

Spitfire Mk XII Conversion

1/32 Conversion Set for Tamiya Spitfire MkVIII/IX

Laminar Flow Design
 Email : info@laminarflowdesign.com
www.laminarflowdesign.com



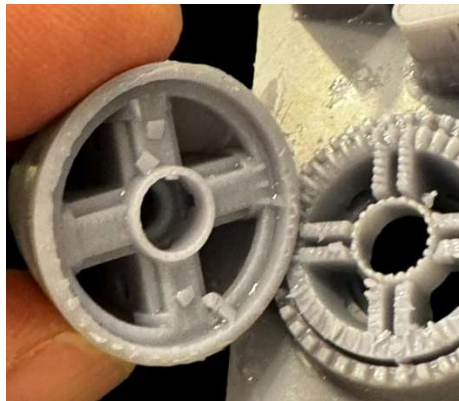
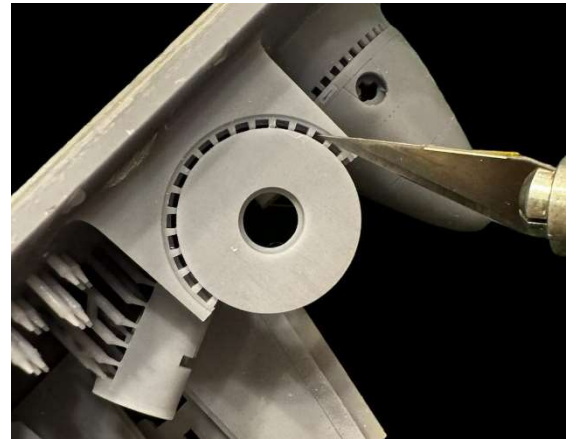
- Working with 3D printed parts.
 - o Removal of the supports: Parts are printed into an enclosed cage that protects them in the different stages of production, transport and storage. Please cut the 4 pillars at their base on the corners and clean up the remaining mesh to access the parts. Then you can remove the parts from their support, starting by the most accessible on the sides and working your way to the center. Work support by support, using razor saw or new scalpel blade.
 Avoid snapping the part off its supports as it could damage the part in the process.
See Preparatory work section 1 for freeing the parts from customized supports
 - o Outer fuselage surfaces (ie: Sides of the cowling) might need Surfacer and sanding work for optimal result. Please try to avoid filling small rivets in the operation.
 - o Avoid to “force fit” parts into assembly. Cured resin is very hard, but will break under pressure.
 - o For accurate fitting, prefer trimming and sanding the plastic parts rather than resin. Plastic is easier to form and shape. But ultimately the choice is up to the builder.
 - o Washing agent residues can remain on some surfaces, fine grid sand to get rid of them
- Start with the right kit: The Spitfire MkXII was manufactured in 2 batches. The first featuring a fixed tail wheel (base kit MkIX), and the later a retractable tail wheel (Base kit MkVIII). Select the base kit according to the machine of your choice as there is no tail wheel provided in this kit.

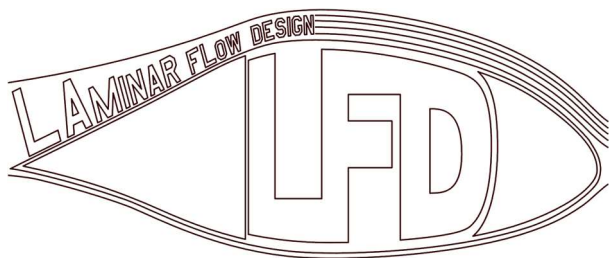
Preparatory work

- o Removing the parts from their customized supports:

▪ Cage 1:

- Spinner back plate: Insert a scalpel blade in the blank spaces. Move the scalpel up and down until you hear a distinct “Tick”, it means the support has given in. Repeat for all the blank spaces and the part will fall off. Clean and restore cylindric shape by sanding the edge.
- Spinner cowling: Gently push the scalpel blade against the border of the part in a circular pattern. Again, the distinctive “Tick” will let you know once the supports breaks. Once the external circle is all separated. Snap the spinner (yes allowed this time) to break the inner ring. Clean up the remaining inner supports. Run the lower edge on a flat sanding material in circular pattern until obtaining an even flat surface





