Cold Weather Camping or Winterize?

5 Minute Fix to a Warmer RV
IN THIS ISSUE

6  5 Minute Fix to a Warmer RV
Get some tips & hints on how you can prepare your RV to be warm and cozy this winter in just 5 minutes.

9  My RV Storage To-Do List
15 tips from Mark to help prepare your RV for storage over the winter months.

16  Polk’s Top 7 Tips for Camping in Cold Weather
If you like the thought of RVing during the winter months here are some tips to help you get the most from your cold weather RV camping trips.

22  Easy Steps to Winterize your RV
If you are a DIYYourselfer follow these 7 steps to protect your RV plumbing system from freezing.

26  Prep your RV for Cold Weather
There is more to getting your RV ready for cold weather than just the plumbing system. Check this article out so nothing is overlooked.

DEPARTMENTS

4  Editor’s Desk
8  RV Product Review
IncinerGrate by FIREase, an easy way to start a campfire and keep it burning longer and stronger.

10  Polk’s Top 10 RV Battery Tips
Here are some quick & easy RV battery tips just in time to prepare your batteries for the cold weather.

15  RV Quick Tips - Cold Weather Camping
Get some quick tips for camping in cold weather.

25  RV Video Spotlight
For over 50 years the Equal-i-zer® hitch has been providing safe towing for families.

The Equal-i-zer hitch’s superior design makes it the best performing sway control hitch on the market. Four steel on steel friction points (known as 4-Point Sway Control™) and excellent weight distribution – provide unmatched resistance to your trailer’s attempts to sway. That’s the premium performance that keeps families safe, and the premium performance that keeps owners recommending the Equal-i-zer hitch to their friends.

Tell all of your friends.

“Last year I moved cross-country... across Alaska... to the East coast. [The Equal-i-zer hitch] performed flawlessly through the mountains, on the open road... and even in the tightest of campsites. I have told all my friends they need this hitch for their towing.”

- Devin T., Georgia

Get Superior Sway Control - Get the Original Equal-i-zer® Sway Control Hitch.

Call now to get a FREE DVD to see how much safer you can tow with an Equal-i-zer hitch.
(800) 478-5578
www.EqualizerHitch.com
Cold weather is back again. It seems like just yesterday I was preparing the RV for another great camping season, and now it’s time to think about storing the RV.

We are fortunate to reside in a warmer region of the country, and we enjoy using our RV during the fall and winter months. Folks in other parts of the country aren’t so fortunate, and need to winterize and prepare their RVs for cold weather storage.

Regardless of what your winter RV plans are we have you covered in this issue of RV Consumer Magazine. We’ll take a look at using your RV during the colder winter weather, and we’ll offer some pointers on preparing your RV for winter storage.

Enjoy this issue and we will see you back here again next month.

Mark
www.rveducation101.com
www.rvconsumer.com

“Some of my favorite camping memories are waking up to a cool fall breeze drifting through the RV and the sound of a river running just outside the front door.” ~ Mark Polk
RV Education 101 is your premier destination for RV how-to & RV product videos. Enjoy watching over 145 videos on our YouTube channel with over 2,400,000 views and over 150 videos on our RV101.TV site with over 250,000 views. These free video sites were designed to help educate you on DIY projects, RV product installations, RV tips and much more. The RV videos are grouped by category, so finding exactly what you are interested in learning more about is easy.

For a complete line of RV training DVDs visit RV Education 101
When you use your RV for cold weather camping it’s nice to have a warm place to retreat back to after enjoying some outdoor activities. Would you believe me if said that it’s possible to prepare your RV to be warm and cozy for cold weather camping in just 5 minutes?

Let’s give it a go!

**Minute #1**
Test the RV furnace. Make sure the LP gas supply is turned on and fire up the furnace. Make sure you are getting heat from the heat ducts in the RV.

**Minute #2**
Check the propane level in your LP cylinders or tank and check the condition of your auxiliary battery(s). The furnace consumes more LP gas than other appliances and requires a fully charged battery if you are not plugged into an electrical source. Checking the propane level is self-explanatory and you can check the battery condition using the RV’s monitor panel or with a multi-meter.
Minute #3
Pack warm clothes, extra blankets and don’t forget the electric blanket! Sweatshirts, sweatpants and a good pair of winter socks makes resting and relaxing in the RV much more enjoyable when it’s cold outside.

