

Carburetor Models – Avoiding Fuel-Related Problems

Your Honda Marine engine is designed and manufactured to precise specifications to ensure years of trouble-free operation. This includes the fuel system. However, the properties of gasoline can quickly lead to stale fuel causing starting or running problems and, in some cases, damage to the fuel system if precautions are not followed. Note that this type of damage is not covered by the *Distributor's Limited Warranty*. The good news is most fuel-related problems can be avoided by following a few simple steps.

Follow These Steps to Prevent Most Fuel-Related Problems

<u>Step</u>	<u>Reason</u>
Do not use gasoline containing more than 10% ethanol in your Honda outboard motor.	Ethanol is corrosive and quickly attracts water from the air into the fuel. This can cause starting or running problems or, in some cases, damage to your engine's fuel system.
 If you believe it will take more than 30 days to consume the fuel in the fuel tank, we suggest adding a fuel stabilizer to the fuel each time you <u>fill</u> the tank. 	The current properties of gasoline can quickly lead to stale fuel causing starting or running problems.
Portable fuel tank: Close the vent when not in use and store the fuel tank away from direct sunlight. Inboard fuel tank: We recommend adding a fuel stabilizer following the manufacturer's instructions each time you fill your boat's fuel tank.	Gasoline will deteriorate faster when exposed to air and sunlight.
3. When you're finished using your outboard, fill the fuel tank if you plan to use your boat again within 90 days. If you do not intend to use your outboard for 30 days or more, add fuel stabilizer when you fill the fuel tank. Start the engine (in water) and allow it to run until the stabilizer/fuel mixture fills the carburetors (about 10 minutes). Turn the engine OFF and disconnect the fuel line (portable fuel tanks). Note: If you normally use a fuel stabilizer when filling your fuel tank, stabilized fuel will already be in the carburetor(s) and you do not have to run the motor for the additional 10 minutes.	The small amount of gasoline in your engine's carburetor(s) will deteriorate faster than the fuel in the fuel tank due to its small volume and proximity to residual engine heat. Fill the fuel tank after each use (instead of before each use). If the fuel tank is partially filled, air in the tank will promote fuel deterioration.
If you don't plan to use your Honda outboard motor for more than 90 days, follow the storage guidelines on the following page.	Untreated gasoline (without a fuel stabilizer) left in the engine's fuel system will deteriorate, causing starting or running problems and, in some cases, damage to the fuel system.
5. Additionally, we recommend installing a primary fuel/water separator in your boat when the boat has inboard fuel tank(s). This filter is located between the fuel tank(s) and the motor. A primary fuel/water separator provides additional capacity to remove water and contaminants before reaching the motor's filter.	The larger capacity of inboard fuel tanks can absorb a greater amount of water, requiring additional capacity to filter out water and contaminants.

Refer to your owner's manual for additional information. If you do not have an owner's manual, you can download the manual from the Honda Marine website at http://marine.honda.com Owner's Resources > Owner's Manuals.



Storing Your Honda Outboard Motor for More Than 30 Days

If you don't plan to use your Honda outboard motor for more than 30 days, follow these steps to reduce fuel-related problems.

Storage Time: 30 to 90 days

1. Add fuel stabilizer to the fuel tank following the manufacturer's instructions. When adding a fuel stabilizer, fill the fuel tank with fresh gasoline. If only partially filled, air in the tank will promote fuel deterioration during storage.

Note:

- All stabilizers have a shelf life and their performance will deteriorate over time.
- Fuel stabilizers will not reconstitute stale fuel.
- After adding a fuel stabilizer, run the engine outdoors for 10 minutes (in water) to be sure the treated gasoline has replaced the untreated gasoline throughout the fuel system. Always run the engine in water to prevent damage to the cooling system.
- 3. Stop the engine and disconnect the fuel line (portable tank) or turn the fuel valve off (if applicable).
- 4. If you can disconnect the fuel line or turn off the fuel, restart the engine (in water) and allow it to run until the carburetor(s) run out of fuel. Running time should be less than 10 minutes.



Honda Marine Fuel Stabilizer, 32 oz. PN 08732-0032M 8 oz. PN 08732-0008M

Storage Time: More than 90 days (long term or seasonal storage)

Drain the carburetor(s) following the instructions in your owner's manual. If you do not have an owner's manual, you can download the manual from the Honda Marine website at http://marine.honda.com > Owner's Resources > Owner's Manuals. If at all possible, we recommend draining the fuel tank. If you cannot drain it, we recommend filling the tank with fresh fuel and adding the appropriate amount of fuel stabilizer.

Stale Fuel in Your Portable Fuel Tank or Fuel Container

If you have some fuel left in your portable fuel tank or storage container at the end of the season, the Environmental Protection Agency (EPA) suggests adding the gasoline to your car's gas tank (http://epa.gov/reg5oair/mobile/winter.html), provided your car's fuel tank is fairly full.