



Service Bulletin

Bulletin No.: 20-NA-188

Date: November, 2021

TECHNICAL

Subject: Rear View Camera Image Flickers When Brake Lamps or Turn Signals are On

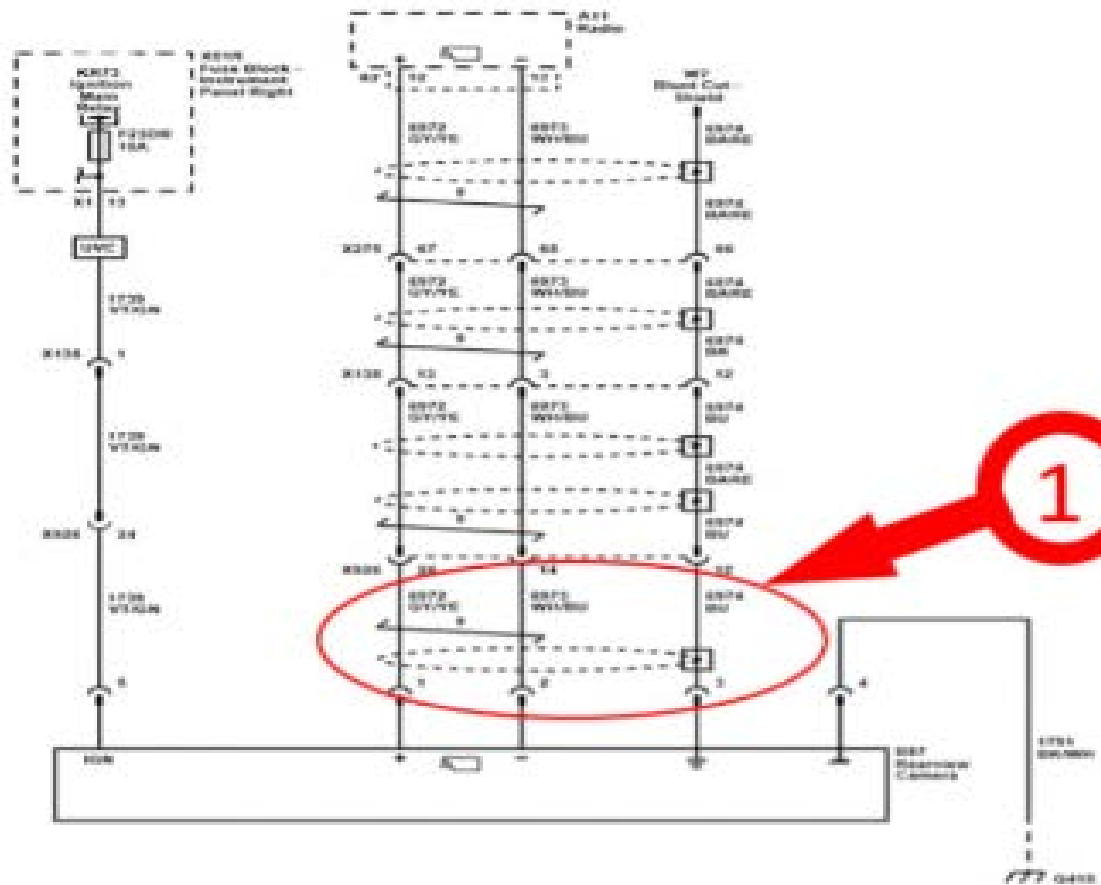
This Bulletin replaces PIT5639, please discard PIT5639.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Silverado 1500 (New Model)	2019	2019	SOP	July 15, 2019		
	Silverado 2500/3500 HD	2020	2020				
GMC	Sierra 1500 (New Model)	2019	2019	SOP	July 15, 2019		
	Sierra 2500/3500 HD	2020	2020				

Involved Region or Country	North America
Additional Options (RPOs)	Equipped with RADIO-INFOTAINMENT SYSTEM - 3.X LOW HMI, MIDLEVEL CONNECTIVITY 3.X (RPO IOR)
Condition	Some customers may comment on a slight flickering or distortion in the rear view camera image (while in reverse or in Camera view mode) when the brake lights, turn signals, or hazard flashers are on.
Cause	The cause of the condition may be due to voltage induced in camera image feed wires from brake light circuits distorting the image.
Correction	Re-string the camera image feed +/- with a twisted pair utilizing a "drain" (High Speed Data Cable Assembly) that shields the circuits from induced voltage.

