

## LIFE SAFETY ISSUES

When we do inspections, there's a designator we don't like to use, but unfortunately, we usually find at least one on every inspection. These make buyers leary even though they can typically be fixed easily. Whether you already own an RV, or are looking to buy one, make sure you check these out:

**LP/CO Detector** | This is probably the number one item that we see on RV's over 5 years old. It is recommended that the LP [liquid propane] and CO [carbon monoxide] detectors be replaced every 5 years. These devices are critical to the safety of yourself and your loved ones. As with other maintenance items, be sure to test these items at least twice a year just like you do with your detectors in your sticks n' bricks.

**Smoke Detector** | Just like the LP/CO detectors listed above, these should be replaced every 5 years. Be sure and check the batteries regularly too!

**Tires** | The tires on your RV [or on the RV you're wanting to purchase] are one of the most important things. Know the date of your tires, inspect them before each trip and again before you come home. Look for cracks in the rubber and make sure you understand the proper pressure for your RV and its tires. New RV, and sometimes experienced RV owners don't realize the extra care their RV tires require. More often than not, RV tires will 'age out' before they wear out. Want to learn more about RV tires? Check out YouTube.com for videos that cover the proper care of RV tires.



# Diesel Exhaust Fluid?

DEF was required by law to be used by all medium to heavy diesel engines in 2010. Most motorhome manufacturers begin using DEF in model year 2011, although, you will occasionally find a 2010 that uses DEF.

DEF is a liquid that is placed into a special tank used only for DEF. You never want to put DEF in your fuel tank since DEF is mostly water with a set concentration of Urea (32.5%) and distilled water (67.5%). Placing DEF in your fuel tank can cost thousands of dollars to repair and could ruin your vacation.

The issue I want to talk about is the shelf life of DEF. Bad DEF can cause "check engine" lights and even "limp mode" to kick in if the concentration of UREA is too low or too high. No one wants the inconvenience or cost of having your RV towed in for repairs.

Shelf life on DEF is about 2 years, depending on the temperature at which it is stored. "Peak" Blue DEF™ is available at auto parts stores, Walmart stores and gas stations that sell diesel fuel. One word of caution! Peak does not make it easy to figure out the production date. Walmart brand DEF has the "best use by date" printed clearly on the container, Mopar DEF also has the date clearly visible..

To help you understand How to figure out the production date for Peak Blue DEF™ let's look at the following example: Blue DEF containers have an eleven digit number on the container. If you can't find this number then we don't recommend that you purchase that DEF. Most stores carry several brands of DEF and one of them should have a readable date code.

**READING THE CODE ON BLUE DEF** | Use the following instructions to read the production date on BLUE DEF using the example CP213252453 :

The third and fourth digits are 21, the production year is this number minus one. So, 2020 is the production year. The next three digits are 325, this is how many days are left in 2020 at production. So, 365-325 = 40 so the 40<sup>th</sup> day of 2020 or February 9, 2020. So, whenever you buy Peak Blue DEF™ check the year and do a quick Julian equation to get the exact date. You can find a Julian Perpetual Calendar online.

One Caution I want to voice is using DEF from the pumps at the truck stops. They use a bulk carrier to bring in DEF and dump fresh DEF into an underground tank that has the older DEF from the last delivery, so you have a continuous mixing of old and new DEF. This can be okay if it's a busy truck stop, but since we don't know how much DEF they sell, or how old it is, it's better to error on the side of caution.

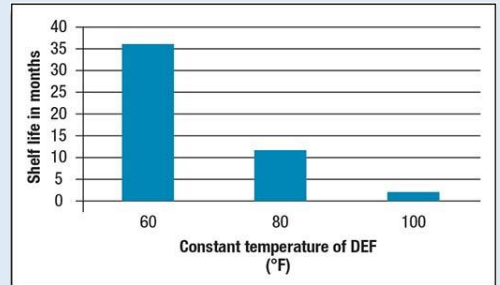
After all this, I am sure your brain is going "@#%&t" so here is an easier way to check your DEF before you put it in your rig. [www.acustrip.com](http://www.acustrip.com) has a test strip you can use to test your DEF [50 strips for \$37.50]. I use this company for coolant test strips, and they are incredibly accurate. I use an Analog DEF Refractometer to check the DEF during our pre-purchase inspections but this a little more expensive and time consuming than the strips. Check out how to properly store DEF on page 2.



