

October 2024
SF708 A-B
(Revised November 2024)

Subject: eCascadia & eM2 Electric Refrigerant Compressor

Models Affected: Specific model years 2024-2025 Freightliner eCascadia and eM2 vehicles, manufactured November 14, 2023, through May 15, 2024.

General Information

REVISION: Instructions for swapping the bracket from the old chiller to the new chiller have been added.

Daimler Truck North America LLC (DTNA), on behalf of its Freightliner Trucks Division, is initiating Field Service Campaign SF708 to modify the vehicles mentioned above.

On certain vehicles, due to an equipment issue at the manufacturing plant, refrigerant oil may not have been injected into the A/C system.

The following parts will be replaced: A/C compressor, condenser, receiver/dryer, evaporator, chiller, junction block, thermostatic expansion valve (TXV), and all associated refrigerant plumbing.

There are approximately 236 vehicles involved in this campaign.

Additional Repairs

Dealers must complete all outstanding recall and field service campaigns prior to the sale or delivery of a vehicle. A dealer will be liable for any progressive damage that results from its failure to complete campaigns before sale or delivery of a vehicle.

Owners may be liable for any progressive damage that results from failure to complete campaigns within a reasonable time after receiving notification.

Please contact Warranty Campaigns for consideration of additional charges prior to performing the repair.

Work Instructions

Please refer to the attached work instructions. Prior to performing the campaign, check the vehicle for a completion sticker (Form WAR261).

Replacement Parts

Parts are now available and can be obtained by ordering the part numbers listed below from your facing Parts Distribution Center (PDC).

If our records show your dealership has ordered any vehicle(s) involved in campaign number SF708, a list of the customers and vehicle identification numbers will be available on the DTNA Portal via OWL. Please refer to this list when ordering parts for this campaign.

Table 1 - Replacement Parts for SF708

Campaign Number	Part Number	Part Description	Qty.
SF708 A-B	22-78023-000	CHILLER-BATTERY,MAHLE,SO-TXV	1 ea
	22-79626-000	COMPR-AC,MAHLE,57CC,400V,ERC	1 ea
	A 960 830 09 84	VALVE-SHUTOFF,134A,HVAC,EMG	1 ea
	A22-77966-000	HOSE-AC,J-BLOCK-CHILLER,EDEP	1 ea
	A22-77970-000	HOSE-AC,ERC-J-BLOCK,DISCHARGE	1 ea
	A22-78390-001	J-BLOCK-ASSY,AC,EDEP	1 ea
	A22-79355-000	HOSE-AC,EDEP,SUCTION	1 ea
	SHC ZERHD46 8OZCN	OIL-AIR COMPRESSOR,HD46, 8 OZ BOTTLE	1 ea

(Parts list continued on next page)

October 2024
SF708 A-B
(Revised November 2024)

Campaign Number	Part Number	Part Description	Qty.
SF708 A (eCascadia)	A22-77123-001	RECEIVER DRIER-AC,STUDLESS	1 ea
	A22-78160-000	HOSE-AC,H01,EP4	1 ea
	A22-78161-000	HOSE-AC,H02,EP4	1 ea
	A22-78162-000	HOSE-AC,H03,EP4	1 ea
	A22-78167-000	FITTING-AC,J-BLOCK,EP4,1/2	1 ea
	A22-78168-000	JUNCTION BLOCK-AC,EP4	1 ea
	A22-79586-000	HOSE-AC,H04,EP4	1 ea
	BOA 84032539001	KIT- SEAL	1 ea
	BOA FZ671001	EVAPORATOR	1 ea
	TXE 1210679A	CONDENSER ASM	1 ea
SF708 B (eM2)	05-37341-005	CONDENSER	1 ea
	A22-77123-002	RECEIVER DRIER-AC,OUTBOARD	1 ea
	A22-78156-000	HOSE-AC,H02,EM2	1 ea
	A22-78157-000	HOSE-AC,H03,EM2	1 ea
	A22-78169-000	FITTING-AC,J-BLOCK,EM2,1/2	1 ea
	A22-78869-000	JUNCTION BLOCK-AC,EM2	1 ea
	A22-79759-000	HOSE-AC,H01,EM2	1 ea
	A22-79762-000	HOSE-AC,H04,EM2	1 ea
	VCC T1001838L	TXV ASSY-SERVICE KIT	1 ea
	VCC T1001836U	EVAPORATOR	1 ea
ALL GROUPS	WAR261	BLANK COMPLETION STICKER	1 ea

Table 1

Removed Parts

U.S. and Canadian Dealers, please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts. Export distributors, please destroy removed parts unless otherwise advised.

Labor Allowance

Table 2 - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Corrective Action
SF708 A (eCascadia)	Remove & Replace Complete A/C System	6.6	996-F224A	12-Repair Recall/Campaign
SF708 B (eM2)	Remove & Replace Complete A/C System	5.1	996-F224A	12-Repair Recall/Campaign

Table 2

IMPORTANT: When the campaign has been completed, locate the base completion label in the appropriate location on the vehicle, and attach the gray completion sticker provided in the field service kit (Form WAR261). If the vehicle does not have a base completion label, clean a spot on the appropriate location of the vehicle and first attach the base completion label (Form WAR259). If a field service kit is not required or there is no completion sticker in the kit, write the campaign number on a blank sticker and attach it to the base completion label.

