



Installation Manual



Model 377, 379, 386, 388, 389
63" Sleeper no window

Table of Contents

Introduction	1-3
Before You Start	1-4
Parts List	1-5
Tools Required	1-7
Installation	1-8
Electrical Installation	2-1
Espar Heater	3-1
Webasto Heater	4-1
Checklists	5-1

Congratulations. You have chosen the premier no-idle climate control system on the market today—the **NITE[®] Plus system** from Bergstrom.

The **NITE Plus** is a powerful 12V rechargeable DC system that keeps sleeper compartment cool in hot weather and warm in cold weather (with optional heater) without having to idle the truck's engine—and without a genset. It not only dramatically reduces fuel burned, it's also very environmentally friendly.

Your **NITE Plus** is a self contained, hermetically sealed, compact A/C system that produces approximately 4,600 Btuh and has been quality engineered for years of reliable service. The system operates independently from your truck's engine using its own deep cycle batteries that are completely separate from the truck's starting batteries.

The deep cycle batteries used are the most advanced ever—and will efficiently power the system for 8 to 10 hours. The batteries are then fully recharged after just 4 to 6 hours of driving.

Add it all up, and you have a revolutionary no-idle system that will save you money and fuel year after year—the **NITE Plus** from Bergstrom.



NOTE:

*The **NITE Plus** A/C system is designed to maintain a comfortable temperature inside the sleeper without running the engine.*

For optimal comfort, the curtain between the cab and the sleeper must be closed when using the unit. To enhance cooling efficiency during the day, solar reflectors or curtains should be placed over the windshield and all windows to block sunlight from entering the cab and sleeper.

*The **NITE Plus** A/C unit will not pull down a hot sleeper that has been sitting in the sun without the factory A/C running. To assist the **NITE Plus** unit in cooling down the sleeper, start the engine and run the factory A/C until desired temperature is reached. The **NITE Plus** unit will then maintain a comfortable temperature depending on solar load & ambient temperature.*

A typical installation of the **NITE Plus** generally takes between 8 to 10 hours, although your particular situation may vary. This manual contains step-by-step installation instructions. It is divided into three categories:

- General installation
- Electrical installation
- Heater installation (optional)

There is also a section on how to check your **NITE Plus** to make sure the installation was successful, and a section on how to operate your **NITE Plus**.

If relocation or reinstallation of any pre-installed equipment is necessary for installation of the NITE Plus equipment - please refer to the components manufacturer's instructions or safety guidelines for proper installation.

Before you start, we highly recommend doing the following to help make your installation as easy as possible.

1. Lay out all parts and check to make sure you have all parts listed on the parts list.
Depending on truck, some hardware may not be used. If you are missing any parts, please call 1-866-204-8570.
2. To prevent damage to compressor, keep the **NITE Plus** unit in an upright position at all times. If unit is tipped, place back in upright position for a minimum of 6 hours prior to running.
3. Check the list of tools needed for installation and make sure you have all of them. Keep all tools within easy reach.
4. Look through the whole installation manual to get an understanding of the order in which components are installed.
5. Make sure you have good lighting and enough space to work in.
6. You may want to get an assistant to help you to reduce the number of times you have to climb in and out of the cab.
7. Make sure you wear all appropriate safety equipment.



Photo above is representative of kit 1000113986 only.

Parts List

1-5

Bergstrom Part #	Part Description	Quantity
1000113877 NITE STANDARD KIT A/C ONLY		
1000078163	ASSEMBLY, NITE UPGRADE UNIT	1
1000014440	KIT, NITE POWER	1
1000007552	POLICY, NITE WARRANTY	1
585421	MANUAL, NITE OPERATION	1
585511	CARD, NITE, WARRANTY SURVEY	1
1000119244 NITE STANDARD KIT A/C & HEAT		
1000078163	ASSEMBLY, NITE UPGRADE UNIT	1
530713	KIT, ESPAR HEATER	1
1000014440	KIT, NITE POWER	1
1000007552	POLICY, NITE WARRANTY	1
585421	MANUAL, NITE OPERATION	1
585511	CARD, NITE, WARRANTY SURVEY	1
1000113986 INSTALL KIT		
454651	ANGLE – DUCT COLLAR	1
500105	LOUVER, CARY 633 WITH 631 BEZEL	2
500198	GRILLE, AIR RETURN	1
560235	HOSE DEFROST 4.0 X 45"	1
584510	PLUG BUTTON .5 IN HLE 3L4566	2
870235	ASSY, MOUNT PLATE 4 BEND	1
1000007614	DUCT, UPPER	1
1000007617	DUCT, STEALTH	1
1000007618	DUCT, TRANSITION	1
1000011467	CONTROL DUCT ASSY	1
1000113415	WIRE HARNESS NO IDLE CONTROL	1
1000113881	TEMPLATE, NITE FLOOR	1
1000115617	CD ROM, NITE INSTALL MANUALS	1
1000113995	KIT, NITE STANDARD HARDWARE	1

