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On Target

FORD PARTS

For Ford and Lincoln wholesalers and the collision repair industry

2021 Ford Bronco Sport: Vehicle-Specific Body Construction

Last fall, *On Target* introduced the all-new 2021 Ford Bronco Sport (2020 - Vol. 3). Here, we begin focusing on the material makeup of some of its key exterior components.

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

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

Below are some callouts on the 2021 Bronco Sport highlighting specific component-level material construction.

The body of the 2021 Bronco Sport consists of the following:

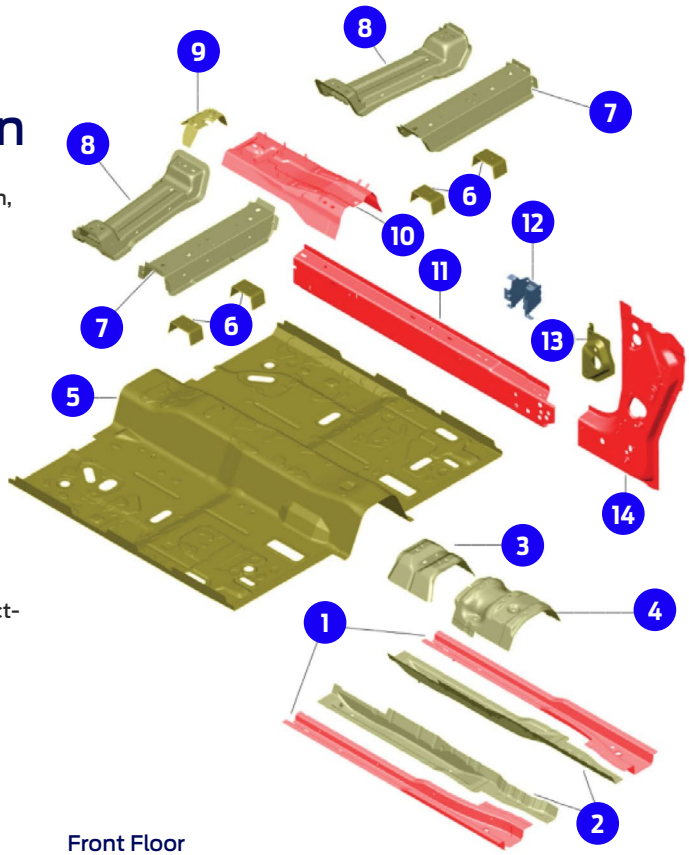
- Front frame rails constructed of high-strength dual phase (DP) 600 steel
- Rear frame rails constructed of Boron ultra-high-strength steel
- Fender reinforcement tube constructed of DP 800 high-strength steel
- Fender apron assembly constructed of DP 600 high-strength steel
- Liftgate outer panel constructed of mild steel
- Body structure constructed of Boron, DP and high-strength steels
- Roof panel reinforcements constructed of DP 600, smart and high-strength low-alloy (HSLA) 380 steels
- Bolted, removable front fenders, hinged doors and hood
- Bodyside outer panels constructed of mild steel
- Mastic pads used on floor pan for sound deadening

Bumper Beams

Bumper beams are typically constructed of high-strength or stronger class steel. If the bumper beam shows evidence of a kink or tear it is not repairable and must be replaced. The use of heat to repair these components is not allowed and will result in weakening the component. Minor damage may be corrected through cold straightening only.

On Target plans to include more construction details on the Bronco Sport in future volumes, as well as the full-sized Bronco, when information becomes available.

For more information on the Bronco Sport, 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.



Front Floor

Item	Description	Steel Type
1	Lower side member	Boron steel
2	Lower side member extension	Dual phase (DP) 600 steel
3	Reinforcement	Dual phase (DP) 600 steel
4	Reinforcement	Dual phase (DP) 600 steel
5	Floor pan assembly	Mild steel
6	Seat mount bracket brace	Mild steel
7	Front upper crossmember	Dual phase (DP) 600 steel
8	Crossmember assembly	Dual phase (DP) 600 steel
9	Bracket support	Mild steel
10	Tunnel reinforcement	Boron steel
11	Side member floor	Boron steel
12	Bracket support	High-strength low alloy steel (HSLA)
13	Bracket support	Mild steel
14	Side member	Boron steel

