

<b>Subject:</b> <b>KEYLESS ENTRY INOPERATIVE OR VEHICLE DOES NOT START</b>	<b>Bulletin No.:</b> 01-007/18
	<b>Last Issued:</b> 03/21/2018

## APPLICABLE/MODELS/VINS

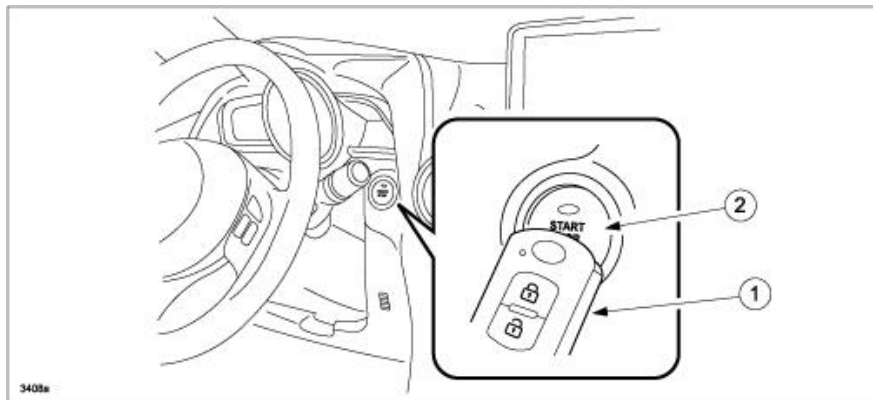
2016-2017 MX-5 (soft top) with VINS lower than 124775 (produced before August 4, 2017)

2017 MX-5 (RF) with VINS lower than 108909 (produced before August 4, 2017)

## DESCRIPTION

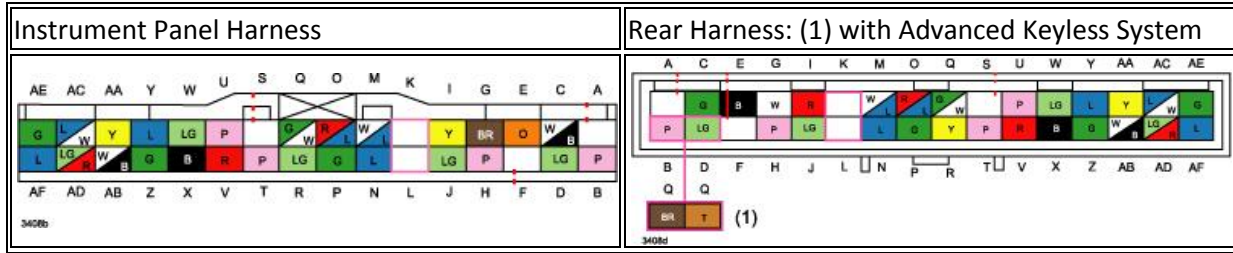
Some vehicles may experience a condition where the engine does not start using the normal starting procedure and the doors will not lock/unlock when using a request switch. The engine will start if you touch the backside of the remote (1) to the push button start (2). This may be caused by water running down between the windshield and the dashboard resulting in corrosion of the terminals at connectors C-16 and/or C-04. To correct this issue, shield plates have been attached to the upper dashboard to prevent water from dropping onto these connectors.

**NOTE:** The occurrence of other electrical malfunctions (such as horn working by itself) may also be possible, depending on the corrosion condition of the affected connector terminals.

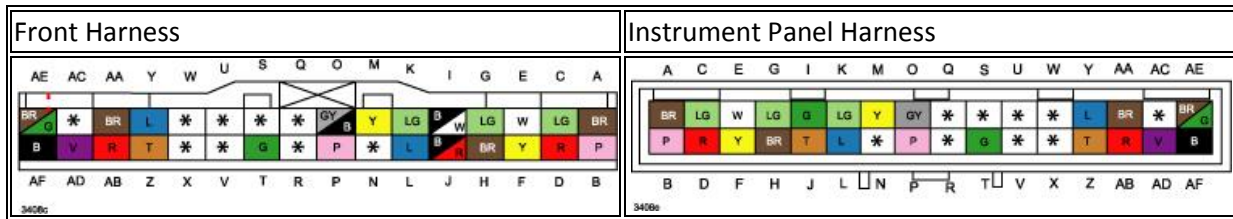


**NOTE:** It has been found that some customers are having the front windshield tinted to block UV light, and water used during the installation of the tint is running down behind the dashboard. Look carefully at the windshield to be sure if tint is installed or not to see if this might be the issue. Some tint film appears clear and is for UV light only.

C-16 Instrument Panel Harness - Rear Harness

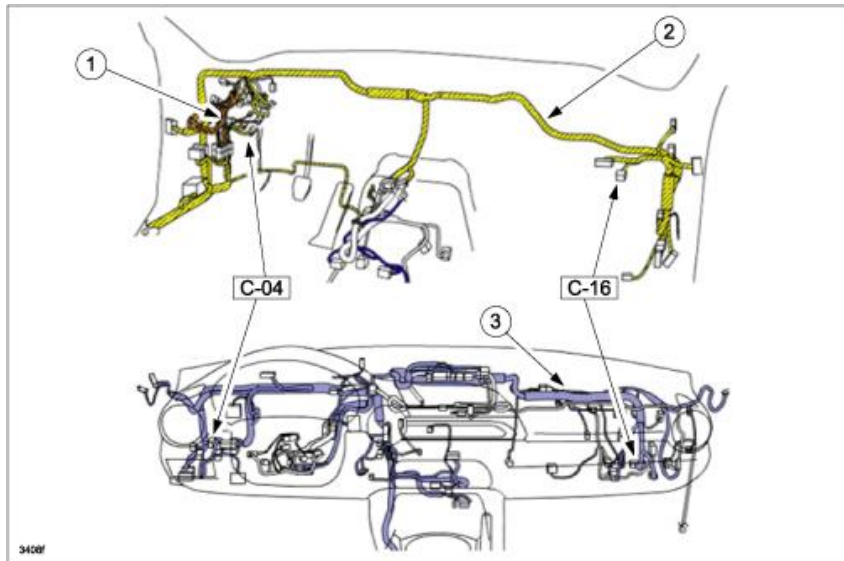


C-04 Front Harness - Instrument Panel Harness



Location of Connectors

- (1) Front Harness
- (2) Rear Harness\
- (3) Instrument Panel Harness



Customers having this concern should have their vehicle repaired using the following repair procedure.

