Subject: MCC Evaporator Motor Replacement			
Field Change Program: Field Campaign	**FCP Number:** 483	**Revision:** A	**Date:** 08/05/2020
Coach Section: 16- Heating & A/C	**P/N:** 16-06-1622		**Type:** Product Integrity

Application:

Coach Model	Model Year	VIN
J4500	2019 - 2020	68983 - 68987, 68989 - 68999, 69001 - 69007, 69010, 69031 - 69036, 69038 - 69050, 69052 - 69058, 69061 - 69068, 69073, 69076 - 69080, 69082 - 69087, 69089, 69091 - 69093, 69095, 69097, 69098, 69100 - 69105, 69110 - 69113, 69115 - 69127, 69129, 69130, 69132 - 69134, 69136, 69138 - 69143, 69146 - 69168, 69170 - 69174, 69189 - 69193, 69195 - 69197, 69199 - 69214, 69217, 69218, 69220 - 69222, 69224 - 69227, 69229 - 69231, 69233, 69235 - 69238, 69240 - 69245, 69247 - 69249, 69251, 69254 - 69257, 69259 - 69262, 69264 - 69273, 69275 - 69278, 69280 - 69287, 69289, 69290, 69292, 69294 - 69302, 69304 - 69323, 69325 - 69331, 69333, 69335 - 69337, 69340 - 69342, 69344 - 69350, 69358, 69360 - 69363, 69365 - 69374, 69376, 69379 - 69384, 69386, 69388 - 69398, 69400 - 69408, 69412 - 69421, 69423 - 69431, 69433 - 69445, 69447, 69449, 69450, 69452, 69453, 69455 - 69471, 69473 - 69487, 69489 - 69518, 69531, 69532, 69535 - 69580, 69585 - 69668, 69670 - 69677, 69679, 69680, 69682 - 69685, 69687, 69688, 69692, 69701, 69706, 69708, 69714, 69715, 69723, 69733, 69735, 69738, 69739, 69748.
This field campaign does not necessarily apply to all the above-mentioned coaches. The owners of the coaches affected by this field campaign will be advised by a letter indicating the Vehicle Identification Number (VIN) of each coach concerned.		

WARNING

Read this entire procedure before beginning work.

Use Safe Shop Practices at All Times.

To avoid personal injury:

a. ***Proper Personal Protective Equipment (PPE) must be worn. Safety glasses and protective gloves are required for working with DEF Fluid.***
b. ***Turn the main battery disconnect switch to the OFF position.***
c. ***Ensure that both the front and the rear wheels are chocked.***
d. ***Position the ENGINE RUN and ENGINE START switches on the engine compartment remote control box to the OFF position.***
e. ***Allow enough time for components to cool down prior to working in the engine compartment.***

1.0 Description

Customer complaint:

Mobile Climate Controls (“MCC”) has informed Motor Coach Industries (“MCI”) that certain new style evaporator motors supplied by MCC for MCI J4500 coaches may have inadequate electrical contacts at the main circuit board, which could result in premature failure of the motor.

Cause:

MCC advises that certain motors have been found to have inadequate electrical contacts at the main circuit board that may degrade rapidly once the motor is put in service.

Corrective action:

MCI recommends that owners of the affected coaches contact MCC for a replacement motor and to have the following procedure performed as soon as possible.

2.0 Material requirements

ITEM	MCC PART No	MCI PART NO	QTY	U/M	DESCRIPTION
1	25-3237	16-06-1546	1	EA	Evaporator Motor - 24V

To obtain a replacement motor, please contact MCC by sending an email to Willie Aningalan at willie.aningalan@mcc-hvac.com and request shipment of a replacement motor to your address.

3.0 Special tools

Thread locker (Vendor: Loctite, VPN: 243)

Flexible foil tape (Vendor: 3M, VPN: 3350)

Anti-seize lubricant (Vendor: Permatex, VPN: 80078)

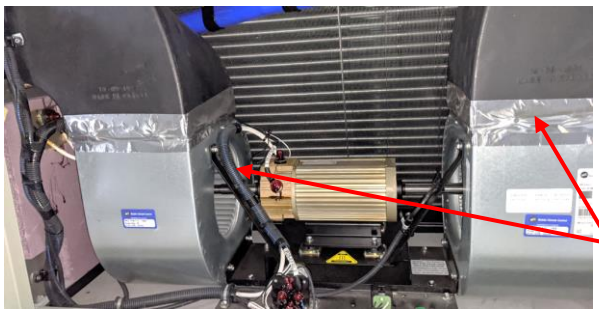
Hub Puller (Vendor: Supco, VPN: FBP100)

Corrosion inhibitor, MCI P/N: 23-02-0119 (Vendor: CRC VPN: SP 400)

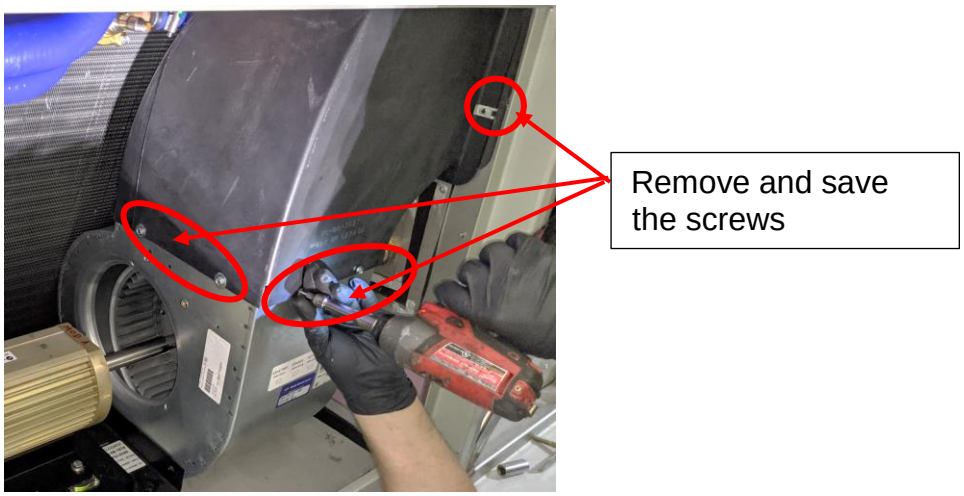
4.0 Removing the existing motor

Remove the evaporator door in the Baggage Bay #3 compartment.

