

## My Hawk build part 19 by Stuart Clarke

### Anyone for Spaghetti? Part c.

I was still waiting for the headers to turn up so I thought I'd trial fit the Dash to see if everything fitted OK.

All was OK but if I'm honest, the hazard light switch was a bit of a squeeze and if the dash is pushed back too far at the bottom, can foul on the scuttle frame. The hazard light switch is quite long, much longer than the clock that would normally fit in this location. The terminals are all insulated so if there is a slight gap then I was happy.

Now I knew everything was going to fit I could start to make the mechanical connections for the Oil and Water temp gauges and the Oil pressure gauge.

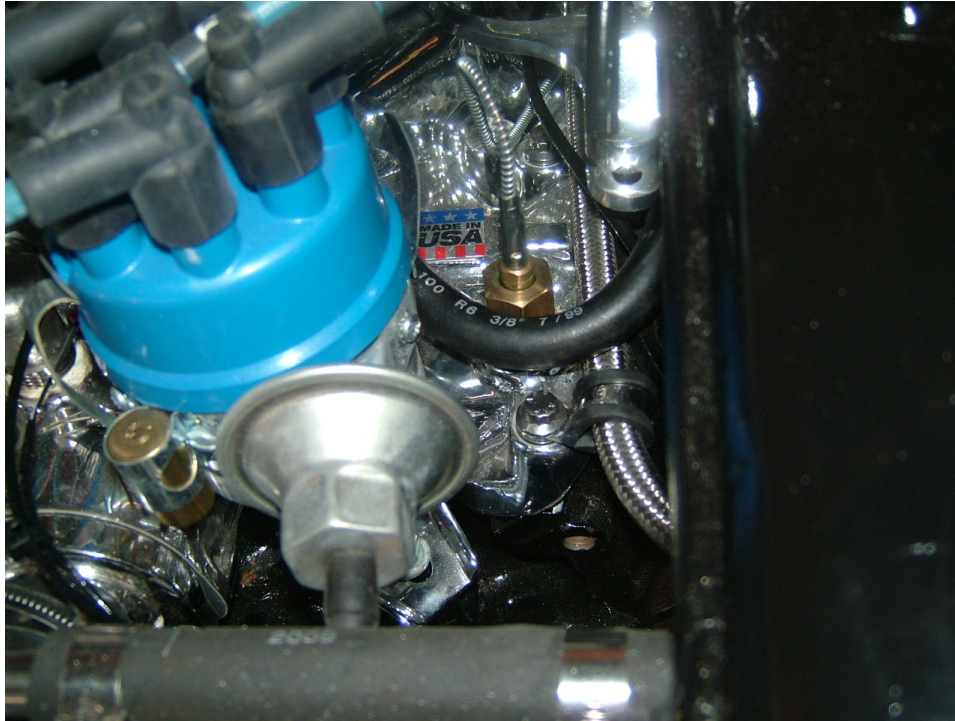
To enable me to carry on with the installation, I laid the dash face down across the transmission tunnel just in front of where it would be fitted

To install the pipes and bulbs for the temperature gauges, I drilled holes in the bulkhead either side of the heater to suit the grommets provided with the gauges. The grommets supplied are designed to allow the bulbs to pass through and close up on the thin capillary pipes afterwards.



I also drilled another hole for the oil pressure plastic pipe and fitted a suitable grommet for that too.

On the Ford engine the water temperature gauge bulb senses the water temperature from the Inlet manifold. There's a threaded port available for this on the manifold and the fitting provided with the gauge bulb just screws in (using a suitable sealant.)

