The Berkeley B105 WJN 896



This is what Jackie saw when I told her I have just bought a new car!
The rear end and lots of boxes and buckets of bits were still out by the hired van.

B105 rises again, from BEC 2005 publication.

Following on from me completing a total rebuild of a T60 for Jackie, on my Strawberry Patch I had chance to think about constructing a proper wooden shed or workshop.
To preserve the T60 from getting knocked about whilst this was going on I took an opportunity offered to me to put the car on show at the Bubble Car Museum with Mike and Paula Cooper for a while. It is now among lots of other small cars and seemed quite happy last time I called in. They have an excellent display of cars with always something new just arrived.

However things never go as planned, only a week after we had delivered it and with only the new shed foundation trench dug, I came across an advert for B105 WJN 896. Needless to say I bought it and without much consideration of the how and where!!

There is something about owning a tiny car, so light and with a promise of 105 mph, well; you just have to have one, don't you!

So back in November 2004 I took delivery of my own B105. Or rather several large parts and many boxes, a suitcases, buckets and bags of assorted Royal Enfield and Berkeley parts. I ended up with six wheels four doors 2 two bucket seats and two sets of rear swing axles, it almost filled up a Ford Transit van.
Put together that would make a strange beast I thought.
Everything, just everything that could be unbolted or unscrewed had been taken apart.
The good parts I stored in and around the house to keep dry. And the rest under tarpaulin outside.
I continued to build the new shed, now with more difficulty as I had even less room to work in.
When advertised it was said to be 90% complete, but as I started to get things sorted out, it became obvious which 10% was missing, that was all the difficult to find bits.
I found I thought the very rare starter motor, but it belonged to a MG Midget
It was not the very rare reverse rotation type fitted to Berkeley B95 or B105.
The dynamo was also from a Midget with rev counter drive on it.
The TT carburettor was missing; the engine had a magneto and not a distributor. It proved to be an early Super Meteor and not the Constellation engine shown in the log book. The clutch was the smaller B95 Type, half the AC Speedo was missing, it was also in bits. The Icknield rev counter was missing, switches missing, gauges missing and the list goes on.
Never believe what you are told, only when you see the car all bolted together is it really all there.
BEC helped me track down some former owners names; I thought I would try to find out who took it all apart.
The chap I got it from purchased it in bits himself, as a project a little over twenty years ago, after two or three house moves and a time spent in storage when he was working overseas, he still had not got around to starting on it.
Then I found the chap he purchased it from, he also got it in bits and had to sell on before he could start on it.
This takes it back more than twenty five years of being in bits , moved , stored and sold, no wonder bits are missing I thought.
I wrote to all the former owners I could find and got a reply back from most.
I had one reply in particular, a previous owner from South end who owned it in 1969. Mr BL Carter was still living at the same address. I was going to be in the area so arranged to call in and see him. He was very poorly but did seem to enjoy talking about the cars he had had, amazingly after all this time he still had one Berkeley spare part left in his garage. It was a flywheel and starter ring from the B105.
The flywheel and ring gear was in very good order only the duplex chain sprocket had lost some teeth. I just had to buy it from him.
This is now back on the car it came from.
Over time he had owned several Berkeley's, both three and four wheelers, His favourite was the B95, much softer to drive than the B105 which he said was very harsh.
Then he went on to tell me about a journey from Southend into London in the B105 with a failing clutch, in heavy traffic and getting lost, an unforgettable bad journey it seemed.

He recalled that he swapped the car a short while after that bad journey, for a twelve bore shot gun. It went to a surgeon he thought, who got the car for his wife to drive.

That said I never did find out who took it all to bits in the first place.

For the past eleven months almost every evening and most weekends have been taken up with B105 parts research, or rebuilding.

My plan to find all the missing pieces and bolt every thing together, and try to make it all operate and run before starting the refurbishment proper with the painting and chrome.
It did get to its first rally when I trailored it to John Lee's Copt Oak rally, last July.
It did look a sorry state among the other cars, all of them perfect and shiny.

