



MAZDA DEALER EMAIL

February 10, 2022

Attention: Mazda General, Parts and Service Managers

Subject: Notification of Emission Recall 5421K - 2019 CX-5 Diesel - Selective Catalytic Reduction (SCR)/AWD Harness concern

Dear Mazda Dealer Partners,

Mazda Motor Corporation has decided to conduct an Emission Recall Campaign on certain 2019 CX-5 vehicles equipped with SKY-D 2.2 Diesel AWD. Please see the description, model, year and VIN ranges below.

Subject Vehicles:

Affects 561 U.S. vehicles:

Model	Subject VIN range	Subject production date range
2019 CX-5, SKY-D 2.2, AWD	JM3 KF**** K0 568893 – 678929	From November 22, 2018 through July 31, 2019

Concern Outline:

There is a SCR/AWD harness that has a unique routing around the SCR tank cover. Over time, contamination (i.e. sand, dirt) on the SCR/AWD harness may cause wear on the harness wiring and insulation due to vibrations of the SCR tank cover. In the worst-case scenario, the electrical circuits in the wiring harness can be disconnected with the MIL/SCR/4WD warning lights illuminating.

For all subject vehicles:

Inspect the SCR/AWD harness for signs of damage. If the CORE WIRES inside the harness have no damage, protective shrink tubing will be installed on the harness. If CORE WIRE damage is found in the harness, the harness will be repaired with supporting parts.

Repair Procedure and Parts Ordering:

If it is found that the CORE WIRES are damaged in the harness and/or the harness connectors contain corrosion, as per the repair instructions, you must contact Dealer Recall Help on OneMazda and provide photos of the damage. Once approved, the recall team will place the necessary short cord harness kit order through the DAG and provide a Sales Order# by email. Note that damage to the Core Wires is expected to be under 7%.

Owner Notification:

Mazda will notify owners of affected vehicles for this campaign on February 11, 2022. Owners will be asked to bring their vehicle to the nearest Mazda dealership for repairs. **Vehicles will display in eMDCS as "Open" on February 11, 2022. This campaign will not be listed on the Missed Recall Dashboard.**

To help you effectively perform these recalls, Mazda has developed the following resources:

1. Parts and Warranty Information and Repair Procedures will be posted on MGSS on February 11, 2022 by the end of the business day. Searching the campaign with a VIN is available that same day. Keyword search in MGSS for the campaign will be available the following business day.
2. For Warranty questions, please contact the Warranty Hotline at (877) 727-6626, Option 3.
3. Vehicles will display in eMDCS as Open February 11, 2022.
4. For parts questions, contact the Corporate Dealer Assistance Group at (877) 727-6626 Option 2.
5. For recall related questions, please fill out the Dealer Recall Help Form located on OneMazda>Warranty, Recall and Service Tools.

Please make certain the appropriate personnel in your dealership are aware of these resources and are familiar with the details of this recall before responding to customer inquiries. We apologize for any inconvenience this recall may cause you and your customers. Your understanding and support in carrying out this campaign are greatly appreciated.

Protect What is Important to You

Sincerely,

Mazda North American Operations

Emissions Recall 5421K – 2019MY CX-5 Diesel – SCR/AWD Harness Concern

DESCRIPTION

The CX-5 Diesel has a Selective Catalytic Reduction (SCR) system. There is a SCR/AWD harness that has a unique routing around the SCR tank cover. Over time, contamination (i.e. sand, dirt) on the SCR/AWD harness may cause wear on the harness wiring and insulation due to vibrations of the SCR tank cover. In the worst-case scenario, the electrical circuits in the wiring harness can be disconnected with the MIL/SCR/4WD warning lights illuminating.

ALL DEALERS PLEASE READ: If you find corrosion or exposed wires and need Part# KFY1-67-SH0 OR KB8F-67-SH0A (including any related harness), as per the repair instructions you must fill out Dealer Recall help with photos of the damage AND part numbers. They will provide authorization and place the harness order through the DAG and provide a SO# by email.

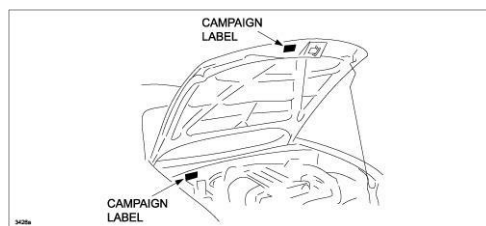
A. VEHICLE INSPECTION PROCEDURE

1. Verify the vehicle is within the following VIN range:

Model	Subject VIN range	Subject production date range
2019 CX-5	JM3 KF**** K0 569040 – 678929	From January 29, 2019 through July 31, 2019

- If the vehicle is within the above VIN and production date ranges, proceed to Step 2.
 - If the vehicle is not within the above VIN and production date ranges, return the vehicle to the customer or inventory.
2. Perform a Warranty Vehicle Inquiry using your eMDCS System and inspect the vehicle for a Campaign Label 5421K attached either to the vehicle's bulkhead or to the vehicle's hood. Refer to eMDCS System - Warranty Vehicle Inquiry Results table below.

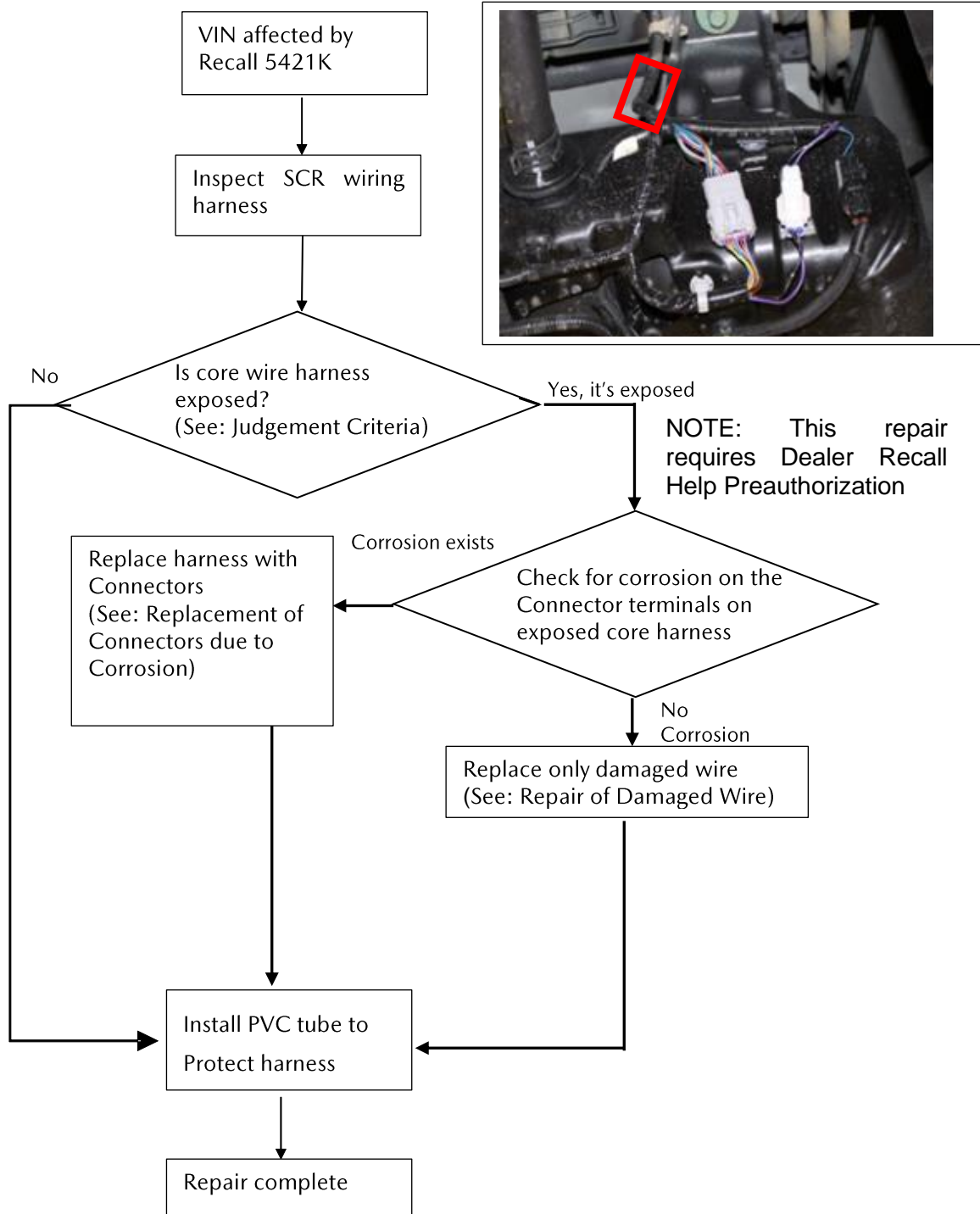
NOTE: Verify the campaign number as the vehicle may have multiple labels.



