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On Target

Ford Parts

For Ford and Lincoln wholesalers and the collision repair industry

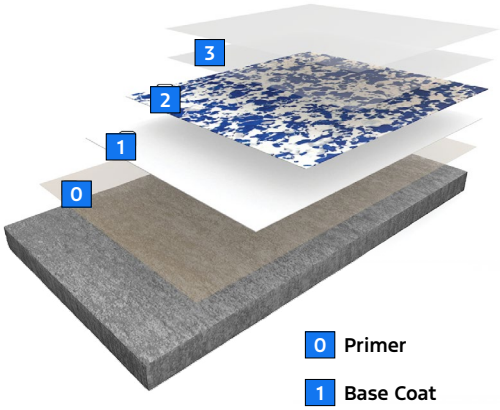
Ford Paint and Body Technology Center Renovation Highlights Repair Shop Needs

Sherwin-Williams Collaboration Offers Key Areas of Enhancement

In 2009, recognizing an effort to improve vehicle repairability and reduce repair costs, Ford Motor Company opened the Paint and Body Technology Center (PBTC) in Inkster, Mich.—a first-of-its-kind collaboration of repair and safety experts, product suppliers and insurers.

The participation of automotive suppliers from numerous industry segments—from paint and adhesives to tooling and equipment—remains a key point for the PBTC, helping to make the facility a fully equipped, state-of-the-art body shop.

"The main goal of the PBTC is to determine what real-world technical applications are needed to perform proper repairs, and to anticipate any potential problems a repair technician may encounter and provide them with all the necessary information they may need as up-front as we can," said Gerry Bonanni, senior damageability engineer for Ford.



0 Primer
1 Base Coat
2 Broadcast
3 Grout/Seal Coat

Mimicking a real-world body shop, the PBTC has experienced its share of daily wear-and-tear and began to show its age. In late 2024, it was determined the shop needed some attention. Enter Sherwin-Williams, one of the Ford suppliers that has been working closely with the PBTC and Bonanni since 2012.

This long-standing collaboration has been pivotal in enhancing automotive paint products, refining repair processes, and training technicians on advanced painting techniques and products, including Sherwin-Williams' Ultra 9K Waterborne Refinish System. As the PBTC celebrates its ongoing impact on the automotive industry, its latest renovation project highlights the importance of creating a modern, functional and visually impressive space that inspires pride and professionalism for any body shop.

Shop Floor: High-Performance Flooring for High-Traffic Areas

One of the foundations of a successful and efficient repair shop is the foundation itself: the shop floor. The floor of a busy repair shop is subjected to daily heavy wear and abuse, from damaged vehicles scraping the floor, to harsh chemical, paint and solvent spills.

The existing solid-color floor of the PBTC had begun to show signs of damage. To revitalize the look with enhanced durability, Sherwin-Williams installed the SW Resuflor® Deco Flake system, a high-durability, multi-layer epoxy flooring option. The new flooring system is not only visually appealing with a mix of colors (reflecting the Ford brand) but is also engineered to withstand the heavy foot and vehicle traffic typical of body shops.

Having a high-performance, resinous floor professionally installed offers several benefits for the shop, including:

- Seamless for increased cleanliness, aesthetics, and maintenance
- Extreme durability
- Chemical- and stain-resistant for the service life of the floor and long-term aesthetics
- More impact- and abrasion-resistant than other flooring solutions
- Protects and increases the service life of the concrete substrate
- Standard and custom-blend options available to meet a shop's specific design intent

"The work Sherwin-Williams invested in the PBTC has helped provide us with peace of mind," said Bonanni. "Repairers know all too well the types of damaged vehicles that can come into their shops—with flat tires or missing wheels, or with damaged components—scraping against the floor. The refreshed, multi-layered floor Sherwin-Williams provided to the PBTC allows us, in part, to focus solely on collision repair work without concerns about severely damaging the floor for years to come."

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FCCN Announces New 'Pinnacle Performer' Recognition Award

The Ford Certified Collision Network (FCCN) is excited to announce the creation of the Pinnacle Performer Award, an annual recognition for participating collision repair facilities that reach the highest levels of collision repair. An evaluation of in-process vehicles, facility standards and technician certification blend to identify the FCCN shops that stand out within the network.

