



California Automotive Teachers

April, 2011

Spring Issue #39

CAT NEWS

www.calautoteachers.com

Newsletter Highlights

- What's going on in Sacramento?
- Summer Training Opportunities.
- Variety of Advertisements!

What's in this issue?

Changing the "BAR"	1
President's Letter	3
Registration Update	4
Executive Director's Report	5
Excellence in Teaching	9
Spring Conference Info	10
ASE Ends Written Testing	12
My Friend, My Mentor	17
Summer Training Schedule	18
Detonation	22
Adventures in Retirement	24
So Long.....	26
NACAT 2011	27

Changing the "BAR"

The BAR Standards and Training Branch has undergone some dramatic changes in the last few years. The unit now is part of BAR's Engineering branch and is now managed by Ed VanMil. Ed has had a lengthy career in the automotive industry; starting at 16, he was designing and building a race car chassis for the family company in the Midwest. He's been a multiple ASE Master Technician starting in 1979, at one time holding five master technician certifications. While working full time as a dealership technician, he worked to get his community college teaching credential in 1984 and taught community college courses from 1982 thru 1990.

At BAR since 1991, Ed was tasked to improve the BAR 90 Roadside test process. Ed's also been deeply involved in the development of a certification process to test the speed and accuracy of Remote Sensing Device (RSD) and Optical Character Recognition (OCR) systems. When BAR needed to develop a portable BAR 97-based dynamometer test system for the roadside testing process, Ed developed the design and fabricated the systems. Now, more than ten years later, these test systems are still in use. After running the roadside program for nine years, Ed was assigned the task of managing BAR's Standards and Training unit.

(Continued on page 7)

The California Automotive Teachers will meet at Monterey-Peninsula College for the spring 2011 Conference on April 29 & 30.

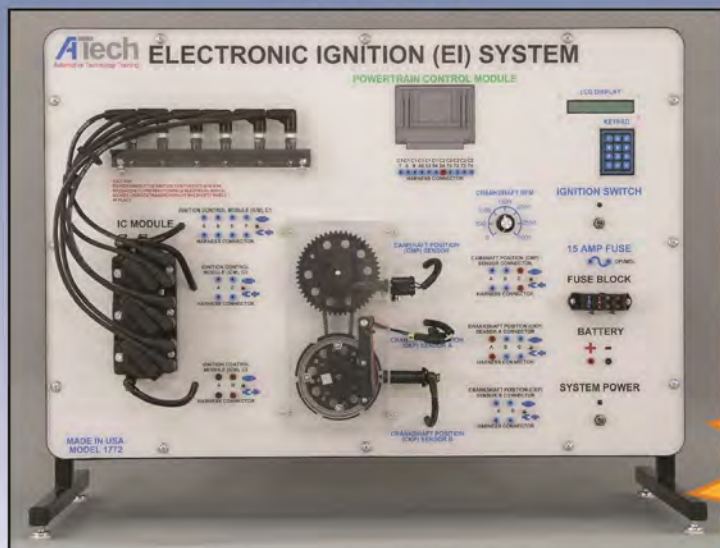
GM J1850 OBD II model 2652



GM J1850 OBD II Features:

- » Performs OBD II Drive Cycle.
- » Connects to Scan Tool (not included) via the DLC Connector.
- » Fuel Trim Control

Electronic Ignition (EI) System model 1772



Features:

- Actual new vehicle components.
- Operate as stand-alone trainers to teach and demonstrate engine control, transmission control, and electronic ignition.
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- Intermittent and hard fault codes can be inserted using the built-in keypad, a single computer, or the A/Tech Network System (ANS).
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Electronic Ignition System Features:

- » Circuit Identification with Probe Points.
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A/Tech
Automotive Technology

President's Letter by John Overton

The last two years have gone by quickly. My term as president is close to ending and it is important that we look to the future of our organization. During the spring conference we will again be electing a new vice president (from the North) as well as electing our ROP representative. Please think hard about who can fill these positions and contact a board member with your nominations. I have been very lucky to have served with a strong organization and board members; they all do an excellent job!



I would like to welcome our new members who have come from the ranks of the ASCCA. Please take time to read the letter by Bob Barkhouse regarding the ties we have made with the ASCCA organization. We believe it will serve both organizations well.

I would also like to remind you that the membership and conference registration may be accomplished on-line at this time. This has made it much easier for conference coordination and tracking of membership by Steve Vail our Treasurer. Tom Broxholm just sent out an email to all members alerting you that the site is open for registration. If you did not receive the email it is possible we have your wrong address. Please let Steve Vail know so he may update his records.

During our winter board meeting we added to the constitution three new amendments dealing with; Document Destruction, Whistleblower Policy, and Conflict of Interest Policy. These are required of us as a non profit organization. We have posted a copy of the changes in the web site: <http://www.calautoteachers.com/PDF/CAT%20Constitution1-1-2010%20wChanges.pdf>. We will also provide a posted copy for review at the Monterey Peninsula College conference. We will be asking for ratification of those additional amendments at our general meeting.

As I am sure you are all aware we will be hosting the spring conference at Monterey Peninsula College on the 29th and 30th of April. I know that Jim Custeau our 1st Past President and CAT Conference Coordinator is working diligently with James Lawrence of Monterey Peninsula College to ensure another excellent conference. With the Conference being held in Monterey I know you are all looking forward to attending. Please take some time to register for the conference on our web site and use the on-line payment features to save you time in registration. Don't forget that late registration, after the 17th of April, increases the overall cost from \$35.00 to \$55.00.

(Continued on page 4)

As the summer nears, start watching the web site for the schedule of our “Train the Trainer” summer workshops. Drew Carlson 2nd Past President and Quentin Swan are already working with the factory training centers to establish a schedule. Though finances at the schools are tight please consider the advantages of taking classes to keep you abreast of industry changes. We have been lucky that factory training is offered, if the numbers drop to low we may not see them in the future.

