



HOT AIR

NEWSLETTER

JUNE 2010

The Automotive Air Conditioning, Electrical and Cooling Technicians of Australasia

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VASA - an industry force as relevant now as it ever was

Membership must keep VASA strong



*VASA president
Ian Stangroome reviews
a busy year*

VASA, as an organisation representing the professional workshops of Australasia, is as relevant today as it was when the pioneer auto air conditioning experts got together in the early 1990s.

In fact, now that I have seen the real role that VASA plays, much of it behind the scenes, I have come to appreciate even more the value of being in an organisation which is structured to look after the interests of its members.

From the president's seat, I have come to value the links and influences VASA has in the industry which encompasses not just air conditioning in vehicles, but auto electricians and cooling technicians.

All these roles are now intertwined and while air conditioning is still a significant

part of our association, we have a growing number of auto electricians who depend on us for representation.

I want to assure members that VASA is held in high regard, and that means we have considerable clout when it comes to regulations and future direction for our industry.

All members would be impressed by the role played by VASA directors if they could be a 'fly on the wall' at meetings of key industry bodies such as the Australian Refrigeration Council, Refrigerants Australia and Refrigerant Reclaim Australia.

Two of our most senior directors, Mark Mitchell and Mark Padwick donate so much of their time to representing our industry at these all important forums.

The fact that Mark Padwick was re-elected as Chair of the body which administers the refrigerant licensing regime in Australia is a real feather in VASA's cap.

Certainly these are all related to air conditioning issues, but it is no surprise that, with a new refrigerant about to be introduced on a world scale, this area of our industry is currently the one demanding a lot of our attention.

However, as important as all this work is, it cannot happen without a strong and active membership.

Like all voluntary associations,

VASA has its losses and its gains in membership during the year, but we manage to hold our own.

We have a hard core of loyal members and I thank them for their continued support.

More feedback from members would be welcome. As much as your directors have a good feel for the issues which concern all of us, it helps to be given a clear idea of the concerns of all workshops.

I trust that members attending the Wire & Gas convention will give us plenty to think about during the open forum which will be part of our annual general meeting.

But members should not wait for an AGM to share their views or concerns. Your directors have put up their hands to represent you at the highest level, and members are encouraged to phone me or any of the other directors at any time during the year to let us know what's on their minds.

The issues which occupy a lot of VASA time don't seem to change that much through the years.

During the past year, the government's Carbon Pollution Reduction Scheme had us worried until it was abandoned for the time being, and we continue to fight against hydrocarbons in vehicle systems. We are hoping that our new campaign for licensing of all

technicians will go a long way to regulating the use of refrigerants of all kinds, not just those which have environmental impacts.

The new refrigerant HFO-1234yf will now occupy our minds for a few years because our role will be to understand its qualities and retrofit issues and ensure that our members handle it professionally.

I thank members for the opportunity to represent them as president, and I thank the board members for their work and advice through the year.

New refrigerant passes the tests - now for the long transition process

The major announcement by refrigerant developers DuPont and Honeywell that they will combine their resources to build a world-scale manufacturing plant for HFO-1234yf, signals the end of the years of testing and evaluation of the preferred replacement for R134a as a vehicle air conditioning refrigerant.

The new refrigerant has a global warming potential (GWP) 99.7 percent lower than R134a, more than satisfying the demands of the European Union which has led the world by banning R134a in all new cars after 2011, and demanding a global warming potential under 150. The GWP of R134a is 1,430.

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BRONZE



Another winner for VASA - and the delegates

The Wire & Gas Convention and Trade Show for 2010 has all the hallmarks of success.

By the time this issue of Hot Air is read by the membership, delegates will have begun arriving at the Royal Pines Resort on the Gold Coast.

Some will begin by playing a round of golf, with big prizes donated by VASA commercial supporters to be won.

By Friday afternoon 11 June, the ballroom at Royal Pines will be a frenzy of construction activity,

as the Trade Show is built from scratch in time for the traditional opening party that night.

According to the exhibitors from previous years, the Friday night is the night when most of the business is transacted.

The atmosphere is electric as delegates browse from booth to booth to see what's new in the world of air conditioning, auto electrics and cooling.

Convention committee chair Mark Mitchell is pleased with the response to the convention.

'Times have been tough and people are naturally nervous about spending, but despite that, we have managed to attract around 300 delegates.

'With 43 exhibition stands, the Trade Show is a record size, not only in booth numbers, but in the range of individual exhibitors,' Mark added.

