

Gasoline Refueling Dangers

Older gas-powered boats have a higher risk of exploding after refueling.

Last year, *Seaworthy* received several reports of gasoline explosions. In all cases, the boats exploded right after refueling. Older gas-powered boats have the highest risk because their fuel hoses — especially fill hoses — tend to be older and more likely to leak. Unfortunately, the hoses are often hard to inspect and get brittle and crack, and clamps get rusty (fuel fills must be double-clamped), which can cause gas to leak into the bilge during fueling.

Last Memorial Day, a 32-foot Wellcraft with nine people aboard, including six children, exploded as it was pulling away from the fuel dock at Oak Grove Marina in Maryland. The occupants jumped into the water to save themselves, but two children were hospitalized with burns. While refueling, gasoline fumes had collected in the engine compartment. When the owner tried to restart one of the engines after it stalled, the boat exploded.

Gasoline vapors in the engine compartment can stall an engine or make it hard to start because the gasoline-rich air going into the engine makes the mixture too rich for the engine to burn. A backfire or errant spark can ignite the buildup. Refueling a gas-powered boat is not like filling up your car at the local gas station and should be done with full attention to the job.

Here's a list of procedures that should be followed every time you refuel with gasoline.

- Have everyone leave the boat while refueling.
- Shut off all engines, electric motors, and galley stoves and turn off the battery at the main switch.
- Close all compartments, ports, windows, and hatches. The idea is to keep fumes out of all spaces while fueling.
- Don't smoke.
- Keep the nozzle in contact with the fill to prevent static sparks.
- After fueling, make sure the gas tank cap is replaced, wipe up or wash off any excess or spilled fuel, open all hatches and ports, and let the boat air out.
- Operate the bilge blower for at least four minutes.
- Sniff your bilge and engine compartment areas before starting your engine. Keep in mind that a bilge blower can't remove vapors from spilled liquid gas, so use your nose before turning the key. If there is a strong odor of gas, get everyone off the boat, notify the attendant, and call 911.
- If the engine is hard to start after refueling, stop cranking and investigate!

— *Published: July 2014*

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