

The Official Newsletter of the Auto Body Association of Connecticut

Electric Vehicle Technology on the Horizon



"On The Minds of Members"

"Are you prepared to handle accident damaged Electric Vehicles?"

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ABAC President's Message Bob Amendola EV Technology Is Here!



EV's are rolling into the mainstream motoring public faster than we care to acknowledge as repairers. The new technology we're seeing now calls for a new level of respect because of the inherent associated risks such as electric shock, thermal runaway etc. If you don't have any immediate plans for retirement, I strongly recommend you carefully read through this edition of ABAC news dedicated to EV technology, seek out training and resources and do your due diligence to make sure you are prepared to repair these vehicles properly and

safely. The stakes are simply too high not to! The safety of our customers and our team comes first.

To recap for those who missed our most recent membership meeting, I would first like to thank our sponsors, Norton/Saint Gobain Abrasives and the Gates Auto Group. Thank you to David Morin, Parts Manager at Gates, and Larry Pearson, Outside Sales Manager at Columbia Auto Group. I would also like to thank DJ White (Regional Sales Manager) and Matt Munsell (Territory Manager) from Norton/Saint Gobain Abrasives for their support and excellent presentation to kick off our meeting. Lastly, thank you to our GM reps, Dan Foster and Ted Rahmann. Dan Foster gave us a "short dive" into the deep pool of Hybrid Electric vehicles. He has a wealth of knowledge and I know I can speak confidently for the group of attendees when I say that we are grateful to have had the opportunity to learn from him.

In summary, I would like to encourage our members to attend each meeting. Our association strives to provide you with educational and informational content to help you in your business. Please take advantage of them. To reiterate what I always say, please also maintain the lines of communication with your colleagues. Our association has built up a network between each other. Share your successes and lean on each other when an issue arises. We are all here to help one another. We are not competitors. There is enough work to go around. Let's focus on the unity we have built in our association and how we can move forward each day improving our industry together.

Sincerely,

Bob Amendola

Autoworks of Westville - President - Auto Body Association of Connecticut

"On The Minds of Members" Are you prepared to handle accident-damaged electric vehicles?



Tony Cavallaro Jr Airport Road Auto Body

Bob McSherry North Haven Auto Body

Bill Denya Denya's Auto Body

Continuing our series of "On The Minds of Members", we interviewed 3 members of the Auto Body Association of Connecticut for their views pertaining to the **new challenges that are on the horizon for collision shops as EV's make their way into the market.**

Recently, California announced they will ban gas powered vehicles by 2035.

Whether this is right or wrong, electric vehicles are becoming more common. Collision shops that want to survive the coming "Technical Tsunami" need to invest the time, money, and energy into preparing for the EV evolution now! We asked several ABAC members questions about EV's and how they plan to handle repairs.

How are you dealing with EV vehicles in your shop? Are you prepared?

Denya: As prepared as we can be. It's all about following the OEM Repair Procedures. That's our bible to repairing all cars including EV's.

McSherry: We have been prepared since 2015. Electric vehicles are just a different approach. It is a different animal in many ways, but the same in many others. Training for safety precautions and vigilance to having the correct protective equipment in conjunction with making sure they are inspected, tested and cared for.

Cavallaro: We are fixing quite a few. We are Tesla certified and that makes up a good portion of our EV business already. We're geared up for them. Continued on Page 4



Have you begun preparations in your shop to repair EV's?

Denya: Again, you will find out your needs as you get more involved repairing the EV. There will be certain tools that are a MUST to have before you even pull an EV into your shop.

McSherry: Preparations are complete. We welcome the transfer to electric.

Cavallaro: We have all the equipment, all the tools necessary to do the repair work.

Are you planning to upgrade your electrical service in your shop to handle Electric vehicles? Or is your shop already equipped?

Denya: So far, any EV that we have worked on was capable of being repaired with what we currently have. (No pun intended)

McSherry: Shop was already equipped. You will need a minimum of three "class 2" chargers. Each of these occupy 50 amps, so be prepared. (Especially with the supply chain issues, service panels are 36-48 weeks out.

Cavallaro: Our shop is already well prepared with all the necessary equipment to repair Electric Vehicles. We have 4 stationary chargers in the shop mounted on the wall, including the two in our showroom. This is where we keep cars before delivery. In a perfect world, we fix the car, detail it, put it in the showroom, plug it in and when the customer comes to pick up their car it's clean, plugged in, fully charged and ready to go.