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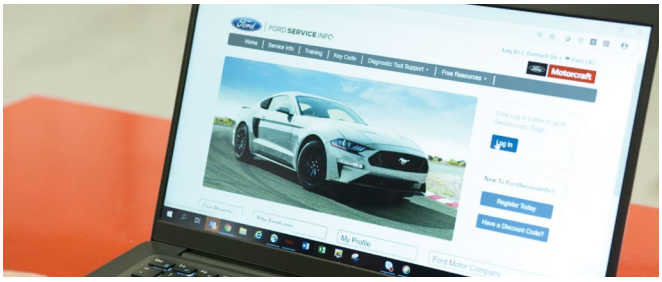
COLLISION REPORT



Ford Offers Collision Repair and Safety Tips in New Videos

Ford Motor Company has unveiled two all-new additions to its growing library of *Collision Report* videos on FordCrashParts.com, continuing its efforts to provide repairers with the most up-to-date, official OEM collision repair information straight from the automaker.

The latest topics include:

- F-Series Bedside Replacement Update
- Motorcraft® Service Site Overview

The first video details the revised Ford-approved repair procedures now available on F-Series Bedside Replacement. In it, Ford Senior Damageability Engineer Gerry Bonanni details the steps involved in replacing the pickup box outer side panel on the aluminum F-150, from 2015 to the current model. The updated repair procedures are noted in the official *Ford Workshop Manual* **(Section 501-30: Rear End Sheet Metal Repairs, Removal and Installation)** as having a revision date of 9/14/20 in the upper right-hand corner of the first page, replacing the previous repair, dated 9/12/19.

The instructions include the options available for this repair, including using only MIG plug-welds, favoring blind rivets, or using a combination of both of those fastening methods. "You can perform a combination of the fastening methods and still deliver a fast and efficient, Ford-approved outer side box panel replacement," Bonanni states in the video.

Bonanni also notes that self-piercing rivets (SPRs) are now available for use on the wheel well in the F-150, but cautions that the replacement SPRs **cannot** be placed in the original rivet location. They must be placed *adjacent* to the original rivets, but still must match the original number of rivets.

In addition, Bonanni cautions that the updated repairs presented in the video are for the F-150 only, and do **not** translate to the F-Series Super Duty®.

On Target plans to include further details on this topic in the future, and more information on this repair can be found in the *Ford Workshop Manua*l, located at Motorcraftservice.com.

The second video provides an overview on how repairers can access and navigate the detailed collision repair information as provided in the official *Ford Workshop Manual*.

"We remain focused on Ford and Lincoln owners and support everyone who repairs these vehicles to provide safe and quality repairs," said Ford Collision Technical Operations Manager Chad Steed.

Repairers are reminded that FordCrashParts.com offers additional repair information, including Ford and Lincoln position statements, instruction sheets for the F-150 and Super Duty, information on the Ford Certified Collision Network, vehicle diagnostic software, Ford-approved adhesive, glass and paint systems, and more.

Suggestions for future C*ollision Report* videos can be sent to cphelp@fordcrashparts.com, and please check back often for new content throughout the year.

A2C2 Releases White Paper on Counterfeit Parts

The Automotive Anti-Counterfeiting Council®, (known as A2C2), a collaborative effort between Ford and other automakers to combat counterfeit parts, recently released a white paper detailing the significant and growing problem of counterfeit automotive parts sold through online marketplaces.

The report details key factors contributing to the proliferation of counterfeit auto parts online, including an unwillingness on the part of e-commerce marketplaces to cooperate with brand owners against counterfeiters and sufficiently verify the legitimacy of the third-party sellers and products on their sites, and the general lack of awareness among consumers that some automotive parts sold online are counterfeit.

The white paper also offers several suggestions to improve the situation, including implementation of industry practices to validate marketplace supply chains; greater collaboration with e-commerce marketplaces, brands and law enforcement to identify and track counterfeiters; and improved consumer education.

The white paper can be read in its entirety here.

For more information on A2C2 and its fight against counterfeit parts, see *On Target*, 2020 - Vol. 3 and visit A2C2.com.