eMDCS System - Warranty Vehicle Inquiry Results:

If eMDCS displays:	Campaign Label is:	Action Required:
"Campaign: 5421K Open"	Present	Contact the Warranty Hotline at (877) 727-6626, option 3 to update vehicle history
	Not Present	Proceed to "REPAIR PROCEDURE"
"Campaign: 5421K Closed"	Present	Return vehicle to inventory or customer
	Not present	Complete a label and apply it to vehicle's bulkhead or hood
"Campaign: 5421K Open" or "Closed" is not displayed	Does not apply	Campaign does not apply to this vehicle. Return the vehicle to inventory or customer

Section A : Flow Chart



-----END OF SECTION A-----

Section B. REPAIR PROCEDURE

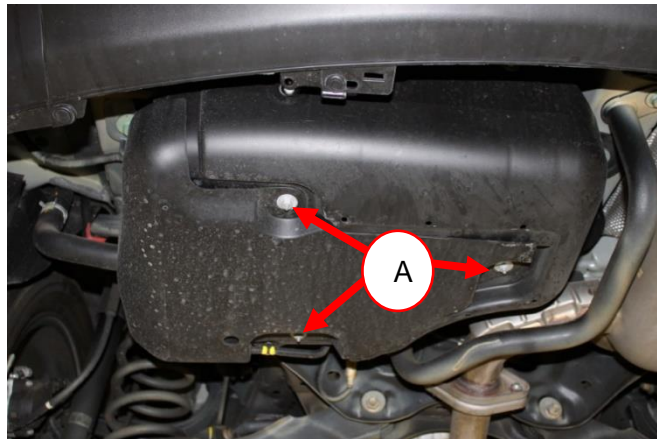
Outline of Repair Procedure

Repair SCR Harness if damaged and install PVC tube protection to critical areas

Repair Procedure

Inspection

1. Remove Urea tank cover No.1
 - Unscrew three nuts indicated below
 - Remove cover




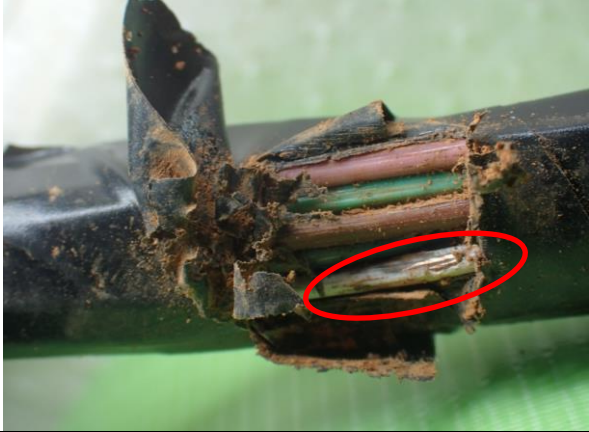

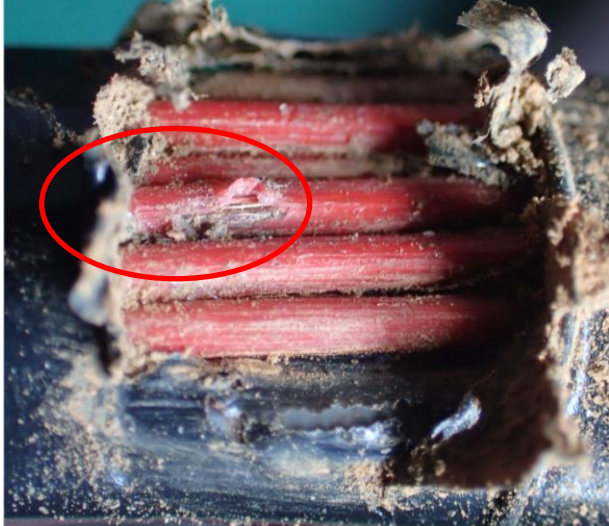


A	Nut
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2. Inspect insulation/wires for damage as shown on photos below



Judgement Criteria

OK	NG
<p data-bbox="164 302 592 336">Core wires are not exposed. OK</p> 	<p data-bbox="746 302 1378 336">Some core wires are exposed. HARNESS REPAIR</p> 
<p data-bbox="164 790 592 824">Core wires are not exposed. OK</p> 	<p data-bbox="746 790 1378 824">Core wire of white is exposed. HARNESS REPAIR</p> 
<p data-bbox="164 1294 592 1328">Wire cores are not exposed. OK</p> 	<p data-bbox="746 1294 1378 1328">One Red wire core is exposed. HARNESS REPAIR</p> 

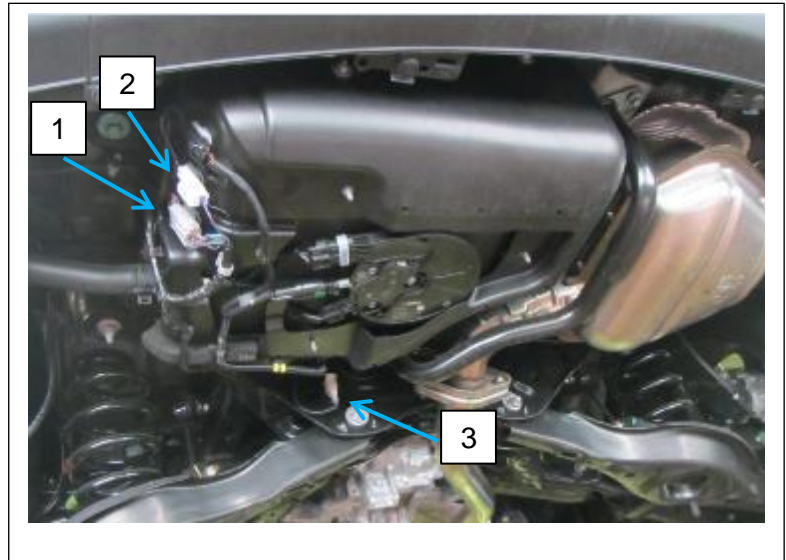
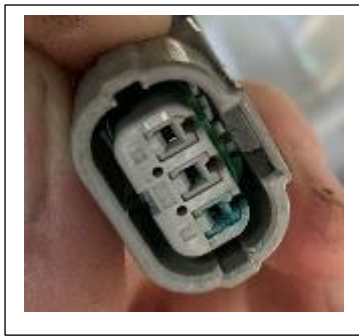
3. If no damage is found to the Core Wires as in the left column examples, proceed with installation of PVC tubes, step "Installation of PVC tubes" of this repair procedure. This is 90% of the vehicles.
4. If damage is found, proceed with next step to check for corrosion in the connectors of the damaged wiring harness.

“Replacement of Harness with Connector due to Corrosion”

Check the connector with the exposed core wire, and if corrosion is found on the connection, replace both the male and female connector’s harness with new ones.

Note:

If it is found that the connectors contain corrosion, please replace using the information below. Please note that this repair will be very low. Contact Dealer Recall help with photos of the damage. They will provide authorization and place the harness order through the DAG and provide a SO# by email.



