



**Copper-Fin[®]
Car Wash
Bay De-Icing
Systems**



**Completely Packaged
Gasketless Heat Exchanger
Lower Installed Cost**

Car Wash Bay De-Icing Systems

by:  **Lochinvar**[®]
High Efficiency Water Heaters, Boilers and Pool Heaters

De-Icing Package Systems

All De-Icing systems are pre-engineered and pre-assembled complete with all piping to meet your specific application, which means that installation is easier. Lochinvar's De-Icing Systems come with a circulating pump and all controls mounted and wired, so just slide the unit into place and connect the utilities. And like every Lochinvar product, we thoroughly test them to ensure proper performance from the moment they're installed - Guaranteed.



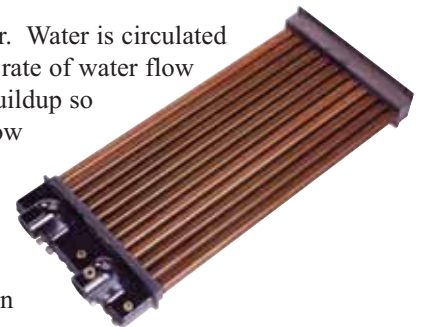
We also offer the Multi-Stack stand, which allows you to put two units in the footprint normally required for one, saving valuable space in the mechanical room.

High Heat Transfer

The high heat transfer ratio of the finned copper tubing, together with the high velocity water flow characteristics of our heat exchanger design, combine to offer yet another benefit: a virtually instantaneous response to the demand for heat. Heat is always provided quickly and accurately-eliminating the temperature lags and overshoots often found in other de-icing systems.

Unique Copper-Fin[®] Heat Exchanger

The Lochinvar Copper-Fin design uses a two-pass heat exchanger. Water is circulated through a row of highly-efficient, finned copper tubes. The high rate of water flow creates a scouring action that prevents sediment and lime scale buildup so common in conventional boilers, and the finned copper tubes allow maximum heat transfer efficiency.



Heavy Duty, Gasketless Design

What's more, advanced casting processes allowed Lochinvar to develop a unique one-piece header system. This gasketless design provides enhanced reliability, improved durability and optimizes performance - but without the problems or failures found with O-Rings and gaskets.

A Space-Saving, Money-Saving Design



The entire Copper-Fin product line offers you greater flexibility and ease of installation. These high efficiency units are compact enough to fit through standard 36" doorways intact for models up to 2,065,000 Btu/Hr.

The space-saving design of Copper-Fin leaves more space in the mechanical room. And with the optional Multi-Stack stand you can place the packaged de-icing boiler in the same footprint utilized by the water heater.

Making Installation Easier - For Less (CB645-745 - Fan-Assisted Models)

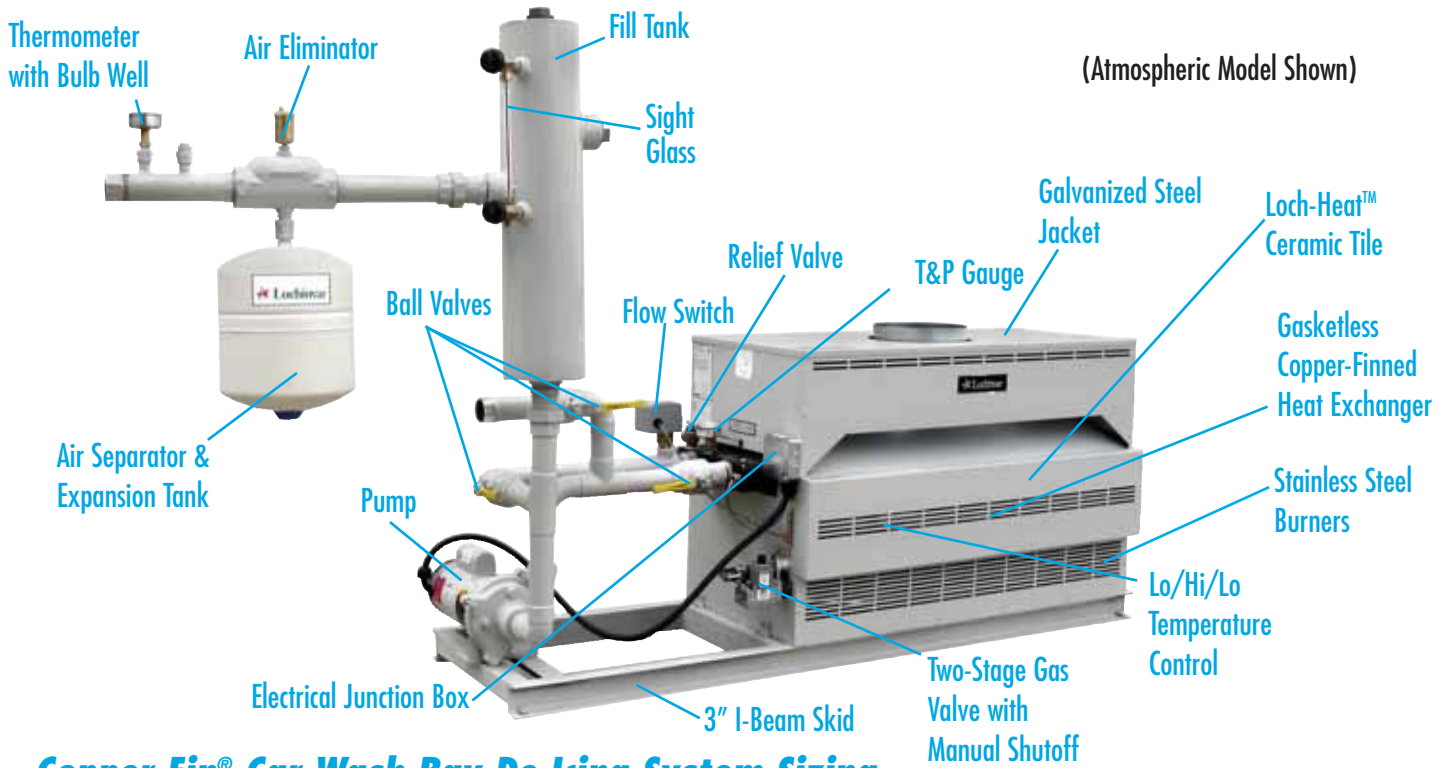
Save energy, save space, and save on installation costs - with the Copper-Fin. High-efficiency, fan-assisted combustion means you can use a smaller diameter vent stack, up to 8" smaller than typically required - making installation less expensive and less time-consuming.



