

## **Cracker's Cockpit Seats Part 2.**

As described in Part 1. the seat boards were taken to the upholsterers in early November 2023 and I received a quote of £500 plus VAT, which was accepted. This was about £100 more than I was expecting but the design is more complicated than the ones I had made for Mungo (the Lomax 224). The upholsterer does good work using quality materials and he guarantees the seats for as long as I own the car, so it's an investment really. Unfortunately he is very busy and estimated a completion time towards the end of February 2024. In the event I collected the seats on 05 March 2024.



**Baseboards at the upholsterers.**



**As collected.**



**First trial fit of the cockpit seats.**

**Note.**

*The gap between the lower part of the upholstered area of the backrest and the top of the seat bases was deliberate and is threefold; first it enables tilt and height adjustment to the seat bases, second it enables the backrest to be tilted forward without disturbing the seat bases and third it is somewhere for the bottom rumpled edge of a warm thick jacket to occupy without continually pressing into the driver and passengers backs.*

While the seats boards were at the upholsterers I found the time to finish the seat belt guides by polishing them before cutting into their two separate parts; this proved to be a big mistake as I couldn't use them in their existing format.

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**Fitting the seats:**

The first task was to remove the existing seats which was simply a matter of removing the securing nuts and bolts enabling the complete seats and brackets to be lifted away.

The seat backrest was then placed in the body tub and set to the angle of the driver's seat in our family saloon, the seat cushions were then placed in position.

After getting in and out of the car and making minor adjustments a few times I finalised the seat position. This placed the rear lower edge of the backrest 7-1/2" forward of the fixed plywood carpeted panel that closes off the rear foot-wells (the ones for the passenger's legs on the TD and TC models). To retain the backrest in this position I fitted two 2" lengths of 1" x 1/8" thick aluminium equal angle bolting them to the floor with M8 Button Head screws. The surplus seat securing holes were also filled with short M8 screws with a fibre washer on the underside.

**Note.**

*The MGB has Unified threads but these are not as plentiful in stainless steel as its metric equivalent. I have large stocks of stainless Metric fastenings which I tend to use for bodywork where UNF fixings are not compromised.*



**One of the 2" long equal aluminium angle pieces that locate the bottom of the backrest.**

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**Setting the backrest position:**

The next task was to securely locate the top of the backrest to prevent it tilting too far towards the rear. For positive location it needs to be supported at either side and across the full width of the back. Looking inside the rear body section I decided to make up two angle brackets using 2" x 1/4" thick equal aluminium angle and 15mm thick Birch plywood.

Two triangular plywood sections were cut which simply bolt to the upright sides of the aluminium equal angle to form 'L' shaped brackets.



**Equal angle and plywood brackets.**



**Ditto.**



**Ditto.**

With the brackets made they were positioned in the luggage area at a forward position, the seat backrest was then placed in the car and the top was pushed towards the rear, which also pushed the brackets into their correct position. With the backrest removed the brackets were straightened up and secured to the body floor with M8 stainless steel fixings.

With the triangular support brackets in place another length of the equal angle was used to span the two, this would support the seat backrest across its entire width. The transverse angle was secured to the brackets by M6 stainless steel fixings into aluminium brackets.



**The brackets that support the transverse backrest support.**



**The transverse backrest support.**

**Note.**

*I did consider mounting the aluminium angle to the seat belt mounting point; which would allow more room in the luggage compartment, but I rejected that idea as it would encroach on the rear mudguard retaining fixtures.*

With the mocked up brackets in place I decided to support seat belt guides at the ends and the lovingly prepared seat belt guides were butchered and fastened upside down to each end of the transverse equal angle.



**Seat belt guides fastened to transverse backrest support.**

**Note.**

*As an alternative to the transverse equal angle you could fit a batten across the seat backrest and just let it rest against the triangular brackets but I wanted to have a strong transverse rail to which a shaped wooden block could be attached to support the upper bodywork so we could put our weight on it if necessary during cockpit access and egress.*



**Belt positioned in the guide.**

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**Rear body support:**

As purchased Cracker had a rear body support strut, this was to enable the previous owner to support his weight on the body tub when getting in and out of the car. I had removed it as it just got in the way of accessing the luggage area.



**The original body support.**

With the new backrest support in position I made a new body support which was inserted in the gap between the transverse equal angle and the underside of the body tub. The support was a simple shaped wooden block covered with rubber on its top surface; it was screwed to the transverse equal angle from the underside.



**The rubber covered body support block.**



**The body support block in positions.**

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**Accessing the luggage area:**

To enable the seat backrest to be easily pulled forward I fitted two small straps, one either side. These are secured to one of the four redundant captive nuts which were originally planned to hold the seat belt guides.



**One of the straps that enable the backrest to be easily pulled forward.**

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**Finishing off:**

The addition of the seat backrest supports meant modifying the carpeted panels that cover the luggage area floor; both front and rear panels were simply cut into three parts on the circular saw. To support the two



separate side pieces at the rear I cut a slot in the plywood support frame (tool divider) and inserted a length of 2" x 1/4" aluminium equal angle.



**The equal aluminium angle that supports the rear edge of the rear floor panel.**

When I receive my new carpets I will make new luggage area floor panels and fettle and paint all of the aluminium and plywood parts in black to match the carpets but that's probably a job for next winter, or maybe a prolonged wet period this summer.

Removing the original seats left a ragged mess of carpet; as a temporary measure the carpet under the seats was cut out and replaced with a new piece of Axminster carpet off-cut.

A short road test revealed that the seats were comfortable and the bases stayed in place. Longer trips will reveal whether or not the seat bases need to be angled or set at a different height. If so it will be a simple matter to make suitable plinths; at that time I will fit two leather cloth covered battens to the floor to positively locate them.

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### **Adjustment:**

The seats are now fixed in position for one driver (me). To alter the seats for another driver would require either forward or rearward movement of the seat backrest support bar and the two locating angles on the floor; with adjustment to the seat base made by changes to any supporting plinths.

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### **Summary:**

The cockpit seat fitment is now complete. Access to the luggage compartment is obtained by tilting the backrest forward. The whole seat assembly can be easily be lifted out in less than one minute. In use it is retained in position by the driver (and passenger when carried). The driver and passenger being retained by the seat belts.

We find the seats more comfortable in use than individual seats, another advantage is you don't have to get out of the car again to release the trapped inner seat belt buckles after you have trapped them under the seats when last accessing the luggage area. Believe it or not we have both done it more than once!

The total cost of seats and misc. materials was in the region of £650, which compares favourably with the price of two new individual seats; to help offset the cost I will sell the original seats.

Are they suitable for everyone? Perhaps not; the answer may lie below.

**The advantages of cockpit seats are:**

- More room for the fuller figure.
- Easier access to the luggage area.
- Increased security\*\* for the luggage area; and
- Can easily incorporate seat belt guides.

**Notes.**

*\*\* One task still in the pipeline for even better security is to fit a securing device to the top of the seat backrest, similar to a bonnet catch.*

*Care was taken to ensure that no modifications were required to the tonneau cover.*

**The disadvantages are:**

- Not easily adjustable and are normally built/fixed in position to suit an individual driver.
- The angle of the backrest may not suit the passenger.
- The passenger may need a footrest; and
- Both driver and passenger need to exit the car to allow the seat backrest to be tilted forward enough to access the luggage area.



**Before; they looked good but were not comfortable.**



**For comfort the depth of the seat backrest is quite substantial.**



**But most of it is hidden.**



**Finished.**