'The training sessions will be impressive.

'We've gone overboard to make delegates comfortable, so all sessions will have seating, many of the trainers will be using small PA systems so they can be clearly heard, and all of the sessions will be laid out inside the Royal Pines ballroom, with the exception of Grant Hand's sessions on large earth moving vehicles, on the lawns outside the ballroom,' said Mark.

'A big new attraction will be the special series of workshops being

delivered by business trainer Geoff Mutton, aimed at helping technicians and workshop operators to convert their knowledge and skills into money in the till, and retain happy customers.

'VASA has realised that in these competitive and tight economic times, it has an obligation to help member businesses to be sustainable and profitable, as well as keeping them up to speed with technology,' said Mark.

'Pulling together such a big convention and Trade Show has meant more than 18 months of hard work by a dedicated committee, and I thank them for volunteering their time and expertise,' he added.

European cars outside Europe after 2011?

The VASA Board of Directors has considered the implications of the new refrigerant release on Australian vehicles.

Given the lack of detail from car manufacturers to date, the Board believes that, until stocks of HFO-1234yf are able to meet world demand, European vehicles imported into Australia would continue to contain the existing refrigerant R134a for some time. The service industry in Australia may not face the new refrigerant until 2015 or 2016.

The EU has restricted the sale of new vehicles in Europe containing R134a after 2011, but VASA understands that since there are no major component changes required to the air conditioning systems (HFO-1234yf being touted as a 'drop-in' refrigerant requiring no retrofitting), cars intended for sale outside Europe could continue to be charged with R134a.

As yet, VASA has no information on how the aftermarket should handle HFO-1234yf, but as it becomes available, it will be passed on to members.

New refrigerant goes through rigorous testing

The SAE International industry evaluation of HFO-1234yf confirmed that HFO-1234yf is an environmentally friendly refrigerant suitable for use in direct expansion Mobile Air Conditioning (MAC) systems. HFO-1234yf is a non Ozone Depleting Substance.

The green-light findings of SAE follow extensive testing supported by multimillion dollar (USA) funding and in-kind support provided by 15 vehicle makers from China, France, Germany, India, Italy, Japan, Korea, Sweden, UK, and USA and 18 Tier one suppliers from Asia, Europe and USA.

SAE International is a global association of more than 121,000 engineers and related technical experts in the automotive, aerospace and commercial-vehicle industries. SAE International's core competencies are life-long learning and standards development.

Flammability testing demonstrated the difficulty in igniting the HFO-1234yf refrigerant under the most severe testing conditions. Tests show a very low probability that an accidental release of refrigerant creates a sufficient concentration at the same time and

The move from R134a to HFO-1234yf begins next year

Honeywell and DuPont introduced HFO-1234yf to the automotive industry in 2007 and since then, it has undergone extensive testing for safety and efficacy by independent testing groups such as the SAE International Cooperative Research Program, in which leading carmakers take part.

The SAE testing found the product offers environmental performance superior to carbon dioxide, an alternative refrigerant, while having the lowest risk for use in mobile air conditioning systems in meeting environmental and consumer needs.

It's believed there are more than 400 million cars with air conditioning systems in the world, each using between 500 grams and one kilo of refrigerant.

The joint venture between Honeywell and DuPont to jointly design, construct and operate a world-scale manufacturing facility for the new refrigerant is the next step in ensuring there is adequate supply of HFO-1234yf to meet the expected global demand.

Mr John McCormack, Business Manager Industrial Chemicals for DuPont in Australia, said that by forming this joint venture DuPont and Honeywell are able to bring together the technical expertise needed to design and build the facility and share the cost of such a major undertaking.

"Initially we will be commercialising HFO-1234yf through our DuPont China Joint venture. This initial production facility will supply both DuPont and Honeywell and is expected to produce enough HFO-1234yf to meet the auto OEM's demand required by the EU regulation," said Mr McCormack.

"This initial plant is scheduled to start shipping commercial quantities of HFO-1234yf as early as the fourth quarter of 2011.

"Our plan is that this plant will be succeeded by a sustainable world scale plant and this is where we are focusing all of our attention.

"To be sustainable, a world scale plant will require a new and innovative manufacturing process. There are technical and financial risks inherent in an undertaking of this

location as a sufficient ignition source. There's also a very low probability, lower than associated with other hazardous vehicle events such as brake failure, that occupants could be exposed to an open flame.



