

Abbreviated traveling check-list outline. Page 5, 6, 7 of 7.

AIR CONDITIONERS

There are not too many spare parts needed for your Air Conditioner. Inside the RV you should remove and either clean or replace the air filters. You remove the knobs and then the two nuts/screws from underneath to drop the shroud, which has the filters installed in it. You should do this every two weeks if things are very dusty since dirty filters will severely reduce the efficiency of the AC. We recommend purchasing permanent filters that can be washed, dried and reused. They are a lot cheaper than the replaceable type over time. Some units have drain tubes, for the AC drain water, that are routed through the walls of the RV. These tend to clog up at the top and the drain water can drip inside the coach. When you are getting gas and checking your tires, blow the tubes clean on a regular basis.

GENERATORS

A reasonable set of spares for your generator would consist of the following: Sparkplugs and points (for gas generators); oil, fuel and air filters; special oil if required. Since these are usually unique to your generator, even if you cannot do the repairs yourself, they will be available for any repair person to use. All generators will stop running if the oil gets low. One common failure mode is a loss of AC input voltage from either the Generator or the AC mains. This is usually due to the switchover relay that is used in all RV's that have generators. The relay has three poles (three wire input circuit) which automatically change from shore power AC to generator AC. The relay is wired to be in the Campground AC position and changes once the generator starts to put out AC voltage. In a 50-amp system, there are two relays with three poles each. Over time, the relay contacts arc and burn. A carbon build-up eventually prevents good electrical contact in the relay. The fix, **after turning off the shore power and the generator**, is to clean all the relay contacts with a scotch pad (don't use steel wool because of the possibility of getting metal bits in the relay).

WATER SYSTEM

A common water system problem is the tank drain valve(s). Many trailers have the drain valve at the bottom of the tank in the center, so it sticks out, unprotected. This can break off when driving over a high rock, log, or other road projection resulting in no more water. Carry at least one spare valve if your valve is under the tank. You should also purchase a brass plug, with the correct threads, as a back-up solution. The plug will allow you to at least use the tank until you can get a replacement valve. You can also install a drain valve in your hot water heater in place of the fixed drain plug.

Filtering your drinking and cooking water on a caravan is of major importance. Most of the rigs have filters on a special kitchen sink fixture. A lot of these use very expensive cartridges that do an excellent job. These can be replaced with a simpler unit where the cartridge case remains, and you simply replace an internal filter. You can get carbon filters which remove chlorine, odors etc. for about \$10. These last over six months and are so inexpensive that you do not mind replacing them every year. You can use these instead of your special kitchen sink faucet filter. Some campers have also added an external RV sediment cartridge filter holder that hangs on their bumper. There is another filter screen between your water tank in your RV and the water pump, which is connected into the water pump. Do not forget to clean this filter at least once per

year. You can get the filter holders that use the inexpensive standard cartridges available at Lowes or Home Depot.

HITCHES & TOWBARS

If your hitch is installed properly and the bolts are, tight than your major concern is a **loose ball mount**. This should be checked before each trip. You need a very large set of channel lock pliers or a pipe wrench and an adjustable spanner wrench or deep socket. This set could cost in the \$50 to \$70 range. You should have a ½-inch socket set with an additional 1-½-foot handle to check all the hitch platform, A-frame and sway control bolts. For torqueing the wheel nuts purchase the correct size black-colored sockets that are 6-point. Use your “clicker” torque wrench to properly set the torque. Current recommendation is 110 ft. lbs. for trailers. Follow your manual for your motor home. These sockets are designed for powered air tools and will not round off the high torque nuts. Learn the proper method for setting your brake controller and checking for correct operation. These concerns also apply to motor home owners who tow cars.

