



INSPECTION UPDATE

Volume 15, Issue 1

Spring 2014

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Inspection Update is a publication produced by Massachusetts Vehicle Check; a joint program of the Massachusetts Department of Environmental Protection (MassDEP), the Registry of Motor Vehicles (RMV) and Parsons Environment and Infrastructure Group, Inc.

New Leadership at the Registry of Motor Vehicles; Celia Blue Appointed Registrar

Massachusetts Department of Transportation (MassDOT) Secretary and Chief Executive Officer Richard A. Davey in late January appointed Celia Blue as Registrar of Motor Vehicles. Blue succeeded Rachel Kaprielian, who was named by Governor Deval Patrick as the state's Secretary of Labor and Workforce Development.

Blue returns to the Registry of Motor Vehicles (RMV) after working as MassDOT's Assistant Secretary for Performance Management and Innovation for the past two years. She previously served as Deputy Registrar and was responsible for overseeing the RMV's customer service operations.

"Celia has spearheaded numerous successful innovation initiatives and led our efforts to make performance management more transparent and accountable to the public," said Secretary Davey. "As a former Deputy Registrar with private sector experience, she is uniquely qualified to lead the RMV."

Under Blue's leadership as Deputy Registrar, customer wait times at RMV branches and the call center were reduced. She also played an instrumental role in the implementation of the RMV's innovative partnership with American Automobile Association (AAA). As Registrar, Blue is committed to continuing the good work achieved through the Vehicle Check Program, notably cleaner air and safer roads.

Blue previously served as a Commissioner of the Massachusetts Aeronautics Commission (now a division of MassDOT). She has worked in the private sector in leadership roles focusing on customer service, operational management and small businesses management. Blue holds a Bachelor of Science degree from Worcester State College and a Master's in Business Administration degree from Anna Maria College.



Celia Blue, RMV Registrar

Registered Repair Technician Updates

► 2014 Ongoing Training Courses

All current Registered Emissions Repair Technicians are required to attend one, four-hour ongoing training seminar each year to maintain their status in the Massachusetts Vehicle Check Program. Parsons is offering these quarterly seminars from 6:00 PM to 10:00 PM at the following Motorist Assistance Centers (MACs) located throughout the Commonwealth.

Courses Name	Locations and Dates
Understanding and Utilizing OBD Mode 6	Braintree MAC - June 9 Pocasset MAC - June 10 Shrewsbury MAC - June 11 West Springfield MAC - June 12
New Misfire Diagnostic Techniques	Medford MAC - September 15 Fall River MAC - September 16 Shrewsbury MAC - September 17 West Springfield MAC - September 18
Understanding, Utilizing and Using your Lab Scope	Braintree MAC - November 17 Pocasset MAC - November 18 Shrewsbury MAC - November 24 West Springfield MAC - November 25

The cost of each seminar is \$150, and payment can be made by either check or credit card. The application for these courses are available at http://www.massvehiclecheck.state.ma.us/inspection_ongoing.html. Should you need help registering or have any questions about the course, please contact our Registered Repair Coordinator at (781) 794-2961. It is important to sign up as soon as possible as space is limited to 35 technicians per class.

► Prospective Registered Emissions Repair Technicians

If you would like to become a Registered Repair Technician, please visit http://www.massvehiclecheck.state.ma.us/inspection_repair_tech.html to review the application and training requirements.

► OBD Diagnosis and Repair Training

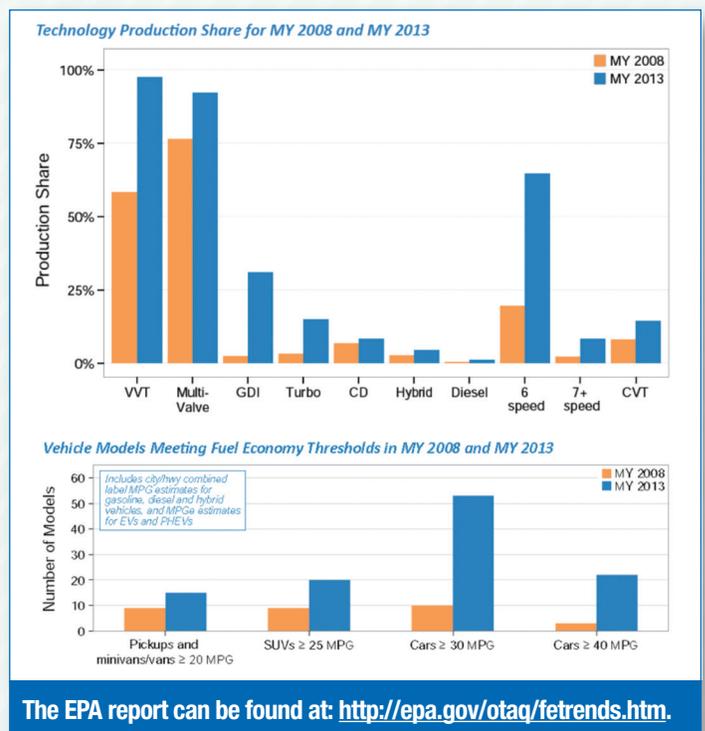
The OBD Diagnosis and Repair Training is a \$600 course designed for motor vehicle repair professionals who are seeking to become Massachusetts Registered Emissions Repair Technicians. The course provides foundational information concerning the diagnosis and repair of OBD-equipped vehicles. The OBD Repair Training course is a 28-hour course consisting of 20 hours of classroom lecture and eight hours of hands-on training and examination.

