

ARVM TECHNICAL TIPS

TYRE ROTATION

IF YOU DO ROTATE THE TYRES, WHAT IS THE SEQUENCE?

An American technical expert suggests the following sequence for tyre rotation on American motorhomes.

Left front to outer twin left rear to inner twin left rear to left front; right front to outer twin right front to inner right rear to right front.

It looks as though the fronts have to stay on the front, and the rears because of their style, must stay on the rear, and ditto on the two inside tyres. That's not what Monaco suggests in the manual I received with my motorhome.

The reason for the rotation is to allow the tyres to wear evenly to get more miles from all six tyres.

Yes, that's correct. Since we RVers typically don't wear tyres to the death like truckers do who travel 100,000 miles or more in a year, it is questionable how urgent tyre rotation is for us. We tend to replace our tyres, or at least should replace them, after about five years (recommended by Monaco) of exposure to sunlight and the elements, regardless of the mileage driven.

Discussing the cost factor alone, does it make financial sense to do this? Multiply the cost of a tyre rotation by the number of times you plan on doing this every 6 or 15 thousand miles. Under ideal conditions you might get 5 or 6 thousand more miles from your tyres. Would you prefer to spend \$1,000 (plus time in the garage) for tyre rotations or buy a new set of tyres 5 to 6 thousand miles early?

If I put 15,000 miles on my RV in a year, which is more than most RVers do. I would put 5 years x 15,000 miles/year = 75,000 miles on the tyres before its time to replace them because of age, exposure, etc. I don't intend to keep my coach that long, but let's ignore that for now.

If I rotated every 15,000 miles which, in my case, would be once a year, at a cost of \$75 each time, I would spend 5x\$75=\$375. I can't buy tyres for that amount.

If I rotated every 6,000 miles, which is 2.5 times more frequently, I would spend 2.5 times as much, which is \$375x2.5=\$937.50. Of course, I omitted to add taxes which should also be thrown into the equation.

But what's worse is that over 75,000 miles you can develop a very bad tyre. The developing problem may not even be

visible at 15,000 miles but as things progress it will be too late at some time to 'fix' an uneven tyre by rotating it. That, in my opinion is the big reason why RVers should rotate their rubbers. A thousand dollars over five years isn't going to change our lifestyle but the added safety makes me more comfortable.

As for time in the garage, I agree, I wouldn't want to drive there just for a tyre rotation. However, you could combine this chore with another service, if nothing else an oil change, or annual MOT.

HOLDING TANK MONITOR SYSTEM PROBLEMS

How many times have you found out the hard way that your holding tanks were full? If it was only once, it was once too often. You probably asked yourself 'Why did this happen? What happened to the tank monitor?' These are very common questions asked among recreational vehicle owners today. However, the one question you should ask yourself is 'How can I prevent this from happening in the future?'

Firstly, a quick explanation of how the monitoring system works in your holding tanks. On the end of each tank is a series of wires. They include one single wire and a harness of three or four wires. These wires are hooked onto bolts which go into the tank itself. When liquid touches both the single wire bolt and one of the harness wire bolts, a circuit is completed and shows up on the monitor inside. As more of the harness wires come into contact with liquid (i.e. as the tank fills up), a stronger current is supplied to the monitor panel and more indicator lights come on.

If your monitor panel is not reading correctly, either one of the signal wires is damaged or build up has occurred on the inner part of the bolts in the tank. Ensure that all the wires are connected to the terminals on the tank and that there is no corrosion on the connections. If everything looks correct but the indication on the panel is still incorrect it is well worth giving the tanks a thorough clean out before you call in someone to check the system over.

Once you have the monitor system working properly then all you need to do is to keep the tanks clean. The very least that should be done is to keep your tanks well flushed out when the vehicle is not in use. Allowing the tank to sit with any contents for more than a couple of days will ensure some sort of build-up on the monitor probes in the side of the tank and future problems, even if this is the first time you have used your RV. One way to help flush them out is to drain them at the campsite, then fill each tank half full of water for the trip home. The constant agitation while driving home usually does a good job of cleaning the tanks. Drain the tanks completely before parking up.

There are a few things you can do to help facilitate the cleaning process later. First, you should always use some type of chemical additive in your tanks designed

for RV holding tanks and try using toilet tissue designed for recreational vehicles. It will break down farther than residential style tissues.

While parked-up it is always advisable to keep the dump valves closed as the holding tanks cannot be drained properly unless there is a sufficient amount of material to gravity-flow from the tank.

ELECTRIC STEP RETRACTION WARNING LIGHT

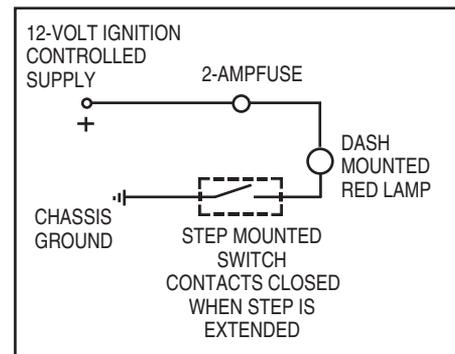
Have you had the misfortune of having the electric step on your motorhome fail to retract when the ignition switch was turned on, as it is designed to do? If you have, then you will know what damage can be done to the mechanism when the extended step contacts a kerb or some other solid object. Unfortunately the motorhome will also suffer damage, particularly if the step is ripped off its mounting points.

To prevent a recurrence of this misadventure you can purchase a suitable waterproof two-way micro switch and a red 12-volt indicator lamp from an electronic component retailer, such as Tandy. Mount the switch on a bracket on the step so that when the step is fully retracted it depresses it and opens the circuit to the indicator lamp, cutting off the 12 volt supply. If the lamp remains off when the step is out and comes on when it is retracted then change the connections over on the switch.

The 12 volt supply for the warning device should be obtained from an ignition switch controlled circuit under the dash. Run a wire via a small in-line fuse to the dash mounted red light and then to the switch mounted on the step and connect the other switch terminal to a good ground near the step.

As the switch contacts are normally closed whilst the step is extended the circuit to ground will be complete and the red light will illuminate as soon as you turn the ignition on. Provided the step retracts whilst the ignition is on the red light will go out as soon as it is fully retracted.

This is a very easy and cheap warning system which can potentially save you hundreds of pounds in repair bills.



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