



The VW-based Purvis Eureka.

# January 2017

IN THIS HOLIDAY ISSUE: The Purvis Eureka story VW's 2016 sales figures The Toy Department A supercharged VW

Motorworld Sydney Tiguan wins COTY - twice Amarok V6 test drive Plus lots more...



Club VeeDub Sydney.

www.clubvw.org.au



A member of the NSW Council of Motor Clubs. Also affiliated with CAMS.

### **Club VeeDub Sydney Committee 2016-17.**

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Please have respect for the committee members and their families by only phoning at reasonable hours.

#### **Club VeeDub membership.**

Membership of Club VeeDub Sydney is open to all Volkswagen owners. The cost is \$45 for 12 months.

#### Monthly meetings.

Monthly Club VeeDub meetings are held at the Arena Sports Club Ltd (Greyhound Club), 140 Rookwood Rd, Yagoona, on the third Thursday of each month, from 7:30 pm. All our members, friends and visitors are most welcome.

#### **Correspondence.**

Club VeeDub Sydn	ey
PO Box 1340	
Camden NSW 25	70

#### Our magazine.

Zeitschrift (German for 'magazine') is published monthly by Club VeeDub Sydney Inc. We welcome all letters and contributions of general VW interest. These may be edited for reasons of space, clarity, spelling or grammar. Deadline for all contributions is the first Thursday of each month.

Opinions expressed in Zeitschrift are those of the writers, and do not necessarily represent those of Club VeeDub Sydney. Club VeeDub Sydney, and its members and contributors, cannot be held liable for any consequences arising from any information printed in the magazine.

Back issues (2007-on) are available at www.clubvw.org.au under the Media - Żeitschrift tag.

Articles may be reproduced with an acknowledgment to Zeitschrift, Club VeeĎub Sydney.

#### We thank our VW Nationals sponsors: 29 VW Nationals.

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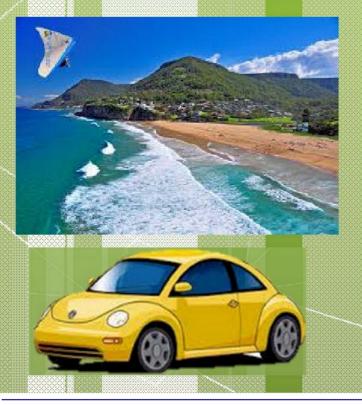
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#### 5 years and over.

Custom T-Shirts Expert Signs Exoticars Service Centre Just Kampers Motexion MacKellar Service Centre Mountain Mechanics Quik Strip Bankstown Rod Penrose Racing Subarugears Volkscare Melbourne Westside Mufflers

Meet at Uncle Leo's Diner, the Crossroads, Liverpool, at 9:30am, departing at 10:00am, stopping at Appin and finishing at Stanwell Park at 12:30pm.

If you are not up for a cruise, head straight to Stanwell Park and meet us under the Club VW Marquee.



The *11<sup>th</sup>* Annual VW Watercooled Summer Cruise 2017

## Sunday the 22nd of January!

Families and kids are all invited, with a free BBQ lunch of snags and rolls along with ice cold drinks. There is a great playground and of course the beach! All donations on the day will go to the cancer council.

Contact Craig - 0404 184 893 Steve - 0490 020 338

# JEFF'S VW CRUISE TO THE GOSFORD CLASSIC CAR MUSEUM!





## **SUNDAY 19 FEBRUARY**







Join us for a VW club run to the largest car museum in the southern hemisphere!

Meet at McDonalds at Mt Colah (513 Pacific Hwy, corner of Lady St) at 8:00 am for breakfast/coffee.

 Depart on cruise to Gosford at 8:30 am. Reserved VW Club parking and discount entry.
Enjoy over 450 classic cars (including VWs)
Optional - stop at the Pie In The Sky Café at Cowan on the way home!
Contact Jeff on 0402 280 242 for more info!
Hope to see you there! ©

# VW Pizza and Pasta Restaurant Night!

## When: Saturday 4<sup>th</sup> March from 7:00 pm

- Where: Mancini's Restaurant, 1026A Forest Rd., Lugarno (plenty of parking right in front)
- RSVP: To Dave Birchall on 9534 4825 to confirm your booking and numbers - leave a message if no answer. Name and number of people attending! Close-off for booking is Wednesday the 1st of March.
- Great Italian food, Sydney's leading and original wood-fired pizza restaurant
- Bring Your Own Grog.
- Don't forget to wear your best Hawaiian shirt or dress!





# Sunday 5th March 2017

The 2017 Thirlmere Festival of Steam is a great escape into our railway past - it's Australia's biggest rail heritage festival, featuring the largest number of steam locomotives to be found anywhere - five steam locomotives in operation!

The Festival is a fantastic day out for all the family, with all the fun of a country fair. Thirlmere village comes alive with a street parade, vintage steam machinery and historic vehicles, food, music, country crafts and displays. Over a hundred market stalls will offer their produce, craftwork, toys, snacks and specialty foods for sale.

The Festival is centred on historic Thirlmere Railway Station and Australia's largest display of historic locomotives, carriages and rail memorabilia at the Rail Heritage Centre, Thirlmere. A popular feature of the Festival is the huge variety of operational steam locomotives, all in operation on the day to provide frequent vintage steam train trips on the Thirlmere Heritage Railway to Buxton and back.

The ever-popular gala parade features bands, floats, performers and displays from local groups, car clubs and businesses, while classic and historic vehicles (including VWs) will line the streets. The parade starts at 1.00 pm. The Steam Festival also has lots of attractions especially for children, including miniature train rides, model train layouts and amusement rides of all kinds.



It is with great pride that we extend an official invitation to Club Veedub Sydney to join us at the Thirlmere Festival of Steam 2016 at Thirlmere, NSW, on **Sunday 5th March 2017**.

After the remote and scattered classic car parking of the last few years, this year we are changing the route for the parade and the display area for all clubs and classic cars back to the way it was before!

The VWs will once again display in Westbourne Avenue. Please enter from the northern end of Westbourne Avenue, as entry from all other locations will be prohibited. Please ensure that all members are in position by **no** later than 9:30am. There will be overflow parking for latecomers, but it will not be near the show cars. The earlier you arrive the better chance of a good spot. Join the Club Veedub convoy from Uncle Leo's Caltex Servo, Liverpool Crossroads, at 7:15am for a 7:30am departure.

The festival hours will be from 10:30am through to 5:00pm. Apart from the parade, which starts at 1:00pm sharp (marshalling from 12:30pm), vehicle movements will be kept to a minimum.

There is a restriction on parade vehicle numbers to **2 per club** to allow the parade to move freely and to reduce traffic snarls. If your club could select their appropriate vehicles and let the parade manager know on the day, that would be appreciated. The owners would then be required to ensure their vehicles are made available at the marshalling point in Westbourne Ave at the appropriate time (12:30pm). If they are not there on time, they will not be participating in the parade.

Please don't hesitate to contact me with any queries.

Gary Tierney, Vehicle Show and Parade Manager 0422 004275



www.thirlmerefestivalofsteam.com.au

### Von dem Herrn Präsident.

Hi all. Minuteman Press at Peakhurst who print our magazine, came in especially for us on his holidays to print this issue, so a big thanks to Bruce for doing this. He even drives a VW.

I hope you all had a great Christmas and New Year! I hope everyone enjoyed our Christmas meeting at Arena (Greyhound Club) in December. There are new caterers in the Greyhound club and they provided much improved food this time. We also got to use the extra space in the auditorium. Thanks also to the people who organised nibbles – Lily, Gwen and Shirley. Thank you too to everyone who brought a present, and to Dave for running the big Christmas raffle.

2017 is going to be a busy year for VW events, with some great things coming up for you to do with your VW. You should check the Klub Kalendar and make a note in your diary or calendar so that you don't miss out on these events.

The VW Summer Cruise is just about to happen so check the coming events section for more details. See the flyer and ring organiser Craig if you have any queries. The Club BBQ will be sizzling at Stanwell Park beach, so we'll see you at Uncle Leo's at 9:30am on 22 January.

On Sunday 19th of February is Jeff's VW Cruise to the Gosford Classic Car Museum. I'm told that this place is amazing – it used to be a Bunnings so it's huge. Meet at McDonalds at Mt Colah (north of Hornsby) at 8am.

Our annual Pizza Night is on again, at a new venue -Mancinis at Lugarno. Book your place with David Birchall. Numbers limited to 30. Don't forget your Hawaiian shirt!

Thirlmere steam festival in March has new organisers for the classic car show. We're back in the main street again after several years off to one side.

The VW Nationals is fast approaching. Sadly, we will not be able to do the Supersprint at Eastern Creek this year. Even though we made a booking with Sydney Motorsport Park, they proffered to take a booking from a club that was doing a two day event on the main circuit which uses the South Circuit that we normally run on. Dave tried to book other NSW motorsport venues but none were available. Instead, we are organising a Go Kart day at Luddenham as an alternative. Stay tuned for more info – we will probably have a 'practice day' there first.

Enquiries about the show are already coming in, so we

will get the VW Nationals 2017 pages up and running on the website very soon. Thanks Aaron. I hope to see you at an event in 2017 soon.



Steve Carter

# Kanberra Kapitel report.

Hi everyone, I hope you have had a relaxing Christmas break and are looking forward to 2017.

In December we ran our Christmas cruise, heading off from Old Parliament House and finishing at some community carols in Gungahlin. Many thanks to David and Mandy for organising the event attendance and the cruise. There are some pictures in this issue.

There will not be an event for January as we all get organised for return to work, school, etc. We will have our normal club meeting on Monday 30 January.

We had listed in the magazine that we are looking at a trip to Captains Flat for 18 / 19 February, but we are now considering changing that event so that we can join the Sydney cruise to the Gosford Motor Museum (Sunday 19 February). We have emailed the Canberrans and will let you all know the

outcome by email very soon. If you haven't emailed us back please let us know your thoughts.

March will be the Wheels carshow, with more info to come.

Happy New Year to you all.



Bruce

## Klub Kalender.

\*\*\* All information correct at time of printing but subject to change - events are sometimes altered or cancelled without notice. Check www.clubvw.org.au for the latest information and any changes.

### January 2017.

Thursday 19th:- CLUB VW MONTHLY MEETING at the Greyhound Social Club, 140 Rookwood Rd. Yagoona (right next to Potts Park). Get the latest VW news and views, plus VW socialising, drinks, raffles, trivia and plenty of prizes. Lots of fun, all welcome. 8:00pm start.

Sunday 22nd:- VW Summer Cruise 2017. Meet us at Uncle Leo's Caltex Roadhouse, Liverpool Crossroads, at 9:30am for coffees, photos and VW chat. Cruise departs at 10:00am. Brief stop at Appin, then to Stanwell Park by 12:30pm. Families and kids welcome, with gold coin BBQ sausage sizzle and drinks. Large grassy park with kids playground, kiosk and nearby surf beach. All profits to the Cancer Council. All VWs welcome, new and old.

**Thursday 26th:- Australia Day CARnivale** at Parramatta Park. Celebrate Australia's birthday in 2017 with a day-long program of events. Hot air balloons, BBQ festival and cookoff, family zone with kids' activities, rides and concert; Hot 100 party and bar, main stage concert and main fireworks at 9pm. Huge vintage and classic car show. Pre-bookings essential. On-line registrations open on 14 October. Go to www.ausdayparramatta.com.au for more info.

**Monday 30th:- Canberra General Meeting** at the Harmonie German Club, 49 Jerrabomberra Avenue, Narrabundah, at 7:30pm.

### February.

Thursday 2nd:- Magazine Cut-off Date for articles, letters and For-Sales.

**Thursday 9th:- Committee Meeting** at the Greyhound Social Club, 140 Rookwood Rd. Yagoona (next to Potts Park).

Thursday 16th:- CLUB VW MONTHLY MEETING at the Greyhound Social Club, 140 Rookwood Rd. Yagoona (right next to Potts Park). Get the latest VW news and views, plus VW socialising, drinks, raffles, trivia and plenty of prizes. Lots of fun, all welcome. 8:00pm start.

Sunday 19th: Jeff's VW Cruise to the Gosford Classic Car Museum. Join us for a run to the largest car museum in Australia! Meet at McDonalds at Mt Colah (513 Pacific Hwy, cnr Lady St) at 8:00am for breakfast/coffee. Cruise together to the Gosford car Museum - special reserved parking area for VWs. Discounted entry (normally \$20 adults kids \$14). Stop at the Pie In the Sky cafe on the way home! Contact Jeff on 0402 280242 for more info.

**Monday 27th:- Canberra General Meeting** at the Harmonie German Club, 49 Jerrabomberra Avenue, Narrabundah, at 7:30pm.

### March.

Thursday 2nd:- Magazine Cut-off Date for articles, letters and For-Sales.

Saturday 4th:- VW Pizza and Pasta Night at Mancini's, 1026A Forest Rd., Lugarno, from 7pm. Note the new venue this year! Sydney's leading wood-fired pizza restaurant. 3course banquet, unlimited soft drinks. BYO alcohol. Don't forget to wear your best Hawaiian shirt or dress! You must book your places with David Birchall (02) 9534 4824. Numbers strictly limited to 30 maximum.

Sunday 5th:- Thirlmere Festival of Steam 2017 at Thirlmere. After several years of bad parking locations, the classic cars are again front and centre in Westbourne Pde! Street festival and parade, steam train rides, Trainworks Museum, food, drink and trader stalls, model railways and family entertainment. Club VW Convoy meets at Uncle Leo's Caltex at Liverpool Crossroads at 7:15am for a 7:30am departure. We have to arrive by 9:30am.

**Thursday 9th:- Committee Meeting** at the Greyhound Social Club, 140 Rookwood Rd. Yagoona (next to Potts Park).

Thursday 16th:- CLUB VW MONTHLY MEETING at the Greyhound Social Club, 140 Rookwood Rd. Yagoona (right next to Potts Park). Get the latest VW news and views, plus VW socialising, drinks, raffles, trivia and plenty of prizes. Lots of fun, all welcome. 8:00pm start.

**Monday 27th:- Canberra General Meeting** at the Harmonie German Club, 49 Jerrabomberra Avenue, Narrabundah, at 7:30pm.

### April.

**Thursday 6th:- Magazine Cut-off Date** for articles, letters and For-Sales.

**Thursday 13th:- Committee Meeting** at the Greyhound Social Club, 140 Rookwood Rd. Yagoona (next to Potts Park).

Thursday 20th:- CLUB VW MONTHLY MEETING at the Greyhound Social Club, 140 Rookwood Rd. Yagoona (right next to Potts Park). Get the latest VW news and views, plus VW socialising, drinks, raffles, trivia and plenty of prizes. Lots of fun, all welcome. 8:00pm start.

**Monday 24th:- Canberra General Meeting** at the Harmonie German Club, 49 Jerrabomberra Avenue, Narrabundah, at 7:30pm.

### May.

Thursday 4nd:- Magazine Cut-off Date for articles, letters and For-Sales.

**Thursday 11th:- Committee Meeting** at the Greyhound Social Club, 140 Rookwood Rd. Yagoona (next to Potts Park).

Thursday 18th:- CLUB VW MONTHLY MEETING at the Greyhound Social Club, 140 Rookwood Rd. Yagoona (right next to Potts Park). Get the latest VW news and views, plus VW socialising, drinks, raffles, trivia and plenty of prizes. Lots of fun, all welcome. 8:00pm start.

Saturday 27th:- VW Nationals Go-Karting Challenge at Luddenham. Unfortunately all NSW race tracks are unavailable this year, so instead we are going go-karting at Luddenham Raceway https://luddenhamraceway.com More details soon.

Sunday 28th:- VW Nationals 2016 at Fairfield Showgrounds, Sydney. Australia's biggest Volkswagen show! 45 show categories, concours class, trade stands, swap meet, new VW display, kids rides, Club shop, German dancing, musical entertainment, great food and drink, VW fun for the family all day.

