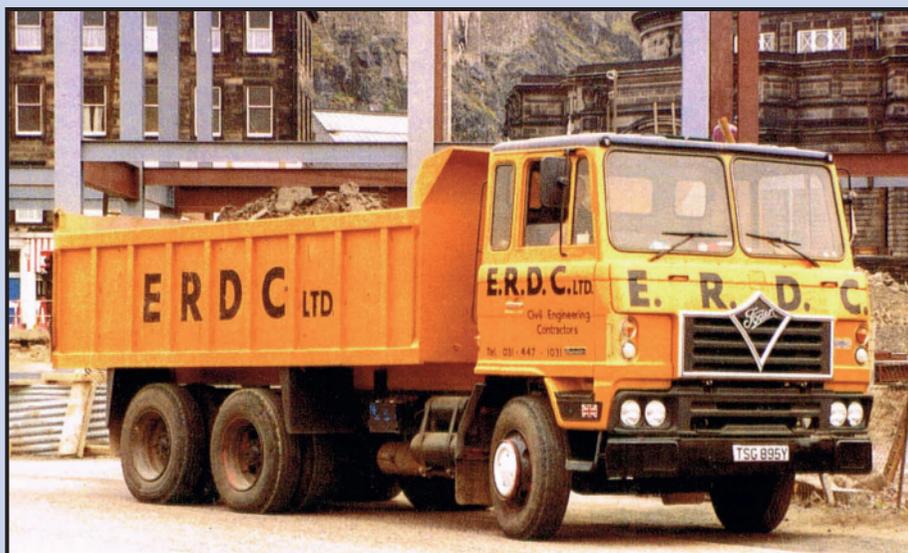


# GARDNER

## *Engine Forum*



*Spring 2014*

No. 25

[www.gardnerengineforum.co.uk](http://www.gardnerengineforum.co.uk)



*Engine  
Forum*

Membership  
Application

Title	Mr / Mrs / Miss / Dr / Other		
Forename(s)			
Surname			
Address			
	Post Code		
Telephone Number		Ex Directory	Yes / No
Mobile			
Email Address			
Engine Model			
Engine Serial Number			
Engine Application	Stationary	Road	Marine
Year of Manufacture			
Name Vehicle /Vessel			
Signed		Dated	
Any Other Info			

This information will be held on a computer database

Membership fee £10.00 per annum (UK) £18.00 per Annum (Overseas)

Renewable on the anniversary of joining,

Payable by cheque electronic funds transfer or standing order.

Standing order mandate is available at [www.gardnerengineforum.co.uk/subscribe](http://www.gardnerengineforum.co.uk/subscribe)

Please complete the above and send to

Mr J McCool

Membership Secretary G.E.F

Artasooley,

Benburb

Dungannon

N Ireland

BTB71 7LN

Tele 07802 57441

Email:-[tangent.gardner@gmail.com](mailto:tangent.gardner@gmail.com)

## Gardner Engine Forum Philosophy

“The aims of the Forum are to promote and foster interest in all Gardner engines”

### Forum Officers

Chairman: Mike Johnson  
5 The Green, Wrenbury  
Nantwich, Cheshire  
CW5 8EY Tele 01270 780093

Secretary: Yvonne Crane  
7 The Green Wrenbury  
Nantwich, Cheshire  
CW5 8EY

Treasurer: Judith Gray 29 Verity Walk  
Wordsley Stourbridge West Midlands DY8 4XS  
Tele 01384 827745

Membership Secretary: Joe McCool, Artasoooley,  
Bendurb, Co Tyrone, Northern Ireland BT1 7LN  
Tele 07802 572441

Editor-Webmaster: Steven Gray 29 Verity Walk,  
Wordsley, Stourbridge, West Midlands. DY8 4XS  
Tele 01384 827745

Andrew & Linda Kemp  
Korna Cottage  
Notts  
NG13 9JJ

Note 1: Please note that all information in this publication is given in good faith and is not necessarily checked for accuracy and hence the Gardner Engine Forum cannot accept responsibility for any errors.

Note 2: All material contained in this newsletter is the copyright of the Gardner Engine Forum and must not be reproduced without permission

Note 3: The Gardner Engine Forum does not specifically endorse advertisements placed in this publication and it does not accept responsibility for the products advertised.

<b>Contents</b>	<b>Page</b>
Chairman's Notes Editors Piece	2
A.G.M Notice	3
Minutes of 2013 A.G.M	4
Diesel Motorcars	7
Rust: Public Enemy No 1	12
Gardner Triumph's in Epic Northwest Passage	14
Engineering Excellence Brochure	16
Murphys Law	18
Somerset Steam and Country Show	19

**Advertising Rates:**  
**Free for Members Personnel Ads**  
**Trade ½ page**  
**£25 per 2 editions**

### **Cover Picture**

Foden at work  
In Edinburgh

Photo by John Sandilands

## Chairman's Notes

I was busy, busy just before Christmas getting the boat ready for a winter cruise up the Llangollen Canal for a fortnight or so. Incessant lower back pain caused me to cancel the trip and a visit to the doctor's after the festive season was very revealing. I was diagnosed with prostate cancer on New Year's Eve and admitted to hospital a few days later with that and pneumonia and pleurisy.

In early March I am now out of hospital, after two separate stays, and am eating almost normally after losing three and a half stones in weight. Even Joe, the landlord of the Cotton Arms, was worried I was wasting away and has been round with a large beef stew.

