Dedicated to Promoting Quality Collision Repair of Toyota, Lexus and Scion Vehicles

Spring 2015

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COLLISION PROS

Restoring Sound-Deadening Material

How to Replicate the Original Appearance for Customers

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Calibration Can Help Save a Life Toyota Requirements for Occupant Classification Systems

Two Easy Steps to Enroll in Training Discover the New CR&R Training Website



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Joseph DiDonato Collision Training Administrator

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"We know that many collision centers feel just as passionate about our cars and our customers as we do. That's why we strive to work hand in hand with body shops to provide them with the support they need to deliver safe, high-quality repairs and superior customer satisfaction."

– Kathy Capozza

Providing the Support You Need

AT TOYOTA, OUR PASSION FOR THE VEHICLES we make doesn't end when a car drives off the assembly line or out of the dealer lot. We believe in our vehicles and we believe that each customer deserves an excellent experience, even in the event that they have repairs carried out on their vehicles.

We know that many collision centers feel just as passionate about our cars and our customers as we do. That's why we strive to work hand in hand with body shops to provide them with the support they need to deliver safe, highquality repairs and superior customer satisfaction.

In this issue, we detail many of the resources Toyota makes available to collision centers. You can read about new online courses, available soon, which provide you with information about paint, welding, body repair techniques and more. You can learn about all of these subjects in a convenient, self-paced online format.

This issue's Best Practices Showcase details a Toyota-pioneered method for recreating the original factory appearance when replacing sound-deadening material. The article on occupant classification system calibration gives you Toyota's recommended guidelines for working with this important safetyrelated technology.

Collision centers are valued partners. Whether in the form of training, best practices or repair information, Toyota aims to provide the resources you need to get the job done right.

Kathy Capozza

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Restoring Sound-Deadening Material

TOYOTA, LEXUS AND SCION VEHICLES FEATURE FACTORY-INSTALLED SOUND-DEADENING MATERIAL in the floor pan area. This material helps suppress road noise that may enter the cabin and makes travel more comfortable for passengers.

A LONGTIME CHALLENGE

Keep various sized

material.

threaded rods avail-

able so you can closely

match the texture of the

original sound-proofing

Since factory sound-proofing material is installed by a robot during the manufacturing process, it can be challenging to replicate the original factory appearance for customers.

"Body shops have historically encountered considerable difficulty when replacing this material because they are unable to replicate the look of the original material," says Joseph DiDonato, Collision Training Administrator, Technical & Body Training Department, Toyota Motor Sales, U.S.A., Inc. "I have created a simple process that replicates the original look of the sound-deadening material using the replacement material."

Replicating the look and feel of the original material allows collision centers to live up to the commitment of returning each vehicle to the original factory specifications.

HOW TO

- Step 1: Use asphalt sheeting.
- Step 2: Take precise measurements of the sound-proofing material you are replacing before you remove the original material.
- Step 3: Using your measurements, cut a replacement strip from the asphalt sheeting.
- Step 4: Warm up the UV material with an infrared heat lamp or other heat source. This will make the material pliable.
- Step 5: Once the material is malleable, use a threaded rod from the hardware store to create the right texture by rolling the rod back and forth over the sheeting.
- Step 6: Immediately cool the strip by spraying it with water or submerging it in water. This ensures the material will retain its new texture.
- Step 7: Paint the material to match the original coloring.

For additional reference material relating to sound-absorbing materials, see CRIB #159— Corrosion Prevention and Sound-Absorbing Measures.



3M asphalt sheeting, part number 08840, was used for this demonstration.

CALIBRATION Can Help Save a Life

Adhere to Toyota Requirements for Calibrating and Testing Occupant Classification Systems Frontal airbags have helped to save lives and prevent many injuries; however, special care must be taken when children are sitting in the front seat. To help protect these passengers, Toyota vehicles are equipped with an Occupant Classification System (OCS) that detects the weight of the occupant in the passenger seat and disables the passenger-side front airbags if a child is seated there. Because the accuracy of the OCS can have significant consequences, Toyota has requirements for OCS calibration after a collision.

