

David J. Johnson
Director
Service Engineering Operations
Ford Customer Service Division

Ford Motor Company P. O. Box 1904 Dearborn, Michigan 48121

January 18, 2022

TO: All U.S. Ford and Lincoln Dealers

SUBJECT: NEW VEHICLE DEMONSTRATION / DELIVERY HOLD

Safety Recall 21S54

Certain 2020 Model Year Transit AWD Vehicles Rear Driveshaft Bolt and Washer Replacement

REF: Advance Notice - Safety Recall 21S54

Certain 2020 Model Year Transit AWD Vehicles

Rear Driveshaft Bolt and Captive Washer Replacement

AFFECTED VEHICLES

Vehicle	Model Year	Assembly Plant	Build Dates
Transit AWD	2020	KCAP	May 1, 2019 through February 1, 2020

Affected vehicles are identified in OASIS and FSA VIN Lists.

REASON FOR THIS SAFETY RECALL

In some of the affected vehicles, it may be possible for the rear driveshaft to transfer case Constant Velocity Joint (CVJ) mounting bolts to become loose, missing or damaged. Loose, missing, or damaged driveshaft attachment bolts can lead to separation of the driveshaft from the transfer case. This can result in an undesirable noise, loss of motive power while driving, or unintended vehicle movement in park without the parking brake applied.

SERVICE ACTION

The dealer is to check torque of all 6 driveshaft bolts on driveshaft to transfer case side for looseness, missing, or damaged bolts. If bolts are found loose, missing, or damaged, the dealer is to replace the driveshaft, all driveshaft bolts, center bearing bracket bolts, driveshaft to rear axle companion flange bolts, transfer case flange kit, and transfer case seal. On vehicles that do not have a loose or missing bolt, dealer is to replace the driveshaft bolts per WSM (Workshop Manual). This Includes drain and fill transfer case per technical instructions at no charge to the vehicle owner. Dealer will also send pictures to SSSC of loose, missing, or damaged bolts and/or damage of adjoining components.

OWNER NOTIFICATION MAILING SCHEDULE

Owner letters are expected to be mailed the week of January 31, 2022. Dealers should repair any affected vehicles that arrive at their dealerships, whether or not the customer has received a letter.

PLEASE NOTE:

Federal law requires dealers to complete this recall service before a new vehicle is delivered to the buyer or lessee. Violation of this requirement by a dealer could result in a civil penalty of up to \$21,000 per vehicle. Correct all vehicles in your new vehicle inventory before delivery.

ATTACHMENTS

Attachment I: Administrative Information

Attachment II: Labor Allowances and Parts Ordering Information

Attachment III: Technical Information

Owner Notification Letters

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,

Pf Johnson
David J. Johnson

Certain 2020 Model Year Transit AWD Vehicles Rear Driveshaft Bolt and Washer Replacement

OASIS ACTIVATION

OASIS was activated on December 18, 2021.

FSA VIN LISTS ACTIVATION

FSA VIN Lists was made available through https://web.fsavinlists.dealerconnection.com on December 18, 2021. Owner names and addresses will be available by January 31,2022.

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 recall 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 recall.

SOLD VEHICLES

- Owners should contact their dealer for an appointment to have their vehicles remedied as soon as practicable.
- 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.

DEALER-OPERATED RENTAL VEHICLES

The Fixing America's Surface Transportation (FAST) Act law effective June 2016 prohibits a rental company from selling, renting or leasing vehicles subject to a safety or compliance recall. Please consult your legal counsel for legal advice.

TITLE BRANDED / SALVAGED VEHICLES

Affected title branded and salvaged vehicles are eligible for this recall.

OWNER REFUNDS

Refunds are not approved for this program.

RENTAL VEHICLES

Rental vehicles are not approved for this program.

Certain 2020 Model Year Transit AWD Vehicles Rear Driveshaft Bolt and Washer Replacement

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 (21S54) 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.

- **Refunds:** Submit refunds on a separate repair line.
 - Program Code: 21S54 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.

