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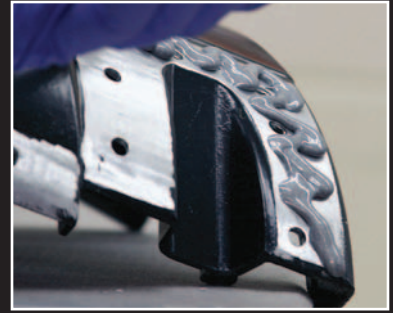
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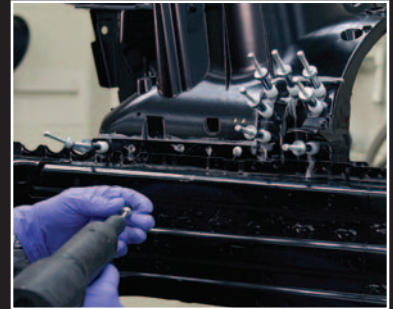
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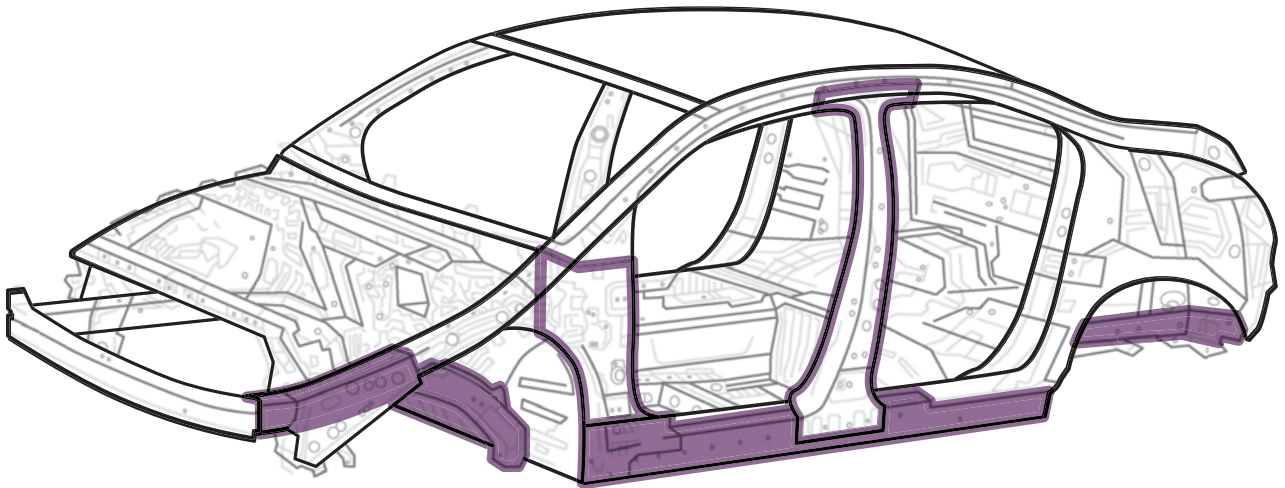
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Talk Shop Anytime



AUTOPRO
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JANUARY 2016



TECHNICAL

UNDERSTANDING IMPACT RESISTANT STRUCTURAL ADHESIVES

AS STRUCTURES BECOME LIGHTER, STRUCTURAL ADHESIVES WILL BECOME MORE COMMONPLACE

SHOP PROFILE

Collision King Auto Body Repair Center; Lubbock, Texas

TECHNICAL TRAINING

KEEPING PACE

Stay on top of OEM developments

MECHANICAL FOCUS

FUEL CELLS

A look at current hydrogen fuel cell cars

COMMITMENT TO TRAINING

ADDRESS PROBLEMS IN THE SHOP BEFORE THEY HAPPEN

COMMIT TO POSITIVE ACTIONS, RATHER THAN REACTIVELY PLACING BLAME

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INDUSTRY TRAINING

FOCUS ON CUSTOMER EXPERIENCE, NOT SERVICE

BY KRISTA MCNAMARA | CONTENT CHANNEL DIRECTOR

An overall positive customer and employee experience helps drive repeat customer business and word-of-mouth promotion.

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CADILLAC LAUNCHES ALUMINUM REPAIR NETWORK

8 The network will ensure that authorized collision repair facilities have the required tools, equipment and training to properly repair the Cadillac CT6, which uses new mixed metal, aluminum intensive construction.

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IBIS 2016 AIMS TO DRIVE FORWARD THINKING

8 The IBIS Global Summit 2016 aims to deliver more world-class presentations and industry-leading information to assist delegates in developing a forward-thinking approach to business.

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automechanika
CHICAGO

COMMITMENT TO TRAINING

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SHOP MANAGEMENT TRAINING

ADDRESS PROBLEMS IN THE SHOP BEFORE THEY HAPPEN

BY MIKE JONES | CONTRIBUTING EDITOR

In regard to our customers' vehicles, we should be focused on fixing what is broken. But when we wait for something to be wrong in our shop before we start fixing it, we see those situations as broken, and they are driven by negative energy.

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THE COLLISION EXECUTIVE

BY MIKE LEVASSEUR

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10 Responses to some of my early career injuries were creative, but not always ideal.

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PRODUCT SPOTLIGHT

Motor Guard's Magna-Stripper System is the ultimate spot repair tool for steel and aluminum body panels. It strips clear coat, base coat and primer without damaging the body panel.



PRODUCT FOCUS

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FUTURE INSIGHTS

WHAT TO EXPECT IN 2016

BY JOHN YOSWICK | CONTRIBUTING EDITOR

From the courtroom to the “clean room,” 2016 is shaping up to be another year of change and drama for the collision repair industry. We take a look at what’s to come for collision repair as the new year begins.

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COLLISION KING AUTO BODY REPAIR CENTER; LUBBOCK, TEXAS

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24 Implementing lean in Lubbock strikes a responsive chord for this Texas shop.



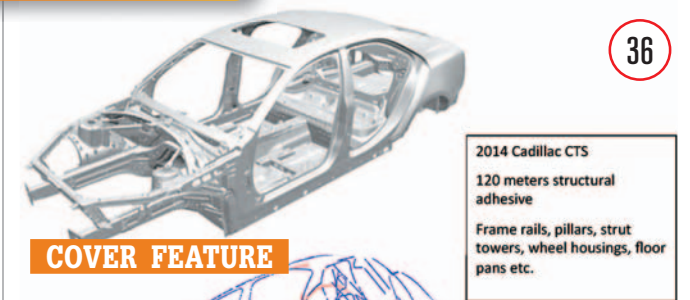
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JIM COMPTON / CONTRIBUTING EDITOR

18 Training has a direct measurable impact on sales, as well as other KPIs. Don't let your shop fall flat.

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2014 Cadillac CTS
120 meters structural adhesive
Frame rails, pillars, strut towers, wheel housings, floor pans etc.

COVER FEATURE

IMPACT RESISTANT STRUCTURAL ADHESIVES

TECHNICAL TRAINING

BY SHAWN COLLINS | CONTRIBUTING EDITOR

The collision repair industry continues to see drastic changes in vehicle construction, which in turn requires equally drastic updates to repair methods and equipment.

MECHANICAL FOCUS

FUEL CELL TECHNOLOGY

BY JEFF MINTER | CONTRIBUTOR

40 Take a look at some of today's hydrogen fuel cell technology vehicles.



BONUS ONLINE CONTENT



VIDEO SPOTLIGHTS

USING QUALITY and reliable parts during repairs in your shop is vital to help reduce comebacks and ensure not only customer satisfaction, but also their safety. So it is important to understand where the parts you are using truly come from and what your responsibility is to the consumer. Opt-OE is one descriptor being used in the industry that can be misleading or cause false confidence. Rick Leos, collision program developer in the marketing division of Toyota, discusses the Opt-OE parts term, your liability as a shop and how you can determine if a part is in fact a “genuine” Opt-OE part.

[URL ABRN.COM/OPTOE]

WHILE THERE are multiple financial factors that play into a successful acquisition, culture is also a key determinant of success, discusses consultant and blogger Brad Mewes.

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John Formica presented at the Sherwin-Williams A-Plus Network Vision Group Conference in Houston, Texas.

Focus on customer experience, not service

HOUSTON — Focusing on customer service makes your business just like any other collision shop. What you need to create to truly stand out is the customer/employee experience.

John Formica, a former Disney employee, or self-proclaimed “ex-Disney guy,” author and business coach kicked off the Sherwin-Williams A-Plus Network Vision Group Conference in Houston by encouraging shops to stand out and not be “boring” with the presentation, “If Disney ran your business, what would it look like?”

Shops need to create an environment where employees want to do their job, rather than feel like they have to do it. This is all part of fostering a successful customer/employee experience, and its success lies not just in a shop’s employees and customers, but also in its leaders.

A positive customer/employee experience helps drive repeat customer business and also build word-of-mouth promotion, which Formica says is vital to shop success. “If 85 percent of your customer base is not referrals, you need to have focus groups with your customers and find out why,” he said.

“Walt Disney said, ‘If you can dream it, you can do it,’” Formica said. “But you have to know what your business purpose is. Disney’s purpose is to make people happy, and it sells imagination and fantasy. And you need to as well.”

Formica says to break the stereotypes and perceptions of those out there in the collision repair industry — images, for example, of dirty waiting rooms with bad coffee, old

magazines, a run down waiting room and unprofessional employees. “You are not in an auto body repair shop, you are in a relationship-building business. What you have to do is what Walt said: ‘You don’t build a product for yourself. You need to know what the people want and you build it for them.’”

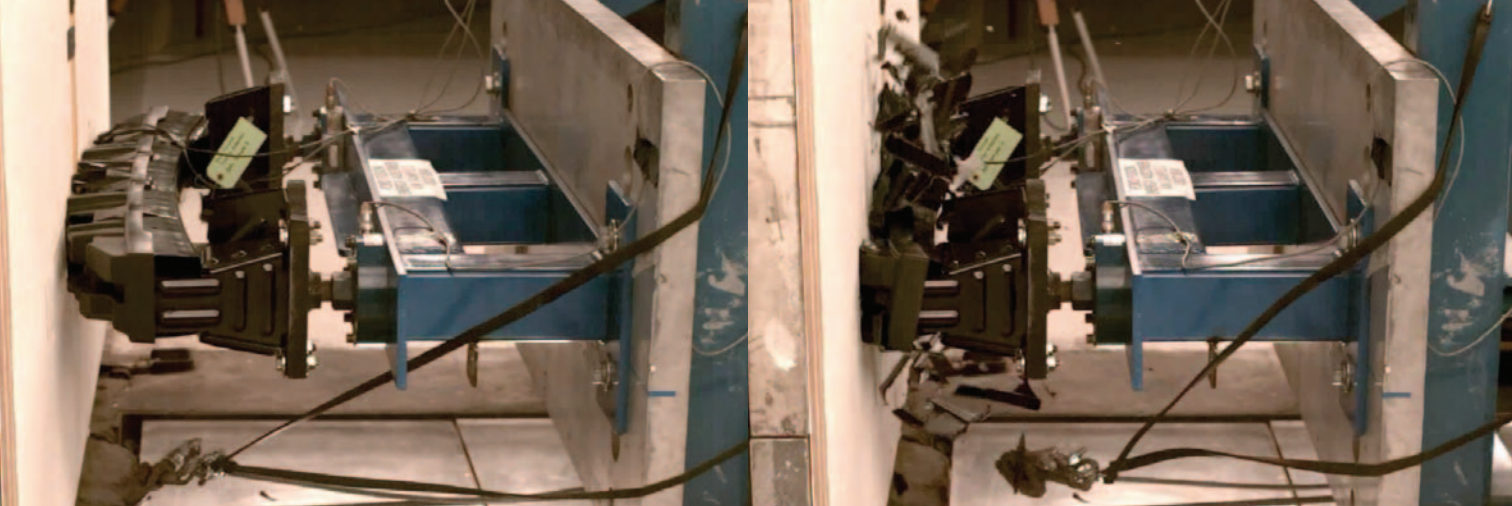
Customers seek reliability, empathy, trust, tangibles and a positive, memorable experience. “If you just fix my car, I can go to anyone to fix my car. But I want to come to your business because of that relationship you have built,” Formica says. “Your business is only as good as you are today. You can stand out and be better than everybody else if you just change that experience a bit.”

