



INSPECTION UPDATE

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Winter 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.

Round 3 of Inspector Recertification Training Begins

The Massachusetts Vehicle Check Program has commenced another two-year inspector training recertification (RECERT) cycle. This third round is for inspectors who completed their initial inspector training certifications in 2008 and who already participated in their second RECERT training during 2012.

Parsons sends inspectors approaching the end of their certification period notices alerting them to take their RECERT exams. Approximately 90 days before inspector training expiration dates, Parsons mails the notifications directly to the inspector's home address that contain detailed information regarding the RECERT process.

Licensed Commercial inspectors are required to attend a four-hour classroom session before they can access and take the exam on the program website. For this RECERT cycle, the classroom material has been updated to include an emphasis on specific safety checklist areas and improve inspector proficiency in performing Commercial vehicle inspections.

The updated Commercial training content has been integrated into the original Commercial RECERT classroom curriculum and will be offered during both first-round and second-round Commercial RECERT courses from this point forward.

For licensed Non-Commercial, 7D, and Motorcycle inspectors, there has been no change to the RECERT process. Inspectors can pay for the training online or by check. Non-Commercial, 7D, and Motorcycle RECERT training is available to inspectors 24 hours a day on the program website at http://www.massvehiclecheck.state.ma.us/inspection_recert.html.

Inspector Training Manuals are available in Adobe Acrobat files that can be viewed or downloaded from the RECERT website once inspectors have logged into their RECERT exams.



Commercial inspectors are reminded that they can take their RECERT exam two days after they have attended the class.

New Program Changes Beginning January 1, 2015

► Windshield Sticker Changes

- Blue 2015 Vehicle Information Reports (VIR) and windshield stickers began shipping to stations in late November 2014.
- The first shipment supplied your vehicle inspection needs for approximately three months. Your station will automatically receive additional sticker shipments when your inventory indicate that you are on the final book of stickers.
- If your station did not receive the new sticker shipment by December 26 or you have a question about the new blue 2015 stickers, contact the Technical Help Desk at 877-834-4677.
- Keep all new stickers in their unopened, shrink-wrapped packaging, and in a secure location until they are needed.
- Always load the workstation with the lowest sticker book number.
- You should set aside all unused yellow 2014 stickers in a secure location at the year's end. The Massachusetts Department of Transportation Registry of Motor Vehicles Division will come by to collect them.

► Program Changes

Effective January 1, 2015, all 2000 model year light-duty vehicles will be exempt from the on-board diagnostics (OBD) emissions testing requirement. However, all 2000 model year vehicles will still be subject to annual safety inspections. In addition, all 2000 model year diesel-powered vehicles over 10,000 pounds Gross Vehicle Weight Rating (GVWR) will still be subject to the opacity emissions inspection requirement.

Also beginning in 2015, the Massachusetts Vehicle Check emissions waiver and economic hardship repair extension minimums will increase to the following:

Vehicle Age	Emissions Waiver Spending Minimum	Economic Hardship Repair Extension Estimate Minimum
Five model years old or newer	\$870	\$1,305
Six to 10 model years old	\$770	\$1,155
Greater than 10 model years old	\$670	\$1,005

► Workstation Changes

The program will release a workstation software update that makes the following changes:

- Second printer tray will automatically be recognized if the printer is replaced

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The Year in Review: October 1, 2013-September 30, 2014

October 2013 marked the five-year anniversary of the Massachusetts Vehicle Check program. Congratulations to all who contributed to another successful year! The following is a summary of program statistics* from Year Five:

Number of vehicle inspections.....	5,067,326
Number of inspectors receiving initial training	1,670
Number of inspectors re-certified.....	3,889
Number of active Inspection Stations (excluding Motorcycle-only stations).....	1,819
Number of active Registered Emissions Repair Shops.....	216
Number of Motorist Hotline calls.....	12,783
Number of Technical Helpdesk calls.....	26,744
Number of registered vehicles in Massachusetts	5.1 million
Average age of vehicles in Massachusetts.....	8.97 years

Communities with the most registered vehicles:

1. Boston 331,811
2. Worcester..... 112,975
3. Springfield..... 92,633

Communities with fewest registered vehicles:

