

Zeitschrift

10th & 11th APRIL 2004



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www.clubvw.org.au

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VW Nationals Coordinators:	
David Birchall	9534 4895
Bob Hickman	4655 5566

**Please have respect for the committee
members and their families and only call
during reasonable hours.**

2004 VW Nationals Easter - April: Saturday 10th & Easter Sunday 11th Sydney Australia

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17 Year VW Nationals Sponsors

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Monthly Club meetings are held at Greyhound Social Club Ltd., 140 Rookwood Rd, Yagoona, on the third Thursday each month at 7:30 PM. All members and visitors are most welcome. All mail should be addressed via the Secretary, c/- 14 Willoughby Cct Grassmere NSW 2570. Zeitschrift is produced monthly by Club VeeDub Sydney. Classified ads are free to members, send your add to the above address or send an email to the

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Presidents Report

Welcome to Australia's premier Volkswagen event, the VW Nationals 2004. This is our seventeenth year and we are still going strong. I hope our event appeals to you and your family and you become inspired by the display of vehicles and traders over the weekend. Most importantly, don't forget to enjoy yourself while you are with us.

We have a dedicated group of Club members who are willing to work their butts off to put it all together, for you to enjoy.

This year we have our Drag racing back at Sydney's World-class facility, Western Sydney International Dragway. I attended the official opening a few weeks ago and it was great, if you have not had an opportunity to have a look, please do so this Easter Saturday April 10th and support the VW Racers at the track.

Once again our major sponsors Volkswagen Group of Australia are supporting our club with sponsorship.

Minor Sponsors are up this year proving that it pays to advertise. We suggest that you keep this copy of our program in your car file and use it as a handy phone book next time you need parts or repairs for your vehicle.

In the centre of this program you will find our event listing for the weekend. We thank Fairfield City for the use of their facilities. The complex is ideal for our show as everything is within easy walking distance. Don't forget to purchase your Nationals regalia from the Club Vee Dub stand in the car show area. While you're there purchase some raffle tickets in the Nationals raffle.

Have a great time at the VW Nationals 2004 and enjoy yourself.

David Birchall



Club Calendar

April:

Thursday 8th:- Committee Meeting, CANCELLED.

11th & 12th VW Nationals 2004.

Thursday 15th:- CLUB VW MONTHLY MEETING at the Greyhound Social Club Ltd., 140 Rookwood Rd., Yagoona (right next to Potts Park). Get the latest VW news and views, plus VW socialising, drinks, films, trivia, and plenty of prizes. **Lots of fun, all welcome. 8:00 p.m.**

May:

Thursday 13th:- Committee Meeting & Magazine assembly night, at the Greyhound Social Club.

Sunday 16th:- NSW Hillclimb championship round 4 at Huntley Hillclimb, Huntley Rd West Dapto. Come & see the VW's fly! Starts 9.00 am. For further info call Wayne Penrose (02) 4272 5644

Sunday 16th:- Charity Car Show. The show is organised by the Lioness Club of Camden and is held at Camden Showgrounds, it's a great family day with rides for the kids, food stalls and lots of trophies and cash prizes for the car categories. Gates open 7am to 11.30am for entrants. entry fee for judging is \$5-00 per car and entry to the grounds is \$5-00 for adults and \$2-00 for children. Camden is a lovely rural area with plant of antique stores and other interesting sites within walking distance of the Showgrounds. Further details contact Maria Campton from the Lioness Club on 0414 478684.

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

Sunday 30th:- Day trip to Blackheath. We meet at the Prospect Hotel on the Great Western Highway, Prospect (almost opposite Blacktown Rd and adjacent to Klunies Ross Drive) at 8.00am leave 8.30am.

The first stop is at Evans lookout, about 1 1/2 hours drive and approx 87km, Then we drive to Govett's Leap (named after William Govett in the 1830's) where we can admire the spectacular views of



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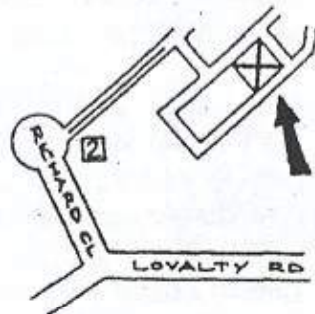
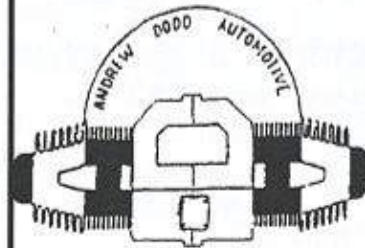
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the Grose Valley below and the streams which make their way into inaccessible gullies.

We stop for lunch at the Gardeners Inn, Blackheath at 1.00 pm. Governor Macquarie passing the area wrote: This place having a black wild appearance, I have this day named it Black-heath.

If we have time after lunch we will visit the Farm House at Megalong Valley about 20 minutes on the other side of Blackheath. Please note lunch at the Inn and visit to the Farm by appointment only so I need to know number of people interested.

June:

Thursday 10th:- Committee Meeting & Magazine assembly night, at the Greyhound Social Club.

Thursday 17th:- CLUB VW MONTHLY MEETING at the Greyhound Social Club Ltd., 140 Rookwood Rd., Yagoona (right next to Potts Park). Get the latest VW news and views, plus VW socialising, drinks, films, trivia, and plenty of prizes. **Lots of fun, all welcome. 8:00 p.m.**

18th — 20th: 21st Beautiful Budel. The International Beetle Weekend is held at Budel, in the Netherlands. See www.keverclub.nl for more info

July:

Thursday 8th:- Committee Meeting & Magazine assembly night at the Greyhound Social Club.

Sunday 11th:- Huntley Hillclimb, Huntley Rd West Dapto. Come & see the VW's fly! Starts 9.00 am. For further info call Wayne Penrose (02) 4272 5644

Thursday 15th:- CLUB VW MONTHLY MEETING at the Greyhound Social Club Ltd., 140 Rookwood Rd., Yagoona (right next to Potts Park). Get the latest VW news and views, plus VW socialising, drinks, films, trivia, and plenty of prizes. **Lots of fun, all welcome. 8:00**

August:

31st July — 2nd August VW Spectacular at Valla Beach

Thursday 12th:- Committee Meeting & Magazine assembly night at the Greyhound Social Club.

Thursday 19th:- CLUB VW MONTHLY MEETING at the Greyhound Social Club Ltd., 140

Rookwood Rd., Yagoona (right next to Potts Park). Get the latest VW news and views, plus VW socialising, drinks, films, trivia, and plenty of prizes. **Lots of fun, all welcome. 8:00 p.m.**

September:

Boris Picnic day, date TBA.

Thursday 9th:- Committee Meeting & Magazine assembly night at the Greyhound Social Club.

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

25th and 26th Canberra VW Weekend. The third annual weekend away in Canberra will run the same format as last year. Cruise and Picnic Saturday from 12 midday Show and Shine Sunday from 8:30 am Come on down for a fantastic weekend away with other Dub enthusiasts Enquiries Steve Crispin - 0419 429 453 stevecrispin@hotmail.com

2005

March:

26th & 27th VW Nationals 2005.

For Sales

For Sale:- Polo 5 door hatch, 2001, first registered end of November '01, 5 speed manual, always garaged and serviced by specialists more than the VW company requires, 37 000km on the clock, still under factory warranty, economy plus: 7l/100km around town, 5l/100km on a trip, upgraded cd player, aircon, power front windows, electric mirrors, genuine mag wheels, full set of genuine mudflaps. Price: we start haggling around \$17 000. The equivalent new car is around \$23 000. I am fastidious with my cars. This is a beaut safe car that is in absolutely outstanding condition. Phone Graeme on 0408 756 034.

