STARTING POINT

Some things to have with you to assist in your inspection:

- A flashlight with a strong beam is a very useful tool to have.
- A screwdriver with straight, Philips and square bits will come in handy as well.
- You should also have available the delivery invoice for the trailer. It will show all the standard equipment and ordered options and should be compared to what you thought you ordered and should be referred to during your inspection. Pictures from the glossy brochure will also help in your inspection.
- An inexpensive clipboard will make it easier to use this checklist and to record any problems.

Make a list of anything you find wrong, needing adjustment or that is unacceptable. This will serve an important role when you go to discuss the next step with the dealer's salesperson.

You will need the understanding & cooperation of your dealer for this process, as it probably involves far more depth & detail than they normally anticipate and schedule for. Make sure the dealer knows about it in advance & try to schedule your visit for the morning to allow enough time (about 2-3 hours) to perform your inspection & actually get some things fixed (if necessary). You may get a better-prepared trailer if the dealer understands your intentions. At the very least, tell the person doing the "owner inspection" or "walk through" what you intend to do, give him or her a copy of this checklist and work with them to plan the time accordingly.

A sense of humor will also come in handy!

If you are having a hitch and brake controller installed at the same time, give yourself some time to understand how your hitch works and how it should be adjusted.

Once the rig is hitched up it may take upwards of an hour for the dealer to make the proper adjustments with your tow vehicle attached. Regardless of which hitch you use, it MUST be adjusted properly to match your tow vehicle to the trailer.

Finally, my assumption for this PDI is that both (if fitted) propane tanks are full, shore power is available, city water and a hose are located close by and sewer connections, a drain or a dump station is available. A fully charged battery must be connected as well.

OUTSIDE WALK AROUND

The outside walk around should take around one hour. At this point, you're generally searching for anything that does not look right.

1. Roof Sealing & Fixtures:

You will need to get up on the roof here, so round up a ladder or carefully inspect the one on the back of the unit if you are going to use it. Check that all the ladder mounting points are solidly attached to the body and the rungs are firmly fixed to the frame. Carefully climb on the roof and inspect all seams, gaskets and any other place that the roof material has been cut or holes drilled and then sealed. Proper polyurethane caulking should have been used to seal all places where the roof has been penetrated.

- ☐ Check that all shrouds & covers are intact, unbroken and properly seated on the roof.
- ☐ Check closely around:
  - ☐ air conditioners
  - ☐ vents
  - ☐ antennas
  - ☐ sewer vents
  - ☐ side seams

Look for any signs of:

- ☐ bubbles (large and small)
- ☐ delamination
- ☐ foreign objects or protruding screw or nail heads under the membrane (if a rubber roof).

2. Windows:

- ☐ Check closely around each window to make sure it has been properly aligned and sealed.
- ☐ Confirm that the window glass itself is not scratched and that there is no sealant or adhesive sticking to the visible surface.
- ☐ A gap between the trim ring & the window frame is acceptable, but it should be nearly even all the way around the window.

3. Entry Doors:

- ☐ Check the gasket used on all doors for proper adhesive and coverage. Look closely at the door from the inside and confirm that it sits flush against the inside of the doorjamb.
- ☐ Confirm that each key works in the appropriate lock.
- ☐ The main door should open & close smoothly without sticking and lock with out undue effort.
- ☐ Check that the screen door opens smoothly alone and locks to the main door without any extra effort.

4. Baggage Compartments:

- ☐ Open and close each door checking for alignment and gasketing.
- ☐ Confirm that each key works in the appropriate lock.
- ☐ All hinges should be tight and secure and the latches should hold the door tightly closed and still be easy to open.
- ☐ Feel the floor or carpeting and look for any signs of moisture that might indicate rain leakage.
- ☐ Verify that compartment lighting (if fitted) works properly.
- ☐ Any gas cylinders used for keeping the door open should be properly installed so as not to interfere with items stored in the compartment. If clamp-type door hold-opens are used, make sure they are present and hold the door correctly.

5. Sewer & Fresh Water Connections:

Inspect this area on the trailer to make sure that nothing is broken or deformed

- ☐ If appropriate at this time, make certain you understand how each valve or fitting works.
- ☐ Understand the proper function of the black and gray water valves. Confirm that they are labeled correctly!
- ☐ If tank flushing is installed, understand how it operates.
- ☐ Understand where the low point drains are for the fresh water system.

