



# No-Idle Units

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## NITE Phoenix System

The NITE Phoenix is the ultimate in battery-powered electric air conditioning systems. It is designed to keep sleeper compartments cool in even the hottest climates without idling the engine. Automatic temperature control assists in keeping the sleeper compartment at a comfortable temperature year round. NITE Phoenix is available in A/C only as well as a combo configuration that provides both cooling and heating capabilities. Optional heating systems will require small amounts of diesel usage.

The NITE Phoenix requires four additional auxiliary batteries that meet the following criteria: AGM (Absorbed Glass Mat), deep cycle group 27 or 31. Use of any non-approved battery technology will automatically void any warranty and may impede the performance of the NITE system. Lithium Ion battery technology is being developed for the Phoenix unit.

Please see [www.nitesystem.com](http://www.nitesystem.com) for updates.



**To obtain information about any of the NITE systems go to [www.nitesystem.com](http://www.nitesystem.com) or call toll free 1-866-204-8570.**

**CARB approved (# 08-643-004)**

### NITE Phoenix System

Description	Part No.
NITE Phoenix, Standard <b>A/C Only</b> System (No Heater & Base Kit)	<b>3620001</b>
NITE Phoenix, Standard <b>Combo</b> System (With Heater & Base Kit) (Espar)	<b>3620002</b>
NITE Phoenix, Standard <b>Combo</b> System (With Heater & Base Kit) (Webasto)	<b>3620003</b>

#### NITE A/C System with Digital Controller

- Cooling Capacity – **7500 BTUH**
- Voltage – **12VDC**
- Weight – **70 lbs.**
- Unit Dimensions – **22.0" L x 17.0" W x 11.0" H**
- Sealed hermetic system – eliminates refrigerant leaks
- Variable speed compressor – for greater efficiency
- All 12VDC components – requires no power inverter
- Brushless DC (BLDC) technology
- Patented technology

#### Digital Controller

- LCD Digital Display
- Auto temp control
- Diagnostic broadcast
- Unit runtime broadcast
- Service info broadcast

#### Battery Monitoring System

- Provides data on any batteries state of charge
- Aux battery state of health
- Aux and truck batteries voltage

#### Engineered Power Source System

- Deep cycle battery system
- Maintenance-free design
- UL recognized
- Pressure relief safety valve
- Meets Mil-B-8565J for hydrogen gas emissions
- Low voltage cutout

NITE Phoenix Application Chart for Installation Kits

Make	Model	Part No.
Freightliner	Any model - Under bunk mounting	4420001
International	9000i Series	4420002
International	ProStar, LoneStar	4420007
Kenworth	Classic Sleeper	4420001
Kenworth	T2000/T700	4420003
Kenworth	Sofa Sleeper/T680	4420004
Mack	Vision, CH, CL, CXU, CXN	4420001
Peterbilt	377, 379, 386, 388, 389 with 36", 48", or 63" Sleeper	4420001
Peterbilt	387, 579 377, 379, 386, 388, 389 with 36", Older 48", or 63" Sleeper with Window, 377, 379, 386, 388, 389 with 70" Sleeper	4420004
Sterling	A-Line	4420001
Volvo	VN Classic Sleeper	4420005
Volvo	VN 77" Sleeper 780 with Work Station, VN 61" Sleeper 670 with Work Station	4420005
Western Star	4900, 4900EX & 4900 Lomax	4420009

\* For Batteries and Battery box options, please refer to the Battery Specifications on page 388

NITE Phoenix Service Parts

This is the list of the most commonly used service parts. For a complete/up-to-date list of service parts please visit the NITE website at <http://us.bergstrominc.com/nite-no-idle/>.