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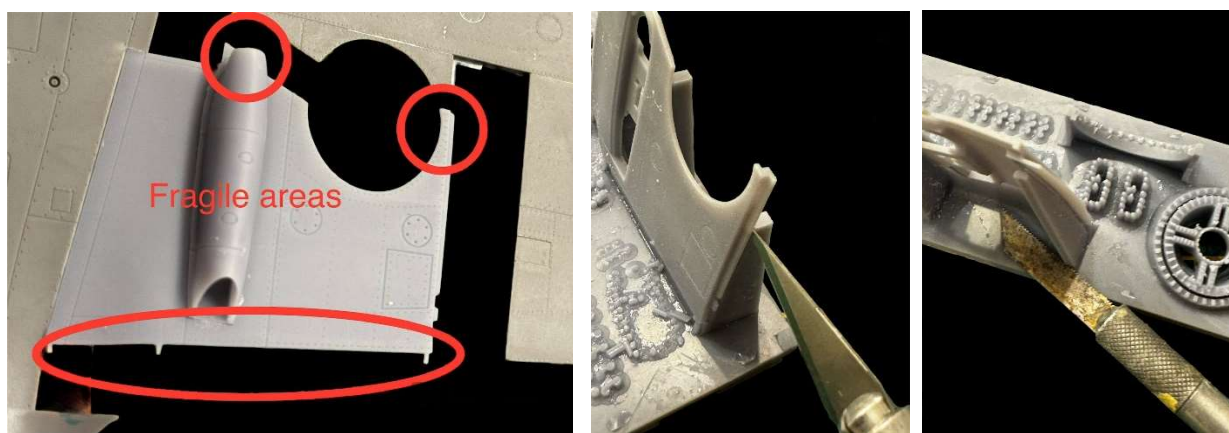
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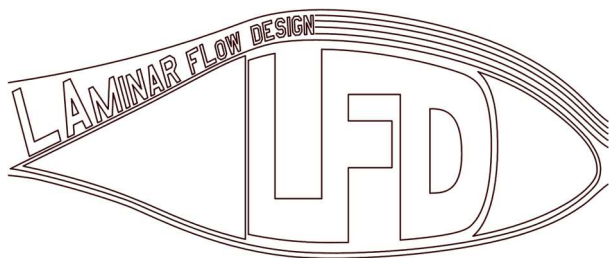


- Carb intake Grill: Small part, but don't rush this one. Avoid (like in the previous step) to push the blade against the part, as it is very fragile. Remove the part with its customized supports from the traditional supports (pillars). Once freed, run the tip of a new scalpel blade along the supports to grind them progressively. Don't cut the grill fixing arms (to the intake) too close, as you will need the inner recessed part to slot into the intake. (you have 2 tries just in case)



- Underwing Panel: before starting, visualize 3 fragile areas circled in red: The outer wheel bay opening, the oil cooler front edge, the flap hinges. Keep them in mind at all time while working on the part and avoid putting pressure on them. Start with the 2 outer vertical supports. Run down the tip of the blade multiple times until completely free. saw the 2 outer supports at their base and remove to allow easier access to the central pillar. Repeat the operation with the central. Once freed, the part will detach by itself from the horizontal support line.





