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Ford Motor Company  
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August 3, 2021

**TO:** All U.S. Ford and Lincoln Dealers

**SUBJECT:** **NEW VEHICLE DEMONSTRATION / DELIVERY HOLD Safety Recall 21S31**  
Certain 2020 - 2021 Model Year F-350 Pickup Trucks Equipped with 6.7L Diesel Engine and Single Rear Wheel Axle Spring Seat Weld

**REF:** **NEW VEHICLE DEMONSTRATION / DELIVERY HOLD - Advance Notice Safety Recall 21S31**  
Dated: July 16, 2021

#### **AFFECTED VEHICLES**

<b>Vehicle</b>	<b>Model Year</b>	<b>Assembly Plant</b>	<b>Build Dates</b>
F-350 Pickup Truck	2020 – 2021	Kentucky Truck	August 6, 2020 through May 15, 2021

Affected vehicles are identified in OASIS and FSA VIN Lists.

#### **REASON FOR THIS PROGRAM**

In some of the affected vehicles, the rear axle tube may deform and potentially separate at the spring seat interface. This can potentially cause an axle tube leak, vibration while driving, shuddering upon acceleration, and drive shaft separation. A separated drive shaft results in a loss of motive power while driving and unintended movement when placed in park if parking brake is not applied, increasing the risk of a crash.

#### **SERVICE ACTION**

Before demonstration or delivering any new in-stock vehicles involving this recall, dealers are to inspect the rear axle for damage.

- If no damage is found, both spring seats will need to be reinforced with a weld per technical instructions.
- If damage is found, axle housing replacement is required. Approximately 1% of affected vehicles will require axle housing replacement. Currently parts are not available for the axle housing repair. Vehicle cannot be safely driven until axle housing is replaced.

This service must be performed on all affected vehicles at no charge to the vehicle owner.

#### **OWNER NOTIFICATION MAILING SCHEDULE**

Owner letters are expected to be mailed the end of August 2021. Dealers should inspect and repair any affected vehicles that arrive at their dealerships, whether or not the customer has received a letter.

## **ATTACHMENTS**

Attachment I: Administrative Information  
Attachment II: Labor Allowances and Parts Ordering Information  
Attachment III: Technical Information  
Recall Reimbursement Plan

## **QUESTIONS & ASSISTANCE**

For questions and assistance, contact the Special Service Support Center (SSSC) via the SSSC Web Contact Site. The SSSC Web Contact Site can be accessed through the Professional Technician System (PTS) website using the SSSC link listed at the bottom of the OASIS VIN report screen or listed under the SSSC tab.

Sincerely,

A handwritten signature in black ink, appearing to read "D.J. Johnson". The signature is written in a cursive style with a large initial "D" and "J".

David J. Johnson

**NEW VEHICLE DEMONSTRATION / DELIVERY HOLD Safety Recall 21S31**

Certain 2020 - 2021 Model Year F-350 Pickup Trucks  
Equipped with 6.7L Diesel Engine and Single Rear Wheel Axle  
Spring Seat Weld

**OASIS ACTIVATION**

OASIS was activated on July 16, 2021.

**FSA VIN LISTS ACTIVATION**

FSA VIN Lists were made available through <https://web.fsavinlists.dealerconnection.com> on July 16, 2021. Owner names and addresses will be available by September 2021.

**NOTE:** Your FSA VIN Lists may contain owner names and addresses obtained from motor vehicle registration records. The use of such motor vehicle registration data for any purpose other than in connection with this program is a violation of law in several states, provinces, and countries. Accordingly, you must limit the use of this listing to the follow-up necessary to complete this service action.

**SOLD VEHICLES**

- Ford has not issued instructions to stop selling/delivering or driving used vehicles under this safety recall. Owners should contact their dealer for an appointment to have their vehicles remedied as soon as practicable. Owners can continue to safely drive their vehicles.
- Owners of affected vehicles will be directed to dealers for repairs.
- Immediately contact any of your affected customers whose vehicles are not on your VIN list but are identified in OASIS. Give the customer a copy of the Owner Notification Letter (when available) and schedule a service date.
- Correct other affected vehicles identified in OASIS which are brought to your dealership.
- Dealers are to prioritize repairs of customer vehicles over repairs of new and used vehicle inventory.

**STOCK VEHICLES**

- Correct all affected units in your new vehicle inventory before delivery.
- Use OASIS to identify any affected vehicles in your used vehicle inventory.

**TITLE BRANDED / SALVAGED VEHICLES**

Affected title branded and salvaged vehicles are eligible for this service action.

**OWNER REFUNDS**

- **This safety recall must still be performed, even if the owner has paid for a previous repair. Claiming a refund will not close the recall on the vehicle.**
- Ford Motor Company is offering a refund for owner-paid repairs covered by this recall if the repair was performed prior to the date indicated in the reimbursement plan, which is posted with this bulletin. Owners are directed to seek reimbursement through authorized dealers or, at their option, directly through Ford Motor Company at P.O. Box 6251, Dearborn, MI 48121-6251.
- Refunds will only be provided for the cost associated with rear axle spring seat damage.

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**RENTAL VEHICLES**

If axle housing fails inspection the vehicle is not safe to drive. Rentals will only be reimbursed for the day(s) the axle housing parts are not available. Prior approval is required from the SSSC. Contact the SSSC via the SSSC Web Contact Site for consideration and approval if appropriate. Follow Extended Service Plan (ESP) guidelines for dollar amounts. Rentals are approved for personal use only.