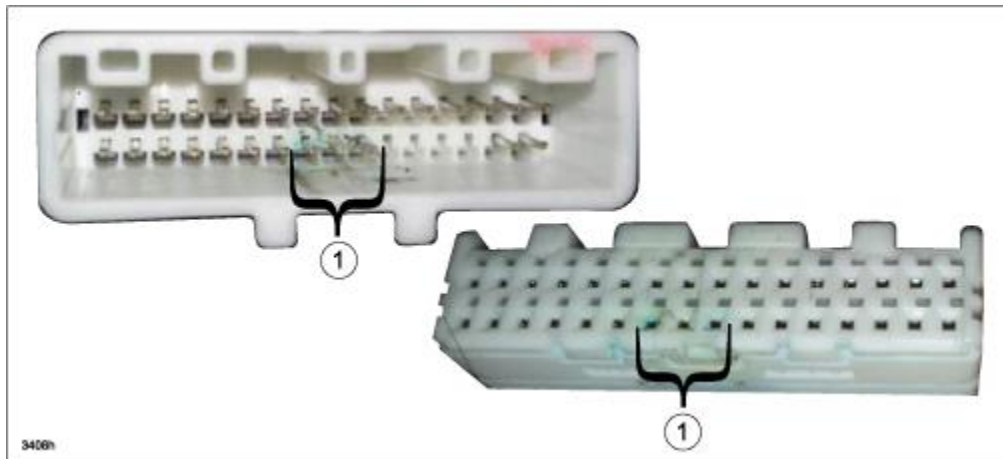
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## REPAIR PROCEDURE

1. Verify customer concern.
2. Remove the passenger-side lower panel according to the instructions on MGSS (PASSENGER-SIDE LOWER PANEL REMOVAL/INSTALLATION).
3. Remove the C-16 connector (1) from the bracket (2) by releasing the clip (3) with a pair of pliers, then disconnect the C-16 connector (4).

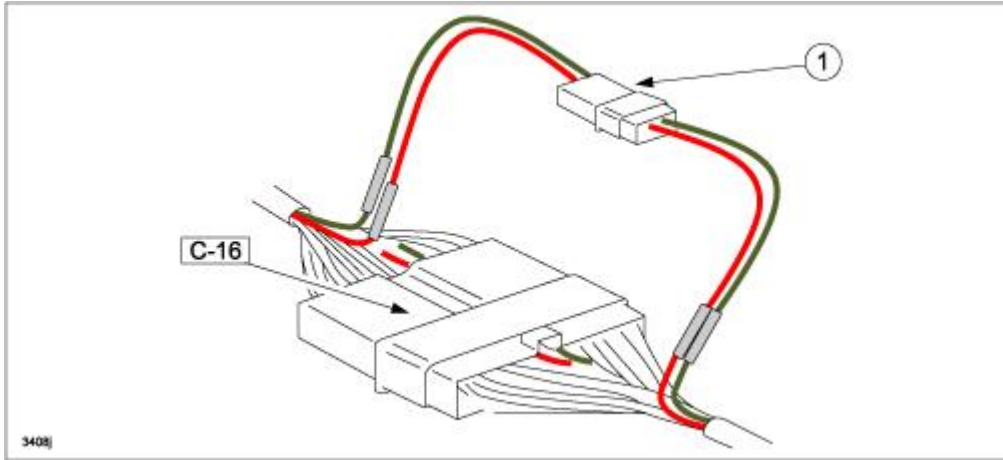


4. Inspect terminals of the C-16 connector for any corrosion (1).

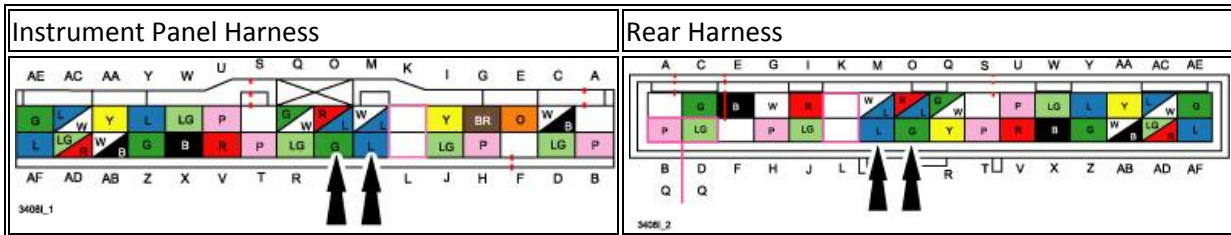


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- If any terminal(s) is corroded, cut all the affected wires and connect them using a short connector (1) from the repair kit following the instructions in step 5.



**IMPORTANT:** If the symptom is “NO ENGINE START”, the two terminals (G-Green and L-Blue) indicated by the arrows should be corroded and needing repair.