**Monday 29th:- Canberra General Meeting** at the Harmonie German Club, 49 Jerrabomberra Avenue, Narrabundah, at 7:30pm.

### Marktplatz.

Marktplatz ads in Zeitschrift are free. All ads should be emailed to **editor@clubvw.org.au** All ads will be published here for two months. All published

ads will also appear on our club website, **www.clubvw.org.au**. Photos can be included on the website but not in Zeitschrift. All ads will appear in Zeitschrift first so our members have first chance to see them. They will then be transferred to the club website on the third Thursday of the month.

### New Ads.

**For Sale:-** Hi I was looking to see one of your might need a parts car. I have a **1974 std beetle** I was restoring have now I have no time to do runs drives just body has rust except wings, bonnet and boot also missing carpets . Any help would be much appreciated Thank you for reading this. Please contact Mr Benjamin Watts on 042 0869354 or email benjaminwatts95@outlook.com

**For Sale:- 1966 VW Beetle**, 'Basil'. As is. 1600cc twin-port engine, runs OK. Original inside, now painted matt-black. Bright yellow paintwork, late-model fibreglass guards with upright headlights. I have a new project so time to find a new home. Car is in QLD. \$8,000 ono. Contact me (Jeanel) on 0439 631005 or email jaydalgrin@hotmail.com

Wanted:- Interested in doing a Bash in a VW? I am looking for a co driver for this year's Royal Flying Doctor's Outback Trek. June 4th -10th 2017. Travelling the outback via Griffith, White Cliffs, Tibooburra, Hungerford, Lightning Ridge, Dirranbandi, Armidale and Port Macquarie. For details contact Barry Parks on 0425 275097 or email bpparks@tpg.com.au



### 2nd month Ads.

**For Sale:- 1973 Type 3 automatic Notchback**. Unfinished project, garaged since 1989. This was going to be a "luxury car" project, so has lots of modifications, including a custombuilt dash and interior. Rust-free, all panels file-finished, but unfinished sliding sunroof. Engine is out of another Type 3, has T2 Kombi fuel injection conversion, 2074cc displacement. \$3000 o.n.o. Owner leaving country, must sell. Please email Rod at rod.young@aphs.nsw.edu.au for more info.

**For Sale:- 1963 Beetle.** Exceptional Functionality! Only travelled 56300 km. This car is exceptional value at \$33,000. Registration expires in May 2017. Don't let this go at this

price! Red exterior colour, white interior. Ruby has been in a showroom for the majority of her life. She is in complete original condition. The majority of the rubbers has been replaced. The side running boards are brand new. Changed from 6 volt to 12 volt. To all VW lovers, I do have nostalgic detailed information on Ruby in storage. We are in the middle of knockdown and rebuild of house so for serious VW lovers and buyers I can provide magazines and history of her lovely life. Price: \$33,000Odometer: 56,300 kms Registration: 88RUB. For more info and photos, contact Mrs Ra-el Miller on 0404 848280 or email rael@pyramidoflight.com

Wanted:- VW Type 3 Squareback. All year models considered! I'm seeking a tidy car (not necessarily a show car). Rego not essential. Willing to pay according to condition. Will be going to a good loving home where all its wants will be attended to. Please contact Graham on: (02) 4441 1166 or email gkingram@bigpond.com

Notice:- Hi, we have discovered we have the wreck of a **split** screen kombi ute in our personal rubbish dump. Just wondering if there would be any interest in it. We are located in Finniss, South Australia. If you want more info and photos, contact me! Margaret Mead, 0428 819631, or email mulpataflowers@gmail.com

## MotorWorld Sydney.

Club VeeDub was invited to attend the inaugural MotorWorld Mega Test Fest in December, and Steve Carter and Mandy Conway went along to participate in the event's activities and display some Club cars.

Leaving Canberra on Saturday 3rd Dec I hit the highway in my yellow 1300 '63 Beetle to Eastern Creek Raceway, Blacktown. There were few cars on the road to Sydney and averaging 60-65mph made for a very pleasant





#### trip. It also wasn't windy.

MotorWorld Sydney, held over four days, is an event which enabled car enthusiasts to test drive a range of new cars or compare brands and models with the CarAdvice team by taking part in their 'Mega Test' reviews. Visitors were encouraged to pre-book three test drives on street, track and off-road circuits. Cars on offer ranged from the Nissan 370z or the Subaru Levorg (amongst others) in the under \$60,000 Performance Car Mega Test, and the Honda HR-V or BMW X1 (amongst others) in the Compact SUV Mega Test. Over 7,000 test drive opportunities ensued.

After staying overnight at the Alpha Hotel, located directly opposite Sydney Motorsport Park, I met up with Steve Carter in his son's rather gutsy late model Beetle. We were greeted by Matthew Dunn from the event organising committee and were asked to display our Beetles in an area opposite the Mini car club. My photo, taken after Steve had left, tells the story. There were only a couple of other car marques being displayed on the day, although many marques had been there on the previous three days.

The small crowd in attendance meant we could mingle and chin wag to representatives from the motoring fraternity with ease. Ron Goodman made a special appearance at the event along with the Porsche 356 that he guided to victory at Monterey in the USA. Steve and I had several opportunities to chat to him and his team. Also on display were his fully restored 1956 and 1983 Porsche Speedsters.

Other classics from many marques were displayed in large marquees behind pit lane, various 'mint' early Porsches stood out. On hand to answer questions about the cars or to be directed to the test tracks were many young volunteers. I spent some time with a Russian lass who applies to volunteer



at motor events all over the world. If only I was 20 years younger...

My first test drive was around the race track. I attended a safety briefing session before taking possession of a Honda HR-V VTi-L. Our line-up of about 12 cars drove off and, following a lead car, toured the track 4 times. Reaching speeds of around (err..) 110km/h the track curves made for some quick braking and nice manoeuvres. The Honda was certainly nippy and my volunteer passenger said they liked my driving style.

Next came a Range Rover experience over a hilly dirt track. The plethora of automatic 'drive modes' made the drive feel like the car was in total control and I was just a passenger. I guess watching the dash-screen telling me which wheel was working properly was fun, but I think I'll stick to early vehicles with few to nil bells-and-whistles.

My next test drive was supposed to be in a Volvo on the street course but a spot became available in the Smart Cone Challenge slalom course and I was there! It's technologically advanced and sets the course as you drive, very challenging. I had to aim the 'Jag' between cones topped with green flashing lights whilst trying to spot the blue flashing ones which would soon turn green. I scored 82% competency and ended up 32nd on the lead-board. Well, not bad for a very first attempt at a slalom course and in an F-Type Jaguar no less.

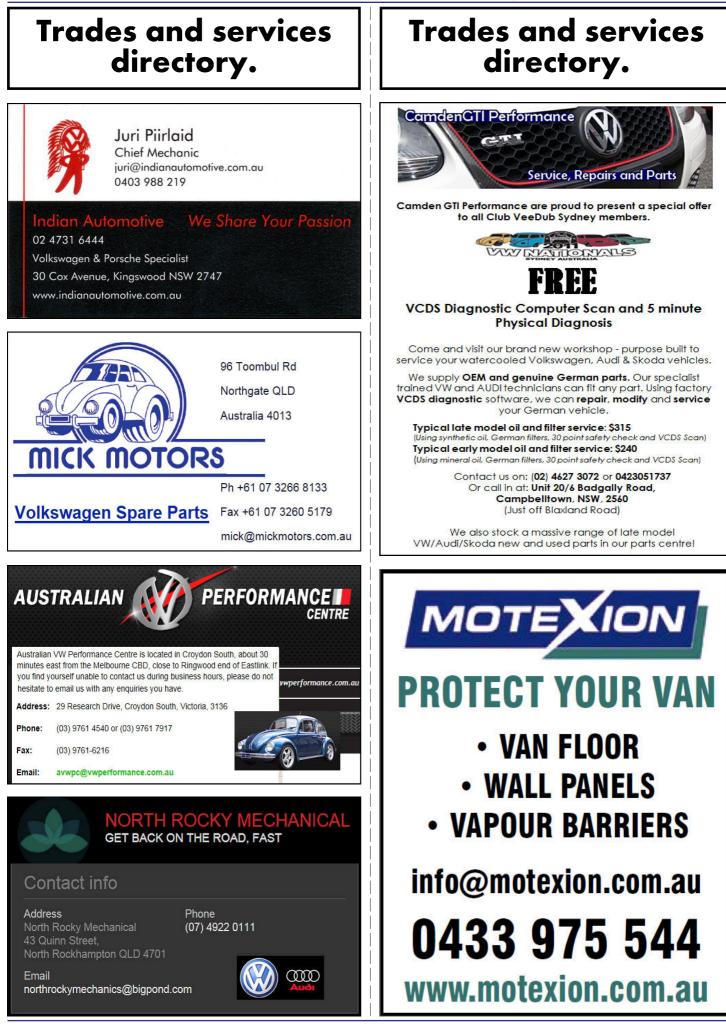


Then came the experience of a lifetime: being a passenger in a Porsche GT4 driven by Gareth Downes. Gareth has a long-standing interest in restoring classic cars and motor racing in Porsche 944s, 356s and 911s. Race suit and helmet on, and take off: I experienced true G-Force at 210km/h towards a bend and now realise my driving abilities will never reach these heights. (Having said that, keeping a stock '63 Beetle straight on a windy highway with lots of big trucks certainly needs skill.)

A final word from Matthew Dunn: '..Thank you for making the journey to fly the flag for the Vee Dubs. I am glad you were able to get a few laps in!" I intend to be there next year too.

Mandy Conway





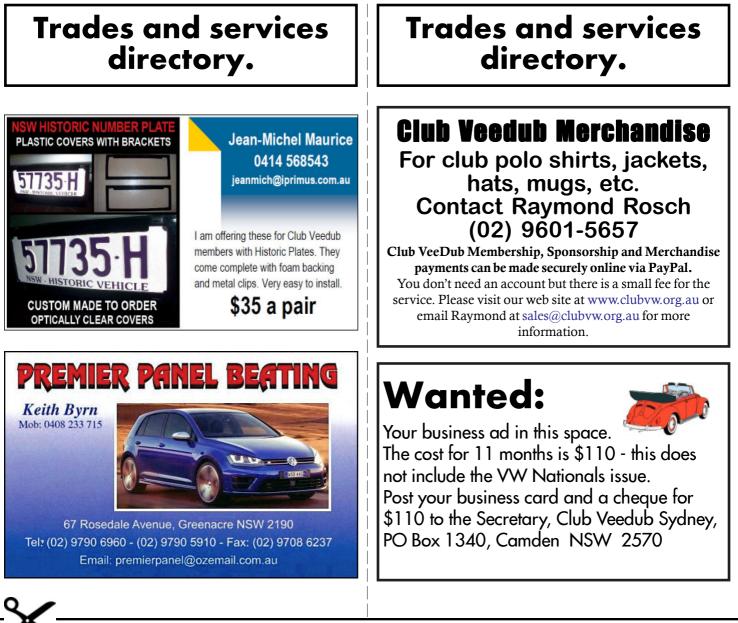


(BH) (AH) (Mob) Drag or track racing Meetings and tech talks

Other (you tell us!):

Email:

Phone:



# Club Veedub Sydney Membership / Subscription Form.

Please tell us about your Volkswagen(s):

Year	Model	Engine Size	Rego No.	Colour	Please enclose a cheque or money order for <b>\$45.00</b> ,
					payable to Club Veedub Sydney, and post it with this
					form to:
					Club Veedub Sydney,
					PO Box 1340 Camden NSW 2570
					Camaen NSVV 2570
					You will receive 12 issues.

# VW's 2016 sales – a slight drop.

Volkswagen has recorded a 6.1% drop in annual sales in Australia for 2016, but still recorded its second-best ever year here, according to VFACTS sales figures released this week.

Volkswagen sold **56,571** vehicles, down 6.1% on the all-time record 60,225 sold in 2015. This is a slightly disappointing result, given that the overall Australian market grew by 2 percent and most of the major brands grew their sales. However, the 2016 result is still greater than the results recorded in 2013 (54,892) and 2014 (54,801).

Some commentators have blamed VW's drop on the fallout from their US diesel emissions scandal, but Australia does not have the same Nox emission laws or testing as the USA. Rather, the drop is a result of the end of the older Tiguan model, VW's second-best selling model here after the Golf. The brand new Tiguan did not appear on our market until October. Other models like the Polo and Golf, and Jetta especially, are getting very old and due for redesigns.

Volkswagen again finished **8th** on the list of the most popular makes in Australia, for the sixth year in a row. VW again finished behind Nissan and Ford, and ahead of Subaru and Kia. Volkswagen finished 2016 as Australia's most popular European brand, for the twelfth year in a row.

As for the million Australian VWs countdown, remember that VW had sold 940,038 vehicles here, from 1954 to the end of 2015. Add on the 56,571 sold in 2016 and the overall total is now 996,609 (!) Just 3,391 to go to one million. At the average 2016 sales rate of 4,714 per month, **the one-millionth Australian VW is due to be sold on Monday 23rd January.** It is very surprising that Volkswagen Australia has not done anything so far to promote this significant milestone.

Volkswagen did not have passenger car models in the 'top three' in any category in 2016. The Golf was outsold by the Toyota Corolla, Hyundai i30 and Mazda 3 in the Small Car class, and the Golf did not make the overall Top Ten bestsellers this time.

The VW Caddy however, did again finish as the market leader in the Small Van category. The results were Volkswagen Caddy (1,706), Renault Kangoo (1,118) and Suzuki APV (472).



In the Medium Van category, the evergreen VW Transporter finished third. The results were Toyota HiAce (7,478), Hyundai iLoad (5,467) and Volkswagen Transporter (1,960). The Transporter grew by an amazing 45.6% and recorded its highest figure since the 2,273 sold in 1997. It's interesting to see again that the VW Kombi's highest-ever sales – 7,718 in 1974, 8,415 in 1973 and 8,974 in 1975 – are still higher than Toyota's Hiace figures today. Remember also that Australia's population in the 1970s was only half what it is now, so the VW Kombi's market penetration then was twice that of the Hiace now.



There were other VW Group vehicles that did well in their categories. The Audi A1 (2,113) finished second in the Light Car Above \$25K category behind the Mini (2,429). The Audi A3 (6,161) topped the Small Car Above \$40K category in front of Mercedes-Benz A-Class (4335) and BMW 1 Series (2,567). The Audi A6 (517) was third in the Large Car Above \$70k category behind the Mercedes-Benz E-Class (1,271) and BMW 5 Series (545). The Porsche 911(422) was the bestselling Sports Car Above \$200k in front of the Ferrari range (188) and BMW 6 Series (164). The Audi Q3 (3,634) finished third in the Small SUV Above \$40k, behind the the BMW X1 (4,090) and Mercedes-Benz GLA (3,766). Lastly, the Audi Q7 (2,908) finished third in Large SUV Above \$70k behind the BMW X5 (4,181) and Range Rover Sport (3,099).

Overall, Australian new vehicle sales hit an all-time high of 1,178,133 units spread across 67 brands in 2016, according to the VFACTS data.

The new market high is up 2.0 per cent on last year's result, and is the third calendar-year sales record in four years.

Reflecting trends, Light Commercials (up 9.4 per cent) and SUVs (up 8 per cent) did the heavy lifting, with passenger car sales declining almost 6 per cent. Light commercials and SUVs now comprise a combined 56 per cent market share.

Respective market shares by vehicle type were: passenger (41.3%), SUV (37.4%), Light Commercial (18.5%), and Heavy Commercial (2.8%).

The top-five segments by volume were Small Cars (224,450, down 4%), Medium SUV (172,194, up 16.5%), 4×4 Ute (146,820, up 10%), Large SUV (142,495, up 2%) and Small SUV (110,414, up 2%).

The sub-total of sales by buyer type for 2016 was: private (571,544, down 7%), business (472,156, up 13%), government (40,989, down 1.4%) and rental (60,335, up 6%). Buyers using their ABN to

buy a single car count as a business sale, while novated leases count as private.

