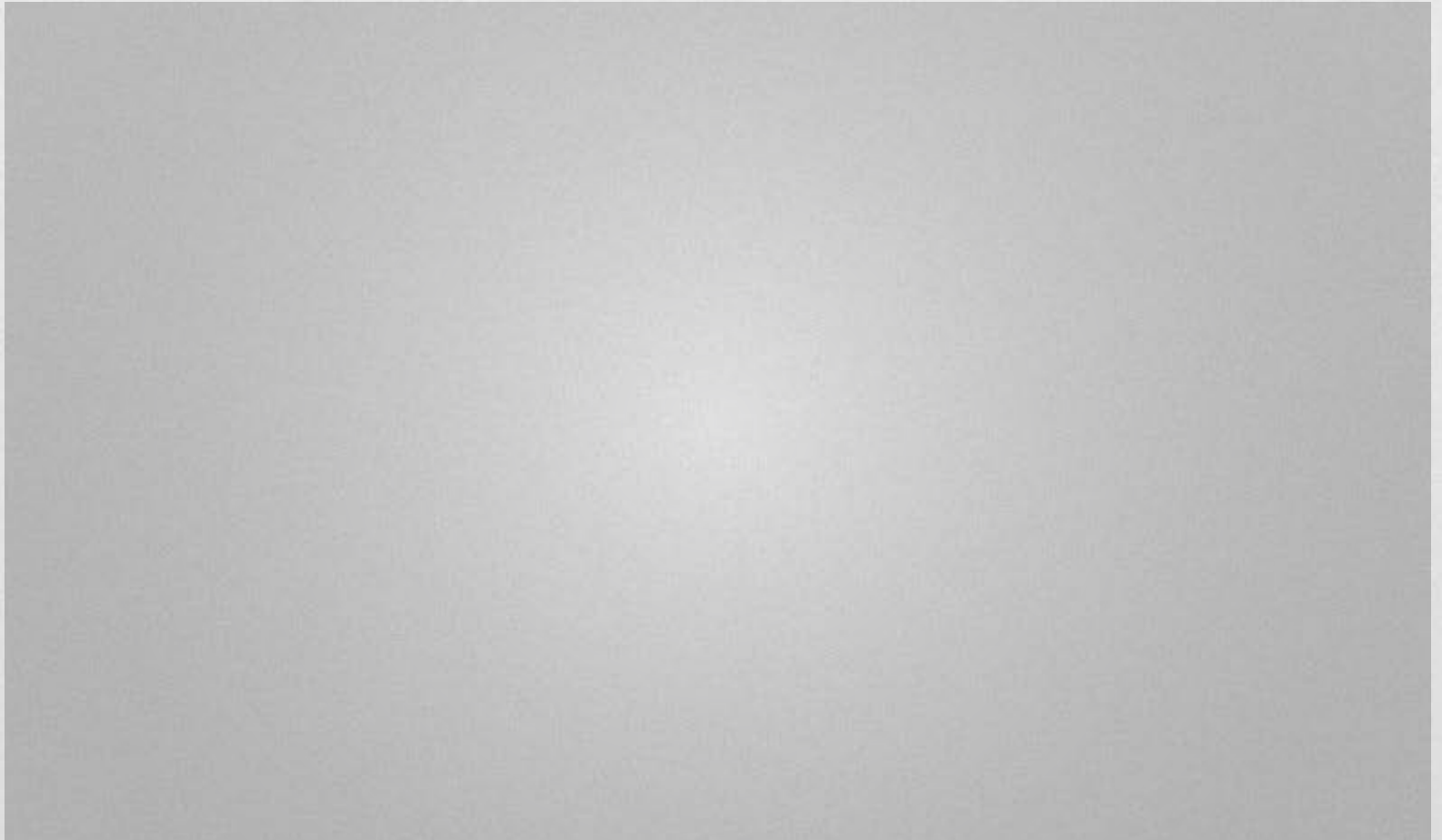
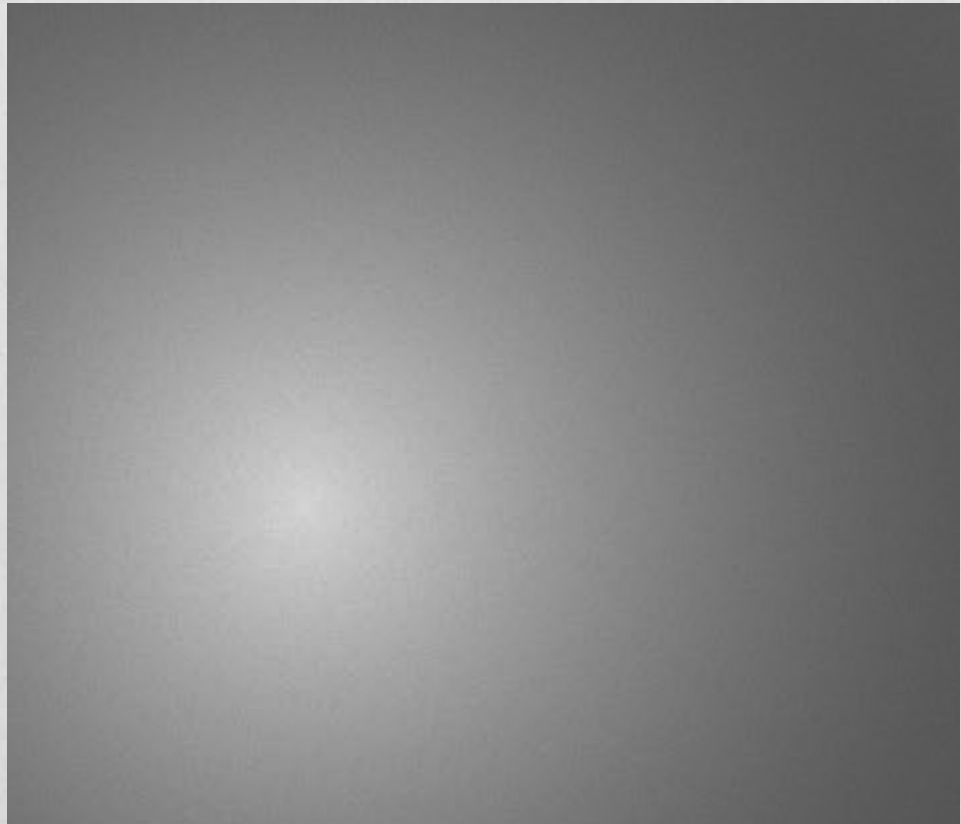


## In This Issue . . .



### Pickup Cab and Box Offerings



# Ford Stresses Importance of Researching Plastic Repairs

Though much attention has been focused recently on the continually expanding role of high-strength, ultra-high-strength and other exotic steels—and the repair methods and methodologies associated with them—Ford Motor Company would like to remind repairers of the equal importance of plastic component repairs which, when performed properly, create a robust and high-quality repair.

Gerry Bonanni, Ford’s senior damageability engineer, has long advocated researching all vehicle repairs before any work is begun and this is especially true of plastic components, which include their own set of rules and guidelines to ensure a proper repair.

“While a lot of attention continues to be placed on exotic steel repairs, which is good, it remains vitally important for repairers to research every aspect of the repair, which includes plastic components,” said Bonanni. “With the recent announcement of changes to Ford’s official workshop manual, repairers are presented with a unique opportunity to re-familiarize themselves with the necessary plastic component repair information available to them, found in Section 501-35 and Section 501-25.”

Before any work is started, several considerations need to be taken into account that will determine the viability of plastic repair procedures:

- Is the damage cosmetic or structural?
- Can the repair be carried out on the vehicle?
- Is the part readily available?
- Is component-repair the most cost-effective method?
- Will the repair provide for the fastest, highest-quality repair?

If it is determined that repair is a viable option, (typically, components with molded-in color or those with a textured finish are not considered repairable) repairers next need to identify the type (or types) of plastic to be repaired. Some plastic components—those that are not from recycled plastic—contain either a code or material designation moulded in or a stamp indicating the plastic type. *Proper identification of the various types of plastics is vital to select the appropriate repair method necessary to carry out high-quality plastic repairs.* Though several types of plastic are used in Ford’s automotive applications, all plastics fall into two primary categories: thermosetting plastics and thermoplastics.

Thermosetting plastics generally are rigid or semi-rigid compounds made with a two-part thermosetting resin, which,

when combined, create a chemical reaction that produces heat, generating a cure that is irreversible.

A burn test can be utilized to determine if the part is made of thermosetting plastic by applying an open flame to the corner of the damaged component. If the material crystallizes and becomes rigid, it is a thermosetting plastic.