My intention is now to fight this illness as far as possible, and return to good health, continue to chair the Forum and help run its affairs, and see as many of you as can attend the forthcoming AGM in April.

Mike

## Editors Note

It is now some 13 years since the formation of the forum, of the total number of members we have 80 whom have been members from that first year. The forum was set up with the support of L Gardner and Sons who were still manufacturing, this changed not long afterwards with the final demise of the company, Since the formation of the forum a total of 24 (this being the 25<sup>th</sup>) newsletters have been published each of which has had some content which was directly relevant to the Gardner Marque. As may be expected finding relevant content is becoming harder to source, do you have any old magazine articles or some experience that could be written up which would be of interest to other members. Photo copies scans or even hand written articles are needed if we are to continue to be able to produce the newsletter on a regular basis. Copy can be emailed to [gardnerengineforum@blueyonder.co.uk](mailto:gardnerengineforum@blueyonder.co.uk) or by post to the address on page 1

Steve

# **NOTICE**

**ALL MEMBERS OF THE GARDNER ENGINE FORUM**

**TAKE NOTE**

**THE ANNUAL GENERAL MEETING**

**OF THE**

**GARDNER ENGINE FORUM**

**WILL BE HELD AT  
THE ANSON ENGINE MUSEUM  
ANSON ROAD, POYNTON, CHESHIRE, SK12 1TD**

**ON SATURDAY 26 APRIL 2014**

**AT 2.00 PM**

**ITEMS FOR THE AGENDA TO BE WITH  
THE SECRETARY, MRS YVONNE CRANE,  
7 THE GREEN, WRENBURY, NANTWICH, CHESHIRE,  
CW5 8EY  
BY 14 APRIL 2014**

**NB THIS NOTIFICATION IS FINAL.  
NO FURTHER COMMUNICATION BY POST  
WILL BE SENT OUT PRIOR TO THE AGM**

MINUTES OF ANNUAL GENERAL MEETING  
SATURDAY 1 JUNE 2013  
2.00 PM  
THE CONCERT ROOM  
COTTON ARMS PUBLIC HOUSE  
CHOLMONDELEY ROAD, WRENBURY, CHESHIRE, CW5 8HG

PRESENT:

COMMITTEE: Mike Johnson (MJ) - Chairman  
Steve Gray (SG) - Editor-Website Manager Judith Gray (JG) - Treasurer  
Yvonne Crane (YC) - Secretary Linda Kemp (LK) - Committee Member Andrew  
Kemp (AK) - Committee Member Colin Paillin (CP) - Committee Member

PRESENT:

MEMBERS: Mimi Alderman, Richard Alderman, Ian Ashcroft, Joan Ashcroft,  
Peter Bull, Neil Ecclestone, John Dickson-Simpson, Mick Edge, Edwin Fasham  
Peter Freakley, Ian Gilbody, Andy Hehlyar-Brook, Alan Imrie, Charles Mills,  
John Naylor, Terry Olds, David Pemberton, Pat Roberts, Simon Roberts, John  
Sandilands, John Smith, Mike Stoddard, Paul Syms, Robin Wighton .

APOLOGIES: David Dixon, Tim & Sara Millward , Penny Heath, Paul Robinson,  
Joe McCool.

WELCOME

The Chairman welcomed everyone and opened the meeting at 2.00 pm.

MINUTES OF LAST MEETING

The Chairman read out the minutes of the last AGM and these were signed as  
being a true and accurate statement.

Proposed by Mr A Kemp, Seconded by Mr Charles Mills.

MATTERS ARISING

There were no Matters Arising from the minutes of the last meeting.

CHAIRMAN'S REPORT

The Chairman said there was nothing significant to report. A fair amount of  
organisation had gone into this latest Gathering at Wrenbury.

TREASURER'S REPORT

Copies of the accounts for the year were passed to the floor.

The Treasurer said there was nothing to add, other than because we did not have a rally last year there was a figure of £202.20 being excess of income over expenditure.

#### MEMBERSHIP SECRETARY'S REPORT

The Chairman said membership is static. We sign up about 10 new members every year. We are at the 170 mark. 32 people may re-join or not.

#### ELECTION OF OFFICERS

The Chairman stated he understood everyone on the Committee was willing to stand again. It was proposed that the current members of the Committee were elected en bloc. This was agreed unanimously.

Proposed by Mr Alan Imrie, Seconded by Mr A Hellyar-Brook.

#### UPDATED MEMBERSHIP LIST

John Naylor had requested if there was the possibility of having an updated membership list.

The Chairman said we will sort this out, by having it included in the journal, as a separate list.

#### GARDNER ENTHUSIASTS

Paul Smith had requested this item to be put on the agenda. The Chairman said he had heard of people having lax delivery dates, and non-delivery of items which they have paid for.

Charles Mills said he has been talking to Trevor Mason. He has been told he will not get his goods.

The Chairman advised anyone dealing with them to be wary. They are apparently still trading.

#### FUTURE RALLY VENUES

The Chairman said Paul Syms had very kindly offered to arrange a Gathering at Bugsworth Basin in 2 years' time. It was mentioned that 2/3rds of the canals are in the North West and Midlands.

Someone mentioned Stobarts at Runcorn. There is a lot of commercial activity there.

The Chairman mentioned that this year, at Wrenbury, we are here for free. Some places would want £2,000 for a tarmacked car park. Walsall was mentioned as another venue. Dudley was suggested as a possible venue, but the Chairman said who was going to organise it?

Stoke Bruerne was another place suggested. There is some road access. It would have to tie in with the Museum. Boat moorings are limited.