DuPont Australia's John McCormack

magnitude, so we are sharing these risks, eliminating the duplication of effort and this will allow more efficient use of technical resources and, hopefully, lead to faster results.

"DuPont and Honeywell have shown the automotive industry we can work well together by developing HFO-1234yf and bringing it to production is the logical next step," added Mr McCormack.

Globally, consumers are expected to benefit from this new technology, which reduces greenhouse gas emissions.

The new refrigerant enables the automotive industry to reduce the environmental footprint of vehicles at significantly lower cost than alternatives, the joint announcement said.

The European Union's mobile air conditioning directive requires that, starting in 2011, all new vehicle models use a refrigerant with a GWP below 150, and by 2017, all new vehicles sold in Europe will be required to use a low-GWP refrigerant.

When Australian and New Zealand workshops will begin seeing the new refrigerant is not known, but VASA will be talking with the car companies to try to determine if this will occur with all European cars imported to Australia from late 2011.

More information at www.SmartAutoAC.com

Additives and system improvers - do they really do anything? Probably not.

An academic from Melbourne posed a question to VASA concerning the use of products called system enhancers - things designed to improve the performance of air conditioning systems in vehicles.

The question triggering an international response and once again reinforces the stand of professional organisations, which is: 'If OEMs wanted anything else to be in their systems, they'd put it in.'

Hot Air recalls posing the same question years ago to component manufacturers and one leading designer of compressors made it abundantly clear, 'We regard anything placed in an air conditioning system other than the oils and refrigerants stipulated by the manufacturer as a contaminant and if we can prove it, warranty is voided.'

Has anything changed through the years? It appears not.

The Melbourne academic who asked the question named a number of additives or system enhancers, all of them from the US. Hot Air will avoid using product names for obvious reasons.

VASA's stand was summed up by current Director and one of the founders of VASA, Mark Mitchell, 'If these system enhancers actually did enhance systems, then I am sure the OEMs who spend millions on R&D would enhance the use of these products so they could do the enhancing.

'In air conditioning and refrigeration there is a firmly entrenched culture to stay with the native refrigerant and lubricants in the systems for which they were originally designed and tested.



'VASA usually takes the view that enhanced refrigerants are commercial blends of something already in existence, and mostly don't offer anything new in performance or durability for components.'

Since America seems to be the breeding ground of many of the system enhancers, Hot Air referred the question to the experts at MACS Worldwide, VASA's affiliate organisation based in the US, and the biggest mobile air conditioning society in the world.

MACS President, Elvis Hoffpauir, said that his organisation's position was that technicians should use the type and amount of refrigerant and lubricant specified by the maker of the equipment, and that's it.

'There is an SAE J standard (SAE J2670) which, if met, gives the user some confidence that the product meeting that spec will do no harm, but meeting the standard does not give any credence to the product's advertising claims about its effectiveness,' added Elvis.

In the past, some manufacturers of enhancement products have challenged the OEMs to test them for effectiveness.

It is believed the standard OEM response is, 'You do all of the expensive testing to back up your claims. We didn't ask for it and we don't want it.'

MACS figures that the OEM designed, built and tested the system, so the OEM should know best how to maintain the system.

The lead trainer for MACS, Paul DeGuisseppi, said he was once told by an OEM that it costs a car maker US\$1 million to validate a chemical.

'That said, they must have a pretty good idea initially of what's worth spending that kind of money on and, also, what isn't,' said Paul.

He recalled a keynote speaker at a MACS convention saying, 'When a vehicle leaves an assembly plant, its a/c system contains two, maybe three things - refrigerant, oil and maybe dye. That's what the OEMs want in the system. If they wanted anything else to be in it, they'd put it in.'

Hot Air appreciates that the uncompromising stand of organisations such as VASA and MACS irks the importers and sellers of what they see as 'good ideas'.

What these people have to understand is that neither MACS nor VASA have the resources or the laboratories to test any of these ideas. Therefore, given the lack of any other scientific evidence, the default position for any organisation that professes to represent the professionals in the industry can only be to adhere to the principles laid down by the car makers.



The Automotive Technician (TaT) has contracted to provide technical services to VASA members and this also includes an additional service where members can seek help from the TaT technical team to resolve

tricky repair issues.

While this is a free service for the nominated VASA member, it is not intended to cover all technicians in the workshop.

For that reason, VASA members are urged to consider providing TaT subscriptions to their key technical staff, for the small annual outlay of \$115.

