THE BERKELEY 492 cc DE LUXE COUPE

RMJ 946

A late photo, taken some time after the 1957 London Motor Show showing the car RMJ 946 with factory staff out at a rally or road test, we think it could be a North London ECC driving test meeting in April 1958.

Photo came to the BEC years ago via the then historian Bernie Pearson, not sure of source but probably someone close to factory.

Building behind is the Jackoman hanger at RAF Heston, now Heston Services on the M4 West of London



Berkeley Car Factory's MD Charles Panter was keen to promote their cars by being involved with racing, road testing and rallying. At all levels .They did not actually have a race team but would assist those drivers who wanted to.
Often seen together were three cars, painted Red White and Blue. A patriotic promotional idea, as seen in this picture.

The Red Coupe car, RMJ 946 can be seen to be the very same Coupe as I now have, proven by sight of the chrome outside door handle and wrap around plex glass in the rear window, unique to this one car only.
The publicity photos and adverts that were in all the car magazines of the day, all showed the Coupe with a recessed door handle and it's hard top positioned differently on the body. We are confident that the first incarnation of Coupe was just as shown in those publicity shots, the car being developed from its earlier 328cc twin Sports form. Fitting of a hard top, to that body, would make it look so.
There had been comments of it now being perhaps a bit small and cramped inside.

With the availability of a new three cylinder engine with think , well we know , that they addressed that problem with a lot of very hasty work ,with the second incarnation of the same car, all done in time for the 1957 London Motor show .

Stand 116. Had a different style 3 cylinder 492 cc Fixed head Coupe's on show.
This can be seen in the unpublished pre Motor Show opening photos , found by Nigel Halliday in the Haymarket Publications picture library on the old style glass plate negative's They show the car as it was presented on the stand with the bigger engine and all those body work changes made.
Changes would all be confirmed, with evidence found at the time the restoration was taking place.
THE BERKELEY 492 cc DE LUXE COUPE STAND 116



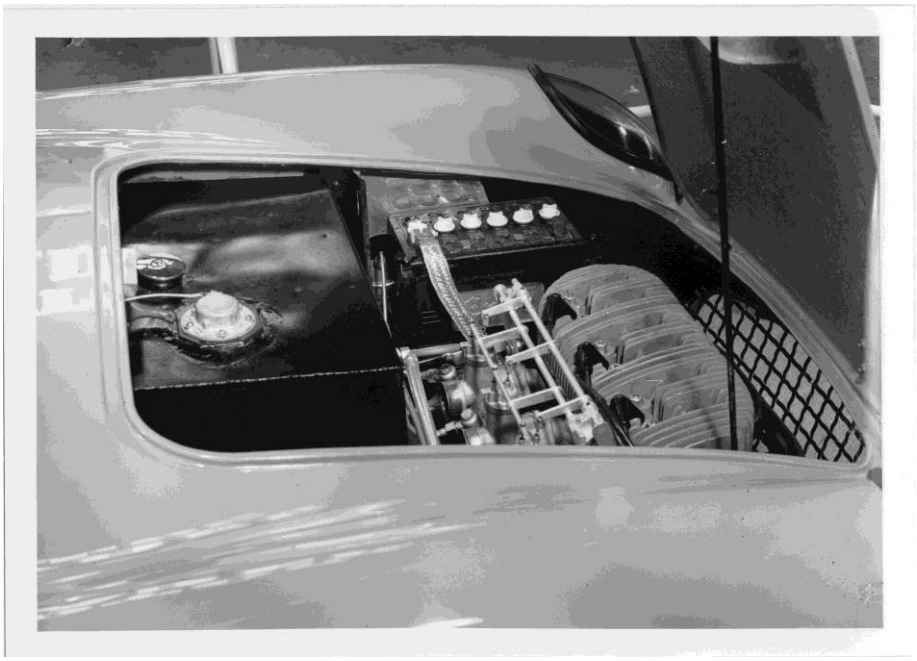
NOTE. SWF tandem, rat tail wipers same as used by Porsche
PMG hooded, indicators bezels
Wilmot Breedon push button, key locking door handle, as used by early Metropolitan. Not recessed in to the door now.
Early wheel trim covers and spinners that are extra deep because the early lug type wheel rims used flat nuts and required a three legged spider to hold the covers on.
Hard top positioned differently perhaps changed.

THE BERKELEY 492 cc DE LUXE COUPE STAND 116



The stop and tail lamps are PMG, Hooded bezels on the indicator lamps are PMG
Chrome surround for the permanent fixed to the door, and glass sliding windows.
Push button door handle, Passenger side has no key, it locks with a inside door handle
Wrap around plex glass for rear screen
Small clock in place of rev counter
Plush bench seat

THE BERKELEY 492 cc DE LUXE COUPE STAND 116



The engine bay, of the new 3 cylinder engined Berkeley. Clearly not that new.
See the over spray behind the tank and scrubbed up, alloy behind the battery.
Perhaps the first car to equip with an AC fuel pump by looks of the plumbing.
That will have been a requirement with three carb's fitted.
AC fuel tank sender unit, Petrol Gauge, Ammeter when these were requested it turned a standard car into a Deluxe
First engine had long cables to each carb; soon all triples had a gantry similar to this proto type one,

Colour was reported as the brightest Red you can imagine.

