

LSP Replacement Cowling for Trumpeter 1/32 F4U-1D



This set is offered as a direct replacement for the cowling and cowling ring parts provided in the Trumpeter kit. We are hopeful that this set gives you great results for your 1/32 Corsair.

The set is accurate for the following versions of the F4U:

- ✓ F4U-1 (Corsair MkI)
- ✓ FG-1 (Goodyear-built)
- ✓ F4U-1A (Corsair MkII)
- ✓ F3A-1 (Corsair MkIII - Brewster-built)
- ✓ F4U-1C (20mm armed variant of F4U-1D)
- ✓ F4U-1D (Corsair MkIV)
- ✓ FG4U-2 (Night-fighter)

Please take a few moments to fully review the included contents and instructions prior to beginning assembly of the set or joining the engine to the fuselage in the standard kit assembly as there is a mounting dependency on the order of assembly noted in the kit instructions.

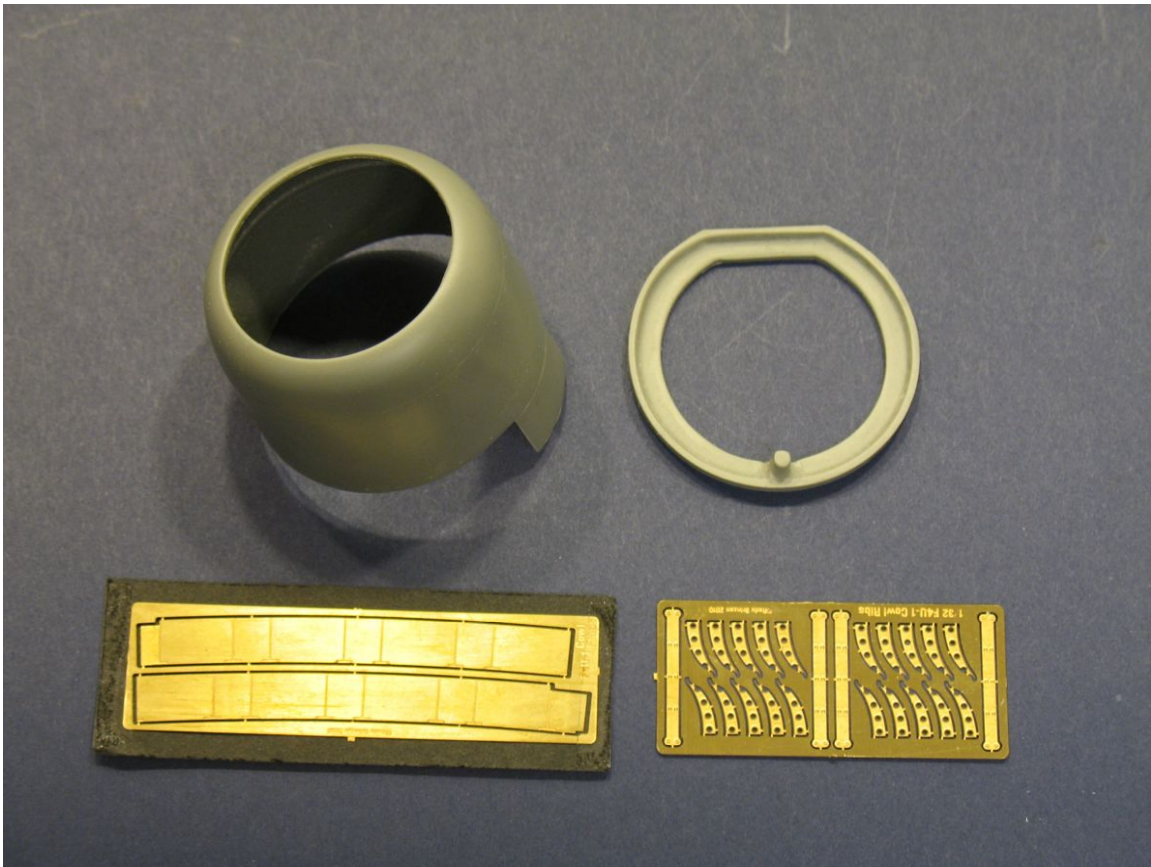
You must not permanently attach the cowling ring to the cowling part prior to joining the fuselage halves as noted in the kit instructions.