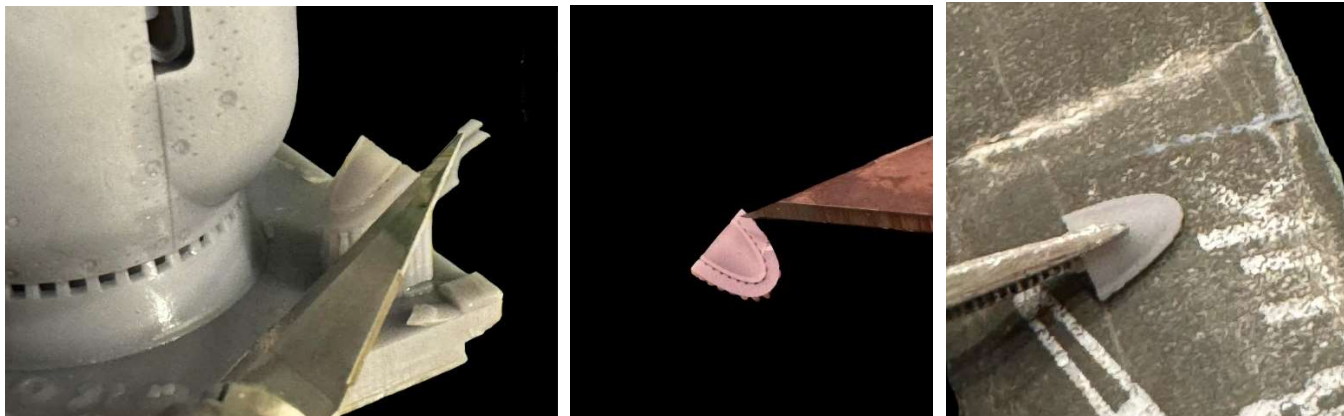
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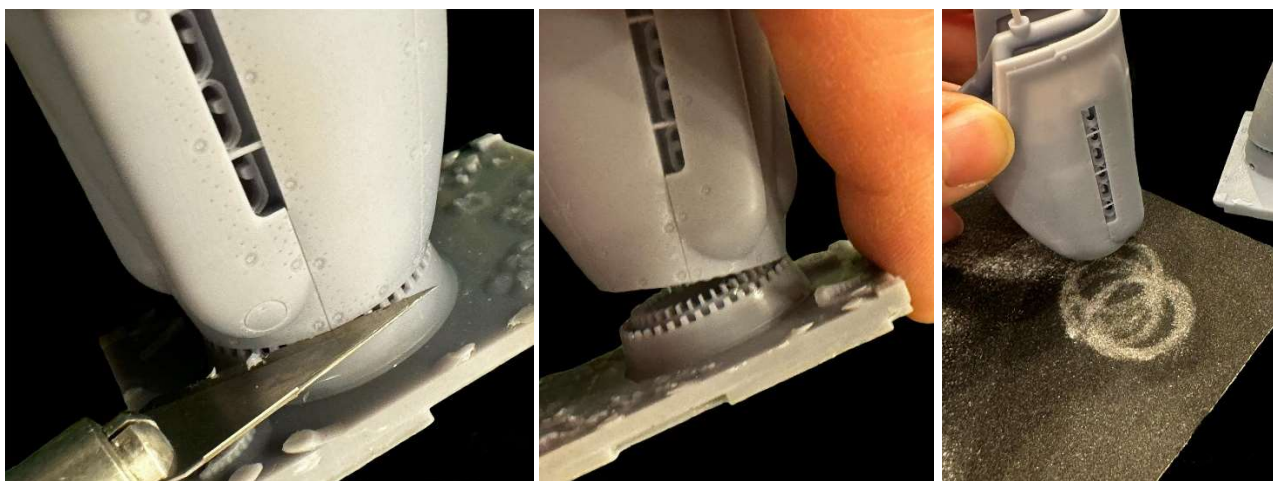
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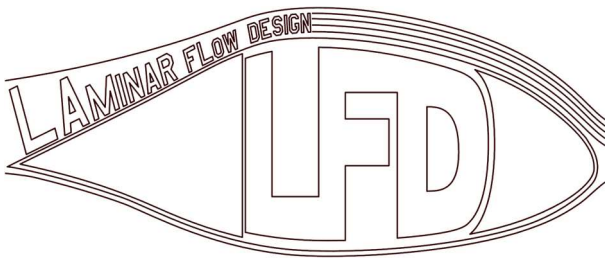


- Cage 2:
 - Supercharger scoop: Same process as the carb intake grill. Remove the part with custom support from the cage. Put the assembly aside and play multiple light pass with the tip on a new scalpel blade on the edges of the scoop. Once free, sand the lower edges until smooth. (Again, you have 2 tries, just in case)



- Griffon nose: Free the plate from all the surroundings (parts, supports). Same process as the spinner. Push the scalpel blade at the support junction in a circular scalpel movement. With the distinctive "Tick" you know when they give it. Once (and only once) the whole perimeter is worked out, snap the nose from the part to break the inner crown. Sand flat and even the front surface, prefer a circular pattern.