**ADDITIONAL REPAIR (LABOR TIME AND/OR PARTS)**

Additional repairs identified as necessary to complete the FSA should be managed as follows:

- For related damage and access time requirements, refer to the Warranty and Policy Manual / Section 6 – Ford & Lincoln Program Policies / General Information & Special Circumstances for FSA's / Related Damage.
- For vehicles within new vehicle bumper-to-bumper warranty coverage, no SSSC approval is required, although related damage must be on a separate repair line with the "Related Damage" radio button checked.
  - Ford vehicles – 3 years or 36,000 miles
- For vehicles outside new vehicle bumper-to-bumper warranty coverage, submit an Approval Request to the SSSC Web Contact Site prior to completing the repair.

**CLAIMS PREPARATION AND SUBMISSION**

- **Claim Entry:** Enter claims using Dealer Management System (DMS) or One Warranty Solution (OWS) online.
  - When entering claims, select claim type 31: Field Service Action. The FSA number 21S31 is the sub code.
  - For additional claims preparation and submission information, refer to the Recall and Customer Satisfaction Program (CSP) Repairs in the OWS User Guide.
- **Related Damage/Additional labor and/or parts:** Must be claimed as Related Damage on a separate repair line from the FSA with same claim type and sub code as described in Claim Entry above.

**IMPORTANT:** Click the Related Damage Indicator radio button.

- **Provision for PM-13 Anti Corrosion Coating and welding wire:**
  - Program Code: 21S31
  - Misc. Expense: OTHER
  - Amount: Up to \$5.00
- **Rentals:** For rental vehicle claiming, follow Extended Service Plan (ESP) guidelines for dollar amounts. Enter the total amount of the rental expense under Miscellaneous Expense code RENTAL.
- **Refunds:** Submit refunds on a separate repair line.
 

- Program Code: 21S31	- Misc. Expense: ADMIN
- Misc. Expense: REFUND	- Misc. Expense: 0.2 Hrs.

Multiple refunds should be submitted on one repair line and the invoice details for each repair should be detailed in the comments section of the claim.

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**LABOR ALLOWANCES**

Description	Labor Operation	Labor Time
Inspect (axle fails inspection vehicle not safe to drive)	21S31A	0.3
Inspection passed weld spring seats	21S31B	1.5 Hours

**PARTS REQUIREMENTS / ORDERING INFORMATION****SSSC Web Contact Site:**

To place an order for parts listed below submit a VIN-specific Part Order contact via the SSSC Web Contact Site.

Part Number	Description	Order Quantity	Claim Quantity
W520115-S440	Shock Nuts (4 in pkg, 2 req for repair)	1	2

Dealers will be notified via a DOES II communication if circumstances warrant a change in part supply strategy and when open ordering resumes.

**Order the parts below through normal order processing channels:**

Part Number	Description	Order Quantity	Claim Quantity
W500764-S439	Shock Bolts (4 in pkg, 2 req for repair)	1	2
HC3Z 5705 E	U Bolts (1 in pkg, 4 req for repair)	4	4
N620485-S441	U Bolt Nuts (4 in pkg, 8 req for repair)	2	8
PM-13 A	PM-13-A Anti-Corrosion Coating.	Claim as MISC OTHER up to \$5.00	
MC-710 XL	Lincoln Electric Wire MC-710XL. (Or Equivalent)		

To guarantee the shortest delivery time, an emergency order for parts must be placed.

**DEALER PRICE**

For latest prices, refer to DOES II.

**PARTS RETENTION, RETURN, & SCRAPPING**

Follow the provisions of the Warranty and Policy Manual, Section 1 - WARRANTY PARTS RETENTION AND RETURN POLICIES. If a replaced part receives a scrap disposition, the part must be scrapped in accordance with all applicable local, state and federal environmental protection and hazardous material regulations. Federal law prohibits selling motor vehicle parts or components that are under safety, compliance, or emissions recall.

**EXCESS STOCK RETURN**

Excess stock returned for credit must have been purchased from Ford Customer Service Division in accordance with Policy Procedure Bulletin 4000.

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**REPLACED FSA PARTS INSPECTION AND SIGN OFF**

Effective March 1<sup>st</sup> 2021 all parts replaced as part of an FSA repair with a repair order open date of March 1<sup>st</sup> 2021 or later must be inspected and signed off on the repair order by a member of your dealers fixed operations management team or an employee the task has been delegated to. If the task is to be delegated to a non-management employee, the employee needs to be someone other than the technician who completed the repair and needs to understand the importance of completing this task consistently and accurately.

- All parts replaced as part of an FSA repair should be returned to the parts department following the Warranty Parts Retention and Return Policies.
- Inspect the replaced parts to verify the FSA repair was completed.
- If the FSA repair is found to be complete, the designated employee signs the repair order line or parts return stamp area (electronic or hand signed) for the FSA repair indicating the parts were inspected and validated to have been replaced.
- After the parts have been inspected, they should be handled based on the guidance in the parts status report in the Online Warranty System (Hold, Return, CORE, Scrap, etc.).
- This process is subject to review during warranty audits for FSA repairs with a repair order open date of March 1<sup>st</sup> 2021 or later. Any eligible FSA claims requiring parts replacement, found not to have been inspected and signed off during a warranty audit will be subject to chargeback and consideration for enrollment into the Dealer Incomplete Recall Repair Process.

**Note:** Other approvals (electronic or handwritten) for add-on repair lines, dealer owned vehicle repairs, and repeat repairs do not qualify as FSA parts inspection approvals. The post repair FSA parts inspection process (electronic or handwritten) is independent from other warranty approval requirements. The approval by the designated employee implies that the FSA parts were found to be replaced and must be able to be clearly identified on the Repair Order. If multiple FSA's require approval on a single Repair Order, each applicable occurrence will require individual post repair approval by the designated employee.

## CERTAIN 2020 - 2021 MODEL YEAR F-350 PICKUP TRUCKS EQUIPPED WITH 6.7L DIESEL ENGINE AND SINGLE REAR WHEEL AXLE — SPRING SEAT WELD

### SERVICE PROCEDURE

1. Disconnect battery cable to ground. Please follow the Workshop Manual (WSM) procedures in Section 414-01
2. Position the vehicle on a hoist. Please follow the WSM procedures in Section 100-02.