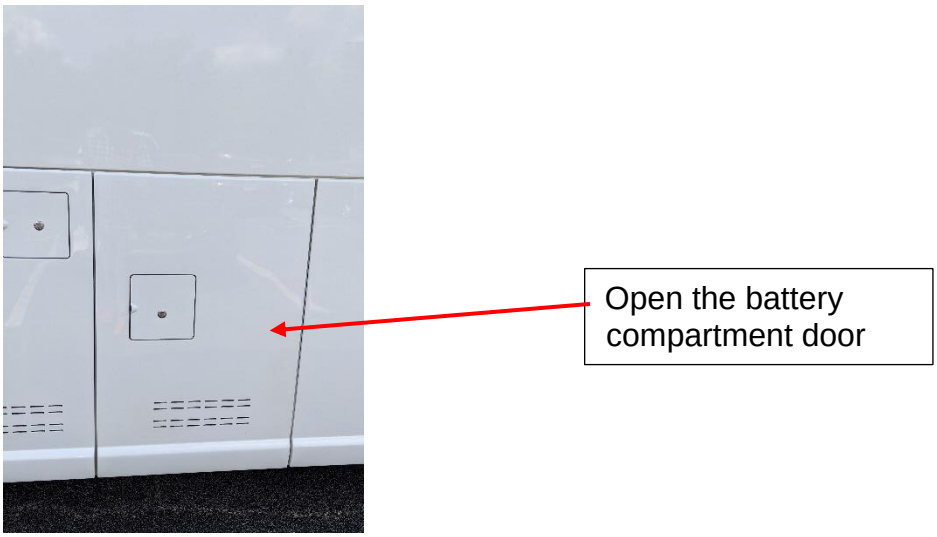
Remove and discard the flexible foil tape on the blower housings.



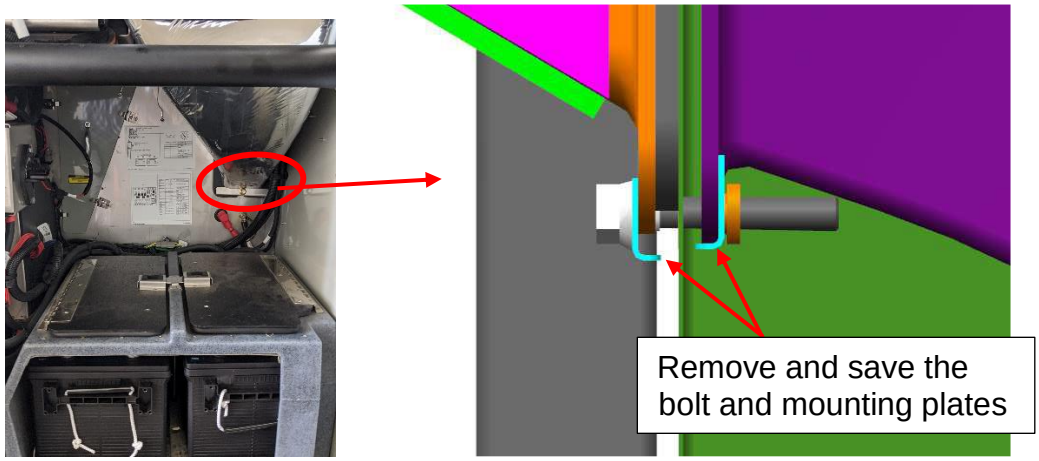
Remove and save the five screws securing the left-hand and right-hand transition ducts.



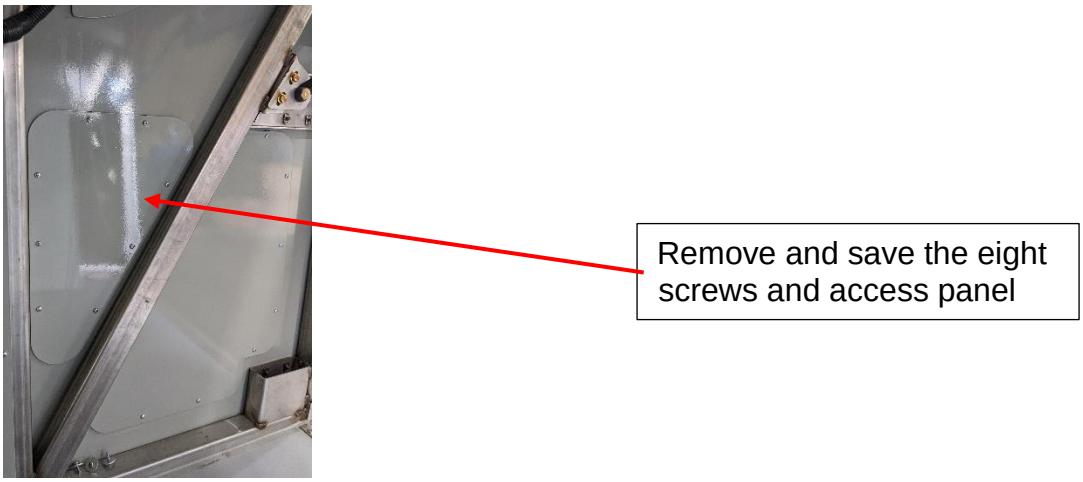
Open the battery compartment door.



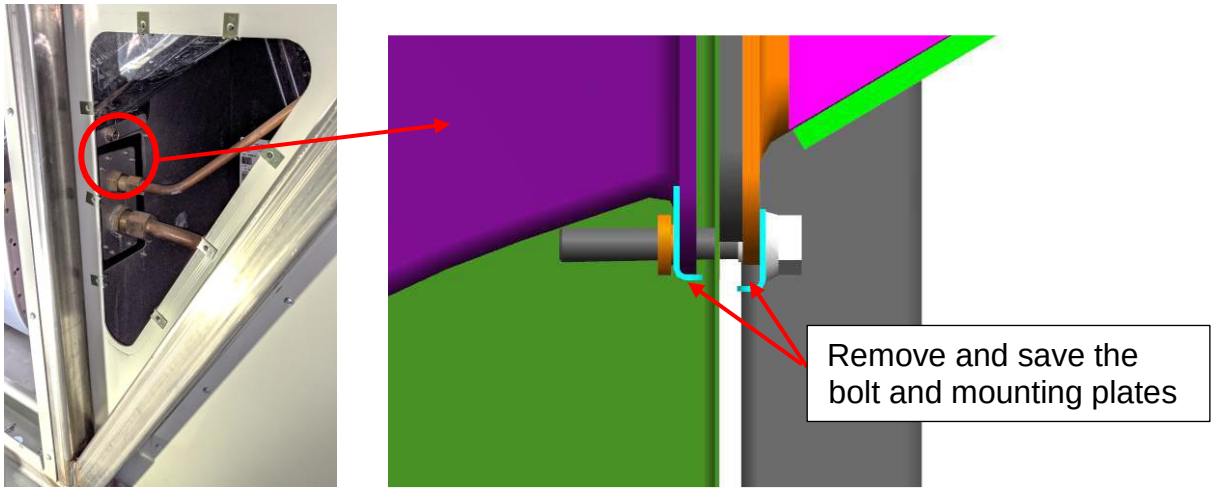
Remove and save the bolt securing the LH transition duct mounting plates (one in the battery compartment and the other in evap compartment). Save the mounting plates.