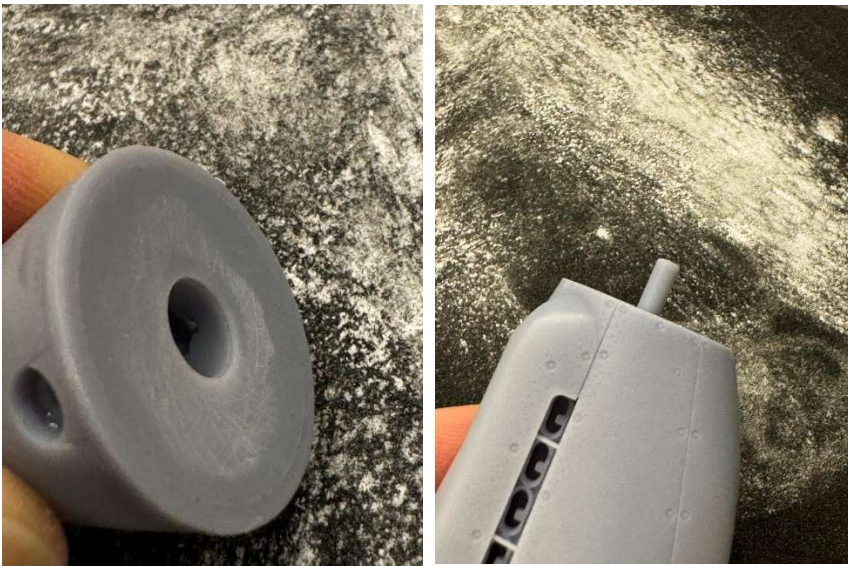
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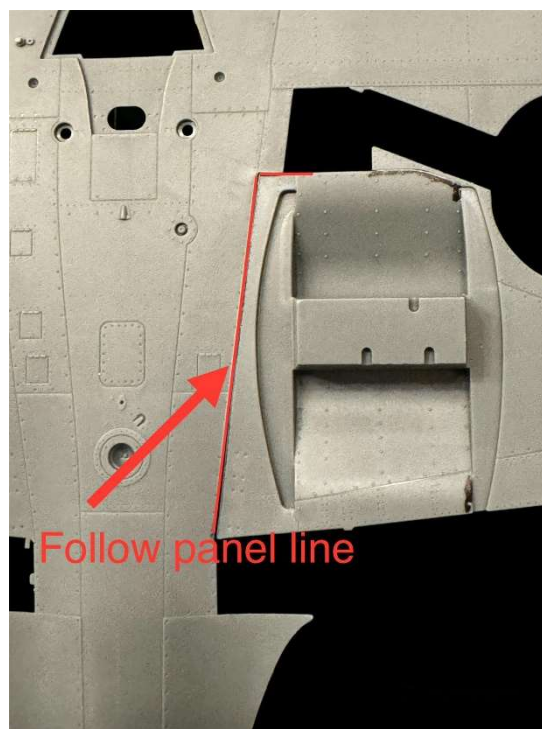


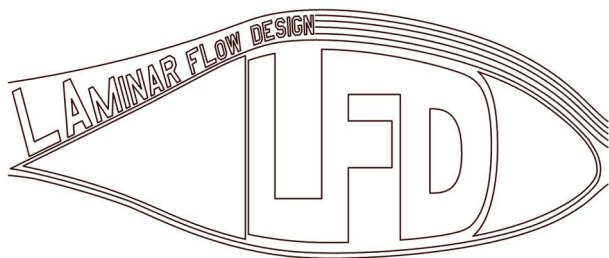
- Applies to spinner and nose assemblies. For a proper Spinner to nose distance, Give the backing plates a flat sanding to reduce their thickness. Go smooth, and regularly check your work to ensure not going to far.
 Backing plates must not protrude from their respective assemblies.
 Finish by temporarily assembling the Spinner with back plate, and Nose with front plate and cap, and give the whole a very slight pass to even.



- Necessary cut to the plastic parts:
 - Underwing panel: Cut along the panel line like pictured.

You are done with the cuts..