**NOTE:** This inspection is to be performed on the Left Hand (LH) and Right Hand (RH) leaf spring seat brackets.

3. Visually inspect the front of the rear axle housing assembly below the leaf spring seat brackets for damage (dents, creases). See Figure 1.
4. Visually inspect the rear of the leaf seat spring bracket for damage (rips or breaks in the metal or welds) and to see if the leaf spring seat bracket is pulling away from the rear axle housing assembly. See Figure 1.
5. Inspection results. Is there damage present to either the LH or RH rear leaf spring seat brackets?

Yes - Fails visual inspection, the rear axle housing will require replacement. Currently parts are not available for this repair. Vehicle cannot be safely driven. Contact SSSC.

No - Further inspection is required, proceed to Step 6.

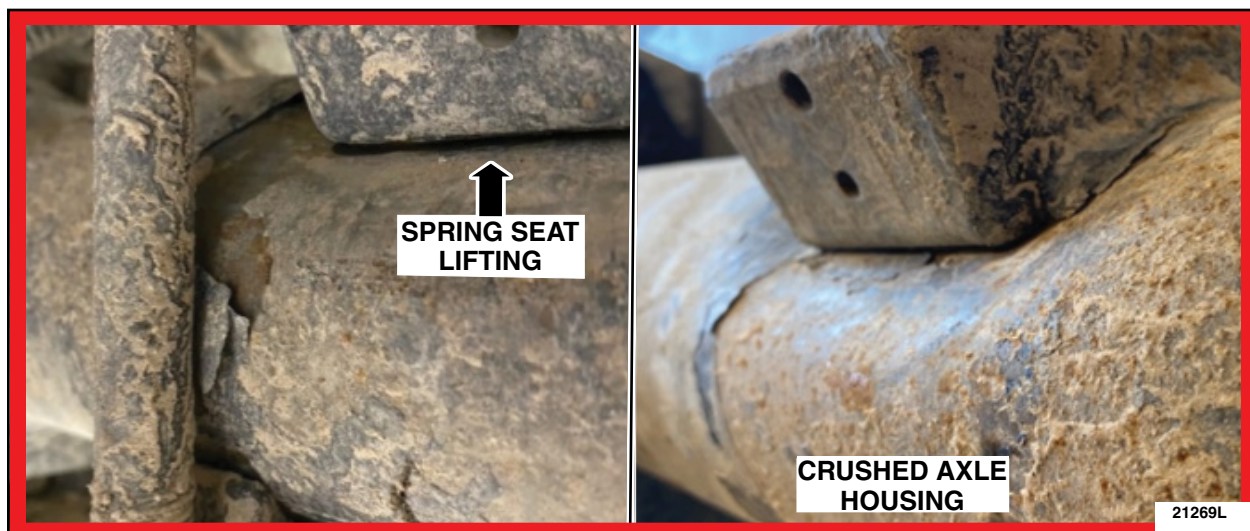


FIGURE 1



**NOTE:** The welds on the *new* rear axle housing assembly may be different than what is on the original rear axle housing assembly and will not require rework.

**NOTE:** Perform this inspection on the LH and RH rear leaf spring seat brackets.

6. Using a 0.002" feeler gage measure the gap along the rear of the leaf spring seat bracket to the rear axle housing assembly. Is the gap greater than 0.002" on either the LH or RH side? See Figure 2.

YES - The rear axle housing will require replacement. Currently parts are not available for this repair. Vehicle cannot be safely driven. Contact SSSC.

NO - Proceed to the Leaf Spring Seat Bracket Interface Weld Repair Procedure on Page 3.

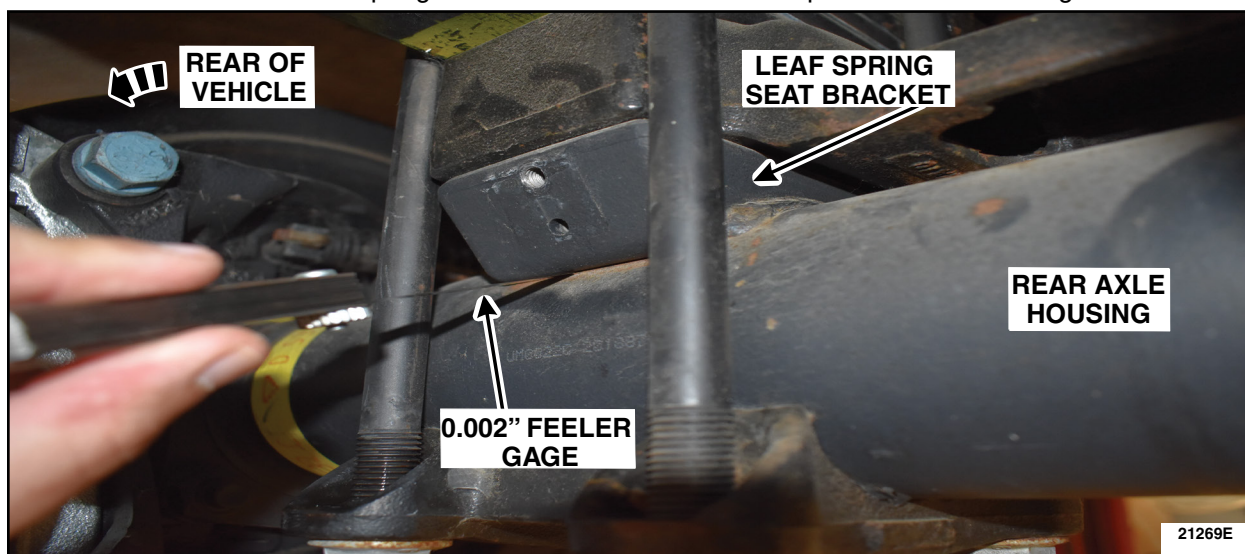


FIGURE 2





## LEAF SPRING SEAT BRACKET INTERFACE WELD REPAIR PROCEDURE

1. Remove the Anti-lock Brake System (ABS) sensor bolt and position the ABS sensor aside.  
See Figure 3.

- Torque: 177 lb.in (20 Nm)

