



### General Genset Maintenance

Many times because gensets respond to the touch of a button and are hidden in the basement of the RV, they are frequently forgotten until they finally fail to respond. Periodic maintenance is required for dependable on-going performance.

Your RV vehicle maintenance is performed according to the number of miles you travel. Similarly, with a genset it is based on hours of running time. Keeping track of the hours your generator runs is next to impossible without an hour meter. If your Onan genset does not come equipped with an hour meter, install one, and place it in an easy to see location, near the RV's electrical control panel if possible. (A feature of the Onan Deluxe Remote Control Panel)

The following RV genset maintenance chart indicates general maintenance interval guidelines recommended for the Onan MicroLite, Emerald, Marquis and Diesel gensets. Consult your Onan Operator's Manual for specific maintenance procedures and intervals.

Log all genset service for proper on-going maintenance and Onan warranty support. (See page 22.)

**NOTE:** Emerald Plus features longer maintenance intervals over the Emerald models due to its electronic ignition. The electronic ignition was not available on Emerald generators built prior to January 1990. A Retrofit Kit for adding an electronic ignition to pre-1990 Emerald gensets is now available from Onan. Contact your local certified Onan Service & Parts Dealer for more information.

### General Onan Gasoline Genset Maintenance Intervals

SERVICE ITEM	SERVICE INTERVALS									
	50 Hrs	100 Hrs	150 Hrs	200 Hrs	250 Hrs	300 Hrs	400 Hrs	500 Hrs		
<b>Clean Spark Arrestor</b> - (all models)	X									
<b>Change Oil / Oil Filter</b> - 2.8 MicroLite & Diesel 7.5 and 8 DKD - MicroLite 4000 - Emerald and Marquis - Diesel 15 DL3		X	X	X						
<b>Clean &amp; Check Battery &amp; Connections</b> - All models			X							
<b>Change Air Filter</b> - Emerald - MicroLite 2800 - MicroLite 4000 - Emerald Plus & Marquis - Diesel 15 DL3 - Diesel 7.5 & 8 DKD			X	X	X		X			
<b>Clean Spark Plug(s)</b> - Emerald - MicroLite 2800 - MicroLite 4000 - Emerald Plus and Marquis			X						X	X
<b>Change Fuel Filter</b> - Emerald - Diesel 15 DL3 - Diesel 7.5 & 8 DKD - MicroLite, Marquis, Emerald Plus			X							X
<b>Schedule Onan Service Center Tune-Up</b> - Emerald - All other models				X						X

Note: Maintenance and tune-ups of LP and Diesel fuelled gensets can be difficult. We recommend that you depend on the expertise of your local certified Onan Service & Parts Dealer for regular maintenance service on these models.





Running the genset out of fuel won't prevent varnishing because a small amount of fuel always remains in the genset carburetor. The only way to prevent fuel varnishing in units that aren't used often, is to treat the contents of the tank supplying fuel to the genset with a fuel preservative. Onan developed a fuel preservative specifically for RV generators, Onafresh Fuel Preservative and Stabilizer, which is added to all Onan gensets before they leave the factory. Onan recommends consumers continue to add this preservative to their fuel for out-of-service storage. It will prevent varnishing and extend fuel life as long as six months.

However once varnishing has occurred, adding a preservative won't correct the problem. You need to add a fuel cleaner, or manually clean the fuel system parts. For this situation, use Onan Premium Fuel System Cleaner, in your fuel tank.

The use of Onan Premium Fuel System Cleaner can help eliminate or greatly reduce the amount of carbon deposit build-up in the gasoline engines of RV generators and gasoline engines of other power equipment such as garden tractors, turf maintenance equipment, welders, as well as automobiles, trucks and RVs.

Onan Premium Fuel System Cleaner does this by removing essentially one molecule of the carbonaceous build-up at a time, allowing it to be burned in the combustion chamber and evacuated along with the exhaust.

