

MGB V8 Roadster restoration project – Rebuild 19

Monday 16th March 2015

Feeling a lot happier this morning. Yesterday I had an email from Roel Hellemans telling me about how he is making a spit for his MGB bodyshell with two engine stands. He also wrote: *Keep up your reports it gives me the courage to keep going. Unlike you I don't have a supporting team only my wife who insists that RB stands for Rust Bucket and encouragement along the lines "when are you getting rid of that"!*

His email arrived at just the right time for me – a low point. It gives me the encouragement to get stuck in again. I can't remember if I have said it before in these reports – you are going to get reports with warts and all!

The Torrey Canyon has now had its sump repaired and has driven off under its own power. No excuse now not to cut the grass, oh dear it's starting to rain! Perhaps tomorrow?



Roel Hellemans spit for his MGB bodyshell with two engine stands with 6" casters attached. This maybe the way to go for me if I can't find a suitable cheap spit.

As you know if you have been reading the previous reports, I have been trying to fit the 3.9Efi RV8 engine into the MGB without having to modify the bonnet or the injection system. Well – I'm a failure!



There is just not enough room to fit the steering rack in without raising the front of the engine. I have spent enough time trying to achieve it, but now is the time to give in. I shall decide later whether I lower the injection system by machining the castings or plump for a power bulge. Now I shall just concentrate on getting the engine, gearbox and steering rack fitted in their correct places.



I have new 5/16" UNF fitted bolts and nuts in temporarily to hold the rack in position. These bolts I will machine down to the correct length in the lathe and when it comes to fitting the steering UJ for the last time I shall use Nyloc nuts.

The following photo is of the top end of the steering column. Something wrong here, the inner has slipped down the outer column. Time to try and fit the second hand early type steering wheel I bought a Stoneleigh.

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Went up to the Black Boys for a couple of pints before dinner and discussed the problem of the engine and rack positioning with John. He told me that I had given up too easily! OK – one last try. I will clean up the rack today, fit the steering rack ends and make the stainless steel inserts to fit in the elongated holes on the left side of the rack. Remove the engine mounting parts on the RH side of the engine and see what we can do to get the engine to the level I want. That is to clear the bonnet so it will close without having to machine the injection castings. John's a bloody slave driver!

Roel Hellemans sent me another email with photos of his Hoyle rear suspension that uses a Ford Scorpio diff and vented discs on Ford hubs. The front suspension is Fast Car parts, I have never heard of this company, but it looks pretty impressive to me. Remind me not to try and out brake or overtake him in a corner on a track day!

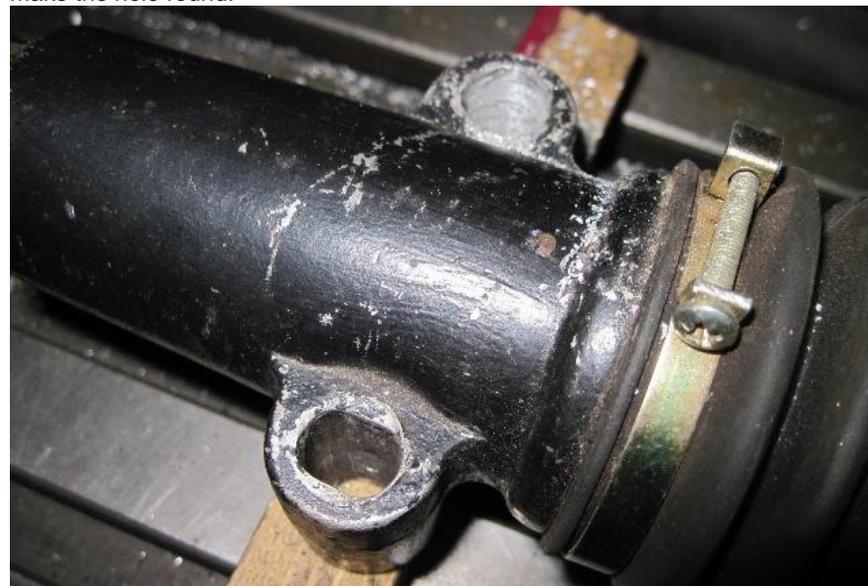


I still think I am going to use the more or less standard suspension until I have tried the MG out. I will use what I have got until I have got used to the car and then find its failings in the suspension department. After many years of building BMW 2002 race cars it is amazing what is available for the MGB. We had to design and make our own trick suspension set ups for the BMW 02 & CS models.

Spent today making inserts for the oval holes in the steering rack. Initially, I set the steering rack on the bed of my small milling machine and clamped it in position so it did not move. I mounted it on wooden battens so that I would not drill through the metal milling machine bed.



Then I found the largest drill that would go through the smallest part of the elongated hole in the steering rack casting and centred the drill in the oval. I then drilled through with progressively larger drills until I had made the hole in the casting round. The top hole in the photo below is the hole I have drilled and the lower one has yet to be drilled. I was careful to only take enough metal out to make the hole round.



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I then set about machining, in the Myford lathe, some solid aluminium bar to fit the diameter of the holes in the steering rack.



