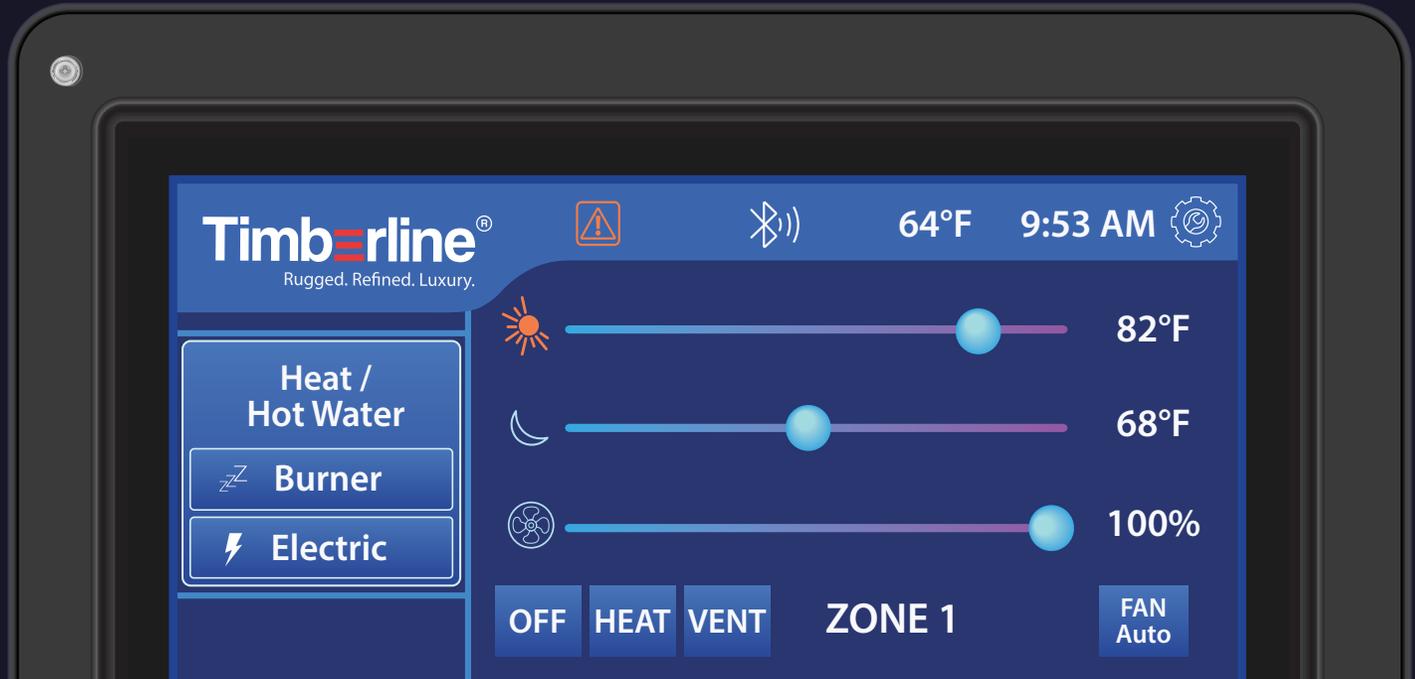


Timberline[®] 2 SERIES

Touch Panel User Manual

For use with the Timberline Heat and Hot Water System by Elwell



Welcome,

to your Timberline 2 Series Heat and Hot Water System.

Follow along with this manual to set up and customize your Timberline heating system via the intuitive touch panel.

