

that these days mould making involves only computers talking to computers. I have learned that it takes real craftspeople getting their hands on real copper and steel to make kits happen. The precision needed to tool a kitset far exceeds that needed to make a refrigerator or a Jaguar so those people slaving over hot metal deserve our respect.

The Investors

As well as Neil and Keith a number of other investors have been crucial to the Spitfire project. I send them all my heartfelt thanks.

The Miocevic family (Judith, John and Jeremy) have been a form of private bank for me for over 20 years, and their support has been massive. They really know business and have been supportive since day one, and they know that nothing good happens without hard work and persistence.

My veterinary clients Lorraine and Tony King offered to help me fund a new vet clinic, but when I said, "how about a model Spitfire" they "pivoted" (to use modern business-speak) and were happy to invest in scale plastic.

My tennis buddy Mark Grover and his understanding wife Annelie were welcome investors who saw the long-term potential of the business and have become integral to the realisation of my dream.

Richard Alexander himself has given crucial help at times when the bills exceeded predictions, and my lovely partner Rochelle Windram (who has learned enough about Spitfires to know the difference between the marks) also helped substantially at a crucial time.

My modelling friends Craig Sargent (and his long-suffering wife Merridee) and Steve McCrorie (with his Irish bride Sheila who hardly knows me!) have also stepped in to drive the project forwards.

It has been amazing that through a turbulent period of plague, war and cyclone every time things were looking sticky someone stepped in to provide the impetus to keep us going, and usually without being asked.

Again, thanks to you all!

For You – The Modeller

A business does not exist without customers, and I want to thank everyone who has bought one of our Spitfires, or who buys one of our future kits.

Richard and I dream big. There are multiple projects in development right now and the list of subjects we want to do is endless, and to be frank, unattainable. However, we will have fun trying!

Rest assured that we read almost all the internet message boards, all of your emails to us and all of the relevant Facebook posts, and we have recording devices in your modelling clubs and pubs. That last bit may not be true!

Suffice to say we know the wish lists, and we know who wants a Defiant and who wants a Heinkel 112. We will try to oblige, but the subjects have to be of interest to at least one of us and be moderately commercially viable. A movie magnate I am not!

In fact, I have been thinking a great deal about the model company Matchbox. Contrary to most opinions about this brand, the plastic modelling division was apparently nicely profitable. It was dragged down by other parts of that business. The principle of 4-5 sure-fire sellers and then a risky subject serves as an example to me, so to all those who say "oh how boring, a Spitfire" I counsel patience. The Fairey Fruitbat or the Blackburn Blackburn may not be far away.

Please build our models, post pics, and enjoy!

Cheers

Mark Robson