

## Humps and Pipes



Issue No.45

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# Humps and Pipes

The quarterly newsletter of the Ronart Drivers' Club

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Cover Page Photo – Arthur's done it again  
- the new Vanwall single-seater.



## FROM THE EDITOR

Always apologising for the lateness of things, it seems. I might as well admit here and now that there will be no Q3 issue - just a second-half issue after Christmas.

It's a long time past, but the Christmas Lunch again went very well. Probably for the last time at Oxford though. And probably the longest AGM meeting in our history. That sounds boring but, for once, we had a lot of input from the members present.

On the administrative front, our Treasurer, John Ellis has made a proposal to get all the members to sign a direct debit for their subs, and to get the payments timed for January or February each year, so that 1) fewer people forget & have to be chased, and 2) we could get the membership funds more in kilter with the financial year-end.

John could then reconcile DD statement credits against member ID numbers, and also save Simon Sutton time & postage.

There was general contentment at the possibility of holding the "Christmas" lunch in January or February. So plans for this will be published soon.

As I write this, the Autumn long-weekend in the Dales is approaching. David Small really hoped that a shorter trip, closer to homes, would draw out some members who seldom join the more extensive trips.

Disappointing - it didn't work! If there is something amiss with the options we are providing, please let me or David know.

There was good attendance this year at Henry & Jane Weitzmann's final Open Day. Many thanks to the Weitzmann family for their hospitality and all their work in setting this up.

Arthur rolled up in the superb Vanwall V12 single-seater, which looked and sounded outstanding.

Maybe some of you saw the feature article about it on the front/second page of the Saturday Telegraph Motoring Section? Arthur was surely chuffed to bits!

We will have a reprint of the review and more of the pictures in our next issue, so do not despair if you missed it.

Freddie Trodd is one of the privileged few to have experienced a drive of this unusual motor, and his reflections (if that's the word) are printed in this issue.

Congratulations to Gerard McLaughlin and Carolyn (previously Downes) who were married on 23rd July. We wish them every happiness and hope the Ronart relationship will continue despite their Mercedes interests..

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*The following is an actual advertisement in an Irish Newspaper..!*

1985 Blue Volkswagen Golf

Only 15 km

Only first gear and reverse used

Never driven hard

Original tyres

Original brakes

Original fuel and oil

Only 1 owner-driver

Wishing to sell due to employment lay-off

Please see following photo..... (next page)

Wait for it.....

This is good.....

## "WOGER THE WILD WONART WONDER BOY"

*Well Woger, taking the Wonart to work in the sunshine has been wonderful this week. The turning heads on the M25 wealy makes having a Wonart worthwhile.*

*The lead up to the summer has been busy hasn't it Woger? Had a Getwag gwearbox fitted just after Christmas. Gweat bloke in Portsmouth fitted and got it weady for me. Told Watchel it was going in for a bit of a tune up before the MOT, did not dare tell her I had changed something else on the car. Mind you had a bit of a shock myself when I got the bill. Woger! you must stop saying "Yes, go on then"!!*

*I told her I was not spending much on the car this year as all the bits and pieces I bought last year would see me through. Good job you're not Pinocchio Woger, as your nose would be longer than your dipstick.*

*We are supposed to be saving for the structural defects in the new garage we had built last year. Don't want it falling down aound my Wonart. Had a mate of mine wound to look at it, he's a big fellow, he stood there hands on his hip, sucked air through his teeth and said "Woger twust me". So that's ok then!!*

*Had to do some explaining when I still had the old Bwedish Leyland gwearbox in the garwage. First thing Watchel saw on the way to the washing machine. "What's that?" she said in the way that she wealy wanted to know, but did not want to look too bothered. Had I said the wong answer, I would have been in twouble. I said it was the new Wonart key wing, and laughed. But she looked at me as if I was stupid. I had to tell her it was a fellow Wonartier's and I was just storing it for him whilst he cleaned his shed out.*

*I am going to sell it, must put it in the magazine or E-Bay. I have heard there is a lot of money to be earned selling second-hand Jaguar parts. There's a thought Woger..... What did I do with those old XJ wing mirrors?*



## Back on the Road Again -

### - The Trials and Tribulations of W152 Ownership

By **Barrie Cannon**

In the last edition of Humps & Pipes the Editor printed that he thought my W152 (crashed only 25 miles from Calais on the 2002 Corsica trip) was nearly ready. This was indeed true and I finally got it back at the end of March 2004 and straightaway committed it to the proposed trips to Ireland and Provence.

I had been much frustrated by being Ronart-less for a long 1 year and 8 months. The reason for the delay was that I put the repair in the hands of a local man who I knew I could trust but who did it between other "bread-and-butter" jobs in his own sweet time. This man, Nigel Newth-Gibbs at South Ockenden, Exxes is not only an excellent mechanic but also a fibreglass expert – his speciality being Scimitars, Lotus and any unusual sporty cars. He is also a perfectionist and I knew he would miss nothing and do a good job. In fact the car is now better than new.

He had already put right various niggles and faults from the usual factory build-quality prior to the crash in France, and during the repair-rebuild discovered a few more.

Firstly the chassis needed a slight "pulling straight" at the front. Then a new steering rack, steering arm, and a new front wheel (to replace the now oval, banana-shaped one). He made an excellent job of repairing the torn and crazed nose-cone and scuffs to the bottom of the side panels. He also improved the fit and gaps between the various front body-panels and repaired the fixings to one front mudguard. The engine mounts were also straightened and strengthened.



Due to much scuffing and stone-chips over much of the car, two-thirds of the body was resprayed (very well) by a painter who shared his premises.

So, after 4 years of ownership, it's been off the road for 2. In spite of this I would not part with it, as it gets phenomenal attention wherever it goes as you all know only too well – we are a lucky, exclusive bunch.

To complete the story up to August 2004, I have also had an attractive custom-made air filtration system made of stainless steel by Swallow Engineering of Basildon who also replaced leaking carb gaskets and water-rail, and tuned the car. After the terrible, bumpy Irish B-roads, I've needed to have the back-end off the car in order to improve the petrol tank fixings as it has twice slid sideways. It now has stronger strapping and right-angle side-braces. At Tony Legon's suggestion the tank now stands on a wooden base to protect the bottom and has a board across the front, under the strapping, to prevent bulging that may lead to the baffle-welds breaking. The Irish roads also knackered the rear nearside damper after only 5000 miles, as we discovered and replaced while the rear was off. At the same time we raised the ride-height by 1.25".

Anyway the car is now A1 and ready for the Provence trip. I hope it will now at last give me some trouble-free fun with little further expense for a while – unless I crash it again!

## CLUB TOUR REPORTS

### Provence Trip – September 2004

by **Barrie Cannon**

I made up for lost time this year. Having spun my W152 only 25 miles from Calais on my first attempted Ronart holiday (Corsica 2002). I had a year-and-a-half frustrating wait during the slow repair process before I could risk it again.

I have written previously about the rebuild and the great success of the South Ireland trip in early August this year – now I was at it again only 6 weeks later.

This time it was David Mansfield's trip to Provence. I was not the only glutton for punishment though, as Peter & Wendy Jordan, David & Sue Mansfield, and David & Sue Small, also booked both trips. In the event the Smalls pulled out due to David's mother being very ill just beforehand. David Mansfield this time took his elder son Julian. I myself took friend Steve Sturgess who was with me when I nearly killed us both on the Corsica trip – he must have a death-wish.