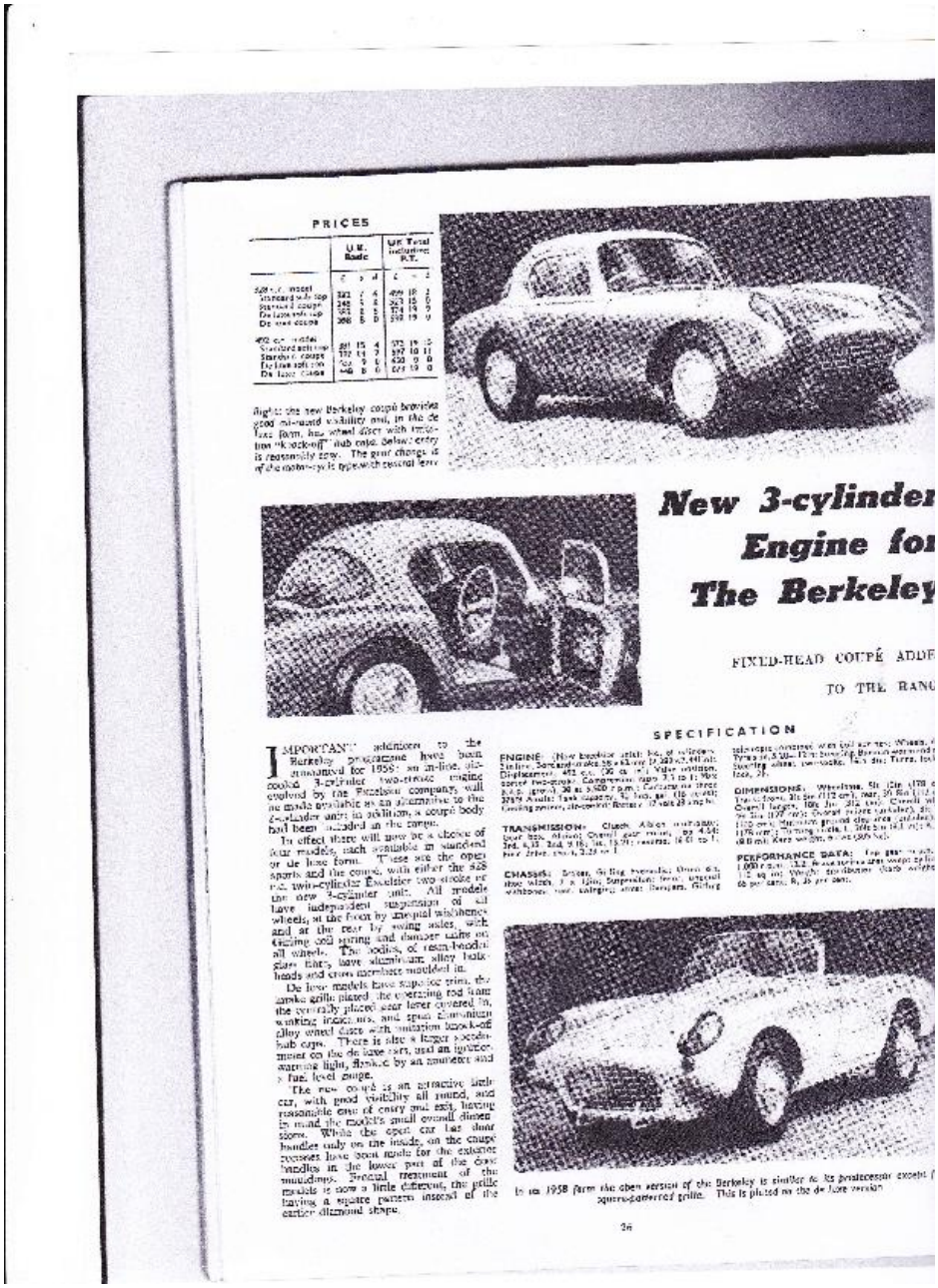
NOTE Very close to the available today Fiat 151 Old Monza red in Cellulose paint.

Price £448-8-0 plus £225-11-0 purchase tax

Although Berkeley advertised there cars as" **The worlds lowest priced sport cars"**.

Still expensive to buy.

Sales advert of the day clearly show a different style door, window, seat, and hard top fitment



PRICES

	U.K. Basic	UK Total including P.T.
	£ s d	£ s d
328 c.c. model		
Standard w/h/ top	382 7 4	499 18 2
Standard coupé	395 5 4	513 15 0
De luxe w/h/ top	451 5 4	574 14 9
De luxe coupé	468 5 0	592 19 9
492 c.c. model		
Standard w/h/ top	491 15 4	632 19 10
Standard coupé	510 14 7	657 10 11
De luxe w/h/ top	560 9 8	720 9 8
De luxe coupé	578 8 0	743 19 0

Right: the new Berkeley coupé provides good all-round visibility and, in the de luxe form, has wheel discs with chrome trim "knock-off" hub caps. Behind entry is reasonably easy. The gear change is of the centre-pivot type with central lever

New 3-cylinder Engine for The Berkeley

FIXED-HEAD COUPÉ ADDE TO THE RANG

SPECIFICATION

IMPORTANT additions to the Berkeley programme have been announced for 1958: an in-line, air-cooled 3-cylinder two-stroke engine developed by the Piccadilly company, will be made available as an alternative to the 2-cylinder unit; in addition, a coupé body had been included in the range.

In effect there will now be a choice of four models, each available in standard or de luxe form. These are the open sports and the coupé, with either the 328 c.c. twin-cylinder Excelsior two-stroke or the new 3-cylinder unit. All models have independent suspension of all wheels, at the front by coupled wishbones and at the rear by swing axles, with coaxial coil spring and damper units on all wheels. The bodies, of resin-bonded glass fibre, have aluminium alloy bulkheads and cross members moulded in.

De luxe models have superior trim, the sports grille plated, the operating rod from the centrally placed gear lever covered in, winking indicators, and sport Dunlop alloy wheel discs with imitation knock-off hub caps. There is also a larger specification on the de luxe cars, and an ignition warning light, flanked by an ammeter and a fuel level gauge.

The new coupé is an attractive little car, with good visibility all round, and reasonable use of entry and exit, having in mind the model's small overall dimensions. While the open car has door handles only on the inside, on the coupé recesses have been made for the exterior handles in the lower part of the door mouldings. Frontal treatment of the models is now a little different, the grille having a square pattern instead of the earlier diamond shape.

ENGINE: (Now bracketed with list of cylinders, Bore and stroke, 58 × 63 mm (= 328 c.c.), 68 cub. in.) Displacement, 492 c.c. (30 cu. in.) Valve position, sprint two-stroke. Compression ratio 7.1 to 1; 9.0 to 1. B.H.P. (gross) 36 at 5,500 r.p.m.; (nett) 30 at 5,500 r.p.m. Petrol: Tank capacity, 4½ gals. (18 litres). Cooling system, thermostat. Battery, 12 volt 28 amp/hr.

TRANSMISSION: Clutch, Albert multi-plate; four speed. Gearbox: Overall gear ratios, top 4.54; 3rd, 6.13; 2nd, 9.16; 1st, 13.91; reverse, 16.61 to 1. Rear drive, ratio, 9.33 to 1.

CHASSIS: Brakes, 6½ dia. hydraulic. Front axle, short stub axles. Track, 3 ft. 11½ in. Suspension: front, independent wishbones and coil springs; rear, swing axles.

DIMENSIONS: Wheelbase, 6ft. 10in. (178 cm.). Track: front, 3ft. 11½in. (112 cm.); rear, 3ft. 8in. (112 cm.). Overall length, 10ft. 3in. (312 cm.). Overall width, 5ft. 2in. (157 cm.). Overall height unladen, 3ft. 11½in. (120 cm.). Minimum ground clearance, unladen, 6½in. (16 cm.). Turning circle, 31ft. 6in. (9.6 metres). Weight, 8½ cwt. (430 kg.).

