

HOW TO ...

Winterise and store inboard engines and outboard engines

Thank you to **Black Dog Marine, Looe**, who have helped us create this guide.

Owner, Rob, says "The main reasons for preparing your outboard for storage is to protect it from rust, corrosion, and damage caused by the freezing of trapped water. It's good practice to prepare your engine for storage if it's being stored for two months or more."

The process for winterising your engine will depend on your engine type. Here are the suggested procedures from Black Dog Marine to winterise your engine, together with advice on storage...

Use a Fuel Additive - such as Quicksilver Quickstor

Quicksilver Quickstor is ideal to add to your fuel prior to storing your boat to:

- Prevent regular and ethanol-blended fuels from breaking down and oxidising
- Prevent fuel system corrosion
- Prevent gum and varnish from forming in the fuel and settling in fuel lines and tanks, carburettors and injectors
- Keep carburettors and injectors lubricated

How to use Quicksilver Quickstor - Outboard Engines

- 2 stroke engines
 - Add Quicksilver Quickstor into your tank
 - Start your engine and run it up to temperature (either with engine muffs or in a suitably sized bucket)
 - Take the fuel connection off from the engine and allow the engine to run out of fuel
- 4 stroke engines with carburettors
 - Add Quicksilver Quickstor into your tank
 - Start your engine and run it up to temperature (either with engine muffs or in a suitably sized bucket)
 - Take the fuel connection off the engine and allow the engine to run out of fuel
- EFI 4 stroke (injection) engines
 - Add Quicksilver Quickstor into your tank
 - Run your engine up to temperature (either with engine muffs or in a suitably sized bucket) and allow the fuel mixture, with Quicksilver Quickstor, to go through the system

Storing Outboard Engines

If your outboard engine is being left on your transom, store it trim down as this allows the engine to drain of water, avoids having to winterise it and prevents the block freezing. Storing the engine trimmed down also relieves pressure off the rams and spreads the load more evenly on the transom. If you can't store your engine trim down, flush antifreeze through the engine using muffs.

If your outboard is being removed from your transom, if possible, store it stood up and in secure manner so it doesn't accidentally fall over or get knocked over and become damaged.

What about Inboard Engines?

Inboard engines systems should be treated with Quicksilver Quickstor too and should also have antifreeze flushed through using muffs.

Is there anything else should I consider?

Quite simply, yes, and this includes:

- Fogging Oil: 2 stroke engines require fogging oil to be sprayed into the carburettor, whilst the engine is running at fast idle. This should be done simultaneously with the carburettor runs out of fuel. 4 strokes require fogging oil too, but this is done by spraying it through each spark plug hole.
- Grease: All outboard components listed in the engine maintenance schedule should be lubricated.
- Batteries: Follow the battery manufacturer's instructions for storage and charging. This typically involves removing the battery from the boat, checking the water levels and periodic charging as required. Store the battery in a cool, dry place.
- Fuel storage: Black Dog Marine recommend storing fuel tanks either as full as possible or empty, especially on diesels, to avoid condensation. HSE provide lots of information on petrol storage on their site:

<https://www.hse.gov.uk/fireandexplosion/petroleum.htm>

including a page about storing fuel at your home and at your Watersports club:

<https://www.hse.gov.uk/fireandexplosion/petrol-storage-club-association.htm>

As a final note, Chris from Black Dog Marine says "Remember, winterising is *NOT* the same as servicing, but it's often convenient to do both jobs at the same time."

Whilst we believe we are offering good advice, we would recommend consulting your engine manual for additional specific winterising information. If you're not sure what to do, there are lots of great engine servicing companies out there who can undertake this work for you.