

Q: Why is my Catalina 30 so prone to having cooling water from the engine back up into my exhaust system?

A: Catalina 30s are very prone to getting water back into the engine from the exhaust system. The center cabin location of the engine, allows practically no space to construct the hot section (or dry section) of the exhaust system so that it extends upward before it drops down and into the inlet of the fiber glass water lift muffler.

This situation results in very little storage capacity within the system for water, and it takes very little cranking of the starter during a hard starting episode, before the water lift muffler fills (since the engine isn't starting to blow the water out of the back of the boat with the exhaust), and water then flows back into the exhaust manifold and into the combustion chambers.

The only protection against this threat is to be religious in keeping the raw water through-hull valve closed anytime that the engine is being cranked for any reason, and the engine is not running.

A second potential problem in the Catalina 30, is the high loop in the engine cooling water hose which runs up and under the galley sink, before it drops back down to enter the hot section of the exhaust just ahead of the water lift muffler. The factory installed a small check valve at the top of this loop to prevent siphoning water through the engine, and flooding the exhaust system while the engine is not running, and the boat left unattended. These one-way check valves are very prone to becoming blocked, so unless someone recently inspected this valve on your boat to be sure it is still working, you could very well be getting water back into your engine while the boat sits unattended for several days or weeks.

The solution to the siphoning problem is the same as for over-cranking, keeping the through hull closed any time the engine is not being used.