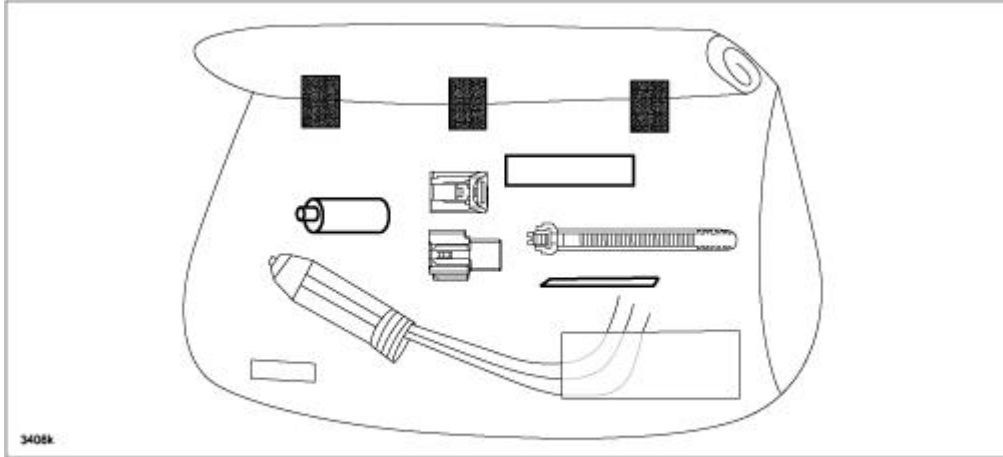


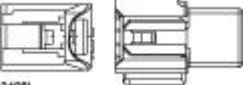

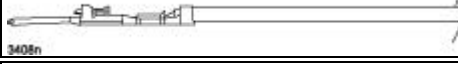



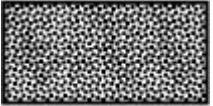
- If no terminal is corroded, apply grease to the C-16 connector for water prevention and attach it in a place where water cannot drop on it, then go to step 6.

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5. Cut the wires with corroded terminals and connect them using a short connector according to the following steps.

**NOTE:** This repair uses a Repair Kit (NAY1-67-SH0) which includes the following parts.

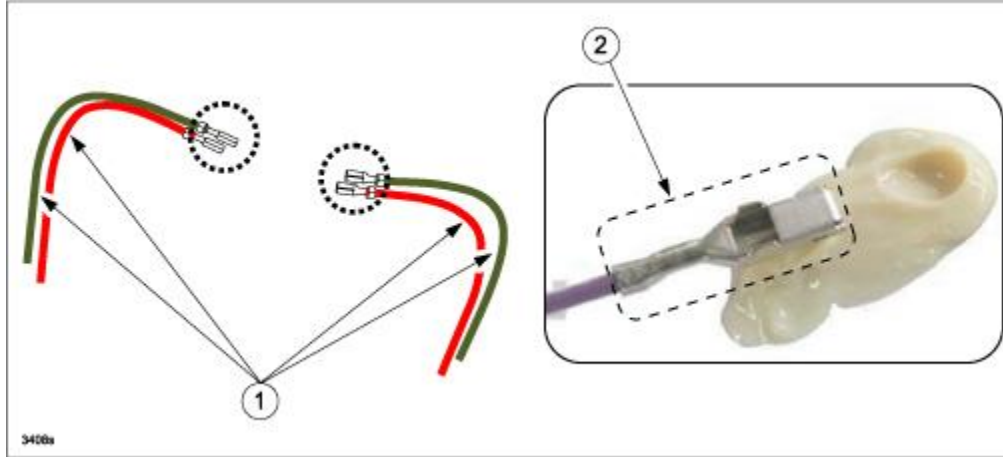


No.	Description	Pieces	Figure
1	Short Connector (8-pin)	3	 3408f
2	Short Wire with Female Terminal (8 colors X 3)	24	 3408m
3	Short Wire with Male Terminal (8 colors X 3)	24	 3408n
4	Heat Shrink Tube	48	 3408o
5	Grease (30 ml)	1	 3408p
6	Plastic Tie Strap	5	 3408g
7	Urethane Pad	2	 3408e

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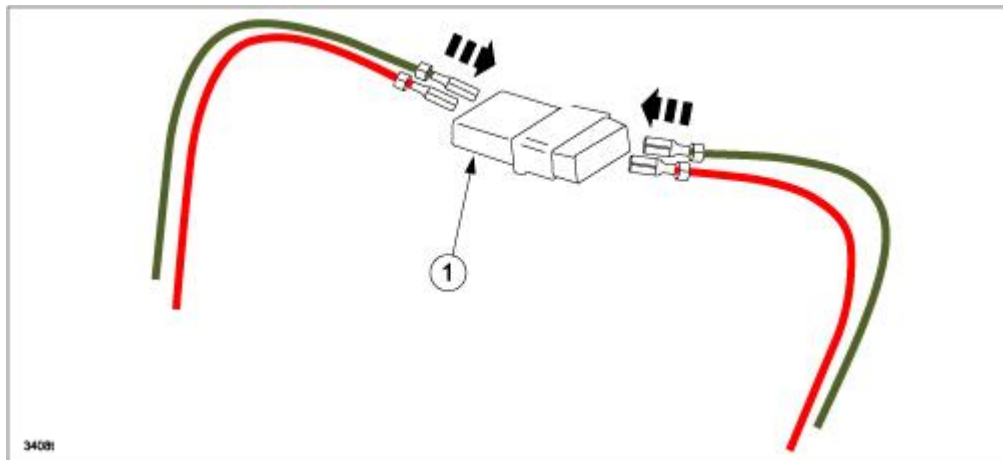
**NOTE:** This procedure explains how to repair two terminals that are corroded using the pieces from the Repair Kit as an example.

- a. Apply the grease to the terminals of the short wires (1). Cover the metallic area of the terminal completely with grease, including the wire crimp area (2).



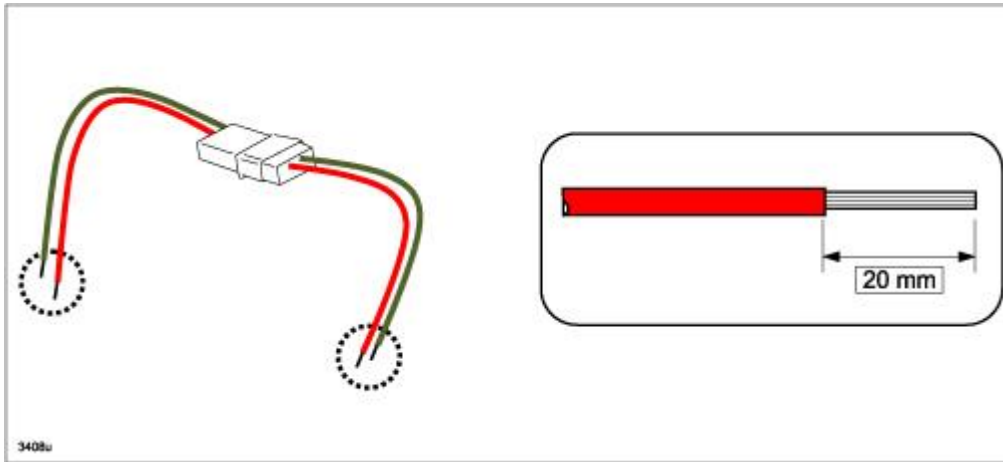
- b. Install the terminals into the short connector (1).

