

# Zeitschrift

January 2007



Laurence Murray's 1964 VW 1200

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Plus all the usual stuff...



**PUBLISHED BY CLUB VEEDUB SYDNEY**  
**[www.clubvw.org.au](http://www.clubvw.org.au)**

Proudly a member of the Council of Motor Clubs



## CLUB VEEDUB SYDNEY Committee 2006-07

President:	David Birchall	(02) 9534 4825
	david@clubvw.org.au	
Vice President:	Andrew Rankin	(02) 4733 2848
Secretary & Public Officer:	Bob Hickman	(02) 4655 5566
	hicko@inet.net.au	
Treasurer:	Martin Fox	0411 331 121
	martin@clubvw.org.au	
Editor:	Phil Matthews	(02) 9773 3970
	philjmatthews@optusnet.com.au	
Webmaster:	Steve Carter	0413 811 186
	info@clubvw.org.au	
Trivia Mistress:	Heather Pascoe	(02) 9836 0464
Book Librarian	Simon Matthews	(02) 9898 3665
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Tool Librarian:	Bob Hickman	(02) 4655 5566
Merchandising:	Raymond Rosch	(02) 9601 5657
	sales@clubvw.org.au	
Raffle Officer:	Christine Eaton	(02) 9520 4914
Vintage Registrar:	Leigh Harris	(02) 9533 3192
	leigh@clubvw.org.au	
VW Nationals Coordinators:	David Birchall	(02) 9534 4825
	Bob Hickman	(02) 4655 5566
	Chris Pascoe	(02) 9836 0464

### General Committee:

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Secretary:	Bruce Walker	0400 119 220
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*Please have respect for the committee members and their families and only phone at reasonable hours.*

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### Kleingedrucktes

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

All mail to Club Veedub Sydney should be addressed via the Secretary, c/- 14 Willoughby Cct Grassmere NSW 2570, or emailed to info@clubvw.org.au.

Zeitschrift is published monthly by Club VeeDub Sydney. 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. Views expressed in Zeitschrift are those of the writers and do not necessarily represent those of Club VeeDub Sydney. Articles may be reproduced with an acknowledgment to Zeitschrift. Club VeeDub Sydney, its members and contributors to Zeitschrift cannot be held liable for consequences arising from information printed in the magazine. Back issues are available from the Secretary, or in PDF format on the Club Veedub website.

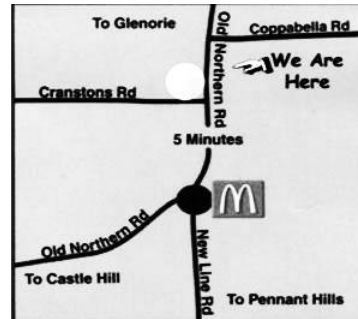
Please note that all events listed in the Zeitschrift Club Calendar or on the Club Veedub web page are sanctioned by the Club and its Committee.



# Sunday February 18th Putt Putt Golf

Meet at Dural Putt Putt at  
11:00 on the Corner of  
Cranstons and Old Northern  
Road Dural.

3Km past Dural Country Club



Adults: 18 holes, espresso coffee & cake for \$15.00 ea.

Children: 18 holes, and receive a hotdog (or Gelato) AND  
a can of soft drink for \$12.00 ea.

**If you're game to cruise there in a group**, meet at  
the old swimming pool car park on the corner of Memorial  
Avenue and the Hume Hwy (Copeland St), Liverpool.

**Departing 09:00, avoiding Toll Ways...**

You can email me at [sales@clubvw.org.au](mailto:sales@clubvw.org.au) for more  
information including a Map of the cruise in PDF format.

**Trophy supplied by Dural Putt Putt.**

Email [info@duralputtputt.com.au](mailto:info@duralputtputt.com.au) or Visit  
<http://www.duralputtputt.com.au/> for  
more information on the venue.

See you there

- Raymond



# THIRLMERE FESTIVAL OF STEAM 2007

**Correspondence:** NSW Rail Transport Museum,  
Barbour Rd, Thirlmere NSW 2572

**Phone:** 4681 8001

**Fax:** 4681 8410

**Chairman:** Peter Berriman

**Secretary:** Jenny Smith

**Phone:** 0412 610 024

**Phone:** 4681 8001

**E-mail:** petabear@ozemail.com.au

**E-mail:** rtmth@bigpond.net.au

## Club VeeDub Sydney Inc – Thirlmere Festival of Steam 2007

It is with great pride that we extend an official invitation to Club VeeDub Sydney to join with us in participating in the Thirlmere Festival of Steam 2007 at Thirlmere NSW, on **Sunday 4<sup>th</sup> March 2007**. The Festival will be held between 10:30am and 3:00pm on the above date, and an area has been set aside for the public to view your club's vehicles. We would also like to extend an invitation to join in the gala parade with a limited number of vehicles representing your club. The parade takes place between 1:00pm and 2:00pm around the main streets of Thirlmere. Marshalling for the parade is to start at 12:30pm.

This year the parade route has been altered to overcome previous problems that we had encountered. This year's parade will contain a mixture of car clubs, sporting groups, school groups, local businesses, bands, dancers, motor cycle clubs and your involvement would be very much appreciated in creating a fantastic atmosphere of colour and history.

It is important for the organising of this event that we have an idea of vehicle numbers, no later than February 20th 2007 (2 weeks prior to the festival). It would be greatly appreciated if you could acknowledge the receipt of this letter and your interest in participating as soon as possible. The Thirlmere Festival of Steam has a great following with over 10,000 people visiting the precinct in 2005, and having Club VeeDub Sydney on display and in the parade, would generate a great amount of interest, both for your club and for the festival.

Please don't hesitate to contact me by phone (02) 46772462, mobile phone 0409 952 874 or email [krmodels@gmail.com](mailto:krmodels@gmail.com), if you would like more information. Our aim is to provide a fantastic, entertaining day with plenty to see and do, including bands, dancers, food & market stalls, fun rides, train rides, model railways and plenty of car groups including Club VeeDub Sydney.

Yours sincerely,

**Keiran Ryan**

Parade Manager

On behalf of the Organising Committee



# VW NATIONALS

## 20<sup>TH</sup> ANNIVERSARY YEAR 2007



**EASTER SUNDAY 8TH APRIL 2007** FAIRFIELD CITY SHOWGROUNDS  
 SMITHFIELD RD, PRAIRIEWOOD NSW  
 ENQUIRIES: PLEASE CONTACT DAVID BIRCHALL  
 PHONE (02) 9534 4825 | EMAIL: DAVID@CLUBVW.ORG.AU  
 FOR MORE INFO VISIT OUR WEBSITE [WWW.CLUBVW.ORG.AU](http://WWW.CLUBVW.ORG.AU)

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See unbelievable aerobatic displays by champions of the sport. Experimental, recreational sports and workhorse aircraft. High-speed ground and air challenges! Cars and bikes from around the world. Exotic, classic and extraordinary machines.

Displays, demonstrations, prizes and more. The best in food and wine from around the region, taste, enjoy and buy.

**A great family day out!**



*Club Veedub Sydney has booked a display parking area. Come along and enjoy the show!*



**FOR MORE INFORMATION:**

Mudgee Aero Club  
Wings, Wheels and Wine 2007  
PO Box 272  
Mudgee NSW 2850

Phone: 0417 683 069

[www.mudgee.aero.club.hwy.co.nsw.au](http://www.mudgee.aero.club.hwy.co.nsw.au)

# Sawtell Winter Break

**17th - 19th August 2007**  
**Sawtell Beach Caravan Park**  
**Lyons Road, Sawtell**  
**(02) 6653 1379    1800 729 835**



Plenty of cabins & camping spaces. You must make your booking directly with the caravan park on the above numbers.

The caravan park is within walking distance of the town centre.

Catch up with your VW friends in a relaxed atmosphere.

Participate in the activities - or just veg out.

Location: 554km north of Sydney  
427km south of Brisbane

7 hours drive  
5 hours drive

All VW clubs are invited to attend.

Booking Code: ClubVeeDub

Toll-free telephone number for the park: 1800 729835

Internet address of the park: [www.sawtellbeachcaravanpark.com.au](http://www.sawtellbeachcaravanpark.com.au)

Organised by local members of Club Veedub Sydney.

More info soon!

## Der Bericht von Präsidenten

Our December meeting was very well attended, with the main meeting being kept short in order for everyone to have some Christmas cheer and socialise. Our monster Xmas raffle was a festive one with all prizes being gift wrapped, to add a bit of Xmas mystery. Many members brought along prizes for the raffle, with everyone winning a prize on the night. Thanks to everyone who brought along prizes.

I hope everyone is kicking back and relaxing over the Christmas and New Year break, that's if you were lucky enough to have time off. So did Santa give anyone a VW gift over Xmas ??

Our next event will be that Annual NRMA Australia Day 26<sup>th</sup> January display, in and around Macquarie Street in the city. Unfortunately if you did not get a entry card you can not take your car along. All members are welcome to come along and enjoy the days activities. Our club cars will be on display in the St James Square area, thanks to Ray Black for organizing all the VW clubs together in one place.

Précis of Committee and General meetings:- NRMA Motorfest, VW Nationals 2007, Wollongong and Newcastle shows. Sawtell Weekend.

If anyone has an outing they would like to plan, please tell us and we will find a free day well in advance.

KeeponKruzin,

David Birchall



## Canberra Kapitelreport

Happy New Year! 2007 is here and I'm sure everyone is busy fitting new bits and pieces to their dubs, and making plans for events and shows in 2007.

For the Canberra-ites, we'll be in planning mode very soon to organise our events. First up should be the Shannons Wheels display - Sunday 11 March 2007, on the lawns in front of Old Parliament House. Mark your calendar and have

your car ready - don't forget your sunscreen!

Looking forward to catching up with many of you in 2007.

Bruce



## Klub Kalender

### January:

**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.**

**Sunday 21st:- Watercooled VW Cruise.** Meet at Krispy Kreme donuts, Orange Grove Rd Liverpool, at 10am. Cruise to Mt Kiera lookout and on to the Gong for lunch. Phone Matthew on 0423 051737 for more info.

**Friday 26th:- Australia Day NRMA Motorfest** in Macquarie St and Hyde Park, Sydney. Phone (02) 9416 7055 for more information.

**Friday 26th: Australia Day Classic Car Display** at Parramatta Park. Family entertainment, hot-air balloon display, circus, interactive workshop, food and drink stands. 7:30am-1pm. Phone Loretta on 9806 5212 for bookings and more info.

### February:

**Thursday 1st:- Magazine Cut-off Date** for articles, letters and for-sales.

**Sunday 4th:- CMC Bathurst Swap Meet** at Bathurst Showgrounds.

**Thursday 8th:- Committee Meeting** at the Greyhound Social Club, 140 Rookwood Rd. Yagoona (next to Potts Park).

**Sunday 11th:- Newcastle Euro Day Motorfest** at Lambton Park, Newcastle, from 9:00am. All European cars welcome. \$5 per vehicle. Food and Drink available. Contact Noel (MGCC) on (02) 4943 5051 for more info.



**Thursday 15th:- 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 18th:- Club Veedub Putt Putt Golf Day.** Meet at Liverpool Swimming Pool carpark at 9am for cruise, or at Dural Putt Putt at 11am. See the ad on page 3 for more info.

