

Purvis Eureka Car Club of Australia

PURVIS EUREKA CAR CLUB

# CLUB NEWS

JUNE 2014

Issue 3

[www.purviseurekacarclub.com.au](http://www.purviseurekacarclub.com.au)

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## Special points of interest:

- TECH TALK
- NEWSLETTER
- YOUR STATE
- OLD NEWS
- PUZZLE

## TECTALK - To Alternate or not to Alternate

Today's discussion is specifically for those of you that have beetle donks but the principles are the same for all engines. Of course anyone with a more modern engine such as a Subaru will already have an alternator so this discussion is moot. Theory of operation: No I'm not going to bore you with how each works except for the primary differences. No wait ..... I am!

*See inside*



## THE WWW

THE main CLUB site [www.purviseurekacarclub.com.au](http://www.purviseurekacarclub.com.au) has had over 65,857 Visitors as at 13OCT 2013 . This is the hub of all our WEB activity, hosting the static site, Wiki & Forum .



We now have a unique symbol appearing in our daily lives. You may have seen them around. Those little square things made up of dots just like the one here.

They are called QR Codes. With the latest technology most phones now have a scanner App, or the ability to download one. Here we have our own QRCode which, when scanned will take you to the Club Website. Give it a try.

These newsletters will be uploaded to the site and will be available through a link on the Forum

Now 161 Members of the FORUM with 8,913 posts in 1,239 topics. CYCO wins the top Poster award this month, but I'm still beating him with the most time on-line. Currently 129 Members are now on our FACEBOOK Page. This has been quite a positive for the club, having pulled a number of Eureka's from obscurity,

2014  
Melbourne

2015  
Ballina

2016  
Adelaide

**NATIONAL MEET 2014 MELBOURNE — 24 - 26 OCTOBER**

Coordinator;- Allan Purvis [natmeet@purviseurekacarclub.com.au](mailto:natmeet@purviseurekacarclub.com.au)

# A HAUNTING HANGOUT @ Hanging Rock

Thanks to Stuart & Radek flying the Eureka Flag and their kind permission to reprint here.



Well, what a day, all sunshine on the way down, till we reach Kyneton, then misty rain right up to the gate. We finally got in the grounds, and by chance, I just happened to pull in next to Radek with his recently registered Eureka! It finally passed a roadworthy, and was registered last Monday, so this was his maiden voyage in the Car. So another "smick" and rather unique Eureka on the roads in Victoria!

Over the morning there were patches of misty to light rain. The attendance and spectators were well down, probably no more than 400 or so cars on display, which was more than I expected due to the weather. For an event that in recent years attracts up to 4000 vehicles.

Only the main arena (where they set up the stage) and 2 areas adjacent were taken up with cars.

No cars were on the centre of the race track oval, or to the right of the main road going into the grounds. So those who have been previous years can get the idea of how many were in attendance.

Due to the weather, some display vehicles were leaving as early as 10.00 am, and the flow of cars kept streaming out the gate, as quick as they came in. 12.00 noon they gave out the trophies, and around 1.00 pm, most of the grounds were vacated. We stayed on till 1.45 pm, talking Eureka etc with Radek, and were 3 of the last

cars in the paddock. As soon as we hit the highway, dry roads all the way home! Overall it was a good day out, with the exception to the winterish weather. I took along my Eureka (Red) and 300ZX Convertible (Yellow), by chance we were directed to park in this paddock, and we just happened to pull in right next to Radek who had only pulled in some cars prior to us. The Yellow 300zx got knocked back from entering because it was just under 25 years old, we had to do some running around to finally get it entered into the display cars. Otherwise it would have sat in the spectators paddock.

It was a good day (albeit the bad weather) and we had two separate people contact us during the day which I'll update everyone on as more info becomes available. Both contacts would like to involve the club rather than just individual cars.

