

COVER STORY



WILL SCANNING SAVE THE COLLISION REPAIR INDUSTRY FROM LIABILITY?

BY LARRY MONTANEZ III, CDA
AND
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Technology demands
a more thorough repair.



WHY SCANNING MATTERS

Every day, we see posts on multiple collision-related social media sites regarding vehicle electronics. We regularly receive phone calls from technicians about electronic issues on vehicles they're attempting to repair. The places we rarely hear from are the European OEM-Certified Collision Repair Facilities (CCRFs). Why is that? Well, this article offers a possible explanation.

A large percentage of American repair facilities are under-tooled, under-equipped and under-trained to repair modern vehicles, and the extensive use of electronically controlled systems adds to this issue. Many shops and technicians assume that if there is no Malfunction Indicator Lamp (MIL) illuminated, then everything is working properly (just like they assume that there is no structural damage if they don't see it.) This is not only incorrect, but extremely dangerous and potentially costly. Most of the European OEM CCRFs are not only trained, but required by their CCRF program contracts to pre-scan the collision-damaged vehicles in their shop. Pre-scanning and pre-measuring a vehicle are the two most important procedures to perform prior to writing a damage report (estimate).

Why do you need to perform a pre-scan on collision-damaged vehicles? Today's automobiles are equipped with multiple computer-controlled systems that oversee a variety of safety systems, which require maintenance and updates as part of their normal operation. But in the event of a collision (and after repairs and/or replacement of components), the electrical systems will require resetting or reinitializing to ensure the system is operating correctly. The Electronic Control Modules (ECMs) operate vehicle systems including adaptive cruise control (ACC), lane assist, vehicle stability, collision avoidance, blind

spot detection, back-up cameras, front and rear radar, DISTRONIC cruise control, discriminatory SRS, PRE-SAFE, heads-up display and more.

What is unknown to most technicians and insurance companies is that many vehicles hold diagnostic trouble codes (DTC) or fault codes and history codes. In many cases, they may or may not illuminate an MIL. Facilities must have the equipment and ability to read these codes to determine if they are a result of the collision event or an operational issue prior to the accident. Once the repairs are completed, a post-scan is required to ensure that all codes have been identified and cleared and/or other system problems have been identified. Additionally, systems often need a re-learn or initializing after repairs are completed. If post-scans are not performed, collision repair facilities may be unaware of any symptoms or inoperative functions. Symptoms will sometimes be noticed by the vehicle owner while operating the automobile, and/or warning lights will illuminate soon after delivery. This will cause the customer to return to the body shop. Sometimes the vehicle owner will bring his or her vehicle to a dealer for warranty repairs, thinking the issue is not accident-related. But as we all know, the dealer eventually finds out the vehicle was in an accident and then claims it is related to that collision event. Oftentimes, the shop gets involved and says it can't be related to the incident, and an argument ensues. The issue with a particular system is very often related to the collision event, but many shops do not know how the system operates, and this leads to confusion.

Here are examples of problems or inoperative systems that do not illuminate an MIL/warning light:

- Auto/express power windows
- Auto-adjust mirror functions/curb parking
- Satellite radio reception/updates
- Passive entry/auto approach entry
- Hands-free calling/bluetooth/voice command
- Puddle lamps/approach warning
- Auto A/C blower functions/ambient temperature climate control
- Passenger presence disable/occupant weight system

Let's look at a few examples of pre-scanning, post-scanning and relearning. Many vehicles require fuel management systems to be reinitialized or reprogrammed after certain sensors or modules are disconnected or replaced.

Toyota, Lexus and Scion vehicles: After any collision event, these vehicles require a reweighing of the passenger seat Occupant Weight System (OWS) for the passenger airbag discriminatory system. Many other OEMs also require this procedure. A

pre-scan is required to determine what other systems are inoperative after a collision event. These include (but are not limited to) seat belt buckles, pretensioners and the airbag control module. Many OEMs have procedures for "Inspections Required after a Collision" that explain the scanning and testing that should be performed (such as static testing of the seat belts and checking the system for fault codes and the deployed airbag module mounting areas for misalignment, to name a few.)

BMW vehicles equipped with turning headlamps require a scan and relearn to align the turning lamps with the GPS and steering angle sensors after removal, installation or replacement. Additionally, the electric power steering in many BMW models requires resetting once it is disconnected and/or replaced.

Almost every OEM with a guided back-up camera requires it to be aligned with the steering angle sensor after the decklid, tailgate or hatch is removed and reinstalled or replaced. **Audi, Porsche** and **VW** vehicles require the parking sensors to be aligned after just removing and reinstalling the bumper fascia. Certain Audi and Porsche vehicles have radar sensors in the fascia that require a specific aim in procedures after the fascia have been removed and reinstalled. Additionally, Audi A8 Ls require a specific Audi computer program to set the ride height, headlamp aiming, distance control and pre-crash system while the wheel alignment is being performed. Certain equipped **Mercedes-Benz** vehicles require three or four systems reinitialized after replacement of windshield glass. These systems can be lane departure, PRE-SAFE and rain sensors.

These are just a few examples. Please remember that checking with OEM repair procedures will allow the damage assessors to know what needs to be done. Pre-scanning will also ensure that any inoperative systems are noted and addressed. Technicians and insurance adjusters must understand that there will be no so-called "idiot light," "malfunction lamp" or "warning lamp" illuminated. If certain systems (such as pre-crash/accident avoidance, distance cruise control and lane departure, to name a few) are not re-aimed, reinitialized or reset, a collision event could occur due to the vehicle not identifying another vehicle or object in its path. This could be extremely dangerous.