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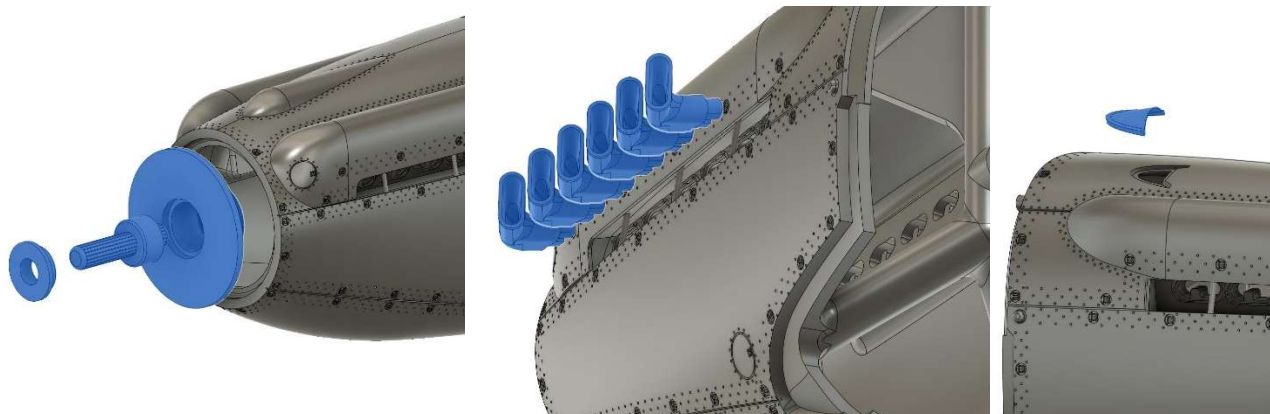
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- General Assembly:

○ Nose :

- Do not glue the spinner axis in the recess. Make sure the front caps do not protrude from the nose part (Previous step)
- Mind the locating tabs (RH/LH) on the exhausts
- Add the supercharger scoop



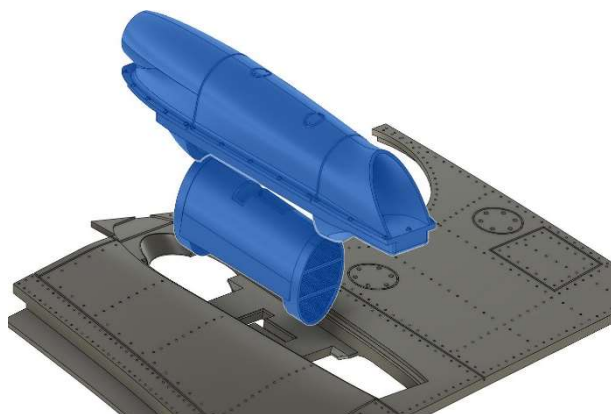
○ Spinner :

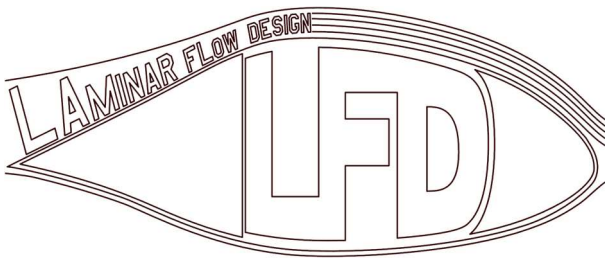
- Make sure the Back plate do not protrude from the Spinner part (Previous step)
- Insert the kit provided polycap to allow inserting/removing of the spinner.
- Mind the Blades locating tabs.



○ Underwing Panel:

- Make sur the oil cooler contact surface is evened from the supports
- Mind the T locating tab for the oil cooler orientation
- Test fit and adjust both parts separately to the underwing panel, and between them before committing to assembly.
- Better paint the duct and cooler body before gluing.