Top maker for the 14th year in succession was Toyota, ahead of top full-importers Mazda and Hyundai. Toyota and Mazda both increased slightly on 2015, while Hyundai dropped slightly.

For the first time ever, local hero Holden finished outside the top-three. Its sales dropped by over 8 per cent to below 100,000 for the first time since the 1980s and they finished in fourth place. They were just in front of a resurgent Ford, which grew a massive 15 percent and doesn't miss the old Falcon at all.

Next came Mitsubishi and Nissan, both of which grew slightly over 2015. In eighth position was Volkswagen, whose sales dropped 6 per cent but still recorded their second-best sales ever in Australia. Rounding out the top 10 was Subaru and Kia, just edging out Mercedes-Benz and Honda. Kia grew an amazing 25%.



In the luxury market, Mercedes-Benz (41,226, up 13%) easily carried its title over BMW (28,028, up 12%), Audi (24,258, up 5%), Land Rover (13,597, up 14%) and Lexus (9,027, up 4%).

Smaller-scale brands that showed good growth included (alphabetically): Infiniti (807, up 41%), Isuzu Ute (23,377, up 11%), Jaguar (3,008, up 133%), LDV (1542, up 101%), Porsche (4,434, up 8%) and Volvo (5,878, up 19%).

Brands that went backward included: Alfa Romeo (711, down 55%), Chrysler (462, down 50%), Citroen (965, down 13%), Dodge (366, down 69%), Fiat (2,414, down 39%), Foton (839, down 21%), Jeep (12,629, down 48.3%), Peugeot (3,129, down 22%) and SsangYong (371, down 63%).

The Toyota HiLux was Australia's top-selling new vehicle in 2016, marking the first time a light commercial ute has finished a calendar year atop the podium. Two of the top four-selling vehicles are now utes, and half of the top 10 were either light commercials or SUVs.

To further illustrate the changing tastes of Australian buyers, the traditional Holden Commodore sedan was the top-selling vehicle in Australia from 1996 to 2010. It was usurped by the smaller Mazda3 in 2011-12, then by the Toyota Corolla in 2013-16. Now, the top selling-car is not even a car – it's the HiLux ute.

Remarkably, about half of these were the flagship SR5 4×4, which surged on the back of growth in the 'lifestyle' ute market, and responded to unprecedented discounts prompted in the most part by the success of the Ford Ranger.

#### Australia's top-selling brands for 2016:

- 1. Toyota 209,610 (up 1.6% on 2015)
- 2. Mazda 118,217 (up 3.7%)
- 3. Hyundai 101,555 (down 0.4%)
- 4. Holden 94,308 (down 8.4%)
- 5. Ford 81,207 (up 15.3%)
- 6. Mitsubishi 73,368 (up 2.3%)
- 7. Nissan 66,826 (up 1.1 %)
- 8. Volkswagen 56,571 (down 6.1%)
- 9. Subaru 47,018 (up 10.4%)
- 10. Kia 42,668 (up 25.5 %)

#### Australia's top-selling models in 2016:

- 1. Toyota HiLux 42,104
- 2. Toyota Corolla 40,330
- 3. Hyundai i30 37,772
- 4. Ford Ranger 36,934
- 5. Mazda 3 36,107
- 6. Toyota Camry 26,485
- 7. Holden Commodore 25,860
- 8. Mazda CX-5 24,564
- 9. Mitsubishi Triton 21,987
- 10. Hyundai Tucson 20,132

### Amarok V6 now here.

The long-anticipated Amarok V6 has arrived in Australia, giving Volkswagen Australia a serious point of difference in the intensely-fought 4×4 ute market.

As expected, the Amarok V6 will come only in rangetopping Highline (\$59,990 plus on-road costs) and Ultimate guises (\$67,990), which are \$3000 and \$4000 more than the superseded four-cylinder versions respectively. The Amarok V6 is made in Germany, not Argentina like the rest of the Amarok range.

The six-pot Amarok models will compete with other so-called lifestyle utes such as the massively popular Ford Ranger Wildtrak (\$61,790), as well as the forthcoming Mercedes-Benz X-Class.

The new power and torque leader in Australia's 4×4 ute class sports a 90-degree 3.0-litre turbo-diesel V6 based on the mill used in the VW Touareg, Audi Q7 and Porsche Cayenne.

It produces 165 kW between 2500 and 4500rpm, and 580 Nm from 1500 to 2500rpm — though its pared-back braked towing capacity of 3.0 tonnes with 300 kg towball load limit due to our hot climate is 500kg shy of the Ranger,



HiLux, D-Max and most others. If you fit the VW wiring kit, you get active trailer sway control built into the ESC.

The payloads are 911 kg and 864 kg respectively, which is short of the 1000 kg offered by the Amarok Core, though the V6 is not really pitched as a workhorse per se. The gross combined vehicle mass is 6000 kg. Underneath is a front double-wishbone setup, while at the rear is the class-standard (excluding the Nissan Navara) rigid axle with leaf springs.

The Amarok also has an overboost function that kicks in past 70 per cent accelerator extension which will up the ante, briefly increasing power to 180 kW and torque to 580 Nm. At this peak, it offers 48 kW/150 Nm more than the current 2.0-litre Amarok, though claimed combined-cycle fuel use of 8.6 L/100 km is only 0.3 L/100 km inferior.

Optimal timing for the V6's overboost function is third or fourth gear from 50km/h, with a span of 10 seconds at a time, broken up by five-second cool-offs. Thus, the Amarok V6 is capable of completing the 0-100km/h sprint in only 7.9 seconds and accelerating from 80-120 km/h in 5.5 sec. It's also hauled in by all-round ventilated disc brakes.

The V6 engine will come standard with VW's 4Motion 40:60 front:rear permanent AWD system, meaning no low range, but there is an off-road mode, hill-descent control and rear Torsen diff lock standard. All versions sold here will sport an eight-speed auto, with the six-speed manual due in Q4, 2017.

Volkswagen claims you can scale 100 per cent inclines (slope angles of 45 degrees) with a full load. Approach and departure angles are 29-degrees front and 24-degrees rear, and maximum wading depth sans snorkel is 500 mm.

The changes to the V6 Amarok are not just mechanical. The interior has been given an overhaul as part of this midlife update as well, though it still lacks airbags in the rear unlike most rivals, and also the Ranger Wildtrak's advanced active safety features such as radar cruise and blind-spot monitoring.

Options include Metallic/Pearl Effect paint (\$590); Vienna Leather upholstery (includes front heated seats) – \$2690; Alcantara upholstery (includes front heated seats) – \$1890 and 20-inch 'Talca' alloy wheels (set of 5) – \$990.

The Amarok V6 is step-one in VW's 2017 Australian Amarok rollout. In March the updated four-cylinder range arrives. Around June the range-topping Aventura arrives priced north of \$70,000 RRP, and in Q4 the V6 manual lobs for performance enthusiasts.

Read our road test of the Amarok V6 in this issue. See the Amarok V6 at your VW dealer now.

Volkswagen Amarok V6 Retail Pricing: Amarok V6 Highline – from \$59,990 Amarok V6 Ultimate – from \$67,990

# Golf 7.5 to have fewer versions.

The updated Volkswagen Golf range will be have the number of options and variants rationalised as part of VW's push to improve its profitability.

Herbert Diess, CEO of the core Volkswagen brand in Germany, has confirmed to Autocar UK that the revised Golf



lineup will be trimmed as a part of a push to boost its slim profit margins.

It's not clear yet what type of alterations will be made, but it's possible that the vast range of drivetrain options available in Germany will be pared back, with some lowerpower versions phased out in favour of a new mild hybrid setup using a 48V electrical system.

Autocar reports that Diess has been pushing VW's engineers to strip away cost from the allegedly overengineered MQB component set that underpins the Golf, as well as practically every new FWD Volkswagen, Audi, Skoda and Seat vehicle released in the last few years.

Diess has also been pushing for a better and more flexible deal with its labour unions, as well as placing a greater emphasis on SUVs, which are not only more profitable, but have a global appeal unmatched by other body styles.

The push to make the Golf cheaper has been spurred by Volkswagen's profit margin falling to just 1.4 per cent during the first half of 2016.

A lot of the blame for this fall can be attributed to the US diesel emissions cheating scandal. The Volkswagen Group has formally set aside 16.2 billion euros (\$23.2 billion) to deal with the saga's various costs, as well as agreeing to a US\$14.7 billion (\$19.3 billion) settlement with US authorities. Things will only get tighter now, as the company is investing around \$2.4 billion in the new MEB electric vehicle platform, which will a spawn a raft of new EV models and which was previewed by the ID concept unveiled at the recent Paris motor show.

Going on spy photos and leaks, the 7.5 Golf update will feature a relatively minor visual upgrade, but will have many revised interior and trim specification upgrades.

Earlier this month VW confirmed that the revised Golf range will make its European debut late in 2016 or early 2017. That means that the updated Golf range probably won't start entering local showrooms until some time during the first half of 2017. Stay tuned.

# VW Atlas debuts in California.

The Volkswagen Atlas seven-seat SUV made its world premiere today at California's Santa Monica Pier, but don't expect to see it arrive in Australian showrooms any time soon.



The company's most obviously North Americanfocused vehicle marks a new chapter in its history there, as it seeks to make a clean break from the diesel emissions saga.

The full-size crossover will be made exclusively in Chattanooga, Tennessee alongside the US-market Passat. Volkswagen invested 900 million euros in re-fitting the site for the Atlas, which was previewed years ago by the CrossBlue concept and was going to be called the 'Teramont' until the recent launch – not any more.

In terms of price, the VW Atlas will be positioned between the Tiguan and Touareg, but it'll be the most spacious by far, and unlike the former pair is not made for European markets.

The flared arches, squat proportions and bold grille flanked by LED headlights give the VW Atlas very 'American' lines. The character lines and kinked rear window give it some extra panache.

The Atlas is not a sedan version of the Amarok, or a rebodied Touareg. It's actually based on VW's ubiquitous Modular Transverse Matrix (MQB) architecture, a collection of components that also underpins the Golf, Tiguan and Passat (and a multitude of other FWD Group cars such as Audis, Skodas and SEATs).

It's 5037 mm long, 1979 mm wide and 1768 mm tall, making it about the same size as a Mazda CX-9 or Toyota Kluger. Volkswagen says it has ample space for three rows of seats, the latter two rows of which have newly developed folding mechanisms.

Standard features include a touchscreen with Apple CarPlay/Android Auto, plus a Fender audio system with 480W amplifier. Depending on spec, you get the Audi-style Virtual Cockpit TFT instruments, radar cruise control, autonomous brakes and blind-spot warning.

The Volkswagen Atlas arrives with a choice of two powertrains: a 2.0-litre four-cylinder TSI turbo-petrol with 175 kW, and a 3.6-litre VR6 engine with 206 kW. Both engines route power through an eight-speed transmission. No diesel option for the US market, naturally.

It can be configured either as front-wheel-drive or with 4Motion all-wheel-drive in combination with the VR6 engine.

Should it come to Australia, it would compete with the Toyota Kluger and Mazda CX-9, both of which are very popular in Australia. Ergo, Volkswagen Australia is keen to import it, but is unlikely to get its wish. This is a car for an American audience only. "We have to acknowledge that right-hand-drive is a remote contingency in Atlas," said Volkswagen Australia product marketing manager Jeff Shafer.

"That said, there's no doubt that Atlas would fit naturally into Volkswagen Australia's SUV rollout. It would slide in below the new Touareg – which remains our halo vehicle and technology showcase – and above the soon-to-come longwheelbase Tiguan.

"There would be more room in the Atlas's rear seats than the seven-seat Tiguan because it's the next segment up."

The seven-seat Tiguan XL is due to arrive in Australia later in 2017, giving Volkswagen at least a smallish presence in the booming family

SUV market, in which it has so far been a non-player.

### US Passat GT.

The Volkswagen Passat GT Concept has made its inthe-flesh debut at the recent Los Angeles motor show.

Designed by Volkswagen's North American arm, the Passat GT is, according to the Matthias Erb, the region's chief engineering officer, meant to be an "early example of how the new Volkswagen North American Region will meet the needs and desires of American customers going forward."

The Passat GT Concept is based on the US Passat that's sold almost exclusively in North America and China, a completely different vehicle than the Euro Passat sold here. Based on an older platform, not the more modern MQB toolkit of the Euro Passat, the US Passat GT Concept rides on 19-inch alloy wheels and suspension that's been lowered by around 15mm.

Styling changes include red trim for the grille and headlights, a honeycomb cover for the lower air intake, tinted tail-lights, LED headlights, red brake calipers, a subtle boot lip spoiler, and black wing mirrors, rubbing strips and window surrounds.

Inside, the Passat GT Concept has faux carbon-fibre trim, black headliner, piano black panels for the centre tunnel, and sportier seats with black and grey leather upholstery and contrasting stitching.

While the Passat GT Concept may borrow some styling cues from the Golf GTI, it doesn't feature an upgraded drivetrain.

Under the bonnet, the GT Concept is powered by the



same 3.6-litre VR6 engine that's already available in the American Passat. When fed with premium fuel, the VR6 engine develops 209 kW of power and 350 Nm of torque.

That's all delivered to the front wheels a via a six-speed dual-clutch transmission.

In the wake of the US diesel scandal, Volkswagen's regions were given wider latitude to run their own businesses.

Erb notes, "We have the freedom and the responsibility to shape future North American vehicles here in the US, combining engineering resources from around the world with our unique perspective and talented local team."

The US Passat is not sold in Australia.

### Gol GT in Brazil.

The Volkswagen Gol GT concept has been revealed at the Sao Paulo motor show in Brazil.



Built in Brazil, the Volkswagen Gol is the South American relative to the Polo and Skoda Fabia. It's not a misprint or mis-spelling of 'Golf' – it's Portuguese for 'goal' for the soccer-mad Brazilians. The first generation Gol was built in 1980, using a Polo platform with a 1300cc air-cooled engine in the front. Modern Polo/Golf engines were introduced in 1985. The second-generation Gol appeared in 1994, and the third and current – the 'Novo Gol' (New Goal) in 2008, facelifted in 2014 to look like the European Polo (even though it's a different vehicle). Currently the Gol is available with 1.0 or 1.6-litre Polo-based engines that run on E100 ethanol.

The new three-door GT concept looks similar to a Polo GTI, featuring an even more aggressive bodykit, full-LED headlights, integrated LED daytime-running lights in the front bumper, and 18-inch 'Serron' alloy wheels.

Inside, the Gol GT Concept gets sports seats, a 'GT' sports steering wheel, new door panels, air vents and door handles, along with aluminium sports pedals and 'GT' branding throughout the cabin.

The interior also sports a black and red colour scheme, similar to the Golf and Polo GTI models we know and love.

It's unknown what actually powers the Gol GT, though reports suggest Volkswagen's 93 kW 1.0-litre turbo threecylinder (as used in the Euro Up!) would be a likely candidate if the model is confirmed for production. The older 8V 1.6 is tuned to produce just 90 kW on E100.



### Canberra Christmas Cruise.

In December, the Canberra Chapter ran a Christmas Cruise, meeting at Old Parliament House, and cruising to Gungahlin to display our cars at a community carols event, and participate in the local activities.

It was a great event and we had an excellent turnout by our members. Thanks go to David for organising the event and Mandy for coordinating, as well as all who attended, helping to make it a great way to cap the year off.

Bruce





### VW Tiguan wins 2016 Carsguide COTY.

It faced a tough bunch of rivals after a punishing year – but VW's Tiguan SUV helped to raise the brand's image.

It's the Tiguan! Volkswagen is back to its best as a car maker, claiming the 2016 Carsguide (Daily Telegraph) Car of the Year crown despite enduring one of the worst years in its corporate history.

After the US-market complaints, controversies and a \$20 billion penalty in the USA for emissions cheating, in Australia VW's Tiguan SUV has easily trumped one of the best fields in the 20-year history of Carsguide's Car of the Year.