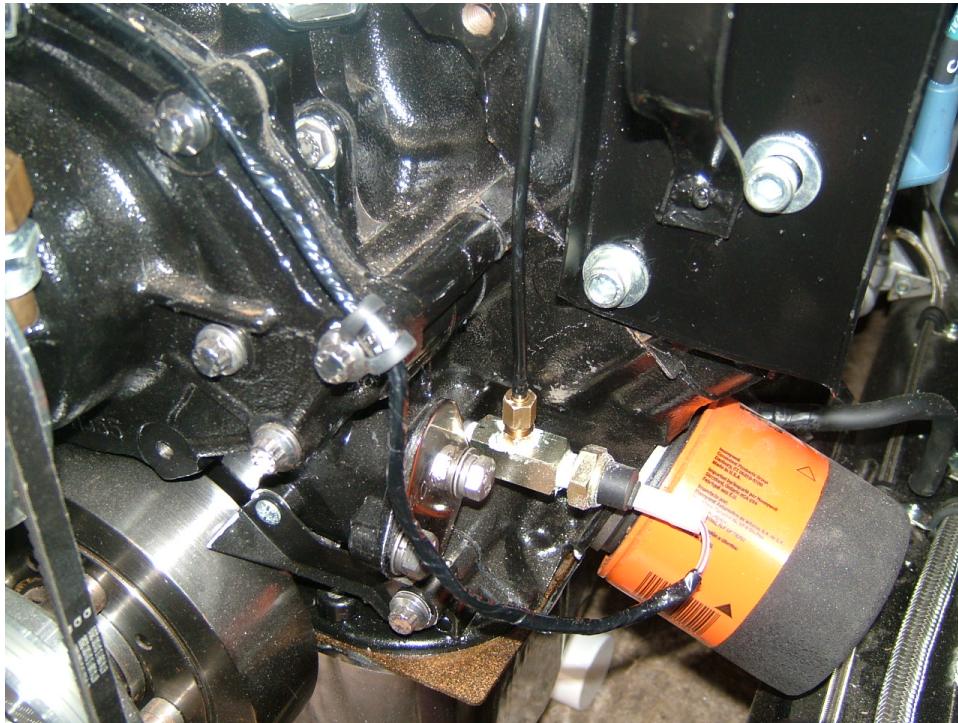


The oil temp is best taken from the sump. I'd already fitted a suitable bulkhead fitting in the sump when I assembled the engine (all those months ago!). It was now time to make the connection.

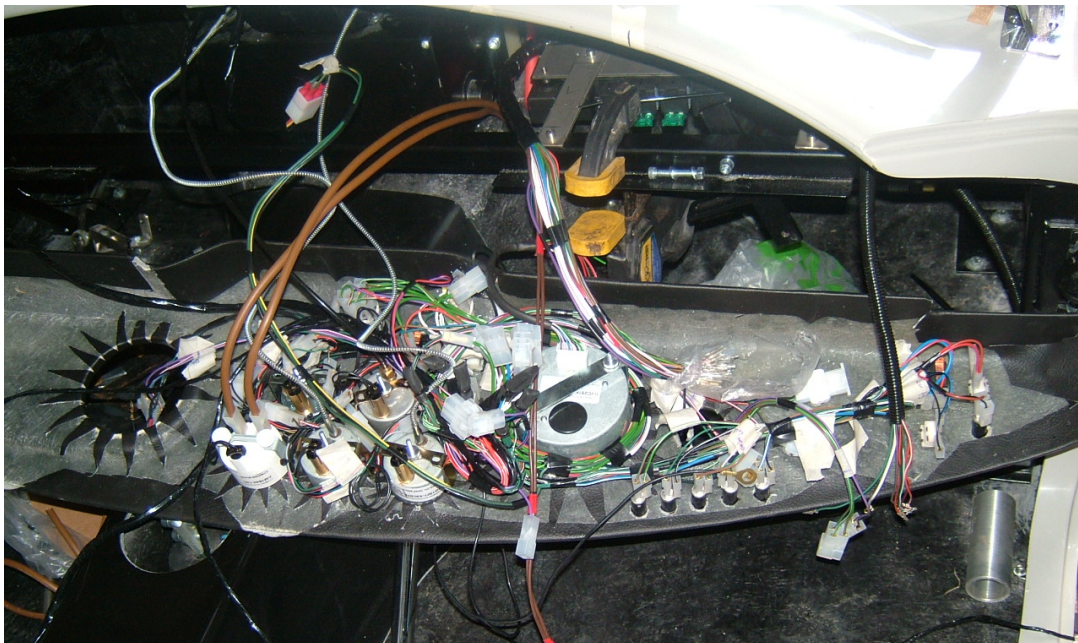




The final mechanical connection to be made was the oil pressure. I took this from the same position as the oil pressure warning light switch which on the Ford engine is by the fuel pump blanking plate.



I then tried to route the pipes neatly. The coils in the pipes between the engine and bulkhead were to take up the excess length and also to dampen any vibration. The other end of the oil pressure pipe could then be connected to the pile of spaghetti that is the rear of the dash board. The pipe tightens up on the respective fitting on the back of the Oil pressure gauge using the fibre washers provided in the pipe connection kit which can be supplied by the gauge supplier.