Castlefields was mentioned. The land belongs to the Council. There are a lot of wine bars and the Chairman said he would be very wary.

The Chairman said health and safety needs to be kept to a minimum.

The Chairman said he would recommend us going back to Bugsworth in 2 years' time.

Terry Olds mentioned Stoke Works; there are clubs, pub, hard standing. It is a linear site. Steve Gray said he would like the idea of Stoke Works. Norbury Junction was also mentioned.

The Chairman said to leave it to the Committee and some investigation will be done.

Someone asked about what is involved in organising a Gathering.

The chairman said 90% is common sense. Getting the welcome packs together is quite difficult. No risk assessment was needed at Wrenbury. This is easier to organise.

The insurance for Wrenbury is approximately £150 for the weekend. It will be thousands if admission to the paying public was allowed.

#### ANY OTHER BUSINESS

It was mentioned that with the majority of people being on e-mail, we may save some money on postage. A list of e-mail addresses would be needed, no telephone numbers. We can put telephone numbers in with the approval of the person.

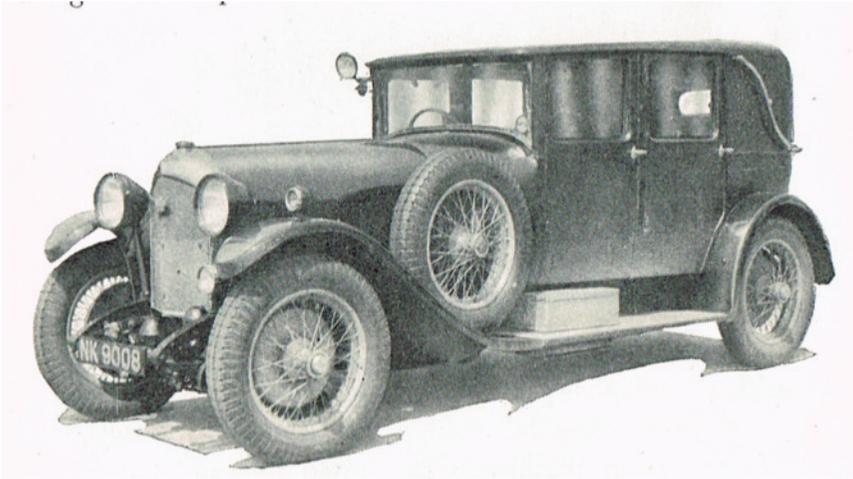
Re Gardner Parts. They are still functioning. Leyland Parts have taken them over. They are still very helpful when contacted.

The Chairman thanked everyone for attending, and closed the meeting at 2.30 pm.

## Diesel Motorcars.

DIESEL power for many types of road vehicle is now accepted as best, both mechanically and economically. The application of the oil engine, however, to private and racing cars has presented a number of knotty problems to those enterprising pioneers who have spent much effort and money in their solution.

It must be remembered that the petrol-driven car has reached a high state of perfection and the substitution of an oil-engined power unit calls for



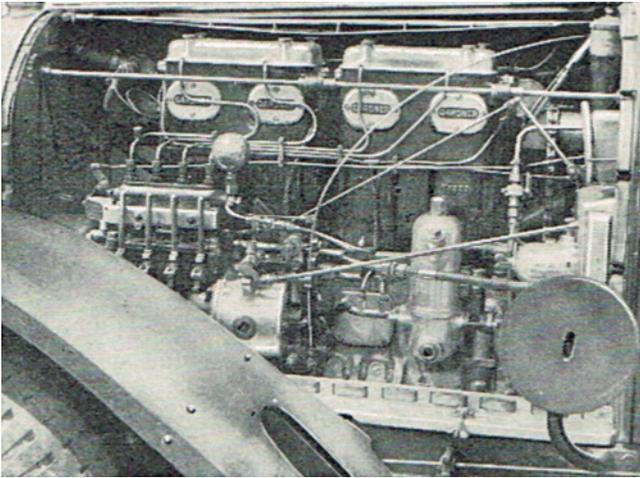
The Bentley car with a Gardner oil engine that covered 2,350 miles in the Monte Carlo Rally of 1933.

some justification. Admittedly there are the oil engine's inherent advantages of economy in operation and immunity from the risk of fire. Against these considerations we must place those of cost and, hitherto, the necessity for more robust construction both of engine and chassis.

The outstanding advantage, however, of the Diesel over the petrol engine lies in the fuel consumption, the fuel consumption rate of the oil engine being about half that of the petrol engine of corresponding power. In addition, the question of fuel price disparity must be taken into account in many overseas countries. In Britain there is little difference in prices of fuel oil and petrol respectively, a circumstance that does not necessarily pertain abroad.

Another point of interest to exporting oil engine manufacturers is that fuel oil in the tropics does not evaporate as does petrol and, further, is not so subject to pilferage.