On a final note I would again like to thank both you and the board for the support you have given me over the last two years. Though I can't say I have accomplished any great things, I do believe the organization is enjoying a strong financial position, conferences have been excellent and well attended, and we have continued to press for improvement in all that we do. I look forward to following in Custeau's shoes and provide excellent leadership as the new 1st Past President.

Website & Registration Update By Tom Broxholm

Along with website innovation and registration we are also experiencing growing pains. Website registration has improved efficiency and reduced work load and yet we are still striving to make web registration simpler for you to use. We now offer the option to bring a spouse or significant other as a guest to our luncheon for an additional conference fee. We are striving to keep our conference registration information updated with our official records which is sometimes a challenge. We will be meeting all challenges head on so tune in for future changes. As always, I'm interested in hearing about your website and registration experience and suggestions.

Institutional Members fill out a special form once a year and pay as a group. Please do not register for our CAT conferences as an institutional member if you are not on our institutional member list. There is a link on the website that has a list of all of our institutional members. If you are unsure if you are an institutional member or not, please check the list first. This link is available right inside of the registration form.

If you are an institutional member or you are planning on registering your institution this next fiscal year please pay close attention to the application opening and closing dates. Institutional membership registration opens on May 1st and closes on October 1st. Please fill out the registration form and submit it prior to the closing date even if you have not fully secured funding.”

Please don't hesitate to contact me with website suggestions, corrections or registration help.

tom@calautoteachers.com

Executive Director's Report by Bob Barkhouse

You CAT members need to pat yourself on the back. In light of tight budgets, limited travel funds, in some cases no travel funds at all and the depressed economy, you had enough pride in your teaching that you made it to UTI for the mini tradeshow and seminars. Numbers in attendance were about normal. I hope CAT can continue to offer a program that continues to meet your needs. In a time where other associations are in a decline, CAT continues to maintain its membership and attendance at our conferences. I am proud of each and every one of you for your willingness to stay current and offer to your students the best programs that are humanly possible.



An interesting thing happened after the noon luncheon at UTI. I engaged Gale Banks in a conversation, after everyone left the dining area, thanking him for his great talk and asked him if he was interested in helping with our legislative effort in Sacramento. He replied that he was committed to CTE and was available if needed. From that, in November, I spent the day with him at the Pomona Fairgrounds and at his place of business. In attendance that afternoon was Gale, myself, Senator Hernandez and his aide. A great discussion ensued about CTE with the outcome to pursue legislation and to meet again in December. The above and our lobbyist Chris Walker, along with the Executive Director of Manufacturing, did meet in December with the long and short of it being that we would reintroduce last year's legislation again this year and I was to go back down to Banks and see about recruiting companies to finance our efforts. Hope to make that trip in March.

Your CAT Executive Board met all day on December 28th to deal with CAT issues and set a budget for next year. As you all know, I have been around a long time and I have to say that this Board is one of the most progressive and efficient Boards that I have observed. It is hard for the general membership to realize the amount of work that the Board and your President put in behind the scenes to make CAT function. I especially want to thank President John Overton for the great job he has done over the last two years. I am thankful that we will have him on the Board for the next 6 years. The activity of the December Board meeting minutes can be read on the CAT web page.

Out of that meeting, a giant step was taken to establish a working agreement between the CAT and ASCCA that would allow each to mutually benefit from a relationship. For those that are not familiar with ASCCA, It is comprised of independent shop owners. CAT feels that a strong relationship with the shop own-

(Continued on page 6)

ers would help improve the offerings that it's members provide. It is CAT's intent to encourage membership in ASCCA and to participate in local Chapters. From an ASCCA membership, CAT members would have access to Team Talk, ASCCA web site, receive the California Independent and pertinent electronic mailings. Joining a local Chapter gives CAT instructors access to technical assistance from the service industry. Local Chapter members are potential Advisory Committee members that have earned community respect and provide clout and credence to the Advisory Committees activities. Participating in Chapter activities establishes camaraderie with local shop owners that can lead to providing jobs for CAT graduates along with the potential for donations of equipment that is being replaced with newer versions.

ASC will benefit from this relationship by having access to the local school automotive programs for potential employees and to receive the CAT newsletter that is published twice a year. It will be available to ASC members electronically through the ASCCA web site. Future selected articles from our newsletter and conference dates will be published in the California Independent.

Conference costs are the same for both CAT and ASCCA members. In order to attend the conference, both will have to be a member and pay the conference fee. Membership is \$50 annually and each conference has a fee of \$35. ASCCA will collect CAT memberships on a volunteer basis as a line item on its regular billing and will forward the collect membership fee to CAT on a monthly basis. Those that choose to register at the conference will pay the late registration fee. Due to conference logistics, ASCCA participation at a conference will be limited to the first 50 ASCCA members that register and pay their conference fee. Future CAT conference dates and locations will be published in the California Independent. I encourage you to join the ASCCA Chapter in your area. If there is no ASCCA Chapter in your area, you can join as a member-at-large by contacting the ASCCA Executive Office in Sacramento by calling Heather Vigil at (916)-924-9054 x110. Many of you are already members. The membership fee for educators is \$50. If you participate, it will be the best \$50 you have ever spent!