### **March:**

**Thursday 1st:- Magazine Cut-off Date** for articles, letters and for-sales.

**Sunday 4th:- Thirlmere Festival of Steam 2007** at Thirlmere. Club vehicle display and street parade. Market stalls, music, model railways, train rides. Contact Keiren Ryan on 0409 952874 for more info. See Page 4.

**Thursday 8th:- Committee Meeting** at the Greyhound Social Club, 140 Rookwood Rd. Yagoona (next to Potts Park).

**Thursday 15th:- 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.

**Thursday 22th:- Cut-off date for April Zeitschrift** (VW Nationals special issue)

**Sunday 25th:- 7th Annual VW Jamboree** at Caribbean Gardens, Melbourne.

### **April:**

**Saturday 7th & Sunday 8th:- VW NATIONALS 2007 at Fairfield Showgrounds.**

**Thursday 12th:- Committee Meeting** at the Greyhound Social Club, 140 Rookwood Rd. Yagoona (next to Potts Park).

**Saturday 21st:- Wings, Wheels and Wine** at

Mudgee Airport. Aircraft displays, food and wine, historic cars. See page 6.

**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.

### **May:**

**Thursday 3rd:- Magazine Cut-off Date** for articles, letters and for-sales.

**Thursday 10th:- Committee Meeting** at the Greyhound Social Club, 140 Rookwood Rd. Yagoona (next to Potts Park).

**Thursday 17th:- 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 20th:- CMC Rylstone Swapmeet** at Rylstone Showgrounds.

### **August:**

**Saturday 18th & Sunday 19th:- Sawtell Winter Break** at Sawtell, NSW. Details to be advised.

**Saturday 25th & Sunday 26th:- Shannons CMC Eastern Creek Classic**, Eastern Creek Raceway.

### **September:**

**Sunday 30th:- Old Bar Beach Festival and Kombi Gathering** at Old Bar, NSW. Contact [kombi@oldbarbeachfestival.com.au](mailto:kombi@oldbarbeachfestival.com.au) for more information, or phone Cozette on (02) 6553 7328

## **Marktplatz**

*info@clubvw.org.au is the address to email ads. Classifieds are free to Club VeeDub Sydney members and \$10.00 for non club members. Ads will appear for two months, or longer if requested.*

*In addition to appearing here, all ads will also*

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appear on our club website [www.clubvw.org.au](http://www.clubvw.org.au) Photos can be included on the website but not in Zeitschrift. All classifieds will appear in Zeitschrift first in order that our members have first chance to see them. They will then be transferred to the club website on the third Thursday of the month.

Non-members please post us a cheque or money order for \$10.00, payable to: Club VeeDub Sydney, c\~14 Willoughby Cct Grassmere NSW 2570.

### New Ads:

**For Sale:- 1967 Type 3 Wagon**, extensive rebuild ten years ago, but now needs some TLC, 1973 IRS floor pan fitted, front discs, good gearbox, 1600 cc motor with extractors. 12volt conversion, replacement headliner fitted original door trims , inertia reel seat belts, high back bucket seats fitted, Body has a few rust holes, but basically good, allow wheels. Asking \$3000.00 ONO contact David on 49 42 2175 or 0405 108 285 or email [kerda3@bigpond.com](mailto:kerda3@bigpond.com) for more details.

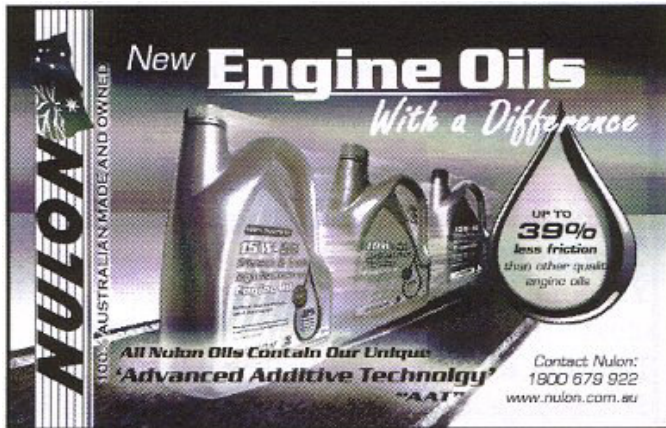
**For Sale:- VW New Beetle 2001**, auto A\C, 48835K Reg 7\07, metallic blue. Power options electric roof, rear spoiler, sports exhaust A1 condition many extras. Phone Diane: 0421693357

**For Sale - 1961 J&S Buggy**, ACT rego to 2/07. Engineering certificate, SWB. 1600 stock engine. Front rims 6" x 13 185/70 tyres, rears 7"x14 8.5R14LT Bridgestone Desert Duelers, heaps of tread. Valves (inlet, exhaust, guides), heads, fuel pump, front brakes done late 2005(receipts). Steel cage covering engine with opening 'lid' for access. No rust, aftermarket seats, new inertia belts, fire extinguisher, ½ roll cage, sports steering wheel. Has not been off-road since built and rego'd as a buggy. Car is reluctantly offered for sale due to family reasons. Priced at \$9K, will consider a Kombi Dualcab as part-payment depending on condition. Call Bruce or Sue on (02) 6294 1057 (car located in Canberra).

### 2nd Month Ads:

**Wanted:- A copy of the AutoPress Workshop Manual for the 1954-67 VW Transporter.** This is the manual that was borrowed from the club library in January 2003, and not returned (see page 35). I have so far been unable to find a copy to replace it. If you have a copy you no longer

## Trades and services directory



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Contact Raymond Rosch  
(02) 9601-5657 or  
sales@clubvw.org.au

require, please let me know and we will buy it for the club library. Simon Matthews, club librarian - (02) 9898 3665 (ah)

**Wanted:- Perspex sunvisors** for 1960s Beetle. Would prefer charcoal or green. Phone John Vellis on 041 3501895.

**For Sale:- VW Beetle 1964.** Restored 1.6-litre engine, steel alloy wheels. Red/white. Lismore area. \$7500 ONO. Tel. 0408 495201.

**For Sale:- 1970 VW Beetle.** Was one owner for thirty years. 90,000 genuine log book miles. Actually was owned by a little old lady no kids! Complete restoration had begun (Engine overhauled to standard specs by Stan Pobjoy (1600cc) Gearbox overhauled by German Autos Brisbane) as this car could easily be concourse with little effort but now must sell. This is the best VW model, swing axle rear but disc brake front end. Needs paint in due course for concourse but no rust etc. Looks OK, paint still shiny. This is a very genuine straight unmolested car. Original registration Very rare like this. \$4,750 ono [fwpike@yahoo.com](mailto:fwpike@yahoo.com), (02) 4990 3717, Mob (043) 2071371

**For Sale:- Blue VW Beach Buggy.** Full length Chassis Number 118 997 385 sought after disc brake front end was NSW registered as a buggy was running with all lights etc working good 1600 cc twin port engine quite strong gearbox seats now disassembled for overhaul (car driveable) has rollover bar but some fettling and seatbelts required before ready for reg has no back seat but can be fitted \$3,950 [fwpike@yahoo.com](mailto:fwpike@yahoo.com) (02)49903717 or 043 2071371 (mobile usually out of range ).

**For Sale:- 1600cc twin port** with full tin ware generator, heaters, exhaust pipes etc fully overhauled \$1195 ono 0249903717 or 043 2071371 [fwpike@yahoo.com](mailto:fwpike@yahoo.com)

**For Sale:- 1976 Kombi Camper.** Good condition. Reconditioned 2-litre engine. 4 spd manual with new shocks and tyres. Tinted windows and new Kenwood stereo system. Original interior with complete camper set-up (stove, fridge, sink, storage, sleeps 4). Great traveller - Reluctant sale. \$5,900. Contact Fiona

**Trades and services  
directory**

on 0411 167 497.

**For Sale:- 1600cc Twin Port Beetle engine.** Was fully overhauled by VW specialist and has not been started since. Complete with generator and carb and all tinware. Looks good. \$1200 ono Complete exhaust system also available [fwpike@yahoo.com](mailto:fwpike@yahoo.com) 0249903717 or 0432071371.

**For Sale:- VW Type3 Variant (Wagon) 1973** model, good condition but paint fading, log books, workshop manual 99,500 miles, registered to June '07. GJZ178 Asking \$3000.00 ONO Please contact Gordon on 0428 381 879

**For Sale:- 1968 Beetle**, registered to March '07, 1600 cc engine, no rust, to be sold with many spares, asking \$1800, phone Karl on 02 9436 2803

**For Sale: 1974 Kombi.** Unfinished project, complete but disassembled. 1800 engine; good gearbox, brakes. Homebrew sunroof w/vinyl ragtop, or fit poptop. All bodywork done. \$1000 or swap. Contact Chris in Mt Victoria on (02) 4787 1213.

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## Excellent Australian VW Sales in 2006

The Federal Chamber of Automotive Industries (FCAI) have published preliminary figures for vehicle sales in Australia in 2006. They can be found on the FCAI's website, [www.fcai.com.au](http://www.fcai.com.au)

Volkswagen Group Australia sold 21,571 VW vehicles (cars and commercials) in Australia in 2006, an increase of 36.7% over 2005. This is a truly excellent result, putting Volkswagen back into the top ten best-selling marques in Australia for the first time since 1976. The result of 21,571 vehicle sales was VW's biggest total in Australia since 1965, and was VW's 6th-biggest Australian total of all time.

The only years more VWs were sold in Australia were during the period when Volkswagen Australasia locally manufactured VW cars and commercials. The record years for VW in Australia are 1964 (31,419), 1960 (28,597), 1963 (27,068), 1965 (25,577), 1962 (24,604) and 2006 (21,571). The only other year above 20,000 Australian sales was 1959 (21,002).

The FCAI's figures are only preliminary at this stage, so there is no data yet on sales of individual models, or even by category (passenger-SUV-Light Commercial). These will be published in due course.

VW had previously done well in 2005, when 15,782 vehicles were sold. In 2005 these were made up of 1,320 Polos, 9,311 Golfs, 354 Boras, 9 Jettas, 835 New Beetles, 208 New Beetle Cabrios, 443 Passats (1 W8), 291 Multivans, 39 Kombis, 1,320 T5 Transporters, 170 Cab-Chassis, 659 Caddys, 262 LTs and 561 Touaregs. However, with total 2006 sales increasing by 36.7%, we would expect similar increases across the range.

Audi also sold well in 2006, with a total of 5,770 sales in Australia. This was an increase of 23.6% over the 4,666 sold in 2005, and was Audi's best-ever year in Australia. Audi has shown remarkable growth since selling only 138 vehicles in Australia in 1986.

VW's recent Australian history is very similar. LNC Industries gained the Australian VW franchise in 1968 at a troubled time, when Volkswagen Australasia was losing money. The manufacturing facility reverted back to assembly of CKD kits, and only 14,957 VWs were sold.

LNC managed to gradually increase sales, up to 19,138 in 1971, but after that sales fell away. The arrival of the Passat in 1974 and the Golf in 1976 did not arrest the slide, as they were soon priced off the market by LNC as they sought higher and higher profits. In 1980 sales of petrol-engined VW cars were terminated, and only the diesel Golf and Passat, and the Kombi, continued. In 1982 LNC sold only 518 VW vehicles in Australia, after which no more VW cars were imported; only the Transporter continued on. LNC sold only 48 Transporters in 1987, VW's absolute low point on the Australian market.

