This document was compiled by Peter Cook

Berkeley 328, 4 wheeler, Micro Sports Car

It was back in the 60's, a lad of 8 years old, I used to see this little dark green sports car at the end of the road from where I lived. The guy would drive it like a bat out of hell! Plus he seemed a bit of an eccentric. The micro size and sound was something that I will always remember.

Now 40 odd years later I was in America and came across the car again, with some surprise of the following, upon returning I looked up what was happening here in the UK with these cars.

The car in question was a Berkeley 328, 4 wheeler, you do not see many articles about them and there is not that much on the book front either.

The BEC UK club was found and I became a member, they do a very good little bi monthly and there members are very helpful, with a wealth of knowledge and enthusiasm.

So my task was to find one.

I decided to go for a car that required a full restoration, being that there are not that may around, I was able get in touch with Andy Carter from the twin engine Mini fame, who is a bit of a specialist re the micro car market.

He located a couple for me, one a complete car the other a basket of bits and that was an understatement.

With much deliberation with my father, we chose the basket case, as felt that was the way to go, as from the American trip the car that I wanted to replicate was a racing version of which a photo captured what the end result was to be. (See photo)



This is the story of the cradle-to-grave entire restoration of the car.

The restoration was to take place at my father's home, who had spare space capacity in his garage. He fortunately is an engineer retired from the automotive design industry.

Trained in the RAF, of which has been a god send whilst I am working he researched and worked on the project over the next 3 years.

Delivery was made, Andy brought the basket of bits and body parts of which we proceeded to lay out on my garage floor and start the task of tagging every item, identifying what was re usable, restorable and the parts that required complete replacement. (See photos)







Parts were sent off to the soda blaster and then refurbished and powder coated. Parts that required complete replacement were drawn up and remanufactured, that included the whole of the aluminium bulkheads to the floor pan, I had these made by an aluminium fabrication specialist.

Whilst awaiting for parts to return, we then set about resourcing the replacement of new parts. This was achieved through the BEC Club, American Berkeley enthusiasts and our own suppliers. (See photos)



Work started with a full clean up of the floor pan (punt) and body parts, then paint stripping and glass fibre repairs readying for the paint sprayer.

Colour was chosen (Porsche Blue)

Floor pan returned and now the rebuild process began. (See photo)





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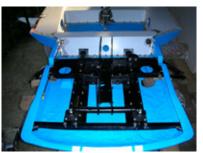




All fixings ie: nuts bolts washers were to be new.

The new rear wishbone cradle, cross members, front cross members, engine cradle, front wish bones, steering assemblies, brake pipes, brake cable, rear wire loom, fuel pipe and aluminium bulkheads fitted. (See photos)











The next task was to rebuild all the wheel drums and braking components which were all new parts. Hand brake mechanism was rebuilt and fitted.

All bearings and nilocks replaced including wheel drum studs replaced.

Floor pan now complete photographed for records and future book publication. (See photos)







It was decided to install a rear petrol tank, which was manufactured in aluminium drawing pattern taken from an original from Dave Perrin. (See Photos)





For the body work assembly it was dry fitted several times before going to the sprayers. The rear body was to be fitted first.

Rear body assembly took place by fitting the petrol tank shock absorber mounts first. Front body was fitted with pedal box than fitted and all bolted down with a rubber seal between the body and the floor pan to take up any discrepancies.

New Hogan shocks fitted, transmission rebuilt and fitted all including connecting up the front brake pipes, wire loom, fuel pump, battery housing, steering, front wheel assemblies and wheels with new tyres. (See photos)



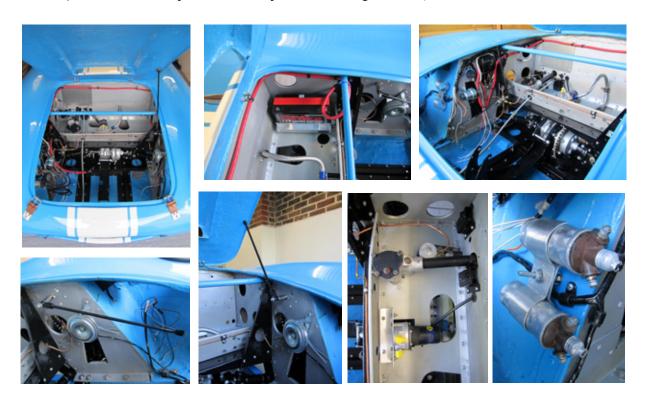
Doors rebuilt with new hinges, locks, wood trims and leather restraint straps. (See photos)



Rear seat cover rebuilt with cross brace strengthening bars and new locks fitted. (See photos)



All was plumbed in all ready to receive 2 cylinder, 328 engine. (See photos)



The engine that came with the car was completely dismantled ready for restoration, when by chance a freshly rebuilt engine became available through Phil Turner of Berkeley car fame.

The engine is a completely restored unit, rebuilt by Talisman enthusiast Chris Ellison late-type motorcycle primary drive case. Single carb, VR gearbox, new clutch, new bearings, seals, and gaskets throughout. Bare metal parts replated. Engine is freshly rebored and has the Nametab caged needle roller big-end crankshaft conversion.

(See photos)







Differential completely restored and rebuilt with modified weep caps added:







Racing fly screen, mirrors, lights, bonnet, new seat, dash board, fire extinguisher, rear seat cover and doors were then fitted, all including door and body trims and rubber mats.

As it was decided to be a copy of a racing version, bumpers road windscreen hood were not fitted.

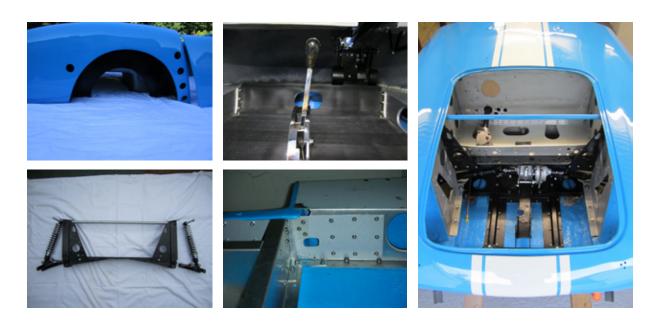
(See photos)







The only modifications made were all taken from factory mods, body ventilation holes, engine /transmission strengthen tray, rear fuel tank, torsion bar and front shock absorber housing version from 492. (See photos)



Our own modifications: small amount of floor pan bulkhead strengthening, footwell rubber mats no carpets, dash instrument panel and bonnet straps instead of lock.

Decals applied and a concourse clean made. (See photos)





Now looking forward to showing for summer 2013.

It has been an enjoyable, sometimes frustrating and rewarding journey.

What next, a Porsche 912 SWB, same again basket of bits!