Certain 2020 Model Year Transit AWD Vehicles Rear Driveshaft Bolt and Washer Replacement

LABOR ALLOWANCES

Description	Labor Operation	Labor Time	
Inspection / Replacement: Check torque of rear driveshaft to transfer case bolts for damage, missing or looseness, Pass inspection. Replace Driveshaft bolts and Captive washer. (Can only be used with E)	21S54B	0.4	
Pictures: Submit Pictures if Driveshaft Bolts Found damaged, missing or loose. (Can only be used with C or D E and F)	21S54ZZ	0.2	
2-piece Driveshaft: Check torque of rear driveshaft to transfer case bolts for damage, missing or looseness, fail - replace driveshaft/bolts, transfer case flange and seals (Includes drain and fill transfer case and prep driveshaft for return) (Can only be used with E and ZZ)	21S54C	1.3	
3-piece Driveshaft: Check torque of rear driveshaft to transfer case bolts for damage, missing or looseness, fail - replace driveshaft/bolts, transfer case flange and seals (Includes drain and fill transfer case and prep driveshaft for return) (Can only be used with E and ZZ)	21S54D	1.6	
4-piece Driveshaft: Check torque of rear driveshaft to transfer case bolts for damage, missing or looseness, fail-replace driveshaft/bolts, transfer case. (Can be claimed with E, and ZZ)	21S54F	1.7	
Extra Time: Remove Running Boards if Equipped.	21S54E	0.3	

Certain 2020 Model Year Transit AWD Vehicles Rear Driveshaft Bolt and Washer Replacement

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. There are limited pats to perform this recall and may initially go on back order.

Part Number	Description	Order Quantity	Claim Quantity
LK4Z-4R602-BL	2 PC Driveshaft (Driveshaft CVJ mounting bolts included in pkg.)	1	1
LK4Z-4R602-BK	3 PC Driveshaft (Driveshaft CVJ mounting bolts included in pkg.)	1	1
LK4Z-4R602-BJ	4 PC Driveshaft (Driveshaft CVJ mounting bolts included in pkg.)	1	1
W713078-S439	4PC Driveshaft Center Bearing Bracket Bolts (6 Bolts needed 4 in pkg)	2	2
W713078-S439	3 PC Driveshaft Center Bearing Bracket Bolts (4 bolts needed 4 in pkg)	1	1
W713078-S439	078-S439 2 PC Driveshaft Center Bearing Bracket Bolts (2 bolts needed 4 in pkg)		1
MB3Z-7B215A	Transfer Case Seal	1	1
LK4Z-7061-A	Transfer Case Flange Kit	1	1

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
LK4Z-4B496-B	Rear Driveshaft Mounting Bolt Kit with Captive Washer (1 in pkg 2 req for repair)	2	2
N800594-S100	Driveshaft Rear Axle Companion Flange Bolts (4 bolts needed 4 in pkg)		1

DEALER PRICE

For latest prices, refer to DOES II.

Certain 2020 Model Year Transit AWD Vehicles Rear Driveshaft Bolt and Washer Replacement

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.

REPLACED FSA PARTS INSPECTION AND SIGN OFF

Effective March 1st 2021 all parts replaced as part of an FSA repair with a repair order open date of March 1st 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 1st 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 MODEL YEAR TRANSIT AWD VEHICLES - CVJ BOLT AND CAPTIVE WASHER REPLACEMENT

SERVICE PROCEDURE

- 1. With the vehicle in neutral and parking brake disengaged, position vehicle on a hoist. Please follow Workshop Manual (WSM) procedures in Section 100-02.
- 2. If equipped, remove running boards. Please follow WSM procedures in Section 501-08.
- 3. Using a 10mm (3/8 in) socket with a Digital or Dial Indicator Torque Wrench, loosen each of the 6 bolts and note the max breakaway torque. See Figures 1 and 2.



FIGURE 1

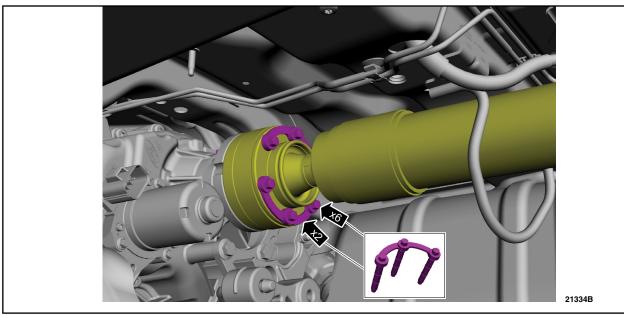


FIGURE 2

4. Are any of the bolts or washers missing or damaged?

No - Continue to Step 5.

Yes - Continue to Step 10.

5. Do any of the bolts show a torque less than 26 ft-lb (35 Nm)?

No - Contine to Step 6.

Yes - Continue to Step 10.