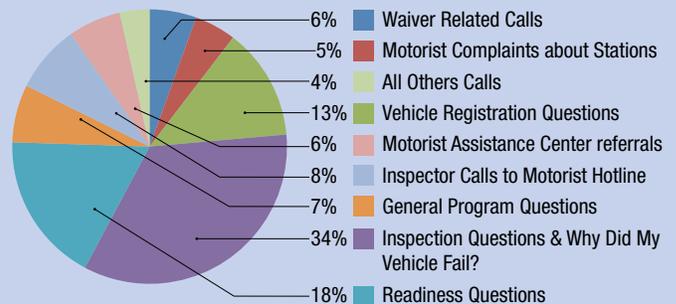
1. Gosnold 14
2. Monroe..... 37
3. Mount Washington 65

Communities with oldest average vehicles:

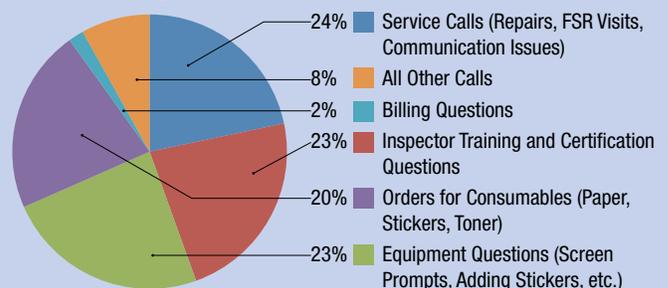
1. Aquinnah..... 14.55 years
2. Chilmark..... 14.09 years
3. Oak Bluffs..... 13.23 years
3. Mount Washington 9.25 years

**Statistics as of September 30, 2014*

Motorist Hotline Calls:



Technical Helpdesk Calls:



Inspection Procedure Reminders

► License Plate Inspection Reminders

The Registry of Motor Vehicles (RMV) would like to remind vehicle inspectors of the inspection requirements for vehicle license plates. Inspectors must reject vehicle plates if:

- The license plate(s) is (are) damaged, not securely mounted, faded, repainted, and/or not clearly visible. No bumper, trailer hitch, or other accessory may interfere with a clear view of the license plates.
- The license plate(s) is (are) bordered by a frame that covers or obscures in any manner the plate number.
- The reflectorized license plate is covered with glass, plastic or similar material so that the plate number is not legible.
- The illuminated rear plate is not plainly visible at a distance of 60 feet.
- The license plate(s) is (are) not mounted in the proper location. Any decorative license plate or license plate replica not issued by the RMV on which any jurisdiction name appears must be removed from the vehicle.

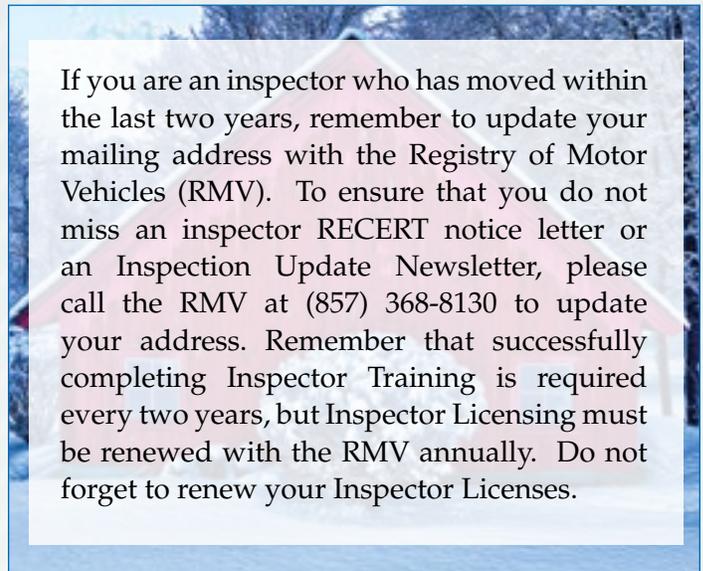
The following image shows an example of a license plate that should be rejected. The plate is faded and not clearly visible from 60 feet.



► Frame and Undercarriage Inspection Reminders

RMV reminds all inspectors conducting Non-Commercial Vehicle safety inspections of the following frame or unibody rejection criteria. All non-commercial vehicles with broken, cracked, modified or rusted structural parts of the undercarriage or unibody so as to cause a hazard or structural weakness must be rejected.