Minute #4
Pack a couple portable electric heaters. Supplementing the heat with thermostatically controlled ceramic heaters does wonders. These heaters work extremely well and you don’t need to be concerned about fire or carbon monoxide.

Minute #5
Keep the heat in the RV. Make sure all windows and vents are closed and close the curtains or shades to help keep the heat in. Remember heat rises, use some foam cushioning or aftermarket accessories to seal the area around roof vents.

Okay, it might take a little more than 5 minutes, but it’s worth it when the end result is a nice warm RV on a cold winter day. There are other concerns with cold weather camping in your RV, like protecting the plumbing system from freezing, but when it come to staying warm this 5 minute fix will do the trick during those cold weather camping trips.

Tip: Park your RV where it gets plenty of sunlight throughout the day. This will help a great deal in keeping the RV warm.

~ RV101
Since we are talking about cold weather camping this product is the perfect fit. A while back a friend of mine told me about the IncinerGrate by FIREase. In a nutshell it is super easy way to start a campfire, and once started it keeps the fire burning longer and stronger.

I have been building campfires for lots of years. From Cub Scout to Eagle Scout, and to this day we enjoy campfires for heat, cooking and just for fun. The way I was taught to build a fire was using a teepee. We would lean pieces of wood against each other in the shape of a teepee. The premise was, you need oxygen for a fire to burn and the teepee enabled air to circulate under and around the fire. By design the IncinerGrate products help you build and maintain fires quickly and easily using the teepee style throughout the fire.

I really like the concept behind the product, so it was time to test it. One evening we had a cold spell so we got the marshmallows and headed to the fire pit. To really test it I explained the concept to my son and told him to have at it. Within a few minutes we had an awesome fire. The product worked exactly the way it was advertised.

RVs and campfires have always been synonymous and the IncinerGrate makes that experience even better. It works great for tent campers and RV owners because it is small, portable and lightweight. The model I tested was an S4000. It is constructed from ½” steel bar stock so it is very durable, yet only weighs 5 pounds. For more information on FIREase products and for some great tips on building and maintaining campfires and fire safety visit the website.
Time to store the RV for winter? Here are a few helpful tips

- Wash the RV & clean interior.
- Don’t forget to cover the tires.
- Clean the refrigerator, put baking soda in compartment and leave doors cracked open.
- Remove all dry cell batteries.
- Inspect the roof seams body seams and sealants. Reseal as needed. Use the proper sealants.
- Remove all consumables that would attract mice and other rodents, and anything that can freeze.
- Turn LP gas off.
- Clean & dry the awning fabric.

- Look for anywhere that mice or other rodents can get it, and seal as necessary.
- Clean the air conditioner filters.
- Check and fill the water levels in all lead acid batteries.
- Charge battery and remove for storage.
- Change the engine and generator oil and oil filter.
- Fill fuel tank and add a fuel stabilizer. Run the engine and the generator long enough for the stabilizer to get through the fuel system.
- Winterize the RV plumbing system.

Want to DIY but could use some help? Check out our [Winterizing & Storing DVD](http://www.rvconsumer.com)
With cold weather quickly approaching I thought it would be a good time to discuss some easy & helpful RV battery tips.

These battery tips can help extend the life of your RV and automobile lead acid batteries. Battery maintenance is not that difficult, but always keep safety in mind when you work around lead acid batteries.

**Caution:** Lead acid batteries contain sulfuric acid which is extremely corrosive and can cause severe burns or blindness. The hydrogen gas that batteries produce when they are charging is very explosive. When you work around batteries you need to wear goggles and gloves, remove all jewelry and do not smoke or use any open flames.

Now that all the safety stuff is out of the way let’s look at my Top 10 RV Battery Quick Tips

**Note:** If you don’t feel comfortable working around lead acid batteries have the work performed by an authorized RV service center or battery shop.

To learn more about this product [click to watch the video](#)
Tip #1
Routine maintenance and recharging a discharged battery as soon as possible will extend the life of the battery.

Tip #2
Sulfation will occur when a battery’s state of charge drops below 80 %, or 12.4 volts. Recharging a battery at an 80% state of charge will help prevent battery sulfation.