6. Remove and replace first set of 3 bolts and 1 captive washer. See Figure 3.

•Torque: 52 ft-lb (70 Nm).

7. Remove and replace second set of 3 bolts and 1 captive washer. See Figure 3.

•Torque: 52 ft-lb (70 Nm).

NOTE: Do not completely disconnect driveshaft from transfer case at any time.

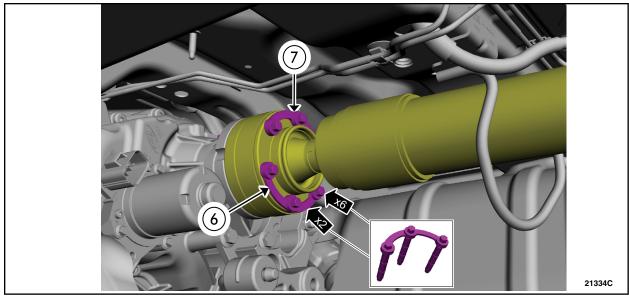


FIGURE 3

- 8. Box and ship bolts and captive washers per the warranty return process.
- 9. Recall is complete.

Recommended Tools List

Small Pry Bar	
Installation Tube (205-1018)	
Installer, Output Shaft AWD (205-1067)	
Holding Fixture, Drive Pinion Flange (205-126)	
2 or 3 Jaw Puller (205-D027)	
Installer/Remover, C-Frame and Screw (205-086)	

NOTE: A new driveshaft is required, if the driveshaft is dropped.

NOTE: Driveshafts should be supported so that each section of the driveshaft is parallel.

NOTE: Driveshafts should be supported to ensure center slip mechanism doesn't pull out of slip boot or over articulate the joint.

NOTE: The maximum articulation of any CV-joint is 5 degrees. The maximum articulation of any U-joint is 10 degrees. If the CV or any U-joint of the driveshaft is articulated further than the maximum allowable degrees, damage may occur.

- 10. Note the index mark on the axle flange (yellow dot). If yellow dot is visible on driveshaft but not on the pinion flange, add corresponding mark on pinion flange. See Figure 4.
- 11. Remove the driveshaft flange to pinion flange bolts. See Figure 4.

NOTE: The driveshaft flange fits tightly on the flange pilot. Never hammer on the driveshaft or any of its components to disconnect the driveshaft flange from the flange pilot. Pry only in the area shown with a suitable tool, to disconnect the driveshaft flange from the flange pilot or damage to the driveshaft flange can occur.

- 12. Using a small pry bar, separate the driveshaft flange from the pinion flange. See Figure 4.
- 13. Support the driveshaft. See Figure 4.

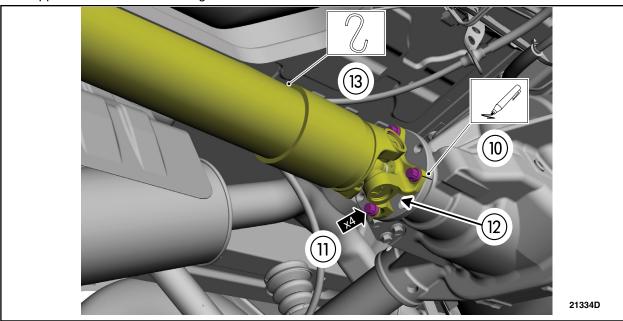


FIGURE 4

14. Remove and and set aside the driveshaft CV-joint to transfer case flange bolts and the retaining straps/washers. See Figure 5.

NOTE: Index mark is not required at the Transfer Case CVJ interface.

NOTE: The driveshaft CV-joint fits tightly on the flange pilot. Never hammer on the driveshaft or any of its components to disconnect the driveshaft CV-joint from the flange pilot. Pry only in the area shown with a suitable tool, to disconnect the driveshaft CV-joint from the flange pilot or damage to the driveshaft CV-joint can occur.

- 15. Using a small pry bar, separate the driveshaft CV-joint from the transfer case flange. See Figure 5.
- 16. Support the driveshaft. See Figure 5.

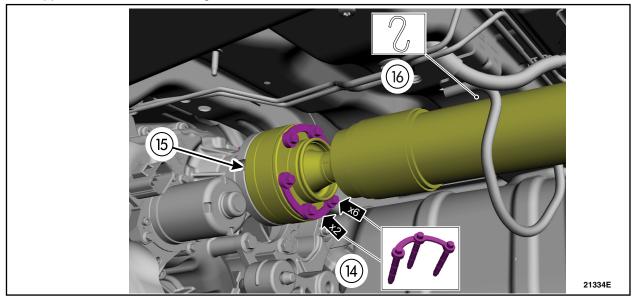


FIGURE 5

NOTE: The driveshaft is long and heavy with multiple U-joints. Do not over articulate the driveshaft or damage may occur.