		Connector fixed to the vehicle	Connector Not fixed to the vehicle
1	Connector #1	KB8F 67SH0A (Short cord)	*----6705Y (Rear harness)
2	Connector #2	KB8F 67SH0A (Short cord)	*----6705Y (Rear harness)
3	Connector #3	KB8F 67SH0A (Short cord)	*----6705Y (Rear harness)

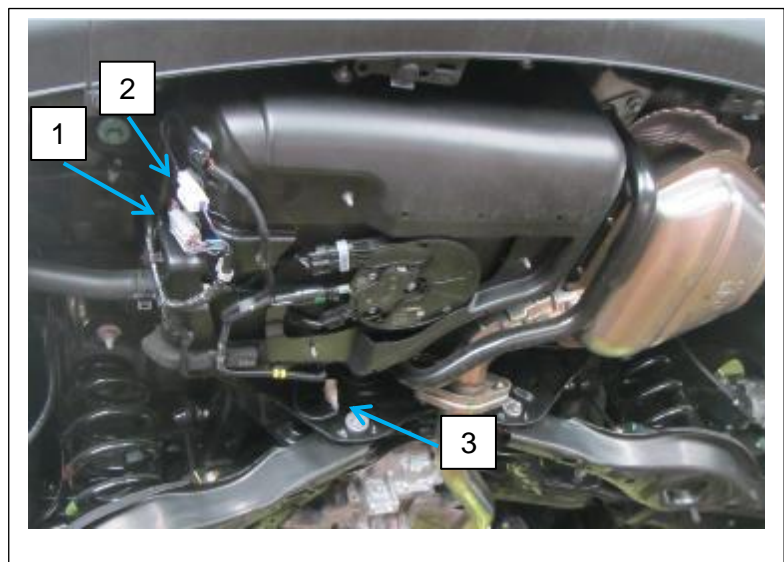
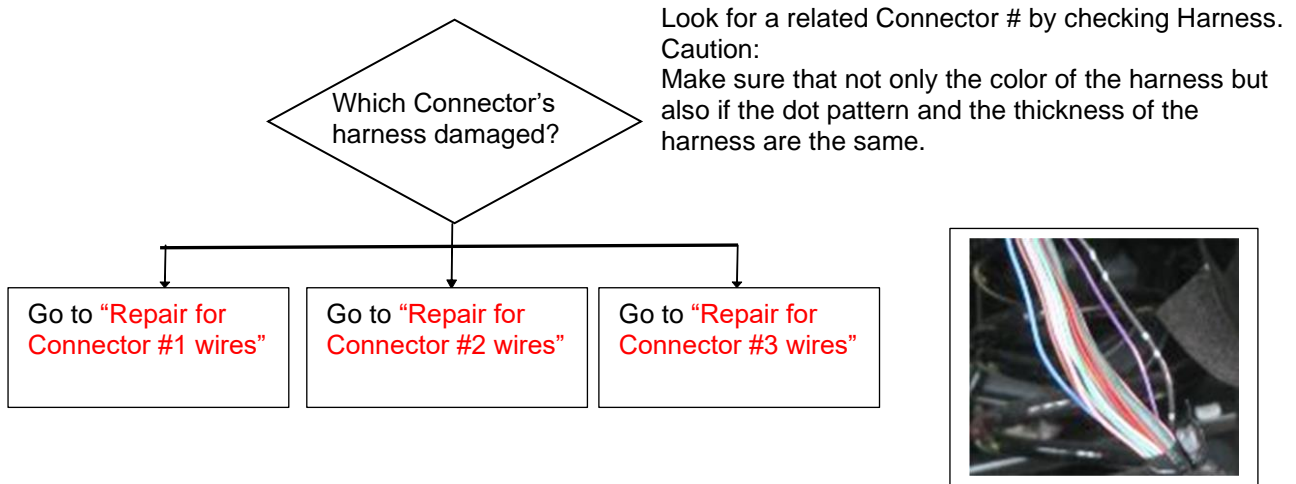
* First 4 digits depended on VIN

6700AA 08/09 FRONT & REAR WIRING HARNESSES (DIESEL)

D-Code	Part Name Part Number Description	Qty	Ord Qty	Info.	S/S	Pric
67-060	HARNESS NO.2,REAR					
67-06Y	HARNESS NO.3,REAR					
	-67-05Y	1	1			
67-091	CORD,SHORT					
67-130A	HARNESS NO.4,REAR					
67-GD2	GROMMET					
67-GP1	GROMMET,INNER					

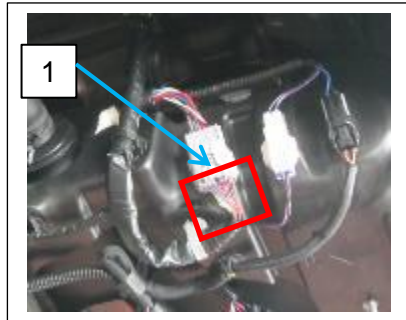
Repair of Damaged Wire – Note: If Core Wire damage is found contact Dealer Recall Help for Preauthorization as parts are very limited along with a photo of the damage. They will order the kit required for repair.

5. Disconnect Battery ground terminal according workshop manual
6. Repair according to following flow.



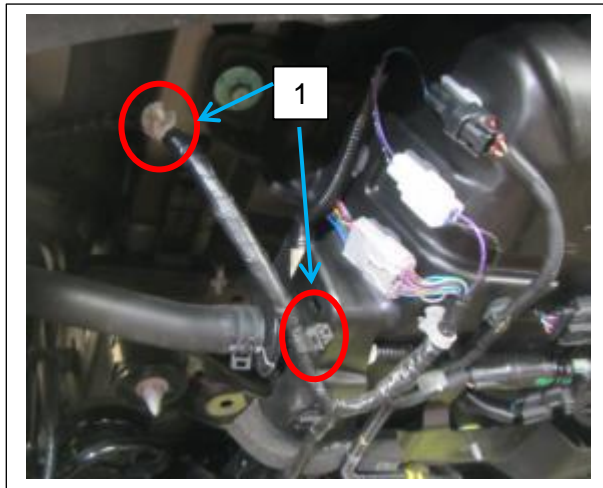
1	Connector #1
2	Connector #2
3	Connector #3

“Repair for Connector # 1 wires”



1	Connector #1
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1. Remove harness clip to make it easier to repair harness and install PVC tubes.



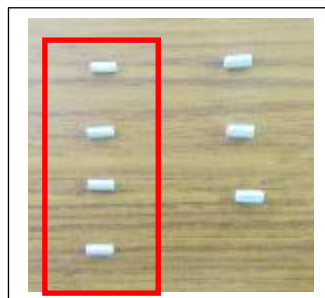
1	Harness clip
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2. Prepare repair harness with terminal, crimping tube and heat shrink tube on it

Harness with terminal in Red (Thin harness)
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Crimping tube (Small diameter)

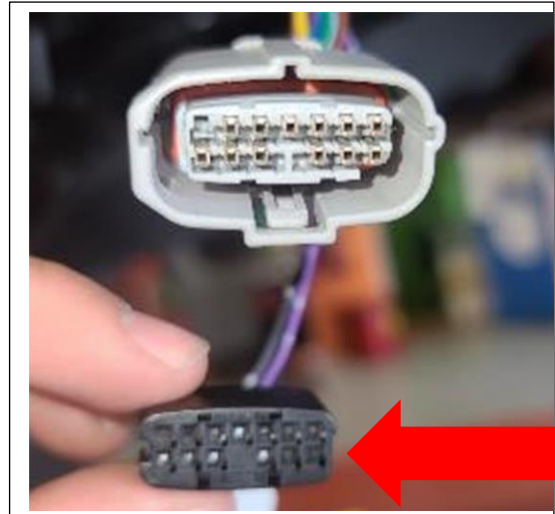


Shrink tube (All are same spec)



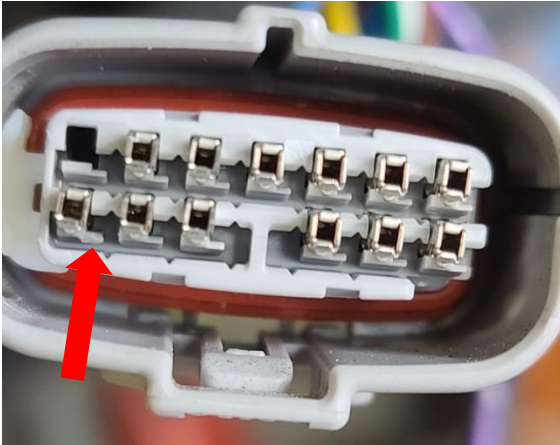
NOTE: If wiring harness does not need to be repaired, the Shrink Tube must be cut in longitudinal direction to locate it over the affected harness.