For Sale:- 1999 (first registered 2000) VW Passat 2.8 V6 Tiptronic. The vehicle has black paintwork and beige brushed velour interior. Always garaged and with new Pirelli P6000's the car is in immaculate condition having travelled 74k, with full maintenance logs. The vehicle is at the end of lease and quite

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frankly we have had difficulty receiving realistic trade in offers from dealers. We are not seeking the world for the car but the values provided are simply ludicrous. We are looking for around \$27,000, but of course are prepared to discuss. We are quite genuine in our desire to see the car appreciated, as we have done, and of course wish to attain a realistic price for its sale. Contact Bruce on 0417 43 22 88 or bkweir@bigpond.com.au

For sale:- 1976 VW Kombi camper, 1600cc Motor, Leather front seats, AM/FM Radio Cassette Player, Mag Wheels, Good Battery, Tyres ok, Runs but needs a good service, Unregistered since late 2003, Needs Rust Repairs for rego, Located in Penrith Asking \$950 ono Email tim@frenzix.com or visit users.tpg.com.au/adslso3x/webpics/campersale/index.htm or call 0408 616 993 for more info.

For Sale:- VW Beetle 1959, Fully restored from ground up, new paintwork inside and out, fully re-trimmed in original colours, seats, roof lining, rubber mats, carpet etc. Engine bay has been detailed to look original, working semaphores, original gearbox, show winner Shannons Auto Fest of Canberra. Can email photos see car in second issue of Volkswagen Magazine of Australia, will consider offer of \$10,000.00 Contact Peter 02 6280 4819 or 0413 626 237 or peter@beetleexchange.com.au

Wanted:- VW Splitscreen Double cab, prefer good condition, minimal rust and ready to use, but will look at non runners or clean project vehicle, willing to pay good \$\$ for a nice example or would appreciate any info on the whereabouts of one of these. Email w.vandermeys@ext.canterbury.ac.nz

For Sale:- 1971 Beetle unreg. needs TLC- complete \$1200.00 contact Caro 0427311047

For Sale:- 1956 Oval Shell only, suit modifier, \$1500.00 contact Caro 0427311047

For Sale:- 95% Rust free 56 oval shell, very good condition oval pan, spare 1956 engine and gear box. \$1700 Neg, can separate.

Assorted parts for 1956 & 1962 and half. Solex carburettor, fuel pump, manifold, head light, taillights, mudguard, boot and engine lid, full set of seats, wind screen for mid 60's, 1956 and 1962 rims with tyres. Please call Hany Saleeb on 0412 08 08 64 or e-mail on saleeb@bigpond.com

For Sale:- 1966 1300 Deluxe Beetle. This car has

been in my possession since new. It is in very good condition and well maintained. It is ideal for an enthusiast wanting to own a classic Beetle. Rego Number - EEG 669 and is registered until September 2004. Colour, Panama Beige CLR 803. Wheels, wide rims and tyres, also comes with original rims and tyres. Electrics, modified for 12 V dc. Radio, JVC KD-S630. Extras, Original Carburettor, 3 workshop manuals, Price, \$6000 ono, Contact Max on (02) 9838 7996, mwehling@bigpond.net.au

For Sale:- 1965 Beetle, unregistered, no rust, straight body, mechanically good, needs paint. Original number plates are on hold. \$1800. Call Larry 4631 2069

For Sale:- Beetle parts, suit 61-67 model beetles, re-chromed front and rear bumper overriders, drivers side door handle and lock, pair of tail lights complete with chrome rings and lenses, Hub caps, clutch cable suit 1200cc beetle and service manual printed in German. Contact Paul on 02 43 96 5606

For Sale:- Number plates, they say "DUBBIE", asking \$3990 ono for them. Call 0421910469

For Sale:- The following parts are either BRAND NEW, NOS or Repro for T1 and T3 check out these prices! 25-60% off retail!

Chrome Fan doghouse fan housing with internal vanes for proper cooling \$ 180

Chrome tinware to suit doghouse fan housing \$ 20

Chrome cylinder head tinware \$ 50

CB Comp Eliminator heads & manifolds, bare with 48 x 40 mm seats installed \$ 1500 (incredible heads !!)

SCAT 1.25 ratio rocker arms \$ 230

Chrome Fire Wall Kit \$ 100

T1 stock 85.5 mm piston cylinder kit \$ 180

T1 lifters (Mahle) set of 8. \$80

Steering Wheel genuine wood grain (by Autotecnica) \$ 70

Carpet kit to suit Beetle black in colour \$ 55

T3 front & rear indicator lenses (reproduction, for pre '70 model) \$ 230

T3 door grey coloured linings (NOS) suit fastback, notchback, pair \$30

T3 (NOS) muffler & tail pipe & end pieces \$ 320 (suit '68 onward),

T3 parking light lenses, pair (reproduction) amber \$ 30

Canon type exhaust system to suit Manx style buggy heavy-duty construction Australian made \$100

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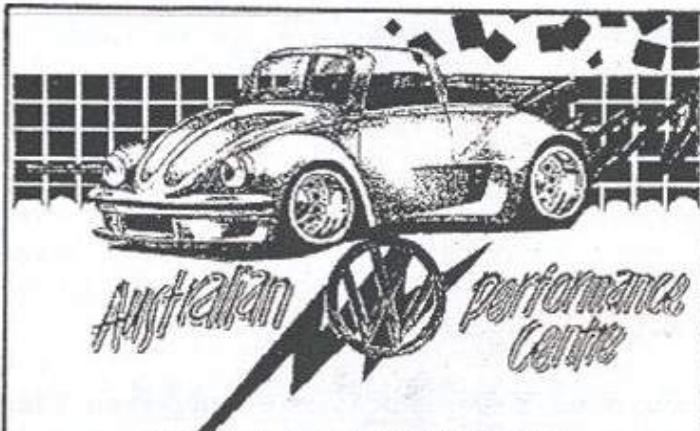
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Centreline wheels (4) suit 4 stud Beetle need polishing, no damage on the rims \$50

Fuel tank to suit oval Beetle (no leak or rust) \$10

Clutch plate suit 12 volt flywheel \$10

Gearbox IRS (good condition) \$25

T3 dash board (good condition) \$20

T3 radio \$20

T3 carbies and linkage (suit late model) complete \$30

T3 carby rebuild kit \$10

T3 tow bar (will clear late model rear apron notch, fastback & sedan) \$10

Scat chrome rocker covers (for T1 & 3 based engines) \$15

Berg shifter (suit T1 & 3) in good condition \$140

Phone Simon (02) 9889 2607. after 7pm or weekends

For reluctant sale:- 1982 Kombi. 8seats. Last of the 2 litre fuel injected aircooled and an absolutely bullet proof cruise machine, Ex condition. No rust. Nothing to spend. I am only the 4th owner, the last one being the little old ladies who owned it for 8 years. I love this thing but unfortunately something has got to go. \$7,000 or pretty close to it. Call Jim on 02 64944119 or email at bournda@asitis.net.au

For Sale:- 1975 Superbug L 1600cc, excellent condition. 5500 ono, JFW 730, Marion 99041190.

For Sale:- Hot Type 1 engine goodies, brand new with original receipts from CB performance (personal imports) Save big \$\$ on shipping and duty. Street Eliminator heads 42x37mm valves, 94mm bore, polished etc, match ported manifolds for Weber or Dellorto carbs \$1800.00, Forged 78mm crank \$1000.00, chrome molly std length rods \$380.00, Dual Weber 48mm IDF carbs with CB performance linkages \$2000.00, 94mm bore kit \$300.00, Scat lightweight lifters \$100.00, Kennedy stage 2 clutch pressure plate \$200.00, Engle F8 cam \$150.00, Steel straight cut cam gears \$150.00 will consider additional discount if two major items are purchased email or call for photos, Canberra based delivery options negotiable contact Adam on 0408 655 584 or 02 6281 3395 or email adam@riskfusion.com.au

For Sale:- Porsche 914 '73 2.0L, major body damage, but totally complete. 2.0L 4-cylinder engine (type 4 engine), will fit Kombi with tinware

change. Brand new dual Webbers, only driven 200 Klms since reconditioning. 4-wheel disc brakes (will fit beetle) 4 stud. 5 x Fuchs alloy original Porsche wheels. 5-speed gearbox. Will sell complete \$4800 W 02 9627 1874 Mob 0407 296 370 H 02 9627 3798

For Sale:- VW Beetle Cabriolet, 1975 Genuine factory convertible. Restored Condition. JT2001 02 4321 0559 or 0419 185527

For Sale:- Supercharger - 471 centre mounted on to new Scat heads with front mounted magneto, blower starter setup, zoomie pipes, new blower gauge etc. The lot \$3000 no offers.