In this connection much of the British pioneer work has been done by F. Perkins, Ltd., of Peterborough, and one of their latest designs represents a marked step forward in the adoption of Diesel power for private cars. An



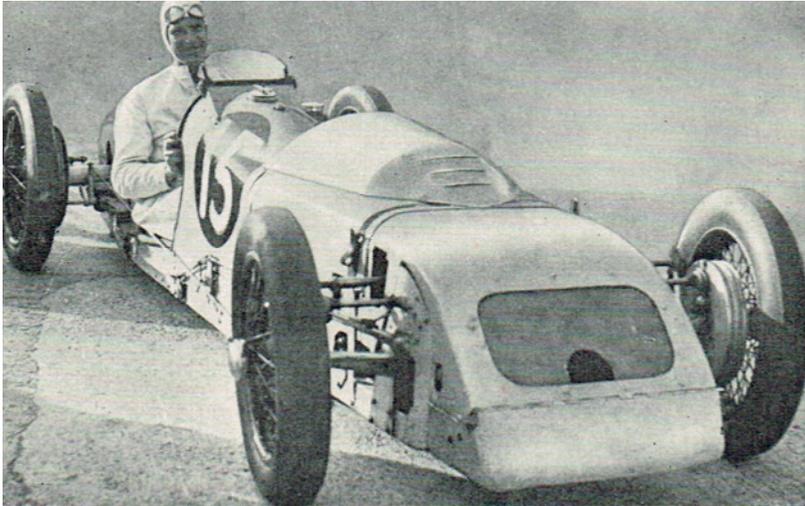
The Gardner four-cylindered engine fitted to the Bentley car in the 1933 Monte Carlo Rally. the 1933 Monte Carlo Rally.

excellent example of oil-engined private car practice is illustrated by the photograph on page 9 of a Nash 90 m.p.h. saloon fitted with a Perkins Aeroflow oil engine. Other cars fitted with these engines have given very satisfactory results both at home and abroad, standing features being the smooth running and lack vibration of the power units.

In the realm of racing, the Perkins Diesel engine was gaining world records as early as 1935. The first world records Diesel-engined cars were set up at Brooklands by Mr. Reg Munday in October, 1935, using a Perkins "Wolf" four cylinder oil engine similar to those fitted to a number of private cars. The flying kilometre record was first established at 94.70 m.p.h. The Wolf engine in the record-breaking car developed 62 b.h.p. at 3,000 r.p.m.

The present holder of the oil-engined car record is Capt. G. E. T. Eyston (of World's Land Speed Record fame) with a speed of 159.1 m.p.h. over the flying kilometre with the 17-litre 12-cylindered car, "Flying Spray," with an experimental aircraft-type engine.

Yet another record set up by Capt. Eyston with a Diesel-engined car is noteworthy as regards reliability at sustained high speed. This was the 24-hour record established with his car "Black Magic," on the Montlhery track in April, 1937. The car was fitted with an A.E.C. six-cylinder Diesel, identical with the type used in many London omnibuses. Taking turns with A. Denly, Capt. Eyston covered 2,329.2 miles in 24 hours at an average speed of 97.05 m.p.h.

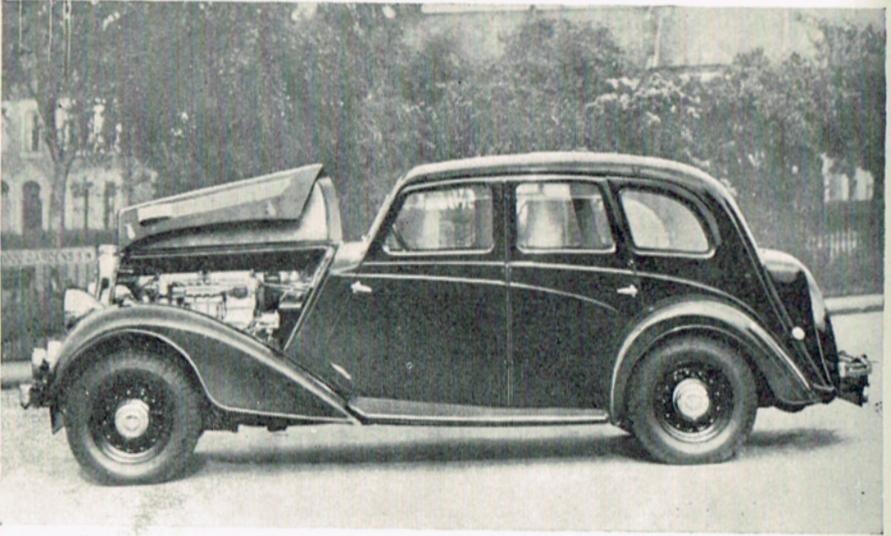


Mr Reg Munday, at Brooklands, in his record breaking car fitted with a Perkins four cylinder oil engine

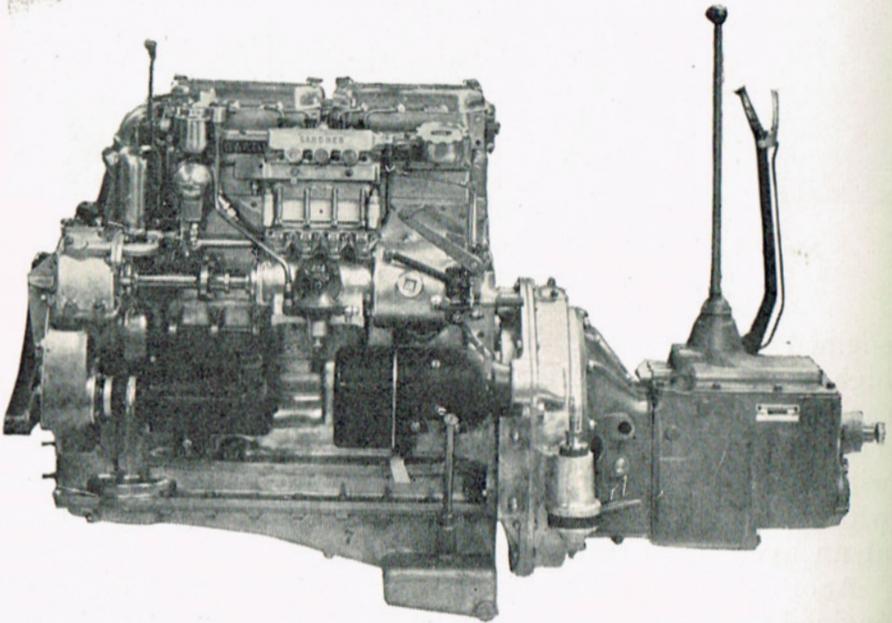
Another engine that has played an important part in oil-engined car development is the Gardner, made by Norris Henty and Gardners, Ltd., of Patricroft. A Gardner-engined Bentley saloon car, shown in an illustration, competed in the Monte Carlo Rally in January, 1933.

