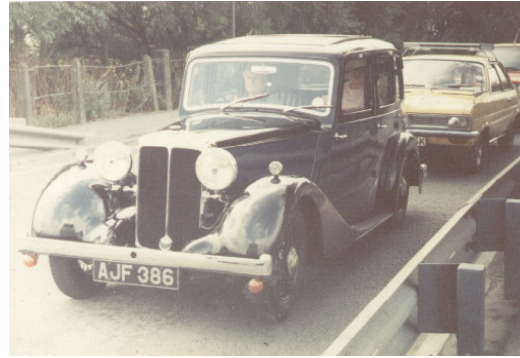
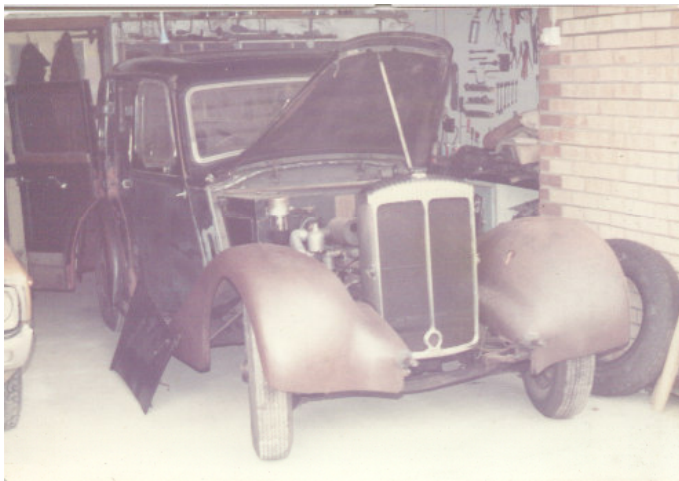


Daimler Light 15 1936



By Andy Lockwood.

The restoration of the Daimler dates back to the early 1980s. When we purchased the car its condition was sound with no welding work required, the cylinder head had been removed to replace a head gasket and was never refitted, the wings had been stripped of paint but never re covered so they had surface rust though they were solid.



The car as it arrived home — note the rust coated wings, these were removed and taken for shot blasting followed by etching primer as soon as possible.

The rear door hinges were loose which pointed to some determination of the ash frame.

Once home the head was re fitted using a gasket supplied with the car, some repair was carried out on cracks in the inlet manifold and the engine was coaxed into life. I always like to get a vehicle running as soon as possible in the restoration process as it allows other parts to be accessed, in this case it I was keen to see how the Wilson semi automatic gear box with fluid drive and the bronze crown wheel / worm drive back axle would perform, the initial trials I a near by yard went very well so we opted to leave these parts well alone as the car's recorded mileage was quite low for its age and all appeared to be un touched from new.

Two issues came to light with the engine, both associated with the cooling system, one was the speed at which the water heated up and the second was the excessive leakage from the water pump.

Once the wings had been removed for shot blasting and painting both the water pump and the radiator could be removed easily, the radiator was taken to a professional repairer who was able to un solder both the top and bottom sections and clean out all the individual passages using a long welding rod, followed by the standard acid cleaning etc, before rebuilding and painting. The water pump which on this model bolts on the non drive end of the dynamo, was removed for repair,

During the winter months, work concentrated on the mechanical bits and pieces that needed attention, the chassis was inspected and the spring hangers were checked, the rear hangers were badly worn, the spring hangers were fitted with bronze bushes, and steel pins rather than been made out of rubber or nylon as we see today, the other unusual thing with this design is that they are threaded, the actual pins that go through the bushes are threaded externally, and the inside of the bushes are made to suit, I can only assume this spreads the surface area to reduce wear and end float, they are lubricated by an automatic lubrication system that had only been getting to the front ones due to leaking pipes, the idea is that you have an oil container (usually a glass bowl screwed to a carrier) – it looks almost like a filter, this mounts on the bulk head, submerged in the oil is a pump, which pumps oil through a series of pipes down to all the lubrication points on the suspension, the pump is operated by a weight that bounces up and down as the car is driven down the road, the more bumpy the road the more oil goes to the springs.