Sheet-Molded Composite (SMC) is a type of thermosetting plastic, similar but not identical to fiberglass since it utilizes glass, nylon or other fibers in combination with thermosetting polyester resins. When fully cured, SMC, which Ford utilizes in such large-panel components as fenders, hoods, liftgates and quarter panels, is strong and rigid.

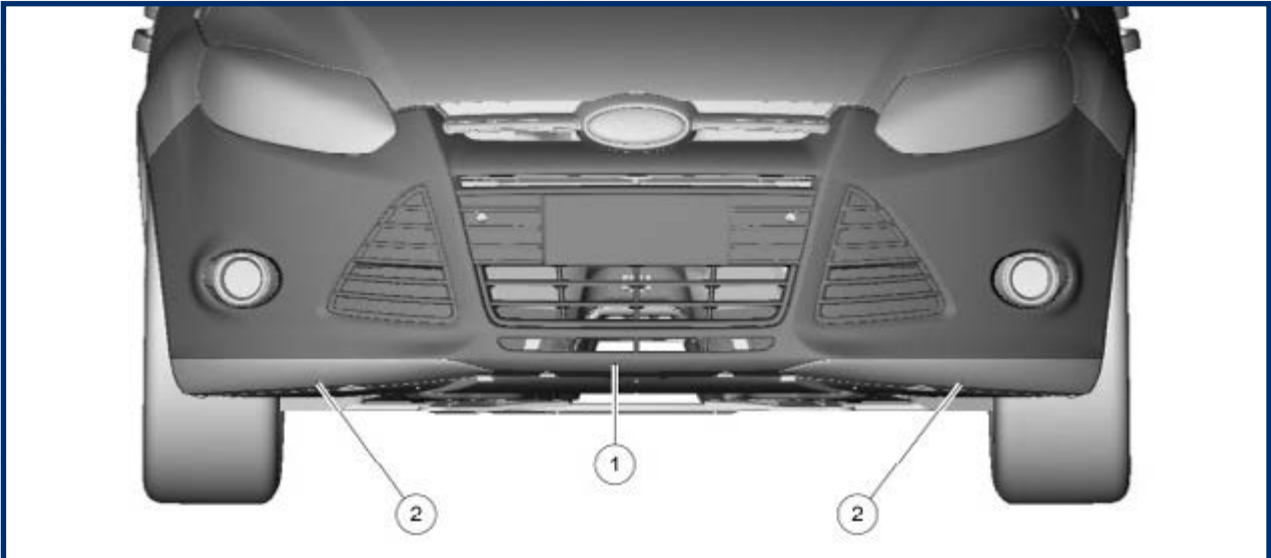
Thermoplastics are solvent-reactive compounds produced by a process that is reversible. Thermoplastics can be repeatedly remolded by adding heat, a characteristic that makes plastic welding a possible repair alternative. However, care must be used when applying heat to thermosetting plastic parts as 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 through the use of heat. A number of 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 a powdery dust. Another test is a simple “sink or swim” test: polyolefin plastic will float in water; non-polyolefin plastic will not.

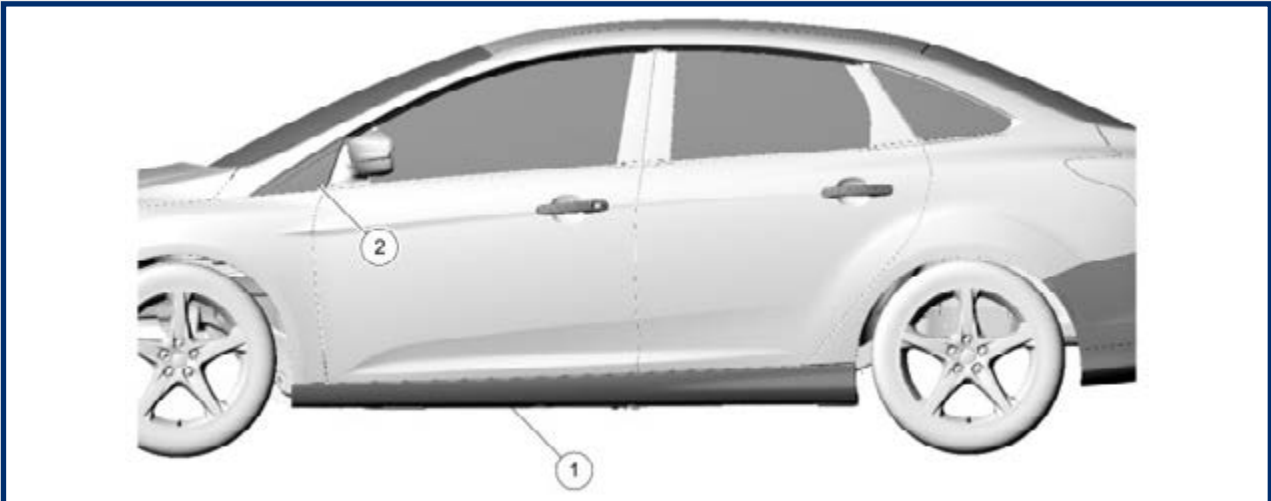
Once the plastic has been properly identified, repairers are further reminded of the following:

- **Never** apply solvents such as lacquer thinners or reducers at any stage of a plastic repair. Solvents, cleaners and even water are absorbed by many types of plastics and may swell in the area of 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 primed layers.

Continued on page 2



Item	Service Part Number	Description	Torque	Material Name	Notes
1	17D957	Front bumper cover	-	Thermalplastic Olefin	-
2	17626-A Right Hand (RH) 17626-B Left Hand (LH)	Front bumper cover lower panel	-	Thermalplastic Olefin	-



Item	Service Part Number	Description	Torque	Material Name	Notes
1	5810176 Right Hand (RH) 5810177 Left Hand (LH)	Rocker panel	-	Thermalplastic Olefin	-
2	16003 Right Hand (RH) 16004 Left Hand (LH)	A-pillar to door	-	Acrylonitrile Butadiene Styrene	-



# Researching Plastics Repairs

Continued from page 1

- Ford also strongly recommends carrying out 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.

Additional important reminders include:

- **Always** refer to the manufacturer's label directions and technical data sheets regarding the various 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.

Section 501-35: Body Repairs in Ford's official workshop manual (Section 501-25 in newer-format manuals) contains all of the information repairers need to correctly identify each type of plastic and its correct, corresponding repair procedure.

For more information, visit [www.motorcraftservice.com](http://www.motorcraftservice.com). Questions on any Ford Motor Company plastic repair procedure can also be directed to Gerry Bonanni (313-317-9000 or [gbonanni@ford.com](mailto:gbonanni@ford.com)) or the Ford Collision Parts Hotline at [cphelp@ford.com](mailto:cphelp@ford.com).



Item	Service Part Number	Description	Material Name
1	5810176 Right Hand (RH) 5810177 Left (LH)	Rocker panel	Thermalplastic Olefin
2	7810154 Right Hand (RH) 7810155 Left Hand (LH)	Mud flap	Thermalplastic Olefin
3	16003 Right Hand (RH) 16004 Left Hand (LH)	A-pillar to door	Acrylonitrile Butadiene Styrene (ABS)



Item	Service Part Number	Description	Material Name
1	17K835	Rear bumper cover	Thermalplastic Olefin
2	17810	Rear bumper cover extension	Thermalplastic Olefin
3	5444210 AA	Rear spoiler	Acrylonitrile Butadiene Styrene (ABS)



Item	Service Part Number	Description	Material Name
1	17K835	Rear bumper cover	Thermalplastic Olefin
2	17810	Rear bumper cover extension	Thermalplastic Olefin
3	5444210 AA	Rear spoiler	Acrylonitrile Butadiene Styrene (ABS)

# Ford Unveils New Parts Warranty

Ford Motor Company has announced the launch of a new 24-month, unlimited-mileage warranty on Genuine Ford and Motorcraft service parts. The new warranty also calls for fleets and independent repair facilities to be reimbursed up to \$150 in labor coverage and includes a customer towing reimbursement for repairs made at any Ford or Lincoln dealership. Ford's previous service parts warranty was 12

months or 12,000 miles, whichever occurred first, and labor was covered if the part was installed by a Ford or Lincoln dealership, but not on parts sold over-the-counter to a fleet or installer. The company notes, however, that the new warranty does not affect or change Ford's lifelong guarantee on original equipment sheet metal parts or the current three-year warranties on some systems, such as powertrain.



## INSIDE THE INDUSTRY

### Caliber Collision Continues Growth; Has New Owner

Caliber Collision Centers continues to expand its operations, adding 22 new shops in three separate acquisitions in California, Colorado and Texas, giving the company a total of 158 repair centers in six states. Meanwhile, Caliber's previous owner, private equity firm ONCAP, announced it has sold its stake in the company to OMERS Private Equity. Details of the deal were not announced.