Product Description	Kysor P/N	SRT Prefix	BWF Prefix	BYC Prefix	CAI Prefix	CCA Prefix	CDJ Prefix
<b>Phoenix Service Unit</b>							
If you are replacing a SRT or BWF unit with a current service unit you will have to upgrade to a 1000299202 control. Also if you are controlling an Espar heater with the Phoenix control you will need an Espar heater plug.		x	x				
If you are controlling an Espar heater with the Phoenix control & replacing a BYC unit with a current service unit you will an Espar heater plug.		x	x	x	x		
	Obsolete	x	x	x	x	x	
	3620005	S	S	S	S	S	•
<b>System Controller Service Kit</b>	4475038	•	•				
	4475065			•			
					x		
	4099202				S	•	•
<b>EVAP Blower Service Kit</b>	4475036	•	•	•	•	•	•
<b>Temp Sensor Service Kit (freeze switch)</b>	4475028	•	•	•	•	•	•
<b>Condenser Fan Service Kit</b>	4475037	•	•	•	•	•	•
<b>Linear Power Module</b>	4475054	•	•	•	•	•	•
<b>Filter 259x215x12.7</b>	4475023	•	•	•	•	•	•
<b>Thermal Limit Switch</b>	4099200	•	•	•	•	•	•
<b>Drain Tube</b>	4099082	•	•	•	•	•	•
<b>Micro Relay</b>	4099150	•	•	•	•	•	•
<b>Relay, 70A 12V W/Resistor</b>	4099086	•	•	•	•	•	•
<b>Phoenix LCD Display Control Kit</b>	Obsolete	x					
	Obsolete	x	x				
	4099195	S	S	•	•	•	•
<b>Battery Separator</b>	Kissling 4475001	•					
	Terra Power 4099194	•	•	•	•	•	•
<b>BMS, Battery Management System</b>	Obsolete	x					
All Straight Shunts are being Replaced by Joggled Shunts	4499079	S					
	Obsolete		x	x	x	x	
	4099196		S	S	S	S	•
<b>Power Harness</b>	4099179	•	•	•	•	•	•
<b>CAN Bus Harness</b>							
The new 1000493450 harness allows the Y & Resistor to be removed from the system.	Obsolete	x	x	x	x	x	x
	4475066	S	S	S	S	S	•
<b>BMS Wire Harness</b>	4475009	•					
	4099197		•	•	•	•	•
<b>Unit Harness Service Kit</b>	4475002	•	•	•			
	4099203				•	•	•
<b>Phoenix Control Harness (Unit to Control)</b>	4475004	•	•	•	•	•	•

LEGEND:	
x	Obsolete Part Number
S	In Place of Obsolete Part Number
•	Current/Original Part Number

## NITE Plus System

The NITE Plus air conditioning system is an all ELECTRIC, 12 VDC system, designed to main-tain sleeper compartment comfort for up to 8 to 10 hours without requiring your engine to idle. NITE Plus is available in A/C only or Combo configurations that provide both cooling and heating capabilities. The optional Espar air-heating system sips just 0.03 to 0.06 gallons of diesel per hour.

The NITE Plus unit requires four batteries that meet the following specifications: AGM (Absorbed Glass Mat), Deep Cycle, Group 27 or Group 31. Use of any non-approved battery technology will automatically void any warranty and may impede the performance of your NITE System.



*To obtain information about any of the NITE systems go to [www.nitesystem.com](http://www.nitesystem.com) or call toll free 1-866-204-8570.*

**CARB approved (# 08-643-004)**

### NITE Plus System

Description	Part No.
NITE Plus, Standard <b>A/C Only</b> System (No Heater & Base Kit)	<b>3699011</b>
NITE Plus, Standard <b>Combo</b> System (With Heater & Base Kit) (Webasto)	<b>3699039</b>
NITE Plus, Standard <b>Combo</b> System (With Heater & Base Kit) (Espar)	<b>3699012</b>

#### NITE A/C System with Smart Control

- Cooling Capacity – **4600 BTUH**
- Voltage – **12VDC**
- Weight – **70 lbs.**
- Unit Dimensions – **22.0" L x 17.0" W x 11.0" H**
- Sealed hermetic system – eliminates refrigerant leaks
- Variable speed compressor – for greater efficiency
- All 12VDC components – requires no power inverter
- Brushless DC (BLDC) technology
- Patented technology

#### Smart Control System

- Engineered duct work for optimum airflow
- Low voltage cutout

#### Engineered Power Source System

- Deep cycle battery system
- Maintenance-free design
- UL recognized
- Pressure relief safety valve
- Meets Mil-B-8565J for hydrogen gas emissions
- Low voltage cutout

### NITE Plus Application Chart for Installation Kits

Make	Model	Part No.
Freightliner	Any model - Under bunk mounting	3699014
International	9000i Series	3699015
International	ProStar, LoneStar	3699021
Kenworth	Classic Sleeper	3699014
Kenworth	T2000, T700	3699016
Kenworth	Sofa Sleeper	3699022
Mack	Vision, CH, CL, CXU, CXN	3699014
Peterbilt	377, 379, 386, 388, 389 with 36", 48", or 63" Sleeper	3699014
Peterbilt	387, 377, 379, 386, 388, 389 with 36", 48", or 63" Sleeper with Window, 377, 379, 386, 388, 389 with 70" Sleeper	3699017
Sterling	A-Line	3699014
Volvo	VN Classic Sleeper	3699014
Volvo	VN 77" Sleeper 780 with Work Station, VN 61" Sleeper 670 with Work Station	3699018
Western Star	4900, 4900EX & 4900 Lomax	3699019

**\* For Batteries and Battery box options, please refer to the Battery Specifications on page 388**

### NITE Plus Service Parts

This is the list of the most commonly used service parts. For a complete/up-to-date list of service parts please visit the NITE website at <http://us.bergstrominc.com/nite-no-idle/>.