And thanks to our unique fan-assisted combustion, it also produces extremely low Nox emissions.

** For California and Texas installations consult factory for low Nox certified products as low as 100,000 Btu/Hr.*

Copper-Fin® Car Wash Bay De-Icing System Outstanding Features



Copper-Fin® Car Wash Bay De-Icing System Sizing

Number of Bays	System for Zones 2, 3	System for Zones 3, 4
2	CBN180	CBN180
3	CBN260	CBN315
4	CBN360	CBN500
5	CBN399	CBN500
6	CBN500	CBN645
7	CBN645	CBN645
8	CBN745	CBN745

Notes:

* Heaters available from 985,000 - 2,065,000 Btu/Hr for larger applications. Consult Factory for sizing.

Sizing based on 120 BTU per square foot.

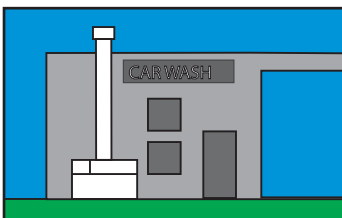
Bay sized as 26 ft. X 15 ft. X 4" with 3-foot approach.

Overall bay size 32 ft. X 15 ft. X 4" or 491 square ft.

Call for sizing outside these specifications.

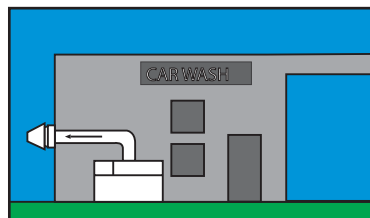


Copper-Fin® Car Wash Bay De-Icing System Venting (Smaller outdoor models available - consult factory)



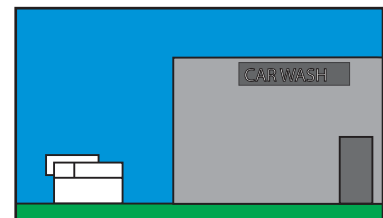
Conventional

Vents into conventional flue or vent breaching using Type B double-wall vent.



Side Wall

Vents directly through the outside wall using the optional powered side wall cap. Ideal when a vent stack is not practical.

