

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

Winter 2017

# Supporting 20 Years of Technical Revolution & Evolution in the Collision Repair Industry



## CP Winter 2017

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## OUR COMMITMENT TO YOU

Toyota has earned its reputation as a leader in the automotive industry by staying in the forefront of parts, technology, safety and training.

Our customers have a right to have their vehicle repaired right the first time and restored to its pre-collision condition. Therefore, we are committed to providing you with ongoing support you need to repair a Toyota vehicle. In order to take the best approach to achieving a proper repair the first time, you should:

- Use Genuine Toyota Parts
- Become Toyota-trained for repair and refinish
- Refer to Toyota-approved procedures and resources

In our ongoing effort to support you with your repairs, please look to *Collision Pros* magazine and the Toyota Collision Repair and Refinish training program and its website, <u>www.CRRTraining.com</u>, for the most up-to-date recommended procedures, information and Toyota technical training.

For a free subscription to an electronic version of *Collision Pros* magazine, email your request to info@collisionprosmagazine.com. Please provide us with your name, email address, and body shop name.

DID YOU KNOW: Even if there are no Malfunction Indicator Lights (MIL) on your customer's dashboard, there may be faults with your customer's vehicle that can only be detected by performing a Health Check.

# How to Perform a "Health Check" Diagnostic Scan Video

TOYOTA HAS CREATED SEVERAL RESOURCES EXPLAINING WHY AND WHEN YOU SHOULD PERFORM A DIAGNOSTIC SCAN, ALSO KNOWN AS A "HEALTH CHECK". As part of their continuous effort to support guality repairs, Toyota created Collision Repair Information Bulletin (CRIB) #191, Scanning for Electrical System Faults, which highlights the need for Health Checks and states Toyota's recommendation that technicians perform them before and after every repair.

#### ALL-NEW TRAINING VIDEO!

Toyota is excited to announce the all-new How to Perform a Health Check Training Video, led by Eric Mendoza, Collision Repair and Refinish Training Assistant Manager, which is live on the Toyota Collision Repair and Refinish website. Find it under the "News" tab at www.CRRTraining.com. In the video, Eric provides you with all that you need to know about how to properly perform a Health Check. The video includes an overview of the hardware that you need, and guides

you step-by-step through the Health Check process using Toyota's Techstream software. Go to www.CRRTraining.com now and learn how to perform a Health Check so that you can incorporate them into your repair facility's practices.

#### WHY PERFORM A HEALTH CHECK?

A Health Check is a function of the Techstream scan tool that checks the vehicle control modules for Diagnostic Trouble Codes (DTCs) and then reports the results back to the technician. Even if there are no Malfunction Indicator Lights (MIL) on your customer's dashboard, there may be faults within your customer's vehicle that

> can only be detected by performing a Health Check. Because of this possibility, and as outlined in CRIB #191, Toyota is asking all repairers to perform a Health Check if a vehicle has sustained damage as a result of a collision that may affect electrical systems.

#### **HEALTH CHECK HISTORY**

For some DTCs, you can even use Techstream software to go back and look at when the DTC was set, revealing whether or not there have been issues in the past. This feature can help you identify the DTCs that were set prior to your customer's collision and isolate the DTCs that were set as a result of the collision. Identifying pre-existing DTCs before you begin your repairs will help you to create an accurate estimate. 🔊

Toyota is asking all repairers to perform a Health Check if a vehicle has sustained damage as a result of a collision that may affect electrical systems."



THIS YEAR MARKS THE 20-YEAR ANNIVERSARY OF COLLISION PROS MAGAZINE, representing Toyota's commitment to the collision repair industry. Since its inaugural issue, *Collision Pros* has played an important role in the dialog between Toyota and collision repair shops. In an era when technological advancement is driving the evolution of the collision industry, this manufacturer-direct publication has excelled in sharing the most current, in-depth and accurate collision repair information with shops and technicians nationwide. In 2013, *Collision Pros* noted that advances in technology, a continued emphasis on safety systems and an increase in specialization would likely characterize the collision repair industry in the future. Let's take a look at the past several years and see just how accurate that prediction was and how *Collision Pros* has helped shops nationwide evolve.