Product Description	Kysor P/N	Grey Box Old Pressure SW & Standard Wiring	Grey Box New Pressure SW & Standard Wiring	Grey Box New Pressure SW & Upgraded Wiring	NITE PLUS Prefix BOT	NITE PLUS Prefix CDH
Service Unit	Obsolete	x	x	x		
	Obsolete	x	x	x		
	Obsolete	x	x	x		
	Obsolete	x	x	x		
	Obsolete	x	x	x		
	Obsolete	x	x	x		
	Obsolete	x	x	x	x	
	3699040	S	S	S	S	•
Separator	160 amp	Obsolete	x			
	100 amp	Obsolete	x			
	200 amp	4099091	S	•	•	•
Relay, 70amp 12V W/Resistor	Obsolete	x	x	x		
	4099086	•	•	•	•	•
Internal Unit Harness	Old HI Pressure	Obsolete	x			
	New HI Pressure w/o Relay	Obsolete	x	x	x	x
	New HI Pressure w/ Relay	4099193	S	S	S	S
Controller Harness	w/ LED Harness	Obsolete				
	w/o LED Harness	4099166	•	•	•	•
Power Wire Harness	10ga GND 10ga POS	Obsolete				
	6ga GND 8ga POS	4099103	•	•	•	•
NITE Control Assy	Old Style Aftermarket w/ LEDs	Obsolete	x			
	Old Style Aftermarket w/o LEDs	Obsolete	x	x		
	Aftermarket	4499038	S	S	•	•
Switch, Rotary	3 Speed	2199005	•	•	•	•
Control Knob	Old Style	2599050	•	•	•	•
	New Style	4099132	•	•	•	•
Drain Tube		4099082	•	•	•	•
Freeze Switch		4099084	•	•	•	•
HI Pressure Switch (Old)	Obsolete	x				
	2213007	S				
Complete Blower Assy		4099079	•	•	•	•
EVAP motor only		4099138	•	•	•	•
Condenser Fan	Old Style	4099081	•	•	•	•
	New Style	4099167			•	•
Compressor Controller	Analog	Obsolete	x	x	x	
	Digital	4099085	S	S	S	•
Main Controller	Std w/ Old HI SW	4499036	•			
	Upgrade w/ Old HI SW	4499037		•		
	Upgrade w/ New HI SW	4099158			•	•

LEGEND:	
x	Obsolete Part Number
S	In Place of Obsolete Part Number
•	Current/Original Part Number

## NITE Battery Specifications

The NITE System is powered by 4 batteries which are recharged in approximately 4 to 6 hours while the truck is running down the road.

### Requirements

- Group 27 or Group 31
- Deep Cycle

### Performance

- Voltage - 6 VDC - 6 volt batteries must have a minimum of 110 amp hour rating
- Voltage - 12 VDC - 12 volt batteries must have a minimum of 105 amp hour rating
- Use of any non-approved battery technology will automatically void any warranty and may impede the performance of the NITE system

### NITE Power System (AGM Batteries)

- Capacity – **440 amp hours**
- Battery Life – **2+ years**
- Operates – **8-10 hours**
- Recharges Time – **4-6 hours**
- Weight – **300 lbs.**
- Dimensions – **12.93" L x 6.75" W x 9.34" H**
- Alternator – add an additional 30+ amps

## NITE Systems Add-On Options

Description	Part No.
Battery (Trojan), 13.42" L x 6.80" D x 9.21" H (4 Pack)	<b>3699032</b>
<b>Battery Box options:</b>	
Battery Box Kit, Quantity of 2, each box holds 2 batteries, Dimensions: 20" L x 14.5" D x 12" H	<b>3699010</b>
Vertical Clamp On Aluminum Battery Box, holds 4 batteries, Dimensions: 16.45" L x 20.25" D x 24.2" H	<b>3699025</b>
Z Brackets Kit, Quantity of 2, used to mount steel battery boxes away from structure on frame rail	<b>4499010</b>
Lid Deck for Battery Box 27"	<b>3699034</b>
Lid Deck for Battery Box 28"	<b>3699035</b>
Between the Rail Aluminum Battery Box , holds 4 batteries	<b>3699033</b>