Visit: timberlineheat.com

Email: info@elwellcorp.com

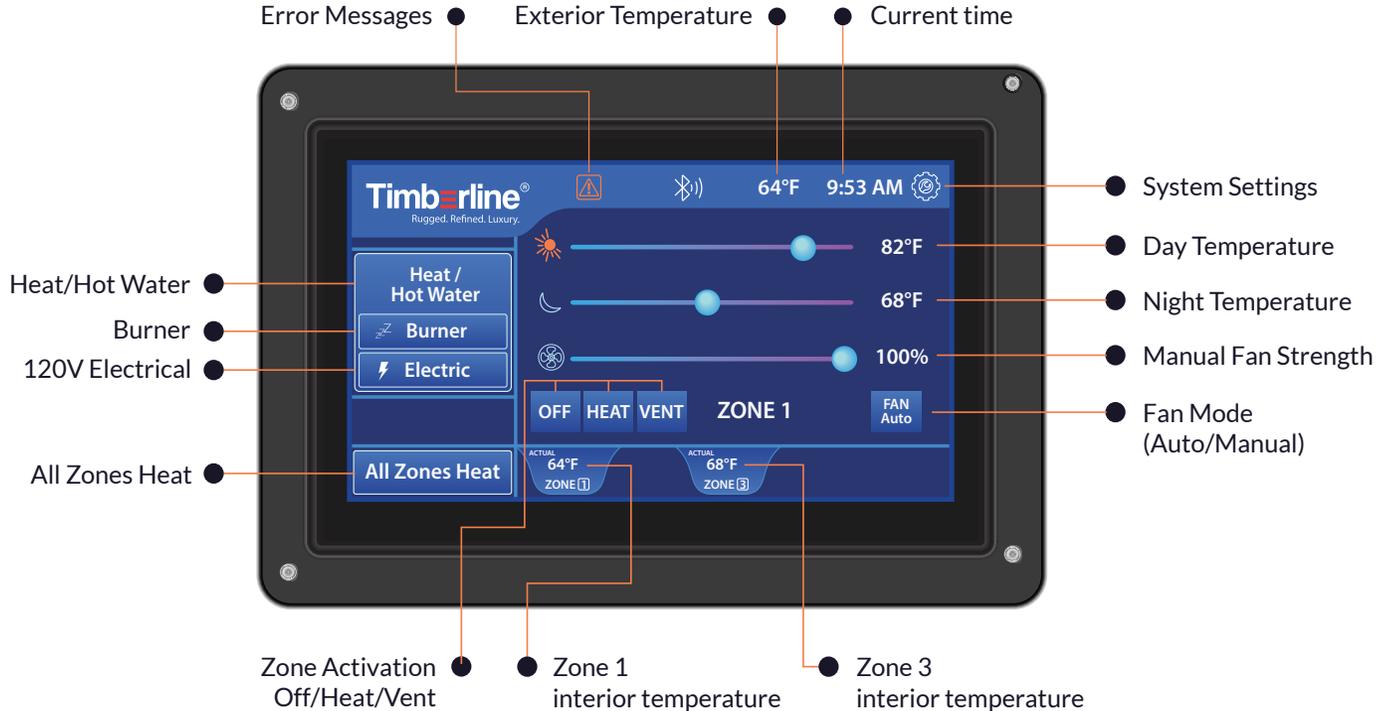
Call: 360-608-0916

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1. Homescreen Explained

Overview of Elements



2. Thermostat Components & Explanation

2.1 Burner and Electric

Burner

The burner is the primary heat source, using diesel or gasoline to heat the antifreeze, which then warms the van and provides hot water.

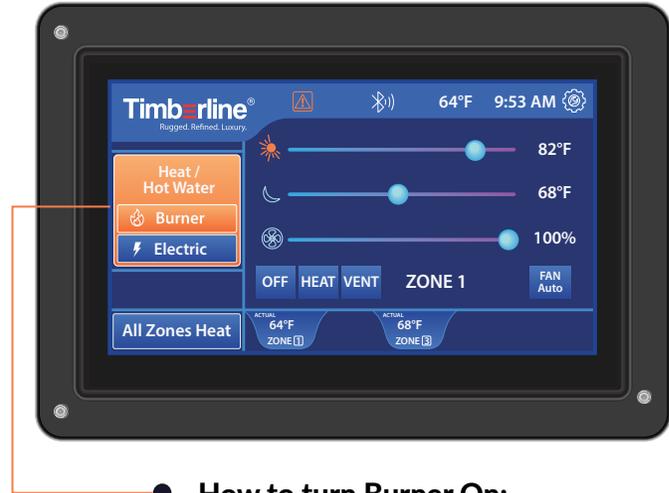
Flame:



The small flame icon indicates the burner is operating at low intensity.



The large flame icon shows the burner is running at high intensity.