The Bentley, driven by Lord de Clifford, finished fifth in the Rally, after a journey of 2,350 miles from Tallinn, on the Baltic. Appalling winter conditions prevailed, but no serious mechanical defects developed throughout the journey. The engine was a 1932 four-cylindereed Gardner of 5,570 c.c. capacity, developing some 70 b.h.p.

Considerable development of the oil engine for private car application has taken place on the Continent of Europe. A particularly interesting exhibit at the Paris Motor Show of 1936

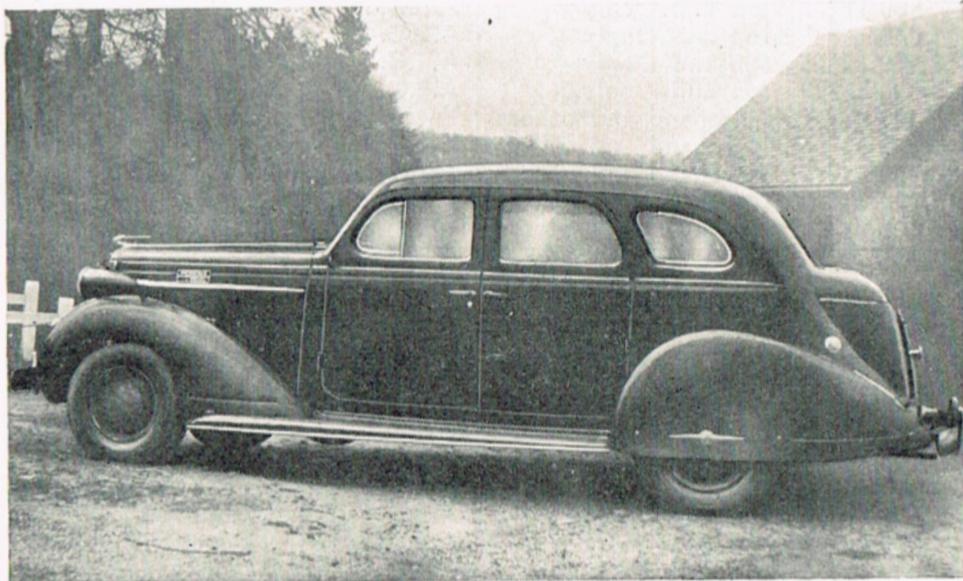


**Wolseley saloon car fitted with a Gardner LK type oil engine.**



**Gardner LK type oil engine with Fuller gearbox for installation in Chevrolet Master saloon car.**

was the German Hanomag car fitted with a four-cylinder engine of the same make. The engine capacity was 1.6 litres, giving 32 b.h.p. at 3,500 r.p.m. An ante-chamber combustion system was adopted, and starting from cold was ensured by an electrically heated hot spot. A feature of the



**A Nash 90 m.p.h. saloon fitted with a Perkins Aeroflow P6 oil engine.**

engine was the use of light alloys to obtain a low weight in proportion to the power output. Other Continental makes of Diesel engine for private cars include the 2.5-litre Mercedes-Benz and the 1.3-litre Citroën-Ricardo.

As we close for press we learn that an oil-engined car is to be marketed in this country as a standard product, whilst a Diesel car is also being put into commission by a member of the staff of The Oil Engine.

This article is taken from the Oil Engine Manual published in 1936, loaned by Dr Ian McKim Thompson.

It is interesting to note that it has taken another 60 years before oil engines have become more common place in mass production cars (ed)

## Rust: Public Enemy No I

Following on from Peter Freakleys article about Salt corrosion in the last issue, John Naylor sent in this submission from Stationary Engine magazine ISSUE 307 OCTOBER 1999

By coincidence a couple of features in this issue and a recent conversation turned my mind to the subject of rust this month. First, I was talking to Jim Punter about the subject. Jim is a very interesting, lively character. He is the editor of the very successful trade magazine 'MOT Tester & Authorised Examiner', he also owns his own MOT testing station, so he has had regular experience of the vagaries of rust. Apart from this he is a pilot, a registered DTI business consultant, has a science degree and was at one time a government rocket research scientist.

Later, as an industrial research scientist he was engaged in various experiments into the way rust works. In one experiment he took new unused mild steel sheet metal with the mill scale still on and rusty steel, shot blasted both down to bare metal, and, exposed them in laboratory conditions to all the rust inducing elements such as cold, excessive damp and lack of circulating air.

Well you might have guessed the result already - the previously rusted metal returned to rust at a rate several times quicker than the new metal which had never previously experienced rust.

It was as though the previously rusted metal had been imprinted with a 'rust memory' and at the slightest provocation couldn't wait to return to a happy state of rust.