October 2024
SF708 A-B
(Revised November 2024)

Claims for Credit

You will be reimbursed for your parts, labor, and handling (landed cost for Export Distributors) by submitting your claim through the warranty system within 30 days of completing this campaign. Please reference the following information in OWL:

- Claim type is **Field Service Campaign**.
- In the Campaign field, enter the campaign number and appropriate group, (**SF708-A or SF708-B**).
- In the Primary Failed Part field, enter **25-SF708-000**.
- In the Parts section, enter the appropriate part number as shown in the Replacement Parts Table.
- In the Labor section, enter the appropriate SRT from the Labor Allowance Table. Administrative time will be included automatically as SRT 939-6010A for 0.3 hours.
- The VMRS Component Code is **F99-999-005** and the Cause Code is **A1 - Campaign**.
- This Field Service Campaign will **terminate on October 31, 2025**. Dealers will be notified of any changes to the termination date via an Important Campaign Information Letter (ICI) posted on the DTNA Portal.

IMPORTANT: OWL must be viewed prior to beginning work to ensure the vehicle is involved and the campaign has not previously been completed. Check for a completion sticker before beginning work.

All claims must be submitted within 30 days of the repair and within 30 days of the termination date of the campaign. U.S. and Canadian Dealers: All excess inventory to be returned to the PDC following the conclusion of the campaign must be returned in resaleable condition to the Memphis PDC within 90 days from the termination date. Please submit a PAR to request return to the Memphis PDC. Canadian Dealers: return kits to your facing PDC. Export Distributors: Excess inventory is not returnable.

For questions, U.S. and Canadian dealers, contact the Warranty Campaigns Department via the Warranty Support Center (WSC) located on the DTNA Portal. Export distributors submit a WSC inquiry or contact your International Service Manager.

October 2024
SF708 A-B

Copy of Notice to Owners

Subject: eCascadia & eM2 Electric Refrigerant Compressor

Daimler Truck North America LLC (DTNA), on behalf of its Freightliner Trucks division, is initiating Field Service Campaign SF708 to modify specific model years 2024-2025 Freightliner eCascadia and eM2 vehicles, manufactured November 14, 2023, through May 15, 2024.

On certain vehicles, due to an equipment issue at the manufacturing plant, refrigerant oil may not have been injected into the A/C system.

The following parts will be replaced: A/C compressor, condenser, receiver/dryer, evaporator, chiller, junction block, thermostatic expansion valve (TXV), and all associated refrigerant plumbing.

Please contact an authorized DTNA dealer to arrange to have the campaign performed and to ensure that parts are available at the dealership. The campaign will take approximately seven hours and will be performed **free of charge**. To locate an authorized dealer, search online at northamerica.daimlertruck.com/contact-us. Scroll down to "Locate a Dealer," and select the appropriate brand.

This Field Service Campaign will **terminate on October 31, 2025**. Please make sure the campaign is completed prior to this date. Work completed after this date will be done at the customer's expense.

As stated in the terms of your express limited warranty, DTNA will not pay for any damage caused by failure to properly maintain your vehicle. DTNA considers the work necessary under this campaign to be proper maintenance and will, therefore, not pay for any damage to your vehicle caused by your failure to have the repairs that are the subject of this campaign performed in a reasonable time.

If you have any questions, contact the Warranty Campaigns Department at (800) 547-0712, 7 a.m. to 4 p.m. Pacific Time, M-F, e-mail address: dtna-war-campaigns@daimlertruck.com, or the Customer Assistance Center at (800) 385-4357.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

October 2024
SF708 A-B
(Revised November 2024)