NOTE: This step requires the aid of another technician.

17. Remove and discard the driveshaft center bearing bolts and remove the driveshaft. This will require pulling the driveshaft rearward to clear the front safety strap/hoop. For Medium Wheelbase see Figure 6. For Long Wheelbase see Figure 7.

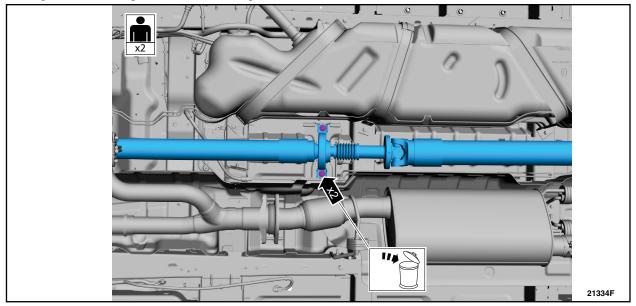


FIGURE 6

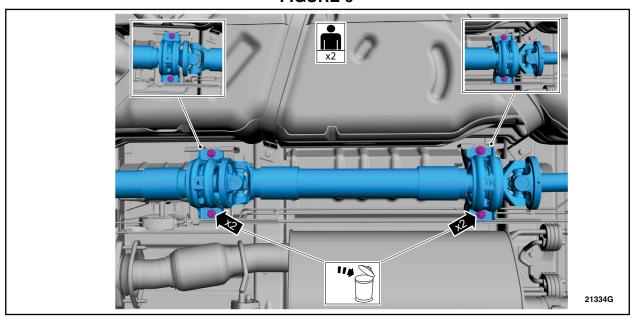


FIGURE 7

18. Drain the transfer case. Please follow WSM procedures in Section 308-07B.

NOTE: Note the position of the component before removal.

19. Using Special Service Tool (205-126 Holding Fixture, Drive Pinion Flange), hold the flange, remove and discard the flange nut. See Figure 8.

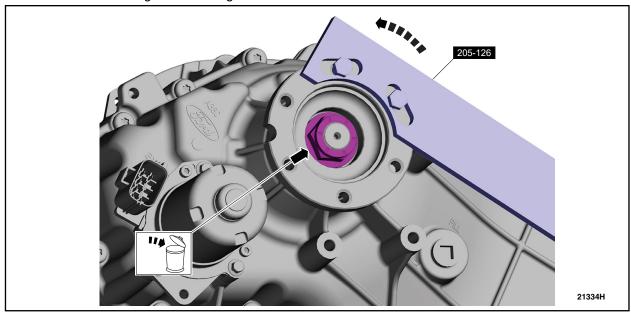


FIGURE 8

20. Remove the spacer. See Figure 9.

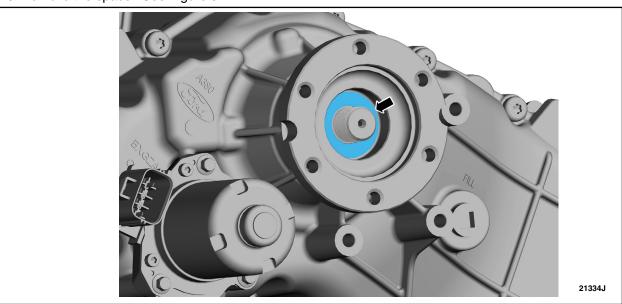


FIGURE 9

21. Remove the seal. See Figure 10.

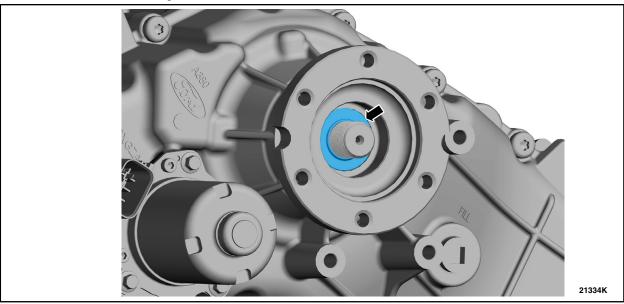


FIGURE 10

22. Using Special Service Tool (2 or 3 Jaw Puller), remove the outlet flange and set aside for warranty return. See Figure 11.