For more information about counterfeit Ford products and the Ford Global Brand Protection department, visit fordbrandprotection.com or contact them at brandpro@ford.com.

Ford Introduces New Mustang Mach-E Video Series

To show off its brand-new, all-electric Mustang Mach-E, Ford Motor Company has released a series of YouTube videos, collectively titled *Mustang Mach-E v. Everything*.

The five current videos showcase the capabilities and unique features of the vehicle, including its torque output (v. Gravity), estimated 300-mile range (v. Rocket Science), the speed of its over-the-air updates (v. Pit Crew) and more.

For more information on the Mustang Mach-E, visit Ford.com.

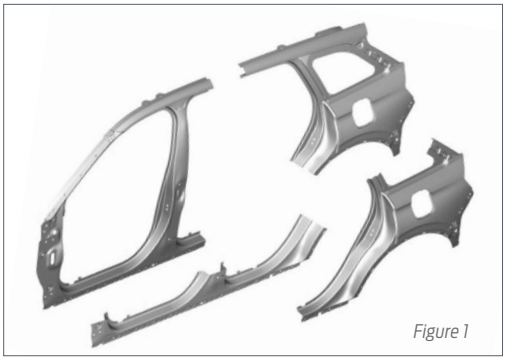


Figure 1

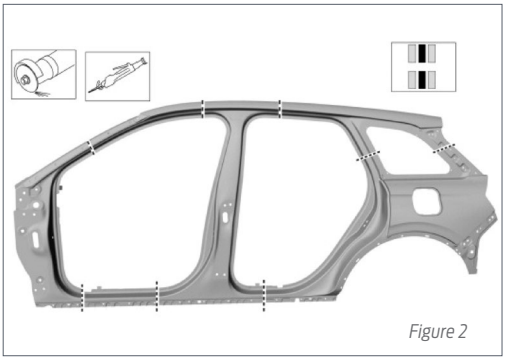


Figure 2

2020 Lincoln Corsair: Body Panel Sectioning

Moving on from its examination of the vehicle-specific body construction of the 2020 Lincoln Corsair, *On Target* now focuses on the proper body panel sectioning repair procedures, which also include special notes regarding handling of high-voltage batteries (see sidebar).

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

Section 501-26: Body Repairs – Vehicle Specific Information and Tolerance Checks, General Procedures

Special Tool(s)/ General Equipment

- Resistance Spot-Welding Equipment
- Spherical Cutter
- Air Body Saw
- MIG/MAG Welding Equipment
- Locking Pliers
- Seam Sealer TA-2-B, 3M™ 08308, LORD Fusor® 805DTM

NOTICES

- Do not carry out body-side sectioning repairs in areas of door hinges, safety restraints or striker anchoring points. Welding within 50mm (1.96 in.) of door hinge or striker locations may compromise structural integrity during a collision.
- Sectioning within 50mm of the door hinge portion of the A-pillar, B-pillar or dog leg portion is not approved by Ford Motor Company.

NOTES

- Factory welds may be substituted with resistance or metal inert gas (MIG) plug welds. Resistance welds may not be placed directly over original location. They must be placed adjacent to original location and match factory welds in quantity. MIG plug welds must equal factory welds in both location and quantity.
- Do not begin removal of the vehicle body side until the replacement panel is available for reference.

Left-hand side shown; right-hand side similar.

The following illustration is intended as a general guideline for body-side and door-opening panels and is not all-inclusive.

1. Available service panels **(Figure 1).**
2. Possible sectioning points **(Figure 2).**
3. Restore the vehicle dimensionally to pre-damage condition **(Section 501-26)**.
4. As a general rule, sectioning cut points should be chosen to result in the smallest repair area possible **(Section 501-26)**.
5. De-trim the vehicle as necessary in the area to be repaired.
6. Only remove as much of the **outer** body side as necessary, using the air body saw and the spherical cutter.
7. Where possible, create a lap-joint backer plate from an unused portion of the old or replacement panel, using the MIG/MAG welding equipment, resistance spot-welding equipment and locking pliers. This will create a stronger joint **(Section 501-25)**.
8. Rough finish all sectioning joints with a fiber-based body filler, final finish sectioning joints and plug welds with a conventional body filler.
9. Properly seal all joints to prevent moisture intrusion. Water and moisture migrate toward horizontal joints and corrosion tends to occur more rapidly in these areas (seam sealer TA-2-B, 3M™ 08308, LORD Fusor® 805DTM).
10. Proceed with the refinishing process, using a Ford-approved paint system and the manufacturer's recommendations.
11. Restore corrosion protection **(Section 501-25)**.
12. Reinstall vehicle trim, as necessary.

