

Oil Separator Upgrade for Bendix Electric Compressors

TSB-13-008-FTL

Creation Date: 2026-02-26

Engine or Vehicle Affected:

- ▶ eM2
- ▶ eCascadia

Warranty applies to this described condition. See the warranty information at the end of this bulletin.

Described Condition

This bulletin applies to eCascadia and eM2 trucks equipped with Bendix® electric compressors. In some cases, excessive oil may pass through the discharge line, which can lead to oil contamination in the air system and possible corrosion in the oil separator cartridge. These conditions can affect overall system reliability and compressor performance if not addressed promptly.

To enhance durability and maintain optimal performance, install the Bendix® oil separator kit. This updated design improves the robustness of the oil return channel and helps prevent oil-related issues. Aftermarket service kits are available for both preventive maintenance and corrective action, and they are recommended when corrosion is present or as a proactive measure to ensure long-term compressor efficiency.

Parts Table

Table 1, Parts Table

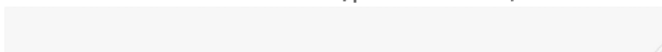
Part Number	Part Description	Quantity
K201902	Oil Separator Support Kit	1
K195909	Oil Separator Cartridge Kit	1

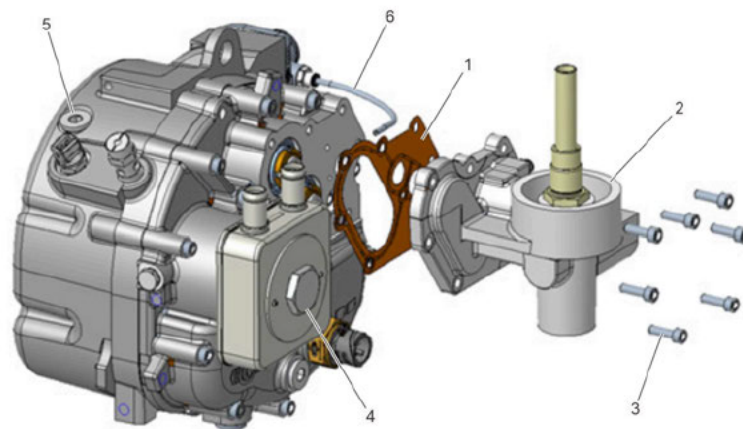
Table 1, Parts Table

Air Compressor Oil Separator Procedure

🔧 **Note:** See Fig 1 for all steps in this procedure.

1. Park the vehicle on a level surface, place it in neutral, shut down the vehicle, and set the parking brake. Chock the tires





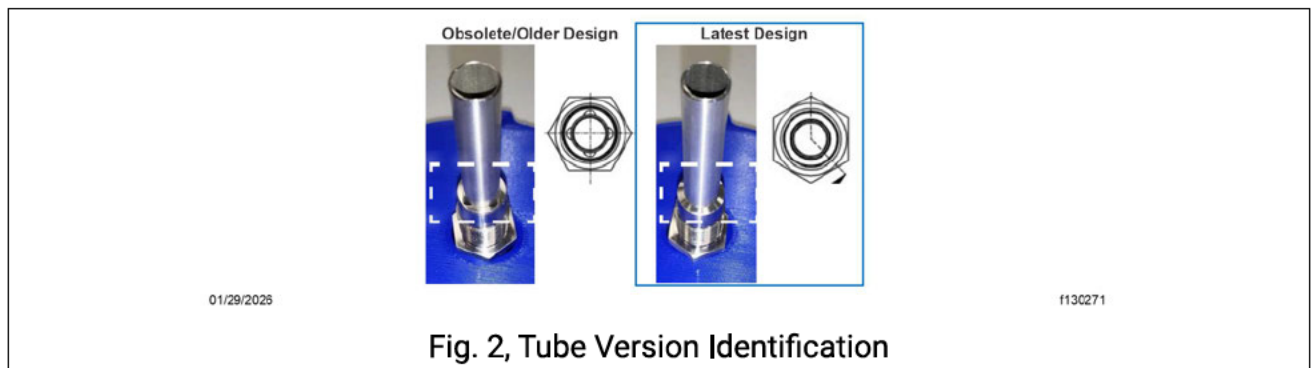
01/14/2025

f13c269

- | | |
|--------------------------|--------------------------------|
| 1. Gasket | 4. Bolt |
| 2. Oil Separator Support | 5. Vacuum Drainage/Fill Plug |
| 3. Screw | 6. Clear Pressure Release Tube |

Fig. 1, Oil Separator Cartridge Kit Contents

2. Access the oil-coalescing cartridge area according to the affected model.
 - o For the **eCascadia** model: Remove the bumper, see **Removal of the Aerodynamic Bumper** of the *eCascadia Workshop Manual*.
 - o For the **eM2** model: Remove the EVDM, see **Removal of the EVDM** of the *eM2 Workshop Manual*.
3. Remove the insulation or cover over the oil-coalescing cartridge by taking out the panel clips or fasteners using the appropriate tool.
4. Depressurize the compressor by partially unscrewing the vacuum drainage/fill plug one turn. Wait until all pressure is fully vented. Retain the insulation and the vacuum drainage/fill plug. See Fig. 1, item 5.
5. Remove the cartridge using a filter wrench. Identify the cartridge version. If the old design is found, proceed with the remaining instructions. See Fig. 2.



