

# The Truma Primer

Daniel Senie

[dan@danandfaith.com](mailto:dan@danandfaith.com)

October 15, 2017

Revision 2

Welcome. So you've bought a Winnebago Travato with the Truma Combi. Want a cold shower? No? Then you're in the right place. Read on, and learn from those who've gone before.

## Introduction

Your new camper has a Truma Combi. It's a pretty neat piece of technology. Let's review the components first:

- The Truma Combi system itself, it's located under the dinette seat in the 59G, and under the driver's side bed in the 59K
- The Truma Control Panel. This is above the dinette seat along with lots of other control panels, or above the aft-end of the passenger-side bed in a 59K
- The Truma Sensor, located next to the control panel. It's a little, dark-colored plastic round thing. This tells the Truma the air temperature.
- Plumbing bits, including pressure regulator, pressure relief valve and drain valve. These are all Truma-supplied pieces of the plumbing, located near your Truma Combi.

Next, let's talk about fuel sources:

- **Electric:** The Truma has two electric elements. Each produces 850 watts. Might sound like a lot, but if you have a water heater in your house, it's in the 4,500 watt range. The Truma produces 850 watts with one electric element on, or 1,700 watts with two elements running.
- **Propane:** The Truma produces 7,500 BTU/hour with the burner on low, or 14,300 BTU/hour if it's running full tilt. You do not have control over this. The Truma selects what it needs. The watt equivalent of these BTU ratings are 2,200 and 4,200. So that 4,200 watt range is sounding a lot closer to that home electric water heater, isn't it?
- **Combined Electric/Propane:** In MIX modes, the gas burner, and one or two electric elements are used. We'll talk later about MIX modes. Don't start there.

Finally, some display prompt info:

- The good folks at Truma changed the control panel a bit from when this document was originally written. The hot water settings used to show OFF, 104, 140 and Boost. Newer control panels show OFF, ECO, HOT, Boost. So you will see ECO/104, HOT/140 in the rest of this document when referring to hot water temperature settings, so that both old and new control panel settings are represented.

The Truma is amazingly efficient, running in the 90% range for propane. While the Travato has a small propane tank, you'll be able to get several nights of heat without draining the tank.

## Getting started

First things first. Power up your Travato. Make sure your battery disconnect switch (located near the sliding door) is set to ON, and its light illuminated. Good. Now you have power to the coach systems. You might anyway if you had the Travato plugged into shore power, but it's a really good plan to have the battery disconnect set to have the battery connected too. Trust me. You'll be happy later when you unplug.

OK. Now Let's take a look at that control panel. There are two buttons. One is round and spins and you can press it. The other is rectangular and is the return button. Press the round one once, then rotate it to the right to the clock symbol. No, not that one, that's the alarm symbol. The other clock symbol (farther to the right). Press the button, and set the time. It doesn't really affect the operation of the Truma, but it'll make you happy to have the clock right.

Did you turn off the battery disconnect after reading this far? Was the coach disconnected from shore power? Congratulations! You need to set the clock again. The control panel loses power when you power down the coach systems. Get used to setting that clock (and the one on stereo too) when you power back up.

Is it cold out? Let's turn on the heat. OK, hold on a second. We're going to do this first with propane.

## Propane?

Do you have propane in the tank? Press the Tank Level button on the One Place monitor. It's not super accurate, but it'll give you some idea if there's some propane in the tank. You have some? Good. There's a switch nearby the Truma panel that says "Propane." Be really quiet, and turn that on. Do you hear a clunk sound? That's the solenoid valve on the propane tank. Didn't hear it? If you didn't, go outside and check the switch next to the propane fill on the driver's side of your Travato. That switch might be in the wrong position. Both the indoor switch and the outside are needed to complete the circuit and engage the solenoid valve. Do you hear the clunk now?

OK. Go inside and try lighting the stove. Why? It's the simplest way to see your propane is flowing. OK. Turn the stove back off. Now, let's get back to heating the coach.