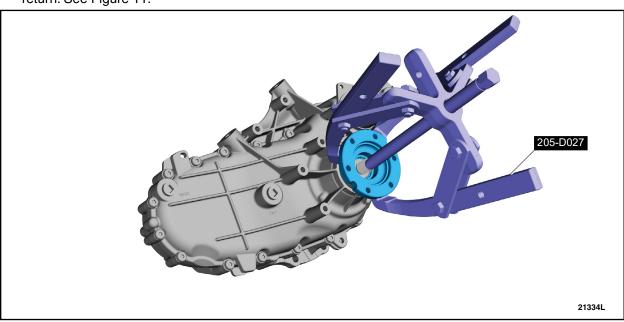


FIGURE 11

23. Remove the transfer case rear output shaft seal dust cover. See Figure 12.

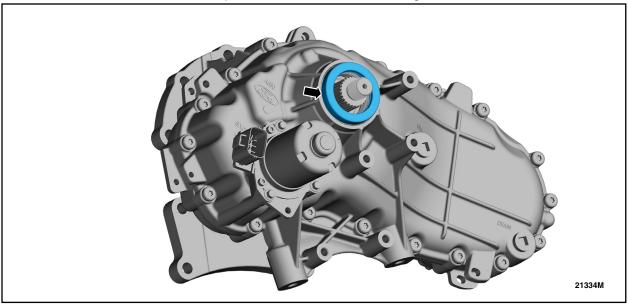


FIGURE 12

24. Remove and discard the transfer case rear output shaft seal. See Figure 13.

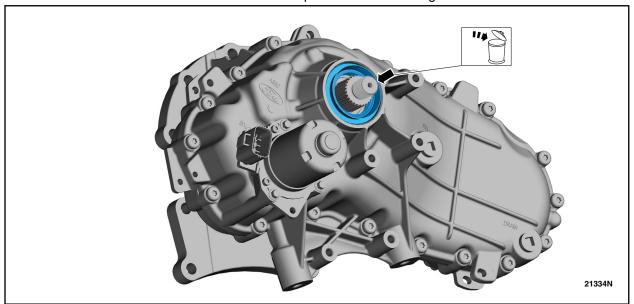


FIGURE 13

25. Use Special Service Tool (205-1018 Installation Tube, 205-1067 Installer), to install the special tool to the seal. See Figure 14.