Service Procedure

Using the illustration below, restring the camera image feed [+/-] with a High Speed Data Cable Assembly that shields the circuits from induced voltage.



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Restraining the camera image feed [+/-] from the A11 Radio to X926 harness (1).

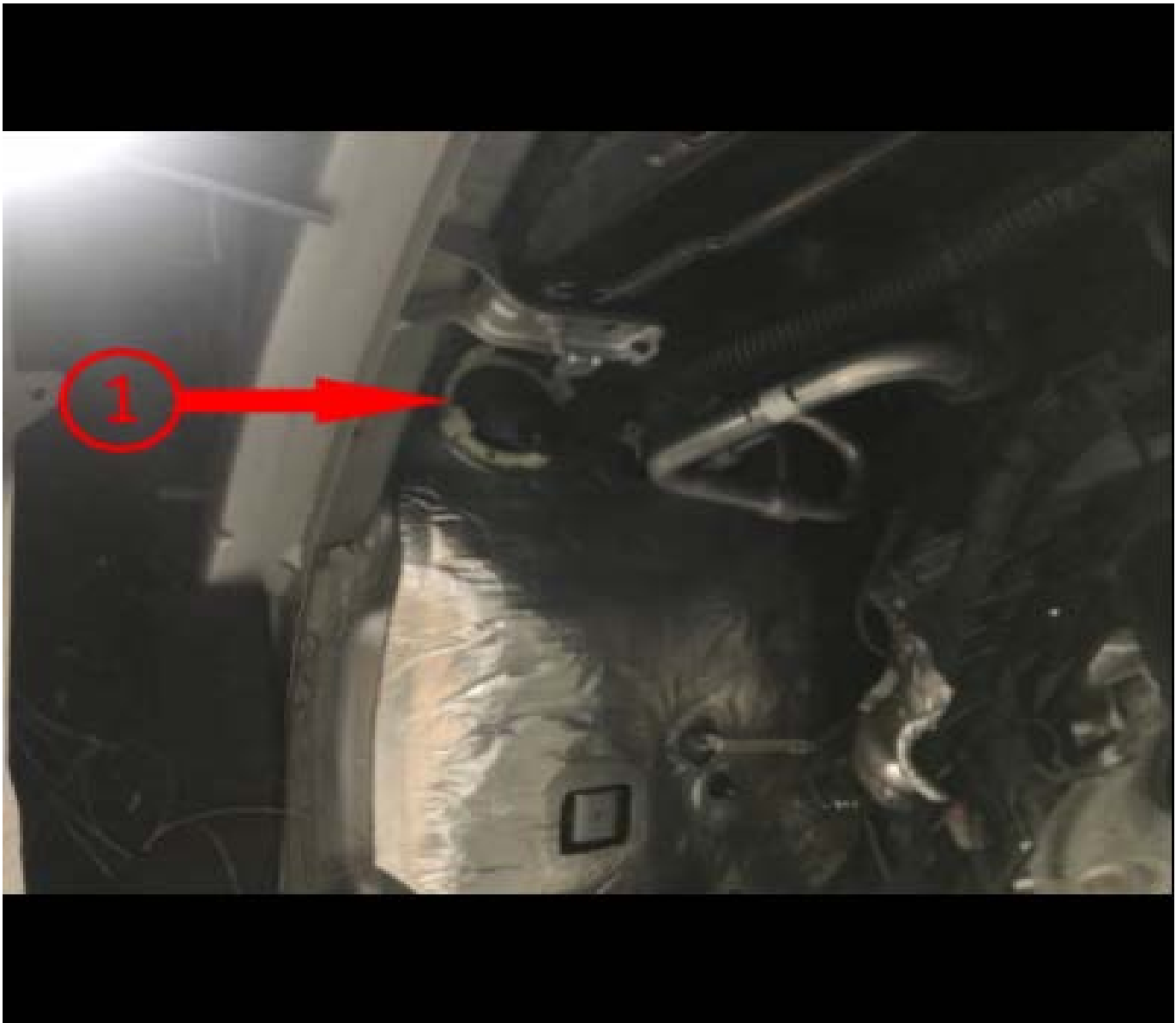
Wrap the entire length of the new data cable (P/N 84991086) with KENT AUTOMOTIVE anti-abrasion tape (P/N 1089482) before routing the cable along the vehicle.