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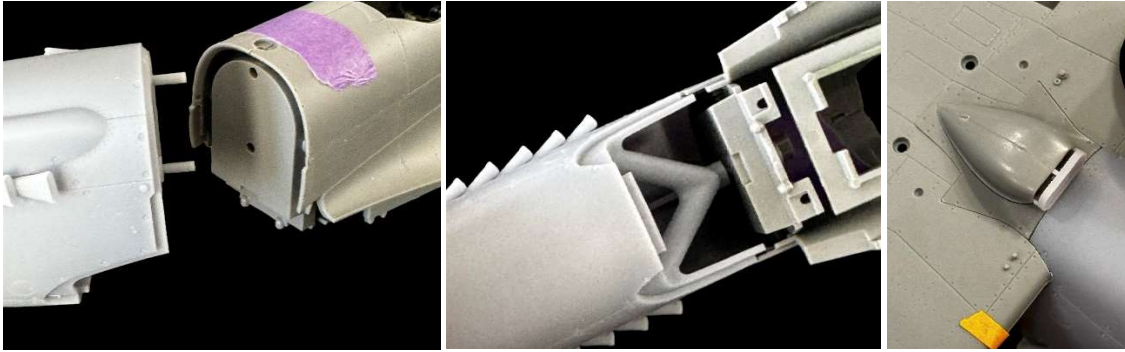
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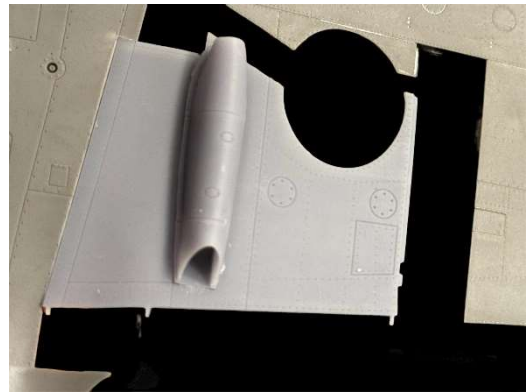


- Mating to the kit:

- Nose: Slide the nose part in lieu of the firewall (Tamiya part X11) into the fuselage. Glue once in place from under. Use part AA27 and early carb intake scoop (AA16/17). Add the intake grill provided.

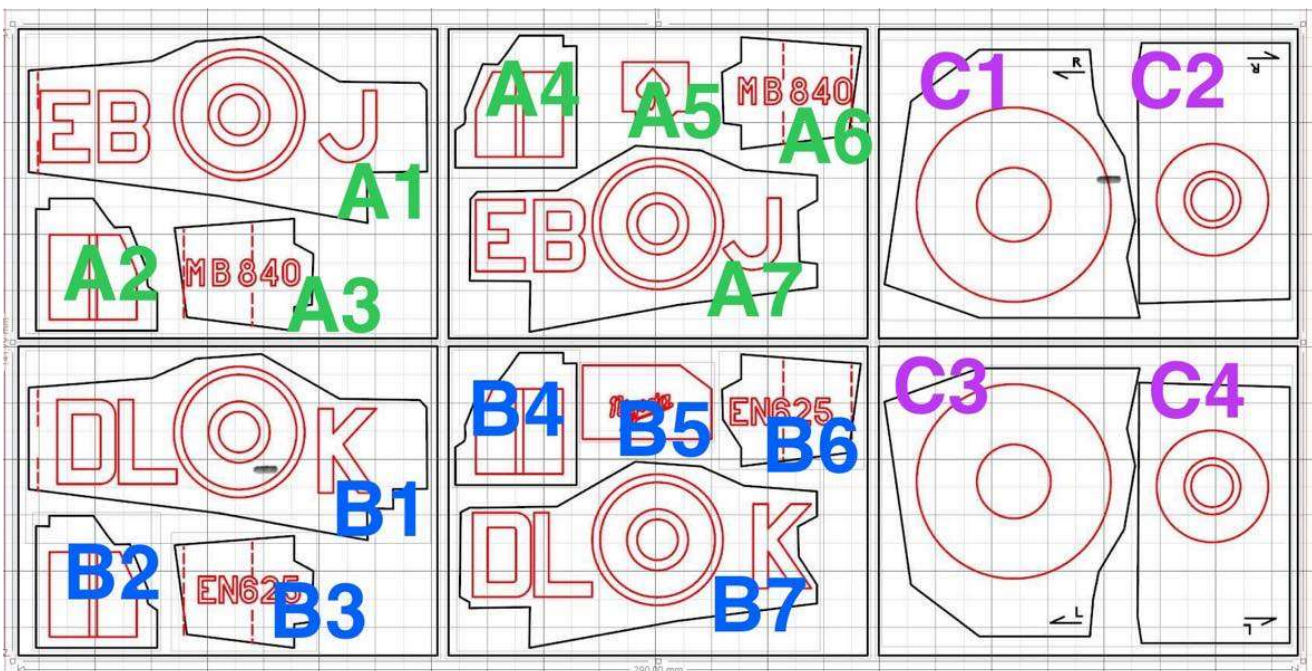


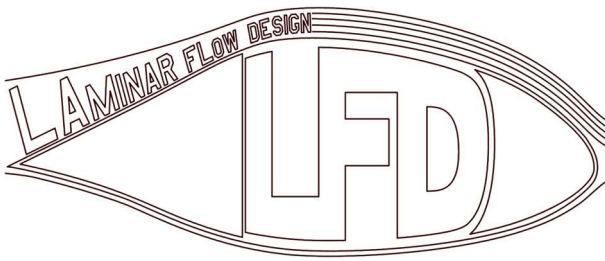
- Wing: Attach the wing panel in place of the removed panel. Assemble the wing per instructions (Wheel bays, other panels)