● How to turn Burner On:

1. Press Burner Icon.
2. Burner turns Orange.
3. Will get big flame with ignition (5-10 Minutes).

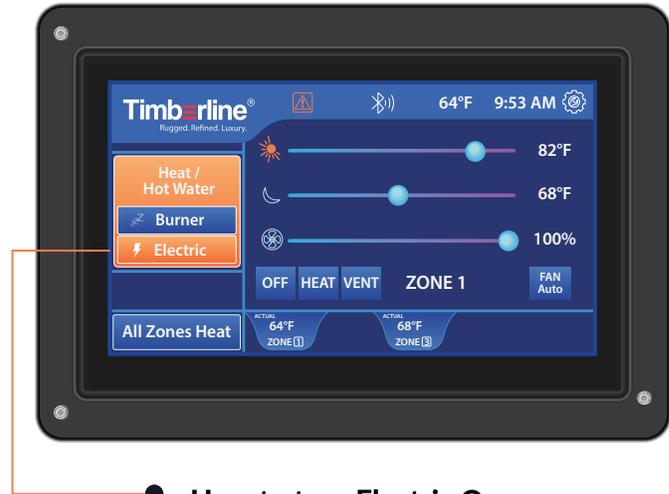
2.1 Burner and Electric

Electric

The electric element provides supplemental heat when connected to shore power. It works alongside the burner or independently, heating the antifreeze to warm the van and provide hot water. The system prioritizes electric heating when both options are activated.

Shore Power:

The electric heating element operates when the vehicle is connected to shore power, unless your specific system is configured differently. It provides an alternative or supplemental heat source to the burner, warming the antifreeze for both interior heating and hot water.



How to turn Electric On:

1. Press Electric Icon
2. Electric will turn orange

2.1 Burner and Electric

Heat/Hot Water

The Heat/Hot Water button illuminates orange when either the electric element or burner is activated.



This visual indicator confirms that a heat source is enabled, signaling that the system is ready to provide heating and hot water on demand.

2.2 Zones Individualized

Heating Zones

- To control each heating zone individually, tap the corresponding zone tab at the bottom of the screen. This selects the specific zone you want to adjust.

Each zone can have its own day and night temperature settings, activation status, and fan settings.



2.3 Fans

Fan Modes Explained

When *FAN Manual* mode is selected the fans consistently to run at the percentage you select, any time there is a call for heat.

When *FAN Auto* mode is selected the fans will regulate air flow based on the needs inside the living space. The fans will blow harder when more heat is needed and softer when maintaining the selected set point.



- **Fan Manual Mode**

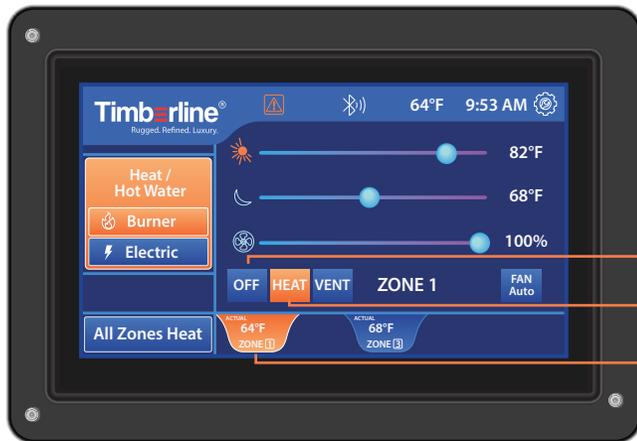
Drag the fan slider to choose the percentage at which your fan speed will run.

- **Fan Auto Mode**

Tap the *FAN Manual* button to toggle it to *FAN Auto*. When *FAN Auto* mode is selected, the fan slider will disappear from the home screen.

2.4 Activate Zone

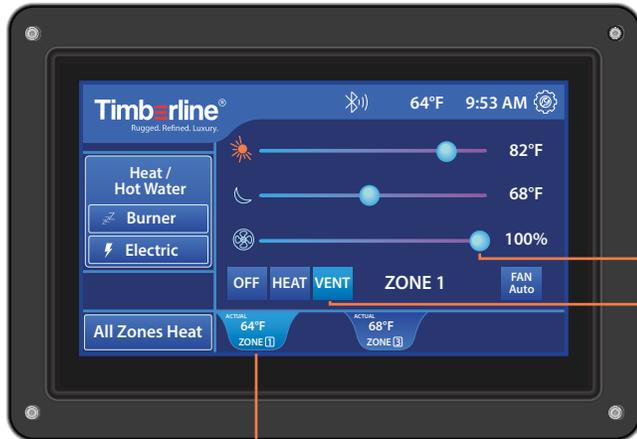
Activating Zones, Pt.1



- **Off:**
When the zone activation tab is set to *OFF*, heating and ventilation are disabled for that specific zone.
- **Heat:**
When the zone activation tab is set to *HEAT*, the system will heat that specific zone to the set temperature.
- When *HEAT* is selected for a zone, that zone tab turns orange.

