



GoWesty Gasoline Furnace for 1980-91 Vanagon

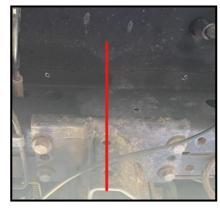
Hardware	Parts List	
(6) Vent Screws	(1) Gasoline Heater	
(12) Fuel Hose Clamps	(2) Articulating Vent	
(1) M6x35mm Self-Drilling Screw	(1) Mounting Plate	
(2) P-Type Clamps	(1) Main Harness	
(2) M6x30mm Self-Drilling Screws	(1) Fuel Pump Harness	
(1) Heater Exhaust Clamp	(1) Fuel Filter	
(4) Ducting Hose Clamps	(1) Fuel Pump	
(2) Intake Hose Clamps	(1) Fuel Pump Clamp	
(10) Zip Ties	(1) Control Monitor	
(6) Bolts	(1) Remote	
(6) Nuts	(1) Air Intake Filter	
(2) T-Fitting Clamps	Air Intake Hose	
	Exhaust Hose	
	Ducting	
	Fuel Line Hard Line	
	(6) Rubber Fuel Lines	
	(1) T-Fitting	
Tools Required		
2-1/2" Hole Saw Dri	ill Step Drill Bit	

Removal of the original coolant-fed rear heater under the rear seat is necessary for the following installation. If you still have the rear heater you will need to purchase our REAR-HEAT-DELETE kit.

- 1) Follow the directions for the Rear Heater Delete Kit (REAR-HEAT-DELETE).
- 2) After removing the rear heater, print the <u>template</u>. Use this <u>template</u> to mark the locations for drilling all 7 holes accurately.

Note: Any location above the line shown in the image below is not easily accessible from underneath the vehicle. Please avoid drilling any holes above this line.

3) Working from underneath the van, center the template with the edge up against the wall of the cross member. Use a magnet or tape to hold the template securely in place.



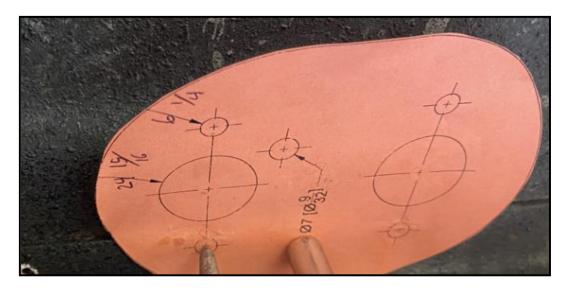






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- 4) With the template centered and up against the cross member, mark the two holes **closest to the cross member**.
- 5) Using a center punch and drill, drill these two holes using a 1/8" drill bit. These two holes will pass through the spot-welded flange of the cross member and the floor of the van. These two holes will be finished, and the remaining holes will be marked and drilled working from above.



- 6) Working from above and inside the van, finish the two 1/8" holes drilled from below with a $\frac{1}{4}"$ drill bit
- 7) Place the template in the correct location and orientation using two of the M6 bolts proved, as shown in image below.



8) Mark the location of the final five holes using a center punch. Drill 1/8" holes in each location, then drill to the final size with the appropriate drilling tools. It helps to use the metal plate in the kit for accuracy. See image below.



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CAUTION: The remaining five holes are near non-flat areas of the corrugated floor sheet metal. Exercise extreme caution. Drilling tools can catch unexpectedly on the uneven surface and cause injury.



9) Place the steel plate at the bottom of the heater and align the studs and tubes into the holes in the van.





10) Apply hi-temp silicone around the holes on the underside of the vehicle, and secure the heater with four serrated nuts.

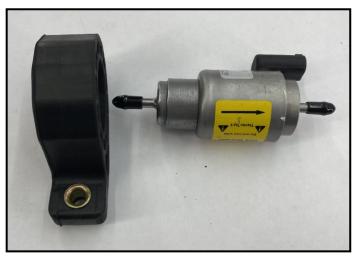




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11) Locate the fuel pump kit. You will find a vibration dampening mounting bracket and self-drilling screw. Assemble the fuel pump and bracket as shown below.

Note: The fuel pump is directional and needs to be oriented with the electrical connector end toward the heater.

