TECHNICAL SERVICE BULLETIN
Various Driver Assistance System Warning Messages - DTCs C1001:31, U3000:89, And/Or U3000:49 Stored In The IPMA

26-2206
01 May 2026

This bulletin supersedes 23-2146. Reason for update: clarify prior approval requirements.

Model:

Ford 2021-2023 F-150

Markets: North American markets only

Issue: Some of the vehicles listed in the Model statement above may exhibit DTCs C1001:31, U3000:89, and/or U3000:49 stored in the IPMA and at least one of the following conditions:

- "Front Camera Fault Service Required" message.
- Pre-collision assist inoperative.
- Adaptive cruise control inoperative.
- Front windshield camera alignment routine fails to complete.

This may be due to the coaxial cable between the IPMA camera and the IPMA.

Action: For vehicles that meet all of the criteria in the Issue and Model statements, follow the Service Procedure to repair the connection and reset the IPMA.

Parts

Service Part Number	Package Order Quantity	Description
TA-31	As Needed	Motorcraft® RTV Silicone Sealant
164-R9343	As Needed	Rotunda 3M™ Film Tape 9343
Obtain Locally	As Needed	Zip Ties

Parts - Parts To Inspect And Replace Only If Needed

Service Part Number	Claim Quantity	Description
ML3Z-10E929-ABA	Only If Necessary (Up To 1)	Image Processing Module A (IPMA) Camera to A-Pillar Coaxial Cable (Built With Minor Feature Code CHAAA)
ML3Z-10E929-ACA	Only If Necessary (Up To 1)	Image Processing Module A (IPMA) Camera to A-Pillar Coaxial Cable (Built With Minor Feature Code CHAA1)
ML3Z-10E929-AAA	Only If Necessary (Up To 1)	A-Pillar to IPMA Coaxial Cable (Built With Minor Feature Code J3KAR)
ML3Z-10E929-BKA	Only If Necessary (Up To 1)	A-Pillar to IPMA Coaxial Cable (Built With Minor Feature Code J3KAB And HJGAJ)
ML3Z-10E929-BLA	Only If Necessary (Up To 1)	A-Pillar to IPMA Coaxial Cable (Built With Minor Feature Code J3KAB And HJGAX)
ML3Z-10E929-FAA	Only If Necessary (Up To 1)	A-Pillar to IPMA Coaxial Cable (Built With Minor Feature Code J3KAH)
ML3Z-19H406-B	Only If Necessary (Up To 1)	Image Processing Module A (IPMA) Camera
14G647	Only If Necessary (Up To 1)	Image Processing Module A (IPMA) - Refer To The Parts Catalog For The VIN Specific Application

Claim Quantity refers to the total number of individual pieces required to repair the vehicle. This may differ from the number of service part number packages due to the unit of issue (UOI).

As Needed indicates the part is necessary but amount of the part may vary and/or is not a whole number. Parts can be billed out as non-whole numbers, including less than 1.

Only If Necessary indicates the part is not mandatory. Refer to the Service Procedure to determine the inspection/inclusion criteria.

Warranty Status: Warranty coverage limits and policies are not altered by a TSB. Warranty coverage limits are determined by the identified causal part.

Labor Times

Description	Operation No.	Time
2021-2023 F-150: Retrieve DTCs Inspect And Repair Following The Service Procedure (Do Not Use With Any Other Labor Operations)	MT262206A	Actual Time Up To 3.5 Hrs

Repair/Claim Coding

Causal Part:	10E929
Condition Code:	B4

Service Procedure

NOTE: This article does not remove any RVC, Prior Approval or Warranty and Policy requirements for component replacement.

1. Are DTCs C1001:31 and/or U3000:89 stored in the IPMA or were recently stored in the vehicle's 60-Day vehicle health alert (VHA)/ DTC History? The vehicle's 60-Day VHA/ DTC History (if applicable) can be found in PTS > Connected Vehicle > Connected Vehicle Home.

(1). Yes - inspect the coaxial cables between the IPMA and the IPMA camera for loose connections. Perform a wiggle test to check C900 and C9128 connectors for loose connections. If no loose connections are present, proceed to Step 2. If loose connections are present, reconnect and proceed to Step 3.

(2). No - proceed to Step 21.

2. Start the vehicle and wait 30 seconds. Clear and retrieve DTCs. Are DTCs C1001:31 and/or U3000:89 present in the IPMA?

(1). Yes - proceed to Step 4.

(2). No - the issue is intermittent. Replace both sections of coaxial cable running from the IPMA camera to the IPMA following Steps 4-6 and Steps 8-18, then proceed to Step 19.

3. Start the vehicle and wait 30 seconds. Clear and retrieve DTCs. Are DTCs C1001:31 and/or U3000:89 present in the IPMA?

(1). Yes - proceed to Step 4.

(2). No - proceed to Step 21.

4. Replace the coaxial cable running from the IPMA camera to the A-pillar by overlaying the new coaxial cable next to the existing coaxial cable and cutting off the existing coaxial cable connectors. To do so, begin by lowering the headliner (Figure 1). Refer to the WSM, Section 501-05 Interior Trim and Ornamentation > Headliner > Lowering.

Figure 1

5. Overlay the replacement coaxial cable into the headliner behind the headliner harness and overlay the new coaxial cable next to the existing coaxial cable (Figures 2-6). Use 3M™ film tape (not zip ties) to overlay the cable in the A-pillar, as using zip ties with sharp cuts near the side curtain airbag may impede the airbag's performance once installed. Small zip ties may be used in the headliner and near the IPMA camera.