2.4 Activate Zone

Activating Zones, Pt.2



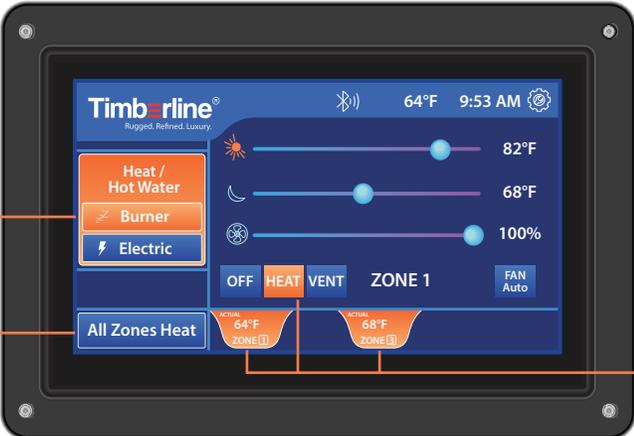
- **Vent:**
When the zone activation tab is set to **VENT**, the system will turn on the fans, and begin to move ambient air throughout the selected zone.
- The manual fan slider will appear, allowing you to choose the strength in which the fans blow.

If the Burner/Electric have been on, this will blow hot air within the vehicle.

If the Burner/Electric have been off, this will circulate ambient air within the vehicle.
- Activating **VENT** changes the selected zone tab to Blue.

2.5 All Zones Heat

Activating All Zones Heat



The image shows a Timberline control panel with the following elements:

- Top status bar: Timberline logo, Bluetooth icon, 64°F, 9:53 AM, and a settings gear icon.
- Left sidebar: Three buttons labeled "Heat / Hot Water", "Burner", and "Electric".
- Main display area: Three horizontal sliders for temperature and fan speed. The top slider is set to 82°F, the middle to 68°F, and the bottom to 100%.
- Bottom control bar: Buttons for "OFF", "HEAT", and "VENT" (all in orange), "ZONE 1" (in white), and "FAN Auto" (in blue).
- Bottom status bar: Two zone temperature indicators showing "64°F ZONE (1)" and "68°F ZONE (2)".

An orange line highlights the "All Zones Heat" button in the sidebar and the "HEAT" button in the bottom control bar. Lines also connect the "All Zones Heat" button to the first two bullet points on the right, and the "HEAT" button to the second bullet point.

- The *All Zones Heat* button serves one main purpose: to quickly activate all zones in the system.

When pressed, it:

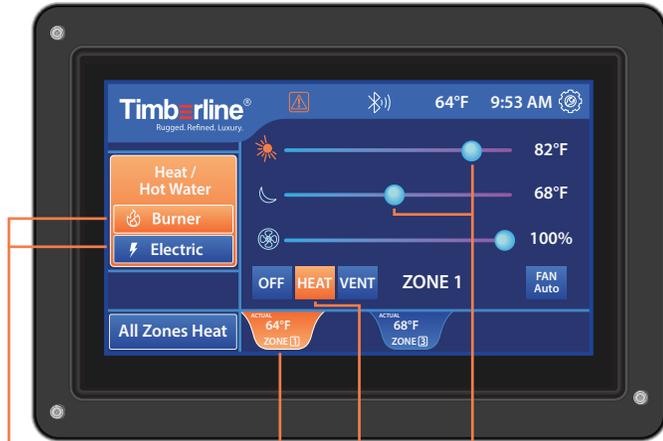
- 1. Activates all zones simultaneously to HEAT
- 2. Turns on the Burner

This one-touch solution allows the choice to rapidly warm up the entire van without adjusting previously set individual zone settings, making it ideal for quick comfort.