Tip #3
Never let a battery discharge below 10.5 volts. You can measure the voltage using a digital voltmeter. Measuring the voltage gives you a quick picture of the battery’s depth of discharge so you know when it needs to be recharged. Set the voltmeter on DC voltage and put the red lead on the positive terminal and the black lead on the negative terminal.

Tip #4
Reducing the battery’s depth of discharge will increase the life of the battery. A battery discharged to 50% everyday will last twice as long as it would if it’s cycled to 80%.

Tip #5
RV’s have parasitic loads that will discharge the battery over time. Some but not all of these loads are LP gas leak detectors, the TV antenna power booster, clocks, stereos and appliance circuit boards. If your RV is equipped with a battery disconnect switch make sure it is in the OFF position when you are not using the RV or when it is in storage. If your RV is not equipped with a battery disconnect switch you can purchase a battery disconnect that installs directly to the battery.
Tip #6
Hot temperatures and overcharging kill batteries. During hot weather or during high usage check the batteries frequently. Checking the electrolyte levels and adding distilled water as required can save your lead acid batteries.

Tip #7
When you add water to a battery, use mineral free water. Distilled water is best. Regular tap water can cause calcium sulfation.

Tip #8
Properly charging your batteries needs to be done in stages. A bulk charge should be performed to return the battery to 90% of a full charge in the first few hours. An absorption charge is used for the remaining 10% to prevent any battery gassing and loss of water, and then a float charge to keep the battery fully charged.

Tip #9
Batteries should only be watered after charging unless the plates are exposed prior to charging.

Tip #10
To prevent water loss from bubbling and gassing leave the vent caps on the batteries while charging.

Note:
The lead and plastic used to construct batteries can be recycled. More than 97% of all battery lead is recycled. Be sure and recycle your old batteries.
Use this chart to help maintain your lead acid battery's.

If the battery state-of-charge is below 70% the battery needs to be recharged before you test it. The battery should not be tested if it has been charged or discharged in the last 6 hours and preferably 24 hours. This is called an open circuit voltage test. To measure the voltage you need a good digital voltmeter. Using the DC voltmeter check the voltage and compare it to this chart.

<table>
<thead>
<tr>
<th>% State Of Charge</th>
<th>Open Circuit 12-Volt</th>
<th>Open Circuit 6-Volt</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>12.73</td>
<td>6.37</td>
</tr>
<tr>
<td>90</td>
<td>12.62</td>
<td>6.31</td>
</tr>
<tr>
<td>80</td>
<td>12.50</td>
<td>6.25</td>
</tr>
<tr>
<td>70</td>
<td>12.37</td>
<td>6.19</td>
</tr>
<tr>
<td>60</td>
<td>12.24</td>
<td>6.12</td>
</tr>
<tr>
<td>50</td>
<td>12.10</td>
<td>6.05</td>
</tr>
<tr>
<td>40</td>
<td>11.96</td>
<td>5.98</td>
</tr>
<tr>
<td>30</td>
<td>11.81</td>
<td>5.91</td>
</tr>
<tr>
<td>Discharged</td>
<td>11.80</td>
<td>5.90</td>
</tr>
</tbody>
</table>
Keep a tank flushing tool in your RV tool box to keep the water heater tank clean and operating properly.
Carbon monoxide is deadly. You cannot see it, taste it or smell it. Never use your range burners or oven as a source of heat. If your RV is not equipped with a carbon monoxide detector you should purchase a battery operated model designed for use in RVs. Always test the carbon monoxide detector for proper operation before each trip.

The Other Antifreeze
Automotive Glycol antifreeze helps lower the freezing point of water, the corrosion inhibitors help prevent scale and rust build-up in the cooling system and it helps keep the engine operating at its most efficient temperature regardless of operating conditions and outside temperatures. **Do not use for RV plumbing systems!**

Calculating Propane Usage
The first step is to multiply your propane container capacity using one of these formulas, (gallons or pounds), to determine the container BTU capacity. BTUs per gallon equal 91,502 or BTUs per pound equal 21,548. Next, divide your container BTU capacity by the total BTU demand of the appliances you are using. BTU appliance demand can normally be found on the appliance or in the appliance owner’s manual. This will give you an idea of how long you can expect your LP gas to last.