The rest of the party to meet at Dover were Robert & Barbara Latham in a green W152, and Peter & Lin Atherton in their blue Lightning. This was the first time a Lightning had come on an RDC holiday and was naturally the "star-turn". Apart from these five cars we were to meet three other couples in France – Jean-Paul & Yvelise Gouzin, Mike & Ros Kanter, and David & Peta Lougher in a new Jaguar XKR.

David & Liz Mansfield last year bought a holiday/retirement home in Provence and it was here that some of us would stay. His Ronart was already down there and so he and Julian drove down in a small Peugeot. His intention was that the trip would allow him to prepare

*The "posh" villa at Draguignan*



their house plus assorted bicycles for the use of various holiday hirers as a means of income from the house when they were not there himself.

Anyway, we got to Lille without mishap (much to my relief, after 2002) where we were to get the sleeper car-train. Unfortunately they had new loading ramps with a high apex, which prevented the low W152s from boarding, as they would "hang".

After promises of a full refund we were suddenly hit with the realisation that we would now have to drive the whole way down France, some 700 or more miles in two days, with three couples in open W152s. We bit the bullet and made good progress, finally stopping in Dijon (about half-way) at around 9pm.



*David & Liz's Villa at Draguignan*

## CLUB TOUR REPORTS (Cont.)

Cruising constantly at 70-80mph for 7 hours with the buffeting wind and high noise-level, I felt was no mean achievement. Luckily all the W152s went perfectly. We stayed in a Hilton hotel and had a really average meal, but beggars can't be choosers at 9pm; have you ever tried to get a well-done steak in France? I gave up after three tries.

The next day was the same – noisy, windy and trouble-free but getting warmer as we went South.

David's house is just outside Draguignan which is about 50 miles South of the Gorges de Verdon, and 50 miles north of St Tropez; certainly an ideal area to live. The Kanters joined me & Steve at the Mansfields' house. The Gouzins were staying with local friends. The Lathams, Athertons, and Loughers had been given the use of a millionaire's house, on top of a hill, up a winding dirt-track, with wonderful views plus a giant swimming pool – very posh it was inside too. During the next week or so we would meet up, usually at David's, and he would dutifully lead us to all manner of interesting places, in between many odd jobs he had to do at his house. He was always up early and sometimes did not turn-in until 3am.



*The Ronart Diners' Club hits Aquinnes*

He took us to St Tropez which was nothing special, but the surrounding area had some stunning views and some beautiful hilltop villages with tiny streets, old towers, windmills etc. Also on the South Coast we went to Eze which is a fortified village – tiny streets, with the buildings all crammed together on many levels, hanging plants everywhere, seemingly growing out of the rock and walls – how did they water it all, I wondered? There was an exotic garden with stunning views along the coast. Another day we drove along the coast-road around St Raphael (where the car-train should have delivered us).



This part of the coast has many inlets, small bays and beaches, and changes to huge dark red cliffs after a few miles – very nice drive.

Another coast trip was a day to Monte Carlo/Monaco. This was an amazing experience for several reasons. The architecture was a mixture of olde-worlde, Art Deco pre-war opulence, mixed with modern futuristic, space-age buildings, all jostling for space in the limited room between beach and inland cliffs. Every shop and building oozed wealth. I've never been anywhere like it – a millionaire's playground. The best bit, though, was visiting the famous Monte Carlo Casino. This has a rectangular park in front with statues,

## CLUB TOUR REPORTS (Cont.)

fountains, flags, palm trees, and so on, which you drive around. The Casino is at the coast end, flanked by street cafés.

In front of the Casino are many of the best cars, Merc's, Ferrari's, the latest (BMW) Rolls



Royce and (VW) Bentley etc. Yet, in spite of all this, when we drove round in five W152s and the Lightning, people ran out of the cafés, cheering us and taking our photos. We got more attention than all the posh cars. It made us feel like famous celebrities. To get that kind of attention there, in one of the richest places on earth, was a great memory. It was so good we went out and came back again 10 minutes later. Arthur, you should have been there!!

Another day David led us to the Verdon Gorges which some describe as the French Grand Canyon (the French probably) but it is pretty impressive. When we got to the other end there was a lake where Steve & I, plus the Kanters hired Canadian canoes for an hour and paddled back up the steep gorge. The other lazy b\*\*\*\*rs just loafed around meanwhile.

Needless to say, on all these trips we had lots of drink stops and lavish lunches (the usual Ronartier style). The

## Les Arcs



weather was glorious as you would expect and we had many barbeques at both houses in the evenings. One evening the Mansfield house group ate at a restaurant in the nearby town of Les Arcs where it turned out to be "nouvelle cuisine" (i.e. big bucks for very little, served in a pretentious way). My first course was a joke but the berries dessert made up for it after I discussed the portion size. A local couple next to us had a large and a small dog sitting under their table. We then debated whether dogs should be allowed in restaurants. I said 'no' but Wendy and Ros thought they were cute. When they left, the puddle on the floor (luckily tiled) settled the point.

On the way home we had one-and-a-half days of beautiful Alpine scenery as we headed for Grenoble (we had now parted



## CLUB TOUR REPORTS (Cont.)



*Beaune*

from the Loughers, the Kanters, and temporarily the Gouzins). David made a detour to take us through the Gorge de la Borne, a narrow, shadowy, winding road with tunnels and rocky overhangs, which was quite long and a lot of fun. In this region we also saw some amazing cloud-banks rolling over mountain ridges. This alpine ridge around Grenoble has some amazing scenery. From then on the scenery was flat and got cooler as we headed North.

There were two more treats on our leisurely 4-day saunter home. The first was stopping in mid-France at the mediaeval town of Beaune. This is probably the prettiest French town I have seen with old city walls and many lovely old buildings and quaint back-streets.



*Gorges de la Borne*

We visited a 14th century hospice created for the poor: a very ornate building with central courtyard and multi-coloured roof-tiles. While in Beaune we also went to some cellars for a wine-tasting, sampling 16 different types – all too dry for my taste, but a fun experience. Beaune also produces a mustard mixed with blackcurrants which is better than it sounds.

We then went to the Epernay champagne region at the invitation of the Gouzins. They have a lovely thatched house (I didn't know they thatched in France). Jean-Paul showed us his several classic cars and plied us with good champagne. It was good to see them one more time. Jean-Paul had arranged for us to visit a friend of theirs who have a champagne production. We were given a tour and tasted 3 excellent varieties.

## CLUB TOUR REPORTS (Cont.)



All in all it was a great holiday, seeing a few old friends again, and meeting new Ronartiers. Peter Atherton was good enough to give me a ride in his Lightning in Epernay. This, and the Monte Carlo 'reception' were my highlights.

On behalf of the whole group I would like to thank David and Liz Mansfield for the excellent organisation and all his continual efforts to keep us amused – what's next year, David?

After this, it was off to Calais. There were only minor car problems during the trip. The Lathams' alternator played up on the Monte Carlo section, but it resolved itself. Both the Jordans and my brake-lights stopped working. After the Irish tour I discovered that my gearbox mounting has broken away, probably as a result of the 2002 spin-off. [Frequent problem, easily solved by replacing with a V12 engine mounting – Ed.]