### University of Michigan Plans for Driverless Fleet

The University of Michigan's Mobility Transformation Center has announced plans to bring an entire fleet of autonomous vehicles to Ann Arbor, Mich., by 2021, which could make it the first American city with a shared fleet of networked, driverless vehicles. Proponents of the plan anticipate consumers using their Smartphones to schedule an autonomous vehicle to pick them up. In October, the University approved a \$6.5 million facility for testing driverless vehicles, with about 3,000 local residents partaking in the study.

### Independent Repair Shops on the Rise

The latest figures from the federal government show the number of body shops nationwide actually increased in 2012. The Bureau of Labor Statistics puts the shop count at the end of the year at 34,437, an increase of 79 shops from the previous year, and the first such upward movement since 2001.

### Deer-Vehicle Collisions Decline

According to State Farm Insurance, the number of deer-vehicle collisions in the U.S. declined 3.5 percent in 2013 year compared to 2012. The insurer estimates the odds of a driver hitting a deer over the next 12 months at 1 in 174, down 4.3 percent versus the 1 in 167 odds given last year. North Dakota saw the biggest drop at 24.8 percent, followed by Nebraska (22 percent), South Dakota (12.6 percent) and Michigan (11.4 percent).

### Length of Rental Holds Steady in Third Quarter

According to data provided by Enterprise Rent-A-Car, the average length of rental (LOR) for 2013's third quarter was 10.8 days, the same as the same period in both 2012

Continued on page 3



# Ford's Direct Repair Program Helps Fix Vehicles Right the First Time

Today's Ford and Lincoln vehicles use more high-strength steels, composite materials and new technologies than ever before, which translates into more complex repairs when accidents occur, making it critical for consumers to seek out certified, factory-trained technicians using genuine parts.

The Ford Motor Company Insurance Services (FMCIS) Direct Repair Program (DRP) network consists of Ford and Lincoln-franchised dealerships with body shops, or affiliations with local independent shops that are inspected and approved and agree to specific program requirements. The program was originally set up to support quality repairs for Ford fleet vehicles—repairs that utilize only new OEM parts. “The use of new OEM collision repair parts on fleet vehicles helps to guarantee that when the vehicles are sold at auction, they are as close to new condition as possible,” said Chris Frey, program manager. “It also helps to ensure a vehicle repair with excellent fit and finish.”

Additionally, the FMCIS program has been aligned with Ameriprise Auto & Home Insurance—an A.M. Best A-rated insurance company—since 2005. The Ameriprise referral repair

shop program currently utilizes many Ford and Lincoln DRP facilities. When Ameriprise seeks to add a qualified repair facility in a specific market area to its network of body shops, the FMCIS program manager can recommend a facility that has already been validated by American Road Services Company personnel who have inspected the repair facility and reviewed the necessary agreements and guidelines to participate.

Customers of the FMCIS program ([www.FordAutoInsurance.com](http://www.FordAutoInsurance.com)) have the opportunity to possibly save on their current premiums. In addition, FMCIS customers receive extra benefits when they utilize a participating repair facility\* including:

- Guaranteed workmanship for as long as they own their vehicle
- The use of genuine Ford parts for the first four years or 50,000 miles (whichever comes first)
- \$100 off collision deductible when repairs are made at participating dealer-owned body shops\*

To keep pace with the frequent advances in the technology required to repair today's vehicles, the DRP guidelines are currently being reviewed to determine if any program changes are necessary to help ensure continued quality repairs. Each Ford DRP facility will receive explicit details on how to implement any changes.

Ford employees who drive a company car that requires repairs can find their closest approved Ford DRP by accessing “Vehicle Programs” through the Ford HR website: HR Online > Vehicle Programs > Accidents, Damage & Glass Repair – Company Vehicles > Repairs. Other customers may contact their Ameriprise agent for the nearest approved Ford repair facility.

For more information on this program, please contact Chris Frey at [cfrey@ford.com](mailto:cfrey@ford.com) or (313) 584.1641 or contact the Ford Collision Parts Hotline at [cphelp@ford.com](mailto:cphelp@ford.com).

\* Insurance availability varies by state. The eligibility criteria for coverage and discounts may vary by state.

## Ford Releases New Position Statement On Using Approved Paint Systems

*Responding to industry concerns pertaining to the use of non-approved paint systems for warranty repairs, Ford Motor Company has released the following position statement:*

In order to earn Ford Motor Company approval for use in warranty and collision repair, paint systems are required to pass a rigid series of tests based on real-world conditions. Ford's high standards for quality and durability are outlined in its refinish specification, WSS-M2P-100D, and the company cannot be confident about the performance of paint systems that have not been shown to meet this specification.

For these reasons, Ford Motor Company does not allow the use of non-Ford-approved paint products for warranty repairs of Ford and Lincoln vehicles and strongly recommends the use of only Ford-approved products on customer-pay and insurance-pay repairs.

Ford has also become aware of the troubling industry practice of mixing one paint product line with another during a single repair, and reminds repairers of the importance of using only one paint system throughout the refinish process. Any

deviation or substitution of products during the course of a repair may result in the ultimate failure of that repair, and paint companies will not warrant their products if it is determined that substitutes have been used. To help ensure proper performance and durability, Ford recommends that repairers strictly follow all guidelines detailed in the paint system manual.

For a list of all Ford-approved paint systems, contact your local Ford or Lincoln dealer. Ford and Lincoln dealers may access [www.FMCDealer.com](http://www.FMCDealer.com) > body shop > paint > [specific product brand] for a listing of all approved paint products.

For more information, please contact Gerry Bonanni, Ford's Senior Repairability Engineer, at (313) 317-9000 or [gbonanni@ford.com](mailto:gbonanni@ford.com), or the Ford Collision Parts Hotline at [cphelp@ford.com](mailto:cphelp@ford.com).



## FCSD Collision Truckload Program

- 475+ high-volume collision parts now available
- Covers over a dozen replacement part types
- 72 new parts added in October feature an average list-price reduction of 11%
- Helps collision repairers deliver high-quality, cost-effective repairs
- Allows Ford and Lincoln wholesaling dealers to compete more effectively against non-OEM copy parts and other parts specified by insurance customers



## INSIDE THE INDUSTRY

*Continued from page 2*

and 2011. Enterprise says the Northeast region had the highest LOR at 12.1 days, while the Northwest reported the lowest rate at 9.4 days.

### CCC Launches Parts Procurement Platform

CCC Information Services has launched its own electronic parts procurement system, CCC TRUE Parts Network, which provides repairers and insurers a direct link to part suppliers. The company says the system, which is integrated with the CCC ONE Platform, gives suppliers an opportunity to display their parts inventory and provide real-time pricing, and is open to all suppliers including OEM dealers.

### Mature Drivers Favor Blind-Spot Warning Systems

Among a list of 10 new vehicle technologies, older drivers say blind-spot warning systems make them feel safest behind the wheel. That's according to a new survey released by The Hartford and the MIT AgeLab, which also lists crash mitigation systems, emergency response systems, and drowsy-driver alerts as the next three technological advancements when it comes to making mature drivers feel safe.

### Ford Dealer Donates Parts to Collision Schools

An Illinois Ford dealer recently donated \$45,000 in automotive parts to local area schools. Arlington Heights Ford made the donation through the Collision Repair Education Foundation. The parts—which included door skins, quarter panels, core supports and other parts—will allow collision repair students to receive real-world training on current-model vehicle parts. “We are always willing to help educate and promote young technicians,” said Tony Guido, general manager at Arlington Heights Ford.

### Ford is Newest ASA Corporate Member

The Automotive Service Association has welcomed Ford Customer Service Division as its newest Corporate Member, a new membership category introduced this year. “To have Ford among our corporate partners is truly an honor,” said Dan Risley, ASA executive director. George Gilbert, FCSD collision merchandising manager, echoed the sentiment, stating, “We are pleased to continue our long-standing support of ASA.”

*Continued on page 4*



# Ford Returns to NACE; Looks Forward to Big Changes in 2014

After a brief hiatus, Ford Customer Service Division (FCSD) returned to the International Autobody Congress & Exposition (NACE) show floor this fall, in support of the Automotive Service Association (ASA) and the collision industry.

Mingling with collision repairers, FCSD staff was on hand to answer questions and distribute flash drives containing a wealth of Ford collision repair information, including position statements, informational videos, press releases, technical repair data, the *On Target* newsletter and its joint-OEM Steel Repairability Matrix (see revised version on page 7).

"As one of the first corporate members for ASA [a new membership category introduced this year] Ford was proud to show our support for the show and we look forward to what 2014 will bring," said George Gilbert, FCSD collision merchandising manager.

As for 2014, ASA has already announced several significant changes, including new dates and locations. For the first time ever, NACE will take place during the summer (July 31 – August 2), and instead of Las Vegas, the show will be in Detroit, where attendees will be given the chance to experience many of the automotive industry-related attractions the Motor City has to offer. In addition, ASA has hired Stone Fort Group as its new show management company, ending the long-running affiliation with Hanley Wood Exhibitions.