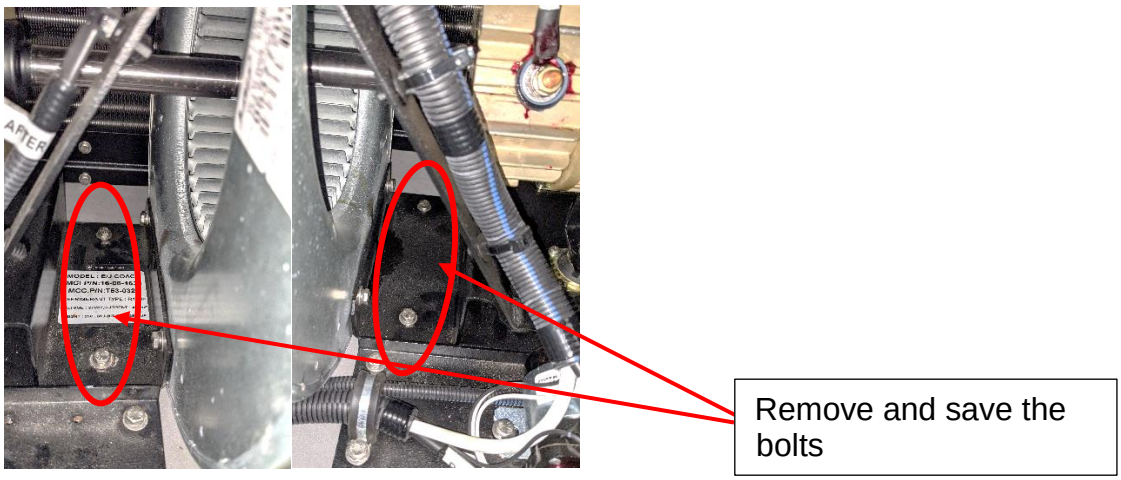
Remove and save the eight screws securing the condenser compartment access panel located in the street-side of Baggage Bay 3. Save the access panel.



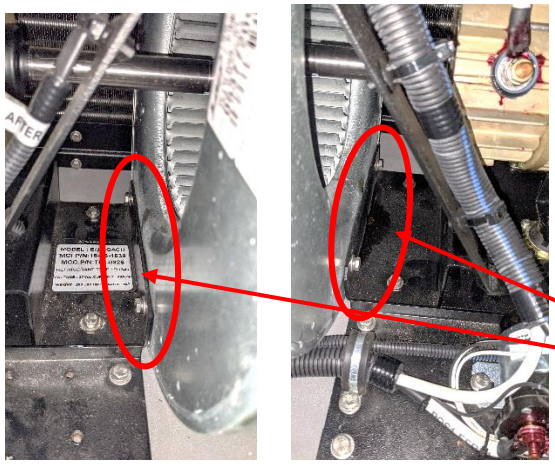
Remove and save the bolt securing the RH transition duct mounting plates (one in the condenser compartment and the other in evap compartment. Save the mounting plates.



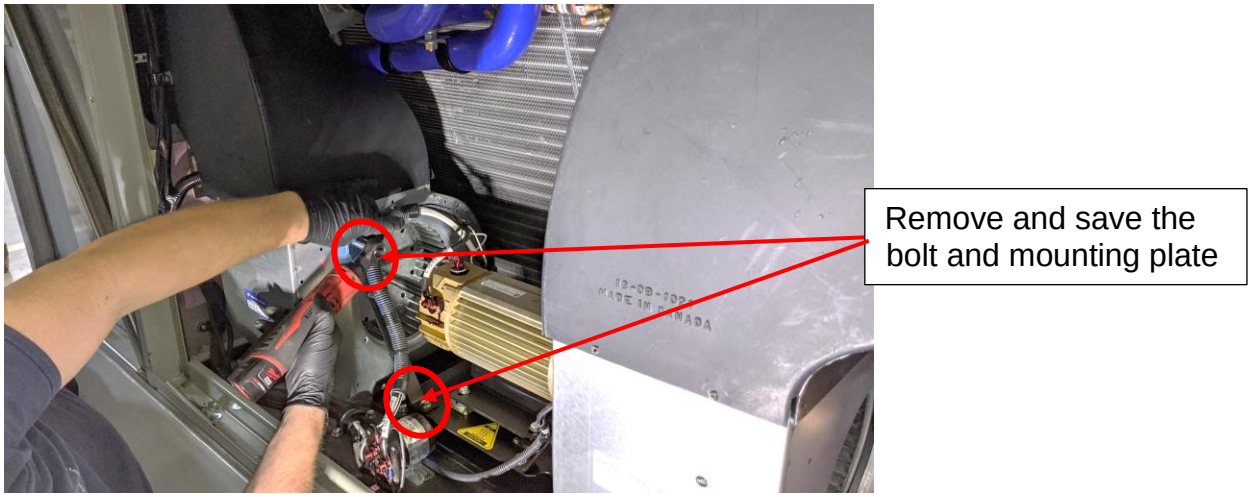
Remove and save the four bolts securing the blower assembly to the mounting base.



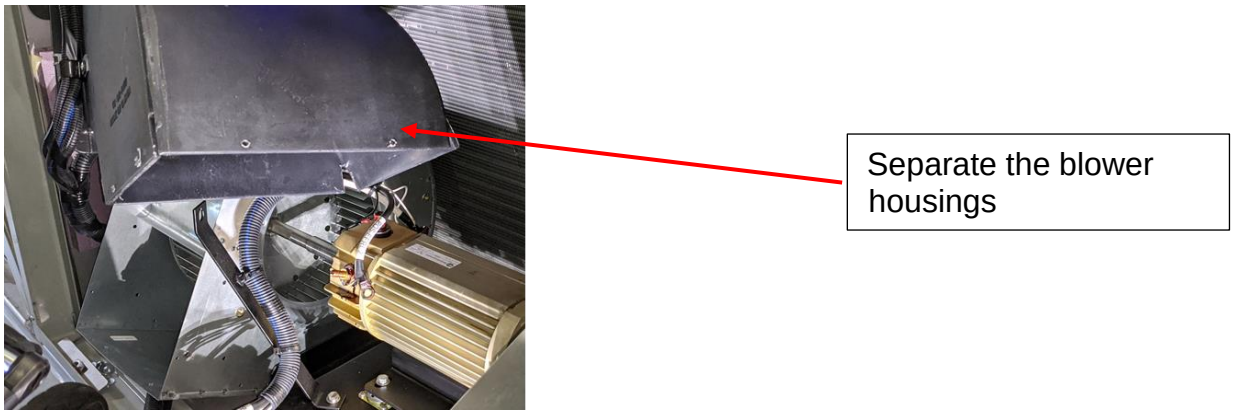
Remove and save the four bolts securing the LH and RH blower to the blower assembly base.



