

# Rover Car Club Of Otago Tribune

December 2008



**THE OFFICIAL NEWSLETTER OF  
THE ROVER CAR CLUB OF OTAGO**

Web Site: [www.trcco.freeservers.com](http://www.trcco.freeservers.com)

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**2008 / 2009**

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The Otago Rover Tribune is published by the Rover Car Club of Otago.

The views or opinions expressed by individuals are not necessarily those of the Club or Editor.

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## **Rover Car Club of Otago.**

### **Suggested & Organised Events 2009**

January 09

No monthly meeting in January.

February 09

Wednesday the 4th of February. Monthly meeting University Staff Club  
27th of February-1st March. Queenstown Auto Extravaganza.  
[www.queenstowncarshow.co.nz](http://www.queenstowncarshow.co.nz) or Grant Coburn 027 434 3968  
28th of February - 6th of March. Classic Motoring Awards, Nelson

March 09

Wednesday the 4th of March. Monthly meeting University Staff Club  
Sunday the 8th of March. Wings & Wheels, Taieri Airport  
Saturday the 28th & Sunday the 29th of March. McLeans Island Vintage Country Fair.

April 09

Wednesday the 1st of April. Monthly meeting University Staff Club  
10th - 13th of April. ARCC Rally, New Plymouth

May 09

Wednesday the 6th of May. Monthly meeting University Staff Club

June 09

Wednesday the 3rd of June. Monthly meeting University Staff Club

July 09

Wednesday the 1st of July. Monthly meeting University Staff Club

August 09

Wednesday the 5th of August. Monthly meeting University Staff Club

September 09

Wednesday the 2nd of September. Monthly meeting University Staff Club

Monthly meetings 1<sup>st</sup> Wednesday each month.  
University Staff Club 7.00pm.  
Drinks & Natter

## From The Editor...

There is a dangerous virus going around. It is called WORK.

If you receive WORK from your colleagues, your boss, or anyone else, via E-mail or any other means, DO NOT TOUCH IT!

This virus wipes out your private life completely. If you should come into contact with WORK, put on your jacket, take two good friends and go straight to the nearest pub.

Order the antidote known as BEER. Take the antidote repeatedly until WORK has been completely eliminated from your system.

Forward this warning immediately to at least 5 friends. Should you realize that you do not have 5 friends, this means that you are already infected and that WORK already controls your life.

REMEMBER, THIS VIRUS IS DEADLY!

All right, all right - I promise not to swear at you again.  
...Let Go!



I'd like to take this opportunity to wish all our members and their families a happy and safe Christmas. I hope to see you again in the new year

Ray P

Bumper Sticker Suggestion Of The Month

STUDENT DRIVER, GET THE HELL OUT OF THE WAY



Jan & Grant Smith display the Nove Rove trophy they one last month



Rovers on display in Oamaru during Nove Rove '08

# ROVER CAR CLUB of OTAGO

**MINUTES** of meeting of members, held in the University Staff Club, 7pm Wed 2nd December 2008.

**PRESENT** Ross Allan, Terry Bough, Walton Brown, Reid Buchan, Ian & Eleanore Clark, Diana Kearns, Stuart & Jacqui McCraw, Alastair McInnes, Jan Smith, Jeff Sparrow,

**APOLOGIES** Ray Pilley, Norman Sparrow

## CORRESPONDENCE

Club newsletters received from - Canterbury, Manawatu, Waikato.  
Letters of appreciation sent to - Parkside Quarry Ltd, Totara Estate, Burnside Home-tead Country Estate

**MEMBERSHIP** Resignations, nil Applications, nil

**SUBSCRIPTIONS** Subscriptions paid to date. Town 20, Country 26, Outstanding 3

## TRIPS & OUTINGS

Toko A & P Show Milton 13<sup>th</sup> December 11am to 4pm Meet at Precision Motors, lower Kaikorai Valley, 10am. Club members invited to Clark's residence for coffee  
Classic Motoring Awards Nelson Feb 26—Mar 6  
Queenstown Classic Car Show Feb 27 - Mar 1  
Palmerston Show Feb 7  
Best of British Rally 8<sup>th</sup> March Cars depart from the Octagon from 11am for Taieri Airport  
Club to provide a judge  
Taieri Wings & Wheels Display. Taieri Airport, 8<sup>th</sup> of March. \$5 adult, \$2 children under 12.  
Classic Motoring Awards Nelson Feb 26 / Mar 6  
McLeans Island Vintage Country Fair Mar 28/29  
ARCC Rally 2009 New Plymouth 10/13 April

## GENERAL BUSINESS

Rover Club Tee-shirts now available \$30

## ARCC Rally 2010

The following names put forward for committee membership. Ian & Eleanore Clark, Jeff Sparrow, Ross Allan.