So, at last we have had a Ronart tour without any significant problems – unbelievable – what a contrast to Corsica! Arthur will be relieved, and pleased that I've got nothing to whinge about now. My friend Steve got his Ronart holiday experience at last, and I even let him drive my W152 a few times.

We arrived at Calais 3 hours early and all the others decided to pay £40 extra for an earlier crossing. Steve and I didn't think it was worth it and, after quick 'goodbyes' we headed back for a drive around Calais, visiting bars and had a meal. My W152 got lots of attention parked around town. It felt strange driving back from Dover without the others in convoy.

## Blonde Puzzle

A blonde girl calls her boyfriend and says, "Please come over here and help me. I have a killer jigsaw puzzle, and I can't figure out how to get it started".

Her boyfriend asks, "What is it supposed to be when it's finished?"

The blonde says, "According to the picture on the box, it's a tiger".

Her boyfriend decides to go over and help with the puzzle. She lets him in and shows him where she has the puzzle spread all over the table.

He studies the pieces for a moment, then looks at the box, then turns to her and says,

"First of all, no matter what we do, we're not going to be able to assemble these pieces into anything resembling a tiger".

He takes her hand and says,

"Secondly, I want you to relax. Let's have a nice cup of tea, and then..." he sighs...

"Let's put all these Frosties back in the box."

## THANK YOU, ARTHUR

### From Freddie Trodd

Well I must say this has been a day to remember!!

I was on a jaunt up to the Ronart factory with my son Steven with a differential that needed the cage and a propshaft that needed shortening. Upon arriving we were welcomed with a cup of tea and a chance to have a look at the new Vanwall..... Yes!! What a design, it looked wonderful. A honed in bodyshell that is breathtaking, and a concept of design and engineering that is to dream of.

It is as aerodynamically efficient as possible, low profile, spectacular, single seater - you name it, the Vanwall has it all. Well, I had to see the engine!!

I was not disappointed! Six twin-choke Webers over 12 cylinders, looking so neat and tidy and the best of all it's "STREET LEGAL". You can go down the High Street in it!!

Also a wonderful job has been done with the aluminium body work - all painted in real Racing Green. This is a real lightweight racing car that you can drive anywhere. Arthur has done it again. I have to hand it to him, you look at the Vanwall and you have to drive it and admire it!!

And then Arthur said "would you like a drive?" I said "thank you, thank you, thank you" whilst kissing him lots of times, but not on the lips!!!

Steven got me a hop-up box so I could step in without marking anything. All because I have a gate hinge for a knee joint and the other one is not much better.

Well in I got. I felt that there was a lot more room in the cockpit than I had thought. As you know I am not small, but I must say the

seat was made for Arthur's seat and I had side bits digging into my two wallets. A good job I had loads of money in them.

So it was seat belt on, (had a lot of help) turned the key, pressed the silver button..... And what a deep wonderful sound. I put it into gear (it's just like changing gear in the W152 only the gear box is between your feet). What a great job with the linkage!!

So off I went. Arthur in front in his car leading the way, which I was glad about because I might have taken it home!!

When I put my foot down, the delivery of torque to the wheels was uninterrupted. This happened through each gear change - you could feel the power feeding through the tyres onto the road. There was masses of acceleration pushing you back into the seat.

What a great ride! We negotiated plenty of roundabouts and I must admit I let Arthur go off in front so I was able to go round a few of them quite quickly!! I know it's hard to tell at 40MPH, but the Vanwall went round without one bit of under- or over-steer. The car went dead in line. One time Arthur was way in front and I caught him up in a flash; I was up to 105MPH in no time. The acceleration was so fast, so quick, also great brakes.

This is a great car, with performance and prestige, you should see the heads turn.

Thank you Arthur for letting me drive your superstar Vanwall. To drive it, you have got to have one, and I think the twin seater will be even better.

I am saving my money now!!!

## TECHNICAL TOPICS

### More from the V12 design archive -

#### Cooling System (Fig. 22)

The cooling system consists of a radiator matrix (A), a water pump (B), belt driven by the engine crankshaft; and remote header tanks (C). Two thermostatic valves (D) are fitted, one to each cylinder tank to ensure rapid warm up from cold.

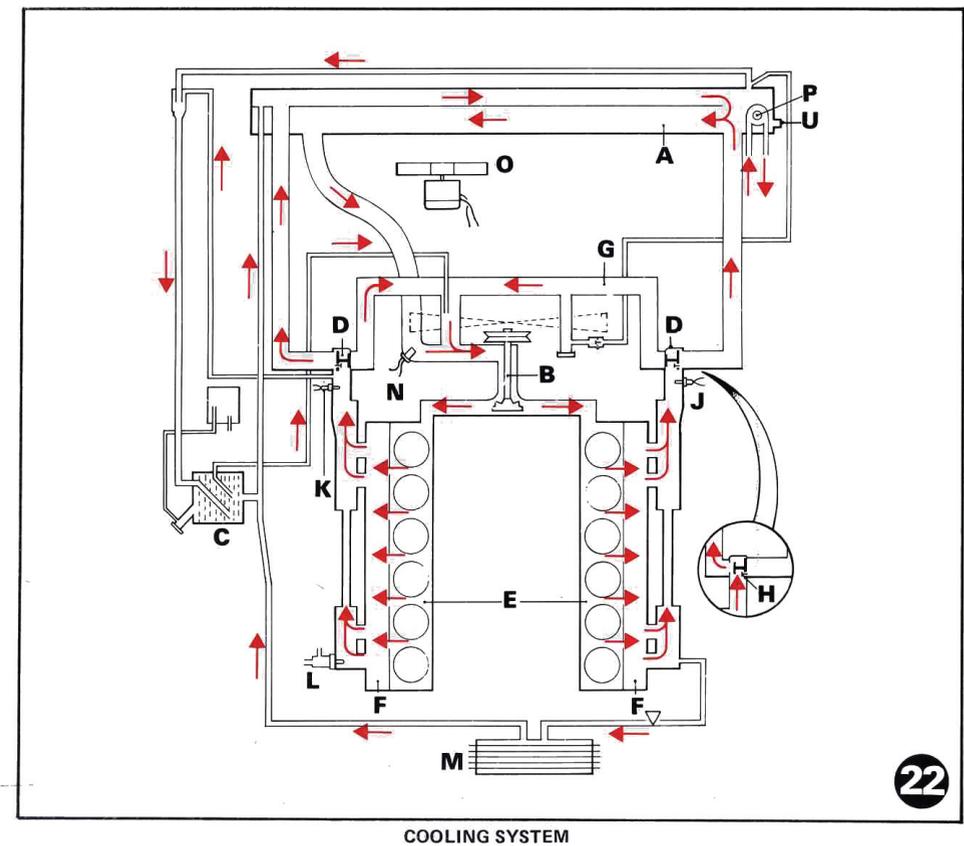
Under start conditions (see insets) coolant is forced by the water pump equally through each cylinder block and cylinder head (E and F) to the thermostatic valve housings. The valves are closed and coolant is therefore returned via the engine cross pipe (G) to the

water pump inlet.