For proper wire repair refer to *Wire to Wire Repair* in SI

For Silverado 1500 or Sierra 1500 follow the step by step procedure below, for Silverado 2500HD/3500HD or Sierra 2500HD/3500HD jump to the HD truck section.

Silverado 1500 and Sierra 1500:

1. Lift and support the vehicle. Refer to *Lifting and Jacking the Vehicle* in SI.
2. Remove passenger side tire and wheel and passenger wheelhouse liner. Refer to *Tire and Wheel Removal and Installation*, and *Front Wheelhouse Liner Replacement* in SI.



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3. Locate the body harness (1) to A11 Radio. Located under the vehicle, in right front wheel well, near the frame rail.



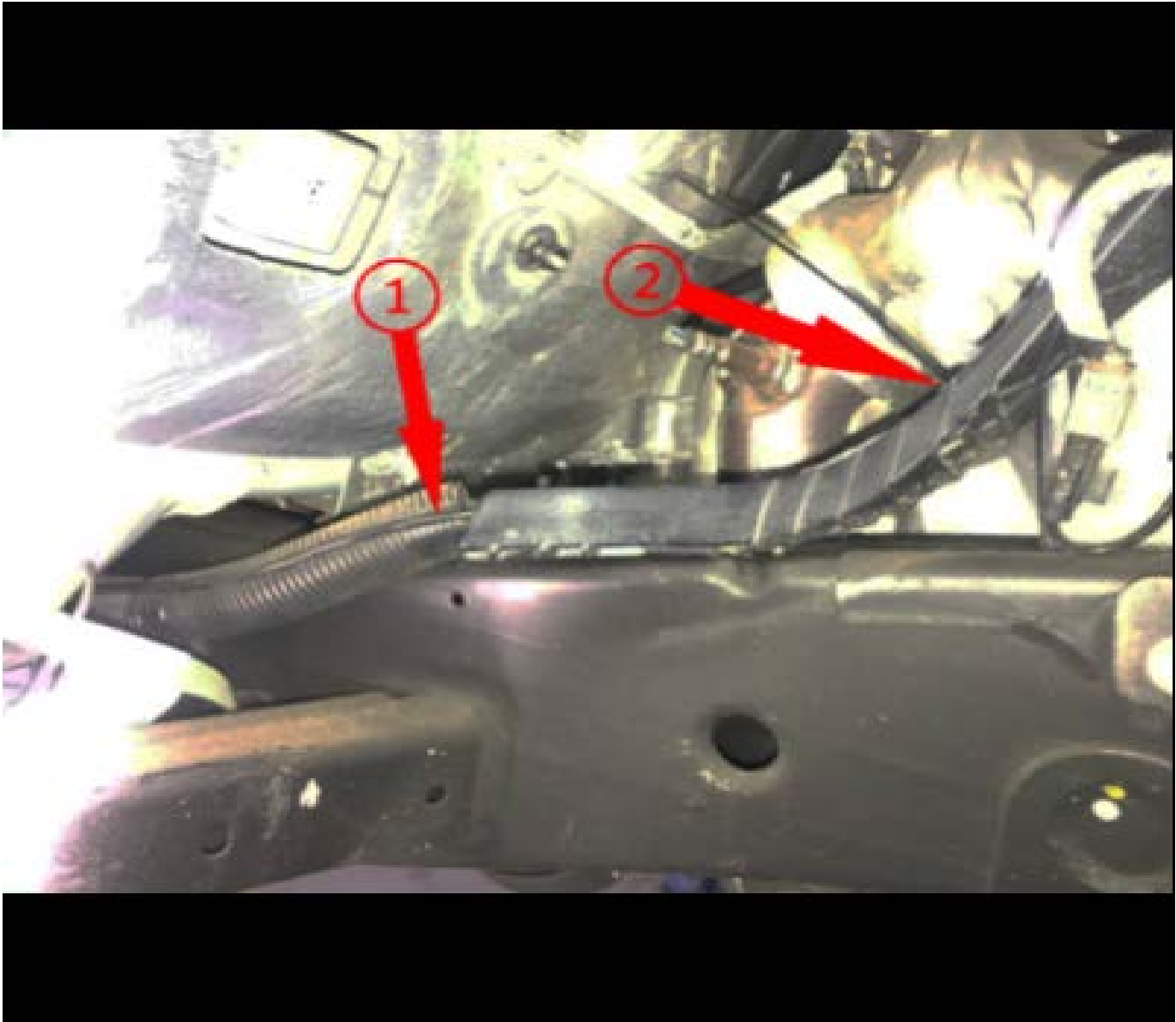
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4. Cut an opening into a small entry port (1) of the cowl into the vehicle and feed one end of the data cable into the vehicle.