Also note that some elements of this set are quite delicate and assembly can be challenging. Take your time and proceed with care for best results.

Good luck!

CONTENTS

Please take a moment to review the set's contents and confirm the following parts count:



1. One gray resin cowling
2. One gray resin cowling ring
3. Two Photo-Etched frets
 - Fret 1
 - ✓ Cowling Flaps (2 parts)
 - Fret 2
 - ✓ Cowling lip stiffeners (20 parts)
 - ✓ Cowling panel fasteners (4 parts)
4. One assembly template (paper diagram)

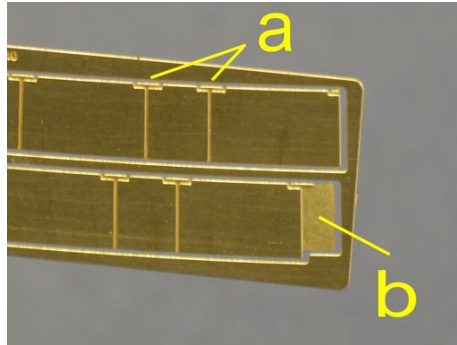
(if you are missing any parts from the set please contact LSP administrators at editor@largescaleplanes.com)

It is a good idea to gently wash the resin elements in warm dish soap to remove any release agents that may be adhered to the surface, and might interfere with paint or adhesive application.

INSTRUCTIONS

STEP ONE (Cowl flaps)

1. Examine the cowl ring parts carefully (port-side and starboard-side parts) and identify the following details:



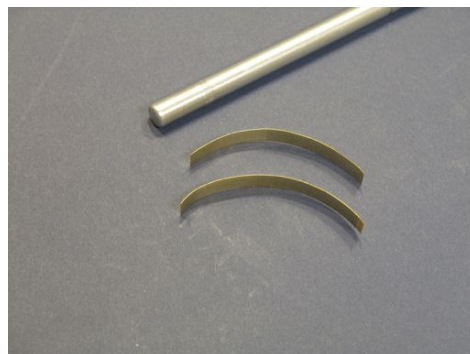
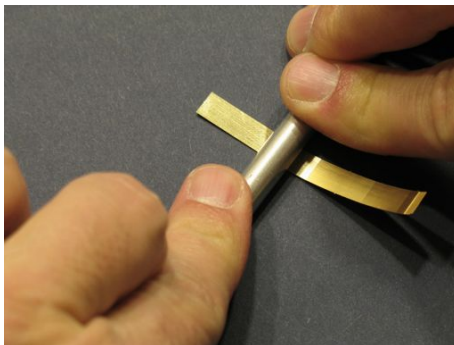
- a. Flap hinges detail
- b. Bottom flap overlap detail

These details are fundamental in correct assembly and alignment.

The flap hinges detail are perpendicular to the flap panel lines and set between each flap. This detail is present on the real aircraft parts and also helps denote the side of the part that joins the cowling ring.

The two flap parts are designed to overlap where they meet at the bottom of the cowling. Fit the port-side cowl flap part first. The starboard-side part is designed to be fitted second in order to overlap on the bottom of the port-side part, so assembling them in order is essential.

2. Carefully remove the flap parts from the PE fret
3. Using a strong, heavy weight cylindrical object, carefully but firmly roll along the backside of the cowl flap parts as they lay on a medium-hard surface to bring a consistent curve to them. This will help to relieve pressure needed to apply the cowling flap parts to the cowling ring.



4. Temporarily insert the cowling ring into the cowling part. This can be done with no adhesive, or white glue (we will be removing the ring once we install the flaps).
5. Test-fit both cowling flaps a few times to get familiar with the overlap along the bottom and how to get a snug fit at the top of the cowling.