The award recognizes shops that score in the top five percent of their peers on several specific collision repair and facility elements, as conducted by the OEC Certified Repair Network team's annual on-site assessment. The process is designed to review collision repair preparedness and performance against established industry benchmarks.

Assessment categories include: proper procedures when developing repair plans for high-voltage vehicles; measuring procedures for steel and aluminum; welding, brazing and bonding; body work including finishing; and quality control.

Top performers receive a distinctive FCCN Pinnacle Performer Award coin to display and inspire customers and facility team members on the shop's accomplishments. In addition, the business receives a $500 credit toward annual Ford certification fees.

While the Pinnacle Performer Award spotlights high-performing shops within the Ford network, the FCCN remains grateful to the entire network of shops that deliver quality collision repairs utilizing original equipment procedures and parts around the clock.

For more information on the FCCN, visit ford.com/ford-certified-collision-network.

The Ford Certified Collision Network would like to congratulate these 2025 Pinnacle Performers:

- **A&R Body Specialty** – Wallingford, CT
- **A-1 Custom Auto Body** – East Providence, RI
- **Affordable Auto Body** – Warwick, RI
- **Akiki Auto** – Hyde Park, MA
- **APC Auto Body** – Dartmouth, MA
- **Autotech Collision Service** – Sewell, NJ
- **Axelrod Collision Center, LLC** – Cleveland, OH
- **Balise Collision Repair** – West Springfield, MA
- **Ron's Collision Center & Auto Sales** – Somerset, PA
- **Bi-County Auto Body** – Smithtown, NY
- **Brandywine Coachworks, Inc.** – Chadds Ford, PA
- **C&E Auto Collision** – Norwood, MA
- **Caliber Collision** – Austin, TX
- **Carl's Collision Center** – Fall River, MA
- **CARSTAR Allstar Collision** – Corona, CA
- **CARSTAR Fred Beans** – Boyertown, PA
- **CARSTAR Fred Beans** – Mechanicsburg, PA
- **CARSTAR Laneys Collision Center** – El Dorado, AR
- **Central Florida Paint and Body** – Orlando, FL
- **Cloninger Collision Center** – Salisbury, NC
- **Collex Collision Experts** – Shrewsbury, NJ
- **County Line Auto Body** – Howell, NJ
- **Cranston Collision Center** – Cranston, RI
- **Crash Champions** – Burbank, CA
- **Crash Champions** – Jonesboro, GA
- **Crash Champions** – Pleasanton, CA
- **Dayton Collision Center** – Dayton, NJ
- **Ellsworth Auto Body** – North Canton, OH
- **Elmer's Auto Body** – West Collingswood Heights, NJ
- **Factory Collision and Restoration** – Weymouth, MA
- **Fix Auto** – Moreno Valley, CA
- **Flood Ford of East Greenwich Collision** – East Greenwich, RI
- **Franchi Bros. Auto Body** – Worcester, MA
- **Freehold Collision** – Freehold, NJ
- **Gerber Collision & Glass** – Kaneohe, HI
- **Hance's Uptown Collision** – Plano, TX
- **Herb Chambers Collision Center** – Braintree, MA
- **Herb Chambers Collision Center** – Holliston, MA
- **Joe Hudson's Collision Center** – Waxahachie, TX
- **John's Collision** – Hyannis, MA
- **JP Auto Collision** – Garland, TX
- **K & M Collision** – Hickory, NC
- **Keri Coach Works** – Westbury, NY
- **King Collision Center** – Pembroke, MA
- **Krean's Auto Body** – Toms River, NJ
- **Mountain View Auto** – Wayne, NJ
- **My Way Auto Body** – Stamford, CT
- **New Trimble Auto Body** – Clifton, NJ
- **Noaker's Auto Body, LLC** – Duncannon, PA
- **North Haven Auto Body** – North Haven, CT
- **Otis Auto Body** – Quogue, NY
- **Park Place BodyWerks** – Plano, TX
- **Petrone Automotive, Inc.** – Flushing, NY
- **Preston Auto Body** – Wilmington, DE
- **Providence Auto Body** – Providence, RI
- **Quonset Auto Body** – North Kingstown, RI
- **Randy Marion Collision Center** – Statesville, NC
- **Reliable Collision Repair** – West Warwick, RI
- **Rick's Auto Collision** – Revere, MA
- **S&A Repair and Paint, LLC** – Lititz, PA
- **Salinas Collision Repair** – Salinas, CA
- **Shadow Lake Collision Center** – Papillion, NE
- **State Auto Body** – Providence, RI
- **Statesville Collision Center** – Statesville, NC
- **T&J Auto Body, Inc.** – East Hartford, CT
- **Tom Masano Collision –** Reading, PA
- **Tulley Collision Center** – Nashua, NH
- **Ultimate Collision Repair** – Edison, NJ
- **VIVE of Duncansville** – Duncansville, PA
- **Wagner Certified Collision** – Worcester, MA