Is your team trained to power down electric vehicles?

Denya: We regularly attend the ABAC meetings which provides us with a wealth of information. Our last meeting in Hartford was a perfect example. A team from GM gave us information on handling EV's. It was extremely in-depth, and I recommend making sure you don't miss anything that the ABAC offers it's members at these meetings. Where else could I have gone to get this type of information, as a paid ABAC Member? Everyone knows how much they can learn just from attending.

McSherry: Yes, we are trained. All the manufacturers have specific procedures. They must be followed!

Cavallaro: All our technicians are up to date on the latest technology for EV repair. Follow the repair procedures. Nothing is better than the OEM repair procedures. When getting this information, whether you have to pay for a subscription or not should not be a concern.

Continued on Page 5



If you're certified with a particular OE the info subscription is included, if not, you pay for a 1-day, 3-day subscription or beyond but we pass on these associated costs to the customer and include it in our repair invoice.

Do you have plans on how you will move these vehicles when they are powered down in your shop?

Denya: Yes, we use dollies and WHATEVER the OEM calls for. Add to that a level of common sense and it all works well.

McSherry: Once they are placed in tow mode, they will free wheel. Certain cars will require "go jacks" to get them moved around. Thought needs to be put into staging before disabling.

Cavallaro: Many of the EV's are able to be put into a "service mode" so it's not like the vehicle totally loses power. This allows you to either push it, some of them can also be driven in that service mode. Otherwise, we use dollies to move them around. Typically, the non-drivable vehicles will be a total loss. Whenever a battery gets compromised, even if it's a scratch, we write to replace the battery.

How are you training your employees to keep up with this new technology

Denya: Again, besides the ABAC meetings, we use OEM training when possible. We will not even take an EV in the shop without looking at the Repair Procedures first.

McSherry: All the car makers offer the training. We are certified for most all of them, so we have to keep this standard current. The minute you stop learning, you start dying... (Mentally, not figuratively!)

Cavallaro: Since we are certified in a lot of the brands, we use the OEM training to stay up to date. This training is also mandatory to be certified and to remain certified. Electric vehicles are the latest technology so being educated is of most importance. Continued on Page 6

The OEM's provide classes where we can send our employees (and ourselves) for the latest education. A lot of the training is virtual so that's convenient. As far as "hands-on" training, there are a few manufacturers that require us to be there and if that's the case, we will have our senior technicians attend. Our techs are great at helping each other too as far as sharing their knowledge of EV repair which helps considerably when we hire someone new.

Are you prepared to invest in the proper tooling you will need to perform repairs?

Denya: Yes. As we move forward in this industry, you MUST be ready to invest, or you will ultimately fail. You need to keep up with current tools and technology.

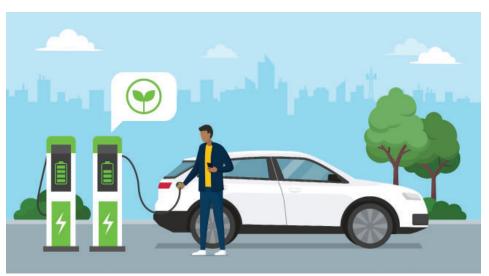
McSherry: We have the equipment; however, each manufacturer has their own special tools required. If you are starting from scratch, the investment is \$150k as a starting point.

Cavallaro: Yes we are. You'll have to. If you're not going to invest, you won't be in business. We have been Tesla Certified since 2013. We are 1 of only 4 shops in the state of Connecticut that is certified. (Bob Mc-Sherry's North Haven auto Body is one of the others). We go through an audit every year with a re-certification process. Being one of 4 in Connecticut. we also get customers from nearby states because of our proximity as a Tesla Certified Repair Shop. Remember, being a Tesla Certified Shop is very important since it means ONLY Tesla shops are are allowed to purchase parts for their cars.

Are you aware that booth temperatures on certain EV's cannot exceed 150 degrees (65 degrees C)? Is your booth equipped to stay within the range and still cure properly?

Denya: Yes. But it's the paint that you should be more concerned about, and the paint code will dictate the temperature.

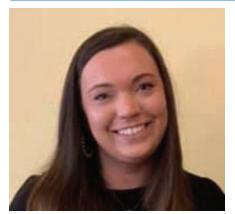
McSherry: Most cars electric or not have a "not to exceed" temperature. It is all in the repair procedures. On performance cars (Porsche and a couple others) it states the car cannot be baked with the tires on. Research and reading are critical in today's market. Repair procedure procurement is not included in any operation, so bill for your time and the cost of the subscription. You will get pushback, but stay the course, you are not the only one asking for it!