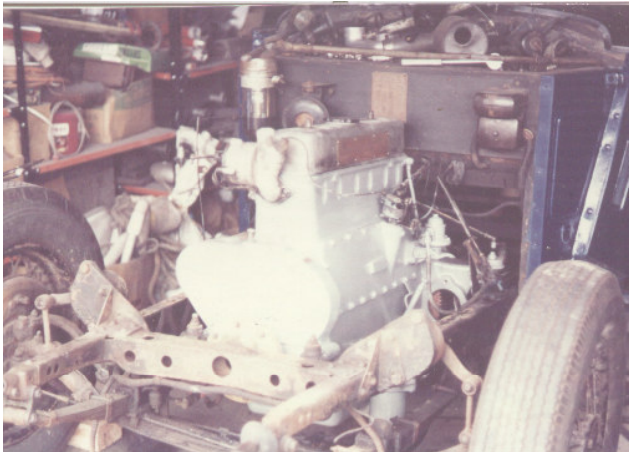
Great idea! but due to pipe failure it just run all over the underside of the car, which was not a bad thing because it kept the chassis in good condition, but at the expense of the rear spring bushes ---- these new had to be replaced.

Due to the lack of a lathe with a screw cutting facility and also the need to replace the bushes without fully removing the springs, we opted to replace the worn bushes with straight ones, a piece of phosphor bronze bar was purchased and machined to suit, new pins were made from high tensile steel bolts machined down, drilled down the centre and tapped to take the oil pipe fittings.

The car was jacked up as high as possible at the rear and the bushes and pins changed one by one, the full lubrication system was re-piped, using black nylon pipe in place of the original brass, which had fractured with vibration, this made it fairly straight forward to connect up, using 1/8th BSP fitting screwed straight into the drilled and tapped end of each pin.

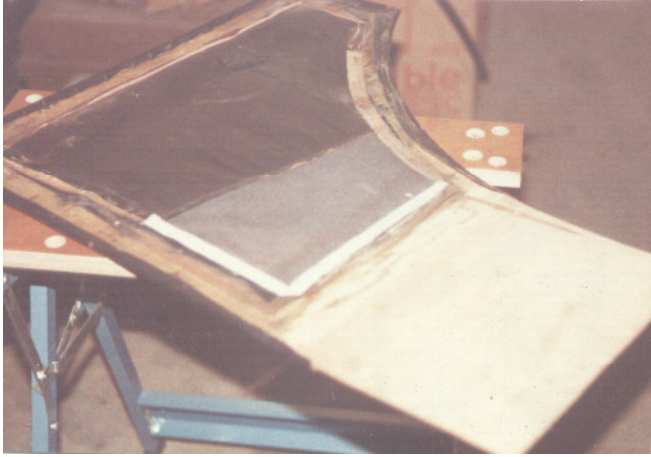
Originally this system had lubricated the steering as well as the suspension bushes, but we decided to replace the steering lubrication system with grease nipples due to the oil finding its way out of ball joints to easily and making rather a mess on the drive, the last thing we wanted was oil dipping down the tester's neck during the MOT.

The old water pump was stripped and cleaned to discover that the seal was made by a tapered section on the impeller pressing up against a carbon ring in the body, over the years the tapered section had become stepped so this was skimmed in a lathe to remove the step and once put back together gave a reasonably good seal.



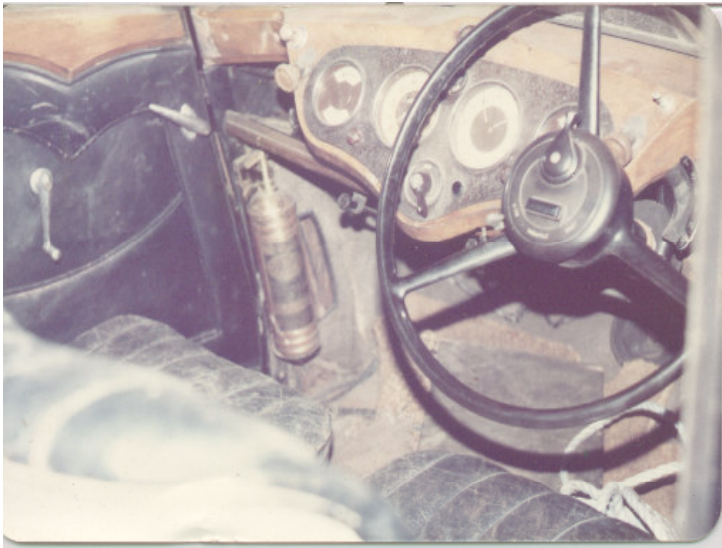
The engine block was cleaned down and painted in light grey to match the original colour, following this the chassis was painted black ready for the bodywork rebuild