VW Germany revoked LNC's VW franchise that year, and awarded it instead to Ateco Industries. LNC Industries suffered financial difficulties and were sold to the Liberman investment company, who broke them up and sold off the various divisions. Lanock Motors was sold to City Ford, who wound them up in 1991, thus ending a VW association that stretched back to 1954.

Ateco sold 87 Transporters in 1988, then with a major relaunch of the marque (Volkswagen Is Back!) sold 1,097 Transporters in 1989. They then sold 107 Golf Cabrios and Mk2 GTIs, plus 1,075 Transporters, in 1990 and another 289 Golfs and 665 Kombis in 1991.

Ateco sold the VW/Audi franchise to British importer TKM for \$25 million that year. TKM planned to treble VW's sales by 1994, intending to sell 10,000 VWs a year including 1,000 Audis, 2,500 VWs and 6,500 commercials. Volkswagen was most unusual in having an independent importer/distributor for their product; all the other major manufacturers such as Mercedes, BMW, Volvo, Mazda and Honda were factory-owned. And, as it turned out, no one looks after your product as well as you do.

In 1994 TKM sold only 3,639 VWs and 1,722 Audis, not the 10,000 promised. TKM's best year was 1999, their last, when they sold 6,214 VWs and 2,890 Audis. A flirt with SEAT along the way was a waste of everyone's time.

In 2000 Volkswagen AG finally stepped in and created Volkswagen Group Australia, a fully German-owned and VW-run organisation, the first since 1967. VW's sales were 8,216 in 2000, then 11,007 in 2001, 12,357 in 2003 and 15,782 in 2005. Now, with 21,571 sales in 2006, we can finally say that Volkswagen REALLY IS back!

## Interesting Chinese Volkswagens

*Beijing, November 2006:* Volkswagen Group China recently presented the new Bora HS. It is based on the previous Mark 4 version of the popular Golf. An especially dynamic hatchback version was created here, which among other things is impressive with its exceptionally good handling characteristics and practical rear hatch.



At the front of the car the hatchback is characterized by the succinct, refined and typical V-shaped Volkswagen front grille with chrome cross struts and arranged next to them the distinctive and unique-to-China dual round headlamps. The distinctive body design, homogeneous line styling and narrow gap sizes also emphasize solidity and elegance. The powerful appearance of the new Bora HS is supported by a wide track, massive bumpers and prominent wheel cutouts.

The Golf 4 has not been produced in Europe since 2003, but it is interesting that it has resurfaced in China. Also interesting is that it is sold not as a Golf, but as a Bora - the name used everywhere else for the booted version of this model Golf. The current Jetta (based on the Golf 5) is also sold in China.

VW's other partner in China, FAW-Volkswagen, have presented the VW Magotan as the flagship of the range. It is known everywhere else in the world as the Passat, but it has been especially adapted to the Chinese market.

The name 'Magotan' was chosen to keep the model separate from the previous model Passat, which is also sold in China by Volkswagen Group China. Some models are sold as Passats,



while others are called Santanas.

The VW Magotan shares the fundamentals of its design with the European Passat, as sold in Australia. The Magotan has 57% more torsional stiffness than the previous Passat and Santana, and shares the new Passat's 4-link trapezoidal rear suspension and 565-litre boot. The Magotan also has the Phaeton's automatic dual-zone climate control system, push-button electronic parking brake and keyless entry / start system.

Shanghai Volkswagen have revealed their VW Neeza concept car at the Beijing International Automotive Exhibition.



The Neeza concept is a crossover between a sports coupé and an estate with an off-road appearance, and has been designed in China for China. The study combines Chinese and German design philosophies, signifying the future of new models from Shanghai Volkswagen. Produced with Chinese culture, tastes and requirements firmly in mind, it is a mix of traditional Chinese and modern European features.

The name Neeza originates from 'Ne-zha', the name of a famous and mystical figure from Chinese history who had magical weapons and fought evil spirits.

## Best Car Awards 2006

Volkswagen has won three awards at the prestigious NRMA 'Australia's Best Car Awards' for 2006. The details of the awards are as follows.

1. **Best Small Car: Polo TDI**
2. **Best Midsize Car (over \$28k): Jetta TDI / FSI**
3. **Best Sports Car: Golf GTI**



The magnitude of this achievement cannot be ignored as there are only twelve categories in total ranging from Small Cars to Luxury SUVs. In addition to this, the awards to both Polo and Jetta are in segments that have traditionally been dominated by Japanese brands in the Australian market, which adds to the significance.

Jutta Dierks, Managing Director – Volkswagen Group Australia said, “These awards are significant for a number of reasons. Firstly, given the market segments we were successful in, it further confirms Volkswagen’s position as a premium volume brand. Secondly, Golf GTI followed up the success in 2005 making it two in a row with another award for being a great all-round sports car in 2006. And thirdly, our decision to introduce diesel (TDI) engines to all Volkswagen passenger vehicles has certainly been vindicated with the Australia’s Best Car awards for both Polo and Jetta and the sales of Volkswagen TDI powered cars thus far.”

‘Australia’s Best Car Awards’ are in their seventh year as a co-operation between the seven State and Territory based motoring associations of Australia. As a combined voice they speak to over six million Australian motorists, hence magnifying the importance these awards.

## VW Transporter for Harley-Davidsons

There is now a perfect vehicle available for Harley-Davidson motorcyclists. Volkswagen Commercial Vehicles has developed a system for the Multivan which enables motorcyclists to transport their motorcycles easily in the vehicle. No other manufacturer offers equipment for this purpose. This innovation and the details of the cooperation between two cult product manufacturers were presented today at the Harley factory in Frankfurt.



The system is practical and very simple to use: two different Harley-Davidson transporter packages can be ordered when the customer orders a Multivan Comfortline. The system, for which Volkswagen Commercial Vehicles has applied for a patent, consists of a winch and a folding ramp for pushing the motorcycle into the Multivan, and a moulded rail inside the vehicle for attaching the motorcycle securely with fastening rings and belts. This special equipment package is known as “Easy-in”. It can handle motorcycles with a weight of up to 300 kilograms.



The limited series package “Easy-in-black” is available to motorists wanting a very special look for their vehicle. In addition to the basic package, it also has sports running gear, Black Magic pearlescent paintwork, opaque windows in the rear, and black 18-inch alloy rims with chrome trim. When the holder is fitted, there is still room for two seats in the rear of the vehicle. A total of four people can travel alongside the Harley-Davidson.

Starting prices for the Multivan Comfortline are approximately 37,000 euros. The “Easy-in” package costs 2,064.80 euros and the “Easy-in-black” package costs 7,308 euros. If the second package is ordered along with a Multivan Comfortline, savings of 1,038 euros are made.

Help is on hand from Volkswagen Commercial Vehicles for motorists who do not yet own a motorcycle: the Harley-Davidson Night Rod, colour-coded to match the Multivan, can be supplied by all authorised Harley-Davidson dealerships.

“A true partnership,” explained Harald Schomburg, member of the management body of Volkswagen Commercial Vehicles responsible for Sales and Marketing. “Two products which gained cult status and stand for freedom and individuality have partnered up for the benefit of the customer.”

## VW Nanospyder Concept

A team of highly creative Volkswagen designers based in California have unveiled their own unique take on the future of modern transportation.



The result is the Volkswagen Nanospyder. Futuristic nanotechnology supported by hydrogen fuel cells, solar power, wheel-mounted electric

motors and inflatable organic body panels combine to form the unusual shape of the two-seater concept.

Nanospyder is the work of a team of three young designers – Patrick Faulwetter, Daniel Simon and Ian Hilton - based at the Volkswagen Design Center in Santa Monica. They created the Nanospyder in response to a challenge laid down by ‘Design Los Angeles’, a conference set to take place at the upcoming Los Angeles Motorshow in November. The brief – unlike the solution – was simple. To design a vehicle able to make the most of California without harming the environment.



The team met its brief by thinking well beyond current manufacturing techniques. According to its creators the Nanospyder would be formed out of a latticework of billions of tiny programmable nano devices measuring less than half a millimetre in diameter. Each of these tiny devices can be programmed to be as strong or weak as required meaning active crumple zones can be created. The ‘spine’ of the vehicle, onto which the rest of the components are attached, remains immensely strong.

Clothing the nano-lattice are panels formed out of a mix of organic materials some of which can inflate to provide further cushioning in the result of an impact. The material doubles as a power source as polysynthesis generates small amounts of electricity. This coupled with hydrogen fuels generates power to drive the tiny electric motors mounted within the hubs of all four wheels.

The Nanospyder, although purely intended as a concept vehicle, gives an insight into the depth of thinking going into the search for sustainable forms of modern transport.



## Neuspeed Concept Thunder Bunny

The story began back in the early '80s, with a man named Bill Neumann. Bill founded the California-based tuning firm Automotive Performance Systems (APS). He was frustrated with the fact that Volkswagen's hot hatchback GTI had been sold in Germany since 1976, but hadn't yet come to America. Bill had driven the GTI in Europe on several of his parts-searching trips, and he was convinced it would be a big hit in America. So he sent letters to the factory. He wrote to enthusiast magazines and lobbied Volkswagen dealers for support. Then, he put together the proof that a Rabbit-based performance car was capable of generating both stunning performance numbers and lots of attention from the American automotive press. Thus was born the original Thunder Bunny.

The APS-modified Rabbit was delivered to Motor Trend magazine late in 1981. Even though its staff was used to driving the best cars in the world, they were blown away by the little Volkswagen hatchback. As it was written in the March 1982 issue: "The little white wonder packs its own kind of lightning-quick rabbit punch — one that's guaranteed to kayo unsuspecting boulevard bullies." And when Road & Track magazine got its hands on the car, it reported a zero to 60-mph run in the low seven-second range and slalom times that at the time had been bettered only by the Ferrari 512 Boxer, Lamborghini Countach and Renault R5 Turbo. Exalted company, indeed.

Bill's frustration ceased in the fall of 1982 when the GTI finally came to America, but by then Thunder Bunny had done its job. It put Neuspeed, the APS-trademarked line of parts and accessories, on the map. It also helped launch a vital North American community of specialists in watercooled Volkswagen performance. Modifying Volkswagens, of course, was not new in America — the Beetle had spawned a huge following of enthusiasts — but the new generation of Volkswagen cars hadn't sparked much interest in the go-fast crowd before the early '80s.

Neuspeed continues to be a leading force among the world's Volkswagen tuners, and it has never stopped building special projects. The latest is also called Thunder Bunny, and it was built in

commemoration of Neuspeed's quantum leap forward all those years ago with the original rabid Rabbit. Designed in collaboration with Derek Jenkins, Chief Designer at the Volkswagen Design Center California located in Santa Monica, the new Thunder Bunny is an updated, thoroughly modern version of the original, and it debuts alongside the Concept R GTI on the Volkswagen stand at the 2006 SEMA Show.



