Working with Toyota’s High Strength Steel and Ultra High Strength Steel

It’s about technique, not equipment.

Quad Coat
Meet the challenge of four-stage Toyota & Lexus colors.

Step into the Toyota Booth (#939) at NACE | CARS
Stay Up to Speed

THIS YEAR, TOYOTA EXPECTS THE ANNUAL NACE | CARS EXPO TO BE ONE OF THE MOST EXCITING EVENTS YET, as it will give attendees the opportunity to see demos, learn about new technologies and techniques and meet other professionals in a highly interactive and dynamic setting. Of course, we at Toyota are setting the bar high at the Toyota Booth (#939) with a model race track, presentations by the experts and a Tacoma cutaway. You won’t want to miss this event and opportunity to have fun and stay up to speed on new technologies.

As practices in the industry change rapidly, it’s key to stay knowledgeable on how things are changing and which techniques and skills you’ll need to learn. As practices in the industry change rapidly, it’s key to stay knowledgeable on how things are changing and which techniques and skills you’ll need to learn.

Kathy Capozza
Wholesale Marketing Administrator Sr.
Toyota Sales and Marketing | Toyota Motor Sales, U.S.A., Inc.
Collision Pros Magazine | info@collisionprosmagazine.com

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– Kathy Capozza

TELL US YOUR IDEAS—email us at info@collisionprosmagazine.com
DID YOU KNOW: UHSS helps manufacturers to achieve fuel efficiency requirements by lowering the weight of a vehicle.

WORKING WITH TOYOTA’S HIGH STRENGTH STEEL AND ULTRA HIGH STRENGTH STEEL

Metallurgists have played a vital role in developing steels that are lighter and equally capable of controlling collision energy forces for occupant protection.

Automobile manufacturing continues to advance when it comes to weight savings. The materials used are lighter and sturdier than ever before. It is common to find UHSS (Ultra High Strength Steel) where previous models used HSS (High Strength Steel). The use of UHSS continues to grow and so do expectations for quality.

For example, the new federal mandate of CAFE (Corporate Average Fuel Economy) standards requires that passenger vehicles achieve 54.5 miles per gallon by 2025. And while manufacturers are exploring powertrain advances, they also know that lowering the weight of the vehicle will help them achieve the fuel efficiency requirement.

Metallurgists have played a vital role in developing steels that are lighter and equally capable of controlling collision energy forces for occupant protection. Toyota has been increasing its use of Ultra High Strength Steel (UHSS) in many models. Now on the 2016 Prius and Tacoma, you will find UHSS rated as high as 1480 MPa also known in the industry as Advanced Ultra High Strength Steel (AUHSS).

Continued on page 4.
For the 2016 Tacoma, the cabin is constructed of 440 MPa, 590 MPa, 980 MPa and 1480 MPa* steel (*Toyota’s first on this vehicle). The strength of the cabin reinforcements has tripled when compared to previous models. As you can imagine, the use of UHSS also requires special attention to repair and welding methods. When UHSS structural properties are lessened by deformation from a collision or improper sectioning and welding, the UHSS can no longer perform as it was designed, which could affect occupant safety in a subsequent collision.

This is why Toyota published CRIB (Collision Repair Information Bulletin) #175 titled: HSS & UHSS Cabin Reinforcement Repair & Replacement, which you can find at www.crrtraining.com. This bulletin addresses the safety concerns and standards associated with repair decisions that accompany damage to HSS and UHSS cabin reinforcements. Model-specific Collision Damage Repair Manuals provide the location and strength ratings for HSS and UHSS in the Structural Outline section.

Once a reinforcement is deformed by an impact the integrity of the steel is compromised and would be made worse if it were to be straightened by any repair method. This is why damaged HSS and UHSS occupant cabin reinforcements must be replaced with only Genuine New OE Service Parts. Gone are the days of reducing repair cost by repairing instead of replacing components that contribute to occupant safety.

Now more than ever, all stakeholders involved in making vehicle repair decisions need to be aware of OE repair requirements and specifications. Toyota publishes model-specific Collision Damage Repair Manuals and CRIBs that are available to all collision repair professionals through TIS (Toyota’s Technical Information System) at www.techinfo.toyota.com.

