

MAINTENANCE MATTERS[®]

A SIMPLE GUIDE FOR THE LONGEVITY OF YOUR BOAT





PROTECTION AND PEACE OF MIND WHY MAINTENANCE?



Yamaha wants you to have an outstanding ownership experience. Maintenance plays a big part in that. We've learned a lot about caring for boats during our many years as a personal watercraft manufacturer; so here's some knowledge and simple tips on the subject.

From their painstaking design to their meticulous construction, Yamaha boats are manufactured to provide you with years of enjoyment. However, they live in one of the harshest environments imaginable. High load, high-RPM operation, extreme temperatures and humidity, saltwater, sun, even long periods of non-use can all exact a heavy toll. And it's not just Yamaha boats. All boats face these same challenges. Regular maintenance is important in helping your boat meet the demands of these challenging environments, and only you can make sure it happens.



Spending a relatively small amount of time making sure your boat is in proper condition is simple to do, and:

- You'll have more hours of trouble-free enjoyment on the water.
- You'll preserve your investment with a higher resale value.
- Your boat will be ready when you are.
- It's easier and costs less to maintain than repair.
- Yamaha dealers stand ready to help.

What are the basics? Keep your boat ready to run with basic maintenance like:

- Changing engine oil every 50 hours or once a year
- Flushing regularly
- Maintaining your batteries
- Helping to prevent corrosion

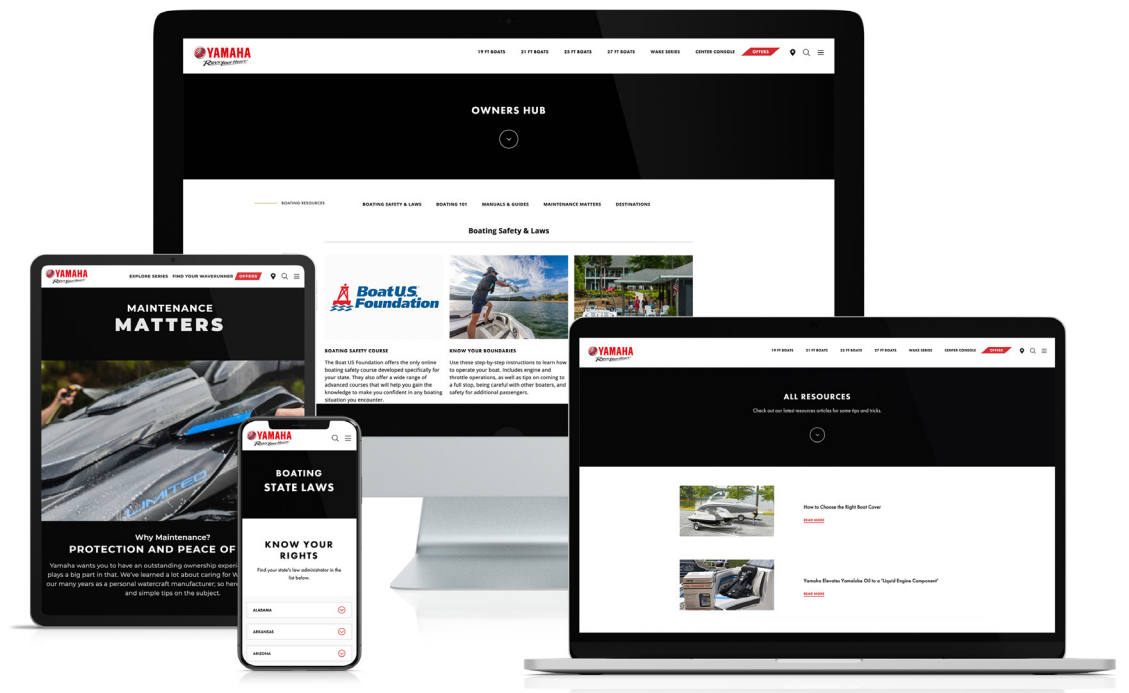
This simple guide will walk you through all of these items and more using:

- Information in an easy-to-read-and-understand format
- Maintenance charts with service intervals
- Links to expanded information and short "why/how-to" videos
- Checklists to help make sure you've covered it all, until it becomes second-nature
- Referrals to the Yamaha smartphone app and/or **YamahaBoats.com** for helpful information and maintenance-related technology

Boat maintenance doesn't need to be difficult or expensive. Whether you do it all yourself or have one of approximately 150 authorized Yamaha boat dealers do parts of it for you, we're committed to helping you maintain your boat in a way that's easy to do and easy to understand. Let's get started.