2025 Ford Expedition® Repair Details

On Target provides some information on the 2025 Ford Expedition, including an overview of its components as well as instructional guidelines to help technicians determine when a vehicle panel can be repaired and when it needs to be replaced.

Please note the following information is intended as a general guideline and may not be all-inclusive. For more in-depth repair information on this and other Ford and Lincoln vehicles, consult the *Ford Workshop Manual*, found at FordServiceInfo.com.

For more information, consult **Section 501-26: Body Repairs - Vehicle Specific Information and Tolerance Checks, Description and Operation**.

The body consists of the following:

- Aluminum and aluminum alloys
- Body cab structure constructed of aluminum
- Bolted, removable front fenders, hinged doors and hood constructed of aluminum
- Bonded and riveted aluminum body panels
- Mastic pads used on floor pan for sound deadening
- Standard and extended wheelbase models
- High-strength steel frame

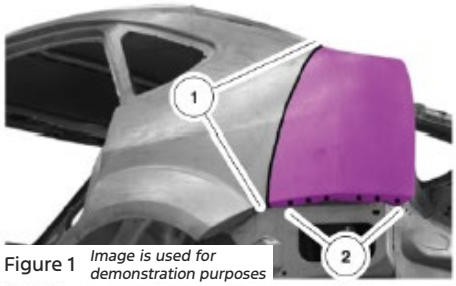


Figure 1 *Image is used for demonstration purposes*

Item	Description
1	Sectioning area
2	Manufacture weld joint

Decision Criteria
The decision on whether a panel should be repaired or replaced includes two key points:

- Is the repair economically feasible?
- Does the repair retain the integrity of the original joint?

In addition, sectioning or partial panel replacement must meet standardized guidelines or approved procedures in the model-specific workshop manual for a sectional replacement solution in the damaged area.

Depending on the damaged area, the following points need to be considered when determining whether to perform a partial repair or complete replacement:

- Sectioning cuts should be as short as possible.
- Feature lines and panel margins must meet original manufacture design.
- Inner reinforcement panels must not limit the straightening work.
- Inner reinforcement profiles in the pillar areas must allow for separation.
- Partial replacement on structural frame sections must be followed for the specific vehicle being repaired. **If no procedure exists, it must be assumed no sectioning is allowed**.
- The large surface welding seams at the connections must be restored.

Panel Repair
Repairing a panel offers many advantages for a technician:

- Repairs can be made both in the outer panel area (e.g. side frame) and in the inner areas (e.g. structural member, trunk floor).
- The repair can be limited to the actual damaged area.
- Reduction of repair costs, as aggregates and other components can usually remain on the vehicle.

Panel Replace

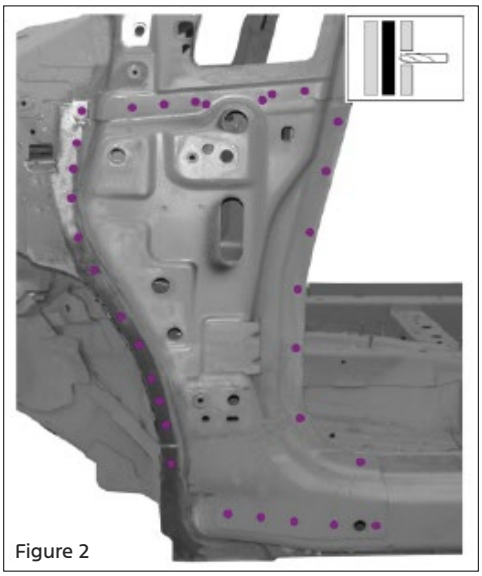


Figure 2

When replacing the entire panel, the original connections are largely reused. A complete replacement is advantageous if the damaged body part can be detached from its original connections and the replacement part can be fitted without creating additional joints.

