



Hot Air

NEWSLETTER

April 2012

The Automotive Air-conditioning, Electrical and Cooling Technicians of Australasia

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The carbon price on refrigerants – theft under the guise of environmental concern – could undo the best refrigerant stewardship scheme in the world and most likely result in more greenhouse emissions than ever and everybody knows the solution (ask a Queenslander)

The vehicle aftermarket industry is still in shock at the prospect of hefty price increases for refrigerant which will follow the Australian Government's introduction of what they euphemistically call a 'carbon price', but is in reality a 'tax' with no rebates and no benefits for the industry or the environment.

Far from achieving any kind of environmental goals as touted by the government's spin doctors, it is more than likely that the price increases may dilute the current compliance regime and encourage indiscriminate release of refrigerant with global warming potential.

VASA, through its representatives on various industry networks, has tried its best to ward off this tax, but so far the Gillard government has steamrolled it through, taking no notice of industry, and in apparent ignorance of the best practice standards which the industry already follows.

VASA President Ian Stangroome said, "The government stands to gain significantly from the introduction of the carbon tax.

"Unfortunately, the end users, our workshop members, will have very little opportunity to carbon proof themselves until a refrigerant is introduced into our systems which does not fall into the carbon tax net, and

then what? Until then VASA members will pay more for their refrigerant, have to construct some story to explain why their customers will pay more for their air conditioning service and receive no credit for recovery and destruction. In the meantime, inflated service costs, a direct result of the carbon tax, makes the job that much harder for VASA workshops to sell their services. The average Australian household income is under enough pressure now without this extra burden.

"The government forbids blaming the carbon price as the reason for the price increase only because they don't want the stupidity of this decision to be public knowledge, which could have a detrimental effect on future election results.

"As for passing on the cost to the customer, as business owners, VASA members will deal with it, but it's just another straw on the camel's back, and could see some members, and others in our industry, reluctantly switching to alternative refrigerant use, or other cost saving strategies to maintain a competitive position."

Members need to understand the difference between the Carbon Pollution Reduction Scheme and this separate carbon price scheme.

'I hope you all remember that night five years ago at the VASA convention on the Gold Coast when I said this would be hard. I also said carbon pricing was going to be the biggest monetary event since the invention of money itself – I still stick by that.' – VASA Representative, Mark Mitchell

The industry is being charged a 'carbon price' on the Global Warming Potential values of each refrigerant, but the industry cannot claim credits for destruction. This will extract a cool \$300 million in revenue from our industry.

VASA's representative on the Refrigerants Australia board, Mark Mitchell, says that taxing the consumer as a way of driving technology change to influence the environment is flawed.

"The government is applying a macro solution to a micro problem. They don't have to take \$300 million off us to tell us to change refrigerants.

"The industry has proved time and again that it is capable of change for the better. This is a problem that would be best left to the engineers to sort out – and they are already doing that.

In a few years, a refrigerant with a next to negligible global warming potential (HFO 1234yf) will reach Australia, and the environmental problem will be all but solved.

"The government would have achieved a lot more for the environment, if that's their genuine concern, if they imposed deadlines on technology change, as the European Union has done.

"Leave a strict licensing regime in place, and the problem is solved. The impact of the carbon price on this industry will be worse than the impact of the whole of the Carbon Pollution Reduction Scheme tax. You just can't keep taxing the hell out of everyone," Mark added.

"The 'pass the cost on' attitude is pathetic. That's just turning workshops into tax collectors."

Mark, and some VASA directors, including Tim Grimes, are appealing to VASA members not to lose their nerve, and to stand firm on supporting a professional air conditioning service and refrigerant regime.

At the bottom end, the \$99 regas may be a thing of the past for the approved refrigerant, but they don't believe that the majority of customers will risk damage to their vehicles just because the price of refrigerant has risen.



Grant Hand
Automotive Training Solutions

Analysing the modern air conditioning system

The industry is in a new phase. The air conditioning technician is not only dealing with electronic and mechanical interfacing but is also being confronted with myriad variations in systems.

Unfortunately, the old 'gauge recognition' days are over. All technicians now need to understand the operational strategies of the air conditioning system **and** the interfacing strategies to the vehicle and

engine electronic system.

That is the focus of the two sessions of this year's Wire & Gas training program.