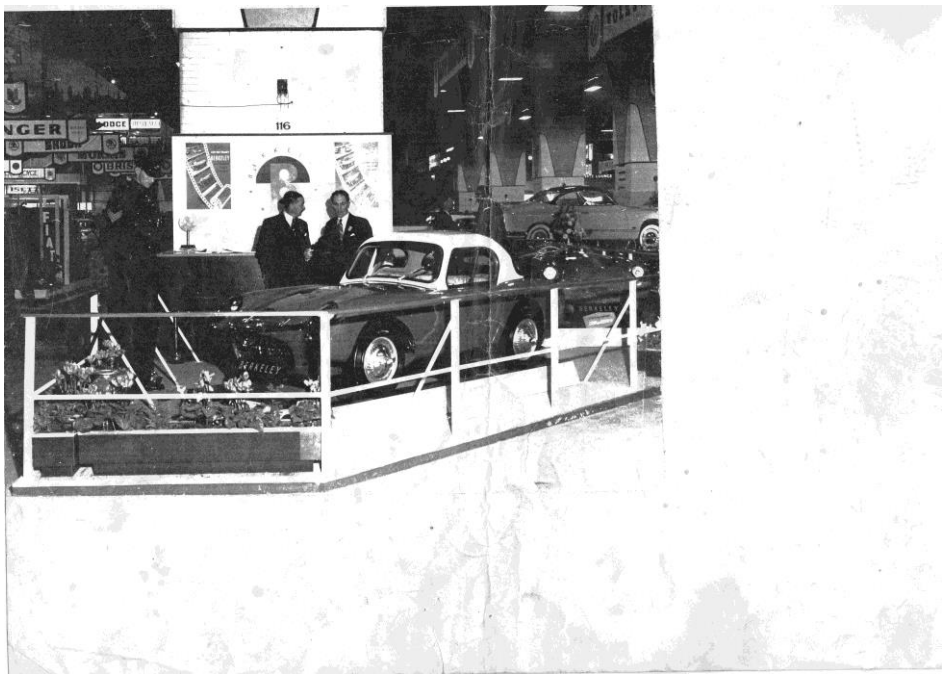
PERFORMANCE DATA: Top gear speeds in m.p.h. for engine speeds up to 1,000 r.p.m., 12.2. Acceleration from standing start, 0 to 30 m.p.h. in 5.2 sec. Weight per brake horse power, 23.9 lb. Petrol consumption, 45 m.p.g. at constant 30 m.p.h., 35 m.p.g. at constant 40 m.p.h., 30 m.p.g. at constant 50 m.p.h.

In the 1958 form the open version of the Berkeley is similar to its predecessor except for the square-patterned grille. This is fitted on the de luxe version

THE BERKELEY 492 cc DE LUXE COUPE STAND 116

The sales team consider their chances of winning best in show. Of filling the order book ,whilst looking on at the Coupe as it sat gleaming under the spot lights , in front of the crowds. --- Was just not to be.

The show gets under way.



The Coupe
SE 328 Chassis No 101 Engine No 105

The restoration started proper with setting the Coupe punt up in the shed on my long timbers , and started looking for bits to bolt back on, or in some cases remove.

The car was still very much together, strong and undamaged unlike earlier projects just some key parts were missing

No plans at all to repair anything, just finding homes for bits I had first and then to find the missing bits next.

The car has been many things as it morphed it way through its life and times time in the factory , as I suppose proto types do, from 328cc twin to 492cc triple from open car to closed car from rally or race car to a running test bed and last as a styling tool.

The biggest impact the car had I guess, will have been as the Coupe and probably the longest lived of its incarnations.

So that made the decision easy as it could have been restored to any of the other configurations.

One of the first things to be noticed was what appeared to be the remains of the cars rally or road testing days, we can only assume now what it actually did, but found still attached to the front end were head lamp brackets for 7 inch Lucas lamps, also know as export brackets, to meet with some USA state rules. And used in many of the know factory rally cars.

Then a map tray with factory Hardura lining is found fixed above the main parcel tray. A pointless fitting unless planning to carry lots of maps about with you.

In the back a tank with two fuel feed pipes in the bottom , and a near vertical fill pipe of much bigger size than normal diameter, This extra large capacity fuel tank is also a know part and used on rally cars.

This car at some time in its working life had been set up to ready to travel to remote or distant places, It never left the factory ownership, so all parts are factory originals.

The wear and tear commonly found on cars that have done considerable mileage was evident, around the door latch area, due to flexing. Even the alloy guide that the door engages into was broken on one side. So this was no factory mule , The comments about the state the engine had got in, reference a letter from MD C Panter to JG Watts race car driver, can only come about as a result of high mileage .
This car had seen plenty of action.

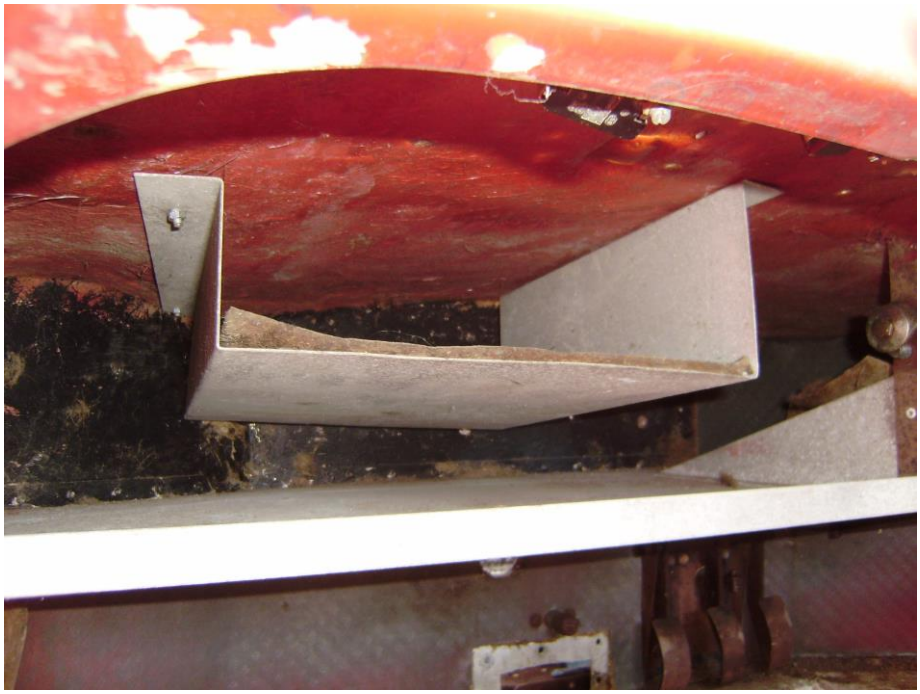
Coupe **Long range fuel tank**



Coupe 7 **inch Lucas lamp brackets**



Coupe **Under dash Map Tray**



Coupe Hole for H box



Coupe **H box hole cover**



The front end was found with a big hole cut into the front cross member with a nicely formed cover plate on the inside.