This means that the technicians

will receive their own copies of the TaT magazine mailed direct, and will be able to access all of the extensive TaT services in their own right.

It's a low fee for an excellent service, which is also committed to increasing the skills and knowledge of the individual technicians.

This makes signing up workshop technicians employed by VASA members a solid investment in

workshop productivity.

Technicians in VASA workshops can review the TaT offerings at www.tat.net.au, and there's a subscription form on line as well.



ADAIR Auto Air Products is a leading range of Aftermarket Automotive and Industrial Air conditioning components



Our range covers 12 main product groups:-

Condensers	Compressors
Electric Fans	Evaporators
Heaters	Fittings
O-Rings	TX Valves
Pressure Switches	Refrigerant
Receiver Driers	Accessories

The ADAIR range is constantly monitored to ensure that the products supplied are of the highest quality. New ADAIR products are also under investigation and development to expand our product offering. With over 3,500 lines of air conditioning products held in ADAIR's extensive national network of warehouses, the availability of product when and where required by customers is maximised.

Products include brands such as Sanden, Delphi, Behr Hella, Uniola, KOYOAIR, Red Dot, Maradyne Fans, Javac and Air International to complement the extensive range of ADAIR quality components. With an extensive range of tools, equipment and refrigerant, ADAIR offers a comprehensive range of automotive a/c products.

ADAIR also offers an extensive and growing range of Industrial a/c components to suit on-highway, off-highway, agriculture and mining applications. These products are displayed in the latest ADAIR parts catalogue and include Condensers, Compressors, TX Valves, Driers and Evaporators along with an extensive offering of Red Dot rooftop units and components.

ADAIR's new 930 page catalogue is formatted in an easy to read make/model layout.

This catalogue conveniently lists all the key components for a particular vehicle on the same page. The ADAIR catalogue also contains very helpful technical sections - specifically created for quick referencing in the workshop.

Customers familiar with ADAIR's huge range will appreciate the handy fast-find index as a real time saver.

The ADAIR innovative catalogue layout is just another example of ADAIR's commitment to innovation and continuous improvement to service our customers at the highest level.

For further information please contact your local Adair office on 1800 1ADAIR 1800 123 247 or visit www.adair.com.au.



New members

David Robson
Robson Auto Electrical
DOOEN VIC 3401

Danny Shane
South Coast Auto Repairs
PORT ELLIOT SA 5212

Domenic Pansino
Pansino Radiators
BRUNSWICK WEST VIC 3055

Julian Mason
Mansfield Motors
TINGALPA QLD 4173

Darrel Hursey
Tumut Auto Electrics
TUMUT NSW 2720

Chris Albertini
Chris Albertini Automotive
NORTH LISMORE NSW 2480

Convention planning is in the very best of hands

The Wire & Gas Convention committee has met monthly for the past year, and regular meetings have extended over two years, since the last convention.

Planning your convention has become a permanent chore for VASA because it really does take two years to properly plan and market a convention of this size. The communication program to members and technicians from around Australasia actually begins in earnest one year before the convention opens. Committee Chair Mark Mitchell has paid tribute to his team.



Ian Stangroome
VASA President



Jeff Smit



Shayne Quaile



Mark Mitchell
Chair



Warrick Steel
Coordinator



Tim Grimes



Deyan Barrie



Ben Marsh



Ken Newton
VASA CEO

CoolDrive kicking goals with automotive specialists



CoolDrive Distribution has moved to further cement its position as one of Australia's preferred suppliers to automotive specialists in the air conditioning,

radiator and auto electrical industries, with the roll out of a huge expansion of products in air conditioning and electrical accessories.

Coming off the back of the completely revamped 900 page air conditioning catalogue will be the soon-to-be released electrical accessories catalogue, showing off the vast range of products now available at CoolDrive.

"We've revised and hugely expanded our range of electrical accessories, and we've added such exclusive and specialist

products as Vintage Air and PowerLite to our range," said Tim Grimes of CoolDrive.

"This shows our commitment to continuing to provide support to industry specialists, something the company has been doing for over 30 years.

"Our support of VASA and Wire & Gas is just part of our strategy to continue to be the number one supplier for our specialist customers. It's not just about selling parts, but about listening to our customers' needs and responding to them, which often

means developing new product ranges," he said. "This is the main reason why the number of parts carried in each of our 10 branches is now more than double that of a few years ago," added Tim.

For a complete list of the vast range of products available at CoolDrive, contact your local branch for a copy of the Wire & Gas Special Edition CD Catalogue Suite.