**NOTE:** Be sure to insert the terminal until it locks securely.

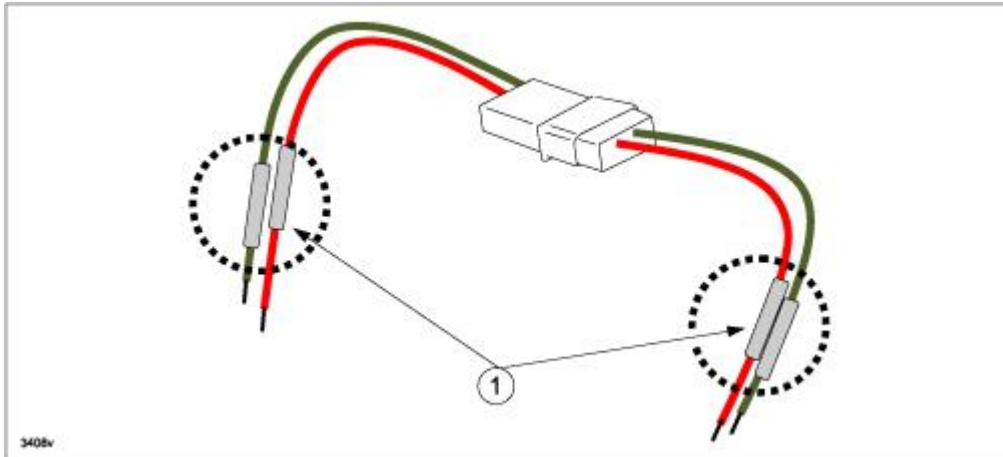


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c. Strip 20mm of insulation from the ends of the short wires.

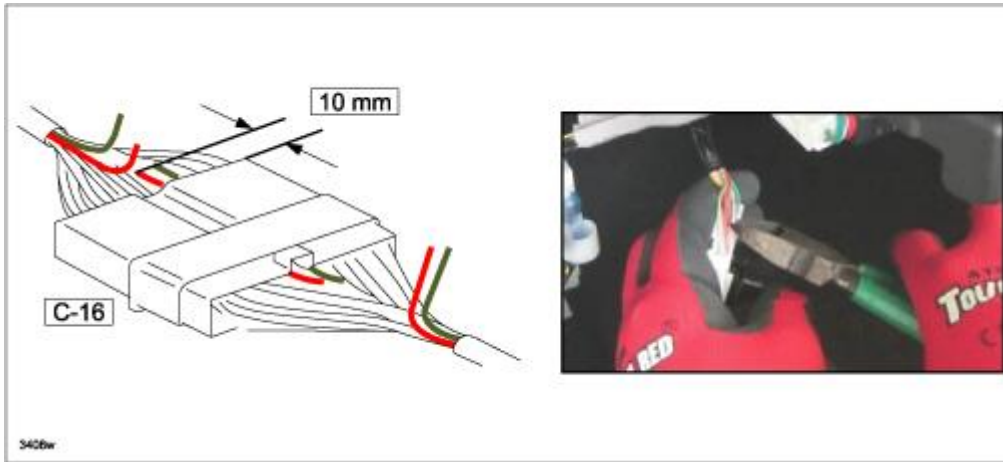


d. Pass the short wires through the heat shrink tubes (1).

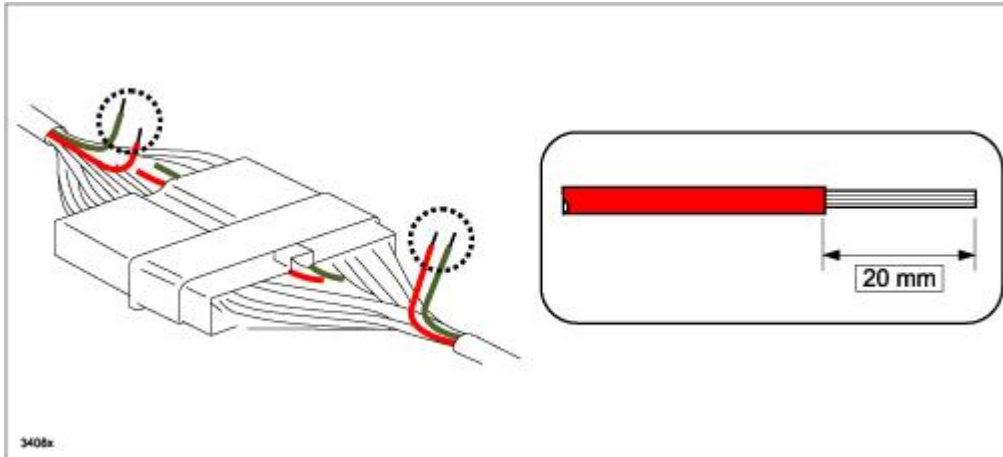


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e. Cut the wires of the corroded terminal(s) of C-16 connector 10 mm from the terminal.