STEP ONE (Cowl flaps) cont.

6. Install the port-side cowling flap part first. Best results can be obtained attaching the flaps from the top of the ring, moving down along the sides, and finally adhering the bottom using Cyanoacrylate glue applied on the **INSIDE** of the flap and ring join using a small brush or liquid applicator to allow capillarity to spread the adhesive. Take enough time here to ensure that the part lines up well with the resin cowling, and retains a consistent curve.

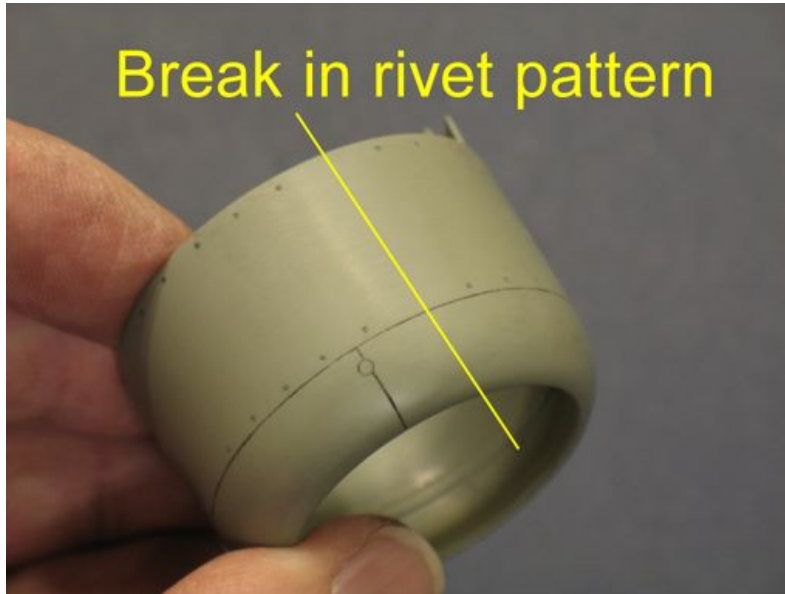


7. Install the starboard-side flap using the same technique, and take care to tend the overlap join of the PE parts at the bottom of the assembly.

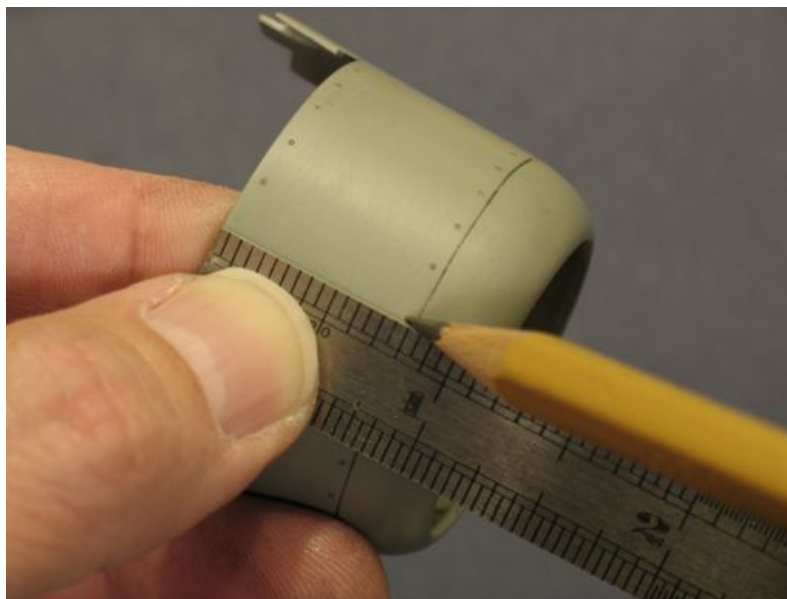
Now carefully remove the cowling ring and flaps assembly from the cowling part. It may be necessary to also remove white glue or other temporary adhesive residue from the ring.