One person was a journalist from Unique Cars magazine who'd like to do a piece on Eureka's in the future and therefore if/when he writes the piece I'll update the club on any correspondence and put up a post to see if any other members are interested in having their cars also appear in the piece. The other was the motorsport director for the Geelong Revival festival. This year they are intending to move the festivals focus around Australian-made cars and he would like it if the Eureka Car Club would take part in the event. There's two parts to the festival - show and shine and the drag strip. Of course it's down to the individual as to which they participate in. I'll update the club once entrant's registration is open

# YOUR STATE

For what's happening around your state  
<http://www.classiccargurus.com.au/classic-car-events.asp>



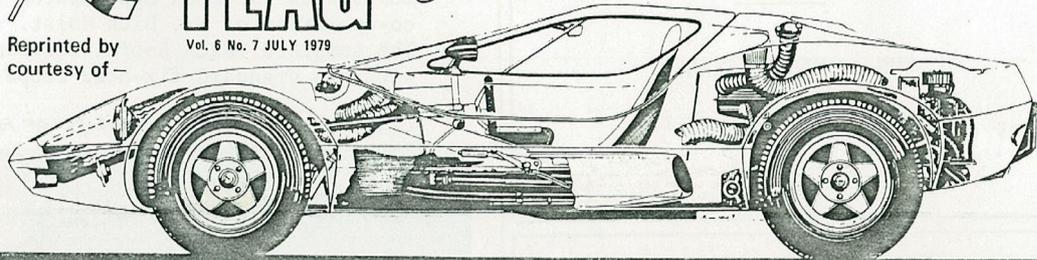
or FOR ALL UP TO DATE INFO SEE THE FORUM "EVENTS"

## Chequered FLAG

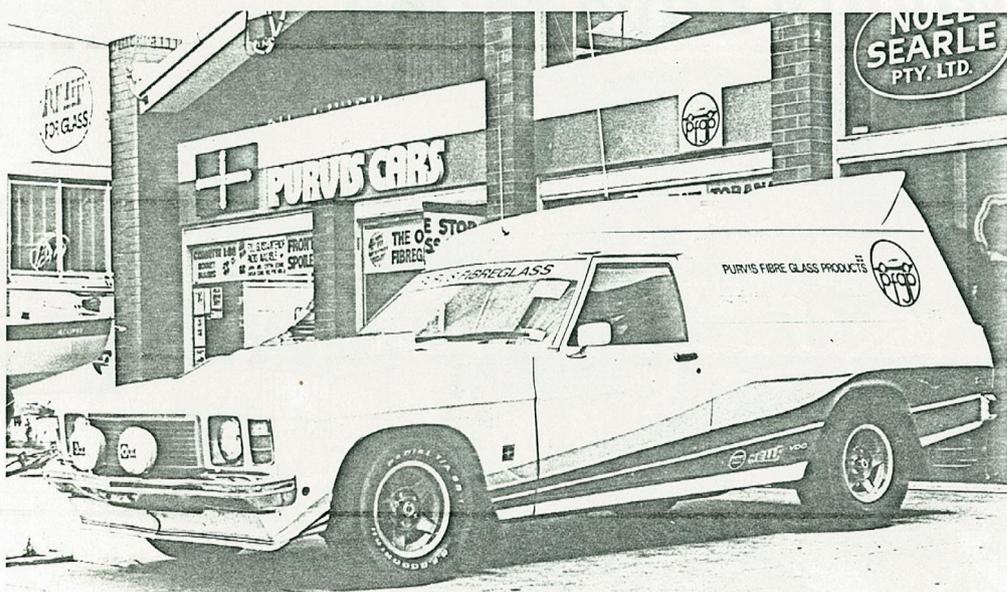
Reprinted by  
courtesy of -

Vol. 6 No. 7 JULY 1979

*Latest Road Test!*



For those who have possibly seen this Panel Van and not known, it's P.F.G.P.'s 24 Sheet Poster on Wheels. Accessories contribute reasonably to the monthly turnover. Range now totals over 60 individual parts and includes dress-up packs for anything from 260-Z to Gemini Vans.



BLAST FROM THE PAST Featuring pages from the Club Newsletters  
of the 70's & 80's thanks to Allan Purvis

**PURVIS EUREKA NEWS**

## PURVIS EUREKA NEWS

The primary difference between generators and alternators is what spins. Generators, love them or hate them are the normal charging system for our little VW engines (pre Superbug I think). Generators have an outer magnetic layer. There are also field coils to ensure this is magnetised the right way. They then turn an armature that has the main power winding on it. This is then fed into a commutator connected to the spinning armature to rectify the output voltage. We then have to have a regulator to try to limit the voltage produced by the generator and also limit the current drawn from it by the car. The single biggest advantage over an alternator is that the residual magnetism in the field coils means a generator will work even with a dead battery.