The engine bearer top hat section appear differently spaced , Yet the original holes in the cross member are there in place for a twin cylinder engine spacing as well, so that takes the car back to its first 328cc incarnation.

But why the big hole and wider spacing.

It became apparent from a letter from JG Watts to the MD. C Panter that turned up. JG Watts raced Berkeley's all his racing carer, he had written to the MD at some point in time asking if he could run a covered car at a particular race car event.

He was turned down and told, the only covered car they had, the Coupe , was currently up in Tysley , Birmingham with Albion having a new type transmission tested, and any way the engine was rough and they did not have time to fix it.

This was for a completely new H box, a conventional style H change gear box but one that incorporated a differential.

That's what the hole was for and why it the engine had to be spaced differently.

He went on to say did not want the public to see the gearbox as it was not going to be continued with anyway.

We think this was about the same time as Berkeley were planning to give up with the triple engine staying with twins , and in favour of the bigger 700cc Royal Enfield B95 . All this getting close to the end of the day for Berkeley.

Tales are told that the Coupe ended its days in the works, after being robbed of this gear box among other bits. I have since seen an H box in a car, not original to it, in a collection of cars kept outside Malvern; they said it was purchased at the works!

The last job this car did would seem to have been with for the styling department. Constantly changing models, there was always a drive to update cars. They had the Foursome, a bigger wider car and a range called Twosome was planned .The main difference would be the bonnet – the Foursome hinged open from the punt level. The bonnet incorporating the grill, allowing the engine to be serviced easier.
The two some was to have the same bonnet, but never got introduced.
They did however develop this car, it came with the modified Twosome front and bonnet.
First job planned for this restoration was for that to be corrected and put back to what would be standard.

Twosome Style Change



The Twosome Bonnet that never was



Some long time later, the front is back to standard form



With a better idea of what I was to restore work started to remove parts that had belonged to both the earlier and later incarnations of the car.
The guiding documentation now was the unpublished black and white photos of the Coupe at the London Motor show that Nigel Halliday had discovered.

They were key to ensuring I just put back the parts that were in keeping with that period.
And a good help in finding the missing bits.

Coupe Missing Bits

Too many to recall now, but one of the most unique parts was the doors and its locking mechanism.
Never seen before on any Berkeley before, a lock, handle and inner handle was missing and a guide was broken.

Door lock Mechanism



Inside door locking handle

Note Access slots to the COUPE fixed window frame.



The door locks anti rattle guide and gear rack in B post



External Push button door handle



It has been said I was often seen wandering around classic car, show grounds, with an old door handle in hand, looking along the lines of classic car doors, and often asking if I could have a look at a particular lock.
All a bit strange but when you don't have the answer; detective work is the only way.
Eventually I found the Chrome external handle was a Wilmot Breedon product and also used on the very early 1956 Metropolitan cars. The drivers side door handle locks with a key, the passenger side has no key but locks by mean's of the inside door opener.
Searching magazines and archives, visiting WBH the company that were once were Wilmot Breedon. I eventually found that the door end locking mechanism and the anti rattle guide and the gear rack, were the same as passenger rear door from a Wolsley 1500.

Malcolm Mc Kay sent me to one gentleman who restored old MG's and had a real Spitfire on the go as well, really , what a day that was, and he had remembered he had a pair of Wolseley door end locks , they are handed you know , up in his attic.

In the mean while I made a copy of the inside door opener that I had only to find the same bits turn up on E bay.
So that was sorted, in fact with that knowledge I was able to buy NEW external door handles from Ashwater Classics in Cornwall.

The home made inside door opener



Looking at the rear end of the car it was all in very good order and from its construction started life as an early did. Early cars rear ends had an aluminium cross member between it and the punt floor. Later cars the rear end is all GRP down to were it touched the punt floor.
It had also had an upgraded rear suspension later in life I guess, the empty fixing holes still left unpainted.
The Coupe did not have a rear tank.
This was just a simple task of refitting the A arms, shock absorbers and rear drums all else was good.

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Early rear end and punt



Nothing wrong in here



Rear A arm support pillar changed from two bolt fixing
A late modification



Interesting to find were all the marks left in the paint, these makes came about because the paint had not fully hardened when the parts were assembled and they left an imprint.

I clue perhaps to the “rush job” of completing modifications to meet the opening date of the London Motor Show.

Plus it confirmed the exact foot print the hard top gasket made. There for the hard top position was in no doubt when it came to fit it back on.

Hard Top, both on the rear and the front, the gasket lines were clear as you like to show where the hard top once sat.

Then another tale is told, it has been said it was removed when in the factory to go racing on another car, only to be destroyed when the car flipped over.

How true cannot say, but I do know, I don’t have a hard top, that’s for sure?

This followed with the imprint of the front indicator lights PMG; you could even see the diamond logo and parts number in reverse in the paint.

The soft paint also gives a clue to the Registration once carried by the car.
As across the back a series of marks first got us thinking, but then it was realised these were marks left from the individual digit rivet washers of the number plate.

Further measuring and research into the manufactures of number plates it was concluded these were 3 ½ inch and were BLUEMELS Piramoid plastic digits.
The specialist that was contacted advised the digits might have had two or three rivets, can be in different positions on them, but are spaced out according to a template. From a tracing given to them of all the marks they suggested those numbers and letters could have made RMJ 946

Hard top foot print in the paint



Hard top foot print in the paint on the rear end



Rear oval PMG and tiny circle holes of number plate rivet washers



Rear oval PMG and tiny circle holes of number plate rivet washers



Turning back to the front end some parts had been cut, I suppose this was when the H Box was tested, as it was going back to a standard gearbox that would need a TR 4 speeder engine cradle to be period correct, the top tray and top suspension cross member where copied and new ones made.