While the show itself is being revamped, moving to the summer also let ASA co-locate NACE with three other popular collision industry events—the Collision Industry Conference (CIC), the Inter-Industry Conference on Auto Collision Repair's (I-CAR)



annual meeting, and the Collision Repair Education Foundation's annual golf outing—creating a new "Industry Week" that will kickoff July 28th.

FCSD will be there with a new booth, exciting new parts displays

and plenty of repair information technicians need ... we'll have more details in our next issue.

For more information on NACE / CARS for 2014, please visit [www.asrwevents.com](http://www.asrwevents.com).

## INSIDE THE INDUSTRY

Continued from page 3

### NABC Joins Anti-Texting Campaign

The National Auto Body Council is joining the anti-texting-while-driving crusade, announcing it has teamed up with wireless service providers AT&T, Sprint, T-Mobile and Verizon to help promote *It Can Wait*, a national anti-texting and driving campaign. "This is one of the most important issues facing our communities today," said Chuck Sulkala, NABC executive director. "We can salvage vehicles but we cannot salvage a life." More information on the campaign can be found at [www.itcanwait.com](http://www.itcanwait.com).

### I-CAR Alters Gold Class Program

I-CAR has announced changes to its Gold Class program, aimed at boosting consumer awareness of Gold Class shops. The new branding initiative includes a new Gold Class plaque that is now free to eligible shops, but must be returned if a shop's Gold Class status expires, and the elimination of the program renewal fee. Currently, only about 10 percent of collision shops are Gold Class-rated, a status that can only be achieved by having on-site staff reach I-CAR Platinum training status in the four key collision repair roles.

### Vehicle Age Hits Record High

The average age of all light vehicles on the road in the U.S. has increased for the eighth straight year. According to automotive data provider Polk, the average age of all passenger cars and light trucks is now a record 11.4 years, up from 11.2 years in 2012. In analyzing over 247 million vehicle registrations, Polk also found that while the number of vehicles six-to-11 years old is declining, the number of vehicles older than 12 continues to increase.

### VMT Up Slightly

The U.S. Federal Highway Administration reports vehicle miles traveled (VMT) nationwide increased 1.5 percent in September, pushing VMT for the first three quarters of the year to 0.4 percent ahead of 2012's pace.

### Accidents Down in Canada

Allstate Insurance Company of Canada says its customers were involved in 5.3 percent fewer accidents from July 2011 to July 2013, when compared to the previous two-year period. The study involved the insurer's customers in Alberta, New Brunswick, Nova Scotia and Ontario.

## 2014 Industry Events Calendar

<b>Jan. 13 – 26</b>	North American International Auto Show Detroit, MI <a href="http://www.naias.com">www.naias.com</a>	<b>Mar. 3 – 9</b>	ASA / VISION HiTech Training and Expo Kansas City, MO <a href="http://www.asashop.org">www.asashop.org</a>	<b>Apr. 9 – 13</b>	Denver International Auto Show Denver, CO <a href="http://www.paragonexpo.com">www.paragonexpo.com</a>	<b>Jul. 31 – Aug. 2</b>	Congress of Automotive Repair and Service (CARS) Detroit, MI <a href="http://www.carsevent.com">www.carsevent.com</a>
<b>Jan. 15 – 17</b>	Collision Industry Conference (CIC) Planning Meeting Palm Springs, CA <a href="http://www.ciclink.com">www.ciclink.com</a>	<b>Mar. 21 – 23</b>	AASP-New Jersey NORTHEAST Trade Show Secaucus, NJ <a href="http://www.aaspnjnortheast.com">www.aaspnjnortheast.com</a>	<b>Jul. 29</b>	Collision Industry Conference (CIC) General Meeting Detroit, MI <a href="http://www.ciclink.com">www.ciclink.com</a>	<b>Nov. 4 – 7</b>	Specialty Equipment Market Association (SEMA) Las Vegas NV <a href="http://www.semashow.com">www.semashow.com</a>
<b>Jan. 15</b>	National Auto Body Council Golf Fundraiser Palm Springs, CA <a href="http://www.autobodycouncil.org">www.autobodycouncil.org</a>	<b>Apr. 9 – 10</b>	Collision Industry Conference (CIC) General Meeting Portland, OR <a href="http://www.ciclink.com">www.ciclink.com</a>	<b>Jul. 30</b>	I-CAR Annual Meeting Detroit, MI <a href="http://www.i-car.com">www.i-car.com</a>	<b>Nov. 5 – 6</b>	Collision Industry Conference (CIC) General Meeting Las Vegas, NV <a href="http://www.ciclink.com">www.ciclink.com</a>
<b>Jan. 16 – 20</b>	New England International Auto Show Boston, MA <a href="http://www.paragonexpo.com">www.paragonexpo.com</a>			<b>Jul. 31 – Aug. 2</b>	International Autobody Congress & Exposition (NACE) Detroit, MI <a href="http://www.naceexpo.com">www.naceexpo.com</a>		



# NABC Raises \$100K For Operation Comfort's AutoMotivation Program

## Wounded Soldiers Re-Build Their Lives While Re-Building Cars

The National Auto Body Council (NABC) has raised over \$100,000 to help support the re-launch of Operation Comfort's AutoMotivation—a unique program where wounded soldiers returning from Iraq and Afghanistan can simultaneously undergo occupational and rehabilitative therapies while they work on automotive-related projects.

Thanks to the collision industry's support, renovations to a new leased facility for the AutoMotivation program are nearing completion. The new facility, as well as AutoMotivation itself, recently held its grand opening on December 9, 2013, and is expected to be fully-operational by January 2014.

Soldiers participating in this effort with Operation Comfort will have available to them training materials developed and donated by I-CAR designed to provide the basic-to-intermediate job skills required for entry-level-through-journeyman positions within the collision repair industry. The program is self-paced and accommodates participants in various stages of recovery and rehabilitation who require schedule flexibility for hospital appointments, therapy, and other physical and mental limitations due to their injuries. The ongoing desire is to help get both I-CAR and vocational instructors to help out for a week at a time as donated services, to work alongside and help guide these vets on the proper repair methods needed for today's vehicles. Efforts also are underway to help fund the transportation and housing expenses for their donated efforts.

Operation Comfort was started in 2004, when patients at San Antonio's Brooke Army Medical Center—the country's primary medical facility for treatment of traumatic brain injuries, burns, amputations and other war wounds—converted a simple waiting room at the facility into a multi-purpose recreation area, allowing soldiers a place to relax away from their hospital beds.

The initiative soon added adaptive sports programs including sled hockey, hand cycling and amputee surfing and softball, which encourage soldiers to resume an active,

outdoor lifestyle in a safe, group-based environment. The AutoMotivation program was added in 2007, inspired by a request from a soldier whose hands were badly burned in an explosion while driving a fuel tank in Iraq. His main motivation during his healing was to be able to complete a car renovation project he had started with his dad prior to leaving for the service.

The program was unfortunately put on hold in March 2012, when its facility in San Antonio was leased to another party. Soon thereafter, however, NABC started its fundraising efforts to assist Operation Comfort in getting it restarted.

"Our primary concern is for our wounded troops who have been without the valuable occupational therapies and rehabilitative benefits of AutoMotivation," said Chuck Sulkala, NABC executive director. "Many disabled veterans will be better served today with industry resources re-focused on helping AutoMotivation become fully operational so they can once again have the opportunity to receive the positive therapeutic benefits they deserve."

According to Janis Roznowski, executive director of Operation Comfort, many of the renovations to the new, leased facility are being completed by a number of veterans from Operation Comfort.

"Whether it is simply changing a tire or working on restoring a complete vehicle, these activities are important first steps in the recovery process for many participants in AutoMotivation," said Roznowski. "We are extremely grateful to the many individuals and companies in the collision industry whose generous contributions enable us to continue supporting our wounded soldiers through AutoMotivation."

For more information on Operation Comfort's AutoMotivation or how you can support the program, visit [www.operationcomfort.org](http://www.operationcomfort.org), or contact Operation Comfort Executive Director Janis Roznowski (210-826-0500) or NABC Executive Director Chuck Sulkala (888-667-7433 or [chuck@nationalautobodycouncil.org](mailto:chuck@nationalautobodycouncil.org)).



The waiting room of the Brooke Army Medical Center transformed into the multi-purpose room seen here was the first project completed by the effort that would eventually become Operation Comfort.



Sgt. Chris Leverkuhn is busy wet-sanding a 1966 Cobra kit car, which was one of the first projects tackled by members of AutoMotivation.