3. Disconnect Connector #1 and remove (BLACK) connector pin cover.

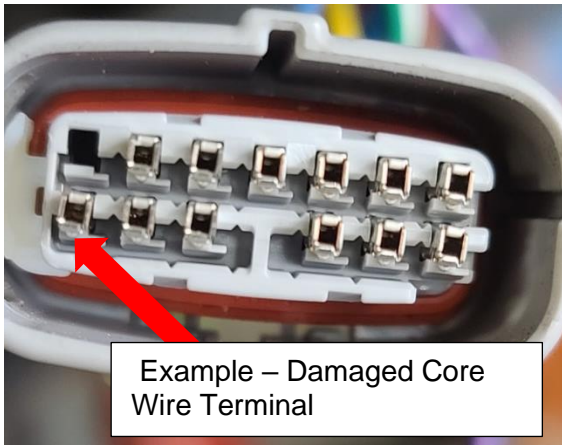


4. Lift (WHITE) connector lock

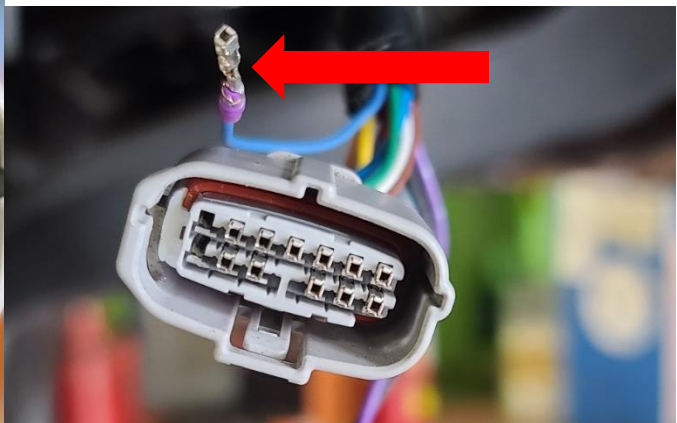




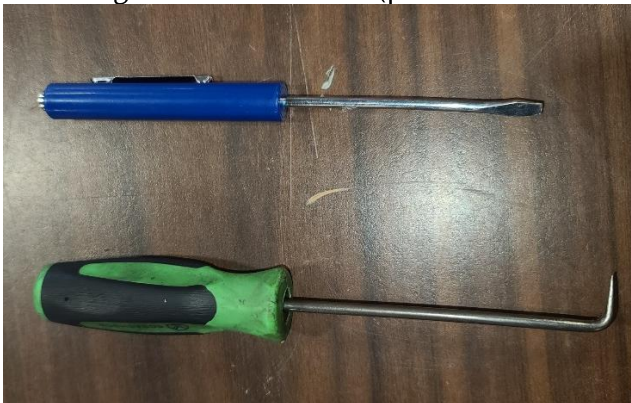
5. Press down on the locking tab to release pin.
6. Removed Terminal



Example – Damaged Core Wire Terminal

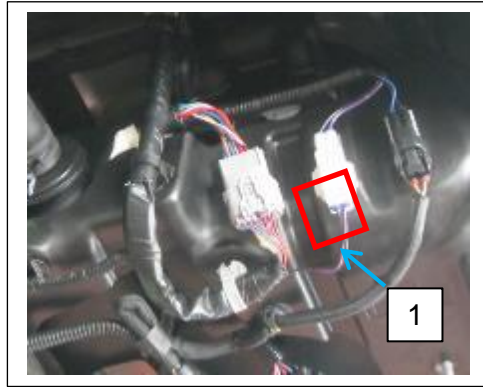


Following tools are available (pocket screwdriver (Flat Head), a 90° pick, etc).



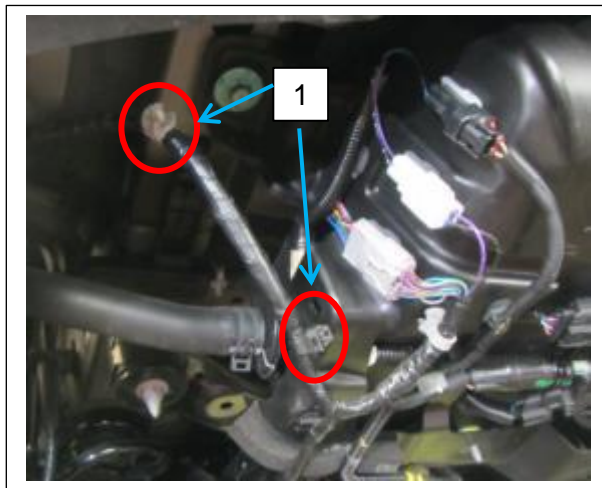
7. Replace exposed harness with new one according to **"Installation of Repair wires"**
8. Install PVC tubes according to **" Installation of PVC tubes"**
(Include Re-installation of the Urea tank cover and Re-connect battery ground terminal)

“Repair for Connector # 2 wires”



1 | Connector #2

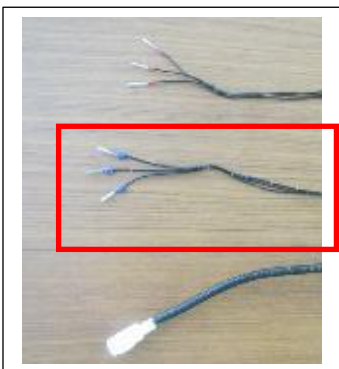
1. Remove harness clip to make it easier to repair harness and install PVC tubes.



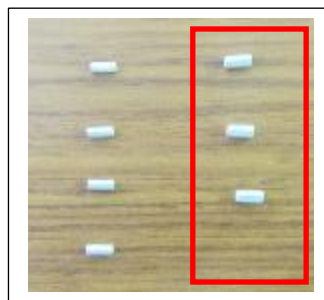
1 | Harness clip

2. Prepare repair harness with terminal, crimping tube and heat shrink tube on it

Harness with terminal in Blue
(Thick harness)



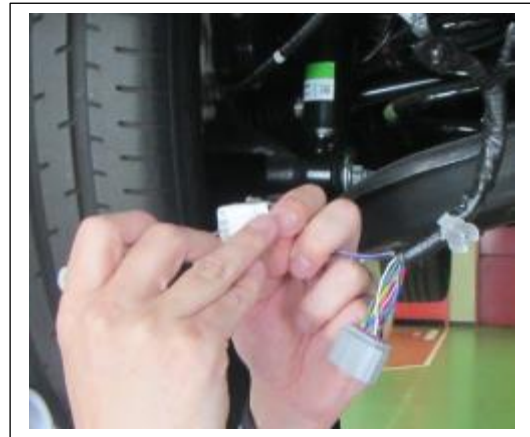
Crimping tube
(Big diameter)



Shrink tube
(All are same spec)



3. Disconnect Connector #2 and remove terminal.



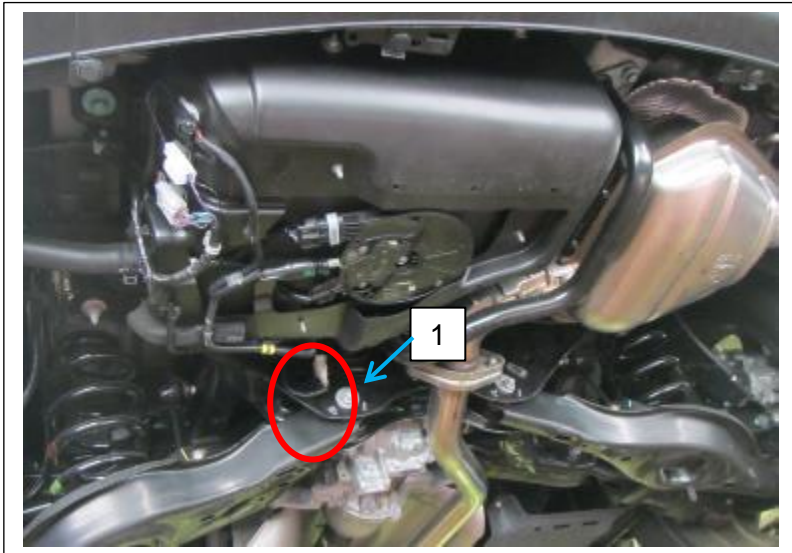
4. Replace exposed harness with new one according to **"Installation of Repair wires"**
5. Install PVC tubes according to **" Installation of PVC tubes"**
(Include Re-installation of the Urea tank cover and Re-connect battery ground terminal)

“Repair for Connector # 3 wires”

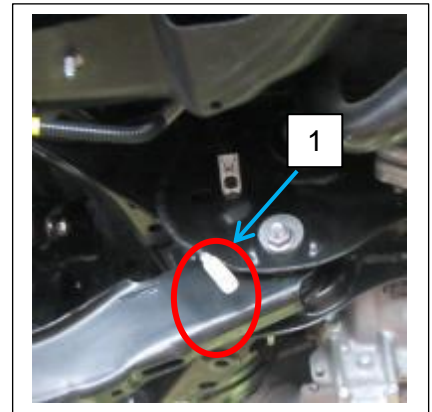
If the core wire connected to the connector 3 is exposed, replace the entire connector #3 and harness with a new one.