Work Instructions

Subject: eCascadia & eM2 Electric Refrigerant Compressor

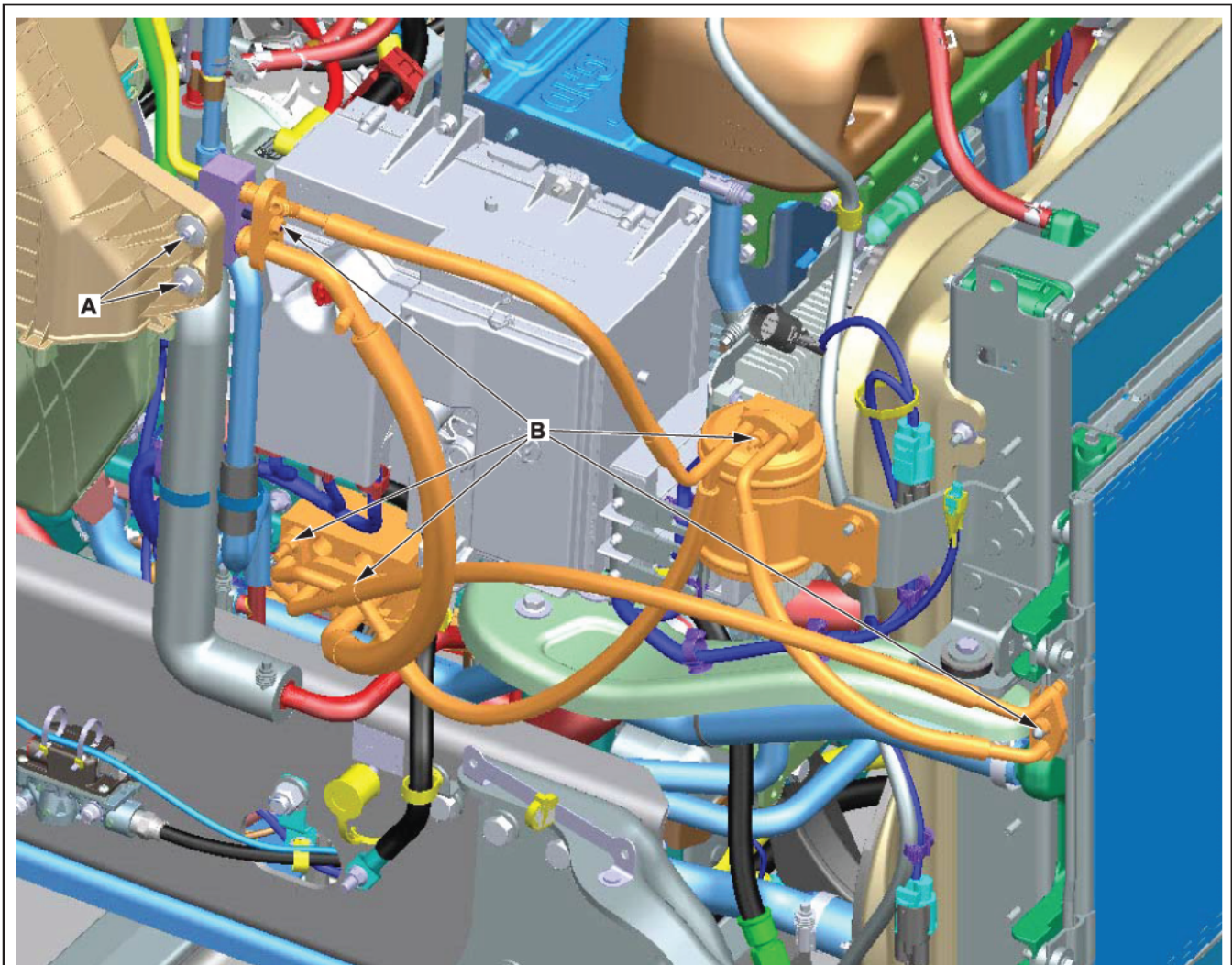
Models Affected: Specific model years 2024-2025 Freightliner eCascadia and eM2 vehicles, manufactured November 14, 2023, through May 15, 2024.

REVISION: Instructions for swapping the bracket from the old chiller to the new chiller have been added.

Removal and Replacement of the Entire Refrigerant System

1. Check the base label (Form WAR259) for a completion sticker for SF708 (Form WAR261), indicating this work has been done. The base label is usually located on the passenger-side door, about 12 inches (30 cm) below the door latch. If a completion sticker is present, no work is needed. If a completion sticker is not present, proceed to the next step.
2. Park the vehicle on a level surface, place the vehicle in neutral, shut down the vehicle, and set the parking brake. Chock the tires.
3. *For eCascadia vehicles only*, remove the aerodynamic bumper. For instructions, see **Group 31: 3.1** of the *eCascadia Workshop Manual*.
4. Connect to DiagnosticLink®. Ensure the EXV refrigerant chiller and the shut-off valve are open 100%; then evacuate the refrigerant from the air conditioner (A/C) System.
5. Open the hood.
6. Decommission the vehicle.
For eCascadia instructions, see **Group 08: 8.4** in the eCascadia workshop manual.
For eM2 instructions, see **Group 08: 1.2** in the eM2 workshop manual.
7. Remove the evaporator from inside the cab. For instructions, see the applicable workshop manual.
Group 83: 1.4 (eCascadia)
Group 83: 1.6 (eM2)
8. Remove the left-hand radiator baffle.
9. Remove the right-hand radiator baffle.
10. Remove the fasteners from the outboard air conditioning (A/C) lines. See **Fig. 1**, **Fig. 2**, and **Fig. 3**.
11. Remove the two fasteners from the upper J-block. See **Fig. 1**.
12. Remove the outboard A/C lines and the upper junction block (J-block). See **Fig. 1**, **Fig. 2**, and **Fig. 3**.

October 2024
SF708 A-B
(Revised November 2024)