#### **A VITAL CONDUIT**

*Collision Pros* gives shops and technicians a direct line to Toyota, keeping them abreast of the latest information and technology that drive their business. This vital conduit keeps technicians in the know regarding new model cutting edge technologies. It not only provides news of the latest technologies and best practice techniques; it also publishes the latest course curricula and training opportunities available to technicians nationwide.

"Collision Pros plays an important role in the dialog between Toyota and certified and independent shops," says Agustin Diaz, Collision Repair Training Administrator, Toyota Motor Sales, U.S.A., Inc. "The publication does a fantastic job communicating to the collision industry new trends and technologies and, most critical, increases awareness of the importance of training."

There's no doubt that advances in technology are reshaping and changing the collision industry from tools and resources down to even the most basic procedures. Reading *Collision Pros* regularly helps to ensure that you have access to the most current repair information, including ProTips and Collision Repair Information Bulletins (CRIBs), as well as repair best practices that are mindful of new technologies.

"Back in the day, we used to repair the sheet metal, paint it, make it look nice and then off you go!" continued Diaz. "Now, when you work on a repair, there are sensors and relay modules throughout the vehicle. You have to know how the systems work so that you do not impact them during a repair."

*Collision Pros* also helps ensure you get up to speed with Toyota and Lexus new model introductions. With each announcement, the publication reviews the vehicle's new technologies. It's a great heads-up in the event that one of those new models shows up in your shop! You'll have advanced awareness of new systems and any precautions you'll need to take during a repair.



#### **WINTER 2015**

Toyota debuts its new estimating system, Toyota Recommended Repair Procedures (TRRP) at the November 2014 SEMA show, announcing the release of the TRRP app in early 2015 and a Mitchell Estimating software integration later in the year.



#### **FALL 2015**

Pre-Collision Sensors (PCS), Dynamic Radar Cruise Control and Lane Keep Assist sensors and cameras call for calibration as an important step in the vehicle repair process.



FALL 2015 2016 Toyota Mirai provides precision-crafted, state-of-the-art technology, leveraging hydrogen "fuel cell" technology. The magazine provides vital information regarding new models, new technologies and new courses to help every technician to fix-it-right-the-first-time and ensure that every customer's vehicle is returned to its pre-collision condition."

#### **TECH REVOLUTION DRIVES INDUSTRY EVOLUTION**

There's no doubt that advances in technology are driving the evolution of the collision repair industry. In fact, a few innovations in the past several years have had a tremendous impact on collision repair.

"An important technology impacting our industry is the development of new metal alloys, which helps us lighten the weight of vehicle while helping to make it stronger. The new CAFE (Corporate Average Fuel Economy) standards require that passenger vehicles receive 54.5 MPG ratings by 2025," says Diaz. "Lowering the weight of the vehicle can help us reach the fuel efficiency standards. But, these new metal alloys need special care when being worked on—heat can destroy their mechanical properties."

The advent of Ultra High Strength Steel is not the only innovation shaping the industry today. New technologies that add safety, comfort and sophistication to vehicles also require technicians to be more tech-savvy and well trained than ever before. Safety features such as blind spot monitors, Lane Departure Alert (LDA), collision warning systems and even backup cameras mandate additional care and attention in any repair. A simple bumper repair is no longer as simple as that—the technician must be keenly aware of the positioning of monitors and sensors that drive these advanced systems.

Toyota is committed to helping ensure that Toyota owners nationwide are safe and secure in their vehicles, whether a repair is completed at their dealership, a certified shop or an independent. This commitment to customer safety drives our dedication to continuing education, and *Collision Pros* is a critical part of that effort. The magazine provides vital information regarding new models, new technologies and new courses to help every technician to Fix-it-Right-the-First-Time (FRFT) and ensure that every customer's vehicle is returned to its pre-collision condition.