STEP TWO (Cowling panel fasteners)

1. Examine the main resin cowling part and find the four “breaks” in the scribed fastener rivet patterns along the front and back of the cowling. These breaks in the rivet pattern are present on the very top, bottom, and along the sides of the cowling part, and are where the long panel fasteners are applied. It may be necessary to use a dark wash or pencil graphite to rub into the rivet pattern to help as a visual aid.

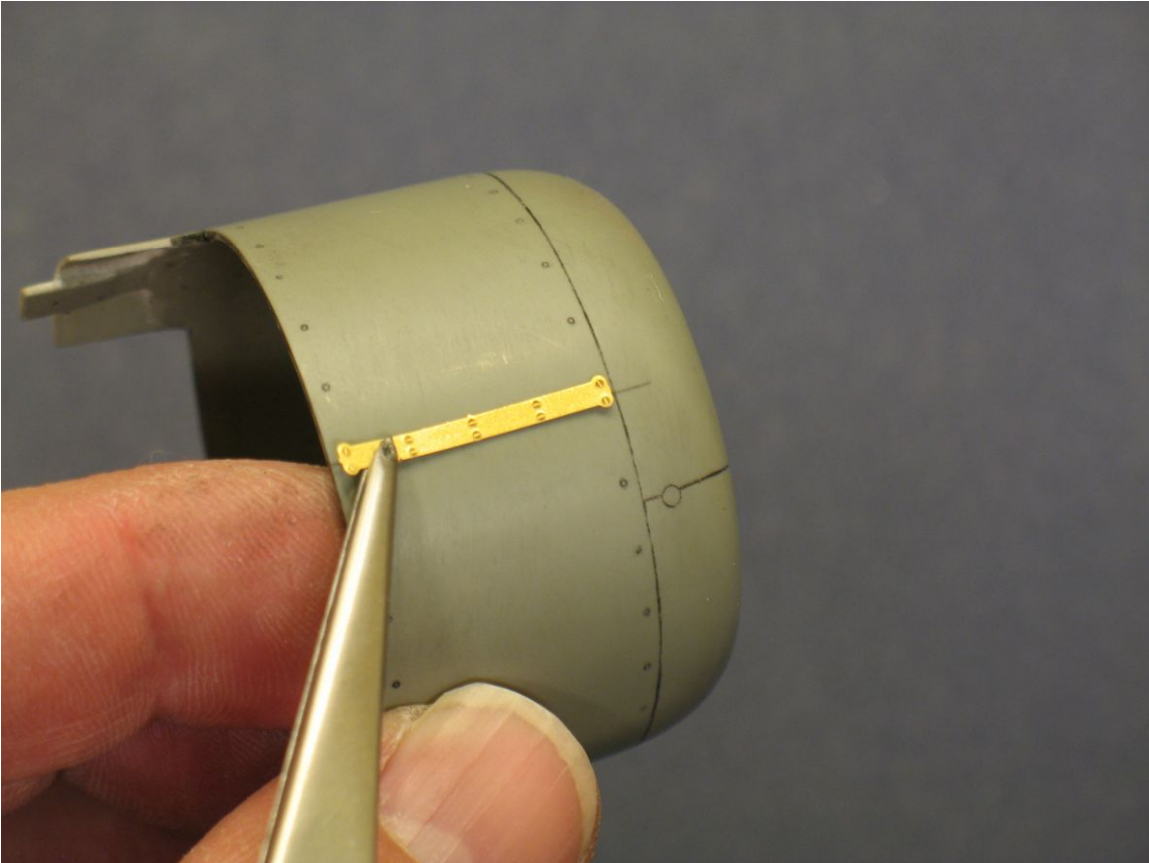


2. Using a ruler and pencil, draw a guideline perpendicular to the back edge of the cowling along the side of the cowling as shown through the center of these pattern breaks; this will be your alignment mark for the fasteners.



STEP TWO (Cowling panel fasteners) cont.