High-Voltage Battery Warnings

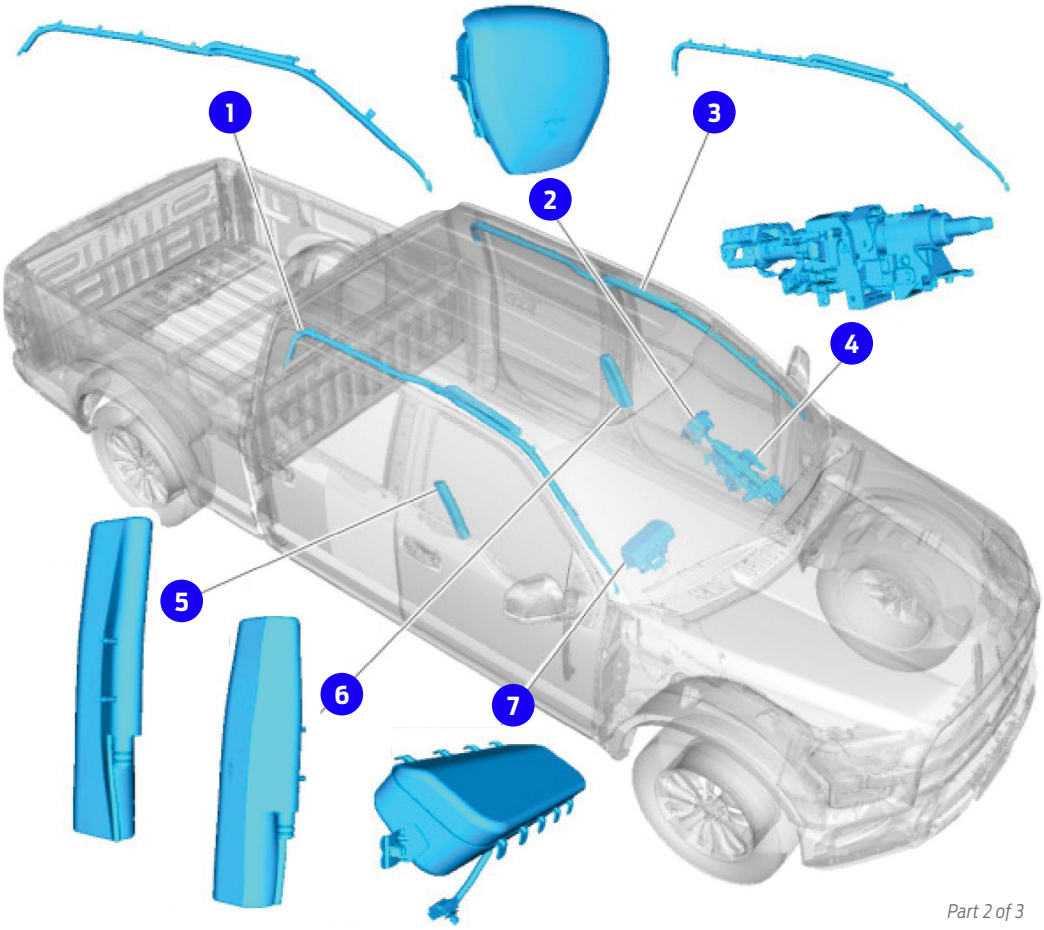
WARNING

Electric vehicles damaged by a crash may have compromised high-voltage safety systems and present a potential high-voltage electrical shock hazard. Exercise caution and wear appropriate personal protective equipment (PPE) safety gear, including high-voltage safety gloves and boots. Remove all metallic jewelry, including watches and rings. Isolate the HV system as directed by the Ford Emergency Response Guide for the vehicle. Failure to follow these instructions may result in serious personal injury or death.

