

Wav'n and Toot'n Good Time.

Road Rat II verses Tri-Via

By Patrick Harlow

On one side is the Road Rat and on the other the "Tri-Via" and I am supposed to compare the two. One has three wheels the other four. One is mid-engined and the other rear-engined. One has five-speed motorbike gearbox that is moved by the left hand, the other a four-speed moved by the right hand. One uses a bicycle speedo to judge road speeds and the other has bulldog clamps to hold driving gloves. Nothing in common so far. Looking at their builders, Brian Worboys and John Bell, I notice that they both wear glasses. Finally a starting point.

Having spent two pleasant afternoons with these two I quickly became aware how unique they were. Both are car building boffins of the "number 8 fencing wire" variety. Their cars have evolved on their whims and like them their cars are unique. Built from a bit of this and a bit of that with a body that was supposed to be functional first with styling a distant second. (I'm talking about the cars here) Bertone and Pininfarina design studios were



John Bell and Brian Worboys.

Two boffins (with spectacles) out for a spin.

probably not consulted as these cars came into being. Although had they been consulted both would have been happy to tell the designs studios the shortcomings of too much complexity in the designs of Lamborghini and the Ferrari. Millions of dollars in development were not invested in either the Road rat or Tri-Via. Generally if the part was not on the shelf then it was prefabricated or another part that was on the shelf was used. The Road Rat was built to a budget of \$20-00 a week. The odd detergent bottle and Coke can became integral parts as the body took shape. Tri-Via shows John's love of plywood and the mechanical headlight dipping system, his love of simplicity.



The face off. Three wheels verses four.

HISTORY

Road Rat

Road Rat 1 was originally built in 1977 in Brian's bachelor days in just four months using an old VW Beetle that happened to be lying around. Built without any sign of sophistication, it lacked a lot of refinement and had a rushed together look that Brian was never totally happy with. Although it gave Brian many years of fun it was decided in 1990 that it was time to give it a major upgrade. The reborn Road Rat was completed in 1999 and it came with such luxuries as a place to stow luggage and a windscreen that kept more of the weather out than the original. The best way to describe the car is to say that it is a cross between a Lamborghini Countach and a vintage farm tractor.



Road rat looks different from any angle but never ugly.

Tri-Via on the other hand is the third car built by John. Starting with a Bambina that was turned into a Ute and called the "Four.B.Two" which was built back in 1985. This car unlike the next two had four wheels, albeit small ones. The entire framework was hidden under an aluminium skin and featured a wooden steering wheel. John is very much anti fibreglass so this car was also clad in aluminium. The second car was called "Three.B.One" and was a three-wheeler in the same configuration as Tri-Via with one at the back and two at the front. Again built from parts lying around the garage this car used an entire motorbike to propel it along in a similar vane to Tri-Via. Luxury features were a flip-top roof and again a wooden steering wheel made by John. John wanted to use a motorbike because he discovered that they come totally self-contained.

Everything is there and in a very small, light package. Steering is 'T' bucket style and all instrumentation was motorbike. However this car was never finished. Once John had got it mobile the challenge of building it was over and it was never really finished. Thus it was that Tri-Via was started. In this case it was designed to be an improvement on the Three.B.One and to sort out all the minor irritations that John had with the first design. This time however the challenge was to get it mobile and registered. None of his three-wheelers have been what you would call pretty, but to use the farm analogy again, they were designed to be functional. Hence if you were looking for a style to describe them I would suggest the "agricultural look" rather than "aerodynamic" or the currently trendy "retro".



The back is Tri-Via's least flattering angle.

DRIVING IMPRESSIONS

The first testing these two cars happened to be a very wet day which was a slight challenge as neither car has much in the way of wet weather protection. However the Road Rat gives you more with its full windscreen as long as you are not turning right. On right hand turns the cycle guard on the right hand wheel lined up nicely with the drivers face and water tended to follow that path. Tri-Via was blessed with only a wind fairing and the driver experiences all the elements first hand. Due to a large quantity of these elements and Tri-Via developing a small mechanical problem with the gear stick the test was abandoned until the following weekend. This time the weather was a complete reversal of the previous weekend and

I would be driving in a very sunny and clear winter's day.

First impression driving both these cars is that they were designed for smaller people in both girth and stature. Reverse gear in the Road Rat happened to be in the same place as my knee and the foot brake on the Tri-Via tended to be a bit of a contortion. On the Road Rat the handbrake was hidden under the right cheek of my buttock and on Tri-Via it was hidden under the left cheek. Gear changes in the Road rat were performed with the right hand in the standard "H" pattern and in the Tri-Via a sequential box changed with the left. As long as you knew what you were grabbing for it was not a problem. With changing cars regularly the muscles soon adapted and I started to have fun.