- Painting and masks instructions:

- When there is an arrow, it indicates the front direction, R/L the side of the plane.
- In order to avoid deformation during the mask application, apply a transfer tape over the masks during manipulation.
- Mask borders are to be aligned with panel line to help the positioning. Check on the drawing for the Highlighted panel lines in orange color.
- C Sheet is common to A&B marking options





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Scheme A: Spitfire Mk.XII MB840 "EB-J" 41 Squadron Royal Air Force. April 1944.

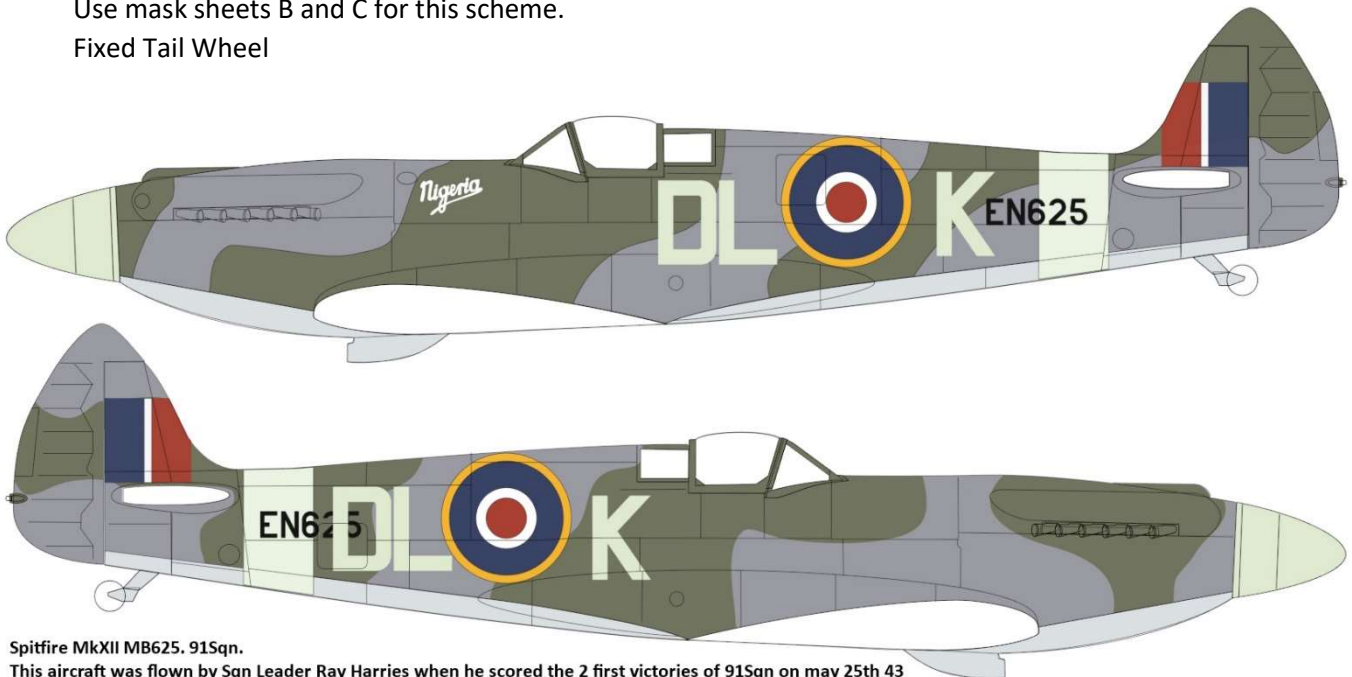
Use mask sheets A and C for this scheme.
 Retractable Tail Wheel



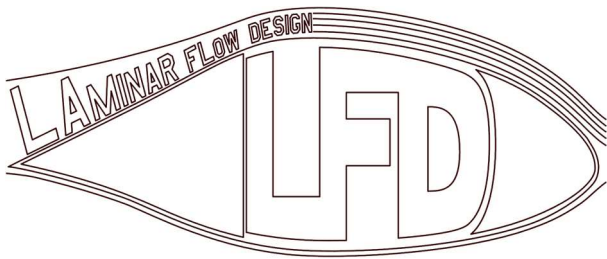
Spitfire MkXII MB840. 41Sqn.
 This aircraft was part of the famous 41Sqn 7 Spitfires photo shoot in april 44.