The AutoMotivation Program was founded in 2007, after a request from California soldier Aaron Coates, seen here with Operation Comfort founder Janis Roznowski.



After Operation Comfort's official founding in 2004, the program soon added adaptive sports programs, such as sled hockey, which helped promote an active lifestyle within a supportive group.



Sgt. Matt Kline works on a converted Weapons Carrier, another early project of AutoMotivation.



Retired Army Sergeant First Class Vic Hash, a veteran with two tours of Afghanistan under his belt, and a valuable part of AutoMotivation's success, poses with the completed Weapons Carrier built on a 1984 Ford Bronco chassis.




**GENUINE  
PARTS**

# TECHNOLOGY TARGET

## NEW TECHNICAL SERVICE BULLETINS

Ford Motor Company has released two collision repair-related Technical Service Bulletins (TSBs) in recent months, covering important information repairers need to know in order to fix their customers' vehicles right the first time. Here are the details on each:

### TSB 13-5-18: Luggage Compartment Will Not Stay Open

**Issue:** Some 2013 Fusion vehicles equipped with a rear spoiler built on or before 5/2/13 may exhibit a luggage compartment lid that will not stay open.

#### Service Procedure:

1. Remove two (2) push-pin fasteners securing the luggage compartment lid striker trim cover and remove the cover. Remove the spare tire cover.
2. Remove four (4) cargo net fasteners and two (2) push-pin fasteners securing the luggage compartment trim and position trim aside on right and left sides. *Support the luggage compartment lid in the full open position.*
3. Remove the nylon tie strap holding the torsion bars. Release clip securing the luggage compartment lid torsion bar (**Figure 1**).
4. Hold torsion bar using large tongue-and-groove pliers or equivalent (**Figure 2**).
5. Lift up and push forward to remove the torsion bar from the bracket. Release tension by allowing the pliers to slowly rotate forward.
6. Remove the torsion bar from the opposite side hinge assembly and discard. Repeat these steps to remove the second torsion bar.
7. Reverse removal steps to install both the torsion bars in the same orientation as removed, ensuring the torsion bars are installed in the lower notch (**Figure 3**).
8. Repeat steps three to one in reverse order.

**Note:** Part numbers utilized: **DS7Z-5444890-B** (lower luggage compartment lid torsion bar) and **DS7Z-5444891-B** (upper luggage compartment lid torsion bar).



Figure 1



Figure 2



Figure 3

### TSB 13-8-12: Convertible Top – Headliner Pulled Out From Number 1 Bow (Supersedes TSB 10-4-13)

**Issue:** Some 2005 – 2014 Mustang vehicles equipped with a convertible top may exhibit a headliner that pulls away from the number 1 bow.

**NOTE:** The convertible top will need to be opened to the  $\frac{3}{4}$  position to perform the following repairs.

#### Service Procedure:

1. Remove the right-hand (RH) / left-hand (LH) front weather-strip retainer channel (refer to WSM Section 501-18).
2. Remove the front compression panel, also referencing section 501-18. Remove the RH / LH staples from the number 1 bow.
3. Drill out the two (2) pop rivets located on each side of the top cover to the number 1 bow (**Figure 1**).
4. Fold the front of the top cover back exposing the header form panel and remove the six (6) screws. (Short screw is located in the front center position).
5. Detach the RH / LH head bow listings from the number 1 bow, revealing the headliner attachment (**Figure 2**).
6. The front of the headliner attachment / u-channel should now be visible. The center of the headliner u-channel can be re-attached to the groove in the number 1 bow. The headliner u-channel will need to be firmly seated into the groove on the number 1 bow using a small, rubber mallet (**Figure 3**). Note: The two (2) pieces of double-sided sticky tape present in the number 1 bow groove can be reused.
7. Remove the remainder of the drilled-out rivets from Step 3. Reinstall the two header bow listings to the number 1 bow.
8. Install the header form panel, ensuring that the center headliner cloth tab is secured between the number 1 bow and header form panel securing it with the rear screw. Install the short screw in the forward center position.
9. Before pulling the top cover over the header form panel, apply a light mist of water over the double-sided sticky tape on the header form panel to allow the top cover enough movement for securing before the tape bonds to the top cover.
10. Pull the top cover over the header form panel and install the top cover rivets to the number 1 bow.
11. After ensuring there are no wrinkles in the convertible top material, install stainless steel 10mm staples in the RH / LH front corner locations of the number 1 bow.
12. Install the compress panel and eleven (11) screws. Install the RH / LH front retaining channels.
13. Firmly press against the header panel to seat the double-sided tape.

**Note:** Part number utilized: **W707504-S303** (rivet).



Figure 1



Figure 2



Figure 3

**Dealers can get complete details on each of these TSBs at [FMCDealer.com](http://FMCDealer.com), while independent repairers should contact their local Ford or Lincoln wholesaling dealer for more information.**

# Ford Updates Steel Repairability Matrix

Ford Motor Company has provided a slight revision to its popular Steel Repairability Matrix. The Matrix, which outlines the auto manufacturer’s recommended procedures for repairing several grades of steel on Ford vehicles, can be found in Ford’s official workshop manual, **Section 501-35: Body Repairs** (**Section 501-25** in newer-format manuals).



## Ford-Recommended Steel Repairability Matrix

Grade	Trade Descriptions	Welding Method			Cold Repairs	Use of Heat for Repair	Temp. Range	Maximum Heat
		MIG	RSW	MIG Braze				
Mild Steel	Mild	Yes	Yes	N/A	Yes**	Yes	Up to 1200°F (650°C)	90 sec. X 2
Laminate Steel	Quiet Steel	No	Yes	No	Yes**	No	N/A	N/A
Bake-Hardened	BH 180, BH 210, BH 250, BH 280	Yes	Yes	Yes	Yes**	Yes	Up to 1200°F (650°C)	90 sec. X 2
Solid Solution-Strengthened		Yes	Yes	Yes	Yes**	Yes	Up to 1200°F (650°C)	90 sec. X 2
High-Strength, Low-Alloy	HSLA 250, HSLA 350, HSLA 550	Yes	Yes	Yes	Yes**	Yes	Up to 1200°F (650°C)	90 sec. X 2
Dual-Phase <= 600 Mpa UTS (particular to 780 and 980 grades)***	DP 500, DP 600	Yes	Yes	Yes	Yes**	No	N/A	N/A
UHSS Martensitic Boron****	Bare Boron USIBOR	Yes* (plug weld only)	Yes	Yes	No	No	N/A	N/A
TRIP	TRIP 590, TRIP 780, TRIP 980	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**NOTE:** MIG Braze allowed for non-structural applications only.

\* Mig Plug Only, NO STITCH WELDING.

\*\* Cold repairs can be performed if damage excludes kinks; may section only if Workshop Manual procedure allows.

\*\*\* Dual-phase steels DP 700, DP 780 and DP 980 must be replaced at factory joints; may section only if Workshop Manual procedure allows.

\*\*\*\* Boron components must be replaced at factory joints; no sectioning allowed.



# Ford Pickup Box and Cab Assemblies Offer Many Benefits

A collision repairer calling for the replacement of a pickup truck's box or cab is a major undertaking, but Ford reminds repairers that for select F-150 (boxes) and Super Duty (boxes and cabs) models, choosing the original equipment assemblies offered by Ford comes with many advantages:

- Shorter delivery time—from the time of order it's approximately three to six business days
- Reduced repair cycle time—the assemblies eliminate the need to order and assemble individual components

or the prep work often required on a salvage unit

- Reduced damage thanks to superior, custom packaging
- Competitive price and ease of installing help reduce overall repair cost
- Improved overall repair quality—the new assemblies are the same as those used in new-vehicle production, with equivalent fit, finish, structural integrity, corrosion protection and dent resistance, and come with Ford's lifetime sheet metal guarantee.

Pickup box assemblies are available for 15 current models (five F-150 and 10 Super Duty) and 2008 – 10 Sport Trac models, while cab assemblies are available for seven current Super Duty models.

For more information on Ford's box and cab replacement assemblies, please contact the Ford Collision Parts Hotline at [cphelp@ford.com](mailto:cphelp@ford.com) or your local Ford or Lincoln collision parts wholesaling dealer.