When I had machined the inserts to the correct diameter, I sawed the machined bar in two and faced one end of each and used a centre drill to as a start for the correct size drill for when it came to machine the holes in the steering rack casting.

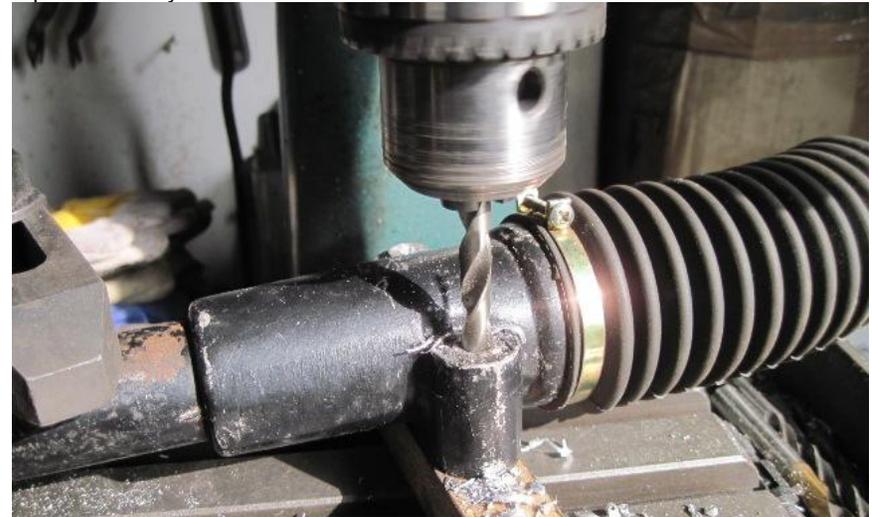


I checked the fit of the inserts and then machined them down in the lathe to the correct height. Although they were a push fit into the steering rack I did not want them to move or rotate when I drill the holes through the inserts, so I pushed them in coated with Araldite (not the rapid type Araldite). The steering rack is now in our downstairs bathroom waiting overnight for the Araldite to set.

I know I said before that I was going to use stainless steel for the inserts; I had forgotten that I had some alloy bar I could use.

Wednesday 18th March 2015

Thought I was going to get really stuck into the MG today, but..... a friend from the village came round with his rotavator. It had a bolt sheared off. (For you quizzers out there did you know that rotavator is the longest palindrome in the English language?). It's not going to be an easy fix as there is now an Easy-out broken off in the drilled through stud! It is amazing how much work you get in our village when you don't charge anything for little jobs. I've even had two church safes to repair after they had been broken into.



This morning the blanking plugs in the steering rack were ready to be machined. I had already put a centre drill down the centre of the plug when it was in the lathe. This made it easy to find the centre when it came to drill a 3mm pilot hole bang in the centre of the insert. I measured the diameter of the new 5/16" UNF bolts I was going to use to bolt the rack into place on the car.

Drills always make holes a fraction bigger than the size they say they are so I picked a drill slightly under size. A set of metric drills that go from 12.5mm to 1mm in 0.1mm increments is a great advantage to have in your workshop.

Next I bolted the bits of the steering rack bracket I had left and lowered the engine to the point at which I wanted it to be. Removed the rubber engine mounting on the steering column side and offered the rack up to the suspension crossmember. It appears that it will fit behind the crankshaft pulley that I have machined previously. I will have to be very careful to mount the rack in the correct position to

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avoid bump steer and other nastys like that. It will need some ingenuity to hold the rack in the correct position to measure, to make the brackets to hold the rack in place. They need to be reasonably substantial to counteract the steering loads on hard cornering. Who was it that said "If it looks right, it is right". I remember Colin Chapman saying "If it doesn't break it's too strong"! Or something like that.



Next problem is the right hand engine mounting. There is no way an original MGBGT V8 or RV8 rubber engine mounting is going to fit. I will have to make my own or modify one.



As you can see there is not a lot of room, but as they say "A miss is as good as a mile". I have an idea for an engine mounting using the existing metal engine mounting bracket that bolts to the engine. You can see one of the three bolts under and between the two spark plugs and exhaust ports. I am embarrassed by this photo – I have forgotten to stuff some clean rag into the exhaust ports before cutting and grinding the rack mountings off the crossmember.

Thursday 19th March 2015

Feeling a bit tender this morning! It was the 'Saga Louts' night at the pub, too much beer was consumed. We had a very good debate on the merits of a straight

washing line against a rotary washing line or tumble drier! The wives would have been impressed.

Before I finished writing the report yesterday we had a power cut. It is starting to become a more regular occurrence. I don't want to get political but; with a high over us, no wind, in addition to a dull day the electricity produced by the wind turbines and solar farms is minimal. I did buy an emergency generator a year ago, but as yet have not got around to plumbing the generator in. If the power cuts get even more frequent I will have to take some time off from the MG to get the generator working.



I stretched a length of cable down the centre line of the engine bay to check the position of the engine. It needs to move to the LH side by about a 1/4".



Comments, etc. to mikemacartney@btconnect.com