Details are at www.cooldrive.com.au.

VASA Board of Directors to be re-elected for another term

When nominations closed for the election of the seven directors who make up the Board of VASA, only the existing directors had indicated their willingness to stand again.

This means that a ballot will not be required at the Annual General Meeting, to be held in conjunction with the Wire & Gas Convention on the Gold Coast on Saturday, 12 June.

Since its founding in 1992, VASA members have never been required to vote in a ballot, because only the correct number of directors have ever been nominated.

While VASA has always been blessed with long-term consistency with its directorships, the Board would like to see more members show an interest in board positions in the future.



Tim Grimes
Director
General Manager - Sales and Marketing, CoolDrive Distribution, Melbourne
Bachelor of Applied Science
Associate Diploma of Business



Ian Stangroome
President
Director of Corjay Aire Pty Ltd, Adelaide
Cert III - Automotive electrician
Cert III - Electrical fitter
Cert II - Automotive air conditioning
Cert IV - Business management



Mark Padwick
Vice President
General Manager of Sanden Australia and Chairman of the Australian Refrigeration Council
Degree - mechanical engineer
Degree - MBA



Deyan Barrie
Director
Director - Barrie Auto Electrics Pty Ltd, Sydney
Cert III Aircraft Electrical Mechanic & Electrical Fitter
Cert II Mobile Auto air conditioning
Formerly president of the Australian Association of Automotive Electricians



Mark Mitchell
Director
Director - SCA Australia and Chairman - SuperCool Pty Ltd, Southport Qld
Cert IV- Automotive technical
Diploma - Automotive Management
VASA 'Legend'



Jeff Smit
Secretary - Treasurer
Director - Tower Motors, Sydney and The Automotive Technician Pty Ltd
Cert III- Mechanical and auto electrical
Formerly secretary of the Australian Association of Automotive Electricians



Barry Rogers
Director
Director - Auckland Auto Air
Diploma - Accounting

Ashdown-Ingram continues to grow from strength to strength

**ashdown
ingram**

Ashdown-Ingram made the bold decision to keep expanding its network during the global financial crisis. This decision to continue to increase the level of service being provided to customers has resulted in

with internationally respected brands, Ashdown-Ingram truly offers a professional advantage to customers.

April saw the opening of our new Coffs Harbour branch and May saw the opening of our latest addition to the network, Karratha. New branches are not the only signs of expansion and growth as May will also see Ashdown-Ingram's Bunbury branch



us cementing our position as Australasia's largest aftermarket supplier of automotive electrical components.

Boasting the most comprehensive range of product (including Alternators, Starter Motors, Air Conditioning components, Radiators, Lighting, Auto Electrical Parts and Accessories)

doubling in size as it takes over the adjoining tenancy.

Our 44 branches across Australia and New Zealand, ensure that we are well-placed to service customers' every automotive electrical and thermal need, thereby delivering a more efficient and reliable service.

Death of world auto airconditioning authority - Robert Bandeen

Robert Bandeen, regarded as one of the world's foremost authorities on the beginnings of the automobile air conditioning industry, has died at his home in America.

With his mechanical engineering degree and extensive war service, Robert was hired by Overseas Motors in Fort Worth to work in the fledgling auto air conditioning industry.

He later formed Delanair with Delaney Galley in London and was the co-inventor of the electric compressor.

He then co-founded Sanden Engineering Company in 1984 as a branch of Sanden Japan.

He was one of the first to

recognise the dangers of emissions to the environment, and he addressed this issue at a conference held by the United States Environmental Agency at the United Nations at The Hague.

He worked with colleagues at General Motors, Volkswagen, Jaguar and Rolls Royce, mentoring many young engineers.

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



VASA foundation member calls it a day after 50 years

Penrith auto identity David Roberts has gone fishing.

On 31 May, he shut his doors at David Roberts Automotive in Penrith's High Street, the main street in the CBD, after 50 years of sheer car-fixing enjoyment.

David joined VASA as soon as he heard of its existence (member number 79) and he is proud of the fact that he is one of the few in the trade in his part of the world who can repair air conditioning systems as expertly as he can.

He's been an NRMA approved repairer for the past 25 years.

David moved with his parents to Penrith when he was six years old, and he's been there ever since. His dad had a haulage business, and David went into the automotive trade.

He operated his business smack in the centre of the main street for 34 years, and then bought his own piece of real estate and established his current business just on the edge of the CBD.