NITE Day Cab Air Conditioning System



**Technical Specifications**

	Cooling
• Performance	7,200 Btuh 2.11 kW
• Air Flow	180 cfm 323 m <sup>3</sup> /hr
• Current Draw	25-55 amps @ 12vdc 636 Watts
• System requires refrigerant charge	

**Features**

- Split system: condenser unit outside, evaporator unit inside cab
- 3 fan speeds
- Virtually maintenance free
- Quiet operation
- Easy to clean interior filter
- Optional voltages available on request

**Construction**

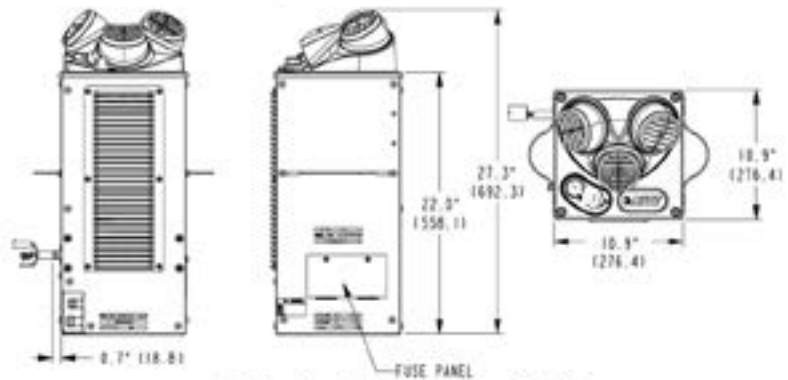
- Shell constructed with durable steel
- Electrified unit, runs on auxiliary AGM / deep cycle batteries (minimum 12v required)
- R134a refrigerant

**Weights and Dimensions**

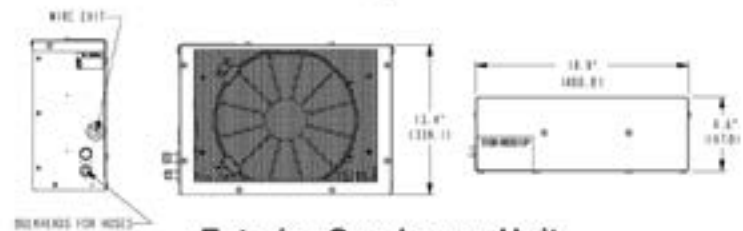
	Interior Unit	Exterior Unit
• Weight	52 lbs 23.6 kg	25 lbs 11.3 kg
• Length	10.9 in 276.4 mm	18.9 in 480.8 mm
• Depth	10.9 in 276.4 mm	6.6 in 167.8 mm
• Height	27.3 in 692.3 mm	13.4 in 339.1 mm

**Warranty**

- 1 year limited warranty parts and labor



Interior Evaporator Unit



Exterior Condenser Unit

# NITE Battery Specifications

## NITE Day Cab System

Description	Part No.
NITE Electrified Day Cab System Power Kit	<b>3699028</b>
NITE Electrified Day Cab System Standard Kit (Includes External Kit, Internal Kit and Day Cab Power Kit)	<b>3699029</b>
NITE Electrified Day Cab System Installation Kit (Includes all hardware are for both the External and Internal Kits)	<b>3699030</b>
NITE Electrified Day Cab Combo (Webasto)	<b>3699038</b>
NITE Electrified Day Cab Combo (Espar)	<b>3699037</b>

## NITE Day Cab Service Parts

This is the list of the most commonly used service parts. For a complete/up-to-date list of service parts please visit the NITE website at <http://us.bergstrominc.com/nite-no-idle/>.

