

 **HYUNDAI**
Technical Service Bulletin

GROUP Body Electrical	NUMBER 21-BE-005H
DATE March, 2021	MODEL(S) Santa Fe (TMa) Palisade (LX2)

SUBJECT: SURROUND VIEW CAMERA DISPLAY TROUBLESHOOTING GUIDE

This TSB supersedes TSB# 20-BE-011H to include a warranty claim note.

Description: Some 2020-2021 Santa Fe (TMa) and Palisade (LX2) may intermittently experience abnormal camera image display conditions on the instrument cluster when the turn signal is turned ON or the radio screen when transmission is in Reverse. The following conditions may occur; blurry image, line on the screen, fuzziness, or blue screen. This bulletin provides information to assist with troubleshooting the condition(s) above.



Applicable Vehicles:
20-21MY Palisade (LX2) Limited, Calligraphy Trim
20-21MY Santa Fe (TMa) Limited, Calligraphy Trim

Warranty Information:
Normal Warranty Applies.

NOTE: If a wire harness was repaired, file the warranty claim using the part number of the repaired wire harness.

General Information

NOTICE

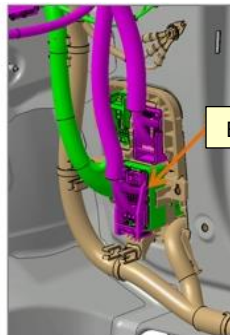
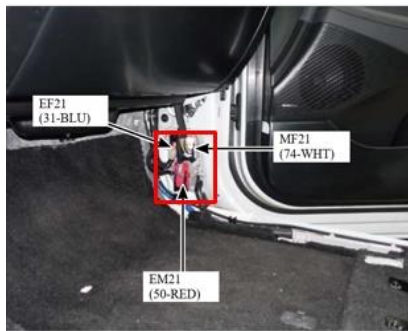
In general, the cause of abnormal camera image (blue screen, black lines, fuzzy, or blurry) may be caused by either the camera or improper connections between the coaxial cables. The information below concentrates on the possibility of improper coaxial cable connection. Please check the coaxial cable connections before replacing the camera.

There are multiple coaxial cable connections within the vehicle. This troubleshooting guide will assist with narrowing down the location based on which camera is faulty.

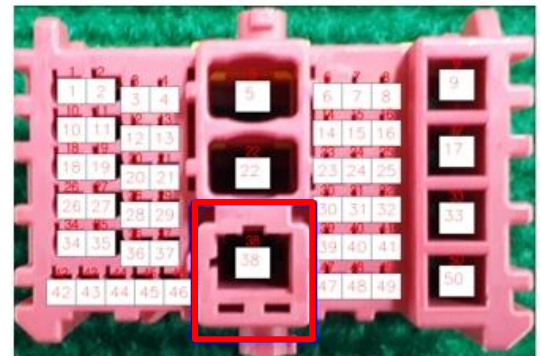
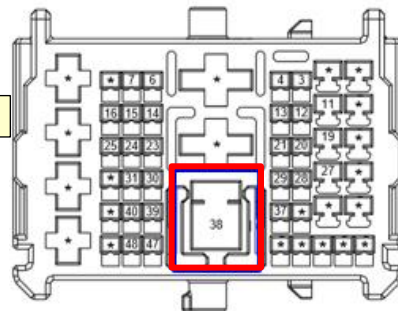
FRONT CAMERA

Location of possible improper coaxial cable connection:

Front passenger side lower kick panel



Main harness connector

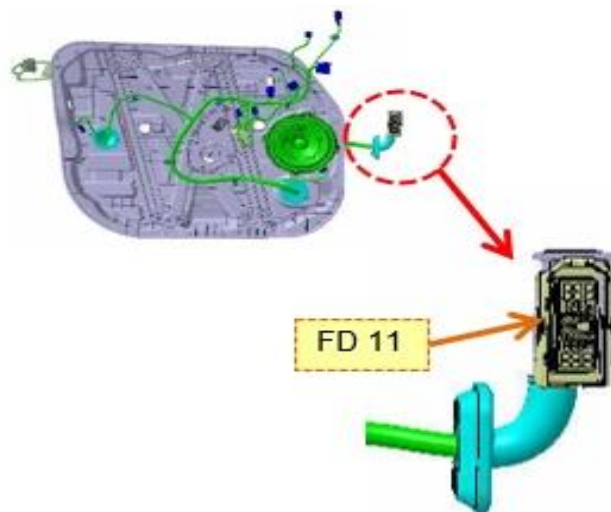


SUBJECT: SURROUND VIEW CAMERA DISPLAY TROUBLESHOOTING GUIDE

LEFT CAMERA (DRIVER SIDE MIRROR CAMERA)