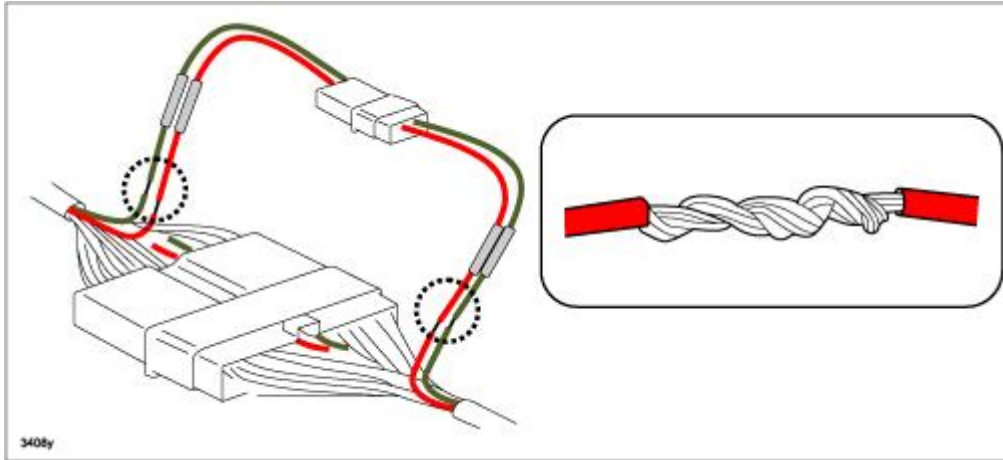


f. Strip 20 mm of insulation from the ends of the wires of the vehicle harness.

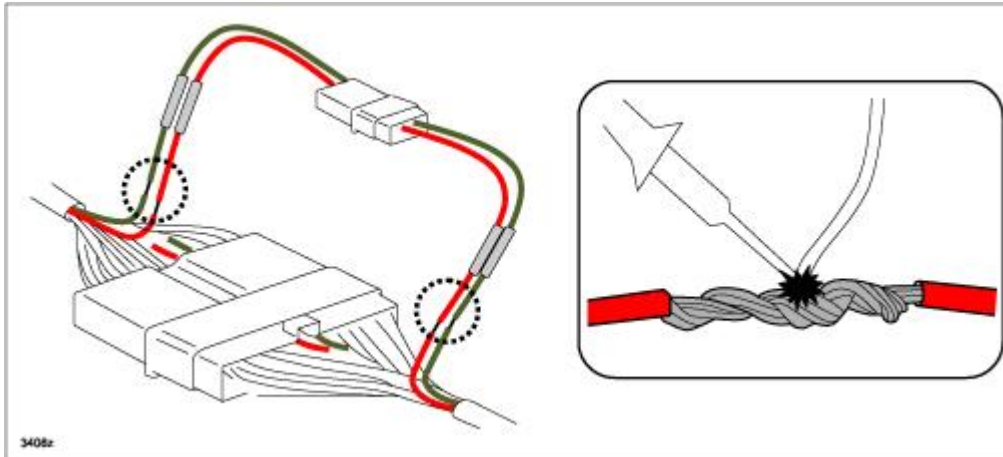


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g. Connect the wires from the vehicle harness and the short wires by twisting them together.

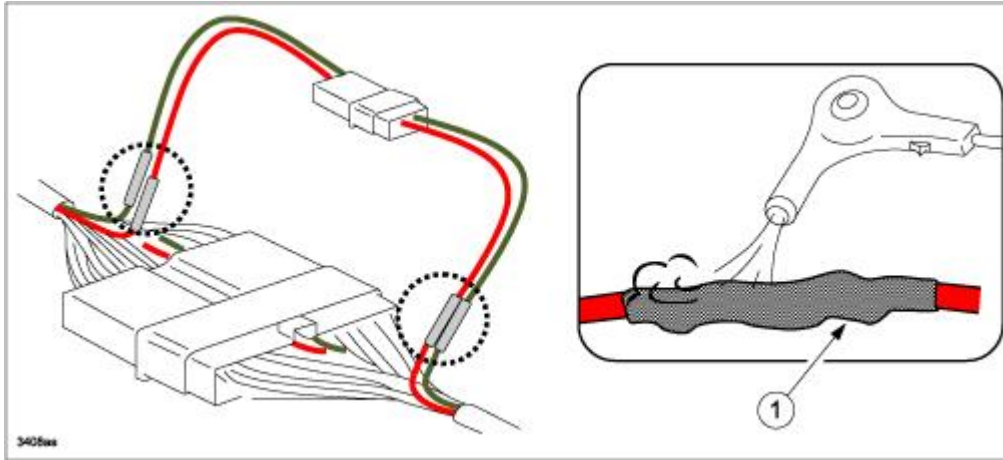


h. Solder the twisted wires together, spreading the solder out across the entire twisted wires.



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- i. Place the heat shrink tube over the center of the soldered area and using a heat gun, apply heated air until the tube shrinks securely over the soldered wires.



- j. Wrap a piece of tape around the short wires and note the reference number of this TSB on it to inform others about this modification in case of future repairs.

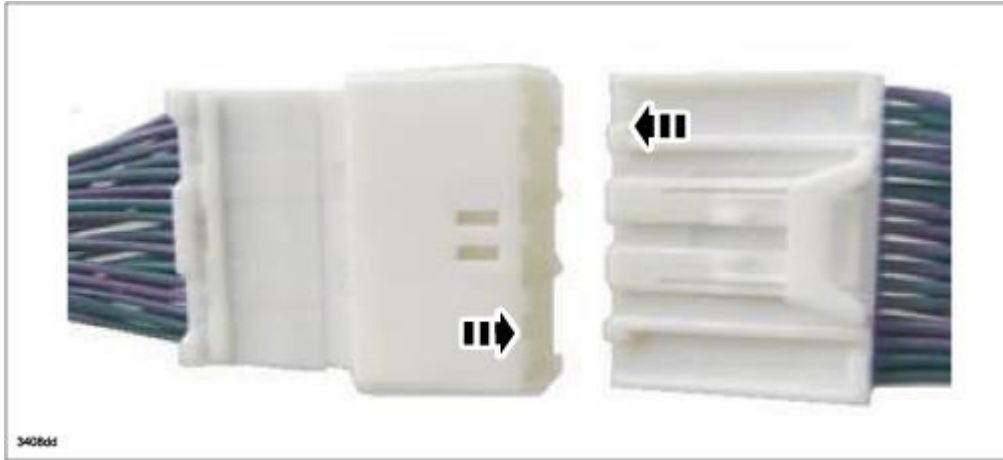
6. Apply the grease (in Repair Kit) to the C-16 connector.