The Tiguan scored on all counts – safety, comfort, quality and driving enjoyment – to take a unanimous firstplace sweep with the seven hard-nosed COTY judges.

It finished ahead of the Honda Civic and Audi A4 after two days of intensive testing of a 10-car field of finalists.

The Tiguan's victory is the fourth time in the past eight years that a Volkswagen has claimed the COTY crown, following the Golf in 2013 and 2009, and the Polo in 2010.

"This is a well-deserved win by a very impressive car," said Carsguide editor Richard Blackburn.

The battle for this year's crown covered most segments of the new-car market, from family seven-seaters to roadsters. The Civic burst from the pack during the final test runs to jump ahead of the A4, Mazda CX-9 and Fiat 124 Abarth after the contenders were culled to a final five after the first day.

Including the Astra, there were four 1.4-litre turbos in the field. The Civic's is a 1.5-litre turbo and even the E300 has a 2.0-litre turbo four and not a V6.

Then there is the technology, with driver-assistance on almost every car and an incredible battery of lifesaving technology on the E300.

#### The Cull

First out were the Kia Sportage and the E300, with the Korean SUV not living up to the promise of last year's COT Y winner, the stablemate Sorento.

Most judges found it underwhelming. It looks good on paper with a seven-year warranty and standard leather but its old-school engine and a lack of standard safety tech counted against it.

Everyone loved the luxury and the huge digital dash display in the Mercedes but its unsettled ride and a less than silky-smooth engine brought it undone. "It oozes luxury but it's not the breakthrough of the C-Class," said Dowling.

Next out was the Focus RS. Everybody loved having a sprint in it but no one wanted to own it. "I really don't think it rates here. It's missing two airbags and there is no driver-assist technology," said Dowling. "It's a fun car, but no. It's too noisy, too jiggly in the suspension and there's not enough tech. You couldn't live with it day-to-day," says Duff.

After these exits, it was the turn of the Jaguar F-Pace and, despite all of Holden's promises, the Astra.

"I think the car is let down by the interior. It doesn't feel like luxury to me," Chris Riley said of the Jaguar, although, "the steering and chassis are as good as, if not better than, a Porsche Cayenne," said Dowling.

Some judges felt the Astra was built to a price, despite the premium being asked. Many felt it didn't have the necessary wow factor in the cabin.

#### The Final Five

On the second day, judges assessed the Abarth 124, Audi A4, Honda Civic, Mazda CX-9 and Tiguan. The course was the same but the focus on 'real cars on real roads for real people' was sharper.

"The Fiat is the best adaptation of a donor vehicle we've seen. It's a better Mazda MX-5," said Blackburn. "I really like it to drive but is it a Car of the Year?" asked Duff. Most judges felt Fiat could have done more to differentiate the interior from the Mazda.

Judges felt Mazda's CX-9 was missing equipment and pizzazz in the cabin. "The CX-9 is let down by some poor planning decisions. It needs front parking sensors, a power tailgate should be standard and there are no third-row air vents," said Dowling. The petrol engine was also a query. "A diesel is a better way of moving seven people than a petrol engine. And the steering wheel tugs in your hand when you accelerate," said Blackburn.

The A4 won marks for its sharp price and class-leading technology, including a coasting function to save fuel and an exit warning system to detect cyclists and motorcyclists.

"The Civic is nearly as big as the original Accord. It has a massive cabin and a big boot," said Duff. "It's not cheap but it has a much classier cabin than the Astra and any other



car in the class," said Dowling.

But the final vote was unanimous in favour of the Tiguan. The Tiguan scored on all counts – safety, comfort, quality and driving enjoyment – to take a unanimous first-place sweep.

An impressive list of standard safety equipment – including steering the car back into its lane if it begins to wander – was backed up by convenience features such as automatic parking.

Ample storage, a big load area and clever touches in the well-finished cabin also helped seal the deal, while the driving experience was topnotch.

"It's got cylinder-on demand technology, dual-clutch auto, stop-start and a superb chassis," said Dowling. "It's not the usual spartan Volkswagen. It's a very impressive car," said Blackburn.

### VW Tiguan also wins Drive 2016 COTY.

The new Volkswagen Tiguan has also won the competing 2016 Drive Car of the Year.

Website www.drive.com.au is co-owned by Fairfax Media (publishers of the Sydney Morning Herald and owners of the Macquarie Radio Network), and digital publishers 112 (www.themotorreport.com.au). Drive Car of the Year has been run since 2006. Volkswagen has won numerous categories since then, and had won the overall award twice before - for the Golf 6 in 2009 and the Polo in 2010.

The new Tiguan competed in a field of 46 new vehicles to appear in Australian showrooms in 2016, including the defending champion the Ford Everest, across fifteen different classes. Testing was done on urban and country roads in and around Goulburn, as well as on the Wakefield Park circuit. Each vehicle is assessed in five categories – under-bonnet performance and efficiency; how it drives; price, value and equipment levels; safety features; and comfort and practicality.

The cars are judged and scored according to these criteria, resulting in fifteen different class-winners. These fifteen winners are then assessed and eliminated leaving one overall winner, the Drive Car of the Year.

After the first elimination rounds, the final four vehicles were the Ford Focus RS, Mazda CX9, Mercedes-Benz E220d and the Volkswagen Tiguan. At the next stage of assessment, the judges then eliminated the Ford and the Mazda.

Judges were split evenly between the Mercedes and the VW for the overall award. The Merc was praised for its advanced safety technology. The Tiguan was described as providing 'Audiderived technology' for an affordable price (it's a Volkswagen MQB platform with Volkswagen running gear, not Audi – Ed.), with class-leading safety equipment and efficiency that gives it an edge over its rivals.

But ultimately only one car could win – and that car is the Volkswagen Tiguan.

"Ultimately, it is the Tiguan's position as the more popular family car that really sealed the deal



for it, "said Drive editor Lucas Kennedy. "The fact that it is in one of the most competitive segments in the world, let alone Australia...there are some great rivals, and everybody is doing a compact family SUV. But the Tiguan elevates the concept to more of a new level.

"It is bigger on the inside, it has more cargo carrying space in the back, and it is really well catered for in terms of those rear seat passengers. It's clever...it's got sliding and reclining rear seats, and there's even picnic tables of the back of the front seat rests. It's really cleverly thought-out car.

"But it's also modern, and full of new technology that was literally only available in luxury cars six months ago.

It has all the modern safety tech; it rides really well; this engine, the 1.4-litre four-cylinder turbocharged petrol engine, is all you'll ever need for everyday use. It's smooth and refined, and it's also really fuel efficient.

"While you'll pay a little bit of a premium for some of the higher-grade models, this variant is exceptionally good value.

"It was a very, very tough decision. That E-Class is mighty impressive, and brings technology that will improve the car of the future – and it's here today. The judges were not only split once, but twice on a re-vote. Ideally, we would love to have two Dive Car of the Year winners. Both of these cars are impressive in their respective classes.

"Modern, efficient and relevant to consumers, the Volkswagen Tiguan is a worthy overall winner of Drive's Car of the Year for 2016."

Naturally the new Tiguan also won the Best Small SUV category, beating its brother and last year's winner, the Golf Alltrack, not to mention the Renault Kolios and the Kia Sportage.





### The Purvis Eureka.

The Purvis Eureka caused an instant sensation when it was unveiled at the Melbourne Motor Show in March 1974. Modern Motor promptly featured the Eureka on its cover in June 1974, and Sports Car World included a 'we drove it first' article in July 1974. Over the next decade or so, SCW, Wheels and other magazines had Eurekas on their covers, and articles on the Eureka appeared in magazines from 'Kit Car' to 'Racing Car News'. Motor Manual even built its own 'Project Eureka' and featured it in a series of magazine articles.

The Eureka first started life in the UK in 1971. Automotive Design and Development Ltd (ADD) was an English company that was responsible for the creation of the futuristic-looking 'Nova' kit car. 'Nova' is a Latin word that means 'New'. GM had used it for their small Chevy sedans from 1962, but these weren't sold in the UK and the name was unknown in that market.

The Nova was styled by Richard Oakes, with engineering by Phil Sayers. It has been described as one of the most beautiful cars ever. The two seater Nova with its dramatically opening roof/door combines elements of the Ford GT40 and Lamborghini Miura in a fibreglass shell on a VW Beetle chassis and mechanicals. With the benefit of hindsight it's not difficult to reflect that this body was against the ordinary and seemed destined for relatively great things right from the outset. The prototype was completed in England late in 1971, and went on sale as the Nova early in 1972.

Why didn't the Nova merely boom and bust like so many others of its kind? It didn't because it wasn't just another of that kind; not just another bolt-on body (yawn) for the Volkswagen Beetle platform chassis. That's basically what the body was (and is) of course, but it had features that stood it apart from its peers and assured its continuing success.

The Nova was particularly well planned, well made and very well finished. But more than that it had a daring and trend-setting style far in advance of anything available even from the Italian specialists. Never was the humble Beetle so dramatically and completely disguised. There but for its mundane underpinnings might go some fabulously exclusive

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design by Ferrari, or Lamborghini, or some other exotic marque.

And if its devastatingly impressive lines weren't enough, there was always the piece de resistance - the use of a one-piece up-andforward cockpit canopy instead of doors. That was the clincher. Though the canopy wasn't really the optimum means of opening and closing the cockpit, it was a feature that made the Nova different and stamped the driver as one prepared to forsake some practicality for the sake of style and individuality.

Licenced version of the Nova were built in Austria as the Ledl; in France as the Défi; in Italy as the Totem and Puma; in New Zealand as the Scorpion; in South Africa as the Eagle; in Switzerland as the Gryff; in the United States as the Sterling and Sovran; and in Zimbabwe as the Tarantula. There have also been numerous un-licensed copies. No other VW body

conversion body has been as successful in so many countries. None gets close; perhaps only the Meyers Manx buggy body achieved similar international popularity and number of copies, but many of them were unique designs that only vaguely looked like a Manx.

ADD was based in Southampton from 1971 to 1973, after which it moved to Accrington, Lancashire. ADD suffered financial difficulties and went out of business in 1975. After a 3-year hiatus, the rights to the Nova were bought by Vic Elam who founded a new company, Nova Cars in Mirfield, West Yorkshire in 1978. Elam produced a 'Mk2' Nova in 1981, and they remained in business until 1989. Nova enthusiast Sam Colbey bought the original moulds in 1993 and produced a run of new bodies until 1997, when he sold them to Aerotech in London. They planned a new run, but no further new bodies have been produced since then.

In the US a British Nova had featured on the cover of Car and Driver magazine in 1973, leading to a flood of enquires from Americans. ADD could not keep up with demand from European buyers, let alone the much larger US market. So Oakes and Sayers licenced the Nova design to Norm Rose and Cecil Robinson of San Lorenzo, California. They founded California Component Cars and were soon producing Americanized versions of the Nova – now called the Sterling – for the US market.

By the late 1970s over 8,000 had been sold but demand was slowing. Ownership of CCC changed several times as partners and investors came and went. In 1979 an updated



squared-off version called the Sovran was released to 'take the design into the 1980s' but it was a failure. It was killed off in 1983 and replaced with an updated original Sterling 'GT'. Production continued until 1992, by which time CCC had diversified into other more modern 'replicar' kits, and the moulds were sold to Redhead Roadsters.

In 1996 Sterling enthusiast Mike McBride bought the moulds and began limited production of Sterling spare parts, and updated components, as well as a few complete bodies. He made around 8 complete cars by the time he retired in 2005, and sold the Sterling business. Dave Aliberti of Pennsylvania took over and created Sterling Sports Cars. His company still produces components for the Sterling today and can be found at www.sterlingkitcars.com.

Of course the Nova also made it to Australia. Aussie Alan C. Purvis had seen the Nova/Sterling featured in English and American motoring magazines. He liked what he saw and wanted one. On holiday in the UK in late 1972, he saw an opportunity for the Nova and met with Oakes and Sayers. He imported a body, acquired production rights and made distribution arrangements for Australia and New Zealand. He was convinced it could be successful in Australia despite the tightening registration laws.

With a background in advertising and industrial design, Purvis was among hundreds or even thousands of Australians who dreamt of running his (and very occasionally, her) own car company. Purvis set up shop in Victoria in 1974, planning to make an 'Australianised' version of the Nova fibreglass-bodied sports car.

Behind the extreme appearance was a garden-variety VW Beetle platform and VW mechanical components, which were very common in Australia due to Volkswagens being locally assembled in Melbourne. The favourable response at the 1974 Melbourne Motor Show encouraged Purvis to offer a do-it-yourself version, plus a full 'turn-key' ready to drive away model. Among the claims were that the newcomer was an 'economy sports car', more aerodynamically efficient and 20% lighter than a standard Beetle, and thus capable of delivering better performance and economy.

Allan chose to rename the Nova to Eureka in recognition of the fighting spirit demonstrated by the miners at the 1854 Eureka Stockade, and adopted the Eureka flag as the company symbol. Being told that the car would never make it past the Australian Design Regulations simply made Allan more defiant and determined.

There was no escaping the distinctiveness of the low, sleek form of the Eureka with its radical opening roof, which certainly turned heads wherever it went. Economy was another huge success factor, in terms of what these days would be called "total cost of ownership". Being a kit car, the labour component could be excluded from the purchase price, and with the standard VW engine, fuel economy was excellent. If you did all the work yourself you could get a Eureka onto the road for a fraction of the price of anything else that looked anywhere near as exotic. "Being a Volkswagen underneath, the Eureka was in the

lowest insurance category. There was also the safety factor. The long nose actually formed a great crumple zone, and thick fibreglass panels and wide box sections gave the body of the Eureka excellent strength. Performance wasn't too bad either, given the aerodynamics and reduced body weight.

The Purvis Eureka was marketed as being 'For the



Individual', and provided the owner with many options to create a totally individual sports car. If the factory options weren't adequate, the owner had plenty of other choices. VW or Ford engines could be hotted up in all manner of ways, or could be replaced by something completely different. Mazda rotary and Subaru flat 4 engines were options, and various other engines have also been fitted.

Disc brakes from later model VWs could be fitted on the front, and rear disc conversions were also available. There was also scope to play with the suspension for improved road handling. A Porsche 914 5-speed gearbox could even be fitted for extra performance, although at considerable cost as the 914 was not sold in Australia. More recently 5-speed Subaru gearboxes have been used.

Being of fibreglass construction, body modifications could be made quite easily, and T-bar type and open top roofs could be created. Pop up headlights, modified rear lights, and different rear spoilers can all be added to make the car more individual.

While the Eureka was initially very similar to the UK Nova, subsequent local development made it quite different, and unique. In many ways the Australian Eureka was actually better than the Nova or the Sterling. These were the major Australian Eureka models.

#### Sports

This was the first model, produced roughly between 1974 and 1975.

The Eureka Sports, sometimes incorrectly referred to as Sportsman, was introduced in 1974 and was virtually identical to the UK Nova. The roofline was extremely low, with total height of the Eureka Sports just over 101 cm. The roof lifted up on gas struts, with catches on the interior to hold the roof down securely while in transit. There was a handle in the rear of the roof that was used to open and close and lock the roof down. The long bonnet included very distinctive 'nostrils' or air intakes. Front headlights were rectangular Ford Capri units, while rear lights were from a Thames van. A single wiper covered the large windscreen. Standard equipment included a fire extinguisher, sports exhaust system, laminated windscreen, full harness seatbelts, mag wheels with radial tyres, and many other items seen only as options on other cars for many years to come.

Inside, there was a narrow centre console with a single in-dash air vent at the top. The narrow instrument pod contained a speedo and tacho, and a number of other gauges. A second instrument pod was mounted in front of the



passenger, and often held the optional radio/cassette player.

The VW gearshift came out from the top of the console and the standard VW hand brake and heater controls were between the seats. Many owners fitted a remote gearshift and moved the handbrake further back for ergonomic reasons.