Parts List

1-6

Bergstrom Part #	Part Description	Quantity
B290303	CLAMP, HOSE 4.12 I.D.	2
B300571	EDGING BULK	4 FT
B360692	GROMMET, NO 6 AND NO 10 HOSE ADAPTER	2
1000014440 NITE Plus POWER KIT		
660706	ASSY, WIRE BATTERY CABLE 5300MM BLACK	2
660707	ASSY, WIRE BATTERY CABLE 5000MM RED	3
660694	ASSY, WIRE BATTERY CABLE 225MM	2
660678	HARNESS, WIRE NO-IDLE POWER	1
660827	WIRE, 16 GAUGE BLACK	1
651383	SEPARATOR 200 AMPS	1
651225	FUSE, MAXI 50 AMP	1
B230083	RING TERMINAL, 5/16	2
B300642	WIRE LOOM, .413 I.D. X BULK – BLACK SPLIT PLASTIC	70 ft.
B300652	WIRE LOOM, .625 I.D. X BULK – BLACK SPLIT PLASTIC	15 ft.
B360113	STRAP, CABLE TIE	50
709860	BLADE TERMINAL	1
708000	RING TERMINAL, 5/16 16 GAUGE	1
651462	HEAT SHRINK TUBING	10
670136	5/16 RING TERMINAL, 4 GAUGE	8
670137	3/8 RING TERMINAL, 4 GAUGE	2
660706	ASSY, WIRE BATTERY CABLE 5300MM BLACK	2
660707	ASSY, WIRE BATTERY CABLE 5000MM RED	3
660694	ASSY, WIRE BATTERY CABLE 225MM	2

- 1) Drill Bit Set
- 2) Hole saws (1", 1-5/8", 2", 2-1/2" and 4-3/4")
- 3) Electric/Air Drill
- 4) Screwdrivers/Assorted Bits (Flat Head & Phillips Head)
- 5) Impact Gun
- 6) Air saw/Jigsaw (Cutting Sheet metal)
- 7) Torx Head (T30) Bit
- 8) Metric Wrenches
- 9) SAE Wrenches
- 10) 1/4", 3/8" Drive Ratchets
- 11) SAE Socket Set
- 12) Metric Socket Set
- 13) Wire Cutters
- 14) Terminal Crimpers
- 15) Wire Strippers
- 16) Razor Knife
- 17) Electrical Tape
- 18) Cable Cutters
- 19) #4 Professional Grade Cable Crimpers
- 20) Cable Strippers
- 21) Work Light
- 22) Torque Wrench up to 50 in/lbs
- 23) U-barrel Crimper
- 24) Pop Rivet Gun

1

Prepare the Work Area

Set up your work light, clear the sleeper compartment of loose items, and remove the divider curtain if there is one. Then remove the mattress and set outside the cab. The *NITE Plus* unit is going to be mounted under the lower bunk in the central storage compartment. Remove the particle board decking and set outside the truck.



2

Remove Bunk Support Decking

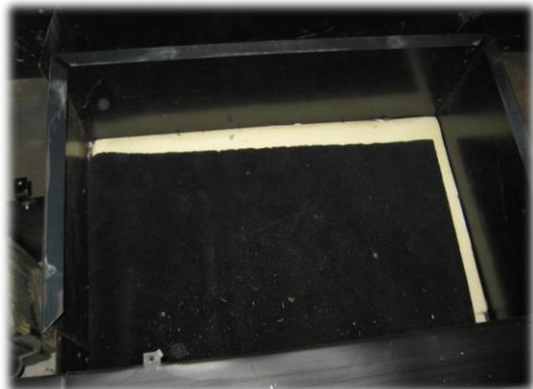
Remove all the screws from metal deck covering the center storage compartment. Next use grinder to cut rivets securing the safety belt brackets. Then remove decking.



3

Remove Floor Mat from Center Compartment

Remove floor mat to expose the floor under the storage compartment.