Session 1

- A review of pressure/temperature relationships
- A new way of analysing system flow and related pressures
- Full enthalpy chart analysis and its application to the modern systems
- A full analysis of the following systems:
 - * Cycling clutch thermostatic expansion valve
 - * Orifice/expansion tube systems
 - * Mechanical variable pump systems
 - * Electronic variable pump systems
 - * Advantages and limitations of all systems
 - * How gauges (both pressure and temperatures) will vary between systems.

This session will include full

fault analysis charts for future reference.

Session 2

This session will link with Session 1 but will go further in exploring the performance, efficiency and capacity analysis of the various systems.

As with Session 1, some old habits need to be amended, particularly the one where technicians believe vent temperature is the major performance indicator. This is **not** the case.

This session will detail pressure, temperature and strategy analysis and directly link it to system testing for all systems – from small cars through to 350 tonne dump trucks.

We will also analyse why compressors fail and the linkage to system operation.

The problem we now face is that some automotive compressors cost \$4000 – an expensive mistake when a repeat failure occurs. Costly for the hip pocket and costly for reputation.



Jack Stepanian
TaT Research Centre

Oscilloscope waveform types and interpretation

Settings: Oscilloscopes 'x' and 'y' axis will be discussed in relation to the waveform being measured.

Recognising typical defective signals: A plethora of waveforms will be discussed, focusing on the anatomy of a waveform and the intricacy of the pattern that constitutes a healthy waveform pattern.

Practical testing of common vehicle circuits: A practical session of hands-on activities to illustrate the process of obtaining a circuit diagram, interpreting what the waveform ought to look like and then physically measuring it on a vehicle.

A selection of common component fault traces as a reference: During the practical session, delegates will have the opportunity to induce faults into the vehicle and observe waveform pattern change.

Vehicle sensor types and testing: You will analyse the changes when different types of sensors generate differing types of waveforms.

Variable camshaft timing control system: The process of controlling valve timing and its operation by analysing the sensors and actuators waveforms, how the two ought to follow suit and why diagnostic trouble codes are logged.



Geoff Mutton
TaT Biz Trainer

Understanding your numbers to improve your bottom line

There will be three major sections – one basic and two advanced. Many templates will be used and these will be made available to members.

Understanding your Profit and Loss statement

This is the basic section focusing on the fundamentals of the P&L statement. The objective is to ensure that everyone is comfortable reviewing their own P&L statement. You will learn how to:

- read a basic P&L statement
- calculate both gross margin and gross profit
- understand the difference between margin and markup
- understand the difference between fixed costs and variable costs
- understand how cash flow is king and that a net profit does not always mean a positive bank balance.

Budgeting and building your financial dashboard

This section will focus on business budgeting and monitoring actual results. Learn to understand the importance of setting budgets and monitoring their performance every week. You will know how to:

- set a P&L budget for the business
- calculate the forecast break-even point
- build a financial dashboard to monitor the performance of key areas.

Structuring the workforce within your business

This section will focus on staff, generally the greatest expense in any workshop. You will learn how to think about the contribution staff make to the profitable running of a business.

You will know how to :

- structure the workshop to maximise profitability
- allocate key duties to each position to ensure everything gets done correctly
- analyse the technician profit contribution to assist in workshop structuring and recruitment
- analyse staff output to evaluate performance against expectations.



Steve Pohlner
Product Development
Ford Asia Pacific and Africa

As well as conducting the main tour of the ACART facility, Steve will present an overview of technology evolution covering air conditioning systems and their components, as well as the electronic components such as system sensors and vehicle system modules.

He will take delegates through the automatic climate control systems in the modern vehicle, and cover heat exchangers, compressors, expansion devices, and hoses and tubes.

His session will be conducted in a separate area of the ACART facility, while Jack Stepanian will be conducting his session in a large workshop area on site.