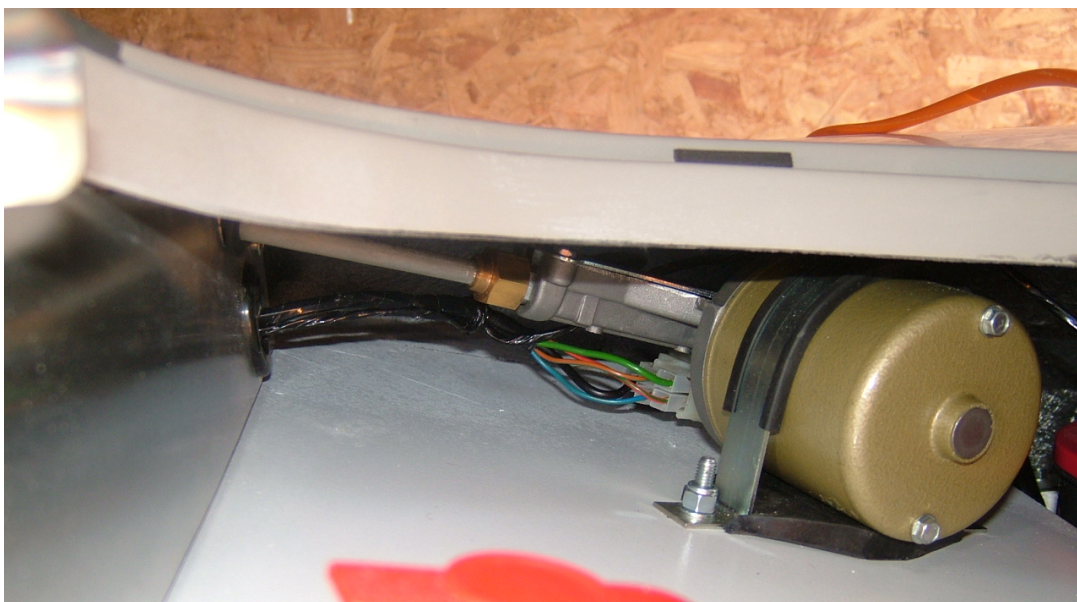


This picture also shows the conduit that sheaths the rear harness, which is laid from the boot area under the driver's door and up the scuttle frame leg. It also shows the connections for the ammeter (the brown heavy gauge wires). I've made all the connections to the dash harness long enough to make it easier for the dash to be removed, but not too long as to make it a tight fit behind the dash when it's installed.

The last couple of electrical connections that were needed in the engine bay were the nearside side repeater and the windscreen wiper motor. For this I needed to drill another hole on the nearside of the bulkhead for this cable branch to pass through. The hole location can be seen in relation to the wiper drive Bundy tube.



I used the same 32mm grommets as before. This branch of the loom can then be passed through the grommet into the engine bay. The spade connections to the wiper motor simply plug on to the connector. This is another fiddly job.

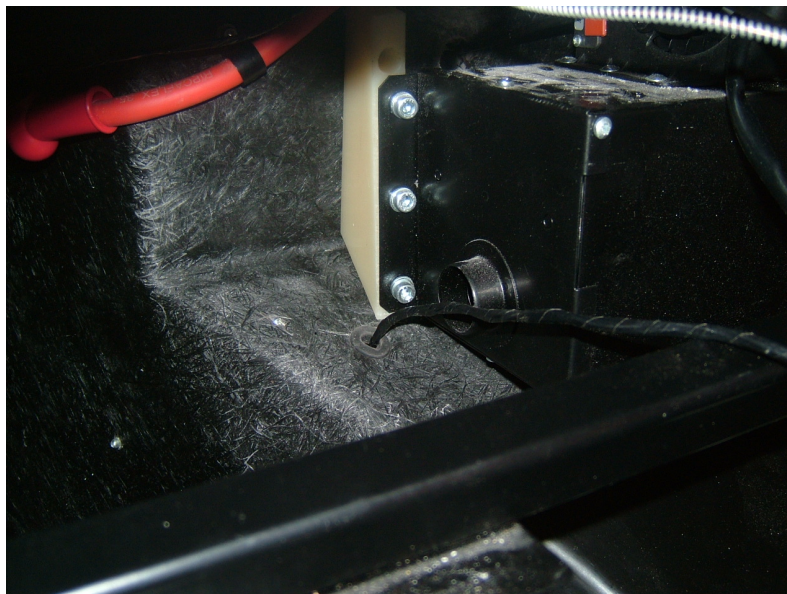


I then made up the plug connection for the nearside side repeater and plugged it into the harness. The excess could then be cable tied into a loop to neaten it up a bit. Whilst I was working down this side I fitted a clamp to hold the battery in place.