If a vehicle is presented for inspection at your business, it is your responsibility to take the time needed to inspect the entire frame and undercarriage carefully. Based upon a vehicle's age and/or general body condition (rust, body rot, etc.), there could be a greater chance for a vehicle to have structural frame or unibody conditions that should be rejected.



Get Local Approval, Notify MassDEP before Heating with Waste Oil

Waste oil is combustible and may pose a fire hazard if not handled properly. It also can be contaminated with heavy metals, gasoline, chlorinated solvents and other toxics, which is why the Massachusetts Department of Environmental Protection (MassDEP) enforces specific handling, storage, transportation, recycling and disposal requirements. If you are planning to install a space heater that burns waste oil in your business, be sure to choose equipment that meets MassDEP standards and notify the agency before you begin using the system. You will also need to obtain local fire department approval to store waste oil fuel and comply with MassDEP rules for handling it. See the MassDEP fact sheet at <http://www.mass.gov/eea/docs/dep/recycle/laws/spacehtr.pdf> for additional information.



Registered Repair Technician Updates

► Emissions Repair Success Ratings Reminder

For Registered Emissions Repair Shops that have entered repair data, the Third Quarter 2014 Emissions Repair Success Ratings are now available on Vehicle Inspection Reports and on the Repair Shop Locator found on the website at: http://www.massvehiclecheck.state.ma.us/find_emissions_repair.php.



On September 15, 2014, "G" Truglia instructed registered repair technicians at the Medford MAC on how to diagnose and repair misfire DTCs.

Each repair shop is responsible for entering its vehicle repair information for any given month *by the tenth day of the following month*. For more information about repair data entry, visit: http://www.massvehiclecheck.state.ma.us/inspection_repair_data_entry.php

► Summer and Fall 2014 Training Recap

In September, the Massachusetts Vehicle Check program offered a Registered Repair Technician ongoing training module titled "New Misfire Diagnostic Techniques."

At the trainings, Instructor Jerry "G" Truglia spoke about how to improve emissions repair diagnostics related to misfire diagnostic trouble codes. A total of 46 repair technicians attended the trainings at four Motorist Assistance Centers (MACs).

In November, the Massachusetts Vehicle Check program offered a Registered Repair Technician ongoing training module titled "Understanding, Utilizing and Using your Lab Scope." At these sessions, "G" spoke about techniques

for using a lab scope tool to diagnose emissions repair problems. The trainings were held at four MACs and attended by a total of 45 repair technicians.

► 2015 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 Motorist Assistance Centers (MACs) located across Massachusetts. The following 2015 classes are available:

Course Name	Locations and Dates
Winter 2015 Seminar	Medford MAC - March 16 Fall River MAC - March 17 Shrewsbury MAC - March 18 West Springfield MAC - March 19
Spring 2015 Seminar	Braintree MAC - June 8 Pocasset MAC - June 9 Shrewsbury MAC - June 10 West Springfield MAC - June 11
Summer 2015 Seminar	Medford MAC - September 14 Fall River MAC - September 15 Shrewsbury MAC - September 16 West Springfield MAC - September 17
Fall 2015 Seminar	Braintree MAC - November 9 Pocasset MAC - November 10 Shrewsbury MAC - November 23 West Springfield MAC - November 24

In 2015, all of the Training Seminars will be free for Registered Repair Technicians. The applications for these courses are available at http://www.massvehiclecheck.state.ma.us/inspection_ongoing.html. Should you need help registering or have any questions, please contact our Registered Repair Coordinator at (781) 794-2961. It is important to enroll as soon as possible because space is limited to 35 technicians per class.

► OBD Diagnosis and Repair Training

The on-board diagnostics (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.

This class is open to all technicians, including those studying to take the A8 Engine Performance or L1 Advanced Engine Performance Specialist National Institute for Automotive

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Inspection Update Profile

William Murphy, Owner and Operator
Auto Clinic, Pepperell, Mass



William Murphy, owner and Stephanie Murphy, office manager,
Auto Clinic

Q: What services does Auto Clinic offer?

A: Auto Clinic is a full-service, state-of-the-art auto repair facility, celebrating over 26 years in business. We offer vehicle oil changes, factory maintenance, engine replacement and diagnostics, as well as timing belt services. We are able to work on foreign and domestic vehicles, as well as light-duty trucks up to 26,000 lbs. Gross Vehicle Weight Rating (GVWR) because we are a Class B inspection station.