### Issues:

The voltage is proportion to rotation speed.

Therefore they required a significant speed to operate. At low idle they don't charge!

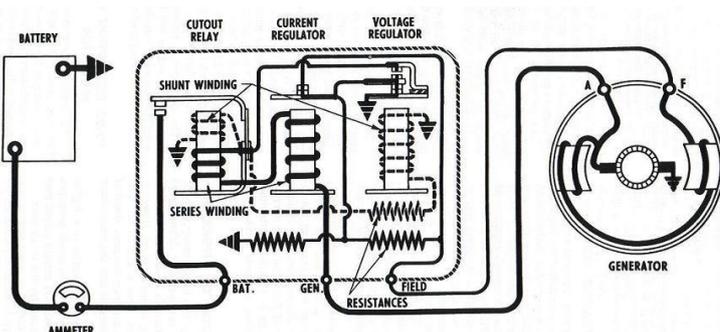
The VW regulators were mechanical. They chop the voltage when it reached 12v. This is a nightmare for electronics.

They were heavy.

Due to the commutator and regulator being mechanical and switching high currents they were prone to wear and would eventually require replacing.

They are inefficient. They produce power even when it isn't required.

This diagram while not VW is typical of the wiring for a generator regulator.



## TEC TALK with The GreenReek

Then along came the Alternator. Its primary difference is that it spins the field coils. This means that most of the mass on the armature is gone. Great we can now rev harder perhaps even to 3,000 rpm!! We still require the power generation coils but these are positioned around the armature. To make the voltage smoother alternators have 3 coils producing the power. These will do this sequentially during a revolution and therefore gives us a much smoother voltage. Because our output voltage can now be controlled by the voltage feed to our field coils, alternators will only produce power as it is required and will produce it at much lower speeds. Alternators still have regulators to control the field current. VW replacement alternators are usually internally regulated. This is even better as the regulator is electronic with no moving parts and should last the life of the car.

### Advantages:

Lighter and can spin at higher speeds

Only draws the power from the engine required.

No wasted HP

Higher currents available than from generators

With the electronic regulator and the 3 phase coils the voltage is almost spike free. The electronics will love it! (Not that I'd put a computer in a car)

Theory done!

Typical VW internally regulated alternator



With that unbiased appraisal out of the way.

## How do we convert to an Alternator?

**Answer:** Easily. Should only take you about an hour to toss the genny and be running smooth power.

### Parts required:

**New Alternator.** These are available from places like Mike motors and very reasonably priced. I have seen them as 55 amp, 75 amp, 85 amp and 100 amp. I am currently running an 85 amp have tried several others. One thing you will find is that the larger the current, the larger the diameter of the front section of the alternator. Can be an issue depending on your main pulley.

**New Alternator mount.** The standard mount used by the generator won't fit.

**Oil filler extension and Cap.** The new mount will have a screw in connection for an oil filler. There are a few varieties of these available either straight or with angled arms.

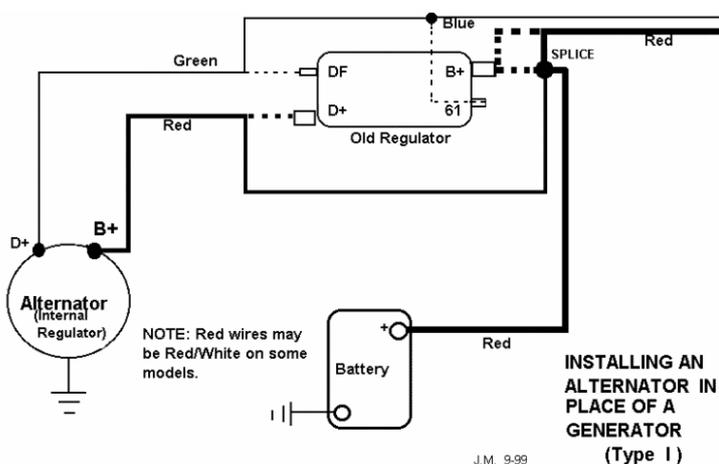
Fitting the alternator is a reasonably straight forward job for we Eureka owners who of course have all had to become VW mechanics anyway. Now the old regulator can be tossed (YEH). The following diagram shows how the wiring needs to be changed to allow the new alternator to function.

