

UTILITIES		Notes
<p>Shore power connection point</p> <p>On units where the shore power cable is not hard-wired, carefully inspect the shore power connection assembly. If it is accessible from the exterior side wall, does the weatherproof cover function properly? Are the connections clean? Is the assembly caulked are securely mounted? Does the umbilical cord “lock” into place?</p>		
<p>Shore power cable condition</p> <p>Carefully inspect your shore power cable. Check for cuts or damage to the cable. Inspect the plug end of the cable. Is the cable in serviceable condition? Is the plug clean and complete?</p>		
<p>Shore power cable length</p> <p>How long is your shore power cable? For lengths shorter than 30 feet, consider purchasing an extension for a total of at least 50 foot.</p>		
<p>Date of batteries</p> <p>For new RVs, check the battery in-service date. The batteries should not be “new-old-stock”. For used RVs, what is the in-service date for the installed batteries? Are they approaching end-of-life service life?</p>		
<p>Batteries</p> <p>Locate your coach batteries. What type are they? 6-Volt or 12-Volt? The coach batteries supply the needed 12-Volts DC to the coach for lights, auxiliary power accessories, electric slide motors, appliance controllers, and more. Inspect the coach batteries. Are they clean and free of damage?</p>		
<p>Battery disconnect switch location and operation</p> <p>Locate the RV battery disconnect switch. Check the functionality of the switch. When switched, is 12-Volt DC power terminated? Are there multiple switches? Is so, understand the path for each.</p>		

	<p>Dry cell, wet cell, sealed</p> <p>What type batteries are installed? There are three types of batteries, Wet Cell (flooded), Gel Cell, and Absorbed Glass Mat (AGM). Gel and AGM are considered maintenance free style batteries.</p>	
	<p>Coax inlet</p> <p>Test the coach coax inlet by attaching a signal producing device. If possible, use a coax continuity tester to validate the integrity of the coax runs. For external coax inlets, does the cover provide proper weather protection?</p>	
	<p>Satellite inlet</p> <p>It is unlikely that you'll be able to test satellite coax without an actual satellite antenna and receiver being installed. For new units, where these accessories are installed, the dealer can show test screens with one of the satellite service source pages. For used units, testing the coax with a coax continuity tester may be the best option available to you.</p>	
	<p>Telephone inlet</p> <p>Telephone service at RV parks is becoming a thing of the past just as telephone jacks are more and more uncommon in RVs. If the coach has a telephone jack inlet, check the weather cover for effectiveness. If you wish to test the telephone jack, find service or use a tone generator.</p>	
	<p>Solar power panel inlet</p> <p>Some coaches have solar power wiring installed at the factory. If the RV does, check the power inlet cover to ensure it is weather tight. Some units have the inlet on the roof, some on the forward wall while others are located in basement storage areas. Check the owner's manual for specific information.</p>	
	<p>Fresh water inlet</p> <p>Check your fresh water inlet connection. Is the connection clean? Is there a washer and debris filter installed? Does the hose connection ring turn freely?</p>	

	<p>Water manifold systems</p> <p>Many RVs are configured with very elaborate water manifold systems, allowing each hot/cold water feed to be independently controlled. This is an outstanding feature to have should you ever need to isolate a water feed source. If the RV includes this manifold design, locate it and review the proper operation of the individual valves. If the system includes a specific valve for the water bypass, understand the configuration it must be in for winterizing purposes.</p>	
	<p>Anderson valve (if equipped)</p> <p>Many water distribution systems in RVs are controlled by an Anderson Valve. This multi-position valve allows the RV owner to select fresh water tank fill, fresh tank use with pump, city water source, and winterization. Check the operation of the valve. Is the selector knob providing the source indicated? Is the knob selector firm and sure when switching between positions? Does the valve selector leak at all? If it does leak, the valve is likely failing and should be replaced.</p>	
	<p>Outside shower</p> <p>Locate the outside shower (if equipped) and test. Are there leaks? Adequate water pressure from the pump? Any damage to the hand-held wand or hose?</p>	
	<p>Black tank flush</p> <p>These systems are available from various manufacturers but their purpose is much the same. These systems are connected to a water source using a garden hose (NEVER your drinking hose) and this water inlet sprays clean water into the black tank to help keep the tank as clean as possible. If your system is equipped, test it and ensure the jets in the black tank operate properly.</p>	
	<p>Waste water sewer connection</p> <p>While not the most glamorous part of RVing, understanding the proper method of emptying the black and gray tanks is critical. Check the connection on the RV to attach the sewer hose to. Is the pipe and connection point sturdy? Does the sewer pipe have a functional cap? On the bayonet mount, are the tabs on the pipe intact?</p>	