Today's Thunder Bunny is a blend of subtle design massaging and tuning technology, built to show how a comfortable daily driver can also provide an exciting motoring experience. Creating the thunderous noise from under the hood is a newly developed turbocharger system, designed by Neuspeed especially for Volkswagen's 2.5-litre five-cylinder engine. The high quality installation includes a modified intake manifold, Garrett ball-bearing turbocharger and air-to-air intercooler. A stainless exhaust and specially baffled aluminum oil pan were also sourced from APS for optimum flow and cooling. Boost is restricted to a maximum of 0.5-bar in this Stage 1 kit, but it still produces 168kW, 57 more than the stock 2.5 L, and a hefty dose of low-end torque. A performance clutch and Quaife differential were added to the powertrain for durability and a more efficient delivery of power to the front wheels.

Thunder Bunny's gleaming candy white exterior is made distinctive by several design studio touches. The concept's body kit includes a larger central grille and a more muscular rear valance framing a twin R32-style exhaust from Neuspeed. Like the R GTI, Thunder Bunny's paint was overlaid with graphics Jenkins calls "topographical" in pearl silver. They were meant to evoke the contours of the car's geography or waves of air that flow over the surfaces. However they are interpreted, the pearl silver graphics make



a unique visual statement as they appear to blink on and off in the changing angles of the sun.

Like the original Thunder Bunny, the forged alloy “street” wheels are painted gold. In 19x8-inch sizing, they’re wrapped with Michelin Pilot Sport Cup 235/35-19 tyres. Similar sized multi-spoked forged alloys were sourced from Neuspeed’s RS line of wheels for track use. Both sets are lightweight, in keeping with the core GTI quality of nimble handling. The front brakes are 328mm two-piece floating cross-drilled discs from Brembo, gripped by bunny-bedecked Brembo four-piston brake calipers. That’s right, bunnies. A veritable warren of Thunder Bunny logos dash to and fro across the surface of the white-painted caliper. At the rear, 310mm disc brakes are fitted.

Handling prowess comes from a suspension fitted with a Bilstein coil-over shock system and APS/Neuspeed sways bars, measuring 25mm front and rear. The suspension system is adjustable for both ride height and for shock stiffness, giving the new Thunder Bunny a dual character, suitable for the street or the track. A Neuspeed short-shift kit and custom spherical aluminum shift knob, created in the design studio,



put the driver in closer touch with the manual transmission. A stock GTI steering wheel was recovered in alcantara to go along with the upgraded upholstery and trim.

Stock GTI seats were recovered in black and white checkered tweed that echoes styling trends from the early ‘80s, and the striking fabric is elegantly framed by surrounding black leather with white stitching. The color scheme is perfectly complemented by the white carbon-fiber interior trim provided by OSIR, experts in hand-laid composites and also major contributors to the design studio’s Concept R GTI.

All those years ago, Bill Neumann asked a simple question. Volkswagen responded with the GTI, while Neuspeed became a leader in Volkswagen tuner circles...why a new Thunder Bunny? Think of it as a beautifully crafted response to another question, “What happens when you give a modern Rabbit to one of the original water-cooled Volkswagen tuners?”

## VW High Temperature Fuel Cell

Volkswagen Research has developed a type of high temperature fuel cell (HTFC) that is one of a kind in the world. It eliminates numerous disadvantages of the low temperature fuel cells (LTFC) previously known. A new high temperature membrane and electrodes specially adapted for this membrane will thus enable significantly more compact, cheaper and more efficient fuel cell systems for cars. The breakthrough in this type of propulsion has come a bit closer. However, the prognoses of many manufacturers for when the hydrogen fuel cell will be ready for series production and available on a grand scale have been repeatedly revised due to the imponderabilities of research. This is why Volkswagen is sticking to the facts:

**1999.** VW Research begins the program for the development of a high temperature membrane.

**2001.** At the end of 2001 Volkswagen decided to carry out independent development of the high temperature fuel cell – starting with basic research on the topic of membrane technology.

**2003.** Three years ago Volkswagen researchers achieved significant success in membrane development. But suitable electrodes were missing as the key to implementation.

**2006.** Today the electrode problem has for the most part been solved. The results are very promising: The high temperature fuel cells are currently being developed and tested in the Volkswagen Technology Center in Isenbüttel, specially constructed for the research of alternative drive systems and located at the gates of Volkswagen headquarters in Wolfsburg.



A peek into the future could look like this:

In about **2010:** More higher performance high temperature fuel cell systems come about that are perfected step by step and will power the first research vehicles in 2010.

In about **2020:** The first Volkswagens with a fuel cell drive that is affordable and suitable for everyday use – the decisive factors – could appear. Volkswagen sees no chance for the mass series production of low temperature fuel cells (LTFC) primarily being used by other car makers today due to the disadvantages related to their conceptual design.

### **Disadvantages of the LTFC**

Low temperature fuel cells are operated at a membrane temperature of approx. 80 degrees Celsius. If the temperature greatly exceeds this value fuel cell performance breaks down and irreparable damage is done to the fuel cell. This is why LT fuel cell vehicle prototypes – should they be able to pass driving test cycles similar to a combustion engine – place very high requirements on the cooling system, making it very expensive. In addition, in a LT system the supply of hydrogen gas and air must be continuously humidified, because otherwise the production of energy will break down, permanently damaging the fuel cell and bringing the electric engine being powered to a stop. This humidification also takes space, weight and money.

### **Advantages of the Volkswagen HTFC**

The high temperature membrane developed by Volkswagen can, in combination with newly designed electrodes, be “driven” at temperatures of up to 160 degrees at the same output of power. A medium operating temperature of 120° C is intended for vehicle operation. This without additional humidification. A distinctly simpler cooling system and water management is sufficient here, significantly reducing the need for space, weight and money.

### **Fuel Cells In General**

*Chemical energy turns into electrical energy.* To more precisely classify the advantages of the high temperature fuel cell will require a consideration of the general workings of fuel cells. The central element of each individual fuel cell – many of which are combined into a block (stack) – is a proton exchange membrane. It is located between the anode and cathode of each fuel cell. Hydrogen flows into the fuel cell on the anode side and the cathode is supplied with air. Many of these cells in combination generate enough energy to power a vehicle. Hydrogen and oxygen react inside each cell, producing water on the cathode side. Energy is released in this process. The fuel cells thus convert the chemical energy of an oxidation process, known as “cold combustion”, directly into electrical energy. The “exhaust” produced is nothing more than clean water vapor.

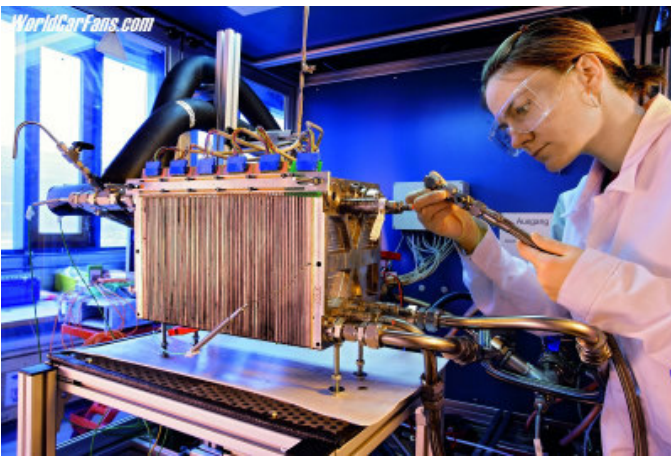
*Electric, not combustion engine.* The fuel cell is supplied via a hydrogen tank and an external air intake. The electrical energy – the power – generated by the fuel cell is delivered via a converter and a downstream static inverter to one or more electrical engines. Consequently, the car runs virtually without making a sound, but definitely emission free.

### **Fuel Cells in Detail**

*General process.* Hydrogen is split into electrons and protons on the anode. The positively charged protons travel through the membrane to the other electrode, the cathode. The negatively charged electrons flow through an external circuit to the cathode. This current flow powers the electrical engine of the car. On the cathode the protons react with the inflowing oxygen and the electrons to form what is called product water, which for the most part escapes from the exhaust pipe. Approximately sixty percent of the energy

employed in the form of hydrogen is converted into electricity.

*Disadvantages of the LT fuel cell:* In the low temperature fuel cells primarily employed up to now, the protons are carried from the anode to the cathode in the membrane via a short connection of the protons with the water in the membrane. To prevent the membrane from drying out the reaction gases hydrogen and air must therefore be humidified. This results in two decisive disadvantages: The membrane may not, as previously outlined, heat up to above 80 degrees Celsius. The result is a very small difference in temperature between the cooling medium and surrounding air. Continuous hill climbing and trailer operation are virtually impossible. Yet in order to attain sufficient cooling performance LT fuel cell systems – if being used for the everyday operation of a normal car – need a cooling surface approximately three times as large as for a diesel engine (!). This is without taking into consideration situations such as hill climbing and the necessarily higher cooling performance associated with it.



*Cooling problem in detail:* Cars with conventional combustion engines produce more waste heat than vehicles with fuel cell powered electrical engines. Combustion engines can release this waste heat to the environment via the engine cooling system and exhaust fumes. The fuel cell does not have this option. As a consequence of the comparatively lower operating temperature, heat is almost exclusively released via the cooling system, but not via the exhaust system. The result is that at the same engine output more than twice the amount of heat has to be discharged via the car radiator. And this holds true despite the efficiency advantage of the fuel cell.

LT fuel cell gases must be continuously humidified. There is another problem: The inflowing gases hydrogen and air dry out the electrolyte – the water molecules stored in the membrane. And this also disrupts the flow of current. This is why a special unit humidifies the inflowing gases. For these reasons, apart from the actual fuel cell other complex technology must be integrated in the vehicle. The result is that the overall system is heavier.

### VW High Temperature Fuel Cell In Detail

*Advantages of the HT fuel cell:* It's precisely these problems that the fuel cell with high temperature membrane developed by Volkswagen doesn't have. This is because the protons are carried via other liquid electrolytes such as phosphoric acid. The acid has good electrolytic properties similar to water, yet demonstrates a higher boiling point.

The advantage is that no additional humidification is necessary. In this way, it is possible to increase the maximum operating temperature up to 130 degrees Celsius with no loss in performance. The high temperature fuel cell developed by Volkswagen makes a significant contribution towards making the system lighter, smaller and cheaper.

*How the HT fuel cell is made:* Simply stated, high temperature membranes are produced by dipping a film into a bath of phosphoric acid. The phosphoric acid permeates the film within a matter of minutes. The membrane is then integrated into a fuel cell stack. A sheet of pressed carbon fibre is first placed on the pre-configured cells. Air will later flow through the grooves in this sheet. Attaching a seal follows as the next step. Then comes a cloth of carbon fiber which is doped with a catalytically active platinum paste, the gas diffusion electrode. It is simultaneously used as a gas distribution layer and cathode. The membrane doped with phosphoric acid is spread over the cathode. Following this is another seal and a cloth-shaped counter electrode, this time used as an anode. Hydrogen flows through the grooves of the last sheet. The back of the sheet is cooled with water. Finally, every cell is pressed together under pressure and joined together into a fuel cell stack. Conventional electrodes don't work. But there has been one problem up to now: Similar to the low temperature membrane, product water formed on the cathode. The water permeated the

membrane and washed out the phosphoric acid. This in turn interrupted the flow of current. At this point all attempts up to now to make a high temperature fuel based on familiar materials useable have failed.