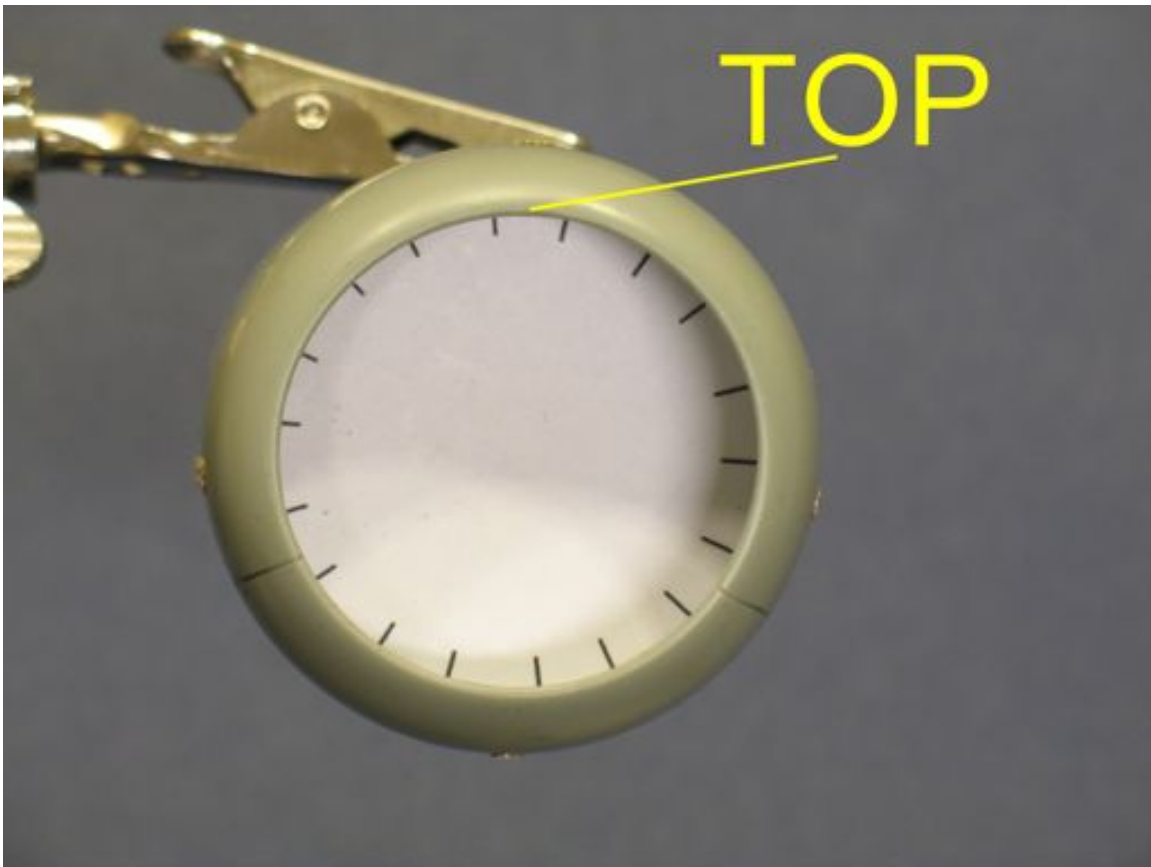
3. Carefully remove the fasteners parts from the PE fret.
4. Using a slower-drying adhesive (Future / Klear, etc...), fix the fasteners along your guide lines. The fasteners should fit between the rear of the cowling, and the panel line demarking the cowling lip near the front. Any adjustment in alignment needs to be made before the adhesive dries.