Alloy rockers and forged rods (all new). Both sets for \$1000

Autometer Monster tacho with memory (new). \$450

Autometer oil filled oil pressure gauge a must for s/ charged or turbo engines (new) \$100

Simpson 2 layer fire suit (Size M) in good cond. with new gloves + leather boots. The lot \$200

Cheap project car for serious racers. It is a 96" wheelbase Altered with a fibreglass T Ford body a narrowed 9" diff with a Strange spool and Summers Bros unbreakable axles (this setup cost over \$3000 worth here alone), disc and drum brakes, rare 12 spoke front wheels with spare tyres, trailer etc. A giveaway at this price as I now have no storage for it \$2000 for the lot. Home: 9793.2411 or Mobile: (0418) 407620.

For Sale:- 1966 Bahama Blue Beetle, runs well, body in reasonable condition, 12 volt system otherwise unmodified, a collectors item VW660 \$3500 contact Brian on 0412 015 076 or (02) 9600 6417 or brian_catherine2003@yahoo.com.au

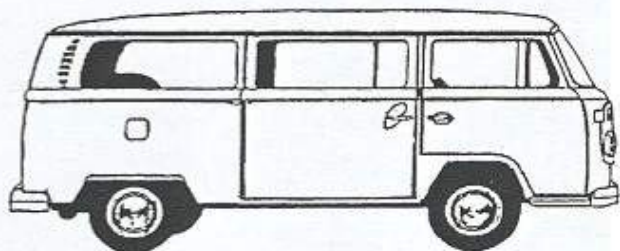
For Sale:- VW Kombi 1979/80 Campervan, 2 litre, As new versatile factory fit out, including inside/outside stove unit, table, fridge and dual batteries. As new free standing annex, body carefully maintained, mechanically maintained by expert VW enthusiasts, log books, travelled 224,000 Km, New heads (unleaded) and rings. Immaculate condition- looks great and runs beautifully, rare vehicle, registered until Oct 04, Asking \$9900.00 Contact Paul on 43 96 5606

For Sale:- VW Kombi 1967 model \$16,000 o.n.o. I I've owned this Kombi for 6 years it has been all over Australia and never missed a beat eg; I travelled to the Hay plain on the 2nd of Jan this year 04, we did 3000 miles in temps from 35 to 48 degrees c , averaging 100

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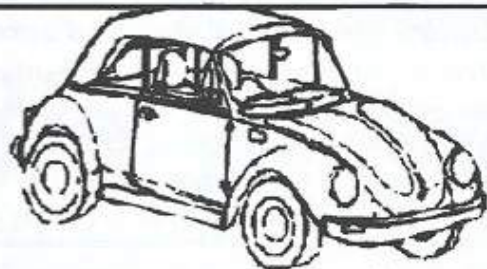
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kph, in 3 days loaded with camping, photographic gear and 4 people. This car is totally reliable and ensures you always arrive in style! The bus has been serviced 4 times a year by VW pros. I have also done the majority of the modification work, having been doing so to beetles and kombis for 15 years. The car consists of the following features; Green and cream paint work in good condition, No rust. Rego Sept 04. Good Tyres\195,65R15. Koni shocks front/KYB Rear. 69 beam with adjusters, supplied by Indian Auto. 100 watt bulbs and spottys. Tacho/temp gauges. Alternator/twin batteries 6 CD stacker 5 speakers Honda Prelude drivers seat/Toyota bench Removable bed. Original front and rear seats for 9 excellent condition, Timber panelling, green carpet/curtains 1600 twin port with Kadrons, extractors, 009 dizzy and type 4 oil cooler. this motor is bullet proof and will sit on 120kmph all day, I've over taken 2litre kombis up Bulli pass!) Full length roof rack. Heaps of spare parts. I will be selling the car with new paint, wheel bearings and brake shoes apart from a little play in the steering box this car is rock solid so no tyre kickers please! I need the bucks! Contact John Stuart de Muer on 94100515 great car only serious people please!

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oil pressure gauges 1500 single port motor 2 years old Good tyres wide steel wheels Lowered cut/shut,8mm caster shims and German ball joints Serviced 4 times a year KYBs all round New rubbers No rust. Contact John Stuart de Muer on 94100515 great car only serious people please!

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Screen shot from the next Gran Turismo, I wonder if you can put a 2007cc motor in it?

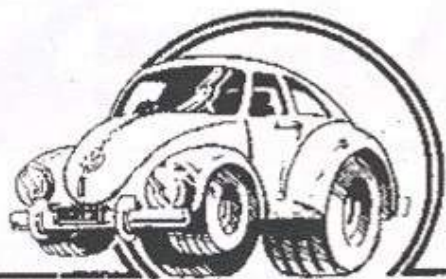
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Summary by Month

Month	Daily Avg				Monthly Totals					
	Hits	Files	Pages	Visits	Sites	KBytes	Visits	Pages	Files	Hits
Mar 2004	12477	10420	1452	546	13953	1883499	13658	36311	260516	311948
Feb 2004	11870	9640	1336	510	16427	1999786	14792	38762	279570	344236
Jan 2004	11139	9093	1339	495	16356	2005511	15349	41532	281904	345313
Dec 2003	9231	7598	1068	421	13773	1682974	13060	33132	235539	286190
Nov 2003	11445	9596	1173	425	13271	1949763	12772	35195	287887	343369
Oct 2003	12548	10767	1175	437	12518	1848389	11376	30574	279953	326251
Sep 2003	11955	10199	1152	436	14210	1901490	13081	34584	305982	358654
Aug 2003	14120	11561	1215	439	13178	2256177	13612	37695	358405	437744
Jul 2003	10780	8882	1203	450	13427	2025610	13975	37297	275355	334204
Jun 2003	11395	9227	1193	457	13502	1937406	13725	35817	276827	341852
May 2003	12516	9945	1238	485	13770	2102442	15059	38380	308324	388005
Apr 2003	13681	10925	1443	495	13363	2408267	14875	43312	327760	410435
Totals						24001314	165334	442591	3478022	4228201



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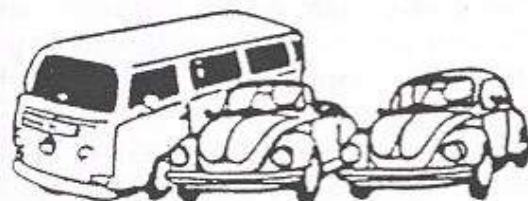
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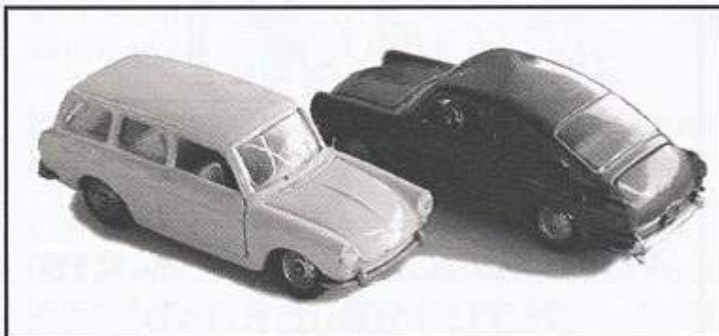
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THE TOY DEPARTMENT

Hello and welcome to the VW National's edition of the Toy Department. Some time ago we featured two Kombi models (below) made in West Germany by Lego, they were the red and Green two-tone plastic split window Kombis.



On a recent search of the web I was able to find this great site of various VW Kombis (below) made in various countries around the world. <http://membres.lycos.fr/vwtoy/>



The models in this first image are part of the same series of VW models made in West Germany, which come complete with service station & accessories. This would have to be a once in a lifetime

find and very rare indeed.

Some other rare Kombi variations are these robust diecast Techno Kombis or these poly toys type 3 models. It just seems that there is a never-ending source of VW model cars.

