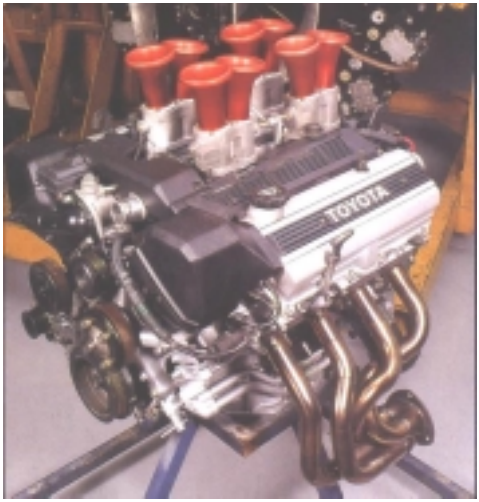
Behind closed doors

Matthew Cooley

Isn't it funny how projects take significantly longer to complete than you first envisage? Six months ought to be long enough to re-power the Saker surely? But, as we all know, these things are never quite that easy, and what started, as an engine re-power has become a complete rebuild including several modifications along the way. I purchased the ex-Radiola Car at the end of June last year, and did not start work on it until early September 2000.



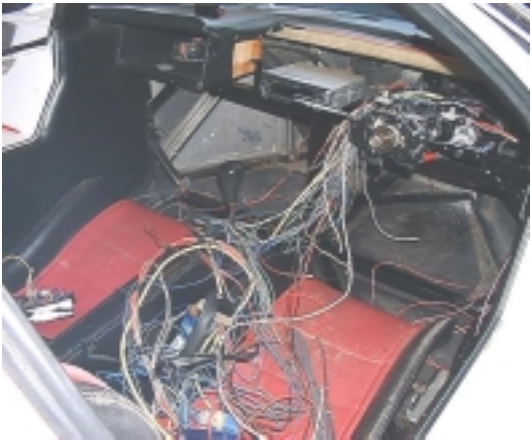
This started with the purchase of an engine. I hunted around measuring up several high performance engines from the wreckers including Nissan Twin Turbo V6, Nissan SR20DET, Toyota 3SGTE, Mitsubishi VR4 engines (V6 model), Holden 3.8 V6 and a Toyota 1UZ-FE V8. Finally I decided on the Toyota V8 for many reasons including, surprisingly, the price. Also the V8 should sound better, right? For those that are interested, these engines are all alloy, 32 valve quadcam V8 with 6 bolt mains, forged crank, 4 litre displacement and 256hp in standard trim.

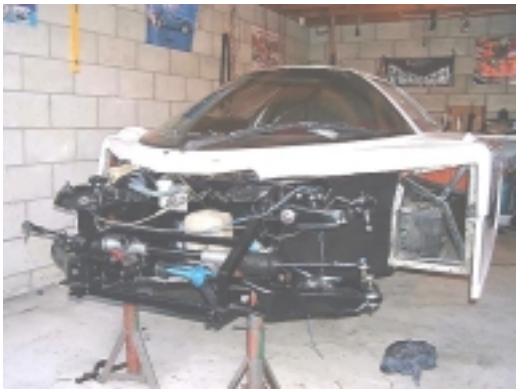
After the engine was purchased, I pulled the old Subaru engine out and began cleaning up the back end. This required removal of an old battery mount as well as engine/gearbox mounts used by the Subaru. I purchased a Renault UN1 transaxle from Bruce and adaptor plate from Dave Short. We had the flywheel custom made in Palmerston North (as used by the speedway cars), as none of the Toyota V8's came out in manual form. A Nissan 300ZX pressure plate is used mated to a Nissan Diesel Navara clutch plate. This is about as large as you can fit inside the Renault bellhousing. With the help of Dad and Phil Derby, we made up the engine and gearbox mounts before I trailered the car up to Bruce's to have the drive shaft adaptors fabricated and gear linkage sorted out (the car was previously automatic!!). Whilst up there I managed to pursuade Paul Woodfield to make a lovely pair of extractors for the engine, and he also complimented this by making a pair of stainless steel mufflers. Can't wait to hear it!!

I picked up the car just prior to Christmas, and not much more was done on it until early in the new year. After staring at the engine bay for a long time, I finally dismantled it all and totally stripped the rear end back to the chassis for painting. This is where the re-power started changing direction, as I stripped all the suspension, had powder coated (thanks Mr Beazer), and then re-bushed using Nolathene. Whilst the engine was out I gave it a spruce up, we changed the cambelt, made a spigot bearing and thrust bearing carrier to suit, fitted the ring gear to the flywheel, had it balanced and mounted the gearbox back up to the engine. The rear suspension was refitted and engine installed sometime during March from memory

The front end now started looking a little shabby,

and I needed to change the brakes anyway, so off came all of the frontend. The chassis was cleaned and repainted, just in time for the garage tour in April. Since then things have been a little slower, but most of that time was waiting for the front discs to come from Australia (about 15 weeks). They are aftermarket Holden HQ discs, both Crossdrilled and slotted, 276mm in diameter and 26mm thick. I decided to continue using the Torana uprights and Hunter steering arms as these were properly setup for bump steer. This meant I could not use the HQ calipers or the Torana ones, so I set out to try and find some that did fit. I ended up purchasing a





pair of Nissan 4 pot calipers, and I am currently in the process of mounting these up to the Torana upright. The discs came undrilled so we have drilled them for the Torana stud pattern to save costs on new wheels.

I have also replaced the Viva steering column with an adjustable one out of a Toyota Corolla and thanks again to Phil for making up the brackets to hold it in place. Toyota universals with splines were used and to finish this off, Roy hand cut a spline onto the Torana rack for me. The steering is all now in and complete, master cylinder, clutch cylinder, front/rear brake lines plumbed in, front suspension arms powder coated, nolathened and installed, just waiting now to finish of the mounts for the calipers and then the front suspension can be finished off.

Having built and owned a race car before (not road registered), I decided from the start I was not going to make this an all out race car, but a very nice road car that can be driven to the track. This is now taking shape as I am adding a Stereo system, speakers, alarm, remote central locking and lots of sound deadening. The old wiring loom has been removed and a friend of mine is helping to make the new loom (see picture). Most of the wiring is in place with only the Link engine management wiring to be installed.

Being a mid mounted sports car, having the petrol tank between yourself and the engine is probably not that risky, but having said that I still decided on having the tank filled with explosafe. And many thanks to Roy for making up a new Stainless steel tank for me, as this turned out easier than trying to unstitch the old tank. The new one was sent to Auckland to Street Marine Ltd, where they filled the tank up with the aluminium explosafe material and returned it so Roy could weld the front face on. The explosafe is quite cheap, and I would definately recommend it to anyway looking at building or modifying their petrol tank.

Over the next couple of months (possibly years!!), the wiring will be completed, radiators plumbed in, fuel system plumbed and ready to start up! Then there will be the finishing touches, upholstery and paint.

Matthew