

MODEL:	TYPE:	SECTION/GROUP:	DATE:
J4500 Series	Field Change Program	07- Electrical	April 18, 2018

Ref. MCI NHTSA Recall No.:18V-223

Ref. MCI Transport Canada Recall No.:2018-170

Customer Complaint:

Motor Coach Industries (“MCI”) has become aware that the wiring of the left hand tail light harness may come in contact with the coolant surge tank, potentially causing the engine low coolant light in the instrument panel to flash, and/or shorting out the tail light circuit and causing the left hand tail lights not to function. The low coolant light flashing is a false indication to the operator that a low coolant issue may exist.

Cause:

The left hand tail light wires were routed too close to the coolant surge tank support bracket.

Corrective Action:

MCI strongly urges owners of the affected coaches to have the following procedure (26-07-0162) performed as soon as possible.



Read this entire procedure before beginning work.

Use Safe Shop Practices At All Times.

To avoid personal injury:

- a. Turn the main battery disconnect switch to the OFF position.***
- b. Ensure that both the front and the rear wheels are chocked.***
- c. Position the ENGINE RUN and ENGINE START switches on the engine compartment remote control box to the OFF position.***
- d. Allow enough time for components to cool down prior to working in the engine compartment.***

REV	ECN	BY	CHK	APP	DATE	REVISION
A	68803	RP	MT	IA	01DE17	Initial Release by CSE Team

1.0 Scope

On the model year 2018 J4500, there is a potential for the wiring of the left rear tail lamp harness to contact the engine coolant surge tank. This field rework identifies the necessary procedure for rerouting the wiring harness and, if the wiring was damaged due to rubbing the surge tank, the procedure outlines the steps for repairing the wiring.

2.0 Material requirements

ITEM	PART NO.	QTY	U/M	DESCRIPTION
1	19-11-1465	4	IN	HEAT SHRINK-4-1
2	19-11-3473	1	EA	CABLE TIE - EDGE CLIP, SIDE, .06-.12THK
3	24-54-0037	4	IN	LOOM CORR - .25
4	26-07-0162	1	EA	REWORK INSTRUCTIONS-LH TAIL LIGHT PLUG ROUTE UPDATE

3.0 Reference documents

Document Number	Description
25-07-0013	MCI Standard for Heat Shrink Tubing

4.0 Special Tools.

NONE

5.0 Rework Instruction

5.1 Inspection

Remove the left rear directional lamp assembly from the housing to access the electrical connector labeled "EC-P543". Disconnect connector and set lamp assembly to the side.



Carefully inspect each of the wires for any damage due to rubbing on the sharp edge of the coolant surge tank. If any damage is found as shown in the picture below, proceed to step 5.2. If during the inspection no damage is observed, proceed to step 5.3.



5.2 Repair the damaged wire

Identify the damaged wire and unload it from the connector using the correct terminal release tool (refer to the appendix for more details). Place a piece of shrink tube (PN 1911-1465) over the damaged portion of the wire, and ensure that the damaged area is covered on both sides by at least a ¼" (6.35 mm) of heat shrink.



Picture for illustration purposes only.

5.3 Update the harness routing

Install the ¼" diameter slit conduit (PN 25-54-0037) over the exposed wires. Position the conduit so that the bottom of the edge is positioned just above the existing conduit on the harness; then apply electrical tape to close the loom.



Install end clip wire tie (PN 19-11-3473) on the harness and secure to the edge of the coolant surge tank as shown below. Trim off wire tie end after securing around the harness.



6.0 Testing and Validation

Reconnect left rear tail lamp connector to tail lamp assembly and reinstall in the housing. Test functionality of all rear lights.

7.0 Appendix

7.1 Heat Shrink Application based on MCI Standard 25-07-0013:

Selecting the proper size

Always select the largest size of tubing that will fit snugly after shrinking, according to the shrink ratio of the product being used. For products with a 2:1 shrink ratio, select a tube with approximately twice the diameter. To allow for a tight fit, the tubing's recovered diameter (diameter after shrinking) must be less than the smallest diameter of the area to be insulated. The expanded diameter (diameter before shrinking) must be large enough to pass over the existing insulation and/or other connectors.

Determining the proper length

The tubing length should allow for a minimum overlap of ¼ inch (6.35 mm) over the existing insulation or connector after shrinking. Allow for 10 percent shrinkage in the axial (cable) direction. If cutting is required, use a clean, square cut to avoid splitting.

Heating the tube

Shrink the tube using a hot air gun. See individual tubing specifications for recommended heating temperature. Apply heat evenly over the length and the outer diameter of the tubing until the heat shrink conforms to the shape of the splice. Remove the heat shrink from the heat source immediately. Allow the tubing to cool before applying physical stress. Note: Overheating will cause the tubing to char or become brittle.

7.2 Unloading a wire from a connector

The connector is a 3 wire, Delphi weather pack style. Remove the red terminal retainer from the front of the connector. Obtain the correct Delphi Terminal release tool and insert into the terminal retainer slot in the connector. Carefully lift the terminal retainer and slide the terminal and wire from the rear of the connector.





Field Change Program Conditions:

The parts required for this change will be supplied without charge.

A labor allowance of 0.5 hour will be granted for this rework on affected J series coaches.

This labor allowance will be credited to your MCI Fleet Support Parts Account on receipt by MCI's Warranty department of the attached "MCI Field Change Program Verification Form" and a "Warranty Claim Form" as detailed in your Owner Warranty manual. An "MCI Field Change Program Verification Form" needs to be submitted for each VIN affected. Photocopy the attached "MCI Field Change Program Verification Form" as required for the number of affected coaches in your fleet.

Motor Coach apologizes for any inconvenience resulting from this campaign, but urges you to implement this change as soon as possible.

Sincerely,

Motor Coach Industries



MCI FIELD CHANGE PROGRAM (FCP) VERIFICATION

CONTACT INFORMATION	
CUSTOMER NAME: _____ <small>(PLEASE PRINT)</small>	
FCP INFORMATION – ONE FORM PER UNIT	
FCP#: _____ Coach Model _____ Model Year _____	
COACH SERIAL #: (At least the last 5 digits)	DATE COMPLETED __ / __ / __
MILEAGE:	
IMPORTANT: TO RECEIVE CREDIT FOR ANY ALLOWABLE LABOR CHARGES, THIS VERIFICATION FORM MUST BE RETURNED TO MCI UPON COMPLETION OF THE FCP.	
SUBMITTED BY: (Please Print) _____ DATE __ / __ / __	
TITLE: (Please Print) _____	
SIGNATURE: _____	
COMMENTS: 	

FAX TO: 800-360-8886



To receive credit for the hours used to complete this task mail or fax the completed limited warranty claim form and verification form to MCI's warranty department, or photocopy and mail to:

MCI Fleet Support

Attn: Warranty Department

7001 Universal Coach Drive Louisville, KY 40258

Fax Number 1-800-360-8886

Contact the MCI Fleet Support Technical Center at 1-800-241-2947 for any further information.



«CUST_NAME»
«ADDRESS_1»
«CITY», «STATE» «ZIP»
«COUNTRY»

Customer Name: «CUST_NAME»

Affected VIN List:

MODEL:	VIN:
«MODEL»	«UNIT»