2. Disengage the ABS sensor wire harness pushpin retainers and position the ABS sensor wire harness aside. See Figure 3.

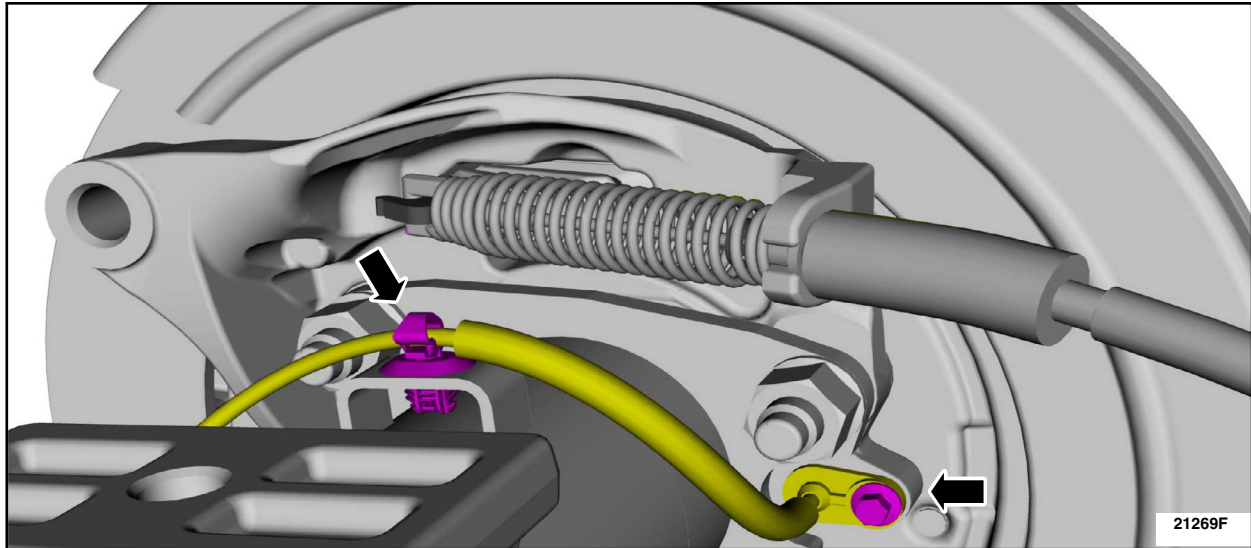


FIGURE 3

3. Disengage the rear axle housing assembly vent hose. Remove the brake line bracket bolt and position the brake line bracket assembly aside. See Figure 4.

- Torque: 159 lb.in (18 Nm)

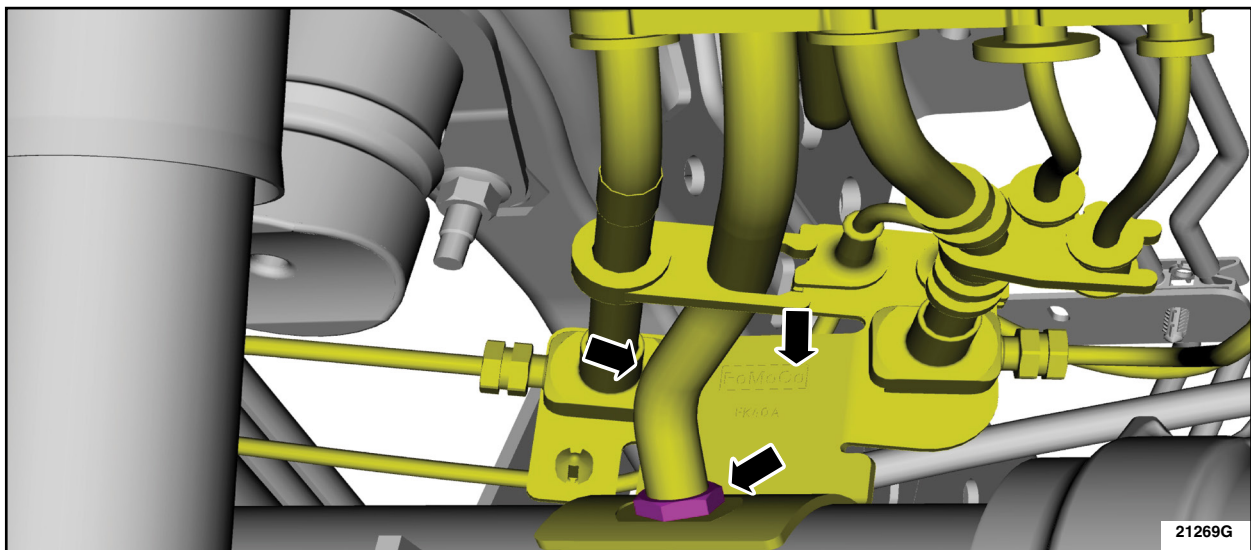
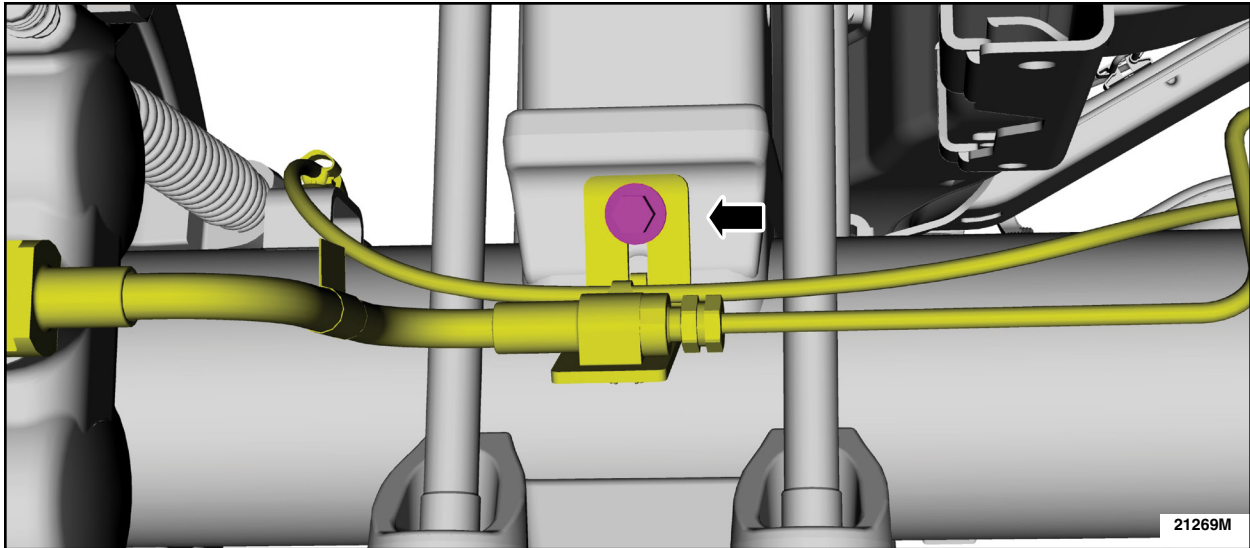