THE WHAT, WHEN, HOW AND WHY OF WIRE & GAS 2012

- Registration and accommodation reservation forms were posted to all VASA members. If you have mislaid your form, go to www.vasa.org.au and download it, but act quickly.
- Registration spaces are strictly limited to 100 actual delegates (this does not include partners, trainers, and mini-trade show exhibitors), so be quick. Spaces at the ACART facility are restricted to 25 people at each of four sessions.
- Travel to the ACART facility will be by coach from the convention hotel and this cost is included in your registration price.
- Because of security and space restrictions, partners of delegates cannot be accommodated at the ACART facility.
- If your wife/partner intends to join you in any of the training sessions, they must register as a full delegate.
- If your wife/partner intends to accompany you to any of the catered delegate lunches and morning and afternoon teas on Saturday or Sunday at the convention hotel, or to the buffet dinner on Saturday evening, you must notify VASA and pay an extra catering fee. Day catering will be an extra \$60 per head, and will entitle a partner to morning and afternoon tea and lunch, and the Saturday buffet dinner cost for partners will be an extra \$70.
- The convention hotel will have Geelong shopping and sight seeing tour information available for partners.
- Geelong's airport is at Avalon just a short distance from Geelong CBD. Note that flights to Avalon are limited to Jetstar. If flights do not suit your schedule, your other option is to fly into Tullamarine, hire a car or get a taxi to Geelong. There is a regular bus shuttle service connecting Avalon to the Melbourne CBD. Details of this service are at <http://www.sitacoaches.com.au/avalon/>
- Monday, 11 June is a public holiday in most states, and there is no official convention activity that day.
- At the registration desk at the hotel you will receive your name badge and full timetable for all sessions.
- All delegates will be separated into four colour coded groups. Workshop groups will be kept together, but no other changes can be made.

Wire & Gas 2012 broke the record for delegate registrations, with more than 50 paid sign-ups in the first eight hours after registrations opened.

On going to press, registrations totalled 76 with inquiries still coming in. So if you are planning to attend this exciting training convention, send in your registration form quickly.

Seats are strictly limited to 100 delegates. The registration form can be found at www.vasa.org.au

The president wants a word



My take on diagnosis

As vehicles become more complex, it follows that their faults are more complex.

For those of you who are continually honing your diagnostic skills, seeking additional training and sourcing the required test equipment and vehicle data, the process of diagnosing complex vehicle faults is made a little more bearable. For those who aren't so proactive, it's going to be tough going at best.

Regardless of the vehicle fault, the fundamental approach to finding the cause should be the same each time. The diagnostic process should become a routine.

A systematic approach will, in most cases, lead to a correct diagnosis in a timely and efficient manner, and may well avoid the cost associated with an incorrect diagnosis. By following a process it is also likely that other weaknesses will be uncovered at the same time, leading to additional work and revenue and a better result for the customer.

Like any process, it should be written down and made available to all technicians in the workshop. Once a routine is established it should be followed, and modified only to introduce improvements or upgrading to meet evolving technology.

The goal of the diagnostic process is to accurately identify the root cause of the problem which will enable you to formulate a solution and not just repair the symptoms. If you only address the symptoms the vehicle will ultimately return with the same or worse symptoms and the same underlying cause.

Intermittent or transient faults are the most difficult

to diagnose. You may not experience the fault symptoms yourself and have to be guided by the customer's report. With experience you learn that the information you extract from the customer is highly valuable in the diagnostic process. Asking better questions will get better information.

If you can somehow simulate the fault conditions, you are off to a good start. If you can't, you need to dig deep and draw on experience, analyse the information and clues, and build a scenario which matches the symptoms – and don't forget to call on your network for assistance or advice.

In earlier times, diagnostic time was minimal compared to the end value of the invoice. Today's vehicles will continue to present with faults which often require considerable diagnosis time and this time often outstrips the actual repair time many times over.

Armed with this knowledge, it is imperative for the success of your business, that you ensure you remain ahead of your competitors as a diagnostic workshop. It is also vital to your bottom line that your diagnostic time is accurately charged out, as this can now be a considerable portion of your income, and must not be discounted or given away.

It's too easy to devalue our own skills as they become second nature to us, but your diagnostic skills are more valuable now than ever, and to maintain their value they must remain relevant.

With that said I hope to catch up with quite a few of you at the Wire & Gas event in Geelong in June where we can continue our training journey.