Of course, Toyota Technical Training plays a vital role in keeping technicians ahead of the curve. Through e-learning modules and training center classes, today's Toyota technicians learn more than torch and hammer. "Enhancements to our Toyota Technical Training curriculum include new technology classes, from how to read a repair manual and how to understand the geometry of a unibody car to measuring critical points on the car," added Diaz. "If you are working on the electrical system, you need to understand the calculations involved in measuring voltage and amps. Five years ago, we didn't have LDA, blind spot monitors and collision alert systems. Now our training focuses on these elements to ensure FRFT."

*Collision Pros* continues to maintain pace with the industry, staying on top of each new model, new technology and new technique. The past twenty years have marked significant accelerated change in the collision repair industry. The forecast is for more to come. So, fasten your seat belts and look to *Collision Pros* as a resource as we advance toward the twenty-five year milestone!



#### SPRING 2016

Move over HSS and UHSS — the 2016 Prius and Tacoma utilize Advanced Ultra High Strength Steel (AUHSS), rated as high as 1480 MPa. Awareness of OE repair requirements and referring to Toyota-published CRIB bulletins, found on <u>www.CRRTraining.com</u>, become even more critical! See *Collision Pros*: "Working with Toyota's High Strength Steel and Ultra High Strength Steel," Spring 2016.



#### SPRING 2016

Toyota Quad Coat paint process ensures the quality of paint finishes and color options for which Toyota has earned a solid reputation. See *Collision Pros*: "Quad Coat," Spring 2016.



#### **SUMMER 2016**

Toyota provides invaluable guidance on making more informed repair decisions by focusing on four key strategies to help shops fix a Toyota right the first time. See *Collision Pros*: "Making Better Repair Decisions," Summer 2016. *Collision Pros* plays an important role in the dialog between Toyota and certified and independent shops. The publication does a fantastic job communicating to the collision industry new trends and technologies and, most critical, increases awareness of the importance of training."

—Agustin Diaz Collision Repair Training Administrator Toyota Motor Sales, U.S.A., Inc.

### SUPPORTING 20 YEARS OF **TECHNICAL REVOLUTION AND EVOLUTION** IN THE COLLISION REPAIR INDUSTRY 1998 - 2017

Standard of Safety



#### **SUMMER 2013**

TIS and Techstream offer ready access to model-specific diagnostic and repair information. With just a few clicks on Techstream, technicians have immediate access to the most current information available to assist them in even the most technically complicated repairs.



#### **WINTER 2014**

Toyota introduces Toyota Recommended Repair Procedures (TRRP), a new interactive tool that transforms the way repair plans and estimates are written. TRRP provides complete repair plans that consolidate all Toyota repair procedures, parts and additional information in a single, easy-to-use software solution—an industry first!

#### **FALL 2014**

Toyota launches a new Toyota technical training website, <u>www.CRRTraining.com</u> with online class enrollment, technical support materials and videos. Enhancements to Auto PartsBridge are announced, including training manuals, optimized navigation and advanced technical support.

Ultra High Strength Steel (UHSS) takes the spotlight —as enhancements are made, UHSS requires special handling and special training. As its use becomes integral in more new models, Toyota supports the industry with recommended special tools and detailed guidance on the Toyota Technical Information System (TIS).

# DRIVE YOUR BUSINESS THROUGH TRAINING

#### **BE PREPARED TO LEARN**

Let's say that your shop has just committed to enrolling in Toyota Collision Repair and Refinish (CR&R) Training. To ensure that your team can make the most of all that Toyota CR&R Training has to offer, you'll need to take a look ahead at all the different courses and prepare your schedule ahead of time. Toyota's CR&R Training program offers a wide variety of specialized courses both in the classroom and online, allowing you the opportunity to advance your knowledge about everything Toyota. Making sure that you are proactive in your planning allows you to maximize your learning potential as well as attend the courses that best fit your needs as a collision repair professional. As you dive into this next quarter of CR&R Training programs, be prepared to learn, and know that Toyota's CR&R Training program is here to help you in your quest to stay up-to-date on all of the changing technologies and repair processes related to Toyota, Lexus and Scion vehicles.