NOTICES

- The high-voltage battery (HVB) and the high-voltage traction battery (HVTB) in a battery electric vehicle (BEV), hybrid electric vehicle (HEV) or plug-in hybrid electric vehicle (PHEV) can be affected and damaged by excessively high temperatures. The temperature in some body shop paint booths can exceed 60°C (140°F). Therefore, during refinishing operations, the paint booth temperature must be set at or below 60°C (140°F) with a bake time of 45 minutes or less. Temperatures in excess of 60°C (140°F) or bake durations longer than 45 minutes will require the HVB and the HVTB to be removed from the vehicle prior to placing it in the paint booth.
- The HVB must be removed to avoid heat damage before any welding is performed near it.
- If refinishing cure temperatures exceed 60°C (140°F), the charge port light ring must be removed.

For more information on the Corsair, 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**.



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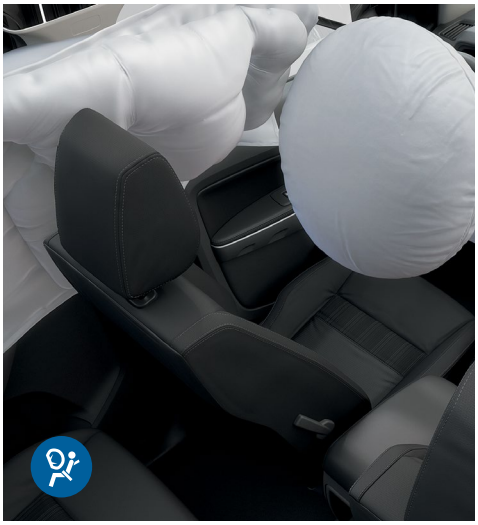


SRS Component Locations

Item	Description
1	RH side air curtain
2	Driver airbag
3	LH side air curtain
4	Deployable steering column
5	Passenger side airbag
6	Driver side airbag
7	Passenger airbag (includes canister vent)

SRS Airbag and Seatbelt Pretensioner System Detailed

Utilizing the official *Ford Workshop Manual*, *On Target* continues its detailed look at the Supplemental Restraint System (SRS). This time, we examine the airbag and seatbelt pretensioner system operation, while offering additional component location diagrams, using the 2020 F-150 as an example vehicle.

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

Section 501-20B: Airbag and Seatbelt Pretensioner System Component Location

The SRS is controlled by the restraints control module (RCM), which continually monitors various inputs. When these inputs indicate a frontal or side crash, the RCM may deploy some components, based upon the severity of the crash and the sensor inputs.

Although some deployable devices may not have activated for all occupants during a crash, it does not mean that something is wrong with the SRS.

The RCM performs a self-test of the complete SRS during each start and continuously monitors all the SRS components and circuitry for correct operation.

Airbag Warning Indicator

The airbag warning indicator:

- Proves out by lighting for six seconds and then turning off
- Flashes and/or illuminates based on the message the instrument panel cluster (IPC) receives from the RCM
- Illuminates if the IPC does not receive a message from the RCM

When the ignition is turned ON during normal operation, the IPC illuminates the airbag warning indicator continuously for six seconds. If the SRS is free of faults, the airbag warning indicator turns off and remains off. If an SRS fault exists, the airbag warning indicator illuminates and remains illuminated for the rest of the ignition cycle. The RCM communicates with the IPC via the high-speed controller area network (HS-CAN). The IPC illuminates the airbag warning indicator if there is no communication between the RCM and IPC.

Event Notification Signal

The event notification feature provides other vehicle subsystems with information pertaining to SRS deployment or fuel cutoff status. When an impact occurs that exceeds a pre-determined threshold, the RCM sends a signal on a dedicated circuit to the body control module (BCM).

When the BCM receives the crash signal input, it initiates fuel cutoff to disable the fuel system.

After the fuel system is disabled, the vehicle can be re-started after carrying out the following steps:

1. Turn the ignition ON and wait 10 seconds.
2. Turn the ignition OFF.
3. Turn the ignition ON.
4. Turn the ignition OFF.
5. Turn the ignition ON.