Next meeting Wednesday 4<sup>th</sup> February 2009

asm 3/12/2008

## Tank Engine Tales.

Rover took over the Meteor Tank engine project from Rolls Royce in 1943, as a 'swop' for the jet engine work. The Meteor was an unsupercharged version of the 27-litre V12 Merlin aero engine, tuned to suit the requirements of big battle tanks.

By January 1950, Rover were producing not only the regular (petrol) Meteor 27-litre V12 tank engine, developing 620bhp and 1500 ft lbs of torque, but also a Meteor Diesel with 470bhp. In addition they had developed an 18-litre V8 'Meteorite' version of the engine, also in petrol or diesel form.

The Rover Meteor engine powered the Centurion tank, and in its ultimate fuel-injected form, it was used in the later Conqueror tank. The Thornycroft 'Mighty Antar' tank transporter was fitted with the Rover Meteorite V8 engine, thus giving the British Army some useful engine service and parts rationalisation.

At their Acocks Green factory, Rover worked alongside the MoD's Fighting Vehicle Engine Research and Development staff, with extensive special test facilities such as extreme climate chambers. The Rover Meteorite engine was also developed for Marine applications, including Admiralty and H.M. Customs launches.

Production and development of these very large Rover engines continued until 1964. There is a technical link with Rover K Series engines, in that both families use aluminium alloy castings under compression by long-bolt fixings.

Thanks to Nathan at Autoweb for permission to reprint this article



Club members touring the Oamaru Stone Quarry



The dining room at Dunside Homestead, Napier, Nov. 2009

## IGNITION.

December 2008.

This is the last “Ignition” for 2008, and almost Christmas again. No doubt many of you are looking forward to the holiday break and a time with families and the upcoming fine sunny weather. All the last minute work and home jobs to be completed before the holidays.

Although this year has taken an apparent downturn for some, many I have spoken to have not seen any such thing nor in next years line up yet.

Possibly due to the non boom and bust situation here. My Rovers are going to have to last a bit longer which I do not see as a problem. Petrol is still available at an affordable price although most other costs are going up. Still, at least we can grow food and feed ourselves in New Zealand, allowing me to close this subject on a positive note..

To complete the year we are invited to the Toko A & P Show at Milton this Saturday 13<sup>th</sup> December. Meeting at Performance Cars Kaikorai Valley Rd at 10 a.m. Anticipate the day being 11 am to 4 pm. An invite has been issued to Clark’s residence for coffee.

A BIG THANK YOU to those who put forward their names for the ARCC Rally committee, a good start and with a few ideas in the pipeline. More on this early next year.

All available at Milton this Saturday the club monogrammed polo shirts available in an assortment of sizes all \$30-00 each. New club cloth monogrammed badges with black or red background are also available at \$10-00 each.

**A VERY MERRY, ENJOYABLE, RELAXING CHRISTMAS  
& ALL THE BEST FOR THE NEW YEAR**

**Safe & Happy Roving.**

Norman & Carleen S.  
President.

## Modified Rovers



1996 Rover 214



2004 Rover 75 Coupe Concept



Rover 220 turbo Coupe



The only surviving 1963 P7 prototype

## Technical Aspects Of Rover.

The current Rover 75 was designed using some of the world's most advanced real-time virtual engineering techniques, which Rover had been developing well before the BMW takeover. These powerful computer-based concurrent engineering and simulation facilities allow rapid creation and 'on screen' testing and analysis of designs, thus radically reducing the time and cost of physical prototype testing.

The Rover 75 was the first Rover to have a full multiplex electronic system, covering all of the power train management and body systems electronics. It allows very sophisticated interaction between all of the advanced control systems in the car, such as 500,000 bits per second communication between the engine management, anti lock braking/traction control and automatic transmission programming.

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Enjoying the Vintage & Classic Motoring day in Naseby

The first Rover car, the 1904 8hp, had a cast aluminium backbone chassis structure, housing the engine, prop. shaft and rear axle. Aluminium castings were also used for the body framing.

During 1945-47, Rover developed a small car prototype called M1, which had an all-aluminium platform-based body structure, as a potential way of alleviating post-war steel shortages. Although the idea was not progressed to production, three examples were built and used as Rover company cars to gain high mileage experience.

Rover made considerable use of aluminium body panels over the years. The P4 saloon range from 1949 to 1964, used alloy bonnets, doors and boot lids for almost the entire production run, while the 1963-77 P6 range featured alloy bonnets and boot lids.

Variable camshaft timing is a modern feature, but the 1904 single-cylinder Rover 8hp had a foot pedal which operated a sliding cam mechanism, so that the inlet valve cam changed to a zero-lift profile, keeping the inlet valve closed, and the exhaust cam changed to a twin-peak profile. This turned the engine into a very effective compression brake. The same system was fitted to the four-cylinder Rover 16/20 in 1905.

