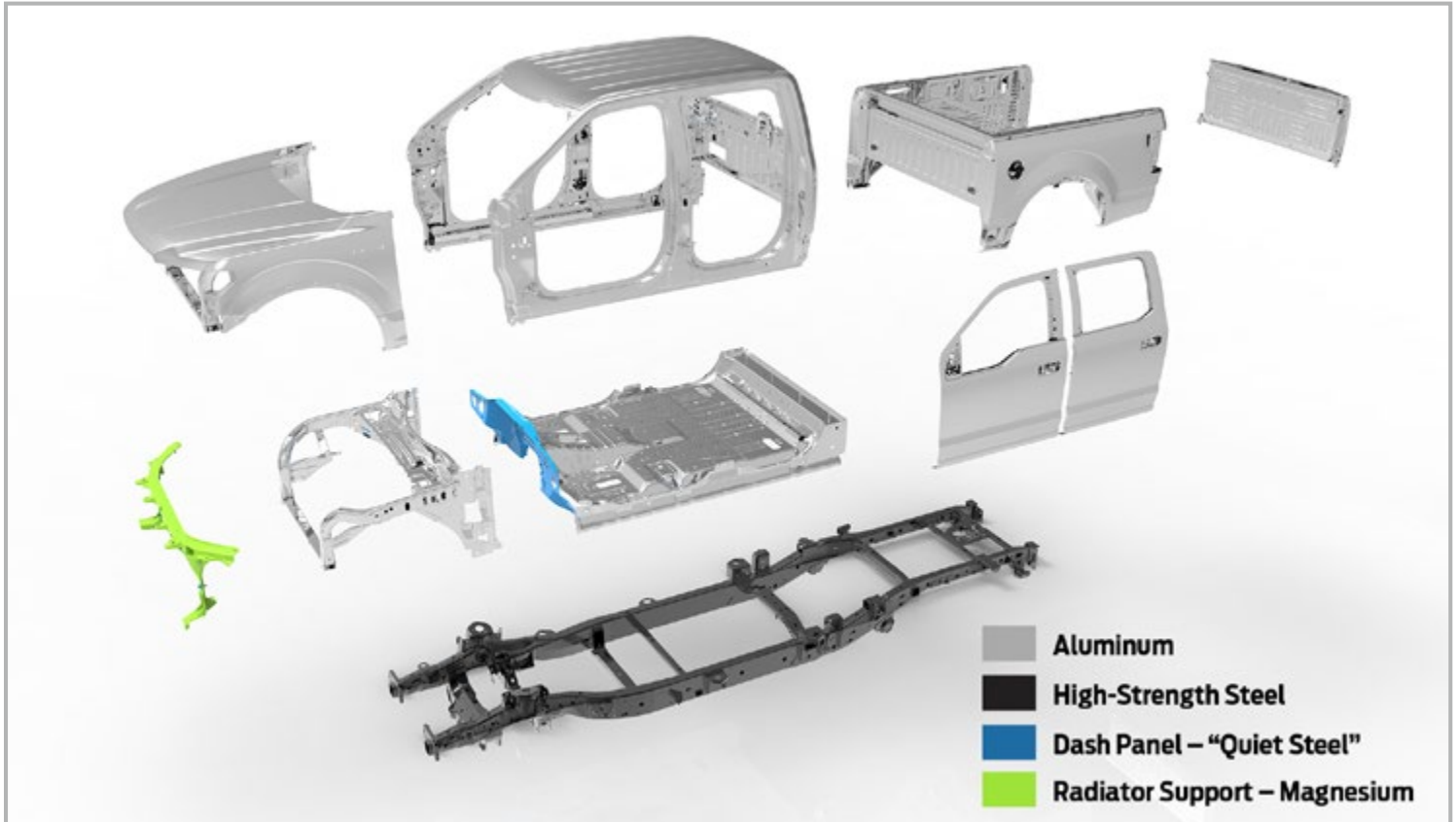


## The 2015 F-150 is Ford's Toughest Truck Yet



- Aluminum**
- High-Strength Steel**
- Dash Panel – “Quiet Steel”**
- Radiator Support – Magnesium**

The all-new Ford F-150 brings a new meaning to Built Ford Tough, with cutting-edge materials and an industry-first frame design, making the truck tougher and more efficient than ever.

