

RV 101®

**RV Preventive Maintenance
E-Guide**

RV Education 101 E-book Series

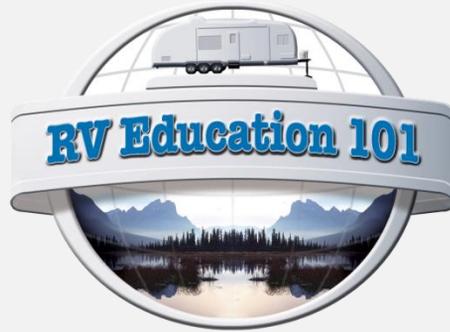
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LEARNING RVs THE EASY WAY

by Mark Polk





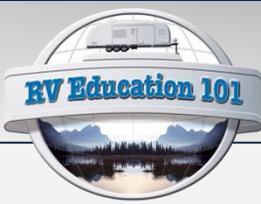
RV Preventive Maintenance E-Guide

Presented by RV Education 101



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INTRODUCTION

It doesn't matter if you own a pop-up or a diesel pusher, when you made the decision to purchase an RV it was a major investment. Like any other major investment there are certain things we must do to protect our investment so we can enjoy it. **There are three basic types of maintenance for your RV, Preventive Maintenance, Scheduled Maintenance and Emergency Maintenance.**

Preventive Maintenance is maintenance you can perform on your RV before a problem exists. These checks are designed to prevent or identify potential problems that could lead to mechanical breakdown, malfunction or failure of a component or system on your RV. Preventive maintenance consists of cleaning, inspecting, lubricating, adjusting and servicing your RV.

Scheduled Maintenance or routine maintenance is performed in intervals, normally based on time, mileage or hours. Scheduled maintenance is designed to keep your RV in top operating condition and prevent untimely breakdowns and repairs. It is absolutely essential that you read your owner's manual and warranty information in regards as to who is responsible for what when it comes to scheduled maintenance. Scheduled maintenance required by the manufacturer and not performed can void your warranty.

Emergency Maintenance is maintenance and/or repairs required when you least expect it due to component, system or mechanical failure.

The lack of preventive maintenance and/or scheduled maintenance will eventually result in emergency maintenance. For example, if you don't check the air pressure in your tires (preventive maintenance) the under-inflated tire over heats and prematurely fails resulting in emergency maintenance.

An RV is larger and heavier than an automobile, and its not just the chassis you need to worry about, its the entire house sitting on top of the chassis. The good news is the average RV owner can perform much of the required RV care and maintenance on their RV and, prevent untimely breakdowns and costly repairs (emergency maintenance).

Start your RV preventive maintenance program with the checks in this guide, and add some of your own. Before you know it, you will be identifying and preventing potential problems before they exist. ***Note:** If you don't feel comfortable performing your own maintenance find a reputable RV service facility that can do it for you.

Happy Camping,
Mark J. Polk



ABOUT THE AUTHOR

Mark J. Polk was introduced to RVs in the early 70's. His friend's father was the General Manager for an RV dealership and he would take them camping all of the time. At the age of 15 Mark was working for the dealership, washing RVs, and soon afterwards working as an apprentice RV technician.

Not long after graduating high school Mark joined the U.S. Army and was a wheeled vehicle and power generation mechanic. Six years later he graduated from Warrant Officer school as an Automotive Maintenance Technician, and was in charge of some very large fleet maintenance operations throughout his military career. He retired from the Army in 1996 as a Chief Warrant Officer Three.

After retiring Mark got back in the industry he had a passion for. He started selling RVs for a dealership in North Carolina, and was soon promoted to the Sales and F&I manager. Polk was concerned about the lack of education and safety awareness for the RV consumer and started his own company, RV Education 101, in 1999. RV Education 101 produces educational videos and written material on how to properly use and maintain RVs.

In addition to producing RV instructional videos, Polk writes articles for RV trade publications, RV consumer magazines and he is the author of the best-selling book titled, *The RV Book (over 50,000 copies sold)*. For more information about RV Education 101, and to view the complete line of RV training videos and e-books visit [RV Education 101](http://www.RVEducation101.com)



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Disclaimer

There are numerous RV, equipment and appliance manufacturers. The instructions provided in this e-book may not be applicable on certain Recreation Vehicles, equipment and appliances. This e-book is for information purposes only. Consult your RV owner's manuals, equipment manuals, appliance manuals and specific product installation and operating manuals prior to using any system, appliance or product on your RV. If you do not feel comfortable, or if you have questions regarding a specific system, task, product, appliance or product installation you should consult a professional RV technician prior to using any system, product, appliance or installing any products on your RV.



