

## Rechipping an RV8 - V8 Bulletin Board thread in May 2008

Rechipping an RV8 engine is a topic which has regularly come up on the V8BB and in RV8 Workshop Notes. An interesting thread popped up in May 2012 launched by a query from **Peter Garton**, an RV8 enthusiast in Germany – see below. Previously **Mark Adams** has been very helpful with our enquires, so the V8 Webmaster got in touch with him again for some clarification and obtained his permission to publish some of his useful notes and guides on his chip upgrades for the V8 engine in an RV8. For the links to the additional material on rechipping go to the "Information Gateway on "Rechipping" on the V8 Website at: <http://www.v8register.net/subpages/gatewayrechipping1.htm>

### Tornado versus Optimax chips

I've noted, with interest, the idea of rechipping the RV8. However I see that there are, in fact, two alternatives available i.e. the Tornado and Optimax chips. RPI sell the Optimax exclusively, as I understand it, but there are indications that the Tornado equivalent is superior. Maybe RPI can also supply this version as a better (more expensive?) alternative. If the Tornado is better then why? Would appreciate info. on this one, please.

**Peter Garton**

10 May 2008 @ 14:34

Under topic: RV8

Reply(ies) received for this Message

Peter. I have just received an email from Mark Adams, the designer of the chips, in response to questions I put to him. Mark confirms that the Optimax is basically a 'cut down' version of the tornado and is correct for the Rover 3.9 V8 if it is to be used in a 'standard' form. The tornado is specified for drivers looking to uprate or tune their engines to provide even higher BHP figures (with, one presumes, even higher fuel consumption) Mark now has an eBay site, V8performance and has informed me he can upgrade an Optimax to Tornado spec for £75 + VAT

**Barry Martin**

10 May 2008 @ 18:44

Many thanks, Barry for the valuable information. This is a field which is fraught with all sorts of traps one can fall into. I would suspect that the Tornado chip incurs a "rats tail" (Rattenschwanz - German idiomatic) if installed on the RV8, meaning that the diff. gearbox, brakes and suspension would all undergo extra stress and strain that they were not originally designed to suffer.

**Peter Garton**

11 May 2008 @ 15:49

Peter,  
I had my RPI supplied Optimax Chip up-graded to Mark Adam's Tornado chip last summer. The injectors also needed cleaning, and most do. The result was impressive. Mark did the work and the car was set up on a rolling road. Mark told me that the Optimax chip was never intended for a sports car but for a V8 powered Range Rover. I get 30 mpg on a run sticking to about the 70 speed limit

**John Cumming**

11 May 2008 @ 19:48

Thank you John. It seems, though that your info obtained from Mark tends to conflict with that from Barry by 100%. This was the objective of my original query, actually. Most members tend to have the Optimax chip fitted often by RPI so I still don't really comprehend why, then the Tornado chip was not fitted right from the beginning if, as you say, the Optimax was only ever intended for a V8 Range Rover. This would suggest that RPI were using a chip with questionable characteristics when used on the RV8. I'm having difficulties here, I'm afraid.

**Peter Garton**

12 May 2008 @ 09:17

I can't offer any answer to your original question Peter but I can tell you that my RV8 has the Optimax chip fitted and the car runs beautifully at any rpm, also returning about 30mpg (about 1litre/10kms). As I understand it, the original chip allows the delivery of too much fuel to our cars, being optimised for the Range Rover. I had thought that Optimax chip was profiled for our cars specifically. I assume that you are thinking of fitting one? I live just a few minutes from RPI in Norfolk if that can be of any help to you.

**Angus Munro**

12 May 2008 @ 12:30

I have received another email from Mark today. I can only repeat that he confirms that the Optimax is fine for the RV8 if you are not looking to uprate the engine and are satisfied with a 'happier, smoother' engine without necessarily any power gain. My own RV8 was fitted with the Optimax two years ago and I am satisfied with the increased flexibility of the engine. Is the difference worth £350 - probably not! The RPI statement is that the standard RV8 chip could (and does) cause possible engine problems in later engine life - see their website [www.v8engines.com](http://www.v8engines.com) . Mark also offers the rolling road tune up at several sites in south UK and states, as has been mentioned, that the standard Lucas injectors often show poor spray patterns. In this case he recommends replacement with superior Bosch injectors which also improve performance and fuel economy. I must add that I have no connection with Mark and that I have only just contacted him as I am interested, like all of us I am sure, in getting the best out of my RV8, without spending a fortune. I may book a rolling road session with Mark as I live only 30 minutes drive from the Gatwick area, where he holds the odd 'clinic'. The price will dictate whether or not I go ahead. I will report further.

**Barry Martin**

12 May 2008 @ 19:46

Many thanks, Barry. Now I reckon we have got to the crux of this theme. There seems to be a bottomless pit if one wants to optimise the RV8 engine! The extent one can go to is amazing and one has to decide whether all these changes are really what one needs for "pottering around."

**Peter Garton**

13 May 2008 @ 05:42