## How to Properly Store DEF

Now that you're fully versed on how to buy Diesel Exhaust Fluid [DEF], it's important to know how to store it.

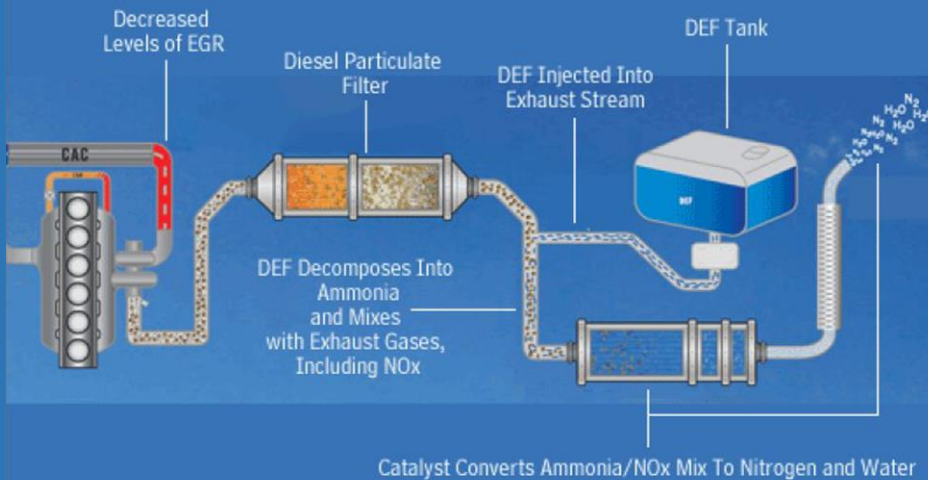
As we discussed in the article on page 1, DEF has a shelf life of 2 years. The shelf life can be drastically shortened, and even lengthened when it is stored properly. A local gas station near our home has their DEF in the hot sun right near the entrance. You'll see in the following chart, why I would never buy this DEF!



Buying older DEF is not the only thing to avoid. As you can see, how you store it is just as important.

Also, consider this: You're looking at purchasing an RV, and that RV has been on the dealer's lot for many months, just sitting. Add to that, it's the middle of summer and the temps are near 100 degrees. This is one of the reasons why we test the DEF on all diesel powered motorhomes. The damage that can be caused by bad DEF [weak or concentrated] can be very expensive to repair and could definitely ruin your travel plans. Put DEF in your maintenance protocol just like you would oil changes, coolant, tires, slide seals, etc.

## How DEF Works



## Just for Laughs



RVtravel.com

*"I just spent a ton of money on accessories for my RV. So, I'd like to order some water and 10 baskets of your free bread."*

## FREE & ALMOST FREE CAMPING

Campsite across the country vary greatly from free to 5-Star Luxury Motor Coach Resorts. Here are a few options to consider when looking for budget friendly ideas.

**Beach Camping** | Yes, there really is still free camping on the beach. Make sure you keep an eye on the tides if you like this option. RV's don't float very well!

**Boondocking** | There are many areas across the US where you can boondock [dry camping]. Everywhere from deserts to lakes. Always consider the size and type of RV you have before deciding to go off-road. There are a number of "boondocking" books on Amazon that cover everything from getting ready to places to boondock if this is something that interests you.

**Harvest Hosts** | This is a great way to save some bucks when your traveling to your next destination. Harvest Hosts has a small membership fee [\$79/year] and allows you to stop at farms, vineyards, breweries, etc. as you travel across the country. They also have an option for golf courses and country clubs for a small upcharge. Keep in mind they do ask that you purchase something from the business where you are staying. Most of these locations have no hook-ups, so make sure you're ready to spend the night without electricity, water or a dump station. I would much rather support a local business by purchasing dinner or a bottle of wine, than paying for a place to park for the night. Check out there website at [www.harvesthosts.com](http://www.harvesthosts.com).

There are a number of additional options for free and almost free camping. Try typing "FREE CAMPING" in the search bar on YouTube.com.