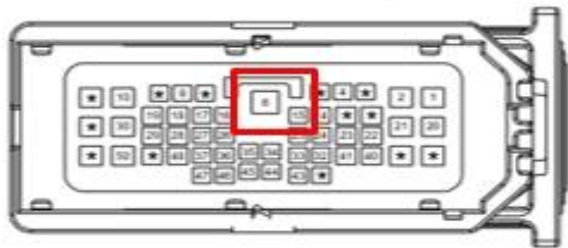
Location of possible improper coaxial cable connection:

Driver door harness

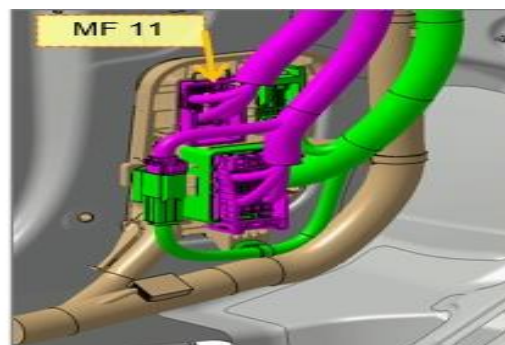
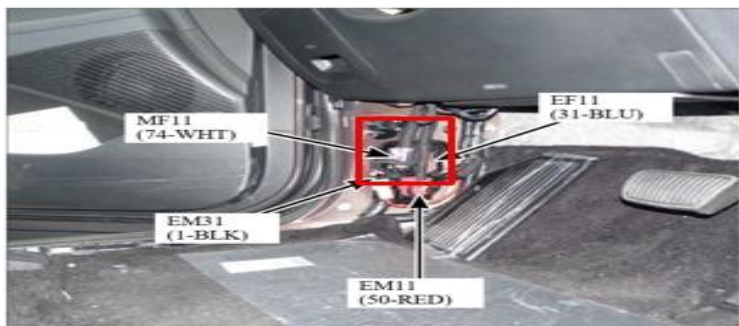


Driver door connector

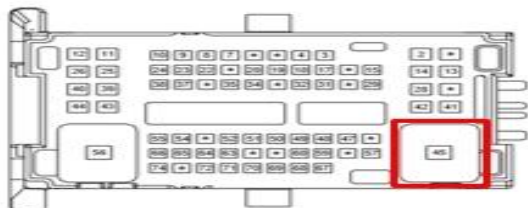
WRK P/No.	-
Vender P/No.	2309513-2
Vender P/Name	AMP 025060110 51F



Driver side lower kick panel



Main harness connector

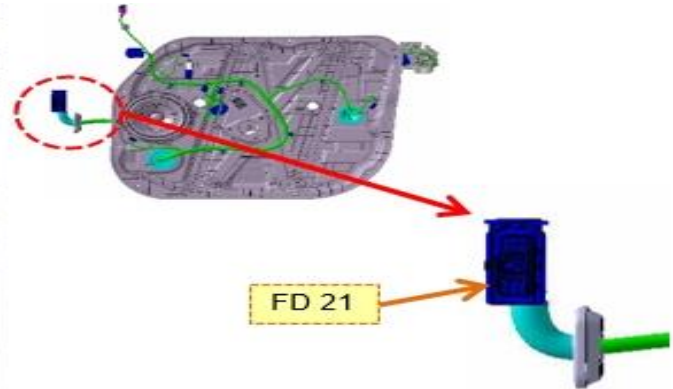


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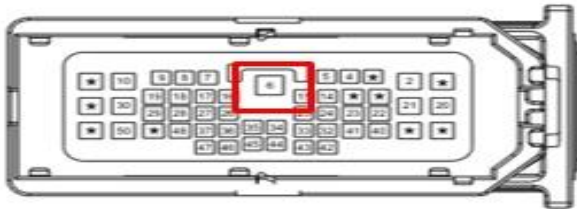
RIGHT CAMERA (PASSENGER SIDE MIRROR CAMERA)

Location of possible improper coaxial cable connection:

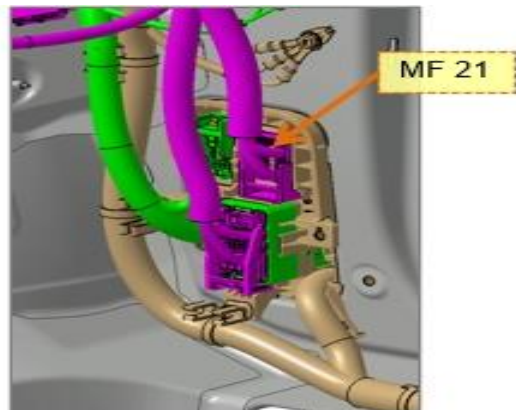
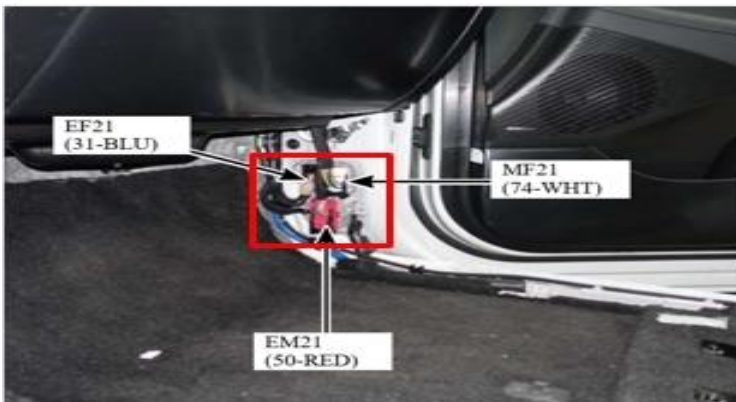
Front passenger door



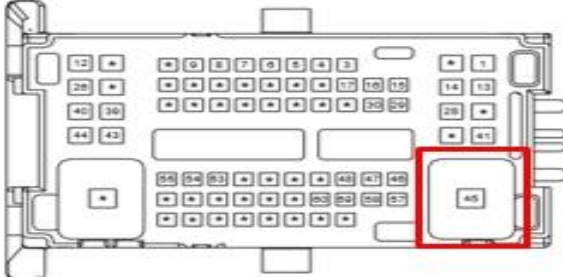
Passenger door connector



Front passenger lower kick panel



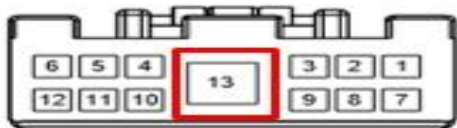
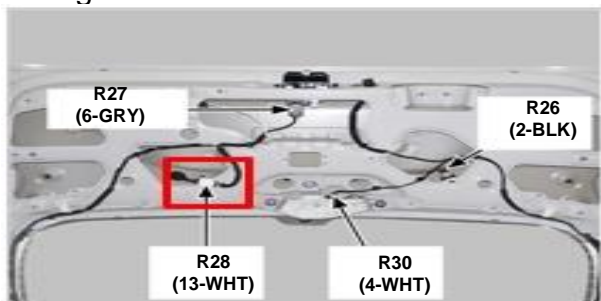
Main harness connector



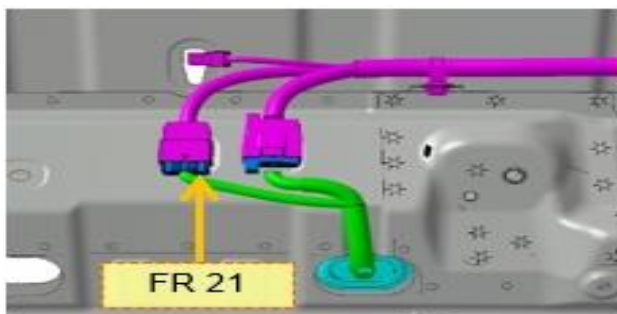
REAR CAMERA (TAILGATE)

Location of possible improper coaxial cable connection:

Tail gate harness



Rear side of the roof panel



Tail gate connector



Service Procedure:

COAXIAL WIRE PIN REPAIR

1. Locate the area of possible improper wire connection.

NOTICE

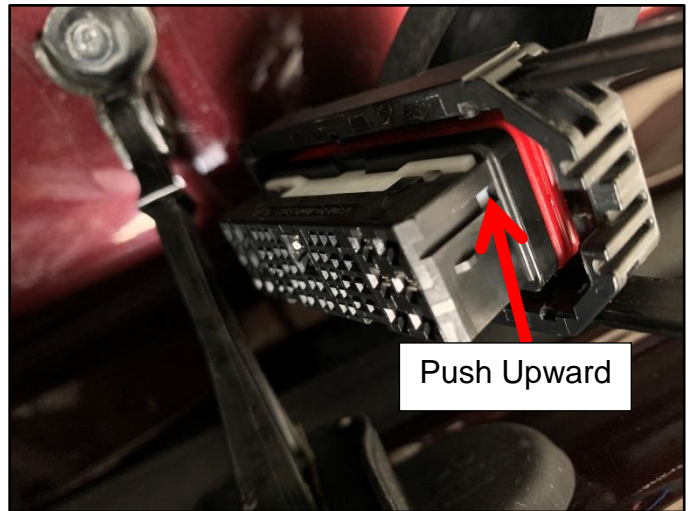
In general, the methods of removing the coaxial wire pin are all the same. The wire connector may have a different shape, but the mechanical pin locking mechanisms are all the same.

With all connectors, the first step is to unlock the locking mechanism and then proceed to remove the coaxial wire pin.

2. Use any small flathead screwdriver to unlock the connector's locking mechanism.

This is an example of the passenger door harness.

Insert the small flathead screwdriver to the left and right side of the harness and push the white locking mechanism upward.

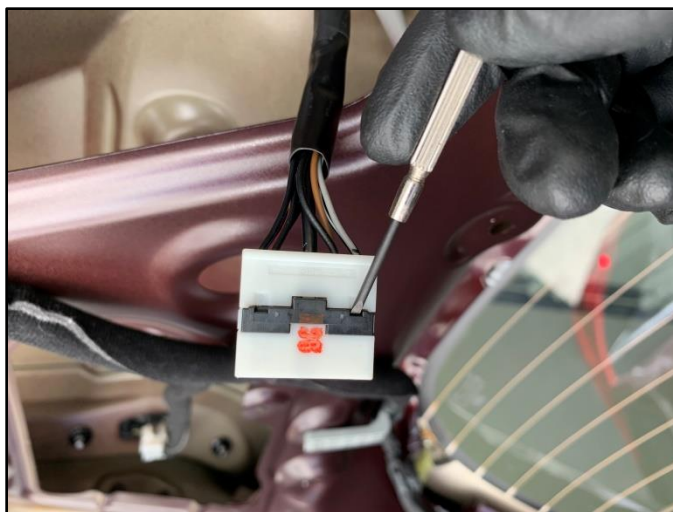


This picture shows the connector's locking mechanism fully unlocked.

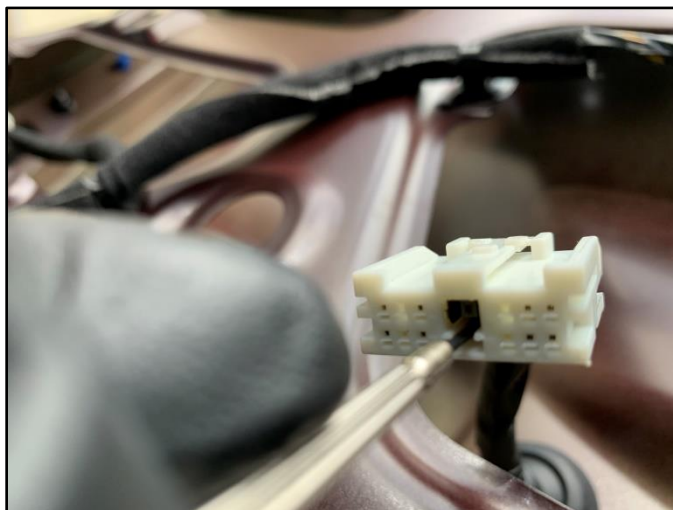


This is an example of the connector in the tailgate area.

Use the small flathead screwdriver to gently lift the black locking mechanism upward.