During this period the radiator is under pump suction and air is bled by jiggle pins (H) in each thermostatic valve.

Note. When fitting a replacement thermostat the thermostat MUST be fitted with the jiggle pin at the top of the housing.

The engine contains air pockets which have to be purged before effective cooling is possible. The air entrained by the coolant rises to the highest point on each side of the engine, the thermostat housings, then through the jiggle pins to the top of the radiator.



COOLING SYSTEM

## TECHNICAL TOPICS

During this phase the thermotime switch (J), the coolant temperature sensor (K) and the auxiliary air valve (L) function as an automatic choke and warm up the system. Full pump suction draws coolant from the base of the radiator and starts the full cooling circuit.

At this time pump suction also appears at the heater matrix (M), and the remote header tanks carry out an air separation function in addition to providing a reservoir of coolant.

When coolant temperature rises to a pre-determined level the thermostatic valves open and allow coolant to flow into the top of the radiator.

A thermostatic switch (N) is fitted in the water pump suction elbow. The switch starts the radiator electric cooling fan (O) should the temperature of the coolant leaving the radiator rise above a pre-determined level.

A cooling tube coil (P) is included in the fabrication of the right hand end tank of the radiator, and is connected in series with the automatic transmission hydraulic fluid circulation.

The radiator is fitted with a bleed tap (U) through which, during initial cold fill, the radiator is vented. A drain tap is located in the base of the right hand end tank.

### Thermostat

This is a valve incorporated in the cooling system which restricts the flow of coolant through the radiator until the engine has reached its operating temperature. When the engine temperature rises to a pre-determined figure (see 'Thermostat Data') the thermostat valve commences to open and allows the water to circulate round the radiator.

The flow of water increases as the temperature rises until the valve is fully open. Included in the system is a water by-pass utilizing a slot in the thermostat housing integral with the water outlet pipe. This allows the coolant to by-pass the radiator until the thermostat opening temperature is attained, thus providing a rapid warming-up of the engine and in cold weather an early supply of warm air to the interior of the car.

The wax element thermostat has long since established itself as the foremost device for controlling the coolant temperature of internal combustion engines.

### Principle of Operation

In essence the element of a Wax Thermostat consists of a small hydraulic jack. The piston rod of the jack is stationary, and the cylinder carries the valve that opens or closes the cooling circuit. To obtain the necessary sensitivity to temperature the cylinder or capsule of the element is filled with a wax having a high coefficient of thermal expansion. Changes of temperature therefore cause relative axial movements between the piston and cylinder, thus opening or closing the valve. Since the element is single acting a return spring is necessary.

Although the description hydraulic was used in the last paragraph, it is not strictly accurate, since the contents of the capsule are in a plastic not a fluid condition over the operating range of the thermostat. The wax actually employed is of the micro-crystalline paraffinic type having a coefficient volumetric expansion of approximately 1.0% per degree centigrade temperature change. A lift of 9.5 mm and a thrust of no less than 15 kgs. are given by the standard automotive element which contains 0.9 grms of wax.

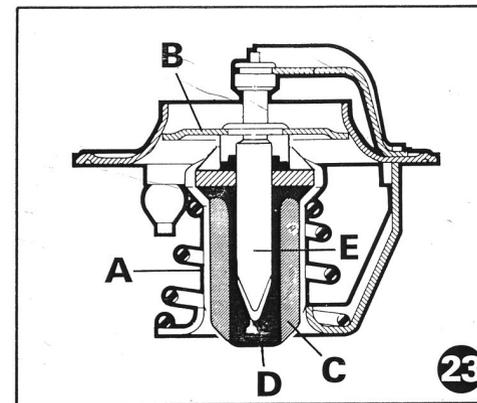
## TECHNICAL TOPICS

### Construction (Fig. 23)

The element consists of five items; they are the capsule body (A), its cap to which the valve is attached (B), the wax content (C), a synthetic rubber sleeve (D) and the piston or stem (E) that reacts the thrust. Constituting the body is a thimble shaped brass pressing which incorporates a shoulder near the top. Sealing the wax content is effected by the rubber boot which encloses the portion of the stem within the capsule and protrudes through the hole in the cap. The cap is a machined part which is later spun over to secure the valve, the latter being usually a stainless steel pressing. The top of the capsule is crimped over to secure the cap and the boot after the wax has been inserted.

### Thermostat Faults

The thermostat is often quite erroneously blamed for many cooling system faults. It is a very reliable unit, though obviously there are exceptions.



The only form of failure with the wax type of thermostat is wax escaping from the element. This can only occur when the temperature of the cooling system rises above

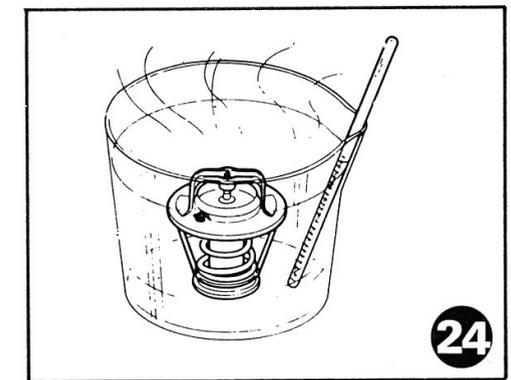
150°C, causing the pin to extrude too far from the elastomeric boot, resulting in the boot rupturing and releasing the wax. In such a case, the engine must have overheated and would either have seized or been switched off. When the complaint is investigated it is likely the thermostat will be tested and pronounced guilty. However, as explained, the 'stat' has only failed as a result of the system overheating, and the cause of this is far more likely to lie amongst the following.

- faulty pressure cap
- loss of coolant
- faulty water pump or fan belt
- leaking cylinder head gasket
- blocked radiator or clogged hoses
- restricted air flow through the radiator

The moral is — when you find a fault always look for the cause.

### Testing Thermostats (Fig. 24)

Another reason for 'stats' being changed is incorrect testing. The two main thermostats in general use are those marked 82°C and 88°C. These figures indicate the temperature at which the thermostat 'cracks' open. To test a thermostat, place it in cool water together

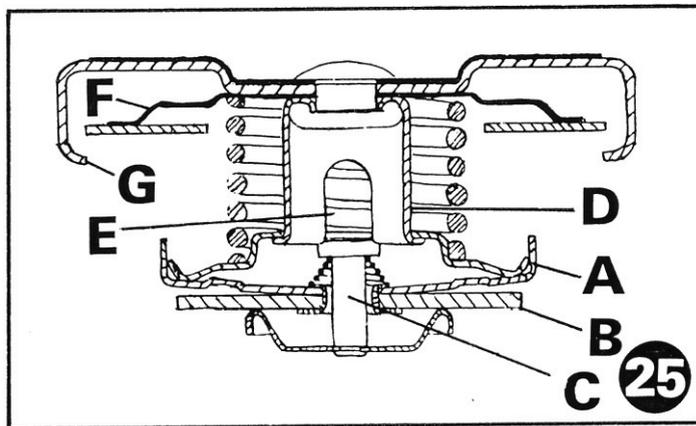


## TECHNICAL TOPICS

with a thermometer and raise the temperature slowly until the figure stamped on the thermostat is reached. HOLD THIS TEMPERATURE FOR TWO OR THREE MINUTES to allow time for the heat to penetrate the wax. After this period the thermostat will crack open approximately 0.08 mm, which is hardly noticeable, so raise the temperature a further 5 to 10°, when the 'stat' will be visibly open. Remember that when the thermostat is in the engine, it rarely opens more than 0.25 mm. In the pressurized environment of the cooling system, an 82°C thermostat is fully open at approximately 96°C and an 88°C one at approximately 102°C.