#### 460 Structural Body Repair Techniques

This course addresses topics that are essential to correctly performing structural body and frame repairs. Topics include collision force analysis and vehicle design, structural damage classification, dimensioning and damage diagnosis, structural repair welding, structural sectioning and frame repair.

#### 301 Non-Structural Body Repair Techniques

This course covers a wide variety of nonstructural body repair subjects. Topics include: damage descriptions and diagnosis, precautions for specialized body repair tools, metal working and finishing recommendations, welded panel replacement specifications and techniques, and restoration of corrosion protection and sound deadening materials.

#### 503 Steering & Suspension Analysis & Repair

This courses utilizes numerous animated sequences and simulated exercises. Topics include: steering and front suspension types, steering geometry, analyzing steering and suspension damage and misalignment, rear suspension and tracking.

#### PLAN AHEAD

In order to maximize your training and to feel as up-to-date as possible on all of the evolving technology in Toyota, Lexus and Scion vehicles, be sure to look ahead at the schedule for Toyota's CR&R Training courses in West Caldwell, New Jersey, Jacksonville, Florida and Torrance, California, and pick out the courses you wish to attend. By being proactive and planning your training schedule now, you can maximize your exposure to Toyota's CR&R Training courses and instructors and feel confident that you are up to speed with all of Toyota's new technologies and repair processes. The schedule for each branch is located on the back of this publication and posted online at <u>www.CRRTraining.com</u>.

#### A CLOSER LOOK

As you take a closer look below at some of the courses that CR&R Training offers this quarter, be sure to identify which areas you want to learn more about, and then enroll ahead of time to ensure that you are able to attend those specific courses. For more information on courses and to see other courses that are offered by CR&R Training, visit <u>www.CRRTraining.com</u>.

Do you have this vehicle covered? GET TRAINED.



piloted in June 2017, will address the new technology features that are not currently a part of the Collision Repair & Refinish Training curriculum. Some of these technologies are: blind spot monitoring and lane recognition cameras.

COMING SOON! New Technology Course

#### **250** Advanced Painting Techniques

Advanced Painting Techniques reviews Toyota factory paint processes and demonstrates how to duplicate them during the refinish process. Topics include: urethane paint systems, low VOC and waterborne materials, transfer efficiency, blending techniques, preparation and painting of plastic bumper covers and restoring chip-resistant coatings.

Toyota's CR&R Training instructors are here to offer you hands-on experience with repair processes and to answer any and all questions you may have about Toyota, Lexus and Scion vehicles. Start taking advantage of this amazing opportunity now by enrolling in the Collision Repair & Refinish Training Program at <u>www.CRRTraining.com</u>.

# Collision Repair and Refinish Training Courses



THERE ARE SEVERAL WAYS TO QUALIFY FOR CR&R TRAINING COURSES. Whether you are part of a Certified Toyota or Lexus dealership or an independent collision center or you work as a professional making repair decisions in the collision repair industry, you can attend Toyota Collision Repair & Refinish Training. Be sure to read below and find out how you can take advantage of Toyota's CR&R Training courses!

#### **CERTIFIED COLLISION CENTER**

If you are employed by a certified Toyota, Lexus or Scion collision center, you automatically qualify and have required courses that you must attend in order to stay up to date. For a full spectrum of information regarding the courses you must take, go to the CR&R Info tab on <u>www.CRRTraining.com</u> and select Certification to see the requirements of your specific certification program.

#### INDEPENDENT COLLISION CENTER

If you are an independent collision repair professional, then enrolling in CR&R Training courses requires a sponsorship by your local Toyota dealership. You will need to foster a positive relationship with your local Toyota Wholesale Parts Manager, who is the key to sponsoring you for enrollment in CR&R Training courses. Reach out to your local Wholesale Parts Manager to get the conversation started, and take a look at the illustrations on the next page, which offer you a step-by-step guide as to how you can enroll in and attend CR&R Training courses.