Starting with the signature fully-boxed frame, Ford engineers increased the use of high-strength 70,000-psi steel—from 23 percent to 77 percent of the frame—to improve stiffness and durability while reducing weight. The new frame is up to 60 pounds lighter than the current frame.

“The new F-150 frame was developed using industry-first engineering techniques to create a foundation for the truck that is lighter without sacrificing any of the F-150 legendary toughness,” said Larry Coan, Ford’s damageability product concern engineer.

As you’ve likely heard, Ford engineers also increased the use of advanced materials in the F-150 body.

High-strength, military-grade, aluminum alloys—already used in aerospace, commercial transportation, energy and many other rugged industries—are used throughout the F-150 body for the first time, improving dent and ding resistance, and also saving weight.

Overall, up to 700 pounds have been shaved from the previous F-150, helping it tow and haul more, handle better, accelerate quicker and stop shorter.

“Ford engineers selected these aluminum alloys

because of the metals’ unique ability to withstand tough customer demands,” said Ford Senior Damageability Engineer Gerry Bonanni.

### 10 Million Miles of Testing

The 2015 F-150 is also the most-tested F-150 in history; it will have undergone more than 10 million miles of testing by the time customers can purchase the truck.

<b>Frame</b>	Increases use of 70,000-psi steel from 23 to 77 percent	Combined reduction of about 700 pounds
<b>Body</b>	Utilizes military-grade aluminum alloys	

“Ford engineers wanted to be sure the new designs and materials used in the truck would excel when faced with our customers’ tough demands,” said Coan. “Our extensive testing proved the durability of the military-grade, aluminum-alloy body parts.”

“Ford’s goal in designing the truck was to make it as tough—or tougher—than the current model,” said Bonanni. “It has been torture-tested for thousands of hours in labs, at Ford proving grounds and with some of

the truck’s most demanding customers to meet rigorous Ford standards for quality, durability and dependability.”

### New Repair Training

Ford is also preparing repairers for when the truck ends up at the shop in need of fixing. The company has collaborated with I-CAR to create a collision repair training program for the 2015 F-150 (see story on page 3) and also developed its own online course—“Collision

*Continued on page 2*

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- Ford Dealer Donates Parts for Student Efforts..... 4
- Ford Debuts New Paint Process for 2015 Transit..... 5

# The 2015 F-150—Built Ford Tough

## TESTED TOUGH

<b>Ford Internal Testing</b>	Ford tested the 2015 F-150 longer and further than any other F-150 in the company's history. Tests included salt and acid sprays for corrosion; extreme temperature and altitude tows; and simulated miles of abuse with post-testing teardowns and inspections to improve the truck's designs.
<b>2013 Baja 1000</b>	Ford Racing teamed up with Foutz Motorsports to race the all new F-150, with the 2.7-liter EcoBoost® engine—disguised as the 2014 model—in one of the world's toughest off-road races. No extra oil or transmission coolers were added, and throughout the 883-mile race, the only maintenance required was changing the stock air filter at every fuel stop.
<b>Real-World Fleet Testing</b>	Six F-150 trucks with high-strength, military-grade, aluminum-alloy cargo boxes were placed with a mining company, an energy utility and a construction firm—none of them knowing any of the trucks' parts were different—to monitor performance. The trucks were used in the companies' daily routines for two years and more than 300,000 miles of abuse, then underwent a teardown and inspection process that led to new engineering tests and design changes for the production vehicle.