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FIRST THINGS FIRST LET'S GET STARTED



We boaters can take a lesson from pilots, who perform a simple walkaround of their craft before each and every use. They know taking a few short minutes to do this every time is key to safety and enjoyment. Each time before you go boating, you should do the same.

In the pre-launch checklist below, you'll find information that you can use to help make sure you fully enjoy your day on the water. It's regular attention to these basic items that will help make boating the safe and enjoyable experience it's meant to be.

Keep in mind you're never alone.

- **Yamaha dealers stand ready to help.** With approximately 150 authorized Yamaha boat dealers nationwide, one can assist you with proper maintenance of your Yamaha boat. From regular maintenance to installation of parts and accessories, they have the tools and the training to do the job right. And they feature Genuine Yamaha and Yamalube® maintenance and care products. That's important.
- **Yamaha website.** For additional information on why "Maintenance Matters," including helpful "how to" information and a complete list of Genuine Yamaha and Yamalube® maintenance and care products and accessories, please visit YamahaBoats.com.



PRE-LAUNCH CHECKLIST

1. Check navigation lights
2. Inspect trailer winch
3. Ensure registration numbers are properly displayed, plus current registration and other necessary documentation is on board
4. Ensure trailer hitch and safety chains are secure, and inspect trailer wires and connections
5. Check hull for damage, soft spots or blistering
6. Grease bearings, ensure lug nuts are tight and not rusting, check tire tread and pressure
7. Test bilge pump
8. Check gauges
9. Check marine radio
10. Check magnetic compass, charts and navigation tools



11. Check engine oil for level and color
12. Check fuel system for leaks (visual and "sniff test"). Check fuel level for trip (1/3 out, 1/3 return, 1/3 spare)
13. Ensure battery connections are clean and tight
14. Replace anodes if over half gone
15. Check for any debris in the jet pump area
16. Inspect clean out plugs for debris and install before launch
17. Ensure scupper are clear, bilge clean and drain plug installed
18. Check transom for cracks
19. Inspect trailer bunks for damaged boards or torn carpet
20. Ensure trailer lights are sealed and working

- Check and/or prepare fire extinguisher, first aid kit, visual and audible distress signals

- Check for throwable type IV PFD and ensure all passengers have properly fitted PFDs

- Check the weather and file a float plan with a friend

- Check load of vessel and secure gear from shifting

- Prepare tool kit with extra wire, spare fuses, spark plugs, hoses and clamps, etc.

- Verify your vessel is in compliance with all applicable boating laws

DEFEND AGAINST THE ELEMENTS CORROSION PREVENTION



While your Yamaha boat dealer can help you with, or even do, most of your general and preventive maintenance, corrosion mitigation is something you can only do yourself—and time is of the essence.



Regardless of where you boat, corrosion attacks both the inside and the outside of your boat—every day, all the time. Some forms you can see, some you can't, and it can take only a short time for the damage to begin. Even those boating in freshwater have corrosion-mitigation duties to attend to. Why, even rainwater can have corrosive effects that can be damaging to your boat. So it's vital to be diligent in your anti-corrosion defense.

Your dealer can help provide the right products to help prevent some forms of corrosion, but their regular and diligent use is strictly up to you. The following are answers to common questions about how to mitigate the presence and damage of corrosion.



Where do I need to concentrate my fight against corrosion?

Corrosion can happen pretty much anywhere on or in your boat: inside, in your fuel system or in the internal cooling water passages, and on the outside, in various electrical connections and exposed metal components. But don't worry, you have a lot of allies on your side, and we're here to help by teaching you where to look and what to look for.

What's so important about flushing my boat? I boat exclusively in freshwater, do I still need to?

Your Yamaha boat is raw-water cooled, meaning it uses the water it's operating on as cooling water. All water, fresh or salt, contains contaminants that will eventually build up in the cooling passages over time. Additionally, saltwater is naturally corrosive and any remaining in those cooling water passages after use is left there to do its worst, unabated. Saltwater can also experience crystallization when exposed to heat above 170 degrees, which causes deposits to form and potentially restrict cooling water passages. For these reasons, it's a must that you flush your engine thoroughly with fresh, clean water after every use.

How do I go about flushing my boat?

Use this basic method to flush after each trip.

- With the boat out of the water, connect the garden hose adapter to a garden hose.
- Loosen the flushing hose connector cap and remove it. Insert the garden hose adapter into the flushing hose connector by pushing and twisting it until it is securely connected.
- Connect the garden hose to a water tap.
- Make sure that the area around the boat is clear, and then start the engine. Immediately after the engine starts, fully turn the water supply on so that water flows out continually from the jet thrust nozzle and cooling water pilot outlet.