Q: What are your roles and responsibilities as owner?

A: As the owner of Auto Clinic, I oversee the daily operations to make sure the shop runs efficiently. I also help guide our technicians when questions arise on the job and ensure that the technicians are offered an opportune amount of training.

Q: How many employees do you have? What are their roles?

A: We have a total of eight employees, including five technicians; three are Automotive Service Excellence (ASE) Master Technicians, ASE L1 certified, and two are Massachusetts Registered Emissions Repair Technicians.

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

A: I grew up in Pepperell and have been professionally employed in engine mechanics since I was 12 years old when I repaired dune cycles. Two years later, I worked

at Kemp's garage for owner John Kemp. When asked why he hired such a young kid, he told people, "He's nothing short of a genius when it comes to car repair." Later I moved to California, where I worked on the FedEx fleet. I finally opened my own business here in Pepperell in 1988.

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

A: I have attended Motorist Assistance Center (MAC) Ongoing training seminars and enjoyed them very much; they are highly informative and taught by great instructors. My shop also participates with companies who provide us with lots of classroom and web-based trainings. We also take advantage of manufacturer trainings to stay cutting-edge within the industry.

Q: How has being a Registered Repair Technician (RRT) helped your business?

A: Being a Registered Repair Technician has helped the business because vehicle emission failures are directed to qualified shops like ours for repairs. We also get to take advantage of the RRT training.

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

A: Some of my most challenging repairs take place on vehicles that have limited release information. Other challenging repairs are on vehicles that have intermittent problems.

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

A: Motorists should have their vehicles inspected in preparation for winter travel and commutes. In particular, they should have their vehicle's coolant, belt, hoses and tires checked.

Q: How do you advertise your business?

A: We follow the times, whether it is through print, broadcast or social media. However, over the past 26 years, our greatest business advertisement has been our reputation.

Q: What is your business motto?

A: Our motto is "Old fashioned service with modern technology." We give our customers fast and friendly service, while keeping up with technology advancements.



How Vehicle Tampering Affects Registered Repair Shops

The Massachusetts Vehicle Check Program has seen a large number of vehicles referred to the Motorist Assistance Centers (MAC) for suspected emissions control device tampering. During the inspection process, if a vehicle is identified as having its emissions devices tampered with, it will be referred to the nearest MAC. The Inspector must remember to inform the vehicle owner to call the Motorist Hotline at 866-941-6277 to schedule a MAC appointment.

In many cases, the owner will bring these vehicles to you, the repair technician. The owner may not know why his or her vehicle failed the inspection or what is needed to be done to restore its emission control systems to proper working order.

The Federal Clean Air Act requires that engine performance modifications are properly designed and installed, and prohibits those that increase motor vehicle emissions.

Emission control tampering could involve equipment removal, bypass, disconnection, or damage, or anything else that renders ineffective any emissions control device or element of design that has been installed on a vehicle or engine.

Tampering comes in many forms and may include:

- Spark plug anti-foulers installed on oxygen sensor(s), trying to cheat catalyst monitors;
- Aftermarket performance software installed in the Powertrain Control Module (PCM);
- Vehicles that have received an incomplete manufacturer software update;
- Non-conforming engine swaps;
- Catalytic converters removals, relocations or add-ons;
- Alterations to engine components or devices that do not meet original factory specifications;
- Aftermarket turbochargers or superchargers with accompanying performance software that does not have supporting documentation allowing the installation of these devices;
- Long tube headers that eliminate or relocate catalyts and oxygen sensors;
- Diesel trucks with EGR valves disconnected or disabled by non-complaint software; and
- Diesel trucks with the exhaust after-treatment devices removed.

This picture is an example of a vehicle with the wrong catalytic converter installed, a catalyst that may not be positioned in the correct location and an altered or tampered downstream oxygen sensor installation.

In all cases of identified emissions control tampering, the vehicle must be restored to a compliant configuration before an inspection will be allowed to proceed. There are no emission waivers or repair extensions available for vehicles with tampered emissions.

Manufacturers of virtually all non-compliant emission parts provide language somewhere on their websites or original packaging to indicate that these parts are "for competition or off-road use only, not legal for street or highway use."