A complete replacement is necessary if there is no sectional replacement solution.

On Target plans to include additional repair information on the Expedition in future volumes, including sectioning details, door skins and more.

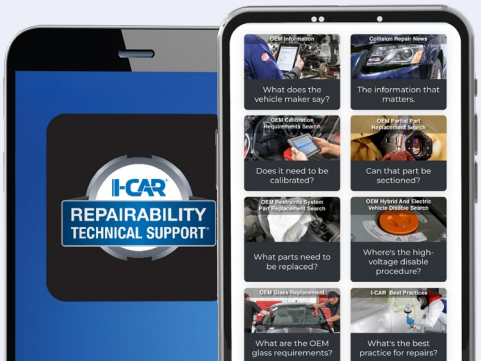
For more information on the Expedition, or any Ford or Lincoln vehicle, contact the Ford Crash Parts Hotline at cphelp@fordcrashparts.com or visit I-CAR's RTS Portal at RTS.i-car.com.

I-CAR® Repairability Technical Support Mobile App Improves Repair Process

As the collision repair industry continues to navigate through rapid changes—particularly with the rise of advanced driver assistance systems and electric vehicles—technicians increasingly need to rely on accurate, accessible data. To help fill that gap, I-CAR has launched the Repairability Technical Support (RTS) app, which aims to help reduce the amount of time spent searching for guidance, while accelerating access to repair information.

Introduced in the spring of 2024, the RTS app expands real-time access to locate critical repair information for technicians, serving as a centralized, on-demand resource to help technicians quickly locate OEM procedures, best practices, emerging vehicle technologies and technical clarifications—all of which are essential for safe, accurate repairs.

"Our RTS app has closed significant information gaps within the industry as we collaborate with vehicle companies to provide clarity on repair procedures," said Scott Van Hulle, manager of RTS and OEM Technical Relations at I-CAR. "It's a tool designed to make technicians' research more efficient and help them stay current."



In its first year, the RTS app recorded 6,817 downloads, supporting over 9.5 million page views on the RTS portal. It also earned runner-up for Best New Product at the 2024 SEMA Show, reflecting its early impact.

I-CAR is using technician feedback and interaction data to inform ongoing app enhancements. Continued collaboration with OEMs will ensure the app remains a dependable resource across evolving vehicle technologies.

These additions all support the broader goal of I-CAR and Ford Motor Company: equipping technicians with the tools and knowledge needed to meet increasing vehicle complexity and repair demands.

The RTS Mobile App is available here for Android® devices and here for Apple® devices.

For information on I-CAR/Ford collision repair training, visit info.i-car.com/network-programs/OEM/Ford.

Understanding Corrosion Protection as a Process (Part 1)

Courtesy of Ryan Marrinan, Application Engineering Specialist, 3M™

What would you say if you were asked, *What is needed to prevent corrosion on a repaired vehicle?* Many replies may reveal the notion that corrosion protection is thought of as just a single step, or a single product on the work order. Instead of that mindset, the key to properly restoring a vehicle's corrosion protection is to understand that it is not a product, but a process.

After an intensive cleaning cycle to ensure that all bare substrates are free of contamination, all automotive steel and aluminum are given an electro-deposition coating (e-coat), which helps prevent moisture and corrosion. This process occurs after the structure has been bonded, welded and riveted, the hoods and doors have been hemmed, and all steel and aluminum parts are affixed to the vehicle structure. This process involves fully submerging the vehicle in a zinc-phosphate bath before any seam sealers are applied. In the collision repair industry, we are not able to duplicate this process, but we can replicate the results by following OEM repair guidelines and the instructions on automaker-recommended products.

Blueprinting is one of the most important steps before starting a repair. It is important when blueprinting to identify any area where the factory coatings may have been damaged or broken. These areas will need to be addressed, especially if corrosion has already started due to the vehicle sitting while repair authorizations or scheduling is set up. Additionally, this is the time to research not only the OEM repair procedures but also bulletins and position statements related to corrosion protection, coatings and sealers. Often overlooked, this information is fundamental and can also provide the appropriate documentation needed when writing a repair estimate that will itemize non-included operations that are required to restore the vehicle's crash worthiness.