07/23/2024

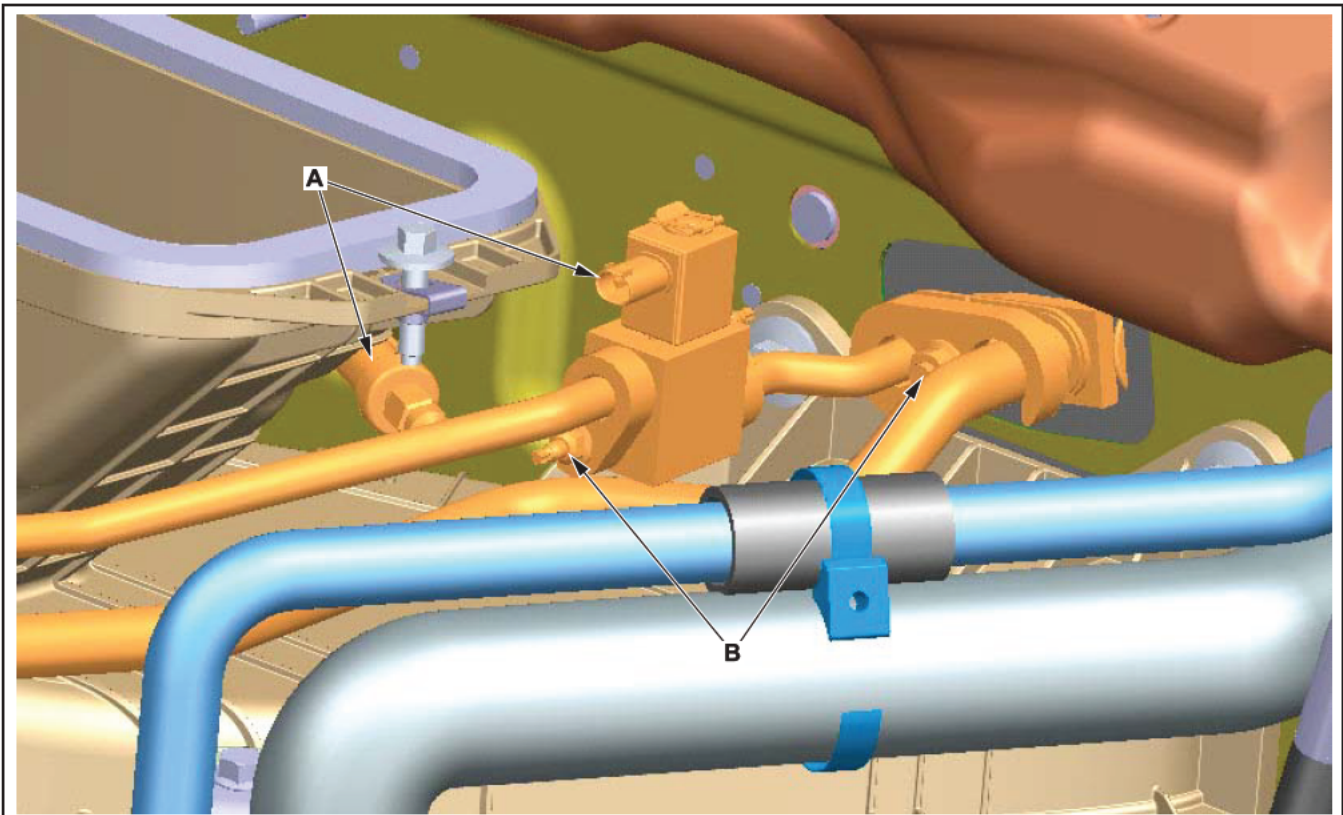
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A. Remove the two mounting fasteners.

B. Remove the A/C line connection fasteners.

Fig. 1, Removing the A/C Line Connection Fasteners

October 2024
SF708 A-B
(Revised November 2024)

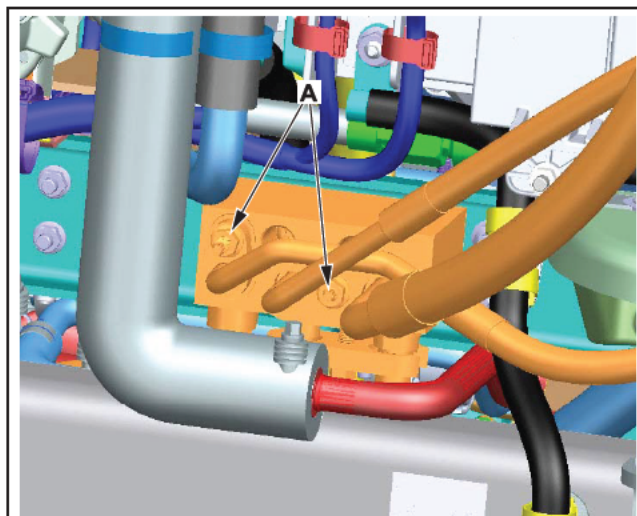


07/23/2024

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- A. Disconnect the low voltage connectors as the lines are removed.
- B. Remove the upper A/C line fasteners.