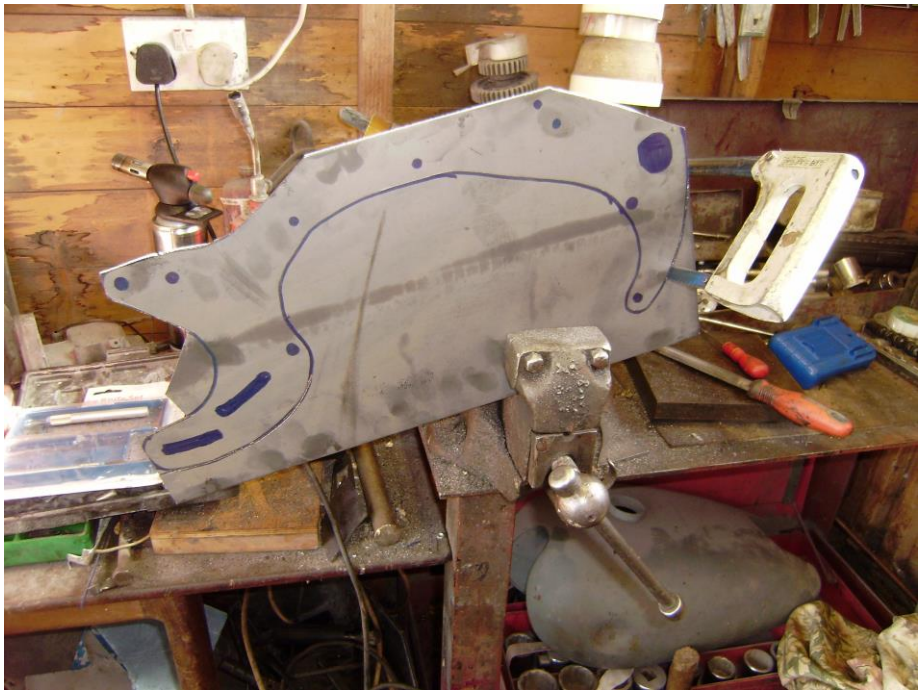
I swapped parts with Geoff Toyer to get hold of a rare TR triple engine cradle .these are so very rare.

I decided not to use it but to make an exact replica and keep the other for pattern.

The new bits made by copying the old cut and split originals



Engine Plates in my trusty old vice
Waiting the hacksaw blade to cool down



The patchwork of holes and old repairs in the punt floor did make me think this had been changed and changed again. Even perhaps as far back as Anzani.



It was soon evident that this had been used as 328 and H box and 492 by following the lines of engine bearer holes and matching then up.

Note the early 492 set up was made by using an out rigger top hat section.

Unlike all the others this Dynastart end bearer did not extend to the ally front cross member but terminated under the lower suspension tray.



This is when I learned that Lower suspension trays are not all the same.

Collection Lower Suspension Trays
T60 RE Coupe T60 aligned differently

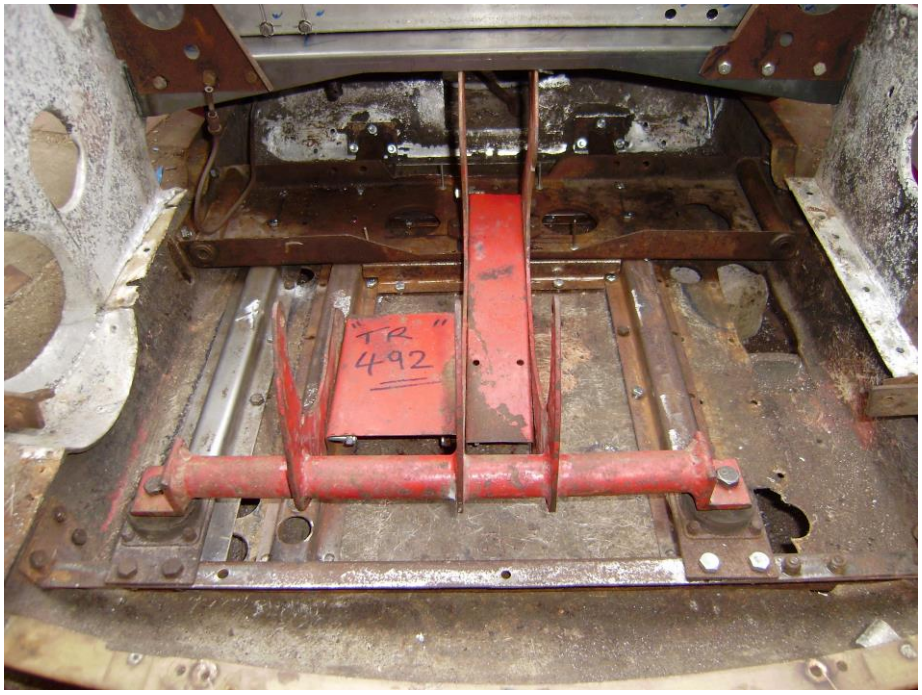


Nothing New is there.

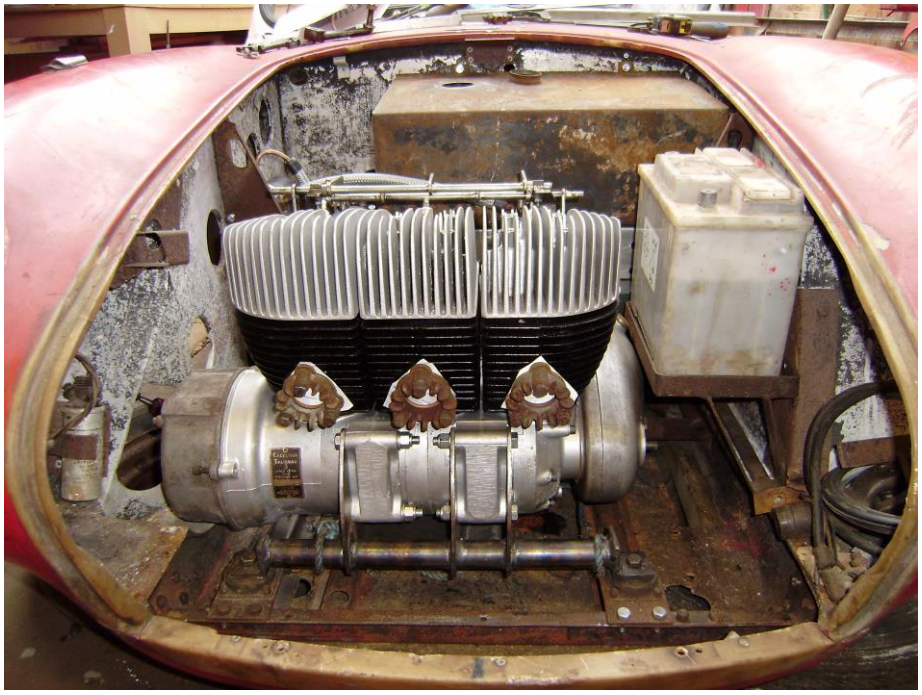
Lower suspension tray, “Stiffener Mod “of old Factory made.



With all that sorted out was possible to fit the engine cradle, onto the top hat bearers on the suspension
Note the NEW outrigger



Then the engine is test fitted in



Engine Bay

The front mounted fuel tanks have subtle differences in shape, perhaps there are three variants, but I had just a rear tank and that was far too big.
I found the two original fixing holes in the bulk head matched a T60 Tank spacing and one would fit in, so a good one of those was chased down.
By looking at the black and white photos .I copied the AC tank sender and hexagonal boss fitting and got it welded on. The sender was another thing that had to be made shorter; the one I found might have been for the military.