This all begins with your people. Formica reminded the audience that Walt Disney said, “You can design, create and build the most wonderful people in the world. But it takes people to make the dream a reality.”

Disney hires people to fill a role, not a position, Formica said. “Some of you have nice people in your shops. But you may have the wrong people in the wrong roles. Because you won’t create connections with your clients if you don’t have the right people,” he said.

“Your every action is a direct reflection of your entire business,” Formica said. So carefully evaluate your “on-stage presence” and make sure you are presenting the right image to your clients.

Formica finished with a final Walt Disney quote that he encouraged shops to remember: “Do what you do so well that they will want to see it again and bring their friends.”



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Necessity begets innovation

Responses to early career injuries were creative, but not always ideal

Those who know me well are aware that I struggle at times with a bum shoulder. It dates back to an intramural sports injury in my tech school days. Early in 2015, I slipped on the ice and slammed my elbow, tearing up the beautiful shoulder surgery work I'd had done in 1997. After trying unsuccessfully to rehabilitate it over the months that followed, I finally had to go back under the knife this past fall.

While recovering from that in recent months, I thought of several stories related to the initial injury back in the early 1980s that any technician (or former technician) will likely appreciate, but that likely will elicit a cringe from those currently responsible for the health and safety of shop employees.

My first surgery to fix the dislocated shoulder was in the days before the use of scopes; it was a full-open operation. It would be eight weeks of recovery and rehab before I could return to my job at the dealership body shop.

As I walked into the shop my first day back, the owner came up to me in a panic and said, "Boy, am I glad to see you. I've got a customer who is screaming at me. I need the back end of this car painted ASAP."

"No problem," I told him.

I believe it was a 1980 Bonneville – a big car. Back in that day, my spraygun of choice was a Binks model 7. Those who have used one know that when the cup was filled, that gun had some weight to it. As soon as I started the motion of spraying, I realized that there was no way my shoulder was going to handle it. There was just too much weight, holding it out in front of me, to spray.

Today, an occupational therapist might have helped devise a solution to enable me to do the work. But back then, it was more what every good technician knows: Necessity is the mother of innovation.

So I got a bungee cord and hooked it to the back of my belt, pulled it over my shoulder, and attached it to the gun. I was glad I was the only one working at the time, because it must've looked ridiculous, but it took enough of the gun's weight off

my shoulder that I could spray the car. It actually worked out very well.

Several days after I returned to work, the shoulder was starting to really bother me, so I went back to the doctor. He gave me a cortisone shot and told me to wait 24 hours before I returned to work, so I did.

One of my first jobs upon my return – after yet another missed day of work – involved putting a suspension into one of the greatest cars of that time period: An AMC Gremlin. I was basically bench pressing the thing with one hand while using a torque gun in the other hand to attach it.

Suddenly I felt a little pop in my right arm. I wondered what that was, but it didn't seem to hurt, so I kept going and didn't worry about it. A couple of days later, I was on the phone and looked down at my arm and the bicep was about twice the size of normal. The doctor told me I'd ruptured my muscle and needed surgery immediately.

Employees today are hopefully better trained and outfitted with state-of-the-art equipment to avoid such injuries. Back in the "old days," I knew after already missing eight weeks of work, there was no way I could miss another six or more weeks to recover from yet another surgery.

I overcame the popped bicep without surgery, and still use it for "show-and-tell." ("I'll show it to you, and tell you not to do what I did after sustaining a significant injury.") The lesson for others – I should have taken the time to heal.

Some guys carry an old war wound around with them. Me, I still have my old Gremlin injury. 📧

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Mike LeVasseur is the Philadelphia Market Vice President for ABRA Auto Body.

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WHAT TO EXPECT IN

2016



A PREVIEW OF 'COMING ATTRACTIONS' FOR THE COLLISION REPAIR INDUSTRY AS A NEW YEAR BEGINS

BY JOHN YOSWICK | CONTRIBUTING EDITOR

FROM THE courtroom to the aluminum "clean room," 2016 is shaping up to be another year of change and drama for the collision repair industry. New laws will go into effect, new vehicle technology will roll into shops and new insurer and vendor practices are expected to play a role in the day-to-day business of shops.

As 2016 begins, here's our annual preview of what to look for in the coming year.

Two-tier shop licensing begins

The industry this year will get its first look at how a two-tiered shop licensing program can work as a new Rhode Island law goes into effect this month.

The legislation segments collision repair facilities as "Class A" or "Class B," based on equipment and training levels. It also requires that insurance companies conduct labor rate surveys to determine "separate and distinct" prevailing labor rates for the two classes of shops.

The law stipulates that a Class A facility must be certified by at least one auto manufacturer for the repair and refinishing of aluminum, high-strength steel and other metals; must provide a written limited lifetime warranty against workmanship defects; must maintain a system for documenting customer complaints and responses; and must provide evidence of certification of all technicians employed at the facility.

For insurers, the new law has very

specific requirements for the annually required labor rate survey process, though it does allow insurers to consider factors in addition to the survey when establishing prevailing rates for each classification of shop.

Jina Petrarca-Karampetsos of the Auto Body Association of Rhode Island, which backed the new law, expects that less than 15 percent of the approximately 200 shops in the state will initially qualify as Class A. But she said the association is working to find ways, such as bringing in group training, to help shops more affordably meet the "Class A" requirements.

"It's in everyone's interest to get up to this level," she said. "Any shop that doesn't get itself ready in the next 5-10

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Number and severity of claims to rise

For collision repairers bombarded with news about new accident-avoidance technology, here's some good news: Analysts at the top three estimating system companies don't think that will hurt the industry in the short term. Across the board they are not predicting decreases in 2016 in the number and bottom-line price of collision repair jobs.



Rick Tuuri

Rick Tuuri of AudaExplore is perhaps the most guarded, suggesting that the number of claims "will remain flat to up slightly in 2016." He expects the

slight rise in report costs seen in 2014-2015 also to continue in 2016.

Greg Horn of Mitchell International says as long as fuel prices remain low, that will more than offset any decrease in claims counts from accident avoidance technology. With new-car sales reaching record numbers, he said, "the number of insured vehicles on the road will increase and pull the average age to a newer model year, and with that (will come) an increase in severity."



Greg Horn

Susanna Gotsch of CCC Information Services gives her predictions a "Back to the Future" twist, saying 2015 numbers were more like the pre-recession peak of 2007 than those of the 2008-2014 period. While longer-term demographic trends – including aging drivers – and vehicle technology changes point to an eventual decline in accident frequency, she doesn't expect those trends to show up in 2016.

"In the near-term, with miles driven up across the U.S., and gas prices low, frequency will likely continue to

see moderate growth in 2016 and 2017, before the industry really begins to see the impact of the crash avoidance technology," Gotsch said.

She noted Mother Nature is also doing collision repairers a favor with recent increases in the frequency and severity of hailstorms.

Gotsch also said repair costs are growing at a rate comparable to what they were pre-recession.

"New materials and growing complexity of newer vehicles are adding to the mix," she said. "The industry saw increases in repair costs overall across all vehicle ages between 3 percent and 4 percent in 2015, and will see a potentially slightly larger increase in 2016."

Total losses on the rise

Analysts across the board also seem to agree that the percentage of vehicles declared total losses will rise in 2016 — they just vary a bit by how much they think that increase will be.

"With the vehicle fleet and claims data currently concentrated around the newest and oldest vehicles, total loss frequency has risen and will likely remain elevated through 2016," Gotsch said. "In fact, vehicles 15-years-plus have seen the largest growth in volume share – and given the market value for these older vehicles, it doesn't take much damage until the vehicle is deemed a total loss."

Tuuri said he thinks the biggest hit from total losses came in 2014, when the percentage of totals jumped 16 percent, likely caused by downward pressure on used car values as new-car sales finally began rebounding in earnest. As 2015 was ending, Tuuri said the increase in total losses was looking to be half what it was the prior year, so about 8 percent. He's predicting a similar rise in 2016.

Horn, however, is predicting a bigger spike in total losses in 2016 than in recent years, likely a full percentage point. He cites much the same reason as Tuuri for the increase: New-car sales suppressing used-car values.

More aluminum repair – but still not a lot

Knowing that the historically best-selling vehicle in America is now an aluminum-intensive vehicle, it's easy to imagine a glut of aluminum repair work flooding into shops. But even the alu-

minum industry, which champions the growing role the material is playing for the automakers, say repair volume will be modest in 2016.

Speaking at the Society of Collision Repair Specialists' OEM Collision Repair Technology Summit last fall, Doug Richman of Kaiser Aluminum shared some projections that extended out to 2025. For 2016, his numbers showed, approximately 69,000 aluminum-intensive vehicles like the Ford F-150 will need collision repair work. That may sound like a lot until you spread that work out among what he estimates will be about 4,000 body shops equipped and trained to do aluminum repair work in 2016. It means an average of just 17 aluminum-intensive vehicles per shop, barely more than one per month.



Doug Richman

The numbers are a little more encouraging when vehicles with just aluminum closures (doors, hoods or decklids) are added to the mix. Richman projects there will be about 681,000 of those coming into shops in 2016. It seems unlikely that all of those will roll into the 4,000 aluminum-ready shops, though if they did, that's an average of 169 jobs in 2016 for each of those shops.

In any case, Richman said, the numbers aren't staggering.

"This isn't taking over your business," Richman said of aluminum repair. "This is just going to be a segment of your business."

Study will look at danger of aluminum dust

In other aluminum-related news for 2016, I-CAR is involved in research into safety issues related to aluminum dust.

Richman said concentrations of aluminum dust do pose an explosion risk, but I-CAR is working to determine the potential level of that threat within the collision repair environment.

"There is a hazard, but it's really, really rare to have a combustible problem in a plant," Richman said. "The only places we've ever encountered a difficulty with the dust hazard have been in very high volume production facilities that were not properly managed. I don't think there's been an incident in



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decades in the United States. There have been some overseas. But these were in facilities that were polishing hundreds of wheels every hour, all day long. That can create quite a cloud of dust. That's where we see the problem. But we don't ever want to make a mistake and not respect the potential risk. So we want to do some work to understand what's the real risk in your shop environment for this dust hazard."

He said the end result in 2016 will be a bulletin focused on the aluminum dust particle size and concentrations found in collision repair facilities, to give shops what they "need to know to be sure you're safe, your employees are safe and your shop is safe."

More consolidation – but how much?

A year ago, it seemed in the realm of possibility that a multi-shop operation (MSO) might end 2015 having 500 shops. But despite a non-stop flurry of acquisitions, that milestone wasn't achieved – and it's not a given it will happen in 2016 either.

For several years, two franchise operations, Maaco and CARSTAR, each with about 450 shops, have the closest to that milestone. But neither is growing nearly as quickly as what are often called the "Big 4" MSOs: The Boyd Group (which operates in the United States as "Gerber Collision & Glass"), ABRA Auto Body & Glass, Caliber Collision and Service King.