Intensive Volkswagen basic research came to the result that in addition to a new membrane special modifications of the electrodes are necessary which are able to prevent product water from penetrating the membranes.

*New electrodes delivered the breakthrough:* The solution: On a special screen printing machine like the ones used in the field of semiconductor technology the researchers at the Volkswagen Technology Center in Isenbüttel coated cloth elements made of carbon fibre with a new type of paste. The newly created electrodes then underwent extensive testing in fuel cell stacks. The clear result: The product water can no longer leach out. HT technology is thus ready for use. The new cells now work in a considerably wider temperature window than fuel cells known up to now. The membrane is also less sensitive to air impurities due to the higher temperatures. Using the high temperature fuel cell developed by VW, approximately one third of overall system components can be dispensed with. This makes HT systems lighter, cheaper and suitable for vehicles. This make the future of fuel cells exciting.

### **Volkswagen Technology Centre, Isenbüttel**

*Fuel cell milestones:* Volkswagen has for decades been involved in the area of fuel cell research. The milestones include the Capri Project (1996-2000, hybrid drive in the Golf Variant with 2 kW fuel cell), the Bora HyMotion (2000, fuel cell hybrid car with 30kW fuel cell continuous power rating), the PSI Bora in cooperation with the Paul Scherer Institute (2001, driving tests over the 2,005 meter high Simplon Pass with 40kW fuel cell) and the Touran HyMotion (since 2004, integration of a fuel cell with 65kW continuous power rating with no restrictions on available space, including field tests in California, China and continuously in Berlin as part of the Clean Energy Partnership).

*Technology Center opened in 2001:* In order to ideally bundle the forces for this research project oriented towards the far future, in the previous decade the company decided to establish its own technology center located near its headquarters in Wolfsburg. The choice was made for Isenbüttel

located about 15 kilometres away. The Volkswagen Technology Center for fuel cell and electric vehicle technology was established there in 2001 over an area of 38,000 square metres. Investments amounted to 20 million Euros alone for testing and measuring facilities.

*Ideal infrastructure:* The floor space for test stands and vehicle construction is 6,800 square metres and offers sufficient space for every imaginable research and development infrastructure. The office building of the technology center comprises 2,800 square metres, offering room for 100 engineers. A test stand park specially geared towards the needs of the high temperature fuel cell supports the testing of all stack (fuel cell stack) and system components. This includes test stands for small, individual laboratory fuel cell and vehicle fuel cell stacks with output of up to 100kW as well as fuel cell components and complete fuel cell systems. For research into electric vehicle components an electric drive test stand and a battery test stand were integrated. Fuel cell vehicles can be assembled on lifting platforms and put into operation. Initial tests in the driving cycle and consumption measurements of the fuel cell vehicle can be carried out on a roller dynamometer.

*Own hydrogen production and hydrogen filling station:* The infrastructure of the technology center includes a hydrogen filling station, allowing vehicles to be filled with liquid hydrogen at -253 deg Celsius or compressed hydrogen at 350 bar with the option for upgrading up to 700 bar. The hydrogen for the pressurized filling station is produced regeneratively using solar energy from a 50 square meter photovoltaic field installed on site.



# Volkswagen Passat FSI Turbo



## Passat FSI Turbo

The value of the new Volkswagen Passat FSI Turbo is difficult to judge.

If you're expecting NVH far superior to an Australian built car, you'll be disappointed. Acceleration is also similar to the locals, despite the Passat using a sophisticated direct-injected turbocharged engine. On the other hand, you're unlikely to find a safer car in the price bracket and it is amongst the cheapest 'prestige' cars on the market.

But then again, it's not that cheap!

The base price for the Passat FSI Turbo is \$44,990 but by the time you bring it up to the specification of the car on test (leather trim, a sunroof and electric seats with driver's seat memory) the price balloons to \$51,460.

The 2.0-litre FSI Turbo engine is positioned in the middle of the Passat range – it has more power than the 2-litre turbo diesel but it trails the 3.2-litre V6. It's an interesting engine that combines FSI direct injection technology and a

10.5:1 static compression ratio (which is extremely high for a turbocharged engine). The result is strong bottom-end performance and a useful 280Nm of torque between 1800 and 4700 rpm. This gives effortless performance in normal driving conditions - but it's not a sweet sounding engine when revved. Maximum power is 147kW spread from 5100 to 6600 rpm.

A six-speed (non DSG) automatic transmission provides smooth changes but its shift strategy is flawed. Hard acceleration after gentle driving will result in the transmission obstinately holding on to a low gear, rather than changing up normally. There is a sequential shift function which is useful for sporty driving.

Volkswagen claims 0-100km/h in 7.8 seconds but we doubt that could be achieved in normal conditions. Volkswagen also suggests 8.9 litres per 100km fuel consumption (ADR 81/01) but the trip computer indicated consumption in the 11s during our test, which included a large proportion of gentle country road driving. Ninety-eight RON fuel is recommended to satisfy the turbocharged high compression engine.

The front-wheel-drive Passat chassis does an admirable job transferring the torque to the road. The traction control works overtime in wet conditions but the car never misbehaves by tramping or torque-steering. With large 235/45 17 Continental SportContact2 tyres, the handling is best characterised as grippy and safe – but it's not a car that can be driven with fingertip sensitivity. Electronic stability control is fitted as standard.

With MacPherson strut/lower wishbone front and a four-link independent rear suspension,





the Passat delivers a mostly comfortable ride, although the 45 series tyres can crash in urban potholes. We also noticed squeaking from the front suspension when passing over speed humps. The steering is well-weighted with constant feel at all steering angles. The brakes feature the latest ABS and Brake Assist technology and perform well in normal driving conditions – though the front wheels are rapidly covered in pad dust.

absence of a conventional key and barrel arrangement in preference for a small rectangular communicator which is pushed into a slot in the dashboard. We're not sure what its advantage is. There's also a different-for-the-sake-of-it electrically operated handbrake which makes an intrusive whirring sound when operated.



The Passat's body is smooth and attractive with standard 17 inch wheels and LED rear indicators and brake-lights adding a touch of sporty appeal. Paint quality is excellent, the doors shut beautifully and overall build quality is to a very high standard.

But the Passat FSI Turbo lacks spark - there are few highlights besides safety and build quality. If we were in the market for a \$50,000+ car we'd want something more.

The new Passat is bigger than the previous generation and offers plenty of useable space for two rear passengers as well as a surprisingly large boot. Innovative boot hinges avoid intrusion into the load volume and a 60:40 split backrest can be folded forward to expand the carrying capacity. The equipment list is comprehensive. There are eight airbags and the optional sunroof and leather trim in our test car created a very pleasant ambience. We also love the clarity of the multi-function digital display that's positioned ahead of the driver.

But not everything is user-friendly. For example, the dual-zone climate control initially looks easy to operate but lacks any meaningful markings. The cruise control can also be challenging to master. There are also a couple of 'features' of questionable worth. First is the

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2L Turbo, FSI, 141KW, 雙利自動剎車, 電子穩定  
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## The Toy Department

Hello and welcome to another New Year! I hope that all you who share this interest and hobby were showered with gifts of the model car variety during the Christmas season.

This month I have continued with the Jada series as they have gone to some extreme effort to please us VW supporters.

Wave two Panel van kombis in purple & black over tan should be getting around now.

**DUB CITY OLDSKOOL** 1:64  
BIG CAST VEHICLES



Item #12037-Purple 1962 VW® Bus™

**DUB CITY OLDSKOOL** 1:64  
BIG CAST VEHICLES



Item #12037-Black-Yellow 1962 VW® Bus™

**FOR SALE**  
DIE CAST COLLECTIBLE

1:64



Item #12063-Wht-yellow 1962 VW® Bus

**V DUBS**



Item #12062-Blu-wht 62 VW® Bus™

**V DUBS**



Item #12062-Red-blk 62 VW® Bus™

Also the following yet to be released in Australia range speak for themselves but as you can see Jada have released a new wave called the V Dub series wave 2.

In particular are the ratty "for sale" range which are real hot in the US with real life VW's and as recently seen about the VW scene here in Australia.

Other VW Kombis in blue and black over red with surf boards are also a must.

**V DUBS**



Item #12062-Brn-gld 59 VW® Karmann Ghia™





Item #12062-Blk 49 VW® Hebmuller Cabriolet™

Jada has catered here for all VW fans, including Karmann Ghia, VW Hebmuller cabriolet, & VW Thing all with surf boards and in 1/64 scale.



Item #12062-Yellow-wht 73 VW® Thing™

These are just the tip of the iceberg and next month we will feature the rest of the range in 1/24 scale including some odd looking long wheel base & double axle kombis.

Cheers for now

Tony Bezzina

## The All VW Shootout 2006

What a week leading up to the Show. Mostly warm to very warm days mixed with showers. On the morning of the Show it was wet. It was really nice to drive into the Michael Wendon Centre under cover and what a centre. I have not attended a Shootout since 2003 and that was at the E G Whitlam Leisure Centre at Liverpool.

I thought that Show was good, but now I like this centre much better as long as one arrives

early otherwise it would mean parking out in the elements and whatever the weather turned on.

The way the cars are positioned makes for good photos, you can almost cover the whole area with three photos. The cars and Kombis were first class, present company excluded. I just like being amongst them. It looks like I have company now with the Rat Class, but I entered the Split Window Kombi Original category.

There were quite a few Club Vee Dub entries on the day. After checking out all the Kombis and cars I ventured outside to see the Swap Meet Stalls and what cars of interest were in the car park. I often think the car park has cars that could be on display.

Food and coffee was available to purchase. The Club had their own food and drink stall, and ran a raffle. There was a separate mobile coffee van. There was a guessing competition where we needed to guess the number of tiggers in and around a VW Golf. I heard the count was over 100.

When trophies were being awarded I heard Club Vee Dub members names being called out-Ray and David, and, surprise surprise-yours truly picked one up too. That makes 3 in 16 years. I'll soon have to get a bigger display cabinet (joke Joyce!). I would like to thank VW Magazine Australia, of which I am a subscriber, for sponsoring the trophy.



Once the presentation was over it's start engines and leave the centre, after saying goodbye to new and old enthusiasts. The trip home was in light drizzle.

I hope you all enjoyed the day, I know I did and look forward to next year.

John Weston

## Day of the Volkswagen 2006

We decided to make the trek down to Melbourne for Victoria's annual VW event, Day of the Volkswagen, which was held on 26 November 2006 at Cranbourne Racecourse in Melbourne.



As we were driving through Melbourne's outskirts, we noticed that their freeway/tollway system is more advanced and organised than our Sydney motorways.

Gates opened at 9:00am. Pre-purchased tickets helped us beat the queues.

We were directed to where we parked the car. Each type of Volkswagen was allocated a different area of the grounds, with each area being

well spread out from each other.

There was a large turnout of bay window Kombis and Trakka vans, but only a few split-screen Kombis turned up, the dead opposite from Sydney's shows.

Overall there were 200 cars to be judged, of which only three I noticed were from NSW. Cars to be judged had to be in place by 11:00am, but the flow of cars kept on coming in. Judges were fast completing all cars by 1:00pm.



The swapmeet wasn't as good as I had expected; not as many swappers set up as we thought there would be.