RV Chassis Preventive Maintenance

***Note:** Always follow your vehicle's owner manual for routine and scheduled maintenance intervals. Service your vehicle as recommended by the manufacturer.

Follow the checks in the guide that apply to your RV:

Check all fluid levels: Check the engine oil, transmission, power steering, brakes and windshield washer fluid. Adjust fluid levels as required. Change fluid and filters "In Accordance With" (IAW) your vehicle owner's manual recommended intervals. When checking the transmission fluid consult your owner's manual for proper instructions.



Any low fluid level indicates a leak or potential problem and must be investigated further. If the transmission fluid has a burnt smell it needs to be replaced. Follow your owner's manual for the proper types of fluids to use when adding or changing fluids.

RV Preventive Maintenance How To Check Vehicle Fluid Levels

[Click to Watch Video](#)



Check the air filter: A clean air filter helps your engine perform better and improves fuel economy. Replace the air filter IAW scheduled maintenance intervals, or when you see it is dirty.



RV Chassis Preventive Maintenance

Check for any leaks: Look under the RV and/or the tow vehicle for any indications of leaks. Locate the source of the leak and have it repaired. Transmission fluid leaks contacting hot surfaces like exhaust system components contribute to vehicle fires.

Chassis lubrication: Have the chassis lubricated IAW the manufacturers recommended intervals.

Check radiator coolant: Check the level, condition and concentration of anti-freeze. Antifreeze not only protects the engine in cold temperatures, it helps the engine run cooler in hot temperatures. For best results coolant should be flushed and replaced IAW your owner's manual guidelines. Do not drain or flush coolant directly on the ground.

Caution: Never remove a radiator cap when the engine is hot.



[Watch a video demonstrating 7 tips](#) that will help extend the life of RV or tow vehicle engine



RV Chassis Preventive Maintenance Continued

Check radiator hoses & clamps: Look for worn, cracked, brittle or soft spots in the hoses. These are early indications of hose failure. Replace hoses as required.

Check heater hoses & clamps: Look for worn, cracked, brittle or soft spots in the hoses. These are early indications of hose failure. Replace hoses as required.

Check all belts: Look for signs of wear and for any cracking on the inside or outside surface of the belts. Check the belts for proper tension. It's a good idea to take spare belts with you on extended RV trips.

Check all lights: Check all lights for proper operation prior to leaving on a trip.

Check the wiper blades: Check your wiper blades for wear and/or poor operation. It's too late once it starts raining. Periodically clean the wiper blades with some windshield washer fluid on a rag.

Check the starting battery: Check the RV or tow vehicle starting battery state of charge, water level, cables and connections. If you're not familiar working around lead acid batteries have the batteries checked by a qualified service center. Whenever you work around batteries remove any jewelry and wear gloves and safety glasses.



To learn more about testing and maintaining batteries check out our [battery care and maintenance e-book course](#)

Check the condition of your tires: Look for uneven wear, cuts, poor tread depth and cracking on the tire sidewalls. Check all tires for proper tire inflation pressure using a quality tire inflation pressure gauge. Check the tire pressure before traveling each day and always check the tire pressure when the tires are cold, before traveling more than one mile. Adjust inflation pressure to the manufacturer's recommendation. Watch this video for some [helpful information on tire inflation gauges](#).

Start the engine and allow it to warm up: Check all of the gauges for proper operation. Monitor your gauges while driving. If a gauge reads out of the normal range pull over as soon as it is safe and call for assistance.

Check the dash air for proper operation: When you are towing a trailer or driving a motor home try to avoid using the dash air when the engine is under a strain, like ascending an upgrade.



Check your emergency roadside kit: At a minimum it should include a flashlight, extra batteries, jumper cables, a first aid kit, basic hand tools and warning devices.

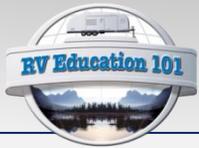
Note: In addition to these checks, if you have a pop-up, travel trailer or 5th wheel trailer the wheel bearings and brakes should be inspected annually

Inspect all hitch-work for damage:

Prior to leaving on a trip inspect the breakaway switch and pigtail for proper operation. Inspect the coupler and look for any loose nuts or bolts and cracked or broken welds. Replace any damaged hitch components immediately. Do not use any hitch components that are damaged.