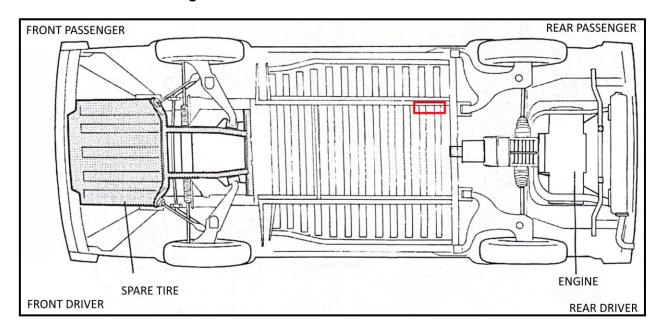




12) Install the fuel pump in the location and orientation shown below.

Note: The location of the pump relative to the heater—and the angle at which it is installed—are critical. If you choose to install the pump in any other location or angle, we cannot offer troubleshooting support.

Note: The final angle of the pump is important. It needs to be between 15-30degrees. Do not start the heater until the pump is bolted down solidly in the correct location and at the correct angle.





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Attach the rubber fuel line to both ends of the fuel pump with the provided clamps.

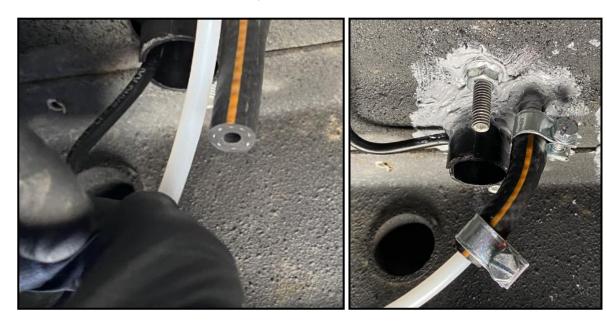






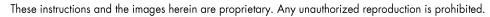
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- 13) Cut and attach the hard line to the rubber line on the fuel pump.
- 14) Shorten the path of the hard line between pump and heater as much as possible and attach to the heater with the rubber fuel line and clamps.



15) Assemble the rubber fuel line, fuel filter, and clamp as shown below.

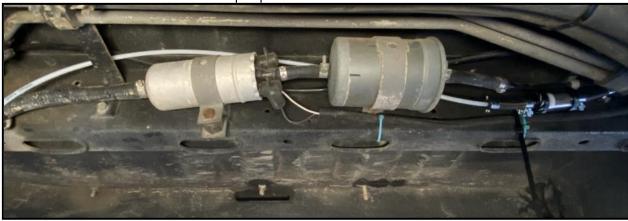






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16) Tidy up the area with zip ties and route the hard line to the front of the vehicle to where the 12mm fuel hose that runs to the inlet of the fuel pump is located.



17) Cut 12mm hose and install supplied T-fitting with the provided clamps. WARNING: Expect gasoline to leak out from the cut hose. Exercise extreme caution.



18) Grab the intake hose, filter, (2) hose clamps and assemble as pictured below.







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19) Secure the open end to the intake to combustion chamber (black port) with the 2nd clamp.

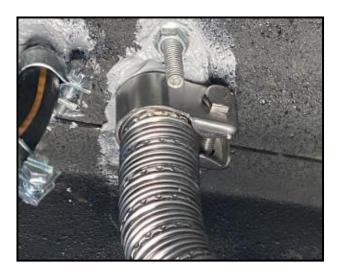




20) Route and secure the rest of the assembly under the vehicle using the Adel clamps or zip ties.



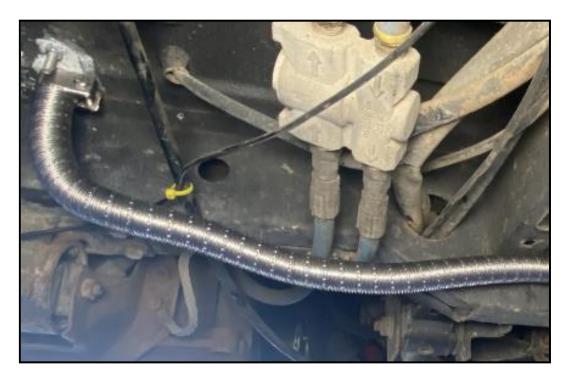
21) Next, get the steel exhaust hose and exhaust clamp, and secure one end to the heater's aluminum body port.





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22) Bend and route the hose under the vehicle toward the driver's side of the van, where the jack point is located.



23) Mount the hose outlet end of the hose to the body near the lifting jack point with the included clamps.