A side note for owners of the G model struggling to light the fridge: the same procedure, to see if you have propane flowing, can be useful before lighting the fridge too.

## Turn On The Heat

On the control panel for the Truma, press the knob and spin over to the fuel source icon. It looks like some lightning bolts and a bottle. Once there, press the button again. now spin to the left, and the display should say GAS. Press the button again. Then press the return button.

Why am I telling you to use gas? I'll get into that later. Just trust me on this, and start with propane gas as your heat source.

Now spin the knob to the first icon on the top left, which looks like a camper, sort of, with a thermometer inside. Click there, then rotate the knob to the right. It will move from OFF to showing the temperature. Dial that up to your desired temperature, then press the button again. Assuming it's colder than the value you set, you will hear the Truma fans start up, then the igniter, then the ignition of the propane. Soon the ducts will be blowing very warm air at you.

Congratulations. You won't freeze tonight.

## Hot Water

OK. That's great, but I wanted to wash my hands and the water is freezing! The next thing you want to set up is the hot water. First, you need to make sure there's water in the Truma. Open the hot water faucet in the kitchen or bathroom. Do you get any water? Are you hooked to campground water, or do you have water in the fresh water tank and the water pump on? No? Well, get some water in your camper first, then come back.

Good. You've got water in your camper. When you close all the faucets, do you still hear water flowing? Better track that down next.

OK. There's water in the lines, and the Truma's tank is full. Now you can turn on the water heating part of the Truma. Press the big button on the Truma control panel, and select the hot water icon. It looks like a thermometer in waves of water. Press the button, then rotate to the right. You will see choices of OFF, ECO/104, HOT/140 and BOOST. Let's choose ECO/104, which is a good temperature for doing dishes and washing hands. The icon will start flashing in the top row of the display. When it stops flashing, you're ready to use the hot water. This can take 5 minutes or it can take 20. If the Truma was already supplying heat, it might take less, but the main message here is be patient!

We'll talk about the other temperature settings in a bit.

## Using Electricity

So you've got your Travato plugged in to a 30 amp outlet at a campground, and don't want to burn propane. First, read the campground's rules. Are there any rules about not using electric water heaters? No? Good. Most don't have any issue with it, but you might come across one that does.

Remember that icon for selecting fuel source? Well, there are choices other than GAS. The others are EL1, EL2, MIX1 and MIX2.

If you select EL1, a single electric element is used to produce heat. This will be fine for taking the chill off on a summer evening. If the temperature is closer to freezing, it will not be enough to keep the camper warm. EL2 uses two electric elements. This will do better, and pull a lot more electricity from the shore source. You are using a proper 30 amp circuit, aren't you?

So what's with this MIX thing? Remember that temperature sensor? The Truma can tell the actual temperature of the air with that sensor. The Truma also has sensors in the hot water tank. The MIX modes allow the use of both electric and gas. The MIX1 mode uses one electric element or gas, while the MIX2 uses two electric elements or gas. Notice that "or"? It's important.

When the Truma senses the temperature desired for air and/or water are far from the present temperatures and you're in MIX1 or MIX2, it'll use propane to do some heating. Once it's at or close to the desired temperatures, it'll switch to electric and save your propane supply. The point here is that gas gets you to temperature a lot faster than electric. This will be important in the next section.

There's one more thing to know about the MIX settings: if you're plugged into shore power, MIX1 or MIX2 will use 110v when possible. Now what happens if there's a power outage? That's where MIX modes really shine: the Truma will sense the power failure and heat as necessary using propane. Pretty cool.

One more note on energy source settings. Remember that bit about having to set the clock after powering down and up your coach? Guess what? The Truma will reset the energy source too. It always defaults to GAS when it powers up. Not a huge issue, but worth keeping in mind.