Note: Never turn on the water before starting the engine. The water could flow back through the muffler into the crankcase causing severe engine damage. Be sure to turn on the water immediately after starting the engine to prevent engine overheating.

- Run the engine at fast idle for about 3 to 5 minutes. If the engine stops while flushing, turn the water supply off immediately, repeat previous step and continue.
- Turn the water supply off. Drain residual water from the exhaust system by alternately pushing the remote control lever to half throttle and back to idle for 10 to 15 seconds.

- Stop the engine.

Note: Never have the water on when the engine is not running. The water could flow back through the muffler into the crankcase causing severe engine damage. Do not run the engine for more than 15 seconds after the water supply has been turned off to avoid engine overheating.

- Remove the garden hose adapter.
- Install and tighten the cap securely.

What is "dry corrosion"? What causes it and what can I do about it?

Dry corrosion occurs in areas not in direct contact with water—exhaust systems, for example. The outside of most exhaust system components is cooled by raw water to prevent overheating. When today's ethanol-enhanced fuel is burned, it creates by-products known as sulfate salts. These salts are highly corrosive, especially when exposed to very hot temperatures. If the boat's cooling water passages are not kept clean by regular flushing (the exhaust area in this example), hot spots can form on the interior of the exhaust components, concentrating the sulfate salts' corrosive effects. The result is corrosion from the inside out. That's why flushing your engine with fresh, clean water for 3 minutes after each trip is a vital part of preventing even dry corrosion. It helps the cooling system run at maximum efficiency by keeping the cooling water passages clean and clear, which helps minimize the heat inside the engine, making it less susceptible to dry corrosion.





How can I fight corrosion on the outside of my boat?

It's a good practice to set up a regular schedule and stick to it. There are quick and simple things you should do after every use if you boat in saltwater, and periodically if freshwater is your game. These include visual inspections you should do every time. If you're unsure about what to do and when, your authorized Yamaha boat dealer can help.

- 1 • **Rinse it.** Don't spare the hose when returning from a trip, particularly in saltwater. Rinse the entire outside of the boat with clean water. Give the outside of the boat a once over with some mild soap and a soft cloth. (Do not use liquid dish soap, it can strip off important protectants.) Go ahead and wash the whole boat and trailer. Wiping it down with a good quality chamois afterward helps keep it all looking sharp.

Note: If salt build-up has become a problem, or your boat's engine has somehow been directly in contact with saltwater, it's okay to gently rinse portions of the engine with clean, fresh water to remove salt and other contaminants. Just use a hose on low pressure—not a spray attachment—and don't rinse around the air intake area. Make absolutely sure the engine is completely air dry before closing the engine hatch.

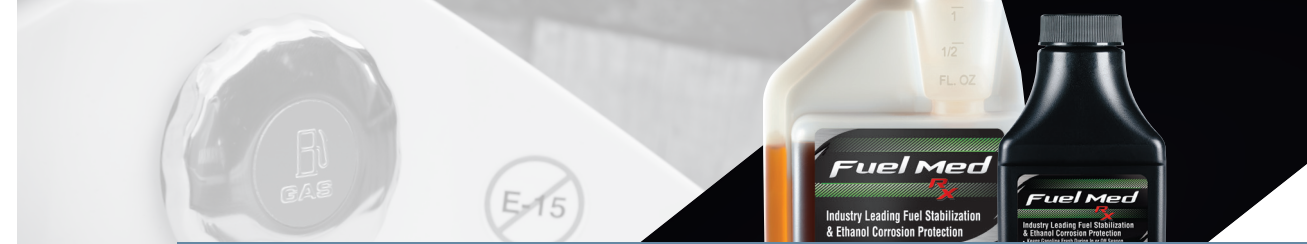
- 2 • **Spray it.** Liberally spray the entire dry engine with a protectant like Yamashield™. It's a lubricant, a water displacement agent and a corrosion preventative all rolled into one. A high-quality silicone spray works well here, too. We recommend Yamashield for hard-to-reach places, since it does wash away with water, and silicone spray for easy-to-reach areas, since it requires reapplication monthly because it dissipates. Spray all external engine surfaces and the electrical connections to help keep them corrosion-free.

- 3 • **Check it.** Do a quick visual inspection of your boat and of your jet pumps every time you use them. Look for anything out of the ordinary and investigate if need be. Keep a special eye on:

Anodes: Anodes intentionally corrode before your engine does, in order to help protect it. Better known as "sacrificial anodes," they are typically dull grey in color. On Yamaha boats, they're usually located on the jet pump body or on or outside of the jet pump. As corrosion occurs over time, they begin to "dissolve." Replace them when they are about 50% gone with only high-quality, factory-recommended replacements. Don't be fooled by lesser-quality imitations. Too much is at stake to risk it. Yamaha sacrificial anodes are made of a blend of high-quality alloys specifically designed to help protect your Yamaha boat.