But as of late 2015, none of these Big 4 had yet topped the 400-shop mark, and all would have to have their largest year of growth ever to reach 500 in 2016. With the number of mid-sized MSOs dwindling (because of previous acquisitions),

the Big 4 will increasingly have to grow through acquisition of smaller operations, often individual shops, rather than 10-, 20- and 30-shop chains. That could slow their speed of progress toward the 500-shop mark.

On the other hand, all it would take would be for any two of these Big 4 to merge to instantly create a 500-shop MSO and the single biggest player in the industry. A few industry analysts think that could happen — but more seem to think each of the Big 4 will just continue to each add 50 to 100 shops in 2016, keeping them each just shy of 500 shops at the end of the year.

Legal dramas continue to play out

Lawsuits against insurers by shops around the country dominated much of the news in 2014 and 2015. As 2016 begins, the shops in the legal boxing ring haven't suffered a complete knock out, but have certainly taken some tough blows.

At one point there were about two dozen such lawsuits in about 20 states in which shops (and in some cases their trade associations) accuse insurers of conspiring to manipulate labor rates and other shop charges to reduce costs.

All, at some point last year, were dismissed in whole or in part by the U.S. District Court in Florida where all the cases have been consolidated. In most of the suits, the shops chose to refile amended lawsuits, adding more details about insurers' behavior and working to address legal shortcomings the court found in portions of the lawsuits.

But by year's end, at least a half dozen of the suits had been dismissed entirely or were dropped by the shops involved. The dismissals of others were under appeal. And in many of the cases, one side or the other (or both) are seeking sanctions (in the form of attorneys' fees) from the other.

2016 will likely see either the demise of the rest of these suits or the end of the summary judgment portion of the process (in which the suits can be dismissed early on) and a move toward preparing for a trial that wouldn't come before 2017.

Will other automakers follow GM on parts pricing?

General Motors has now rolled out its MyPriceLink system, which does away with static retail list pricing for crash parts in favor of more flexible "real-time pricing," designed to help the automaker compete with non-OEM parts. The system, first announced in November 2014, was delayed a year while GM worked to integrate the system with the estimating systems.

How much impact it will have on shops, insurers or parts vendors (OEM or non-OEM) isn't entirely clear. But many in the industry suspect other automakers will be watching it closely in 2016 to decide if they want to follow GM's lead. It will be interesting to watch whether the change impacts shops' parts choices or profits.

Those trends — and the fall out from many of these items to watch for — will likely be more clear by the end of 2016. ☞



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BY **JIM COMPTON** | CONTRIBUTING EDITOR

FIRST, I have a little disclaimer: I am an I-CAR instructor, so I have a positive attitude towards training. If you send your techs, but you haven't been to an I-CAR class in a while, stop in and sit through a class. More dynamic material, more challenging tests and a vast array of new technology to discuss all combine to bring a real learning environment. Even industry veterans can learn something new.

I have found that essentially two types of students come to my I-CAR classes: those who ask, "Why am I here?" and those who say, "This is great — I am going to learn new things that will help me increase my value. My company must care about me because they are investing in me."

With the first group, the "why am I here?" types, it can be a challenge to help them find the value. I had one technician tell me, "I am the best in my role and have been doing this for X years. What can this class possibly teach me?" I was taken aback that anyone would consider themselves "the best" with nothing new to learn. I suggested that they relax, try to enjoy and just see what the class was all about. More on this later.

Ron Stazonni, the owner of D&R Auto Paint, a PBE jobber in Omaha, Neb., has long been a supporter of training. I have joined Ron at many industry meetings, and can always find him either taking a class or leading a class or two. Ron now travels around the country and does jobber training.

"I'm regularly asked by my customers, why do some shops seem to be growing and my shop is flat or declining?" Ron said. "One constant differentiator is always training."

Ron sees this as a sign of the times. "We are in a world of instant gratification. If we pay for something today, we want results tomorrow. It's difficult for many shop owners to see the long-term positive effects, the increase in profitability and the positive culture extensive shop training creates."

I asked Ron for a real-world example. "Any business will get the best results from training if you also measure results. I recently had a shop owner tell me the estimator training he sent his office staff to has done nothing. He did not have pre and post measurements,



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but rather a gut feeling. Once we dove deeper into his labor sales, we found a 5 percent gain in sales. In this shop, that would result in an additional \$42,000 per year in sales."

You can't manage what you don't measure, so how do you measure the value of training? Ron and many of the others agree — any changes you make in your business will benefit from measurements before and after. Not all benefits of training are immediately measurable in purely numeric terms.

"In today's collision repair industry, training isn't just a good idea. It's mandatory for success!" Ron said. He and his staff not only provide regular training for their customers, but also attend regular training themselves.

Speaking with Craig Seelinger, the BASF VisionPLUS Program Manager, he cited three classes in particular got high marks from attendees.

Craig said both BASF's advanced production management class and another on estimating for profit both get high scores from attendees who see not only higher touch time and technician efficiency, but also an increase in capacity.

I-CAR CEO John Van Alstyne has shared findings and elaborated about the large increases I-CAR is seeing in the demand for continued education. Last year, 8,822 businesses and 59,460 students trained on 82 I-CAR live courses, 87 online courses and 17 virtual ones. John is among the first to state that as an industry, we still have a long way to go. John and many others feel that the answer is a paradigm shift for many of us — seeing learning as a part of the culture of each business, not a periodic thing we do to meet someone else's demands.

Obviously training can be expensive; I-CAR Gold Class®, ASE or OEM certifications can cost a shop thousands of dollars. As any good business person will tell you, ROI (return on investment) is a critical measure of most purchases or expenditures. What measures can we use to see if training is really an investment or just an expense? Recent studies commissioned by I-CAR seem to confirm several higher KPIs by Gold Class® shops compared to non-Gold Class® shops.

Even shops making only one change,

that of introducing I-CAR training, saw significant results. On average, after just six months of I-CAR training (compared to the same six-month period in the previous year):

- Cycle times fell 14.35 percent
- Touch time rose 33.75 percent
- CSI scores rose 5 percent
- Supplement frequency fell 11 percent
- Reworks and come backs dropped as much as 80 percent

Maybe a better measure should be the cost of not doing training, longer cycle time, lower CSI scores and more come backs.

How do these figures come out if they are measured by a third party, one that does not provide training? For instance, what does a rental car company see in the market? Enterprise Rental Car did just that: The company's "analysis examined all collision repair shops with which Enterprise does business in the United States. In the first quarter of 2015, Enterprise compared the market average Length of Rental (LOR) for repairable vehicles to those shops that have earned Gold Class® recog-

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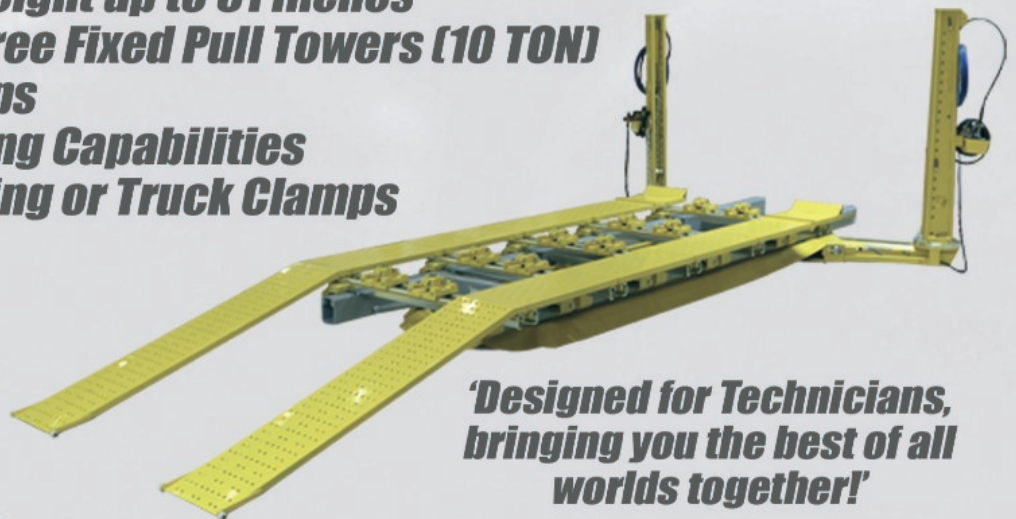
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dition from I-CAR.” The Gold Class® shops showed an 11 percent improvement in LOR days.

Whether it is OEM, I-CAR, ASE or other training, it seems that one thing is clear: top performers value training; perhaps that is why they are top performers. Many have spoken about a learning culture, including Jeff Peevy, president of the Automotive Management Institute. It seems that just doing the training may not be enough. Training needs to be part of what we do, not merely the occasional attendance of a required class.

Overall impact

So how does training impact individuals and businesses? It's not just the training, it is also the value a business places on training and learning. We need to stop saying, “You need to go to this class.” How about presenting the class as an investment, an opportunity for both the individual and the organization to grow and improve to be better prepared for the future. With the onboarding of a new hire, we have an opportunity to explain our culture and

goals, including that all employees grow and continue to learn so there will be a positive impact on their growth and the company's growth.

Billy Walkowiak is the president of Collision Safety Consultants in North Carolina. Doing post-repair inspections and diminished value reports, I was sure Billy would have seen the correlation between training and quality repairs. I asked if he could draw any conclusions along these lines. “No,” he said. “Even the best trained technicians can only do so much without the proper equipment. With the complexity of many of today's vehicles, proper repairs just can't be done without the right equipment.”

Billy went on to discuss scan tools, frame equipment and specialized welders needed on many new vehicles. He stated that training is needed and that shops will get ROI from thorough hands-on training. So I asked again — what about those shops that are trained or even OEM certified that have invested in the proper required equipment? Surely we can see a correlation now?

Again Billy patiently replied, “No.

There is a third element needed — the support and follow-up by management, the quality control part of the repair. It is more than just the certificates on the wall and shiny new equipment. Management needs to insist, verify and promote proper repairs. Only when all three are combined do we truly realize the full value of training.”

Billy also pointed out that learning can happen all the time. “If there is not a written procedure on sectioning or the repair process, you cannot begin the blueprint or repair procedure without the manufacturer's guidelines.” Isn't this an opportunity for learning, reading and following the OEM guidelines? Learning and training are not limited to the classroom. Hands-on training or working with a mentor can be a great method of training. We need to strive to value all forms of learning.

Value in the numbers

Ryan Cropper is the owner of Able Body Shops in Anchorage, Ala. With two shops and a truck accessory center, Ryan is a busy guy, but always willing to support the industry. I reached

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out and asked Ryan just how serious he is about training.

"You can train someone and they may leave, or, you don't train them and they may stay, which one is worse?" Ryan asked. Some owners are reluctant to spend on training because an employee might leave and go work somewhere else. Ryan and many others agree that it is not worth having under-trained staff and suffer the slower production, errors and potential come backs. For Ryan and others, they seem to follow the mantra of spend a little to get a lot back!

This echoes what I-CAR found in their studies: "Perhaps most impressive was the fact that, among facilities that embraced training, during our study period these facilities experienced no employee turnover – compared to 20 percent turnover for facilities that did not place the same high priority on training their employees."

Ryan further states: "I'm a huge advocate in all aspects of training, especially anything that helps our culture. I spend more money in training than advertising by far."

Ryan was not alone with this epiphany. Matthew McDonnell, owner of Big Sky Collision Center in Billings, Mon., said, "We also spend 2 percent of sales for cultural training each year. We believe in treating all of our team members like owners. After all, we expect them to act like it. The results are huge and the ultimate work ethic we get is ownership in their work." This is above the weekly technical training that every employee receives. There are some benefits that are not always easy to attach statistics to, including reduced cycle time, lower waste, high quality repairs and satisfied customers.