3. Use Cases

3.1 Creating Hot Air

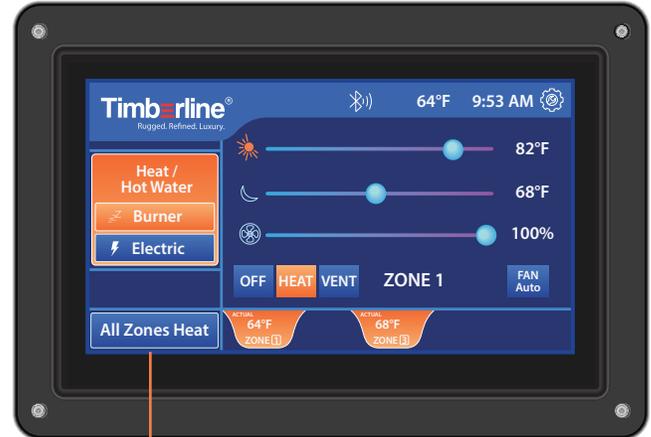
Two ways to call for Hot Air:



Method 1

- ① Select Zone(s)
- ② Activate Burner /Electric
- ③ Set Thermostat Temperature(s)
- ④ Activate Zone(s) by Selecting HEAT tab

OR

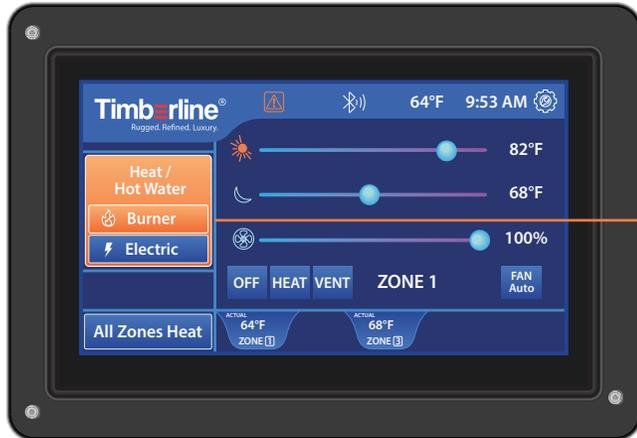


Method 2

- Tap All Zones Heat

3.2 Creating Hot Water

Calling for Hot Water



- ① Ensure Burner is turned on.
- ② If system has been off, wait 5-10 minutes. The system will heat up and automatically produce hot water.

3.3 Use of Burner and Electric Together

Burner + Electric

The Timberline system is designed to safely and efficiently use both the burner and electric heating elements simultaneously. This combination is particularly beneficial when extra heat output is needed, such as in extremely cold conditions or when rapid heating is desired.

Users are encouraged to utilize both heat sources when plugged into shore power, as this allows for quicker heat-up times for both hot air and hot water. By leveraging both the burner and electric heating, users can enjoy faster comfort and more consistent hot water supply, making the most of their Timberline heating system in various climate conditions.



- Select both the *Burner* and the *Electric* tab when plugged into shore power to achieve the best comfort experience Timberline offers.

4. Settings

4.1 Date and Time

Setting Date and Time



- 1 From the home screen, tap the Settings icon to visit the system settings.



First screen of system settings

- 2 Set your current time and date by pushing the orange buttons. Tap the **SET** button to finalize.
- 3 Ensure your clock is set correctly. Day and Night temperatures on the home screen run based on the system clock.

4.2 Temperature

Setting Temperature

Choose your unit of Temperature.



Second screen of system settings

- Tap one of the temperature unit buttons to choose whether your temperature displays as Fahrenheit or Celsius.

4.3 System

Setting System Settings

Limitation system heating time

Limitation system heating time allows you to choose a length of time the system will be activated; from one hour to infinity. This function can be used when you plan to leave your vehicle for some time and want to limit the heater operation.

One-time pump activation

One-time pump activation is used by technicians when replacing or installing parts within the plumbing loops of the Timberline system. As a system owner you don't set anything for this part of the system.



Third screen of system settings

- Drag the slider from 1 Hour to infinity to choose how long you want your system to run.

4.4 Storage mode

Using Storage Mode

The storage mode feature keeps your van from freezing if temperatures get too low inside the van while your vehicle is parked and you are out adventuring for the day.

When the *Storage Mode* button is activated, the Timberline system will utilize the heater and electric to maintain the temperature inside your van. Heater and Electric will be “locked” in the on selection until Storage Mode is turned off.

CAUTION

Do not use the storage mode feature while your vehicle is parked inside a building as the heater will produce fumes.



Third screen of system settings

- Tap the *Storage Mode* button to activate storage mode.