This also being the 71st edition of the Toy Department, I would like to remind our readers that this edition and all other back issues are available on the club web site in full colour.

Anyway that all for now and I look forward to catching up with you for a yarn at the VW Nationals where I will be trading some spare models and displaying a sample of my collection.

Tony Bezzina



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Modern fuels and the aircooled VW engine

A question posted on the RAVE Newsgroup

Everything thing else being equal, 92 octane fuel will lower cylinder head temps (marginally). You do not need "higher compression" in order to burn high-octane gas. However, in an un-modified modern water-cooled engine, it's seldom of any benefit

Then tell me, why do they put spacers in between the cylinders and the case to lower compression and burn low octane fuel in VW engines. This is common practice to keep from pinging and frying an engine.

Rob responded -

The octane number of a gasoline is NOT a measure of its hotness or coolness in the burning process, and it is NOT a measure of how 'powerful' it is. The octane number is simply a measure of how good the gasoline is at resisting detonation (knocking/pinging).

The internal combustion engine is - in simple terms - a gas pump (that's "gas" as in vapour, not "gas" as in gasoline). The higher the gas pressure inside the cylinder, the more 'push' there is on the pistons, and this means the higher the power output will be.

We create this pressure by heating a cylinder full of air; and we do THIS by adding a small amount of gasoline to the air and igniting it with a spark.

The engineers aim to get the highest possible cylinder pressure without creating uncontrolled burning of the gasoline.

Detonation (pinging/knocking) occurs after the fuel is ignited by the spark plug, but before the flame front has finished racing across the cylinder to burn all the fuel/air mixture. Don't confuse it with pre-ignition, which occurs when the fuel is ignited before the spark occurs.

So why does detonation occur? It relates to the nature of gasoline. Gasoline is a mixture of different hydrocarbon molecules, and some of these molecules decompose more easily than others when heated under pressure.

So when we ignite the fuel/air mixture with a spark, the flame front starts moving across the cylinder, burning the mixture of air and gasoline vapour as it goes. This increases the temperature

(and therefore the pressure) of the remaining fuel/air mixture rapidly. The remaining fuel starts to decompose before the flame front reaches it. If this decomposition produces 'auto-ignition' compounds (those which will start burning without a spark), you end up with an uncontrolled over-rapid burning of the remaining fuel/air mixture, which sets up an opposing pressure wave in the cylinder. This uncontrolled burning and the opposing pressure wave produces the characteristic clicking/pinging sound of detonation, and results in the piston getting a 'hammer blow' instead of a steady push.

(You can test for detonation/pinging quite easily. Get the engine up to normal running temperature and the in 4th gear at 30 mph floor the throttle (high load/low rpm). If you hear a harsh uneven clicking sound from the engine - that's detonation. You need to either adjust the timing and/or use a higher-octane fuel). These hammer blows can quickly destroy the engine.

Higher-octane fuels are better at controlling the decomposition into auto-ignition compounds than lower octane fuels. They do this in several ways - by interfering with, and reducing the actual decomposition of the fuel, or by chemically reacting with the decomposing gasoline so less auto-ignition compounds are formed.

There are three main sources of heat inside the cylinder, which contribute to the decomposition of the fuel: -

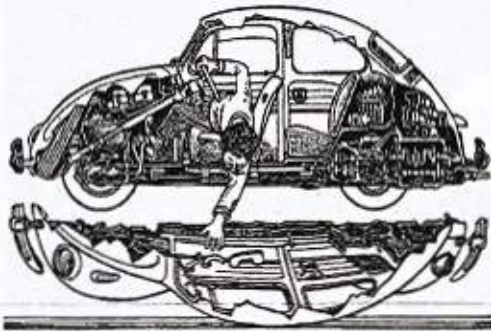
1. The residual heat in the heads, cylinders and pistons. The VW engine is air-cooled and runs hotter than it's water cooled cousins, so more residual heat is present, compared to a water cooled engine.
2. The heat produced by the ignition of the fuel itself. This depends on the nature of the fuel, and on the fuel/air mixture - rich mixtures are "pre cooled" from the evaporation of the extra fuel, so burn a little cooler, lean mixtures burn hotter.
3. The heat of compression before the spark. Compression of a gas raises the temperature of the gas. We want the temperature and pressure to rise, because the higher the compression, the higher the pressure rise after the fuel is burned - giving us more power.

The first two items are largely fixed - not easily adjusted. Altering No1 would need extensive alteration to the engine design. Altering No2 would require a change in the fuel formulation, which is not even in the hands of the engine designer.

No3 - the heat of compression (compression

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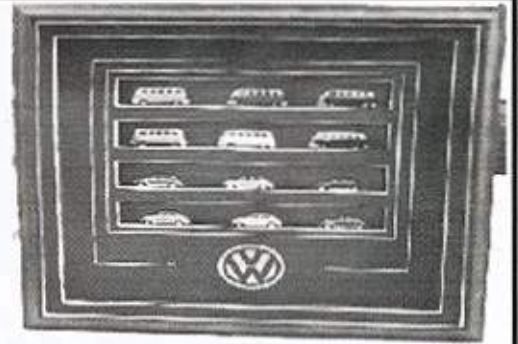


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VW Nationals 2004

Easter

Saturday

10th April

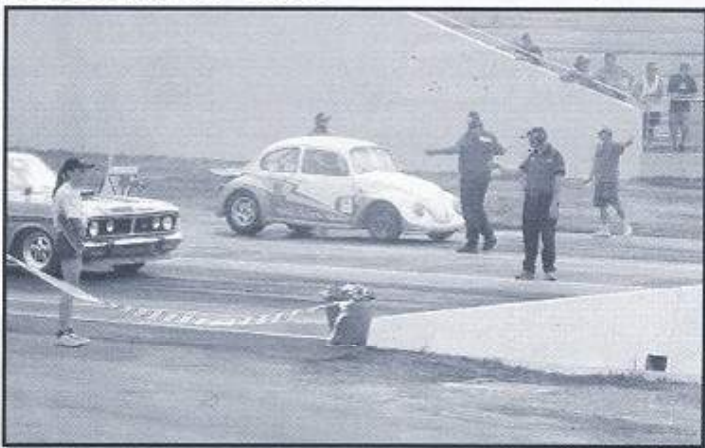
Drag Racing
Western Sydney
International Dragway
10 am — 9 pm (finals from 5pm)

- 1/4 mile
- Grudge Racing
- Bracket Racing
- King of the Hill

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Gene Berg Trophy for the fastest street registered VW will be awarded.

Racing from 10am. Bracket racing is a test of endurance and skill, not how powerful your car is.



Easter

Sunday

11th April

Show Day
Fairfield City Showgrounds

9am-3pm Car Show assembly
9am-3pm Volkswap
9am-11am Car Show judging
2.30pm Engine Blow
3pm Trophy presentation
4pm Raffle draw

VW Nationals 2004 Show & Shine is at Fairfield City Showgrounds, Smithfield Road, Prairiewood.

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VW Nationals 2004



Entries close at 11 am Sunday. One entry per car in categories listed 1-19 (maximum of 3 entries per car). Judges decision will be final

Car Show Categories

- | | |
|---|---|
| 1: Beetle up to 1957 Standard | 20: Best Engine Bay Standard |
| 2: Beetle 1957 to 1967 Standard | 21: Best Engine Bay Modified |
| 3: Beetle 1968 Onwards Standard | 22: Best Paintwork Fit & Finish Standard |
| 4: Beetle up to 1957 Modified | 23: Best Paintwork Graphics Fit & Finish Modified |
| 5: Beetle 1957 to 1967 Modified | 24: Best Interior Standard |
| 6: Beetle 1968 Onwards Modified | 25: Best Interior Modified |
| 7: New Beetle Standard & Modified | 26: Daily Driven up to 1960 |
| 8: Kombi all years Standard | 27: Daily Driven 1961 up to 1970 |
| 9: Kombi all years Modified | 28: Daily Driven 1971 up to 1980 |
| 10: Type 3&4 all years Standard & Modified | 29: Daily Driven 1981 up to 1990 |
| 11: Karmann Ghia T/1 & T/3 & Karmann Cabriolets Standard & Modified | 30: Daily Driven up to 1991 onwards |
| 12: Aussie Convertibles & VW Component Cars | 31: Best Engineered |
| 13: Golf & Vento Standard | 32: Best Unfinished Project |
| 14: Golf & Vento Modified | 33: Display Vehicle |
| 15: Scirocco & Passat Standard & Modified | 34: Presidents Choice |
| 16: Audi all models All | 35: Peoples Choice |
| 17: Off- Road VW vehicle Standard & Modified | 36: Highest Point Scoring Vehicle Overall |
| 18: Vintage VW on Club Plates any club | 37: Volkswagen Group Car Of The Day |
| 19: V.A.G. | |

VW Nationals 2004

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- Access to club Video library
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- Vintage plate facilities
- Zeitschrift (monthly magazine)

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ratio) is easy to adjust in the design of an engine, so this is the one used to match an engine with the fuel it will be using.

