

## **Rufus - Aluminium Bulkhead Part 2.**

### **Introduction:**

The fibreglass bulkhead had numerous unwanted holes, additionally both the clutch and brake pedals had been fitted to the left side of the steering column, which after I re-located the pedal box (to put a pedal either side) left an oversize pedal aperture hole.



**How it was.**

I decided to use small pattern aluminium chequer plate to disguise the holes and strengthen the bulkhead. The first part of this article described the making of the four aluminium panels. This article completes the job.



**Trial fitment of the completed panels.**

\*\*\*

### **Body preparation:**

The fibreglass bulkhead was in poor condition with large holes in the top horizontal surface through which heater hoses and other items had been passed through. With the body on its nose (for easy access) I abraded the inside of the holes and fitted double thickness fibreglass patches. The outside of the holes were then abraded and filled with Isopon P40 to level up the bulkhead. The vertical and horizontal bulkhead panels were then scoured of paint with a large brass wire cup brush in an electric drill.

The scuttle top was repaired with numerous holes requiring filling; these included four, yes four, incorrectly drilled wiper spindle holes that had been previously poorly repaired. Trial fitment of the new dashboard earlier had revealed that the lift-the-dot fasteners for the front of the tonneau cover had been drilled too close to the dashboard preventing it seating correctly; these holes were also eliminated.

Once the holes had been repaired I prepared the top and sides of the front scuttle with an orbital sander before applying some plastic primer paint.

\*\*\*

### **Fitting large rubber grommets to the vertical bulkhead panel:**

At the time I made the vertical chequer plate panel I had not sourced the large rubber grommets through which I intended to pass the wiring harness components; although I had made the cut-out in the bulkhead and marked the grommet aperture on the back of the aluminium panel.

Eventually I sourced some large rubber grommets from.

Vital Parts Ltd  
Unit 17  
Palace Industrial Estate  
Bircholt Road  
Maidstone  
ME15 9XU  
Tel. 01233 713 581.

The large holes required for the grommets were made with a 'step' drill.

\*\*\*

### **Chequer plate preparation:**

With all the holes drilled the reverse side of the panels were prepared with an orbital sander then given a coat of etch primer followed by a coat of red oxide. The areas visible from inside the cockpit; i.e. by the grommet areas, were given a black top coat.

The front face of the panels (containing the pattern) were scoured with an abrasive nylon cup brush in an electric drill then given a coat of etch primer followed by a coat of red oxide.

\*\*\*

### **Fitting the chequer plate panels:**

I wanted to fit the panels and apply some seam sealer at the joints before applying the final coat of paint to the panels. As I intend to secure the panels with M6 stainless steel button head screws I wanted these to be a feature; i.e. not painted.

The panels were temporarily located with M6 countersunk screws this allowed me to paint under the edges of the screws with no paint joints being visible once the temporary screws had been replaced with the button heads.

\*\*\*

### **Applying the seam sealer:**

Working with any form of mastic is a job I hate, so I cheat whenever possible by applying masking tape to confine the seam sealer in its intended position..

With the masking tape in place I applied the seam sealer then smoothed it with a finger before leaving it to dry for twenty four hours.



**The seams are all sealed.**

\*\*\*

### **Painting the chequer plate panels:**

Once the seam sealer was dry I went over the sealant with red oxide and left it to dry for twenty four hours.

Originally I had planned to paint the chequer plate bulkhead in RAL 9001 Cream to match the chosen body colour. As work progressed I decided to paint the under bonnet area, including the inside of the engine panels and radiator cowl in black.

The paint I chose was Mastercraft Black Coach-Paint Brushing Enamel which is very easy to apply on a chequer plate finish. A second coat was applied after 48 hours.

\*\*\*

### **Final fixings:**

After leaving the top coat of paint to harden for another 48 hours I fitted the M6 stainless steel button head screws (replacing the temporary countersunk ones as appropriate). I fitted a normal washer under the button head and an M20 washer (against the fibreglass) securing the assembly with a Ny-Loc nut.





**Sorry about the reflections.**



**Note that the cut-outs in the fibreglass allow the grommets to fit in the chequer plate only.**

\*\*\*

**Summary:**

It took a fair amount of work (and money) to fit the chequer plate panels but in my opinion it was a job that needed doing as it strengthened what was a weak area. Now when I press the brake and clutch pedal there will be no undue flexing of the body.

I'm not a great believer in a concours finish but I do like to do a nice solid job and restore all areas of the car properly.