It was getting lighter at night but still not warm enough for carrying out paintwork so our attention turned to the jobs you can do next to the fire, all the remains of the old carpets were used as patterns to cut out new sections of freshly purchased grey carpet these were all bound by stitching strips of navy blue leather cloth round the edges (by hand while watching TV on cold evenings)



Carpet also covered the bottom section of each door panel, this was quite handy as the bottom section of each plywood backed panel was rotten but the higher up leather section was in quite good condition, so the bottom section of each panel was cut off and sanded to a tapered edge, this meant that matching sections could be cut from new marine ply and have their mating edges

tapered to glue in place with waterproof glue, this was then covered by bound carpet.



The dash and the top sections of the door panels were covered in walnut veneer finished with French polish, These were removed and taken to a retired craftsman who re—polished them, this old gentleman I always knew as Mr Baker, he lived in the next village and was the proud owner of two Rolls Royce's, one a 20/25 the other a 1937

Wraith.

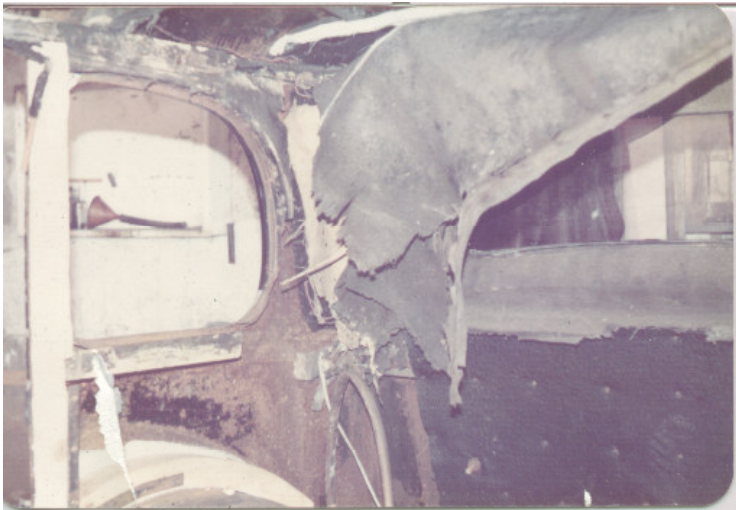
He restored the veneer on the Daimler dash where required and refinished this along with the door panel tops to a very high standard, the seats were cleaned and treated with leather restorer, then stored away to wait for the body work to be completed.

With the interior removed it was clear that the ash frame had suffered where the sliding roof drain tubes had perished and allowed rainwater to stream inside, all the joints in the frame are half let, glued and screwed.

The picture below shows how the right hand rear corner of the ash frame had suffered, Once the loose crumbling remains of the lower section had been cleaned out there was nothing left of the curved section, which the outer wings screw to from the underside.



I understand that coach builders never used mortise and tendon joints as they worked loose and tended to be create noise as the vehicle moved, this meant that it was possible to remove and replace one piece of wood at a time without dismantling the whole structure, we came across a large plank of ash in a disused joiners shop, (it may well have been left over from some cart shafts judging by the shape) templates were



made for the curved sections and a friend cut these out on his band saw.

You can see on this picture that the curved section round the inner wheel arch and the upright which carries the rear door hinges have been replaced and some of the old wood around the side window has been removed, the body panelling is steel

which was nailed to the ash frame in panels then its joints welded so the outer metal is quite strong in its self. All the new joints were glued and screwed using waterproof glue and plated screws.



The headlining was well past its sell buy date, so the remains were removed and used as a pattern to make a new one using wool cloth supplied by Paul Beck on a trip down to Norfolk, he also supplied new door handles and leather door straps etc, as well as the beading to go between the rear wings and the main body.