To further awareness of this and many other important collision repair topics, Toyota’s Collision Repair & Refinish Team of expert trainers offer Web-Based and Instructor-Led Training to all collision repair professionals. Visit www.crrtraining.com to learn how to sign up.

2015 Tacoma

2016 Tacoma

OTHER WAYS TO GET INFORMATION. Visit our trainers this year at NACE | CARS Expo, booth (#939)—August 9-13.
GET TOYOTA COLLISION REPAIR AND REFINISH INFORMATION FROM OUR EXPERT TRAINERS. TOYOTA’S EXPERT COLLISION TRAINERS WILL BE ON HAND TO SHOWCASE WHAT’S NEW ON THE 2016 TACOMA AND TO ANSWER YOUR QUESTIONS. They’ll also give you insider tips that can make your next repair easier and which adhere to Toyota’s exacting standards so that quality is never an issue. Whether you have questions regarding painting, structural repairs or welding, their knowledge is available to you. So take the time to stop by our booth (#939) and meet the team!

HERE’S A SNEAK PEEK!

For 2016, Toyota now uses 1480 MPa Ultra High Strength Steel (also known as Advanced Ultra High Strength Steel) in its cabin structures. Toyota is using the steel in the new Tacoma, Mirai and Prius models. The use of this special 1480 MPa steel not only strengthens the cabin’s structure, but also lowers the vehicle’s weight to help improve fuel economy. As with most improvements, you need to know that there are certain precautions you must take when making repairs.

On display will be a 2016 Toyota Tacoma cutaway that will let you see first-hand the lengths engineers took when building this sturdy and highly capable truck. The cabin is constructed of four different steels and there are special techniques that need to be used when repairing them. Joe DiDonato will be giving presentations on the cutaway and discussing how to properly repair the structure.

Meet the Team!

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

Joe DiDonato
Senior Collision Training Administrator,
Toyota Motor Sales,
U.S.A., Inc.

Eric Mendoza
Collision Repair & Refinish Training Assistant Manager,
Toyota Motor Sales,
U.S.A., Inc.

Dan Hodges
Adjunct Collision Training Instructor

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


The use of this special 1480 MPa steel not only strengthens the cabin’s structure, but also lowers the vehicle’s weight to help improve fuel economy.”
Step into the TOYOTA BOOTH (#939)

There’s more than one reason to visit the Toyota Wholesale Booth (#939) at the NACE | CARS Expo and Conference. Have some fun while checking out the hottest products, services and training in the collision and repair industry. Explore new cutting-edge technology on our OPS speedway, network with Toyota experts and learn new techniques to help improve the quality of repairs at your shop.

Make sure to explore Overall Parts Solution (OPS) Technology Suite, Toyota’s new parts ordering and tracking system. OPS helps collision and repair centers efficiently order, track and procure Genuine Toyota Parts at competitive prices. This technology is demonstrated and explained on the OPS speedway, an interactive, true-to-life model of a race track. Not only will you learn more about OPS, you’ll also have the chance to test your skill and prowess and compete with other NACE attendees by racing box trucks on the track.

Don’t miss the rare opportunity to network with Toyota Representatives who can explain to you the ins and outs of OPS and give you insider tips on automotive repairs. These experts in the industry will be on hand at the booth to demonstrate how this software system improves your cycle time and customer satisfaction. They will also be giving valuable presentations aimed at training professionals such as yourself in new technologies and methods to give you a competitive edge.

Explore Tools for Shop Efficiency.

ARE YOU A COLLISION REPAIR INDUSTRY PROFESSIONAL?

Step into the Toyota Booth (#939) at NACE | CARS to have some fun and gain valuable expertise.
Want to learn more about OPS Technology Suite?

The OPS suite consists of four key components:

- **VALUTRAX**: This is one of the biggest benefits of OPS to its users. With Valutrax, users can shop and order Genuine Toyota Parts at competitive prices.

- **TRAXPOD**: To help keep you informed, Traxpod will send you shipping notifications and let you know of deals and discounts available from your Toyota dealership.

- **OPSTRAX**: Users can submit and track orders electronically. Dealers can view all of their orders in one centralized location to help arrange repairs and respond to customer inquiries.

- **DELIVERYTRAX**: Users can track their parts orders in real time to find out if their part is still at the warehouse or on the truck.