Figure 2

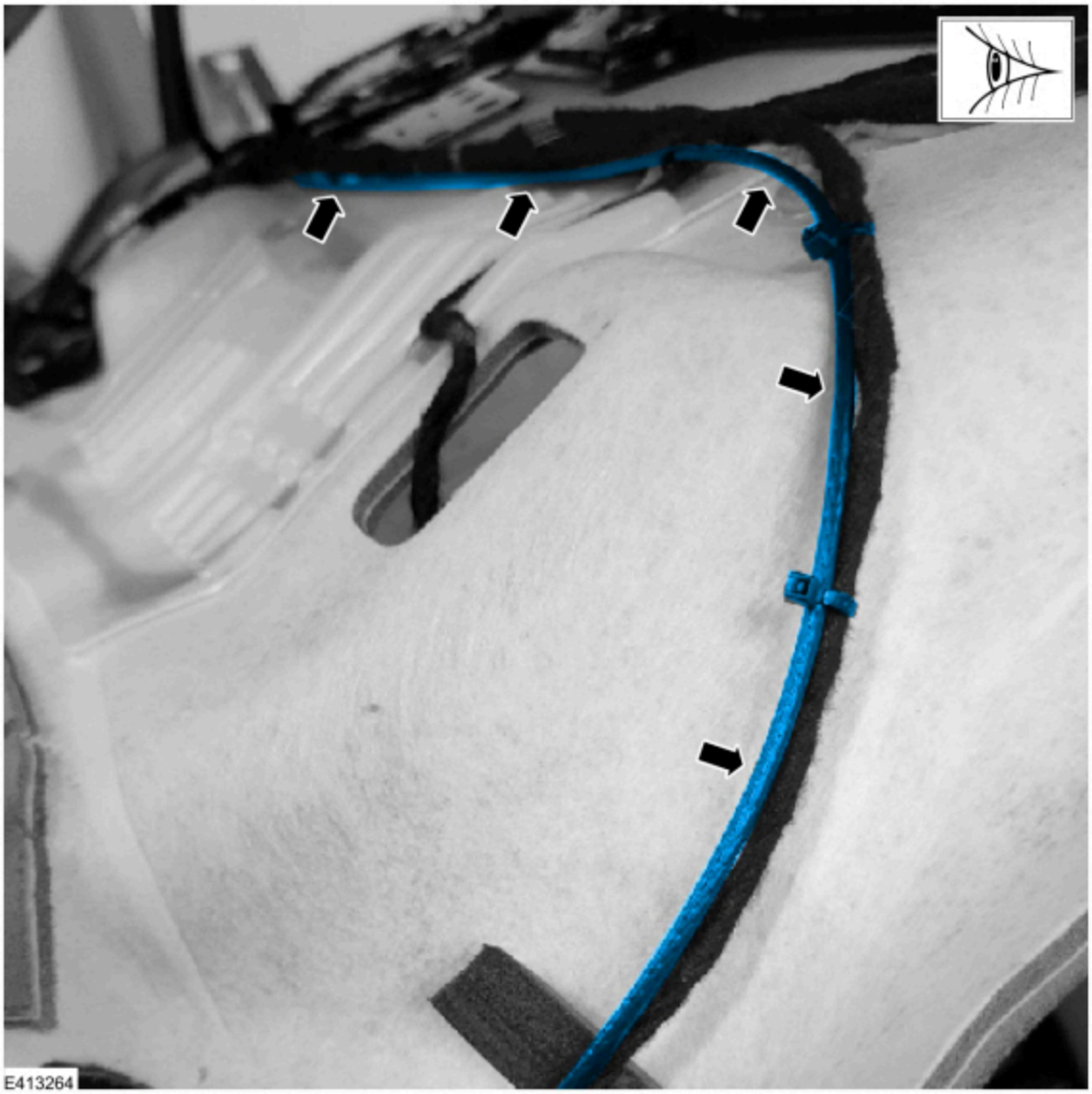


Figure 3

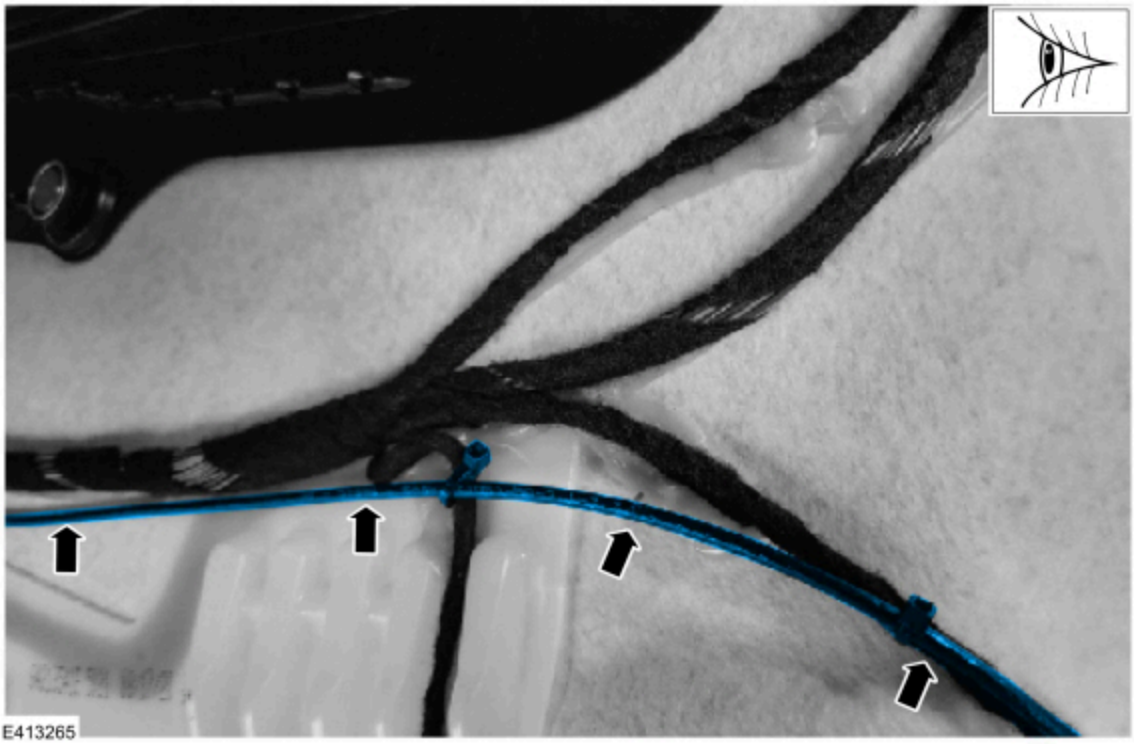


Figure 4

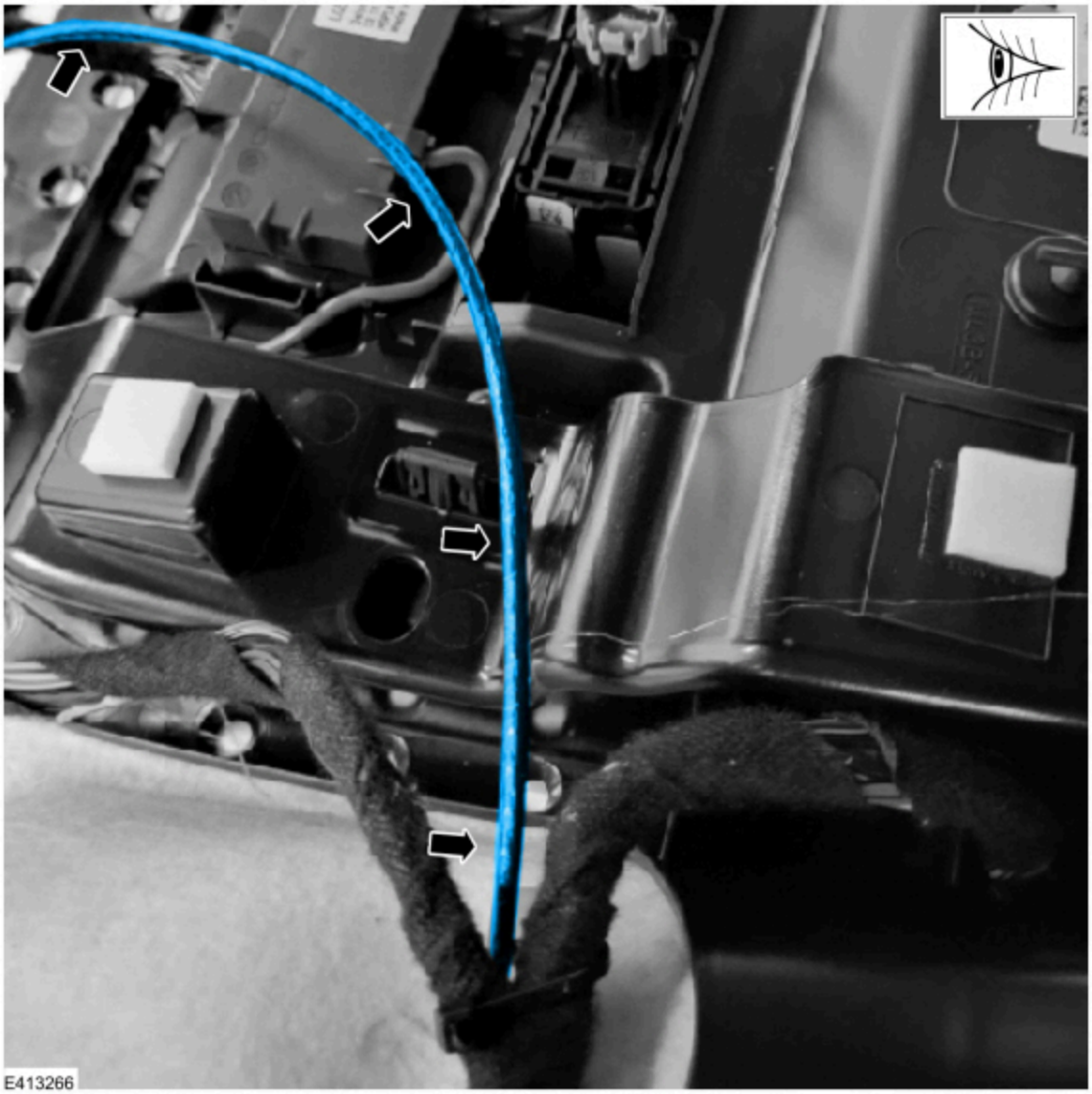


Figure 5

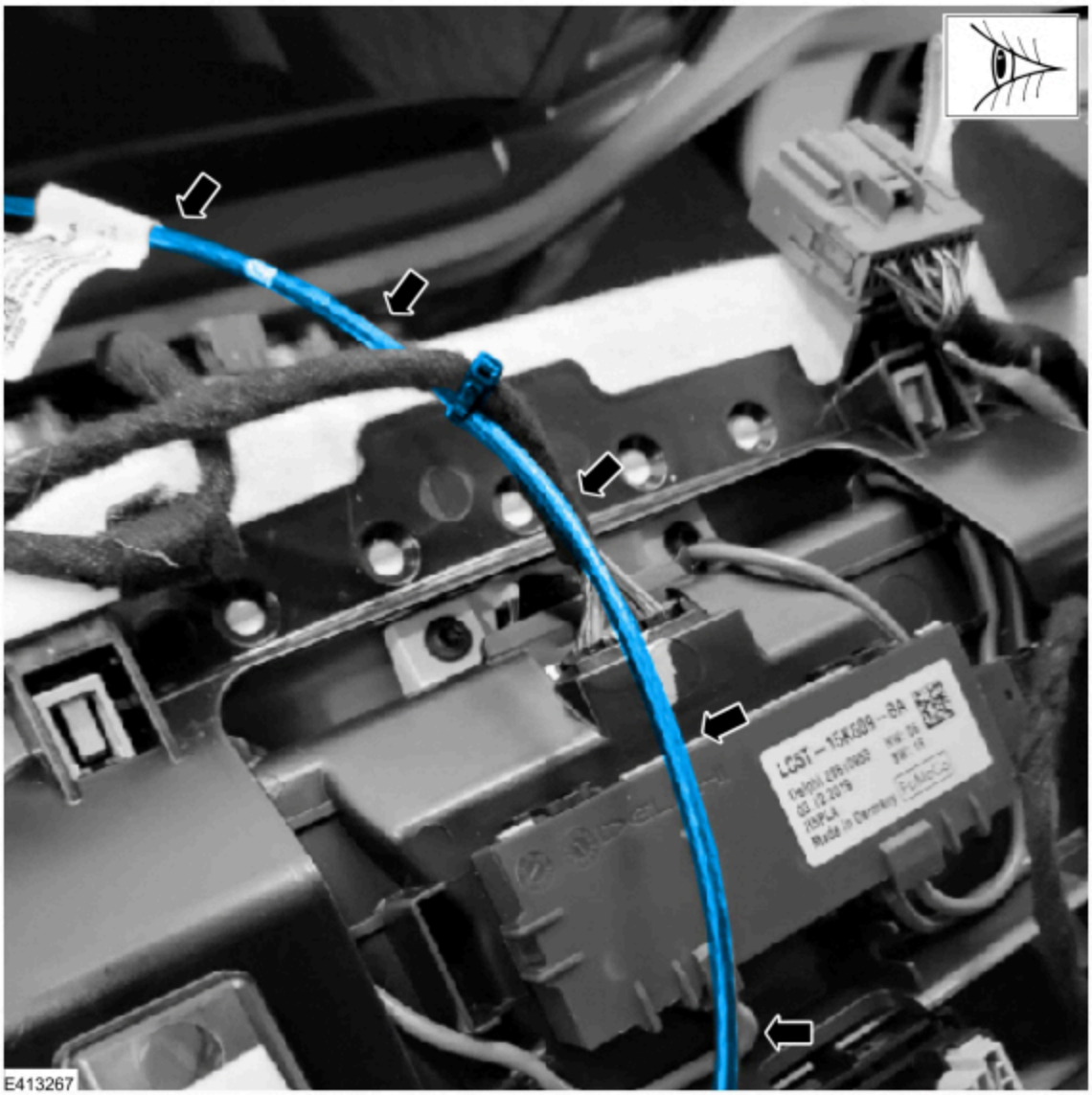


Figure 6

NOTE: Do not kink or route the cable in such a way that it bends greater than 90 degrees over 30 mm (1.2 in). Sharp bends could damage the cable. Press the 3M™ film tape firmly to the headliner to make sure the tape adheres adequately to the headliner.

6. Reattach the headliner to the roof using the headliner magnets and install a new C9128 connector to the IPMA camera and reconnect the headliner wiring harness C900 electrical connector in the A-Pillar. Refer to Figures 7-8.

(1). Cut off the existing coaxial cable connectors to make sure the original cable is not used again.