## PICKUP BOX & CAB OFFERINGS

Part No.	Years	Model	Style	Description	List Price
F-150 Boxes					
BL3Z-8428508-C	2009 - Current	F-150	Styleside	5.5 ft. w/o wheel lip moldings	\$ 1,963.68
BL3Z-8428508-D	2009 - Current	F-150	Styleside	5.5 ft. with wheel lip moldings	\$ 1,857.25
BL3Z-9928508-E	2009 - Current	F-150	Styleside	8 ft. w/o exterior wheel lip	\$ 2,248.65
BL3Z-9928508-F	2009 - Current	F-150	Styleside	6.5 ft. w/o wheel lip moldings	\$ 2,063.45
BL3Z-9928508-H	2009 - Current	F-150	Styleside	6.5 ft. with wheel lip moldings	\$ 2,071.33
Sport Trac Boxes					
8A2Z-9928508-AA	2008 - 2010	Sport Trac	N/A	This is the inner box only. It is NOT a complete box with outer panels.	\$ 4,097.22
Super Duty Boxes					
BC3Z-9928508-C	2011 - Current	Super Duty	Styleside	6.75 ft. SRW w/o Stepgate	\$ 2,075.82
BC3Z-9928508-D	2011 - Current	Super Duty	Styleside	6.75 ft. SRW with Stepgate	\$ 2,348.38
BC3Z-9928508-E	2011 - Current	Super Duty	Styleside	8 ft. SRW w/o Stepgate with 5th Wheel	\$ 2,306.45
BC3Z-9928508-F	2011 - Current	Super Duty	Styleside	8 ft. SRW with Stepgate with 5th Wheel	\$ 2,458.80
BC3Z-9928508-G	2011 - Current	Super Duty	Styleside	8 ft. SRW w/o Stepgate w/o 5th Wheel	\$ 2,424.00
BC3Z-9928508-H	2011 - Current	Super Duty	Styleside	8 ft. SRW with Stepgate w/o 5th Wheel	\$ 2,450.48
BC3Z-9928508-J	2011 - Current	Super Duty	Styleside	8 ft. DRW w/o Stepgate with 5th Wheel	\$ 2,088.92
BC3Z-9928508-K	2011 - Current	Super Duty	Styleside	8 ft. DRW with Stepgate with 5th Wheel	\$ 2,152.38
BC3Z-9928508-L	2011 - Current	Super Duty	Styleside	8 ft. DRW w/o Stepgate w/o 5th Wheel	\$ 2,088.77
BC3Z-9928508-M	2011 - Current	Super Duty	Styleside	8 ft. DRW w/o Stepgate with 5th Wheel	\$ 2,190.47
Super Duty Cabs					
BC3Z-25001B24-A	2011 - Current	Super Duty	Regular Cab	w/o Fatboy Fenders	\$ 6,949.47
BC3Z-25001B24-C	2011 - Current	Super Duty	Regular Cab	with Fatboy Fenders	\$ 7,222.10
BC3Z-26001B24-A	2011 - Current	Super Duty	Crew Cab	w/o Fatboy Fenders with Moonroof	\$ 8,194.94
BC3Z-26001B24-B	2011 - Current	Super Duty	Crew Cab	w/o Fatboy Fenders w/o Moonroof	\$ 8,230.64
BC3Z-26001B24-D	2011 - Current	Super Duty	Crew Cab	with Fatboy Fenders with Moonroof	\$ 9,975.72
BC3Z-26001B24-E	2011 - Current	Super Duty	Crew Cab	with Fatboy Fenders w/o Moonroof	\$ 9,967.15
BC3Z-28001B24-A	2011 - Current	Super Duty	Super Cab	w/o Fatboy Fenders Auto Trans	\$ 8,427.04

## Consumer Collision Repair Brochures



Ford Motor Company reminds repairers that their brand-specific consumer collision repair brochures make great customer handouts. The full-color pamphlets detail the ins and outs of the sometimes intimidating collision repair process, from the roles of insurers and body shops, to what every vehicle owner should know in the event of an accident.

The Ford and Lincoln booklets are formatted in an easy-to-read Q&A format and provide facts about the entire collision repair process, from choosing and working with the best insurance company and body shop, to the benefits of repairing a vehicle with Genuine Ford Original Equipment collision replacement parts.

Both brochures are available to dealers at [FMCDdealer.com](http://FMCDdealer.com) (item # CPB2012 and CPB-LV2012), free of charge, in wrapped quantities of 25 with no ordering limit. For interested independent collision repair shops, please contact your local Ford or Lincoln collision parts wholesaling dealer or the Ford Collision Parts Hotline at [cphelp@ford.com](mailto:cphelp@ford.com) for more information.





## DID YOU KNOW

**That 85% of the materials used on Ford vehicles are recyclable?**

**We are proud** to be part of Ford's global sustainability strategy to reduce its environmental footprint and accelerate the global development of advanced fuel-efficient vehicle technologies.

Since 2003, Ford's Core Recovery Program has kept 120 million pounds of damaged vehicle parts from landfills. Reduce, reuse and recycle.



### WHEEL CORE PROGRAM

Launched in 2005, the Wheel Core Program has kept 34,000+ wheels annually out of the landfills by recycling the metals. It also helps to eliminate aftermarket reconditioned wheels, which may be of poor quality and could potentially affect vehicle safety, from entering the market.



### LIGHTING CORE PROGRAM

Every single part of the 26,000+ lights collected annually through the Ford Lighting Core Program can be recycled. Launched in 2011, the program's number of reclaimed lights is increasing every year.



### FASCIA CORE PROGRAM

Launched in 2010, over 23,000 (and growing) Ford fascias are collected annually and processed into pellets that are reused to make brand-new products.

## SHARE YOUR THOUGHTS

The purpose of **ON TARGET** is to provide Ford and Lincoln dealership parts departments and independent collision repair shops with the general and technical information needed to deliver efficient, high-quality repairs to Ford, Lincoln and Mercury vehicle owners. In addition, information on parts wholesaling policies and procedures, and collision repair industry activities will also be featured. **ON TARGET** is scheduled to be published three times a year.

Your comments and article ideas are welcome. You can contact **ON TARGET** through e-mail at: [cphelp@ford.com](mailto:cphelp@ford.com).

Additional copies of **ON TARGET** are available through Ad Creator or [FMCDealer.com](http://FMCDealer.com). Independent collision repair shops should contact their Ford or Lincoln wholesaling dealer. **ON TARGET** is also available free of charge at [Motorcraft.com](http://Motorcraft.com) under technical resources / quick guides.

## ON TARGET

Produced for Ford and Lincoln wholesaling dealers and their collision repair customers.

### Editor

George Gilbert

### Contributors

Chris Caris Kim Jennings Steven Lubinski Andrea Presnell







Dealership Information

# CRASH PARTS ORDER FORM

Use this form to provide us with the information necessary to make certain we deliver the right parts on time ... the first time!

The information below can be found on the certification label located on the driver's-side door jamb.

If the vehicle is damaged in this area provide us with the Vehicle ID# located on the driver's-side front corner of the dashboard.

<b>VEHICLE ID#</b>	(Need all 17 Digits)				
<b>TRIM CODE</b>		<b>YEAR</b>		<b>DAMAGE AREA (Circle)</b>	
<b>MLDG. CODE</b>		<b>MAKE</b>		FRONT	REAR
<b>BODY CODE</b>		<b>PHONE</b>	(    )	LEFT SIDE	RIGHT SIDE
<b>CONTACT</b>		<b>SHOP</b>		UNDERBODY	LEFT / RIGHT