Because it is difficult to pull out the terminal from the connector.

1. Remove Connector #3.

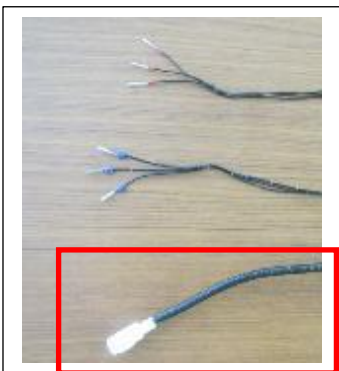


1 | Harness clip

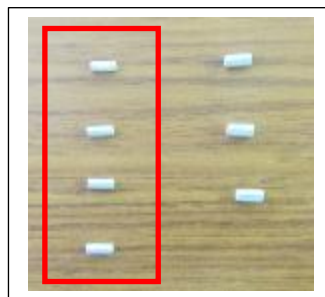


2. Prepare repair harness with connector #3, crimping tube and heat shrink tube on it

Harness with Connector #3



Crimping tube
(Small diameter)



Shrink tube
(All are same spec)



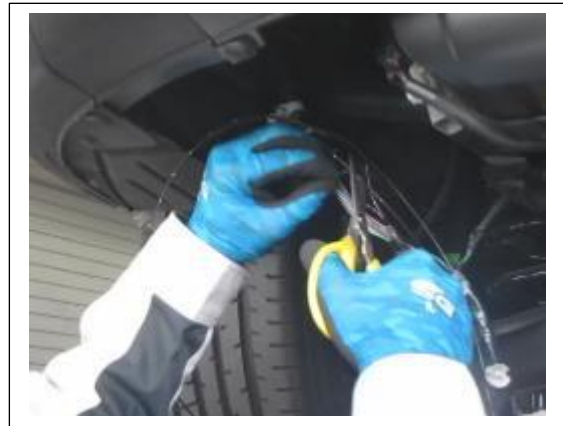
3. Replace exposed harness to new one according to **“Installation of Repair wires”**
4. Install PVC tubes according to **“ Installation of PVC tubes”**
(Include Re-installation of the Urea tank cover and Re-connect battery ground terminal)

“Installation of Repair wires”

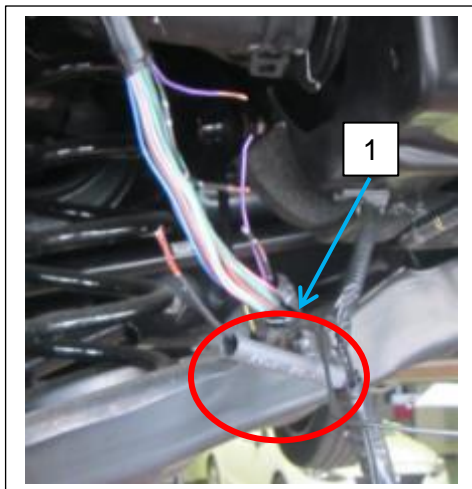
1. Cut the damaged wire above the exposed core wire.



2. To determine the length of the replacement harness, first start at the terminal side.
3. Cut the replacement harness at an appropriate location where the vehicle side harness was cut so the new replacement harness wires can be crimped together.

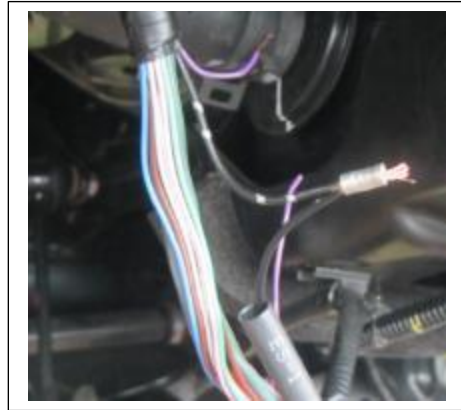


4. After stripping the coating on the harness connection, insert the Shrink tube.

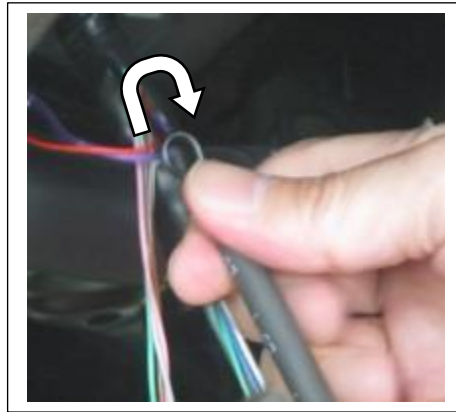


1	Shrink tube
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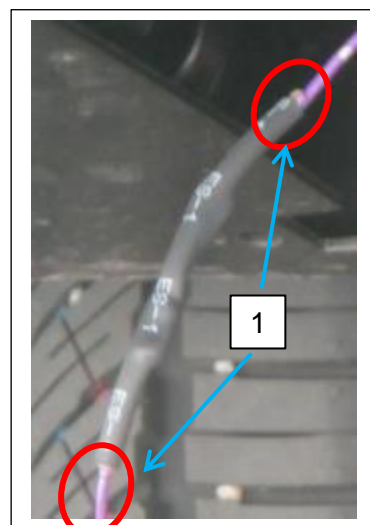
5. Insert Crimping tube (Small diameter) to stripped and twisted core wires until end appears to prevent poor contact in the Crimping tube.



6. Crimp tube and insert it from end into middle of Shrink tube.



7. Properly place the heat shrink tube over the crimp connection and shrink it using a heater until the adhesive seeps out.



1 Adhesive seeps out

8. Install terminals of the new harness into connector. (Handling of other side of harness, to be installed to connector)

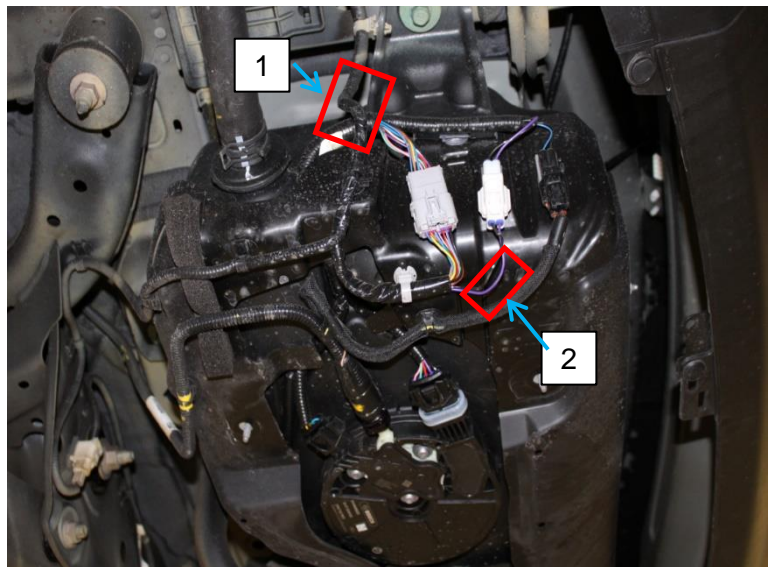
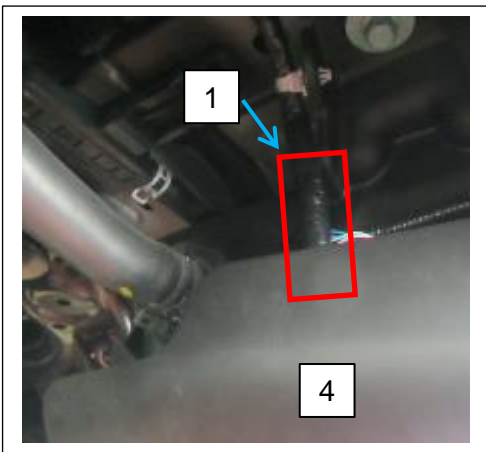


9. Proceed with steps above for each wire damaged
10. Attach a PVC tubes to appropriate parts and wrap the repaired parts with adhesive tape. (See: Installation of PVC tubes)
11. Re-connect battery ground terminal according to W/M

“Installation of PVC tubes”