THE OCS IS COMPOSED OF:

- An Occupant Detection ECU that judges whether the front passenger seat is occupied based on signals from sensors and from the passenger seat belt buckle switch.
- Occupant Detection Sensors that send signals to the ECU in accordance with the weight of the occupant.
- A front passenger seat belt buckle switch that detects whether or not the front passenger seat belt is fastened.
- An SRS warning light that alerts the driver of a malfunction in the airbag system.
- Airbag ON/OFF indicator light that informs the driver whether the airbag and outer belt assembly are active. In the event of a malfunction, both the Airbag OFF indicator light and the SRS warning light come on.

WHY CALIBRATE

"Just as a bathroom scale must be properly calibrated to show your accurate weight, OCS sensors require precise zero point calibration to correctly determine the weight of the passenger," says Eric Mendoza, Collision Repair & Refinish Training Assistant Manager, Toyota Motor Sales, U.S.A., Inc. "Toyota's position on zero point calibration is stated in the Toyota Repair Manual. OCS calibration is an essential part of returning a vehicle to its pre-accident condition."

Toyota requires a zero point OCS calibration and sensitivity check when any of the following occurs:

- The occupant detection ECU is replaced.
- Accessories (seatback tray and seat cover, etc.) are installed.
- The front passenger seat is removed from the vehicle.
- One of the bolts used to install the front passenger seat is removed.
- The passenger airbag indicator light comes on when the front passenger seat is unoccupied.



• The vehicle is brought to the workshop for repair due to an accident or a collision.

PRECAUTIONS ARE PARAMOUNT

Anything that puts pressure on the seat can throw off the OCS reading. To ensure the accuracy of your calibration, always observe these precautions:

- Make sure that the front passenger seat is unoccupied before performing the operation.
- Park the vehicle on a level surface.
- Remove all objects from the front passenger seat.
- Do not put a heavy load in the front passenger seatback pocket or attach a seatback table to the front passenger seatback.
- Do not put objects under the front passenger seat.
- Keep the front passenger seatback as upright as possible.
- Make sure that child restraint systems installed on the rear seat never come into contact with the front seatback.
- Never kick the front passenger seat or subject it to severe impacts.

GETTING STARTED

To perform the zero point calibration and sensitivity test, you will need a weight and the Toyota Techstream scan tool. Techstream provides immediate access to the detailed, model-specific OCS calibration procedure information.

After you have taken all precautions, position the front passenger seat position as follows:

- Rearmost slide position
- Lowest headrest height
- Upright recline angle

Next, place the weight so that it touches the seatback. Then proceed with the following steps:

- Turn off the ignition switch.
- Connect Techstream to the DLC3 connector.
- Turn the ignition switch to ON and turn the Techstream on.
- Enter the following menus: Body Electrical/Occupant Detection/Utility/Zero Point Calibration and Sensitivity Check.
- Follow the prompts on the Techstream screen to perform the zero point calibration and sensitivity check. You will get readings of "Zero Point Calibration Is Complete" and "Sensitivity Check Is Complete" when the checks are OK.

If the zero point calibration does not complete, refer to the repair manual information for additional assistance or send the vehicle to a qualified service department for diagnosis of the problem.

When you have successfully completed zero point calibration on the Occupant Classification System, you have helped to bring the vehicle back to its original factory specifications. Thanks to Occupant Classification Systems, airbags are safer than ever. By adhering to Toyota requirements, you play a crucial role in ensuring that they work effectively—and in doing so, you are helping to protect Toyota passengers from harm.

Strengthening Our Partnership

Get the Information Now!

- techinfo.toyota.com—find Toyota's Technical Information System (TIS) here
- www.toyotapartsandservice.com —your latest parts and service information
- www.crrtraining.com—sign up for Collision Repair & Refinish training today
- www.autopartsbridge.comeasily order parts online

TOYOTA'S COMMITMENT—HELPING PROVIDE HIGH-QUALITY AND SAFE REPAIRS FOR EVERY VEHICLE

TOYOTA IS WELL AWARE OF THE CHALLENGES COLLISION REPAIR CENTERS ARE FACED WITH EVERY DAY AND IS COMMITTED TO LAYING THE FRAMEWORK FOR SHOPS TO BE ABLE TO DELIVER A CONSISTENT, HIGH-QUALITY AND SAFE REPAIR FOR EVERY VEHICLE. Toyota is also aware that new technologies, new materials and constantly evolving vehicle manufacturing processes make this even more difficult. As a result, Toyota continues to close the gap between collision technicians and OEM training materials and technical requirements. The company is committed to supporting collision centers and ultimately helping you to deliver the best repairs for your customers. Here's how we do that.