Ian Stangroome



THE GEELONG PROGRAM

Friday 8 June 2012			
4pm – 8pm	Registration desk opens for delegate arrivals		Four Points by Sheraton Eastern Beach Road, Geelong
Evening	Free		
Saturday 9 June 2012			
7am	Registration desk opens		Four Points by Sheraton eastern Beach Road, Geelong
8.15am	Coach departs hotel for ACART facility at Ford Proving Ground	50 delegates (all by colour code)	ACART facility, Ford Proving Ground, Lara
8.15am	Mini trade show	50 delegates	Four Points by Sheraton eastern Beach Road, Geelong
9am – 12 noon	Training session – Geoff Mutton	50 delegates	Four Points by Sheraton eastern Beach Road, Geelong
9am – 12 noon	Training session – Jack Stepanian	25 delegates	ACART facility, Ford Proving Ground, Lara
9am – 12 noon	ACART tour and training session – Steve Pohlner	25 delegates	ACART facility, Ford Proving Ground, Lara
Morning tea break 10.15am – 10.45am	Mini trade show	50 delegates	Four Points by Sheraton eastern Beach Road, Geelong
Morning tea break 10.15am – 10.45am	Vehicle display	50 delegates	ACART facility, Ford Proving Ground, Lara
Lunch break 12 noon – 1pm	Mini trade show	50 delegates	Four Points by Sheraton eastern Beach Road, Geelong
Lunch break 12 noon – 1pm	Vehicle display	50 delegates	ACART facility, Ford Proving Ground, Lara
1pm – 4pm	Training session – Grant Hand	50 delegates	Four Points by Sheraton eastern Beach Road, Geelong
1pm – 4pm	Training session – Jack Stepanian	25 delegates	ACART facility, Ford Proving Ground, Lara
1pm – 4pm	ACART tour and training session – Steve Pohlner	25 delegates	ACART facility, Ford Proving Ground, Lara
Afternoon tea break 2.15pm – 2.45pm	Mini trade show	50 delegates	Four Points by Sheraton eastern Beach Road, Geelong
Afternoon tea break 2.15pm – 2.45pm	Vehicle display	50 delegates	ACART facility, Ford Proving Ground, Lara
4pm	Coach departs ACART facility for Sheraton Hotel	50 delegates	Four Points by Sheraton eastern Beach Road, Geelong
4pm – 5pm	Mini trade show	50 delegates	Four Points by Sheraton eastern Beach Road, Geelong
5pm – 5.45pm	VASA Annual General Meeting, election of directors and presentation of awards	100 delegates	Four Points by Sheraton eastern Beach Road, Geelong
5.45pm – 7pm Happy hour refreshments served during Service Forum	Service Forum with introductions by Grant Hand and Jack Stepanian	100 delegates	Four Points by Sheraton eastern Beach Road, Geelong
7pm – 9pm	Casual buffet dinner and refreshments	100 delegates	Four Points by Sheraton eastern Beach Road, Geelong
Sunday 10 June 2012			
8.15am – 4.30pm	Program the same as Saturday, with 50 delegates changing places		
Evening	Free		
Monday 11 June 2012			
Free			



Inside the ACART environmental wind tunnel

ACART is a collaborative venture between the Ford Motor Company of Australia and the University of Melbourne. It is funded in part by the Victorian State Government.

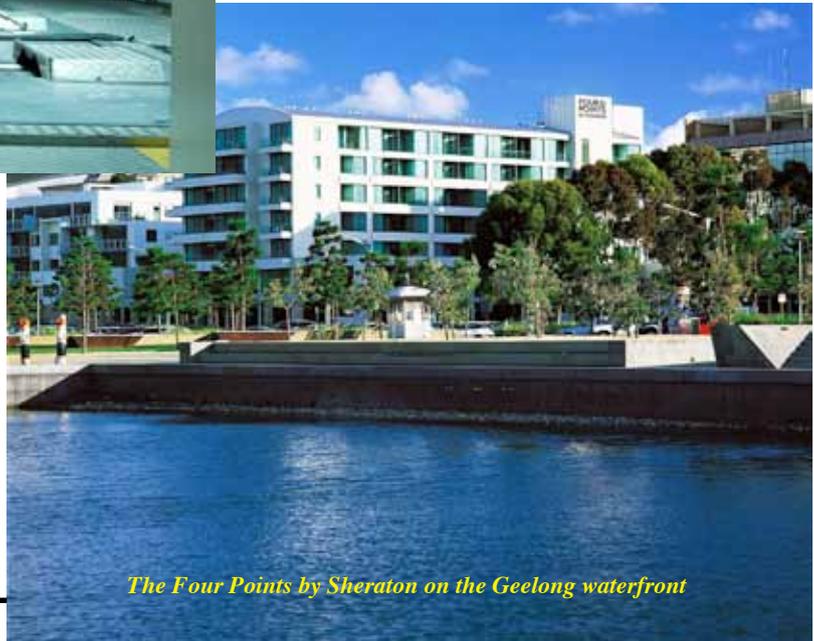
ACART's new environmental wind tunnel testing facility at Ford, which delegates will inspect, can generate a top speed of 250 km/h, and a temperature range between minus 40 degrees Celsius and plus 55 degrees Celsius.