Before I could even begin to think of giving it shiny bodywork there was going to be a lot of "plastic surgery "GRP work to be done. The bonnet needed some reconstruction where the lower section had been torn off in an accident at some time and poorly stuck back on. I reinstated the dash board back to standard; it had been cut and drilled to fit every conceivable type of gauge, dial and clock. I repaired all the body flanges and bolted the body parts back together, having replaced the steel reinforcing plates in the chassis. The doors had been torn out of the body at sometime, leaving nothing to bolt the door hinges to, so hinge points on the body needed repairs as did the splits in the doors themselves.
Apart from repairs to the GRP there was a lot more refurbishment still to be done. From drawings and pictures I copied the bonnet hinges and bonnet stays, made a bench seat frame and rebuilt the exhaust system. I made the back plates and wing nuts for the slot in side windows, converted a Amal 376 Monoblock carburettor to have a in dash pull-on choke, converted the magneto electrics to distributor, fitted the engine with rev counter drive, fitted a through the screen wiper motor system and repaired the original wiring loom, taking everything possible to its original form.
The engine cases were badly damaged as well as was the primary chain case, almost all the threads were stripped but managed to repair them with Lumiweld.The engine was rebuilt with new bearings and studs The heads were in a shocking state and needed new valves and guides, the correct rotation dynamo and starter motor were built up from parts. I even found some original new old stock 520 x 12 tyres
Apart from a Berkeley Icknield rev counter a five stud AC fuel tank sender and a soft top I think I have now found or replaced all the missing bits. I still have to complete the boot lid; I am making this as I have been unable to find an original one.
I also need to finish off the front grill which was badly damaged.
But all the work has paid off, its alive, Almost eleven months to the day it arrived in bits I got it fired up and running, plenty of smoke and oil leaks but it goes, Lights indicators charging, all working-, it still looks a total wreck but it fires up at first touch .
So I finally can start on the restoration proper now.
GH

Following on from my last report when I said I have found most of the bits and had roughly assembled the car.

I have now found a AC fuel tank float and sender unit - this had to have major surgery to get it to fit inside the B105 fuel tank, I had to cut nearly two inches of the length of it and weld it back together ,
It was that long, I forgot AC were not just supplying to Berkeley Car factory, who knows what this originally fitted.
After the "operation" I spent several hours of fiddling I have managed to work out how to wire it in to make it work with the AC fuel Gauge that I have.

Importantly it reads "empty" when the float is fully down and "full" when the float is fully up - Not very accurate in the middle I guess --but pleased it worked at all.

The car still looks like a shell - but its back on its wheels - and now it is all yellow --I still have got perhaps a couple more of coats of cellulose paint to spray on, to get an acceptable gloss.
I've painted it in the new BMW "Mini "yellow. The paint is, as close a match to the yellow paint originally found on the car as I could find.

All efforts to paint just the car and not everything else in the shed, has failed miserable!
Every thing, just everything, tools - spares - the lot, has all gone yellow.

I have as much paint everywhere else, as I do on the car. Dust sheets made little difference it seems. Oh the joys of doing it yourself!

Talking to Ray Bell, he said Yellow does sound a nice colour to paint your Garage, but you will never be able to find the car of course. !! It had reminded him of one of those old jokes.

Why did the elephant paint its feet yellow?
So it could hide upside down in a bowl of custard...!!

I made and have started to stick the vinyl on the door panels and parcel tray trim - Now in Black-- The trim was a light brown - tan colour originally - The seat cover I guess was also Tan, one day when I get to cover my new seat frame it will also go Black, I looked everywhere to find a original looking matching "tan" colour but it seems to have gone from any production. Nothing I found, to my eye was close enough, .So it's going Black, same as Julian Edwards original car. (This changed later on in the build)

I have Pet Sealed the Fuel Tank ready to go back in.
The Chrome's back, bright and shiny ready to bolt on and I have new Hagon suspension units fitted all round (This was a Christmas present to myself)

The gear shift gate was chromed but came back looking very poor - so now I have a bright shiny stainless steel one.

I have got the dimensions of the Amal 376 carb butterfly Choke and Air filter arrangement, a dash mounted pull on type Copied from Julian Edwards's car.

I understand this was used with the TT9 Carb and must have been used on Amal 376 when they started to fit them, now that I have the idea and dimensions I plan to make one,

The windscreen had a large bullet hole and was repaired by Auto Glass, but they failed dismally in fitting the glass back in tightly to the frame. I had to get some rubber u shaped material from Woollies and fitted it myself-- That's another story, what a struggle.

There must be an easy way to fit glass, any ideas.
Where can you get curved rubber U section from? (That gets sorted later)

I am nearing completion of the repairs to the original type steering wheel I have , It was painted black but it will go back to the standard Ivory / white colour.

Doors have been re fitted and adjusted to make them close nicely.

Progress has slowed a bit -- It has been very very cold out there -- but lots of little jobs have been done to many to mention but I like to get an hour or two in the shed after work almost every day and then at weekends when I can.

I have major engine work planned. as I found some good " Constellation "crankcases, I plan to strip my engine unit again and rebuild it to the Berkeley "Conny " spec using these cases - the engine I got with the car was incorrect and came from a early Super Meteor motor bike with a MAG, so this will make it look more like the original Berkeley B105 Conny engine it is supposed to have..

As soon as the painting is over I will start on with replacing the wiring loom-- I have most of the original loom and so fitting on the lights and instruments will start then.

Then the chrome bits,
Then the wind screen,
Then the floor carpet and around the pedals,
Then the wipers,
Then the Handbrake,
Still loads to do.

Have you noticed, when working on Berkeley's it pays to have tiny hands and be very bendy.