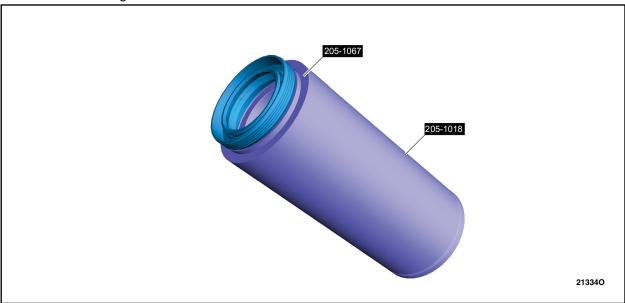


FIGURE 14

26. Using the special tool, install the transfer case rear seal. See Figure 15.

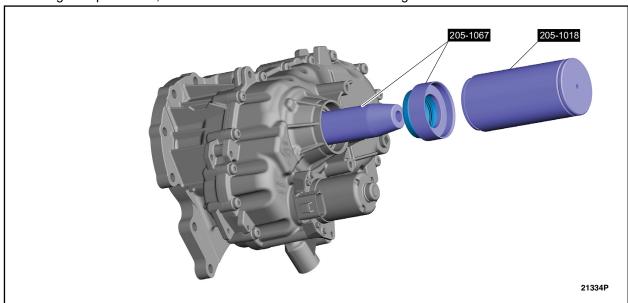


FIGURE 15

27. Install the transfer case rear output shaft seal dust cover. See Figure 16.

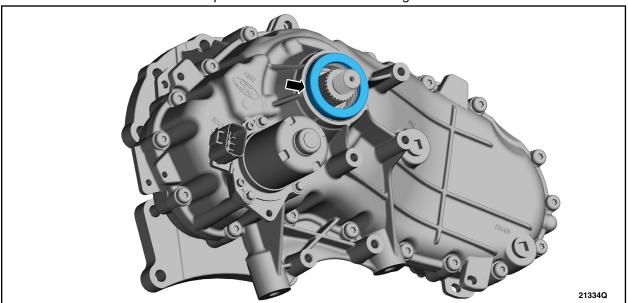


FIGURE 16

28. Install the new transfer case output flange. See Figure 17.

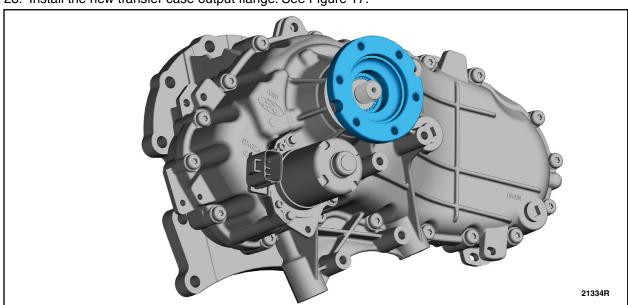


FIGURE 17

29. Install the output flange seal. See Figure 18.

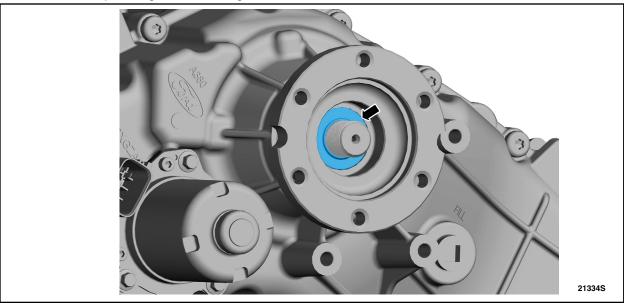


FIGURE 18

30. Install the output flange spacer. See Figure 19.

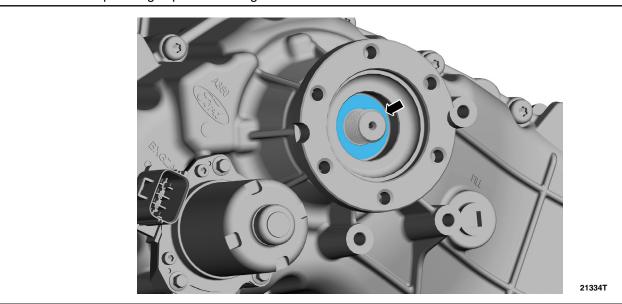


FIGURE 19

31. Use Special Service Tool (205-126 Holding Fixture Drive Pinion Flange), to install the new output shaft flange nut. See Figure 20.

•Torque: 136 lb. ft (185 Nm)

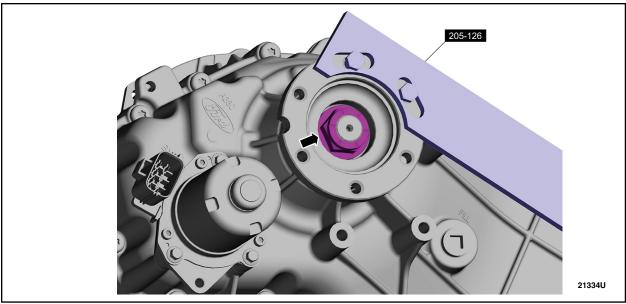


FIGURE 20

NOTE: The driveshaft is long and heavy with multiple U-joints. Do not over articulate the driveshaft or damage may occur.

NOTE: This step requires the aid of another technician.

NOTE: Only tighten the bolts finger tight at this stage.

32. Install the driveshaft and the new driveshaft center bearing bolts. See Figure 21 for Medium Wheel base. See Figure 22 for Long Wheelbase.

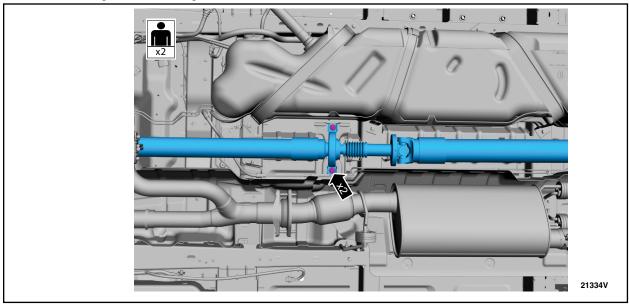


FIGURE 21

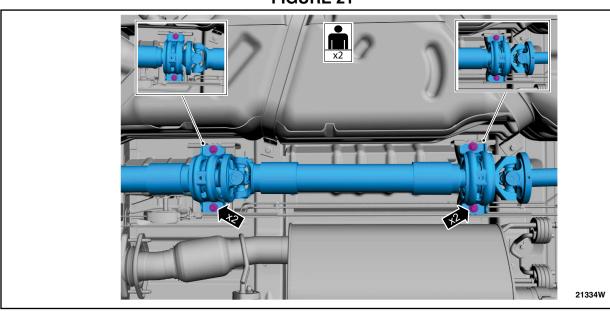


FIGURE 22

21334X

33. Install the new driveshaft CV-joint to the transfer case flange bolts and the retaining straps/washers. See Figure 23.