If you are towing a travel trailer or 5th wheel trailer test the brakes on the trailer prior to leaving on a trip. With the trailer properly hitched to the tow vehicle pull forward slightly and tap the brake pedal. You should feel the trailer brakes stopping the trailer.



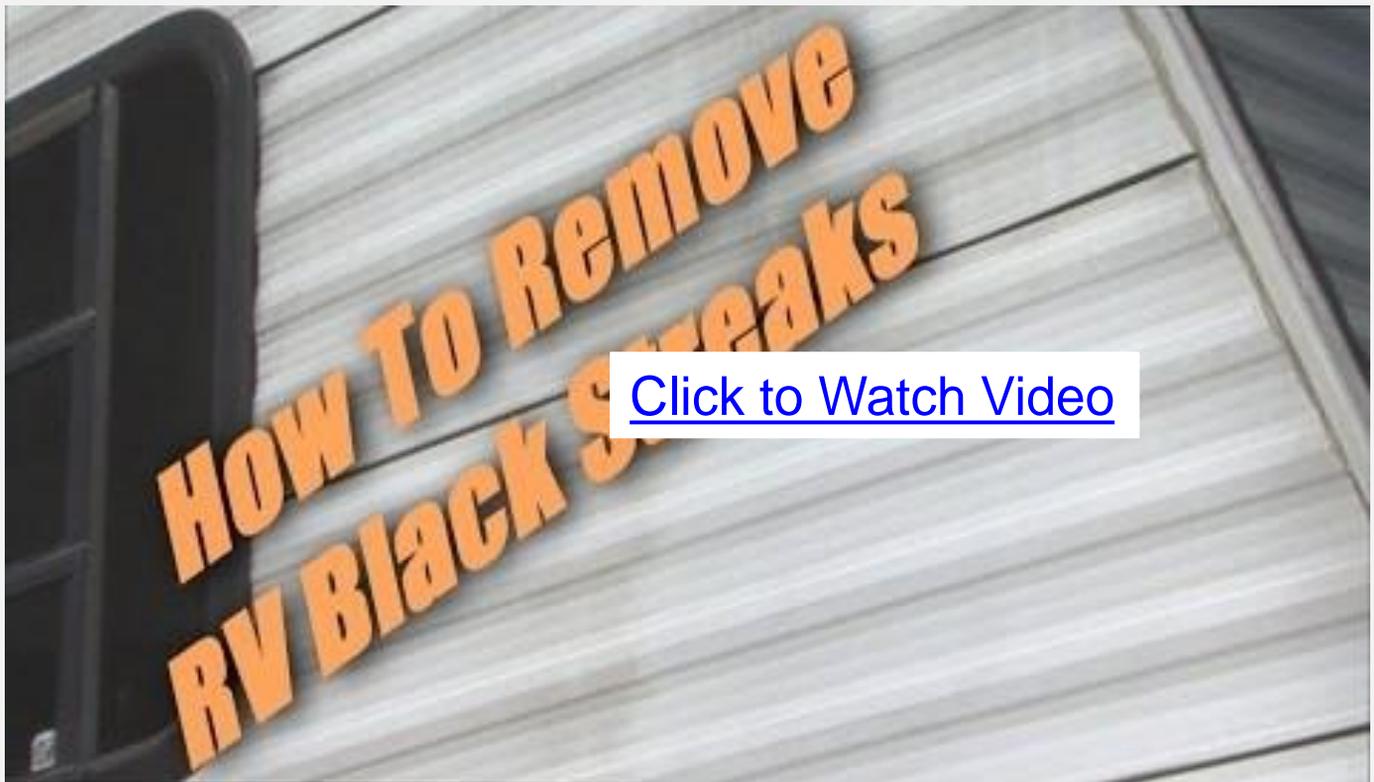
RV Coach Preventive Maintenance

Exterior of RV: Maintaining the exterior of your RV contributes to extending the life of the RV and protecting your investment. If you let your RV go, without cleaning it for periods of time, it can be very difficult to get that new look back again.

Wash and clean the exterior of your RV on a regular basis. I wash our RV after every trip.

Wax the RV to restore the shine and protect your RV's exterior. Use a wax compatible with the exterior surface of your RV.

Use a black streak remover to easily remove those miserable black streaks and other road grime. Follow the black streak cleaner instructions for best results.



Use bug-off to remove dead bugs from your windshield, grill or anywhere else. It really makes removing bugs easier.