*Continued from page 1*

and Body Shop Essentials"—to introduce repairers to the new model and go through specific repair options available. In addition, the truck's Ford Workshop Manual—still in development—will include detailed walk-throughs of every repair. Both the online course and the workshop manual will be available on [www.motorcraftservice.com](http://www.motorcraftservice.com).

In addition to the online content and classes, Ford plans to exhibit a 2015 F-150 body-in-white cutaway at the Specialty Equipment Market Association (SEMA) show in Las Vegas in November, to continue providing the collision industry with the latest information on the new F-150 as well as the benefits of using Ford genuine collision parts.

The new F-150 is scheduled to arrive in showrooms sometime during the fourth quarter.

**ALL-NEW F-150 FRAME**  
**FULLY BOXED FRAME IS TOUGH, MORE CAPABLE**

- UP TO 60-POUND WEIGHT SAVINGS FOR IMPROVED CAPABILITY**
- EIGHT THROUGH-WELDED CROSSMEMBERS FOR INCREASED STIFFNESS**
- STAGGERED OUTBOARD REAR SHOCKS FOR IMPROVED RIDE AND HANDLING**
- FIRST FOR PICKUPS 12-CORNER CRUSH BOXES FOR IMPROVED FRONT IMPACT PROTECTION**
- GREATER USE OF HIGH-STRENGTH, 70,000-PSI STEEL FOR IMPROVED TOWING AND PAYLOAD**
- LARGE CROSS-SECTION RAILS FOR IMPROVED TORSIONAL RIGIDITY**

THE ALL-NEW **F-150** **BUILT FORD TOUGH**

## Coming in the Next Issue – A Review of NACE 2014



The Ford display proved to be quite a draw at the 2014 NACE, held in late July in Detroit. Look for more information on the show, as well as Ford's presence—of course featuring the all-new 2015 F-150—in the next issue.

## INSIDE THE INDUSTRY

### Number of Aluminum Pickups to Increase

According to a forecast by Ducker Worldwide, 70 percent of new pickup trucks will have an aluminum body by 2025 with the biggest users of the material being Ford, General Motors and Chrysler Group. While aluminum usage in vehicles averaged about 350 pounds in 2013, it is expected to increase to 400 pounds next year and 550 pounds by 2025.

### New Car Problems Up

According to J.D. Power and Associates' annual Initial Quality Study—which examines problems encountered in new cars during the first 90 days of ownership—the number of problems per 100 vehicles increased 3 percent in 2014, from 113 to 116. Possible reasons behind the increase include a

higher number of new-vehicle launches, which typically have more problems than carryover models, connectivity issues and difficulties related to the record-breaking inclement weather experienced at the beginning of the year.

### Average Age of Vehicles Remains Flat

The average age of all vehicles on the road in the U.S. this year remains steady at 11.4 years, with both passenger cars and light trucks posting that same average age for the first time since tracking began in 1995. That's according to IHS Automotive, which forecasts the number of vehicles 0 – 5 years old will jump 32 percent over the next five years, while those ages 6 – 11 will see a 21 percent drop.

IHS says the total number of vehicles in operation in the U.S. now stands at a record 252.7 million, up 3.7 million (1.5 percent) from last year.

### Study Finds Consumers Wary of Body Shops

A new survey conducted by AudaExplore finds collision repairer to be among the least trusted professions by consumers. The study, which surveyed over 1,000 adults, gauged responses in three prime areas with regard to collision repair: communication, trust and cost. Forty-eight percent of respondents stated body shops sometimes, rarely or never provide great customer service and 74 percent said they would like to better understand the repairs the shop is performing. Nearly half (46 percent) said that body shops sometimes, rarely or never provided a final price that matched the original estimate. In terms of trust, when asked to rank repairers among five professions (teacher, doctor, law enforcement, automotive collision repair technician, lawyer) collision repair technician came in second to last; 28 percent responded they trust body shops the least.