An important point to remember is that the corrosion process begins simultaneously with the repair process. Any time there are welds being removed, coatings being stripped, surfaces prepped, metal worked or any abrading of steel and aluminum, the substrates are now exposed. Combined with the shop environment, many panels will begin to oxidize even though it may not be visible. Proper repair planning can help limit the exposure on original and OEM service panels. Once the substrate is exposed, understanding the OEM position, as well as the corrosion protection product manufacturer's recommendations for application, is important.

When using a bonding or structural adhesive, several steps are necessary to ensure effectiveness and prevent corrosion. First, make sure all abraded surfaces are coated with adhesive. Abrade only the surfaces where adhesive will be applied to help prevent corrosion. E-coat should always remain intact, as it is the best corrosion-preventative coating. If welding is required but no adhesive is used, clean and abrade the surface, then apply a zinc weld-through coating to protect against corrosion in the joint.

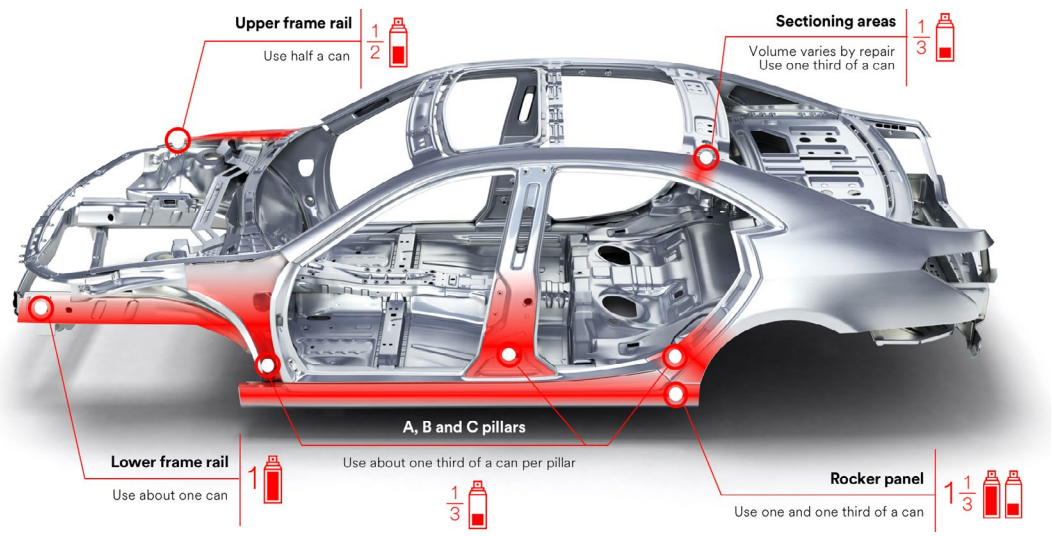
Once the panels are attached, an epoxy primer should be applied to welds, areas around the rivets, rolled-hem flanged panels, or areas that

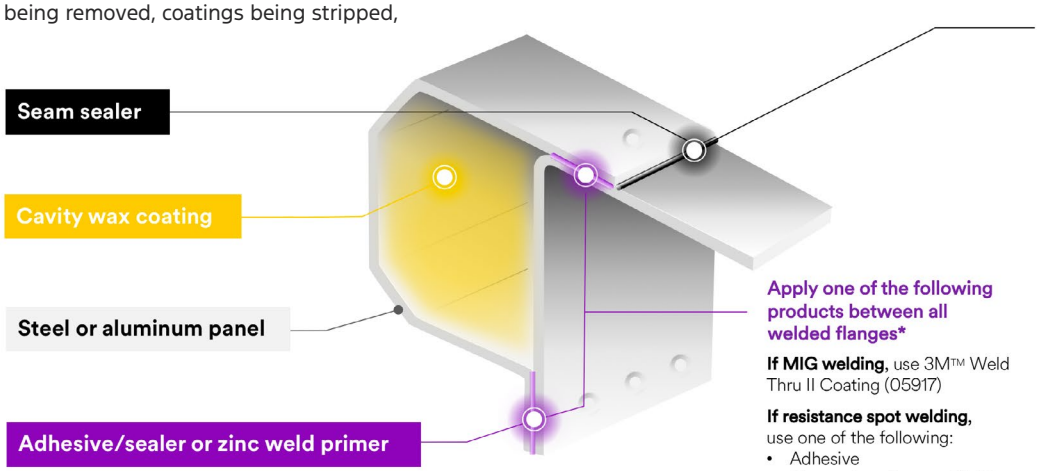
will require body filler, seam sealer or coatings. This is the only way to truly restore the factory-applied corrosion protection system. Remember the e-coat process mentioned previously? That is done at the factory before any gravel coatings, undercoating or sealers are applied and it is done without using direct-to-metal (DTM) products.