Presentation was brought forward to 2:30pm. The PA system was quite good. Even with the size of the grounds and how far the cars were spread out, you could easily understand the



## Club VeeDub - The Legend Never Dies



announcements during the day (*this is something we have to fix for the Nationals - Ed.*)

It was good to see some new VWs, and to meet and talk with their owners.

Before we knew it the show was all over. Overall the show went well and was well worth the effort to make the trip down south.

Wayne Murray

## Cover Car: Laurence Murray's 1964 VW 1200

I bought the car brand-new on 7th July 1964 for £899 (\$1798), with 14 miles on the clock, from Swanton's Motors at Hurstville.

It has been used to travel over most of Australia's back roads, which are now classified as 4x4 tracks only. The car has been utterly reliable, covering up to 7,500 miles (12,100km) in three weeks at a time, year in year out, with my wife and camping gear. Weekend trips to the bush would see us doing 1,200 to 1,500 miles (2,400km) starting Friday nights.

We would at times do trips, such as driving down to the Kosciusko snowfields and back, for a day's drive.

The first rego cost £42 (\$84) and the first NRMA insurance premium was £48 (\$96).

Laurence Murray

## Oporto Kustom Kombi

The Oporto chicken restaurant chain are running a \$220,000 giveaway promotion, with the major prize being the \$100,000 Oporto Kustom Kombi.

You have until 11:59pm on 28 January 2007 to enter the competition.

To enter, you must purchase an Oporto Meal Deal and pick up a scratch card. You SMS the unique code and your name to 19982222, or phone 1900 991 014 to give your unique code and address details. You can enter as many times as you like, so long as you buy one meal for each new entry.

There are many minor prizes, including Ipod Nanos, Activision Tony Hawke Project 8s and food items like Oporto chips, drinks, Bondi or Norm burgers, 1/4 chicken, Rappas and nuggets.



The major prize is the much modified 1974 VW Kombi, which includes on-road costs, rego and Green Slip. It is valued at \$100,000.

The 'Pimp My Ride' Kustom Kombi is a 1.8-litre mobile entertainment powerhouse. Featuring an audio-visual system to rival most homes, it has two 82cm LCD flat panel TVs, a wooden floor, 24 speakers, 6 amplifiers, 1000-watt sine wave converter, Xbox 360 wireless with four controllers, IPod, bar fridge, disco ball and lights, floor-mounted mood lighting, two sealed batteries, motorised limousine divider, Kenwood 18cm touch-screen stereo unit with DVD player, reversing camera, GPS navigation system and base to base alarm system, all wrapped up with a plush cream leather interior. The value of these interior modifications are \$29,900.

The exterior has also been extensively modified. The body was taken back to metal and the front bumper and support removed and smoothed. The blinkers have been removed and

filled, and moved to the headlamps. The front doors have been modified in the front-opening suicide style. The duco is a custom 'House of Kolor' two-tone paint scheme, using Sunrise Shimrim Designer Pearl on the top and Raspberry Shimrin Designer Pearl on the bottom. A 'pre-67 Kombi 'V' paint style has been applied on the nose. All-new glass, rubber and chrome handles have been added.

In the drivers' compartment is a billet steering wheel, custom bench seat, trimmed dash with Autometer gauges, custom under-dash panelling and carpet and custom door panels with speaker pods, crossover housing and billet window winders. In the rear are more custom seating, with a couch that folds into a bed, wooden floorboards, underseat subwoofers, and storage compartment, and rear TV, fridge and gaming area. The false roof has a telescopic drop-down table. The custom body work and paint is worth an additional \$42,000.

The engine is a reconditioned 1.8-litre VW Type 4 unit. It has had a few items added, such as ratio rockers, mild cam, stainless valves, electric fuel pump, electronic ignition, 4-prong spark plugs, Ram air filters and custom extractor with Falcon GT tips. The gearbox is a 4-speed unit from a 2-litre Kombi.

The Kombi's suspension and brakes have been extensively reconditioned with new parts, and the ride height has been dropped by 100mm. The wheels are custom-made 18" x 7" Intro Pentia billet rims, with 215x35 18" tyres. The additional custom parts, reconditioning and modification cost an additional \$38,100.

The prize draw will take place on 31 January 2007, and the winner's name published in the Australian newspaper on Wednesday 7 February.

So who did all the work on the Kustom Kombi? It was done by Xquisite Customs, Unit 5/167 Airids Rd. Leumeah. Their webpage is <http://xcustoms.com.au>

To see more of the Kustom Kombi, visit the Oporto website [www.oporto.com.au](http://www.oporto.com.au) for more details.

You can also see a video clip of the Kustom Kombi being made at:

[www.oporto.com.au/KombiVideo.html](http://www.oporto.com.au/KombiVideo.html)

Hurry - 28th January is the closeoff.

## The Last VW Beetle - Ultima Edition

The VW Beetle ended production in Mexico in 2003. For two months before the end, Volkswagen de México in Puebla marked the last phase of production of the legendary Beetle by releasing the “Última Edición”.



Dr Jens Neumann from Volkswagen AG emphasised that, with the “Última Edición”, the Beetle would be showing itself at its best and added: “True stars, and their fans, know when it’s time to quit.” He went on to say that for many years, Volkswagen in Mexico, had been about more than just the Beetle. Since it was founded in 1964, VW de México had almost always been market leader in the passenger vehicle segment. Currently the Group is at the top of the table with a market share of some 28 percent across the three brands Volkswagen, Seat and Audi.

In March 1954, the first imported Beetle reached the shores of Mexico, prior to the start of production in an assembly plant near Mexico City in 1955. In total, 1.7 million Beetles had been built in Mexico, 100,000 of them for the export markets. Additional best sellers, such as the Golf, Jetta, New Beetle and New Beetle Cabrio, had contributed to a production total of 5.7 million vehicles, of which 2.6 million had been exported. He added that Volkswagen de México, with some 14,000 employees, was a major factor in the economic development of the country.

A total of 3,000 “Última Edición” Beetles were built, and were available in the colours Aquarius Blue and Harvest Moon Beige. The last Beetles had a 1.6-litre petrol engine and a power output of 34kW. In addition to standard

equipment, the special model had chrome trim strips, and chrome parts such as bumpers, hub caps and mirrors. The model was enhanced with colour-coded rims and whitewall tyres, a rear shelf, and a radio with a CD player and four speakers.

The last Beetle left the production line at Volkswagen de México in Puebla on 30 July 2003. The Mexican workforce gave a festive farewell for the 21,529,464th and final Beetle with flowers and mariachi music. At 9:05 am Mexican time the Beetle production line was stopped. This signalled the end to almost 68 years of a unique success story in global automobile history. Mexico had been the only country in which the legendary Beetle, known in Mexico as the “Vocho”, was still made, as Brazil had stopped a few years earlier.

In a short address, Reinhardt Jung, Chairman of the Volkswagen de México Board of Management, thanked the Mexican staff “who had not only worked in the production of a car, but also in the creation of a legend. A legend that would endure in the hearts and minds of all people for whom the Beetle had been a companion on their journeys”.

The very last Beetle was an Aquarius blue “Última Edición”. The “Última Edición” emblem on the glove compartment lid, and the Wolfsburg emblem above the engine compartment lid rounded off the look.



The limited-edition model had been very well received by customers and was practically sold out. Only the last Beetle was not for sale, and was shipped to Germany for a permanent home in the Automuseum in Wolfsburg.

The Beetle had been produced in more than 20 countries worldwide. In Germany alone, where production ceased in 1978, more than 16.2 million Beetles were built.

## Road-Holding Design or Accident?

You see it in the newspapers all the time. In traffic-accident reports the same phrase keeps coming up: "The car went out of control."

Behind that cliché, the truth is hiding. And often there is not one simple truth, but a whole combination of factors. Yes, the car was basically unstable. Yes, the driver failed to compensate for the car's poor balance. And yes, the road surface had a series of potholes that were hard to see before the car hit them. So, what happened?

The driver was going too fast for his car, and discovered the deteriorated road condition too late. The car bounced off the potholes, headed for the ditch, and could not be brought back onto the pavement. "The car went out of control." Bad road, bad car, and bad driving. Put them all together, and an accident happens.

Now, give the same driver another car for the same piece of road, and he might get through all right. One car didn't hold the road very well. The other offers better road holding. Why the difference?

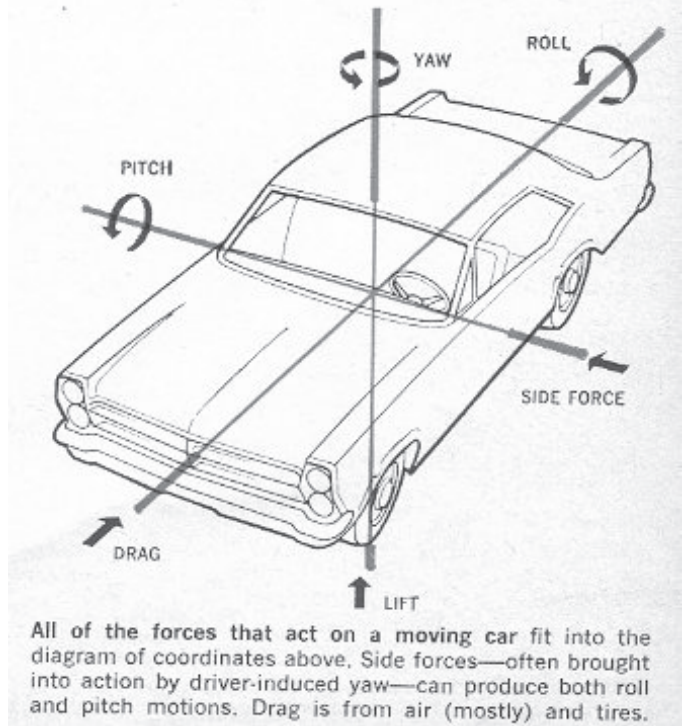
If auto engineers know how to build cars with great road-holding (or handling) characteristics, why don't they build all cars that way? Or don't they really know how to? Is it pure chance that some cars hold the road well, and others don't?

Of course not. It is, of course, by design. But then, you ask, why aren't the designers of the cars with poor road-holding out of a job, or even in gaol? It's not that simple, as this article will attempt to explain.

You don't expect a Family Truckster to handle the same as a Corvette. One is a huge wagon, the other is a low sports car. There's just no way you can put Corvette road-holding into that wagon. No more than you can make a VW Samba Microbus handle like a Golf GTI.

Before we go into the factors that make or break road-holding, let me remind you that the car, when running along the highway, has freedom to move in three planes: Yaw, Pitch and Roll. These can occur singly, or in combination. Yawing means making a turn, Pitching is usually nosediving, and Roll shows up as body lean.

Yaw, when it's driver-induced by turning the steering wheel, is fine. Yaw introduced by outside



forces is bad. Pitch and Roll are always bad, but can be tolerated in small doses. The problem is that doing away with them altogether might bring other penalties that are even harder to live with – a stiff and uncomfortable ride, for example.

Now, what are the design elements that determine the car's behaviour on the road? Here are a few: Static weight distribution, polar moment of inertia, ratio of sprung-to-unsprung weight, centre-of-gravity height, front and rear roll-centre height, static wheel alignment, wheel travel in jounce and rebound, changes in toe-in and camber during deflections, spring rates, shock absorber calibration, tyre sizes and inflation pressures... Sounds like plenty?