The 1905 Rover 6hp had rack and pinion steering, as did the 1919 Rover 8hp, although it was not until 1976 that Rover returned to this type of steering mechanism with the SD1 3500.

The first four Rover cars designed by Edmund Lewis from 1904 onwards all had steering column-mounted gear levers. After this, only one manual transmission Rover ever followed suit, and this was the 1950-53 P4 75.

Rover took an early interest in diesel engines. They made arrangements for Dr Rudolph Diesel himself to visit them in Coventry in 1913, but when Rover employee Dudley Noble arrived in Harwich to collect Dr. Diesel from the mail boat, the famous engineer was reported missing, presumed lost overboard after embarking in Antwerp.

Rover's first diesel engine came a little later than 1913 - in fact it was developed in the late 1940s, in the form of a V12 developing 470bhp. No, it wasn't used in any car, it was a derivative of the 'Meteor' Tank engine, itself based on the 27-litre Rolls Royce Merlin aero engine. There was also a V8 'Meteorite' 18-litre diesel derivative, producing 313bhp.

All of Rover's motorcycles were air-cooled of course, but so was the 1919 Rover 8hp flat twin car. Rover nearly launched another air-cooled car in 1931, the 'Scarab', but withdrew it on establishing a new, more up-market product policy. The aborted 1931 Scarab had all independent suspension and a Vee-twin rear engine. Even Ferdinand Porsche, designer of the Volkswagen Beetle, came to Britain to test drive it.

It wasn't a surprise when Rover began to fit a driver-controlled free-wheel mechanism on their cars for the 1933 season, as such devices had been quite fashionable since the late 1920s. A freewheel, when 'unlocked' by the driver, allowed easy, quiet clutchless gear changing, and made it easy to save fuel by coasting. But it made great demands on the car's engine refinement, braking and handling capabilities. The unusual thing is that Rover continued to fit freewheels successfully as standard right up until the 1956-59 period, only phasing them out as the various models were fitted with vacuum servo brakes. This was in case an engine stopped while freewheeling, thus losing manifold vacuum.

Rover announced independent front suspension (IFS) in some brochures for the 1935 Speed Fourteen models - a four seater open tourer and a four-door Streamline Coupe. However none of the Speed Fourteen production cars ever appeared to have been built with this feature, which seems to have been withdrawn at pre-production stage. IFS was incorporated instead in a next generation P3 model, delayed by war to 1948.

The 1948 P3 range introduced Rover's unusual 'inlet over exhaust' or loE engine design, which combined an overhead inlet valve and a side exhaust valve in each cylinder. Unlike other loE designs such as those used by Rolls Royce and Coventry Climax, the side valve was angled to give a very efficient hemispherical combustion chamber with a central spark plug. The design gave excellent flexibility and tolerance of low-octane fuels, and was used in most of the 1949-64 P4 models and all the 3-litre P5 models.

During the 1950s, when automatic transmissions were gradually appearing on larger cars, Rover developed their own system, called 'Roverdrive', and fitted it to the 1956 105R model. It used a torque converter, a servo-operated clutch, a two speed conventional gearbox and an electric overdrive, all arranged to operate automatically. Despite its unusual configuration, it worked quite well.

The 1963 P6 2000 model was a rare beast in motor industry terms, in that it was an entirely new car with absolutely no carry-over of components from any previous model. It was an extremely brave gamble by a then quite small company, which paid off handsomely. The complete P6 range eventually outselling any previous Rover car range by a factor of at least 2.5, and transforming the company image.

Amongst the many technical novelties of the P6 was a base-unit structure with all external skin panels bolted on. The car was completely assembled and tested before fixing the panels on, thus giving exceptionally easy access for assembly work, and avoiding paint damage during build. This feature also made accident repair much easier.

P6 had a unique suspension design. At the front, the leading upper wishbones pivoted from the bulkhead and operated the bulkhead-mounted coil springs through pushrods, thus putting the loads into the strongest part of the structure. At the rear was a special Rover version of the de Dion axle design, with a sliding de Dion tube to allow the track to vary as the fixed-length drive shafts articulated. The resulting ride and handling capability was rated as world-leading.

Although considered by many to be a much simpler design than the P6, the 1976 SD1 that replaced it had many hidden technical subtleties. The torque tube rear axle suspension, for example, was patented for its clever geometry and packaging. It gave excellent longitudinal compliance, benign handling and a safe forward location for the fuel tank, amongst other benefits.

The use of self-levelling rear dampers on the SD1 was new to the UK, allowing the use of constant rate springs for comfort while maintaining correct ride height and attitude under varying load, but without the weight and complication of previous engine-powered levelling systems.

The Rover 800, launched in 1986, was ahead of the field in having 4-valve per cylinder engines across the range. When the 2.7-litre V6 models were launched in 1988, they led an industry trend to variable-length induction manifolding to optimise torque characteristics.