Cavallaro: If you have the proper training, there are no issues painting an EV. Repair procedures are by VIN, since every car is different.

Submitted by Don Cushing

Streamline To Take Back Your Time!



ABAC Vice-President - Ashley Burzenski

We recently made a significant change in our accounts payable/accounts receivable processes that has made a tremendous difference for our dayto-day operations. So much so, that I wanted to dedicate my article in our ABAC newsletter to discuss how embracing certain technology can help us to free up our time for things that refill our cups.

To serve as an example, we had previously been using the desktop version of QuickBooks, handwriting our checks and maintaining our general ledger in said checkbook. While this helps to keep a close eye on everything, it can

become time consuming. Researching other options had been on the to-do list for quite some time but here again, time is the issue. One day we finally hit a point where we had a few free moments to look into switching things up. After researching various ideas, we landed on switching to the online version of QuickBooks.

The key selling points for us were:

- Data is cloud-based so we never have to worry about a computer crashing and losing anything.
- Checks can be issued and printed right from the program.
- QuickBooks account can be accessed anywhere, giving us the option to work from home if an issue arises (thanks COVID).
- Fully integrates with bank account(s) which automates a P&L, general ledger, breakdown of sales, expenses etc.
- Generate and send invoices electronically so customers can pay the bill in advance online.

By making this shift, we now pay everything from QuickBooks, which has saved us so much time just in the day-to-day parts delivery payments. Furthermore, our bank account is linked to our account, so we log and match each incoming and outgoing payment to maintain an automated ledger. Goodbye to the half an hour-hour every night manually closing out the day and 2-night process of closing out the month! While we are still fine-tuning aspects of our new system, we are already reaping the benefits of embracing change and freeing up some of our time.

An added bonus we are seeing as well is that we can track where we stand at any given moment to see how things are going. We are also loving that everything is in one place now. To give a practical context to how we use QuickBooks, we write our estimates and supplements in CCC. We then generate our invoices in QuickBooks. Remember that your invoice is your bible. It should include exactly what was done to each vehicle, nothing more nothing less. While this is not a one-size-fits-all solution, I hope it serves as food for thought and encouragement to take an honest look at areas you could improve in your business. In my opinion, there's always a feeling that there aren't enough hours in the day so any opportunity I can create to find time to make room for things that recharge my battery are well worth it.

Until next time, Ashley Burzenskí

GM Gives Presentation on the Hybrid Electric Vehicle (HEV) and Battery Electric Vehicle (BEV) at Latest ABAC Membership Meeting

The Auto Body Association of Connecticut held their most recent Membership Meeting on Tuesday September 13th at the USS Chowder Pot in Hartford.

As always, ABAC President Bob Amendola began by thanking everyone for their attendance and went over the evening's agenda. *"It's great to see such a good turnout this evening and thank you all for taking the time to attend. Many of you we haven't seen for a while so it's great to have you back,"* said Bob.

Covering the agenda for the evening, Bob announced our guests from Norton/Saint Gobain Abrasives, and the presenters for General Motors.

"I'd also like to thank all of our ABAC Corporate Sponsors and our ABAC News Supporting Advertisers. Everyone currently listed in our newsletter has made a commitment to support the ABAC and the best way to thank them is to purchase from them. Remember to Support Those Who Support You," Bob continued.

The Sponsors for the night were:

Primary Sponsor

Norton/Saint Gobain Abrasives

- DJ White Regional Sales Manager
- Matt Munsell Territory Manager



Co-Sponsor

Gates Buick-GMC-Nissan – North Windham

- David Morin Parts Manager Gates Buick-GMC-Nissan
- Larry Pearson Outside Sales Representative for the Columbia Auto Group



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Bob talked about all the new ABAC Members that have joined over the last few months. Over 30 shops have signed up as new members through the extensive work done by Dave Fogarty. "It's impressive that in a diminishing market, more and more collision repair shops are seeing the value of our auto body association. I wouldn't want to go it alone. All my colleagues have helped us be what we are and where we are as an association. Remember, we are colleagues, not competitors. It's our time in the industry to catch up and surpass the mechanical repair since our collision repair industry has become so far advanced and we work hard to repair cars the correct way and deserve to be compensated properly. Everyone, by now, should know to meet with your accountant, learn what you need, learn your costs associated with your business and get compensated correctly. We recently had our quarterly meeting with SCRS with many of the other auto body associations throughout the country and many of those associations are very interested in what we are doing and accomplishing here in our state of Connecticut. That's cool and kudos to our ABAC! SCRS finally has a healthcare plan out there that can benefit our shops and it's being done on a national level." said Amendola



Brochures were available at the meeting for anyone interested. The average savings have been 10-20%. For more information contact Heather at abacadmin.heather@gmail.com.