The wind tunnel can operate 24 hours a day, seven days a week, and is staffed by highly trained technicians who work in a high security environment.

Test areas which can be undertaken at the facility may include automotive HVAC, vehicle heat protection, engine cooling, environmental testing, engine performance, engine calibration, fuel system development and brake system development.

Access to the ACART facility is strictly controlled, and Wire & Gas delegates will go through a high security check before being allowed inside.

The only access will be via the official coach which will take delegates from the convention hotel to the facility. **Delegates who miss the bus, will miss out.**



The Four Points by Sheraton on the Geelong waterfront

Trainers praised

A few familiar faces will be missing from Wire & Gas this year, but they will certainly be there in spirit.

The Dalby-based business of Diesel Electrics which has been known to send up to eight of its people to VASA training events, is missing out this year because the business owners, Kellie and Anthony Wenning, will be travelling overseas and the staff will need to stay on the Darling Downs to keep the business pumping.



The Diesel Electrics crew as they appeared on the cover of TaT in April 2010

Ian responded, 'Your team will be missed. It's not often in today's hectic world that people take the time to acknowledge their thanks and support for the efforts of others. Moreover these contributions are generally taken for granted, so I applaud you for that. All those involved with Wire & Gas will be inspired by your positive comments.'

And if that wasn't enough, Kellie added these comments about our trainers: 'To Geoff Mutton, thanks for your

coaching in 2010. As a result we managed a 17% increase in net profit for the last financial year and 2011-2012 is looking good too. We have built on many of the concepts and systems that you helped us develop.

'And Grant Hand - our business in going to miss your aircon training at Wire & Gas and desperately needs it with a few new recruits on the team.'

VASA President Ian Stangroome was chuffed to receive this note from Kellie: 'A quick note to wish you all a successful 2012 Wire & Gas in Geelong. As usual it looks like a great program with some great training and business development opportunities. We love Wire & Gas and look forward to seeing you all in 2013.'

Mini trade show will introduce latest tools and technology

Australia's major wholesalers of automotive air conditioning and electrical equipment will be at Wire & Gas 2012, with their latest tools, technologies and services. They will mount table displays of their best and newest products and will meet and greet delegates during meal and coffee breaks. Over the two days, delegates will have around seven hours of access to the eight displays which will be set up in the main convention training room.

VASA thanks the companies which have so far committed their sponsorship and time to this event. Without their support, the delegate cost would be considerably higher.





VASA Technical Bulletin

Category: ELECTRICAL

Volume 1 Bulletin 4

Every issue of Hot Air will revisit the RTP, in the order in which it was first delivered to members a decade ago. The technical information is as relevant now as it ever was. Members will find it a great resource for younger technicians, or those venturing into electrics and vehicle climate control repairs.

ELECTRICAL – the principles of electricity

EL FALCON SWITCHING

By interpreting the information contained in this and subsequent bulletins technicians will gain a greater appreciation of the decisions by Ford and other manufacturers who have introduced advanced fan control systems, and how the various systems operate.

This bulletin will help technicians understand the EF/EL Falcon fan circuits. It will cover the principles of switching but does not include dual speed motors such as the 120/160W motors of three- and four-brush design. These will be addressed separately and an understanding of dual speed motor principles is not essential for this circuitry.

All vehicle manufacturers are extremely reluctant to allow or endorse modifications to their systems, and understandably so. Some wiring circuit modifications which were circulated Australia wide took out of circuit the normal fan switching strategies which protect against engine overheat and which automatically engage the fans in adaptive strategies (limp home) mode.

When modifying modern electronically controlled systems extreme caution must be exercised to guard against any loss of 'normal switching' which could damage sensitive electronics and inadvertently set fault codes through the tripping of watch-dog circuits.

The EL switching is simplest using two single speed fans and series/parallel switching of them. Normal PCM control in case of engine overheat is the same, therefore modifications to circuits must once again be done to ensure normal switching is maintained.