	<p>Gray dump valve location and operation</p> <p>Locate the gray tank waste water valve(s). The tank waste water valves are operated by pulling the handle out which opens a blade valve, allowing waste water to discharge from the tank. Test the operation by connecting a sewer hose to the RV waste water sewer connection. Add some water to the gray water tank. Open the gray tank dump valve. Does waste water flow? Was the valve smooth to operate? When closed, does waste water stop flowing?</p>	
	<p>Black dump valve location and operation</p> <p>Locate the black tank waste water valve(s). The tank waste water valves are operated by pulling the handle out which opens a blade valve, allowing waste water to discharge from the tank. Test the operation by connecting a sewer hose to the RV waste water sewer connection. Add some water to the black water tank. Open the black tank dump valve. Does waste water flow? Was the valve smooth to operate? When closed, does waste water stop flowing?</p>	
	<p>Outside faucet and/or shower</p> <p>For units with exterior faucets, check the water fixture by running some water. Does the faucet operate properly?</p>	
	<p>Outside kitchen</p> <p>Some units offer outside kitchen accessories including gas stoves and refrigerators while others offer only a LP Gas line connection. Depending on your unit, check the accessories carefully for proper operation. If equipped, does the refrigerator operate properly using the appropriate power source for the unit? Does it operate in multiple power modes? Does the gas grill light properly?</p>	
	<p>Fresh water tank drain</p> <p>The fresh water tank should have a means to drain the tank. Draining is necessary for tank cleansing and for winterization. Locate the low water drain for the fresh tank and ensure it operates properly.</p>	

	<p>Winterizing bypass valve and operation</p> <p>Winterizing plumbing systems vary greatly but some general rules remain. Most often, systems have a bypass. This bypass can be very elaborate or simply bypass the water heater. It may be in the water bay, water heater cabinet, behind the water heater, attached to the water manifold or as part of the Anderson valve. Regardless, identify where the bypass valve is located and understand how it is used.</p>	
	<p>Water heater drain</p> <p>There are two main water heater manufacturers, Suburban and Atwood. While the water heaters are similar, there are subtle differences. Please refer to the manual that supports the unit installed in your RV for specific maintenance instructions. Generally, the Suburban unit drain plug is the anode rod. In the Atwood unit, the drain plug is just that, a simple plug. Locate the water heater and determine which plug type is installed. Consider buying a special drain plug socket to make removal and installation easier. Often the plugs are difficult to get to and cross-threading the plug could lead to an expensive repair bill.</p>	
	<p>Water heater anode rod (if equipped)</p> <p>Suburban water heaters use an anode rod to protect the internal tank lining. The anode rod is a sacrificial device that allows contaminants in the water to attack the anode rather than the tank walls. That's why keeping an eye on the anode rod is so important. It should be inspected periodically and replaced when less than one-third of original size.</p>	
	<p>Water heater tank blow off valve</p> <p>Water heaters are protected by a blow off valve, just like a traditional home water heater. Periodically, check the valve. Is it clean? Evidence of leaks? Does it operate properly?</p>	
	<p>Water heater, electric and propane</p> <p>Test your water heater using the available heating sources. Many RV units are electric and LP gas. Ensure both heating sources are functioning properly.</p>	

	<p>Water pump operation</p> <p>Test your on-board water pump. With water in the fresh water tank and ALL faucets in the off position, turn the pump on. The pump should run momentarily building water pressure in the system then turn off. If the pump continues to run, see if a faucet was accidentally left on. If not, being searching for a potential leak.</p>	
	<p>Convenience panel switches and control</p> <p>Many RVs have a convenience panel which is a common location where many of the RV functions are controlled. This may be a panel near the main door, switches and controls inside a cabinet, or maybe a tablet like device that controls the RV system functions wirelessly. Regardless, locate where the controls are and exercise each one of them. Are all the switches marked? Do all the controls properly function? Don't leave the PDI process believing some switches are just spares. Each switch or control should have a definite function.</p>	
	<p>Tank controls and status gauges</p> <p>Locate the controls and status gauges (if equipped) for your batteries and each of the storage tanks. The fresh, gray and black tanks should include a level indicator. The batteries should have charge status indicator. Locate these and ensure you understand how to check each.</p>	