Continuing, Bob mentioned, "Keep filing DOI complaints. I was a person who thought that a DOI complaint would never have had any validity and Ashley at our shop has proven me wrong. Her tenacity boxes them into a corner where they must address the situation. If there's a statute or a law that's being broken, they are not the quickest to respond but it's starting to have some progress. We are getting results. Doing nothing results in getting nothing."

Stepping to the microphone, Immediate Past President Tony Ferraiolo, first addressed the program for health insurance being developed by SCRS. *"When I was ABAC President a few years ago, SCRS was beginning their work on the health program. I think it's a terrific program since they have the buying power of the whole country in an industry where we can now get competitive rates for us and our employees. So please take the time to look into this program. If nothing else, use this program as a bargaining chip with your current health insurer. Who know? Either way, you could end up getting a better deal with better benefits*!" said Ferraiolo.

Tony then mentioned not only a milestone in the Auto Body Association of Connecticut but a personal milestone for Art George. *"I'd like to give a shout out to Artie's Auto Body of Walcott. Art George's company is celebrating 50 years in business! That is an amazing accomplishment."*



Tony then continued, *"Since stepping down as your President, I've been very involved with Don Cushing in helping prepare content for our newsletter.*

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I've also worked with Dave Fogarty in trying to help increase our Supporting Vendor Advertiser's Directory. As far as content, Don and I are trying to keep the ABAC News as organic as possible with articles that are more "home spun" so to speak, and more reflective of what goes on with the ABAC and its members. We have been doing a series in the newsletter called "On the Minds of Members" which is a series of questions that we ask members for their input and learning experiences that they would share with all of our ABAC membership and readers. We are always looking for fresh ideas and subject matter so that we can send these questions to Don. What happens next is Don will contact members in a live interview which takes about 15 minutes of your time. He asks members the questions and forms the article from their answers. It's a short process and we'd like to get as many members involved as possible. I've been working to get some of these questions at our Board meetings, but we want your input as members. Everyone will benefit from this series so any questions we are asked, we will attempt to answer them. I've learned some great processes from the ideas that we cover in these articles. This is also a great way to network with your local shops because you will see what your colleagues are doing with many of the ideas and processes that we present."

"As Bob Amendola mentioned, we have lost a lot of shops since COVID. For example, at the time of the Hartford Lawsuit, we were at 1,000+ shops in the State of Connecticut. We are now down to less than 400 shops! The time is now to stand your ground and start collecting what's really owed to you for labor rates, for materials. Dig your heels in. Where are they going to go? Who can they send the work to? I'm not having any issues with lack of work in my shop, and I know it's the same for my surrounding area. There is plenty of business out there. Don't do the work for free. Don't do it at a loss of money. Make the profit you need to make; to get the tools and the training to do the job correctly. I'm not telling you what to charge. You need to figure that out with your accountant. "On The Minds of Members" will help you get closer to your bottom line. The insurance companies want to continue playing their games by not paying your charges and using cost shifting and other smoke and mirrors to try and not pay you. It's wrong. They know if we take it to a court of law, we can and will prevail. Heather will send out a mass email to everyone about submitting questions for the series in our ABAC News. If you think of a question or a subject, email back to Heather and we will make a list to give to Don and if you want to participate, we will include you in one of these series articles," Tony added. "The ABAC News is going in a great direction, our Supporting Vendor Advertisers have been great and loyal, so please remember to support these vendors and again, this content will help each one of you in your business. Let's all share the success. Let's all grow together," Tony continued.

Returning to the podium, Bob Amendola asked, *"Does anyone know how many shops there are in the state of Texas? There's 6,000. And here we are, the Auto Body Association of Connecticut making headlines with roughly 159 shops! Amazing. You should all be VERY proud to be members of such a unique and headline making association. I know I am!*

Bob then introduced our first presentation of the evening from Norton/Saint Gobain Abrasives.