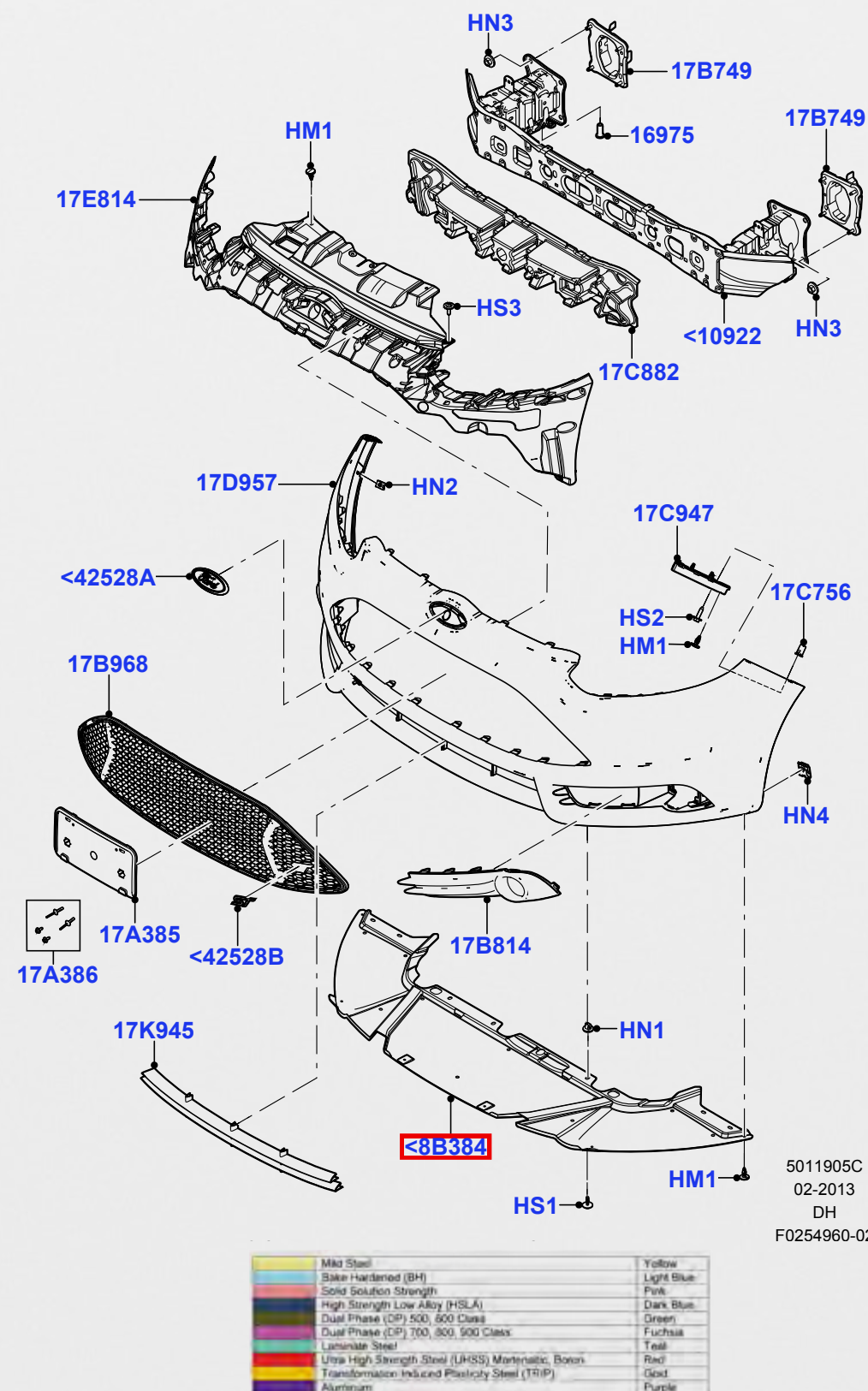
## 2013 - 14 FORD **FOCUS ST**

Date Ordered:	<b>PARTS ORDER</b>	Date Needed:
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[illegible]

**NOTE: Refer to vehicle diagrams for part identification and numbers.**

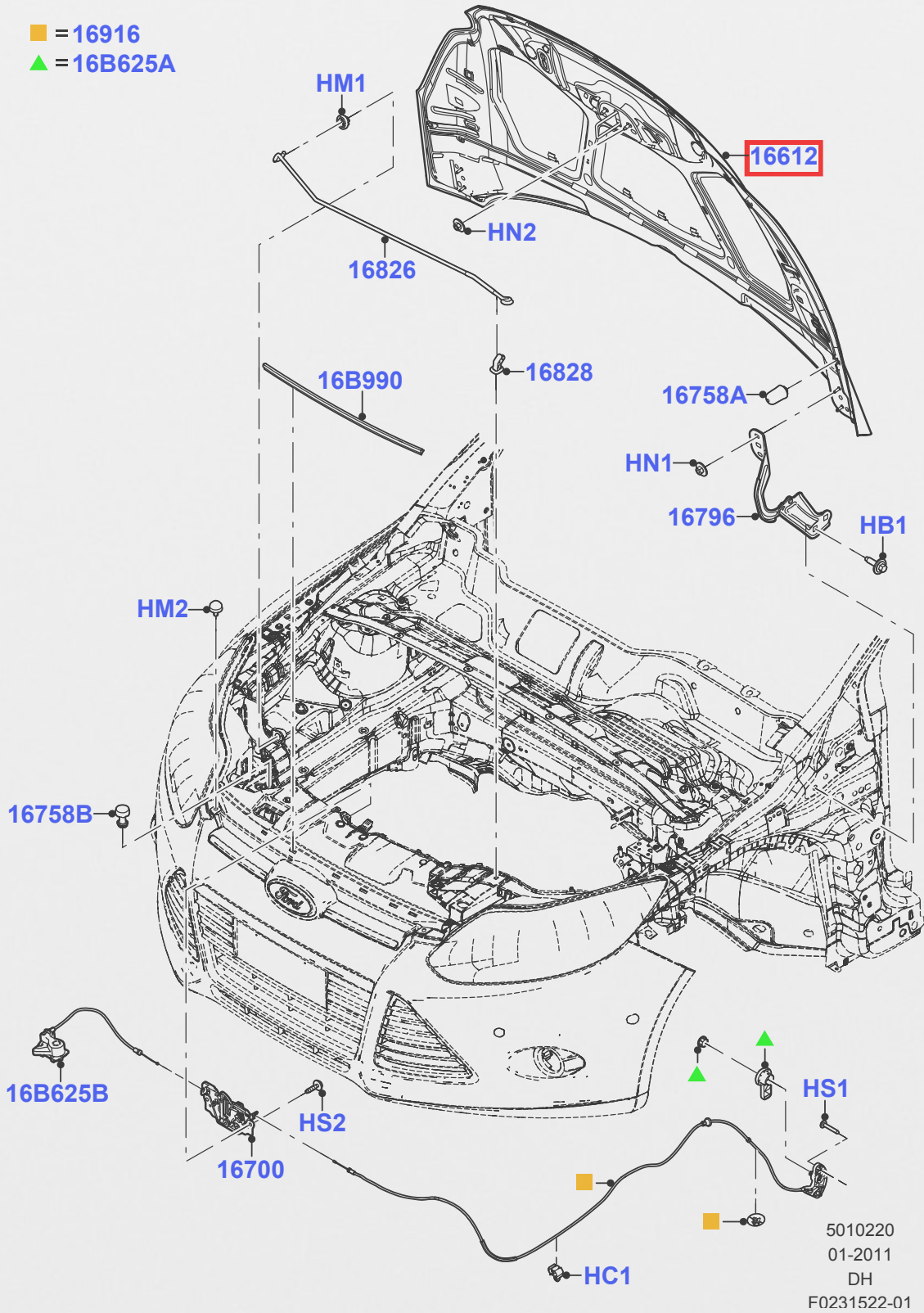
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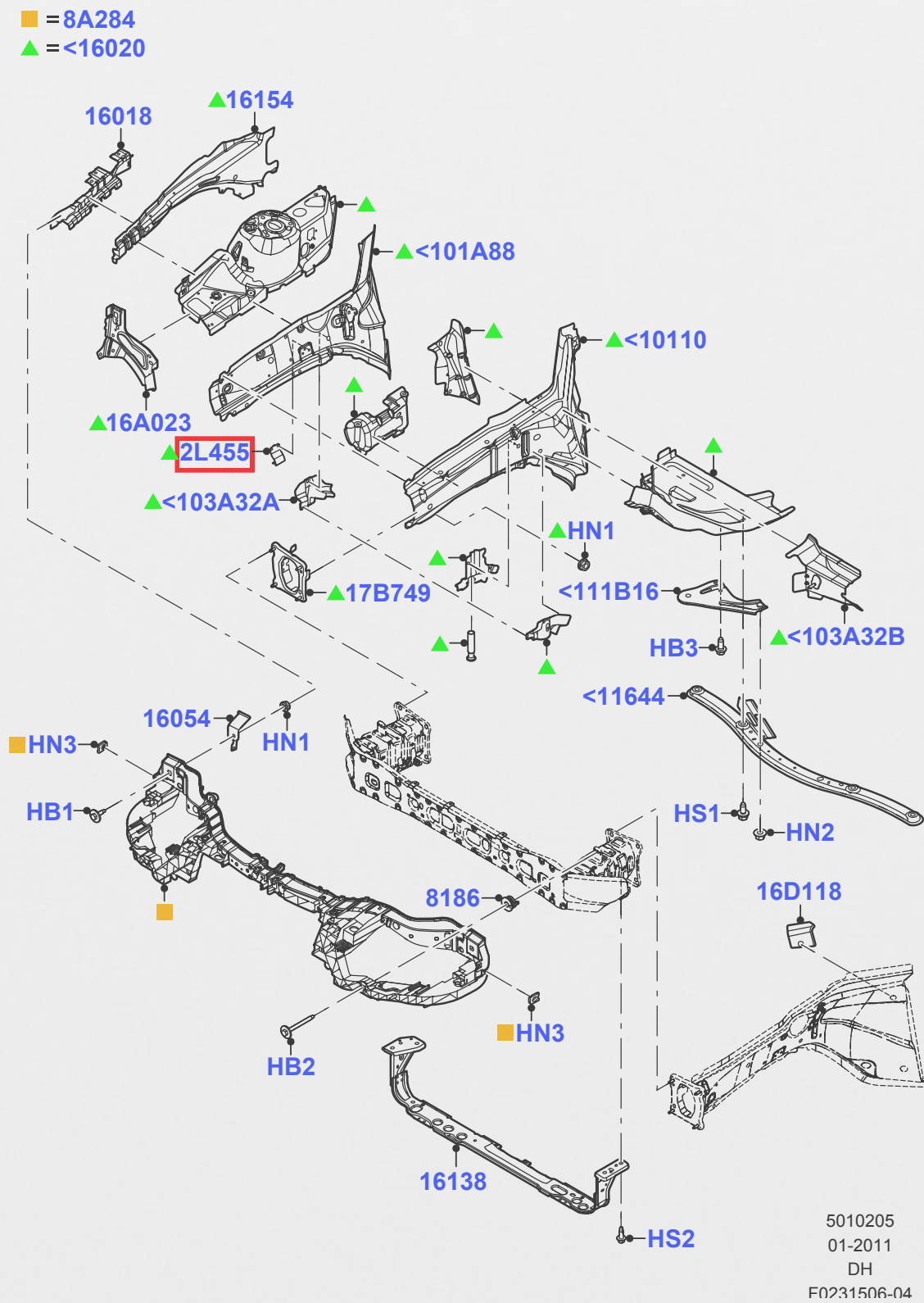
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02-2013  
DH  
F0254960-02