6. Telephone & Cable TV Connections:

- ☐ Find and understand the telephone and cable connections.
- ☐ Make sure a weather cap is present for each connector and that connectors are properly identified & mounting plates are properly sealed.

7. Propane:

If the tank(s) are contained in a compartment, there should be no possible way for propane to enter into the RV or any other compartment.

- ☐ Understand how the regulator works and how it switches between cylinders.
- ☐ Confirm that a leak test has been performed on both pigtails between the tanks and regulator and the rest of the system.
- ☐ Locate and understand the operation of the main shut off valve (if any).

8. Battery:

- ☐ Check the battery box to verify that it is ventilated and that any compartment slide mechanisms work properly.
- ☐ Verify that no battery cables are rubbing on any part of the frame because that will eventually end up with a short circuit and possible fire.
- ☐ Understand the battery type provided and how to maintain them.
- ☐ If a battery disconnect switch is fitted, learn where it is and how to operate it.

9. Paint & Siding:

- ☐ Carefully check the paint finish on the RV. Any problems can be verified and corrected at this point with a lot less hassle.
- ☐ Site down the side of the unit to check for bumps or depressions in the siding.
- ☐ Divide each side of the unit into 2, 3 or 4 sections and inspect for siding issues:
  - ☐ color variations
  - ☐ dents or irregularities.
- ☐ Do the same for the ends of the unit
- ☐ Look at places where vinyl film is used for graphics to make sure it is free of any air bubbles.
- ☐ Check ends of any decals for uniformity or “mistakes” that may have gouged the siding.
- ☐ Look closely where masking tape was used for paint graphics to make sure there is no over-spray.
- ☐ Check for surface smoothness/any place paint coverage is marginal or where there are bubbles.

10. Tires and Wheels:

- ☐ Closely inspect the tires and wheels and understand the proper inflation pressure.
- ☐ Verify the torque of the lug nuts or have the PDI person do it while you watch.
- ☐ Find out the proper jacking point for the trailer and what kind of jack to use.
- ☐ Determine if your TV lug wrench will fit the lugs on the trailer or if another size is necessary.

11. Spare Tire:

- ☐ Check the condition & pressure of the spare tire.
- ☐ Understand how the tire carrier works and if any tools are needed for operation.

12. Awnings:

- ☐ Extend and retract each awning paying particular attention to how the awning is locked in the retracted position.
- ☐ Make sure all springs, locks and supports work well and are properly aligned.
- ☐ Wiggle the mounting points for the support arms to get a feeling for how solidly they are mounted to the body.
- ☐ Learn how to put the awning into a “one side low” position to drain rainwater

13. Chassis Inspection:

Put on some old clothes or coveralls and get a good-sized piece of cardboard or carpet to make it easier to lie on your back while checking around under the trailer. If it’s possible to do so without jacking up the rig, it’s a lot easier, but do what makes sense to you.

You want to be able to Inspect all:

- ☐ air
- ☐ water
- ☐ gas and / or hydraulic lines
- ☐ electrical wiring
- ☐ brake wiring
- ☐ shock absorber attachments;
- ☐ and in general every place that a wire or pipe could rub against something that could cause a problem later.
- ☐ All wiring and piping should be properly fastened.

14. Slide Out Operation:

If the RV includes slide-out(s) then spend the time it takes to understand their operation.

- ☐ Start by checking the seals while the slide is retracted. You should not be able to find any places where you can see light or detect airflow.
- ☐ Listen carefully while the slide(s) are being extended. If there are any unusual noises (popping, grinding, loud rubbing or squeaking), try to get a better explanation than “they all do that”.
- ☐ Once the slide(s) is extended, check that the seals are doing their job and that the slide is square and flush fitting inside and out.
- ☐ Understand the mechanism that extends and retracts the slide.
- ☐ Operate it several times and understand any restrictions on operation.
- ☐ Understand the manual retraction process and actually perform the retraction as if the automatic mechanism had failed.
- ☐ Look for proper alignment of any wheels that may ride on carpet or other flooring, to insure proper clearance.
- ☐ Confirm that no screws or bolts are cutting into the carpeting during operation.
- ☐ Understand any locking mechanisms that are used to hold the top of the slide out tight against the top of the RV.
- ☐ Use a flashlight to look into dark corners under the trailer & slide.
- ☐ Check the under-slide area for proper routing of wires or cables.
- ☐ Confirm that nothing rubs on the tires (parts of the slide, wiring, insulation, Etc.) when the slide is retracted.