### The Pressure Cap

The pressure cap is not just a means of keeping the water in; it functions also nowadays as a pressure sensitive valve which controls the extent of pressure build-up in the cooling system.



### Construction (Fig. 25)

The cap consists of a brass plate (A) and rubber seal (B) in the centre of which is a one-way valve assembly (C). This plate fits into a brass neck (D) which has slots (E) to allow access of air to the one-way valve, and the neck in turn is connected via a brass plate (F) to the steel cap (G). Pressure sensitivity is controlled by a rated spring (H) fitted round the neck and between the brass plate (A) and the steel cap.

### Operation

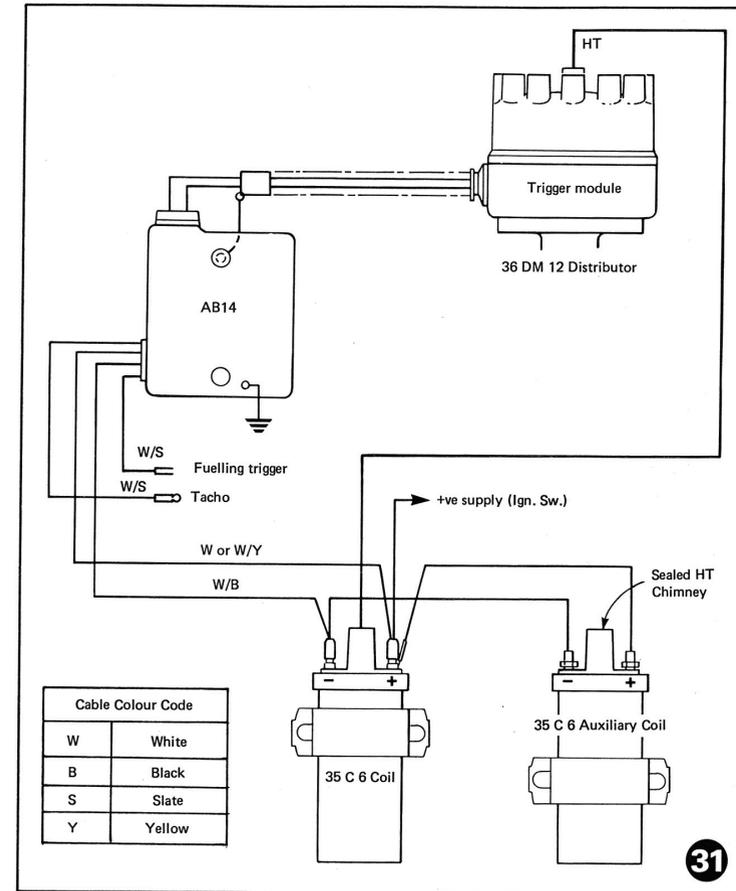
As the engine warms up, the coolant will expand but the radiator cap will remain sealed by virtue of its spring, consequently the coolant in absorbing the expansion will become pressurised. If the pressure rises above the cap setting, it will overcome the spring and the valve will lift, thus relieving excess pressure. When the engine cools down and the coolant loses its high temperature, it will contract. This will cause a vacuum in the system which could collapse hoses, etc., but to prevent this, the one-way valve comes into operation and as soon as the pressure drops below atmospheric pressure it opens allowing air into the system.

## TECHNICAL TOPICS

### 'Constant Energy' Ignition

A Lucas 'Constant Energy' ignition system is fitted as original equipment. This system is similar to that already fitted to the Series III 4.2 litre Jaguar cars but differs in two important ways (Fig. 31).

1. The system on the 'Mayhead' engine incorporates two ignition coils. The main coil model 35C6 is connected in parallel with the primary winding of an auxiliary coil. The HT section of the auxiliary coil is not used and the HT outlet is sealed.



The auxiliary coil enables the ignition system to achieve the required performance at high engine speeds under load.

2. The model AB14 amplifier incorporated in the system is a high load 8A type and is NOT interchangeable with earlier AB14 type amplifiers.

### Spark Plugs

The V12 H E engine uses Champion BN5 or Unipart GSP360 plugs, these plugs have a taper thread which greatly improves the gas seal.

**WARNING.** Taper thread plugs must never be over-tightened or seizure within the head could result. The torque figure is 7 to 9 lbf/ft.. the rule of thumb is finger tight then 1/16 of a turn only. Particular attention should be paid to cleaning the area around the plug before removing.

A special plug spanner 18G1364 is available and recommended.

## TECHNICAL TOPICS

### Lucas Constant Energy Electronic Ignition System

#### System Description

The Lucas Constant Energy Electronic Ignition System employs output current limiting and variable dwell for optimum performance. A long dwell is provided at high speeds for adequate energy storage in the coil, and a dwell is provided at low speeds for minimum power dissipation. The output current limiting function of the amplifier maintains the coil stored energy per spark, and consequently the system open circuit output voltage, constant over a wide engine speed range. It also eliminates the need for a ballast resistor whilst ensuring that the correct value of coil current flows at all times, e.g. cranking.

The system utilises a variable reluctance magnetic pick-up. When a reluctor tooth passes across the pick-up limb, the magnetic field strength around the pick-up winding is intensified inducing a voltage in the winding.

The output from the pick-up winding has a reference voltage (1.5 volts at low engine speeds) superimposed onto it by the

amplifier. Spark timing is accomplished by triggering on the sharp falling edge of the pick-up voltage whilst dwell is controlled by selecting the appropriate input threshold on the slowly varying rising edge. This threshold is set by the control section of the amplifier so that the coil has only sufficient on time to reach current limiting. At higher engine speeds the coil charge time becomes a larger percentage of the total period, and the circuit must respond by providing additional dwell. This is achieved by maintaining the input threshold switching point and raising, with speed, the reference voltage superimposed onto the pick-up output.

Because of the technique within the amplifier of using the threshold voltage to vary the dwell, the threshold off voltage (spark timing point) is moved down the input wave-form. This introduces a small timing delay (retard) as speed increases, which is compensated for by the mechanical auto advance mechanism in the distributor.

The V12 system utilises 2 nominal 6V coils without a ballast resistor. No current flows through the coil when the engine is stalled.



Women Again !

## TECHNICAL TOPICS

### Distributor Description

The distributor (Fig. 32) incorporates a standard automatic advance system, anti-flash shield, rotor arm and cover but the traditional contact breaker is replaced by a reluctor and pick-up assembly.