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24) Locate the fuel pump harness and loose connector. Remove the loose connector and install the two pins coming out of the intake pipe into the connector. Push the contact pins into the connector until you hear a click. This indicates the contact is properly seated.

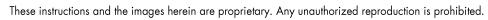
Note: The contacts need to be in a horizontal position to easily install in the connector and are not polarity sensitive.





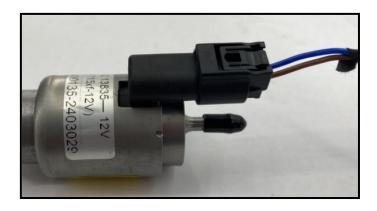
25) Connect one end of the fuel pump harness to the connector you just assembled and the other end to the fuel pump. Use zip ties to secure any excess harness neatly.







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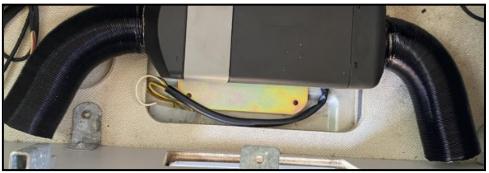
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26) Locate the large diameter ducting hose, and cut it in half with a razor blade or saw. Connect the hose to the ends of the heater.

Note: Remove the plastic vents on the ends of the heater as shown below. Secure the hose to both ends of the heater with the supplied clamps.



Install hoses onto heater as shown below.



27) Place the supplied metal cover over the heater and mark the locations where the vents need to be installed such that the hoses are protected by the steel cover. Get your drill and 2-1/2" hole saw and prepare to drill a harge hole in your kick panel.

Note: You may need to move a secruing angle bracket if it is in the way.





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28) Snap the vent cover back on and install the hoses to the vents as shown below.













Note: We offer new <u>Kick Panels</u> and <u>Vent Block-Off Plate</u> kits for the rectangular hole left behind by the original rear heater.

The next part of the installation involves conecting the main power source to the harness. We recommend conecting the main power to an auxiliary battery. The harness is long enough to reach under the driver's seat.



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- 29) Route the power and ground wires through the back of the cabinets until you reach the auxiliary battery location.
- 30) Connect the loose contacts on the end of the wire to the fuse box, and make sure they are in the correct location. See images below for reference.





31) Connect the main power to the positive power supply on your auxiliary battery. Ground the brown wire anywhere on the vehicle.







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- 32) Note: For ease of installation, removal of the quarter panel with the ashtray is recommended. (However, the installation can be completed without removal.)

 Remove the ashtray from its housing by rotating it to the open position, then press down on the ashtray and rotate it the rest of the way out.
- 33) Route the other wires for the control panel toward the passenger side and route up behind the side interior panel and through the opening in the interior panel where the ashtray was located.
- 34) Grab the supplied ashtray delete panel. Remove the clip behind the monitor, grab the double-sided adhesive film, and apply it to the back of the monitor. Feed the monitor connector through the plate and connect to the connector at the ashtray location. Feed the excess wire behind the panel.
- 35) Place and secure the ashtray delete plate onto the panel. **Refer to these** <u>instructions</u> for further detail on how to install. Once secured, remove the backing on the monitor and stick onto the plate.

36) Remove the plastic grey cover on top of the heater. Connect the plug on the end of the harness to the heater, making sure the long tab that sticks out is in the correct orientation.





37) Position the grommet with the round side facing up. Slip the first groove into the heater, slip the grey cover on top, and make sure the cover slips onto the grooves.







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38) Slip the furnace cover over the heater and secure with the provided sheet screws.

Note: If there is no bottom wooden floorboard under your rear seat, you will need to drill four 3/16" holes into the steel floor, then install the screws. Applying some silicone will help seal the holes.

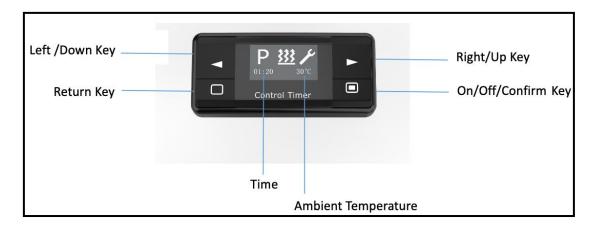


This concludes the installation portion of the instructions. The next sections will help you set up the heater for first time use and aid with any troubleshooting. Skip to the **Manual Fuel Pump Operation** for the fuel line priming procedure.