Are all of you looking forward to the Monterey CAT meeting? Are you going to get out of the house without taking your significant other with you ??? Such a great place, I hear many are staying over to enjoy the Monterey area. It looks like this will be a great conference (as usual). The reports I am getting are that James Lawrence the Monterey Community College instructor (our host) and the local ASCCA Chapter are pitching in to make it a great one. Hope to see you there....remember, keep the shiny side up and the greasy side down. **Bob**

Ed's boss, Larry Sherwood has more than 30 years of experience working in the air pollution control field. Mr. Sherwood's knowledge and experience includes management of numerous programs in both the private and government sectors. Mr. Sherwood's education includes a Master's Degree in Engineering from the California State University, Sacramento. During his first tenure at the Bureau of Automotive Repair (BAR) from 1980-1995, he spent most of his time in the Engineering and Operations Division, starting out as a staff level Automotive Equipment Standards Engineer and eventually becoming the Supervising Engineer managing the Engineering and Research Branch. However, his breadth of experience also included working in the Field operations and Enforcement Division for more than a year where he ran the day-to-day operations as the Assistant Chief.

In 1995, Mr. Sherwood left BAR and went to work for one of the top 10 environmental consulting and construction management firms in the nation. He eventually became a Corporate Officer and implemented a state-of-the-art vehicle emissions and safety inspection program. This project required management of more than a thousand staff with a 400 million dollar budget. In 2007, he returned to BAR to take over management of the Engineering and Research Branch where he manages technical staff performing hardware certification and testing, and program evaluation. Recently, he was assigned the Referee and the training/exam development programs.

Larry is used to working with various groups within the BAR, with other government agencies and with private subcontractors to reach consensus on issues and complete projects. He enjoys working in an environment where new ideas for streamlining programs and reducing costs are encouraged to better serve the public. Customer service is a top priority for him. He is skilled at translating complex programs and technical ideas into plain English. He is respected by colleagues and superiors for his openness and honesty in dealing with tough problems.

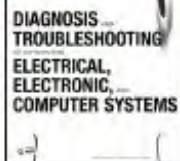
Mr. Sherwood looks forward to working with the training industry to better meet the goals of the Smog Check Program.

CAT NEWS AD Space!

		<u>Color</u>	<u>Black & White</u>
1.	Full page (H 9 3/4" x W 7 1/2")	\$300.00	\$200.00
2.	Half page (H 4 7/8" x W 7 1/2")	\$150.00	\$100.00
3.	Quarter page (H 4 7/8" x W 3 3/4")	\$ 75.00	\$ 50.00

rick@calautoteachers.com

NEW PEARSON TITLES - 2011



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MyAutomotiveLab is an online, study tool that accompanies **Automotive Technology 4e**, by Jim Halderman and can be used with any of Pearson's Professional Technician series textbooks!

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- A new professionalism module.
- A new ASE test prep module and 300 new ASE questions with feedback.
- A virtual tool kit

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ALWAYS LEARNING

PEARSON

Excellence in Education
James Lawrence
Monterey-Peninsula College

Name: James Lawrence

Age: 37

Family: Married with four kids

Hometown: Calgary, Alberta, Canada

Current City of Residence: Monterey, CA



Training/certificates:

BSc Automotive Technology - Montana State

AS Automotive Technology – Southern Alberta Institute of Technology (SAIT)

Journeyman Automotive Service Technician – Alberta Apprenticeship

Toyota Master Technician

Automotive work experience: Heninger Toyota – 8 yrs.

How did you get your start?

I fell in love with an ailing 1973 Jeep CJ5

What is the closest you have been to a famous person and who was it?

I once had a beer with famous textbook author Tom Birch.

What is your dream job?

My dream job is one that combines my love of cars with my love of teaching.

What is the biggest problem you see facing the automotive industry today?

Not surprisingly, the biggest threat the automotive repair industry faces is the push towards maintenance-free, disposable vehicles. Modern consumers, in their restless pursuit of the “new”, seem to demand cars that require little service and are easily replaceable. Thankfully, there are thousands of “creative” engineers out there who keep us in business.

Favorite quote:

The technician’s approach: If it ain’t broke, don’t mess with it.

The engineer’s approach: If it ain’t broke, it doesn’t have enough features.

*The CAT NEWS will highlight one educator for their excellence and dedication to the automotive teaching profession.
If you know of someone who would be a good candidate contact rick@calautoteachers.com.*

SPRING CONFERENCE AND SEMINARS

Monterey Peninsula College
980 Fremont St.
Monterey, CA 93940
April 29th & 30th

The spring 2011 California Automotive Teachers Conference is rapidly approaching. The big event is happening at Monterey Peninsula College in beautiful Monterey. The nearest airport is the local airport in Monterey; which is a convenient, small and relaxed air terminal but often a fair bit more expensive than flying to larger airports. More economical transportation can be found by flying to San Jose International (75 miles away) or San Francisco International (100 miles away). Unfortunately, our conference coincides with another big event in the area—the Big Sur Marathon—so it is important to book early.

FRIDAYS ACTIVITIES

Bureau of Automotive Repair Update Meetings

Times	Description	Location
7pm <u>only</u>	BAR Program and Training Update - We will discuss the coming changes in BAR's program, licensing and training. Main topics include license	MPC Automotive Technology Classroom

Industry Tours

Tour	Description	Cost	Limitations
Mazda Raceway Laguna Seca	We have scheduled a tour of the world famous race track. The tour includes a trip to the Skip Barber Racing School.	Free	Limited to 40
Dinan Research and Development Facility, Morgan Hill, CA	A product of the Auto Tech Programs at both Yuba and DeAnza Colleges, Steve Dinan has since positioned himself at the top of the BMW tuning world. Recognized as the only factory approved tuner in North America, much of his business involves the development and sale of high-end performance upgrades. With recent racing success at Daytona, his focus has shifted slightly to a greater emphasis on race engine design and development.	Free	Limited to 30
Monterey Bay Aquarium, 886 Cannery Row, Monterey, CA 93940	A family-friendly self-guided tour of one of the world's premier aquariums. The Monterey Bay Aquarium has won numerous awards over the years and is a "must see" attraction when visiting Monterey.	\$27.95 /Adults \$25.95/ Students \$17.95/Child	To receive discounted rate, you must reserve by April 22 nd .