Sitting in the Eureka Sports was not all that comfortable. The roofline was extremely low and even a medium height person could find themselves banging their head on the roof. On the driver's side, the situation was not improved by having to fit one's legs under the steering wheel. Seat rails could be modified and the floor pan could be lowered to make the seating position more comfortable. The rear vision mirror seemed uncomfortably close to the driver. Rear vision was quite limited, with only a reasonably small rear window. Electric external mirrors were essential for reasonable rear vision. There were various storage compartments in the cabin, and a reasonable space behind the back seat to stow soft bags, etc. The front under bonnet area was full of battery and spare wheel.

Owners could choose from an impressive list of options including: driving/fog lights; a choice of mag wheels; electric radio antenna; quartz halogen headlights; perspex headlight covers; electric fan and windscreen demister kit; rear louvre; etc. A good range of body colours was available, in the lairy 1970s shades of the times.

Purchasers had a choice of Eureka Sports kits to select from, starting with the Comprehensive Kit that was basically a totally finished body that only needed to be mounted on your VW chassis, plus the fitting of vent ducting, gauges, steering wheel, etc. There was also a Progressive Kit, which entailed no greater level of owner construction effort, but did not include all the components (eg wheels, tyres, seats, sports exhaust, etc) and was, of course, initially cheaper. The owner could then acquire these parts from Purvis or alternative sources as and when he could afford them. There were various levels of build that the factory would carry out for the new Eureka owner.

Around 235 Sports models were made in two years.

#### **PL30**

The second model, produced roughly between 1975 and 1976.

The Australian Eureka PL30 incorporated a number of significant Purvis improvements over the Sports/Nova model and was introduced at the 1976 Sydney International Motor Show. In keeping with Allan's Eureka theme, the name PL30

symbolizes Peter Lalor, leader of the Eureka rebellion, and the 30 miners and soldiers that died.

The most significant change in the PL30 was to the roof line. The slope of the windscreen was reduced by around 14 degrees, the windscreen shortened by about 2 inches and the roof shape changed accordingly. This increased interior headroom by 50 mm, and improved interior comfort considerably. The new angle also reduced annoying light reflection problems. Furthermore, the PL30 was now available with an electro-hydraulic automatic opening hatch, which opened or closed at the flick of a switch.

Other features of the PL30 included a new bonnet without the nostrils, and the plastic rear moulding was replaced by a neater set of squared double rear lights, with a narrow bumper bar underneath.



Interior wise, the dashboard was rearranged and squared up to hold more gauges, and the passenger side of the dash flattened out. The centre console was also remodelled to allow the installation of a radio/cassette unit. The centre console was rebuilt to around 25 cm wide at the top, and on a 45-degree angle over the gear shift, giving the impression of a much shorter gear shift. The width of the console allowed lots of switches, although it also reduced legroom dramatically.

Carpets were fitted to the sides as well as the floor to improve noise levels and general passenger comfort. SAAS seats were cloth upholstered, and a new SAAS deep-dish padded sports steering wheel fitted.

Other improvements to the Eureka PL30 were halogen headlights, a fire extinguisher and electrically adjusted rear view mirrors. These changes reinforced the Eureka's success and before long the PL30's tally stood at 95 units.

#### F4

The third model, produced roughly between 1976 and 1991.

Purvis continued to develop not only the body but also the concept. As it stood, the Eureka was a relatively simple, bolt-on body conversion designed to be adapted to the VW chassis with a minimum of time and trouble. As such it was accepted with few if any hassles by most registration authorities. But Purvis decided there was need for an alternative engine, so he introduced an optional adaptor system by which a water-cooled in-line four-cylinder Ford Cortina engine could be fitted to the VW transaxle, giving a

quieter and more powerful powerplant. The 2.0-litre Cortina engine produced almost 100 bhp SAE, considerably more than the 60 bhp VW 1600, and smoother, quieter and more reliably than hot-rodded VW engines. After some initial doubts and vetoes, most registration authorities came to accept the new F4 (for Ford, 4-cylinder) when satisfied of its integrity.

Apart from the engine option, the F4 also brought other changes including louvred flat engine cover, another increase (30 mm) in canopy headroom, revised side sill panels, and enough room over the engine to allow for turbocharger installations. There was a small indent around the body to improve the fit of the closed roof and reduce weather and noise problems. The area around the windscreen wiper motor was changed slightly, and a small gutter ran across the body under the front of the hood. Probably the most distinguishing feature of the F4 was the round headlights.

The F4 also came with a new range of options including a 'Targa'-style lift off roof, a low line rear spoiler and 'Countach' style air intake boxes. The various kits, optional extras and choice of colours offered with the Sports model carried through to the PL30 and PL30/F4. A fullbuild option for the PL30/F4 was available from 1977.

The Targa top was first available on the F4, and did not leak if correctly fitted. Since then many Eureka owners have adapted their hood to the Targa type style and they can now be seen on all models. Often the Targa tops are actually Ttops, which were aftermarket additions never produced by the Purvis factory. Owners sometimes describe their T-top Eurekas as 'Targas', but this is wrong.

The F4's production score eventually came to more than 225, plus 30 or so of the Targa.



After producing the Eureka in these guises for 15 years, Allan Purvis sold the company to Colleen Long in 1989. Sales in the 1980s were lean, to say the least. Old VWs were still fairly common on the roads then, but the fact that Australian Beetle sales had ended in 1977 made them an ultimately limited resource for parts.

Purvis Cars Pty Ltd also had to overcome a fire, which in 1979 destroyed almost everything, and endlessly battled to keep the show on the road in the face of constant financial challenges. The small turnover meant the company was never profitable in the longer term. One bizarre proposal to reduce production costs involved inmates at Sydney's Long Bay Gaol building Eurekas as part of a rehabilitation program. Needless to say, this never eventuated.

The knockout blow, according to Purvis, was the

failure to secure a federal government research and development grant for a convertible version of the Eureka, known as the Free Spirit.

Purvis made more than 10 Eurekas in black. Allan did not like making this colour for safety reasons, but if a customer insisted on black, then black they got. All white was also not uncommon on both the PL-30 and PL-30 F4 models. Allan Purvis' favourite colour was yellow over yellow.

The only genuine rear wing is the low-line model on the F4, the one that does not obscure the drivers rear view due to the cutdown centre section. This was done in this style to adhere to Australian Design Rules (ADR), which the company had to comply with at the time. The wing actually was modelled on the wing of a Porsche 928, a favourite of Allan Purvis' at the time.



The larger 'Lambo-style' rear wing was manufactured later by Colleen Long. The prototype 'plug' was made from metal and welded onto an engine lid, and was originally intended to be moulded as a whole - engine lid and Lambo wing as one moulded part. Colleen Long sold this Countach rear wing as an accessory after she purchased the company, and these are now commonly fitted to earlier Eurekas.

#### **Recent history**

The final Purvis tally was 683 sold, but only around 450 actually registered. The discrepancy, one suspects, was due to a couple of hundred enthusiasts setting off on the dream of owning/building a Eureka, but tripping up along the frustrating path.

Under Colleen Long's ownership the company continued to manufacture original and updated Eureka spare parts, plus the occasional body. Colleen Long also produced a new Eureka prototype called the Freedom Machine. It was basically an F4 Eureka with the rear window and tunnel section chopped off at the engine cover height. The rear was flat, with an additional fibreglass roll bar at the back. It used a standard mould of the windscreen section, with two small side windows to support the windscreen, but no roof or sides to the roof turret.

You could actually buy the screen separate from Colleen Long for about \$1800. She called it a 'Summer Screen', and would fit any Eureka.

Several prototype and demonstrator Freedom Machines were made, but there was little interest from the public in the 1990s (by which time donor VWs were becoming increasingly rare and outdated), and it never entered production.

One other concept that never made it to production was the Free Spirit. The body shape was very different to any other Purvis body, with very sharp angular lines. The body



was designed to take a mid mounted Ford Laser drive train and a purpose built chassis (By Elfin Sports cars). Allan Purvis was unable to get financial backing so the Free Spirit never went into production. The one-off rolling-pan prototype was never offered for sale and it was eventually destroyed.

Around February 2002 the former Purvis factory in Dandenong Victoria was sold again, packed up and the contents moved to Sydney. The current owner of Eureka Sports Cars is gradually disposing of all the kit car components and is apparently working on a new space frame sports car. Spare parts and accessories have been the main lines of the on-going business, but full Eureka bodies are no longer made.

The world total of Nova-based fibreglass VW conversions is estimated to be around 11,000, of which just 683 were Australian-made Purvis Eurekas, the most popular of all the VW kit cars.

## The Eureka Nightmare.

VW Club of NSW 'The Wageneer', February 1978

### Part 1 - 5,001 ways to waste your spare time – OR – 1 quick way to get a divorce 5 minutes after you're married.

It all dates back to November 1976 when George decided it was time the old brown Beetle had a facelift. The fatigue cracks were beginning to spoil the otherwise unmarked paintwork.

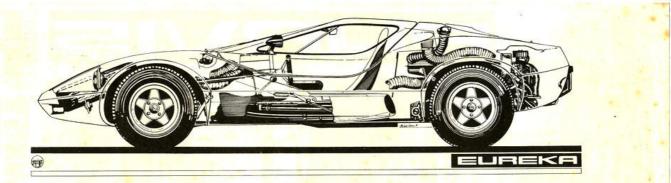
He waited patiently and nursed the Beetle along (at Dirt Circuits, Speedway, etc.) for four months, in the meantime deciding to get married, and in late March after many frustrating calls to Melbourne, the green light was given.

The Porsche Orange Purvis Eureka kit was ready. Thongsy's trailer was borrowed for a couple of days, and I was railroaded into co-driver.

Early one Sunday night the trip of a lifetime began brown Beetle (so comfortable for long trips), trailer, rope and tyre tubes for tying the kit down, a large bank cheque, George and I.

Goulburn was scheduled as the stop for the first night to allow us two full days for the remaining trip. The following morning George, beginning to show signs of seeing this magnificent new car on Amaroo Dirt, we started off along the Hume Highway again.

About 3.00 pm we arrived in the outskirts of Melbourne and decided to try phoning Purvis Cars to let them



### STANDARD EQUIPMENT

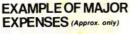
Hazard Warning Flashers 2 rear view mirrors (electric impulse type, titted) 4 on the floor 2lb. fire extinguisher Padded sports steering wheel. Carpets 2 fully upholstered rally bucket seats. 4 Mag wheels 7" x 14". Globe Safety Rims Opening & removable windows 4 Radial tyres. (Fitted)

Flow through ventilation

Laminated windscreen Sports instrumentation Push Button Radio Free flow exhaust system

### SPECIFICATION

EUREKA SPECIFICATIONS:- Body type: Hatch top Coupe S completed vehicle) (approx) inc. Reg etc. on the road for home build. Colour: 30 available (no metaillic or black). Weight: 1736 lbs. approx. Fuel consumption: 30 m.p.g. overall with 1600 cc. Load: 2 persons. Specifications: Engine — all standard VW: Transmission — All standard VW: Overall ratios — All standard VW. Construction: Semi monogue libre glass body bolted to floor pan (steel). Suspension: F: Toralon bar front end only, with anti-roll bar R: Semi trailing arms or swing asle, with torsion bar. Shock Absorbers: Telescopic. Steering Type: Cam and roller. Turns Lock to Lock: 2.00. Turning Circle: 31.5 tl. Steering Wheel Dis.: 13 inches. Brakes: Disc/Drum or drum/drum (11 In. discs; 9 in. drums). Wheelbase: 95.3 ins. Track: F: 56.3 ins. R: 55.2 ins. Length: 14% II. Width: 51.8 in. Height: 42in. Level Tank Capacity: 7.8 gails. Ground Clearance: 5% in. Tyre Size: ER-70 x 14 in. Tyre Pressures: 12 psi front — 18 psi rear.



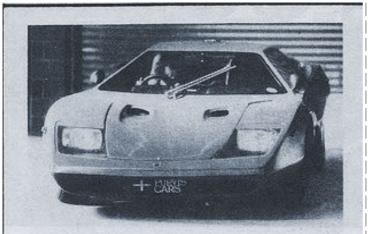
Comprehensive Kit Running Chassis including collapsible steering column, petrol tank etc. etc. On Road & Registration Costs Motor — (Say Seconhand 1600cc) Miscellaneous extras TOTAL



MANUFACTURED BY Purvis Cars Pty. Ltd., 248 The Esplanade, Brighton, Victoria, 3186 Telephone: 592 9548

Purvis Cars Pty. Ltd. May we quote you? For INSURANCE





# EUREKA

Designed and developed in England, this rear engined two seater coupe stands a mere 3 ft. 6 inches high and is virtually hand-made. An expensive high performance GT sports coupe it is not. A well balanced, two seater coupe, with more than a touch of exotica, offering adequate performance and economy by today's standard, it is!

Around \$2890\* including tax with eight weekends work to complete on your Volkswagen running gear. Slip yourself into one of the most exciting cars ever made in Australia. Now available for test driving.



know we had arrived, and would pick the kit up early the next morning. If you have ever tried to navigate your way to Dandenong in peak hour and find a public telephone that works at the same time, you will know how frustrating our next hour was.

This was to be my first experience (I was assured wouldn't be the last), of George's bad temper. I didn't know he had a bad word to say about anything but I soon found out otherwise. Time was getting on and we were now minus a fair bit of petrol.

Finally about 4 pm and many phone boxes later we found one that worked. It was about 20 minutes past before George emerged and asked if I wanted the good or the bad news. I really didn't think Victoria could produce any more hassles but I was wrong.

The Porsche Orange kit ordered for Mr. Hudson would not be ready for another week - we were a week early, despite the fact George had rung on Friday afternoon to make certain everything was OK. BUT, they did have a red kit which was meant for someone in Tasmania, and as we'd arrived first we could have that one. I'd wanted red all along, so I didn't really mind.

Early the next morning, having spent the night in Dandenong, we turned up at Purvis Cars ready to collect the kit and hopefully be on our way home with no more holdups.

Having handed the cheque over to Alan Purvis, the

foreman and his men commenced tying the body on the trailer. Everything was so 'professionally' done and we were on the road again heading back to Glorious Sydney, eagerly reading every distance post as we went.

Approximately 10 km away George wasn't happy. Something was wrong. The kit was bouncing too much on the trailer so we stopped to check. Just as well we did as there was already one hole in the fibreglass where it had been rubbing. We proceeded to untie and retie every knot. Our poor Southern Cross Rally Officials hats, which fortunately were still in the back of the Beetle, were used to stop parts of the body rubbing against the trailer. Midday we set off again.

I am afraid my navigating through the streets of Melbourne leaves something to be desired and certainly was not appreciated with a fully loaded trailer in tow. As the lights turned amber and George put his right foot down (so as to avoid stopping suddenly), I gave the order straight ahead only to find we were approaching oncoming traffic. We were now entering a one way street - the wrong way. It was seen by George in time as he manoeuvred car and trailer around the corner, almost compelled to do a handbrake turn, and many words were said to me, none of which were really meant for female ears.

We both heaved a great sigh of relief when we saw the last of Melbourne suburbia. Neither of us dared to look back. From then on through the day and night we made frequent stops to check all was still OK. About midnight we gave up trying to fight the semis on the hills and picking our way through the heavy fog so we stopped in a rest area to try and get some sleep (in the brown Beetle that was impossible.) We gave up after an hour and set off again. About 3 am we arrived back in Earlwood and I still had to face driving home to Bondi. Then of course we were both faced with the pleasant thought of work as usual in a few hours.

Any sadist who is contemplating buying a Eureka kit, for goodness sake have it freighted up to Sydney.

George will continue now and tell you of his first three months of happily married bliss (the Eureka and I walked the aisle together).