INSIDE FIT AND FINISH

In general you are looking for things that are not finished correctly, since it is really too late to inspect the basic design of anything.

1. Cabinets:

- ☐ Inspect & open all of the cabinets to insure that all the hinges and latches work well and that cabinet doors close evenly and are aligned properly.
- ☐ Pull each drawer out to its stop, return it closed and then try to open it like road vibration might do.
- ☐ Makes sure that there have been no water leaks and that all the wiring and pipes are well fastened.
- ☐ Use a flashlight to look under and behind drawers for concealed leaks or damage, poor workmanship, etc.
- ☐ Inspect the linings (if any), to insure they are fastened securely.
- ☐ Run your hand along all edges, front & back to check for and delamination or loose edges on molding or vinyl wraps (you may want to wear gloves for this part)

2. Molding & trim:

- ☐ Go over all the trim on walls, doors & furniture.
- ☐ Make sure that everything is fastened on well and not loose or ready to come off.
- ☐ Check that no nail heads or staples are protruding.

3. Lighting:

**At this point, only 12V lighting can be tested, as the unit should not be connected to shore power yet.

- ☐ Operate every light switch and observe its function.
- ☐ Use the monitor panel to check battery charge levels.

4. Closets:

- ☐ Open and close all closet doors checking for free operation and proper alignment.
- ☐ Hanger rods should be properly fastened and secure.
- ☐ Check out any lighting that is provided and any switches that are used.

5. Furniture:

- ☐ Examine every piece of furniture to check for construction, upholstery, pattern and cloth are matching.
- ☐ Check out the dinette by making it a bed with the appropriate cushions.
- ☐ Do the same with the couch or sofa.

6. Blinds:

- ☐ Operate each blind and check for alignment.
- ☐ Look at all valances and trim to be sure they are secured.

7. Counter Tops:

- ☐ Inspect all counter tops for alignment and fastening.
- ☐ Make sure that any trim pieces that should be there are in fact tight.
- ☐ Check for caulking quality everywhere there may be water, especially edges near a sink.
- ☐ Check the installation of sinks and faucets by trying to wiggle them.

8. Windows:

- ☐ Open and close every window and operate the latches.
- ☐ Pay particular attention to the location of the safety egress windows or emergency windows and make sure they operate smoothly & easily.

9. Floor Coverings:

- ☐ Inspect carpet and other floor coverings in all corners to insure that they have been properly fastened down.
- ☐ Check areas that slide outs may roll over for pulled threads, cuts or other problems.
- ☐ Check closely for gouges or cuts in linoleum tile.

10. Wall Coverings:

- ☐ Check to make sure that all the wall coverings actually cover and join properly.
- ☐ Look for any discoloration or patch jobs that may cover hidden problems.
- ☐ Try to find any places where there are problems, as now is the time to get it fixed while matching patterns are in stock.

(Some folks suggest ordering extra fabric, carpet, and wallpaper now so that matching material is available to make small modifications or repairs at a later date.)

OPERATION TEST OF ALL HOUSE SYSTEMS

You should be about two hours into to the PDI by now and you are ready to test all of the house type systems.

1. Shore Power System:

Now is the time to connect up to shore power.

- ☐ Pull out all of the AC cord, confirm the length and inspect the plug for proper attachment.
- ☐ Plug the unit into AC power.
- ☐ Inside the unit, check any 110V lighting and switches.
- ☐ If you have a 110V receptacle tester, check all outlets for proper wiring/polarity.
- ☐ Find the GFI-protected outlet and test using the push button.
- ☐ Understand which receptacles “down stream” from the GFI are protected.

Any electrical problems found here could be a safety/fire issue and should be corrected immediately.

2. Converter:

- ☐ Confirm the operation of the converter/charger that is installed.
- ☐ Turn on several interior lights to create a load for the converter and confirm no excessive converter noise or vibration.
- ☐ Have the PDI person explain the operation of the converter, the AC circuit breakers and the DC fuses.
- ☐ Make sure that there is a written list of the loads connected to each fuse and breaker.