The presenters were:

DJ White – Regional Sales Manag-Matt Munsell – Territory Manager



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They both gave a brief bio on their involvement with Norton and presented:

- Learning Solutions & Training
- Value Added Services



DJ White Regional Sales Manager

As one of the leading manufacturers in the automotive refinishing sector, Norton is committed to the manufacturing and distribution of a wide range of non-paint products for the professional body shop. The combination of high-quality products, vast experience and knowledge of professional sanding systems from paint removal to surface reconditioning and polishing allows us to meet virtually all customer demands. www.nortonautomotive.com

Norton offers industry-leading training options for our distributors to ensure you're prepared to answer all your customers' questions about abrasive products and the best practices for their application

Norton Tech Training

Now you can learn from abrasives experts about everything from product selection for every sanding and grinding application to reducing operating costs and increasing productivity. Online learning that's modular, convenient, and free.

Who is RSG?

Refinish Solutions Group (RSG) is an umbrella brand that provides collision shops with access to best-in-class products in a one stop shop.

This unique partnership of industry leaders is committed to helping optimize shop processes for a total refinishing solution:

- RSG offers the ability for higher level SOPs Best Practices for the shop
- Complete exposure to best-in-class quality products
- One Stop Shopping only one sales contact for all partner brands

The Refinish Solutions Group manufacturers bring focused expertise and know-how to deliver a single comprehensive refinishing solutions system to bring increased productivity, reduce cycle time and improve quality.

Their presentation was followed by discussion, comments and questions.

After a break for dinner Bob then introduced our main presentation for the evening.



Matt Munsell Territory Manager

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Representatives from General Motors were here to give us all a presentation on Hybrid Electric Vehicles & Maintenance.

Representing GM were:

- Dan Foster GM Service Development Manager Buick & GMC
- Ted Rahmann Field Manager Aftermarket





Dan Foster GM Development Manager

Introduction to HEVS and BEVS

Vehicle propulsion technology is changing at a rapid pace and the future is electric. All major automobile manufacturers currently offer a Hybrid Electric Vehicle (HEV) and/or Battery electric Vehicle (BEV) in their portfolio. The number of vehicles that will be powered by a hybrid or electric powertrain will increase dramatically in the coming years. Understanding how these vehicles operate, and the unique service requirements that come along with them, is critical to servicing these vehicles correctly.

The Safe Inspection and Service of Electric and Hybrid Electric Vehicles

• Overview of the alternative propulsion systems found in these vehicles

• The required safety equipment and procedures that must be followed when inspecting and servicing these vehicles

• The procedure for removing HV systems components safely in the course of collision repairs

Maintenance Service Procedures That Aftermarket Technicians Can Perform on Hybrid Electric Vehicles (HEV's)

- High Voltage (HV) system operation and related maintenance procedures
- Supporting systems such as Heating, Ventilation and Air Conditioning (HVAC) and brake systems
- Various models and architectures including Ultium Battery
- Propulsion Types
 - o Conventional Powertrain
 - o Battery electric Vehicle Powertrain
 - Hybrid Electric Vehicle Powertrain
 - o Plug-In Hybrid Electric Vehicle Powertrain

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- Drive Systems
 - o Series Drive systems
 - Parallel Drive systems
 - o Series Parallel Drive systems
 - o Battery Electric Vehicle Drive systems
- Hybrid Levels
- Mild Hybrids
- Belted Mild Hybrid Systems
- Integrated Motor Assist
- Full Hybrids
- Hybrid Drive Modes

Did you know.....

- You need High Voltage Safety Gloves?
- That the Safety Gloves need to be replaced every 12 months?
- You need to use one hand only for safety purpose?
- That you need to remove metal objects from your hands, wrists, pocket, etc?
- Vibrations can affect the EV battery?
- There are different colors for different voltage?

These are just some of the important things you learn at our meetings!

This ended the ABAC's night of education, once again proving how important it is to be a member of this association!

Before concluding our meeting for the evening, Bob reminded everyone, "Our future in this industry depends on all of us working hard to find solutions. I recommend that you reach out to your friends and colleagues who are shop owners and invite them to join the Auto Body Association of Connecticut to help better their future to help better our industry. The knowledge that you obtain when you attend these meetings is so invaluable."