Product Description	Kysor P/N	Grey Box Old Pressure SW & Standard Wiring	Grey Box New Pressure SW & Standard Wiring	Grey Box New Pressure SW & Upgraded Wiring	NITE PLUS Prefix BOT	NITE PLUS Prefix CDH
<b>Service Unit</b>	Obsolete	x	x	x		
	Obsolete	x	x	x		
	Obsolete	x	x	x		
	Obsolete	x	x	x		
	Obsolete	x	x	x		
	Obsolete	x	x	x	x	
	3699040	S	S	S	S	•
<b>Separator</b>	160 amp	Obsolete				
	100 amp	Obsolete				
	200 amp	4099091	S	•	•	•
<b>Relay, 70amp 12V W/Resistor</b>	Obsolete	x	x	x		
	4099086	•	•	•	•	•
<b>Internal Unit Harness</b>	Old HI Pressure	Obsolete	x			
	New HI Pressure w/o Relay	Obsolete	x	x	x	x
	New HI Pressure w/ Relay	4099193	S	S	S	S
<b>Controller Harness</b>	w/ LED Harness	Obsolete				
	w/o LED Harness	4099166	•	•	•	•
<b>Power Wire Harness</b>	10ga GND 10ga POS	Obsolete				
	6ga GND 8ga POS	4099103	•	•	•	•
<b>NITE Control Assy</b>	Old Style Aftermarket w/ LEDs	Obsolete	x			
	Old Style Aftermarket w/o LEDs	Obsolete	x	x		
	Aftermarket	4499038	S	S	•	•
<b>Switch, Rotary</b>	3 Speed	2199005	•	•	•	•
<b>Control Knob</b>	Old Style	2599050	•	•	•	•
	New Style	4099132	•	•	•	•
<b>Drain Tube</b>		4099082	•	•	•	•
<b>Freeze Switch</b>		4099084	•	•	•	•
<b>HI Pressure Switch (Old)</b>	Obsolete	x				
		2213007	S			
<b>Complete Blower Assy</b>		4099079	•	•	•	•
<b>EVAP motor only</b>		4099138	•	•	•	•
<b>Condenser Fan</b>	Old Style	4099081	•	•	•	
	New Style	4099167				•
<b>Compressor Controller</b>	Analog	Obsolete	x	x	x	
	Digital	4099085	S	S	S	•
<b>Main Controller</b>	Std w/ Old HI SW	4499036	•			
	Upgrade w/ Old HI SW	4499037		•		
	Upgrade w/ New HI SW	4099158			•	•

### LEGEND:

- x Obsolete Part Number
- S In Place of Obsolete Part Number
- Current/Original Part Number



**Espar Systems**

**Espar Air Heater Systems—**



Developed from the D1LC, the AIRTRONIC D2 is more compact with fewer parts. It is designed for applications such as cab and sleeper heating. This air heater cycles quietly through four heat levels to maintain a desired comfort setting, without idling your engine.

Description	Part No.
Airtronic D2 (12V) with mini controller - Truck kit	<b>3999178</b>

**Features and Benefits:**

- **Compact**
- **Economical**
- **Low fuel and power consumption**
- **Intergrated control unit**
- **Ease of maintainance and installation**
- **Self Diagnostic**

**Airtronic D2**

Heat Output	Fuel Consumption	Electrical Consumption
BTU/hr (KW)	Gal/hr (L/hr)	12V model shown
7,500 (2.2) Boost	Diesel 1, 2 or Kerosene	8.3 amps (Start)
6,150 (1.8) High	0.07 (0.27) Boost	2.8 amps (Boost)
4,100 (1.2) Medium	0.06 (0.21) High	1.9 amps (High)
2,900 (0.8) Low	0.04 (0.14) Med.	1.0 amps (Med.)
	0.02 (0.10) Low	0.67 amps (Low)

Air Throughput	Weight	Dimensions
48 cfm (Boost)	6 lbs. (2.7 kg)	L= 12.2" (31 cm)
40 cfm (High)		W= 4.5" (11.5 cm)
27 cfm (Med)		H= 4.8" (12.2 cm)
19 cfm (Low)		

# Webasto Systems

## Webasto Systems

### Webasto Systems—

All Webasto auxiliary air heaters are compact, lightweight, and easy to install, operate and maintain. The forced air heater provides “engine off” heat for sleeper cabs efficiently and affordably.



Description
Air Top 2000 ST Heater

#### Features and Benefits:

- *Immediate 7,000 BTU/h heat output*
- *Delivers up to 20 hours of heat on a single gallon of fuel*
- *Quiet Operation*
- *Compact for easy in-cab installation*
- *Smart technology offers consistent heat levels with exceptionally low amperage draw*
- *Automatic heat output controls and safety shutdown*
- *Variable control*

### Air Top 2000

Heat Output	Fuel Consumption	Electrical Consumption
BTU/hr (KW)	Gal/hr (L/hr)	12V model shown
3,100 - 7,000	Diesel #1, #2, Artic, Biodiesel B5 & B20 (up to 20%) 0.03 - 0.6 gal/h	1.20 - 2.41 amps

Air Throughput	Weight	Dimensions
37 cfm	5.73 lbs.	12.25" x 4.78" x 4.85"

*Webasto heater packaged with the NITE Phoenix combo kit has a modified harness that connects directly to the Phoenix unit, and operates from the Phoenix digital controller.*

*Webasto heaters packaged with the NITE Plus or NITE DayCab combo kits come with the standard Webasto controller.*