A steering box I had previously cleaned up to use was fitted, only to find my knuckles would hit the switch's on the dash as you turned the steering wheel.
Some thing really had gone wrong here I thought, until in my piles of bits I had accumulated from Julian Edwards I steering column nearly 2 inch longer turned up.

I had just discovered early cars with out the step in the bulkhead have to have longer steering column .when we all thought them to be the same.

T60 tank and photo used as a guide to how it was.



Whoops to short!



The missing Hard Top, Rear Screen, Front screen and side windows

This section is not one for the feint hearted.

This had to be a totally imagined, well perhaps guided really, by those black and white Motor Show photos.

Nothing apart from the foot print, front and back of the hard top and the side screen angle, tip in was known.

The doors had a flat land upon which the side screen frame would have sat on so a good datum to work off.

Dropping a standard T60 Hard top on was not going to work, it did not match the original foot print left in the paint across the front at all, much too big, the window apertures were the wrong shape. It was too wide over the side windows, It was not much better around the rear end, all too big, and it did not have a curved bulbous wrap around rear screen.

A separate T60 grp windscreen surround was tried on across the front, this was not correct, it was flat bottom, where it should fit down in the gulleys of the wing. But it was overall narrower over the top,
When the tip in, of the side windows was mocked up with a ½ chip board window, the top of it would almost marry up to the separate grp windscreen surround.
So that's a positive start I thought.

Not wishing to try and scratch build a completely new hard top by making a mould, As it was a proto type no one else will ever need one , so I decided to adapt what I had available using part of the T60 hard top and part of the separate T60 grp surround.
I had a T60 grp surround glass and fitted it in to make sure it kept its shape, I was going to be cutting it about and did not want it to be floppy, was easier to handle anyway

Adapting existing GRP , This was one thing Berkeley did very well as I was to find out when the paint came off the body.

I had the side window tip in sort of sorted , door tops and photo's giving me that confirmation , now for the lean back, The T60 separate grp windscreen surround seemed to lay back at a different angle to the T60 full hard top , so a compromise was needed .
Just by eye and the black and white photos as a guide, I cut a side widow frame to shape, and then used a wedge to jack up the T60 separate grp surround to make both look the same as in the photos. Not really sure what angle it ended up with, but it looked ok, so all good.

Next was to split the hard top to make it narrower, to meet the window tops, and the separate grp windscreen surround, three full length gussets were sawn out of it, wide at the front to next to nothing at the back
The splits drilled with lots of small holes that steel tying wire was put into, and was slowly laced up; pulling it to a shape that would roughly match the separate grp windscreen surround at the top.
Later I used flat steel strips across the gussets to flatten out some of the thee penny bit shape it now wanted to form.
To make the rear end shorter and narrower I split it in two places ,equal amounts of gpr removed each side , and laced it back together the same way as I did to the top .
The back end could now be made to conform to the original foot print.

Then it was time to chop the T60 front windscreen area out of the old hard top off completely and start to align the narrowed top to the separate grp surround.
I used all means available to hold the shape, clamps, screws, plates, wire. Even timber blocking down from the shed roof, anything that worked really.

All a bit of a nightmare but eventually a new shape began to appear.

In between the wire stitching, clamping. Blocking and when I thought the shape was as I wanted, I ground out a short section and permanently fixed that gap with grp resin and mat. So much grinding , such a mess , after all I had to grind out to find good clean grp to make a new joint , and once that had set, grind partly back in to it again to the next section, and after that go inside, under neath and grind through into the new clean grp yet a gaing before more resin and mat repairs

Could say to get the shape and make it strong was all a bit of a grind.

I often wondered how professionals would do this, nothing like me I am sure, but I am getting there.

Still lots more work needed in reproducing the side window frame rear curve shape , into the hard top aperture , this required laying up more resin and mat , this time against a thin sheet of alloy cut to make the shape , once one layer of mat had set it can be made stronger with additional layers of mat,

With the side widow aperture shape sorted, consideration to the construction of the pocket that the window fits into and up against when it's closed.

This results in more mat and resin being used, this time over a much thicker window template.

I had the rough shape now, and could go about the hard tops footprint, grinding off and adding grp mat until the complete hard top flange followed the curves and valleys of the body shape.
I think I sat it on some 1/8 thick rubber strip and then bolted it down. Later I was to create another grp flange inside and all around it, to conceal that rubber strips edge.

It was a deluxe after all.

The finish profile was achieved with a hand file, well a sort of double handed file.
I made from an old table leg three foot long 3 inch square, with course P90 grit paper nailed to it

The hard top shape was still a bit like a three penny bit so by cutting off the ridges it would flatten down , but also get thin , that I corrected by adding more resin and mat to the underside
What a performance, as the shape improved some grp impregnated filler was finally used to fill the low spots, and my file came into use again carving out the desired shape.
This took weeks and so much effort.
May be I should have made a new mould and just cast a new hard top , but that new mould would have been just as bad to make , so I kept telling myself as I soldered on.

This to be confirmed when I had to later make a mould of the inside shape of the hard top. The only method of reproducing the bulbous curved wrap around rear window was by a process called Drape Moulding, When Perspex like material is heated in a huge oven and draped over a male mould to make the desired shape.

Lean back of a T60 separate grp windscreen surround.



Tip In
There is different between a T60 Hard Top and a T60 separate grp surround

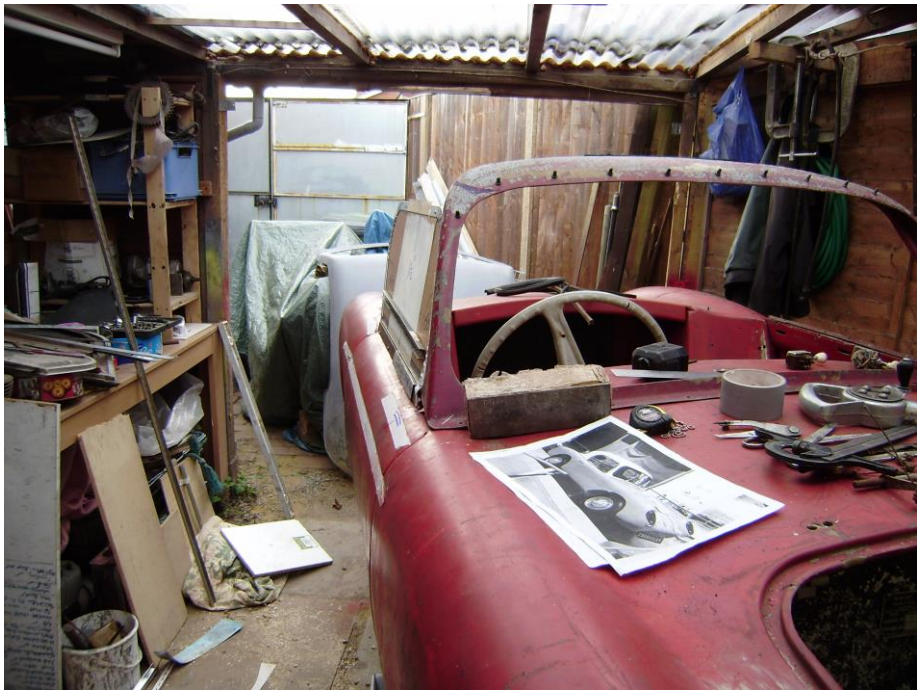


Coming together of a gusseted T60 hard top and T60 separate grp surround



Side window shape template with Windscreen Tip In and Lean back set

Note the photo used a guide.