Additional installments on SRS components and operation will continue in future volumes of *On Target*.

For questions on this or the proper repair of any Ford or Lincoln vehicle, contact the Ford Crash Parts Hotline at cphelp@fordcrashparts.com.

I-CAR® Provides 2021 Gold Class® Renewal Details for Ford Network Participants

I-CAR has announced Gold Class 2021 renewal requirements for Ford Certified Collision Network (FCCN) shops. These shops recognize that being Gold Class signifies an unwavering commitment to ensuring their business represents the highest achievement in collision repair training excellence.

FCCN shops must also complete the eight (8) new EV and four (4) additional training requirements as found on the Ford page: info.I-CAR.com/Ford.

Shops that are Gold Class-recognized are able to:

- Promote a commitment to continuous training
- Enhance the ability to improve shop key performance indicators (KPIs)
- Get free access to I-CAR's Repairability Technical Support (RTS) portal
- Get discounted courses not included in a training subscription
- Gain eligibility to purchase a training subscription that covers live, online and virtual training for everyone in the shop (Annual and monthly payment options are available.)
- Differentiate your shop to consumers

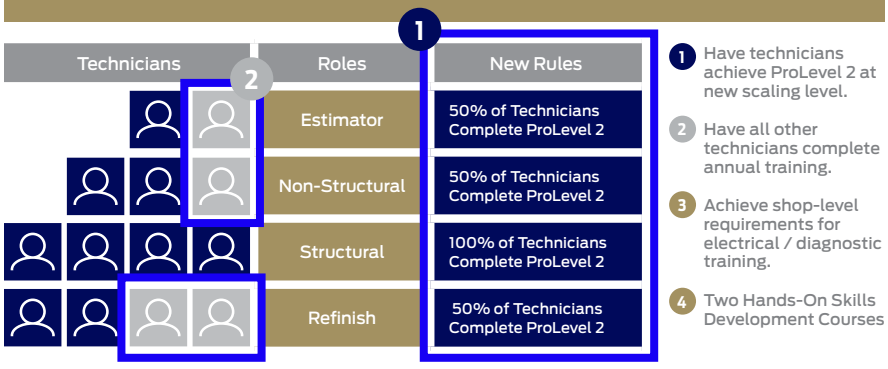
"I-CAR Gold Class® recognition is the highest shop level training achievement recognized by the collision repair industry, and is the foundation for the FCCN program. I-CAR Gold Class and Ford-specific vehicle training requirements support the knowledge and skills that contribute to proper and safe repairs," said Ford Collision Marketing Manager Dean Bruce.

I-CAR also has announced assistance to shops considering attaining Gold Class status through a limited-time Get to Gold Class package, which also includes:

- Limited turnover protection for live, online and virtual training
- A customized training plan
- An In-Shop Knowledge and Skills Assessment
- Assigned customer care representative
- A fixed payment plan to budget training expenses

For further details on 2021 I-CAR Gold Class renewals, go to I-CARTraintoGain.com, and for more information on the Get to Gold Class package, visit info.I-CAR.com/get-to-gold-class, or call 844.505.9557 to speak with a representative.

Key actions to maintain Gold Class by the 2021 renewal date include:



Hands-On Skills Development Courses: MIG Brazing, Squeeze-Type Resistant Spot Welding (The 2 for 1 Bundle promotion has been extended)

Lane Keeping System Message Center

The *On Target* overview of the Ford Lane Keeping System (LKS) continues, this time focusing on the message center settings, camera alignment and other details.

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

For more information, consult **Section 419-07: Lane Keeping System, Description and Operation.**

Message Center Settings

The LKS has two optional setting menus available through the Driver Assist menu in the message center: Mode and Intensity. The last-known selection for each setting is stored by the IPMA and does not need to be set again after the key is cycled.