Figure 7

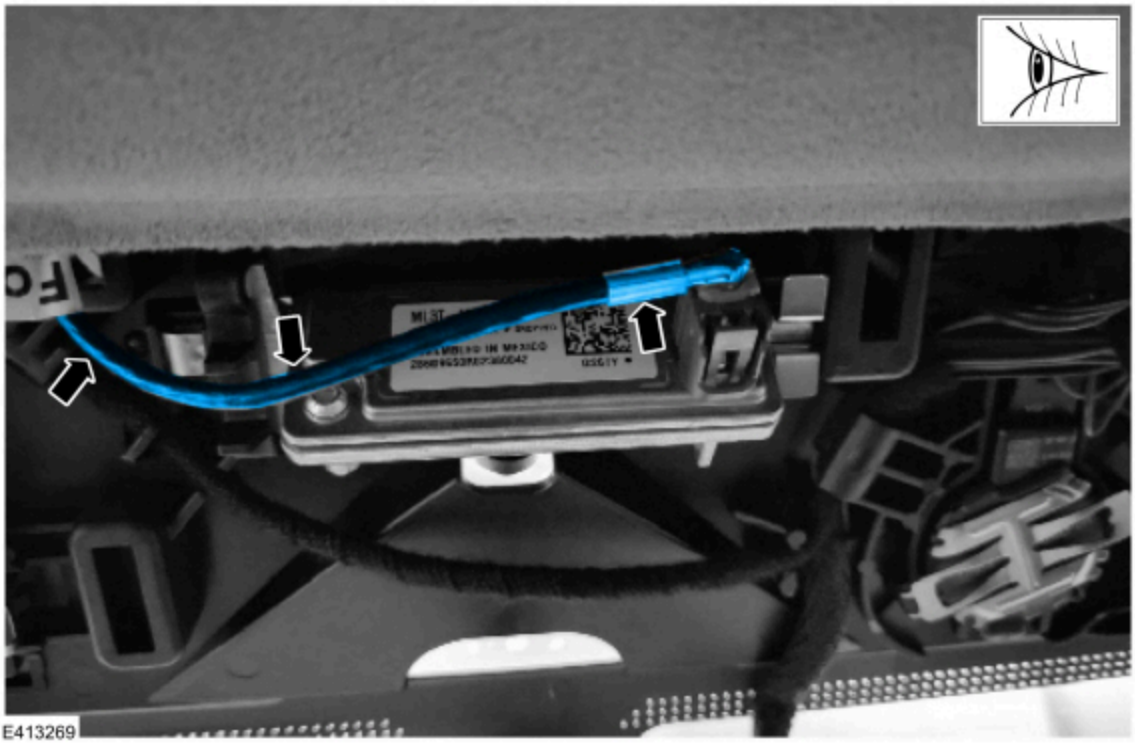
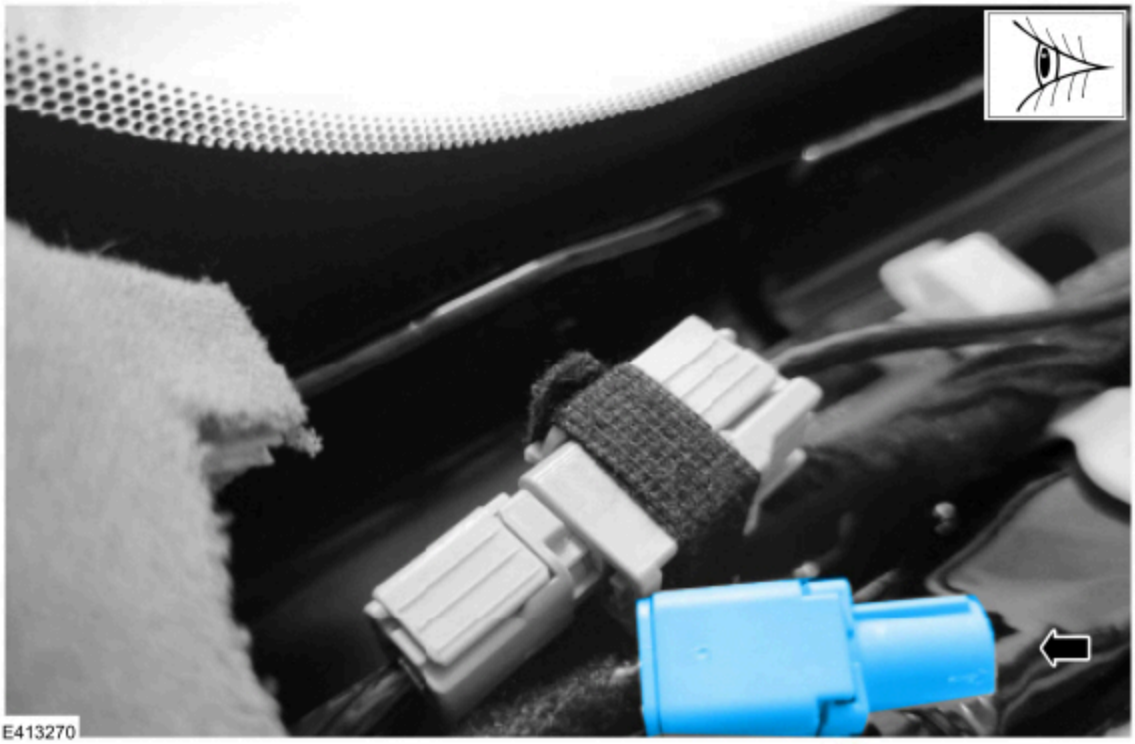


Figure 8



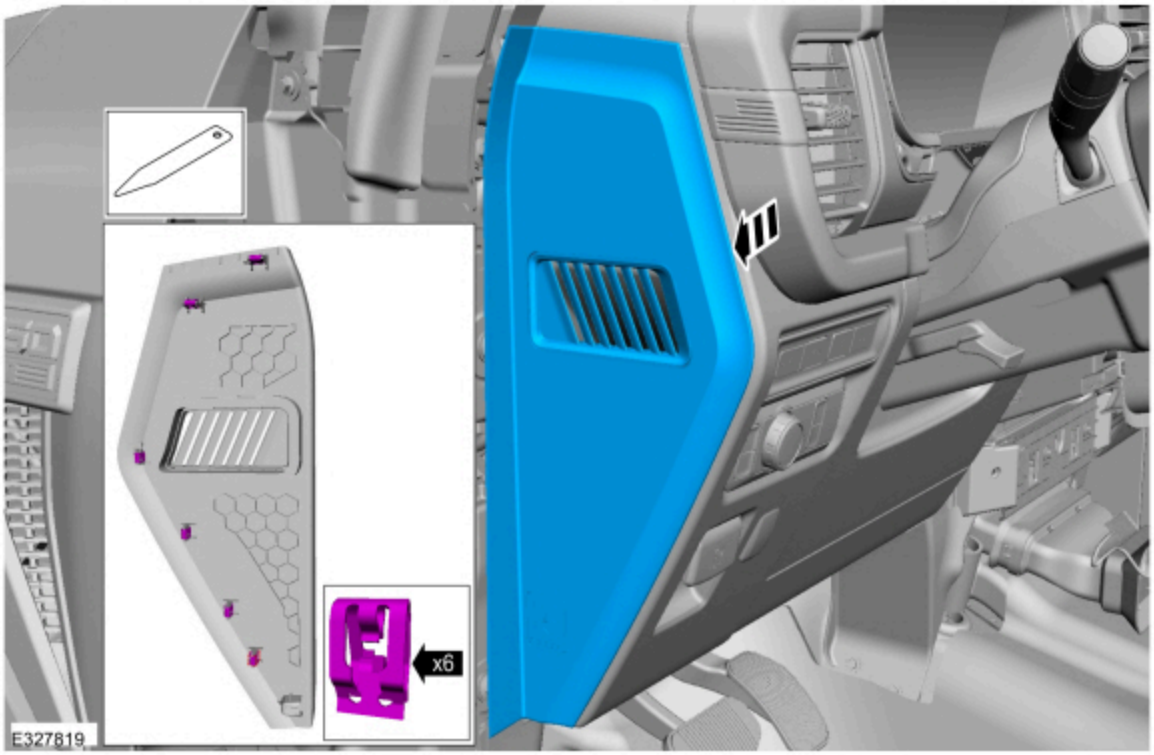
7. Start the vehicle and wait 30 seconds. Clear and retrieve the DTCs. Are DTCs C1001:31 and/or U3000:89 present in the IPMA?