David has watched Penrith grow up around him, and he has a big stake in it. He invested his savings in a number of properties so now he is well set up for his retirement years. He reckons his business is the only one which has served uninterrupted for half a century in Penrith's main street.

Fishing is just one thing on his extensive list of things to do. First job was to spend a real holiday at his holiday house on the Central Coast, followed by long visits with his daughter in England and son in Canberra, as well as reading and more fishing.

Local auto electricians have bought all his stock, and the sale of his building for development will give his retirement fund a boost.

He's proud of the fact that all of his apprentices have done well and set up good businesses. His son Mark, now owner of an automotive franchise, topped the state in his final year of apprenticeship.

What's in it for you?

Every year around this time, VASA gets the same question from some members who feel they have not received their money's worth from being a member of the association.

It's understandable that more and more people are opting out of clubs and associations as a cost saving measure. Others complain they don't have the time.

VASA membership, with respect, is very different. We are talking about your business, your livelihood, your credentials as a professional technician and your ability to keep up in an industry which is undergoing rapid change, in electronic technologies, in refrigerants and in air conditioning systems.

VASA is like most organisations

or industry groups which are usually run by a team of dedicated diehards, who often work tirelessly, without reward, to improve the working lives of their industry mates.

But VASA actually provides something very substantial and tangible, and unattainable anywhere else.

VASA is the only organisation serving the aftermarket climate control and auto electrical industries, which is actually doing something to improve your skills and therefore make you more money. But you need to read your Hot Air newsletter to keep up with the services which are available to you.

VASA provides the platform, the rest is really up to you.

Web access for members

Regular calls are still coming in from members who are having difficulty accessing the member pages on the VASA website.

Some were trying to use the password they had for the old website of several years ago. They no longer work.

The old website has been replaced by a brand new one and for access to the site you must follow this logon procedure:

1. On the front page of the site, you will see this box. Click to login.

VASA Members

CLICK HERE TO LOGIN

Not a member? Click here to join.

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.

Member Log in

Member Number:
Password:
LOG IN

If that doesn't work, please check your membership number and suburb and try again.

Remember that after five password attempts the site will lock you out, and you will need to wait 10 minutes before trying again.

With password entry to websites, accuracy is essential. A capital letter in your password will block your entry. So will an errant full stop, comma or any other accidental key stroke.

So let's clearly explain the

VASA members risk losing their membership status if renewal fees are not paid within two months of the financial year, which begins on 1 April each year.

difference between the VASA website and the TaT website.

The VASA site is all about your association and the information it holds in the member library comprises volumes of technical data, plus technical bulletins from our affiliate organisation in America, MACS Worldwide.

VASA does not offer a problem solving service. This is provided free of charge to VASA members by the TaT team.

As mentioned earlier in this newsletter, the TaT team have taken on the role of technical help, but it is not a phone in service.

So VASA members need to be very clear about what they are looking for on the web.

Here's a general rule:

For matters affecting your membership of VASA, technical archives containing the Registered Technicians Program, consumer information about VASA and a full listing of all members by location and type of membership, the website address is:

www.vasa.org.au

If you have serious technical problems with a particular vehicle, no matter what the problem is, and for access to a growing series of vehicle faults and solutions, the website address is:

www.tat.net.au



All 51 bulletins of the famous VASA RTP bible on vehicle air conditioning are available to members at www.vasa.org.au

Air conditioning servicing DVD is still a hot seller - get your order in while they last at the special VASA price

Produced by one of Australia's most experienced air conditioning trainers, Grant Hand of Automotive Training Solutions, this is the most comprehensive air conditioning service message ever produced.

You receive in a DVD case three programs, including a detailed air conditioning service on a vehicle, an insight into how to sell a professional service, as opposed to a quick 'top up' (now illegal), and an in-depth study of why components fail.



And, inside the DVD case is a 24 page workbook containing a summary of professional air conditioning service procedures.



This total package is retailing for \$50 but, for VASA members, a limited number of DVDs are available for only \$40.

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

How to access the TaT 'help' service

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.

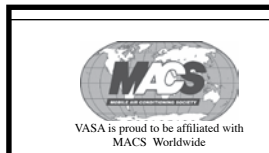
This is a web-only service, so to access technical help, members must go to www.tat.net.au and log in, using the form which will be generated when you click this link on the left of your screen.

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 time to consider your problem.



Go to the members pages at www.vasa.org.au to see the latest MACS service reports.