Hood

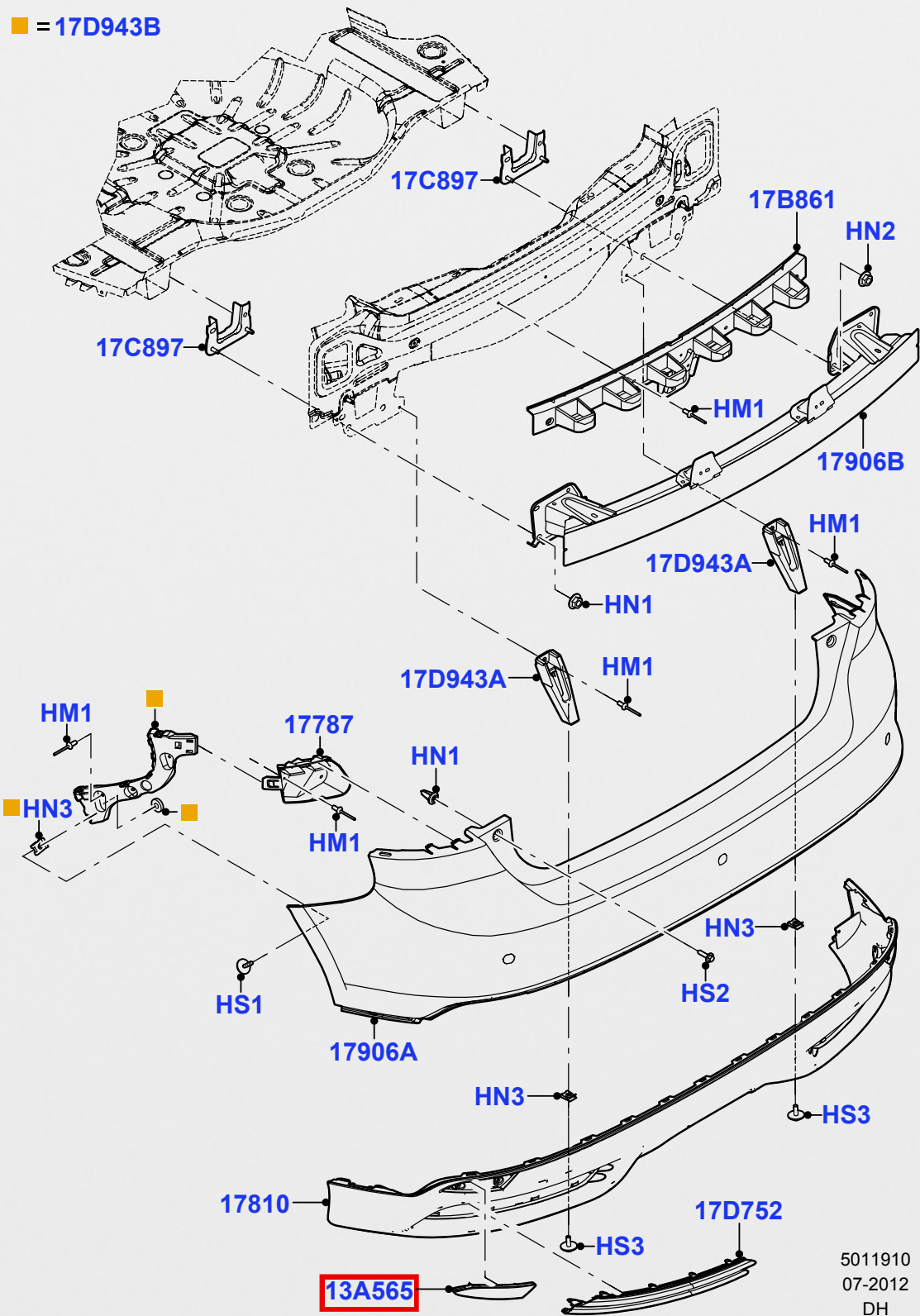


Front Apron



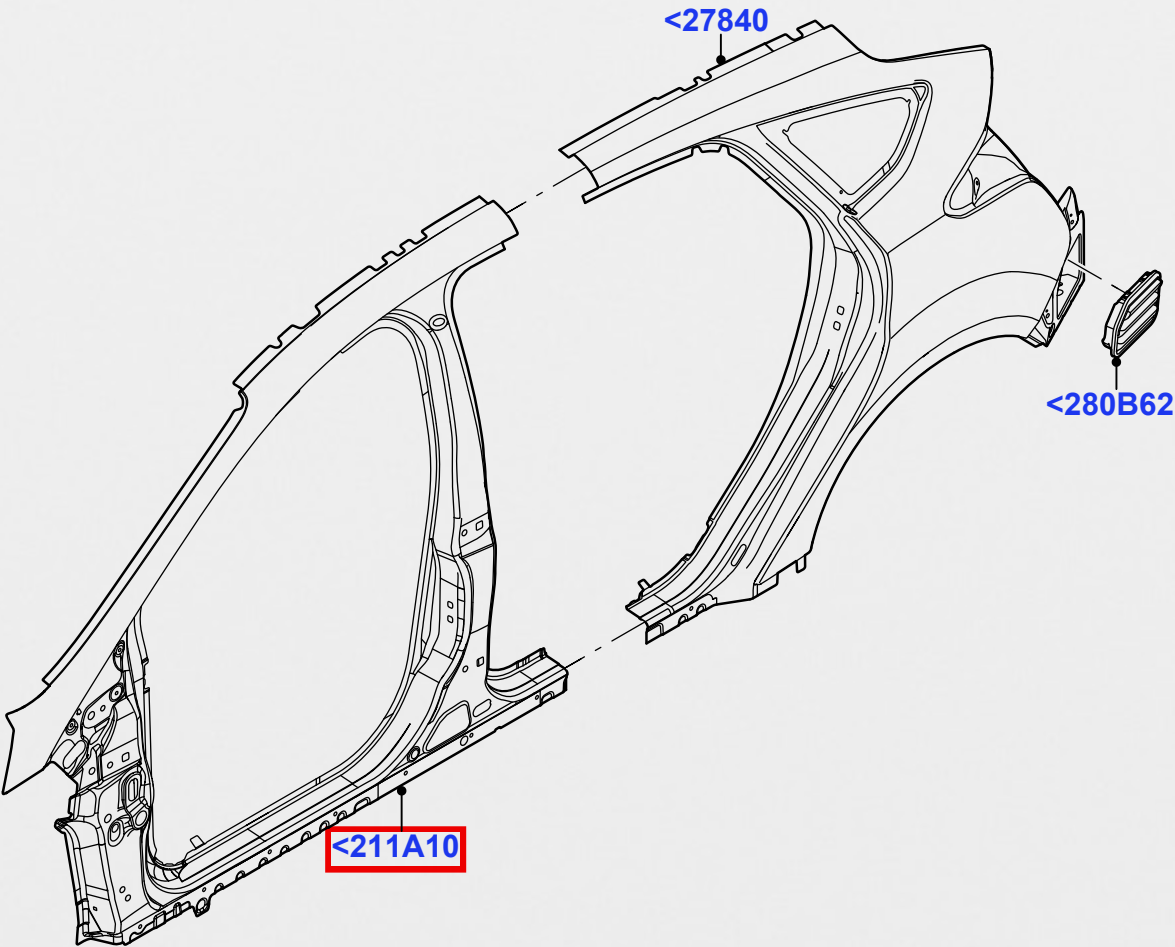
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■ = 17D943B



5011910  
07-2012  
DH  
F0255100-01

Side Panels



5010130  
01-2011  
DH  
F0237040-01