Onan Premium Fuel System Cleaner can be used in either of two modes, clean-up or stay-clean mode. If it is suspected that an engine contains carbon deposits, use Onan Premium Fuel System Cleaner in the clean-up mode. To prevent the formation of carbon deposits in an engine, use Onan Premium Fuel System Cleaner in the stay-clean mode.

The following are the correct usage ratios of Onan Premium Fuel System Cleaner for both the clean-up and stay-clean modes for different sizes of fuel tanks:

Tank Size	Clean-Up Mode	Stay-Clean Mode
1 to 4 gal.	1 oz.	1/2 oz. every other tank fill
5 to 10 gal.	5 oz.	1 oz. every other tank fill
11 to 24 gal.	12 oz.	1 oz. every tank fill
25 to 55 gal.	24 oz.	3 oz. every tank fill

For both modes, pour the correct amount of Onan Premium Fuel System Cleaner into the tank first, and then fill it with fuel.

The use of Onan Premium Fuel System Cleaner in the clean-up mode initially, if necessary, and continued use in the stay-clean mode should help keep your engine free of carbon deposits and the problems they bring. Always read and follow important safety precautions on the bottle.

By understanding how to store and properly care for your RV to protect against fuel varnishing and carbon build-up, you'll enjoy better performance and longer service-free operation.



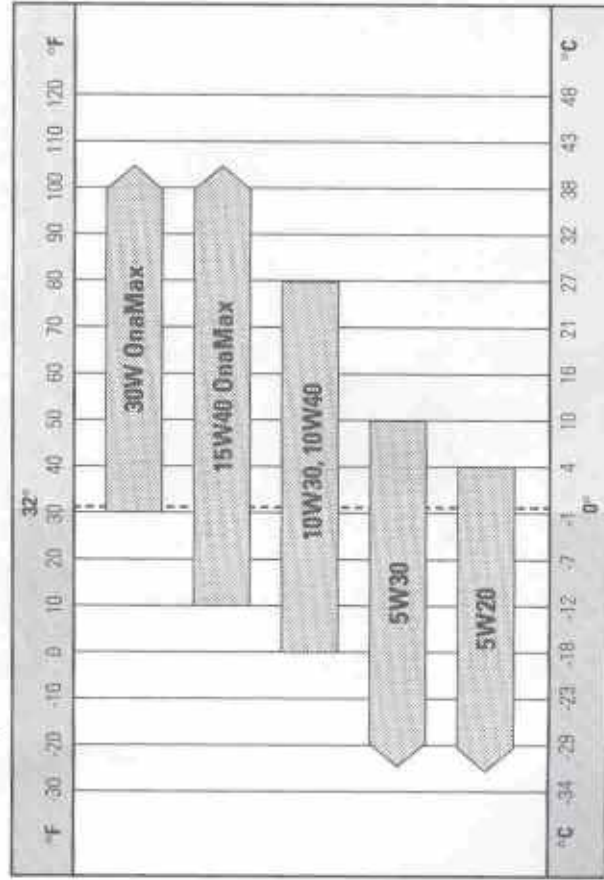
### A Word About Oil ...

Use a premium quality motor oil in the correct oil viscosity for your genset's typical operating temperature range (see chart below), and avoid mixing different grades or brands. For best results use OnaMax, the oil Onan specifically formulated for RV gensets. (See page 29.)

It's good practice to check the oil level daily, or every 8 hours of operating time. Keep the oil level as near as possible to full, but do not overfill. Overfilling may cause foaming and engine shutdown. Replace the cap tightly to avoid leakage. And if your genset has an oil filter, change it when you change the oil.

Do NOT check the oil level while the genset's running because burning hot oil can be thrown out of the dipstick hole, causing severe burns.

### Oil Viscosity Grade Recommendations



Temperature range you could expect before the next oil change.