*Continued on page 4*

# Repairers Flock to I-CAR's New F-150 Training

The collision repair industry has begun preparing for the introduction of Ford's all-new, 2015 F-150, and for many shops that has meant signing up for I-CAR's new F-150 structural repair course. As of early July, more than 755 Ford and Lincoln dealerships and 688 independent collision shops had registered for the training, topping Ford's goal for this point in the year.

Development of the six-credit-hour course was a two-year, collaborative effort between Ford Motor Company engineers and I-CAR, and it's intended to help ensure collision shops are ready to properly repair the F-150's high-strength, military-grade, aluminum-alloy body when it arrives in dealerships in the fourth quarter of this year. "This is a game-changer in the way the collision repair industry approaches training; to be fully prepared with the knowledge, skills and solutions needed before the vehicle debuts," said I-CAR CEO & President John Van Alstyne.

I-CAR's director of industry and technical relations, Jason Bartanen, added, "For a revolutionary vehicle like the 2015 Ford F-150, material-specific training that highlights the unique processes associated with aluminum repair is critical for the front-line professionals faced with safely repairing these vehicles."

Given the popularity of the F-150, I-CAR has scheduled over 800 classes around the country through the end of the year. Successful completion of the course is required for all dealer and independent shops attempting to join the new Ford National Body Shop program, as is passing both I-CAR's Aluminum Welding Training & Certification and Ford's "Collision and Body Shop Essentials," which is available at [MotorCraftService.com](http://MotorCraftService.com). To enroll in the I-CAR classes or for more information, visit [I-CAR.com](http://I-CAR.com).

**I-CAR, which is currently celebrating a milestone anniversary of 35 years dedicated to improving the quality and safety of collision repair, has also recently updated its website. Under the "OEM" icon, repairers can sign up for the exclusive I-CAR classes created in conjunction with Ford on its all-new 2015 F-150.**

## 2015 Ford F-150 Structural Repair Training Course

Course Format: Classroom Instructor

Course Content:

### Aluminum Structures

Provides an overview of the structural characteristics of aluminum, design considerations for working with aluminum structures and how to properly analyze/repair F-150 structural damage.

### Repair Processes for Aluminum Structural Parts

Hands-on work with aluminum and bolted-on structural parts. Information is offered on preventing corrosion, heating concerns, and grinding and sanding considerations. Rivet bonding overview as well as F-150-specific fasteners and adhesives will be detailed.

### Front of Vehicle

Identifies parts on the front of a vehicle and tools used for repair. Continues with information on how to develop a repair plan, replacement part options and assembly instructions. Considerations around separating for a front assembly and methods for corrosion protection are also introduced. Provides improved forward apron tube repair procedure.

### Middle and Rear of Vehicle

Includes information on welded door apertures and rivet-bonded apertures. Also, discussions about vehicle middle and rear assembly replacement procedures, as well as replacing and sectioning aluminum structural parts, including floor pan, cross member, rocker panel, B-pillar, outer pickup box side panel.

### Steel Frame Sectioning Service Procedures

Overview of the Ford-approved steel frame sectioning service procedures for the 2015 F-150.

## I-CAR Aluminum Welding Training and Certification Test™

Course Format: Hands-on, instructor-led training at repair facility

Course Content:

### Classroom Instruction

Overview of course objectives followed by instruction on how to properly set up and tune an aluminum GMA (MIG) welding machine, address safety issues, prepare aluminum surfaces, perform proper welding techniques, identify and correct weld defects, and visually inspect and destructively test welds.

### Hands-on Practice

Opportunity to apply knowledge gained through classroom instruction by making GMA (MIG) plug, fillet, and butt joint with backing welds. Welds are made in both the vertical and overhead positions, and on two types and two thicknesses of aluminum alloys. Participants also perform the required visual inspections and destructive tests for each type of welded joint.