Side window shape template with Windscreen Tip In and Lean back set



This is a Stitch up,
Setting the roof profile with steel wire ties as grp resin and mat set



The rear end cut and joined, it now follows the original foot print



Just a bit more of the old T60 hard top grp roof to cut out.



Making it take it
Using timber blocking coming off the shed roof and curved metal and clamps
Don't look,
But that's a brass chrome wind screen, lower section being put to another use.



It’s getting closer to the shape now. But is still not a pretty site.



Overhang and gap being corrected



First mock up of how the metal frame window will fit on the door And how the glass is to be shaped to allow it to slide in the frame.



The Coupe side windows were again unlike any other, they were built onto the door as a permanent fixture, they were made with a wide chrome plated frame with sliding glass and a window lock.

The method of fixing these windows was obvious from the holes and slots in the door and by looking again at the black and white photos.

I set about replicating these following the design of the standard brass chrome windscreens, in so much as the top part is separate from the bottom rail and joined by cast brass angle and screws, in this case I used steel.

Two or three attempts were made before I finally got the construction method sorted in my head and were able then to fabricate the required profile from steel sheet cut bent and silver soldered together.

Window shape template and steel to start making the wide edge frame.



Cutting out the rim



After some filing it looks better



Out side Edge brazed on inside edge still to be cut out, filed and brazed on



Brackets to allow top and bottom to be parted for installing sliding glass in later.



Test fit on to the door- access to bolts via the slots, all later covered with trim



It’s on the door, See raised outside edge. Inside U shape frame room enough for double window rubber channel to press in.



The various brackets to join top with bottom frame



Completed ready to start polishing for Chrome plate



Installed for the first time



And the other side with Perspex sliding glass in



Ready to Chrome plate



This template was made to knock up the alloy gutter from sheet alloy.



Later I moved on to the rear wrap around rear window.

A major source of worry, just how can I do this?

Following hours spent just looking. Much as I did when trying to get the hard top profile, it had to look, just like the illustrations looked.

Near enough for this one, was not an option

Drawing lines, sticking paper templates on, checking proportions from photos any thing to help, I eventually found what I thought to be an out line that resembled the size and shape the original actually was.

A coat of white paint and with that shape reproduced with a clear line, for weeks after I would go to the shed and just look at it from every angle.

The next job was going to be expensive, something I could not do at home.
Drape Moulding so had to be correct first time.

Drape Moulding.

George at White Ellerton in London almost on top of the Pinewood film studios Was the man , to do this , a visit and a chat later I was back home creating a mould from the inside rear looking out of the “new” hardtop shell shape , now with the rear wrap around window shape cut out.

For them to develop a mould would cost many hundreds of pounds, so the only option for me was to do it my self.

Reproduced on to a stiff timber frame that could be held in a vice the double curve shape was perfected and polished , was not easy and it took ages, the finish had to be perfect, no dinks or depressions , all will show up in the glass that will be cast on to it.

Finally the outside shape was marked on. This needed to be done clearly; they will use that line to cut the plastic screen when still soft, so has to be correct.

With that made and polished I took it to back to them in London.

The place is a jumble, full of plastic film props, it is where these days they make there money, only occasionally do they bother to make car screens.

They much prefer Spitfire canopies, like the one he had just made. Amazing work.

Lots of money later, I travelled back to London to collect a perfectly formed and cut out 3mm thick rear wrap around double curve rear screen, Wonderful work.

A true Black Art, I asked lots of questions but got absolutely nothing back.

Not that I could copy anything or do them out of any work , our oven is not big enough to hang up to 12 foot long sheets of clear plastic, nor do I have the vast array of moulds and formers.

NEW Drape moulded, Rear screen is made and fitted.



THE BODY

The body was solid on the punt front and rear and little needed repairing , apart from all the damage from being dragged about over the recent months , the rear , the wings, the doors , the hinges , the head light holes , all the normal places needed gel crack repair , or attention around the door catches from flexing we all experience.

It was obvious that this car had seen plenty of action even in its factory ownership.

With the removal of doors, under the back side one of the door stops, the paint was like new, unseen since the day it was fitted and shielded from any light, just one coat, so had to be factory paint. A few days later this sample had been analysed by a leading paint supplier and I had ordered several litres of paint, only for the Courier to drop it some where, he got more than a RED face I guess.

More paint arrived.
Fiat 151 Old Monza Red, this in Cellulose was the colour I will use.

Stripping off old paint, as easy as was not the normal six or seven coats, the extent of the body modifications made by the factory became apparent.

B post work, to fit the changed door catches,

Cill, added,

A post converting to internal hinges or from slant door to straight door.

Dash altered full width , not sure if this made it longer inside the cabin or what , Had all the holes for the early 328 Perelli single spin seat.

But also holes for the later bench seat as seen in the London Motor Show photos.

Even the Head lamp apertures had been altered from the early car position and were moved further down the body. All perfectly done,

A post and Dash factory worked



Wiper mounds removed, now has through the screen type holes factory work

,/

A post Internal hinges, Slant door to straight door factory work



B post. Factory work. Note Hood stick holes not needed with hard top or Coupe



Head Light aperture lowered in the body. Factory Work
White converts car back to Coupe shape from the as found Twosome style.
My work.



Finally it’s out side.

Coupe out side with body work just about sorted

Sliding windows,
Brakes
Lights
Export wiring and indicators.
Red indicators were period so still legal in UK

Ready to go – but first paint.

First time on wheels since 1961



During the restoration work I was still attempting to prove how the factory wired the car and how in particular it wired the Ammeter,
This came about as 90 % of the loom was still with the Coupe and differed to what all other diagrams illustrated. This had a separate pair of wires out side the main loom feeding the Ammeter.

Gary Storrs in the USA had been beavering away at the workings of the Berkeley wiring loom for some time and had all the answers with a brilliant written description and wiring diagrams, colour charts, terminals type lengths and terminations in a publication a while back. He put it all on the Berkeley Car Yahoo pages.

Sure he won't mind me including some of his words along with mine in a mail I sent to the Berkeley Enthusiast Club.
See Copy

Wiring a Berkeley Ammeter,

I found in the Coupe body shell (Restoration under way) most of the cars original wiring, I was intrigued to find wires for connecting an Ammeter had been included..