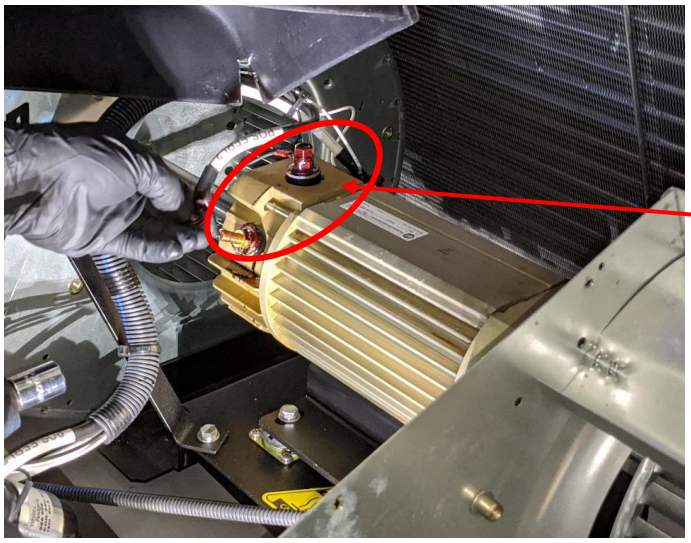
Remove and save the four bolts securing the blower housing supports to the blowers. Save the blower housing supports.



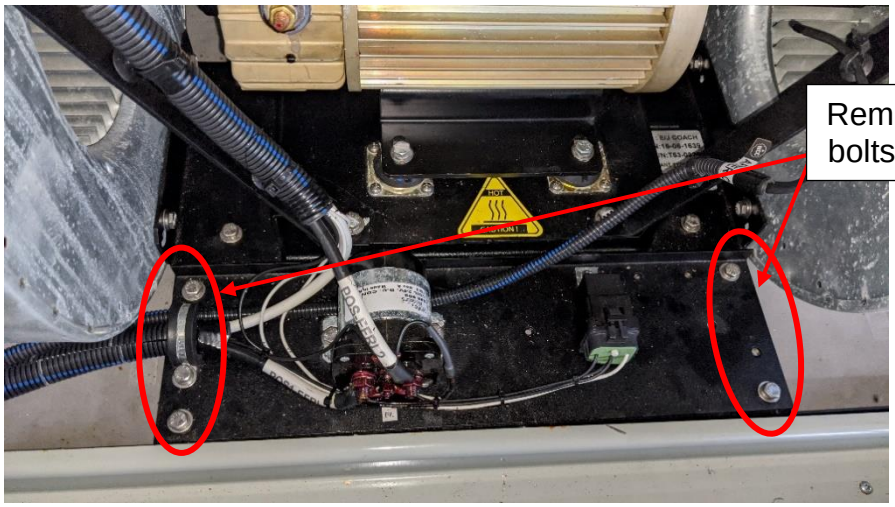
Separate the blower housings from the transition ducts.



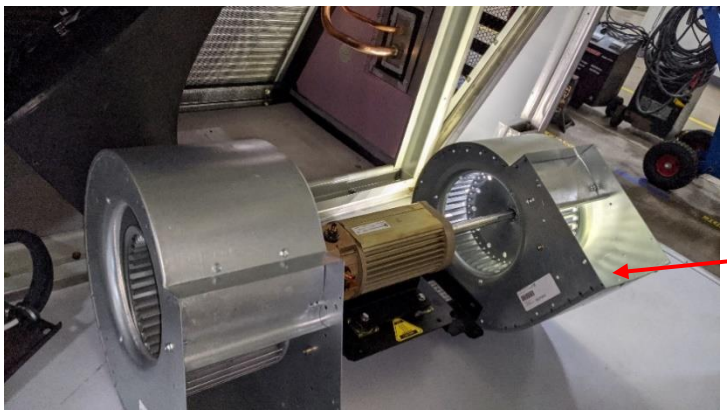
Disconnect the power, ground, and speed control wires on the evaporator motor. Save the nuts. Ensure to hold the nut below the ring terminal with a wrench.



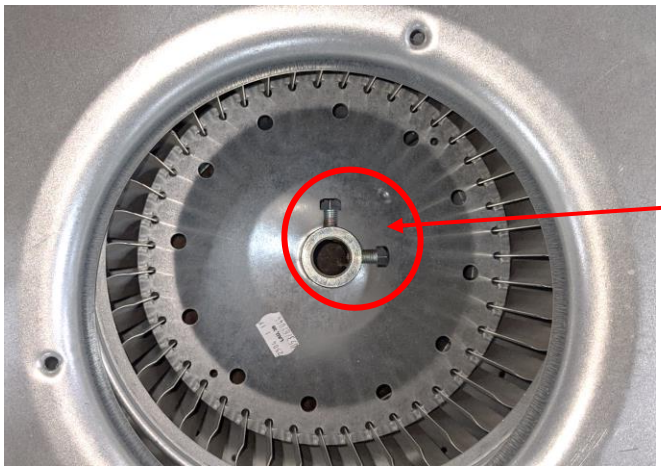
Remove and save the four bolts securing the relay base plate.



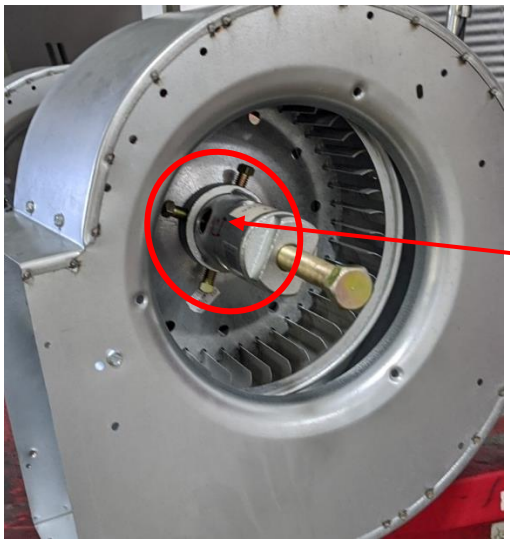
Carefully remove the motor assembly from Baggage Bay 3 and place the assembly on a workbench.



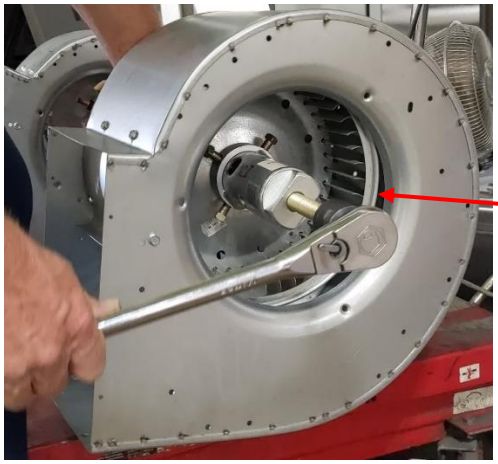
Remove and save the set screws on both blowers. Ensure to mark the left-hand and right-hand blower before removing the set screws.



Secure the hub puller to the LH blower shaft using the three set screws as shown below.