CONSISTENCY

Toyota's commitment to high-quality safe repairs begins during the vehicle manufacturing process. Each vehicle is manufactured with consistency in mind. For example, high-strength steel is typically located in similar places on each vehicle. That way, technicians know that they can look to places such as frame rails, door intrusion beams, fenders, hoods and door pillars to find this particular material. Consistency like this makes it easier for technicians to learn and understand how to repair Toyota vehicles.

In addition, Toyota recommendations are consistent across vehicles. As an example, Toyota never recommends using a sleeve for welding but instead recommends the use of panel bonding adhesives in combination with welds in specific locations. When guidelines are consistent, it's easier for shops to accurately and efficiently perform collision repair work.

INFORMATION

The commitment to helping ensure high-quality and safe repairs extends to making sure that collision centers have the information they need to get the job done right. Toyota makes available all vehicle-specific repair information and all mechanical repair information, as well as Collision Repair Information Bulletins (CRIBs). This information can be accessed with a subscription to the Technical Information System (TIS), which can be found at techinfo.toyota.com. You can also find tips and additional information at www.toyotapartsandservice.com. The latest *Collision Pros*, plus a selection of CRIBs and Toyota Service Bulletins (TSBs), can be found at www.crrtraining.com.

Finally, Toyota provides direct-from-the-manufacturer training that teaches technicians how to restore vehicles back to the original manufacturer specifications. Extensive instruction is offered both online and hands-on in a classroom setting at three training centers across the United States. Training centers are located in West Caldwell, New Jersey; Torrance, California; and Jacksonville, Florida.

PARTS CATALOGUE

Toyota was one of the first automakers in the United States to make the full dealer parts catalog available to the collision repair industry. This helps collision centers fully understand the scope of a repair by letting them see all of the parts that will be needed to accomplish the job. This can help estimators write a more accurate estimate and help shops allocate time and resources more efficiently.

With an up-to-date parts catalogue, Auto PartsBridge is the most comprehensive online parts ordering system—it takes the guesswork out of parts ordering. It is the leader in the industry and can help you with efficiency and profit margins when using Genuine Toyota Parts.

Auto PartsBridge features include:

- Ability to place VIN-specific orders—get the right parts the first time and reduce cycle time
- Direct integration to estimating systems—seamlessly transfer orders and quotes to dealers
- Single click online ordering—available around the clock
- Competitive quotes from dealers—get the best fit part at the best price

The system also includes color photos and fitment instructions for frequently searched parts and tools that help technicians find the right part for a particular application. Auto PartsBridge is offered at no cost to collision centers working with dealerships that actively use Auto PartsBridge. Contact your local Toyota dealership for more information.

COMING SOON

Toyota is constantly striving to bridge the gap and provide the information collision centers need to deliver the best repairs possible to their customers. The Collision Repair & Refinish website is being enhanced to add a host of exciting new features. Coming soon, users can expect a blog and a new Facebook page. Toyota is committed to being an ongoing partner and to adding valuable, new resources whenever possible.

Go to www.crrtraining.com for the latest Collision Repair & Refinish training news and course openings

Two Easy Steps to Enroll in Training

ON THE NEW COLLISION REPAIR &

GET A SPIN

REFINISH TRAINING WEBSITE you can browse course selections and, in a matter of minutes, be registered to take a Toyota instructor-led training course. The website incorporates an online calendar and registration function that make it fast and easy to enroll in training. Want to know how to register online? We'll talk you through the process.

GET STARTED

REGISTER

Once you've decided which course you'd like to enroll in, click the registration tab on the site. You'll be prompted to enter your Secure Personal Identification Number (SPIN) prior to registering (See: Get a SPIN). Once you've entered your SPIN, you'll be taken to a calendar view of the courses.