#### ADDITIONAL REPAIR PROFESSIONALS

Toyota Collision Repair & Refinish Training courses are also available to professionals in the collision repair industry, such as: insurance companies, repair inspectors, state agencies, educators, tool and equipment manufacturers and the like. To find out more information about how you can attend Toyota CR&R Training courses, contact CR&R Training directly by emailing: crrtraining@toyota.com.



# -On Body Component Repa **PLANNING A**





PROPER REPAIR PLANNING HELPS TO ENSURE THAT YOU ARE AS EFFICIENT AS POSSIBLE WHEN REPAIRING YOUR CUSTOMER'S VEHICLE. By planning weld-on body components ahead of time, you can answer questions before you get started that wouldn't normally arise until later on in the repair process. Some of these questions could be: What type of steel will you be working with? What strength rating does that steel have? Are there repair limitations? Is it repairable at all? Can it be sectioned?

Let's answer these questions as if we are blueprinting a repair for a 2016 Toyota Corolla. Blueprinting is the term for the process of assessing all of the damage to your customer's vehicle before repairs have begun. For our scenario, let's say there is side impact damage to the left front door, the b-pillar and the left rear door.

The doors will need to be removed and disassembled and the b-pillar de-trimmed for a more thorough damage assessment. Is there any damage to the intrusion beams? If so, then the doors will need to be replaced. Is there b-pillar damage to the reinforcement 590 MPa High Strength Steel? It is important to note that there are no approved repair procedures for 590 MPa occupant cabin reinforcements. Even a slight deformation can compromise the strength and integrity of these components in a subsequent collision. Both of these important Toyota collision repair positions are reinforced in Collision Repair Information Bulletin (CRIB) #161 Collision Damage Repair Precautions.

Sectioning specifications may be available for occupant cabin steel rated less than 590 MPa. Some of these reinforcements are laser-welded blanks, which combine higher strength steel with 440 MPa in order to help provide occupant protection in a collision, and a less complicated replacement option. The only way to know these precautions and procedures for sure is to study the vehicle-specific 'Structural Outline' along with the 'Component Replacement' specifications, which provide that type of detail. Bulletins, component replacement specifications, approved welding and sectioning locations and steel strength ratings can all be found in vehicle-specific Collision Damage Repair Manuals on the Toyota Technical Information System (TIS).

In the modern age of vehicle design, proper planning can be the determining factor for a safe and proper collision repair. Make sure you take the time in the planning stage of your repair to ensure that there are no surprises down the road.



## **NEW GENUINE TOYOTA RADIATOR AND CONDENSER PRODUCT LINE**

#### THE PERFORMANCE AND PRECISION OF OEM PARTS AT COMPETITIVE PRICES

YOUR CUSTOMER'S SAFETY, SECURITY AND SATISFACTION IS A PRIORITY IN ANY COLLISION REPAIR. As a collision repair professional, you know that the best way to ensure the highest quality repair is to use Genuine Toyota Parts. Their superior performance, excellent reliability and precise fitment make them the best choice in any repair. And, Toyota wants nothing to stand in the way of your making that choice.

Toyota understands that price competitiveness is critical in today's market. That's why Toyota has worked to engineer a new, lower priced Genuine Toyota Radiator and Condenser product line that is designed to provide the superior performance, reliability and precise fitment you've learned to expect from Genuine Toyota Parts. Engineered to Toyota quality standards, the Genuine Toyota radiators and condensers are designed, tested and approved by Toyota. The new product line provides high quality radiators and condensers at highly competitive prices with price reductions ranging from 50% to 70%!

The new Genuine Toyota Radiator and Condenser product line puts pricing directly in line with aftermarket pricing. Now you can offer the fit, form and function of Genuine Toyota radiators and condensers at an exceptional value. The new product line provides broad vehicle model coverage, including over 20 million Toyota units in operation nationwide. That means using Genuine Toyota Parts will be the easy choice for more Toyota owners.