Don’t leave the booth without learning a new skill. Expert Joe DiDonato, Senior Collision Repair and Refinish Training Administrator, will be giving presentations on special repair techniques for each type of steel on the 2016 Tacoma, which will be on display as a cutaway. You’ll see in detail the highly specific interior construction of this vehicle, which is comprised of four different steels.
Toyota and Lexus vehicles have a solid reputation historically for the quality of their paint finishes and color options. Recently, a new “Quad Coat” paint process has been introduced that uses specialized colored tints in the mid-coat clear. As seen on the Lexus RC in Infrared (Code 3T5), the use of the tint produces a very clean candy apple red effect.
IN THE FACTORY, TOYOTA AND LEXUS USE A PROPRIETARY FOUR-STAGE PAINT PROCESS also known as a “Quad Coat.” However, duplicating the finish in a three-stage aftermarket refinishing process is a challenge. The three-stage aftermarket repair process begins with a tinted metallic ground coat layer followed by a tinted translucent mid-coat clear which is then followed by a final clear coat layer.

At the time of this publication, Lexus offers Quad Coats on two models and Toyota on one. The NX is available with Ultrasonic Blue Mica 2.0 (Code 8X1) and the RC is available in Infrared (Code 3T5) and Ultrasonic Blue Mica 2.0 (Code 8X1). The 2016 Toyota Prius is available in Hypersonic Red (Code 3T7).

TOYOTA AND LEXUS RECOMMEND THE FOLLOWING STANDARD OPERATING PROCEDURES:

1. Prepare the substrate. Use the paint company’s correct undercoating system for aluminum steel and plastics. Specific formulas for the metallic ground coat and the tinted mid-coat are available from the paint manufacturers color matching software programs or you can contact their hotlines listed above.

2. Determine the correct shade of primer. To do so, you can sand down through the multiple layers of paint on the OEM damaged panel until they reach the OEM factory primer sealer. If the part is not an originally painted part from the factory, then follow your paint manufacturer’s guidelines. Once you have the correct shade of primer sealer, you must create a “Let-Down Panel” described in step 3.

3. Create a “Let-Down Panel.” This is a required step due to color variations from manufacturing techniques and locations. The “Let-Down Panel” should be prepared as follows:
   a. Determine the correct shade of primer sealer as previously mentioned in #1 or per the paint manufacturer’s TDS. Mix and apply the primer sealer.
   b. Mix and apply the tinted metallic ground coat per the paint manufacturer’s TDS until proper cover is achieved.
   c. Prepare the special tinted mid-coat. This typically requires a special custom toner that isn’t found on basic mixing systems. Please refer to the specific paint line being used.

   DID YOU KNOW: You should not interchange the product lines and be sure to follow the TDS for the paint system being used.

4. Check the “Let-Down Panel” against the vehicle.
   a. Place the “Let-Down Panel” against the vehicle in natural light or under color-correct lighting. This is done to compare the correct amounts of tinted mid-coats needed to duplicate the finish and determine the portion of the “Let-Down Panel” needed to best match the vehicle.
   b. Once you have determined the number of mid-coat layers needed, this also determines the number of tinted mid-coat layers to be considered “blendable” to match the vehicle.
   c. Be sure to monitor the exact equipment, air pressure and techniques. This helps achieve what was used to match the section of the “Let-Down Panel” to the vehicle.

5. Apply the clear coat. For spot repairs or overall panel painting, it is important to remember that when you are completing the repair to apply a minimum of 2 coats of the final clear over the tinted mid-coat clear. This is required to maintain the UV protection.

If additional assistance is needed, contact the paint manufacturers at their hotlines. Their contact information can be found in Toyota’s CRIB Bulletin #77.

Axalta    (888) 371-3313
BASF     (800) 825-3000
Duplicolor (866) 822-2095
PPG Industries (800) 847-5080
Sherwin-Williams (800) 798-5872
Sikkens (800) 618-1010

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REALIZING SHOP STANDARDS!

WHEN TOYOTA EVALUATES THEIR SHOPS FOR “SHOPS OF THE YEAR” THEY LOOK AT EVERY ASPECT OF THE BUSINESS AND SO CAN YOU!