Garry Sandt, a district sales manager for NCS (National Coatings & Supplies), noted some of the less tangible benefits of training. "Training for oneself, as well as for those around you, is truly priceless. There are three ways that training brings immeasurable positive value to an organization. The obvious first benefit is the learning of the material at hand. Everyone needs to continue to grow their knowledge in what they are doing day to day in order to keep up and move ahead. The second is that it reinforces what you already know and do; as well as reminds you of what you may already know but don't practice. "

Garry reminded me that not all the benefits of training are directly related to the subject material covered. "The third and final way is that any time someone is in a learning atmosphere, it tends to stimulate the brain to be open and allows the opportunity for the individual to potentially come up with even more valuable thoughts, ideas and suggestions that the training may not cover or it has a relationship to other areas beyond the material at hand."

Another underlying theme seemed to be that some businesses enjoy a greater impact from training. Those businesses that make training part of their onboarding with new employees, those that take a moment and ask about the training class attended the previous evening with an employee, those that embrace training seem to get more impact (positive measurable benefits) than those who approach training as doing what is required.

Ron, Craig, Billy, Ryan, Matthew and Garry all see training as having a direct measurable impact on sales as well as other KPIs. Is it too much of a leap to assume that those who don't see training as having a strong ROI and a strong positive impact on the business culture and the success of their

business just lack the tools to measure the impact of training?

Remember that tech I mentioned earlier, the tech who thought there was nothing new to learn? I make a practice of asking students at the end of class; "Did you learn at least one new thing that will help you in your job next week?" His response was "yes." He smiled and said he wouldn't mind taking another class. I won, or rather, we won as an industry! Impact!

Is the idea of a learning culture one that we can adopt as an industry? The top performers will continue to see training as the first seeds of an investment followed with the addition of technology, which grows and brings returns only when it is watered with the follow-up, review and support of management.

Training is an investment, not merely a business expense. Training does pay for itself many times over. It appears that high impact learning organizations are also impacting their sales, KPIs, customer satisfaction and their bottom lines with training. If you're not doing regular positive-impact training, what is your excuse? ☺



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Jim Compton, owner and general manager of J. Hunter & Associates, has worked in the auto body industry for over 30 years. He has a special interest in the areas of lean material management, environmental protection and work place safety.

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SHOP PROFILE

A snapshot of one of the industry's leading shops

**COLLISION KING AUTO BODY REPAIR CENTER /
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Lean in Lubbock

Implementing lean strikes a chord for Texas shop

BY **JAMES E. GUYETTE** | CONTRIBUTING EDITOR

As a history-laden birthplace of rock royalty – Buddy Holly! – Lubbock, Texas has long been known for its thriving music scene, and customers are consistently singing the praises of Steven Tisdale's Collision King Auto Body Repair Center.

For nearly a decade it has clinched annual top body shop honors bestowed by local newspaper readers and television viewers in addition to being named in 2013 as the Lone Star State's Body Shop of the Year by Farmers Insurance.

Noting that it feels “humbling to be recognized this way,” owner Steven Tisdale points out that “we are in a smaller market compared to areas like Dallas, Houston and Austin. We often fly under the radar. But we have a great team, utilize teamwork and empower our people to make good decisions and think on their feet.”

The message conveyed throughout the company is “treat that car like it's your own, your daughter's or your mom's car,” he says. “That solves a lot of problems right there.”

Serving motorists in the West Texas and eastern New Mexico regions, Tisdale began his collision repair career in Littlefield, Texas at age 13.

“I was a farm kid, and my dad had

an extreme work ethic. I had a passion for cars, and I got to work in a shop instead of hoeing cotton and doing other chores around the farm,” he recalls. “Some of the older guys helped me out with the repairs. They taught me to think on my feet a lot.”

As Tisdale reached his early 20s, he came under the tutelage of D.W. Baker, initially a supervisor at a dealership service department who became a key mentor. “I learned a lot from that gentleman on how to treat your employees right; working with them instead of barking orders. He viewed every car as *being a privilege* for that car to be in his shop. He always went the extra mile.”

Baker moved up to ownership of his own business, which Tisdale joined and subsequently purchased with a partner in 1990 prior to establishing Collision King in 1998.

He is hands-on in his own shop, frequently working side-by-side with the technicians. Along with his self-taught skills and always striving to

AT A GLANCE

**Collision King Auto Body
Repair Center**

Name of shop

Lubbock, Texas

Location

Steven Tisdale

Owner

1

No. of shops

18

Years in business

42

No. of employees

6

No. of DRPs

26,000

Shop size (square feet)

32

No. of bays

5 days

Average cycle time

\$2,480

Average repair order

\$260,416

Average weekly income

105

No. of customer vehicles per week

\$12.5 million

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gain as much industry-imparted repair knowledge as possible, Tisdale's path to ownership included a stint at a community college studying such topics as economics and communication — subjects aimed at accumulating business acumen.

A year-long move to Rhode Island was another stop along the way. "I gained insight and experience and came back to Lubbock," says Tisdale, adding that he even took a pay cut to assume a shop management position.

Like many successful shop owners, Tisdale credits the quality and integrity of his staff for being able to create a positive and productive environment while maintaining a friendly and attentive attitude with the customers.

"Our technicians are committed to superior quality and service, and we ensure they have the skills to deliver it," says Tisdale, citing his commitment to investing in the latest equipment and employee educational programs. "The auto body industry continues to evolve as new technologies become available. That's why all of our technicians undergo continual ASE and I-CAR re-certification training to stay abreast of all new trends and technologies."

Promising students at area vocational schools are sought as candidates, and while Tisdale does not actively recruit from other shops in the area, talented technicians are often eager to join the company's roster. "Techs are going to go where the work is. They want to be at shops where there are cars to fix, and our volume is going up."

Not to be overlooked is the friendliness factor, which is a critical element of hiring procedures. Not everyone is a suitable addition, despite whatever repair expertise they may possess.

"We've passed by several (technically proficient) technicians because they're not team players," he reports. "You can find out a lot about their integrity just during the interview process. I try to let them do the talking and I do the listening; I ask a lot of open-ended questions."

Once onboard, the new hires are able to take advantage of a mentorship program in which each of the departments has an accomplished and education-minded leader who is eager to assist his colleagues.

In addition to a decent pay and benefits package, flexible hours are available as well. "If his kid has a soccer game at 4 o'clock and his work is done, we want him to put his family first — it makes for a happy employee."

Connecting the dots

Three years ago Tisdale embarked upon converting Collision King into a heavily lean enterprise. "We had been reading about it and aware of it for years — all the trends and fads — and we wanted to make sure this wasn't another gimmick. What made us pull the trigger is that we continued to grow, and we knew something had to give" regarding production inefficiencies. The challenges were further exacerbated by the operation's multiple-building layout on a single Lubbock block.

Continue reading at ABRN.com/Lubbock.



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CONTRIBUTING
EDITOR

James E. Guyette is a long-time contributing editor to ABRN, Aftermarket Business World and Motor Age magazines.

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ADDRESS PROBLEMS IN THE SHOP BEFORE THEY HAPPEN

Commit to positive actions, rather than reactively placing blame

BY **MIKE JONES** | CONTRIBUTING EDITOR

Quite often we go through life focused on fixing things in every aspect of our lives, such as our business process, vehicles, marriage, our children, our friends and even sometimes ourselves.

In the context of what we do in the collision industry regarding restoring our customers' vehicles to a safe, reliable resource, we should be focused on fixing what is broken. However, when the focus is on the people on our team, their behavior, how they interact with each other and the effectiveness of the communication between them, our focus should not be on fixing anything.

In my nearly 30 years of partnering with leaders to develop themselves and their teams, I have observed that when we focus on fixing the people in our lives, we contextualize how we manage our human commodity in a negative way. I am sure that there are behaviors, relationships and methods of communication that need to be fixed, however, "fixing" in this context is being driven by a negative energy. It is important to understand that we do not need to wait for a car wreck or for something to be broken for us to work on ourselves or our relationships.

For illustrative purposes, let's take

"Paige," a five-year body shop manager who, after attending our four-day Master Graduate Leadership Program, returned to the shop and had a meeting with her entire team. She asked them, "What can I do to be a better leader and help each of you be more successful? One of her employees immediately raised his hand and asked, "What did we do wrong?" Though that typically is the first reaction, Paige actually opened the door to a number of new possibilities when she asked that question.

When we wait for something to be wrong before we start fixing things, we see those situations as broken and we are being driven by negative energy. I submit that no matter what is going on in your life, there is nothing wrong and nothing is broken. I submit that there is certainly a lot that can be fixed in our lives and relationships; however, I believe that we can be driven to fix those things deliberately with positive energy understanding that we ALL occupy the largest room in the house, and that is the room for improvement.

I am sure that for some of you dealing with some very tough circumstances these sound like the words of a crazy man; however, I have dealt with some very tough circumstances in my life and I can definitively say

that being driven by negative energy or waiting for something to break in the relationship you have with yourself or others will never create a positive step forward.

When we wait for things to go wrong or break down, the first thing we do is begin diagnosing the problem, like a great estimator examining a wrecked vehicle. I have come to realize that once I have invested time and energy focused on determining what went wrong, once I have searched this damaged relationship or situation from bumper to bumper and I find an answer to what is wrong, the only benefit will be who or what I should assess blame to and that has not proven to have any value in fixing the situation. I further submit that every ounce of energy we spend on determining who or what to blame or "righting" wrongs is wasted energy. Quite often, the real problem is that we are managing people based on our expectations, and not by clearly communicated outcomes. When the outcome isn't clear, things very likely will go wrong.

Some would argue that when you right a wrong, the person that was wronged will feel better, and I agree that may be true. However, I submit that it would be more valuable to acknowledge the wrong and set a positive outcome to move forward focused

>> CONTINUES ON PAGE 30

COMMITMENT TO TRAINING SUPPORTERS



“IT HAS BEEN REALLY WONDERFUL TO MEET A LOT OF VENDORS THAT WE HAVE HEARD ABOUT, BUT HAVE NEVER HAD THE CHANCE TO MEET FACE TO FACE.”

—PAUL STOCK

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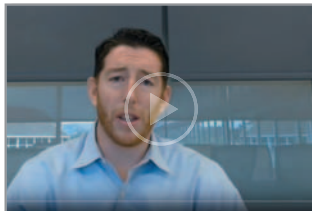


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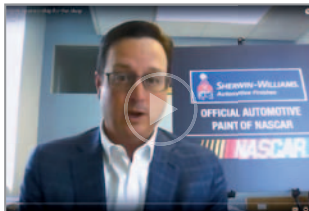
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Impact of interest rates, capital on business value

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Seeing value in a motorsports sponsorship

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SOCIAL INSIGHTS



• Will rising interest rates stop industry consolidation?

It seems to be a forgone conclusion that the Federal Reserve will increase interest rates at their upcoming meeting. There is always a lot of consternation around rate changes, and this time around is no different. Effectively, the Fed controls the price of money (interest rates) in an attempt to influence economic activity. The Fed lowers rates to spur economic activity and raises rates to slow it down. So a rate increase should be perceived as a generally positive event, an indication that economic activity is increasing.

But many express concern over a rate increase. If you are looking to finance the purchase of a house or a car, you may not be excited about the prospect of a rate increase. If you have a variable rate loan, you also may not be excited about a rate increase. If you agree to lend money to someone for 7 or 10 years at a low fixed rate, a rate increase effectively erodes your return.