Use a cleaning product designed to protect all of the leather, vinyl, plastic, and rubber components on your RV. This includes interior items too, like the dashboard and upholstery, and exterior items like awnings and trim pieces.

Odors: To eliminate odors caused by pets, smoke, cooking and chemicals use a good odor eliminator like Febreze.



RV Coach Preventive Maintenance Continued

Carpet and Upholstery: To remove stubborn stains from the carpet and upholstery use a good quality carpet and upholstery cleaner.

Inspect the roof and body seams: Every seam on your RV and anywhere the manufacturer cut a hole in your RV has the potential to allow water in. Inspect your RV roof and all of the seams and sealants on a regular basis for potential water leaks. Consult with your RV dealer for sealants compatible with different types of materials.

Test the roof air conditioner(s): Clean or replace AC filters. Clean AC filters help the AC unit work more efficiently.

Test the refrigerator: Check the operation of the refrigerator in both the 120-volt AC and LP gas modes. Do not over-pack the refrigerator, allow room so air can circulate. Installing a thermostatically controlled refrigerator vent fan can help improve the refrigerators efficiency. [Watch a short video on using a small fan for better cooling.](#)

A photograph of an open RV battery compartment. Inside, there are two batteries, various tools like wrenches and sockets, and some electrical components. The compartment is lined with a red material. Overlaid on the image is a large white text box with a blue border containing the text "10 RV Battery Tips for Longer RV Battery Life" and a blue link "Click to Watch Video".

10 RV Battery Tips for Longer RV Battery Life

[Click to Watch Video](#)

Check the auxiliary battery(s): Check the auxiliary battery state of charge, water level, cables and connections. If you're not familiar with lead acid batteries have them checked by a qualified service center. If the RV is equipped with battery disconnect switches make sure they are in the off position when you're not using your RV, to prevent battery drain.



RV Coach Preventive Maintenance Continued

Check the operation of the generator under load: Check the generator engine oil & all filters. Always inspect the generator exhaust system prior to operation. A faulty exhaust system can lead to Carbon Monoxide poisoning. Service the generator as recommended by the manufacturer. Exercise the generator for a minimum of two hours monthly with at least a half-rated load. Consult the generator owner's manual for load ratings.

Check all appliances: Check all of the AC, DC and LP gas appliances for proper operation. It's a good idea to have your LP gas system checked by your authorized RV service center annually.

Holding tanks: Thoroughly flush the holding tanks every time you empty them. Use RV toilet paper and enzyme based holding tank treatments. Many of our free dump stations are closing due to chemicals that are harmful to septic systems.

12-volt appliances and accessories: Check all of the 12-volt appliances and accessories for proper operation.

Check & test all safety devices: Check the fire extinguisher, smoke alarm, carbon monoxide and LP gas leak detector before each trip. Replace batteries as required. **Important Note:** Check the expiration dates on safety devices and replace the unit with a device designed for use in RVs.

Check the operation of the awning: Inspect the awning fabric for any damage and for cleanliness. Inspect the awning for proper operation. If you have your awning extended when it is raining, lower one end to allow the rain to run-off and prevent water from pooling on the fabric, which can cause extensive damage.

Check the electrical source: Prior to plugging your RV into the campground electrical source check the source using a digital line-meter for proper voltage and polarity. Some RV surge protectors are capable of checking the power source too. [Watch a video demonstrating how to protect your RV's electrical system.](#)

The RV water system: When you return home from a camping trip drain the water out of the water system. Locate and open the low point water drains, drain the fresh water holding tank and the water heater tank. *Caution: Never drain the water heater when the water is HOT or under pressure. Periodically sanitize the RV water system. I like to do it twice a year or anytime I notice an odor in the water system.

Watch this [video to see how easy it is to sanitize the RV water system](#)



RV Preventive Maintenance

This RV preventive maintenance e-guide is not all-inclusive, but it is a good start. You can add to this list or modify it to suit your particular needs. Most of the items on this list are common sense items, but inevitably we will forget something. This guide will serve as a reminder of the items to inspect on your RV.

To learn more about using and maintaining your RV [visit our RV Online Training Program](#). We offer RV video and e-book training on almost every RV topic imaginable.

RV Education 101 is a North Carolina based company, founded in 1999. RV Education 101 produces professional RV training videos and e-books on how to use and maintain your RV. Our goal is to make all of your RV experiences safe, fun and stress free.

Happy RV Learning!
Mark J. Polk

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