FIGURE 4



4. Remove the brake line bracket bolt and position aside the brake line bracket. See Figure 5.

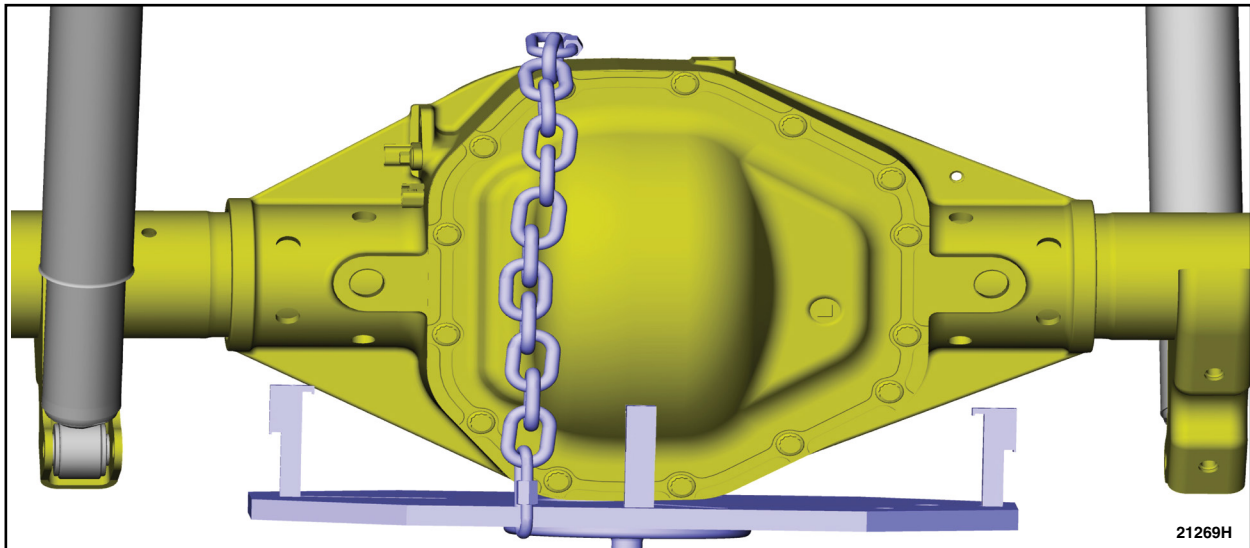
•Torque: 159 lb. in (18 N m)



**FIGURE 5**

5. Position a safety stand at the front of the vehicle.

6. Using a suitable lifting device support the rear axle housing assembly. See Figure 6.



**FIGURE 6**



7. Remove and discard the lower rear shock absorber nuts and bolts. See Figure 7.

- Torque: 111 lb.ft (150 Nm)