In essence with these internally regulating alternators we have only 3 connections.

The first is through the chassis so don't worry about it.

The second is the large screw terminal. This is the main power connector and can be run directly back to the battery. This requires wire rated at least as large as the capacity of the alternator. As we mostly have our batteries in the front there can be some loss. A simple alternative is to run this wire to the heavy battery line running to the starter motor. You can use the original Regulator power wire but make sure it is thick enough to handle the power you have chosen.

The final wire is a standard lug connector.(D+) This is the field coil initial power. Without this wire the alternator won't produce power. It is connected to the ignition/charge light on your dash. The other side of this light is connected to ignition power (NOT earth). A small amount of current is required to make this work. You **CAN NOT** replace this light with a LED **unless** you run a 10 ohms resistor across the light. This is a good idea anyway as it will supply better starting power to the alternator. The resistor will also keep your car charging even if your light blows. It should be at least 6Watts in capacity. I have heard of larger resistors working but this is the recommendation from delco.



### NOTE on the Charge light:.

This light will show you if your battery has more voltage than your alternator. So when you turn on a stopped motor it should always be on. As you start the car it should go off as soon as the engine speed starts to pick up. If it comes on while you're running then battery is being discharged. Get home quickly or not at all!

*Peter*

Aka The GreenReek

**OUTnABOUT** Only just made it. Pulled up at a major intersection on the way to the start of the cruise through the Adelaide Hills and my gear shift snapped clean off at the base due to some dodgy welding I did some years back. Got to a hardware store and bought some vice grips. Did the trick and got me to my sons place where we pulled it out and mig welded it back together. Re-assembled it and made the annual *Rock'nRoll Rendezvous* at the National Motor Museum in Birdwood South Oz about an hour late. Great day for the run out. A good time was had by all that attended. Can't wait to see more Eureka's back on the road . *Philippa*

<b>President</b>	<b>James Mclean</b>
<b>Vice President</b>	<b>Peter Curtain</b>
<b>Secretary</b>	<b>Paul Tonkin</b>
<b>Treasurer</b>	<b>Mary Skopalj</b>
<b>Merchandise</b>	<b>Jeff Thompson</b>
<b>Web</b>	<b>Philip Brow</b>
<b>Registrar</b>	<b>Allan Purvis</b>



**State Coordinators**

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**VIC Paul** [viccoordinatorpurviseurekacarclub.com.au](mailto:viccoordinatorpurviseurekacarclub.com.au)



Spot the spelling error

c c n s e f e s c l f n t g t i  
o a l p i h s r e b m e m p n g  
f n i u i v v o l k s w a g o n  
f b f i b e r g l a s s f a v o  
s e l g a e o u a a r l k i a n  
u r a b u s b c p a f e c s i e  
a r o s i n r l r l r t a n a d  
n a t i o n a l o u o t a e h n  
i d u n d a h o e r a e n t a a  
l z c s t i r l i n g r a a a d  
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a m c r a r e i i o a u l o g l  
b a u n s o a a b l c a f r i a  
y p o n a c t l a a t r t n l i  
s t r o p s e b i o b g a t c d  
l s p d b m y f o a n k e e r e

Our roving reporter advises that a very good day was had by all that attended a Mini Meet in Brisbane. Not sure how many Mini's were in the driveway, but I am lead to believe that some tires on a Eureka were checked for air.