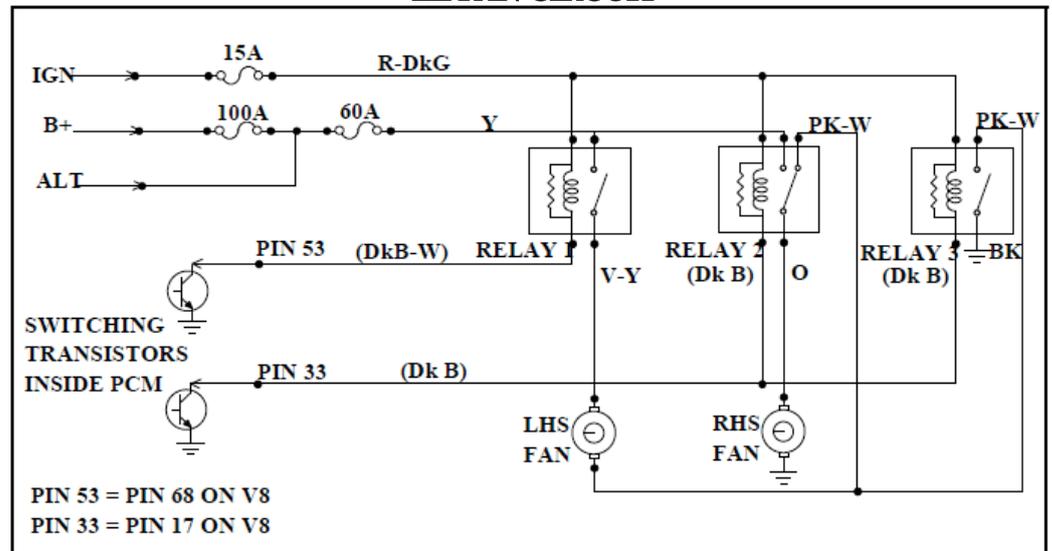
PCM control

Pin 33 and Pin 53 (17 and 68 V8) are grounded by the PCM when required. In fact, switching control is via Pin 33. Pin 53 (68) is switched with a/c activated under normal operation.

When Pin 33 is grounded, relays 2 and 3 are energised. Relay 2 provides a direct supply to the RHS motor. Relay 3 provides a direct supply for the LHS motor.

If the circuit is modified the original switching logic of the PCM is retained. Other methods of modification are being used but ensure the PCM logic is not interfered with.

EL FAN CIRCUIT



Modifying the circuit

It's simple. Ground Pin 33 (dark blue at relay 2 or 3 via an a/c or trinary switch activated relay).

Trinary (medium) pressure switching

When modifying the EL fan switching, particularly when the vehicle is being used predominantly in highway mode, consideration should be given to switching the fans via a trinary switch. This is simply a matter of placing the switch in the relay coil control circuit to ensure the additional relay only energises when the trinary switch is closed. With EF models Pin 46 requires open circuiting (ie using a normally closed relay), thereby making the trinary switch incorporation difficult unless a normally closed trinary switch (medium pressure switch) is sourced (for example in some Kenworth truck types).



Modifying the circuit

If any circuit is modified, the original operational strategies must be maintained.

Therefore, on modifying the above circuit to gain high speed, the principal two circuits that require modification are pins 46 and 68 (relay 3 and relay 4).

Pin 46 will require open circuiting to ensure relay 4 remains closed and pin 68 (relay 3) requires grounding to provide a supply for M1.

This will require the use of two relays activated by a/c (such as the clutch circuit) or by switching through a medium pressure switch (maybe 'centre' switch mode of a trinary switch).

Number 3 relay must be energised by grounding pin 68 (in parallel with the PCM switching).

A 'normal' relay (n/open) taken off the dark blue wire of relay 3 will provide a ground

when the air conditioner is activated or pressures build to the medium pressure switch setting.

Relay 4 (pin 46) must be open circuited via a normally closed or changeover relay.

Activation of the relay is once again done by a/c switch or medium pressure switch.

VASA to push for all refrigerants and all technicians handling them to be covered by the national licencing scheme

VASA directors will fight to extend Australia's current refrigerant handling licence to embrace all refrigerants and all technicians who work with any kind of refrigerant.

The current national licencing regime is designed to reduce the emission of global warming gases into the atmosphere, which means that all other refrigerants which don't have a global warming potential don't fall within the scope of this legislation.

However, VASA says that any technician who works on a vehicle is potentially going to handle a global warming refrigerant, regardless of the type of refrigerant they ultimately replace in the air conditioning system.

"This has created an uneven playing field," says VASA president Ian Stangroome.

"The mere presence of alternative refrigerants, which may have no global warming potential and therefore are under the licencing radar, highlights the anomaly in our current system. Setting a consistent regulatory system for all technicians and all refrigerants in the market place is paramount. Who knows the ultimate variety of refrigerants which may be used in automotive air conditioning systems, hence we need to close this gap in licencing," he added.