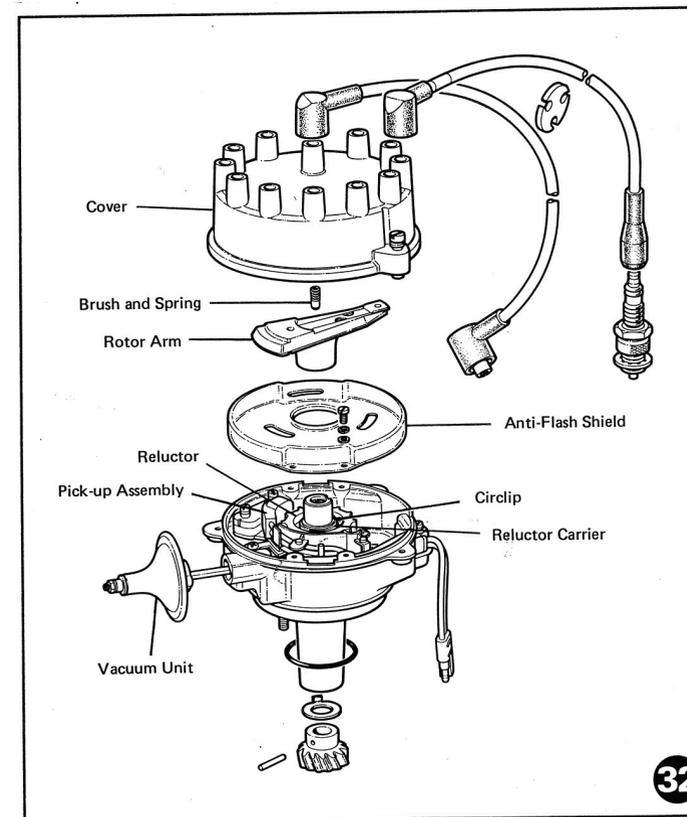
The reluctor is a gear-like component (with as many teeth as there are cylinders to the engine) and it is mounted on the distributor shaft in place of the cam. The pick-up consists of a winding around a pole piece attached to a permanent magnet.

The distributor is prewired with two leads terminating in a moulded two pin inhibited connector.

### Operation

A voltage signal, generated by the reluctor and pick-up assembly is interpreted by the amplifier which switches on and off the current flowing in the primary winding of the ignition coil.

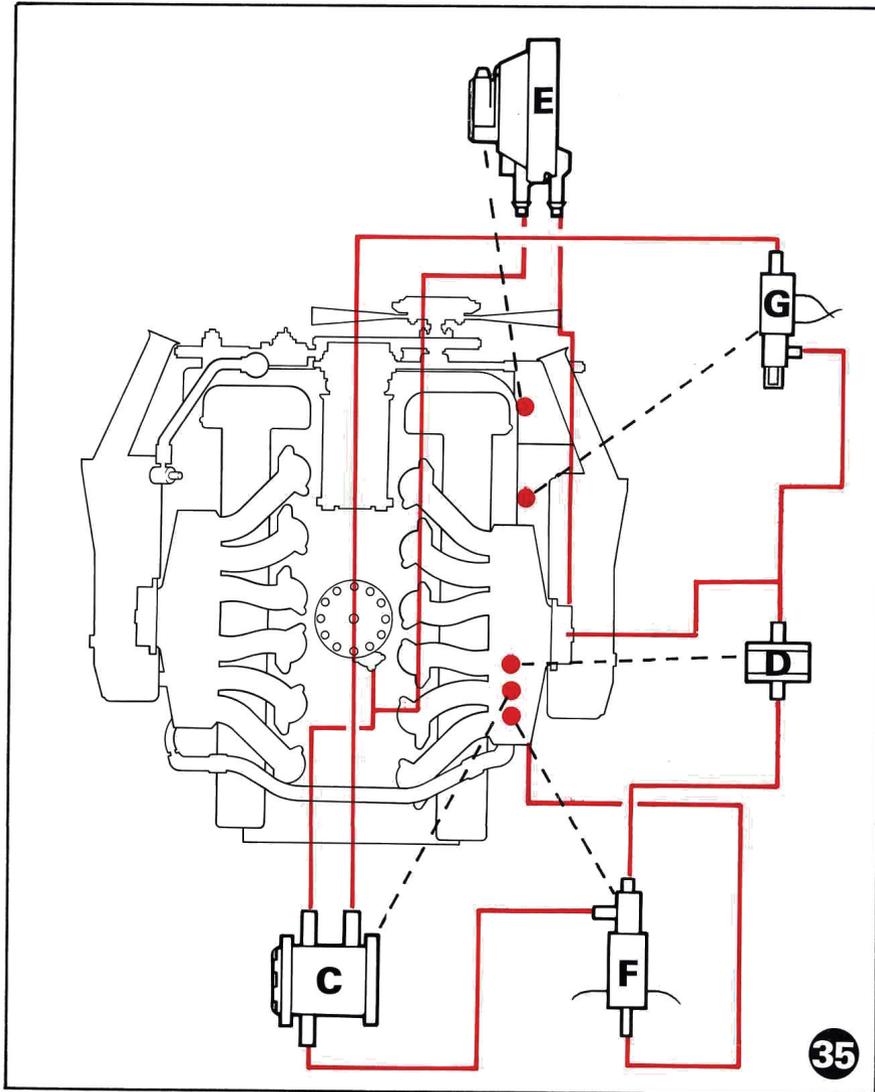
When a reluctor tooth passes across the pick-up limb, the magnetic field strength around the pick-up winding is intensified creating a voltage in the winding. The rise and fall of this voltage is sensed by the amplifier and is used to trigger the transistorized output stage of the amplifier.



## TECHNICAL TOPICS

Vacuum Advance System Component Location (Fig. 35)

- |                            |                               |
|----------------------------|-------------------------------|
| A Water temperature switch | F 3-way solenoid valve        |
| B Time delay module        | G 2-way solenoid valve        |
| C Vacuum regulator         | H Solenoid air switch         |
| D Vacuum delay valve       | J Distributor advance capsule |
| E Vacuum dump valve        | K Throttle edge tapping       |



## Warranty Registration

McDonnell-Douglas Warranty and Registration Card. This was allegedly posted very briefly on the McDonnell Douglas Website by an employee who obviously has a sense of humour.

The company, of course, does not have a sense of humour, and made the web department take it down immediately.

=====

Thank you for purchasing a McDonnell Douglas military aircraft. In order to protect your new investment, please take a few moments to fill out the warranty registration card below. Answering the survey questions is not required, but the information will help us to develop new products that best meet your needs and desires.

1.  Mr.  
 Mrs.  
 Ms.  
 Miss  
 Lt.  
 Gen.  
 Comrade  
 Classified  
 Other

First Name: ..... Middle Initial:.....Last Name:.....

Password: ..... (max. 8 char)

Code Name:.....

Latitude-Longitude-Altitude: .....

2. Which model of aircraft did you purchase?

- F-15 Eagle  
 F-16 Falcon  
 F-117A Stealth  
 Classified

3. Date of purchase (Year/Month/Day):

...../...../.....