- 1. Click the course and date you are interested in on the calendar. When the dialog box opens, select More.
- 2. On the upper right hand corner, select the link under "please click here to register," and then enter your email when prompted.
- 3. Fill out all required information and then click Continue. Be sure to use the email address at which you would like to receive your confirmation. Please note, all registrants must have a valid SPIN.
- Confirm that all information is correct and that you are registering for the right class, on the right day, at the right training center. Take note of whether the class you have registered for is a one-day or two-day course.
 Submit your registration
- 5. Submit your registration.



GET A SPIN

In order to be eligible to take instructor-led and online training, you must have a valid SPIN. The SPIN is used to keep track of your training accomplishments and certification requirements. To get a SPIN, first fill out the SPIN registration form found on www.crrtraining.com. Independent shops must be sponsored by a local Toyota, Lexus or Scion dealership. Choose a dealership in your area and contact the wholesale parts manager, or contact a dealership that you already have a relationship with.

Employees who work at a dealership-owned collision center are advised to contact their body shop managers to be issued a SPIN.

KNOW BEFORE YOU GO

Before enrolling in instructor-led training, be sure to take all necessary prerequisites. You can learn more about the prerequisites required for all courses by viewing the Course Map on www.crrtraining.com. Completion of all pre-work courses ensures that you're prepared for the instructor-led training.

Payment for all Collision Repair & Refinish courses is currently handled through billing the sponsoring dealership for each attendee. Independent shops should work out a method of reimbursement with their sponsoring dealership.

You are eligible to attend Collision Repair & Refinish training if:

- You are a collision repair professional who works for a Toyota, Lexus or Scion owned collision repair facility.
- You are an independent affiliate collision repair professional working for a sponsored referral shop for a Toyota, Lexus or Scion dealer.
- You are an independent affiliate collision repair professional working for a shop that is sponsored as a Toyota, Lexus or Scion wholesale parts account.
- You are a professional in an associated collision repair-related industry such as insurance companies, state agencies, educators or tool and equipment manufacturers.

QUICK NAVIGATION

Have questions about navigating the rest of the new www.crrtraining.com? Here are some helpful tips for the rest of the site:

- An at-a-glance overview of the Collision Repair & Refinish courses of study can be found by clicking the CR&R Course of Study.
- Course descriptions and detailed course information is located on the Courses page.
- A list view of upcoming courses can be found under the Calendar tab.
- Information about training locations, certification requirements and SPIN can be found by visiting CR&R Info.
- A resources library, including back issues of *Collision Pros* magazine, can be found under the Tech Info tab.

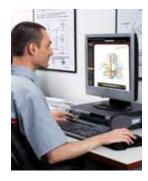
The www.crrtraining.com website is your resource for the latest Collision Repair & Refinish training news and course openings.



New Required Courses

"A great benefit of adding these courses to the requirements is that it gives technicians a chance to deepen their knowledge of welding and safety requirements for hybrid vehicle repair."

– James Meyer, Senior Technical Training Administrator, Toyota Motor Sales, U.S.A., Inc.







Deepen Your Knowledge

The certification requirements for becoming a Toyota Certified Collision Repair Technician and a Toyota Master Collision Repair Technician have changed. New courses have been added to the requirements. The changes were effective as of January 1, 2015, so if you are looking to become certified or have fallen out of compliance with the requirements, sign up for the required courses now.

"What the new requirements mean for Toyota Certified Collision Center (TCCC) technicians is that certified technicians who have not successfully completed the new courses lost their 'certified' status when the courses became a requirement," explains James Meyers, Senior Technical Training Administrator, Toyota Motor Sales, U.S.A., Inc. "A great benefit of adding these courses to the requirements is that it gives technicians a chance to deepen their knowledge of welding and safety requirements for hybrid vehicle repair."

NEW COURSES

The new courses for certified technicians are:

• T300 Welding Techniques for Collision Repair—This course teaches students how to interpret welding specifications, educates them about the types of welds specified, as well as how to tune a welder, perform a quality weld and test weld strength. Students should take prework course *PB300 Welding Techniques for Collision Repair* prior to attending. T601 Hybrid Collision Repair—This course teaches students how to safely work on Toyota and Lexus hybrid vehicles. Students should take pre-work course P070 Hybrid General Service prior to attending.

