Side screen brackets on the MGA Roadster

By

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I have owned my A for over 45 years and one of its least effective features is the weather gear in particular the side screens and the fit to windscreen, door and hood. Over the years I've had both the fabric covered original screens and the "Weathershield". Alloy Items designed for fitting to the works hard top.

Last year as the screens were getting difficult to use; the sliding panel was sticking and the felt runners tatty after 30 years use; it was time to do something about them. I could have made new plastic panels and polished the frame, but the rubber seals were more challenging as they originally were one piece which slotted into the front and bottom aluminium extrusion.

Replacement alloy ones were the most cost-effective solution for me. I collected a pair from Bob West and at the same time had a discussion with Bob's fitter, Les, who advised that the brackets would likely need some adjustment to fit.

Initial trial fit showed that the aluminium rail was too tight to the cockpit rail and also didn't clear the inside top edge of the door; the fit to the windscreen was poor being tight at the lower point and considerably out of alignment in both vertical axis.

On comparing with both the original fabric screens and the original "Weathershield" ones it is quite clear that the front brackets on the new alloy screens are different in shape.

My first attempt at rectifying the new brackets was to re-form the shape using a "scroll tool" created from two pieces of round bar socketed and welded to a base. The resulting bracket was a better fit but still forced the bottom edge too tightly onto the leather covered cockpit rail and didn't alter the fit to the front edge / windscreen.

I also noted that the bracket would catch the windscreen grab handle which apart from damage to the chrome would not allow the screen to ft snuggly into the windscreen edge which the original screen did. At this point I decided that to make new brackets was the solution.



The process to make new screen brackets started with the correct section steel, 5x30 & 5x13 BMS black mild steel has that rounded edge, like the originals,) . Nick Moore, blacksmith at Market Weighton, had the section in stock which he kindly gave me a couple of short lengths.

I first bent the swan neck of the door strap using the scroll tool and heat. This created a similar form to the original ones, then a slot was drilled and cut by hand, (I haven't got access to a milling machine to form the recess to accommodate the knurled doorknob).

The frame part of the bracket was then bent to the shape of the original, the top of the bar clears the grab handle on the screen.

Fitting the two parts together was more involved; first the new screen was positioned to establish were to fix the bracket strap to best avoid catching the windscreen grab handle. Next step was to drill and thread the strap to the screen.

Having now attached the strap to the screen the whole screen was again positioned in the opening and the door swan neck offered up and marked for tack welding. The assembly was then adjusted until a satisfactory fit was achieved and finally fully welded up. The rear bracket and peg were then fitted and welded in much the same sequence. The fit achieved was satisfactory except the top to hood gap was still too large as the hood really needs fitting to the side screens. The final tweak was the addition of a short piece of petrol hose to the door locating peg to lift the angle of the front edge of the screen to fit into the windscreen stanchion.

A replacement pair of top clips were then added to the leading edge of the screens to clip them to the flange of the windscreen surround; these prevent the screens dragging out at speed due to the vacuum created by the air passing by the screen.

Overall, the screens keep the cockpit dry. On the run up to the Caledonian centre Jacobite tour I drove though hours of torrential rain on the A66 / M74 /A9 and was impressed with how dry and warm the car was. The same driving conditions hit us for the run down to the 50th meet at the Phoenix Inn at Fleet, I must add that the hood is one that was supplied and fitted by Bob West and has an extra strip to the door opening apron for the side screen to tuck into, I'm told that this is how the factory made them, and that on some replacement hoods this small detail is missing.

As an aside I have found that since the hood and screens now fit tightly, the ventilation in the cockpit is improved most noticeably at speed when a vacuum is formed and by slightly opening the sliding acrylic window the air is pulled out thus improving the air flow through the heater. The heater and demister are more effective.





Close up of the finished job. The screen bracket clears the cockpit rail, the screen tucks into the side of the windscreen frame and the top of the support bracket misses the grab handle.



Side view showing that the screens tuck into the windscreen stanchion, as finished.



Comparison of original stap bracket to repro supplied items. Original bracket strap in the middle, modified replacement to the left and as supplied strap bracket to the right





Original brackets used as a template when forging the replacement. The bar used is as original BMS 5x30. On the right, the new bracket welded to its mounting plate



The pains taking process of aligning the front of the side screen to the windscreen



Mounting pad on the door frame, on my car is in the original holes, the door card is a single layer of GRP reinforced across the door pull with a 25mm woven tape; the plus of this is that it allows more space for the door seal as it is considerably thinner than the Mil board replacements that are usually supplied.



Brackets as made compared to the ones supplied. Notice they are too short!