



Flyer - classroom - certificate - workshop

2014 Training with AECS

Training in our high tech automotive world is needed.

Of course, you can do all the research into each diagnostic case yourself, but that would be a huge cost to the customer and workshop.

The flood of electronic faults that AECS' helpdesk is being presented with has never been so overwhelming. Anyone saying "we don't seem to get many electronic faults" is most certainly in a minority.

AECS has the facilities and resources to research electronic and software faults in vehicles. On one part, the training is based upon that research, on the other part is the training content based on the technical support provided to the AECS customers.



"Doing the diagnostic research ourselves makes our training unique and directly applicable in the workshop". The seminars have often been described that way by the many technicians who have attended AECS seminars.

AECS has a unique team of 5. Three guys are available for training. There is Paul who is an Ex F1 and WRC auto sparky, there is Peter who is a university honours graduate in electronic engineering, and there is Herbert who is a mechanical and automotive engineer.

Tech support

Paul, Peter and Herbert are also available for technical support, so that all of them get to hear the real problems you are dealing with. Between the three of them, there is always one who has a solution for the diagnostic cases we are presented with. This information assists all of the team members with presenting you with relevant information during the training.

"Our seminars keep changing and adjusting as a result of the real faults we are presented with".

A lot of the questions AECS trainers get are not just simple electronic sensor or actuator faults, but relationship faults. To find faults logged as a result of certain sensor signals not corresponding with each other requires a higher level of thinking and a good understanding of the software written into each control unit.

"We use, for finding diagnosing relationship faults, often the skills we have gained collectively from

the angle "how would we build this?" Unfortunately, there is no information available from factories (not even to the dealer organisations) about how the software is written, so to find out a lot of testing is needed.

Fault finding research

During research the AECS guys often send signals into the control units to see how the related control units respond. They can also intercept and send out inter ECU communication CAN messages on certain late model systems. The response of the related ECU's will tell that the signal was border line or that there was still a large margin.

The simulated sensor signal send out is at first the same as the one measured on the car, after which the signal is modified (increased or decreased). A border line signal indicates an intermittent fault.

| Text |

A good example is cam/crank relation faults (e.g. stretched chain). We have built a system which can simulate phase shift between cam and crank(s) and can therefore move the cam crank timing as far as we like.

3D Fuel map Suzuki GSXR in AECS' labs.

Want to find a misfire in less than a minute? GF force sensor with External Trigger button To get this \$749 For use only with the ATS scope.

Misconceptions

What AECS has found with some customers is that they put off going to one of our seminars as we are regularly present in each part of the country. Putting it off means often a wait of more than a year! That also means that during that year some jobs do not get done or get done inefficiently.

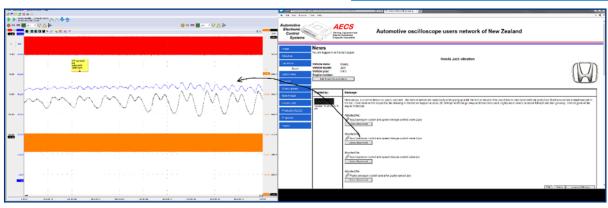
Another misconception is that AECS seminars are like some of those others out there where they explain "this is an air-mass meter, blow through it to see if it works.." No AECS does NOT work like that! We do explain briefly how the component works, but most of all what its role is and how it is affecting in the connected systems.

2013

A few of the new developments AECS had last year were:

- Web based technical support has been introduced, this doubles as a searchable data base with faults/solutions for the scopes and scan tools we sell.
- Chip reprogramming tools, which will be used in 2014 training seminars.
- Truck/bus/trailer diagnostic equipment, also for which a training is being built.





AECS Scope forum for technical support. CVT surge case.

2014

The AECS training seminars are very popular, with most of the 2014 calendar already booked. This shows how much trust there is out in AECS. The enormous demand and trust also means that AECS needs to be responsible with the content of our training; it HAS to be relevant.

Feedback received from some customers is that 2 day seminars are often a bit too long to leave the workshop. In response, AECS is planning on

a number of locations throughout the country AECS Trade shows and short 4 hour training seminars for 2014.

The trade shows will have equipment samples and training systems on display for you to assess if it suits your automotive career.

The 4 hour training seminars will be informative and pitched at different levels. Details about these local events will be published on our web site, Facebook, and mailed to you (if we have your e-mail address).

The usual seminars from simple fault code diagnostics through scope diagnostics all the way to ECU re programming (chip tuning) will be held as per normal throughout the country.

Ranking

The guys at AECS all think that it is an absolute joy to train NZ technicians. Most of the NZ technicians are highly rated in the international industry, a credit we collectively need to maintain by keeping up with modern technology. Above all, it is FUN to know and understand the technology that you are working with on a daily basis!

"Choose AECS as the company you use for equipment and training to further your business. We are working hard to be a worthy partner".



For AECS Ltd: H.P. Leijen (trainer/research) E-Mail: hpleijen@aecs.net

AECS Road Shows

Pencil in your diary, 4 hour *AECS* training seminars

HASTINGS 28th March 2014

PALMERSTON NORTH 18th June 2014

WELLINGTON
19th June 2014

AUCKLAND 27th August 2014

\$180.00 + gst

Ring +64 (6) 8749077 For more information





or Training in 2014

2014

AECS

Training Calendar

	March		April		May
1		1	•	1	
2		2		2	
3		3		3	
4		4			
5		5		5	
6		6		6	ChCh - AED
7		7	Auckland Scan	7	ChCh - AED
8		8	Auckland Scan	8	ChCh - DMS13
9		9	Auckland AED	9	ChCh - DMS13
	Taranaki Anniversary		Auckland AED	10	
	Auckland AED	11		11	
	Auckland AED	12			Dunedin - SCAN
	Auckland ATS	13			Dunedin - SCAN
	Auckland ATS	14		14	
15		15			Nelson - EMS11
16		16			Nelson - EMS11
17		17		17	
1 1	Auckland DMS 1-3		Good Friday	18	
19	Auckland DMS 1-3	19		19	
20	AED - Full	20		20	
21	AED - Full	21	Easter Monday	21	
22		22	· ·	22	
23		23			Auto SS conference Auckland
	otago anniversary	24			Auto SS conference
25	<i>g</i> =		Anzac day		Auto SS conference
26		26		26	
27		27		27	
28	Hastings Road Show	28		28	For more dates on our website
29		29		29	Click AECS.net
30		30		30	
31				31	

For more information on the Training Key and course descriptors see www.aecs.net

Sundays
Trainings
Public/school Holidays
PRIVATE Training

AECS have been training automotive diagnostic technicians for 14 Years