Gaye Hudson

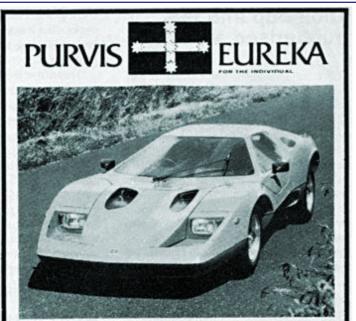
#### Part 2 – How To Assemble A Car After You Have Assembled The Instructions

#### VW Club of NSW 'The Wageneer', March 1978

Pulling the old body off the Beetle was relatively easy using a block and tackle and a couple of blokes. It was also made easier by the fact that the fatigue cracks also opened up so you could see what you were doing!

The next part of the operation consisted of pulling the Eureka body apart (it comes basically assembled), and laying the main body shell on the platform. This was also done with very little pain with the help of 'Shirley' Fergy and Chris Hee-hee-heenan. At this stage I thought it was going to be a snack - but no, I found there were no supports for the fuel tank so they had to be manufactured. And that was just the beginning.

The dashboard fitted in where it was supposed to, but when I followed the instructions for the steering column I



#### **PURVIS CARS**

#### Reg. Address

4 Brooklyn Avenue, Dandenong, Victoria, 3175. Australia. Phone 791-3497 1263 Nepean Highway, Mt. Eliza, 3930, Victoria. Phone 787-3985

#### Interstate Agents:

NSW: John Warren, Warren's Budget Cars, Sylvania. 522-5758. QLD: Larry Franks, Brisbane 57-5440; Ray Miller, Cairns 51-2503; Paul Engelhardt & Erhard, Strohmyer, Toowoomba 32-8442. S.A.: Brian Little, Seaview Downs 298-4842; W.A.: Mike McCain, Maddington 69-2375.

found the steering wheel rubbed against my groin (but I'm not that kinky!) even when I sat on the floor. I raised the whole thing two inches (5 cm) through the top of the dash and later found some builders lift it even higher. In the long run I even fitted a 12" wheel (dial-a-corner) for more room instead of using the 13" wheel supplied.

Next came the seating !!! Following instructions I mounted the seats on the modified frames and then onto the runners in the normal way. I jumped in to check out the driving position which seemed OK and then for the first time I lowered the roof. With the roof resting firmly on my scone I found it needed to come down a further 1½-2" (40-50 mm). Bloody Norah!

After chiselling off the runners I bolted the seats directly to the floor, which was a cow of a job getting all the holes to line up. This time we were successful in lowering the roof, providing you slid into a semi-reclining position. (Of course, since then a new model has been produced with a higher roofline. Naturally I missed out!)

Next came the electrical system. A loom was supplied with the kit, which was extremely simple as it left out the unimportant things like regulator, relays, switches, etc. So with ye olde faithfulle workshop manual in one hand and loom in the other I proceeded to rewire the car to the old Beetle specs. Finally, heading for divorce and 3½ months from when I started, I added all the lower body panels to complete the car – and wonder of wonders, they all fitted! Which is more than I can say for the exhaust system they supplied, which rubbed against the tappet cover on one side and against the inside of the tyre on the other. Anyway some mild bending around a tree fixed that (but there'll be no more mandarins this season).

The car was now basically mobile and required updating to current registration requirements – such as fitting sunvisors, dash padding, standard steering wheel (painful!), roll bar to mount inertia reel seatbelts, screen washers, carbon canister (borrowed from a certain Honda) for fuel emissions, etc etc.

I still haven't finished the bloody thing – it still needs carpets, interior cooling, interior lighting, etc, to finish the job off. Probably by then I'll need to build a new motor ! (that's what he thinks – his typist). At least it does go, stop and handle, even if you only have enough room to carry a packet of Minties in the front and can drive under a Mini to give it an oil change!

George Hudson

### The Toy Department.

Well here we go for another year, and just when I think things are getting a little slow on the VW model scene, well not likely and so much has happened and with even new VW models on the horizon.

Firstly we start off with the Christmas 2016 release of the Greenlight holiday's collection series of VW Vans and Beetle.

The set of six includes two T2 vans, three T1, and one Beetle all in nice Christmas livery. Here is what the standard series look like.

Selling on line for the set from the US for about (trendy) \$25.00 US plus shipping, or if you want to buy individual ones you can also sources these as you please. There are some chase variations which sell for much more because of subtle variations mainly different wheels or colour scheme, not my scene considering the already high shipping costs.





As shown here, also realised before Christmas is new set of 1/64 M2 VW crew cab pickups again 6 in the set and also some chase variations.

If you are lucky you may find these at your local Toys R Us but I suspect they will be very limited in numbers.

For now and until next month keep an eye out the VW Matchbox VW Kombi in the best of series in grey .... But really grey why not a two tone white over orange T2 bus?

You might already have the Lego Kombi and Beetle kits, which Paul Cheetham described last month. The great thing about LEGO is that you can take it apart again and build almost anything, limited only by your imagination. Here's



some unique non-kit VWs that people have built themselves. What VW can you build? Happy hunting

Tony Bezzina











### Amarok V6 test.

When it arrived here in 2011, the Volkswagen Amarok redefined what was capable for a double-cab ute. A car-like cabin, and car-like ride made the VW pickup feel different from the rough Japanese, Thai and Korean trucks we were used to. It felt, well... car-like.

But time moved on, and competitors caught up to the Amarok. Plenty of pickups now offer levels of refinement that almost put them into an 'SUV with a big boot' category, so how can VW possibly counter?

With the one thing that has been eluding pickup drivers since the dawn of time.

The 2017 Volkswagen Amarok V6 packs a 3.0-litre, 24valve, turbocharged TDI V6 diesel that churns out 165 kW of power and 550 Nm of torque. You can hear Holden Colorado sales material being shredded, as we have a new class leader.

That power number, too, is what the big 'Roc can pull at any time. And yet there's more. Find yourself in third or fourth gear, mash the throttle beyond 70 per cent at over 50 km/h, and you engage an overboost function that raises the stakes to 180 kW, and extends torque to 580 Nm.

You get ten seconds of all this bonus oomph, perfect for overtaking a road train, or even an actual train, should the opportunity arise.

The inclusion of the V6 headlines the most significant update of the Amarok since it launched, and the changes don't stop with the heart transplant.

The grille and front fascia have been refreshed, giving the already handsome Amarok a bolder new face. The V6 models bring three new colours to the table, too: Iridium Grey, Starlight Blue and Ravenna Blue (exclusive to the Ultimate and a \$590 option).

We think the Ravenna Blue in particular (the hero colour), suits the straight up-and-down sides of the VW pickup, and gives it real road presence. It is after all, pretty jolly big.

Footprint area is a sizable 5.25 metres long by 2.23 metres wide. The tub

still holds the claim of being the only pickup in its class that can fit a pallet, any pallet, between the arches.

The tub itself is 1.55 meters long by 1.62 meters wide, but has a load lip of 780mm, which is the lowest in its class. You get four tie-down points, a 12-volt outlet and, on the Ultimate, a spray-on bedliner and that cool full-length alloy sports bar that includes an LED light.

Alloy side rails are also included (removed from our car for off-road work) and even feature LED puddle lamps (on the Ultimate).

Wheels are standard at 18-inch on the Highline and 19-inch on the Ultimate. There are 20-inch 'Talca' rims available as an option (\$990).

Prices start from \$59,990 for the Highline and \$67,990 for the Ultimate, before options and on-road costs of course.

Inside, the dashboard has been revised, as have interior materials. It feels much more up market than before, like a chunky Passat.

The cabin itself is wide and tall, and offers excellent room in the front.

Storage is good, but not great. The central cubby lid looks big but it mainly covers the handbrake, and the glovebox isn't what you'd call cavernous. We did like the dash-top tray, big door bins and area in front of the gear shifter to store things though.

The new 16-cm colour touch screen now supports DAB digital radio as well as Android Auto and Apple CarPlay device projections. It's a nice unit, albeit maybe a touch small, and offers the latest VW native software and predictive touch features. And just like every other VW, the (German) Traffic Info doesn't work!

There are new front seats that VW call 'ErgoComfort' and they are excellent. With two-stage heating and 12-points of power adjustment (plus two manual adjustment), the seats offer terrific comfort and support and make long-distance touring a breeze. You can specify Alcantara (\$1,890 option) or even soft Nappa 'Vienna' leather trim (\$2,690 option) as well.

On the Ultimate, there is a colour LCD multi-function display which offers trip, audio, navigation and even tyre pressure data. The rest of the instruments and core switchgear are pure Volkswagen, so work well in that ergonomic yet



clinical way.

Front occupants receive both front and side airbags, but there is no curtain system for either passenger row, leaving anyone sitting in the back without any airbag protection at all.

Arguably, rear airbags aren't the natural high point on any pickup-buyer's shopping list, but considering the V6 Highline and Ultimate models are geared more to the multi-role lifestyle segment, this is something that family buyers do need to think about.

For 2017 though, the Amarok now has a multi-collision braking system that stops it from rolling forward after an

impact. It's good, but we'd rather have seen some more modern driver assistance and safety inclusions like AEB, blind-spot detection, lane departure warning and adaptive cruise control, to help prevent the accident in the first place.



power outputs have been essentially 'de-tuned' to better manage cooling and other higher stresses seen in an off-road environment.



Accommodation in the back is quite tight for taller passengers, and there are no vents or even a center arm rest. The flip-out twin cup-holder on the floor of the rear compartment looks highly susceptible to spilt coffee and damage too.

You can fold up the rear seat base in a 60:40 split but there is no storage under the floor.

There is a 12-volt outlet back there though, one of five in the car. There's the one in the tub, one in the dash-top tray and two in front of the gear shifter on the center console. There's only one USB point though.

To get a real feel for the 2107 changes, turn the key (yes, still) and kick the big V6 into life.

At a top level, the 3-litre V6 is the same engine that features in the VW Touareg, Audi Q7 and Porsche Cayenne. Volkswagen have made some important changes, specific to the Amarok, to better manage the demands put on it by the more 'hard working' pickup platform.

It has a revised sump, a steel vibration damper (more robust) and adapted cylinders and sleeve linings. The

None of that matters though, when you start to wind

the V6 out. It pulls solidly off the line then gets a real boost in the middle revrange as you accelerate ahead.

Volkswagen claim a 0-100 km/h sprint of 7.9-seconds, which is just half a second shy of the Porsche Cayenne Diesel. And it's a ute.

Nail the throttle and you can see the tacho needle flicking back and forth as the car shifts up a gear then quickly builds rev again. It's just the right amount of power too, it feels smooth and confident.

The only downside, is the lack of a hearty exhaust note, and I'd say if the car makes you feel that it needs one, then VW has done a good job!

Peak power is available at 3000rpm with all 550 Nm of torque on board from just 1500rpm. The car feels flexible and potent enough, but perhaps the best example to use is the 80 to 100 km/h overtaking performance, which is, quite simply, effortless.

Even up hill, squeeze the throttle and the V6 responds with the required muscle.

It tours brilliantly and you get used to the urge and flexibility of the V6 very quickly. For pick-up drivers, this is one of those 'where have you been all my life' moments.



Volkswagen claim a combined fuel consumption cycle of 7.8 L/100 km. We averaged about double that for our video shoot and assessment drive, more a story of a heavy foot and repeated high-rev manoeuvres than an ambitious target though.

A short highway tour saw instantaneous consumption drop down to the mid sixes.

It's paired with an eight-speed torque converter automatic transmission (not a DSG), which works well with the extra power. The gearbox itself is rated to 700 Nm loads, and uses first gear as a pseudo low-range, and eighth as an overdrive to help manage touring fuel use and vibration.

On the move, it shifts smoothly both up and down the ratios. High-rev changes are quick, and the Amarok feels quite entertaining to drive because of it.

You can tip the main shifter into a sports-manual mode and change gears with the paddles on the wheel too.



Another key update of the V6 Amarok are the inclusion of rear disc brakes, a first for the class. The rotors are 332 mm at the front and 300 mm at the rear. It's almost amazing that calling out four-wheel discs is still a thing for a 2017 model car, but drums have traditionally been 'enough'

for the pick-up segment, giving their hard-working nature.

The added oomph of the Amarok V6, though – and the skew toward more 'leisure' oriented buyers – means the brake upgrade is particularly warranted. We didn't perform any specific emergency stops, but noted that you could wash off speed, on tarmac and gravel, very efficiently.

For unsealed surfaces, too, there is an off-road driving mode that adjusts throttle sensitivity, AWD setting, ABS and traction control calibration, plus prepares the hill-descent control system. Stamping on the brakes with this activated gives a longer gap between ABS

pulses, meaning that the car is much more controllable, and stoppable on low-friction surfaces.

The 4Motion all-wheel drive system offers a standard 60 per cent rear drive bias, and can adjust anywhere from 80 percent under high acceleration loads to 40 percent for off-road work.

You can engage the standard rear differential lock if the





sluggish, but not critically so. Speaking of reverse, both V6 Amarok models are fitted with a standard reverse camera and front and rear sensors. The camera is situated under the tray door, and above the

bumper so you get a very narrow view of actual 'stuff'. Despite its size, the Amarok still

feels more like an SUV than a truck to drive. The ride is comfortable and compliant even over poorly surfaced roads without a load in the back. The rear leaf suspension feels taut but doesn't exhibit the busy jittering of some other pickups.

Steering too is light and easy to manage, especially at highway speeds. Around town you feel there is a lot of steering angle needed (just under three turns lock-to-lock) to negotiate roundabouts and the like, but this translates to more accuracy off-road.

terrain gets particularly gnarly, but for the most part the Amarok is just a point and shoot tool when the going gets rough.

The lack of a specific low-range drive doesn't seem to slow the Amarok down, as it is capable of climbing a 45degree angle slope in standard trim. To be clear, your body doesn't want to go up or down a 45-degree slope – it's pretty ridiculous.

Further, there are 29degree approach and 24-degree departure angles and a 500 mm wading depth.

We've talked about the V6 Amarok being more of a lifestyle pick-up than a working one, but that doesn't mean that payload and towing isn't important.

Despite the increase in engine capability, the Amarok retains its 3,000 kg tow rating, despite other vehicles in this segment offering ratings as high as 3500 kg.

Volkswagen states that the up-rated (by an extra 500 kg) gross-combination mass of 6000 kg gives greater flexibility for towing and combined load management. In our experience, too, finding a trailer that approaches, let alone exceeds, a 3.0-tonne weight is much more the exception than the rule.

Since it arrived a bit over six years ago, some 41,000 Amaroks have been sold locally. In fact, Australia is the largest world export market for the big VW and was a crucial market for the implementation of the V6. So much so, VW are expecting the torque-monster to account for at least 50 percent of sales.

We've been seeing the  $4 \times 4$  pickup segment get ever more up-market by the day, and the V6 Amarok is the most premium looking and feeling pick-up yet. This great engine is what the category has been missing, and we secretly hope it



will ignite some kind of ute output arms race in the years to come. Who knows, VW might one day consider shoe-horning in another engine from the Touareg, the 250 kW, 800 Nm V8 TDI...Please??

But while the new V6 TDI powertrain is excellent, there are still a number of areas where the Amarok could improve upon. Rear passenger space and the inclusion of safety and driver assistance technology is becoming the norm for this segment, and where we would like to see some big changes.

The lack of this equipment hasn't hurt interest though, with VW claiming over 7,000 enquiries have been made on the V6 models since they were announced.

Combine this with the power, capability and all-round flexibility of the 2017 Volkswagen Amarok V6, we're going to suggest the biggest problem buyers will face is getting their hands on one!

James Ward



### A supercharged Volkswagen.

Sydney Morning Herald, Monday 17 March 1958

Road Tested By Sturt Griffith, B.E.

During the course of this test an unknown Volkswagen owner, on seeing the engine at a halt, seriously enquired why anyone should want a supercharger for this car.

This unsolicited enquiry doubtless is representative of the viewpoint of the great majority of motorists. It emphasises very clearly the desirability of a test of this nature, and of an unbiased examination of the virtues and disadvantages of supercharging small car engines.