4.5 Daytime

Setting Daytime Hours

On the home screen you select the temperatures you want your heater to run during the day and night.

Use the Daytime Setting screen to set the hours you want your system recognize as day time. The system will automatically run your set day time temperature during those hours, and night time temperature during the other hours.



Fourth screen of system settings

- Drag the sliders to choose from when to when you want the system to run your day time temperatures.

4.6 Backlight

Setting the Backlight



- Drag the Timeout slider to choose how long the touch pad screen will stay on before going to sleep.
- Drag the Day and Night sliders to choose the brightness of your touch pad screen during day and night hours.

Fifth screen of system settings

4.7 Diagnostics

Diagnostics Overview

Diagnostics gives you a snapshot of how your system is running.

Ambient Temperature:

Current temperature of air outside the vehicle.

Tank Temperature:

Temperature of coolant inside the Timberline Tank.

Flow Sensor Temperature:

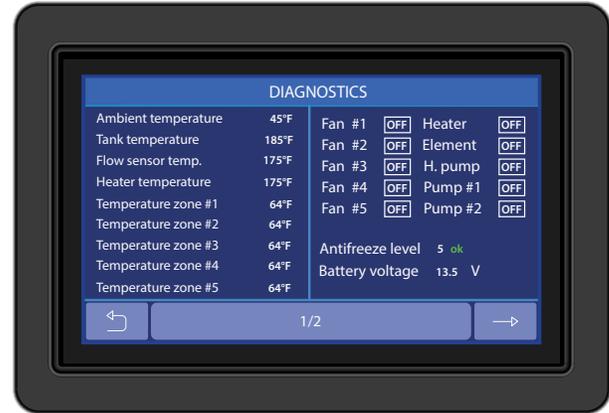
Temperature of domestic water into the Timberline Tank.

Heater Temperature:

Temperature of coolant inside Timberline Heater.

Temp Zone 1,2,3,4,5:

Air temperature within the zone.



Sixth screen of system settings

Fan 1,2,3,4,5:

Indicates if fan is ON/OFF.

Heater:

Indicates if Heater is activated and running.

Element:

Indicates if 110V element is activated.

Heater Pump, Pump 1, Pump 2:

Indicates if Pump is activated.

4.7 Diagnostics

Diagnostics Overview Continued

Total System Hours:

Shows number of hours the entire system has been run.

Heater Hours:

Shows number of hours the Heater has been run.

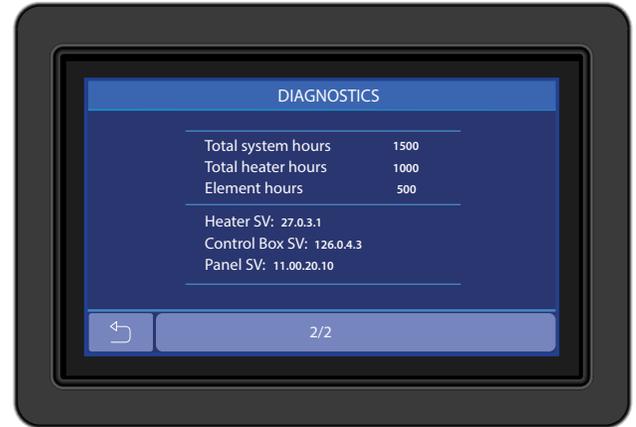
Element:

Shows number of hours the electric has been run.