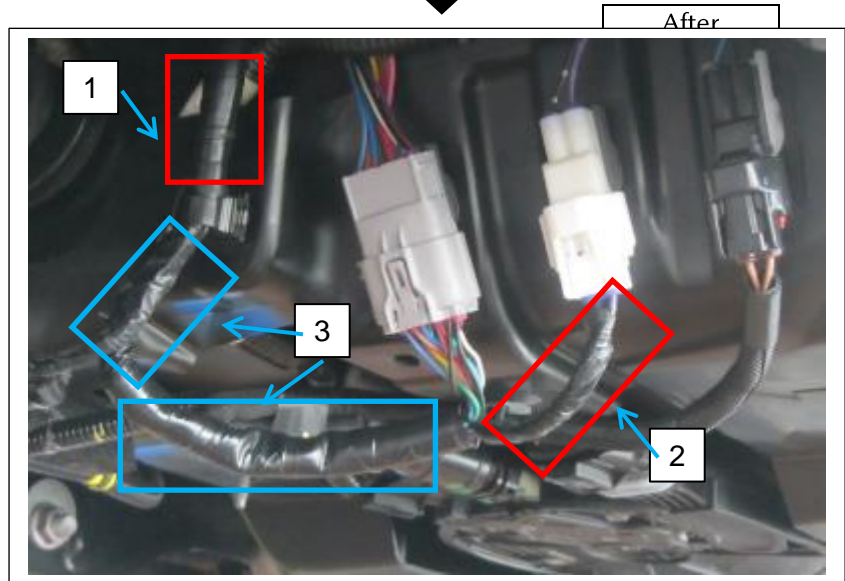
1. Attach PVC tubes around harness in area of potential contact points

Before



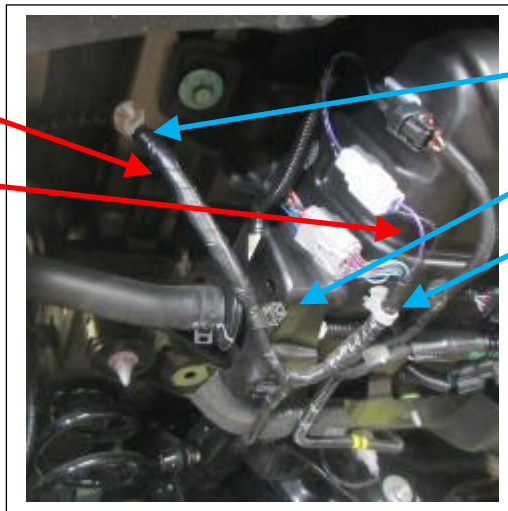


1	Attach PVC tube
2	Attach PVC tube
3	Not attach PVC tube. *Only taping, even if these harnesses were replaced.
4	Urea tank cover No.1



Harness clips
(If you need, use new one)

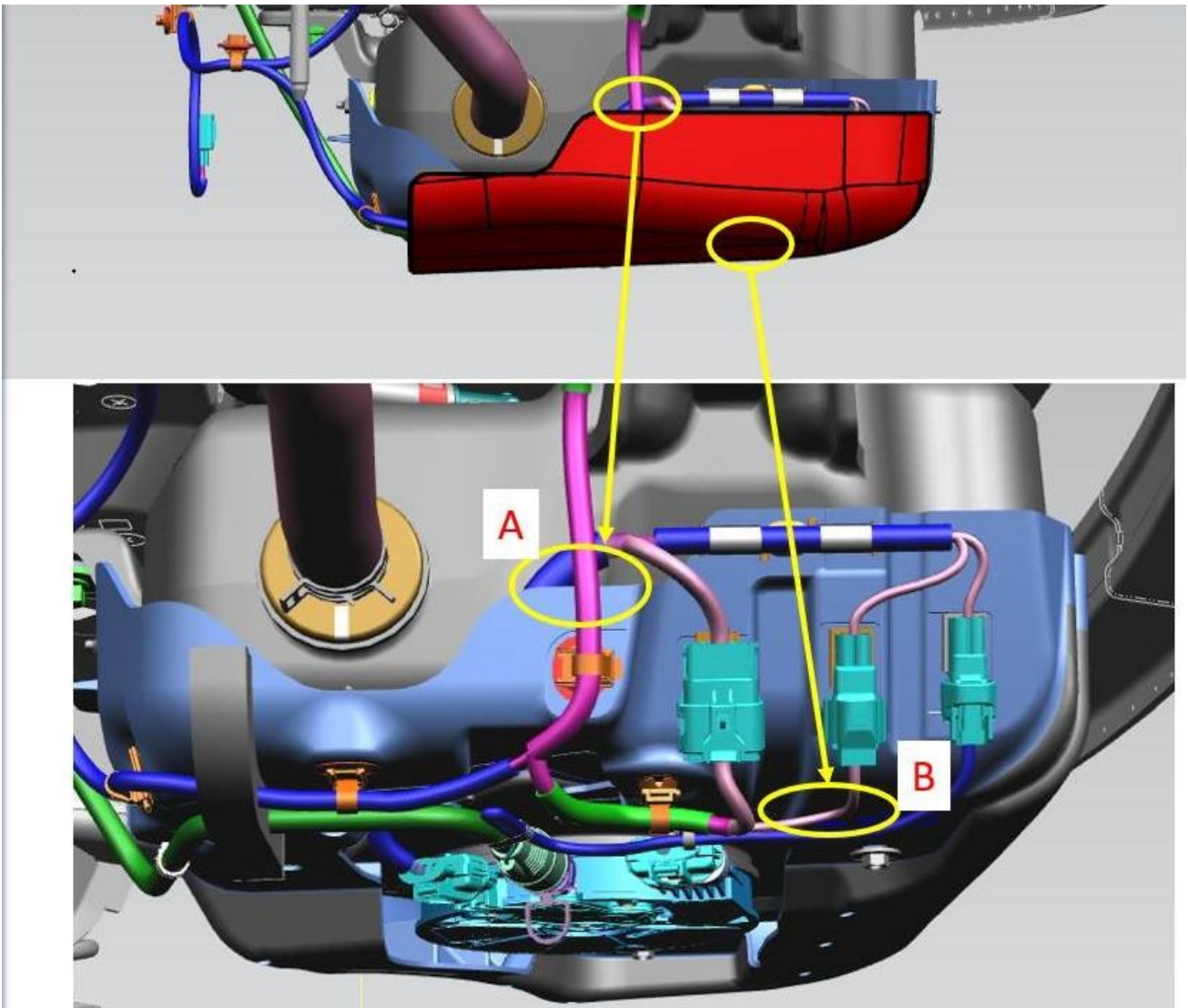
PVC tubes

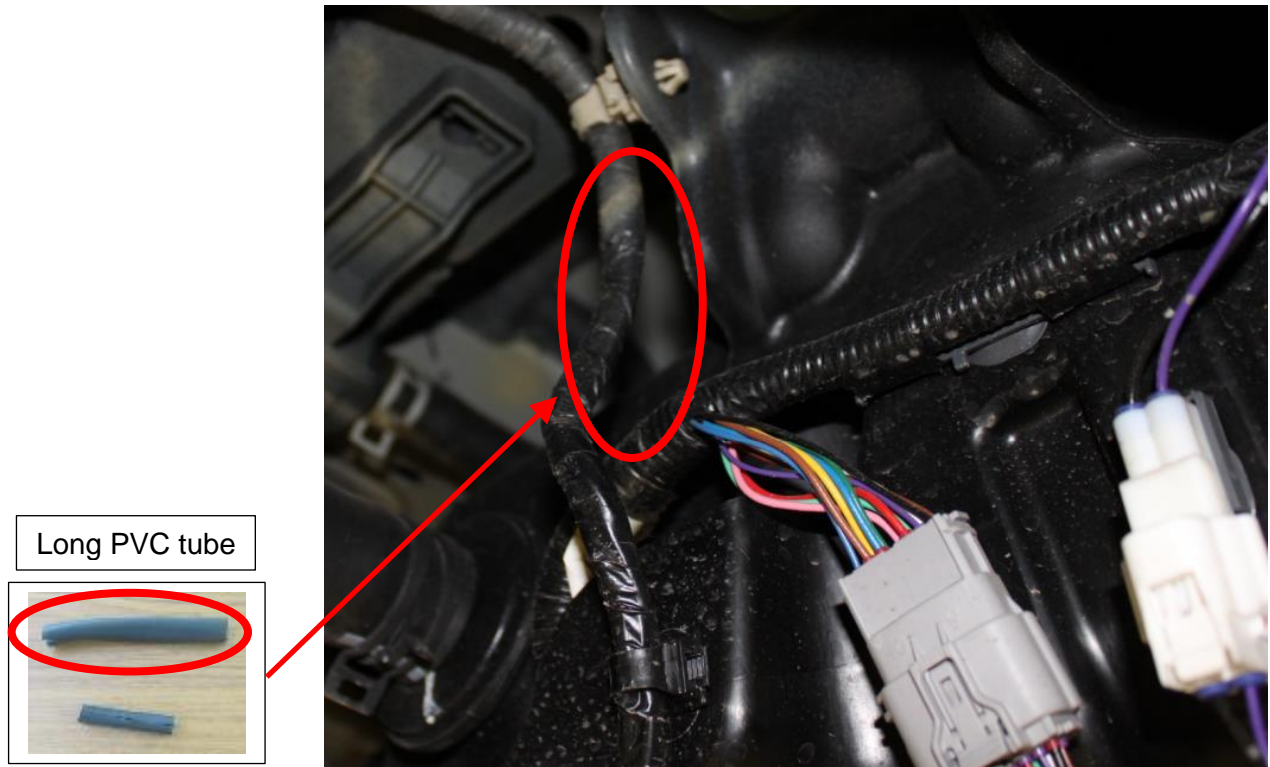


“Installation of PVC tubes”

- a) At the area shown below which you inspected and might have repaired according to this procedure already
- b) At the areas shown below in this picture and the next picture, these are the wires that might have been damaged

Note: The areas of damage are different, see below and on the following pages. Photos here are for reference only.