•Torque: 52 lb.ft (70 Nm).

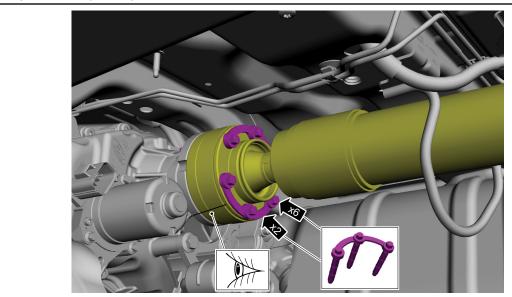


FIGURE 23

34. Align the index-mark on the driveshaft and rear drive pinion flange (yellow dot). Install the new driveshaft to the rear drive pinion flange bolts. See Figure 24.

•Torque: 76 lb.ft (103 Nm)

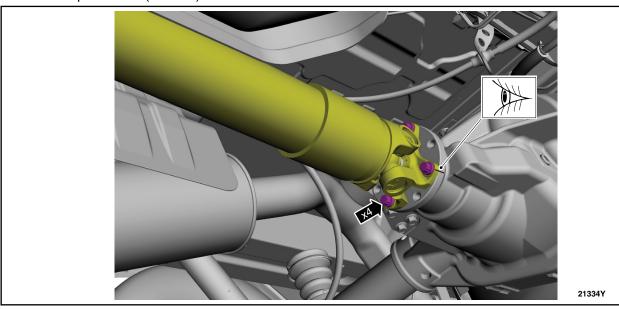


FIGURE 24

35. Check all center bearings alignment for bind, twist, or rub. See Figure 25.

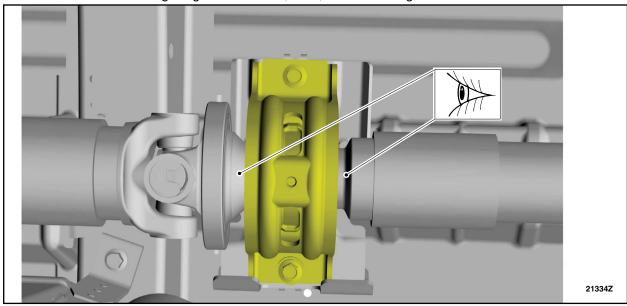


FIGURE 25

36. Tighten the new driveshaft center bearing bolts. 2 on Medium wheel base, 4 on Long wheel base, and 6 on Extra-Long Wheelbase. See Figure 26 for Medium Wheelbase. See Figure 27 for Long Wheelbase.

•Torque: 35 lb.ft (48 Nm)

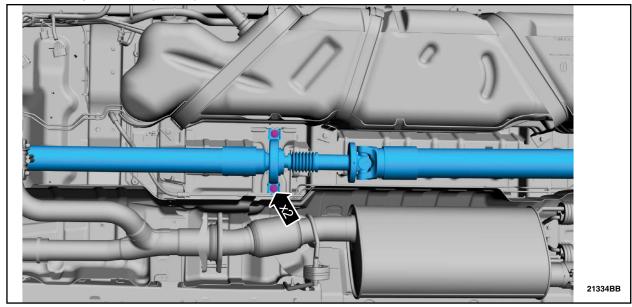


FIGURE 26

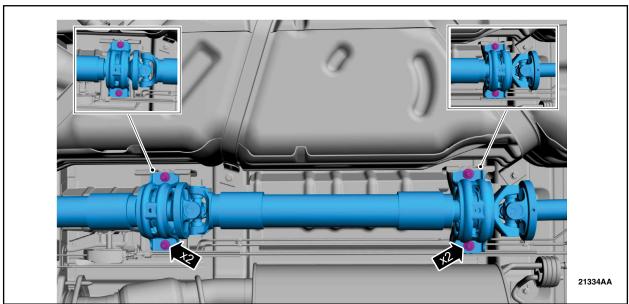


FIGURE 27

37. Refill the Transfer Case. Please follow WSM procedures in section 308-07B.

Preparing Driveshaft for Shipment/Warranty Return

NOTE: Pay close attention to the image below. The front portion of each driveshaft (Transfer Case side with CVJ) MUST be carefully boxed with its fasteners and shipped per the warranty return process. Chargebacks will occur if the wrong portion of the shaft is sent. See Figure 28.