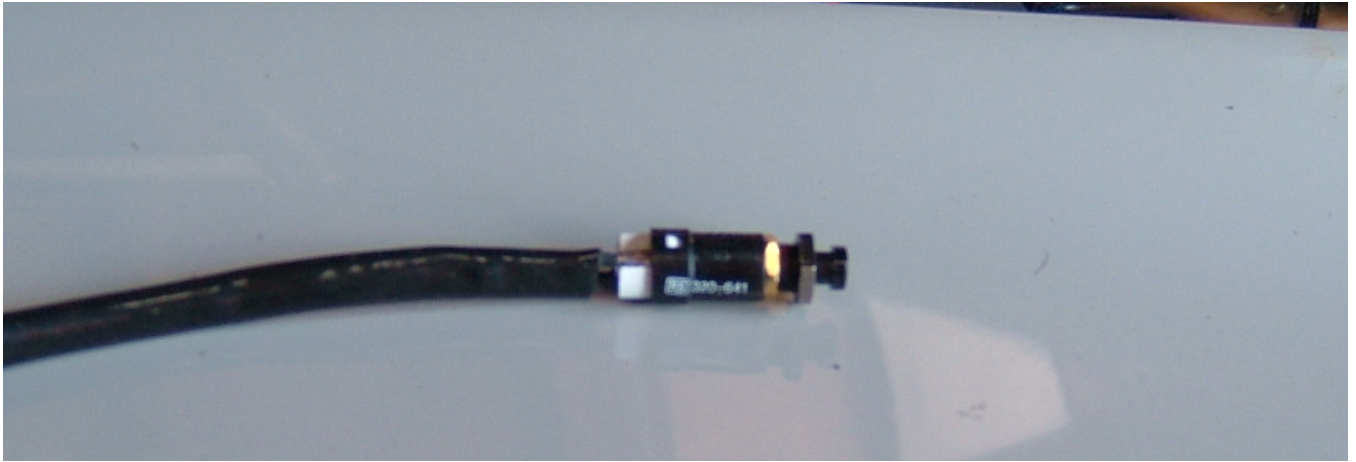
Whilst the battery tray that Hawk supply is nice and the battery fits into it a treat and stops it sliding round, I'd prefer to have a bit of extra security here. As the battery was now secured, the battery cable could be connected to the positive terminal to the battery ensuring first that the isolation switch was off and the key was removed. This would be switched live when we get round to testing the loom.

The final things to connect on the wiring were the handbrake switch and the reversing light. Again I drilled a hole in the transmission tunnel and fitted a suitable grommet for this leg of the loom.





The handbrake switch is a small normally closed push button switch available from RS.



I soldered on some flying leads and fitted some insulated spade connectors. Fitting this, to the handbrake, is another extremely fiddly job that is much better installed with either the body off or, better still, fitted to the handbrake before it is bolted to the chassis.

This was then plugged into some additional female spade connectors that I crimped onto the wires for the handbrake switch. I wouldn't be able to fit the reverse light switch at this stage as I am trying to source the correct plug to connect to the switch on the gearbox. Rather than come up with a Heath Robinson concoction of my own.

The only remaining thing to do at this stage was to make up the plugs from the rear harness and plug the corresponding connections to the dash harness and connect the engine bay plugs to the dash harness too.

I then fitted the immobiliser and spliced that in, but I'm not going to advertise where I've fitted that and how it was connected as it would defeat the object. If anyone needs any advice on this it's best to contact Gerry.

Just to be sure of everything I went through all of the connections on the loom again. There are a couple of single core brown wires that I'd missed. One of these connects to the ignition switch, to the "Batt" spare spade terminal, and the other connects to the Headlight switch. Everything else was OK, but I'd find out for sure when I tested it all.