## Your First Shower

I've now told you a few times to use GAS as your fuel source for your first shower. But did you listen? No? Brrrr! OK. Set it back over to GAS and let the Truma heat until the hot water icon stops flashing. Now go take your shower, and you will be much happier.

OK. First off, you needed to set the hot water to a warmer setting. For a shower, set the water temperature to HOT/140. And again, wait for the hot water icon to stop flashing. You say you're impatient and you can't wait? Prepare to freeze.

So why did I wind up with a cold shower on electric? Go back and read about the amount of heat produced by the electric elements vs. the propane. See? You get a lot more heating when burning propane. Now you can take a nice shower (don't dawdle too long or you'll have a full grey tank!).

Once you have managed to get a good shower in your Travato, you might try using EL2. EL1 will probably not keep up with your showering needs. You may find in warmer weather that these modes work OK. **Note that Truma says MIX modes only work for heating not for hot water mode.** So if you have the heat turned off and select a MIX mode to get the water hot for your shower, you may not be happy with the result.

If you use EL2 mode for a shower, you may be OK, or may not, depending on how long a shower you take, and how cold the water is going into the Truma.

Many of us have learned this lesson the hard way: Gas is the best heat source for your shower, especially your first shower.

OK, so you had a great shower. Stop wasting energy! Go to the Truma control panel and turn the water temperature setting down to ECO/104 (if you still need to do dishes) or OFF if you don't need water the rest of the day. If you have electric available but used gas to shower, you can switch back to EL1 or EL2.

So if HOT/140 is good for a shower, why not use BOOST? You can, but the water will be incredibly hot. Be careful not to scald yourself in the shower. We've never found it necessary to use BOOST to get a great shower.

## Common Questions

- **Can I use the heat when I have the water drained?** Yes, as long as you leave the hot water setting on the Truma control panel set to off, the Truma will provide heat to your camper just fine with no water in the camper's systems at all.
- **Are there separate electric and gas heating elements for heat and hot water?** No. There is a gas burner and there are two electric elements. These heat up the inside of the Truma. If there is water in the tank, it'll get hot. If the fans are running, you get heat. It's a combination heater/hot-water system. This is probably why they call it Combi.
- **It's really cold out and the heat is blasting. I didn't turn on the hot water, but it's hot anyway. Why?** See the last question. There's only one set of heating elements. If you have the heat on, and there's water in the tank, but you haven't asked the Truma to make hot water, you will still find the water from your hot faucets is at least warm. The Truma uses the room air sensor and the sensors in the hot water tank to decide when to turn on the electric and/or gas heating components, so if you haven't asked for hot water, it may be warm anyway from running the heat, but don't count on that for taking a shower!
- **There is a control panel setting for adjusting the fan speed. Should I use it?** Generally you should not. The Truma senses the room temperature and will switch to high fan if the difference between the desired temperature and the present temperature are far apart. As the temperature gets closer to the desired temperature, the fan will slow down and be quieter. It's really clever that way. Let it do its job.
- **Isn't the Truma Combi an instant hot water heater?** No. It's not. The Combi is an efficient hot water heater and camper heater in one, but the hot water function is not instant.

## Sanitizing

Winnebago says to use bleach to sanitize the water lines. This is a good idea. But Truma says not to use bleach. So before sanitizing, bypass the water heater using the valve near the Truma. Note that the sticker identifying which way is which is wrong in at least some Travatos. So use a sharpie and mark which is NORMAL and which is WINTER on your pipes. You will be happy you did.

OK, so you finished sanitizing and rinsed all the chlorine smell out of your camper. Move that valve back to normal, so water once again flows through the Truma. Your Truma still needs to be sanitized. Make sure the Truma is filled with water (see that water comes out of the hot

faucets). Then turn the Truma to BOOST. This takes the water temperature to 158 degrees. This is really hot and you could scald yourself, but it'll do in any critters trying to grow in the Truma. Leave it set like that for 30 minutes before you turn it off. Give it a little while to cool down, then you might as well do the dishes with that hot water.