Queensland VASA director Brett Meads says, "As an industry, we ideally should have licencing of all technicians handling any refrigerant.

"There should be no fine print regarding the nature of refrigerant used, or its toxicity or flammability. If the substance can be or is used as a refrigerant it should be covered by the licencing scheme.

"Likewise, any technician working with a heat exchange system using a refrigerant should be covered by the licencing scheme, regardless of the extent of the work being performed.

Current licencing scheme encourages illegal behaviour

"For this to work it needs to be an all-embracing licencing scheme so that there are no loopholes," Brett added.

VASA director Deyan Barrie also wants a 100 per cent refrigerant licencing scheme. "Having an all-embracing scheme will make everyone more aware of the risks associated with using any type of refrigerant," he added.

"The current position is penalising technicians who are doing the right thing and encouraging technicians who are happy to flaunt the handling laws by using refrigerants with no global warming potential to regas and therefore remaining unlicensed," was the view of VASA director Tim Grimes.

"Having an all embracing licencing scheme would ensure that alternative refrigerants could only be sold to licenced technicians, because practically no air conditioning repairer can service systems without handling R134a on a daily basis. The current scheme is encouraging illegal behaviour," he added.

European a/c show worth a visit

If you were thinking about a European visit, this could be a good way to mix business and pleasure, and claim some of it as a tax deduction.

The 2012 European Automotive Airconditioning Convention (EAAC) will be held on 17 and 18 September in Frankfurt, Germany.

The EAAC will interest everybody who works in the auto aircon service industry as repairer, supplier or manufacturer. The convention will highlight the big changes in the industry, and will encourage delegates to become auto thermocontrol specialists.

It's an international meeting platform for auto aircon and heating service specialists, manufacturers, distributors, engineers and trainers.

The hot topics will be the new refrigerant HFO-1234yf and new concepts where a/c systems and cooling loops are combined for use in current and new hybrid and electric vehicles.

Registrations can be arranged at <http://www.auto-ac-reporter.com/cms/>

In the next issue of Hot Air, our revisit of VASA's much admired Registered Technicians Program (RTP) will continue, with the first of the four Refrigeration bulletins in Volume 1.

All RTP bulletins can be accessed by members online at www.vasa.org.au



VASA SERVICES



See Automotove Training Solutions chief trainer Grant Hand at his best on this air conditioning servicing DVD that comes with a 24-page workbook. VASA member price is \$40.

To order your copy, email secretary@vasa.org.au with your name, membership number and phone number and we will post it to you immediately along with your invoice.



New members

Member #961
Steven Rennie
Ultra Tune
MACGREGOR QLD 4109

The Annual General Meeting of VASA will be held at the Four Points by Sheraton Hotel, Geelong, at 5pm on Saturday, 9 June 2012. All members are invited.



VASA is proud to be affiliated with MACS Worldwide

Members web access

Follow this simple procedure to log in to www.vasa.org.au

1. On the front page of the site, there are two links, one in the top navigation bar and the other on the left hand navigation links. Click on one of the links.



2. Type your member number in the first box. In the password box, type in lower case the first four letters of the suburb in which your membership has been listed.

If that doesn't work, please check your membership number and suburb and try again. Accuracy is essential. *After five password attempts the site will lock you out, and you will need to wait 10 minutes before trying again.*