Apparently it was all something to do with 'sulphur salts' from the rust getting embedded into the surface of the metal during the process of mechanically cleaning off the rust. Once embedded they were able to accelerate the rusting process faster. In the case of cast steel mechanically removing the rust would invariably accelerate the rusting process afterwards at a greater pace than if the rust hadn't been removed in the first place. The only answer to avoid this was to chemically treat the surface to neutralise the sulphur salts, or to remove the rust with chemicals. Does this give you any clues to the behaviour of rust On stationary

engines? Well David Edgington's piece in this issue about 'gone-back' engines (engines which have been completely restored some years ago and now need re-restoring) rung a bell with me. As David mentioned it always seems that unrestored engines can sit around happily for years without apparently getting much the worse for rust, as long as they are not completely exposed to the elements, while restored engines can rust a lot more easily. And if an unrestored engine is exposed to elements alongside a restored engine, it is the restored engine that seems to decline most rapidly with rust.

So there you have it. A good reason, or excuse, for not always restoring the Paintwork on a stationary engine. And from Walter van Gulik's report on the Iueneren show it seems that this idea is proving more and more popular on the continent. Something very much in me with what Bob Weight was advocating in Stationary Engine a few months ago, namely that an engine with vestiges of original paintwork should simply be given a mechanical restoration and not 'over-restored'.

It is a good point, but at the same time the engine scene would be very much the poorer if we didn't have some engines restored to the condition they left the factory in (or even better). there are also many instances where the owner has no option but to completely repaint.

However, it is worth remembering that keeping the engine as far as possible in 'as found' or original condition sometimes has a lot going for it!

Gordon Wright

6LW powered Scammell  
at the 2009 Rally at  
Dudley



## Gardner Triumphs in Epic North-West Passage Journey

# GARDNER

‘... A real tribute to a diesel which has been regarded as the best of its kind ‘



The Mabel E Holland locked in the ice at Depot Bay in the Canadian Arctic.

AN ASTONISHING saga ended when David Scott Cowper sailed his 42ft twin Gardner-engined converted lifeboat, Mabel E Holland, up the Tyne and docked at his home port of Newcastle.

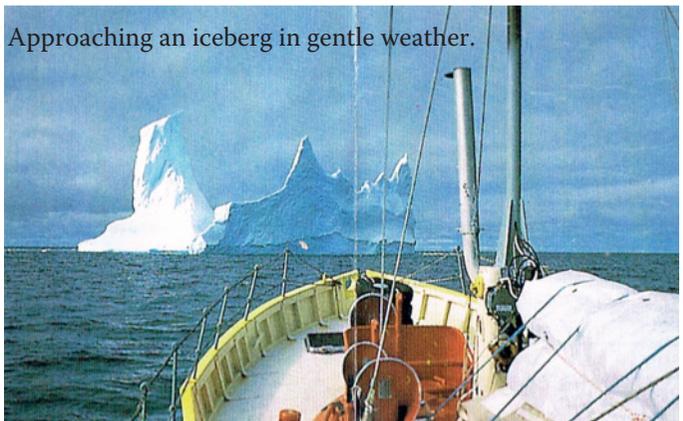
Four years before, he had set out to circumnavigate the world via the hazardous North-West Passage across the Arctic region of Canada. Half way, he had got stuck in thick ice and had to abandon the vessel after being rescued by a Canadian ice-breaker.

Returning in the spring, he found Mabel had been severely squeezed and sunk. Undaunted, he hauled out the battered little yellow boat. . . but that year the ice did not clear and he had to leave her for a second winter.

Finally, in 1988, he got her out and, after two months' repairs, she was as seaworthy as ever, and he escaped for the long haul, down through the Pacific, sailing one 4,000-mile leg non-stop.

Quietly-spoken David said the boat - which, incidentally, had taken him round the world once before - was a tribute to its builder, William Osborne of Littlehampton.

It spent the first 25 years of its life on rescue duties," he told Power News. The really amazing performance was from the engines: twin 50hp 4LW Gardners which



Approaching an iceberg in gentle weather.

were the original power units fitted in 1956. They gave me no trouble and I have never needed to touch the fuel injectors, which have not once been removed from the engine even after 14,000 hours and 7075,000 miles of operation. After being submerged, the engine was simply flushed through with oil and has worked perfectly ever since - a real tribute to a diesel which has always been regarded as the best of its kind. Interestingly, the injectors are Gardner's own make as was

the 1:1.96 reduction gear-box.

A major modification to prepare the vessel for use in the ice, was a special stainless steel rudder he designed. The work was carried out by Service Welding Ltd, of Newcastle-upon-Tyne, which sponsored the epic trip. To give added protection, the two propellers were housed in stainless steel



Negotiating the pack ice. Eventually Mabel was to get stuck.

tunnels fixed to the hull of the vessel.

This arrangement functioned perfectly throughout the trip. . . in heavy ice at temperatures down to minus 60°C and tempestuous tropical conditions where temperatures rose to 120 C," David comments.

Is he putting his feet up and retiring gracefully, perhaps to return full-time to his real profession as a chartered surveyor? By no means.

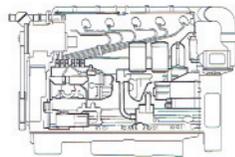
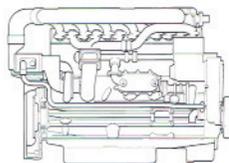
He has recently bought a not-so-old lifeboat, the Three Sisters, formerly used at Walton and Frinton on the Essex coast and is planning another marathon circumnavigation. "The one thing I'm not doing is getting rid of these splendid old Gardner engines," he says.