There are more. Wheelbase and track, steering ratio and maximum steering angles, stabilizer bar location, size and specification, anti-squat and anti-dive provisions. That's about it...

But you've also got to keep in mind that all these design elements are inter-dependent. Change one of them, and a few others will be automatically changed too. Conversely, a change in one may dictate changes in others to counteract undesirable side effects.

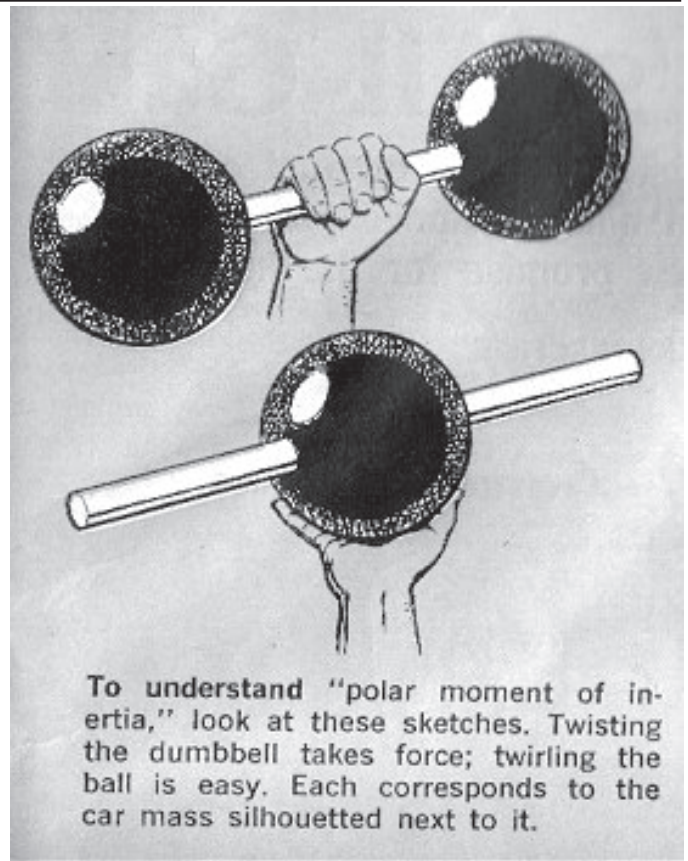
Let's take a look at the most important factors first. It all starts with the type of car you want. A large US station wagon will inevitably have a higher centre of gravity than a two-seater sports car. From that follows a higher polar moment of inertia. Putting a load in the back of the wagon adds another pole of inertia. But the

wagon's centre of gravity is about halfway between them. The distance between the poles and c.g. determine the moment of inertia. The longer the distance, the higher the polar moment of inertia.

Cars with a high polar moment of inertia tend to resist any change of direction, while cars with a low polar moment turn (yaw) easily. Now, a mid-engined sports car such as the Porsche 914, and a rear-engined car such as a VW may both have a 40/60 percent front/rear weight distribution, but nothing like the same polar moment of inertia. As you can see, you can have cars with the same front/rear weight distribution and widely different polar moments of inertia.

Cars that tend to resist yawing are said to have an *understeering* characteristic. Cars that tend to yaw easily *oversteer*. Basically, a high polar moment of inertia tends toward understeer. But there are cars with a relatively low polar moment that also display firm understeer.

This brings us back to the question of weight distribution. Forward weight concentrations tend to promote understeer. A heavy V8 set close to the front wheel axis in a light sports car will have this effect. Cars with the greatest oversteer, on the other hand, have rear engines overhanging the rear wheel axis (can you think of an example?) In the VW's case, the very rearward engine gives a



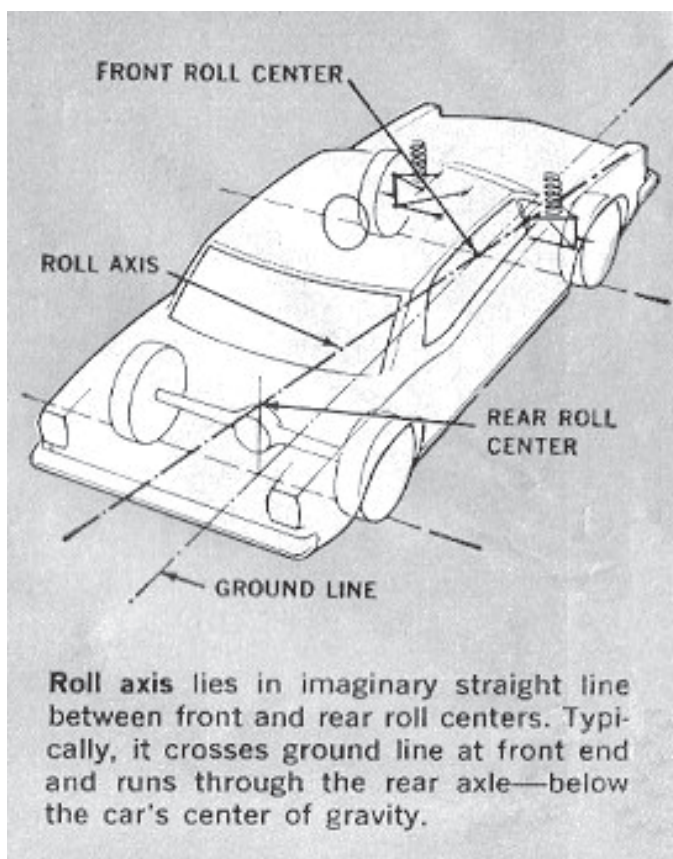
higher polar moment of inertia, which you remember actually promotes understeer. The effects cancel out under most normal driving situations and the VW actually handles very well.

You see, now, that the basic configuration of the vehicle sets the pattern for its roadholding ability. But all the other design factors allow the car's behaviour pattern to be modified to best advantage.

Take the case of excessive understeer. It can be cured on the drawing board by raising the front roll centre, moving the engine (and therefore the centre of gravity) back a bit, and reducing rear-axle-roll understeer. Conversely, excessive oversteer can be taken care of by lowering the front roll centre and going to bigger tyres.

The designer has full control over the roll centre height, since it is determined by the angles of the suspension arms. The front roll centre is at ground level in most cars. Some are as low as 80mm below ground; others up to 150mm above ground. Cars with rigid rear axles have roll centres at spring anchorage height – that's 300 to 400mm above ground level. With independent rear suspension, the designer has much greater freedom to place the roll centre wherever he wants it to be.

One important thing to note is that all cars understeer at the beginning of a turn. They all



need a little time to find the new path. Then their true characteristic takes over. This means that cars with moderate understeer are the most restful to drive, since their behaviour is most constant and predictable. Oversteering cars need frequent corrections (countersteering); but this is one reason why VWs are so enjoyable and satisfying for the aware driver.

Another thing to note is that the handling response of one and the same car will vary with speed. Your car yaws less in a given time or space at higher speed as the slip angles increase.

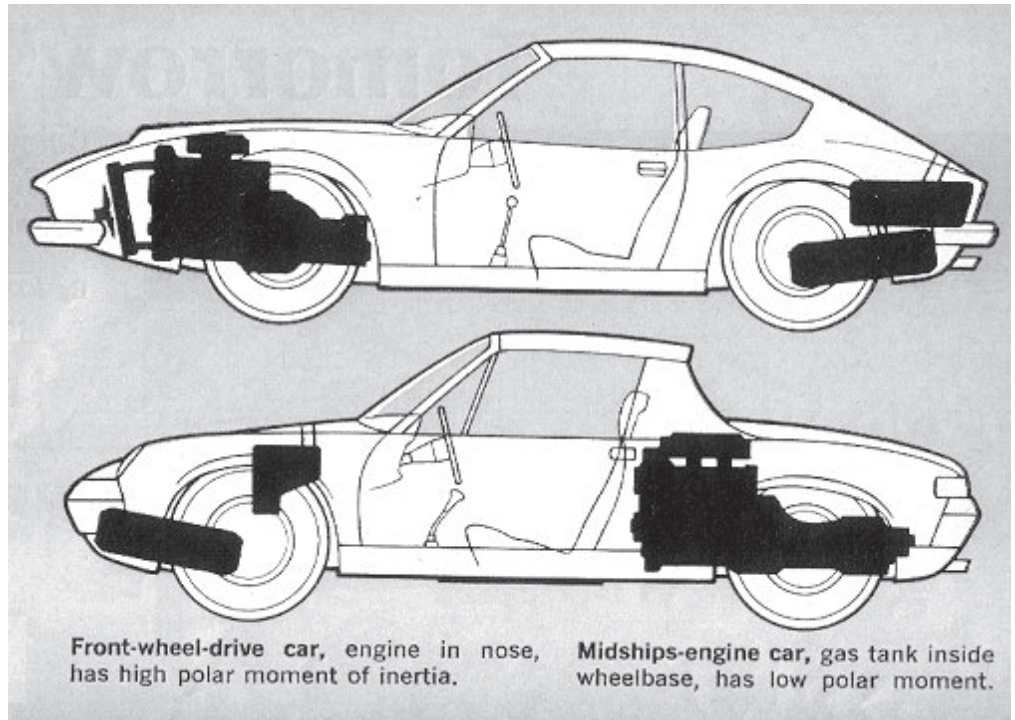
What can you do if your car doesn't hold the road the way you would like? Start with the tyres – buy the best ones you can afford. Next, buy new and better quality shock absorbers – Konis are excellent for VWs. They arrest suspension movements, helping to combat whatever handling ills your car suffers from. If you have too much oversteer, the simplest modification is to increase the front wheel caster angle (this was a common trick for autocross VWs). This improves stability but gives much harder steering. A stiffer front anti-roll bar and adding a rear bar makes the VW more neutral. As for understeering cars, the best remedy is also good anti-sway bars front and back.

The rest is up to you. Improve your driving skills. Learn your car's characteristics, and anticipate its reaction to all situations. You'll soon know what's going on – and you'll be safer.

Jan P Norbye

### 4WD Kombi

Volkswagen began working on 4WD Transporter prototypes in 1975 because two engineers from Wolfsburg wanted to play in the Sahara and decided to make a simple off-road machine by the application of highly



sophisticated design. Their first, hand-built van worked so well the VW board authorised five prototypes to see if there might be a market out there for a production version.

The whole idea was to make tricky terrain crossings easy for every-man by eliminating clever guesses on which gear to pick. At the same time they did away with the transfer case.

Their secret? A torque converter between the gearbox and wheels which lets you start from rest in any of the four normal gears and thus eliminates tricky clutch play and avoids wheel slip when the going gets deep or slippery. To achieve drive to all four wheels VW ran a shaft forward, much as Porsche did 30 years earlier with his famous wartime amphibious VW Schwimmwagen. A second lever by the driver's seat controls 4wd which can be engaged at any time, moving or not.

The van had a normal clutch which was only used — and then quickly — to select a gear. Riding it thereafter would cause expensive damage. In gear the car moved off like an automatic except that it wouldn't change ratios on you at inopportune moments. It did creep on firm ground but not in deep stuff.