### Aluminum Welding Certification Test

The course concludes with the I-CAR Aluminum Welding Certification Test™. All six segments of the welding certification test must be passed in order to earn points. Technicians not passing all segments will have six months to re-test. The welding certification remains active five years from test date.

# Making a Difference – Ford Dealership Donates \$45,000 in Parts to Chicago-Area Collision Schools

A Chicagoland Ford dealer has become a shining example of what the Collision Repair Education Foundation (CREF) hopes can be done nationwide, as it works to help prepare the next generation of collision repair technicians.

Working with CREF, Arlington Heights Ford recently donated \$45,000 in current-model Ford parts—including hoods, bumper covers, door skins, front rails, core supports and more—to two local schools offering collision repair courses, giving students the chance to practice and learn on the latest parts.

“We are always willing to help educate and promote young technicians,” said Arlington Heights Ford General Manager Tony Guido. “We need young people who are willing to get into the automotive collision and service industry. Hands-on is always the best experience.”

The Collision Repair Education Foundation actively reaches out to individual dealerships and dealership groups that might be interested in donating

parts to local automotive repair schools, especially parts that are slated to be scrapped. CREF Director of Development Brandon Eckenrode said current-model parts offer great practice for the students, and added, “We want to end the days of collision instructor ‘dumpster diving’ by helping to connect dealerships with local schools.”

CREF is actively looking for other dealerships to follow Arlington Heights Ford’s lead on donating parts, but it also works with independent body shops and other industry members interested in supporting college and high school collision programs through other in-kind product or monetary donations. For more information, contact Brandon Eckenrode at [Brandon.Eckenrode@ed-foundation.org](mailto:Brandon.Eckenrode@ed-foundation.org) or 847-463-5244.



*The Collision Repair Education Foundation is actively looking to help connect dealerships and independent shops with local collision schools. Collision school programs on average have a \$10,000 annual budget and by donating parts, those funds can help out the students in other areas.*



*Arlington Heights Ford’s donation included current-model hoods, bumper covers, door skins and more, giving some Chicago-area collision repair students hands-on experience with the latest parts.*

## INSIDE THE INDUSTRY

*Continued from page 2*

### More than a Third of Drivers Admit to Texting; NABC Anti-Texting Effort Continues

A new Harris Poll finds 37 percent of drivers admit to sending text messages while driving; 45 percent say they’ve read incoming texts from behind the wheel. The survey of more than 2,000 people also found 94 percent believe texting while driving is dangerous, while 91 percent say reading texts is unsafe.

Meanwhile, the National Auto Body Council says it received more than 1,000 pledges not to text and drive from students, parents and other attendees at the recent SkillsUSA conference in Kansas City. NABC is teaming with AT&T to promote its nationwide “It Can Wait” campaign.

### New Owners for ABRA; Acquisitions Continue

ABRA Auto Body & Glass and its primary owner,

private-equity firm Palladium Equity Partners—which acquired the MSO in 2011—have announced ABRA has now been sold to Hellman & Friedman, LLC, in a deal that closed in late August.

At the same time, ABRA has announced it has acquired all 12 True Quality Collision Centers, located in Ohio and Indiana, as well as multiple additional acquisitions across several states, bringing the total number of ABRA shops to 240 in 19 states.

### AkzoNobel HQ Moves to Michigan

AkzoNobel has announced it is moving its Automotive & Aerospace Coatings Vehicle Refinishes North American headquarters from Norcross, Ga., to Troy, Mich. The move, which should be finalized by March 2015, is expected to bring around 60 new positions.

### VMT Remains on the Rise

The Federal Highway Administration reports the number of vehicle miles traveled (VMT) nationwide in June hit 261.7 billion, up 1.4 percent—or 3.7 billion miles—compared to June 2013. It marks the fourth

consecutive monthly VMT increase vs. 2013, after declines in January and February.

### New CollisionLink Unveiled

OECConnection has launched the latest version of its CollisionLink Shop application. The company says the new edition includes catalog integration for access to OEM-quality part illustrations, and a new-and-improved workflow and web-based user interface intended to improve shop productivity.