## IV. ONAN MAINTENANCE PARTS & CHEMICALS

### Insist On The Quality of Genuine Onan Parts

Insist on genuine Onan Green Label replacement RV genset parts and Onaforce™ Maintenance Care Chemicals. These replacement and maintenance products have been specially designed by Onan for RV generator use to provide you dependable power performances for the life of your set.



#### Air Filters

Genuine Onan air filters were designed for use specifically in RV generators. Other manufacturer's air filters may contain a lighter density filter paper and the sealing surfaces may get hard and crack over time allowing dirty air into the engine intake system. Over time it only takes about a thimbleful of dirt to wear out piston rings and cylinders.

#### Spark Plugs

Genuine Onan spark plugs come gapped correctly from the factory for your RV generator engine. Spark plugs purchased from other sources come gapped for automotive engines which are gapped much larger. When regapping, the ground strap must be bent and it may not cover all of the electrode which will reduce spark plug life.



#### Oil Filters

Onan RV Oil filters feature valves to allow oil to by-pass the oil filter during cold starts, or if the filter becomes plugged. In many cases, "other manufacturer" oil filters do not have by-pass valves. As these "will-fit" filters trap debris, oil pressure starvation can occur, leading to high oil pressures, failed gaskets and even engine damage. Other "will-fit" oil filters do contain bypass valves but they do not determine at what PSI the valve opens. If the setting is too high, the filter's paper element can be damaged during a cold start, rendering it useless or, in worst case, causing oil starvation to the engine.

Onan warrants only the quality and integrity of genuine Onan parts. Any damage caused by the use of non-Onan filters will not be covered under Onan's limited warranty.



### Genuine Onan RV Replacement Parts & Chemicals

Onan Green Label spare part kits are packaged with genuine Onan replacement parts for your Onan RV genset. They contain factory selected maintenance parts that normally need replacing over time. Easy to store, with selection information detailed on their packages, they are available from all certified Onan Service & Parts Dealers.



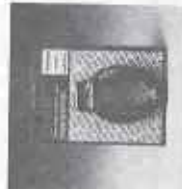
#### Onan Green Label Filter Pack Kit

Contains a genuine Onan oil filter and air filter conveniently packaged to service Emerald, Marquis and many older model Onan RV gensets.



#### Onan Green Label Tune-Up Kits

Contains genuine Onan spark plugs, points and condenser for Emerald and many older model genset tune-ups.



#### Onan Green Label Cable Pack Kit

Contains two high tension plug wire leads and boots for Emerald, Marquis, MicroLite and many older Onan model gensets. Designed to keep RFI (Radio & TV interference) at a minimum for optimum appliance performance.



#### Onan Green Label Fuse Pack Kit

Contains five fuses for use in all Onan RV gensets.



#### Onan Genuine RV Genset Air Filter

(Sold individually.) Specifically designed with a special foam pre-cleaner, for use with Emerald, MicroLite 4000 and Marquis gensets.



#### Onan Genuine RV Genset Oil Filter

(Sold individually.) Designed for use with Onan Emerald, and Marquis gensets, featuring special by-pass valve.

#### OnaMax SAE30 and 15W40 Engine Oil

Factory tested, maximum protection engine oil formulated to reduce consumption and engine wear due to high temperature oil oxidation and viscosity increase. OnaMax meets API specification SG/CE (the highest to date) and exceeds SF, SF, CC, CD and CDII. Quart SAE30 #326-5339  
Quart 15W40 #326-5336



#### Onan Oil Filter Wrench

Cup type oil filter wrench for easy removal of RV genset oil filters. Fits Onan Emerald and Marquis gensets.  
Part # 420-0559



#### OnaFresh Fuel Preservative and Stabilizer

A premium blend fuel additive formulated for long lasting prevention of gasoline and diesel fuel breakdown. Protects against gum and varnish formation, fuel system corrosion and sludge deposits. May be used in any diesel or gasoline or gaseous fueled engine for protection and stabilization for up to 6 months. (Treats 50 gallons)  
Quart #326-5319