For the industry tours, meet at the MPC Auto Tech Facility @12:45 to car pool. We will also have a 12 twelve passenger van going to both Laguna Seca and Dinan. Check the CAT website regularly for the latest updates.

The CAT Board Meeting will take place at 1pm in the Automotive Technology Classroom.

Friday Evening Dinner Reception – We are planning a light dinner and refreshments at the Red Bull Energy Center at Laguna Seca. Check the CAT website regularly for the latest information.

(Continued on page 11)

SATURDAYS ACTIVITIES

7:30-9 am	9-10 am	10:15-11:15 am	11:15-12:30 pm	12:30-2 pm	2-3 pm	3:15-4:15 pm	4:30 pm
Registration/ Exhibitor Displays	Seminars		Exhibitor Displays	Lunch And Business Meeting	Seminars		Close/ Door Prizes
	Hybrid and Electric Vehicle Technology for Technical Education – Bill Steen (90 minutes)				Tire Pressure Monitoring Systems – David May	Hybrid Vehicle Drivetrains – Tom Birch	
	No-Code Diagnosis – Jim <u>Halderman</u> (90 minutes)				Diagnosis and Engine Assembly Tips – Tim Gilles	Diagnosis and Engine Assembly <u>Tips</u> (part 2) – Tim Gilles	
	Toyota Networking – Rick <u>Donia</u>	Automotive A/C, 2011 – Tom Birch			How to Convert PowerPoint into a Movie - Thomas Broxholm	By 2018 <u>Half</u> of all Textbooks will disappear - Rod <u>Boyes</u>	
	Teaching electrical circuit concepts/diagnostics to high school /community college students – John Chocholak	Automotive Engineering as a way to save your high school program – Philip Jelinek			CDX - Engage Students, Save Time, Improve Outcomes – Robert Pearson	Untapped Resources - Ensuring Success in Female and Underserved Students - Julia Johnson	
	Hands-on with DATO Brake Systems – Katie Hall (lab)	Affordable Automotive E-learning – Skip <u>Saurman</u> (Lab)			Automotive Technology Secondary-Post Secondary Partnership - Paul Watters	CTE Online - Free Curriculum for Auto Teachers - Mike Morris	

The main hotel is: The Holiday Inn Express
 1400 Del Monte Boulevard, Seaside, CA
 (831) 394-5335
 CAT Conference Rate \$159 Double (both Friday and Saturday nights)
 Ask for the California Automotive Teachers Rate

Here is a list of other fine hotels in the area:

Hotel	Distance from Campus	Price	Notes
El Adobe Inn 936 Munras Ave. Monterey, CA (831)372-5409	0.3 Miles	\$121/Double – Friday Night \$143/Double – Saturday Night	Nice hotel close to the college campus. Includes continental breakfast.
Comfort Inn 2050 North Fremont Street, Monterey (831) 373-3081	1.2 Miles	\$74/Double – Friday Night \$149/Double – Saturday Night	Small hotel (only about 40 rooms in total) but nice.

Monterey Peninsula College is honored and pleased to be hosting the CAT Conference, and we look forward to your attendance.

If you have any questions, please contact James Lawrence by telephone at 831.646.4189 or by email at jlawrence@mpc.edu

ASE Ends Written Testing after 2011

LEESBURG, Va., September 14, 2010 – The National Institute for Automotive Service Excellence (ASE) announced the beginning of the process to transition all ASE certification tests from paper-and-pencil written testing to computer-based format by 2012. Written tests will be offered for the final two times in May and November 2011. Enhanced computer-based testing for all ASE certification categories will debut in July and August 2011. Beginning in January 2012 and going forward, computer-based testing will be available eight months of the year.

As part of the move away from written testing, ASE has signed an agreement with Prometric to deliver ASE certification tests in their proctored computer-based testing centers. The move represents only the second time ASE has changed testing partners in its 38-year history. “Working closely with Prometric will allow us to make a number of significant enhancements to our testing program as we move toward an all-computer format,” said ASE President & CEO Tim Zilke. “We’ll provide more details on the transition and how it benefits ASE test takers as we move forward.”

“We’ve been working extremely hard to find the right testing partner who could deliver ASE tests in a computer format at a price comparable to our traditional paper-and-pencil testing,” added Zilke. “Prometric is that partner. We’re also grateful for the outstanding support we’ve received over the years from testing partner ACT.”

Based in Baltimore, Md., Prometric is the leading provider of technology-enabled testing solutions, having pioneered the development of computer-based testing and assessment services. The firm provides world-class testing solutions delivered through a broad network of secure test centers worldwide.

“We’re proud to partner with ASE, one of the most respected names in the automotive industry,” said Prometric President & CEO Michael Brannick. “Prometric has successfully converted hundreds of exams and millions of test items from paper to computer format and we look forward to providing this practical expertise to ensure a smooth transition for ASE and its test takers.”

About ASE The National Institute for Automotive Service Excellence was established in 1972 as a non-profit organization to help improve the quality of automotive service and repair through the voluntary testing and certification of automotive technicians and parts specialists. Today, there are nearly 400,000 ASE-certified professionals at work in dealerships, independent shops, collision repair shops, auto parts stores, fleets, schools and colleges throughout the country. For more information about ASE, visit the Web site at www.ase.com.

(Continued on page 23)

GET YOUR STUDENTS IN GEAR

WITH MOTOR'S CALIFORNIA ALTERNATIVE ASE PROGRAM



ASE Alternative A6, A8 & L1 Study Guides

MOTOR ASE Alternative Guides are specifically formulated to meet California State requirements. Each guide contains self study material along with a glossary of terms. Materials for courses are certified by the Bureau of Automotive Repair (BAR) as alternatives to ASE A6, A8 and L1 certification for an Advanced Emission Specialist license in the State of California.