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Initial Boot Up

After powering on the heater, the screen will display the time setting interface.

- 1) Press the **Confirm** key to enter the weekly schedule interface.
- 2) Then press the **Confirm** key again to access the main interface.

The main interface displays icons for Heating, Ventilation, Timer, and Settings.

- 1) Use the **Up** and **Down** keys to select a function.
- 2) The selected icon will blink.
- 3) Press **Confirm** to enter the selected function.

Key Operation Guide (Main Screen Displayed)

Standby Mode

- 1) Short press **Confirm**: Enters the heating timer setting interface. Press again to start heating.
- 2) **Up** key: Scroll up through functions.
- 3) **Down** key: Scroll down through functions.

Boot-up Mode (Heater Running)

- 1) Press and hold **Confirm** key: Turns off the power; display shows OFF.
- 2) **Up** key: Increases gear/temperature by 1.
- 3) **Down** key: Decreases gear/temperature by 1.

Power On/Off Instructions

Powering On (Boot Mode)

When the heater is energized:

- 1) Short press the **On** key to enter the run time adjustment interface.
- 2) Use the **Down** key to decrease the run time or the **Up** key to increase it.
 - Default run time is unlimited (∞).
 - Run time can be set between 10 and 360 minutes.
 - After reaching 360 minutes, pressing the Up key again will set the time to ∞ (unlimited).
- 3) Once the desired run time is set, press the **Confirm** key again to power on the heater and enter the heating interface.

Powering Off

- 1) Press and hold the **Confirm** key for 3 seconds to turn off the heater.
 - The screen will display OFF, and the heater will begin its shutdown process.
 - After a few minutes, the control panel will return to the main interface.



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Remote Control Pairing Operation

- 1) Ensure the heater is in standby mode.
- 2) Press and hold the left key and return key simultaneously for 3 seconds to enter the remote control pairing interface.
- 3) Long press the **Confirm** key on the remote control to start pairing.
- 4) Once pairing is successful, the interface will exit automatically.

You can also exit manually by:

- Short pressing the Confirm key, or
- Waiting 20 seconds without any operation.

Manual Fuel Pump Operation

The following operation is to prime the fuel line before starting the heater itself. If this procedure is skipped, it will result in multiple error codes.

When the heater is in standby mode, follow these steps to manually operate the fuel pump.

- 1) Press and hold the **Up** key for 3 seconds to enter the Manual Pumping Interface.
- 2) The default pumping time ("20s") will be displayed.
- 3) Use the **Up** key to increase the pumping time or the **Down** key to decrease it.
 - Maximum manual pumping time: 120 seconds.
- 4) Short press the **Confirm** key to start or stop the fuel pump.
- 5) Short press the **Return** key to exit the manual pumping mode.
- 6) If no action is taken within 20 seconds, the system will automatically exit this interface.

Time and Date Setting

When the heater is in standby mode, follow these steps to set the time and date:

- 1) Press the **Down** or **Up** key to select the Settings icon, then press the **Confirm** key to enter.
- The Clock icon will appear and blink. Press the Confirm key again to enter the time adjustment mode (24-hour format).
- 3) The hour (e.g., 00) will blink.
 - Use the **Up/Down** keys to adjust the hour.
 - Press **Confirm** to move to minute setting.
- 4) The minute (e.g., 00) will blink.
 - Use the **Up/Down** keys to adjust the minutes.
 - Press **Confirm** to move to day-of-week setting.
- 5) The day of the week will appear (e.g., MON, TUE, WED, etc.).
 - Use the **Up/Down** keys to select the correct day.
 - Press Confirm to finish.
- 6) After completing the setup:
 - Press the **Return** key to go back to the previous menu, or
 - Press the Confirm key to return to the main interface.

Timing Setting (Scheduled Operation)

The heater allows you to set up to 5 scheduled timers (P1–P5) for automatic operation on specific days and times.

To set a timer:

- 1) Make sure the heater is in standby mode and on the main interface.
- 2) Press the **Down** or **Up** key to select the "P" (Timer) icon. The icon will start blinking.
- 3) Press the **Confirm** key to enter the timer settings.



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There are 5 programmable timers: P1, P2, P3, P4, and P5. Each timer can be set for the same or different days of the week.