3. Water Pump:

If the fresh water tank is not yet full, fill it now so now you can test the function of the water pump.

- ☐ Confirm the location of the overflow/air vent and that it functions correctly.
- ☐ Turn on the water pump; you should hear it pump for several seconds to create enough pressure in the system. If you can’t hear the pump, have someone go to where it is to confirm operation & loudness.
- ☐ If the pump does not shut off, there is a problem.
- ☐ Run water in the kitchen and bathroom sink and notice that the pump will come back on until proper water pressure is restored.
- ☐ Check for appropriate flow, Hot and cold, at each sink and at the shower.
- ☐ Check that the toilet works correctly and that there are no fresh water leaks.

Now is the time to fix a noisy pump if it is vibrating or making any irritating sounds. Most pumps make some noise, but poorly routed plumbing, easily corrected, is a common problem.

4. City Water System:

- ☐ Turn off the pump, connect up to city water (use a regulator if overly high pressure is suspected) and confirm that the connection works correctly and does not leak.
- ☐ If your rig has a factory-installed water filter, find out where it is and how to change the filter.
- ☐ Look for leaks under sinks and confirm the operation of all fixtures again while on city water

5. Tankage:

- ☐ Re-fill the fresh water tank if necessary (find out how this is done on your unit) and run water into the gray tank to verify the gauge reading and that there are no leaks.
- ☐ Filling the gray tank until water comes up in the shower will make it easier to find leaks inside & out. If the tub/shower is installed correctly, there will be no leaks!
- ☐ Do the same thing to the black water tank, including filling so that water comes up inside the toilet.
- ☐ Check for leaks (if the toilet is installed correctly, there will be no leaks!)

You can fill the black water tank by using the tank flushing system (if fitted), by using a garden hose adapter for the sewer connection (through a backflow preventer) or by bringing the water hose inside and filling the tank through the toilet. This last method can be a little cumbersome, and I don't recommend it unless you've done it before.

- ☐ Check the gauges for accuracy while you are filling.
- ☐ Find out how the fresh water tank is vented and where the vent is located.

Now is the time you want to find leaks if there are any!

- ☐ Drain the gray and black water tanks using the sewer hose or the garden hose adapter.

6. Water Heater:

- ☐ Try the water heater on propane first. A few seconds after you turn it on, you should hear the click of the igniter and the small pop when the burner lights. The red light should stay on until that process happens. If it does not ignite, then there is a problem.
- ☐ Turn on the AC element in the water heater (if connected) and confirm operation.
- ☐ Make sure you know the location of the electrical switch at the water heater and the correct operation of the interior switch if fitted.
- ☐ If your unit is so equipped, understand the operation of the bypass valves for winterizing.
- ☐ Confirm that hot (or warm water depending on how long the water heater has been on) comes out of the hot tap at the various sinks.

7. Furnace:

Now its time to understand the operation of the thermostat that controls heating and the air conditioning.

- ☐ Turn the furnace on and set a temperature that is at least 10 degrees hotter than the ambient temperature. In about 30 seconds, you should hear the furnace fans come on. Shortly thereafter you should hear the click of the igniter and the sound of the burner. If not then there is a problem. It could also be taking a while for propane to get to the heater, so don't worry yet!
- ☐ Let the furnace blow and you should get hot air at about 110 degrees coming out of all vents.
- ☐ Check each vent in each area of the trailer.
- ☐ Now turn the furnace down and the hot air will gradually turn cooler and the fans will eventually stop after the furnace has cooled sufficiently. During this process have someone with a good nose check for any smell of material getting too hot, or heater fumes coming out. On a very new heater, there may be the smell of oil burning off internal metal surfaces. This is normal and should only last a short time. You may want to have the windows & doors open.

8. Air Conditioners:

Some air conditioners also have a heat strip or heat pump feature so now is the time to verify these functions.

- ☐ Turn on the air conditioner. After a couple of minutes, cool air, 20 degrees cooler than ambient, should be coming out of the registers.
- ☐ If your unit has ducting in the ceiling, make sure a good airflow comes out of each register.
- ☐ Learn how to clean the AC filters at this time.