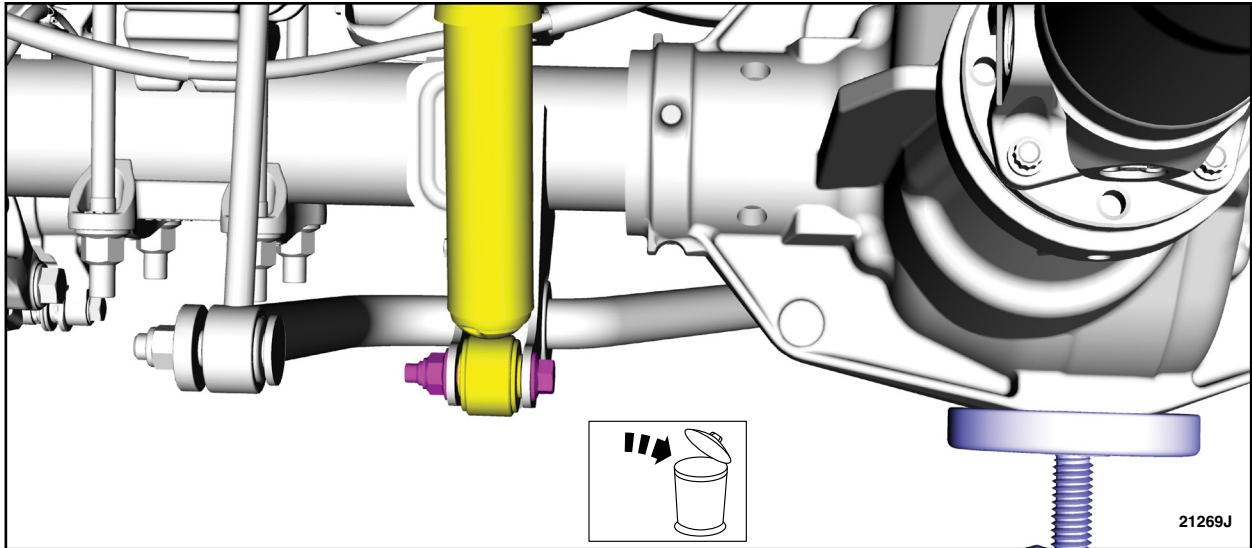


FIGURE 7

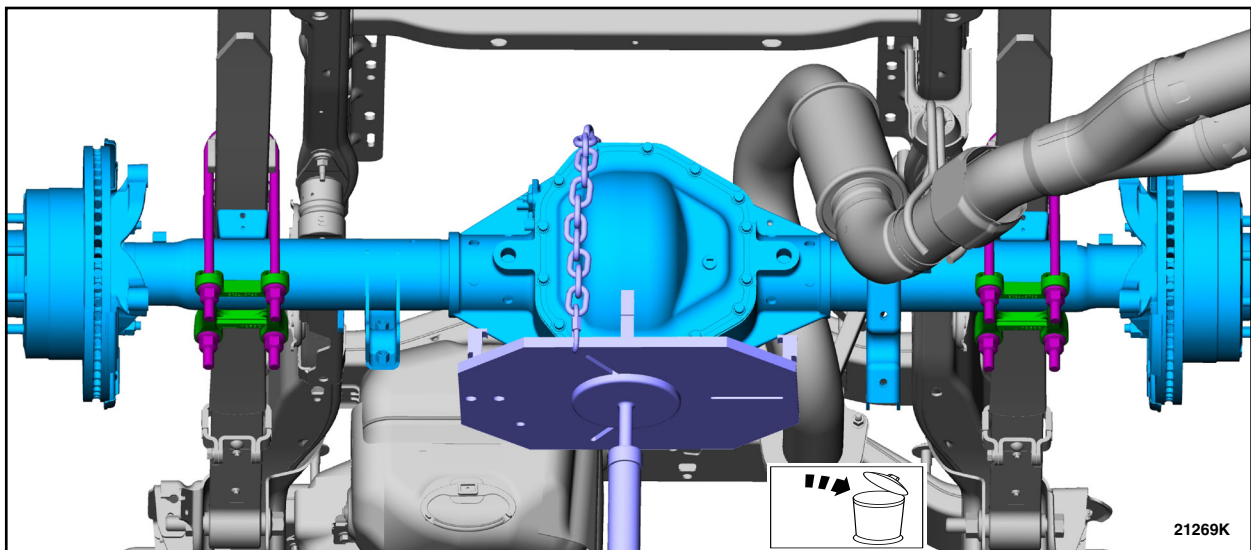


**NOTICE:** The rear axle must be supported before removing the rear spring U-bolts.

**NOTE:** The rear spring U-bolts need to be tightened in a cross pattern with the vehicle resting on the wheels and tires (curb height).

8. With the axle assembly supported with a suitable lifting device, remove and discard the rear spring U-bolts and U-bolt nuts and remove the U-bolt mounting plates. See Figure 8.

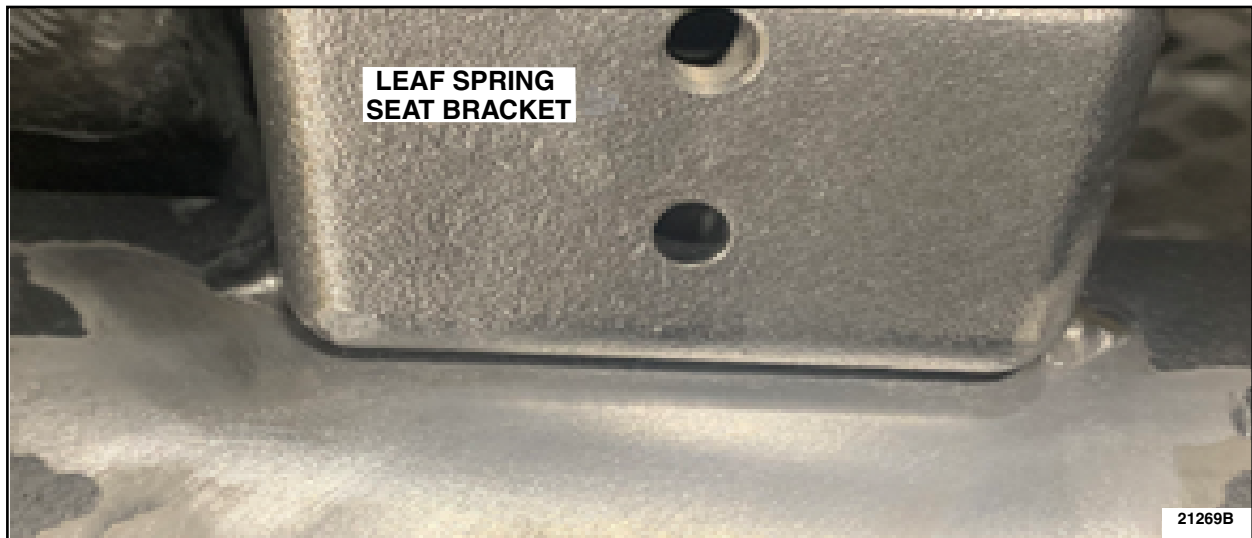
- Torque:  
Stage 1: 48 lb.ft (65 Nm)  
Stage 2: 96 lb.ft (130 Nm)  
Stage 3: 148 lb.ft (200 Nm)  
Stage 4: 195 lb.ft (265 Nm)



**FIGURE 8**



9. Using a suitable tool, remove paint from **BOTH SIDES** of the leaf spring seat bracket and the outside of the shock bracket holes. Repeat on the other side. See Figure 9.