For more great RV Quick Tips, How To Videos, RV Product Videos and RV Maintenance Tips check out our [RV101.TV site](http://www.rv101.tv)
If you’re like me you enjoy using your RV as much as possible throughout the year. Sometimes that includes RV trips during the colder winter months. There are lots of things to do and see in the wintertime; beautiful winter scenery, snow skiing, hunting, riding snowmobiles and much more. It’s no wonder so many people enjoy using their RV’s year round.

When winter approaches each year I get numerous e-mails requesting information about using RVs in cold temperatures. One reason I haven’t written on this subject in the past is because it would require more than just a short article to thoroughly cover this topic. Another reason for not writing about this in the past is that there are no guarantees that your RV can or will be 100% protected from the harsh winter elements by following written advice on the subject.

What I can do is offer you my top 7 tips to help protect your RV in the event you plan to use it during the cold winter months. I just can’t guarantee that it will be 100% protected. These suggestions and ideas are for short term winter camping in your RV.

“Camping in cold weather can be lots of fun as long as you take measures to protect yourself and your RV from the cold winter temperatures.”
If you plan to take extended RV trips in cold weather there are many other precautions and measures that need to be considered, like using insulated skirting around the bottom of the RV for example.

Note: What we will be concentrating on in this article is how to protect your RV during cold weather camping. It is extremely important that you also understand how to protect yourself and other campers in cold temperatures.

1) One of the first considerations for cold weather RVing is if you will be traveling in temperatures below freezing. If this is the case, and there is water in the RV plumbing system, your plumbing lines or water heater tank could freeze resulting in costly repair bills, not to mention ruining your winter wonderland RV trip. To avoid this from happening, when temperatures dip below freezing I travel with the water system winterized. It is actually much easier to winterize an RV than most people think it is, and it doesn’t cost much either. I have winterized and de-winterized our RV as many as three times during one winter.

2) The good news is, it is still possible to use the bathroom facilities when you are traveling with the RV winterized. We take one gallon jugs filled with water to use in the toilet. If your holding tanks are not heated you can put some RV antifreeze in the holding tanks to prevent the contents from freezing. Add the RV antifreeze through the toilet for the black water holding tank and down the shower or tub drain for the gray water tank. The antifreeze will also protect the shower or tub P-trap which is usually located below floor level.

Note: The amount of RV antifreeze required for the holding tanks will be based on the size of the tanks, and how much is in the tanks. It will be necessary to add more RV antifreeze as waste water is added to the holding tanks to prevent the antifreeze from being too diluted. Don’t allow the holding tanks to fill completely before emptying them during cold weather camping (unless the holding tanks are heated). This will reduce the chance of freezing, and resulting in damage to the holding tanks.

Take bottled water along for drinking and other needs like cooking, and brushing your teeth when the RV is winterized. We have a five gallon jug that we take on trips, filled with tap water from our house for our pet’s drinking, for washing up and for other needs. This comes in handy when the RV is winterized.

3) When we arrive at our destination I try to select a site that will be exposed to the sun throughout the day, but also where there is some type of wind break available. Position the RV on the site so the front or rear will be facing the brunt of any wind, not the side of the RV. Normally, once at the campground we use the water system on the RV.
All of the water lines in our RV are in a heated space so we don’t need to be too concerned about the water system freezing as long as the RV has heat. We leave the water heater turned on whenever the water heater tank is full so there is no chance of it freezing. If we have an electric hook-up we operate the water heater on electricity, and if not we operate it on LP gas.

4) It’s important that you know where all of the plumbing on your RV is located. Some RVs have heat ducts going to the basement storage areas where the water system is exposed to outside temperatures, but many RVs do not. If portions of the RV water system are below floor level, in areas that are not heated, it is possible for it to freeze and damage the water lines. If you are hooked up to an external water supply one option is to leave a faucet in the RV dripping, to help keep the water moving, and decrease the possibility of water lines freezing. Another option is to use heat tape to protect any exposed water lines. Heat tape can be purchased at most hardware or building supply stores. Make sure it is suitable for the types of water lines in your RV, and the water hose if you plan to use it on a water hose.