Submitted by Don Cushing & Ashley Burzenski

Unity is Strength - Knowledge is Power Attitude is Everything



Ted Rahmann Field Manager Aftermarket

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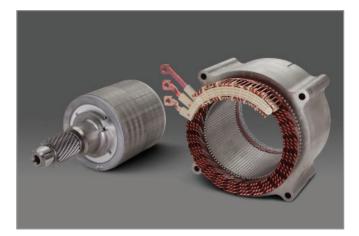


Hybrid & Electric Vehicle Operation, Diagnosis, and Repair

This Instructor-led InShop provides an overview of hybrid and electric vehicle designs, operation, and servicing. Diagnosing and servicing Hybrid Electric Vehicles (HEV) and Battery Electric Vehicles (BEV) requires an in-depth understanding of their propulsion systems, driveline configurations, high voltage batteries, drive motors / generators, and charging systems. The course also covers high voltage safety, high voltage disabling / enabling, loss of isolation diagnosis, and range related conditions.

Upon completion of this course, you will be able to demonstrate an understanding of the following key points:

- · Hybrid and Battery Electric Vehicle configurations, components, and operation
- · Diagnosing and servicing Hybrid and Battery Electric Vehicles
- · Operation and features of high voltage battery charging
- · Drive motor and generator operation



MOTOR / GENERATOR (MG)

MGs are dual purpose components that use electrical energy to create mechanical motion (kinetic energy) when operating as a motor or use mechanical motion to create electrical energy when operating as a generator. The kinetic energy produced by the MG is used to propel the vehicle. The electrical energy produced by the MG is used to recharge the HV battery. In this way, the MGs become the heart of HEV and BEV operation.

3-phase AC MGs consist of three main components: the stator, the rotor, and the resolver or encoder. MGs use the principle of electromagnetism to convert electricity into motion. Resolvers and encoders provide precise MG speed, position, and direction data.

HIGH VOLTAGE SAFETY

HEVs and BEVs use high voltage, high current, electricity as their energy source. High voltage can cause electrical shock, burns, or even death. Proper use of Personal Protective Equipment (PPE) and following OEM service procedures is critical to ensuring technician safety.

The correct PPE must be worn when working on high voltage vehicles. Standard PPE includes safety glasses with side shields and rubber soled shoes. Rubber soled shoes provide slip resistance and additional electrical insulation. Additionally, non-synthetic clothing (cotton) is recommended.

Special high voltage insulation gloves with leather outer gloves must be worn whenever working on a system or component where high voltage may be present. The American Society for Testing Materials (ASTM) classifies electrical safety gloves into five categories according to their insulating properties. Servicing high voltage vehicles requires class 0 gloves which can protect up to 1,000V AC or 1,500V DC.





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Hybrid & Electric Vehicle Operation, Diagnosis, and Repair

LOSS OF ISOLATION DIAGNOSIS

All high voltage should be isolated from the rest of the vehicle and exist only within the high voltage components and cables. HEVs and BEVs do not use the vehicle chassis as a ground path. Any high voltage existing outside of the high voltage cables and components is considered a loss of isolation.

Passive and active chassis isolation detection is used to identify a loss of high voltage isolation.

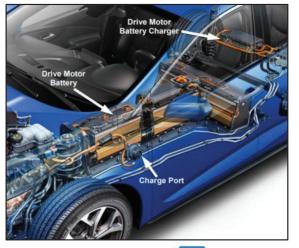
Passive isolation detection is performed whenever high voltage is supplied to the power inverter module. A pair of resistors connects the high voltage positive circuit to chassis ground and another pair of resistors connects the high voltage negative circuit to chassis ground within the PIM. The PIM uses voltage sense wires, connected between the resistor pairs on each circuit, to monitor the high voltage positive and negative circuits for continuity to chassis ground.

Loss of isolation faults may only be detectible when high voltage is present. Using a high voltage insulation testing DMM, such as the Fluke 1587 and the associated test leads, are required to accurately test high voltage circuits and components for a loss of isolation. Insulation testing DMMs work by supplying high voltage through the meter leads to determine circuit resistance. There are many loss of isolation faults that cannot be found using a standard DMM.

HIGH VOLTAGE CHARGING

Alternating current from the municipal grid must be rectified to direct current and amplified for storage into the high voltage battery. This change takes place within the vehicle's onboard battery charger. The vehicle's power electronics detect when the vehicle has been connected to the charge cord. Once connected, the power electronics monitor the battery state of charge and communicate with the battery charger and the charge cord assembly to control the charge rate and battery charge level.