An inquisitive polar bear - cuddly but dangerous.

Originally published in the Perkins Power News Vol 8 No 1

# Engineering Excellence



## AUTOMOTIVE

As one of the world's leading names within the bus industry, Gardner has been at the forefront of the drive towards reducing overall running costs for passenger

vehicles. Today, the company supplies a full range of products and services designed to keep the life costs of a vehicle to a minimum.

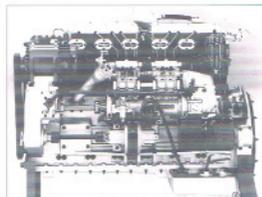
## NEW ENGINES TO EURO 1 SPECIFICATION

For diesel engine manufacturers, Euro 1 legislation is the norm for new engines. Recently, the latest Gardner LG1200 bus engine easily passed its Euro 1 milestone and has been homologated to meet the challenges of this legislation with minimal changes.

The LG1200 engine, which is available in three ratings - 156.5 kw (210 bhp), 175 kw (235 bhp) and 205 kw (275 bhp) - is an all water-to-air intercooled range, with the

210 bhp version of the LG1200 engine meeting all of the standard UK operating requirements, whilst the 235 and 275 bhp versions are ideally suited to more demanding road traffic environments.

Elsewhere in the world, there is still a regular demand for non Euro 1 engines and here, the LXB and LXCT, in both vertical and horizontal format, remain the standard by which other engines are judged.



# GARDNER

## GREEN REMAN ENGINES

For an operator to institute a "green" policy for their existing bus fleet, the most viable means is to plan a programme of installing remanufactured engines into current vehicles as and when a major engine overhaul is required.

Gardner has led the field in offering remanufactured engines for many years. However, it has been their policy of offering "green" remanufactured engines that has caught the attention of most bus companies. It is now almost 3 years since Gardner sold their first green reman engine and today, over 85% of all Gardner remans supplied are the green version.

At Gardner, all reman engines are in complete alignment with the new engines build programme that automatically meets current type approval.



## BUILD YOUR OWN GREEN ENGINES

For those operators with their own engine rebuilding facilities and who want to rebuild Gardner engines to a "green" specification, Gardner have introduced a "Green" Top Overhaul Kit for their engines.

Although the end product cannot be claimed to have a homologation certificate, it will be to green specification as it comprises a cylinder block, 2 cylinder heads, 6 pistons, a set of filters, a gasket set and injectors and a cambox governor assembly, all built to "green" standards.

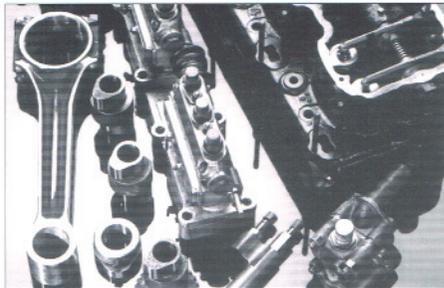
## AFTER SALES SUPPORT

Having been involved in diesel engines manufacture for over 60 years, Gardner have developed a worldwide network of distributors to support their products in service. Experts in their own field, the distributors are supported by Gardner's full parts and service operation based at the Manchester engine factory.

Fast moving parts, extended product warranties, service training and comprehensive application engineering facilities are part and parcel of the Gardner approach to the bus industry, an approach that provides operators with products that will enable them to benefit

from running vehicles with proven low whole life costs.

Further details about the full range of products and services available from Gardner can be obtained by contacting the Marketing Dept at the address below.



# GARDNER

All information given in the leaflet is substantially correct at the time of printing but may be altered subsequently by the Company. Intending purchasers should therefore check for current data at the time of purchase. © Copyright reserved by Gardner 1993. Publication No: 93/QPR/TG-GENERAL

Patricroft, Eccles, Manchester M30 7WA, England. Tel: 061-789 2201 Telex: 668023 Fax: 061-787 7549  
Specialist products from the Perkins Group of Companies. 

## Murphys Law

Ever since the first aviation mechanic crossed -a pair of flight control cables, the universality of Murphy's Law has been continually demonstrated. It extends to all systems. The logical way of hooking up control or electrical cables, pitot-static plumbing, hydraulic lines or fuel and oil lines, is often the wrong way. The insidious characteristics of Murphy's Law must be brought into focus when considering the billions of man hours spent each year in the maintenance and repair of aircraft.

Murphy's Law was first cast by Joe Chase, Editor of the Flight Safety Foundation's Mechanics Bulletin in early 1955. It grew out of the precept developed and published by the Foundation in its Design Notes that "Procedures for adequate maintenance and operating practices established by designers should be consistent with average human effort, ability and attitude."

The Law as coined reads:—

"If an aircraft part can be installed incorrectly, someone will install it that way." Unfortunately, these clever words lend them selves to many variations and interpretations; consequently some-people use the label Murphy's Law for things far beyond the original intent. The concept behind the Law is directly related to the original design of a piece of hardware. The idea is that if the drawing board types design a piece of equipment in such a manner that it may be installed in a way other than intended, some dear soul will surely put it on the wrong way.

When we start modifying the Law to include errors not related to design characteristics, we destroy the effectiveness of the Law. The proper cause of a mistake doesn't get the proper attention and we tend to say, "Oh well, you must expect an occasional blunder like that. After all, there is a 'Murphy' in every crowd." Once we become conditioned to this outlook, we cease asking the all-important "why?" and the system for possible correction is by-passed and the pattern for recurrence is established.