**NOTE:**The connector shown is not the C-16 connector. It is shown as an example only.

- a. Apply the grease to all terminals of the C-16 male connector.

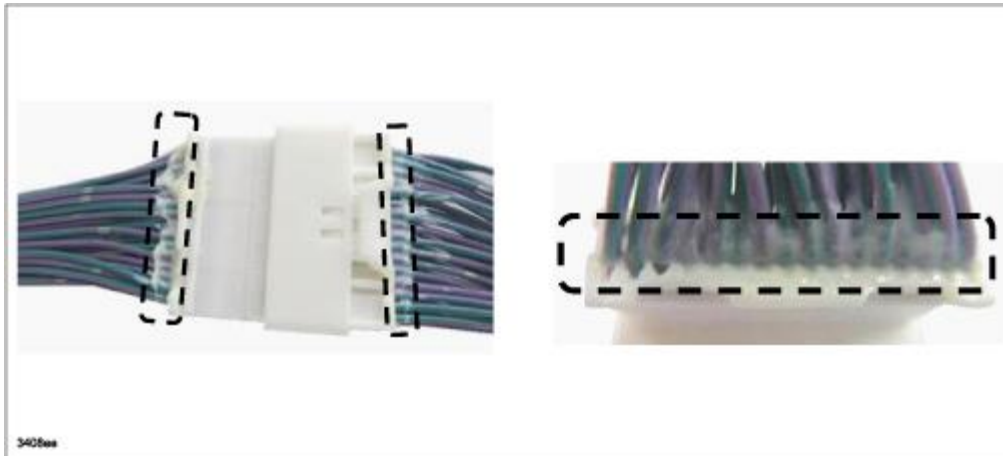


b. Connect and disconnect the C-16 connector several times so the grease can spread and adhere to all the terminals.



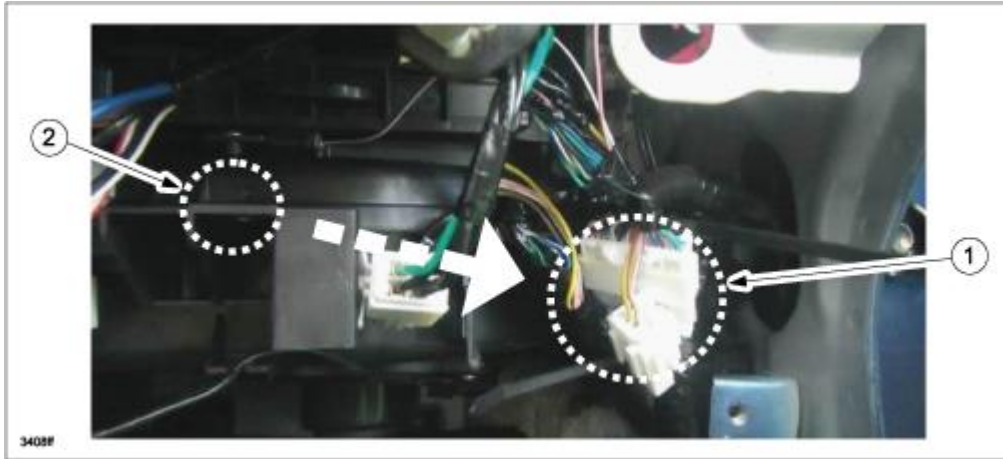
c. Apply the grease to the back side of the C-16 connector.

**NOTE:** Wipe off any excess grease.



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7. Move the C-16 connector to the vehicle outer side (1) away from the original position (2) and attach it in place with the plastic tie straps (in Repair Kit).

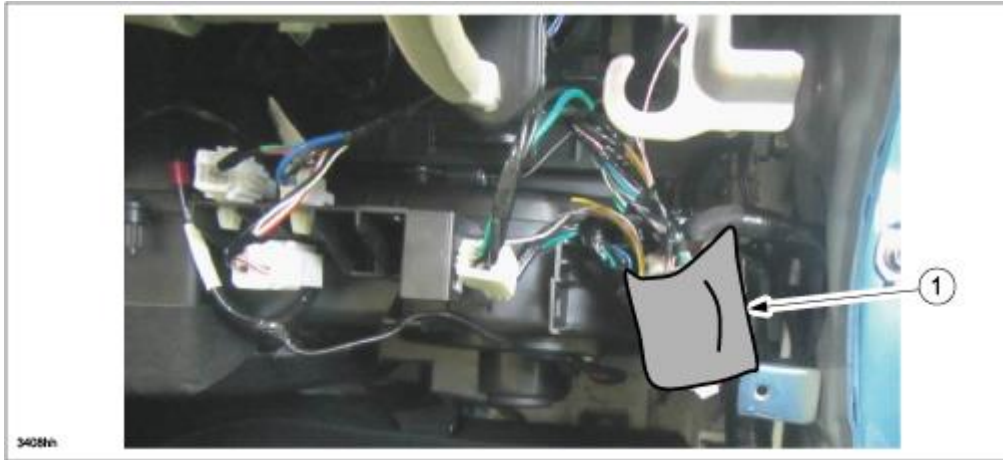


a. Secure the C-16 connector (1) and the short connector (2) to the existing vehicle harnesses with the plastic tie straps (in Repair Kit) (C). Cut off the excess portion of the straps.



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b. Attach the urethane pad (1) (in Repair Kit) over the C-16 and the short connectors for noise prevention.