The VW owner explained to me that his car would do 70 mph (113 km/h) on good roads, and that in any case he rarely wanted to travel that fast.

True indeed it is that hardly one motorist in a hundred wants to exceed 60 mph (97 km/h) in a small car. However, supercharging is not only for the purpose of travelling faster than standard.

#### Object

I sincerely believe that all owners of small cars would welcome a rather more lusty top gear performance on hills, and less gear changing generally. It is in this regard that the small car is less pleasant and easy to drive than its larger brethren.

Put another way, the small engine lacks "flexibility," or the ability to perform smoothly in top gear at moderate speeds.

The flexibility of a small car can be improved in any one of three ways. The installation of a somewhat larger engine in the same car is the most positive way, but is out of the question for the average owner.

The improvement in "breathing" resulting from the installation of twin carburettors and improved inlet and exhaust manifolds will often achieve belter low-speed flexibility, as well as higher maximum speed. This is, however, a disappointing modification on some cars, and in any case gives greater improvement at high rather than at low speeds.

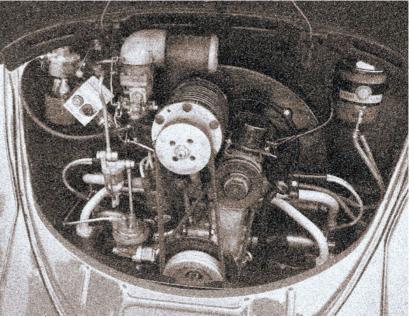
And finally there is low-pressure supercharging. In such a scheme, a rotary blower is added lo the engine, and it simply pumps the explosive mixtures into the cylinders under a positive pressure.

Such forced-feeding obviously results in greater power from any normal engine. The virtue of this scheme is that, with a suitable type of supercharger, it acts almost as well at low speeds as it does at high.

#### Result

Where the supercharger is correctly designed for a particular engine, the result is better performance – greater liveliness and power – at all speeds.

The keen driver will appreciate the very pronounced improvement in acceleration and climbing ability that results



from a sound supercharger installation. A small car can be quite transformed by this means, and without any technical difficulty.

It is, of course, to be expected that improved performance will cost more fuel. This is so in practice, to the tune of some 15 to 25 per cent increase in fuel consumption at the same average speeds, according to the type of blower, and to the fierceness with which the car is driven in acceleration and on hills.

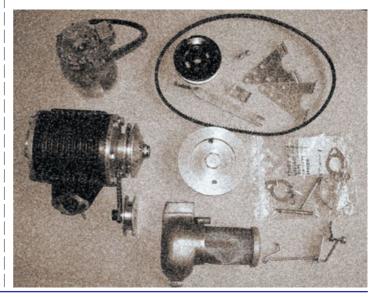
#### Judson Blower

This is the age of super-tuning, where specialist companies design and supply modification kits so carefully and completely turned out that any reasonably competent owner can fit them.

So it is with supercharger kits for many small cars. The Motosacoche concern in Switzerland makes a "family" type blower for VW, Peugeot and several other small cars.

Now the Judson Research and Manufacturing Company of Pennsylvania is turning out an excellent and complete kit expressly for the Volkswagen, for either the car or the transporter vehicle. Complete illustrated instructions are issued, and it is claimed that a mechanically competent owner can fit the supercharger in an hour.

The Judson equipped VW is the subject of this test.



The car has just run 2,000 miles, and the blower was installed by the owner in accordance with the directions.

This blower is of the eccentric vane type, with four vanes of synthetic material in a polished steel cylinder. It is belt-driven from the crankshaft.

Gone are the days when a blower meant noise. I would go as far as to say that for all practical purposes, this blower does not raise the noise level of the engine.

In the following sections I give a detailed comparison of the performances of the standard VW (road text published 10 March 1958 – see Zeitschrift Jan 2016) and the same model of this car fitted with the Judson supercharger.

The two cars were tested by me over the regular test route, and their average speeds were controlled to the same figure.

#### **Test Route**

The 205-mile (330 km) route starts from Penrith, and crosses the Blue Mountains by the Western Highway to Mt Victoria and Lithgow. The journey from Lithgow is by the Newnes Road to Bell (altitude 3,500 ft (1066 m)), Mt Tomah, Kurrajong Heights and down to Windsor. The route then extends north to Wisemans Ferry, back to Castle Hill, then across country to Penrith.

The route includes strenuous test hills, winding mountain roads, and a balanced length of flat country running.

#### Hill Climbing

A substantial improvement in the pulling power of the car resulted from use of the supercharger.

Hills which required third gear in the standard car were climbed in top by the supercharged version. These included easy climbs on:

Bodington (average grade 1 in  $11\frac{1}{2}$ ): Top gear at 50-48-34 mph (80-77-55 km/h).

Kurrajong West (1 in 12½): Top gear at 50-41-36 mph (80-66-58 km/h).

In third gear a generally faster climb was made in every case. With the same starting speed, the speed at the crest was up by 7 mph (11 km/h) on the on the River Lett Hill, and up by 8 mph (13 km/h) on the Scenic Hill.

#### Acceleration

As might be expected, there is a pronounced improvement in acceleration resulting from the use of the supercharger.

The VW is exceptionally high geared in top, and it is in this gear that the supercharger makes the greatest difference. It has the effect of endowing the high top gear of the VW with that liveliness found in the top gear of lower-geared cars of similar size.

In comparison with the standard car, the acceleration times were:—

THIRD GEAR: 20 to 40 mph: standard, 8.5 secs; supercharged, 7.0 secs. 30 to 50 mph: standard, 9.8 secs; supercharged, 8.1 secs.

TOP GEAR: 20 to 40 mph: standard, 14.8 secs; supercharged, 11.3 secs. 30 to 50 mph: standard, 15.9 secs; supercharged, 12.1 secs.

For overtaking purposes, top and third gear in the supercharged version give lively results from speeds about 10 mph lower than in the standard car.

In acceleration through the gears, the supercharged engine had a fairly pronounced fiat spot. Time from 0 to 50 mph was 15.6 secs.

#### **Touring Speeds**

Owing to the additional power available, the modified car will naturally cruise faster than the standard version.

This is particularly noticeable in hilly country or on winding roads, where the improved climbing and accelerative ability put up the comfortable cruising speed by about 5 mph (8 km/h).

The maximum speeds go up by 6 mph (10 km/h) in top gear, and by an average of 2 mph (3 km/h) in the lower gears.

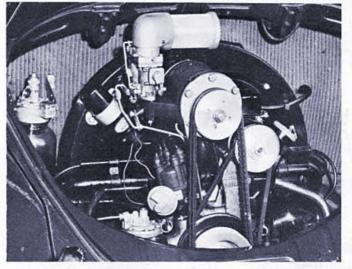
#### **Fuel Facts**

All of this improved performance has to be paid for in fuel. The drop in fuel mileage is quite pronounced with this supercharger.

At the same average speed over the same test route, the supercharged car gave 8.9 less miles per gallon (1.6 L more per 100 km) than the standard car. This is a drop of some 20 per cent.

#### For Big Car Performance

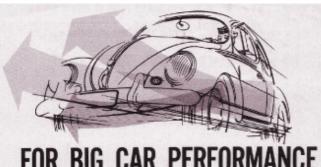
### Supercharge Your Volkswagen with the JUDSON SUPERCHARGER



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### FOR BIG CAR PERFORMANCE SUPERCHARGE YOUR VW

Why not supercharge your Volkswagen? It will provide you with the performance you need. You can pass when you want to and have extra power when you need it. Testimonials from owners and extensive road tests made by every leading automotive magazine in the world prove conclusively the efficiency and reliability of the Judson Supercharger. Bringing complete satisfaction to over 65,000 Volkswagen owners.

The actual figures were: Standard car, 43.7 miles per gallon (6.5 L/100 km); supercharged car, 34.8 miles per gallon (8.1 L/100 km).

#### Technical

The supercharger by Judson is a particularly neat outfit. It consists essentially of a cylindrical unit about twice the diameter of the generator, which sits on the induction manifold in the position normally occupied by the carburettor.

It is driven by a double V belt from the crankshaft (drive ratio 1.3 to 1), the necessary additional driving pulley being supplied with the supercharger kit.

The standard carburettor then mounts on the side of the supercharger casing. A minor complication here is that the oil bath air cleaner (if retained) must necessarily be mounted elsewhere in the engine compartment.

A drip-feed lubricator is supplied with the kit, and this conveniently mounts on the bulkhead.

The only changes made in the engine tuning are the substitution of an air correction jet supplied, the slight opening of tappets to 0.006 in (0.15 mm), and the retard of the ignition by 5 degrees.

The makers claim that gross power goes up from 36 to 57 brake horsepower, but the performances obtained suggested to me that this great increase was not realised on the test car.

An oil-temperature gauge was fitted, and this showed that the additional power output did not result in a rise in oil temperature above acceptable limits, under touring conditions.

Access to engine ancillaries requiring regular service is not impeded in any way. In fact, the installation is light, neat and unobtrusive.

In operation, the blower is quiet, and does not appear to raise the engine noise level at all.

#### Summary

The Judson supercharger kit offers to owners a simple and most effective means of raising the performance of the VW, in those cases where such is desired.

At a first cost of £100, and with in an increase of about

20 per cent in fuel consumption, the top speed can be raised by 6 mph (10 km/h), and hill climbing and acceleration substantially improved.

The most attractive feature of the modification is the additional liveliness in top gear which results. This makes the car quite a good performer in its extremely high top ratio, and allows it to climb hills which otherwise require third gear.

The economics of the modification must be decided by the owner for himself. This test shows that the supercharger will do a good deal for the car.

The car tested was made available by a private owner, T.J. Borrer, Esq. The Judson supercharger was supplied by E.L. Haymanson and Co. Pty. Ltd., of 408 Collins Street. Melbourne.

#### ABOUT THIS CAR

Price of supercharger kit, £100.

**Mechanical:** Judson supercharger, eccentric vane type. Maximum manifold pressure, 6 lb gauge (41.4 kPa, 0.4 bar). Maximum power (claimed), 57 gross bhp. Weight of supercharger kit, 17lb (7.7 kg).

**Fuel Consumption And Average Speed:** 34.8 miles per gallon (8.1 L/100 km) at an average speed of 42.2 mph (67.9 km/h) over the test route.

**Maximum Speeds (In touring trim):** Top gear, 78.5 mph (126 km/h); Third gear, 63.5 mph (102 km/h); Second Gear, 49 mph (79 km/h).

### Don't try this at home.

Be warned – car restoration, 'tis a terrible curse. Certainly it's a labour of love, it's a chance to keep a piece of VW history alive and rolling around, it's the satisfaction of resurrecting something from the dead, it's all of those things.

But if you're thinking about having a crack at making your Grandad's old 1958 Volkswagen a concours winner by turning a few spanners over a few weekends, then think again.

Many a petrol-head has been lured by the singing sirens of an old VW sitting in a chook shed, beckoning to the smitten, "save me, rescue me - I only need a new battery and a bottle of Kitten Cut'n'Polish on the duco."





Don't listen. Because before too long you'll have some unregisterable wreck on a hired trailer heading for your place and you'll be \$1500 worse off right from the word go.

In your mind's eye you can see your car, two years down the track, winning the Best Restored trophy at the VW Nationals with handshakes and a few beers all round, while your mates look on enviously as their girlfriends think any man who can present a shiny, cute old Volkswagen like that must be the new Brad Pitt.

It's no use explaining what the end result will be like to the missus.

All the imagineering of the great Sunday afternoons you'll have, the fun of trips away down the South Coast, stopping for hot dogs at disgraced former Corrective Services minister Rex Jackson's little takeaway van at Stanwell Tops – forget it.

All she'll see is some horrible pile of parts loosely held together by rust.

Once you've got it home, there's no turning back. You are now faced with what I call, divertingly, the Six Degrees of Restoration.

**Stage 1 – Nesting.** Once you've bribed your mates with a few ales to help you push said rust-bucket into the garage, you discover the old VW is only 10 cm too long for the shed, and the family Golf is now living out on the street.

This is a good idea, you've explained to your wife, as her spotless, almost new Comfortline Golf TDI needs a bit of toughening up and a bit of boot camp out in the elements will do it some good.

**Stage 2 – Direction.** Yes, you originally intended to just give your new acquisition a good clean and a once-over with a bit of polish, but by unbolting the mudguards, running boards and taking the doors off, it'll be just that much better a job. And you can't really clean the insides without removing the seats, trim and the dashboard. Better clean and paint the motor too, so it's gotta come out. The car is now in 4,822 pieces in 34 boxes.

Did you remember to write down notes, draw diagrams and take photos as you took it apart?

**Stage 3 – Reflection**. This is the time to ponder as to what the hell you have done. The car is no longer a car, it is a mountain of unrecognisable steel and aluminium bits, coated liberally

in rust, and black grease sprouting hair.

You are at the point that requires your best acting skills to impress upon your wife that you do know what you are doing. A hint - leaving greasy VW workshop manuals and parts catalogues on the good dining room table is not going to impress her.

**Stage 4 – Cleaning.** This is a nightmare, requiring numerous 200-litre drums of detergent, degreaser, paint stripper, and chemical cleaning agents so diabolically evil they should, by all rights, be impounded by a UN inspection team.

At the end of this purgatory, you should be able to ascertain the state and condition of the sum of the car's many parts and how many will need replacing.

**Stage 5 – Consolidation.** Short of funds after paying the body shop for hundreds of hours of rust repair, panel straightening, prep and painting, you now front your credit union, telling them you need \$10,000 for a 'new refrigerator.' Some refrigerator.

You've been through numerous VW parts catalogues and spare parts websites from Germany, the UK and the US, and made a huge list of the new items you need to order. And just as you are about to order a crate load of goodies, the Aussie dollar plunges from parity to 60c.

Meanwhile you are spending every weekend, and most weeknights, in the garage bolting, screwing, sewing, glueing and wiring everything together. Your wife and your kids start to forget who you are.

Stage 6 – Victory. There is light at the end of the tunnel; it's just that the tunnel never really quite ends, but there does come a time when your pride and joy rolls down the driveway and onto the road.



Despite debt equivalent to an eastern bloc country, flattened black fingernails where the gearbox dropped, and the ever-present spectre of the divorce courts, always tell those who admire your handiwork that it was just a few weekends' worth of work.

That's probably what they've just told you about their own car.

Warren Brown



### VWs not sold here #10: T6 California Camper.

New Volkswagen-built camper is better than ever, but the high price will put some off.

#### Auto Express, UK

On the one hand, the T6 VW California is a very expensive Volkswagen Transporter van conversion. On the other, it's the iconic Camper Van reincarnated, which makes it extraordinarily cool. You may have already determined which camp you fall into, and that will define how you feel about an asking price that can exceed £50,000 (\$A85,000).

That huge number is the single most off-putting thing about the California, but to set up camp early, we'll say already that this latest T6 generation model very nearly justifies the price tag – it's very good indeed.

Based on the brand new T6 Transporter, only recently launched and hitting UK van depots from September, California order books open in August for later deliveries.

If you're familiar with the T5 California (or indeed the Transporter), you may already have noted a striking familiarity about all this. If you haven't – there really is one. That's because the T6 Transporter van was developed along



an "if it ain't broke" policy, so Volkswagen kept all the fixed points of the chassis, most of the body panels and the internal dimensions exactly the same.

That extends to the California's internal fittings, meaning the little kitchenette in this T6 Ocean model is basically the same as the T5's was, just with a couple of extra rails and cup holders. There have been tweaks to the front and rear exterior styling, but the real work went into improving overall refinement, ride quality and cabin flair, and adding more of the technology that makes Volkswagen's passenger cars so alluring.

For a start, the California gets Euro-6 emissionscompliant diesel engines, meaning economy is improved and CO2 emissions lowered across the range. So, while the 138-bhp (103 kW) 2.0 TDI T5 California averaged 39.2mpg (7.2 L/100 km), this T6 equivalent, with 10-bhp more, returns 44.1mpg (6.4 L/100 km).