3. Insert the small flathead screwdriver through the front of the connector as shown in the picture to the right.

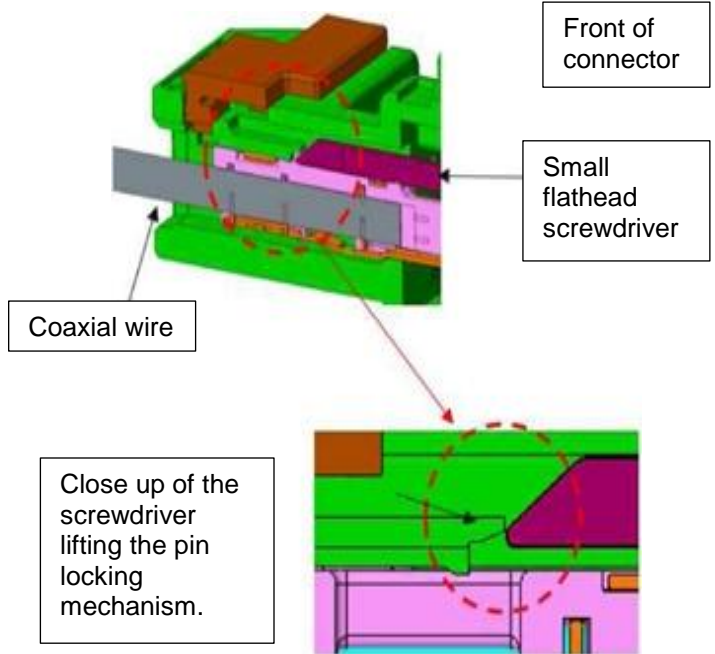


4. While gently pulling on the coaxial wire, lift the locking mechanism upward using the small flathead screw driver.

NOTICE

Insert the flathead screwdriver in a slightly downward angle to access the locking pin.

It can be difficult to release the coaxial pin, so be patient and keep trying.

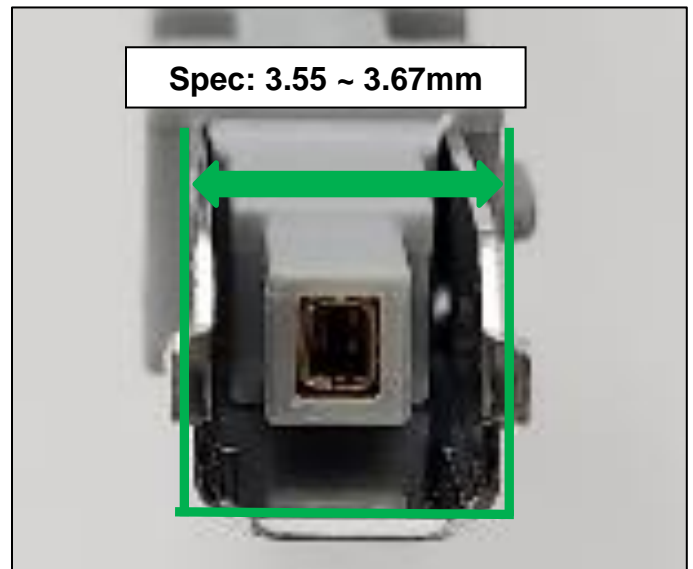


- 5a. Inspect the female pins for deformation. Measure the distance between vertical sides to ensure they are within specification.

NOTICE

Spec: 3.55 ~ 3.67mm

The pins are U-shaped, and should form 90 degree angles (square corners).



- 5b. This is an example of a U-shaped pin that is deformed and splaying outwards (not square at 90 degree angle).



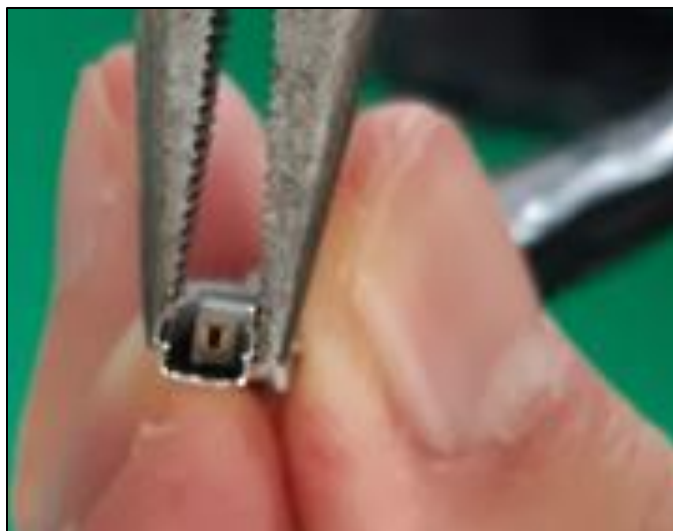
It is also out of specification when measured using a digital micrometer.



6. If necessary, reshape the pin to specification using a pair of long-nose pliers.

NOTICE

Spec: 3.55 ~ 3.67mm



7. After reshaping the pin U-shape, recheck to ensure it is within specification as shown in the picture to the right.



8. Re-connect any disconnected connectors, and reinstall any removed parts in reverse order of removal.

Inspect the camera display image; if it is confirmed, operational, then the service procedure is complete.

If the camera image is still abnormal, then repeat the procedure from steps 1-7.

If after the second procedure and the camera image is still abnormal, then replace the wire harness or camera using the part number provided in the catalog.