MOTOR
INFORMATION SYSTEMS



CALIFORNIA ALTERNATIVE ASE CERTIFICATION PROGRAM

STUDY GUIDES	ISBN #	PROD. #	PRICE*
California Alternative A6 Electrical & Electronic Systems Study Guide	1-57932-489-4	92356	\$35
California Alternative A8 Engine Performance Study Guide	1-57932-490-8	92366	\$35
California Alternative L1 Advanced Engine Performance Study Guide	1-57932-488-6	92346	\$35
TESTING SERVICE			
California Alternative A6 Electrical & Electronic Testing	N/A	92357	\$35
California Alternative A8 Engine Performance Study Guide	N/A	92367	\$35
California Alternative L1 Advanced Engine Performance Study Guide	N/A	92347	\$35
INSTRUCTOR POWERPOINT PRESENTATION CD			
California Alternative A6 Electrical & Electronic Instructor Presentation CD	1-57932-494-0	92357	\$15
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MOTOR



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MY FRIEND, MY MENTOR *BY: CHUCK ROCKWOOD*

Mentors are a part of everyone's experience as they make their way through life. They help and guide us along our path. They are the people we encounter that have a positive impact on our lives.

Every once in a while we encounter someone who has a profound effect on us. They are those special people that have the caring and concern for others that sets them apart. These are the people that have the greatest impact on who we are and what path our life will take. Mentors can be family members, friends, co-workers, teachers or even people we read or hear about. Many times our mentors don't even know the impact they have on our lives.



The first person that I remember having a profound effect on my life was my high school auto shop teacher. He had confidence in me that I lacked. He encouraged me when I thought a task was beyond my ability. He demonstrated the character that I wanted to emulate. He showed me the joy of helping others and the satisfaction that brings. He was the reason I finished high school. I wanted to be an Auto shop teacher.

Many years past after I graduated from high school before I met the person that had the greatest effect on my life. The encouragement, confidence, and guidance that he gave me made my dream a reality. The first time I met "my mentor", I had just been hired as a laboratory-teaching assistant. The department chair was showing me around and introducing me to the staff. As we entered one of the labs I was introduced to this young guy that was nearly as tall as the doorway. I didn't realize it at the time but this was the guy that would change my life. This was Tim Gilles.

I was fortunate to work with Tim for the next four years. I thought that as a laboratory-teaching assistant that I was as close to my dream of being an auto shop teacher as would be possible. Tim had other ideas. He encouraged me to take on tasks that were completely out of my comfort zone. In a short time he had me giving short demonstrations to small groups of students. He started showing me how to plan and prepare the demos for the greatest impact in the short time available. As time past my demos got better and my confidence increased. Then one day he presented my greatest challenge. There was a class in the schedule and no one to teach it, would I be interested? At once I was terrified and excited. With Tim's help and support my dream was becoming a reality. Tim had taught the class previously so he understood the challenge that I faced. He provided me with all his notes, lesson plans, and worksheets, a prepackaged class. I was set. But, his mentoring didn't stop there he spent many hours showing me how to create an overall plan for the class, prepare daily lesson plans, research material, cut and paste, make transparencies and prepare an effective presentation. During the next couple of years he spent many hours with me discussing the teaching philosophy, classroom management and the politics of teaching at a community college. He encouraged me to continue my education and guided me through the credentialing process.

It wasn't long before I was off to another College as a full time contract instructor. Wow, dreams do come true. But, they don't just happen. It takes hard work, dedication and that special person that cares enough to make a difference.

Tim has not only been my mentor but he has been a mentor to many people over the course of his career. Now that he is entering retirement and making plans to travel the world with his wife, he still has thoughts of continuing to help others reach their dreams. I'm not sure what Tim has planned but I am sure that he will continue to be a resource for the automotive teachers all over the world for many years to come.

I will be forever grateful for the help, encouragement and support of my friend and my mentor Tim Gilles. Thanks Tim and have a great time in retirement.

Summer Training Opportunities - Southern

Note: This is the most current information (April 8, 2011) CAT has about instructors' workshops, *and is subject to change*. Please contact the trainer if you have further questions about courses on this schedule.

Instructors wishing to earn quarter-units of credit for professional development through Sacramento State University will enroll directly with CSULA, and not the training provider, as was done in years past. Details about credit offered through CSULA are to be announced on the CAT webpage http://www.calautoteachers.com/inst_train.html under "Instructor Training" as soon as they are finalized (anticipated to be mid-May).

BMW of North America, LLC

Dates: July 6 & 7th, 2011
Location: 1175 S. DuPont Avenue, Ontario, CA 9176
Times: 8:30am-4:30pm
Contact: Brianna Lee 909 975-4301 or Brianna.lee@bmwnaext.com
Min enrollment 10 students

Topics: BMW Diesel Technology

Ford Motor Company

Dates: M-F, August 1st – 5th, 2011
Location: 14923 East Desman Road, La Mirada, CA 90638
Times: 8:30am-4:30pm
Contact: L. Chris Wilde email: lwilde@ford.com

Topics: Ford's New EcoBoost Direct Fuel Injection System (3 days) and other topic TBD (2 days).

Rio Hondo College

Dates: M-F, August 8-12, 2011
Location: 3600 Workman Mill Road, Whittier, CA
Times: 9am-3pm
Contact: Steve Tomory (562) 908-3433, FAX (562) 463-4603

Topics: ATech Training Designed for High School and Community College Instructors

ATech Electronics 10 hour course - Hands-On" Electrical/Electronic Diagnostics

Each participant will build and troubleshoot virtual circuits utilizing ATech's Virtual S.E.T. Program. Also, troubleshooting techniques of Engine Control systems will be discussed and participants will troubleshoot malfunctioning circuits. A final troubleshooting contest will be held with AutoTap Scan Tools awarded to the winning team.

