

## Rechipping an RV8 - V8 Bulletin Board thread in July 2010

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 July 2010 launched by a query from Ross Boyd, an RV8 enthusiast in Australia – see below.

### Optimax chip

I would be interested in hearing from anyone in the UK who might be selling this chip.

#### Ross Boyd

20 June 2010 @ 02:44

Under topic: RV8

Reply(ies) received for this Message

The chip is only the start of an upgrade, you will also need Magnecor leads and fuel regulator power boost valve. If you do not upgrade the lot you would only have a small difference in power to the wheels. I have just had mine done at RPI, the difference is unbelievable, I drove an RV8 in with a Landrover engine and came out with a true MG sports car. Money well spent.

#### Brian W. Kitching

20 June 2010 @ 08:22

I consider the conversion has much improved the car; easy to fit. I suggest a new rotor arm and distributor cap if your mileage is above 25k.

#### Ian Sherfield

20 June 2010 @ 09:17

Have to agree with Brian, Mike Rolls MG fitted mine, as soon as I picked it up I noticed the difference in performance and engine note. The day after I picked it up we went to France for 3 weeks towing the caravan and I was getting 28 MPG towing and the caravan is 1085 kg.

#### Nigel Ricardo

21 June 2010 @ 21:25

Thank you for the positive feedback, but does anyone know one for sale at the moment?

#### Ross Boyd

23 June 2010 @ 09:04

The Optimax and Tornado chips are marketed by RPI engineering.

<http://www.v8engines.com/carbs-2.htm>

#### Mike Howlett

23 June 2010 @ 14:30

I do not wish to doubt the comments above but before spending money on this modification, I would be interested to know if there is any independent evidence confirming the improvements in performance and economy? Also can anybody advise what their insurer's attitude is to the modification?

#### Richard Withington

23 June 2010 @ 17:53

My insurance company was fine with this upgrade, but you must let them know. I am getting about five more miles to the gallon, and power to the wheels is very much improved. Power to the wheels when you want it and economy when on light throttle. Money well spent.

#### Brian W. Kitching

23 June 2010 @ 19:51

The various members who have sent me information over the last five years or more on their chipping and their comments of their RV8 afterwards, have all pointed to a smoother engine which is more pleasant to drive in a relaxed manner, improved fuel economy and slightly better performance in terms of crisper acceleration and power. If any member has seen or can recall an independent test in a classic car magazine then do let me know, or better still scan the document and send it to me so we can prepare an article on the V8 Website for future reference for fellow RV8 members.

As with all modifications an insured party has to ensure proper and full disclosure of all material facts that an insurer would need in order to assess the risk they are covering for the insured. A performance enhancing modification would be considered "material", so a disclosure would be necessary when the modification is made. It would be prudent to speak with your broker beforehand to confirm their understanding of the insurance company's assessment of the chip in terms of any increased risk, and then whether any additional premium might be payable. So far as I have heard most brokers receive the disclosure that a standard Optimax chip has been fitted to an RV8 and by whom (a specialist or by the enthusiast - we have an RV8NOTE showing how it is fitted), note the disclosed facts on their books and confirm to you the chip modification is acceptable without an increased premium or other policy condition.

What has been the experience of fellow RV8 members disclosing their chip to their brokers?

#### Victor Smith

23 June 2010 @ 20:01

Fitting the Optimax chip and Magnecor leads to my RV8 made a very significant improvement to the way the engine ran, it felt much smoother, lumpiness and odd quirks disappeared and generally the engine felt much happier. Probably the best value-for-money modification I have ever made to a car! Peter Best insurers accepted the modification with no increase in premium.

#### Chris Hunt Cooke

24 June 2010 @ 10:54

Having made the decision to buy the Optimax chip is there anyone near me who has fitted one and could offer help on how to do it? RPI say it is really easy to do

## Rechipping an RV8 - V8 Bulletin Board thread in July 2010

and only takes a few minutes but I am lacking experience in this technology.  
Location NG32 near Notts - Lincs - Leics border.

**Richard Withington**  
05 July 2010 @ 14:28

Richard,  
A useful note on how the chip is installed was contributed by Gavin Bailey in 2005 as RV8NOTE226 which will give you a good idea of what is involved.  
<http://www.v8register.net/subpages/RV8NOTE226.htm>

**Victor Smith**  
05 July 2010 @ 17:04

Thank you Victor. Using this note and others, together with telephone calls to Chris at RPI, I have managed to remove the ECU and identify the 'chip' required and ordered an Optimax from them. Hopefully it will be installed later this week, or you might have an SOS message posted!

**Richard Withington**  
05 July 2010 @ 19:50

Hello Richard,

Further to the info above and the Tech Note refs, little has been said about anti-static precautions and other "how to's" if you change chips yourself.

Chips can be damaged by static electricity. We've all experienced static shocks, worse in dry weather and if we're wearing some man-made fibres. A chip would be destroyed by the amount of energy we can just feel, hence the need for precautions. Professionally you would use an earthed anti-static mat and have an earthed wrist band. these are resistive to allow static charges to dissipate but not be a hazard when working with voltages higher than 50V. A minimum set up could easily cost £60 and may not be used again. In this case an earthed metal tray or sheet on which to work would be sufficient and safe (no voltages present). Use a wire to the EARTH pin of a 3 pin plug. Touch the earthed tray before opening the chip's anti-static packaging.

Note the orientation of the original chip and remove it by gently levering with a screwdriver under each end. The legs of chips are splayed to allow them to be held in automatic insertion machines. This makes the new chip difficult to insert manually without chip squeezers. The manual technique is to orient the correctly aligned chip landscape fashion then wedge the far row of pins into the socket with the near row just clear of the socket. Now push the edges of the facing edge of the chip, avoiding bending the facing pins, so that the far row of pins bends inwards and the front row become aligned with the socket holes. As this happens lower and squeeze the facing row into the socket. Inspect that all pins are lining up (none tucked under) and then squeeze fully home. Voila!

If you would have any problems I'd be happy to help (see V8 contacts).

**Bob Owen**  
06 July 2010 @ 16:03

Mission accomplished. The Optimax chip arrived in the post around 12.40 and by 14.00 hrs had it fitted and running. Thanks Bob for you advice, I used the stainless steel drainer to do the chip swapping and all seems well. I am looking forward to seeing how it performs.

**Richard Withington**  
07 July 2010 @ 14:33