The next impression you get is that everybody waves and smiles at you. Little children jump up and down and point. A lot of cars toot at you in a friendly way and some cars flashed their headlights. I have never experienced this degree of attention in my Almac Sabre. It was all good-natured and actually quite pleasant.



The sort of car that Mel Gibson would drive in Mad Max?

Once I got used to that I settled into driving the cars. Again both are very different. The Road Rat drives very much like a go-kart with extremely positive steering. Going over Haywoods Hill I experienced a lot of tram lining as the car was determined to follow every rut in the road. This ensured that I held the steering wheel very firmly at first until I got used to the car's responsiveness. I am now fully aware how this car does so well in motor-khanas. If push came to shove the Road Rat would over-steer but it would take a lot of

effort to make this car accidentally break free of the tarmac. This car is not over powered but there is plenty of power to have fun with. When you are behind the wheel you are very much aware that you are driving it. It is definitely a lot of fun.



Interior of the Road rat is simple but sparten. Note the bulldog clips and huge warning light behind the steering wheel.

Tri-Via on the other hand is a far more relaxing car to drive. In this case the steering has the more normal under-steer characteristics of most cars. Unfortunately I was not able to open it up as it ran out of revs at about four and a half thousand and developed a misfire. Due to this I was unable going up Haywoods Hill to attain a speed of greater than 90 kmh. Normally had I been on a motorbike I would have dropped a couple of gears and twisted the throttle as motorbikes start to perform in the high rev range. Due to the misfire I had to travel in the higher gears to keep the revs down. Although engine had sufficient torque to keep up with other traffic I was unable to experience Tri-Via's full potential.



Tri-Via's boat like front makes a bow wave of an impression with children and others.

The Hillman Imp rack and pinion steering had a good feel and immediate with the cycle guard covered motorbike wheels slightly ahead of your thighs. On sealed roads and normal speeds the cars narrow motorbike tyres would not present a problem. However going fast into a corner would provoke a steady increase in understeer depending on the speed. Still this car was built for its design challenge not as a GT Formula 1 racer. The sequential gear change was simple with a quick movement forward to change down and a flick backward to change up. Modern cars are only now just catching onto this system and in this area Tri-Via is ahead of the crowd. Suspension in the front was hard and would improve with the addition of softer springs.

At highway speeds both cars are reasonably comfortable to drive although both lack virtually all of the creature comforts and on this Winter's day they were definitely an enthusiasts car. Tri-Via protected only by its fairing is the much windier of the two but neither car experiences an uncomfortable amount of buffeting. Conversation at speed would be difficult but not impossible. All right I admit it I was thoroughly enjoying myself.

One thing that both cars have is plenty of quality noise. Cars with the engine behind the head sound so different to cars with the engine in front. The twin banger motorcycle engine of Tri-Via sounded awesome and had a quality that a VW motor can not emulate. A VW motor in most cases, unless some very careful exhaust tuning is undertaken, will always sound like a VW motor. At low revs the engine pulled away cleanly and you could almost feel each spark plug firing. It did not have the best sound but it certainly had the performance edge over Tri-Via.

INTERIOR

As both cars lack doors a degree of elegance has to be sacrificed to enter and exit. Once in place in the drivers seat both cars give the impression that no expense was spared to ensure that the builders money stayed securely in his wallet. In these cars that is how it should be. They were built purely for fun and that is what you got in bucket loads. Luxury extras were; bull dog clips for holding maps and gloves, a spare rubber band in case the one holding the tachometer

and speedometer together broke, The lever poking out of the dash board to ensure that the lights were able to be dipped by physically tilting them forward. Nothing was hidden behind cheap plastic. In short the cockpits of both cars were a Meccano builders dream and one of the main reasons that these cars garner so much attention. There is always something to look at that you missed the last time.



Uncluttered simple vinyl and plywood interior gives Tri-Via the illusion of warmth.

Seats are simple vinyl and totally functional. If you are a different size to the builders then no concessions have been made because clearly you are the wrong size. Seats and pedals are non-adjustable. I was not uncomfortable driving the cars but clearly fitted into the category of the "wrong size". I would be happy to drive either car long distance on a fine day but clearly adjustments would have to be made if I ever wanted to own one of them.



Interior is very minimalist in this car but all you need is there. The lever between the tachometer and the steering wheel is the mechanical headlight dipping system.