Courses Offered	Location, Dates and Times
Spring 2014	Shrewsbury MAC April 14, 15 and 16, 8:00 AM to 5:00 PM April 17, 8:00 AM to 12:00 PM
Fall 2014	Braintree MAC November 17, 18, 19, 8:00 AM to 5:00 PM November 20, 8:00 AM to 12:00 PM

The application for these courses are available at http://www.massvehiclecheck.state.ma.us/inspection_ongoing.html. Should you require assistance registering or have any questions regarding the course, please do not hesitate to contact our Registered Repair Coordinator at (781) 794-2961.

Fuel Economy of New Vehicles Sets Record High

The U.S. Environmental Protection Agency (EPA) late last year issued its annual report tracking the average fuel economy of vehicles sold in the United States. The report shows that 2012 model year (MY) vehicles achieved an all-time high fuel economy of 23.6 miles per gallon (mpg). This represents a 1.2 mpg increase over the previous year, making it the second largest. Comparing 2013 to 2008 MY vehicle models, consumers now have five times the choices in car models with a combined city/highway fuel economy of 30 mpg or more, and twice as many SUVs that achieve 25 mpg or more compared to just five years ago.



The EPA report can be found at: <http://epa.gov/otaq/fetrends.htm>.

Inspection Update Profile

Rick Gregory, Owner
H&S Auto Parts and Service, Pittsfield, MA



Rick Gregory (left) and Mark Farrell (right), Co-owners of H&S Auto Parts and Service in Pittsfield

Q: What services does H&S Auto Parts & Service offer?

A: H&S offers a full line of automotive parts and service for both foreign and domestic vehicles. We have a service department as well as our own parts store on-site. H&S is an independent shop and we pride ourselves in being the “locally grown” parts supplier in town and have affiliated ourselves with the Auto Value group of parts stores and warehouses. We have made it our business to supply quality automotive repair parts to the “do-it-yourself” vehicle owner as well as the professional automotive technician.

Q: What are your roles and responsibilities as co-owner?

A: I work every day from 8:00 a.m. to 5:00 p.m. My primary role is on the service side of the business, working on customer’s vehicles. However, being a business co-owner, I always have to interface with our employees while providing the highest quality service to our customers.

Q: How many employees do you have?

A: We have 10 full-time employees and four part-time employees, including six who work on the service side of the business and four who work in parts. The majority of those employees on the service side are licensed vehicle inspectors. Our team is factory-trained and ASE certified, and we pretty much do it all here at H&S.

Q: How did you get your start in the automotive industry? What made you want to open your own business?

A: I attended vocational high-school in Pittsfield and graduated with a trade in auto mechanics. I worked in various service departments until 1996, when I had the opportunity to come to work for H&S. Five years later

I bought the business with my co-owner Mark Farrell and we have been running H&S ever since. Between the two of us, we have over 40 years of experience. H&S has been in existence for over 25 years.

Q: Have you attended any of the MAC Ongoing Training seminars? How else do you keep up with changes in vehicle technology and emerging technologies in the Industry?

A: I’ve personally taken educational classes and seminars back when they were offered with the dealership I worked for, a facility in Dedham that had eight training bays. After that, I trained at Hudson Valley Community College. Additionally we are an Auto Value Certified Service Center (CSC) that offers online training through the Auto Value Alliance University, and our manufacturers and suppliers do as well. Auto Value offers many opportunities for on-site training in regional locations. One company dedicated to regional training is Standard Motor Products, which provides hundreds of clinics each year to help us stay on top of new industry trends.

Q: What are some of your most challenging vehicle repairs?

A: Some of the most challenging vehicle repairs include emission issues, when cars these days can have anywhere from one to 20 computers inside. Trying to stay up on electronics including everything from body control modules to navigation systems can also be quite a task, so anytime our team can take part in electronics or emissions classes, we like to have them do so.

Q: What should motorists begin to do to ready their vehicles for the spring?