Genuine Toyota Radiators and Condensers are designed, tested and approved by Toyota, including radiator performance, pressure test and vibration test. In addition to the benefit of exceptional OE fit, form and function at aftermarket prices, the new Genuine Toyota Radiator and Condenser product line provides the unmatched product specification, engineering, production and evaluation knowledge and experience of Toyota Engineering. By offering the highest quality radiators and condensers at affordable prices, Toyota hopes to make it easier for your customers to keep

their Toyota a Toyota. 🖎

INDEPENDENT REPAIR SHOPS To order, contact your local Toyota Dealer Parts Department.

## **CP** The Last Word

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

WWW.CRRTRAINING.COM

TORRANCE, CA

02/14 502 Body Electrical Diagnosis & Repair

02/16 602 Advanced Hybrid Collision Repair

02/21 460 Structural Body Repair Techniques

03/14 200/201 Color Matching For Painters

03/21 602 Advanced Hybrid Collision Repair

03/22 460 Structural Body Repair Techniques 03/28 250 Advanced Painting Techniques

04/04 602 Advanced Hybrid Collision Repair

04/05 460 Structural Body Repair Techniques

03/16 101 Paint Finish Repair

03/30 101 Paint Finish Repair

02/23 503 Steering & Suspension Analysis & Repair

03/07 300 Welding Techniques For Collision Repair

03/08 301 Non-Structural Body Repair Techniques

#### THE TRAINING CALENDAR

WEST CALDWELL, NJ 02/14 250 Advanced Painting Techniques 02/21 460 Structural Body Repair Techniques 03/07 200/201 Color Matching For Painters 03/14 300 Welding Techniques For Collision Repair 03/15 301 Non-Structural Body Repair Techniques 03/21 601 Hybrid Collision Repair 04/04 301 Non-Structural Body Repair Techniques 04/06 460 Structural Body Repair Techniques 04/18 601 Hybrid Collision Repair 04/19 300 Welding Techniques For Collision Repair

#### JACKSONVILLE, FL

02/20 503 Steering & Suspension Analysis & Repair 02/21 602 Advanced Hybrid Collision Repair 02/22 460 Structural Body Repair Techniques 03/06 200/201 Color Matching For Painters 03/08 250 Advanced Painting Techniques 03/20 601 Hybrid Collision Repair 03/21 300 Welding Techniques For Collision Repair 03/22 301 Non-Structural Body Repair Techniques 04/03 503 Steering & Suspension Analysis & Repair 04/04 602 Advanced Hybrid Collision Repair 04/05 460 Structural Body Repair Techniques 04/17 601 Hybrid Collision Repair 04/18 300 Welding Techniques For Collision Repair 04/19 301 Non-Structural Body Repair Techniques







#### 04/11 300 Welding Techniques For Collision Repair 04/12 301 Non-Structural Body Repair Techniques 04/18 602 Advanced Hybrid Collision Repair 04/19 502 Body Electrical Diagnosis & Repair 04/25 460 Structural Body Repair Techniques 04/27 503 Steering & Suspension Analysis & Repair

Can't find what you're looking for? More courses can be found at www.CRRTraining.com

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

#### **TECHNICAL WEBSITES**

#### YOU NEED TO KNOW

#### www.CRRTraining.com

Get Toyota, Lexus and Scion Collision Repair & Refinish Training information

#### opstrax.com

Efficiently order, track and procure Genuine Toyota Parts at competitive prices

#### autopartsbridge.com

Order all Toyota and Scion parts and components-clips, fasteners and decalsneeded for a repair

#### techinfo.toyota.com

Get vital information you'll need to effectively service most Toyota, Lexus and Scion vehicles

toyotapartsandservicehub.com Search and order Genuine Toyota Parts right from your computer

#### WE WANT TO HEAR FROM YOU

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