5) If it is extremely cold outside and the possibility exists that the outside water supply could freeze, or if the campground water supply is shut off for the winter, I try to fill our fresh water holding tank and use it for all of our water requirements. Again, keep in mind where your fresh water tank is located; ours is in a heated basement area. If the campground’s shower facilities are still open it’s a good idea to use it to avoid the gray water holding tank from filling so quickly. In this situation it might be in your best interest to keep the RV winterized and just use the campgrounds facilities.

6) The best source for heat is to use the RV’s forced air furnace. There are a couple of things you need to be aware of when you use the RV furnace. First of all it will consume more LP gas than any of the other LP gas fired appliances. The LP cylinders or tank should be full before leaving on your trip, and you will need to monitor the LP gas supply carefully during your stay. Second, if you are not plugged into an electrical supply the furnace fan can quickly drain the auxiliary battery(s). Batteries that are not fully charged in cold temperatures can freeze resulting in not being able to use the RV furnace. I recommend that you plan your stay where you have access to an electrical supply when camping in cold weather. When we are plugged into electricity we set the forced air furnace on a lower setting, and supplement the heat with thermostatically controlled ceramic heaters.
These heaters work extremely well and you don’t need to be concerned about a fire or carbon monoxide.

7) If you will be camping where you don’t have access to an electrical hook-up one option is to use a generator. A generator can keep the RV batteries topped off and allow you to use the RV furnace. You will need to have a sufficient supply of fuel on hand for the generator. If it’s a portable generator make sure the exhaust is directed away from the area where you are camping. Regardless of the type of generator always make sure the exhaust system is in proper operating condition and the carbon monoxide detector in the RV is working properly. ~RV101

If you don’t plan to use your RV during the winter months check out our Winterizing & Storing DVD for some easy to follow step-by-step procedures to keep your RV protected.

More Winter Camping Tips

- Do not store any water hoses with water in them. When you need to use the hose it will probably be frozen. You can take it inside to thaw out if need be, or use a hair dryer.
- Covering the windows with curtains, drapes or almost anything will help hold some of the heat in. It helps to cover overhead vent openings too.
- Leave cabinets or drawers open where water lines are located to let the heat circulate around plumbing.
- Try to avoid opening the entry door as much as possible.
- Oh and don’t forget the electric blanket. It can be a lifesaver at night.
- If you haven’t purchased your RV yet and you know you will be using an RV in cold weather see if the manufacturer offers an arctic package option when you buy it. Some packages include higher R-factor insulation values, enclosed underbelly, heated holding tanks, dual pane windows and more.
- When your winter camping trip is over and you head back home don’t forget to winterize the water system, if you expect freezing temperatures.
Q&A with Mark

Question:
A 2013 Ford F-350 I looked at has a door sticker that shows its GVWR is 11,500 pounds. From the Ford 2013 specifications online information this particular truck has a GCWR of 23,500 pounds.

If I subtract 11,500 from 23,500 pounds, that would leave me with a trailer maximum GVWR of 12,000 pounds (if I understand this correctly).

On the same 2013 specifications information, it says (for this particular truck): maximum loaded trailer weight, conventional: 14,000 pounds. And also says: maximum loaded trailer weight, 5th wheel: 15,900 pounds.

My question is, how are these last two weights possible? It would appear that the maximum size trailer I could pull (either TT or 5er) would weigh 12,000 pounds (as to not exceed the GCWR).

I understand how the payload figure for a particular truck can vary, but once the factory assigns the truck’s GCWR and GVWR, how would one ever pull a trailer that could weigh up to 15,900 pounds?

Thank you in advance.

Answer:
Fifth wheel tow ratings are always higher because of how the weight is distributed over the axle on the truck, but then of course you need to consider axle weight ratings and payload weights as well.

As for the GCWR minus the GVWR keep in mind the GVWR of the truck refers to the maximum allowable capacity if it were fully loaded. If you take the GCWR and subtract the vehicle's Curb Weight (empty weight) you should get Ford's tow rating, but again how many people plan to tow a trailer with no additional weight added to the truck.

You always need to account for any weight added to the truck and subtract that amount from the published tow rating. ~ RV 101

To stay current with RV information between magazine issues visit our Blog.
How will you Remember your travels?

The laptop we would’ve used to keep in touch with the kids.