(1). Yes - proceed to Step 8 to replace the coaxial cable running from A-pillar to IPMA by overlaying the new coaxial cable next to the existing coaxial cable and cutting off the existing coaxial cable connectors.

(2). No - proceed to Step 21.

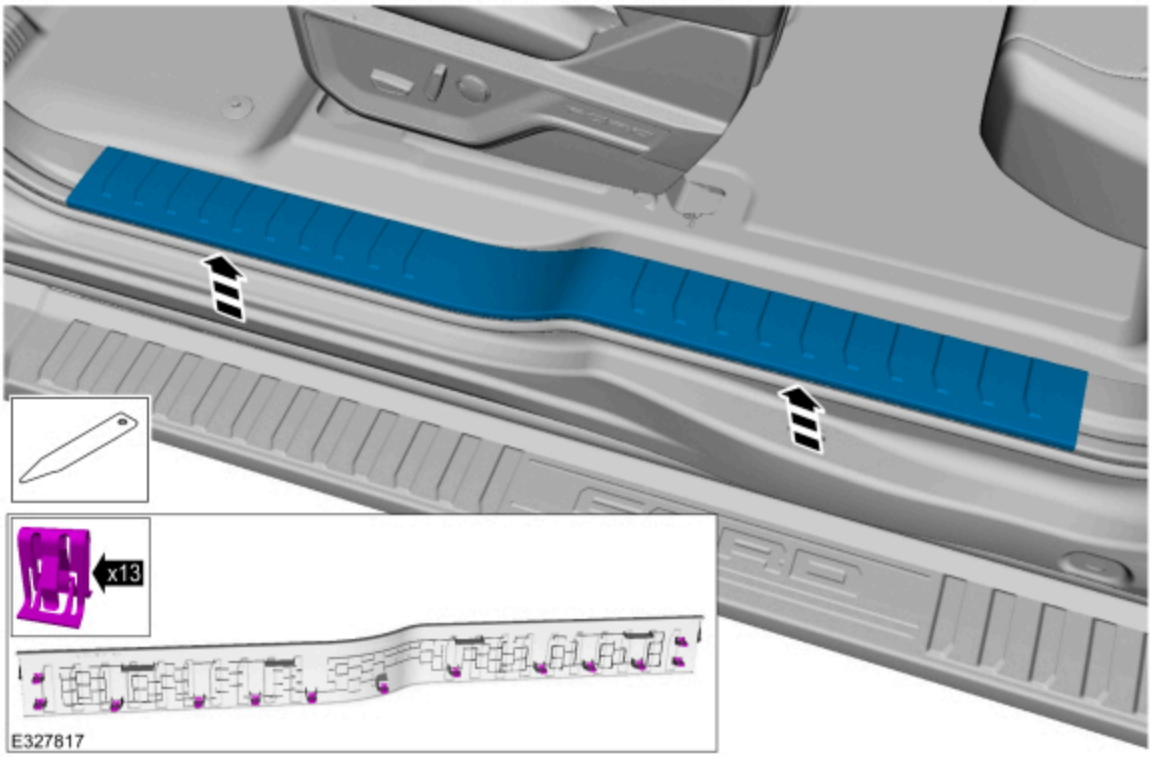
8. Release the clips and remove the left instrument panel trim panel. Refer to the WSM, Section 501-12 Instrument Panel and Console > Removal and Installation > Instrument Panel. (Figure 9)

Figure 9



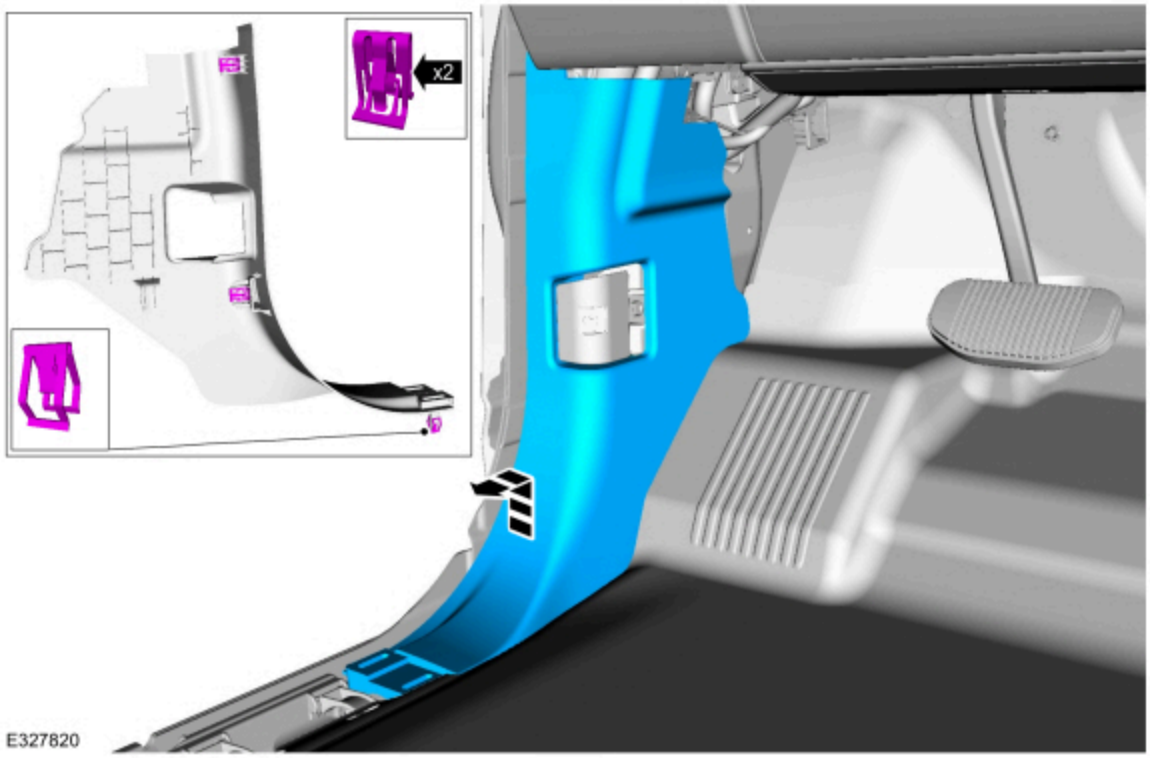
9. Release the clips and remove the left front scuff plate. Refer to the WSM, Section 501-12 Instrument Panel and Console > Removal and Installation > Instrument Panel. (Figure 10)

