

KNOWING THE Procedures

OEM PROCEDURES CAN CHANGE AT ANY TIME, SO IT IS VITAL TO CHECK EVERY ONE BEFORE COMPLETING A REPAIR.

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lease read all of the following procedures before doing anything; you are allowed 10 minutes to complete this task:

- 1. Find a pen and a piece of paper.
- 2. Write your name at the top of the paper.
- 3. Write the numbers 1 to 5, one per line.
- 4. Draw five small circles beside #1.
- 5. Put an "X" in the second and fourth circles next to #1.
- 6. Write the word 'encyclopedia' beside #3.
- 7. On the back of the paper multiply 7 x 9.
- 8. Put an X in the lower right-hand corner of the paper.
- 9. Draw a circle around the X you just made.
- 10. Underline your name.
- 11. Say your name out loud.
- 12. Draw a circle around #4.
- 13. Count the number of words in this sentence and write the answer beside #2 on your paper.
- 14. Put a square around #1 and #5.
- 15. Punch 3 small holes anywhere in the paper.
- 16. Write your first name beside #4.
- 17. Write today's date beside #5 on your paper.
- 18. Circle every letter 'E' you have written.
- 19. Stand up and say 'I HAVE FINISHED FIRST' if you were first, or else say 'I HAVE FINISHED', then sit down.
- 20. Now that you've read all of the instructions, skip all of them except the first two. If you have followed the procedures correctly, you should only have your name on the paper!

Now how many of you actually performed some, if not all of the above procedures? Well guess what, you failed. This epidemic of not following instructions or just hearing and not listening is not only plaguing our industry, but the entire population. The advancement in vehicle construction and electronically controlled systems have grown expeditiously, and it will keep changing. Not following the OEM procedures could lead to a



RIVET and bolt bond procedure.

system failure while being operated, failure of a component in a collision event or under the rigors of the terrain and/or failure of the deployment of the airbags during a collision event. Just because you don't know about a procedure, the insurer didn't pay you for the procedure or you do not have the skill set to perform the procedure, that does not protect you from being liable. The shop is always the professional and the one who has an obligation to the consumer to ensure safe and proper repairs.

About 12 years ago, the European OEMs (Mercedes-Benz, Audi, Jaguar, BMW) started and perfected the OEM Certified Collision Repair Facility (CCRF) programs. Since the inception of their programs, they have required their program facilities to check with the repair procedures for each and every repair. This is required even if you do the same procedure on exemplar vehicles one after the other. Their reasoning is sometimes the information is changed due to component availability, research, cost or an update. And how do you know the information changed if you don't check? In 2007, BMW did a massive change to all their procedures and required rivet bonding on most of the outer-panel replacement flanges. Additionally, the European OEMs have always required their facilities to perform pre- and post-system scans to ensure the vehicle systems are operating properly.

Many Asian and American OEMs recently have produced position statements that are now following the lead of the European OEMs on requirements to pre-scan vehicles for faults prior to beginning repairs (pre) and after repairs are complete (post) to ensure systems are operating correctly. Estimators (damage assessors) and insurance adjusters need to realize that not every system malfunction or even an inoperable system will set a Malfunction Indicator Lamp (MIL). This is one of the major misconceptions in the industry, and it is not only outdated but dangerous and negligent. Scanning the vehicle checks the control modules for any Diagnostic Trouble Codes (DTCs). Many times systems will still operate, but calibration or alignment may be off. For example, back-up cameras with directional guide lines will require re-initializing to the steering angle sensor after the camera has been moved or replaced. An example of this is when the camera is located in the deck lid or hatch and that component was removed during repairs or when the component is replaced. Not ensuring the camera is aligned to the steering angle sensor may cause the operator to impact a vehicle or stationary object due to the back-up camera being misaligned.

Another example is lane departure or parking sensors. Some manufacturers require a special procedure of the lane departure and/or parking sensors if the mirror assemblies or bumper fasciae are removed and reinstalled. A few OEMs do not require the park sensors to be aligned. This is why it is important to read the OEM procedures. Speaking of parking sensors, many OEMs have statements about how many times a sensor can be painted before it must be



2015 TOYOTA CAMRY sectioning — center body pillar.

replaced. This is due to the mil thickness of the finish material that would be too thick for the sensor to operate.

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nent, such as the quarter panel on a late-model BMW. During the assembly process, the outer panels on the body such as the quarter panel - are weld bonded at the factory. Conversely, in the repair process, BMW requires rivet bonding on all flanges and at the sectioning locations, bonded joints are required in the procedures. Mercedes-Benz requires Squeeze Type Resistance Spot Welds (STRSW) on all



MERCEDES-BENZ quarter panel replacement.

flanges and where the arms cannot reach, they require rivets (such as where the quarter meets the rocker panel), because you cannot perform single-sided resistance welds. Many OEMs, such as VW and Honda, are now requiring siliconebronze/MIG brazing on some sectioning locations. The information for what type of attachment process to use is in the OEM repair procedures. Not only do technicians need to





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know this information, but also damage assessors and insurance adjusters. Many times the cost of structural adhesives, foams, rivets and sound-deadening pads can add up to anywhere from \$300 to \$1,500, and that doesn't include the cost of the OEM panel. Also keep in mind that although no OEM permits the use of counterfeit parts and/or used parts, the attachment methods used in the construction of these newer vehicles makes it al-

most impossible to remove the panel without causing significant damage to the flanges and/or panel.

Where to find the information? First of all, every facility must have online access to search for the information. I-CAR has links to all the OEM sites at ABRN.com/ICAROEMinfo. Some are free, but most are subscription-based, and I-CAR also has a "Submit a Question" link at ABRN.com/AskICAR. ALLDATA Collision information, which comes direct from the OEM, is another great resource for repair information.

So what is next? Set up an SOP for vehicle damage analysis and have it include a review of the OEM procedures. The technician should print the procedures and a PDF electronic file should be put in the customer folder by a damage assessor. All involved in the repair process — especially at the beginning - must adhere to the SOPs to ensure not only safe and proper repairs, but also that they are completed in a timely fashion with redundant operations eliminated. Additionally, shops will either need to purchase a scan tool that can read codes and faults, and then after repairs are complete send the vehicle to the dealer for resets or relearning, or the shop will have to purchase a scanner capable of not only scanning, but relearning systems. It can be expensive to own the priority systems for each OEM, but some scan tools can read and reset multiple OEM systems. Shop managers, damage assessors and technicians will need to make scanning, along with looking up procedures, into an SOP and calculate what needs to be charged for the operations. Insurers and adjusters will need to understand why these operations are necessary on every repair, for every vehicle, every time. ■



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