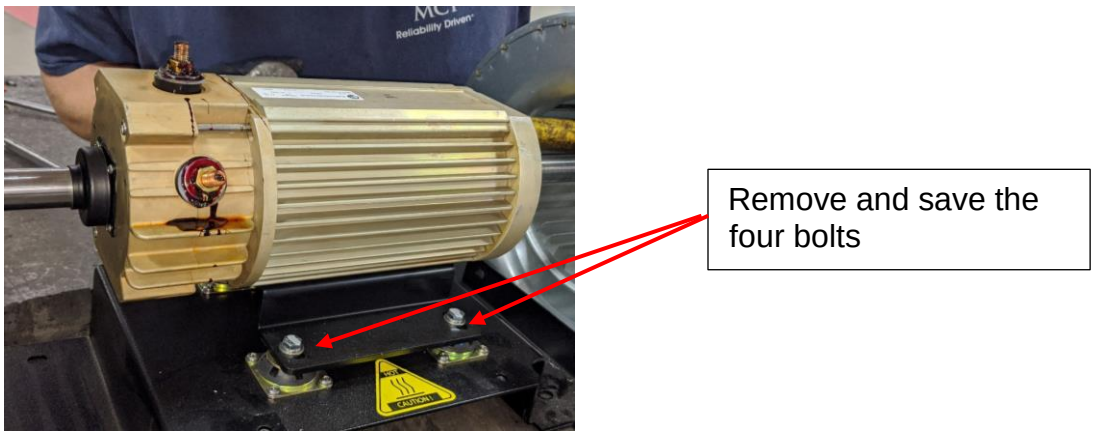


Remove the LH blower by slowly tightening the bolt on the hub puller.



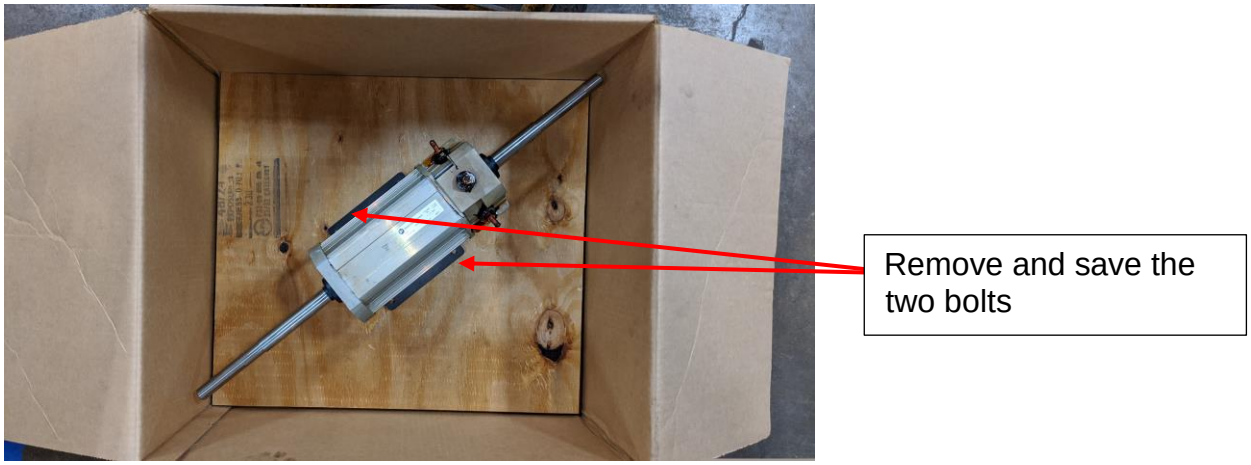
Repeat the steps on the RH blower assembly.

Remove and save the four bolts securing the motor to the mounting bracket and set the motor aside.

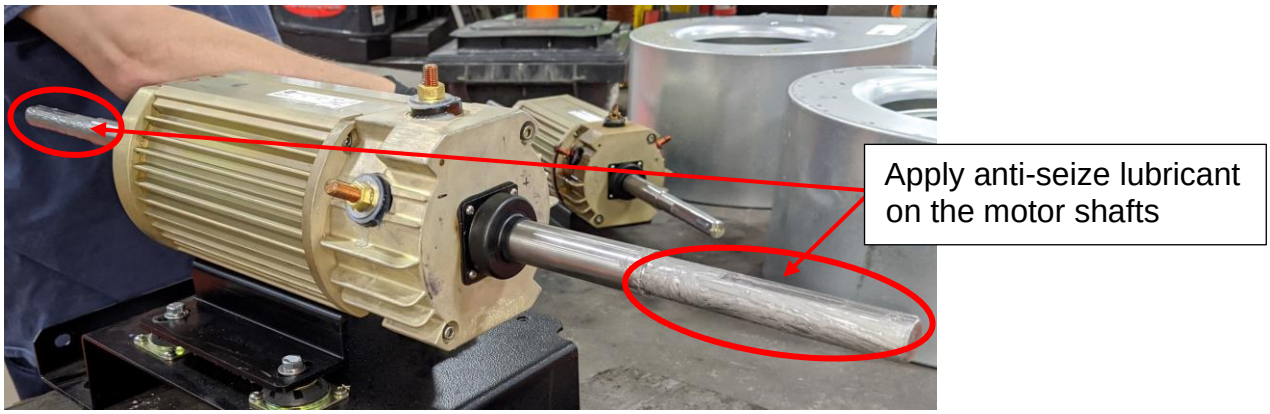


5.0 Installing new evaporator motor

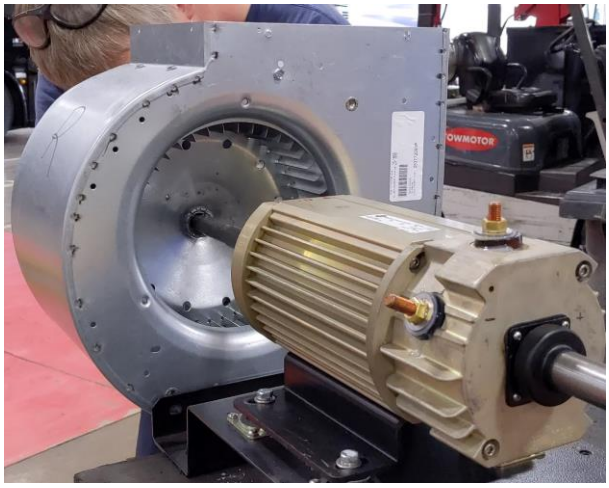
Remove and save the two bolts securing the new motor in shipping box.

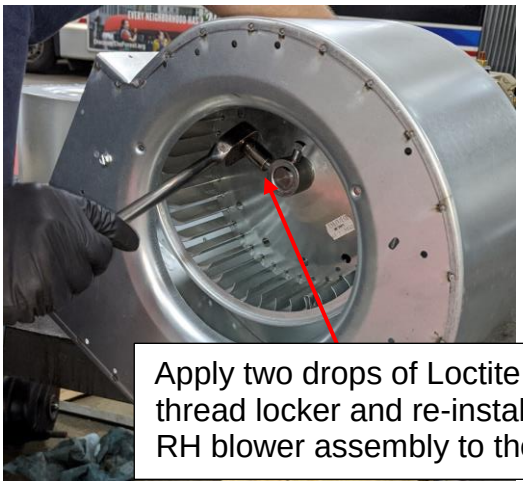


Place the new motor on the workbench. Apply Permatex anti-seize lubricant on the motor shafts.