Figure 10



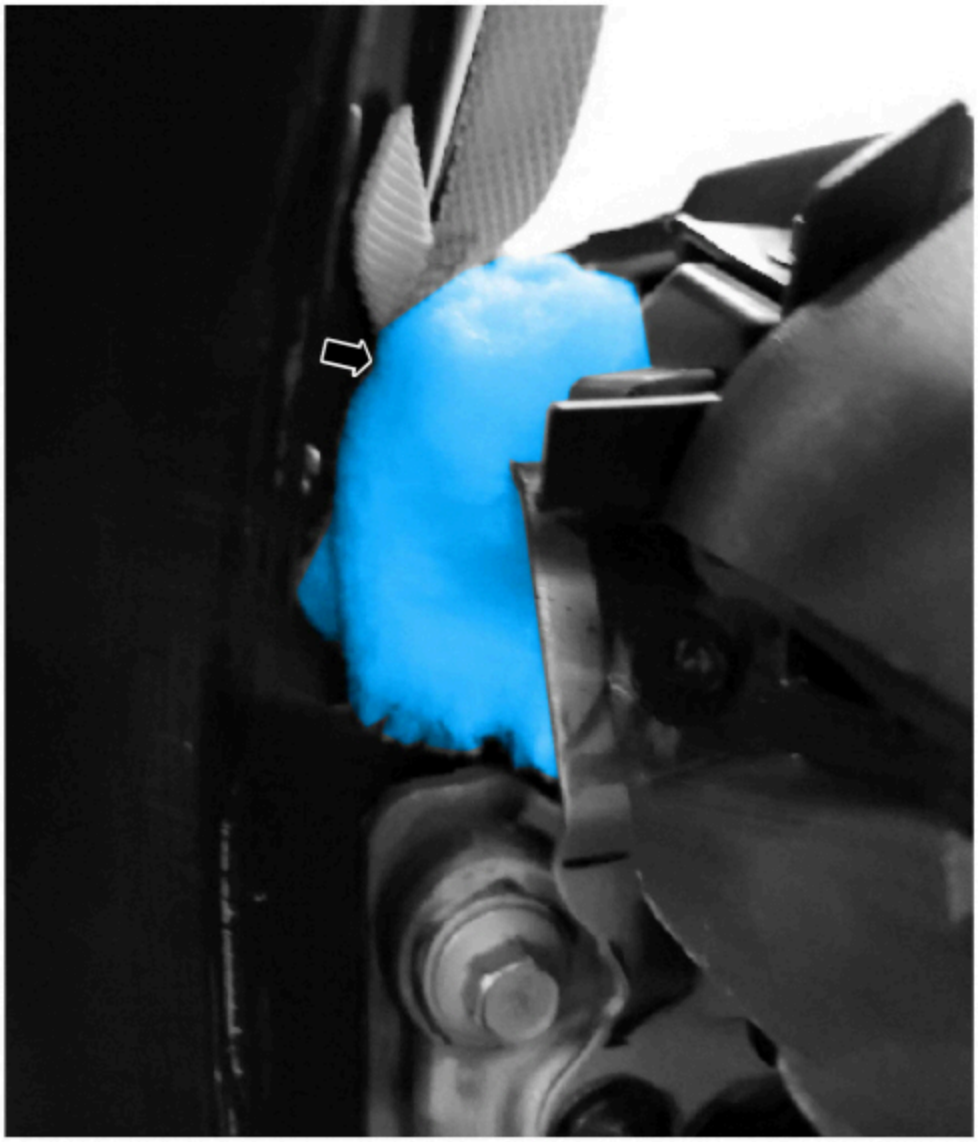
10. Release the clips and remove the left lower cowl trim panel. Refer to the WSM, Section 501-12 Instrument Panel and Console > Removal and Installation > Instrument Panel. (Figure 11)

Figure 11



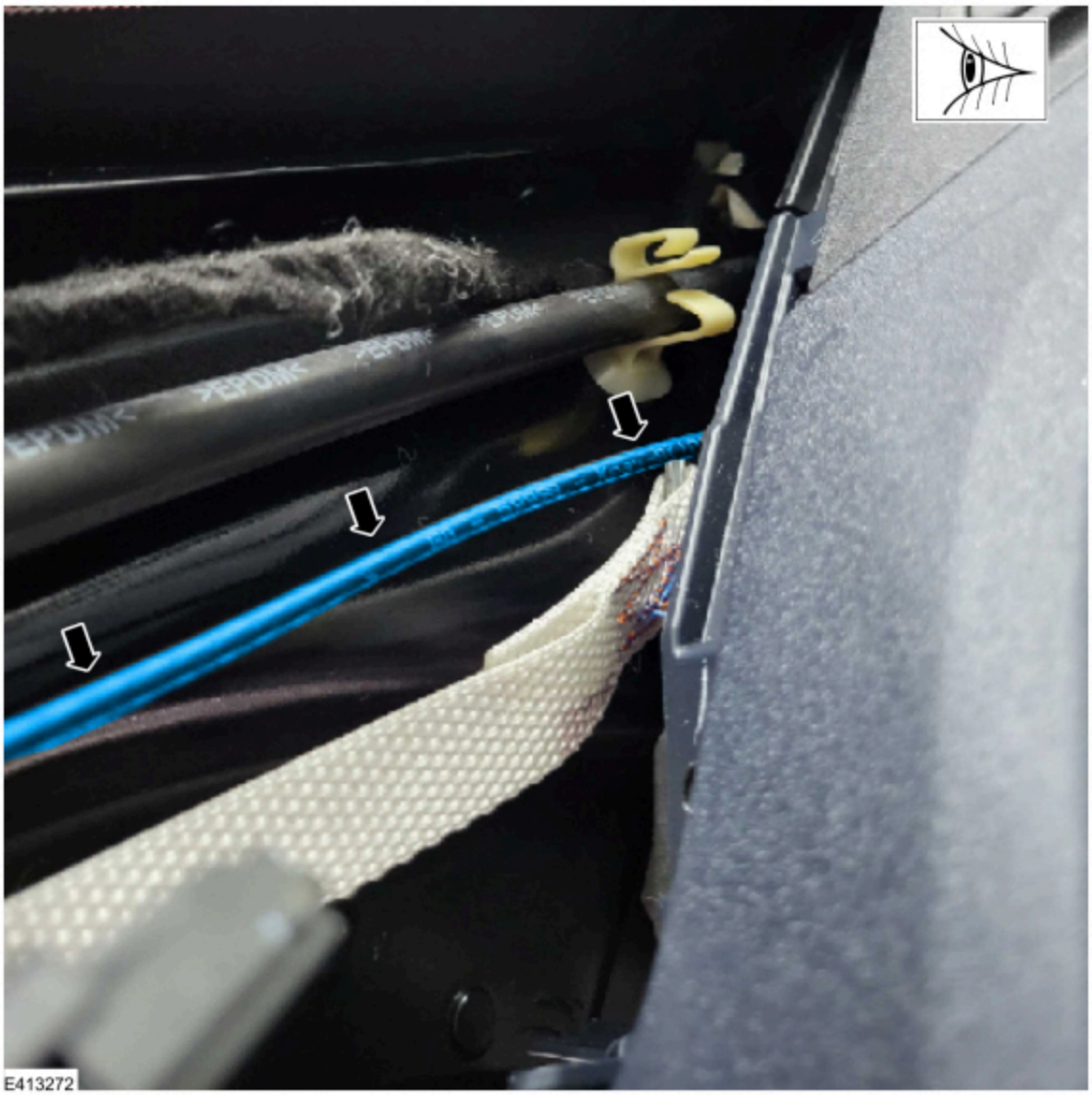
11. Remove insulation between A-pillar and dash. (Figure 12)