Although by now the wires were burnt- shorted- rotten it was all there to be seen.

The Berkeley electrics, the Siba dynastart and Siba regulator is of such a design we are told, that with the standard wiring is not possible for an Ammeter function correctly.

Dave Perrin, Technical Editor, can explain why - it's to complicated for me.

Several articles and diagrams exist that enable owners to get past this supposedly design short coming, by adding solenoids and or rewiring.

This however that is an aftermarket modification. It was not wired that way back in the day at the factory.

I have seen lots of cars fitted with Ammeters, but seen none with the original factory wiring.

I have seen Ammeters in photos at the factory and in brochures and publications, so can be quite sure they did fit them.

I understand most exported cars went out with Ammeters fitted from the factory.

So just what did they do at the factory? How were the cars wired?

As the Coupe had never been out of factory ownership - and the wiring with in it was mostly still in place, I decided to try to find the answer...

Findings from the Coupe Wiring Loom

The Ammeter Black and Red wires with small ring terminals were found coming out the loom, where expected, under the dash.

At the other end in the engine bay, near the Dynastart where other wires split out of the loom -The Red and Black ammeter wires had bullet snap connectors.

So where were these wires connected to?

Most cars, over the years have had wiring modifications carried out to them -all that I have seen so far, none were original -- I failed to find an original UK example.

Then I thought to put the question to those overseas, who may own a genuine factory export car.

Member Garry Storrs in USA came back with findings found on two of his cars .Early SE492 (70) and SE492 (101) both factory exported cars.

Both are under restoration.

He tells me,

Ammeters were definitely installed on US cars.

The wiring loom on both cars have the same factory wires for the Ammeter built in , the Red and Black attach to the Ammeter with small ring terminals.

From there they go directly through the main loom and exit with other wires leading to the Siba Dynastart and Regulator.

The Red and Black ammeter wires have bullet snap connectors.

The Dynastart has three Black wires coming out its housing, Thin. Medium and Thick.

The Medium black connects via a bullet snap connector to the Red Ammeter wire.

The other two black Dynastart wires have Fork end terminals that attach to the Siba Regulator, Thin Black to DF terminal Thick Black to A terminal.

The remaining Black wire from the Ammeter connects to the Siba Regulator 61/D+ terminal.

The two Export car examples and the factory Coupe example I think now confirms how the factory actually did it.

This is how the Coupe will be wired.

Will this wiring arrangement produced an Ammeter reading showing both positive and negative charge? I doubt, but will see once I have the car running.

I think that arrangement will have the Ammeter reading in one direction only,

i.e. Might show a charge but not a discharge.

What ever, that's how they did it back then.

Note-- We all know of Lucas Electrics "The Prince of Darkness" he invented the three positions Lucas switch – Dim, Flicker and off.

The other three switch settings were, smoke, smoulder and ignite.

SIBA Electric wires and components are all stuffed full, with Magic Smoke .The trick when touching anything electrical on a Berkeley is not to let any of the smoke out.

If you do, then it might never work again. So don't blame me, you have been told.

Photos can be found at Berkeley USA Yahoo site. Gary Storrs- 9th March 2012

Thanks Garry.

Coupe Ammeter Wiring



Coupe wiring loom worked out after being nailed on to the shed end.



The fitting of everything else was straight forward; unusually the dash had a small clock when a rev counter might have been a better deluxe option.

The bench seat from looking at the photos was a much plusher and plump item. Most are thin and skinny.

Soon the car was complete with all its systems working, the PMG oval lamps were a hard find, the hooded bezels for the PMG indicators impossible finds so I made them.

Wheel trims were made especially as they are an older type to that available today.

The car has been running for some time now with the small Siba points.

We understand, perhaps this was the first triple engined car to be shown. The first to use of a Fuel Pump and the first to be fitted with Fuel tank sender and a fuel gauge

It has a rather noisy sound as it has a three into one system with a tiny silencer.

It has a new TR Gear Box , a very lucky find from a company who specialised in clearance purchases of failed motor dealers , must be new old stock , they had no idea what it fitted.
Since fitting that I have learned I need to change the quadrant and linkage, we had thought all to be the same but the TR set linkage up is not the same as the later VR. Some thing for a warm sunny week end.

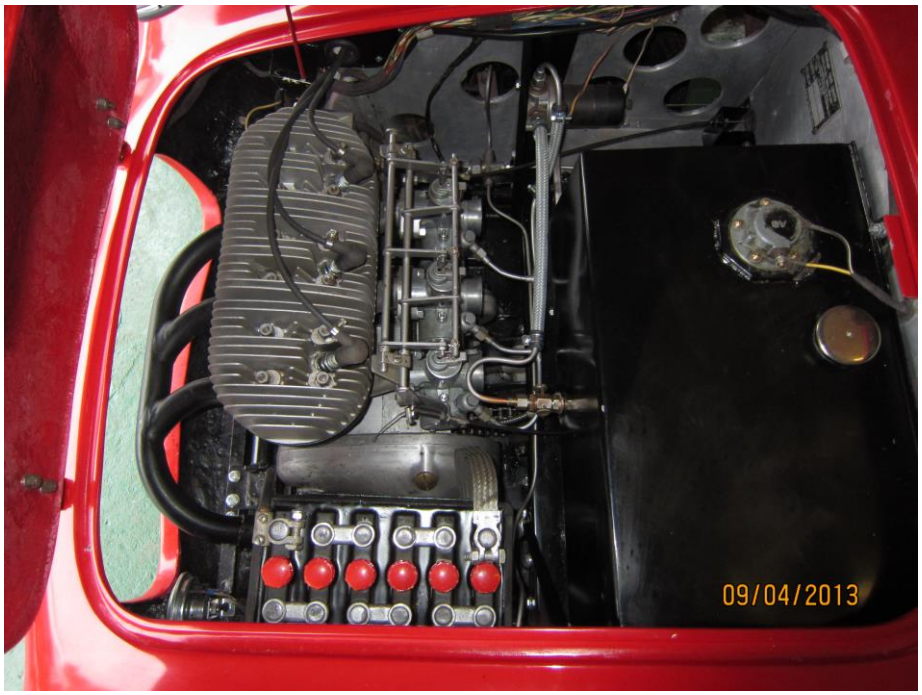
Inside the Coupe



Outside the Coupe



Coupe Engine Bay



Coupe RMJ 946 Lives – well still trying to get the Number from DVLA
Years now and counting.



The Coupe outside

We have done many rallies, many events, photo shoots,
Been in the press, but still to be proven at a Hill Climb or race track.

Roll on getting a registration document.

The Coupe outside.



Just another picture, sort of pleased with this one.