



I found my TVR in the early 80s, a Grantura Mark 3, and one of 90 of that model built. The Mark 3 had the advantages of having the 'new' frame and suspension, (the old one being a Volkswagen suspension on both ends and unsuited to serious competition use) and was lighter than the Mk. 4 and Vixen models that followed it, so in many ways was the ideal choice for a vintage race car. As I had been racing an MGA for many years and had a good store of parts, it seemed a natural thing to do at the time. The car was in running condition, though it had been off the road for some time, and I traded my early long door right hand drive TR-2 for it, figuring that what everyone needed was a second race car!

### FRAME

All of the early cars had the fiberglass body bonded to the frame, which was just asking for a corrosion problem. I decided to do it right, and carefully cut the body off the frame with a high-speed cutting wheel. It took several weeks for me to stop itching from the fiberglass dust! I wish that I had taken pictures of the frame – it is a lovely backbone style consisting of 4 main tubes that form the driveline tunnel, that splay out at front and rear to accommodate the rear suspension and engine. The frame itself was in excellent shape, with no sign of ever having had any accident damage, and I simply replaced all the side outriggers – the tubes that hold the floor of the passenger compartment. I then fabricated and glassed in trough sections into the glass floor, and made up triangular plates which I welded at the four corners of the passenger compartment, for attachment points for the body bolts – I saw no reason to glass the body back on and court future rust problems, so essentially converted it to the same attachment method as the Mk.2 Vixens and other later cars.

After Glyptol priming the frame, which two people could easily pick up and move around, the frame tubes being similar in gauge to exhaust pipe, I began to build the car up again.

## FRONT SUSPENSION

The front end consists of a fabricated tubular upper A arm and a Triumph lower A arm joined by a Spitfire/Herald upright. These are rarely maintained properly, as most people think that a grease nipple means grease, instead of heavy oil, and the threaded lower portion wears as a result. I managed to find two NOS uprights. I also had the advantage at the time, of being able to watch the restoration of a TVR Tuscan, which used the same frame with a 289 Ford, and to note all of the modifications done by the factory to suit the greater power of the V8. As a result, we 'boxed' the lower A arm for strength, and sourced a proper additional part – the factory had let this one out the door without a sway bar, and with two left hand (or right hand, I don't recall) Triumph A arms, and of course I would need a sway bar. This was sourced from a later GT6, which used a heavier bar, and I modified the end links to work on the TVR. The steering was rebuilt and checked for optimum height to minimize bump steer, and the shortened tie rods and spacers fitted for the same reason. New Metalastic bushes were installed in the suspension arms, sourced from Rover parts that were a little firmer than stock.

## REAR SUSPENSION

A similar process carried out on the rear resulted in additional torque reaction brackets for the differential, new bushes all around, the Heliarc repair of the rear hub carriers, that in stock form had 'ears' that hung down and caught and broke off. This was modified to give support for the full length rather than at two points, and to eliminate the 'ears'. The bearings in the hub carrier were replaced and adjusted, and the stub axles Magnafluxed. I also converted to the later 4 shock rear suspension and replaced the shocks all around with competition Spax, using one of the original shocks on each side at the rear. One has the choice of one or two shocks, and one or two springs at the rear!

## BRAKES

The rear brakes are Triumph and quite adequate, and were simply rebuilt. The front calipers were Austin Healey 3000 Mk2, which while perfectly fine for a street car, did not have the advantage of available pads in racing compound. I researched what would work, and ended up converting the front to MGB Lockheed, for which one can source unlimited numbers of competition pads. These bolt directly to the original mounts, but the pads now extend about a quarter inch beyond the rotor, and so when fitting a new set should be beveled to suit. The discs themselves, and the hubs, are from a TR-3. The pads may be my last set of Ferodo DS-11, in which case a switch to modern Carbon Kevlar would be in order – they don't fade and work first time.

The master single cylinder was replaced with twin masters and a balance bar, and the clutch master offset to suit, but the original box and top plate was retained. This was done to allow the car to run in sports racing classes, if desired, as these required dual brake circuits.



## ENGINE

I used a 3 main bearing MGB engine as a basis, as I prefer them to the 5 main engines – freer revving and slightly more power. The usual things were done in engine build-up, with everything magnafluxed and balanced. The pistons in the engine that is in the car are, I believe, forged .080 oversize flat tops, a rare 3 main competition oil pump was found and fitted, and a rarer aluminum flywheel, homologated only for the Elva Courier in SCCA was added with a competition clutch.