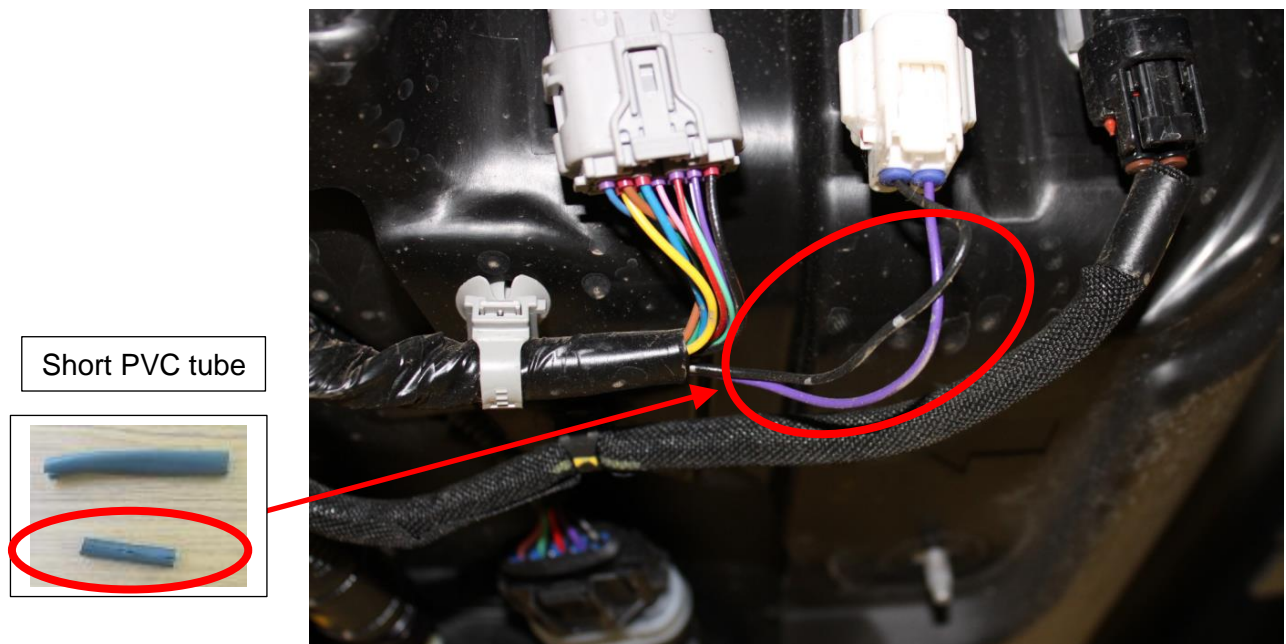




Long PVC tube



2. Properly fix all installed PVC tubes by use of adhesive tape



Short PVC tube



- Re-install the Urea tank cover, route the harness properly to avoid any contact between cover and harness and tighten the nuts with torque of 27-44 *in-lbs*



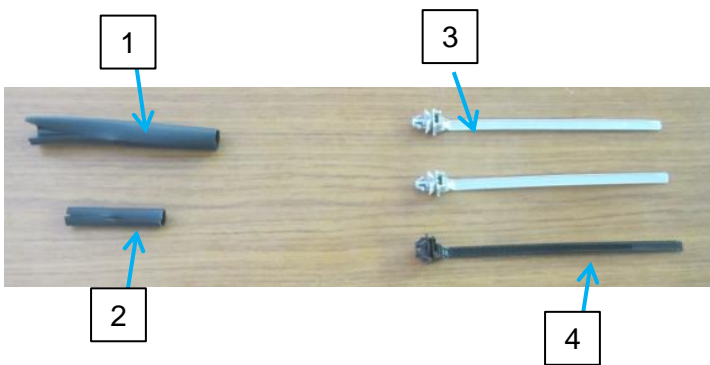
- Re-connect battery ground terminal according to W/M

-----END OF SECTION B-----

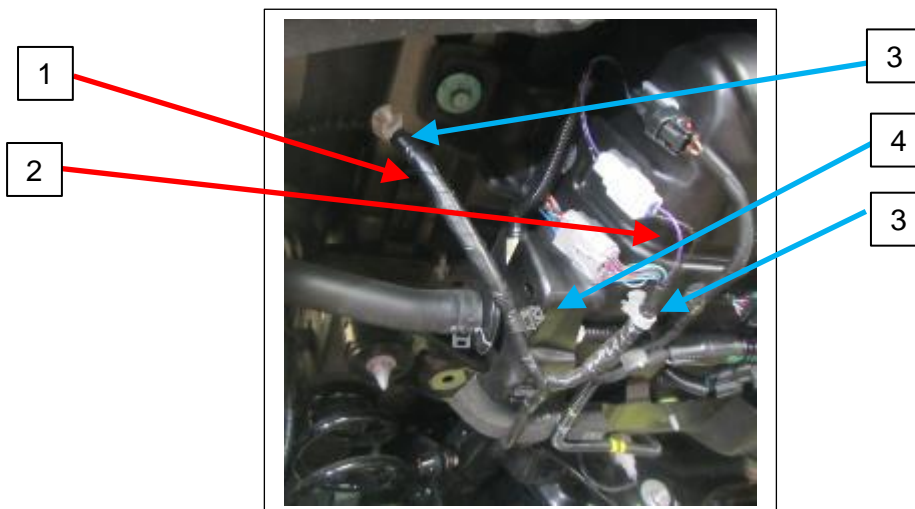
Section C: Parts Information

Description	Part Number	Quantity
PVC TUBE KIT	KFY067SH0	1

KIT A



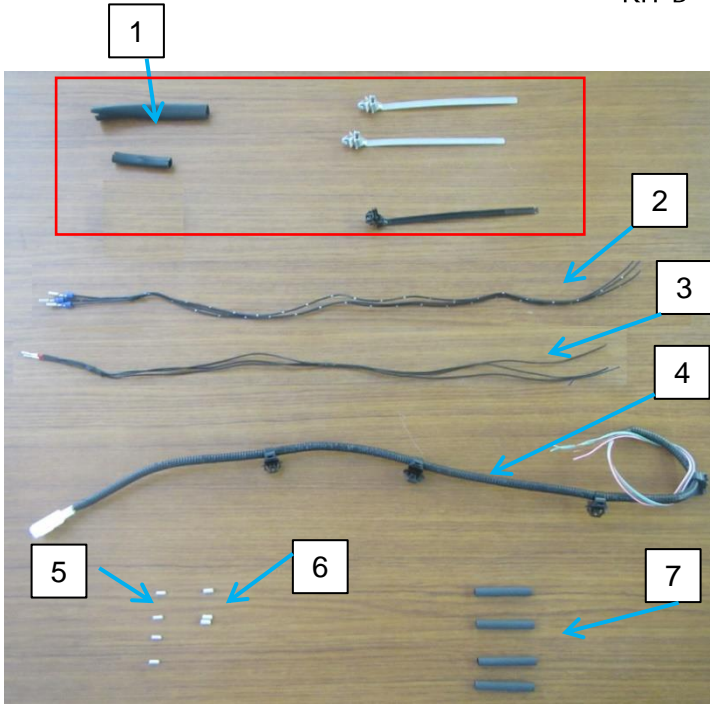
1	PVC tubes (Long)
2	PVC tubes (Short)
3	Harness clips(Light gray)
4	Harness clips(Black)