4. Serial Number:.....

5. Please indicate where this product was purchased:

- Received as gift / aid package  
 Catalogue / showroom  
 Independent arms broker  
 Mail order  
 Discount store  
 Government surplus  
 Classified

6. Please indicate how you became aware of the McDonnell Douglas product you have just purchased:

- Heard loud noise, looked up  
 Store display  
 Espionage  
 Recommended by friend / relative / ally  
 Political lobbying by manufacturer  
 Was attacked by one

## Warranty Registration

7. Please indicate the three (3) factors that most influenced your decision to purchase this McDonnell Douglas product:

- Speed / manoeuvrability
- Price / value
- Recommended by salesperson
- McDonnell Douglas reputation
- Advanced Weapons Systems
- Negative experience opposing one in combat

- +++ Colour TV
- +++ VCR
- +++ CD Player
- +++ Home Computer
- +++ Air-to-Air Missiles
- +++ ICBM
- +++ Space Shuttle
- +++ Killer Satellite
- +++ Nuclear Weapon

8. Please indicate all location(s) where this product will be used:

- North America
- +++ Iraq
- +++ Aircraft carrier
- +++ Iraq
- +++ Middle East (not Iraq)
- +++ Iraq
- +++ Africa
- +++ Iraq
- +++ Asia / Far East
- +++ Iraq
- +++ Misc. Third World countries
- +++ Iraq
- +++ Classified
- +++ Iraq

10. How would you describe yourself or your organization? (Indicate all that apply:)

- +++ Communist / Socialist
- +++ Terrorist
- +++ Crazy
- +++ Neutral
- +++ Democratic
- +++ Dictatorship
- +++ Corrupt
- +++ Primitive / Tribal

11. How did you pay for your McDonnell Douglas product?

- +++ Deficit spending
- +++ Cash
- +++ Suitcases of cocaine
- +++ Oil revenues
- +++ Personal check
- +++ Credit card
- +++ Ransom money

9. Please indicate the products that you currently own or intend to purchase in the near future:

## Warranty Registration

12. Your occupation:

- ++ Homemaker
- ++ Sales / marketing
- ++ Revolutionary
- ++ Clerical
- ++ Mercenary
- ++ Tyrant
- ++ Middle management
- ++ Eccentric billionaire
- ++ Defence Minister / General
- ++ Retired
- ++ Student

13. To help us better understand our customers, please indicate the interests and activities in which you and your spouse enjoy participating on a regular basis:

- ++ Golf
- ++ Boating / sailing
- ++ Sabotage
- ++ Running / jogging
- ++ Propaganda / misinformation
- ++ Destabilization / overthrow
- ++ Default on loans
- ++ Gardening
- ++ Crafts
- ++ Black market / smuggling
- ++ Collectibles / collections
- ++ Watching sports on TV
- ++ Wines

- ++ Interrogation / torture
- ++ Household pets
- ++ Crushing rebellions
- ++ Espionage / reconnaissance
- ++ Fashion clothing
- ++ Border disputes
- ++ Mutually Assured Destruction

Thank you for taking the time to fill out this questionnaire. Your answers will be used in market studies that will help McDonnell Douglas serve you better in the future - as well as allowing you to receive mailings and special offers from other companies, governments, extremist groups, and mysterious consortia. As a bonus for responding to this survey, you will be registered to win a brand new F-117A in our Desert Thunder Sweepstakes!

Comments or suggestions about our fighter planes? Please write to: McDONNELL DOUGLAS CORPORATION Marketing Department, Military Aerospace Division

IMPORTANT: This email is intended for the use of the individual addressee(s) named above and may contain information that is confidential, privileged or unsuitable for overly sensitive persons with low self-esteem, no sense of humour or irrational religious beliefs. If you are not the intended recipient, any dissemination, distribution or copying of this email is not authorized (either explicitly or implicitly) and constitutes an irritating social faux pas. Unless the word "absquatulation" has been used in its correct context somewhere other than in this warning, it does not have any legal or grammatical use and may be ignored. No animals were harmed in the transmission of this email, except the Scottish Terrier Kelpie next door.

## A Year in Provence: a week was enough last September!

### Mike Kanter just looking at the French cars and driving habits

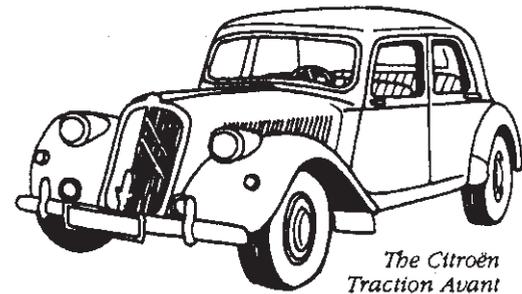
September 2004 saw several club members set out from the UK and France to meet at David & Liz Mansfield's villa, near Draguignan in the VAR, just back from the fabulous Cote d'Azur.

We had a great time but our real mission was to check out French cars and what makes the drivers tick. Subsequent reports by other members will have you think the trip was only for holidaying pleasure – BBQs, breakdowns, delicious wine, marvellous sightseeing, good food, more breakdowns, more good food, more wine and exciting driveabouts between breakdowns.

### THE FRENCH CAR

French cars are no longer the envy of the world, stylish and sexy they aren't; utilitarian, simple vehicles for getting about as quickly as possible (that's very quickly) to humiliate and threaten fellow road users (reference my good friend and Ronart driver Jacques Grandjean). But in French cities, like Paris where cars move at about the same speed as they did 100 years ago, they are an expensive liability as opposed to the rural areas where they are an expensive necessity.

There is little value in a French second hand car; usually never cleaned inside or out and bearing the scars of a thousand 'coming

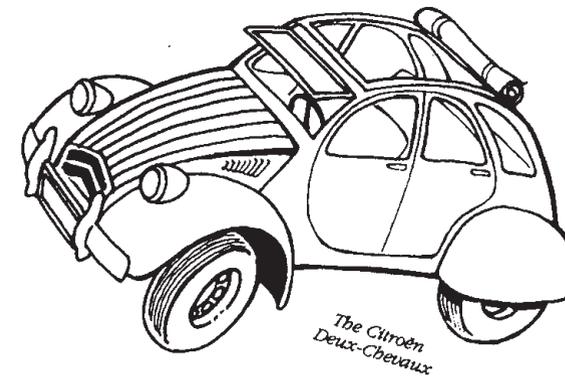


together' on the motoring battlefields of France. The brakes are however usually in pristine condition for French drivers only use their brakes if the horn doesn't work.

## A Year in Provence: a week was enough last September!

### THE FRENCH CAR INDUSTRY

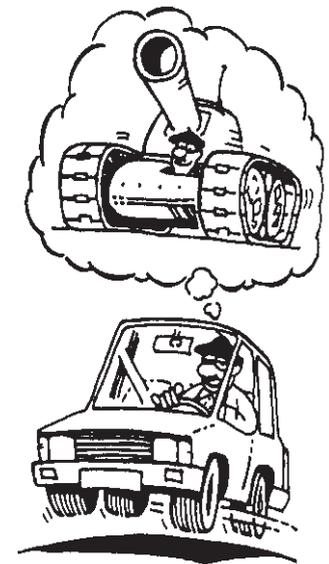
The French car industry can boast of at least still being there, having lasted for well over 100 years, but the two remaining firms Renault and Peugeot-Citroen have lost their distinctive and eccentric appeal and have become just another part of the world market. They are no longer art objects like the Citroen Traction Avant or the DS19 & 21s were, nor any longer do they have the simplicity of the Citroen Deux-Chevaux (the most famous of all French cars, the 2CV) with its 2 cylinder, six horse power engine more suitable for a clockwork mouse.