The new courses for master technicians are:

- B503 Steering & Suspension Analysis & Repair—The objective of this course is to teach students how to analyze and repair suspension-related issues. Students should take pre-work course PB503 Steering & Suspension Analysis & Repair prior to attending.
- T602 Advanced Hybrid System for Collision Repair—Helps students understand how to safely perform collision repairs to Toyota and Lexus hybrid vehicles. Students should take pre-work course PB602 Advanced Hybrid System for Collision Repair prior to attending.

The collision repair certification requirements are guidelines for collision centers participating in the Certified Collision Center Program. Certified collision centers must have a minimum number of certified technicians in order to be eligible for certified status.

For more information about certification requirements and to sign up for these courses, visit www.crrtraining.com.



Help Prime Your Success!

NEW ONLINE COURSES FOR COLLISION REPAIR PROFESSIONALS

TOYOTA IS EXCITED TO OFFER NEW ONLINE COLLISION REPAIR & REFINISH TRAINING COURSES THIS JUNE. The new courses touch on subjects from painting to structural repair techniques. Each online course is a prerequisite for the related instructor-led course and provides valuable information that helps you prepare to make the most out of your time at the training center. Here's a sneak peek!

PB200 COLOR MATCHING FOR PAINTERS

This course provides a solid foundation for color-matching. Upon successful completion, paint technicians will be ready to:

- Identify color judgement variables
- Use color reference materials to help make color adjustment decisions
- Identify color adjustments necessary to get a blendable match

Following the completion of this course, students will be ready to take the instructor-led course *T200 Color Matching for Painters*.

PB250 ADVANCED PAINTING TECHNIQUES

Advanced Painting Techniques provides information about factory coatings, application processes and advanced refinish strategies. Students who complete this online training will be ready to:

- Explain the factory paint coating and application process
- Identify materials necessary to replicate factory coatings
- Identify Toyota-approved paint blending processes

Following the successful completion of this course, students will be ready for the instructor-led *T250 Advanced Painting Techniques*.

PB301 NON-STRUCTURAL BODY REPAIR TECHNIQUES

Technicians who are interested in learning about how to perform non-structural body repairs and welded panel replacement should take this online module. Completing this online training will prepare students to:

- Evaluate and describe primary and secondary damage
- Identify precautions to be observed when performing nonstructural repairs to Toyota vehicles
- Identify characteristics of high-strength steel

When this course has been successfully completed, students will be ready for the instructor-led course *T301 Non-Structural Body Repair Techniques*.

PB460 STRUCTURAL BODY REPAIR TECHNIQUES

This course provides collision repair professionals with an advanced understanding of structural body repair. This course teaches technicians to:

- Identify and explain crash energy-absorbing body and frame features
- Perform a systematic structural damage diagnosis
- Identify precautions that apply to performing structural repairs

After completing this class, students are prepared to take the instructor-led *T460 Structural Body Repair Techniques*.

Ready to take one of these courses? Visit www.crrtraining.com today. $\label{eq:courses}$

"Online courses are flexible and allow you to learn at your convenience. They are a great way to increase your knowledge and skills."

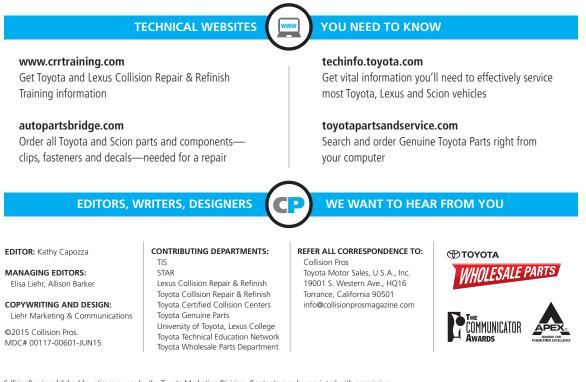
> James Meyer, Senior Technical Training Administrator, Toyota Motor Sales, U.S.A., Inc.

CP The Last Word

Refer to the training calendar at www.crrtraining.com for the latest training schedule.



For a complete training schedule and the latest information on Toyota's Collision Repair & Refinish training, visit www.crrtraining.com.



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