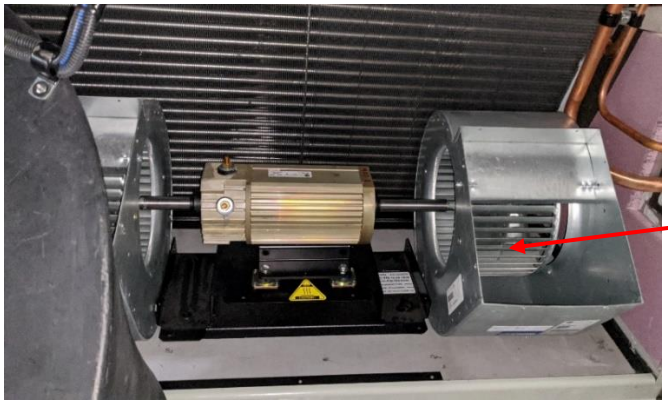
Apply two drops of Loctite 243 thread locker to the existing set screws and re-install the RH blower assembly to the shaft away from the ground and power studs. Repeat the steps to secure the LH blower to the motor shaft. Torque the set screws to 150 In-Lb.





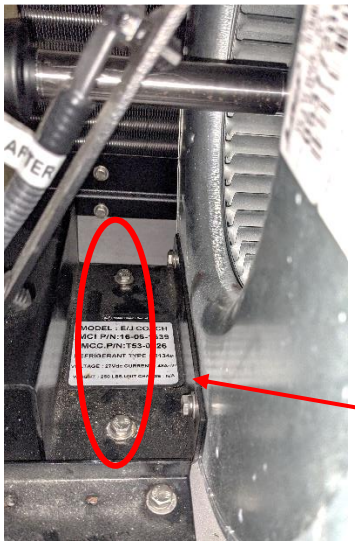
Apply two drops of Loctite 243 thread locker and re-install the RH blower assembly to the shaft

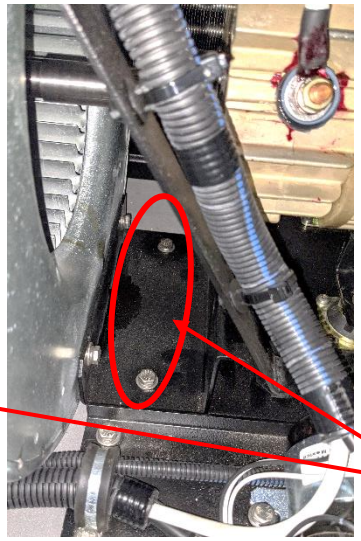
Place the motor assembly in the evaporator compartment.



Place the motor assembly in the evaporator

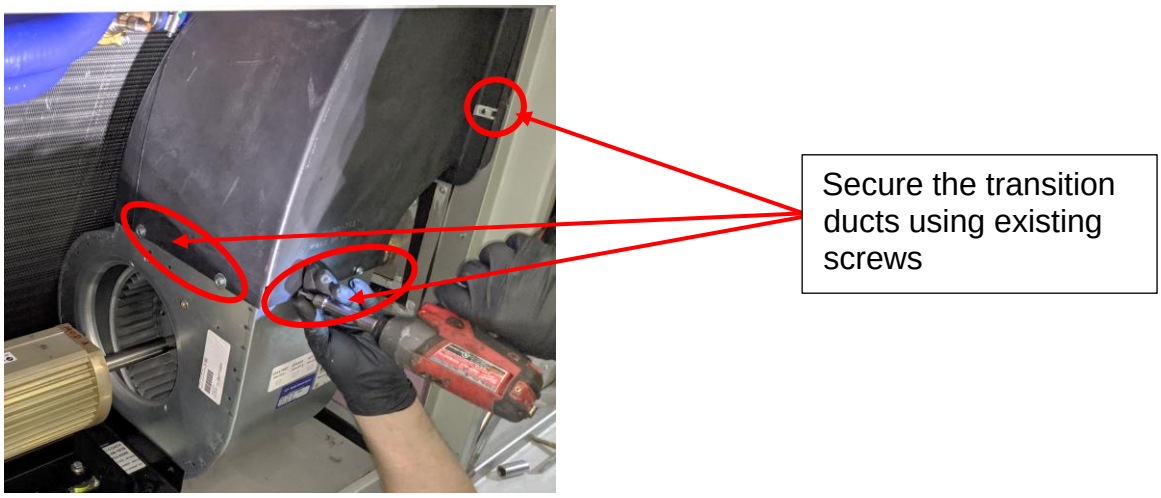
Apply two drops of Loctite 243 to the existing bolts and re-install mounting base assembly to the coach. Torque the bolts to 75 In-Lb.