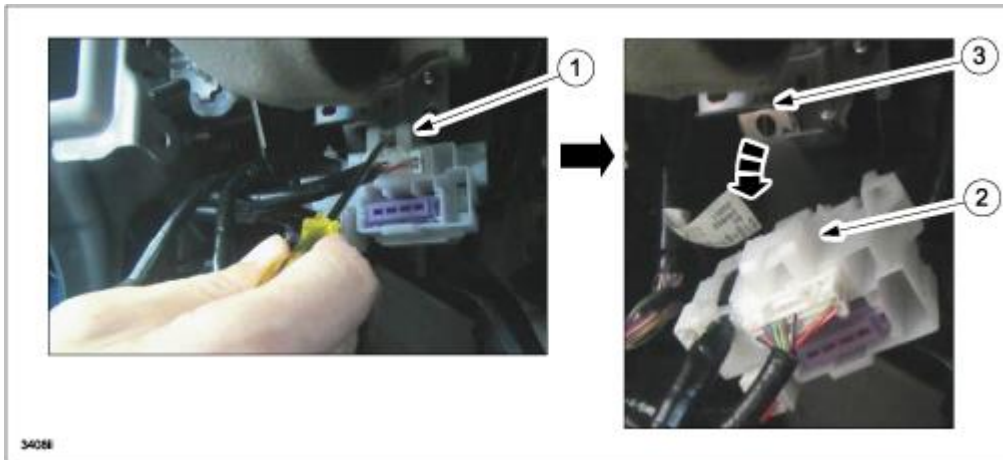


8. Install the passenger-side lower panel according to the instructions on MGSS (PASSENGER-SIDE LOWER PANEL REMOVAL/INSTALLATION).

9. Remove the driver-side lower panel according to the instructions on MGSS (DRIVER-SIDE LOWER PANEL REMOVAL/INSTALLATION).

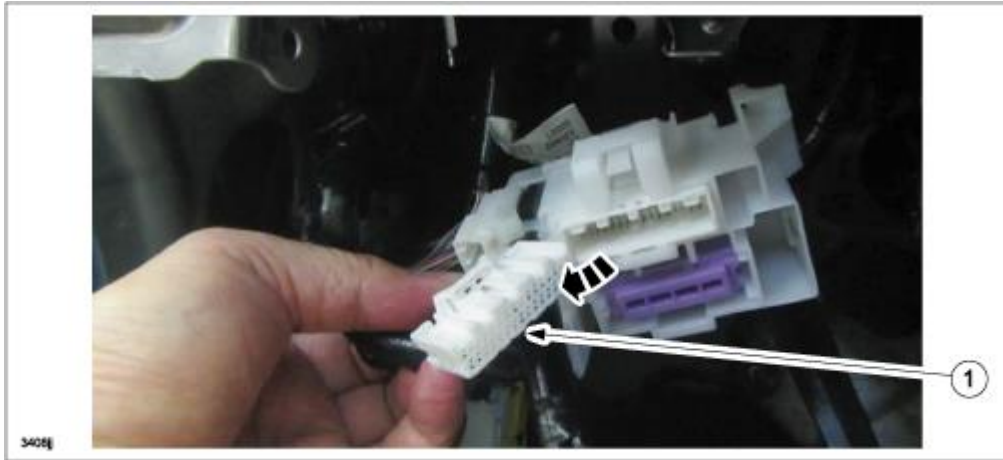
10. Remove the C-04 connector.

a. Prying up the lock (1) with a flat-head screw driver, slide out the united connectors (2) from the bracket (3).

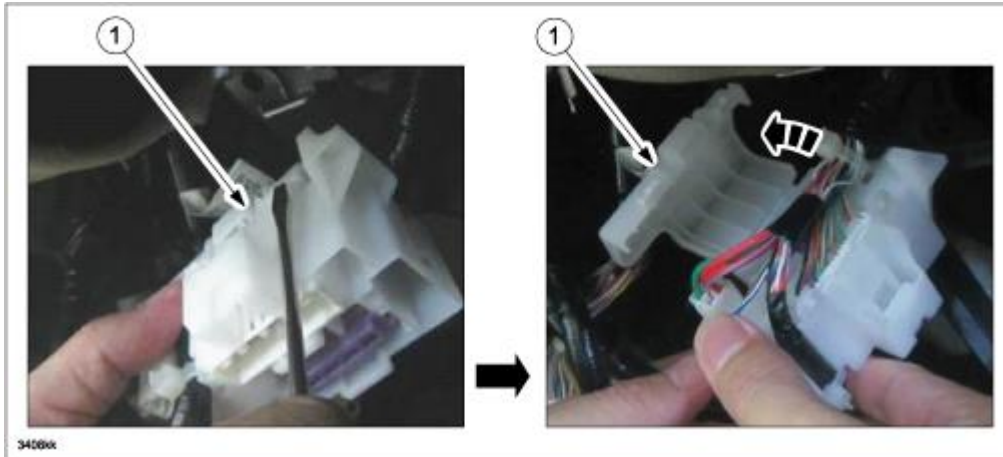


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b. Remove the C-04 female connector (1).

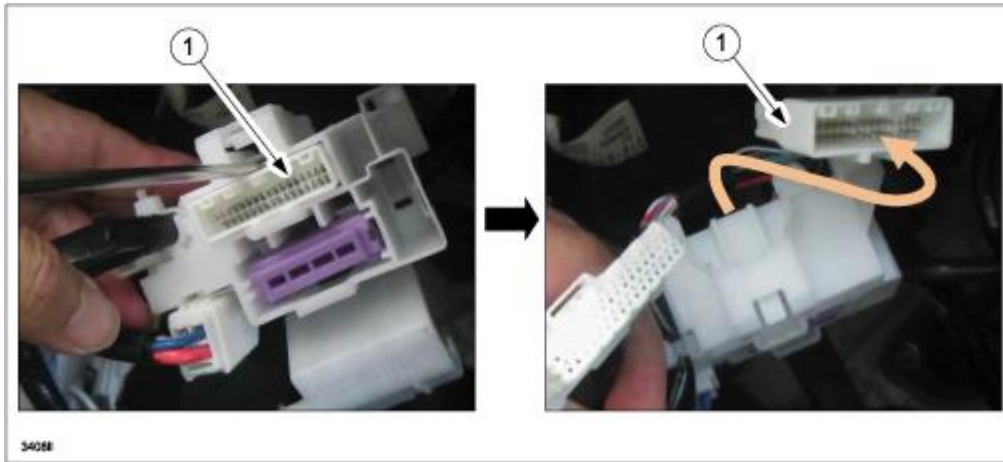


c. Open the back cover (1) of the united connectors.