Many are also concerned about the impact a rate increase has on asset values. Asset values often have an inverse relationship to rates. For example, consider a house. All things equal, a house will sell for a higher price when interest rates are low and a lower price when interest rates are high. Assuming you are like most and finance the purchase of a house, the monthly payment for the same “house” will be lower in a low rate environment. You can buy “more house” on the same monthly budget. But so can everyone else, and the prices of the entire housing market is bid up in a low rate environment.

Some of what we have seen in the past years in the financial markets is a result of the above situation. Asset values have been bid up in stock, bond, commodity and real estate markets as a result of affordable and accessible capital. Many businesses have also taken advantage of cheap and easy money to expand through acquisitions. 2015 was a record-breaking year for M&A across the globe, and a very active year specifically in collision repair.

Continue reading more from ABRN contributor and financial expert Brad Mewes at:

ABRN.com/fedrates

• Case study: Should he be fired for that Facebook post?

A recent online article by the *Harvard Business Review* investigates the blurring lines between personal social media profile pages and the image they can portray on behalf of a person’s employer. Do you have business standards for your technicians and staff when using social media? Do your employees understand that they are acting as a representative of your business not just in a brick and mortar location, but also out in cyberspace? If you don’t have a company policy for social media use, you probably should.

ABRN.com/facebookrules

• CYA – A technician’s most important acronym

On Facebook, sister publication *Motor Age* posted, “professional technicians can be held criminally and civilly liable for their actions – or inactions.” Be sure to protect all you’ve worked so hard for. Learn how to CYA!

ABRN.com/cya

• Stay on top of refinish training

On our Facebook page, *ABRN* reminded readers that the benefits of training and recertification are definitely worth the investment. Though it is never easy for collision shop owners and managers to keep pace with the changes required to compete in a constantly evolving business climate, you must do so to ensure your technicians are up to date with the latest products, information and skills required to perform their roles at their competitive best.

ABRN.com/stayontop

• A glass review

On our Twitter page, *ABRN* asked readers if it was time to take a second look at glass repair. Most shops send a majority of their glass repair work to outside businesses. However, is it time your shop reconsidered and moved those repairs in house?

ABRN.com/glassreview

TRAINING EVENTS

JANUARY 14, 2016

• Collision Industry Conference
Palm Springs, California

JANUARY 20, 2016

• Steering & Suspension Analysis & Repair; Toyota
West Caldwell, New Jersey

FEBRUARY 8, 2016

• Color Adjustment and Blending;
Martin Senour Company
Atlanta, Georgia

FEBRUARY 9, 2016

• PaintManager Essentials I with RapidMatch; PPG
Kansas City, Missouri

MARCH 3, 2016

• Estimating Solutions for Profit;
Sherwin-Williams Automotive Finishes
Chicago, Illinois

MARCH 18-20, 2016

• AASP-NJ Northeast
Secaucus, New Jersey

APRIL 14, 2016

• AASP-MN Annual Meeting and Leadership Conference
Minneapolis, Minnesota

MAY 2-4, 2016

• WIN 2016 Educational Conference
Tampa, Florida

AUGUST 9-13, 2016

• NACE/CARS 2016
Anaheim, California

on what you will do to fix what is wrong. This commitment should be to the things you have control of 100 percent. This will allow you to make a commitment to a course of action and spend all of your energy in a positive, forward moving direction, focused on producing a mutually agreed upon outcome that everyone involved has control over.

When we look for what went wrong, we are looking for answers. When I asked people what the value of this behavior is they respond, "You will know what not to do moving forward." I agree that is true, however, it is a waste of time and energy. If you were to set a positive outcome, the next step would be to clearly communicate the outcome to everyone involved in making that outcome a success. If you gain agreement from them to deliver what you need from them to get to the outcome and they agree, we will not need to know what not to do, because we understand that the only thing that

will move us forward is knowing what to do.

I had a good friend whose 7-year-old daughter was battling cancer. He said to me, "Mike, this is wrong and it is broken. How can this possibly be right?" I responded, "It is not right or wrong, it just is," and I suggested that we spend ALL of our energy loving her, being positive and strong for her, and taking advantage of every moment with her, because that is what we have control of 100 percent. He saw the value in that approach and we did until the day she died.

Whenever we assess a circumstance as positive or negative, right or wrong, what we are really addressing is whether our expectations were met or not. If things turned out the way we expected they would, we generally assess that as positive or right. If the circumstance does not turn out the way we expected it to, we will generally assess that as negative or wrong, and because energy and action follow

thought, there is predictability in both of these situations.


I would like to suggest there is a better way to fix what is wrong in our relationships at work and home. There is a much healthier way to get more production from your team than cussing and fussing. I suggest that the most positive approach is in the question and not in waiting for something to go wrong and then start looking for an answer.

There is a difference between "living the question" and looking for the answer to what went wrong. When we look for the answer to what went wrong, the view is that of the observer and that view is generally being driven by pain or negativity. The driver to fix what went wrong is generally going to be negative energy. The observer is generally looking for the answer outside of themselves. If you are looking for the answer in this context and you find it, that answer is generally something you or someone else has done

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and that answer will be historical in nature. When you find that answer in the context of this conversation it will already be in a state of decay. In other words, it will not benefit you moving forward.

When you approach the same situation by "living the question," it will produce a much different outcome — your view will be that of the observed. In the example with Paige, the context of her question to herself was "What am I committed to do to build a better team?" She became aware in our program that some of the answers to that question could be uncovered by asking her team. The question my friend was living was, "What am I committed to do to ensure that I create a positive, supportive environment for my daughter?"

When you are living the question, you create a proactive, positive answer moving forward. Even if the answer produced is something that you have done before (that may or may not have worked at that time), please

be aware that this approach is different from anything that you have done before and will likely produce a result you have not experienced before. In this present moment everything is different — the environment is different, resources are different, your mindset is different, and the people around you will hear you differently. No matter what answer is created in the context of looking for and living the question, that answer will begin a new positive step forward.

Living the question creates an environment where you are accepting personal responsibility to deliver on a promised outcome. Living the question means there will be NO space for blame. Living the question means you will create a new future based on your commitment to focus on a positive outcome. Living the question will create a way of "being" that can be replicated to invent new positive futures moving forward again and again.

What question are you willing to live to energize your team, create a

more positive environment, improve the effectiveness of your team's communication, and get more production from yourself and your team? What do you have 100 percent control of that you are willing to make a commitment to deliver that will produce a more positive outcome in your world today?

It is possible for one person to make an incredibly positive impact on an environment at work and at home. In fact, that is the only way it will happen. Here is a question I challenge you to live today: Why Not YOU? 📧



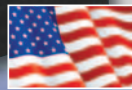
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KEEPING THE PACE

Today's cars and trucks are designed to direct collision forces around the passenger compartment. Technicians should use computerized measuring systems that measure multiple points on a vehicle's upper half and lower structure and should monitor these points in real time during the pull to ensure that no additional damage is inflicted into the vehicle.

AS AUTOMAKERS CONTINUALLY REDESIGN THEIR VEHICLES, COLLISION REPAIR SHOPS HAVE TO ADAPT TO NEW CONSTRUCTION METHODS, MATERIALS, DIMENSIONS AND REPAIR PROCEDURES

BY **RICHARD PERRY** | CONTRIBUTING EDITOR

New 2016 model year cars and trucks are hitting the roads, which means it won't be long before some are involved in collisions and start appearing at your shop. Are you prepared for these new vehicles? If not, you'll likely waste valuable time playing catch up and could even drive away potential customers.

Staying on top of vehicle design updates is no small task. According to data from the National Automobile Dealers Association (NADA), every model year changeover affects 40 to 60 models. Think about it this way: since there

are 52 weeks in a year, that means automakers are redesigning close to one new vehicle each week!

While dealers only have to adapt to the handful of changes made within their brand lines, independent collision repair shops must be prepared for all new vehicles. How can you ensure your facility is ready for 2016 and beyond? Here are four steps you can take throughout the year to limit the possibility that you'll be caught off guard by updates in vehicle construction methods, materials, dimensions and OEM repair procedures.

Take advantage of training opportunities

In order to properly return today's collision-damaged vehicles to OEM specifications, technicians and estimators must be familiar with how they are designed and built. Fortunately, year-round training opportunities are available to help provide this knowledge.

Since the collision repair industry has evolved rapidly over the last decade, many training providers have developed new courses to meet the needs of today's shops. Look for interactive, hands-

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on sessions led by experienced collision repair professionals to ensure the learning environment will be as close as possible to real-world conditions.



Keeping your repair procedures up to date can help ensure your shop is ready for any vehicle. Some measuring systems feature two screens, so the technician can view these procedures and the system's measurement readings simultaneously.

Each provider's curriculum may vary slightly, but here are some core courses that a technician or estimator should attend to get up to speed:

Design Based Repair: A design-based repair course will cover the new materials found in today's vehicles, and how automakers use those materials to construct lightweight, safe vehicles. An up-to-date course should cover the properties of advanced high-strength steels and aluminum, and the latest bonding techniques used to construct vehicle structures.

Aluminum Analysis and Repair: There's no hotter topic in the collision repair industry than aluminum. While aluminum repair techniques are different than those for traditional steel, they are not difficult to learn with the right training.

Computerized Measuring: Gone are the days when simple mechanical and point-to-point systems were sufficiently accurate to measure damaged vehicles. Today's cars and trucks are built to tight tolerances and must be measured

with advanced computerized measuring methods in order to be properly returned to OEM specs. Of course, even the most advanced technology is only as good as the technician using it, so training is essential.

Collision Dynamics: As automakers find new ways to direct impact forces away from the passenger compartment while also lightening vehicles for improved fuel economy, vehicles are behaving differently in collisions than they used to. Even experienced



Without up-to-date OEM specification data, it is hard to know how much a vehicle's design has changed year to year. Your spec provider should measure each vehicle with the frame anchored and the suspension unloaded, as shown here, so the data accurately reflects what the technician sees in the shop.



Training opportunities have evolved to keep pace with the new collision repair techniques that have been developed over the last decade. For the best experience, look for interactive, hands-on sessions that replicate real-world conditions.

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technicians can benefit from an update on collision dynamics and how to find all the damage in a vehicle.

Update your vehicle specifications

When it comes to modern vehicles, accurate spec data is the foundation of every repair. This data includes measurements for window and door openings, tailgates, hoods, engine compartments, trunks and rear hatches, and body widths, and is necessary for knowing how much damage is present.

Often, it is hard to tell at a glance if a vehicle has changed from one model year to another. The only way to really know is to check your spec data. To ensure you receive the latest pre-release and new vehicle updates as soon as they are available, sign up for an annual online subscription. That way, new data will be automatically delivered to your measuring workstations without any installation hassles or delays.

Even the latest spec data is of no use, though, unless it is accurate. Automakers today engineer airbags to deploy within milliseconds of a collision. If your repair is off even by the slightest margins due to inaccurate specs, it could change airbag timing and seriously compromise the safety of the vehicle. Your spec provider should compile its data by measuring each vehicle with the frame anchored and the suspension unloaded in order to provide useable, real-world information for the technician.

Equip your shop with the right tools

New vehicles require more than just a quick visual inspection during the estimating process. That's because they're designed to direct collision forces around the passenger compartment and into areas specifically built to absorb an impact. Without advanced measuring tools, there's a chance "hidden" damage in areas not directly affected by the collision will go unnoticed.

In order to efficiently assess each vehicle and compile accurate estimates, the estimator should be equipped with a multi-point computerized measuring system. The best systems map the entire vehicle frame in three dimensions at once, making it easier to see and document where the structure is out of alignment. These systems can also be used by technicians during the pulling process to show dimensional changes in real time. That way, there's less risk that pulling will inflict more damage into the vehicle.