Fig. 2, Disconnecting the Low Voltage Connectors



07/23/2024

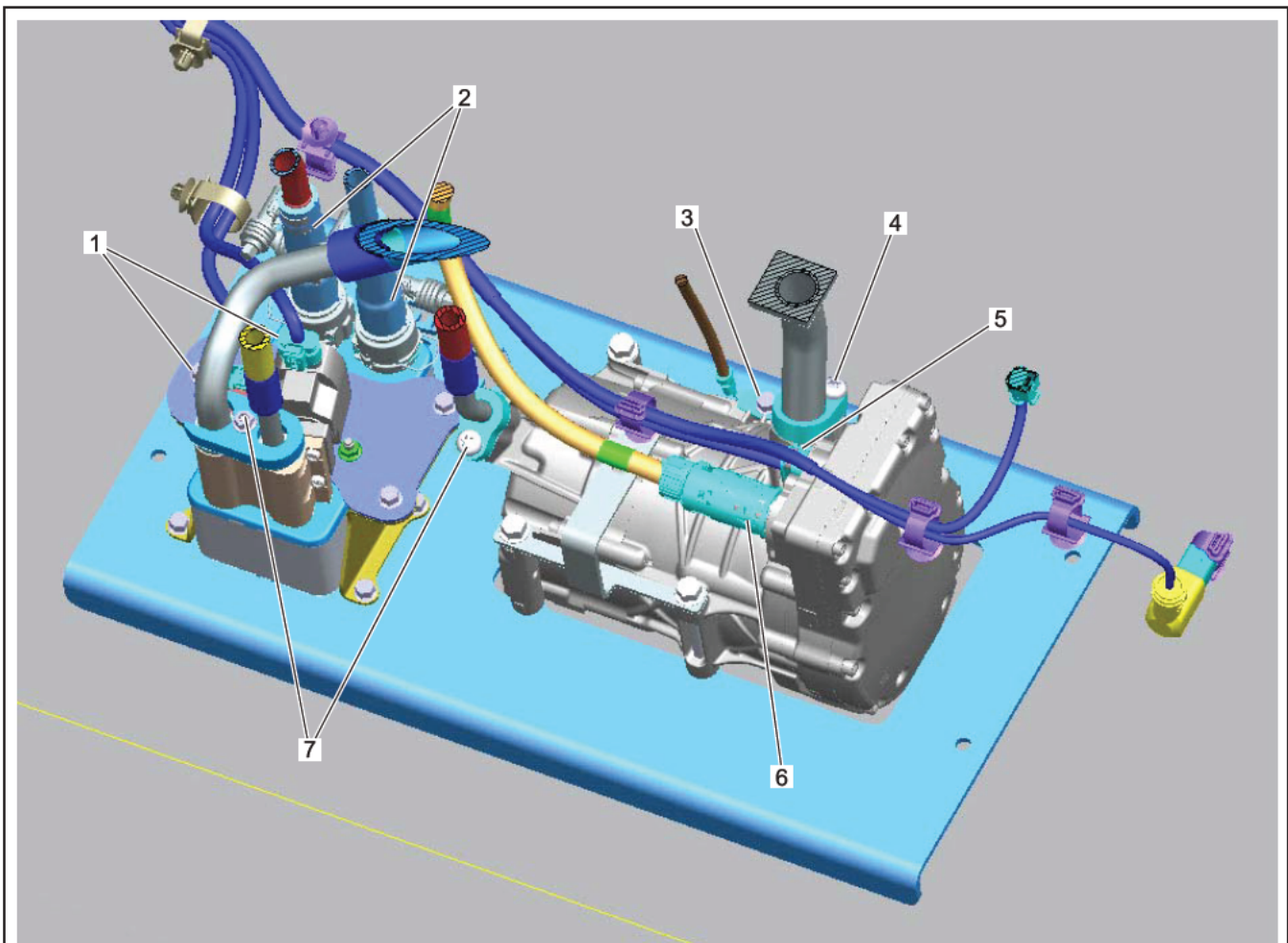
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- A. Remove the line connections.

Fig. 3, J-Block Line Connections

October 2024
SF708 A-B
(Revised November 2024)

13. Remove the mounting bracket fasteners, and remove the receiver-drier.
14. Remove the fasteners that attach the condenser to the high voltage (HV) battery radiator, and remove the condenser.
15. Disconnect the HV connections from the electric refrigerant compressor (eRC). See [Fig. 4](#).
16. Disconnect the low voltage (LV) connections from the eRC. See [Fig. 4](#).
17. Disconnect the equipotential (EQ) ground from the eRC. See [Fig. 4](#).
18. Disconnect both the LV connections from the chiller. See [Fig. 4](#).
19. Clamp the chiller coolant lines. See [Fig. 4](#).
20. Remove the coolant lines from the chiller. See [Fig. 4](#).
21. Disconnect the A/C lines from the chiller. See [Fig. 4](#).
22. Disconnect the A/C lines from the eRC. See [Fig. 4](#).



07/23/2024

f832303

1. Chiller LV Connections
2. Coolant Lines to Clamp
3. EQ Bonding Cable

4. A/C Line to Disconnect
5. LV Connection
6. HV Connection

7. A/C Lines to Disconnect

Fig. 4, eRC Tray

October 2024
SF708 A-B
(Revised November 2024)

23. Remove the service plate mounting fasteners.
24. Remove the eRC and the chiller from the vehicle.
25. Remove the eRC from the service plate.
26. Remove the chiller from the service plate.
27. Remove the chiller and eRC lines from the bottom of the frontbox J-block, and remove the lines from the vehicle. See [Fig. 5](#).
28. Remove the J-block fasteners and remove the J-block from the vehicle. See [Fig. 6](#).