A: By May 1, motorists should have their snow tires taken off. They won’t be able to get a sticker with the studded snow tires still on the vehicle after that date. They should also check their vehicle’s vital fluids—transmission, antifreeze and not to mention oil. Most importantly, they should have their brakes and any safety related items inspected because as we all know, sand and salt will raise havoc with brakes after the winter.

Q: What is your business motto?

A: Our business motto is to “Treat our customers as we want to be treated and they will return.” We hire qualified, knowledgeable, and courteous employees and stock our shelves with quality and affordable products for both the consumer and independent repair shops.

Inspection Procedure Reminders

► Verify Inspection Data Prior to Completing Inspection

The Registry of Motor Vehicles (RMV) reminds all inspectors to verify the following information while completing each inspection:

- Registration information matches the vehicle being inspected;
- Odometer reading;
- Vehicle/vehicle use information requested by workstation; and
- Vehicle Inspection Report sticker number matches sticker number that is affixed to the vehicle's windshield.

Data verification is a continuous process. Prior to starting an inspection, inspectors should match the vehicle presented with the vehicle registration provided by the motorist. Please check all of the registration certificate fields, especially the Vehicle Identification Number (VIN) of a newly-registered vehicle to ensure that an error did not occur at the time of registration. If the registration certificate contains errors, the vehicle should be turned away and referred to the RMV. The motorist will then need to obtain a corrected registration certificate before obtaining an inspection.

When inputting data into the workstation, inspectors should ensure that vehicle data, such as the VIN, model year, fuel type, and Gross Vehicle Weight Rating, are accurate. Inspectors that use the barcode scanner to scan the previous inspection sticker must verify that the information scanned is accurate. If a previous inspector failed to recognize an error in the registration, such as an incorrect VIN, then it is the next inspector's responsibility to turn the vehicle away and refer the customer to the RMV so that the registration can be corrected.

At the conclusion of the inspection, verify that the information on the printed sticker matches the vehicle being inspected. The motorist could be subject to a citation if an improper certificate is displayed on the vehicle's windshield.

If the RMV identifies vehicle inspection records that are inaccurate, the station and its personnel will be subject to enforcement procedures.

► Commercial Vehicle Driver's License Requirements

The MassDOT Registry of Motor Vehicles (RMV) Division has launched an online transaction to provide Commercial Drivers with a self-service option. This meets the new Federal regulation which requires commercial drivers to self-certify with the RMV. For more information about this online service, please visit <http://blog.mass.gov/transportation/uncategorized/rmv>.

Commercial drivers who have already self-certified will not need to do so again until the expiration of their U.S. Department of Transportation medical certificates. Drivers can check the status of their self-certification on the RMV website at <https://secure.rmv.state.ma.us/LicInquiry/intro.aspx>.

If you have questions about the new Commercial Driver licensing requirements, please visit <http://www.massrmv.com/rmv/faq/cdl.htm>.

► Studded Tire Reminder

Studded tires are permitted on vehicles in Massachusetts, but only from November 1 through April 30. Vehicles equipped with studded snow tires that are inspected between May 1 and October 31 should be rejected.



Motorist Assistance Center Repair Technician's Corner

► Working with OBD Non-Communication Failures

On-board Diagnostics (OBD) non-communication or "Non-Comm" problems can be encountered when connecting a scan tool or the workstation to a vehicle. There are many things that can prevent a vehicle's computers from communicating with the inspection machine or scan tool. The most common is when there is no power to pin 16 on the OBD diagnostic link connector (DLC).

Some of the other problems that can cause OBD Non-Comm problem are:

- Blown fuse
- Pin 16 Power battery - system voltage
- Pin 4 and 5 grounds
- Remote Starters
- Other aftermarket devices (radio, SD/DVD players, alarm, auxiliary chargers, radar detectors, etc.)
- Damaged DLC
- Loose or missing pins in the DLC
- Corrosion damaged pins in the DLC
- PCM needs update reflash/programming

(Continued on page 5)

MAC Success Story

(Continued from page 4)

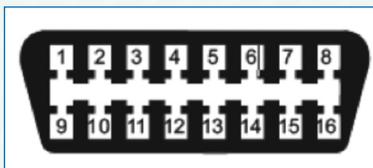
- Network problem, other computers on the system bus that have problems, such as the security module

Case in point is our case study on a 2004 Ford Escape that failed for no communication as well as failing a re-test. This vehicle was subsequently taken from repair shop to repair shop, where it continued to fail on three more occasions. The final repair shop then contacted a Motorist Assistance Center (MAC) and a technician suggested that the shop check for power and ground at DLC pins 16 power, 4 and 5 grounds.