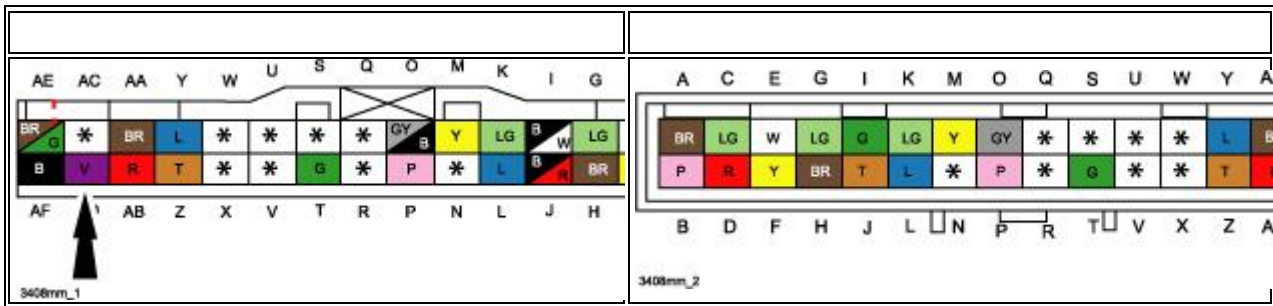


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d. While prying up the lock with a flat-head screw driver, slide out the C-04 male connector (A).



11. Inspect the terminals of the C-04 connector for any sign of corrosion.



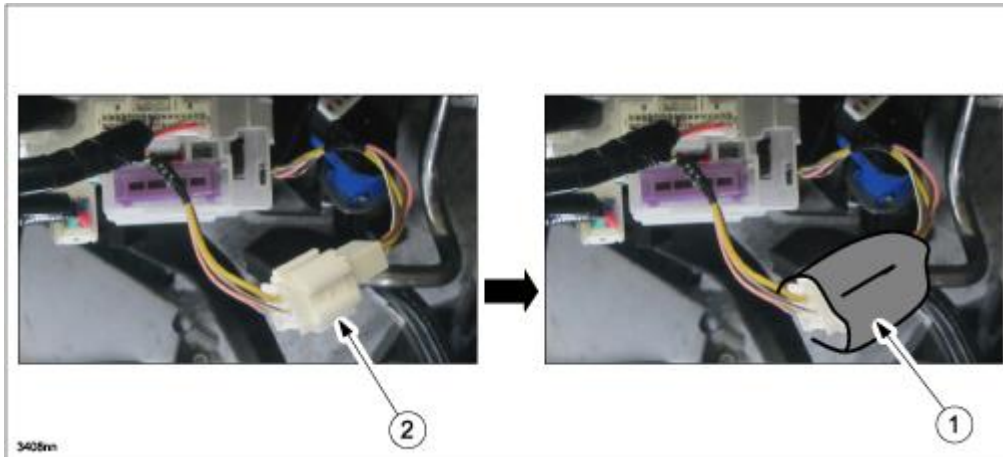
12. Cut and connect wires with the corroded terminal using the same procedure of step 5 for the C-16 connector.

13. Apply grease to the C-04 connector using the same procedure as step 6 for the C-16 connector.

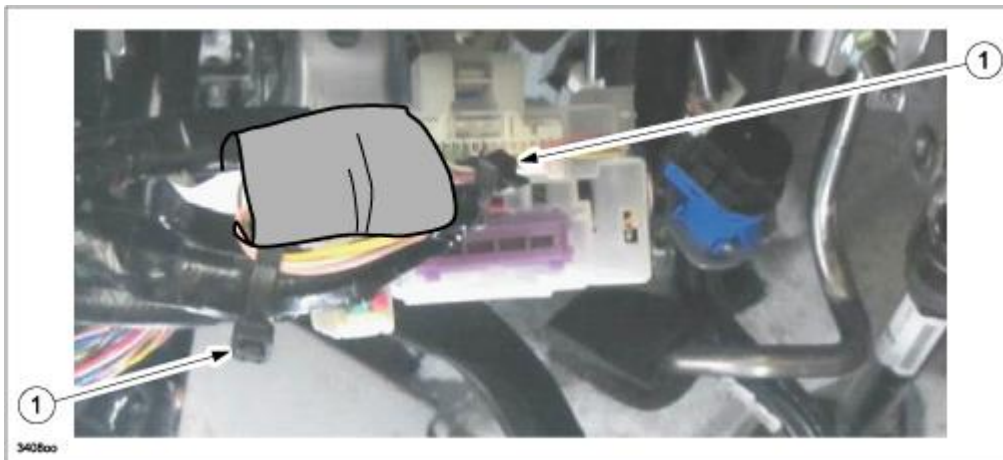
14. Install the C-04 in the reverse order of removal.

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15. Attach the urethane pad (1) (in Repair Kit) over the short connector (2).



16. Attach the short connector with plastic tie straps (1) and cut off excess portion of straps.



17. Install the driver's-side lower panel according to the instructions on MGSS (DRIVER-SIDE LOWER PANEL REMOVAL/INSTALLATION).

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**PARTS INFORMATION**

Parts Number	Description	Qty.	Notes
NAY1-67-SH0	Repair Kit	1	--

**WARRANTY INFORMATION****NOTE:**

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- This repair will be covered under Mazda's New Vehicle Limited Warranty term.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	01
Symptom Code	99
Damage Code	
Part Number Main Cause	NAY1-67-SH0
Quantity	1 (For Case 1 and 2), 0 (For Case 3)
Operation Number / Labor Hours:	<p>CASE 1: Terminal repair was performed for one side (C16 or C04 connector). XXN96ARX / 1.3 Hrs.</p> <p>CASE 2: Terminal repair was performed for both C16 and C04 connector. XXN96BRX / 1.8 Hrs.</p> <p>CASE 3: Grease application on C16 and C04 and location change of C16 were performed. Terminal repair was not performed for both connectors. XXN96GRX / 0.7 Hrs.</p>

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