

Espar HS3 Heater for Dual Parked HVAC



What is it?

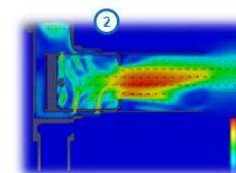
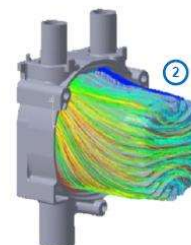
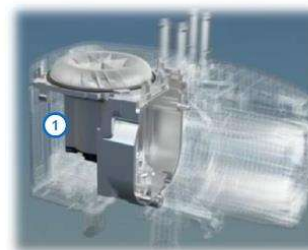
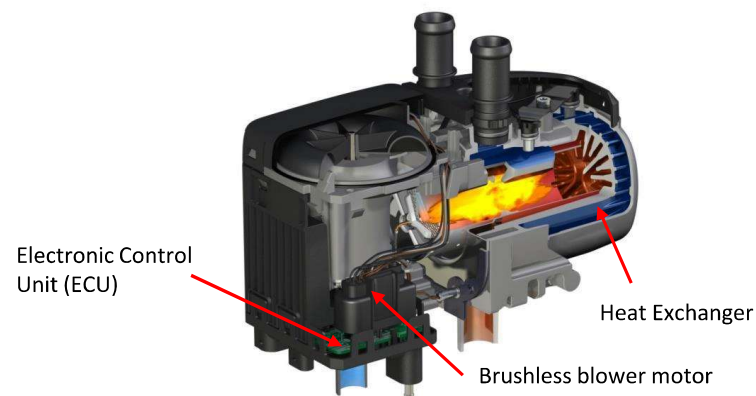
The HS3 is the next generation hydronic heater from Espar, replacing the D5 model. Hydronic heaters use hot water as heat transfer medium in heating and cooling systems. Designed for use with the Dual Parked HVAC system, the HS3 features an under cab mount for easier serviceability, proprietary ECU with direct contact to the brushless blower motor instead of the air intake to encapsulate the motor for greater protection and longevity, and a new heat exchanger to improve heat transfer.

Why is it important?

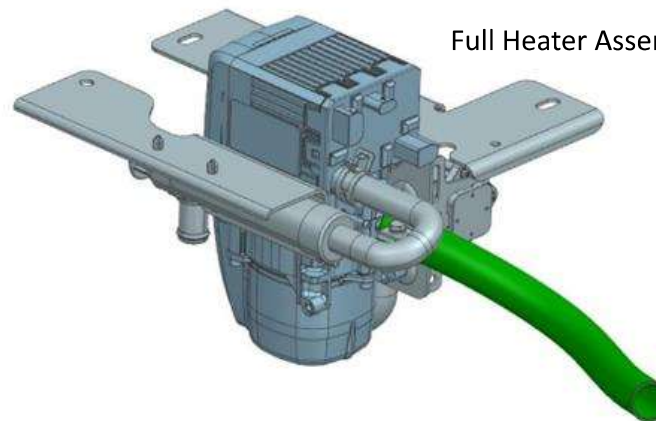
The HS3 offers greater heating capabilities, improved durability, reliability, and overall better performance to improve uptime and driver comfort experience. A brushless motor results in a longer lifetime by 2000 hours when compared to a brush motor. An improved IP (ingress protection) rating from 54 to 56 delivers dust protection and greater water protection from forceful projection streams. IP ratings grade the resistance of an enclosure from dust and liquids. Thermal efficiency is improved by requiring 7% less power from the engine to run and power consumption reduced by 16%. This allows for a more efficient and environmentally friendly heater that saves the driver on fuel and battery use. A 35 second faster start up time and an overall 6 decibel reduction in noise, keep the driver more comfortable.

Key Features:

- **Reduced Maintenance**
 - Improved blower motor life with new brushless motor ①
 - Improved protection from the environment (IP rating)
 - Motor not in contact with air intake (i.e. road spray) ①
 - Fewer restart cycles (less carbon build up)
- **Improved Efficiency and Performance**
 - Better thermal efficiency: 78% → 85% ②
 - Power consumption (electrical): 16% reduction (32W total power)
 - Faster start up: 120 seconds → 85 seconds
- **Improved Acoustics**
 - Noise reduction – 69dBA → 63 dBA
 - Quieter fuel metering pump (~8 db quieter) – added damping and electrical control ③



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Full Heater Assembly

Resources: Highspot, Dual Parked HVAC training videos

Affected models: Cascadia, c/o 7/15/24

Data Codes:			
Previous Data Codes		New Data Codes	
Data code	Description	Data Code	Description
689-096	DUAL PARKED BATTERY POWERED HVAC SYSTEM WITH ESPAR D5	689-128	DUAL PARKED BATTERY POWERED HVAC SYSTEM WITH ESPAR HS3
689-100	DUAL PARKED BATTERY POWERED HVAC SYSTEM WITH CENTER MOUNT BACKWALL CONDENSER WITH ESPAR D5	689-129	DUAL PARKED BATTERY POWERED HVAC SYSTEM WITH CENTER MOUNT BACKWALL CONDENSER WITH ESPAR HS3

Compatibility: See SpecPro for more information

Pre-requisite Options: See SpecPro for more information



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