Heater SV:
Heater Version

Panel SV:
Panel Version

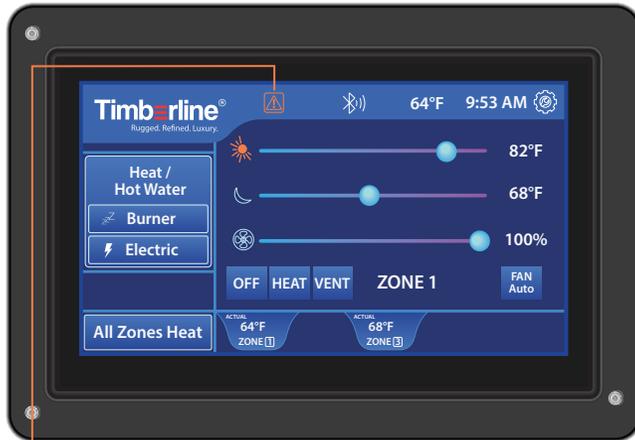
Control Box SV:
Control Box Version



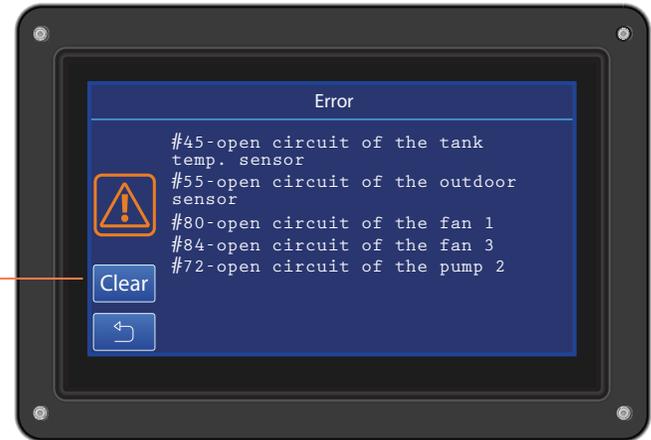
Seventh screen of system settings

4.8 Error Messages

Errors



- 1 To access the error message screen, locate the red triangle icon on the home screen. Tap this icon to view any current system errors or alerts.



- 2 To clear any error message, press the *Clear* button.

4.8 Error Messages

Error Message Meanings

Code 91:

Low antifreeze within the system.

Diagnostics Page:

Antifreeze Level Below Level 3.

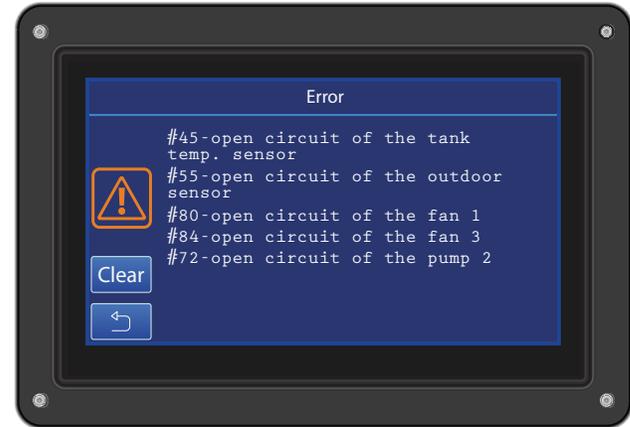
Will not allow the Electric portion to turn on.
(Filling Antifreeze, Reference Section 5.2)

Code 13:

Insufficient fuel level causing ignition failure.
Often occurs when fuel tank is below 1/4 full.

Steps if Fuel has been below 1/4" Tank:

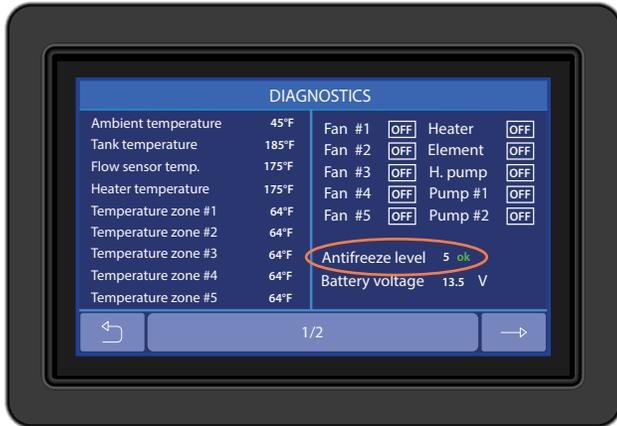
1. Clear Error Message
2. Turn Burner On
3. Allow Fuel Pump to Prime
4. Repeat Steps 1-3



5. Common Questions

5.1 Antifreeze

Filling System with Antifreeze



Navigate to the Diagnostics page in Settings:
Antifreeze level needs to be between level 4-6

5.2 Winterizing

Winterizing

The Timberline system doesn't require a unique winterization procedure. Simply adhere to your van manufacturer's recommended winterization process, and this will adequately protect the Timberline components. The system is designed to integrate seamlessly with your vehicle's standard winterization routine, ensuring hassle-free preparation for cold weather conditions.



Visit:

TIMBERLINEHEAT.COM

for more information about your system.

Contact us here for support

Email: info@elwellcorp.com | Call: 360-608-0916

680-C South 28th St. Washougal, WA 98671