It's all a balancing act, and because the air-cooled engine runs hotter than a water-cooled engine (more residual heat), you need to limit the amount of additional heat produced in the cylinders prior to ignition (lower compression ratio).

Air-cooled VW engines therefore use a slightly lower compression ratio than water-cooled cars using the same octane rated gasoline.

The octane number came about as a result of research carried out in the 1920s and 30s by Sir Harry Ricardo ("The Internal Combustion Engine" 1925, 1935, and other books) and Charles Kettering (he also developed the distributor and coil ignition system). Harry Ricardo developed the concept of a test engine, in which the compression ratio, valve timing and other factors could be altered whilst the engine was running. Kettering assigned Thomas Midgley to investigate the problem of knocking which was destroying his test engines. Midgley conducted a long search of additives which would help a fuel to resist knocking. Amongst the chemicals tried were Iodine, Aniline, Selenium Oxychloride, Methylclopentadienyl Manganese Tricarbonyl (MMT - currently used in Australia for Lead Replacement Petrol - known as LRP), and other Phosphorus, Sodium and Potassium compounds. Midgley even tried melted butter! Some compounds worked better than others as an anti-knock agent, but many had serious defects (Selenium oxychloride corroded the metals in the engine); and Midgley gradually focussed on organo-lead compounds, and eventually developed a combination of Tetra-ethyl Lead (TEL) with Ethylene Dibromide and Ethylene Dichloride acting as scavengers to prevent an excessive build up of lead oxides inside the engine.

During these tests, it was discovered that Iso-Octane had a very high natural knock resistance, but Heptane had a very poor knock resistance. Because these two compounds are very similar in other respects (similar boiling point and molecular weight), they made a useful comparison point for gasoline. So the octane number for any gasoline is a comparison with a mixture of Iso-Octane and Heptane. 91 Octane has the knock resistance equivalent of mixing 91% Iso-Octane with 9% Heptane.

The discovery in the late 1920s that organo-lead products enhanced the anti-detonating characteristics was a revolution in fuel design, as engines could be designed to operate at higher compressions for better efficiency. So gasoline's became 'doped' with tetra-ethyl lead (and the associated bromide scavengers) to

enhance their octane numbers.

Another useful feature of lead in gasoline is that the burned lead products (mainly lead oxide) coated the hot exhaust valve seating area, and prevented a problem called Valve Seat Recession (VSR) which results in the exhaust valve 'eating' its way into the head. With the 'soft' cast iron heads of the day, this was a real bonus. Many older engines in use today which have cast iron heads will suffer VSR on unleaded fuels, and so additives or Lead Replacement Petrol (LRP) is often recommended for this type of engine.

VSR is not a problem with VW engines, as they have hardened valve seats inserts in their aluminium heads. The VW engine can therefore run on unleaded gasoline quite happily, provided the octane number is high enough.

Lead is being removed from fuels because it pollutes the atmosphere, and when ingested by animals, it builds up and causes health problems.

An additional feature of lead additives was that they provided a small but useful amount of lubrication to the valve stems. This was important in engines which had cast iron heads with the valve guides cut directly into the head metal. Most cars also required valve seals to prevent excess oil from dripping down the valve stems and causing a smoky exhaust, and so they had little engine oil available to lubricate the valve stems. TEL in the fuel provided a useful additional amount of lubrication - partially replacing the "missing" oil based lubrication.

The VW engine has bronze alloy valve guides which do not require any lead based lubrication, and the design of the valves does not need valve seals, so they are lubricated very well from the splashed oil on the spring end of the valves. The VW engine does not require leaded fuels for valve stem lubrication purposes.

Gasoline which is high in aromatic compounds like Benzene has a high 'natural' octane rating and so needs less additives to increase the octane rating. Unfortunately, these aromatic compounds are also those most responsible for atmospheric pollution, so these compounds are being reduced in gasoline in many countries. This creates another dilemma - how to increase the octane rating without lead additives, and with reduced aromatic compounds in the fuel.

And there is a second effect here too - carburettor cars like most VWs cannot adjust the fuel/air mixture 'on the run' like computer equipped fuel injected cars can, so they run lean when run on oxygenated fuels. This is because carburettors meter out a volume of fuel into the intake air; they have no regard for the chemical content of the fuel, as noted

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above, oxygenated fuels have less "fuel" in the fuel. The resulting lean burning creates more heat in the cylinders, and this 'excess' heat raises the octane number needed, or require adjustments to the carburettor as outlined below.

It's a vicious circle, so if you can avoid using oxygenated fuels in your VW - do so. If you have to use oxygenated fuels, you may improve the car's performance by using a slightly larger main jet in the carburettor. Doing this brings the mixture back to the correct setting, which helps reduce the extra unwanted heat in the engine, and reduces the likelihood you'll need a higher than normal octane gasoline to compensate. And if your engine is due for a rebuild, and you have to use oxygenated fuels, consider using a slightly lower compression ratio.

Octane numbers are measured in two ways. The 'research' method of measuring the octane number uses a constant speed (1500 rpm) engine in laboratory conditions. This is the RON - Research Octane Number. The other method is the MON - Motor Octane Number, which uses the same test engine, but has a harsher test regime more closely related to road conditions. So the MON is usually lower than the RON for the same fuel.

Often you may see the octane rating quoted as $(R+M)/2$. This means an average of the two methods is used to give the fuel a number. This number method is often called 'pump octane' or AKI (anti-knock index) in the US.

The 1200 VW engine running around 6.6-7:1 compression ratio, and the 1300 with 7.3:1 compression ratio needs a minimum of 87RON octane (about 84AKI). The 1500/1600 engine running around 7.5:1 compression needs 91RON octane (87AKI) or higher. Using a higher octane gasoline in an engine designed for low octane WILL NOT increase it's performance - the octane number is a MINIMUM needed to eliminate detonation, and that's all it is.

I have a 1500 VW with unmodified 1500 heads running 1600 cylinders and pistons. This has raised my compression ratio from 7.5:1 to 8:1 (more fuel/air mix squeezed into the same head space). It was originally designed to run on 91 RON (about 87AKI) but now prefers at least 93 RON (89AKI). If I were to increase the capacity more without modifying the heads, I would need spacers under the cylinders to lower the compression back to a reasonable number (usually around 7.5:1), otherwise I would need to run on Unleaded Premium (95 RON in Australia where I live) to prevent detonation. I include this description to demonstrate the effect of compression ratios on the octane number required.

In conclusion, the octane rating is a measure of

the fuel's ability to CONTROL the burning process (to prevent detonation); it is not a function of burning 'hotter' or 'colder'. And the higher the compression ratio (in the same engine), the higher the octane number needed.

Oxygenates are bad news for carburetted engines, and if you have to use them, expect to increase your main jet to compensate for the reduced amount of "fuel" in the fuel.