New Code of Service for your workshop

VASA Customer Code of Service	The VASA Service Centre
<p>The VASA mission through honesty, professional integrity and application of repair technical knowledge is to provide every customer with an exemplary experience which will encourage them to return to the VASA brand.</p> <ol style="list-style-type: none"> The customer will be treated with respect. Dealing with the customer will reflect a high quality of service and a professional image of a knowledgeable network of technicians. Every vehicle will be diagnosed and repaired in full consultation with the customer. The aim is to get the vehicle safely back on the road as soon as possible, regardless of any underlying issues or challenges relating to further repair, warranty disputes or incorrect diagnosis. Warranty is not the customer's problem - such issues will be resolved amicably and professionally between the Service Centre and its suppliers, without compromising the customer in any way. Following the preliminary inspection by the technician, the customer will be given an estimate of the cost of the necessary repair, an outline of the work and parts required, replacement parts, with costs if available, will be listed separately to the service charges. The customer will be advised, preferably in writing, whether the estimate is subject to further diagnostic work, or whether the quotation is final. Where a complex diagnosis is required, the customer will be advised of any charges for diagnostic tests and a written report. If additional repairs are found to be necessary, the cost of which would exceed the amount quoted or estimated, the customer will be contacted to explain what is required and to seek authorisation for any additional costs before any further work proceeds. Full details of all work carried out will be listed on an invoice along with the corresponding charges for labour, spare parts and materials. All parts replaced will be available for inspection by the customer, where practicable, and an explanation of why the parts have failed will be offered. Service or repairs will be guaranteed against any failure due to defective recommended parts or faulty workmanship. Any dispute between the Service Centre and the customer will be resolved quickly and amicably. 	<p>Members of VASA Service Centres will engage in sufficient training, education or skills development to enable them to keep pace with the technology required to repair modern vehicles.</p> <ol style="list-style-type: none"> Members are responsible for upholding the professional integrity and work ethics of the VASA network and the automotive industry, and will avoid any conduct that may bring discredit to VASA and its members. Members will adhere to standards of public behaviour, honesty and professional courtesy in all dealings with the public, other VASA members and fellow technicians. Members will not sell goods or services as well as environmental resources and Codes of Practice and will promote the use of approved and recommended parts, equipment and consumables of original and replacement. Members will endeavour to educate the public on the long-term value of using approved replacement parts. Where a customer decides on a lower quality part option, the Service Centre will note on the final invoice that non-recommended parts have been supplied by the customer, therefore the Service Centre will accept no liability for any failure of parts or subsequent damage to vehicle systems. Members will discharge their responsibility to their employees by observing all laws and collective and individual employment contracts or agreements, and by providing technical training, support and education to enable them to be productive and efficient employees capable of contributing positively to the welfare of the business. Members will provide adequate working conditions, equipment and facilities, and ensure proper supervision of all safety standards and work practices. Members reserve the right to refuse to undertake any repair that is beyond the Service Centre's equipment capacity or staff expertise. This right also extends to any situation where the customer insists on a part repair that is beyond the technician's expertise and/or competence, or systems at risk of failure. The member will fully inform the customer why such refusal is necessary. Members will take the time to educate customers on the need for proper maintenance of specific vehicle systems and make available relevant brochures or customer parts to promote a better understanding of the need for scheduled maintenance. Members will take responsibility for their own workshop practices and be prepared to guarantee their practices, and the safety of equipment, to the customer. They will provide trouble free operation when used in accordance with manufacturer's specifications. Members will adhere to and readily understand warranty practices as an integral part of their business operations. Members will refrain from criticising the actions of fellow members, and will strengthen the network through sharing of technical information and skills and offering assistance to fellow members as required. Members will be environmentally responsible, ensuring compliance with environmental and energy efficiency guidelines or regulations.

The VASA Code of Service, circulated to all members during April and May 2011, is a valuable marketing tool for workshops.

The codes, one covering the interaction with the customer, and the other covering workshop staff ethics, can be displayed individually, or as a set.

VASA recommends that members frame the codes and display them prominently in their customer waiting areas.

Hot Air is published every two months, and is posted to financial members of VASA, along with the current issue of the TaT magazine.

This newsletter contains information which will help you become a more productive technician. You are encouraged to leave past issues in your waiting room, so that your customers can see that you are a member of a professional repair network.



One of the big benefits of being a VASA member is that you receive a free copy of the TaT magazine, and with it free access to the TaT assist service.

This is a web-only service, so to access technical help, members must go to www.tat.net.au and log in, using the form that is generated when you click this link on the left of your screen.

If this is your first sign-in Click Here and enter the same email you gave with your subscription to generate your login details.

In your case, as a VASA member, your email is already installed in the TaT system, so if it matches, you will be provided with your own password for all future visits.



When you access the TaT assist form, you must fill in as much detail as possible to give the experts enough information to consider your problem.

VASA members can also access a growing database of vehicle faults and solutions in the members' pages of the TaT website.

RTP

The RTP (Registered Technicians Program) was a big hit when first written by VASA, and is still considered the bible of air conditioning practice.

Members are encouraged to use this valuable resource for staff refresher courses, and for ready reference on a range of air conditioning issues.

The entire set of RTP bulletins can be found in the members' area of the VASA website www.vasa.org.au

Hot Air is reproducing the RTP in its entirety and in a new, dressed-up format.

So far, we have covered the whole of Electrical Volume 1, Bulletins 1 - 4.

In the next issue of Hot Air, we will continue with the first of the four Refrigeration bulletins in Volume 1.