Technicians also need new tools to repair the aluminum panels and components found in today's vehicles. These tools include inverter pulsed MIG/MAG welders designed for aluminum's unique characteristics, rivet guns, induction heaters, panel bonding adhesives, benches and racks, along with weld fume extractors, aluminum dust extractors and curtains or clean rooms. All aluminum tools should be kept on a dedicated aluminum work station to prevent cross-contamination with steel tools, which can cause galvanic corrosion on a vehicle's bare metal.


Access the latest OEM repair procedures

Of course, no amount of training, data or new equipment can compensate for a lack of access to OEM repair procedures. These procedures outline the specific techniques and tools that should be used in order to properly repair a vehicle.

Some automakers provide more detailed repair procedures than others. It's important to remember, though, that

deviating from any part of the process or skipping even the smallest detail could increase the risk that your shop will be held liable for an incorrect repair. If an incorrect repair results in a car or truck being totaled by its insurer, your shop could be held liable for the vehicle's full cost.

Most OEMs make their repair procedures available via an online subscription or a third-party provider. Typically, if an automaker provides its repair procedures through an online subscription, those procedures will be available as soon as the vehicle goes to market. This can help to ensure your shop is ready for any vehicle. If needed, OEM repair procedures can also be purchased on a daily, weekly or monthly basis.

Preparing your shop for new model year vehicles is not something that can be done overnight. It takes a year-round commitment to training, and a dedication to keeping your equipment and data current. But by implementing these steps, you can position your facility for years of proper repairs and happy customers, no matter what vehicle design changes may occur. 



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EDITOR

Richard Perry is the OEM and strategic account sales manager for Chief Automotive Technologies. Perry sits on the International Board of Directors for I-CAR, serves as a SkillsUSA collision advisor, and represents Chief at Collision Industry Conference (CIC) and National Automotive Technicians Education Foundation (NATEF) meetings.

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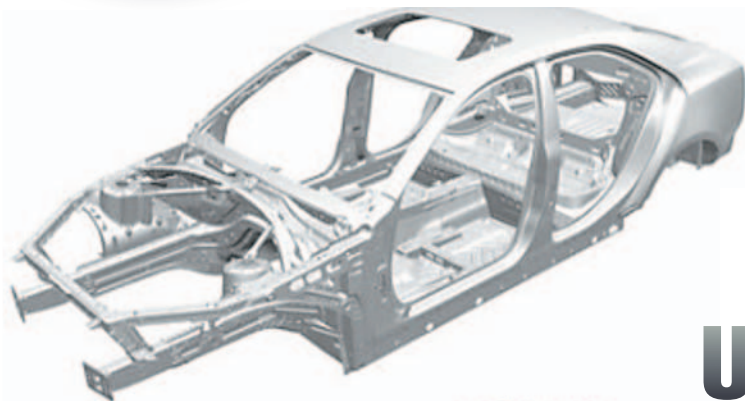
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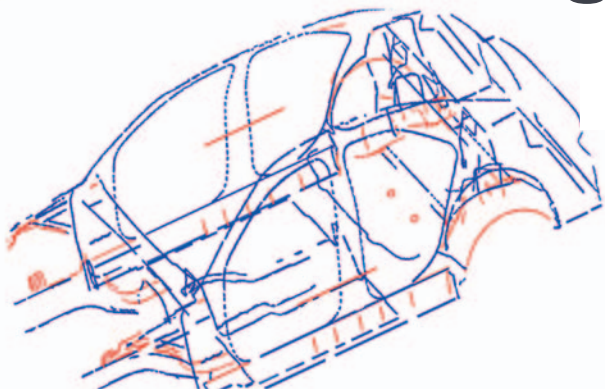
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UNDERSTANDING IMPACT RESISTANT STRUCTURAL ADHESIVES

Colored lines represent structural adhesives.

AS STRUCTURES BECOME LIGHTER, STRUCTURAL ADHESIVES WILL BECOME MORE COMMON

BY **SHAWN COLLINS** | CONTRIBUTING EDITOR

The collision repair industry continues to see drastic changes in vehicle construction, which in turn requires equally drastic changes in repair methods and equipment. The corporate average fuel economy standard of 54.5 miles per gallon by the year 2025 plays a large role in influencing these changes. Other factors driving these changes include safety and crash test performance, reparability, ride dynamics, ease of manufacture and of course, manufacturing costs.

As manufacturers search for new ways to accomplish these performance improvements, we will continue to see an increase in the use of adhesives for

both vehicle assembly and vehicle repair. Industry sources have predicted a structural adhesive market growth of about 33 percent annually. One example is the Cadillac CTS, which uses 120 meters of structural adhesive in areas like the frame rails, rockers, strut towers, wheel houses and floor pans (Fig. 1).

Structural adhesives have been used in some OE structural repairs for the past few years; however, the availability of these products and these types of procedures were limited to a small group of vehicles. The more mainstream type of adhesives available for repairs has been panel bonding adhesives. Panel bonding

adhesives are primarily limited to bonding only exterior non-structural panels. This type of adhesive does not meet specifications for bonding structural parts. Typically, structural applications require greater peel strength, impact strength, and lap shear strength than a panel bonding adhesive can offer. Vehicle manufacturers also desire an adhesive that can absorb collision energy as the bonded parts deform during a collision. This requirement for higher performance standards for structural bonding has inspired more adhesive makers to create what they deem Impact Resistant Structural Adhesives (IRSA).

During both vehicle assembly and collision repairs, structural adhesives are typically used along with mechanical fasteners or spot welding, which is referred to as cold joining using a hybrid joint. The joint is considered a hybrid because it uses both an adhesive and a fastener together. Hybrid joining combines the strengths of both the adhesive and the fastener together to overcome their individual vulnerabilities.

Adhesives have many useful attributes but they are vulnerable in peel mode (Fig. 2). Typically adhesives do not encounter peel forces in a collision, they encounter shear (Fig. 3) and impact (Fig. 4) forces, but the possibility of adhesive peel is still a concern. Therefore, the addition of a rivet or other mechanical fastener in the joint prevents the adhesive from peel failure.

Mechanical fasteners may be spot welds, flow drill screws, rivets or bolts. This type of fastener primarily has the advantage of “pull-out” or peel strength; however, fasteners are only local, meaning all the stress load is placed on one small footprint. Adding adhesive to the joint with a mechanical fastener helps distribute the stress load over a much larger area, increasing joint strength (Fig. 5).

A hybrid joint (Fig. 6) combines the benefits of both the adhesive and the fastener together to complement their strengths and overcome any weaknesses. The contributions the adhesive makes to the joint include completely sealing the joint with adhesive to avoid corrosion; reducing noise vibration and harshness (NVH); and forming a continuous bond along the entire flange, which increases the bond area for better stress distribution. The contributions the mechanical fastener provides to the joint include increased peel strength, immediate fixturing (no cure delay) and the fact that fasteners are known and trusted (Fig. 7).

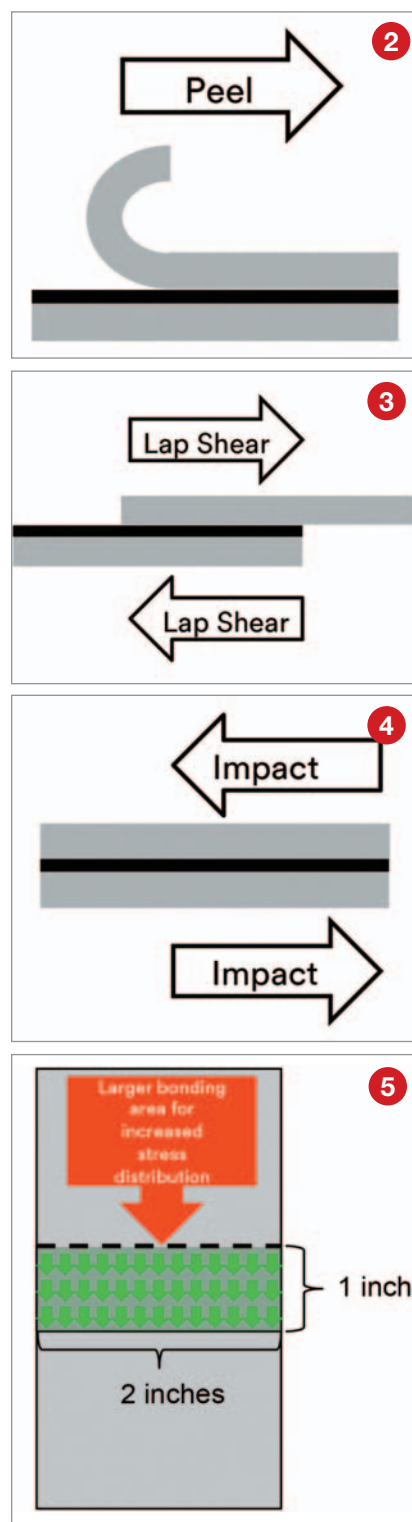
It's important to understand that the OEM factory adhesive is a single component chemistry that is cured at high temperatures that are not attainable in the collision repair shop, around 400 degrees Fahrenheit. The high bake temperature makes it possible for these adhesives to achieve extremely high shear, peel and impact strength numbers. Until recently, automotive aftermarket adhesive makers had not un-

locked the technology to achieve similar strength properties because they are limited to utilizing a two-component, chemical cure adhesive that cures at room temperature. Recently, adhesive makers have overcome many limitations of two-component adhesive chemistry with remarkable innovation.

A special adhesive is required for structural bonding applications because a structural adhesive is different from a panel bonding adhesive. A structural adhesive uses chemical technology to enhance peel strength, lap shear strength and impact strength. These manufacturing processes could include additives or temperature treatments to allow for some give or flexing before fracture. This is a very simplified explanation, as it may take years to develop an adhesive with the physical properties of what is commonly referred to as a “crash toughened” or “impact resistant structural adhesive.”

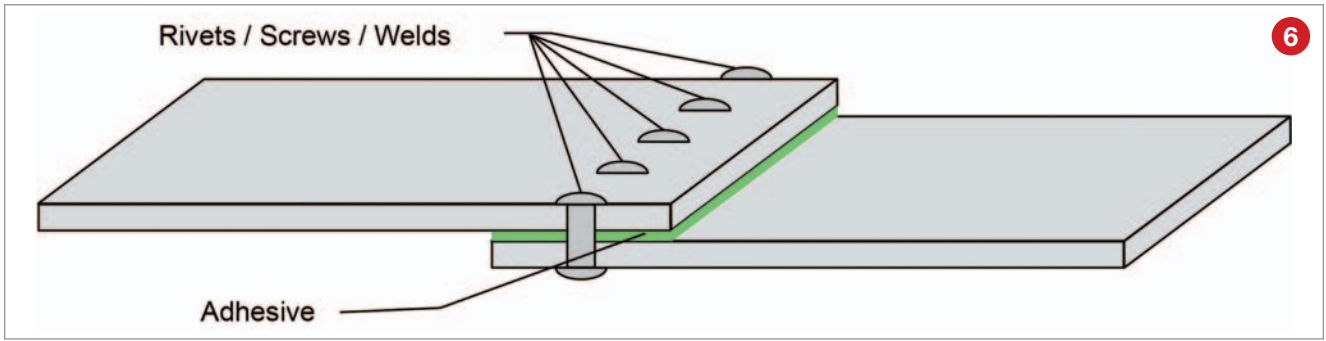
A standard industry test called a “wedge impact test” is performed to measure the stress load the adhesive can withstand as a weighted wedge is driven through bonded strips of steel or aluminum (Fig. 8). “Wedge impact test” samples that are bonded with a panel bonding adhesive separate with far less resistance than structural adhesive samples, which eventually break apart, but with much greater resistance. The amount of energy absorbed as the samples separate can be measured and viewed on a graph and will indicate that a structural adhesive will absorb considerably more energy. Structural adhesives also realize significantly better performance in extremely high and low temperatures, resistance to corrosion, and stress durability. Simply put, IRSA is a completely different class of adhesive than a panel bonding adhesive.