The **Mode** setting allows the driver to select which of the system features will be enabled and turned on when the button is pressed. The three options in this menu are:

- Lane Keeping Alert only – provides a steering wheel vibration when an unintended lane departure is detected
- Lane Keeping Aid only – provides steering input toward the center of the lane when an unintended lane departure is detected
- Lane Keeping Alert and Lane Keeping Aid – provides both a warning and steering input toward the center of the lane

The **Intensity** setting allows the driver to select the intensity of the steering wheel vibration used in lane keeping alert mode. This setting does not impact the lane keeping aid mode. The three options in this menu are:

- Low
- Normal
- High

NOTE: The steering wheel performs a test vibration after the intensity setting is changed through the Driver Assist menu in the message center.

Additional installments on the Lane Keeping System—as well as information on proper ADAS functionality, features and proper repairs—will continue in future volumes of *On Target*.

For questions on this or the proper repair of any Ford or Lincoln vehicle, contact the Ford Crash Parts Hotline at cphelp@fordcrashparts.com.

2021 Industry Events Calendar*

April 21	SCRS – Open Board Meeting and Election	Phoenix, AZ
April 21 – 22	Collision Industry Conference General Meeting	Phoenix, AZ
April 30 – May 1	ASA X50 Automotive Conference & Expo	Virtual
May 4 – 5	Women's Industry Network Annual Conference	Virtual
May 20	AASP-MN Annual Meeting & Leadership Conference	Minneapolis, MN
June 7 – 9	AGRR Auto Glass Week™	Orlando, FL
June 16	AASP-MN 26th Annual Golf Outing	TBD
July 13	Collision Repair Education Foundation Annual Golf Outing	Cleveland, OH
July 14 – 15	Collision Industry Conference General Meeting	Cleveland, OH
September 10 – 12	AASP/NJ NORTHEAST Automotive Services Show	Secaucus, NJ
September 17 – 18	ABAT Trade Show	Irving, TX
September 21 – 26	Motor *Bella*	Pontiac, MI
October 15 – 16	ATRA Powertrain Expo	Nashville, TN
November 2 – 4	Automotive Aftermarket Products Expo (AAPEX)	Las Vegas, NV
November 2 – 5	Specialty Equipment Market Association (SEMA) Show	Las Vegas, NV

**Editor's Note: Due to continued uncertainty regarding trade shows and public gatherings, these events, dates, and other details are subject to change*

Inside the Industry

Collision Bills Considered

The 2021 legislative season is under way, and collision repair-related bills have already been introduced in several states. Here's a quick rundown:

CA – AB 294
Calls for the creation of a "Vehicle Towing and Storage Board."

IL – HB 3133
Prohibits specifying repair procedures not in compliance with OEM directives.

NE – LB 602
Prohibits requiring the use of non-OEM parts for a vehicle's first three years; also prohibits insurers from requiring repairs contrary to OEM specifications.

TX – HB 1131
Prohibits insurers from requiring a vehicle be repaired with a part on the basis it is the least expensive and considering a specified part like kind and quality to OEM unless it has been conclusively demonstrated.

UT – SB 78
Requires auto glass repair companies to inform consumers if recalibration of ADAS features is required and will be performed.

WA – HB 1428
Auto insurance reform bill. Requires insurers to justify denial of payment for OEM repair procedures.

SCRS Video Tips Online

The Society of Collision Repair Specialists has launched a new weekly video tip series. Featuring Collision Advice CEO Mike Anderson and Database Enhancement Gateway Administrator Danny Gredinburg, the brief videos cover topics such as "OEM Procedure Research," "ADAS Calibrations," "Vehicle Options and Build Data," and "Battery Disconnect and Reconnect." The videos are available on the SCRS YouTube channel.

NORTHEAST Moves to September

The Alliance of Automotive Service Providers of New Jersey has announced it has pushed this year's NORTHEAST Automotive Services Show back about six months, now scheduled for September 10 – 12. The popular show is traditionally held in mid-March but is being rescheduled to allow time for more COVID-19 vaccinations to occur and restrictions on gatherings to ease. Visit aaspnjnortheast.com for the latest information.

I-CAR Announces 2021 COVID Relief

I-CAR has announced free access to its Repairability Technical Support online portal will continue through June 30th. The move is one of several included in I-CAR's 2021 Industry Relief program, which was initiated in March of last year in response to the COVID-19 pandemic.

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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On Target Digital

Download *OnTarget* 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

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