What the shop found was that pin 16 only had 9 volts, which is not the necessary battery for running engine voltage. A closer look revealed that an aftermarket remote start system had been installed in the vehicle and attached to pin 16. The installer had used a scotch lock-style connector to tap into the wire, nearly cutting it in two and causing a significant voltage drop when the circuit was loaded. Once the remote starter was disconnected and the wire was repaired, voltage at pin 16 was back to normal at 14.0 volts.

Not all aftermarket devices installed on vehicles will cause an OBD Non-Comm, but the presence of aftermarket devices should be a clue to take a careful look and check that nothing is attached to the DLC and its wires.

To test for a good ground on the DLC, perform a voltage drop test. This is done by connecting a voltmeter's black lead to the battery negative terminal and the red lead of the meter to pin 4, (OBD II system ground), while cranking the engine over as to load the circuit. The voltage drop should be 100 mV or less.



The next step would be to test pin 5 sensor ground the same way pin 4 was tested. On some vehicles, pins 4 and 5 may be switched, but they still need a good connection with less than a 100 mV drop. If the voltage drop is greater than 100 mV, then the DLC does not have sufficient voltage to allow proper OBD communications with scan tools or workstations.

MassDOT Proposes RMV Fee Increase

The state Board of Transportation has proposed increased Registry of Motor Vehicles fees including raising the state vehicle inspection fee to \$35. The fees in part would be used for road and bridge projects, moving employees onto the operating budget, and improved customer service. A public hearing process is required before the fees may take effect.

MassDEP Update on Kit Cars

When Massachusetts eliminated tailpipe testing from its motor vehicle inspection program six years ago, the Department of Environmental Protection (MassDEP) adopted U.S. Environmental Protection Agency (EPA) emissions requirements for kit cars.

Two years later, in 2010, the state Legislature passed a law exempting kit cars from these requirements if they were registered in Massachusetts by April 30, 2012. This gave kit car owners time to complete in-progress vehicles that they had started building before the change.



Source: <https://www.factoryfive.com/galleries/33-hot-rod/>

On behalf of kit car owners, lawmakers and industry groups then asked MassDEP to review the federal rules to determine if the agency could provide any additional flexibility going forward without compromising air quality. Based on developments since EPA established its current requirements in 1994, MassDEP identified two alternatives to meeting them.

Specifically, a kit vehicle owner would need to either:

- Permanently retire another vehicle and destroy its engine, then install a new engine in the kit vehicle that is roughly the same size or smaller, of the same model year as the permanently retired vehicle, and equipped with the emissions controls required for that model year; or
- Purchase a new configuration that is certified by the California Air Resources Board (CARB) and no more than one model year older than the year in which the kit vehicle is first registered.

MassDEP proposed revisions to its Massachusetts Vehicle Check Program regulations that would provide for this flexibility, and held public hearings last fall. Until the proposed changes are formally implemented, MassDEP will allow kit car owners to demonstrate emissions compliance in these alternative ways.

There will be no change in how kit cars are handled during inspections. A Replica or Specially-Constructed Vehicle that is newly built, was just brought into Massachusetts from another state, or has recently undergone a change in ownership should still be referred to a Motorist Assistance Center (MAC) by the workstation software. This will ensure that all titling, registration and emissions testing requirements are properly addressed.

If you have questions or need any assistance during the inspection process for a kit car, please call the Technical Helpdesk at 877-834-4677.

MASSACHUSETTS



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Massachusetts Vehicle Check Program**

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Inspection Data Integrity, 2014 Registered Repair Technician Training Reminders Inside!

Massachusetts Vehicle Check Program At A Glance

Program at a Glance			Enforcement Statistics	
	Count	Failure Rate		Count
Non-Commercial Safety Inspections	1,012,184	4.6%	Violations Issued to Inspectors	100
Commercial Safety Inspections	36,543	4.7%	Violations Issued to Stations	128
7D Safety Inspections	5,854	2.0%	Inspector Privileges Revoked	2
OBD Emissions Inspections	823,054	6.2%	Inspector Required to Retrain	1
Opacity Emissions Inspections	20,661	1.4%	Inspectors Suspended	16
Emissions Waivers Issued	4		Stations Suspended	20
Repair Hardship Extensions Issued	14		Penalties Assessed	\$400
Hotline and Training Statistics			Licensed Stations	
	Count			Count
Motorist Calls Received	2,709		Class A Stations	1,198
Inspection Station Calls Received	6,155		Class B Stations	190
Initial Non-Comm. Inspectors Trained	277		Class C Stations	28
Initial Commercial Inspectors Trained	54		Class D Stations	311
Initial 7D Inspectors Trained	10		Class E Stations	9
Initial Motorcycle Inspectors Trained	14		Reg. Emissions Repair Shops	223

For period 10/01/2013 through 12/31/2013



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