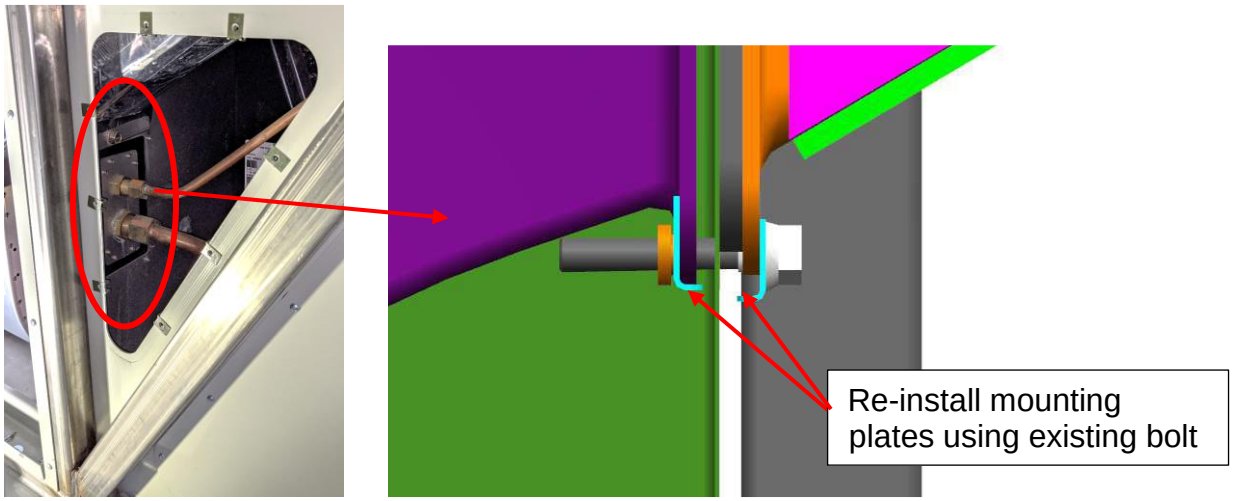


Re-install mounting base assembly to the coach

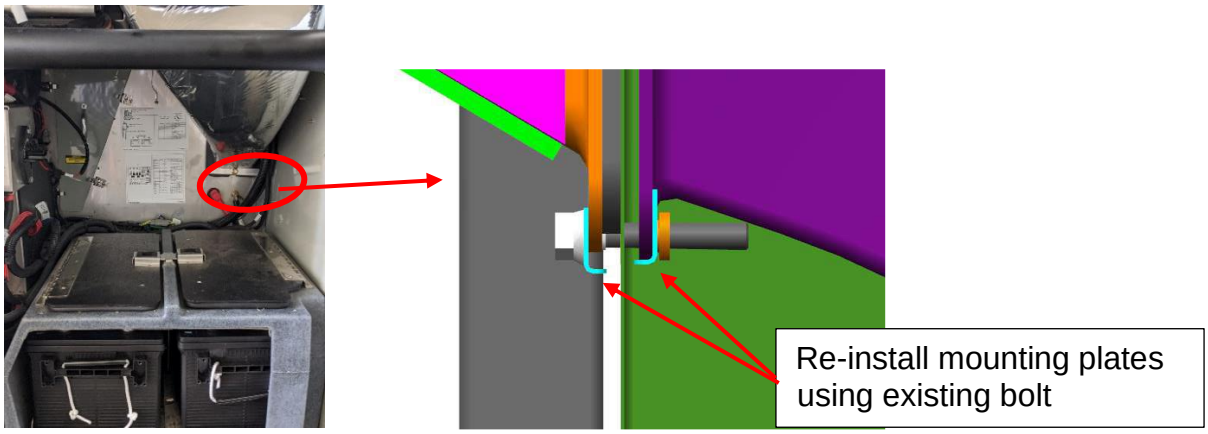
Connect the left-hand and right-hand blower housing to the transition ducts. Secure the transition ducts to the blower housing using ten existing screws (5 on each side).



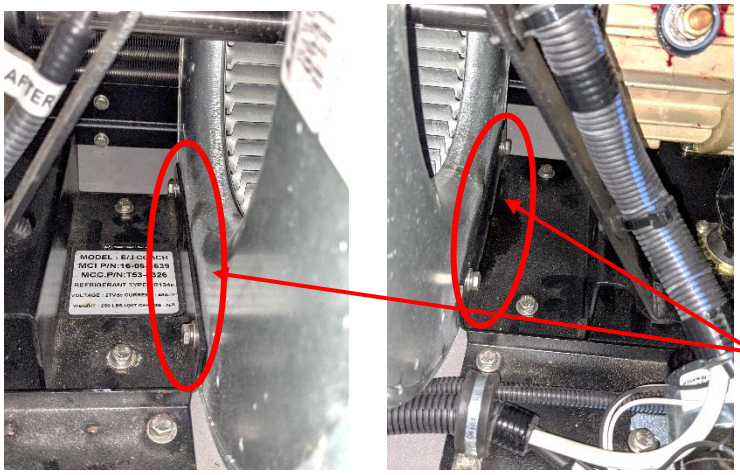
Re-install the RH transition duct mounting plate using existing bolt. Ensure the flange of both mounting plates is at the bottom.



Re-install the LH transition duct mounting plates using existing bolt. Ensure the flange of both mounting plates is at the bottom.

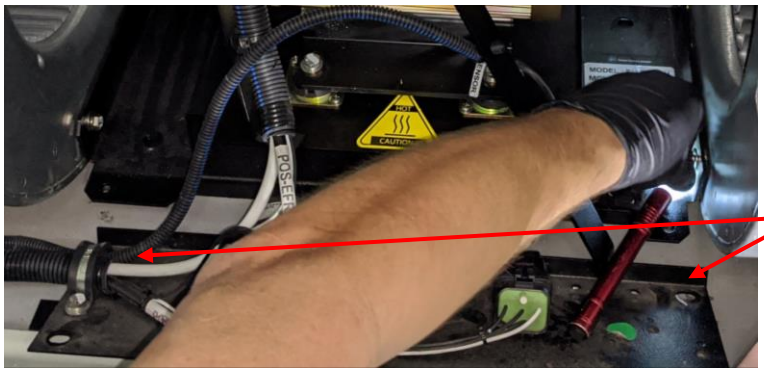


Apply two drops of Loctite 243 to the existing bolts and secure the blower housings to the mounting base assembly (2 on each side). Torque the bolts to 75 In-Lb.



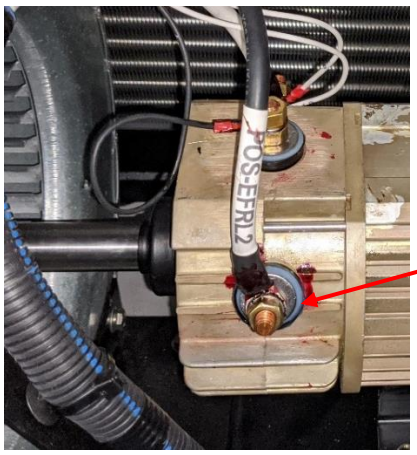
Apply two drops of Loctite 243 to the existing bolts and re-install the two blower housing support mounts to the mounting base assembly. Torque the bolts to 75 In-Lb.

Apply two drops of Loctite 243 to the existing bolts and re-install the relay base plate to the coach. Torque the bolts to 75 In-Lb.



Clean the mounting nuts, ring terminals on all the wires and cables with isopropyl alcohol to get rid of the hi tack adhesive.

Connect the speed control cable, labeled: POS-EFRL2, to the outboard stud using existing nut and torque the nut to 50 In-Lb. Hold the bottom nut with a wrench while tightening the top nut.



Connect the cable POS-EFRL2 to the outboard stud

NOTICE

CAUTION

Failure to hold the bottom nut with a wrench while tightening the top nut may result in loose connection.

Connect the black power wire to the middle stud using existing nut and torque the nut to 50 In-Lb. Hold the bottom nut with a wrench while tightening the top nut.

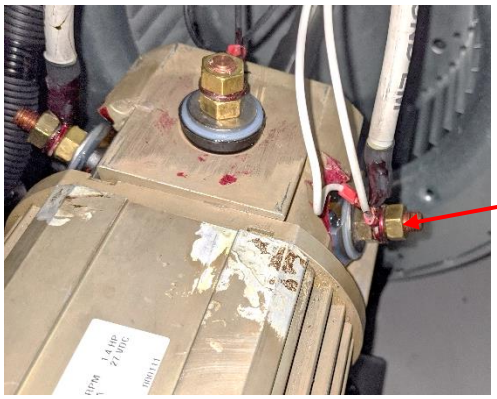
Connect the black power wire to the middle stud

NOTICE

CAUTION

Failure to hold the bottom nut with a wrench while tightening the top nut may result in loose connection.

Connect the white ground wires and cable to the inboard stud using existing nut and torque the nut to 50 In-Lb. Hold the bottom nut with a wrench while tightening the top nut.

