

Outboard winterization – A step-by-step guide

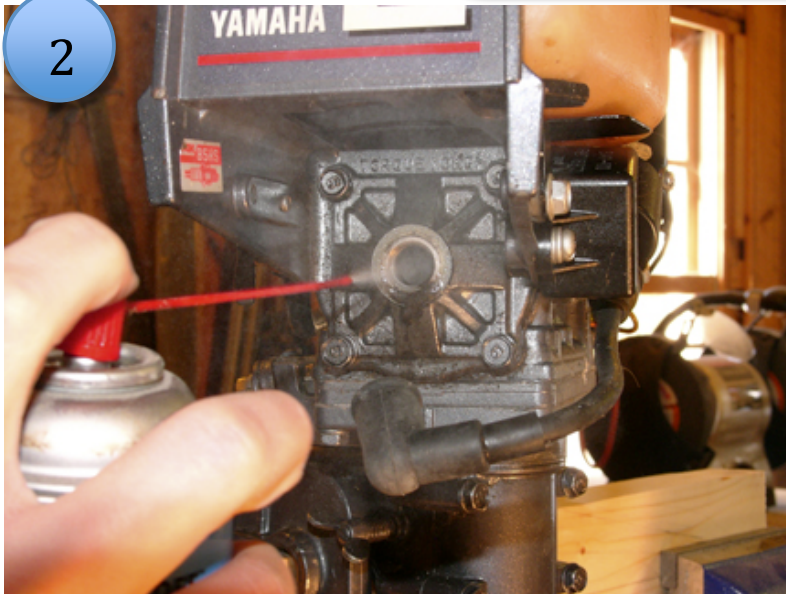
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1. After running the engine to flush the water ways through with fresh water empty out all the remaining fuel. If the engine is large you will have to

either pump it out or disconnect the fuel hose. Old fuel should not be left in the tank over the winter as it goes stale and loses its cetane rating and will gum up carburetors and pipes.

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2. Remove the spark plug or plugs and spray in some fogging oil. Pull the start cord a few times to coat the interior of the cylinders then replace the plugs

but leave the leads off so that the engine cannot be inadvertently started.

3



3. Now is a good time to drain the oil from the lower leg especially as the engine has recently been run and the oil will be hot thus flowing out more freely. Remove both the threaded drain plug and the fill level plug to allow air in and allow the oil to drain completely. I like to refill straightaway so that the engine is stored with fresh oil and there is no chance of starting the engine next season without any oil and doing some serious damage. Use the oil as recommended by the engine manufacturer

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4. One of the major causes of outboard failure is due to overheating. Many owners do not realise that the engine has a water pump and this often goes ignored. I like to check the impeller every year and replace it as a matter of course.

After undoing the bolts holding the lower unit to the leg it can be dropped to expose the water pump housing.

5



5. No prizes for guessing which is the new impellor. The old one on the left had only to blades left and was long overdue for replacement, and had been causing chronic overheating problems with the engine, which was no surprise. Try to find the missing vanes if you can as they often get trapped in the outflow from the water pump restricting the flow of water up the leg to the engine. A blast of air from a compressor often blows them

out easily.

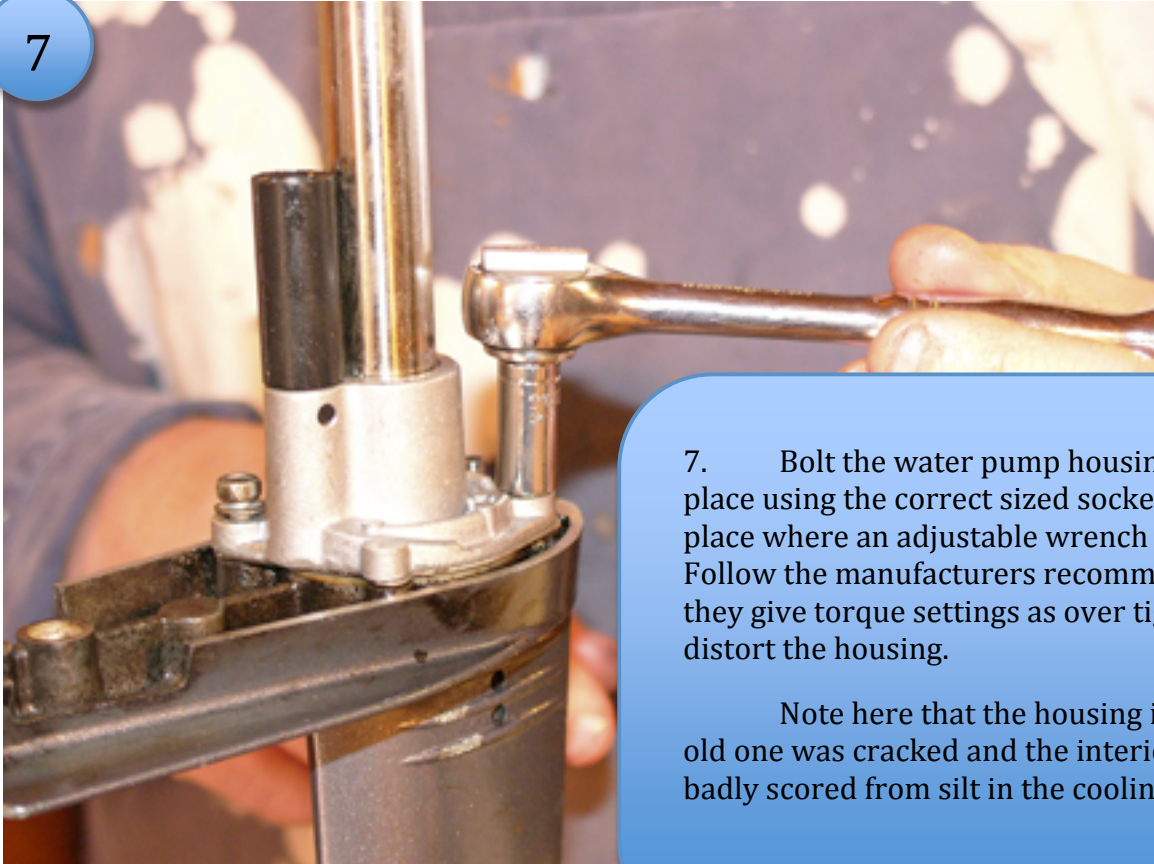
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6. Slide the water pump top housing and impellor onto the drive shaft and reinsert this back into place. Don't forget a new gasket between the two halves of the pump.

You will have to deflect the vanes slightly to get them to fit into the pump housing. A good tip is to use a little glycerine as a lubricant to make the job go easier, it won't hurt the vanes and it is water soluble so will quickly be flushed out as soon as the pump starts.

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7. Bolt the water pump housing back into place using the correct sized socket. This is one place where an adjustable wrench will not do. Follow the manufacturers recommendations if they give torque settings as over tightening can distort the housing.

Note here that the housing is new the old one was cracked and the interior surfaces badly scored from silt in the cooling water.

8



8. Reinstall the bottom unit back onto the leg with the bolts that you removed earlier. While you are at it replace the anode. Do not overlook this, A missing anode will cause corrosion of the aluminum leg at an alarming rate.

Finally wipe down the engine and store upright in a warm dry place ready for next season.