In the March 2013 issue of *Hammer & Dolly*, we wrote about the importance of sending the vehicle to the dealer after repairs for these types of systems. We all must remember that vehicles starting in the \$18,000 range have some of these systems. We can no longer assume and say, "I don't see any warning lights; it must be all good." This way of thinking *must* stop; it is negligent to use old technology and thoughts on new advanced systems.

If you were walking around your house and your laptop fell out of your hands, you would be out of your mind worrying that the

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VEHICLE SCANNING: A WMABA PERSPECTIVE

BY JOEL GAUSTEN

As detailed in this month's cover story by Larry Montanez, pre- and post-repair scanning is quickly becoming an absolute necessity in every legitimate collision repair facility. Not surprisingly, many within the WMABA community have worked to adapt their businesses to this new reality.

"With the technological advancements in the vehicles that we're repairing today, there are systems that weren't there 10 years ago," offers Mark Schaech, Jr. of Mark's Body Shop in Baltimore. "We're dealing with different makes and models with different systems. Part of the reason our facility wants to scan vehicles is to ensure that there are no DTCs in the system that would cause it to not work properly. For example, if there's a DTC in lane assist, distance sensors and those kinds of items, it doesn't always show up on the instrument cluster. There's no way for us to be certain that we've brought the car back to safe, drivable pre-loss condition without hooking a scan tool to it."

As Schaech has learned, scanning and recalibration are vital to even the most minor jobs, as something as innocuous as a displaced microphone for a hands-free system can be picked up by the scan. These days, there's no such thing as relying solely on the dashboard to tell you if there's an issue to address.

"Honda, Acura, Toyota and Lexus are perfect examples of cars that require a recalibration after an accident that do not necessarily provide a trouble code in the instrument panel," he says. "With the passenger seat occupancy sensor, those manufacturers say that they want either the output checked or a recalibration on the weight so that it detects whether a child or an adult is sitting in the seat and whether to deploy an airbag. The weight sensitivity in the seat isn't going to trip a dash light; it's something that we have to check at the end of the repair."

While it is clear that scans need to be performed, does that automatically mean that insurers have caught up to speed with

WMABA's Mark Schaech, Jr. is among the auto body experts who have embraced scanning as a regular part of their repair work.



actually paying for this work? If history has taught us anything, it is that carriers are notoriously slow to adequately pay for certain required procedures. **Hammer & Dolly** has received reports of one insurer that flatly refuses to pay for scanning unless it is to address a warning light on the dash, while another will only pay for it if it is recommended in writing by the manufacturer. Schaech insists on performing scans regardless of a particular insurer's position on the matter.

"In my facility, I offer it to the customer when his or her insurer refuses to pay for it," he explains. "I let the customer know our position and what the manufacturer says about the vehicle. Sometimes, we'll recommend a scan but we won't have a position statement from the manufacturer. We won't be able to show something in print that says, 'This car needs to be scanned,' but we'll still recommend it. We feel that it's not only a way of checking our work, but also making sure that all the systems in the vehicle are working properly. When an insurer says, 'Yeah, I know Honda says that, but we think it's diagnostic in nature, so we don't pay for that,' we call Mr. Jones and say, 'Here's what Honda has to say about post-accident recalibration and scans to your vehicle. This is how much we charge to do this procedure. Would you be interested in doing this?' If the customer doesn't do it, and there is something in writing

from the manufacturer, we require that customer to sign a hold-harmless agreement. As an OEM-certified shop, I feel even more responsible to make sure that the manufacturer's guidelines are followed."

Schaech's philosophy on scanning is shared by industry consultant and speaker Mike Anderson (Collision Advice), who used his March 18 presentation at the NORTH-EAST® Automotive Services Show (see page 29) to stress the importance of using a scan tool to uncover hidden problems and dangers before and after a repair.

"I personally scanned over 1,000 vehicles myself last year with factory scan tools," he added. "[The vehicles] had no dash warning lights on them, but all had issues relating to the accident. I will challenge anybody that I can scan a vehicle that you have ready for delivery, and 98 percent of the time, I will tell you that I will find a fault code." **H&D**

Executive Director's Thoughts

Pre- and post-repair scanning is necessary. Knowing the codes (if any) before the vehicle has been repaired is one way of capturing the entirety of the repair plan. After the job, knowing you are handing back the keys to your customer with those issues addressed is peace of mind for them and you. - Jordan Hendler

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laptop may not work, right? You would turn it on and try a few programs out (or restart it) and do a scan, right? If a vehicle contains 25-50 computers and modules and it is involved in a collision event, wouldn't you think the bare minimum you should do is check the system? There are general scan tools from OTC and Snap-On that will allow some programming and resetting. There is even the all-new AsTech2, which works as an interface to AsTech to read vehicle systems with OEM computers and software programs over the Internet. There are multiple choices for collision repair professionals. The one choice they *don't* have is to neglect making the investment.

A damage assessor who does not pre-measure and pre-scan a vehicle (and check with the OEM repair procedures) is not only negligent, but is also putting the consumer and the general motoring public at risk. **H&D**



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Larry Montanez III, CDA is co-owner of P&L Consultants with Peter Pratti, Jr. P&L Consultants works with collision repair shops on estimating, production and proper repair procedures. P&L conducts repair workshops on MIG & resistance welding, measuring for estimating and advanced estimating skills. P&L also conducts investigations for insurers and repair shops for improper repairs, collision repairability and estimating issues. P&L can be reached by contacting Larry at (718) 891-4018 (office), (917) 860-3588 (cell), (718) 646-2733 (fax) or via email at larrygoju@aol.com. The P&L website is www.PnLEstimology.com.

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