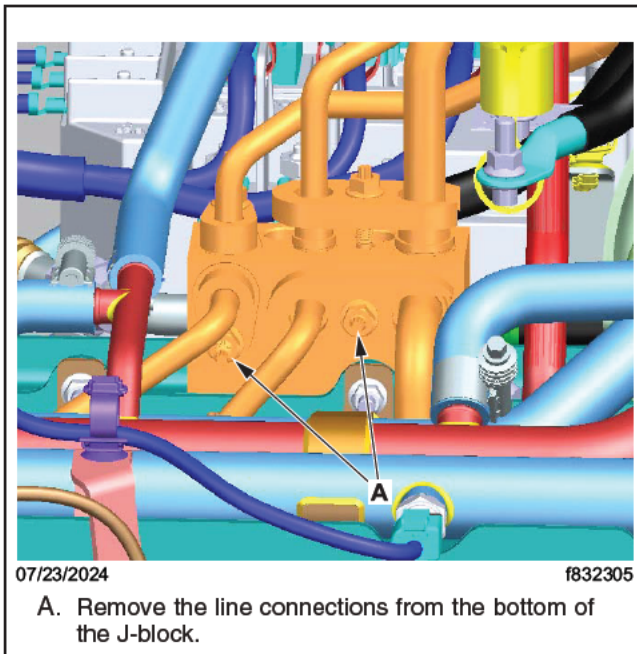


Fig. 5, J-Block Line Connections (bottom side)

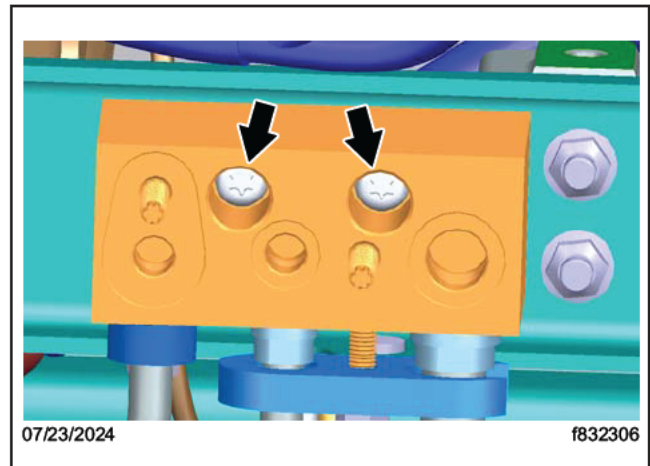


Fig. 6, J-Block Mounting Fasteners

29. Install the J-block and the mounting fasteners.
30. Tighten the J-block mounting fasteners 15 lbf-ft (20 N·m).
31. Install the chiller and eRC lines on the bottom of the frontbox J-block.
32. Tighten the A/C lines on the bottom of the J-block 15 lbf-ft (20 N·m).
33. Install the new eRC on the service plate.

October 2024
SF708 A-B
(Revised November 2024)

34. Remove the two mounting screws that attach the Electronic eXpansion Valve (EXV) to the **new** chiller. Remove and set the EXV aside. See **Fig. 7**.
35. Remove the two mounting nuts and remove the mounting bracket from the top of the **new** chiller. Discard the bracket. See **Fig. 8**

