

Having a comfortable van can seem trivial since we're essentially camping out there, but having the right systems that keep you comfortable while on the road can make or break your van experience (and help you sleep better too). These systems can also make your van all-season capable, giving you more bang for your van conversion buck (since you can use it year-round).

Follow along and take notes as we cover the Van Comfort Combo, the three active systems (and one passive system, insulation) that are going to make all the difference in your vanlife experience.

Which of these systems will you have in your van?

VENTILATION

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Roof vent fans are an essential daily item that make vanlife work since they counteract the greenhouse effect, getting rid of heat buildup, and also giving you fresh air inside your van. Go ahead and check this box, you're going to need this!

AIR CONDITIONING

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These work in conjunction with the vent fans above, and even though they will add cost and complexity to your build, they will extend the number of seasons and locations in which you can use your van.

BUILT-IN HEATING

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Built-in heaters are more costly and require more installation than their hand-held cousins, but will extend your capabilities into winter camping, and anywhere that more than 15 minutes of heat at a time is required. Recommended for the best sleep during the winter.



Note: Be sure and check out the [Van Comfort Combo video](#) for an in-depth discussion on these topics.

VENTILATION

Some ventilation quick facts:

The MaxxAir 4500k and 7500k are the recommended models for their performance, features, and looks.

Intake locations:

- Cab Windows
- T-Vent side windows
- Rooftop skylight, vent, or second fan (good for stealth situations where you don't want your side windows open at night, but uses valuable roof space)

Vent fans are an extremely efficient way to remove heat and change out the air in your van, but they can only pull in the air that's outside, meaning whatever temperature and humidity level is outside, is what will be pulled into your van. They are thus limited on how many seasons they can meet your needs.

AIR CONDITIONING

Some air conditioning quick facts:

Air conditioners will extend the number of seasons and locales where you can be comfortable in your van.

Use a thermostat to extend the amount of time they can run on battery power, and so they can turn themselves on and off automatically (great if you want to leave a pet in the van for bit too).

On battery power, the Coleman Mach 8 Cub uses 2.4 amp-hours per minute (yikes!) but can cool a van down in just a few minutes. Pair it up with a thermostat and you're good to go for hours of air conditioning on battery power. Plug in the van (if you have an inverter charger, see lesson 1) for unlimited cooling and battery charging.

BUILT-IN HEATING

Some heating quick facts:

Smaller hand-held propane heaters such as the Mr. Heater “Buddy” model and the Olympic catalytic heaters can provide a lot of heat in a short amount of time, but are limited in that they combust fuels in your interior space. This means over time CO (carbon monoxide) will build up.

Hand-held units are great for Arizona winters (or similar places) where the nights and mornings are cool, and a spot of heat before bed and when you get up in the morning are all you need. Built-in heaters may be overkill in these situations, and the hand-held models will do great.

In contrast, built-in heaters such as the Propex, Espar (Eberspächer outside the U.S.), and Webasto units will provide all-night heat.

All-night heating is needed when the outside temperature is so far below your ideal interior temperature, that even good insulation can’t keep the inside warm.

In this case, 15 minutes of heat before bed will dissipate after a couple of hours (especially in less-insulated vans).

This usually results in hiding under goose-down comforters all night, or often waking up in the middle of the night because your body can’t get warm and you wake up.

Built-in air heaters start at \$800 (Propex, which runs on propane or LPG) and go up to \$1600-1800 for Espar and Webasto models. The Espar D2 (diesel) and B4 (gasoline) are favorite models.

Altitude Sensors are recommended on these heaters for high-altitude camping (these sensors adjust the fuel mix to optimize it for the lower oxygen levels at high altitudes).

Air/Water heating systems are also available from Rixen’s, as well as Webasto, however combining a built-in fuel heater with an electric water heater is often viable as well.

Make sure you catch the entire Van Conversion Workshop...

Lesson One – The Van Power Triad

Every successful van project relies on a successful power system. This lesson dives into the 3 charging sources that work together to give you abundant power, wherever your travels take you.

The strength of each charging source really shines when you combine them, which is what I'll be showing you how to do in this first lesson.

Lesson Two – The Van Comfort Combo

This lesson is about the three active systems that will make your van all-season capable, and how to know which systems you need based on what you'll be doing with your van.

We'll also talk about insulation and some critical installation tips to prevent condensation and increase your insulation performance.

Lesson Three – The Van Brand Breakdown

After the first two lessons, you've got the groundwork for your van's systems. In this lesson we'll step back and talk about the vans themselves, discussing the vans on their own merit, and then according to how easy each brand is to convert (you may be surprised)! This will be helpful if you're still choosing a van, but also helpful if you already have your van, as you'll learn some conversion tricks and methods for each brand.

Lesson Four – Moving Forward and Next Steps

This lesson is all about you moving forward. I'm a big fan of learning, and I believe that "preparation is the key to success" when it comes to van conversions.

But all the learning in the world won't move you forward – so this lesson is all about you moving into action. I've had hundreds of students convert vans with huge success, and I want you to take your place in that army – and that's what this lesson is about.