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5. From the entry point (1) run the data cable rearward alongside the wire harness, securing with zipties (2) snug to the harness to prevent movement.



Continue running data cable rearward alongside the wire harness (1) and (2).

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6. Then continue down along vehicle frame towards the rear of the vehicle, following along the wire harness (1) securing the data cable (2).



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Utilizing the harness clips (1) or zipties to secure the data cable along the harness.



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7. Utilizing wire harness clips or zipties continue running the data cable (1) to the rear of the vehicle. Across vehicle frame and over spare tire.



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Locate the X926 Endgate Harness to Chassis Harness (1) and run the data cable over the spare tire (2) to the harness.

8. Disconnect the Chassis Harness from the Endgate Harness. At the back of the Chassis Harness locate the ground wire (black w/ white stripe), and

Rearview Camera Signal positive [+] (gray w/ yellow stripe) [+] and negative [-] wires (white w/ blue stripe) [-].



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9. Splice in and seal the new ground wire with the existing connected ground wire at the harness (1). Then splice and seal positive and negative data cable wires with the existing wires (2 and 3).

Note: Positive and Negative wires on the data cable do not specifically have to connect to either color wire but both wires must be connected to the same color on the other end.



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10. Cover open wires with abrasion resistant tape and reconnect the X926 Harness.



11. Locate and access the A11 Radio module under the passenger side I/P. Refer to *Radio Replacement* in SI.

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Disconnect the gray A11 Radio X2 Connector (1).

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12. Splice in and seal the matching wire color with the positive (+) and negative (-) data cable (1) and (2). **Do Not** connect the ground at the radio, cut away the ground wire. Reconnect the A11 Radio X2 Connector.
13. Reassemble the A11 radio and passenger side I/P. Refer to *Radio Replacement* in SI.
14. Wrap the full length of the data cable with Anti-Abrasion tape with "D" level protection.
15. Seal the pass-through at the body harness to prevent water intrusion and reinstall the front wheelhouse liner and tire and wheel. Refer to *Front Wheelhouse Liner Replacement* in SI.
16. Wrap the full length of the data cable with Anti-Abrasion tape with "D" level protection.
17. Remove the support and lower the vehicle.
18. Verify if the camera image feed is no longer experiencing distortion condition.

Silverado 2500HD/3500HD and Sierra 2500HD/3500HD

Note: HD trucks with crew long box the data cable will be about a half meter short and two will be needed to complete the circuit.

Note: Wrap the entire length of the new data cable (P/N 84991086) with KENT AUTOMOTIVE anti-abrasion tape (P/N 1089482) before routing the cable along the vehicle.

1. Lift and support the vehicle. Refer to *Lifting and Jacking the Vehicle* in SI.
2. Remove passenger side tire and wheel and passenger wheelhouse liner. Refer to *Tire and Wheel Removal and Installation*, and *Front Wheelhouse Liner Replacement* in SI.
3. Locate the body harness (1) to A11 Radio. Located under the vehicle, in right front wheel well, near the frame rail.



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4. Cut an opening into a small entry port (1) of the cowl into the vehicle and feed one end of the data cable into the vehicle.