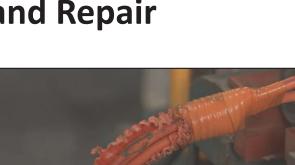
EV RANGE

Poor range is one of the leading concerns for HEV and BEV owners. Scan tool parameter can be used to differentiate an individual cell group capacity concern from an overall pack capacity concern. If a reduced range concern has been caused by something affecting all cell groups equally, such as temperature, discharge rate, driving style, age, or capacity loss, this parameter will indicate a low value. If a single cell group is affecting the battery capacity this parameter will indicate a higher percentage value.

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PERFORMANCE

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ACDelco





This edition of the ABAC News shines our Vendor Spotlight on **Gates GMC-Buick-Nissan**. They recently co-sponsored the Auto Body Association's September 2022 Quarterly Membership meeting, so we decided to reach out to Parts Manager Dave Morin for some information on his dealership.

Gates GMC-Buick-Nissan is very well known in the Connecticut area and surrounding Massachusetts for their dedication to the Auto Collision Industry and the service they provide to all shops, collision and mechanical.

Morin tells us that like many car guys and gals in our industry, he grew up a "motorhead" enjoying the time spent around cars, attending the races at the local racetracks. His auto interests led him to a technician's job at a Chevrolet dealership in Connecticut in 1985. He transitioned to their parts department after there was an opening and found out that he really enjoyed the parts end of the industry, so he decided to stay with it.

In 1992, Morin came to Gates-GMC-Nissan working in the parts department and has been there ever since!

His department now boasts 8 parts employees with several part time delivery drivers. There are 2 parts employees dedicated to strictly the wholesale side of the business taking orders and handling the phones. One of those people is Arianna who, according to Dave is *"a top-notch parts advisor who excels with taking our customers' orders and helping them with whatever issues they may have!"* Make sure to ask for Arianna when you call Gates wholesale!

"Dave tells us that he has one employee who is dedicated to the 15 technicians that work there. "My tech guy, Norman, has a great skill set and has really good communication with our technicians. He is the man for the job. I swear that when he's out, I need 2 guys to fill that spot!", says Morin.

Morin has 2 of his employees that run the shipping and receiving department, checking in the orders and setting up the daily delivery routes. Morin oversees all of this in case there are any questions or concerns but for the most part he allows his team to move forward. This leads to the 4-6 delivery trucks that Gates GMC-Nissan has on the road at any given time depending on the need. Their delivery area covers all of Connecticut and Northern and Western Massachusetts.

It would be difficult to accomplish what we do here without acknowledging the great team I have here at Gates. I know I mentioned two of our employees but without the hard work from the rest of my team it would be a big challenge. I want to make sure I thank each and everyone of them. I count on their efforts daily, says David.

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Boasting an inventory of well over \$1M the parts department uses OEConnection for GM and OEC /Ops Trax for Nissan to fill critical ordering for their collision and mechanical shops.

When asked about how Gates became involved with the ABAC, Morin didn't skip a beat. "You know Larry Pearson, right?" asked Morin with a chuckle. "Everybody knows Larry!" (And Morin is right. I can attest to that.)

Larry Pearson, Outside Wholesale Representative is a very well-known person in the autobody industry. He not only works for Gates GMC-Nissan but he represents the whole Colum-



Parts Manager David Morin & OSR Larry Pearson

bia Auto Group: GMC-Nissan – Columbia Ford & Kia and Putnam Chrysler/Dodge/Jeep. Those who know Larry, and there are plenty of shops who do, know that Larry is a dedicated individual for our industry.

Says Morin, "We were trying to increase our wholesale business, so I began to join Larry at a few ABAC Meetings. I got introduced to some people. It's always great to add a face to the person that you talk to on the phone. When we decided to become a Supporting Advertiser for the ABAC News, we began to see an increase in our wholesale sales. I will say that the ABAC motto that they use at the meetings 'Support Those Who Support You' is a very strong and believable statement coming from the association. It shows that the ABAC appreciates a vendor's commitment and loyalty. I've been getting to know and meet more of our customers since attending more of these meetings with Larry."

The yearly increase in parts business has a caused a problem for Gates-GMC Nissan.....the need for space. But what a good problem to have! That problem is now being solved as Morin shared with us that a new parts warehouse is in the works. *"If you want to grow and expand, you need the space,"* said Morin. The Gates team is looking toward opening their new warehouse by the first of 2023. We wish them well!