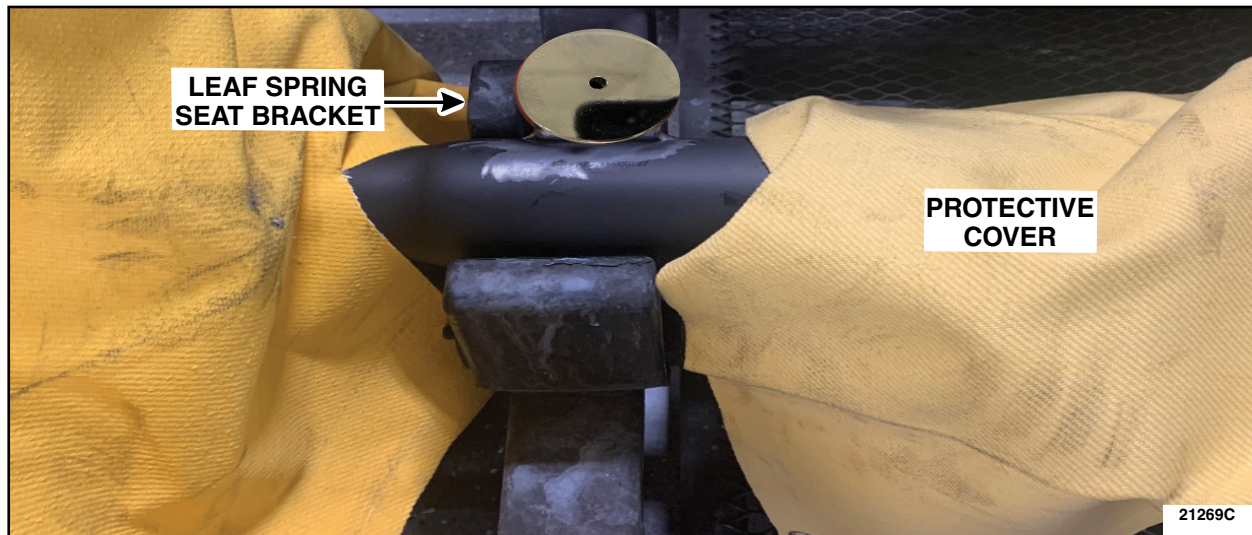
**FIGURE 9**

10. If needed, blow off the joint with air, or wipe with rag or brush.

11. Verify weld setting recommendations and ground attachments.

- Wire is Lincoln Electric MC-710XL. Wire size is 0.052"
- Wire feed is 250 inches per minute.
- Set welder to 25 Volts.
- Shield gas is 90-10 Argon/CO2 shield gas.

12. Protect surrounding areas and leaf spring seat bracket mounting holes to prevent splatter damage. Apply anti-splatter spray as needed. See Figure 10.



**FIGURE 10**

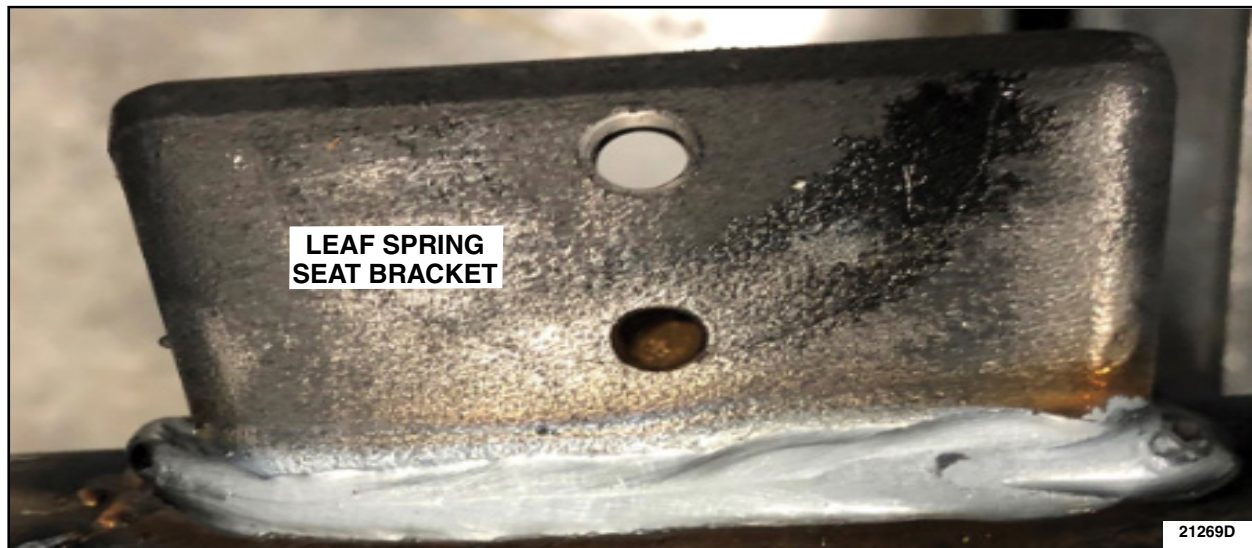




**NOTICE:** To weld the left side leaf spring bracket, attach the ground to the left side shock bracket.  
To weld the right side leaf spring bracket, attach the ground to the right side shock bracket. Failure to do so may cause damage to the rear axle internal components.