Catalytic converter and oxygen sensor tampering are indicated by the white arrows above.

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Motorist Assistance Center Repair Technician's Corner

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There are legal emissions modifications that can be made but the parts that are purchased must be made for that specific vehicle. In the case of performance parts, they must be authorized for street use. A good rule of thumb is that if the part can be lawfully sold in California, then it is probably allowed in Massachusetts, too.

Exempted parts are add-on or modified parts that have undergone California Air Resources Board (CARB) engineering evaluations. If they are shown to not increase vehicle emissions, they are granted exemptions to emission control system anti-tampering laws. These exemptions are called Executive Orders (EOs) and allow the modifications to be installed on specific emission-controlled vehicles. To search for Eos, please visit the following CARB website: <http://www.arb.ca.gov/msprog/aftermkt/devices/amquery.php>



When a vehicle comes to your shop with an emission failure for "tampering," you will be tasked with identifying the concern and restoring the vehicle to emissions compliance. As a reminder, once a vehicle has received a MAC flag, it also must be inspected at a MAC before it will be allowed to receive a re-inspection. Please allow the MAC to be involved with your repair process; we will help you identify why the vehicle may have been flagged and also help you restore the vehicle to full emissions compliance.

New Program Changes

(Continued from page 2)

- If the windshield sticker is not properly assigned to a vehicle, the onscreen message will be clarified
- The screen will clearly display the expected sticker number when the wrong sticker number is scanned
- Improved sticker loading warning message
- Calibration lockout and Aborted test messages will be clarified

Whenever your workstation indicates that a newer version of software is available, it is important to take the time to download and install the update so you will have the most current version. Once the installation is complete, perform a Data File Refresh before starting a new vehicle inspection. If you have any questions about downloading or installing these software updates, please contact the Technical Help Desk at 877-834-4677.

Registered Repair Technician Updates

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Service Excellence (ASE) test. In other words, you do not need to be ASE-certified repair technician to take this course.

The class provides foundational information concerning the diagnosis and repair of OBD-equipped vehicles. The OBD Diagnosis and Repair Training course is a 28-hour course consisting of 20 hours of classroom lecture and eight hours of hands-on training and examination. The next class available is:

Courses Offered	Dates and Times (Location will be determined based upon demand)
Spring 2015	Monday - Wednesday, April 6-8, 8:00 AM - 5:00 PM Thursday, April 9, 8:00 AM - 12:00 PM
Fall 2015	Monday - Wednesday, November 16-18, 8:00 AM - 5:00 PM Thursday, November 19, 8:00 AM - 12:00 PM

The application for this course is available at http://www.massvehiclecheck.state.ma.us/inspection_ongoing.html. If you have questions or need help signing up, please contact our Registered Repair Coordinator at (781) 794-2961.



Inspection Update
Massachusetts Vehicle Check Program
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 Braintree, MA 02184

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2015 MA Vehicle Check Program Changes and Vehicle Tampering Reminders Inside!

Massachusetts Vehicle Check Program At A Glance

Program at a Glance			Enforcement Statistics	
	Count	Failure Rate		Count
Non-Commercial Safety Inspections	1,277,479	4.6%	Violations Issued to Inspectors	91
Commercial Safety Inspections	43,679	4.9%	Violations Issued to Stations	107
7D Safety Inspections	518	1.0%	Inspector Privileges Revoked	2
OBD Emissions Inspections	1,010,863	5.6%	Inspector Required to Retrain	11
Opacity Emissions Inspections	26,520	1.6%	Inspectors Suspended	19
Emissions Waivers Issued	0		Stations Suspended	28
Repair Hardship Extensions Issued	12		Penalties Assessed	\$126,500
Hotline and Training Statistics			Licensed Stations	
	Count			Count
Motorist Calls Received	3,562		Class A Stations	1,186
Inspection Station Calls Received	7,349		Class B Stations	189
Initial Non-Comm. Inspectors Trained	291		Class C Stations	29
Initial Commercial Inspectors Trained	47		Class D Stations	316
Initial 7D Inspectors Trained	11		Class E Stations	9
Initial Motorcycle Inspectors Trained	15		Reg. Emissions Repair Shops	216

For period 7/1/2014 through 9/30/2014



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