For more information, visit 3m.com.

For more information on Ford-approved adhesive suppliers, visit FordCrashParts.com/adhesives.

On Target will continue this topic in future volumes.





Apply one of the following products between all welded flanges*

If MIG welding, use 3M™ Weld Thru II Coating (05917)

If resistance spot welding, use one of the following:

- Adhesive
- One part urethane or 3M™ MSP Seam Sealer (08369)
- Weld Thru II Coating

*OR spot weld through OEM e-coat

Prepare substrate appropriately to ensure proper adhesion of seam sealers

For 3M™ 2-part seam sealers:
Apply 2K epoxy or 2K urethane primer
OR scuffed e-coat
OR scuffed OEM paint

For 3M™ Bare-Metal Seam Sealer (08310), MSP Seam Sealers or 1-part urethanes:
All of the above
OR clean bare metal

Do not apply seam sealer over:
Etch primer
1K primer
Weld-through primer
Body filler
Burned paint
Soot
Rust
Unsound surfaces

Always follow OEM guidelines for specific repair procedure and product recommendations.

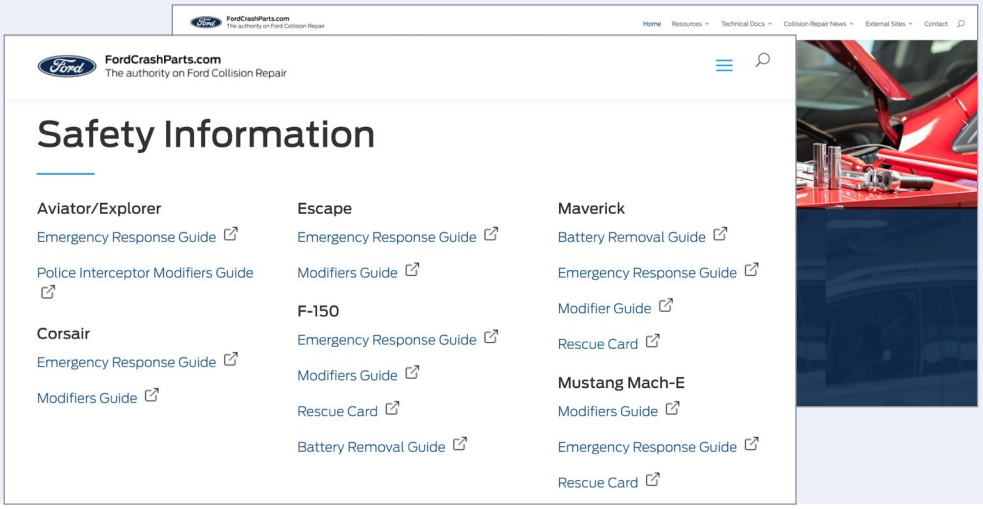
FordCrashParts Updates EV Safety Information

Ford Motor Company has recently enhanced FordCrashParts.com with the addition of more safety information for Ford and Lincoln electric and hybrid vehicles.

On the Electric Vehicle / Hybrid page, readers will see an expanded Safety Information subset that now includes 17 specific documents related to various Ford and Lincoln vehicles, including the Aviator®/Explorer,® F-150,® Maverick® and Mustang Mach-E.®

The documents include useful information such as emergency response guides, rescue cards, battery removal guides and more.

FordCrashParts.com is an excellent resource for official Ford collision repair information and is frequently updated, so check back often.



Plastic Repairs: Tips and Tricks

On Target concludes a focus series on the importance of proper repairs as it relates specifically to plastic components. When performed correctly, plastic repairs can create a robust and high-quality repair.

For the first installment on this topic, check out *On Target* - 2025, Vol. 1.

