

BUYING AN RV?

ELECTRONICS AND SAFETY ARE PRIME FEATURES

Ed Gurdjian &
Carol Maxwell
September, 2003

We have received numerous e-mails asking what to look for in a recreational vehicle. This question leads to an extremely wide discussion and this article is to introduce the novice RV buyer to some important considerations prior to purchase.

At one time, amenities in a recreational vehicle consisted of a small propane-powered absorptive refrigerator, a small propane cook stove, and a box of matches to light those appliances. Most interior lighting was 12VDC and a TV, if present, was an AC/DC model with rabbit ears. Although motor generator inverters had been used during WWII, they did

not find their way into RVs until the late 1970s when Bluebird offered them as an option. (See *Inverter History*) With the development of electronic inverters in the mid 1980s, recreational vehicles began a significant metamorphosis. Today, the elegant sine wave

inverters have transformed recreational vehicles into true second homes. One of the most impressive parts of this transformation is that it not only occurred in the high end spectrum, but many features are available in entry level and medium priced vehicles. In addition, the improvement in aftermarket availability allows owners of lower priced vehicles to add specific high-end features. More importantly, the owners no longer have to do all



*An elegant salon with a home entertainment center
Courtesy of Monaco Coach Corporation*

the work themselves. There are many RV service facilities that have certified technicians who will install equipment and make whatever conversions may be necessary.

The motorhome kitchen has evolved into a complete food preparation facility. There are built-in electric or gas ranges/ovens, microwave/convection ovens, side-by-side refrigerator/freezers, coffee makers, power stations for electric appliances, dishwashers, and trash compactors.

Alarm systems have become very sophisticated. They not only protect entries and windows, but they can be configured to monitor cargo bays. They incorporate motion detectors to monitor the full perimeter of the motorhome, and they can integrate an alarm to protect a towed vehicle.

Nearly every coach has an entertainment center. TVs are flat screen LCDs or plasma screens in a wide variety of sizes up to a whopping 42-inch version. They can be permanently mounted or dramatically unfold

from the ceiling with the touch of a button. Hi-line stereo surround systems fill the interiors with exquisite sound. Some even have a second entertainment center in a patio side cargo bay so that electronic sights and sounds are readily available outdoors. Of course, satellite radio is available whether you are rolling down the highway or parked at your favorite get-away.

systems and, of course, in-motion satellite systems. The GPS navigation systems include laptop computer stations mounted on the co-pilot side, and in-dash devices that are voice activated. These optional systems can be pricey, but people who use them say they are worth the cost.

In selecting which components are installed, electric consumption ratings



*Laptop workstation in co-pilot area for convenient
Wireless communication and navigation
Courtesy of Monaco Coach Corporation*

Since a motorhome is meant to move down the highway, they are now sporting navigation

should be scrutinized. The power system, including the battery bank, inverter/charger, and AC generator must

be adequately sized to supply sufficient power



**ONEPLACE
Systems control Center**

Courtesy of Winnebago Industries, Inc. Unauthorized use not permitted.

if the owner wants to have a degree of independence from power poles. Some manufacturers offer a systems control center which monitors all the systems in one location. These not only include the electrical system, but also water and waste levels, generator controls and other frequently used gauges and switches. In addition, there are some very sophisticated devices that monitor electrical consumption

and can shut down secondary systems when power demand suddenly increases. When the demand decreases, the secondary systems are reactivated. This prevents those pesky campground circuit breakers from popping off-which can be not only annoying, but very inconvenient. In a highly optioned coach, this is a very desirable option.

Another breakthrough is that wireless technology has evolved to make it practical for use in recreational vehicles. Manufacturers now have the capability to provide product diagnosis and support even when your home does not stay in one place. A communication system like On-Star is able to track your vehicle anywhere in the country.

After a buyer looks at all the features a recreational vehicle offers, he needs to determine which ones are necessary, which ones he wants, and which ones he can afford. When he finds a manufacturer that he believes will satisfy those needs, there is still more to consider. A buyer must now look beyond the electronic

and cosmetic appeal to safety and construction.

Safety has always been a major component of RVing. Percentage wise, recreational vehicles probably have more carbon monoxide detectors, smoke detectors, and fire extinguishers than permanent homes. However, safety goes beyond those standard devices. The chassis and its engine, suspension, cooling system, transmission, brakes, and GVWR (Gross Vehicle Weight Rating) must support the loaded weight of the vehicle. We all want to take everything we own with us, but we need to make sure the RV we buy can perform safely. A manufacturer should publish the dry and wet weight of their vehicles. The wet weight includes a full fresh water tank, full fuel tank(s) and full LP gas, if so equipped. The difference between the wet weight and the GVWR will tell you how much cargo you can carry-don't forget that that includes the driver and passengers, including pets. Construction must also provide for balancing the load side to side as

well as front to back. If the subject RV is a motorhome, a buyer must also decide if he wants to tow a car or trailer. If the answer is yes, it is important to check the hitch specifications and towing capacity. If the subject vehicle is a fifth-wheel or travel trailer, these specifications are still important, but in the reverse order. The towing vehicle must have adequate capacity to safely tow the RV. We will not go into great detail about the various chassis and engine combinations because the amount of material would exceed the scope of this article.

A buyer should also look for storage space for routine items like food, clothing, personal items, and tools as well as storage for special needs like skis, golf clubs, etc. If you are planning to go to cold climates, it is important to verify that both the fresh and waste water tanks are insulated and protected from freezing. In addition, adequate wall insulation will be an advantage for comfort heating.

Considering all of these factors carefully before you purchase will help avoid disappointment and very costly errors.

Recreational

vehicles are expensive, but when you have one that fits you, it will provide years of enjoyment and reliable service. That makes it all worthwhile.

Contact information for manufacturers can be found on the Recreational Vehicle Industry Association web page, www.rvia.org

Locator and contact information for dealers can be found on the Recreational Vehicle Dealers Association web page, www.rvda.org