SEWER SYSTEM

The worst thing you can put in your black or grey water tanks is formaldehyde. This can cause solids to build up, require constant cleaning of the tank, and result in your being banned from using some dump stations. You need an active bacteria-enzyme product that will decompose solids and paper to produce liquefied slurry that is easily dumped. One of the best products we have found is Eco-Save, which in the solid form and costs about 50 cents per treatment. This product also lubricates the valve seals and cleans the tank sensors. You cannot use any other chemicals with this product since it will kill the bacteria. You must completely clean both of your tanks if you have been using formaldehyde before you can use this product. The first step is to clean both tanks to get rid of any chemicals or solids left over from the previous use. Put about two gallons of water into each tank, a ¼ cup of dishwasher fluid (Joy or Dawn) and a bunch of ice cubes (10# bag of crushed ice will do). Drive to your next rally (at least an hour or more) with this in the tanks and they will be well scrubbed. Thoroughly rinse the tanks with fresh water and you should be ready for your first bacteria treatment. Put a quart of water in the tanks and the recommend amount of bacteria-enzyme and you should be ready to go. Put a small amount of enzyme in the gray tank to eliminate the rotten egg odor you will get when you cannot dump this tank for several days. The only barrier to keeping odors out of your RV is water. Each sink and the shower have a trap that holds water and prevents odors from the grey water tank from coming into the RV. The only thing keeping black water odors out of the RV is the water in the toilet. You must keep several inches of water in the bowl since this is your odor barrier. Remember to put ¼ inch of vegetable oil in the bowl when you winterize. Carry a new spare seal just in case the oil treatment does not work. Sometimes you should dump after you have driven several hours so that your bacteria have had a chance to thoroughly decompose the contents of the black tank. The proper procedure is to dump the black tank and then the grey tank. Your tanks should be about ¾ full for the best flush/dump. If caravanning, dump on your way into the new camp area and clean the tank before you use it again. Use your flush hose connection if you have one. OR - If a longer hose is available, just stick it in the tank through the toilet valve and give it a good flush. If a hose is not available, after you dump, fill the toilet to the top and flush the tank. Do this twice. OR if you have a bucket. Fill the bucket with water and pour it into the toilet while holding the flush valve open. Do this twice. If you still have RV odor your tank air vent tube could have slipped down and was below the tank water level or could have actually

pulled out of the tank. This tube should be in the tank and above the water level so that it can exhaust the gases at the top of the RV. If everything else is OK, be sure to check the exhaust tube.

REST STOPS

When on the road most of us stop every 2 or 3 hours to stretch our legs. We should take this opportunity to check a few things on the RV and tow or towed vehicle. This should become a routine safety check at every rest stop.

1. A quick look at each tire to see if any have low air pressure. Do not forget the inside tire on the dual axels. Give these a kick to be sure they still have good pressure. Truckers use a tire iron and listen for the sound. Check lug nut torque.
2. Check the wheel hubs temperature to see if any of them are hotter than normal. Be careful because they could be extremely hot if you have a defective wheel bearing or a dragging brake shoe. Before actually touching the hub just get close enough to feel the radiated heat. Excessive heat on any tire hub means you have a serious problem that must be fixed before you can continue your journey.
3. Inspect the hitch, coupling, and A-frame for any loose bolts.
4. And finally, check the main electrical and breakaway cable connections.

See you, **safely**, down the road.

Some recommended spares as mentioned in this article (pages 1 – 7):

several sizes of stranded wire (14 ga., and 12 ga.)
fuses – various sizes and types based upon what you have.
15, 20 and 30 Amp set of automotive ATC fuses.
silicon spray lubricant
WD-40 degreaser
Corrosion Pro Lubrimatic spray grease or Kwiklub step lube
PB Blaster rust remover
electronic circuit cleaner
graphite in small tube.
digital voltmeter.
wire brush battery terminal cleaner.
baking soda and small paint brush.
AC line tester.
round wooden toothpicks.
pint of alcohol or vinegar.
generator spares: sparkplugs and points; oil, fuel and air filters; special oil.
water tank drain valve and/or plug.
spare toilet seal.
bacteria-enzyme product.
hoses and fittings.
torque wrench and socket.
small tube of dielectric paste.
box of different size and type of terminals and butt connectors.
wire stripper/crimping tool to handle several popular wire sizes.
various sizes of shrink tubing, heat gun, your wife's hair dryer, matches.