That installment concluded with information on thermosetting plastics, one of two primary categories of plastics utilized for automotive applications. The second category is thermoplastics. Thermoplastics are solvent-reactive compounds produced by a process that is reversible. Thermoplastics can be repeatedly remolded by adding heat, a characteristic that makes plastic welding a repair alternative. However, care must be used when applying heat to thermoplastic parts as they soften and tend to lose their shape when heated. Types of thermoplastics include Thermoplastic Olefin (TPO), Polyvinyl Chloride (PVC) and Acrylonitrile Butadiene Styrene (ABS). Thermoplastics are widely used in interior trim components, wheel flares, body side cladding, stone shields, fender aprons, fan shrouds and some bumper covers.

Polyolefin, a unique type of thermoplastic, produces an oily or waxy feel when sanded or grinded and lends itself particularly well to remolding using heat. Several tests can be performed to determine if the repair part is polyolefin. When grinded, polyolefin plastic will melt and smear, causing a ragged edge while a non-polyolefin plastic will grind smoothly, producing powdery dust. Another test is a simple "sink or swim" test: polyolefin plastic will float in water; non-polyolefin plastic will not.

Once the plastic has been properly identified, repairers are further reminded of the following:

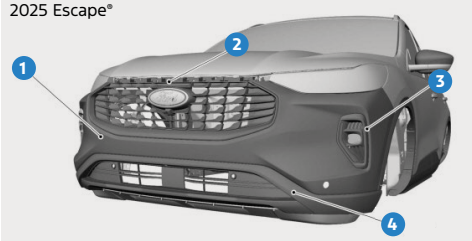
- **Never** apply solvents such as lacquer thinners or reducers at any stage of plastic repair. Solvents, cleaners and even water are absorbed by many types of plastics and may swell around the repair, causing the repair to fail.
- When repairing plastics, especially polyolefin, an adhesion promoter must be applied to the substrate to allow repair materials and paint to bond correctly. Re-application is required when grinding or sanding through the sealer or primer layers.
- Ford also strongly recommends conducting as much of the plastic repair on the vehicle, since parts mounted on the vehicle are held in correct alignment throughout the repair. Attempting to repair the part removed from the vehicle may cause misalignment, which could affect the overall quality of the repair.
- **Always** refer to the manufacturer's label directions and technical data sheets regarding the diverse types of repair materials, fillers, adhesives and bonding agents being used, as they are material-specific.
- Identifying the repaired plastic component as grained or smooth is key, as it determines how the part should be properly cleaned and prepared for refinishing.
- **Always** be sure to utilize the correct cleaner. This is dependent on whether a solvent-based or waterborne paint system is being used.

For more information, consult the *Ford Workshop Manual*—available at FordServiceInfo.com — as it contains all the information repairers need to correctly identify each type of plastic and its correct, corresponding repair procedure. Repairers are reminded to check back often as repair procedures can change without notice.

Specific questions on the proper repair of any Ford or Lincoln vehicle can be submitted to the Ford Crash Parts Hotline at cphelp@fordcrashparts.com.

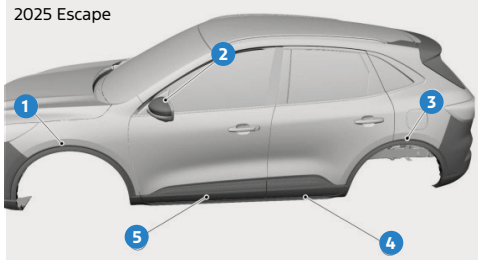
Additional information—including a list of Ford-approved adhesives, paint systems and more—can be found on FordCrashParts.com.

2025 Escape®



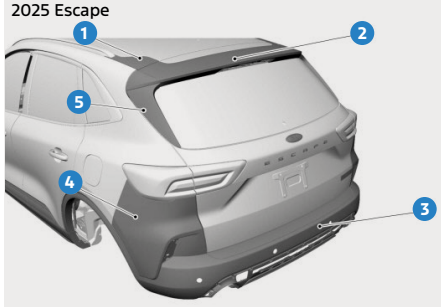
Item	Description	Material
1	Front upper bumper cover	TPO (Thermoplastic olefin)
2	Radiator grille	ASA (Acrylonitrile Styrene Acrylate)
3	Fog lamp bezel	ASA
4	Front valance panel	TPO

