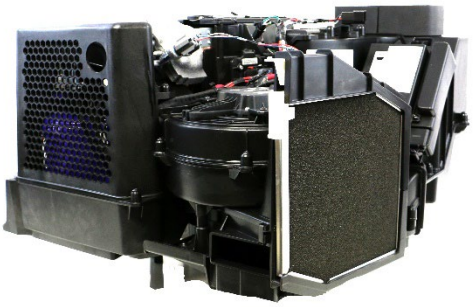
FREIGHTLINER TRUCKS

Dual HVAC System

Freightliner's proprietary Dual HVAC System no-idle system for the Cascadia® Class 8 truck creates the ideal sleeper climate. With an innovative battery-powered HVAC system that fits seamlessly under the cabinet, the engine no longer needs to be idling to heat or cool your sleeper. The system also helps keep the operating costs down while your sleeper stays comfortable.

The fully integrated system provides heat or AC while the truck is running, just like the traditional auxiliary HVAC system. However, when the truck is parked/engine off, the AC system will maintain a comfortable sleeper climate for up to 10 hours*. Additionally, fuel-operated heater can maintain the sleeper climate for 34+ hours. This heater circulates engine coolant through the auxiliary heater core and truck engine.



Features:
- Ease of operation
- Easy service with diagnostic link
- Low maintenance
- No loss of personal storage space
- Dual HVAC System comes standard with Optimized Idle
- Warranty through Freightliner
- No driver disturbance while sleeping
- Qualifies for Federal Excise Tax (FET) exemption
- System is recognized for weight exemptions, reference ATRI
- Factory installed at the Freightliner manufacturing facility
- Single thermostat temperature control for AC and heat
- Brushless motors in condenser, fan, evaporator blower and compressor
- SmartWay Verified
- California Air Resources Board (CARB) approved (ARB #08-643-004)

*Depends on ambient temperature, solar load and truck insulation.

Condenser mounted on the exterior of the back sleeper with your choice of mounting location; either left or center. **Below represents both mounting locations.**

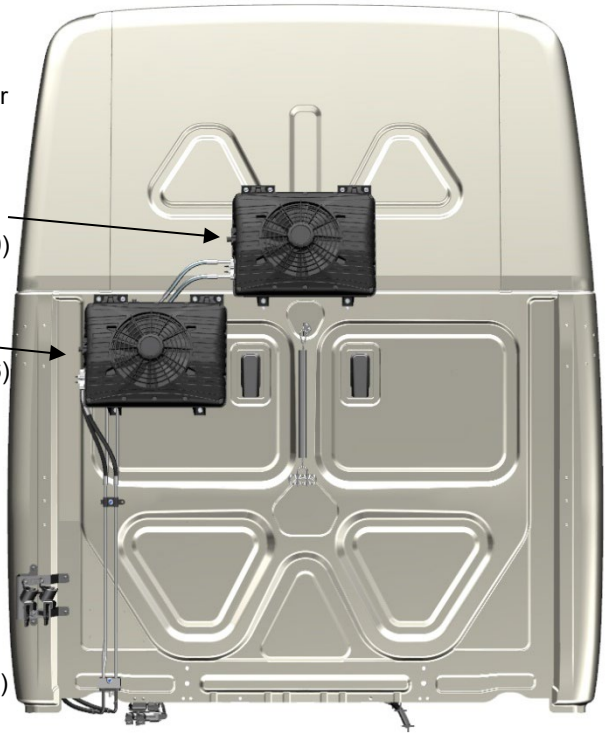
(4) 800 CCA, 100Ah AGM batteries located under driver's door

Center mounting location (689-100)

Left mounting location (689-096)

Between-rail battery box

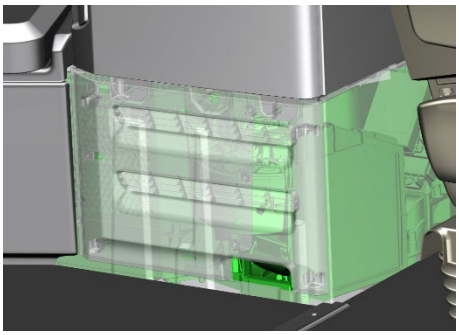
Dual HVAC System batteries (4 group 31 AGM)



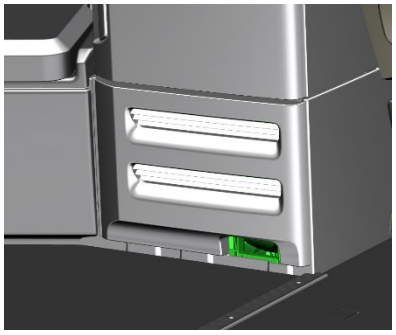
240, 270 or 275 amp alternator

Control inside sleeper on rear wall

Control Functions:
- Park On/Off button
- Blower Speed
- Temperature Setting



Dual HVAC System under the cabinet (evaporator, compressor, heater core, and blower)



Fuel-operated hydronic coolant heater (underfloor)

Required with Optimized Idle

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Models: Cascadia

Data Code Specifications	Description
689-096	Dual parked battery-powered HVAC system
689-100	Dual parked battery-powered HVAC system with center mount backwall condenser
689-102	Dual parked battery-powered AC system
689-103	Dual parked battery-powered AC system with center mounted backwall condenser
689-105	Dual parked battery-powered HVAC system with an Espar Airtronic D-2 & digital controller
689-106	Dual parked battery-powered HVAC system with an Espar Airtronic D2 & digital controller

Configuration Notes:

- Data code 689-096 positions the backwall condenser for the system down and to the left which allows for a tighter trailer gap for those applications focused on fuel efficiency.
- Data code 689-096 allows left-hand (LH) backwall grab handles, but blocks LH load locks, LH hose hangers, slide bar hose hangers, and LH CB antennas.
- Data Code 689-100 is targeted for customers with headache racks and must include data code 600-801. Customer furnished and installed cab guard; customer to relocate back of cab items as required.
- Both 689-096 and 689-100 codes require optimized idle.

Weights & Dimensions

Inside Evaporator Unit
- 54.5 lbs. (24,7 kg)

- 21.5” x 23.1” x 13.1”
(547mm x 587mm x 333mm)

Outside Condenser Unit
- 17.5 lbs. (7,9 kg)

- 39.6” x 10” x 15”
(1005mm x 254mm x 381mm)

Bergstrom Business Development Managers

Victor Gontero - vgontero@bergstrominc.com: 815.721.7499
Drew Goaley – dgoaley@bergstrominc.com: 815.979.2080

Product Line Coordinator
Gretchen Mosley - gmosley@bergstrominc.com: 815.873.4574

Meets TMC Recommended Practices (RP) 432A
This RP offers guidelines for performance requirements of engine-off HVAC systems for sleeper cabs.

- Factory installed curtains closed
- Initial sleeper temperature 73 +/- 5°F
- 100°F ambient outside temperature
- 50% relative humidity
- 600 W/m^2 solar load on vehicle roof