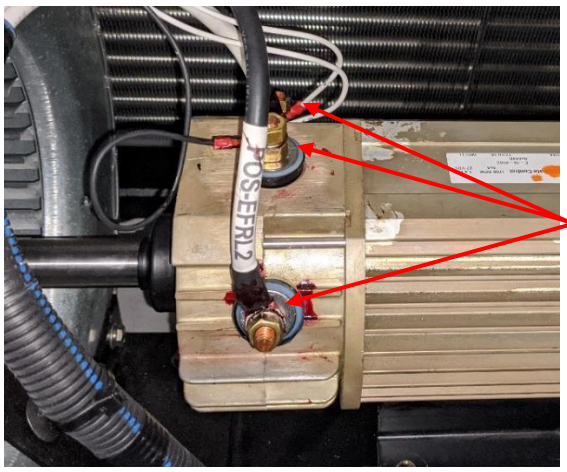


NOTICE

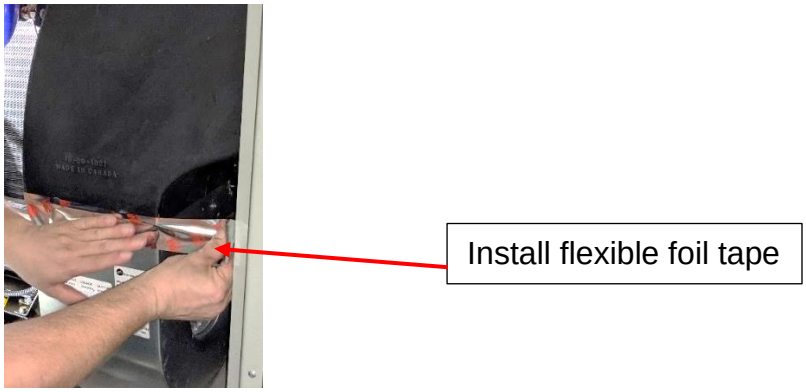
CAUTION

Failure to hold the bottom nut with a wrench while tightening the top nut may result in loose connection.

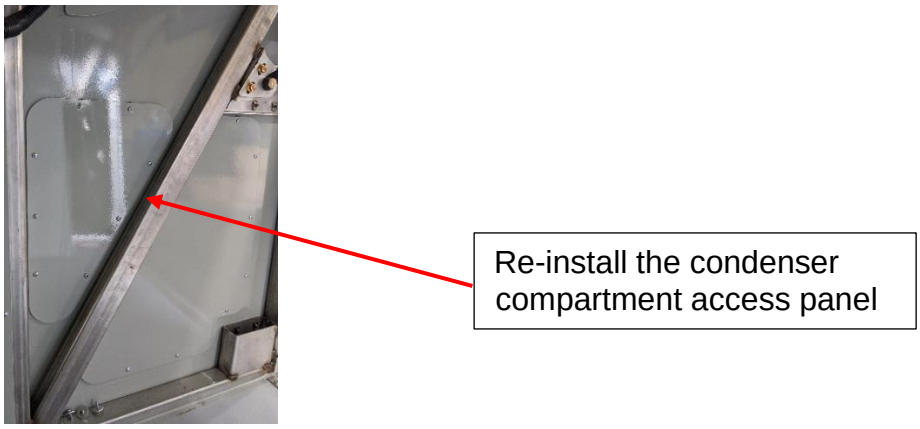
Spray corrosion inhibitor, MCI P/N: 23-02-0119, on all the studs.



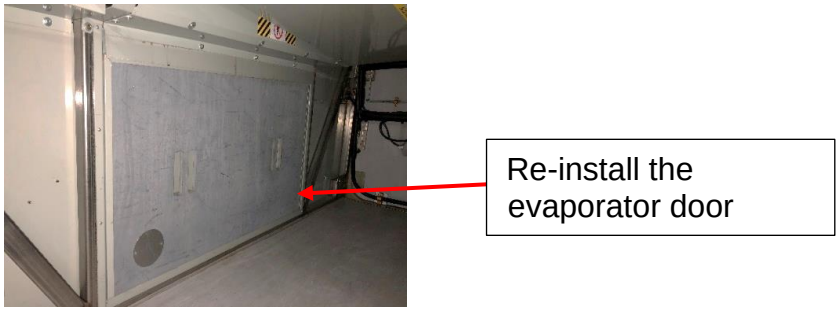
Place 3M 3350 flexible foil tape to connect the blower housings and transition ducts.



Re-install the condenser compartment access panel using existing screws.



Re-install the evaporator door.



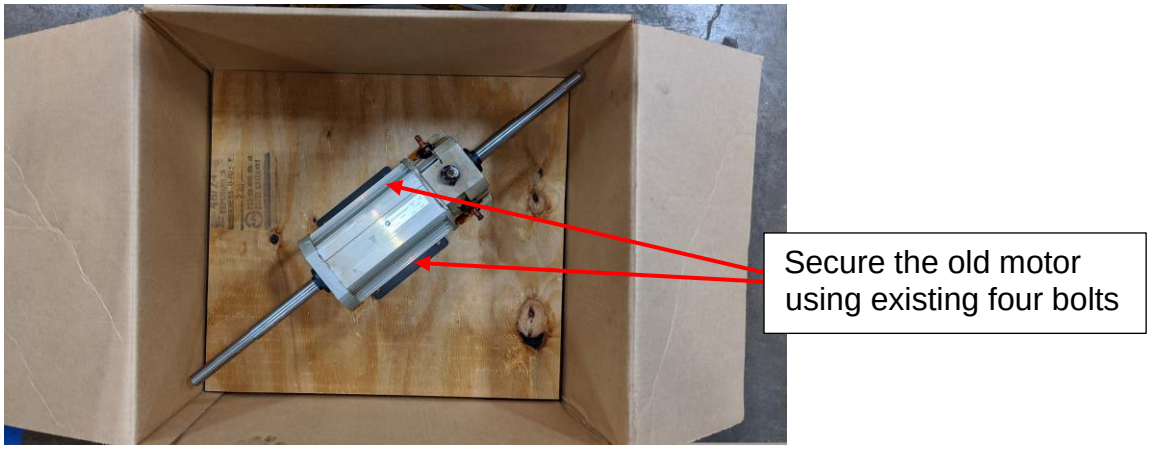
6.0 Testing

Turn on the main disconnect switch in the battery compartment.

Turn on engine and set HVAC to 60° F. Run the HVAC for 5 minutes and ensure the HVAC system runs without any issues.

7.0 Shipping the old evaporator motor

Secure the old evaporator motor in the shipping box using existing four bolts.



Place the packaging inside the shipping box as it was received.

NOTICE

CAUTION

Failure to ship the motor as shown above may result in warranty claim denial.

Ship the box to the following address:

Ametek Dynamic Fluid Solutions

Attention: Laura Davis

Dept: Engineering

100 E. Erie St, Suite 200,

Kent, OH-44240

Phone number: (330) 877-3851

8.0 Field Change Program Conditions:

The replacement motor required for this change will be supplied without charge.

A labor allowance of 2.5 hours will be granted for the rework.

This labor allowance will be credited to your MCI Fleet Support Parts Account on receipt of the attached “MCI Field Change Program Verification Form” and a “Warranty Claim Form” as detailed in your Owner Warranty manual to MCI’s Warranty department. A “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.

This program will end on 08/04/2021.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

8.1 MCI FIELD CHANGE PROGRAM (FCP) VERIFICATION

CONTACT INFORMATION	
CUSTOMER NAME: _____ (PLEASE PRINT)	
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

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

To receive credit for the hours used to complete this task. Contact the MCI Fleet Support Technical Center at 1-800-241-2947 for any further information.