The guy from Ed’s Towing. Spent three hours with him.

Cook’s Field, the week after we missed the Bluegrass Festival.

Not all insurance is equal. Just because you have your RV insured, doesn’t mean your whole RV experience is covered. Things like personal effects coverage, vacation liability, and towing expenses are frequently left out of other carriers’ policies. But at Explorer RV, we believe it’s more than just your RV we’re covering. It’s the travels, the good times, the memories. Visit us online to learn more or to get a quote.

PROTECTING YOUR RV. PROTECTING YOUR MEMORIES.

EXPLORER RV
INSURANCE AGENCY, INC.

Visit www.explorerrv.com to get a quote
It’s always sad to come to the realization that another camping season is winding down. Depending on where you live, part of this realization is preparing the RV for winter storage so it will be ready to go camping again next spring. A major part of winterizing your RV is to protect the RV water system from potential damage, caused by exposure to freezing temperatures. Frozen and damaged water lines are in fact the most common problem related to not winterizing your RV, or not properly winterizing your RV.

The RV plumbing system is the most vulnerable system to damage caused by plummeting temperatures. The good news is it is easy to protect the RV water system from this potential threat. Here are my 7 easy steps to winterize your RV plumbing system.

Before you get started there are a few items you will need to have. These items can be found in most RV parts stores:

- Non-toxic RV/Marine antifreeze. The amount depends on the layout and length of your plumbing lines. Two to three gallons will normally do.
- A water heater by-pass kit, if not already installed.
- A wand to clean out the black water holding tank if the RV doesn’t have a built-in clean out system.
- A water pump converter kit, or tubing to connect to the inlet side of the 12 volt water pump.
- Basic hand tools to remove and install drain plugs.

**Note:** Read your owner’s manuals for unit specific winterizing guidelines. Follow the steps outlined here that apply to your RV.
Step # 1: If you have any inline water filters remove and bypass before starting. Drain the fresh water holding tank. Drain and flush the gray and black water 3% holding tanks. If the RV doesn’t have a built in flushing system clean the black tank out with a wand. Drain the water heater. Open the pressure relief valve and remove the drain plug.

Caution: Never drain the water heater when hot or under pressure. With no water hooked up to the RV and the water pump off open a hot water faucet to remove any pressure on the system. Allow the tank to cool before draining.

Step # 2: Open all hot and cold faucets; don’t forget the toilet valve and outside shower. Locate and open the low point water drain lines. Use the water pump to help force most of the water out of the system, but turn it off as soon as the system is drained to prevent damaging the pump. Recap all drains and close all faucets.

Step # 3: By-pass the water heater. If you do not have a by-pass kit installed the water heater will fill up with RV antifreeze before it goes through the water lines, wasting six or ten gallons of antifreeze.

Step # 4: Install a water pump converter kit, or disconnect the inlet side of the water pump (the line coming from the fresh water holding tank) and connect tubing from the water pump inlet into a one gallon jug of RV antifreeze.

Step # 5: Turn the water pump on and pressurize the system. Starting with the closest faucet to the pump, slowly open the hot and then cold valves until the pink colored RV antifreeze appears. Replace the antifreeze container as required. Repeat on all faucets from the closest to the farthest away. Don’t forget the outside shower.

Step # 6: Flush the toilet until antifreeze appears. Pour a cupful of antifreeze down each drain. Pour some RV antifreeze in the toilet and flush into the holding tank to prevent any water in the tank from freezing. If your water heater has an electric heating element, turn it off. This will protect the element if the unit is plugged in while in storage. Make sure all faucets are closed.

Step # 7: Consult your owner manuals for winterizing icemakers and washing machines.

The unit is winterized. Now, next spring when it’s time to head out in the RV you won’t have any unpleasant, not to mention costly surprises waiting for you. Click here for information on our Winterizing & Storing DVD or E-book. ~ RV101
Having the right insurance coverage on your RV is important when you need it. Get a free quote from Explorer RV Insurance.

Get your free RV Insurance Quote

RV Education
101 products to help you use & maintain your RV

Product Catalog

DVDs

Video Downloads

RV E-Books

Print Books

The Bargain Room
Enjoy and learn from Mark’s RV videos of the month.