For Australian readers - in 2002-2003 some states started allowing Ethanol blend petrol (gasoline). As noted above, oxygenates like ethanol cause a carburetted engine to run lean. 10% Ethanol causes a 3.9% lean mixture (ethanol is 39% "used" oxygen). But some petrol stations are adding up to 20% ethanol and not signposting the pumps - these stations are mostly in New South Wales. Southern Queensland and northern NSW have many BP stations offering 10% ethanol blend (called E10) and these ARE signposted. In South Australia and Western Australia, it is illegal to sell ethanol-blended fuels, and in Western Australia it is also illegal to sell MTBE blend fuels.

10% ethanol blend (E10) needs a main jet 2 sizes larger than a straight hydrocarbon fuel (for example, from a 125 to a 130; or 127.5 to a 132.5), to get the mixture back in to balance (stoichiometry). 20% ethanol blend needs a main jet 4 sizes larger, and will probably need a larger idle jet too. Fuel consumption WILL increase with these changes.

Up until about 2001, MTBE was not an issue in Australia, but Woolworth's Petrol Plus outlets all over Australia (except Western Australia) have fuel with an average of 2-3% MTBE (most Petrol Plus fuel is imported from overseas - they don't get much fuel from Australian refineries). The Woolworth's web site is a little confusing because they also mention up to 7% MTBE (so does the average 2-3% mean none in Western Australia and 7% on other states)???

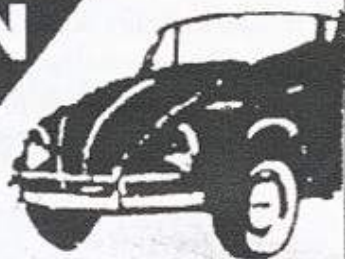
Why the fuss? Well 2-3% MTBE is not going to bother your VW engine to much, but with 7% MTBE, your engine will be running just over 1% lean, which might be noticeable in some engines - especially those using the 34PICT/3 carburettor, which is generally set to run a little leaner than the smaller 30 and 28 series carburettors. So if you experience detonation - try changing brands and see if this makes a difference.

Hope this helps explain a complex issue.

Rob Aussiebug1970@yahoo.com

Disclaimer stuff: Rob and Dave have prepared

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this information from their own experiences. We have not assumed any specialised mechanical knowledge, but we DO assume that anyone using these procedures has at least some basic mechanical ability.

We hope you find this information useful, but we don't take any responsibility for anything, which happens to you, other people, your VW or any other property or goods resulting from your use of these procedures.

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Have fun fixing your VW - just keep them fweeming OK?

Rob aussiebug1970@yahoo.com

Dave david.pratt@charter.net

Last revised 13 March 2003.

VW really backs their products

I own a T4 1.6 Golf manual. Recently I had the misfortune to have very serious problems with my gearbox, although not through dragging Holdens off at the lights.

The mechanic who does my services looked into the problem, and he recommended that I seek repair via a Volkswagen dealer, as he did not have the correct jig for the engine so as to lift the gearbox out.

So I found a dealer who would be able to do the repair without too long a delay, this car is daily driven 40km to work and back each day to the Northern Beaches from the Bankstown area and public transport to there is a real pain in the

So Denlo Service took the car in, and pronounced that a seal was defective. After replacing the seal, back came the bad news. Gearbox is damaged and will have to be replaced, at huge cost (about 3rd the value of the car, YIKE!!). Katrina at Denlo service advised that she would approach Volkswagen Australia, as the car is not far out of warranty (just under 10,000ks).

After a tense (on my part) wait of 24 hours, Katrina from Denlo called back with some very good news, Volkswagen is covering the replacement of the gearbox 100%. Phew!

Thanks to Volkswagen Group Australia my faith in VW products has been restored. The car now drives again like new. My interest in VW vehicles started as with many people with the family car, Dads

'62 beetle, which is now in the possession of a collector, who is unwilling to part with it. I would have liked to have bought it from dad, but had no money at the time. I now own a '67 beetle as well as my Golf.

At first I tried to contact another dealer that was closer to my place of work, and was told in no uncertain terms that I could not have my gearbox looked at till at least 8th of March.

Susan.

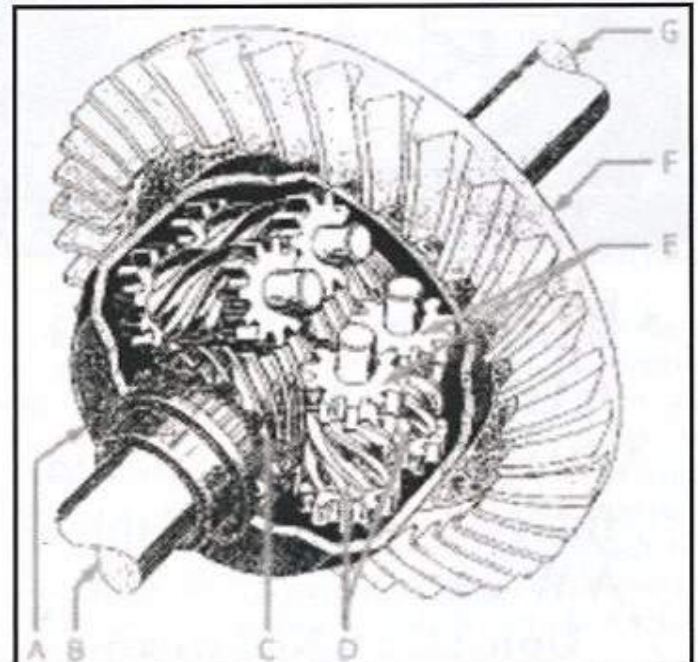
Different types of VW 4WD

Torsen differential - Audi Quattro system

Being the master of 4-wheel drive, Audi always insists to use the most effective system despite regardless of price. Its Quattro 4WD system* uses a pure mechanical LSD, Torsen differential.

Torsen, means "torque-sensing", was invented by an American company calls Gleason Corporation. Its slip-limiting ability is implemented by cleverly using worm gears/worm wheel pair. This pair has a special characteristic: driving torque can be transferred from worm wheel to worm gear, but not reverse. Otherwise, they will be locked up. It is such characteristic that limits slip.

The picture (on next page) explains how Torsen differential works. In normal cornering, i.e., no tyre



A: Differential housing E: Synchromesh
B: Out axle F: Hypoid wheel (from engine)
C: Worm wheel
D: Worm gears G: Out axle

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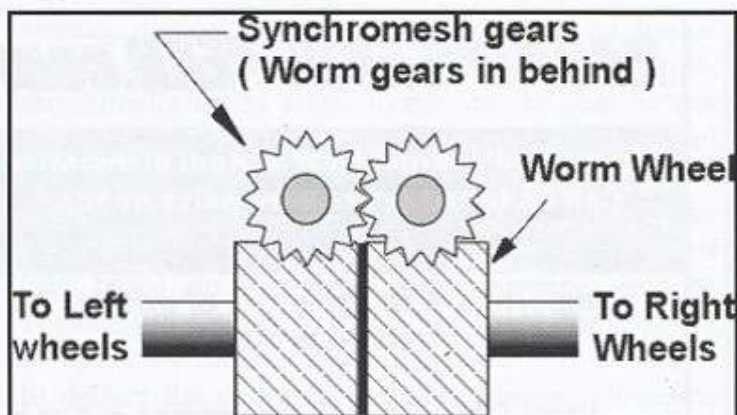
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slip in any wheel, Torsen differential provides the same function as a normal differential. The addition of worm wheel/worm gear pair does not affect speed difference between output shafts. For instance, if the car turns left, the driveshaft to right wheel runs faster than the differential housing, while the driveshaft to left wheel runs slower than the differential housing. The speed difference between left and right worm wheels can be exactly matched in the synchromesh gears. Note that the worm gears / worm wheels pair do not lock up because torque is transferred from worm wheels to worm gears.

When one of the wheels, say the right wheel, loses traction due to poor road surface or whatever reason, the worm gear / worm wheel pair get into effect. At the instant just before they become effective, one must know that by the basic differential theory no torque will be sent to the left wheel, which is with traction. Instead, all the torque will be sent to the spinning right wheel. Then, the fast-rotating right worm wheel will drive its worm gear, through the synchromesh and drive the left worm gear. Now, do you still remember the basic characteristic of worm gear / wheel pair? Well, when worm gear drives worm wheel, they will be locked up. As a result, the left worm gear and right worm gear are actually locked together, thus wheels on both side will rotate at the same speed and get the car out of the lose of traction.