ATech Electronics 10-hour course - GM OBD II Training

The primary focus of this session of the workshop is to allow participants an opportunity to observe a completely operational OBD II system (no fault codes) in an educational setting. The emphasis is on understanding system component relationships, for example—oxygen sensor and fuel trim, EGR and fuel trim. Additional discussion will relate to teaching and presentation techniques.

These classes provide an excellent opportunity to enhance your automotive teaching skills, network with your peers, and meet your annual NATEF training requirements.

Check the Website for additional workshops not listed!

Other summer training opportunities not listed: NACAT 2011, see page 27.

Note: Drew Carlson and Quentin Swan did all that they could to line-up a variety of manufacturer sponsored workshops. So make sure to signup early and to attend the classes, so our training partners will continue to support future summer training workshops.

Summer Training Opportunities - Northern

American Honda Northern California Training Center

Dates: M-F, July 25-29th, 2011
Location: 123 Val Dervin Parkway, Stockton, CA 95206
Times: 8:30 am - 4:30 pm
Contact: Christine Vinson (209) 983-4500 for enrollment procedure
* NEED TO FILL OUT HONDA ENROLLMENT FORM TO GAIN ACCESS *

Topics: Honda's unique "Individualized Skills Training" approach allows students to concentrate their learning on subject areas of their choice. Due to high demand for this course, it is important that you can commit to all five days when you enroll.

Chrysler Group LLC - San Francisco Training Center

Dates: M-F, July 11-15, 2011
Location: 4777 Bennett Drive, Suite C, Livermore, CA. 94551
Times: M-F 8:30am - 4:30pm
Contact: Scott Jefferis, email: SAJ@chrysler.com Limited to 18 participants.

Topics: Course content to include: Fiat 500 vehicle overview (1 day), 1.4 liter Fiat 500 naturally aspirated engine with MultiAir technology overview and hands on disassembly/reassembly (1day), Steering & Suspension including electro-hydraulic power steering, full electronic power steering and air suspension on Jeep Grand Cherokee (1day), PowerNet electrical communication architecture including Active Cruise Control, Smart Beam Headlight system and Passive Entry electrical system (1 day).

Ford Motor Company - San Francisco Training Center

Dates: M-F, August 1st – 5th, 2011
Location: 1035 Serpentine Lane, Pleasanton, CA 94566
Times: 8:30am - 4:30pm
Contact: L. Chris Wilde email: lwilde@ford.com

Topics: Ford's New EcoBoost Direct Fuel Injection System (3 days) and other topic TBD (2 days).

Skyline College

Dates: June 20-24th, 2011
Location: 3300 College Drive, San Bruno, CA 94066
Times: 8am- 5pm M-Th, 9am-1pm Friday
Contact: Rick Escalambre email: escalambre@smccd.edu
Cost: Each student must register for 1.5 units, forty hours of college credit, and the cost is \$43 for residents (Non-Resident fees are \$276 for 1.5 units, plus \$30 Enrollment Fee, \$13 student fees, so the total cost is \$319.00).

Topics: 4th Train-the-Trainer Workshop (intended for Automotive Instructors)
OBD II "Up-To-Date" Diagnostics: Drive Cycles and Monitors, MODE 6, and Evaporative Emission Systems. Vehicle Networking systems and in-cylinder compression waveform analysis will be covered. The week will include approximately sixteen hours of extensive hands-on assignments that include testing and diagnosing a variety of vehicles.



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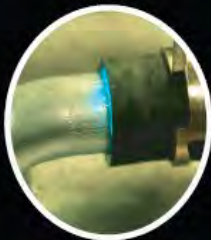


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Detonation By Anthony “Tony” Jewell

The dilemma of what not to teach in automotive technology is usually dictated by the time available to present the concept. Not long ago a colleague and I differed on the relative importance of teaching pre-ignition and detonation. He felt that the time would better spent on testing and explaining the operation of the sensors and the PCM command response. “Contemporary engines do not have detonation issues because of improvements in technology”, he said. Several days later, while talking with a local automotive machinist, he held forth two different pistons from automobile engines with the classic appearance of detonation. “The detonation problem on today’s engine is not ignition management, it is a combination of running fuel at the lean setting, cooling systems at the highest thresholds, and the motorist ignoring MIL lamps on the instrument cluster”, he offered. “Basically, residual hot spots in the combustion chamber often caused by a well intended DIY consumer changing his antifreeze that leaves an unintended air pocket in the cooling system”.

Compression ignition is a good thing on diesel engines, and not called “detonation or pre-ignition” because it occurs by timing the fuel delivery at the optimum temperature of compression and residual heat. But how is a student supposed to understand any of this unless it is demonstrated. First let me tell you of an old engine, that used no spark system, or fuel injection, It sits adjacent to an equally old barn, resting beneath a blanket of sycamore leaves, valley dust and rust of nearly 100 years. An 1897 patent date cast into its side and a flat belt drive gives a bit of insight as to it’s time of service. It has only one cylinder, the height of a man, and a horizontal crankshaft that swings a huge flywheel. There is no carburetor or distributor, merely a pipe elbow, open end down, and a large corroded copper bar inserted into the upper part of the cylinder. The air intake is the elbow, with a small brass tube and screw valve for fuel delivery and metering. Adjacent to the elbow and copper bar rests a plumber’s blow torch fixed on a tray so that the flame will provide heat to the copper bar and the elbow pipe. The preheated elbow vaporizes the coal oil fuel and the preheated copper bar adds a bit more heat to that of the three to one compression and “Bang” the fuel is ignited by compression ignition. Once the engine has residual heat the blow torch can be dismissed.

Another engine that will run with compression ignition and a death rattle is a vertical crankshaft five horsepower Briggs and Stratton engine mounted on lawn maintenance device known as a “lawn vacuum”. YARD VAC is a patented or copy write name, but you get the idea.