**RV Videos of the Month**

- **Play Now**
  - RV Sewer Solution by Valterra

- **Play Now**
  - RV Rubber Roof Coating by Dicor

- **Play Now**
  - Avoiding RV Accidents at the Gas Pump

**RV101.TV**

Your premier destination for RV how-to & RV product videos

www.rvconsumer.com
When you hear the term “winterizing your RV” the first thought that comes to mind is to protect the RV water system from potential damage caused by exposure to freezing temperatures. Frozen and damaged water lines are in fact the most common problem related to not winterizing your RV, or not properly winterizing your RV; but there is more to winterizing your RV than just protecting the water system from freezing.

The English dictionary definition for “winterize” is to prepare something, especially a house or an automobile, to withstand cold winter conditions. What I find interesting about this definition is that your RV is essentially a house and automobile combined. With that said, winterizing your RV would entail more than just preparing the water system for cold winter conditions. We would need to be concerned with preparing the RV’s interior, exterior, chassis, and plumbing from the harsh winter months ahead.

Here are some tips to help prepare the RV’s interior, exterior and chassis for cold weather storage.

**RV Interior**

When RVs are stored for the winter it’s not uncommon for mice and squirrels to make their winter home in the RV. These rodents are notorious for chewing through vehicle wiring, plastic and rubber components, resulting in extensive damage to the RV. Possibly, the most important step is to try and prevent mice and other rodents from being able to access your RV. This can be difficult because they can enter the RV through some very small openings. Start by inspecting the underside of your RV for any gaps or holes. Fill these gaps using silicone or expanding foam. A word of caution, if you never used expanding foam before, you should experiment with it on something other than your RV first. When it dries it can expand a great deal more than you expect.

Next, open drawers and cabinet doors inside your RV. Look in all of the corners and crevices, especially where plumbing and wiring enter the RV. If you can see any daylight mice can get in. Fill these areas with silicone or foam.

Remove all food from the RV when it’s being stored and thoroughly clean the RV to remove any remnants of food that might attract mice and other rodents. Some people say mothballs help deter mice from making their
home in your RV, and others say an alternative to mothballs is dryer sheets, like Bounce. I have talked to people who swear they work and the smell is much more pleasant. If you are close to where your RV is being stored you may want to use conventional mouse traps and check for mice every week or so.

Next you should defrost the freezer compartment and clean the refrigerator. Leave the doors open and place baking soda in the compartments to absorb any odors. If the RV is in long-term storage, and won’t be plugged in to electricity, it’s a good idea to turn off the main breaker in the distribution panel. Turn all LP gas appliances off and turn the LP gas supply valve off. Close the window blinds to avoid sun exposure to the carpet, drapes and upholstery. Leave doors, drawers and cabinets open. Clean the A/C filter(s). If you have vent covers installed on the overhead vents, that prevent rain from getting inside, leave them cracked open to allow for some ventilation. Remove any dry cell batteries from devices like smoke alarms, clocks etc.

**RV Exterior**

When you store your RV outside for extended periods of time the exterior begins to show signs of wear, caused by constant exposure to the elements. Ozone in the air and ultraviolet, (UV) rays from the sun start to take their toll. Ozone causes the paint to fade and makes products like rubber and vinyl dry out, crack, and start to deteriorate. The UV rays from the sun make this aging process happen quicker. Before you store your RV you need to give the exterior a thorough cleaning. Whenever I’m washing or cleaning anything, whether it’s an automobile or the RV, I start from the top and work my way down. It’s a good idea to clean the RV roof before putting the RV in storage too. The type of roof your RV has will determine the cleaner you will need to use. Wash the exterior and if you’re really motivated wax it, using a quality wax formulated for the type of exterior surface your RV has. A good coat of wax protects your RV finish the same as it does an automobile. When you are cleaning the RV exterior inspect all roof seams, body seams and window sealant for any cracks and openings that would allow water to get in. Consult your RV dealer for sealants compatible with these materials and seal as required.

Don’t forget to clean the awning fabric, and let it dry completely before storing it. If you have a pop-up or hybrid trailer make sure all of the tenting material is clean and dry before storage.