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5. From the entry point run the data cable down and to the main body ground (1) down to the frame rail and continue rearward securing with zipties.



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6. Then continue down along vehicle frame towards the rear of the vehicle, following along the frame (1) securing the data cable utilizing the frame holes.



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Continue along the frame (1), utilizing the existing frame holes (2) use zipties to secure the data cable along the frame to the fuel tank crossmember.



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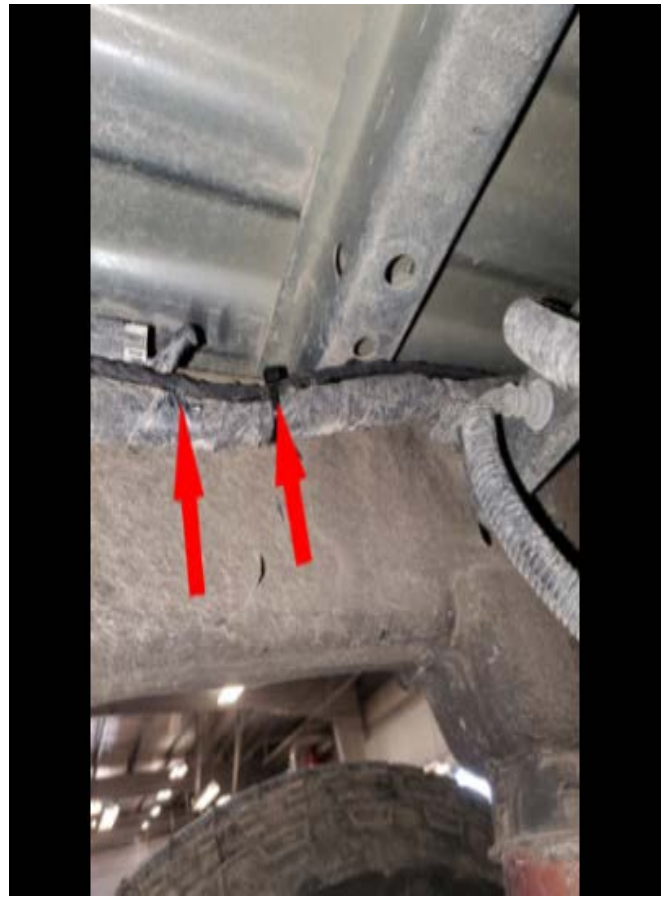
7. Route on top of the fuel tank crossmember.