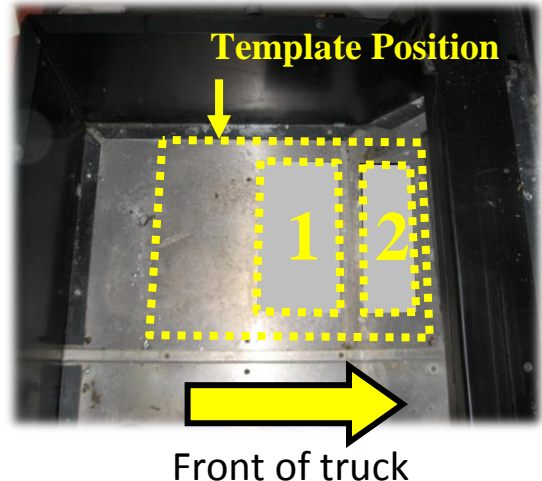


4

Determine Location for *NITE Plus* unit Mounting Plate

Using the provided template, determine where the *NITE Plus* unit will be mounted.

Mark the two rectangular openings (marked as 1 and 2). Check under the truck for any obstructions before drilling or cutting.



5

Drill Pilot Holes and Cutout Floor Openings

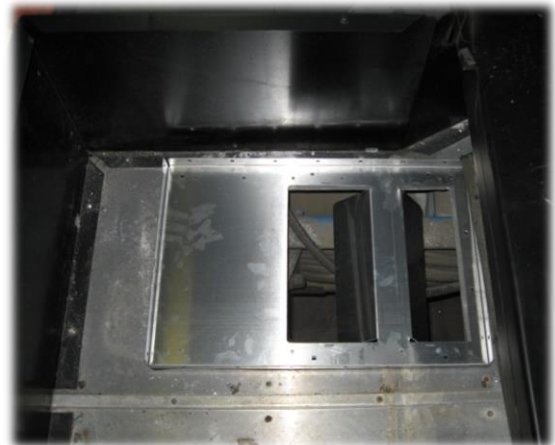
Remove the template to reveal cut out locations. Drill ½" starter holes in opposing corners of the two areas marked for cutting. Use air saw/jigsaw to cut through truck floor. These two openings will provide air intake and exhaust for the *NITE Plus* unit condenser fan.



6

Install *NITE Plus* Mounting Plate

Position the *NITE Plus* mounting plate with the pre-cut recirculation grills, over the holes cut in the truck floor. The openings in the plate should be towards the front of the truck. Attach to the floor through the predrilled holes using self-tapping screws.



7

Attach Metal Flange Adapter to Elbow

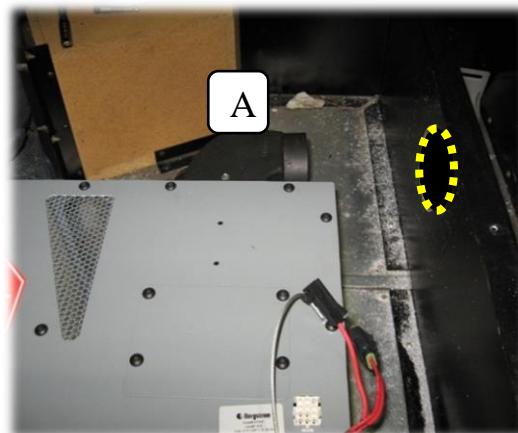
Attach with 3 hex head self-drilling screws. Seal around flange with silicone sealant (not included in kit).



8

Temporarily Position *NITE Plus* unit in Mounting Plate

Set *NITE Plus* unit in mounting plate and hold the elbow duct (A) in position on the side of the unit to help determine the location for the rest of the *NITE Plus* duct work. Ideal location is indicated by dotted circle.



9

Drill Hole for Flexible Duct

Use a 4 3/4" hole saw to drill a hole through the back wall of the center storage unit at the location determined earlier.



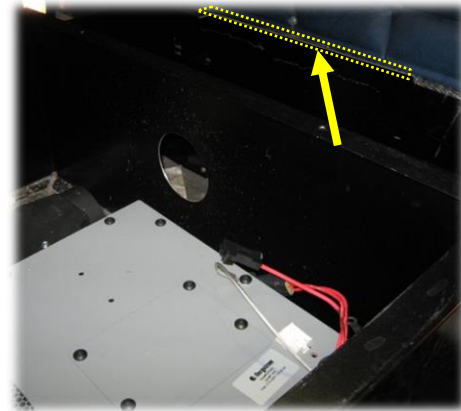
10 Attach Transition Duct to the Bottom of *NITE Duct*

Attach the transition duct to the bottom of the *NITE Duct* using two 1" 5/16 self-tapping screws (circled).