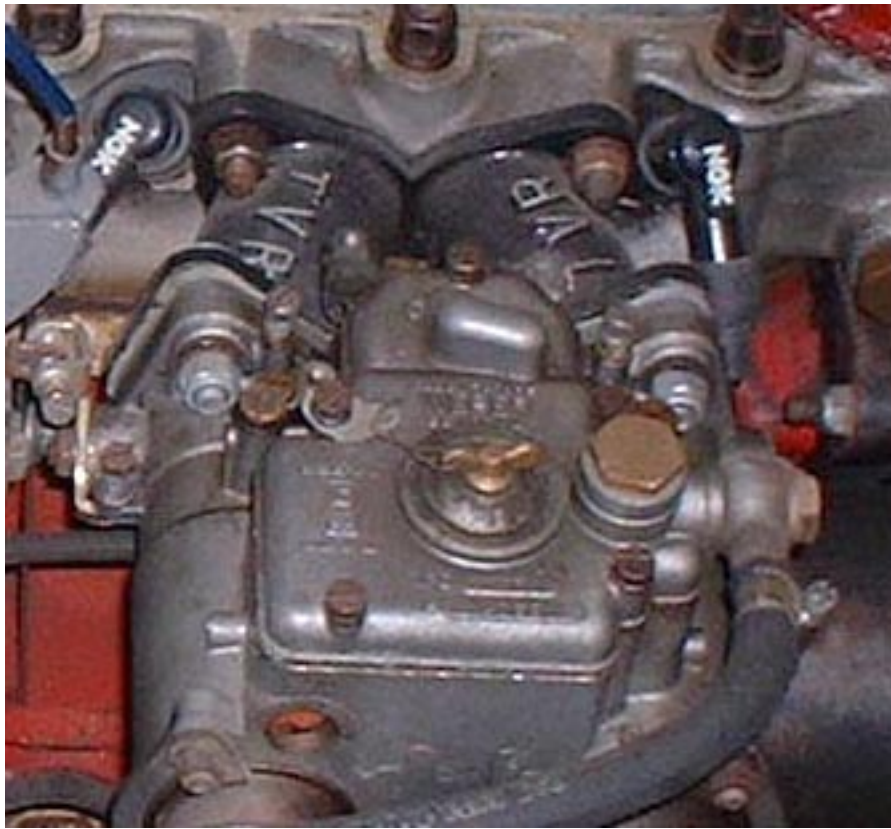
The head was a very lucky find. It is a late HRG competition version crossflow aluminum head, but the real reason I was delighted with it was that it came with factory TVR intake manifolds for Webers, something that I have seen only in photographs of the factory Le Mans cars. There were probably a few sets sold in Britain, I just haven't seen any!

The main venturis on the 40 DCOE Webers are actually slightly larger than those used in the 45 DCOE on my MGA Twincam race car. Fuel supply is by high volume Carter Superpump and fuel pressure is regulated at the carbs to 3 psi.

The original steel fuel tank was retained rather than a fuel cell.

All sorts of period valve bits from the competition catalogue at BMC were used, mostly now NLA, and the manifolds and head were port matched (they were already almost perfect).

Headers were fabricated as the car sits lower than an MGB and headers from that car are too long.



Foam single filters were fitted as the unitary style were too big to clear the passenger side footbox, and I didn't wish to start hacking that about and losing originality. As the front inner fenders were left off the car to improve accessibility, filtering is especially important!



## DRIVELINE

The differential is a 4.55 using NOS gears, although I once ran a 5.12 in it for a hillclimb! No limited slip is fitted nor needed given the superior traction when partially unweighted, afforded by the independent rear suspension. A suitable breather is fitted, although some organizations might require a tube leading to a catch tank (it never loses any lube).

The transmission was built using a brand new set of close ratio MG gears, of the last specification for the non-synch first gear box. In 1968 they went from a 3 bearing layshaft (loose bearings, a real bear to rebuild) to a much better supported and larger diameter arrangement with 4 caged bearings. The transmission case was reamed for the larger shaft and the CR gears fitted. An overdrive was also fitted and a driveshaft and frame mount built to suit. This allows use of the 4.55 diff while still allowing a very good top end.

It is VERY important to use the OD properly. If you lift off at every engagement, you lose a fraction of a second, but by only applying full power once the OD is fully engaged, you avoid burning out the difficult to find internal clutch facings. Many people say that the Laycock OD isn't suitable for racing; they just don't know how to drive with them.

You must NOT use any friction-lowering oils or additives – a can of Moly or a fill with synthetic oil will almost certainly ruin the overdrive unit. I know this works on the street

for many people, but it does NOT work in racing – ask my friend with the other Grantura how long his brand new OD unit lasted with synthetic in it!

### MISCELLANEOUS

I was also lucky enough to find a set of 15 X 5 American Racing magnesium wheels. These were offered, more normally in the aluminum version, as a factory option, at least in North America, as shown by contemporary advertising, and so are acceptable by all racing clubs.



They are presently shod with BFG TA Comp R-1 tires with a couple of races on them, but about 5 years old. There is no evidence of any degradation of the rubber (very little ozone here in BC) and they still appear to be soft enough to run on, but that would be up to the owner to decide.

The roll bar is single hoop with two removable (to allow gas tank access) properly gusseted braces, mounted to plates welded to the frame. It has passed CASC inspection for regular (non-vintage) racing and is stamped beside the inspection hole.

The car has been in dry storage for approximately 5 years. Were I to run it again, I would replace all fluids except perhaps the diff oil, re-kit the brakes, repack the front wheel bearings....the usual stuff that needs checking. I do not want to give the impression that you could load it on the trailer and head for the track, but there is nothing other than that sort of routine maintenance that should need to be done.

Here's a picture of me just having passed Ralphie the Z (his doors fell off a few seconds later) at Westwood:



The price for the car is \$16,750 US, and it is located in Vancouver BC. I have the BC title for the car, and crossing the border to the US should be no problem.

The car comes in at just over 1700 pounds, and with the engine that is in it, is quite a brisk little race car. Of course with a full race 12:1 hand grenade engine, it would also be quite entertaining, but would likely end up in a different class pretty quick.

For more pictures of suspension and whatnot, that I don't have handy for my car, and a copy of the FIA homologation papers for this model, see a Swedish TVR at [http://user.tninet.se/~kaw434x/e\\_home.htm](http://user.tninet.se/~kaw434x/e_home.htm) (mine doesn't have the vents in the nose – this was done on the 1962 Le Mans cars and probably by the owner of the car on that site)

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