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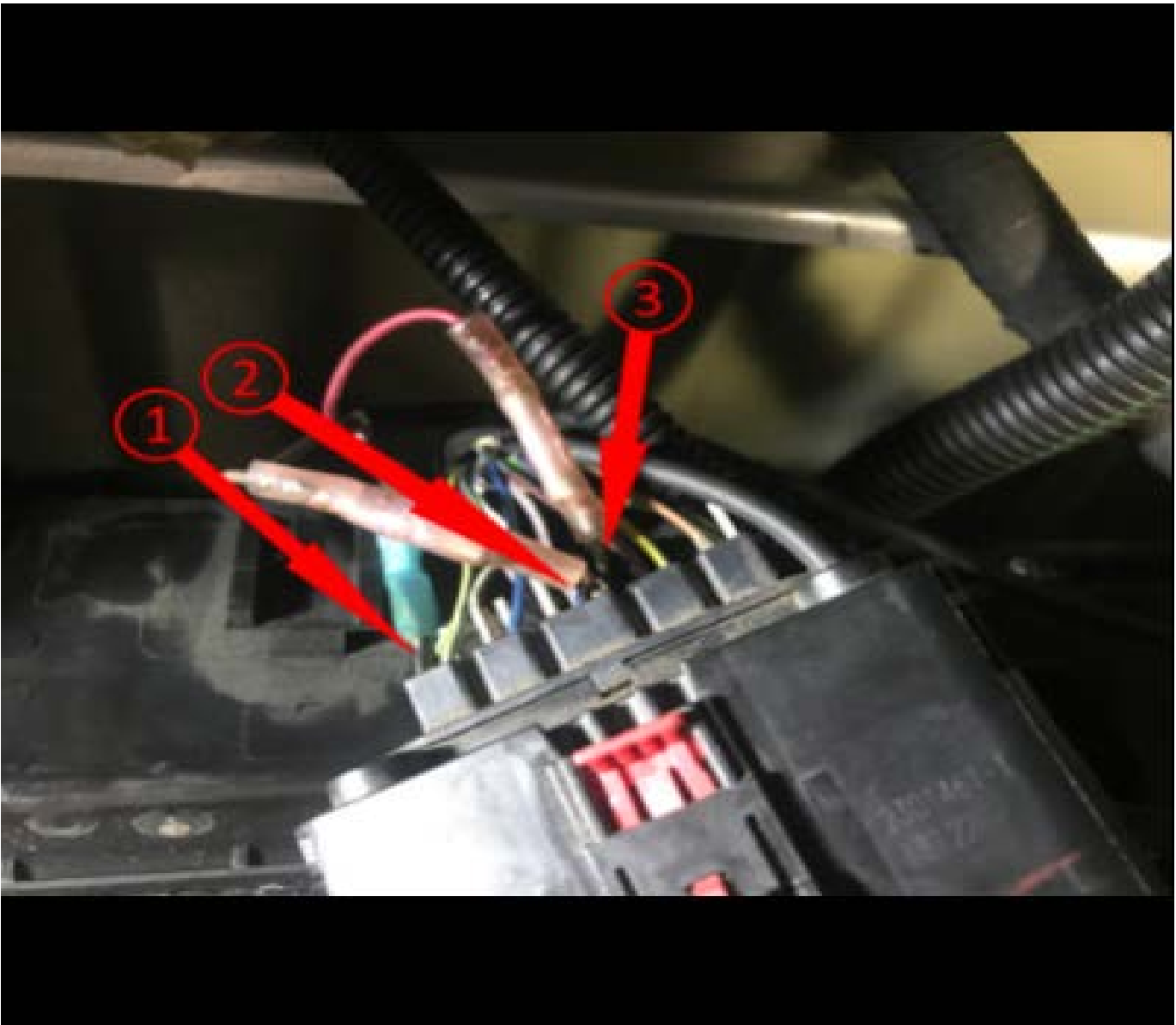
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8. Continue down the right-hand side of the frame (1) adjacent to the existing X926 Endgate Harness to Chassis Harness.



9. Disconnect the Chassis Harness from the Endgate Harness (1). At the back of the Chassis Harness locate the ground wire (black w/ white stripe), and Rearview Camera Signal positive [+] and negative [-] wires (white w/ blue stripe) [-] and (gray w/ yellow stripe) [+].

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10. Splice in ground wire with the existing connected ground wire (1). Then splice and seal positive and negative data cable wires with the existing wires (2 and 3).

Note: Positive and Negative wires on the data cable do not specifically have to connect to either color wire but both wires must be connected to the same color on the other end.



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11. Locate and access the A11 Radio module under the passenger side I/P. Refer to *Radio Replacement* in SI.



Disconnect the gray A11 Radio X2 Connector (1).



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12. Splice in the matching wire color with the positive (+) and negative (-) data cable (1) and (2). Reconnect the A11 Radio X2 Connector.
13. Reassemble the A11 radio and passenger side I/P. Refer to *Radio Replacement* in SI.
14. Wrap the full length of the data cable with Anti-Abrasion tape with "D" level protection.
15. Seal the pass-through at the body harness to prevent water intrusion and reinstall the front wheelhouse liner and tire and wheel. Refer to *Front Wheelhouse Liner Replacement* in SI.
16. Remove the support and lower the vehicle.
17. Verify if the camera image feed is no longer experiencing distortion condition.

Parts Information

Causal Part	Description	Part Number	Qty
X	CABLE ASM-HIGH SPD DATA	84991086	1
	KENT AUTOMOTIVE ANTI-ABRASION TAPE	1089482	1

Warranty Information

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
*3487108	Add High Speed Data Cable Assembly to Analog RVC	1.5 hr
*This is a unique Labor Operation for Bulletin use only.		

Version	2
Modified	Released April 21, 2021 Revised November 03, 2021 – Clarifying steps for ground wire connection in Service Procedure.