Figure 12



12. Using small zip ties, overlay the new coaxial cable with the existing coaxial cable going from the C900 connector in the A-pillar to the C242F connector at the IPMA, going through the gap previously covered by insulation (Figure 13). Make sure the coaxial cable is secured via the mounting clips in the A-pillar.

Figure 13



NOTE: Do not kink or route the cable in such a way that it bends greater than 90 degrees over 30 mm (1.2 in). Sharp bends could damage the cable.

13. Is the vehicle equipped with minor feature codes HJGAX or J3KAH?

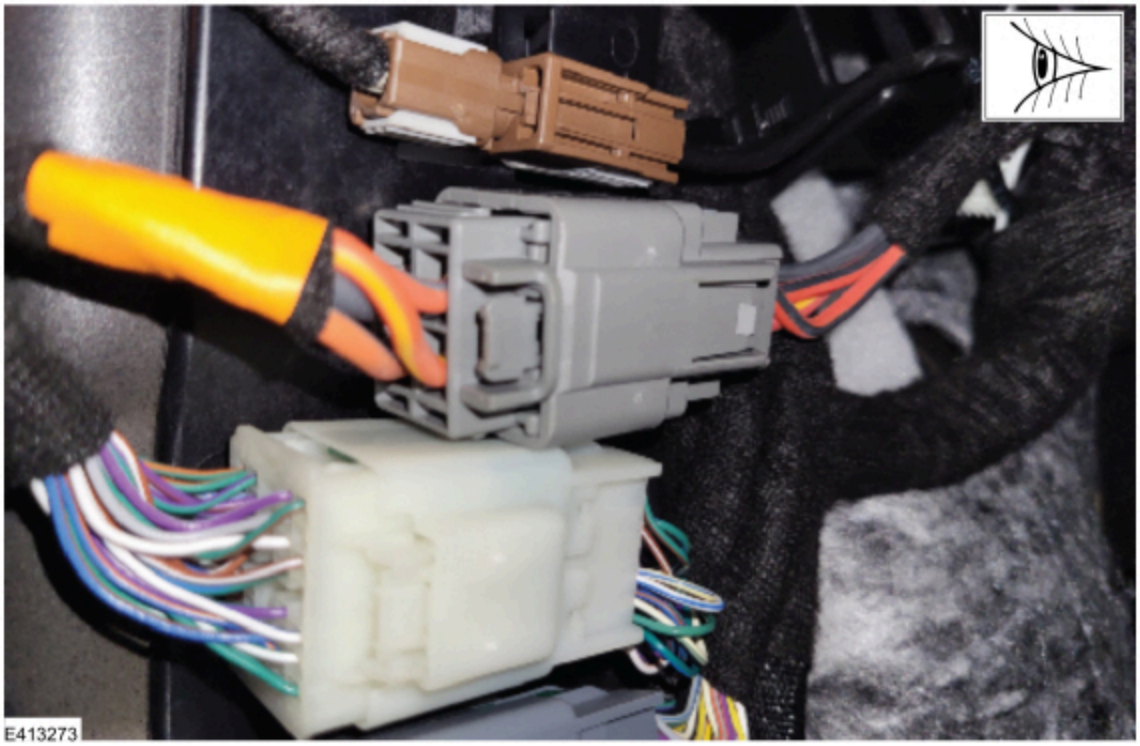
NOTE: To confirm a vehicle is built with minor feature code HJGAX or J3KAH, review the build information by double-clicking the VIN in the upper left-hand corner in PTS.

(1). Yes - proceed to Step 14.

(2). No - proceed to Step 16.

14. The replacement coaxial cable comes with an additional jumper that goes from pin 1 in the C242F connector at the IPMA to a female C2563 connector at the APIM (Figure 14). Overlay the jumper using small zip ties from the IPMA to the C2563 connector located in the left footwell. Refer to the Wiring Diagram, Cell 150 > Connector Views.

Figure 14



15. Once the new connectors are installed, cut off the existing coaxial cable connectors to make sure the original cable is not used again.

16. Is the vehicle equipped with minor feature code J3KAB?

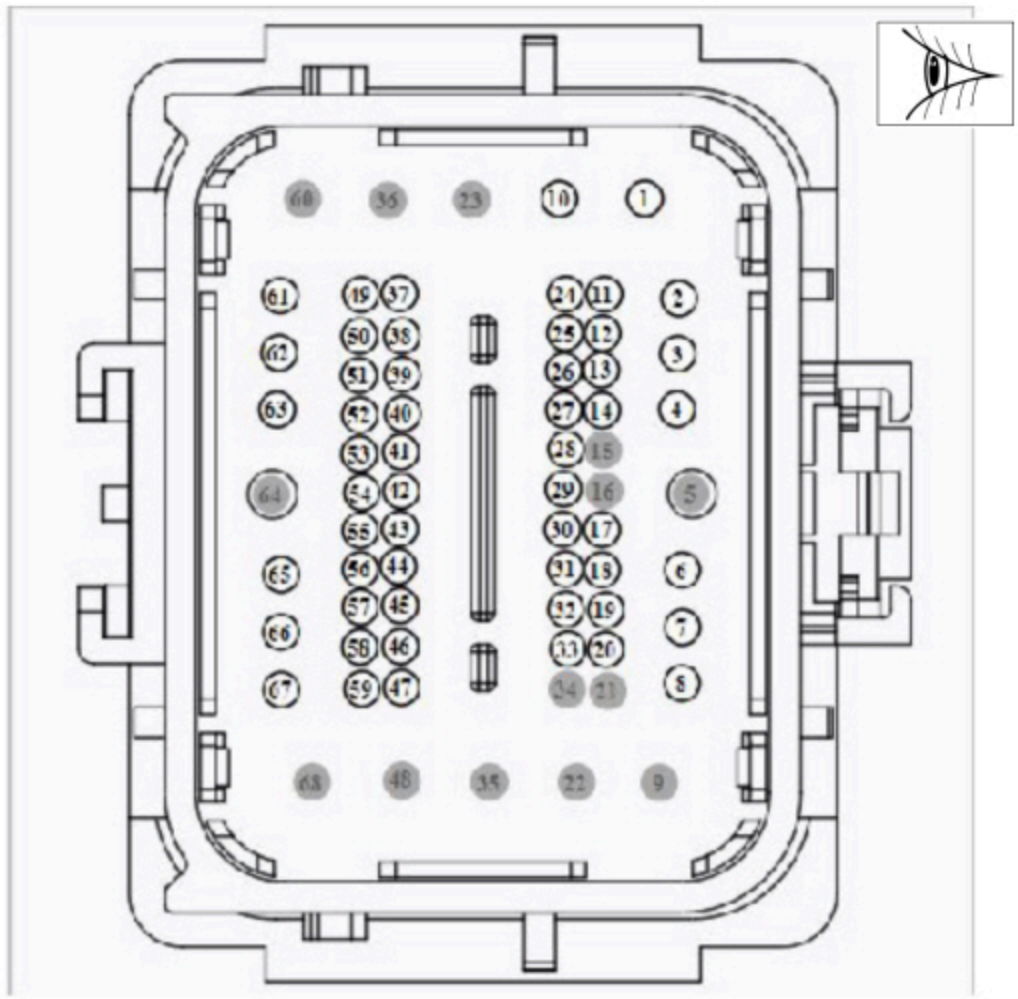
NOTE: To confirm a vehicle is built with minor feature code J3KAB, review the build information by double-clicking the VIN in the upper left-hand corner in PTS.