We must now understand where IRSA can be used during collision repairs. In most, if not all cases, this type of adhesive will be used with some type of mechanical fastener such as a rivet or spot weld when attaching structural panels. Do not get the idea that because this is a very strong adhesive that you can substitute it for mechanical fasteners and make a “bond-only” repair. There are currently some vehicle makers that use a structural adhesive on non-structural panels, such as quarter panels. In this case, if you are



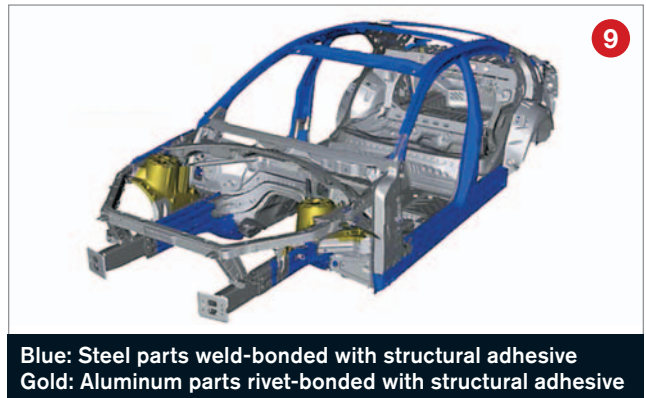
certain it is a non-structural panel and no mechanical fasteners are present, it would be acceptable to bond-only unless the OEM states otherwise.

When determining which type of adhesive is recommended for a repair, the technician should seek out the OEM repair information. Obviously, if the OEM



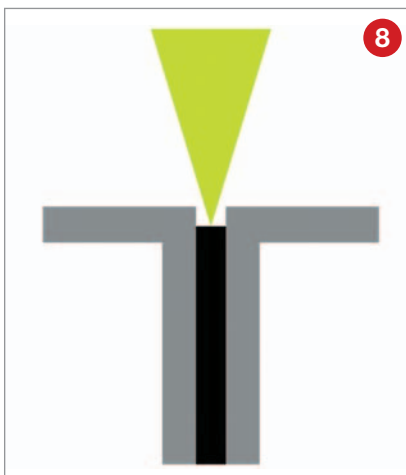
Why Combine Spots with Adhesives to Create Hybrid Joints? 7
Remember the Joint Characteristics

| Spot Joints | Hybrid Joints | Bonded Joints |
|--|--|--|
| <ul style="list-style-type: none"> Pros <ul style="list-style-type: none"> Stronger in Peel Immediate Use/Load Known and "Trusted" Cons <ul style="list-style-type: none"> Weaker in Shear Added Mass Stress Concentration | <ul style="list-style-type: none"> Pros <ul style="list-style-type: none"> Built-In Fixturing Shear Strength + Peel Protection Increased Stiffness Increased Durability Integral Joint Sealing Cons <ul style="list-style-type: none"> Repair Complexity | <ul style="list-style-type: none"> Pros <ul style="list-style-type: none"> Stronger in Shear Provide Sealing Lightweight Stress Distribution Increased Stiffness Cons <ul style="list-style-type: none"> Weaker in Peel Need to be Fixtured |



makes a specific recommendation for an adhesive, there is no question as to what adhesive to use. Technicians should make every effort possible to acquire the OEM repair manual instructions to avoid making a mistake that could make the repair unsafe; after all, these are structural repairs with safety implications.

However, in many cases OEM information is not easy to find or is simply non-existent. One clue that an adhesive may be a structural adhesive is the color. For example, GM uses a purple colored structural adhesive and recommends replacing any purple adhesive found during repairs with an aftermarket Impact Resistance Structural Adhesive. To avoid



confusion or errors, GM has recently modified their repair manuals to recommend a structural adhesive for ALL repairs requiring an adhesive, regardless of whether the part is a structural part or not. Not all manufacturers make it that simple to know which adhesive to use. In the absence of OEM repair information there may be cases in which a decision is based on what area of the vehicle is being bonded. The vehicle maker may state to use a structural adhesive if there is any doubt as to whether the part is structural or not, or to err on the side of the stronger adhesive (Fig. 9).

As vehicle construction continues to evolve and become more complex, it becomes more apparent that in order to make proper repair decisions you must have OEM information. The days of attempting to repair a vehicle by simply reverse-engineering the factory assembly methods are over. It is becoming much more common that the repair attachment method will be completely different than the original assembly method, especially when adhesives are in play. With this in mind the trend is moving towards the OEMs providing more information, especially if the repair procedure is unique or specific. It may also be wise to consult the adhesive maker to inquire as to the OEM recommendations, adhesive substituti-

tion or equivalent recommendations. Adhesive makers' websites should contain directions for use, videos, a list of OEM approvals and other information.

The collision repair industry is changing drastically and we are just beginning to see the tip of the iceberg. As structures become lighter and utilize more mixed construction materials, structural adhesives will become as common as sandpaper and masking tape. It will be more important than ever to use these products correctly and acquire the necessary information from both the OEM and adhesive manufacturer.



Shawn Collins is currently a Senior Technical Service Engineer with 3M's Automotive Aftermarket Division. He worked 26 years as an ASE Master, I-CAR Platinum collision technician. He has been an I-Car instructor for 20 years and received awards as Instructor of the Year in 2009 and the Tech Center Award in 2011 for his work as a pilot class instructor and on new class development. He is also an administrator for the I-CAR Steel and Aluminum Welding Qualification Tests. He has written articles for trade publications such as Edmunds, Auto Body Repair News, and Auto Body Journal. He is a frequent speaker at industry events such as NACE, SEMA, AASP, and ARA conventions.

Fighting against corrosion

Quality products, prevention help protect collision-repair welded parts

Snow, hail, rain, wind and sub-freezing temperatures — winter can be a harsh environment to our customers' vehicles! In many parts of the country, winter is the time when weather elements are at their toughest. You may have heard of the term "winter brine" — this is a mixture of magnesium and calcium chloride used on the roads in colder climates for de-icing purposes and for safer travel conditions.

Winter brine can be highly corrosive to vehicle components. This is because of the high amount of acid molecules that result from mixing those chemicals with water and oxygen.

Unfortunately, vehicle components that can be most susceptible to rust and corrosion are parts that have been subjected to collision repair welding. That is why using quality products and practicing good corrosion prevention techniques during a collision repair is so important, and why we I advise all technicians — no matter what time of year or where in the country they live — to be diligent about building corrosion prevention into each repair and component replacement. This helps ensure that they will deliver a safe, high-quality repair that will last.

On Toyota, Lexus and Scion vehicles, I recommend following the original manufacturer application specifications for chip-resistant paint coatings, seam sealer and cavity wax, which can be found in model-specific Collision Repair Manuals. Apply two-component (2K) epoxy or direct-to-metal (DTM) primer to bare metal to replicate factory e-coat where necessary, and weld-through primers at flange welding locations. These materials, when used and applied properly, help protect against the elements and ensure the longevity of your repairs.

Since the use of zinc-rich weld-through primer has a bit of mystery behind it, let's get into some details of when and how to build corrosion prevention into a job with weld-through primer. In Toyota training, we recommend using only a zinc-rich weld-


through primer for your welding tasks. Keep in mind that zinc-based primers are more suitable than copper-based primers because of the zinc compatibility to the original Excelite steel coatings. This is because steel body components are manufactured using a zinc galvanizing process, and zinc primer bonds to this metal, referred to by its trade name, "Excelite," better. Zinc is also more resistant to corrosion than copper.

At Toyota, we have some pretty simple and effective recommendations for properly using weld-through primer. The following are good procedural tips I recommend when applying weld-through primer.

- The metal must be clean; this helps the primer bond to the surface.
- Coat weld locations that are going to be joined together but won't be accessible after welding.
- Follow product instructions for application technique and dry times.
- Allow the weld-through primer to dry completely before you begin the welding process. This gives the zinc the opportunity to properly bond to the metal.
- Remove any weld-through primer that will affect adhesion of subsequent coatings and seam sealer. Most weld-through primers aren't solvent resistant and can be washed away with cleaning solvent.
- Apply weld-through primer neatly and only to the areas that require the primer. Unwisely over-spray and unnecessary application should be avoided.
- Applying weld-thru primer to butt-weld flange edges is fundamentally unnecessary because it can inhibit weld flow, and it serves no purpose at those locations.

After you have finished welding, clean the heat-affected zones (HAZ) around welds to remove burned or loose material, dress the welds appropriately, then coat with epoxy primer. The reverse side of the HAZ should also be free of loose and burned coatings and coated with 2K epoxy primer or DTM and cavity wax.

Corrosion prevention techniques can be applied to a variety of different repair scenarios beyond welding. For example, outer body and structural components of Toyota, Lexus and Scion vehicles are coated with electro-deposition primer — also referred to as e-coat. E-coat is an excellent corrosion protection material and should be left intact whenever possible. If you have to remove e-coat during a repair, remember that you can replicate it with 2K epoxy or DTM primer.

If you are curious about how your corrosion prevention techniques are holding up, you can put your present corrosion prevention techniques and materials to the test by preparing sample panels and subjecting them to simulated weathering conditions to see how they hold up. For more information, visit www.crrtraining.com. 

“CORROSION PREVENTION TECHNIQUES CAN BE APPLIED TO MANY REPAIR SCENARIOS BEYOND WELDING.”

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Hydrogen fuel cell technology

Take a look inside the Toyota Mirai and Hyundai Tucson



Toyota Mirai Engine Compartment

BY **JEFF MINTER** | CONTRIBUTING EDITOR

TOYOTA was a leader in hybrid (HEV) and electric (EV) technology. Are they starting to move away from hybrids and beginning to embrace hydrogen fuel cells? Are other OEMs heading down this road? How does this technology work and how will it impact the aftermarket?

Wait! Don't roll your eyes and turn the page yet. This article isn't going

to try to convince you that hydrogen fuel cell vehicles will be in your shop tomorrow. In fact, the data presented is likely to convince you otherwise. Does that mean you shouldn't care about fuel cell technology? There are similarities between current technology and fuel cell technology that make having a basic understanding of this technology very relevant. This article will focus on the following:

- Basics of fuel cell technology
- The current (slow paced) roll out of this technology
- Similarities between current vehicles and hydrogen fuel cell vehicles
- Basic facility considerations for shops that may eventually want to service vehicles that utilize lighter than air fuels (hydrogen, compressed natural gas [CNG], etc.)

To begin, let's take a look at some



Hydrogen vehicle being fueled



Toyota Fuel Cell trim cover

of the basics related to hydrogen fuel cell technology. Webster's Dictionary defines a hybrid as "something (such as a power plant, vehicle or electronic circuit) that has two different types of components performing essentially the same function." By that definition, a hydrogen fuel cell vehicle is technically a hybrid. A "traditional" hybrid vehicle is considered a hybrid because it has two sources of power. Those sources

of power are the internal combustion engine and the high voltage battery. A fuel cell vehicle also has two sources of power, which are the high voltage battery and the hydrogen fuel cell. In essence, a hydrogen fuel cell vehicle is simply a hybrid that replaces the internal combustion engine with a fuel cell.