On the personal side Morin says he still enjoys going to the races at the 2 local Connecticut tracks, fishing when he has the time, but his main focus is his family. David says he truly enjoys attending his daughter's college soccer games.

When we asked Morin for his vision of the future of the auto parts business he replied, *"It looks like EV's (Electric Vehicles) could be a huge part of our future. The technology is still emerging but there seems to be a big focus on this portion of the industry. Although there are still many of us in this business that still like to turn that ignition key and hear the roar of a high-performance engine, there is a possibility that that could be reduced soon. I guess that's progress!"*

I'd like to thank Dave Morin for taking the time out of his day to talk with me and answer a few of my questions. It's greatly appreciated and I know I speak for the ABAC when we all thank Gates GMC-Nissan for the support shown at the ABAC Meetings as well as being a valued Supporting Advertiser in the ABAC News!

Submitted by Don Cushing

Repairing An Electric Vehicle Could Cost More Than Gasoline Cars: A New Kind Of Sticker Shock



I cover the pervasive, yet little-understood auto industry.

In the long run, auto industry analysts expect electric vehicles to be cheaper to operate than a comparable vehicle powered by a conventional, internal-combustion engine — in the long run, especially as EV volume grows, and costs per vehicle come down.

In the short run, early data based on insurance claims suggest that contrary to that overall, long-term expectation, EVs can be significantly more expensive to repair, and that affects the cost of ownership.

EVs are mechanically simpler than ICE cars — that is, Internal Combustion Engine cars — since EVs have fewer moving parts.

And there's no engine oil that needs to be contained, pressurized, circulated, cooled, re-circulated, topped up occasionally, and changed when the oil gets dirty. The absence of engine oil and oil changes should mean lower maintenance costs, right?

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But collision repairs may be a different story. According to a recent study from CCC Intelligent Solutions Inc., for example, based on actual insurance claims for small, non-luxury-brand cars with front-end damage that were still driveable, the average EV model cost \$4,041 to fix.

That was about 27% more than the average for roughly comparable non-EV models. Based in Chicago, CCC processes and analyzes auto insurance claims related to more than 16 million repairs annually, the company says. For mid-size, luxury-brand SUVs, the average for similar claims was \$8,037 in repairs for EVs, 53% higher than non-EVs.

However, those results come with a string of asterisks. The short version is, sample sizes may be too small, and the growth in EV share may be too new, to draw lasting conclusions from the data that's available so far, said Susanna Gotsch, director and Industry Analyst at CCC.

"The challenge, really, is finding apples-to-apples comparisons," she said in a phone interview.

For example, mass-market brands have started rolling out EV equivalents to ICE models in popular body styles, like the Ford F-150 Lightning pickup. It could be compared directly with a gasoline-powered version of the same model, from the same brand.

But most EVs on U.S. roads today are Teslas, and there are no ICE Teslas to compare with, Gotsch said.

Here are some factors that are relevant to EV repair costs vs. ICE repair costs, according to CCC:

Repair facilities are making substantial investments in new equipment and training, to work on EVs — costs they will be looking to pass on to consumers. The novelty also means EV repairs can take longer, until technicians get accustomed to the new routines.

While ICE vehicles also have more Advanced Driver Assistance Systems, like forward collision-avoidance, EVs are really loaded with ADAS features. ADAS sensors tend to be located in areas that are likely to be damaged in a collision, like the bumpers or exterior mirrors. They are expensive to replace.

Battery packs make EVs heavier than similar-sized ICE vehicles. That means they collide with greater momentum. It also means EVs make greater use of expensive, lightweight, high-strength materials to try and offset the battery weight. Those materials are expensive to replace, too.

Spray-painting after a repair may take longer for an EV, since often, the battery pack must be removed before painting, and reinstalled after. Time is money.

All vehicles are getting more complex, including ICE vehicles, in terms of high-tech features and far more sophisticated electronics that are expensive to replace.

In addition, those features are so complex they are often impossible to repair in a way that guarantees they are as safe as the original installation, so they may have to be replaced entirely. This is true for both ICE vehicles and EVs.

But these factors apply all the more for EVs, Gotsch said. "As vehicle technology continues to evolve and become ever more complex, EVs are essentially the poster child for the future demands for our industry."

Article by Jim Henry

Source: www.Forbes.com

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