Ideally you should try to store your RV under a covered area and on a solid surface like pavement or concrete. If this isn’t possible avoid parking under trees and in tall grass, fields or wooded areas.
If the RV won’t be parked under some type of covered shelter you may want to invest in a cover. Covering your RV can be a logical and cost effective way to help protect your investment. If you decide to use a cover make sure it is made of a breathable material.

Service all locks with a spray lubricant and lubricate all hinges. Insects are attracted to the odorant added to LP gas. You may want to cover LP gas appliance vents to prevent insects from making their winter home inside these vents. If you do cover the vents, remember to remove the cover next spring.

RV Chassis
Just like the exterior of the RV, the tires on your RV can be damaged by the harmful UV rays from the sun. Inflate the tires to the manufacturer’s recommended pressure and cover the tires with covers that will block out the sunlight. Place something like a piece of wood between the ground and the tires. Frozen ground and petroleum based surfaces, like asphalt, can damage tires over time. Make sure that whatever you use to block the tires is larger than the footprint of the tire. No portion of the tire should hang over the edge of the tire block; this can cause internal damage to the tire. For trailers, chock the wheels front and rear. If you are storing a pop-up outdoors angle the tongue downward to assist in snow and water run-off.

Battery maintenance is an important part of winter storage preparation too. If you plan to start the unit while in storage, and to periodically plug the unit into shore power leave the batteries in the unit. Plugging it into shore power once a month for about eight hours will help keep the coach batteries topped off. If they are lead acid batteries check and adjust the water levels and make sure the batteries are fully charged. A discharged battery will freeze much quicker than a fully charged battery. If the RV is in long-term storage it’s better to remove the batteries and store them where they will not freeze. In either case keep the batteries fully charged when they are in storage.

If it’s a motorized RV you should fill the fuel tank prior to storage and add a fuel stabilizer. Run the engine and the generator long enough for the stabilizer to get through the entire fuel system. Change the oil and oil filter on the engine and the generator prior to storage. Acids accumulate in used oil and can corrode engine bearings, especially while sitting for long periods of time. If possible exercise the generator for at least two hours every month with a minimum of a ½ rated load on it. Consult your generator owner’s manual for load ratings.

This will help prepare items other than the plumbing system for cold weather storage. ~ RV101
Learn more about our products

For all your RV training needs we have you covered
Did you miss previous issues of RV Consumer e-Magazine? Catch up on all the information packed issues right here.

Happy RV Learning

Go To Archives now
Click here to view our complete line of RV Training Products
Visit our Sponsors

www.koa.com
www.rvtrader.com
www.explorerrv.com
www.vdcelectronics.com
www.equalizerhitch.com

RV Education 101 Learning RVs the Easy Way

2013 Media Kit
Our goal with RV Consumer E-Magazine is to provide you with helpful information to make all of your RV experiences more enjoyable. I left my position as an RV Sales and F&I manager in 2000 to start RV Education 101.

We produce RV educational videos & DVDs and publish books and e-books on how to safely & properly use and maintain your RV. The reason I left my job was because of my concern about the lack of educational and safety awareness material available to the RV consumer, in other words you.

My wife Dawn left her position in RV sales to help start the company, and is our Sales and Marketing Director. We currently have a 35-foot Class A motor home. We have two boys, Tyler 16 and Josh 22, both avid RVers and three dogs, Roxie, Gracie and Buck. If you would like to learn more about us and about RV Education 101 please visit www.rveducation101.com

RV Consumer E-Magazine, Copyright 2011,2012,2013 Mark J. Polk except where indicated otherwise. All Rights Reserved worldwide. Reprint only with permission from copyright holder(s). All trademarks are the property of their respective owners. All content provided as is. Not all content may be the opinion of the RV Consumer Magazine editorial staff or of RV Education 101. Advertisers are solely responsible for ad content.

To subscribe please visit our sign up page. All RV Education e-publications are opt-in, available by subscription only. We neither use nor endorse the use of spam. Your e-mail address will only be used to distribute RV Education 101 e-news and will never be sold or given to any other entity.

If you no longer wish to receive e-news from RV Education 101 you can unsubscribe in the e-mail notification you receive in your in box.

RV Education 101
150 Bay Ridge Rd.
Harrells, NC 28444
910-484-7615

Contact:
Mark@rveducation101.com
Dawn@rveducation101.com