Although I liked the big trailer rear light that Brian uses for warning lights the points for best interior would have to go to Tri-Via. The red colour of the upholstery and all that plywood veneer gives an illusion of warmth. However driving this car on a cold winter's day your body struggles to tell your brain that it is a lie but your brain is having so much fun it doesn't listen to your body, even when your ears fall off. Another factor that puts it ahead of the Road Rat is the use of a bike speedo which measures speeds in 1 kmh graduations. Now you can't get more accurate than that. This would be a great case if Tri-Via ever got its photo taken by a speed camera. I doubt that John would ever get the ticket as they would probably send a service technician out immediately to ensure that somebody had not been interfering with the camera when they developed the picture.



Before Tri-Via was the Three.B.One. In many ways even more radical than Tri-Via.

Tri-Via has all the fun of a motorbike without the need of a helmet. It will never fall off its motorbike stand and you won't get a hernia lifting it back up. Lacking a reverse gear it will never be a shopping basket.



Close up of hi-tech bicycle speedo. The lever beside the speedo says hood and opens just that.

EXTERIOR

Neither car will be mistaken for a Ferrari or even a Holden. However some may think that they were movie props and that "Doctor Who" has started filming in New Zealand. From all angles the cars look different. Tri-Via's best angles are directly in front and from the side. From the back it is just too exposed to look attractive. The Road Rat is not what I would call an attractive car either but from the front it has a cheeky surprised look that it manages to carry through all the angles that the car is viewed from. From the side Tri-Via looks better but from all other angles I must give points to Road Rat. Fibreglass is a more flexible medium than wood. Also the way that Brian has made a flat windscreen suit the car so well is to be applauded.



*John's first car was Four.B.Two. (4 x 2)
This is what happens when you have too many Bambinas lying around the house.*

Both cars follow the tradition of the Urba Car built by Roy Hoare some years ago. Roy back then said, "I don't care what it looks like it is still fun." Both John and Brian have had a huge amount of fun with these cars. My experiences with driving these cars on both a terrible and a fantastic winter's day will be remembered fondly for a long time. Also remembered will be the after functions sitting in Johns lounge discussing the two outings

and listening to John and Brian discussing the best “widget” to fix the “whatsit”.

Neither car is the sort of car I could imagine Pamela Anderson or Elle MacPherson driving around but it is definitely a possibility for Mel Gibson (Mad Max) or Russel Crowe (The Gladiator)



Road Rat I, seen here in 1977, the father of Road Rat II was not as refined as Road Rat II but it still was a lot of fun.

AND THE WINNER IS...

When you do a comparison between two cars there has to be a winner. Both cars break strongly with tradition of what anybody would expect a car to be. Tri-Via more so as it managed to lose a back wheel. As long as you don't look at it from behind Tri-Via has a more finished feel to it especially in the interior but the best all rounder must be the Road Rat. It is the car that can be taken to work every day, if its fine. In sports events it will always be a challenge to cars several tens of thousands of dollars more expensive and it has a reverse gear which is very handy in motokhanas.

However in one area that both cars win equally is in their ability to make friends out of people that see the cars for the first time, especially children. Cars that overtake you slow down to get a good look. The drivers going the other way often wave or flash their headlights as they pass by. Neither car is my cup of tea but I understand why their owners built them.

Brian on the Road Rat

Likes

- Enormous sensory feedback.
- Go-kart like steering.
- Just driving it down to the dairy is an experience.
- It is a car he can tinker with anytime.
- Excellent grin factor.

Dislikes

- Lack of weather protection.
- Can't leave it parked unattended for long periods of time due to lack of security.
- Tram-lining on some uneven roads.

John on Tri-Via

Likes

- It does all he wanted it to do.
- It is different

Dislikes

- Draughty
- Lack of storage space
- Front Suspension too harsh

Comments

SPECIFICATIONS

Car	Road Rat II	Tri-Via
Engine	VW 1.6 ltr Flat 4	Honda CX 500
Fuel	1 carburettor	2 twin choke ??
Power	60 bhp	50 bhp
Gearbox	VW 4 Speed Manual	Honda 5 Speed manual
0-100 kph	11 seconds	NA
Frnt Suspension	Torsion Bar	Yamaha C oil Over
Rr Suspension	Torsion Bar	Honda CX 500 Coil over
Brakes	VW Drums front and rear	Fiat 500 drums front Honda CX500 drum rear
Length	2860mm	3310mm
Width	1580mm	1250mm
Height	1200mm	1220mm
Wheelbase	2100mm	2300
Chassis	Full Spaceframe	Full Spaceframe
Body	Fibre glass/Aluminium	Plywood
Weight	585kg	323kg
Est. Build Cost	\$3,500 to \$7,000	\$2,500