### CREF Earns Highest Charity Rating

The Collision Repair Education Foundation has earned top marks from the country’s largest independent charity evaluator. Charity Navigator has awarded the Foundation its highest, four-star rating for its adherence to good governance and fiscal responsibility. CREF says it has distributed more than \$20 million in industry donations to high school and post-secondary collision education programs since 2009, with an average of 90 cents per dollar going back to the industry.

# All-New Ford Transit Debuts State-of-the-Art Paint Process



The all-new 2015 Ford Transit—making its North American debut later this year—offers a wide range of new features and capabilities for those in the market for a larger van, but one of its most interesting may be its paint.

The Transit will be the first vehicle to use the new, two-wet monocoat paint process, developed by Ford and its paint suppliers to produce a more durable paint, and one that uses less energy and water, while reducing carbon dioxide and particulate emissions compared with conventional paint processes.

Ford says preliminary advanced weather testing indicates paint applied using the new process will keep 90 percent of its gloss after four years on the road, compared to just one percent for paint applied using a conventional monocoat process.

“Durability was a critical consideration when we initiated this project,” said Dennis Havlin, Ford global paint engineering development and launch supervisor. “The advancements in paint chemistry enable us to deliver the appearance, performance and durability our customers demand.”

The new, two-wet monocoat process uses a primer coat that requires only a few minutes of open-air drying time before the color coat is applied. The color coat is formulated with the same appearance and protection properties of the clear coat, which eliminates the need for a separate clear coat.

Each color must be developed uniquely for the new process, so for now only white-colored vehicles—accounting for nearly 80 percent of Transit production—will use the new paint, but other colors will be considered going forward as demand dictates.



*The new, two-wet monocoat paint process, developed by Ford and its paint suppliers, is expected to cut carbon dioxide emissions by 9,500 tons and particulate emissions by 35 tons annually when compared to conventional paint processes. In addition, an innovative dry-scrubber system will help save more than 10.5 million gallons of water, while the overall process should save 48,000 megawatt hours of electricity, enough to power 3,400 homes.\**

*The two-wet monocoat process uses a primer coat that requires only a few minutes of open-air drying time before the color coat is applied. The color coat is formulated with the same appearance and protection properties of the clear coat, which eliminates the need for a separate clear coat. The painted body is fully cured in an enamel oven after the color coat is applied. The total process removes one paint-application step and one oven-drying step when compared to conventional paint processes.*

\*Data based on preliminary testing

# Get it right.



## From the source.

**Ford and Lincoln Dealers are the one-stop source for all of your collision repair needs.**

Not only are they a great source for technical and repair information, their Ford Motor Company Genuine Parts can help your body shop reduce cycle time, improve relationships with insurance companies and satisfy customers. So call your local Ford or Lincoln Wholesaling Dealership today for all your Genuine Parts needs.



## 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 [FMCD dealer.com](http://FMCD dealer.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

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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