9. Propane and Carbon Monoxide Alarms & Smoke Detectors:

Now is a good time to check the function of these alarms. The PDI person should have a small canister of gas that can be sprayed at the alarm to test its operation.

- ☐ Have them perform this test while you watch and learn how the alarms work.
- ☐ Confirm that there is a new battery in the Smoke Detector (write the date on it with a Sharpie for reference)
- ☐ Activate the test button to check operation of the smoke detector.
- ☐ Understand how to turn it off.

10. Refrigerator:

Most modern refrigerators work on propane or AC and have an automatic mode that gives preference to AC and then will switch to propane if AC power is not available.

- ☐ Understand the controls and the status lights and set the unit on propane. The RV may need to be unplugged for this to happen.
- ☐ Go outside to the refrigerator vent grill and make sure that the propane flame is lit and heating.
- ☐ While the refrigerator vent grill is open, check to make sure the drain line is positioned & trimmed for proper drainage.
- ☐ If applicable, set the temperature at the highest cooling setting, because setting it to lowest will typically cause the coils to collect moisture and ice up. Come back in about 10 minutes to feel that the coil/fins are actually starting to cool.

11. TV VCR Antenna and Switching and Entertainment system:

For the most through test, bring a small AC/DC TV with you for the initial test. If your rig has a built-in radio/cassette/CD player, bring the appropriate media to test the system. If a DVD player or VCR is installed, bring those media as well.

- ☐ Review and understand the switching system (if any) that allows the selection of viewing channels on the front and rear TV.
- ☐ Raise the TV UHF/VHF antenna and learn how to turn on the amplifier and the DC outlet.
- ☐ Find out the power rating of the DC outlet and compare it to the load of the equipment you will connect to it.
- ☐ Activate the control on the front TV that scans for local stations.
- ☐ Learn how to rotate the antenna to maximize the quality of the picture.
- ☐ Learn how the entertainment system works, play all the media it is capable of and check all functions.
- ☐ Learn how the speakers are controlled and which switch does what.

12. Air Vents:

☐ Test the operation of kitchen, bathroom and other air vents making sure they open and turn on properly (if powered).
☐ Verify that they retract and close tightly.
☐ If thermostatically controlled, learn how that function works.

13. Microwave:

☐ Put a cup of cold water in the microwave and set the timer for 2 or 3 minutes. The water in the cup should boil in less than 3 minutes.
☐ Make sure there are no unusual sounds coming from the Microwave.

14. Propane Stove:

☐ Turn on one burner of the stovetop while the AC's and Microwave are running and the automatic igniters should cause a strong spark to light the burner.
☐ Turn on the other burners to verify that there is enough propane flow to operate the refrigerator, water heater and all the burners. If everything is OK, turn off the burners on the stove.
☐ If your unit has an oven, understand how and where the pilot is lit and verify its operation.

Note: Sometimes the burner igniters interfere with the operation of the thermostats for the roof AC. This is the time to find this problem.

Summary: You have now done a simple test of the major house systems and can shut everything off. Also by now, you will probably have a list of things that you feel need correcting, but it may also be near the end of the day. Decide if you are going to accept the trailer as is or if it needs to stay with the dealer. If you accept the unit and it is appropriate, plan on camping near the dealer for the night. This will give you a chance to further test the various functions. Prepare yourself for waiting until these things are corrected and don't be tempted by the PDI person to sign the acceptance paperwork just yet. For a really serious checkout of your new trailer, you should "dry camp" the first night and not be tempted to hook up to shore utilities just yet. Bring enough kitchen equipment and food so that you can prepare an evening meal. There is no better way to test the living facilities than to actually use them. Don't be tempted, since you've had a tough day, to go out to eat.

ACCEPTANCE: When you are satisfied that all systems are "go" then sign the acceptance papers that the PDI person will anxiously provide for you. Schedule your first return trip to the dealer for about a week to a month from now. You are now ready to take your "shake down" cruise.

SHAKE DOWN CRUISE: Select an interesting destination about 100 miles away for your maiden voyage. Actually use all the systems multiple times to try to detect and infant failures (electronic equipment fails at greater rates at the beginning of its life). Carefully note any problems or discrepancies in a list and make a copy for the dealer when you take the RV in again.