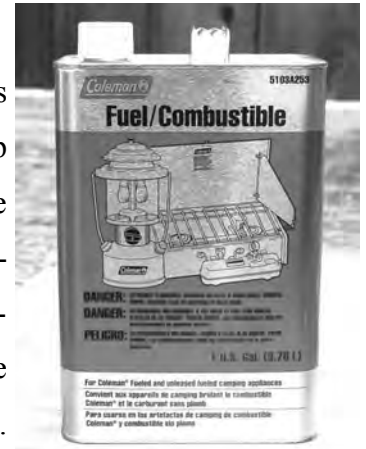
Instead of a blade it has a twenty five pound inertia wheel and a giant impeller (fan) that sucks up leaves and a lot of air. Start the engine with the recommended fuel, gasoline, bring it up to speed and load. The load is the weight of the air that it moves with that heavy flywheel. Then with a two way valve, switch from the

(Continued on page 23)

(Continued from page 22-Detonation)

gasoline to the magic gas, and shut off the ignition. Magic gas? Coleman stove fuel, see the photo below. You have the machine into compression ignition mode. If you advance the throttle, it will rattle in protest, but come up to speed until it smooth's out. To stop the engine, you will need to starve it of fuel or starve it of air, or use a spray bottle and introduce a cooling charge of water into the air intake stream to reduce the residual heat of compression.

How did I discover magic gas? One of GM's infamous '93 S-10 gas gages told me that I had a quarter of a tank of fuel remaining, but the wailing fuel pump and engine stumble told me "no way". With no gas station within reason, and one hundred fifteen degrees of San Joaquin Valley cool, and a nearby Wal-Mart camping department, meant that with Magic Gas, I wouldn't have to push the thermometer or the truck to get home. Even the slightest throttle movement made it rattle badly. But the fuel pump and I survived and another easy demo had been created. The detonation sensors can be disconnected to accommodate the magic fuel demo in the shop environment. Of course only a small quantity of magic fuel should be administered for this demonstration. Don't forget to reconnect the sensors and wait until the PCM dismisses the MIL lamp if you are so inclined.



Who invented Magic Gas? Guys like CAT founders Orville Page and James Kenley who stretched rationed WWII gasoline in Model A Fords by adding kerosene. Should detonation and pre-ignition be taught? I hope that these tips will help. **A. Jewell**

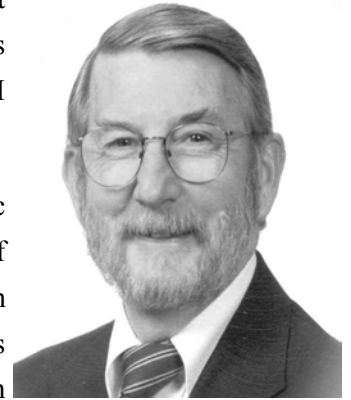
(Continued from page 12 - ASE Testing)

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Stan Thompson's Adventures in Retirement

I retired in 1998 after teaching eight years at the high school level, and twenty eight years at Cuesta College in San Luis Obispo. One of the big incentives for me to retire was the fact that my wife Shirley is an accomplished photojournalist, and retirement meant that I would be able to accompany her on some of her assignments.



Some of the highlights of our adventures together include covering the Aspen Music Festival in Colorado, many activities in St. Paul, Minnesota, including the grand opening of the Science Museum, live theater, Mall of America, History Museum, seeing St. Paul from the roof of the capitol building, and a suite at the historic St. Paul Hotel, along with various other attractions. We also covered assignments in Santa Fe, NM, and many activities in Florida, where we watched a Space Shuttle launch, covered the Hemingway Days in Key West, the Underwater Music Festival, and Key Largo location where they filmed the movie. Ft. Myers, FL is where Thomas Edison and Henry Ford had their winter estates. This historical site has been preserved, so people can take the tour and see Edison's lab just the way he left it. In Tampa, we got a tour of Legends Field, the New York Yankee's Spring Training site, and watched the game from the broadcast booth. Another Florida assignment was a visit to Sanford, FL to experience "Old Florida" as it was before all the building took place. On this assignment, we took a luncheon cruise on the "Nile of America", the St. Johns River. It's the only river in America that flows North.

We attended the International Space Development Conference in Houston, with a VIP tour of Mission Control during a shuttle mission. I got a couple of job offers from people in the space program, but declined them (I was having too much fun!). Another highlight of our adventures was an inaugural cruise aboard Carnival Cruise Line's ship Elation with the Azipod propulsion system. Each Azipod is a 19,000 horsepower electric motor with the propeller attached to it. The Azipod can swivel 360 degrees allowing the ship to actually move sideways for docking. They pull the ship through the water instead of pushing it like a conventional shaft and propeller design. With the two Azipods and the bow thrusters, 45,000 horsepower is available to propel the ship in any direction.

The Santa Barbara Civic Light Opera season was on our schedule for two years. We attended a performance of each of the shows and the cast party afterwards. Shirley wrote publicity for each of the shows.

My son, Don, is in the concrete business, and had an idea for a special tool. He showed me a sketch and asked how much it would cost to have a machine shop make a prototype. This led to the purchase of a South Bend Lathe for sale from an auto repair shop in Santa Barbara that was going out of business. When I contacted South Bend about replacement parts for the lathe, I learned that the lathe was originally shipped on March 4, 1932. Now, both of my sons send me projects to do on the lathe. Many of the projects include figuring out how to make replacement parts for antique equipment.

I've stayed involved with the Southern California Section of SAE as a Governing Board member, and am responsible for setting up tours and meetings with companies located in Santa Barbara and San Luis Obispo Counties. A recent

(Continued on page 25)

tour took us to a company called AeroMech which makes unmanned aircraft and a number of other sophisticated products for the government. Last year, we visited Next Intent which is part of a consortium of companies that make parts for the Space Program. Next Intent makes a number of the suspension parts for the Mars Rovers. They showed us close tolerance machining methods and parts for the Mars Lander including passing around a Mars Rover wheel that will be on it's way to Mars next year.