Characteristic of Torsen-equipped 4WD

Except the first generation Quattro system that appeared in the early Quattro coupe, most of the subsequent Quattro systems used Torsen differential in centre and rear axles. This is rather expensive. However, Torsen-equipped 4WD has many advantages. First of all, its pure mechanical parts react almost instantly to tyre slip. Secondly, it provides linear lock-up characteristic. Thirdly, it is a strictly permanent 4WD system. In normal condition, torque split between front and rear wheels is 50:50 (other ratios are possible, depends on the pitch of worm

gears).

Apart from Audi, few other carmakers adopted Torsen LSD, mainly because of cost reason. Toyota's rally ace, Celica GT4 was one of the few exceptions. It used Torsen in the rear axle. This might be part of the reason why it was so expensive over competitors.

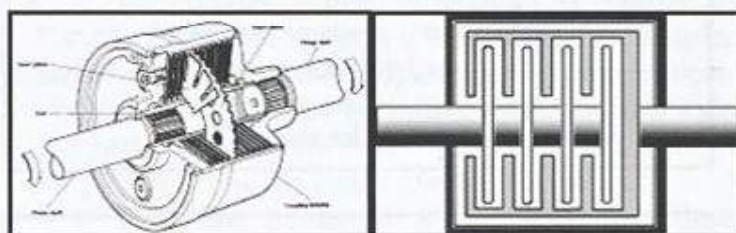
Advantage: Quick response, permanent 4WD

Disadvantage: Pricy, torque split not variable

Who use it? All non-Golf-based Audi quattro models, Toyota Celica GT4, Hummer etc.

Note: the "Quattro" mentioned here is the traditional Torsen system marketing in the name Quattro. That includes all Quattro models until the arrival of Audi TT (which uses the Haldex system). Since then the name Quattro becomes a marketing trademark rather than indicating the actual mechanism. At the time of writing, all Audi Quattro models, excluding the Golf-based A3, S3 and TT, still employs the traditional Torsen system.

Viscous-Coupling differential



Viscous Coupling centre LSD is commonly used in many simple 4WD systems. One of the earliest examples was Volkswagen's Syncro system.

Inside a viscous coupler (above) as shown in the right hand side picture, there are many circular plates positioning very close to each other. Both drive shafts connect to roughly half of the plates in an alternating sequence as shown. The sealed differential housing is fully of a high viscosity liquid, which has a strong tendency to "visco" those plates together.

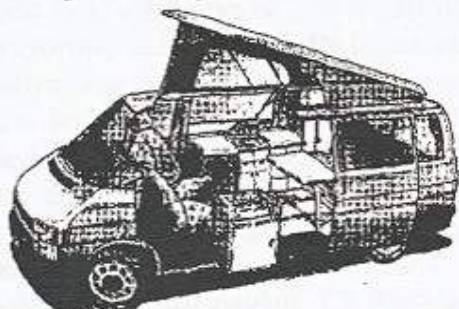
In normal condition, front and rear axles run at roughly the same speed so the plates and viscous liquid are relatively stable to each other. When tyre slip occurs in one of the axle, that means the alternating plates run at different speed, viscous liquid will try to visco them together. As a result, torque is transferred from the faster driveshaft through the liquid to the slower driveshaft. The greater the speed difference, the larger the torque transfer. As a result, limited slip function is implemented.

Characteristic of Viscous Coupling centre differential

Note that Viscous-Coupling LSD is a speed-

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sensing device: under no-slip condition, no torque will be sent to another axle. Whenever slip occurs, theoretically up to 100% torque can be sent to any axle, depending on the traction difference between front and rear axle. Therefore it is a part-time 4WD.

Being a part-time 4WD, it does not have the neutral steering of a permanent 4WD can obtain. For cars based on rear-wheel drive models, such as Porsche 911 Carrera 4, this is not a real problem - as normally the car runs like a RWD car thus is capable to deliver the desirable throttle oversteer. However, for other front-wheel drive-based cars like VW Golf Syncro and Volvo 850 AWD, the part-time 4WD can do nothing to correct their understeering manner. This is the first disadvantage.

The next problem is the delay before the 4WD takes effect. Since viscous liquid is not a fixed medium (unlike a gear), it takes time and speed difference to be effective. The function between speed difference and torque transfer is an exponential function - that means in the early stage of slip, torque transfer remains near zero.

To cure this problem, most manufacturers vary the final drive ratio such that introduce a slightly speed difference even in normal condition. As a result, the car actually runs with 95:5 torque split between front and rear. This shortens the delay time. However, it is still impossible to match the pure mechanical Torsen LSD.

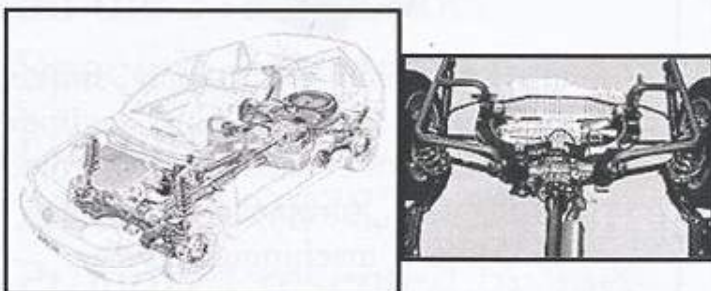
It might be less effective than Torsen system, but it is certainly the cheapest, so we can find it in many mass production 4WD cars.

Advantage: Cheap and compact

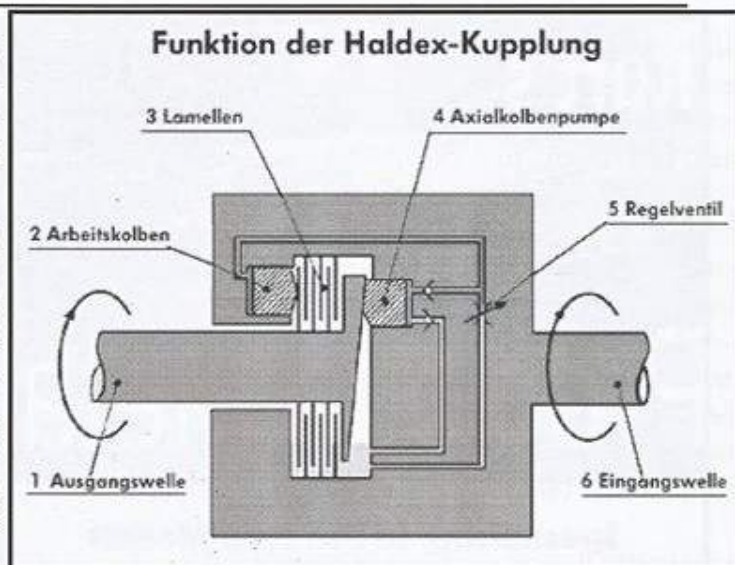
Disadvantage: Part-time 4WD only. Normally feels like 2WD.

Who use it? VW Syncro, Lamborghini Diablo VT, Porsche 993/996 Carrera 4 and Turbo, Volvo 850 AWD etc.

Volkswagen-Haldex system



Since the late 1998, Volkswagen replaced the viscous-coupling Syncro system with a new system called "4motion". First shown in Audi TT and Golf 4motion, the new system uses a multi-plate clutch



centre differential developed by a Swedish company, Haldex, and computer software from the Austria 4WD specialist Steyr-Daimler-Puch. At this moment, it is only offered for the transverse-engined Golf IV platform, but there is no technical reason prevents it from applying to Audi's longitudinal-engined models.

The Haldex centre differential is similar to Porsche 959's PSK system, it is only smaller, simpler and cheaper thus making mass production feasible. The centre differential is mounted near the rear axle and just in front of the rear differential. As shown in the picture below, its clutch consists of 6 discs

They are immersed in oil bath to reduce friction. Actuation is made by hydraulic pressure. Normally the input and output shafts rotate with a speed difference (could be implemented by different final drive ratio), therefore the discs are rotating relative to each other. When no pressure is applied, the clutch is not engaged thus torque will not be transferred to the rear axle. Increase the pressure on the multi-plate clutch, the latter will be partially engaged, thus sending torque to the rear axle. The more the clutch engages, the more torque transfers to the rear axle.