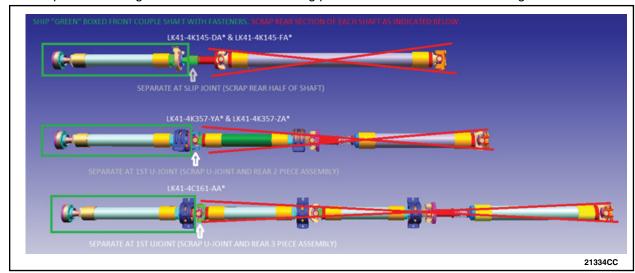


FIGURE 28

For two-piece shafts LK41-4K145-DA and LK41-4K145-AA

38. Remove/cut the boot clamp at the front of the slip joint. See Figure 29.

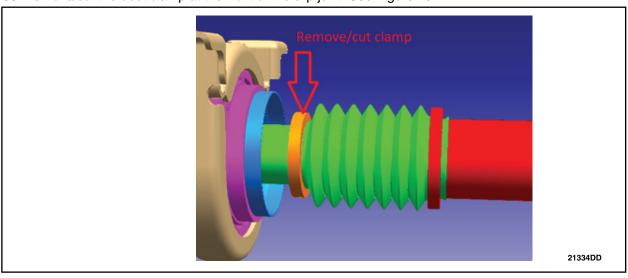


FIGURE 29

39. Box and ship front half of the shaft along with the old CVJ Fasteners.

For three-piece and four-piece shafts LK41-4K357-YA, LK41-4K357-ZA and LK41-4C161-AA

- 40. Remove circlips on first u-joint, closest to Transfer Case. Follow the process below to seperate the U-joint.
- 41. Remove and discard the 4 snap rings. See Figure 30.

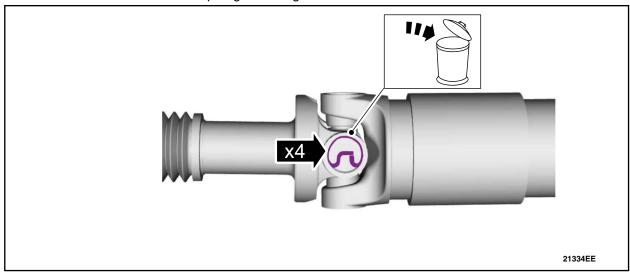


FIGURE 30

NOTE: Driveshaft slip yoke shown. All other driveshaft yokes similar.

42. Using the special tool (205-086), press the u-joint bearing cups out of the driveshaft yoke and remove the driveshaft yoke. See Figure 31.

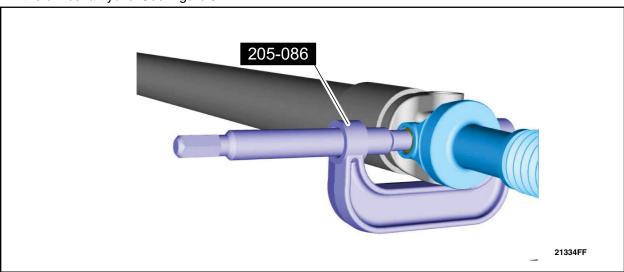


FIGURE 31

43. Using the special tool (205-086), press the u-joint bearing cups out of the driveshaft yoke and remove and discard the u-joint. See Figure 32.

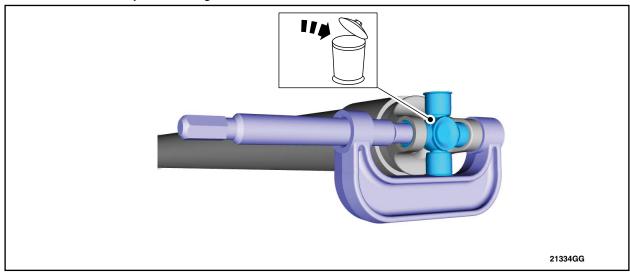


FIGURE 32

- 44. Box and Ship front section of Driveshaft along with the old CVJ fasteners, pinion flange bolts, and outlet flange.
- 45. Recall is complete