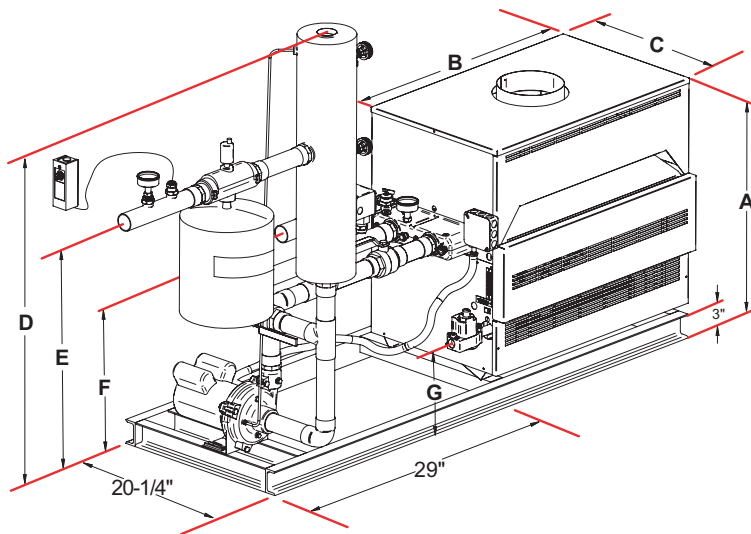


Outdoor (CB645-745)*

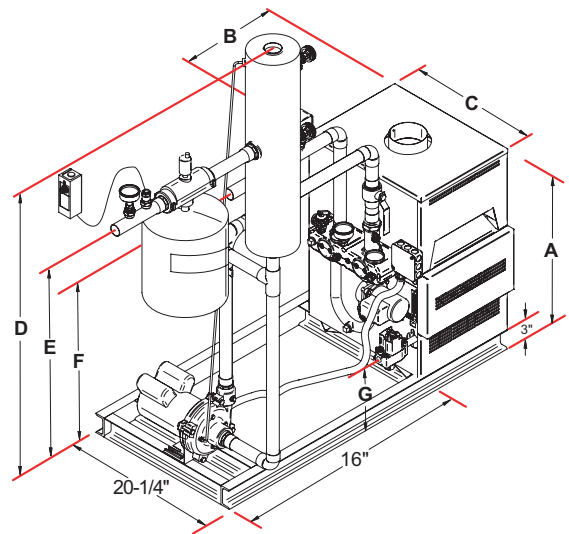
Requires an optional outdoor vent cap. Use when indoor space is a problem or if outdoor location gives better access.

* (Smaller outdoor models available - consult factory)

Copper-Fin Car Wash Bay De-Icing System Dimensions & Specifications



CB 315-745



CB 90-260

Model Number	Btu/Hr Input	A	B	C	D	E	F	G	Vent Size	Circulating Pump Size	Shipping Weight
CBN180-8024	180,000	32-1/2"	23-1/2"	21-1/2"	71-1/2"	62-1/2"	41-1/4"	9-3/4"	7"	1/4 HP	386
CBN215-8024	215,000	32-1/2"	26-1/2"	21-1/2"	71-1/2"	62-1/2"	41-1/4"	9-3/4"	7"	1/4 HP	410
CBN260-8024	260,000	32-1/2"	29-1/2"	21-1/2"	71-1/2"	62-1/2"	41-1/4"	9-3/4"	8"	1/4 HP	424
CBN315-8024	315,000	32-1/2"	32-1/2"	21-1/2"	58-1/4"	53"	26"	9-3/4"	8"	3/4 HP	445
CBN360-8024	360,000	32-1/2"	35-1/2"	21-1/2"	58-1/4"	53"	26"	9-3/4"	9"	3/4 HP	457
CBN399-8024	399,000	32-1/2"	44-1/2"	22"	58-1/4"	53"	26"	19-3/4"	10"	3/4 HP	530
CBN500-8024	500,000	37-1/2"	52-1/2"	22"	58-1/4"	53"	26"	19-3/4"	10"	3/4 HP	563
CBN645-8024	645,000	36-1/4"	56-3/4"	22-1/4"	58-1/4"	53"	26"	33-3/4"	8"	1-1/2" HP	751
CBN745-8024	745,000	36-1/4"	64"	22-1/4"	58-1/4"	53"	26"	33-3/4"	8"	1-1/2" HP	718

Change 'N' to 'L' for LP gas models.

Standard Features (All Models)

- Completely Packaged & Skid Mounted
- 10 Year Commercial Limited Warranty on Heat Exchanger
- Low Temperature Bypass Piping
- Circulating Pump Mounted and Wired
- Expansion Tank
- Air Separator
- Air Vent
- Low Range System Thermostat
- Supply & Return Thermometer
- Spark Ignition
- Flow Switch
- Stackable
- Pump Delay
- Fill Tank w/ Sight Glass
- Built-In Draft Diverter (No External Bell Shaped Hood Required)
- Dual Adjustable High Limit Controls
- Temperature & Pressure Gauge
- ASME Pressure Relief Valve

- Galvanized Jacket
- ASME Certified to 160 psi Working Pressure
- High Efficiency Stainless Steel Burners
- Lightweight Loch-Heat Ceramic Tile Combustion Chamber
- Gas Valve with Built-In Manual Shut-Off
- National Board Certified
- Pre-paint High-Gloss Acrylic Paint

Additional Features (Models CB645-745)

- Fan Assisted Combustion
- Smaller Vent Sizes
- Low NOx Emissions



Optional Equipment

- Direct Vent Models Available (Models up to 2,070,000 Btu/Hr)
- Multi-Stack Frame
- Outdoor Vent Cap for Fan-Assisted Models

FOR EASE IN ORDERING BY MODEL NUMBER

CB	N	180	8024	F9
MODEL	NAT. GAS	MBH	CAR WASH PACKAGE	FIRING CONTROLS

This heater is 180,000 Btu/hr natural gas boiler Car Wash Package System with F9 firing controls.



Lochinvar
High Efficiency Water Heaters, Boilers and Pool Heaters



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