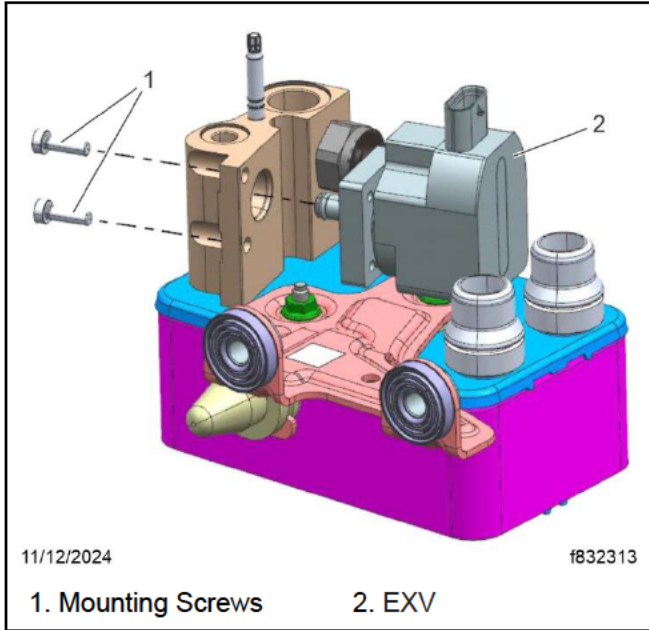


Fig. 7, Removing the EXV

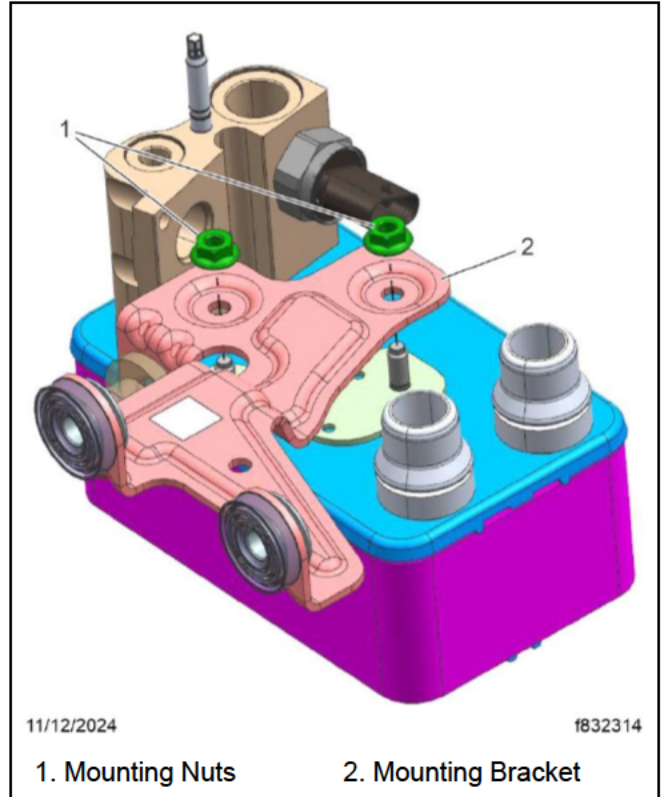


Fig. 8, Removing the Mounting Bracket

October 2024
SF708 A-B
(Revised November 2024)

36. Remove the two mounting screws that attach the EXV to the **old** chiller. See **Fig. 9**.
37. Remove the two mounting nuts and remove the mounting bracket from the top of the **old** chiller. Set the bracket aside. See **Fig. 10**.
38. Install the **old** mounting bracket, shown in **Fig. 10**, on top of the **new** chiller. Use the original mounting nuts to secure the bracket. Tighten the fasteners 71 lbf·in (800 N·cm).
39. Install the EXV and secure it with the help of the two original mounting screws. Tighten the fasteners 62 lbf·in (700 N·cm). See **Fig. 9**.

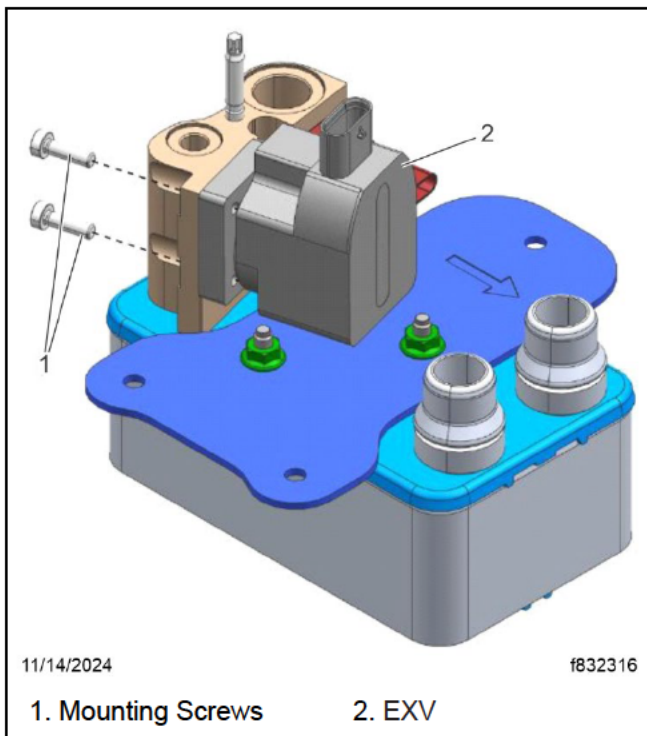


Fig. 9, EXV Mounting on the Chiller with Old Bracket

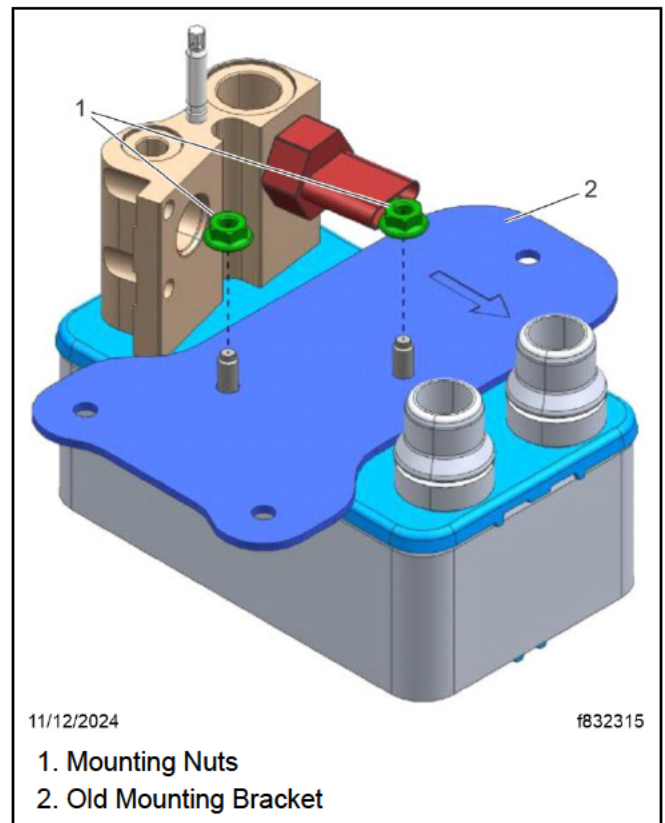


Fig. 10, Old Bracket Mounting on the Chiller

October 2024
SF708 A-B
(Revised November 2024)