For safety's sake please keep Murphy in his proper place and stick to the original Law.

Corollaries to Murphy's Law have sprung from all over the industry. While our aims are to preserve the original meaning of the Law for its intended use, we present these corollaries to illustrate views of others.

If anything can go wrong, it will.

It is impossible to make anything foolproof because fools are so ingenious.

Continued on page 21

# SOMERSET

# Steam and Country Show



# 2014

The Old Miners Arms  
Chew Road  
Winford  
North Somerset  
BS40 8EY

January 2014

Dear Exhibitor

I have pleasure in inviting you to attend the Somerset Steam and Country Show on the 18<sup>th</sup> 19<sup>th</sup> and 20<sup>th</sup> July 2014. Thanks to support from exhibitors in 2013 and a good public attendance we are now in a position to put this year's event on without having to ask exhibitors to contribute to an amenity fund. This was always intended to be a temporary arrangement and we hope it will not be re-introduced.

We hope that you will be able to take part in the traditional Friday Road Run and also join us for a new venture on Friday evening. "Cider and Steam". This will commence at 7.30 pm and will feature a higher profile band than usual plus support, the fairground, our usual excellent bar and variety of refreshments, plus other exhibits and entertainment. There will be a public admission charge of £5, but of course admission to exhibitors will be free. Saturday evening will be for 'exhibitors only' as usual.

You are of course welcome to camp before and during the show as usual We do hope that you will be able to attend and look forward to seeing you again. If you please compete and return your entry form to me at the address above together with a large stamped address envelope by 31<sup>st</sup> May.

With best wishes from all at Somerset Traction Engine Club

Simon Martin  
Section Steward

Somerset Traction Engine Club Benevolent Ltd.  
Company Secretary Mrs. M. Goold, 12 Whitebrook Lane, Camerton,  
Bath, BA2 0PN



18th 19th 20th July 2014  
Entry form

Please use this form for one entry only.  
Commercial, Emergency Vehicles & Landrover  
Steward Simon Martin 01275 474486  
[simon@simonmartin3.wanadoo.co.uk](mailto:simon@simonmartin3.wanadoo.co.uk)

NAME.....

ADDRESS.....

.....

POSTCODE.....

E-MAIL ADDRESS .....

PHONE NO.....MOBILE NO.....

**DETAILS OF YOUR EXHIBIT**

MAKE .....

MODEL .....H.P./C.C.....

REGISTRATION NO.....YEAR OF MANUFACTURE.....

ADDITIONAL INFORMATION.....

.....

.....

.....

IF ADDITIONAL VEHICLE PASS REQUIRED FOR SUPPORT OR EXHIBIT DELIVERY VEHICLE

PLEASE GIVE REGISTRATION NUMBER.....

**DECLARATION**

I declare that during the whole period of the Rally, my entry will be covered by a public liability policy of insurance, including Rally use, having a limit of indemnity of not less than £1,000,000 for any one accident. I further declare that in the case of any event taking place wholly or partly on the Public Highway, that the vehicle hereby entered is covered by insurances as required by the Road Traffic Act 1960, which is valid for such part of this event as shall take place on roads as defined by the Act. I confirm that the driver(s) of any such vehicles entered, hold or has held and is not disqualified from holding or obtaining a license to drive the vehicle of the appropriate class.

Specified environmental conditions will always be exceeded.

Interchangeable parts won't.

Any wire or tube cut to length will be too short.

Identical units tested under identical conditions will not be identical in the field.

Availability of a part is inversely proportional to the need for the part.

Hermetic seals will leak.

After an instrument has been fully assembled, extra components will be found on the bench.

After the last 16 mounting screws are removed from an access plate, it will be discovered that the wrong access plate has been removed.

A dropped tool will land where it can do the most damage (also known as the law of selective gravitation).

Components that must not and cannot be assembled improperly will be.

The most logical way to assemble components will be the wrong way.

The more innocuous a design change appears, the further its influence will extend.



## ASHORE'D BOAT MOVING

NARROWBOATS AND CRUISERS  
MOVED ON ALL INLAND WATERWAYS.

OVER 25 YEARS EXPERIENCE.

C.C.B.M. & R.Y.A. INLAND WATERS HELMSMAN QUALIFICATIONS.

[www.ashoredboatmovingservices.co.uk](http://www.ashoredboatmovingservices.co.uk)

Email: [mike@ashoredboatmoving.co.uk](mailto:mike@ashoredboatmoving.co.uk)

Tel: 07719 034 583



Centurion Court  
Centurion Way  
Leyland  
Lancashire  
PR25 3UQ

Tele 01772 642460  
Fax 01772 621333

## C•M•D ENGINEERING



Telephone 07712 052635  
Lord Vernons Wharf, Higher Poynton  
(adjacent to Bridge 15, Macclesfield Canal)

### Oil Engine Spares & Service

# WALSH'S ENGINEERING LTD

COMMERCIAL DIESEL ENGINE SPECIALISTS

Barton Moss Road



Eccles  
Manchester  
MR30 7RL

Parts & Services

Tele:- 0161 787 7017 Fax:- 0161 787 7038

E Mail:- walshs@gardnerdiesel.co.uk www.gardnerdiesel.co.uk

# Gardner Enthusiast

Parts and Services for the Gardner Engine

Unit 22A  
Monument Business Park,  
Warpsgrove Lane,  
Chalgrove, Oxford.  
OX44 7RW.

Tel: +44 (0) 1865 400703

[www.gardner-enthusiast.com](http://www.gardner-enthusiast.com)