11 Locating the Position for the *NITE Duct* and Cutting Bunk Support Angle

Position the *NITE Duct* based on the hole drilled through support wall. While holding the duct in position, mark the section of bunk support angle that will need to be removed. Set duct aside and use air saw to cut marked area.



12 Feed Control Wiring Through *NITE Duct*

Take the *NITE Duct* and thread the end of the wiring harness with the 5 prong black plug through the opening from the backside to front. Attach the control panel to the wiring harness using the wires with a 5-prong plug—make sure the connection is tight and secure. (The other three wires are not used in this particular installation.)



NOTE: If you will be installing the optional ESPAR heater please review step 17 of the heater control panel installation instructions before proceeding.

13

Attach Control Panel to *NITE* Duct

Push wiring behind duct, and mount the control panel to the duct using $\frac{3}{4}$ " black Phillips head screws through the pre-drilled holes. Tighten carefully. **When finished make sure switch is in the off position!**



14

Run Wiring behind *NITE* Duct

Place the wiring harness along the channel on the back of the duct. The duct is now ready to be attached.



15

Attach Duct to Back Wall

Align duct between area cut out of the bunk support angle and align the bottom of the transition duct with the hole drilled in rear support wall. Press the top of the duct up against the back wall. Make sure the duct is square and level against the back wall. Use 1" 5/16 hex head self-tapping screws to attach top of duct to back wall. Place 3 - 5 screws in each duct opening and install at different angles. Take care not to over tighten.



16

Attach Vents to *NITE* Duct

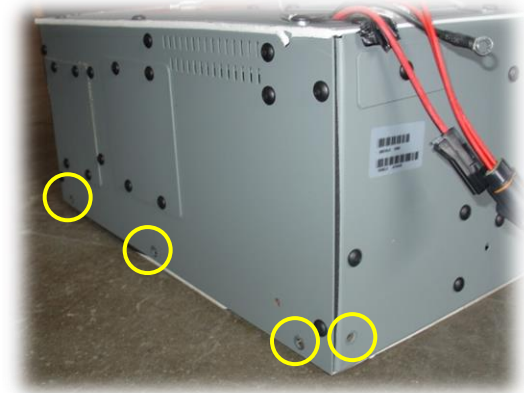
Snap the louvered vents into each of the duct openings—no screws are necessary.



17

Prepare *NITE Plus* Unit for Install

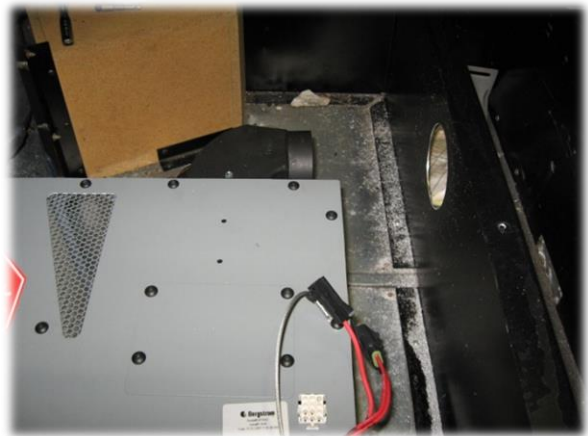
Remove the three screws shown in the illustration from the front bottom of the *NITE Plus* unit, and one screw from the right-side bottom corner. The unit is now ready to be placed in the truck.



18

Place *NITE Plus* Unit into Position

Carefully lift the *NITE Plus* unit by the two strap handles and set it on top of the aluminum mounting plate. Be Careful to keep *NITE Plus* unit level at all times. The “STOP” label should be towards the front of the truck facing the driver’s side as pictured. Be careful not to catch or pull on the wiring harness.



19

Attach *NITE Plus* Unit

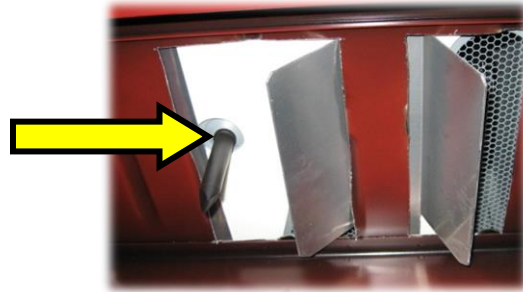
Install screws through the lip on the mounting plate into the *NITE Plus* unit.