01/29/2025

f13c271

Fig. 2, Tube Version Identification

6. Disconnect the clear pressure release tube (quick disconnect) from the oil separator support.
7. Disconnect the discharge line from the air compressor.
8. Remove the discharge fitting from the oil separator.
9. Loosen the oil cooler bolt by half a turn and rotate it to provide access to the oil trap support screws.

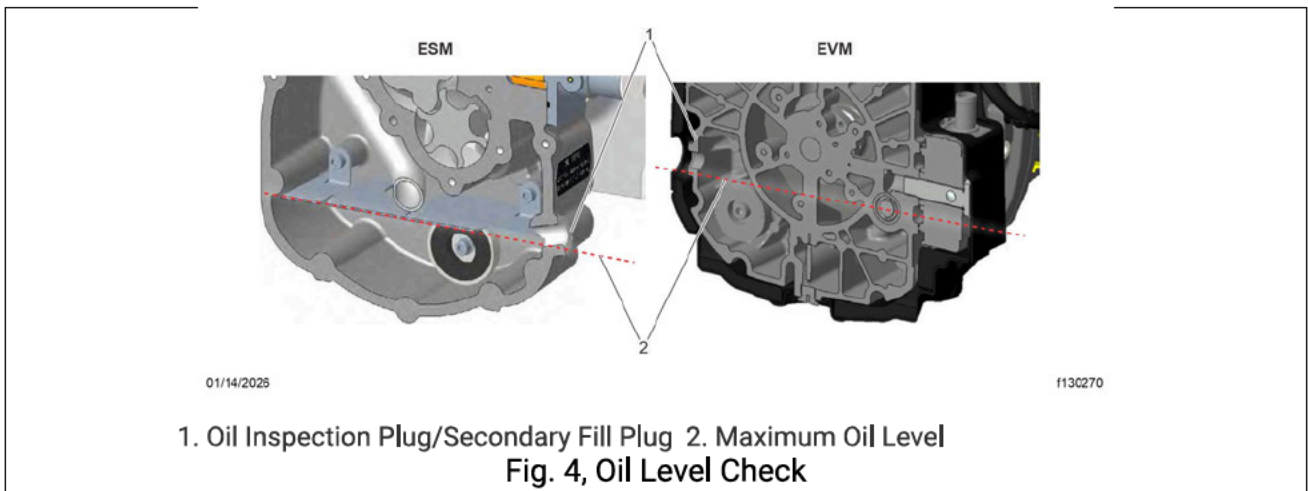
10. Remove and discard the screws, oil separator support, and gasket.
11. Install the new gasket, oil separator support, and screws. Tighten the screws 106 lbf·in (1200 N·cm).
12. Rotate the oil cooler to a vertical orientation and tighten the bolt 30 lbf·ft (40 N·m).
13. Install the discharge line fitting onto the oil separator and tighten it 22 lbf·ft (30 N·m).
14. Connect the discharge line to oil separator and tighten 22 lbf·ft (30 N·m).
15. Connect the clear pressure release tube using the quick-disconnect fitting on the new oil separator support.
16. Lubricate the o-ring of the new cartridge and hand tighten the new cartridge, adding an extra quarter turn. See Fig. 3



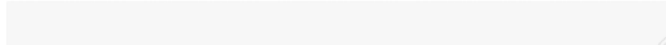
17. Install the insulation over the cartridge.
18. Unscrew the oil inspection plug/secondary fill plug.

⚠ Warning: Use only the approved clean fluid to fill the compressor. Failure to use the specified clean fluid may result in improper lubrication, reduced compressor performance, or potential damage to internal components.

19. Fill the compressor with *Chevron® Cetus® PAO 46* oil until the oil reaches the bottom of the threads as shown in Fig. 4.

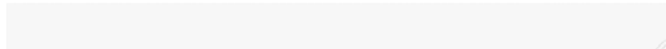


20. Screw in both the vacuum drainage plug/ filling plug and the oil inspection plug/secondary filling plug including new sealing washers. Tighten 30 lbf·ft (40 N·m).



21. Install the components according to the model-specific procedure.

- For the **eCascadia** model: Install the bumper, see **Installation of the Aerodynamic Bumper** of the *eCascadia Workshop Manual*.
- For the **eM2** model: Install the EVDM, see **Installation of the EVDM** of the *eM2 Workshop Manual*.



Warranty

This procedure is warrantable only if the described condition exists and the repair is performed within the applicable base or extended coverage warranty period. If a failure is not found, this procedure is considered preventive and warranty does not apply.

See Table 2 for OWL VMRS codes and labor allowance information. Enter this service bulletin number in the Service Bulletin # field.

Table 2, OWL VMRS Codes and Labor Allowance

OWL VMRS Codes and Labor Allowance						
Primary Failed Part	Component Code	Cause Code	Correction Code	SRT Code	Description	Hours
12-32925-000	013-018-001	61	03	3ZY-5000A	OIL SEPARATOR, HV AIR COMPRESSOR, R/R (SBXX-XXX)	eCascadia -1.0 eM2 - 1.5

Table 2, OWL VMRS Codes and Labor Allowance

Note:

013-018-001
F38
F40
F37
REPLACE

Document Number: 0000211443

Topic Publication Date: 2026-02-25