The sliding roof was removed, it was in quite good condition, just needing cleaning, painting and re covering in vinyl, the drain tubes for the roof which had been soft rubber were replaced with plastic hose.

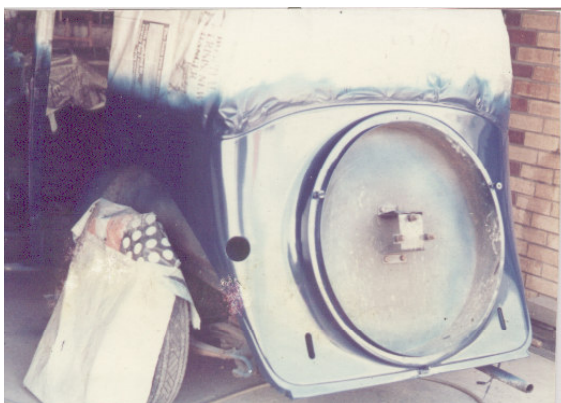
The outer section of the main body shell was rubbed down and prepared for painting.



Most of the old paint was sound so this was sanded and left in place, and bare metal was treated with an etching primer, a coat of sealer was sprayed over all the old paint, followed by four coats of high build primer, any uneven areas were sprayed over with a thin coat of colour, this formed a guide to where there were any low spots when levelling the primer with wet and dry paper and water (any area where the colour coat can be seen after levelling is lower than the rest and in need of further treatment) also take care never to rub through the sealer or etching primer coat otherwise the

final coats may lift.

The top section of the body shell was sprayed with four coats of black gloss cellulose



then lightly flattered with 1200 wet and dry before a final thin coat to leave a smooth shine, once the black was fully hard it was masked off using a special lining tape ready to apply the dark blue to the lower half. The blue was applied in much the same way as the black, lightly flattening before the final coat.

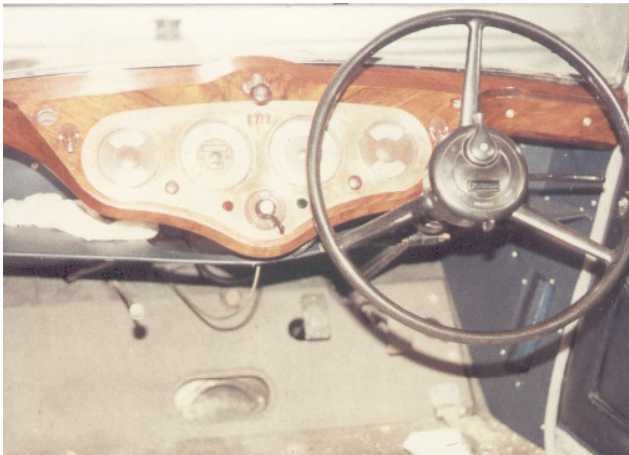


The newly painted shell was moved well out the way while the garage was used to spray all the individual body panels, and doors etc.

As items were painted it was a matter of bolting them back on, so throughout the summer months the old Daimler gradually took shape, once the doors, roof and windows were fitted then work could start on the interior.



The wool cloth was cut slightly over size, the material was folded and stitched to line up with the cross members of the wooden frame, these folds could be tacked to the frame starting at the back and working forward so the tacks were hidden above the main cloth. The sides were then tacked and the sunroof section cut out and its edges tacked. The moving roof section was covered with the cloth on the underside and vinyl in the top before fitting.



All the old side panels and shelf were in a very poor state so these were used as templates to make new ones from marine ply, which was covered in blue vinyl before being screwed into place in the same way as the old ones.

The seats were cleaned and treated with a leather restorer before being refitted.

We went through a stage where a lot of time was spent without a lot of visible changes, this involved rewiring and stripping cleaning and refurbishing all the lights and other electrical items, fitting indicators new rear lights etc.



After a few short test runs on a private road it was time for an MOT, after the man at the testing station had studied what exemptions there was for this age of vehicle we were road legal.

The first trip out, waiting at Bothferry Bridge on the way the Drifffield Steam Rally