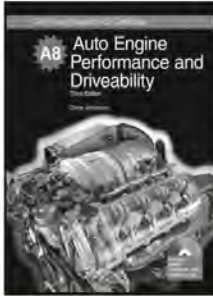
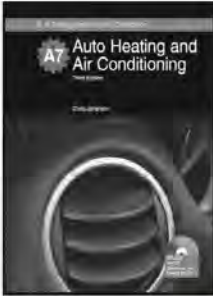
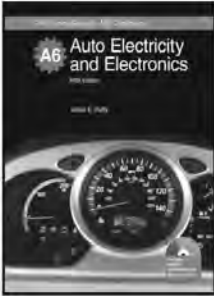

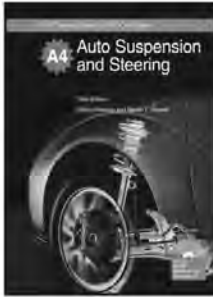


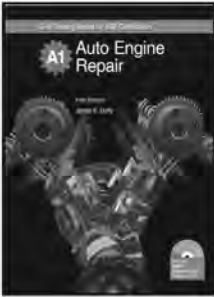
In between all of these activities, I do the cooking at home (I love to cook), and take care of routine maintenance of the house, and some gardening including raising orchids. Shirley and I get to spend as much time as possible with our family, including grandchildren. We get to babysit our grandson, who lives in Solvang, at least once a week. So, we get to play tourist at the same time. The granddaughters live in Florida; so that calls for a trip now and then.

We also enjoy a number of performances each year at the Performing Arts Center at Cal Poly University, San Luis Obispo along with various other local activities.

Note from Wayne Olson: OK all you retirees, send in your story to share with other retirees and still working teachers to show how it is in retirement. Word format is preferred and don't forget to include a recent picture!

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So long, Goodbye, Hasta la Vista, Sayonara, Do Svidanija,



For the past 10 years I have served on the CAT Board and now my time is up! My last official Board meeting will be on April 29th in Monterey, CA. It has been an honor and a privilege to serve with so many dedicated automotive teachers. The Board has and will continue on with its mission of furthering the teachings of Career & Technical Education throughout the State.

I hope some of you will consider working within the CAT organization, but please remember it's not a commitment to take lightly. I've missed many family events, which made me pause time and again to think "when will this be over". All and all it is a commitment I am proud to say that I saw through to the end with a great sense of accomplishment.

My staff and I at Rio Hondo College will have the privilege of hoisting the fall conference on October 21 & 22. We are planning an exciting conference starting on Friday, October 21st with several field trips and a kick-off dinner in the evening. So mark your calendars now! Further information will be coming soon.

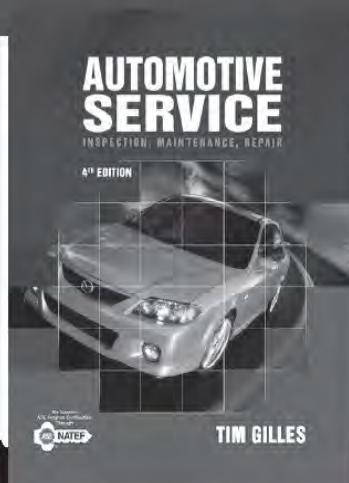
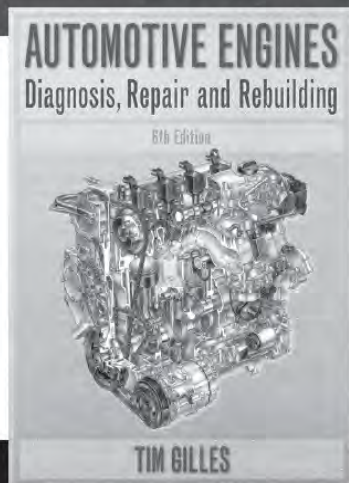
I would like to thank all the members of CAT for the support, help and friendship during my tenure as a Board member and hope to see some of you working with CAT and taking on leadership rolls.

Mike Slavich



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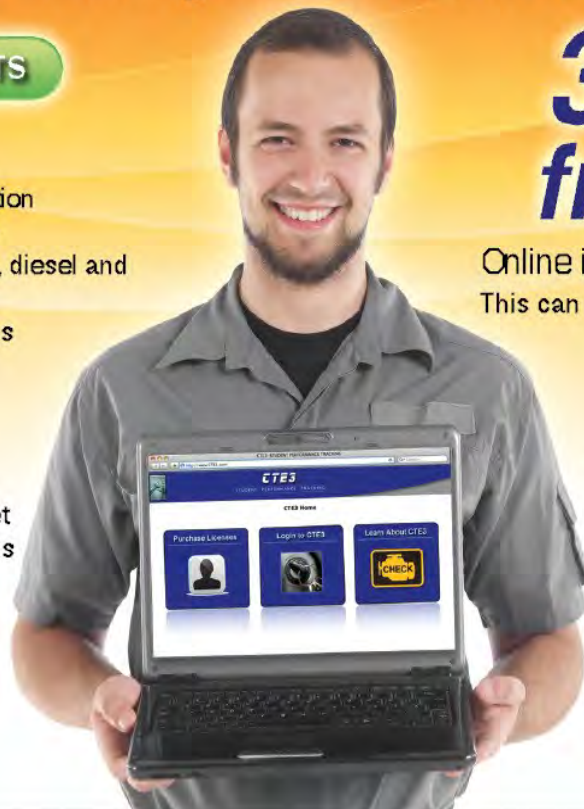
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October 21 & 22**

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