STEP THREE (Cowling lip stiffeners)

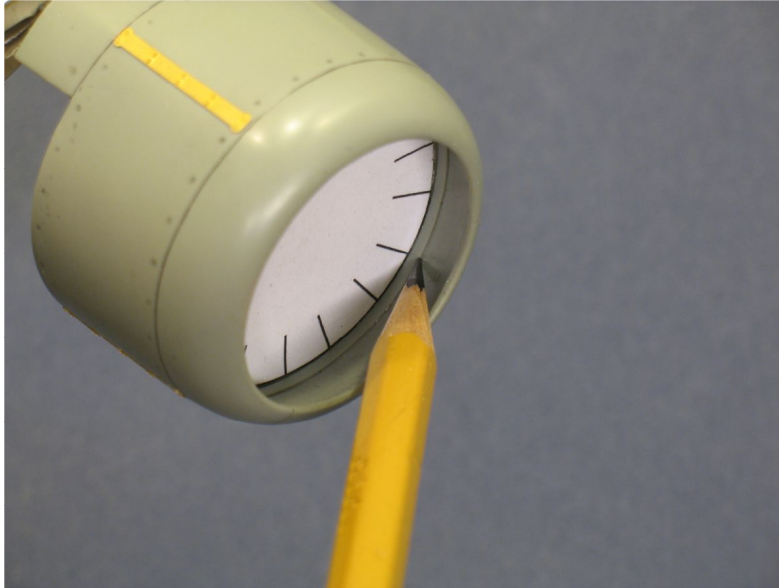
NOTE: While excellent “scale” results can be achieved using the lip stiffeners included in this set, installation is delicate and challenging. The PE parts are small and assembly is quite tricky. As well, accurate measurements can also be challenging here. Again, take enough time before you begin assembly to get your mind around the challenge ahead by test-fitting and examination. Re-read the following section carefully before beginning.

1. Glue the circular template to a sheet of thin card, plastic or cardboard.
2. Carefully trim excess material from the circular template. The result you want here is exact dimensions for the template.
3. Note that the hash marks on the template follow a “thin-wide” wide pattern. This replicates the cylinder heads of the R-2800 engine.
4. Insert the circular template into the cowling from the rear, up against the ring near the front, with the hash-marks facing forward, and with a “thin” space aligned at the top as shown. You may wish to use a temporary adhesive here like white glue or Future / Klear to keep the template in place as you mark the cowling lip.



STEP THREE (Cowling lip stiffeners) cont.

5. Using a sharp pencil; mark lines that align with the hash marks on the template, along the cowling lip. These will be your mounting marks for the stiffeners.



6. Using tweezers hold a stiffener in place. Now using a small brush or liquid applicator, apply adhesive along the bottom of the stiffener. Capillarity will carry the adhesive along the join. **DO NOT DISTURB THE PART WHILE THE ADHESIVE DRIES.**



7. Repeat #6 for each stiffener.

While this is a tedious task, the result can be quite striking and if you've got the patience, it is worth the effort.

STEP FOUR (Painting)

At this stage you should prep the set for painting. Any general primer that you use should work fine (Mr. Surfacer, Tamiya, etc...) to prep the cowling and parts for paint.

While exterior colors will most certainly be called out in your kit or decal instructions, interior cowling colors varied widely depending on the variant you are modeling. Cowling interior color for the F4U-1 through some number of F4U-1A production was described as "Salmon". Possible matches for this Zinc-mixed color could be FS 32276 or FS 32356.

During the F4U-1C production run, Corsair cowling interior colors were switched to be painted with the "underside" color of the airframe (some in Sky Gray and some in Insignia White).