‘Shop of the Year’ winners ensure the quality of their work by continuously promoting the updating and upgrading of the knowledge and skills of their employees... That is why it is important to maintain a structured and regular training schedule for your shop.”
TOYOTA BELIEVES THAT SHOPS THAT ARE THE BEST OF THE BEST GET IT RIGHT IN CUSTOMER SATISFACTION, TRAINING, FACILITY, TOOLS AND EQUIPMENT. WHILE THEY MAY SEEM VASTLY DIFFERENT, EACH PLAYS A VITAL ROLE IN DELIVERING THE BEST CUSTOMER EXPERIENCE IN THE INDUSTRY. LET’S TAKE A LOOK AT THE MAIN AREAS THAT CAN HELP YOU STAND OUT FROM THE CROWD.

CUSTOMER SATISFACTION

When the repairs are finished and the customer has left your shop, consider surveying them on their experience. Ask:
1. How did they perceive the quality of the repair?
2. How did they perceive the treatment they received at the facility?
3. Was their vehicle ready when promised?
4. Would they refer the facility to friends and family?
5. Were they kept informed throughout the repair process?

In order to deliver an exceptional customer experience, your shop must have operating standards in place. This shows that you strive to achieve 100% customer satisfaction and not just on vehicle repairs. Do you conveniently provide alternative transportation to customers during repairs and keep them updated on the progress? Do you have a system in place to resolve CSI vendor referrals and settle customer complaints? And are you monitoring your own progress by submitting daily and weekly closed repair orders to an approved Toyota Certified Collision Center (TCCC) CSI vendor?

TRAINING

Continuous improvement, known as Kaizen in Toyota speak, is part of the Toyota DNA. Toyota products are refreshed and updated every model year. Whether in styling, technicalities or features, it is imperative for shops to stay up to date.

Ensure the quality of your work by continuously promoting the updating and upgrading of the knowledge and skills of your employees. Customers do not like being a part of a shop’s learning curve. That is why it is important to maintain a structured and regular training schedule for your shop. Technical courses are available to managers, estimators and technicians through Toyota’s Collision Repair and Refinish Training department (www.crrtraining.com). Remember, loyalty and consumer confidence are enhanced when the work is expertly performed the first time and that is why training your employees on new products and repair processes is vital for delivering an exceptional customer experience.

FACILITIES/TOOLS EQUIPMENT

To set your shop apart from your competitors means more than a nice reception desk and customer lounge. This means that the repair shops utilize state-of-the-art tools and equipment to ensure the highest quality repairs and to properly equip repair technicians. In order to make quality repairs that meet the manufacturer’s specifications, you must have the proper tools and equipment to do so.

Aside from the welders, computerized paint mixers and alignment benches, take advantage of the wealth of Toyota technical information available at your fingertips. If you don’t already have a Technical Information System (TIS) subscription, get one from www.techinfo.toyota.com. For a sampling of CRIBs, TSBs and current and past issues of Collision Pros magazine visit www.crrtraining.com. While you are there, sign up for the latest training. All of this could help to raise the standards at your shop while increasing productivity, reducing cycle time and gaining more efficiencies.

If you are not partnered with a Toyota dealership, give your local Toyota Parts Manager a call to start the conversation. With the right approach to customer satisfaction, a focus on training and properly equipping your shop, you can exceed your customers’ expectations and grow your business!

2015 Shops of the Year

On behalf of Toyota, the regions and its distributors, congratulations to the 2015 Toyota Certified Collision Repair and Refinish “Shop of the Year” winners! Thank you for striving for excellence and giving Toyota customers a great experience and the quality repairs they’ve come to expect.

This year’s recipients excelled in customer satisfaction and surpassed benchmark requirements for their employee training and facilities. There are three shops being recognized for 2015 as “Shop of the Year” winners.

★ SHOP OF THE YEAR WINNER
A-1 TOYOTA, NEW HAVEN, CONNECTICUT
They are part of the New York region. Michelle Tortora is the Collision Center Manager and this is their first time winning the award.

★ SHOP OF THE YEAR WINNER
PRECISION TOYOTA, TUCSON, ARIZONA
They are in the Denver region. Kimberly Taggart is the Collision Manager and they too are a first time winner of this award.

★ SHOP OF THE YEAR WINNER
FRED HAAS TOYOTA WORLD IN SPRING, TEXAS
They are part of Gulf States Toyota Distributors in Houston, Texas. Jeff Debner is the Collision Center Director and this is their ninth time winning Shop of the Year.
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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.