Computer determines how much torque to be sent to the rear wheels. Normally it is 50:50, but in tight corners when wheels on one of the axles is slipping, the driver can easily feel the torque is transferring from one to another axle. Volkswagen claimed 100% torque could be sent to either axle.

Compared with 959's unit, Haldex's unit has 7 fewer discs in the clutch. This makes the Haldex unit more compact and cheaper. The down side is not capable to handle as much torque (959 had 369 lbft, Audi TT has 206 lbft). Besides, 959's discs were organised as 6 pairs of independent clutches, each actuated by individual hydraulic actuator. The Haldex has just one actuator, acting on all six discs; again, this saves weight and cost. However, I suspect if it



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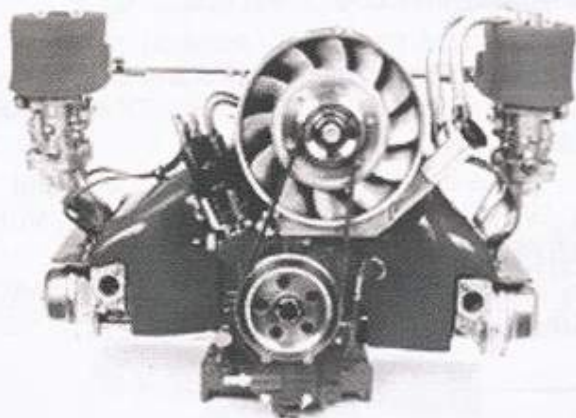
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could vary the amount of torque split as precise as independent clutches.

Based on the journalists comment about the handling of Audi TT and Golf 4motion, it seems that the 4motion system performs even better than the traditional Torsen-differential Quattro. The age of Torsen Quattro is passing away.

Advantage: Inexpensive and quite compact

Disadvantage: Unknown torque-handling ability.

Who use it? Audi TT, Golf 4motion ... actually all 4WD versions of Golf IV's derivatives. Note: "4motion" is not equal to Haldex system. Volkswagen also use "4motion" to represent the Torsen-LSD system used by Passat. Therefore, "4motion" is actually a marketing nameplate instead of indicating the mechanical design.

Volkswagen Touareg & Porsche Cayenne EDL 4wd system

The all-wheel-drive system is also all-new as both companies wanted a vehicle that is as capable off-road as it is on the road. The fully electronic AWD system utilizes electronically controlled differentials that can be programmed to respond to both pre-mapped preferences (say a 30/70 front to rear wheel drive bias) and to varying conditions of

both slip and driver demands. For instance if full throttle is applied from a stop, the system will use actual throttle measurement to apply more torque to the rear wheels in anticipation of front slip (as opposed to a system that must detect slip first before diverting power or locking differentials). The system will still detect slip though and divert more power to the wheels that need it most. The system employs an inter-axle differential lock and also has a true low-range gear set for those demanding conditions that warrant it. Towing capacity is 7,716 lbs and Volkswagen claims more than 11 inches of ground clearance and the ability to ford through water up to 23 inches deep.

The AWD system in the Porsche will reportedly be set with more rear power bias than in the Volkswagen application to give it more traditional Porsche handling and power characteristics. However, the Volkswagen application will reportedly be more suited to hard-core off-road usage due to different programming of the AWD system electronics and its more neutral handling characteristics. Both models will be highly capable off-roaders according to engineers from VW and Porsche as they benchmarked the Touareg and Cayenne against all major competitors available including Jeep, Mercedes, BMW, GMC and others.

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why not join...

Club VeeDub Sydney Inc.

Australia's premier
VW/Audi owners' club!



The legend never dies

For information call David on (02) 9534 4895
Bob on (02) 4655 5566

We welcome owners of all VWs and Audis, old and new. If you own a:

- Beetle / Superbug / Cabriolet
- Country Buggy
- Kombi / Transporter
- Karmann Ghia
- Type 3
- Type 4
- Golf 1, 2, 3 or 4
- Passat 1, 2, 3 or 4
- Polo
- Audi (any model)
- We can help you look after it and enjoy it!



Club VeeDub is on the Internet!



www.clubvw.org.au

Or you can Email us at:
webmaster@clubvw.org.au



Please enclose cheque or money order for \$40.00, payable to Club VeeDub Sydney Inc., and post it with this form to:
Club VeeDub Sydney Inc.

P.O. Box 1135
Parramatta NSW 2124

Tell us about your VWs and Audis!

YEAR	TYPE	MODEL	ENGINE SIZE	REGO NO.	COLOUR

About Club VeeDub Sydney

Do you own a Volkswagen or Audi? Have you had trouble fixing it, or finding a decent VW mechanic who can? Maybe you'd like to restore your classic VW, or what about hotting it up instead? No matter what your VW need is, Club VeeDub Sydney can help you!



Club VeeDub was formed in 1985 to cater exclusively for VW and Audi owners. We're Australia's largest VW/Audi club with members in every state and overseas, but we're based in Sydney. Our logo shows this - the Sydney Harbour Bridge combined with VW's Wolfsburg Crest.

Club VeeDub is dedicated to keeping as many Volkswagens on Australia's roads for as long as possible. We aim to do this by helping owners maintain their enthusiasm and love for their VWs, because as we say, The Legend Never Dies!

Why join Club VeeDub Sydney?

Firstly, as a Club VeeDub member, you'll receive discounts on parts and service from all recommended workshops and parts outlets. Just show your club card! Your membership fee can often be recovered by the savings on your next service.

You'll receive a monthly copy of our club magazine, *Zeitschrift* (that's German for 'magazine'). It's full of the latest VW news, tech tips, how-to articles, history, humour and all sorts of good stuff for the VW fan. It's the most readable VW magazine in Australia.

You're not required to attend meetings, nor participate in any way if you so desire. You can, if you wish, simply accept the benefits we have to offer with no obligation.

However, for the enthusiast we provide

a wide range of other benefits and activities.

If you have a VW older than 30 years and you don't drive it much, we can offer you Vintage Registration to save you an enormous amount on your annual rego bill. Your VW will also look great on its Vintage Rego plates.

You're welcome at our monthly meetings, which are informal and good fun. No 'moving the motion that the minutes be seconded' stuff! There's raffles, quizzes, films, talks and other cool things. Members can borrow VW books, videos, manuals, brochures and magazines from our extensive club library - for free.

Need that special tool to fix your VW? We have an large range of VW factory tools and special fittings you won't find anywhere else, all free to members. We also have many contacts in the VW trade who are happy to offer you free technical advice on restoration, modification and any other VW matter you could think of.

You'll also be welcome to any of our cruises, show days, swap meets, social events, drag days and other events for the VW nut. We also host the VW/Audi Nationals, Australia's premier VW/Audi event, every Easter.

Benefits for Club VeeDub Members

- Club VeeDub member card for discounts on VW parts and service
- Free monthly issue of Zeitschrift
- Professional advice on VW restoration, modification and service
- Free book, magazine and video library
- Free VW tool lending library
- Vintage Registration for 30 year-old VWs
- Non-boring, entertaining meetings with heaps of prizes and laughs
- Enjoyable social events throughout the year
- The VW/Audi Nationals

Membership Form

New Member: (tick one)
Renewal:

Name:

Address:

State:

Postcode:

Phone:

BH
AH

Occupation:

Are you a licensed mechanic, either active or retired? Yes No

How much of your own mechanical work do you do? %

Which of the following activities are you interested in?

<input type="checkbox"/>	Cruises and Observation Runs
<input type="checkbox"/>	Show n Shines, Concours
<input type="checkbox"/>	Social days and/or nights out
<input type="checkbox"/>	Swap Meets
<input type="checkbox"/>	Drag or track racing
<input type="checkbox"/>	Meetings and tech talks
<input type="checkbox"/>	Other: (you tell us !)

Email address

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