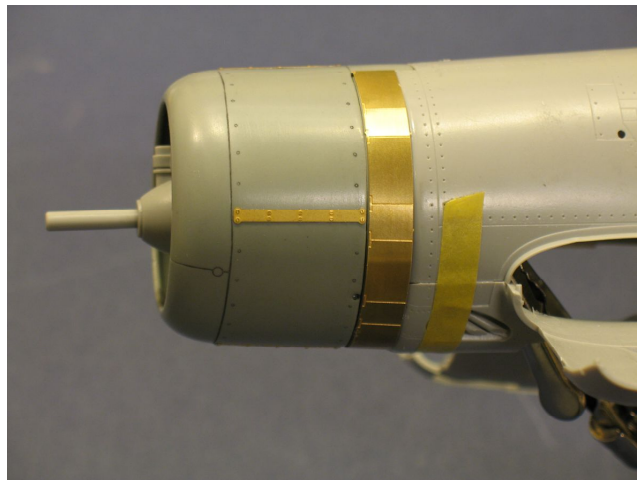
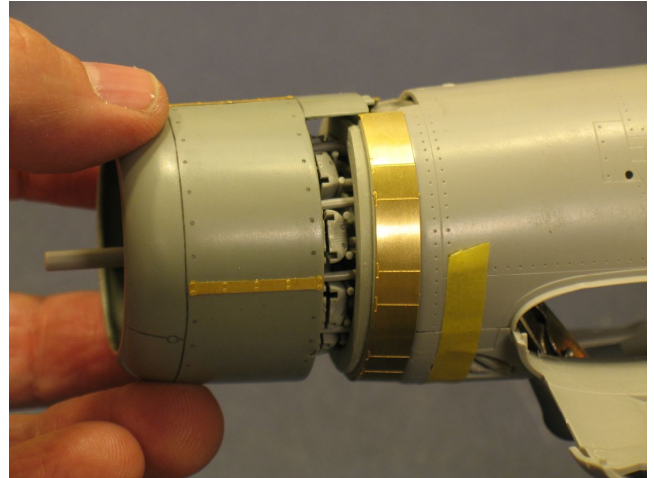
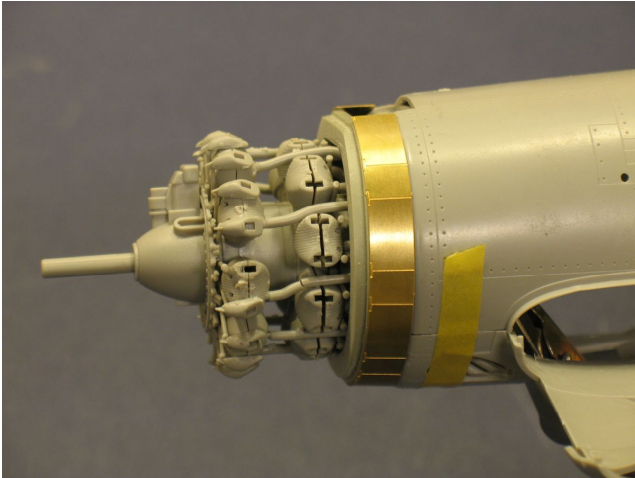
Finally; after October of 1944, Zinc Chromate and Interior Green colors were used on production Corsairs, eventually switching to Black, and yet some sources also indicate that overall Glossy Sea Blue F4Us might have had that color used internally in the cowling as well.

Check your references carefully, clearly there are a lot of choices.

STEP FIVE (Assembly)

The completed cowling ring and flaps assembly **WILL NOT FIT OVER THE COMPLETED ENGINE ASSEMBLY** for the Trumpeter kit. It is essential therefore to “soft-mount” this assembly during the Trumpeter kit’s “**Step 14 Fuselage Assembly**”. The cowling ring and flaps must be loosely “hung” on the rear of the engine assembly as that assembly is attached to the fuselage. This may seem whacky but it will produce the best results.

1. Loosely hang the cowling ring and flap assembly onto the back of the completed kit engine assembly.
2. Follow kit instructions “Step 14 Fuselage Assembly” with cowling ring and flap assembly “along for the ride” with the ring facing forward.
3. When you are ready to mount the cowling onto the fuselage, carefully line up the cowling ring and flap assembly (test fit this a few times before using adhesive). Use a small bead of liquid cement along the cowling ring when confident, along with adhesive on the cowling mounting slot and tab on the top of the fuselage, and carefully but firmly mount the cowling onto the fuselage and the cowling ring onto the cowling. The fit should be snug and tight, with a very small “gap” along the flaps and fuselage.



That's it, your cowling correction set is assembled and mounted. Congratulations!