2025 Escape



Item	Description	Material
1	Front wheelhouse opening moulding	TPO (Thermoplastic olefin)
2	Mirror cover	Acrylonitrile Butadiene Styrene (ABS)
3	Rear wheelhouse opening moulding	TPO
4	Rear door moulding	TPO
5	Front door moulding	PC (Polycarbonate)

2025 Escape



Item	Description	Material
1	Front wheelhouse opening moulding	PC+ABS (Polycarbonate/ Acrylonitrile butadiene styrene blend)
2	Mirror cover	PC (Polycarbonate)
3	Rear wheelhouse opening moulding	TPO
4	Rear door moulding	TPO
5	Front door moulding	PC

The Crash Parts Corner

Did You Know That ...

The official *Ford Workshop Manual*—found on FordServiceInfo.com—provides important details and procedures regarding proper windshield repairs and replacement. It should be referenced often as repair procedures can change without notice.

The procedures include detailed warnings and precautions, especially as it relates to properly preparing the substrate to which the glass will affix, and proper preparation of the adhesives. These are particularly important to note as they affect how the glass adheres to the vehicle and helps to provide structural integrity. Some of the warnings include:

- Fixed glass may have locating pins that vary in location. It may be necessary to cut these pins with a utility knife.
- If replacing the windshield glass and it is equipped with a camera bracket, it must have locating pins and spacers to ensure correct alignment. Do not use a replacement windshield glass without locating the pins and spacers.
- Minimize applying primer over areas with remaining urethane adhesive and observe a minimum flash time of 10 minutes.
- Fixed glass must be installed within 10 minutes of applying the urethane adhesive. Using a power caulk gun will apply the adhesive with less effort and in a continuous bead. Ensure the urethane bead is uniform to prevent air and water leaks.

Carlex™

To ensure the correct OEM replacement glass is being utilized, visit the Carlex OEM replacement glass search tool at Carlex.com/automotive-replacement-glass.

For more information on Ford OEM glass, including job aids, repair videos and more, visit FordCrashParts.com/Glass.

For more information on the Ford Certified Glass Network, or to join the program, visit Collision.Ford.com/FordCertifiedGlassNetwork or call (833) 837-7694.

FORD CERTIFIED GLASS NETWORK

Ford Paint and Body Technology Center Renovation Highlights Repair Shop Needs (continued)

Interior Body Shop: Modernizing Surfaces
To address the aging factory-finished metal walls in the body shop, Sherwin-Williams recommended an adhesion-promoting primer (DTM Bonding Primer) followed by an acrylic finish (Sher Cryl™ HPA) in a modern, clean color (SW7070 Site White). In addition to enhancing visual appeal, the walls are now easier to touch-up over time, allowing easier maintenance down the road.

Interior Training Room: Professional and Clean
The interior training room—an essential part of the center's operations—was another key area that Sherwin-Williams helped to address. ProMar® 200 HP Zero VOC (also in Site White) was applied to continue the updated, modern look and increase the durability of the walls from scuffs, abrasions, and scrapes, while maintaining easy touch-ups later on. These types of coatings can protect and beautify areas in shops, such as waiting room areas, offices and employee spaces.

"I am proud of our relationship with Sherwin-Williams," said Larry Coan, body commodity/damageability manager for Ford Motor Company. "Working with them to refresh the PBTC is an excellent and direct example of that collaboration. It has helped our efforts to reposition the PBTC as a one-stop shop to provide the most efficient and robust Ford-approved repair procedures to our sponsor-vendors, technicians and, ultimately, our Ford and Lincoln vehicle owners."

For more information on Sherwin-Williams automotive finishes, paint and coatings, visit Automotive.Sherwin.com.

For more information on Ford-approved paint materials, visit FordCrashParts.com/paint-systems.

SHERWIN-WILLIAMS®

On Target

Scheduled to be published four times a year, *On Target* aims to provide Ford and Lincoln dealership parts departments and independent collision repair shops with the technical information needed to deliver efficient, high-quality repairs to Ford and Lincoln vehicle owners.

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Chris Caris
Travis Alber
Andrea Presnell

On Target Digital

Download *On Target* for free at FordCrashParts.com, or by clicking the Ford page on OEM1Stop.com

Genuine Parting Thoughts

Have an idea? We'd love to hear from you. Your comments and article suggestions can be sent to **cphelp@fordcrashparts.com.**