Example: Setting Timer P1

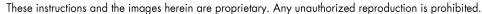
- 4) Use the **Down** or **Up** key to select P1, then press the **Confirm** key.
- 5) Day of the Week Selection:
 - The day of the week will blink.
 - Use **Up/Down** to choose the day (MON, TUE, WED, etc.).
 - Press Confirm to proceed.
- 6) Start Time Setting:
 - The hour will blink. Use **Up/Down** to set the hour.
 - Press **Confirm** and the minutes will blink. Adjust with **Up/Down**.
 - Press Confirm to proceed.
- 7) Runtime Setting:
 - Default is ∞ (infinite).
 - Use **Up/Down** to set runtime between 10 and 360 minutes.
 - After 360 minutes, pressing **Up** again sets it to ∞.
 - Press **Confirm** to proceed.
- 8) ON/OFF Selection:
 - Use **Up/Down** to select ON (enable) or OFF (disable) the timer.
 - Press Confirm to finalize.

The screen will return to the main interface. If the timer is active, the P icon will display with a checkmark ($\sqrt{}$) next to the active timer (e.g., P1 $\sqrt{}$). When the scheduled operation ends, the checkmark disappears, indicating completion. If P2–P5 are not activated, they will show as inactive. Repeat the same steps to configure P2, P3, P4, and P5 as needed.

Heater Function Inquiry

While the heater is operating, you can view real-time system data:

- 1) Press and hold the **Up** and **Down** keys simultaneously to enter the Function Inquiry Interface.
- 2) The following data will be displayed, listed from top to bottom:
 - Supply Voltage
 - Glow Plug Power
 - Motor Speed
 - Air Outlet Temperature
 - Fuel Pump Frequency
 - Atmospheric Pressure
- 3) Use the **Up/Down** keys to scroll through the data pages.





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Troubleshooting and Solutions

Error	Description	Suggested Action
Code	•	
E-01	Heater failed to ignite twice	Check fuel delivery system and intake/exhaust system
E-02	Flame goes out while heater is operating	Check fuel delivery system
E-03	Battery voltage higher than 16V	Replace the battery
E-04	Battery voltage less than 10V	Replace the battery
E-05	Faulty air outlet temperature sensor	Check the sensor connection or replace the sensor
E-06	Faulty air inlet temperature sensor	Check the sensor connection or replace the sensor
E-07	Fuel pump failure	Check for seized or damaged fuel pump
E-08	Blower failure	Check blower connections or replace blower
E-09	Outlet temperature exceeds 320°F	Check if the air inlet is covered or blocked
E-10	Glow plug failure	Check glow plug connection or replace glow pin
E-11	Flame sensor malfunction	Check for blocked air vents
E-12	Faulty superheat sensor	Check sensor connection or replace superheat sensor
E-13	Loss of control panel signal	Check control panel wire connections
E-14	Faulty atmospheric pressure sensor	Replace control panel
E-15	Combustion air entering the heater is too	Check the air inlet
	hot	

Clearing Error Code

While the heater is in standby mode:

- 1) Press and hold the **Confirm** key to clear the fault display.
- 2) If the fault has been resolved:
 - Press the Confirm key again to start the heater normally.
 - If the fault persists the error code will reappear, and the heater will not start. The issue must be resolved before the heater can operate normally.

Notes and Maintenance

There is a bit of residual fluid left in the fuel pump from factory testing. This is normal and will not cause an issue with your heater.

When first using the heater, the heat from the furnace will heat up the plastic housing and give off an odor., This is normal and will fade over time. We recommend running the heater on high for an hour with the van open to break in your heater sooner rather than later.

We do not provide a muffler with this kit. We found that the muffler provided a bit of back pressure and contributes to carbon build up.

Important Maintenance: Preventing Carbon Buildup

All gas heaters, regardless of brand, are susceptible to carbon buildup in the combustion chamber. Over time, this can clog the chamber and cause your heater to stop working.

To extend the life of your heater and prevent early failure, we require that the heater be run on high (Level 9) for at least 30–60 minutes at the end of each camping trip.

Why is this necessary?



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Many users find that Level 1 provides enough heat during camping, which is perfectly fine. However, running the heater continuously on low does not completely burn all the fuel entering the combustion chamber. This leads to carbon deposits building up over time.

Running the heater on High (Level 9) helps by:

- Burning off unburnt fuel
- Clearing out carbon buildup
- Restoring proper airflow and combustion efficiency

This "burn-out" process helps keep your heater functioning reliably and efficiently for years to come.