So what is a fuel cell? In simple terms, a fuel cell is a device that can use a combination of oxygen and hydrogen

to create electricity. Polymer Electrolyte Membrane (PEM) fuel cells are currently the most common versions used for transportation. A PEM fuel cell contains a set of electrodes (an anode and a cathode) and an electrolyte, much like a typical battery. Unlike a battery however, the anode and cathode are separated by the PEM. To create electricity in a fuel cell, hydrogen gas is introduced. The hydrogen flows

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through a series of channels to the anode, where it reacts with a catalyst. The catalytic reaction causes the hydrogen to ionize. This means it separates the hydrogen molecule from the attached electrons. The result is a positively charged hydrogen molecule and negatively charged “free” electrons. The PEM that separates the anode from the cathode will only allow the positively charged hydrogen molecules to pass through. As a result of this selective passage, the electrons are left behind on the anode. The electrons develop a negative charge on the anode and the lack of electrons at the cathode (caused by the accumulation of the positively ionized hydrogen molecules) develops a positive charge. This charge difference should sound vaguely familiar, as it’s very similar to the negative and positive terminals on a battery. As with a battery, if a circuit is provided to connect the negative and positively charged electrodes, electrical current will flow. In essence, a hydrogen fuel cell is a generator with no moving parts. The fuel for the generator is hydrogen and the exhaust emissions are limited to water vapor (H_2O).

Hydrogen fuel cell vehicles have been in the press a lot in recent years. This may leave you wondering how many fuel cell vehicles are currently being sold in the United States, and what impact that may have on your future business. Currently, there are really only two fuel cell vehicles that are relevant to this discussion. Those two vehicles are the Hyundai Tucson Fuel Cell (introduced in 2014) and the Toyota Mirai (which, at press time, was planned for release in very late 2015).

While the Hyundai Tucson Fuel Cell is marketed as the first “mass produced” fuel cell vehicle, it’s very limited in availability. In fact, you can’t even buy this vehicle in the United States if you wanted to. Currently, the Tucson Fuel Cell is limited to three-year, 36,000-mile leases with no option to purchase. Even given those limitations, the bragging rights for this vehicle is that Hyundai has delivered over 75 (no that’s not a misprint!) in the US through September 2015. That’s not exactly a number that would make you scramble to get ready for them in your shop, especially since they’ll be under warranty throughout their lease!

The Toyota Mirai will change things slightly. It appears this will be the very first hydrogen fuel cell vehicle to actually be sold (versus leased) within the United States. That being said, the area potentially impacted will still be very small. These vehicle sales will likely be limited to the Southern California area (as has been the case with current leases) due to the current hydrogen fueling infrastructure and incentives for the automotive manufactures.

So why the discussion?

You may be wondering why you should care about fuel cell vehicles if you’re unlikely to see them in your shop in the foreseeable future. It is not the fuel cell vehicles — at least not yet — that you should care about, but rather the technology in these fuel cell vehicles. From a practical standpoint the battery, electric machine(s) and inverter technology used in fuel cell vehicles isn’t much different than that used in current hybrid and fully electric vehicles. If you haven’t yet embraced hybrid/electric vehicle technology, you are, quite frankly, falling further behind every day. According to the Alternative Fuels Data Center, there were 73 hybrid and/or electric models offered for the 2015 model year. That’s an increase from just eight models in 2005,



Toyota Mirai at fueling station



Hyundai Tucson Fuel Cell Engine Compartment



Hyundai Tucson Fuel Cell vehicle being fueled

which is over an 800 percent increase!

Let’s take a look the Toyota Mirai fuel cell vehicle for a comparison of technology. This is essentially an electric vehicle with an onboard generator in the form of a hydrogen fuel cell. I was surprised to find out just how much of the technology in this vehicle is a carry-over from existing Toyota/Lexus hybrid vehicles. So what is being carried over?

- High voltage battery: The high voltage battery in the Mirai is a 244.8V NiMh battery. Toyota describes this as “an existing design” from a Toyota hybrid model. This battery consists of 34 modules, each rated at 7.2 volts. For those of you already familiar with hybrid technology, this should ring a bell as those are the same specifications listed for a Toyota Camry hybrid.

▪ **Electric Motor/Generator:** Toyota states, “we chose an existing motor from one of our Lexus hybrid vehicles, providing a history of reliability and reducing overall cost.” While this component is more difficult to directly correlate to an existing make/model, the re-use of existing technology further highlights the ability to use existing diagnostic processes.

▪ **Power Control Unit (PCU):** While this unit appears to be unique to the Mirai, Toyota specifically states that it is based on the PCU found in the Prius.

▪ **Inverter/Converter:** Again, this unit appears to be unique to the Mirai with similarities to existing Toyota/Lexus hybrids. The unit is listed as a 4-phase boost converter allowing the battery voltage to be stepped up to approximately 650V. Much like the Prius (and other Toyota/Lexus models), this boosted voltage allows more power to be delivered from the electric machine when under peak demand.

So, what does all of this mean for shops looking to prepare for the future? To start, your technicians need training, but not for hydrogen fuel cell vehicles (at least not yet). The hydrogen fuel cell related training I’d consider relevant at this time is for the electric drive system. While the hydrogen system is interesting and makes great headlines with 10,000 PSI storage tanks and water as the only emission, getting training on that simply isn’t practical. These vehicles will likely be very limited in number and will be under warranty for the foreseeable future. In fact, for the “lease only” vehicles, they will never be out of warranty. That means by the time you will see these vehicles in your shop (if you ever do), the hydrogen-related systems are likely to look much different than they do today. The electric drive portion, however, is relevant today because of the connections to hybrid and electric vehicles.

Your action plan

At a minimum, your technicians should receive high voltage systems safety training. Limiting training to that level, however, significantly reduces your shop’s potential. I’d recommend going well beyond the basic safety training. In fact, I’d even recommend going well beyond the OEM training provided for hybrid and electric vehicles. To really prepare for the future, you should look

into getting your technicians trained on the two major electric components that are most likely to experience problems — high voltage batteries and electric machines (motor/generators). These are both components that are destined to eventual failure due to normal wear and tear. Equipping your technicians with the knowledge and equipment to accurately diagnose these components both at the gross failure stage and ideally at the early/intermittent failure stage will help set up your shop for long-term success and will likely help set you apart from the dealership. In addition, you need to consider training your service advisors/managers on these vehicles to ensure they have the knowledge to explain the problems and related repairs to your customers.

The last thing I’d recommend considering when it comes to the potential for servicing hydrogen fuel cell vehicles is your facility. While there isn’t a reason to start planning renovations today to accommodate vehicles you’re unlikely to see tomorrow, it is something you should keep in the back of your mind. The biggest thing to consider is that current repair facilities are virtually all set up to handle fuels that are heavier than air. If you look around your shop, you’ll notice that all potential ignition sources are at least 18 inches from the ground (provided your facility is up to code). This was done because gasoline vapors can collect at the ground level. When looking at fuels such as hydrogen, however, this scenario changes. Hydrogen is actually the lightest element in the periodic table. This means that if hydrogen was to leak from a vehicle in a shop it would accumulate near the ceiling, not the ground. So, walk out into your shop and look up at the ceiling. Do you see anything within 18 inches of the ceiling that could serve as an ignition source? Anything such as a light fixture, heater, fan, even a junction box could be a danger.

Of course, you’re probably thinking with the limited number of hydrogen fuel cell vehicles likely to be seen in the aftermarket this consideration isn’t worth worrying about. Keep in mind there are other fuels that are also lighter than air. One such fuel that has been making a comeback lately is Compressed Natural Gas (CNG). Much like hydrogen, a leak from a CNG-fueled



Hyundai Tucson Fuel Cell hydrogen tank fueling port



Hydrogen warning label

vehicle can cause fuel to accumulate near the ceiling rather than at the floor. Depending on the level of service being done on these vehicles (hydrogen or CNG), whether vehicles are stored inside overnight, etc. the facility requirements change. If you are considering a new facility or a major renovation/expansion of your current facility, this may be something you want to keep in mind during the planning process. Be prepared, as the required modifications may include a significant expense. However, the alternative of servicing these vehicles without the proper modifications may expose you to significant liability.

The future of hydrogen fuel cell vehicles and the potential impact they will have on the aftermarket repair industry is still somewhat uncertain. Change within our industry, however, is virtually guaranteed and everyone will need to adapt to avoid becoming obsolete. Just try to avoid being distracted by the media hype when making your plans. ☞



Jeff is currently serving as the service director for a group of dealerships in the heavy duty vehicle industry. He is an ASE certified Master/L1/L3/F1 technician with OEM training from numerous manufacturers.
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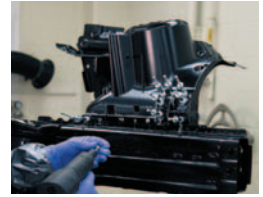
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T H E L A S T D E T A I L [✓]

Welcome to the new year! This is the time of year when we inevitably take a few moments to reflect on the past and, more importantly, look ahead to the coming months with personal plans to become better and to set goals for improving the things that define our daily life.

The new year is exciting for me because it really motivates me to reflect, evaluate and establish a refreshed and reinvigorated resolve in my daily routine (which has become anything but routine).

As I look at the collision repair industry — an industry to which I've devoted my entire career — I'm discovering that what I'm doing every day can't really be called a "job." For me it has become a very personal way of life. And because of this everyday

personal relationship I have with the industry, I find myself constantly evaluating the industry's ongoing progress and the many outside resources that help to create an improved customer experience that enhances the overall perception of our business.

Part of that evaluation involves cleaning up "standard procedure" facets of the business that have been around forever, but today don't seem to make too much sense.

One of those facets is paint and material (P&M) invoicing, which has been a thorn in the industry's side seemingly since the beginning of time. We've forever relied on a "best-guess" number that is derived from a fixed dollar amount multiplied by the refinishing labor hours to determine P&M costs, simply because we've had no better way of tracking specific materials to the specific vehicle that is being invoiced.

I'm sure you'll agree that P&M invoicing using this method has always been a "you win some, you lose some" notion that hopefully evens out in the long run. Hear me when I tell you that this archaic costing measure is a "lose-lose-lose" proposition! It's not fair to the customer, it's not fair to the insurer and it's definitely not fair to your bottom line.

Thankfully, today we have a much more sophisticated and accurate method of determining these costs in the variety of material calculators available that allow us to identify those line-item materials that are specific to each repair.

And these material calculators could not have been developed at a better time, since the vast amount of job-specific materials are increasing at an incredible rate.

Material calculators provide a detailed list of what was used to repair the vehicle, which leads to a more accurate invoice. This accuracy improves the customer perception of your work while ultimately helping to reduce waste in the shop.

So if this technology tool is so great, then why isn't every shop

A NEW YEAR'S RESOLUTION

Challenging the industry as we delve into a new year

in the universe using it? That question is so intriguing, I'm going to follow it up with a few more thought-provoking queries that hopefully challenge your thinking for the coming year:

Can we continue to operate as a viable industry knowing that we're overcharging and/or undercharging for P&M, hoping it will somehow work out over the long haul?

Don't our customers deserve to be accurately invoiced for materials being applied to their vehicle?

Aren't loss costs supposed to be directly associated with that specific vehicle's loss?

Is there a mistrust or suspicion of the validity of material calculators that I'm not aware of? Or is it just that we really don't understand them (or just don't believe them)?

How in the world can we, as an industry, still be so committed to the status quo and archaic methodology when technology enables us to identify, calculate and invoice the material specific to the job?

Materials are specific and unique to each and every job. As professionals, we must invoice with the intention of accuracy and integrity. My "Type-A" personality, for one, can't comprehend it any other way.

In this new year we need to resolve to find the collective courage to seek out better ways to do our job, serve our customers and create change. If you have any ideas on the answers to the questions I've posed above, or want to boast about how P&M material calculators have affected the way you do business, feel free to let me know. ☺

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