Every Day is  
**EUREKA Day**

[secretary@purviseurekacarclub.com.au](mailto:secretary@purviseurekacarclub.com.au)

- |            |            |           |            |
|------------|------------|-----------|------------|
| ADELAIDE   | AUSTRALIA  | BALARAT   | BALLINA    |
| BATHURST   | CANBERRA   | CANOPY    | CLUB       |
| COFFS      | DANDENONG  | EAGLE     | EUREKA     |
| FIBERGLASS | FLOORPAN   | FORD      | HARBOR     |
| LINAK      | MAZDA      | MELBOURNE | MEMBERSHIP |
| NATIONAL   | NEWSLETTER | NOVA      | PURVIS     |
| SCORPIAN   | SPORTS     | STIRLING  | SUBARU     |
| VICTORIA   | VOLKSWAGON |           |            |

**PURVIS EUREKA  
CAR CLUB**

PO BOX 48  
O'HALLORAN HILL  
SA. 5158

**FOR THE  
INDIVIDUAL**

# Celebrating the 40<sup>th</sup> Anniversary of the Purvis Eureka Melbourne 2014



24th, 25th & 26th October 2014

## Club Member Booking Form



Purvis Eureka Car Club of Australia

www.purvisurekacarclub.com.au

Please complete & return by 1st September 2014

**Member Details:**

Name: \_\_\_\_\_ Forum Name: \_\_\_\_\_  
 Address: \_\_\_\_\_ Suburb: \_\_\_\_\_  
 State: \_\_\_\_\_ Post Code: \_\_\_\_\_  
 Phone/Mobile: \_\_\_\_\_ Club Membership #: \_\_\_\_\_  
 Email Address: \_\_\_\_\_

**Attending Vehicle Details:**

Eureka vehicle details (if participating): Model: Sports:  PL30:  F4:  Other:   
 Do you require parking for a Tow Vehicle & Trailer: Yes:  No:   
 Parking Spaces Required: \_\_\_\_\_ Estimated arrival time: \_\_\_\_\_

**Accommodation:**

The prices below are per room per night and include car parking.

**Double Room: Queen Bed - 2 people max: \$130.00**

**Twin Room: 2 Single beds - 2 people max: \$135.00**

If you require breakfast, the cost is \$15 per person per day if booked in advance only. The price doubles if you pay on the weekend of the event.

Please Note: If you would like to share a room with someone, please let us know, otherwise you will be charged for a full room.

If you would like to share a room but don't know anyone, please let us know and we may be able to assist if someone is available.

**Nights required:**

Friday:  Saturday:  Sunday:  Other:  Total Nights:

**Amount \$**

**Meals:**

Breakfast per person:	Number of Breakfast meals required @ \$15.00:	<input type="checkbox"/>	
Friday Welcome Dinner (incl Soft Drinks):	Number of Adults @ \$24.00:	<input type="checkbox"/>	
	Number of Children (Ages 5 to 12) @ \$15.00:	<input type="checkbox"/>	
Saturday Club Dinner at Pier 35: (Incl return transport to Pier 35 from motel)	Number of Adults @ \$65.00:	<input type="checkbox"/>	
	Number of Children (ages 5 to 12) @ \$30.00:	<input type="checkbox"/>	

**Limited Edition 40th Anniversary Meet Shirt (Mens' Sizing) each: \$55.00**

S  M  L  XL  XXL  3XL  4XL  5XL  Total Quantity Of Shirts:

The Meet Shirt will be available to order only and will be presented to everyone in attendance, if you cannot attend your shirt will be sent out to you.

**Total Payable:** \_\_\_\_\_

The Purvis Eureka Car Club will arrange accommodation on your behalf. The full amount payable is to be paid when lodging this form and no refunds can be made after 1st September 2014.

I accept all the above conditions:

Print name: \_\_\_\_\_ Signed: \_\_\_\_\_ Date: \_\_\_\_\_

**Payment Details:**

Complete & return this booking form and your cheque or money order in full to:  
 The Secretary, Purvis Eureka Car Club of Australia Inc, PO Box 48, O'Halloran Hill, South Australia 5158

Please make cheques/money orders payable to Purvis Eureka Car Club of Australia Inc or alternatively you can EFT your payment to:

Bank:	Bendigo Bank
Account Name:	Purvis Eureka Car Club of Australia Inc.
Account number:	124933961
BSB number:	633 108

**If you EFT your payment, please send your payment receipt with your booking form to [natmeet@purvisurekacarclub.com.au](mailto:natmeet@purvisurekacarclub.com.au)**

For any queries or further information, contact the National Meet Co-ordinator 2014 at: [natmeet@purvisurekacarclub.com.au](mailto:natmeet@purvisurekacarclub.com.au) or go to the Purvis Eureka Forum for more information.