13. Apply weld to leaf spring seat bracket area. Inspect for weld coverage and spatter. See Figure 11.

**NOTE:** Fill in existing weld to achieve 360 degree coverage around the leaf spring seat bracket.



**FIGURE 11**

14. Remove protective covers. See Figure 10.
15. Clean new welds to allow for proper paint adhesion.
16. Attach masking to prevent paint intrusion into the leaf spring seat bracket mounting holes.
17. Repaint welded area and shock bracket area with PM-13-A Anti-Corrosion Coating.
18. Remove masking.
19. Check for proper paint coverage.
20. Reverse removal steps to reinstall rear axle housing assembly.



**Ford Motor Company**  
**Recall Reimbursement Plan for 21S31**

*Ford and Lincoln dealers are in the best position to quickly and efficiently process reimbursement requests. However, federal legislation requires all motor vehicle manufacturers to establish processes through which customers may seek recall reimbursement directly from the manufacturer or from the dealers.*

*Regarding the specific reimbursement plan for Recall # 21S31, owners who have paid for service to remedy the defect or noncompliance must have had that service performed prior to Sept 03, 2021. After this date, if repairs related to this recall are performed by a non-Ford repair facility in an emergency situation, customers must submit any refund requests through their dealership. As required by this federal regulation, Ford Motor Company submitted the details of its latest General Recall Reimbursement Plan in a letter to the National Highway Traffic Safety Administration (NHTSA) in February 2019. The following is the text of that letter and the Plan:*

**General Recall Reimbursement Plan**  
(As submitted to the NHTSA)

Pursuant to the requirements set forth in 49 CFR Part 573 and Part 577 of the Code of Federal Regulations, Ford Motor Company (Ford) is submitting required information pertaining to our general reimbursement plan for the cost of remedies paid for by vehicle owners before they are notified of a related safety recall.

Set forth below is Ford's general plan to reimburse owners and purchasers for costs incurred for remedies in advance of notification of potential safety related defects or noncompliance pursuant to Part 573.6 (c)(8)(i). This plan has not changed since our February 20, 2019 submission.

**Reimbursement Notification**

Ford's notice to a vehicle owner in accordance with 49 CFR Part 577 will indicate that Ford is offering a refund if the owner paid to have service to remedy the defect or noncompliance prior to a specified ending date. In accordance with Part 573.13 (c)(2), this ending date will be defined as a minimum of ten calendar days after the date on which Ford mailed the last of its Part 577 notifications to owners, and will be indicated in the specific reimbursement plan available to owners for an individual recall. This notice will direct owners to seek eligible reimbursement through authorized dealers or, at their option, directly through Ford at the following address:

Ford Motor Company  
P.O. Box 6251  
Dearborn, MI 48121-6251

Ford notes that this rule allows for the identification of a beginning date for reimbursement eligibility. Under the rule, an owner who paid to remedy the defect or noncompliance prior to the identified beginning date would not be eligible for reimbursement. Ford generally has not established such a beginning date for reimbursement eligibility and does not presently anticipate changing this general policy. However, in any case where Ford determines a beginning date is appropriate, Ford will indicate that date in the owner notice. As permitted by 577.11(e), Ford may not include a reimbursement notification when all vehicles are well within the warranty period, subject to approval by the agency.

## **Costs to be Reimbursed**

For vehicles, reimbursement will not be less than the lesser of:

- The amount paid by the owner for the remedy that specifically addressed and was reasonably necessary to correct the defect or noncompliance that is the subject of the recall, or
- The cost of parts for the remedy (to be no more than the manufacturer's list retail price for authorized part(s), plus associated labor at local labor rates, miscellaneous fees (such as disposal of waste) and taxes.

For replacement equipment, reimbursement will be the amount paid by the owner for the replacement item (limited by the amount of the retail list price of the defective or noncompliant item that was replaced, plus taxes, where the brand or model purchased by the owner was different than the brand or model that was the subject of the recall). If the item of motor vehicle equipment was repaired, the reimbursement provisions identified above for vehicles will apply.

Ford notes that costs incurred by the owner within the period during which Ford's original or extended warranty would have provided for a free repair of the problem will not be eligible for reimbursement, as provided by Part 573.13 (d)(1).

### Entities Authorized to Provide Reimbursement

Ford will continue to use authorized dealers to reimburse owners under the specific reimbursement plans for a particular recall and will encourage owners to pursue requests for reimbursement directly through dealers to expedite reimbursement. Ford will also provide a mailing address to which customers can, at their option, send requests for reimbursement directly to Ford, as previously noted. Requests for reimbursement sent directly to Ford may take up to 60 days to process. Whether the owner chooses to pursue reimbursement requests through a dealer or directly through Ford, the owner will be directed to submit the required documentation, upon which reimbursement eligibility will be determined.

## **Required Documentation**

The reimbursement determination will depend upon the information provided by the customer. Consistent with Part 573.13 (d)(4) the following information must be submitted:

- Claimant name and address
- Vehicle make, model, and model year
- Vehicle identification number (VIN) and, for replacement equipment, a description of such equipment or, for tires, the model, size and TIN (DOT code)
- Identification of the recall number (either the Ford recall number or the NHTSA recall number)
- Identification of the owner of the recalled vehicle at the time that the pre-notification remedy was obtained
- An original receipt for the pre-notification remedy that includes a breakdown of the amount for parts, labor, other costs and taxes, including costs for the replacement item. Where the receipt covers work other than to address the recall or noncompliance, Ford may require the claimant to separately identify costs that are eligible for reimbursement.
- If the remedy was obtained during the warranty period, documentation indicating that the warranty was not honored, or the warranty repair did not correct the problem related to the recall.

Failure to submit all of the above information may result in denial of the reimbursement request.



**Additional Information**

The Part 577 required owner notice will provide a toll-free telephone number through which specific information about the reimbursement plan can be requested from Ford. This general reimbursement plan will be incorporated into notifications pursuant to Part 573.6 by reference. Information specific to an individual recall also may be incorporated into the Part 573.6 notification.