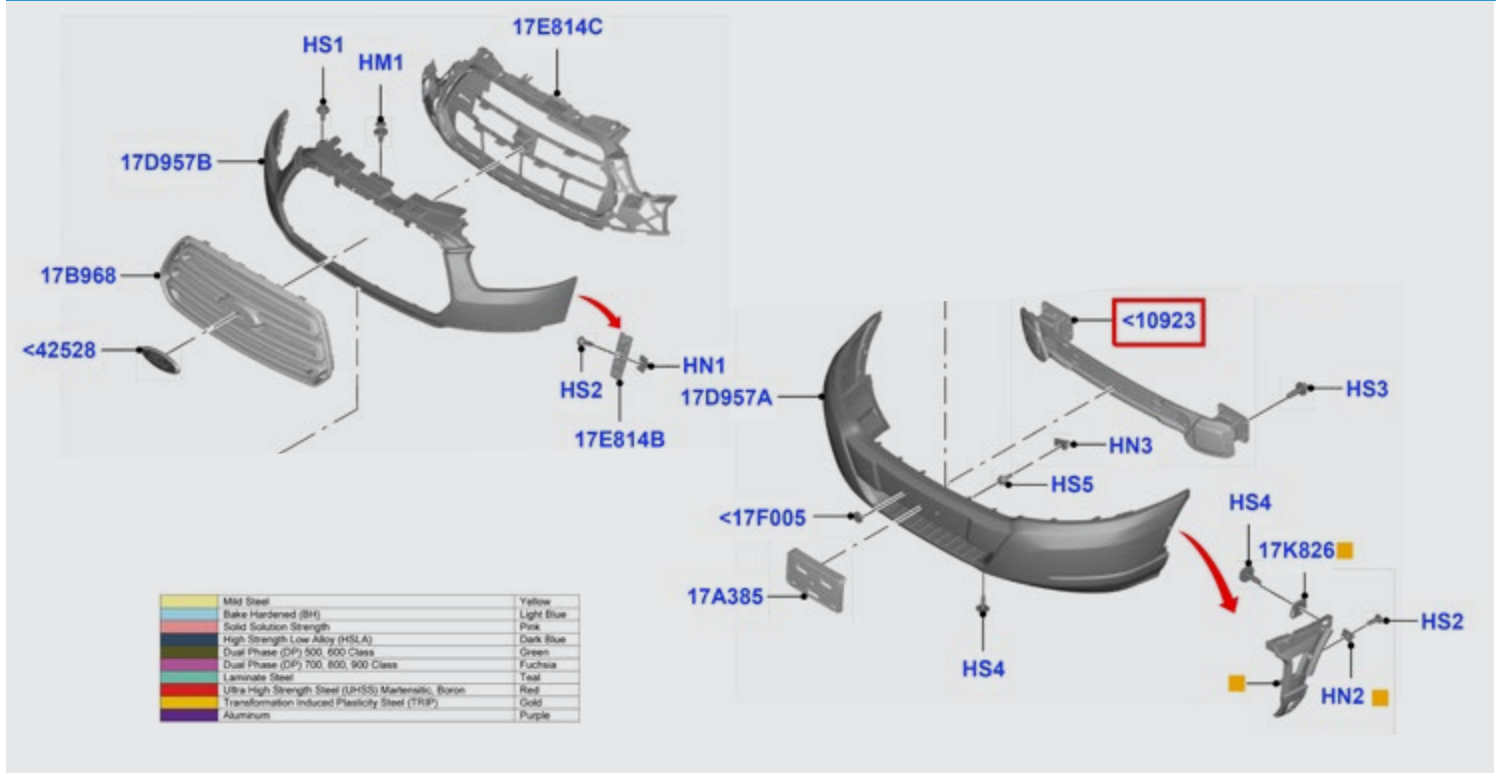
## 2015 FORD TRANSIT

Date Ordered:	<b>PARTS ORDER</b>	Date Needed:
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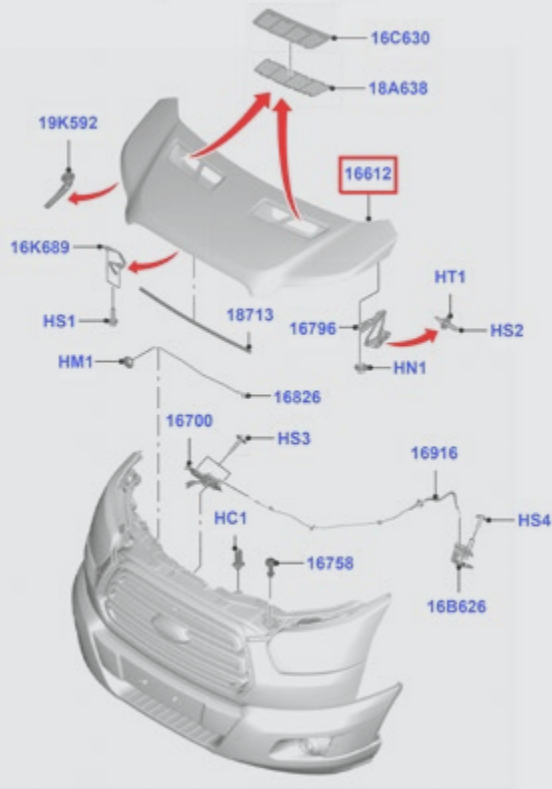
QUANTITY	PART NUMBER / PART DESCRIPTION