An oil temperature dial told you if converter temperature was above 140°C, in which case you simply used a lower gear and more revs. Further traction came from a 25 percent limited slip differential but they debated 100 percent lockup for the rear wheels as well as working on a system which would provide direct drive on pavement to save fuel. On this



## Club VeeDub - The Legend Never Dies

prototype you had to disconnect 4wd, whenever the ground is firm.

Meanwhile the van offered differential braking on the rear wheels by levers which split handbrake action to feed power to the wheel with bite when even a limited slip can't handle things.

Power to move all this was the stock Type 4-based 2-litre flat four of 51 kW but Henning Duckstein, the spiritual father of this van, positively glowed at the suggestion of a turbo diesel one day.

For city use you started in second normally and only shifted up to fourth for the open road. Being a prototype it could've used a little better handling balance. It pushed the nose strongly on dirt, and oversteered on pavement. Sudden ruts could whip the thin standard steering wheel out of your hands all too easily.

Old off-road hands would have to relearn terrain techniques while first-timers wondered what all the mystique was in dirt driving. Here you stayed strictly away from the clutch once in any gear and tromped on the accelerator. The Kombi literally crept forward, with no wheelspin until the ultimate tyre slip point is reached.

To go anywhere without damage too, VW fitted a ribbed three mm pan up front, two more under front diff arid rear engine and two skid rails either side of the drive shaft. Empty, the ground clearance was 290mm, loaded 230mm, but you could charge any ridge with rear wheels

driving until the van tipped over a high crown, when the front wheels pull you clear.

Fording deep water was possible, up to 500mm with the exhaust re-routed through the rear bumper — but the engine needed to be kept running. VW could have easily encapsuled the engine to make a true amphibian but had some worries about river currents against those flat sides. Tip angle was already the prime worry on side-hill runs.

All this technology fitted just as well into the new T3 Transporter range — better in fact since it had larger wheel arches and wishbones in front. Duckstein had to separate the front suspension arms on this older version to fit his universally-jointed drive shafts (constant velocity joints don't allow as much deflection).

In the end VW never did make a 4WD production version of the T2 Transporter. In 1985 VW did introduce a production 4WD version of the T3 Transporter, but the surprising thing was that when they did, they did not use an updated version of this prototype's 4WD system. Nor did they use the quattro 4WD expertise of VW's sister company Audi. Instead, VW used a completely new system. It was developed by the Austrian engineering firm Steyr Daimler Puch.

This 4WD Kombi can be regarded as the spiritual father of all the current 4WD VWs, and it remains an interesting technical milestone. An example of one of the Kombi prototypes can be seen today in the Wolfsburg Auto Museum.



## Ask Herr Doktor

*Have you had a problem fixing your VW, or finding a decent mechanic who can? Need to find or make that special VW part? Want to know anything about Volkswagen? Got a question? Then ask Herr Doktor, c/- Club VW Sydney, 14 Willoughby Cct., Grassmere NSW 2570, or email [info@clubvw.org.au](mailto:info@clubvw.org.au)*

Dear Doktor,

I own a 2005 Golf V 1.6 Auto Comfortline. Ever since I took delivery of it, there has been nothing but trouble with the car. It trembles when the air conditioning is switched off or on 'ECON' mode. It is particularly noticeable when the gear is engaged in 'D' and I take my foot off the brake without accelerating; and also when the car is coming to a gentle stop. The tremble can be felt particularly through the pedals and steering wheel, as if the engine is about to stall (it doesn't actually stall). I was told by the VW dealers (I have been to 2 dealerships in search for an answer) that it is caused by the computer preset to drop engine revolution when A/C is switched off or on 'ECON' mode and it is only normal. It is very hard for me to believe that a reputable German manufacturer like Volkswagen will produce cars that are designed to tremble. When the gear is engaged in 'D' or 'R', the transmission makes a constant noise. Again the answer I got from the dealers is that it is only normal. At constant high speed cruising (between 80-100km/h), the transmission whistles. The whistle would disappear when I take my foot off the accelerator, so I am pretty sure that it is not the wind noise. The noise is also audible at low speed, but not as obvious. Plastic tray on the top of the centre dash makes a noise every time the car drives over a little irregular road surface. I have asked the dealers to repair it repeatedly no less than 5 or 6 times and still it is no fixed. I am thinking maybe I can solve this by installing the 'Sports' model's speaker in the place of the tray? Also, is there a reputable VW private workshop on the lower North Shore of Sydney that you can recommend?

F.F., Lindfield

Without examining your car in person it is difficult to give you the answers you seek, but I will offer some suggestions. Firstly, a trembling felt through the pedals and steering wheel sounds like a problem with your wheels, tyres or brakes; these should be

checked. I am unclear if you are saying this trembling is related to the engine RPM; a thorough road test would determine the severity and frequency of the problem. No, VWs are not designed to tremble. I am skeptical that your transmission is making a whistling noise during such a narrow speed range; if there was a fault it ought to be heard at lower speeds also. Again, a road test ought to be done. The dash noise could be fixed by adding the Sports speaker, but if the source is elsewhere it may not. I recommend taking your Golf back to an authorised VW dealer, preferably a large one such as Barloworld, Denlo or McGraths, and speak directly and forcefully with the Service Manager. I would not recommend a private workshop for your Golf at this stage.

Dear Doktor,

I see that Shell have introduced a new performance petrol called V-Power. Is this the same as Optimax? Will my '68 Type 3 run better on it? How does modern petrol compare with the ratings of the old leaded fuels?

A.L., Chullora

V-Power is a 98-octane fuel, and is replacing Optimax; Shell claims it gives improved performance and responsiveness. As for old fuels, Australian fuel standards were introduced in 1955. Standard fuel was 79-octane and Super was 90-octane at that time. In 1959 Standard was upgraded to 83, and super to 93. Another revision was made in 1962, when Standard went up to 85 and Super to 95. In 1964 Standard went up to 87, and Super to 97. The last leaded update was in 1968, when Standard went to 89 and Super to 98. In 1979 a 92-octane standard was added to the existing 89, and Super was reduced slightly to 97. Unleaded fuel was introduced in 1985, when 'standard' unleaded was 91/93, and 'premium' unleaded was 96. Today's premium is 98.

## Club Veedub Crossword

Across:

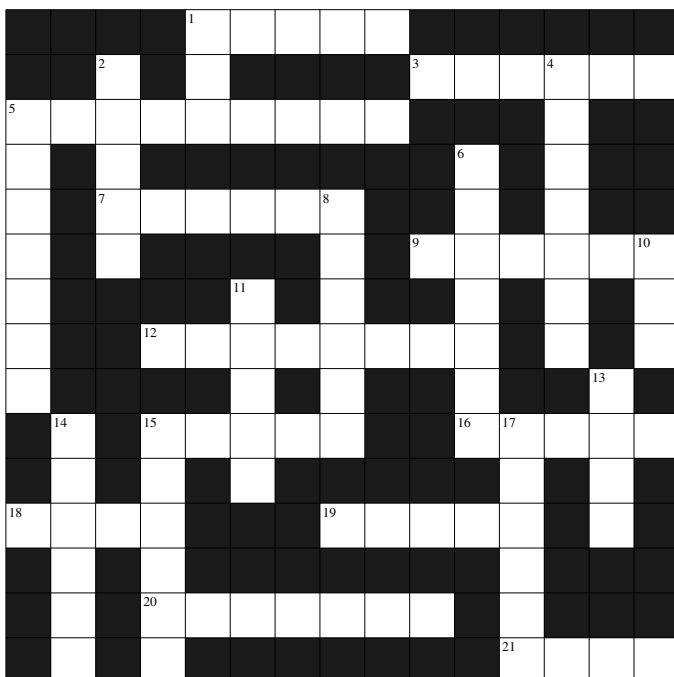
1. This Illawarra fellow is famous for his gearboxes and his old turbo Kombi
3. The Australian base where the Antarctica 1 VW served in 1963
5. German ICE system maker known as the Blue Dot
7. Don played Jim's offsider when Herbie went to Monte Carlo
9. They were once Australia's largest VW dealer
12. Our first Club VW run in 1985 went via

Wisemans Ferry to ..??

15. A large after-market custom oil filter with a removable fine mesh screen
16. Small VW concept car from 1995, never went into production
18. The most famous maker of VW piston and cylinder kits
19. The man behind Deano Dynosaurs was Dean ...?
20. This country is VW's home
21. Easier than saying Society of Transporter Owners

**Down:**

1. A famous oil additive that is scientifically tested petroleum
2. Played by Keenan Wynn, Alonzo was Herbie's enemy
4. German word for Castle
5. Vintage VWs and New Beetles keep their flowers in them
6. A Chinese booted Polo, no longer available
8. An ugly VW Beetle with its roof cut off
10. The German name for Strength Through Joy
11. VW Type 17s are cooled by this
13. What the shitty little kid called Herbie in 1980 (5 and 3 are 8)
14. UK maker of gauges, not often seen in VWs
15. The colour of the VW Antarctica 2 was International...?
17. Extensive British range of VW workshop manuals

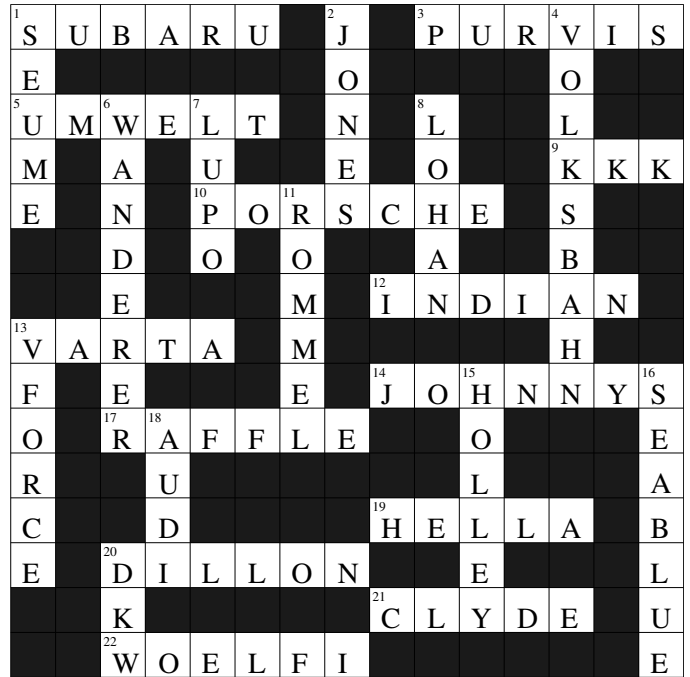


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**Prize offer!** The first person to show me this puzzle correctly finished at the December meeting will win a packet of Tim Tams!

Answer in next month's magazine.

## Last Month's Crossword:



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## Overdue Library Books

Would the following members please bring back your overdue videos or DVDs to Simon Matthews at the November meeting:

**Mick Moran** (Ruby Rd Gymea) - Autopress VW Transporter Manual 1954-67, borrowed January 2003.

**Steve Driscoll** (Evans St Rozelle) - Air Cooled VW Picture Book borrowed February 2004.

## Overdue Videos/DVDs

Would the following members please bring back your overdue videos or DVDs to Joe Buttigieg at the November meeting:

**Ron Bijen** - Video #26, borrowed 18 August 2005.

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