More than that, all the new engines contribute to an overall sense of refinement bordering on remarkable for what is essentially a diesel van. All three available engines are 2.0litre TDI diesel units, but outputs are 100-bhp, 148-bhp or 201-bhp (75 kW, 110 kW, 150 kW) – the last of those being the most powerful ever put into a VW van.



But actually, pound-for-pound it's the 100-bhp (75 kW) engine that's the most impressive, because Volkswagen has tuned it in the spirit of the old Pumpe Duse diesels from the Mk IV Golf era, concentrating all the torque in a thin band near the bottom of the rev range, so there's instant, flexible pickup.

On that basis the 201-bhp (150 kW) engine doesn't feel twice as powerful, although there's no denying its turn of pace. As ever, though, the middling 148-bhp (110 kW) diesel is the best overall, superbly subdued at lower revs, far punchier than its 14.2-second 0-100 km/h sprint suggests, and silkily smooth – for a diesel, anyway. All California models are available with a seven-speed DSG automatic, while the two higher-powered engines can be specified with 4Motion four-wheel drive.

Despite an overarching sense that little has changed from the T5 California to the T6, that's not exactly a fair assessment – Volkswagen counts 6,000 changes from the T5 Transporter to the T6, all of which carry over to the California. They just happen to be mostly suspension, engine



and technology improvements, most of which you can feel rather than see.

And in this case, familiarity is no bad thing, especially rearward of the front seats, where the California is really easy to use: the roof can be popped up and the rear bench turned into a double bed in no time at all, which is especially appeasing on a wet, dark field in the middle of the night.

The main change at the front is the addition of a 'premium' cabin, standard with Ocean models but not available with Beach (these are the only two trim levels). It results in a significant upward ambience shift, dotted with glossy surfaces and soft-closing compartments – but unfortunately still none of the soft-touch surfaces that make certain Volkswagens feel so premium, and that you might expect to see in something of this price.

Without this cabin, the van-like driver ergonomics and open storage compartments conspire to make Beach models feel less a luxurious MPV and more a tarted-up van. Beach models don't feel as good as their high price suggests they might - it costs from £37,657 (\$A64,020).

Beach model do without the rear kitchen but have five seats as standard, a manual pop-up canvas roof and a foldout double bed that will sleep two. An extra two seats are optional, though these need to be removed before the lower bed can work.

Ocean specification, formerly known as SE, is the Camper we're all familiar with, complete with twin gas hobs, a sink, a fridge and a full suite of wood veneered storage units. It seats four, sleeps four (its pop-up roof is electrically operated), and comes with a side awning for outside shelter from the rain – a standard feature on UK Beach models, too. Prices for the California Ocean begin at £47,840 (\$A81,330).



And while it's true that both of those prices look high, in both cases the specification sheet at least justifies some of the expense. All come with Bluetooth, DAB digital radio, climate control (three-zone in the Ocean), alloy wheels, LED taillights and an auxiliary heater to stave off the midnight chill.

#### Summary

Without reinventing the Camper Van, the VW California T6's raft of slight improvements over the T5 make it a significantly better proposition overall. While the basic architecture remains, the 'premium' cabin option makes things feel much more upmarket, which added to improved economy and refinement, makes this generally seem a much more polished product than ever. However, the high asking price remains prohibitive, especially the Ocean version: £50k is an awful lot when you could have nine-tenths of the experience for half the price with a used T5 California.

#### Verdict: 4.5/5

#### Key specs

Price: £47,840 (\$A81,330) Engine: 2.0-litre 4-cyl TDI turbo diesel Transmission: 6-speed manual, front-wheel drive Power/torque: 148bhp (110 kW) / 340Nm 0-100 km/h: 14.2 seconds Top speed: 179 km/h CO2: 169 g/km On sale UK: from August 2015



(The VW T5 California was brought to Australia for appraisal in 2008 and was shown at the Sydney Motor Show that year. However VW Australia was unable to secure Australian certification for the California due it not meeting Australian design rules because, among other things, of its sliding door on the right and its LHD internal layout. The California was never released for local sale. Instead, local companies such as Trakka, Frontline and Kea make highquality local conversions of the RHD T5 and T6 - Ed).



# Why your car needs a vacuum gauge.

Popular Science magazine, March 1975

How would you like to cut 25 percent or more off your petrol bill and, as a bonus, get a daily report on your engine's condition?

Evan Powell, our Southeast Editor, reports fuel economy on his Chevy station wagon increased from 17.0 to 11.9 L/100 km when he began driving with one eye on a vacuum gauge. So much for economy. Below you'll find a guide to diagnosing 16 engine conditions just by reading the gauge while your car is idling.

Considering the many years that experienced mechanics have used them in troubleshooting cars, it's incredible how few vacuum gauges are mounted in, under, or on top of dash panels. Detroit, of course, has known about these little wonders since they were invented. But not until this year have all four U.S. car makers offered a built-in vacuum indicator. All of them are optional - in some cases as part of an accessory group, in others as a substitute for the clock. Even those with dials cannot be used to read engine condition, however, since they have no numbers. Mounted out of the driver's normal line of sight, they may not even be especially useful as fuel minders.

#### Add one yourself

It takes about an hour to hook up a more useful instrument than the factory option, and it costs a lot less money. Vacuum gauges range in price from \$6 to \$30 (around \$90 now - Ed.), depending on durability of the mechanism (even the cheapies are surprisingly accurate when new), appearance of the case, and type of mounting. They will be calibrated in inches of mercury (Hg), usually 0 to 30. Don't hesitate to shop around for a type and price that pleases you. Vacuum gauges are still small-volume sellers, and most retailers stock only one brand or model.

A vacuum gauge measures the difference in pressure between the atmosphere outside the engine and the air inside the intake manifold. Like a giant positive-displacement pump, the engine sucks air in through the carburettor and forces it out through the exhaust.

When you let up on the accelerator, the throttle plate -





Typical kit includes gauge, instruction sheet, dial light, Tee and manifold adapters, 6-in. and 60-in. hoses.

Gauge fits inside mounting cup (above) for top-of-dash or steering-column use. Extra hardware adds about \$6.

a butterfly valve in the base of the carburettor - shuts off incoming air. But the pistons keep pumping air out of the engine, thus creating a negative pressure or vacuum in the intake manifold just below the carburettor.

When you floor the accelerator, the throttle plate flips wide open, letting outside air (and fuel) pour into the engine. It fills the vacuum inside the intake manifold, causing a low reading on the vacuum gauge.

As a fuel minder, the gauge gives you a visual reading of how big the opening is between carburettor and engine. Obviously, the bigger it is the more fuel you're using.

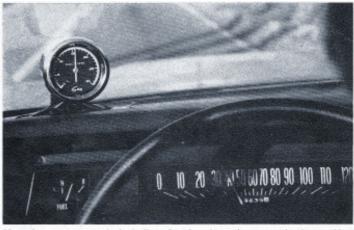
You diagnose engine ills with the car stopped and idling at 550 to 700 rpm. With the throttle plate nearly closed, vacuum should steady up between 17 and 21 inches of mercury, depending on engine design and vacuum takeoffs. In general, the more cylinders the higher the vacuum.

On some cars, a normal reading could be as low as 15, however. Muscle cars with long valve-opening durations, and some '70 to '74 cars whose sparks do not advance at idle read lower than average. Check with your dealer.

If you don't get a steady reading that's normal for your car, it means air is leaking into the intake manifold from outside or inside the engine. The guide indicates all the possible sources of such leaks.

#### Saving gas with a gauge

Here are some driving techniques to keep your vacuum gauge needle up among the high, economical numbers:



Mounting gauge atop dash, in line of tive, but takes extra hardware. Most sight, makes fuel-minding more effec- gauges have in- or under-dash mounts.

• Start off from traffic lights and stop signs slowly; accelerate steadily. Your carburettor dumps in less gas and an automatic transmission shifts into high sooner. You save in the higher drive ratio and the spark advances faster to an economical setting (it's retarded in the lower gears).

• Shift an automatic manually instead of waiting for it to shift. Shift up to get rolling, especially in cold weather; waiting for the automatic uses more gas. Shift down early on a steep hill; a lugging engine takes more throttle.

• In a manual-shift car, get into top gear as quickly as possible. The gauge will warn you with a low reading if the engine's over-revving or lugging in a gear.

• When you've reached cruising speed on the level or while climbing a hill, let up on the accelerator until car speed changes.

• On the highway, hold a reasonable speed steadily. High, erratically changing speeds waste fuel.

• In town, back off as soon as you see a stop ahead. Coast to a halt instead of burning up energy in your brakes.

• Watch for a lower-than-normal reading at cruising speed. It could be caused by a strong head wind, the air conditioner operating, or low tyre pressure, for example.

#### Diagnosing a sick engine

A sudden change in average vacuum readings while you're driving could be an early warning of on-the-road trouble. If there's a drop of two inches or more, pull over and take a reading at idle. The carburettor could have vibrated loose - it happens quite often. A hose might have popped off, or a line split.

Finally, a good daily routine is to take a reading just before you leave your car for the night. The engine's warmed up and idling as smoothly as it can. If the needle isn't steady at its usual healthy number, consult the guide.

Pat Gormley and Erik H. Arctander

#### How to read your car's condition from vacuum-gauge dial

#### Healthy engine



Steady at between 17 and 21 when idling: Engine in good condition.



Drops to 2 then jumps to 25 when throttle is opened and closed quickly: Engine is in good condition.

#### Sick engine-regular or occasional drop



Drops occasionally by 1 to 5 inches: Valve hanging open or plug not firing.



Drops occasionally by 3 to 5 inches: Sticking

valve causes drop each time it fails

to close.



Drops regularly by a few inches: Burned valve causes drop each time it fails to close.



Drops regularly by 3 or 4 inches: L e a k in g valve causes drop each time it fails to close.

#### Sick engine—low and steady



Steady at a few inches below normal: Piston rings are worn and leaking.



Steady at between 13 and 16: Ignition timing is off.



Steady at 14, when 20 is normal: Spark may be retarded.



Steady at between 8 and 14: Valve timing is probably offworn camshaft or timing gears.



Steady at between 5 and 12: Leaking manifold manifold gasket, carburetor gasket, or PCV hose.

Sick engine-gradual change



Drifts slowly between 14 and 16: Plug gaps are too narrow or breaker points are out of adjustment.



Floats slowly between 12 and 16: Carburetor is out of adjustment.



Drops slowly after starting at normal reading: Exhaust is restricted (dented pipe or choked muffler).

Sick engine—erratic change



Vibrates rapidly between 14 and 19: Valve guides are loose.



Varies widely with engine speed: Valve springs are weak or broken.



Varies widely at all engine speeds: Head gasket is leaking, may be blown.

### Larry's Column.

#### Australian VW Power #6, January 1990

My association with the Volkswagen goes back a long way. Eddie Perkins, my father, went in the 1954 Redex Trial in a Rover he'd purchased from Regent Motors, the Melbourne distributor of Rover vehicles. Having finished the event successfully, he was then invited to have a test-drive in Regent Motors' latest and newest machine – the Volkswagen. He took one lap around Albert Park Lake, rated the car as 'excellent' and immediately elected to run it in the next Rally.

This he did, his VW #2 ultimately appearing in the 1955 Redex co-driven with his brother (my uncle) Lance and taking second place behind another Volkswagen driven by Laurie Whitehead, if I remember

correctly. That was the last Redex Trial, but he and Lance then won the 1956 Mobilgas Trial, came second behind Laurie again in '57 and then won the final '58 Mobilgas.

I can remember doing many miles in Volkswagens, jammed behind the rear seat! But that didn't seem strange to us, as we had a large family. We actually grew up in Volkswagens. I come from a farm at Cowangie near Mildura, where the Volkswagen proved to be a workhorse machine. It was very strong and the lack of radiators certainly made it a practical car. When I left school, I always had a VW. One of the first things you did was throw the body away and drive around on the floor-pan, as that was the quickest way to improve the performance – lightening, I think it was called.

The handling was something you either liked or disliked. I've seen an awful lot of what I'd call nonsense written about the Volkswagen and, many thousands of miles later, I'd have to say that the VW is one of the best-handling cars of all time. But there is an element that feels the handling is awful and that has always puzzled me.

My brother Gary went in a rally once – the 1968 Ampol Rally – for which he bought a VW and had another local as a co-driver. This chap had never driven a VW before, so we arranged for my own car to be used for some practice. At the local track, I showed him the way to drive one of these cars, demonstrating oversteer in its maximum form and then letting him into the driver's seat. Off we went and, on the very first corner, he rolled it!

To this day, I'm staggered. I still don't know how he managed to do it. I couldn't believe that a car that was impossible to tip over had just been tipped over. Probably he's now one of those people who say that the VW is a badhandling car.

I've got plenty of memories of Volkswagens. When I first started out in motor racing, Formula Vee was the chosen class. This was really the only practical way that a wageearner could get into racing. An uncle of mine, George Reynolds, was the first person to import a Formula Vee to Australia and he was quite successful in it. I developed quite a taste for racing, just looking at the car at his house and on the track.



So I bought one of these machines, as it was a logical move. My VW tow-car represented a rolling stock of readily available spare parts, if required. My freshly-rolled Beetle could actually wear the Formula Vee's spare race tyres, thus reducing the transportation and storage problems. Suspension, axles, the lot – everything was on the tow-car. This system resolved a very complex problem for me – racing with a lack of money.

There are a lot of good memories for me, particularly concerning preparation of engines and so forth. To this day, the logic of the Volkswagen has always impressed me. You could buy the most current

Volkswagen engine and it would still bolt-up to the very first gearbox, as the bolt pattern remained the same.

You could never get bogged in a Volkswagen – even in the Wynn's Safari a couple of years ago. The rally director advised us all that we'd have to carry winches and he advised me personally that, on the fifth day of the rally, this was the time for the winch. I was running in second place outright and was motoring along behind Andrew Cowan's Pajero. He was about ten minutes ahead of me as we barrelled up the Northern Territory. I came across this outback dry river-bed, about twenty feet deep and covered in sand. Down the bottom of it was Cowan, bogged.

After a quick assessment, we drove down the bank, across the sand and up the other side, thus taking the lead in the rally. I saw the rally director later and mentioned that I still hadn't found the spot where the winch was needed – knowing full-well that the river-bed was it. You could drive anywhere in Australia without chains, as long as you had a Volkswagen.

The Beetle had taken the lead from Cowan on the second-last day, although he got by again before the end of the afternoon. Only one hour into the morning of the last day, a steering ball-joint broke. Now, I might add, one-wheel steering is fairly tricky under these conditions and we entered the control one hour and ten minutes late. According to the rules, if you were more than one hour late, you were excluded from the rally. So I was excluded.

It did disappoint me, as we were able to amass a lead of more than three hours over the car behind us. Incidentally, I've still got the Wynn's Rally car.

In my next article, we'll investigate the handling of the Volkswagen, all my comments relating to the off-road aspects. In real terms, they actually aren't the nicest of machines on bitumen when compared to today's vehicles. But, in their day, they could be very quick – provided you were born with a natural driving ability to suit. If you liked the back of a car hanging out, then you had to drive a Volkswagen.

Larry Perkins



### What Year Car Do The Jones Drive?

The Jones drive a Volkswagen and Volkswagens look alike from year to year.

A Volkswagen is never outmoded. Indeed, no one knows how long a Volkswagen lasts; the first VWs made have not worn out. We hear from VW owners who have clocked astonishing mileage without engine repair.

Most owners rarely see the engine. The

engine hood is open only when the car is serviced and, incidentally, VW service is as good as the car.

The Volkswagen does change — where it counts. A while back we added an antisway bar to the front suspension to make curves even smoother, new insulation to deaden engine and roadway noise. Most recently we changed the footbrake leverage to make braking easier, better. Over the years almost every part in the Volkswagen has been changed (but not its heart or face).

Volkswagen owners find this a happy way to drive — and to live. How about you?



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