20

Install Drip Tube Under Truck

All drip tubes are the same but photo may not represent actual application

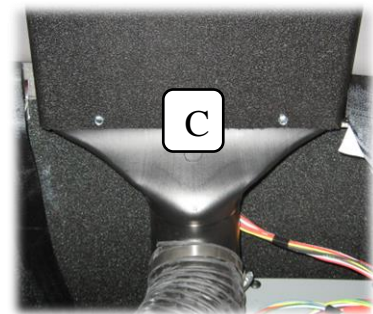
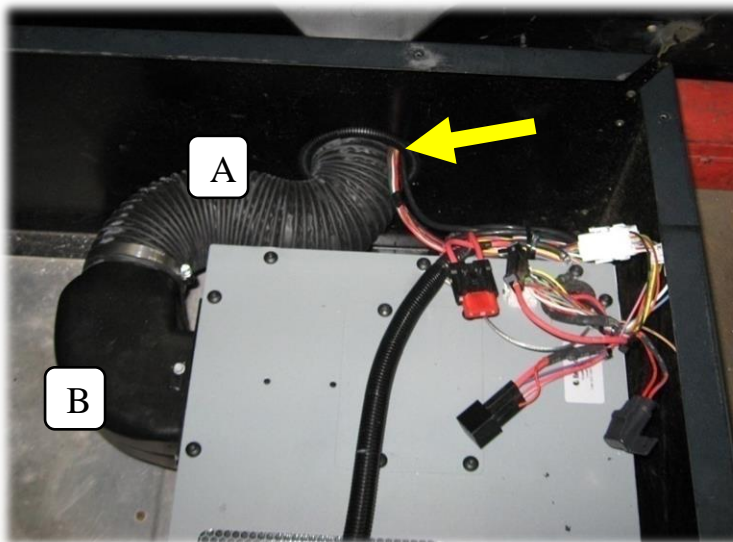


21

Attach Flexible Duct to Assembled Elbow and Transition Duct

Insert flexible duct (A) onto the round end of the elbow unit (B) using hose clamp to secure flex duct to elbow. Run the other end of the flexible duct through the 4 3/4 " hole you drilled in the back wall of the center storage compartment. NOTE: Hole position may vary on back wall. You should also run the control harness wiring through the 4 3/4 " hole at the same time (indicated by arrow.) Attach flex duct to bottom of transition duct (C) and secure with hose clamp. **NOTE: Use protective loom or similar product to cover sharp edges of the 4 3/4 " hole.**

Attach the elbow (B) to the side of the *NITE Plus* unit using #30 torque screws.



22

Attach Control Cable to Unit

Snap control cable harness, coming from the *NITE* duct, into plug on top of *NITE Plus* unit – it only fits one way.

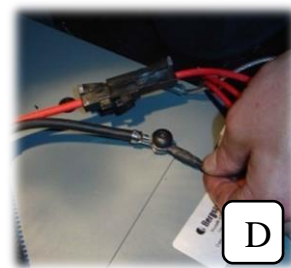
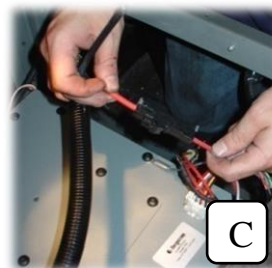
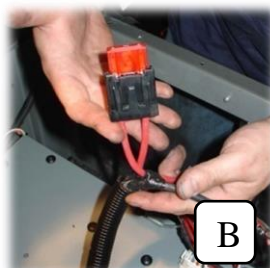


23

Install the *NITE Plus* Unit Power Harness

Take the power harness and place the protective split plastic loom around it. Install provided grommet into hole in the floor (A). Make sure to use this grommet to protect cables as you run the cables from the *NITE Plus* unit, down through the frame rails to the *NITE Batteries*. Secure with zip ties. Insert a 50 amp MAX fuse in the fuse holder at the *NITE Plus* unit end of the power harness (B). Plug the positive end into the positive plug on the *NITE Plus* unit (C). Remove a screw from the *NITE Plus* unit surface, place it through **BOTH** of the negative ring terminals and re-attach to the *NITE Plus* unit (D).

NOTE: DO NOT USE THE SCREW HOLDING CARRYING STRAP FOR GROUNDING!



24

Cut Notch in Metal Deck

Re-position decking to mark cut-out around *NITE* duct. Cut a 2" x 13" notch. Set decking aside for installation after testing the unit.