40. Install the new chiller mounting fasteners on the service plate.
41. Install the eRC and service plate on the vehicle.
42. Connect the A/C lines to the eRC.
43. Connect the A/C lines to the chiller.
44. Tighten the A/C lines to the eRC 15 lbf·ft (20 N·m).
45. Tighten the A/C lines to the chiller 106 lbf·in (1200 N·cm).
46. Connect the EQ ground to the eRC.
47. Tighten the ground cable 62 lbf·in (700 N·cm).
48. Connect the LV and HV connections to the eRC and the chiller.
49. Install the condenser and its mounting fasteners.
50. Tighten the A/C condenser bolts 17 lbf·ft (23 N·m).
51. Install the A/C receiver-drier and its mounting fasteners.
52. Install the lines and fasteners on the outboard A/C lines.
53. Install the two mounting fasteners on the upper J-block.
54. Tighten the A/C line connections 15 lbf·ft (20 N·m).
55. Install the right-hand radiator baffle.
56. Install the left-hand radiator baffle.
57. Install the evaporator inside the cab. For instructions to replace the evaporator core, see **Group 83: 1** in the applicable workshop manual.
58. Add 8 fl oz (237 mL) of HD46 refrigerant oil into the system before recharging with the refrigerant.
59. Charge the A/C system. For instructions, see **Group 83: 1** in the applicable workshop manual.
60. Commission the vehicle. For instructions, see **Group 08** in the applicable workshop manual.
61. Fill and bleed the battery coolant circuit.
62. *For eCascadia vehicles only*, install the aerodynamic bumper. For instructions, see **Group 31: 3.1** in the *eCascadia Workshop Manual*.
63. Close the hood.

October 2024
SF708 A-B
(Revised November 2024)

- 64. Follow the substeps to perform the ERC run-in procedure (verify that the eStop button is released before attempting this procedure.)
 - 64.1 Open the 'Refrigerant System Management' panel. This panel is located on the 'Service Routines' tab in DL version 8.19 SP1 and later. In DL versions 8.19 and earlier, it is under the 'I/O Controls' tab.
 - 64.2 Set the blower fan speed to the maximum level.
 - 64.3 Select 'Start' to re-learn the ERC run-in. See [Fig. 11](#).

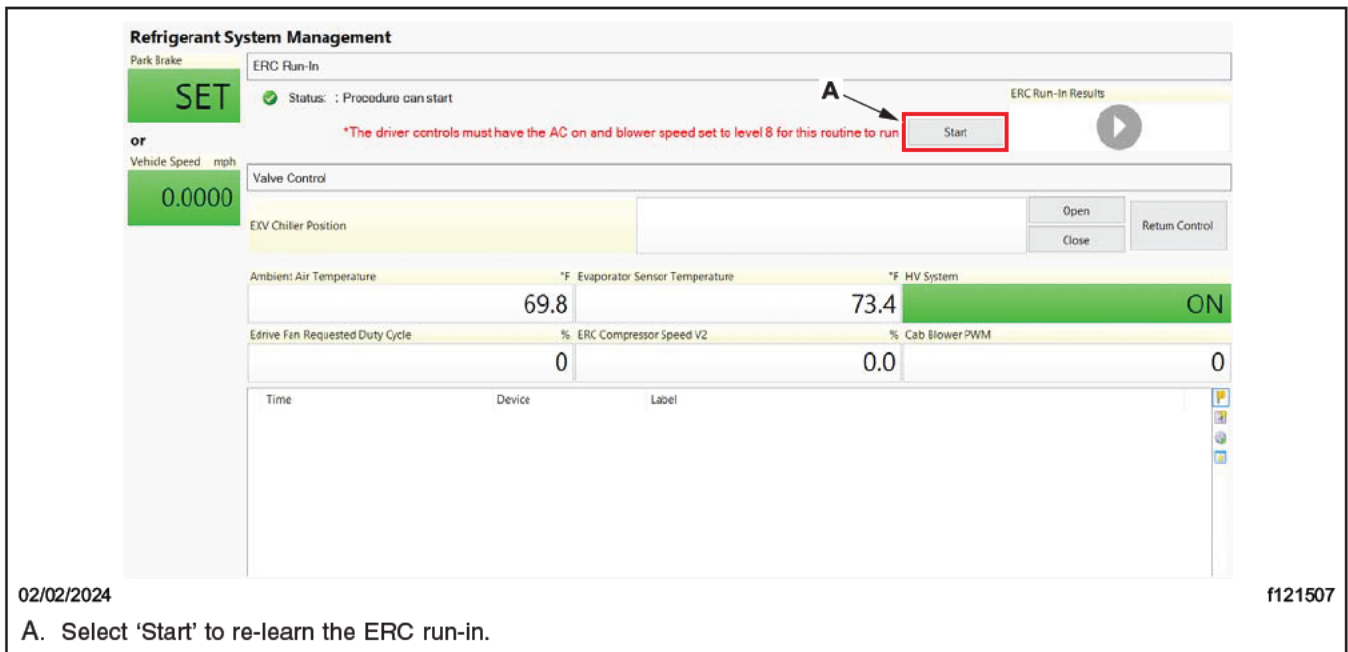


Fig. 11, ERC Run-In Panel

- 65. Clean a spot on the base label (Form WAR259), and attach a campaign completion sticker for SF708 (Form WAR261), indicating this work has been completed.