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

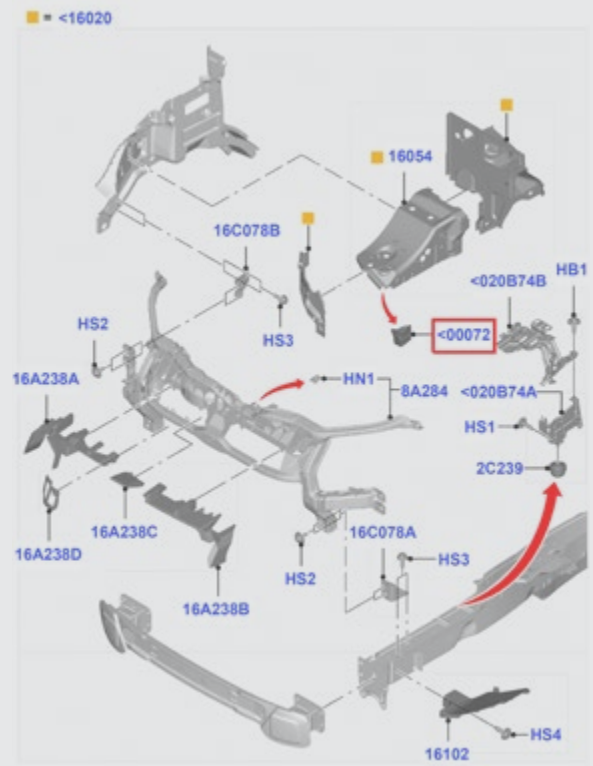
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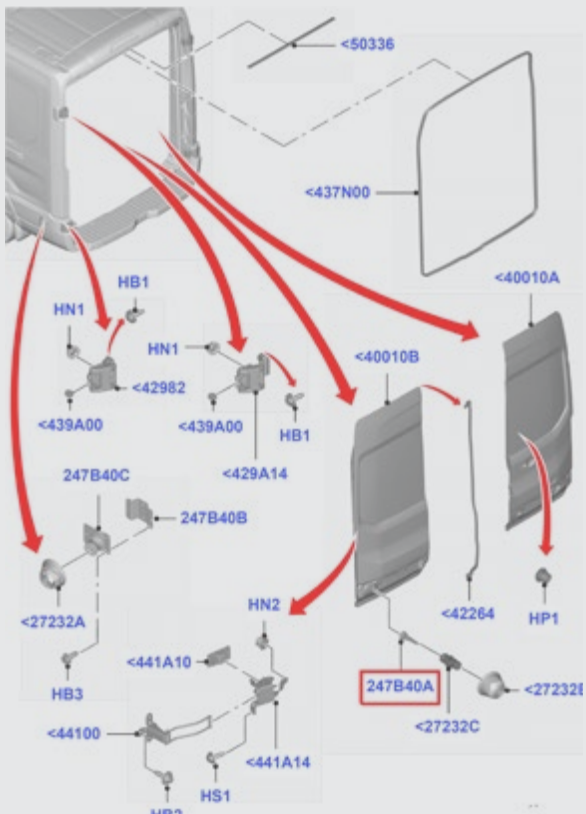
Hood



Front Apron



Rear Doors



Rear Bumper

