My Hawk build part 26 by Stuart Clarke

Fitting seats and seatbelts.

I've yet to source some IVA compliant seats but I'd thought I'd fit some seats and seatbelts to enable me to drive the car up and down the drive to check that things such a the clutch and brakes actually worked and then to take it to a garage for a pre MOT / IVA check. I wanted to do this to check that I hadn't made any silly mistakes. Having never built a car before there's always this nagging thought in the back of your mind that you've missed something; therefore I'd prefer to get it checked over.
So to seats, there are no fixed mounting holes for seats in the Hawk so it's a case of drilling the holes in the floor and using bolts and big washers to spread the load. I'm 5'9" and my other half is a little over 5' to enable her to drive the car (I'm a generous kinda guy) have decided to fit some seat runners.

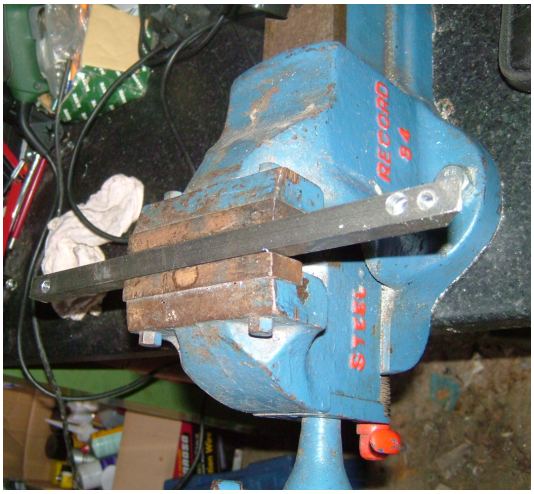
For the seat runners to have sufficient stroke to accommodate mine and my other half's driving position, they need to be spaced off from the seat mounting brackets by about 12-14mm. This equated to a M10 nut and a couple of washers.

8mm bolts are required as the seat mountings are tapped out to M8. The bolt heads need to be narrow enough to allow the opposing part of the runner to pass over them. The holes on my runners didn't quite line up with the holes in the seats so I had to file the runner holes a bit.

With the runners attached to the seats I could think about mounting the runners to the Hawk cockpit floor.
There's quite a lot going on under the cockpit floor so a bit of measuring is required. It's not a good thing to drill through fuel or brake lines and it's quite difficult to get a nut on a captive bolt that's inside a chassis rail. The accepted way to find the hole location points is to bolt the seats and runners to a piece of thin plywood or stiff card that is longer than the seat.

This can be placed into the cockpit and when the correct seat position is found (comfortable, able to reach the pedals avoids the roll bar / handbrake and hood bow locations) you can draw around the protruding part of the board onto the cockpit floor and when the board is removed from the seats and runners and placed in the same position as per the markings, then the hole positions in the board are the correct locations to drill. However…

When I did this the hole positions that I marked coincided with the chassis rails. I couldn't move the seat position further over as it would collide with the handbrake. The only way to do it was to somehow move the inside runner further inboard without moving the seat position. I came up with the idea of replacing the nut and washer spacers with some transverse mounted 15mm square bar. I drilled a through hole to mount the seat runner through the spacer on one side, and drilled and tapped some additional fixings for the other runner on the other side. I then drilled some countersunk holes to attach the spacer to the seat fixings on this side. This system lifted the seat by another 2mm but I couldn't notice the difference.

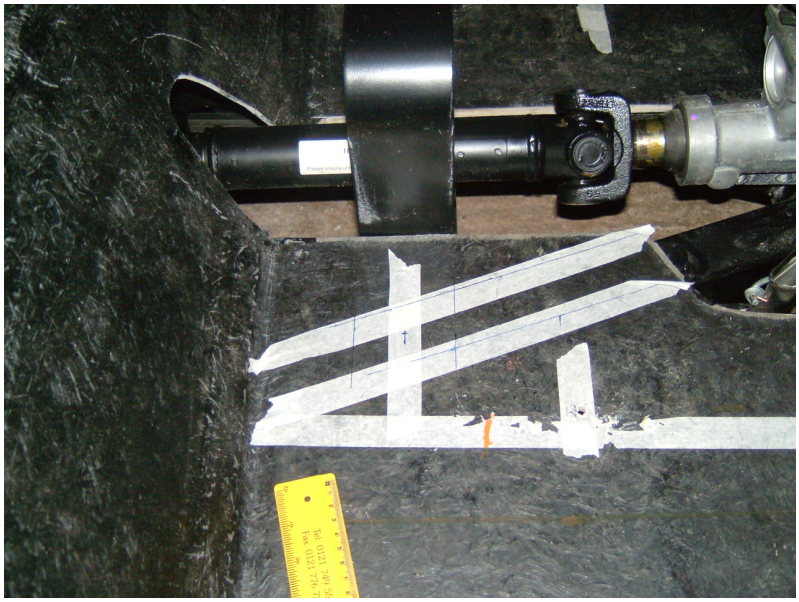


By doing this I moved the inside runners further inboard by about 20mm. This coupled with moving the seat runner to floor fixings slightly further forwards (and adjusting the seat back on the runners slightly to maintain the same seat position) I managed to get four decent fixings to the floor. I used some 1 ½" penny washers on the underside as load spreaders. One of the fixings was a bit awkward to get to as I had to squeeze my hands between the chassis rail and exhaust silencer but I managed to do it up.

Next up were the seatbelts, these come as a set and I got them from Gerry. Once you work out how they fit they are very simple to install. The set belts kits come with a set of brackets and bolts. All the bolts used on the seat belts need to be High tensile 7/16" UNF as this is the required standard. The reels bolt to the SVA frame behind the seats. The first bracket on the belt fixes to the threaded boss on the chassis that the Prop shaft safety hoop bolts to. The prop shaft safety hoop bracket bolts from the bottom and a hole needs to be drilled through the floor of the cockpit to line up with the threaded boss to enable the seatbelt bracket to be bolted down from the top. The boss is threaded to 7/16" UNF so

two of the 1” long bolts provided with the seatbelt set can be used to fix this bracket in place.

Welded boss on SVA frame where the seat belt reel bolts to.



Measuring where to drill the hole for the seat belt bracket & when fitted.

The seat belt buckle needs to be mounted to the floor on the other side of the seat. If the M8 bolt that bolts the body to the chassis through the floor at the back of the door is removed, you will see that this hole in the chassis is also tapped out to 7/16” UNF.

The hole through the floor needs to be enlarged so the 7/16” bolt can be used. I bent a 90 degree bend in two of the brackets supplied with the seat belt kit and, using these, bolted the seatbelt buckles through the floor onto the chassis.

Job’s a good’en.

I’d also received the front grill from Gerry. I drilled 3 fixing holes in the grill and then drilled and tapped the GRP to accept 3 x M4 screws which secured the grill in place.

I suppose I ought to think about getting the Hawk tested now.