Even the least mechanically minded person could remove the engine to the kitchen table for a quick tinker. French cars are just another hi-tech, highly commercial commodity AND the French government forbids any modification of their boring cars by enthusiastic owners wishing to put their mark on their vehicle. Hence the after market is virtually non-existent.

### MOTORING CHARACTER

So how do the French put character into motoring? Well the people change instead - the moment they take control of the car. Normally aggressive, impatient and totally intolerant, they become aggressive, impatient and intolerant homicidal maniacs with an unshaken conviction in their own immortality at the wheel.



This results in about double the number of French drivers being killed at the wheel, compared to the UK, USA or Japan, in proportion to the number of vehicles. When you drive in France your life is not in your hands but in that of some unknown French maniac; a well known ex-pat expression. French law requires you to drive on the right hand side of the road. In practice (and they are always practicing) they drive on BOTH sides of the road. And on pavements, through hedges, across fields, down steps and up lamposts.

## A Year in Provence: a week was enough last September!

Remember also that French truck drivers believe they have a divine right to the entire road, all the time. They also have 40 tons of hardware to back up their conviction.

French motorways are superb and they are relatively safe, why? Because the French cannot or will not afford to pay the tolls for them. Beware of French main roads, most are designated 'priority roads' that purports to mean that traffic joining them does not have the right of way, an admirable piece of legislation which has failed to register with French drivers.

All this has resulted in a code of conduct that has to be learnt by all learner drivers in France, before they can pass their test. This is why the French give kids two years to develop their 'I'm a typical French driver routine' and allow them to start driving at sixteen in readiness for a full licence at eighteen.

### The 10 Codes of driving conduct

- It's every person for themselves
- The other driver is always wrong
- I drive, therefore I am always right
- Never indicate where you are going or what you are doing, it's a sign of weakness
- Speed limits only apply to everybody else
- Overtake at every opportunity and when there is no opportunity at all
- To be overtaken is the ultimate humiliation
- Drive on both sides of the road at leisure, particularly around blind bends
- Use the horn in emergencies; another vehicle, animal, person, insect, all are emergencies

- My flashing headlights mean get out of my way, my not flashing means the same thing

### HOW TO USE THE.....IN FRANCE

**Roundabout** – imagine you are a rugby scrum, everyone charging, bashing and pushing everybody else. Traffic flows anti-clockwise and you have priority on the roundabout, so keep going round until you are sure of your exit. You do not have to steer because you will be carried around by the rest of the traffic, gradually peel off if you have not died of old age or run out of petrol.

**Mirror** – after miles of tailgating the car in front, and approaching the brow of a hill or a blind bend, check that no one is daring to overtake you.

**Manoeuvre** – it's a word of French origin meaning to cut in sharply, causing the other driver to brake heavily

**Map** – if you want to remain in a settled domestic relationship you should perhaps reconsider your 'I must prove myself' wish to drive with a map on the French roads, and take the train.



Paris Olympics

## An Appeal

Can anyone help with this unusual request?

*Dear Ronart Enthusiast,*

*Please let me introduce myself, my name is Marcus Veenhuis and I'm from Holland, I love beautiful cars ever since I can remember, I am 41 years old and happy married for many years, I'm the proud father of our thirteen years old son Devon, who loves nice cars too. Because I've got scolioses combined with arthritis I am handicapped, this is why I have started to collect car emblems about 5 years ago, it's a nice hobby and I enjoy it very much and I think I've got enough emblems to fill up a small museum, and this is a kind of dream from me, but I'm writing this e-mail because I started to write a book about car emblem badges in my collection and I really would love to ad a Ronart and Vanwall badge to it, this will be a nice page in my book, a worn or slightly damaged badge will be good enough, since good badges belong on cars not in collections in my opinion.*

*My brother in law made a web-side for me, if you like you can take a look at it on: [www. MarcVeenhuis.com](http://www.MarcVeenhuis.com)*

*if you click on "pictures" in the upper left corner, you can see more than 100 photo's I made of my collection, my collection contains 4678 emblems from 304 different car marques at this moment.*

*But I haven't got a Ronart or Vanwall badge and these cars are so beautiful, maybe you've got a spare or slightly damaged emblem left somewhere, winter season is coming and since I spend most of my day-time alone I like to refurbish and fix car emblems, due to bad muscle control sometimes I'm not actually a professional in it but I enjoy it very much, maybe it is even possible to publish my request in your club magazine, that would be nice.*

*Hope you can help me, I will be very honoured if you can send me an emblem for the book about my emblem badges collection, if you request more information about me, my collection or my emblems book project please don't hesitate to contact me, I will be very honoured to answer your questions.*

*Thank you for reading my e-mail message, I hope to hear from you soon.*

*Kind regards, with respect,*

*Marcus Veenhuis  
Boomgaard 10  
7021 KZ Velswijk - Zelhem  
Holland / The Netherlands  
e-mail: [carnut8@hetnet.nl](mailto:carnut8@hetnet.nl)*

A young girl who was blown out to sea on a set of inflatable teeth was rescued by a man on an inflatable lobster. A coastguard spokesman commented, "This sort of thing is all too common". (The Times)

At the height of the gale, the harbour master radioed a coastguard on the spot and asked him to estimate the wind speed. He replied he was sorry, but he didn't have a gauge. However, if it was any help, the wind had just blown his Land Rover off the cliff. (Aberdeen Evening Express)

## MEMBERS' NEWS

### Greg Wigmore

Very bad news - that Greg's Lightning caught fire and was totally burnt-out recently. Arthur says it is the only total-loss of a Ronart that he can remember.

### John Ellis -

"A bit of frustration here... hurt my (clutch) leg skiing, so have lost two weeks re-build time. We finished the engine three weeks ago, and it has been sitting on the bench ever since. But we should still be ready for the Ardennes trip. Famous last words..." John & Vivien did make the trip, and didn't break down!

### Mike Kanter -

Make was winner of the last Mystery Photo competition. He ably recognised his own and Freddie Trodd's legs.

### Peter Langmaid -

Following his unfortunate motorbike accident, Peter has been seen on his feet again at a recent Noggin & Natter. He seemed on good form, though a bit brassed off by being house-bound for so long.

"I managed to get my Ronart out of the garage, got it started and went for a drive, albeit a short one! Did feel good to get back behind the wheel once more. My next operation has been postponed until at least after September, so I'm hoping to be able to get out to at least one of the local meets this summer."



A garage clear-out has unearthed some spares which might be useful to someone -

- A set of front 'lightweight racing' suspension arms, manufactured by Spyder Engineering for the W152 Mark 1. They are in bright nickel or chrome finish, not sure which and were an optional extra from the early days of Ronart.



- A set of triple SU carbs bought for his first Ronart, but had never fitted. Peter is looking for offers over £100 and his contact details are on the back page.

### Carl Rasey

Carl needs our best wishes to help him through a serious sickness. We look forward to his complete recovery, and hope to see him out and about again soon.

### Henry Weitzmann

Henry has sold his trusty W152 Mark1 which was looking resplendent after a complete rebuild at the factory including retrim and paint-job. What will fill the Ronart's place in his collection?

### Steve Ward

Steve has bought Henry's car - congratulations! We look forward to meeting him at a Southern Noggin sometime soon.

## CLUB CONTACTS

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**Club Website** - [www.ronartdriversclub.com](http://www.ronartdriversclub.com)