Scheme B: Spitfire Mk.XII EN625 "DL-K" 91 Squadron Royal Air Force. May 1943.

Use mask sheets B and C for this scheme.
 Fixed Tail Wheel



Spitfire MkXII MB625. 91Sqn.
 This aircraft was flown by Sqn Leader Ray Harries when he scored the 2 first victories of 91Sqn on may 25th 43
 F/O Raymond Nash later scored 2 more kills at the controls of EN625 in june and october 43



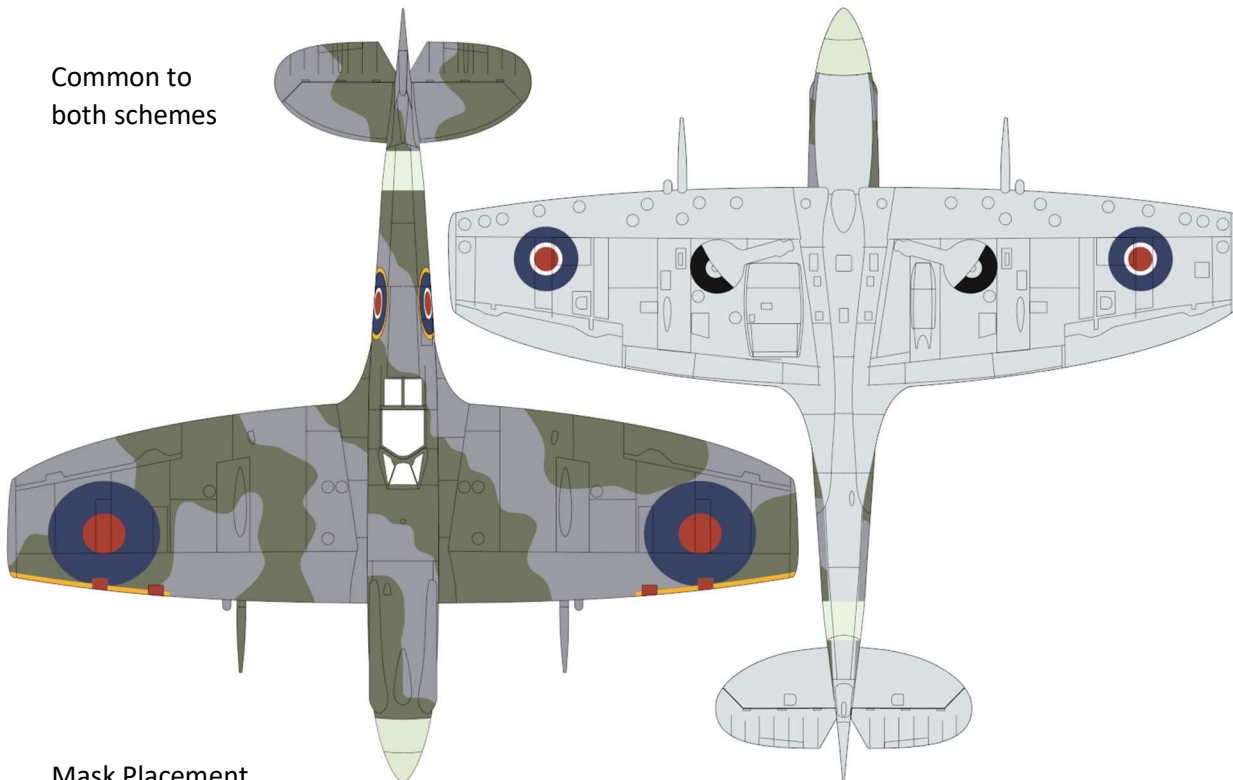
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Common to both schemes



Mask Placement.