(1). Yes - proceed to Step 17.

(2). No - proceed to Step 19.

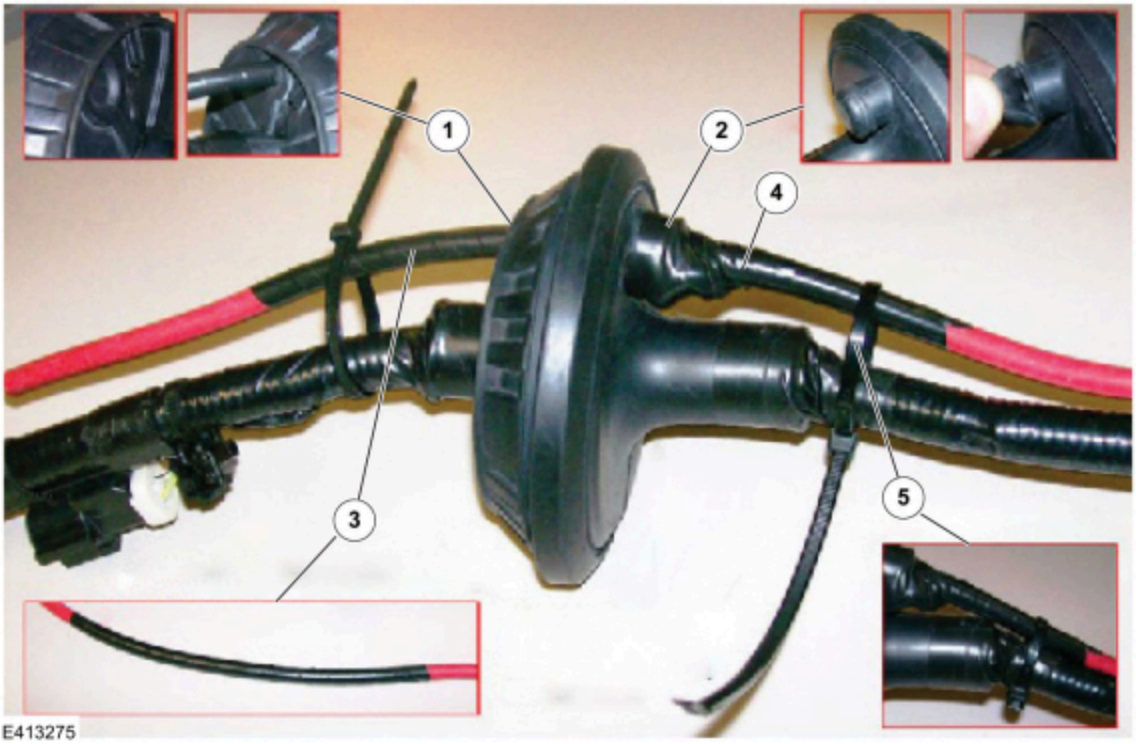
17. The replacement coaxial cable comes with an additional jumper that goes from pin 2 in the C242F connector at the IPMA to pin 5 of the male C316 connector found in the rear left side of the engine compartment (Figure 15). Refer to the Wiring Diagram, Cell 150 > Connector Views > C316. For these vehicles, overlay this jumper using small zip ties from the IPMA to pin 5 of the male C316 connector by going through the service access port of the left side grommet to pass through the firewall (Figure 16).

Figure 15



E413274

Figure 16



(1). Carefully cut a slit into the interior access port face to allow the jumper cable to pass through (Figure 16, Callout 1).

(2). Carefully cut a slit into the exterior access port face to allow the jumper cable to pass through (Figure 16, Callout 2).

(3). Make sure the cable is completely taped to help seal the interface (Figure 16, Callout 3).

(4). Completely tape the cable to the exterior port or use Motorcraft® RTV Silicone Sealant (service part number TA-31) to seal exterior port (Figure 16, Callout 4).

(5). Use zip ties on both sides of the grommet to secure the cable and avoid damage to RTV seal (if applicable). (Figure 16, Callout 5)

18. Once the new pin is installed, cut off the existing coaxial cable for pin 5 to make sure the original cable is not used again.

19. Start the vehicle and wait 30 seconds. Clear and retrieve DTCs. Are DTCs C1001:31 and/or U3000:89 present in the IPMA?

(1). Yes - replace the IPMA camera. Refer to the WSM, Section 419-07 Lane Keeping System > Removal and Installation > Image Processing Module A (IPMA) Camera.

(2). No - proceed to Step 21.

20. Start the vehicle and wait 30 seconds. Clear and retrieve DTCs. Are DTCs C1001:31 and/or U3000:89 present in the IPMA?

(1). Yes - replace the IPMA. Refer to the WSM, Section 419-07 Lane Keeping System > Removal and Installation > Image Processing Module A (IPMA).

(2). No - proceed to Step 21.

21. Is DTC U3000:49 stored in the IPMA?

(1). Yes - download and run the "IPMA - Reset the Image Processing Module A (IPMA) Learned Values" application in the FDRS. Then run the "IPMA - Image Processing Module A (IPMA) Alignment" application immediately after. If DTC U3000:49 is still present after completing the "IPMA - Reset the Image Processing Module A (IPMA) Learned Values" application, then replace the IPMA. Refer to the WSM, Section 419-07 Lane Keeping System > Removal and Installation > Image Processing Module A (IPMA).

(2). No - repair is complete.

NOTE: This article does not remove any RVC, Prior Approval or Warranty and Policy requirements for component replacement.

NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.