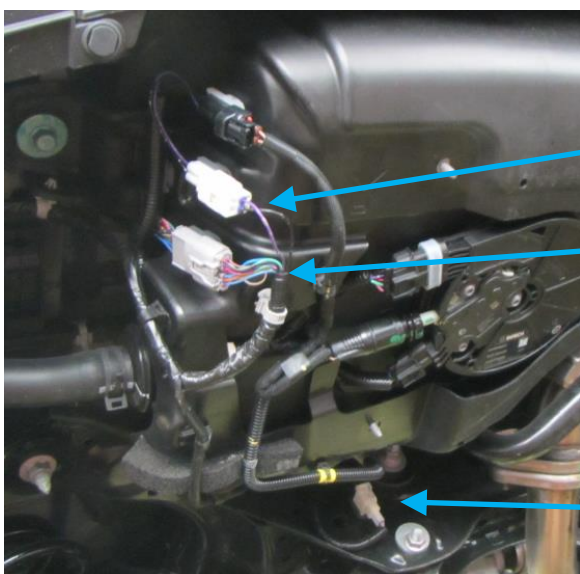
Requires Dealer Recall Help Authorization to order due to limited supply and low chance of damage. Fill out Dealer Recall Help on OneMazda, you will receive back a Sales Order # from the DAG after approval.

Description	Part Number	Quantity
HARNESS KIT	KFY167SH0	1

KIT B



1	Same as KIT A
2	Harness with terminal in Blue for Connector # 2 (Thick harness)
3	Harness with terminal in Red for Connector # 1 (Thin harness)
4	Harness with Connector #3
5	Crimping tube for Connector # 1, 3 (Small diameter)
6	Crimping tube for Connector # 2 (Big diameter)
7	Shrink tube (All are same spec)



2 6 7

3 5 7

4 5 7

D. CAMPAIGN LABEL

1. Fill out a "Campaign Label" (9999-95-065A-06) with Campaign No: "5421K", your dealer code, today's date.

CAMPAIGN LABEL

CAMPAIGN NO: _____

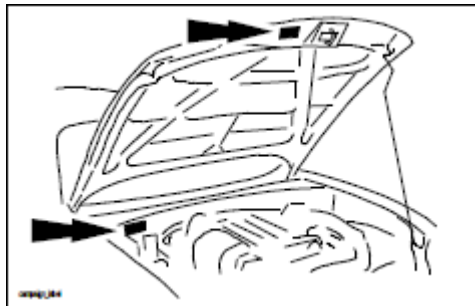
DEALER CODE: _____

DATE: ____/____/____

PIN 9999-95-065A-06

132b

2. Affix it to the hood or bulkhead as shown:



3. Return the vehicle to customer.

END OF REPAIR PROCEDURE

CONDITION OF CONCERN

The CX-5 Diesel has a Selective Catalytic Reduction (SCR) system. There is a SCR/AWD harness that has a unique routing around the SCR tank cover. Over time, contamination (i.e. sand, dirt) on the SCR/AWD harness may cause wear on the harness wiring and insulation due to vibrations of the SCR tank cover. In the worst-case scenario, the electrical circuits in the wiring harness can be disconnected with the MIL/SCR/4WD warning lights illuminating.

ALL DEALERS PLEASE READ: If you find corrosion or exposed wires and need Part# KFY1-67-SH0 OR KB8F-67-SH0A (including any related harness), as per the repair instructions you must fill out Dealer Recall help with photos of the damage AND part numbers. They will provide authorization and place the harness order through the DAG and provide a SO# by email.

OUTLINE OF REPAIR

Inspect the SCR/AWD harness. If the harness has no damage, install protective shrink tubing on the harness. If damage is found, repair the harness with updated components. Please refer to the Repair Procedure document on MGSS for further details.

SUBJECT VEHICLES

Subject Vehicles:

Affects 561 US CX-5 Diesel -fueled vehicles only

Model	Subject VIN range	Subject production date range
2019 CX-5 SKYACTIV-D 2.2, AWD	JM3 KF**** K0 569040 – 678929	From January 29, 2019 through July 31, 2019

The asterisk symbol “*” can be any letter or number.

OWNER NOTIFICATION

Mazda will notify U.S. owners by first class mail no later than XXXX, 2021.

PARTS INFORMATION

Description	Part Number	Quantity	Note
Short Cord (PVC tube)	KFY0-67-SH0	1	Will be used for the repair when the SCR/AWD harness has no damage
Short Cord (PVC tube, Harness repair kit)	KFY1-67-SH0	1	Will be used for the repair when the SCR/AWD harness is damaged
Campaign Label	9999-95-065A-06	1=50 labels	Obtain in Mazda e-Store (no charge)
Vehicle Emission Recall Proof of Correction Certificate *	9999-95-ERPC-99	1=50 certificates	

* California Department of Motor Vehicles and the Commonwealth of Massachusetts, in conjunction with the California Air Resources Board and the Environmental Protection Agency for the State of Massachusetts, have implemented the Registration Renewal/Recall Tie-In Program, which requires the completion of Emission Recalls prior to registration renewal. Mazda dealers must provide customers a Vehicle Emission Recall – Proof of Correction Certificate (p/n 9999-95-ERPC-99) up on completion of the recall.



WARRANTY CLAIM PROCESSING INFORMATION

Note: Please claim the actual cost of adhesive tape as a sublet (Sublet code: Z9).

When SCR/AWD harness has no damage:

	Inspection and Installation of PVC tubes
Process Number	AM038A
Symptom Code	99
Damage Code	99
Causal Part Number	KFY0-67-SH0
Quantity	1
Labor Operation Number	XXT7WXRX
Labor Hours	0.5 hrs.

When SCR/AWD harness is damaged & No corrosion on connector:

Harness(es) for Connector#1 and/or Connector#2 are damaged:

	Inspection, Repair on Harness(es) and Installation of PVC tubes	
Process Number	AM038A	
Symptom Code	99	
Damage Code	99	
Causal Part Number	KFY1-67-SH0	
Quantity	1	
Labor Operation Number & Labor hours	XXT7XARX & 0.7 hrs.	If one harness needs repair.
	XXT7XBRX & 1.0 hr.	If two harnesses need repair.
	XXT7XCRX & 1.2 hrs.	If three harnesses need repair.
	XXT7XDRX & 1.4 hrs.	If four harnesses need repair.

Harness for Connector#3 is damaged:

	Inspection, Replacement of Connector#3 & Harness and Installation of PVC tubes
Process Number	AM038A
Symptom Code	99
Damage Code	99
Causal Part Number	KFY1-67-SH0
Quantity	1
Labor Operation Number	XXT7YXRX
Labor Hours	1.0 hr.

When SCR/AWD harness is damaged & Connector has corrosion:

Harness(es) for Connector#1, #2 and/or #3 is damaged and Connector(s) has corrosion:

	Inspection, Replacement of Rear Harness & Short Cord and Installation of PVC tubes
Process Number	AM038A
Symptom Code	99
Damage Code	99
Causal Part Number & Quantity	KB8F-67-SH0A & 1 pc
Related Part Number & Quantity	****-67-05Y & 1 pc
Labor Operation Number	XXT7ZXRX
Labor Hours	1.1 hrs.

Note: Please submit an appropriate part number of rear harness as a related part.

RENTAL CAR INFORMATION

Mazda recommends the usage of the MCVP loaner vehicle when available. If all MCVP loaner vehicles are in use and unavailable, and the customer needs a rental car, then use your local rental facility and offer a rental car. Be sure that every effort is made to repair the car within one business day or less, so the next customer can receive the same experience.

Rental Car Warranty Claim Information

	MCVP Vehicle Preferred	Rental Agency Vehicle
Warranty Type Code	N/A MCVP does not require claim submission	A
Symptom Code		99
Damage Code		99
Part Number Main Cause		5555-54-21KR
Part Quantity		0
Labor Operation Code		MM024XRX
Labor Hours		0
Sublet – Rental Car		
Sublet Invoice Number		Number from Rental Invoice or Dealer Purchase Order
Sublet Type Code		Enter "Z9" (other)
Sublet Amount		Up to \$30.00 per day for the number of days customer had rental car
Sublet Text		Number of days rental car was supplied to customer

Rental expenses exceeding the two-day limit will require prior Warranty Department Authorization, as outlined in the Mazda Rental Car Reimbursement Program policy.