

Insider's guide to OUTBOARD MAINTENANCE

Rob Melotti gets one-to-one tuition on caring for a 4-stroke at the Honda Institute



ABOVE The pilot jet can suffer blockage from ethanol-based petrol in as little as three weeks.
MAIN The latest model 6hp Honda 4-stroke

Wind, weather and the elements are the usual culprits when it comes to boat maintenance, however one of the most common causes of failure for the 4-stroke outboard engine is from the fuel that we pour into it.

Petrol now contains up to 10% ethanol, which goes off in a surprisingly short period of time, gumming up the intricate innards of the all-important carburettor. The smaller the volume of fuel, the quicker it will go off, according to technical trainer Rob Day, who works at the Honda Institute in Bracknell, Berkshire. On the Honda 6hp we used in this demo, the small puddle of fuel left in the carburettor when you stop the engine could go off in as little as three weeks. The 1.5lit in the fuel tank will keep for only a little longer. The simplest cure for carb problems is to let your engine run dry by cutting the fuel supply instead of stopping the motor using the killcord. Ethanol is also hygroscopic – it soaks up moisture leading to corrosion in your engine. The addition of fuel stabiliser will go some way towards helping this. The following steps will guarantee extended life for your engine when storage for more than a week or two is even a remote possibility.

Photos by Andrew Sydenham

Draining the carburettor

Assuming you didn't empty the carburettor by letting the engine run dry, draining the carb is still a surprisingly easy process:



1 Switch off the fuel flow – the valve lever is usually clearly marked.



3 Loosen the drain screw and let gravity do its job.



2 Attach a tube to the drain nozzle, putting the other end in a container.



4 Retighten the drain screw, remove tube and sleep easy. Job done!

Draining the fuel tank

To drain the fuel tank it's easy to let gravity do the job for you:



5 With fuel tap off, detach the clip holding the fuel line to the fuel pump.



6 Feed the line into a suitable container and open the fuel line.



Working with the motor upright on a trestle or stand makes life easier.

Three tips for longer term storage

Take a look at pbo.co.uk for more step-by-step demo's including changing engine oil and how to recover an immersed outboard

1 Laying an engine on its side



All portable 4-strokes have supports to indicate which side they should be laid on the floor. Incorrect storage will cause engine oil to leak out of the crank case: this makes a mess, but only causes long-term damage if you fail to replace the lost oil before starting the engine.



2 Draining water cooling systems



The cooling galleries throughout the engine will naturally drain with the engine in the upright position out of the water. If you operate your engine in salt water, refer to the manual for how to flush the system through with fresh water. But if there is any danger of sub-zero temperatures while the engine is being stored out of the water, it is important to expel the last few drops from the cooling system as follows:



Disconnect the killcord



Remove the spark plug cap



Gently pull the starter coil half a dozen times. This will slowly turn the impeller and expel the last few drops of water from the system.

3 Preventing corrosion

Outboards are rarely stored in climate controlled conditions, so to prevent the cylinder bore and piston rings from getting rusty, take the following precautions:

Having disconnected the killcord and removed the spark plug cap, unscrew the spark plug.



Squirt about a teaspoonful of oil in through the plug hole and gently pull the starter coil half a dozen times before replacing the spark plug*.

*Expect a few minutes of smoky performance when restarting the engine as this oil burns off.