Caution: Never paint or cover anodes in any way, as they must be in direct contact with the water in order to perform correctly. When exposed to the water (especially freshwater), they can become covered with a layer of organic growth (often referred to as "scum"). This is often so thin you won't even notice it, but it can prevent an anode from doing its job. Therefore, during your regular washdown procedure, make sure to take a brush and some soap to the anodes to keep them clean and in direct contact with the water. This will help keep them working properly.

Electrical systems: Look under the console and in the bilge areas for electrical connection blocks. Also, check the battery terminals. If corrosion appears on either, Yamalube® Battery Terminal Cleaner & Protector will do the trick. Spray it on to clean the affected areas (heavily corroded connections will first need to be disconnected and thoroughly cleaned). When it dries, it leaves a protective waxy film that will help keep corrosion from re-forming.



KEEPING YOUR MACHINE CLEAN FUEL & FUEL SYSTEM



The largest source of trouble with marine engines lies with the fuel and fuel system. Paying regular attention to both can help prevent major headaches down the road. From hoses and connections to proper filtration and even fuel additives, time spent maintaining your fuel system helps keep you safe and your boat ready for action. This is especially true if your boat is not used every day.

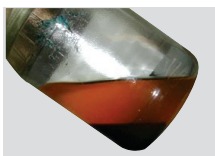


What is ethanol and why is it so bad for marine engines?

Ethanol has been added to most of today's fuel supply as an oxygenate to help reduce emissions. It's also used to extend domestic fuel supplies. Ethanol is alcohol, and alcohol is "hygroscopic," which means it attracts water molecules. Since nearly all boat fuel tanks are vented to the atmosphere, water can (and will) collect in your fuel. When the concentration of water molecules

in your fuel tank reaches just ½ of 1%, the water molecules will bond with the alcohol and sink to the bottom, where your fuel pick-up is. Depending on the amount of water ingested into your engine, this can result in everything from running problems to catastrophic damage.

Ethanol, being alcohol, is also a powerful solvent that can loosen debris in your fuel tank and all the tanks and lines it was in before it got to you. Once in your engine, this debris can cause everything from running issues to a no-start, no-run condition. That's no fun.



What can I do to protect myself from the potentially damaging effects of ethanol?

Fortunately, there are simple procedures that can help, but it's important that you do your part. This is one part of maintenance you must proactively do for yourself.

- 1 • **Add fuel stabilizer and conditioner to every tank of fuel.** Make sure to add a quality, marine-specific non-alcohol-based formula, like Yamalube® Fuel Med RX. These formulations are specifically designed to work effectively in the moisture-rich environments common to boats. And don't believe some of the claims you see today; no matter what you add to bad gas, it's still bad gas. No additive will restore stale fuel, remove water, or cure ethanol-related issues.



Tip: Today's gasoline can begin to break down in a matter of weeks, not months. Make sure to treat every tank of fuel, not just for extended storage. It's cheap protection against a world of hurt.

- 2 • **Add Engine Med RX internal engine cleaner to every tank of fuel.** The cleansing additives in the majority of today's gas are a great start, but they're formulated for automobiles, so they may not work as well on your boat. Do them one better. Med RX makes performance-robbing carbon chemically unable to stick to internal engine components. Its proprietary blend of synthetic anti-corrosion additives helps protect the "yellow metals" in your fuel system (copper, brass and silver solder) from corrosion. These are key components to proper fuel system operation. This helps maintain their performance and reliability. Engine Med RX also cleans gums and deposits off internal engine and fuel system components.

- 3 • **Buy your gas where they sell a lot of it.** The goal is always to keep your boat's fuel fresh and potent. Why buy gas that's already been sitting around untreated? Buy the freshest fuel you can find, and at fill up, treat each tank with Engine Med RX. Add these before adding the fuel so they mix up well. It's an easy, proactive and protective habit to get into.



All the items in this catalog are available through your local authorized Yamaha boat dealer. More information can be found at YamahaBoats.com.



What are some other tips I need to know about my fuel system?

- **Check fuel system components before each trip.** It's important to visually and physically check the condition of the fuel hoses and connections for any signs of leaks or cracking each time you use your boat. Give everything the "sniff test."
- **Get rid of carbon and keep it out.** Yamaha Internal Engine Cleaner is a dealer-only applied product that is the strongest and most effective way to clean out carbon and other build-up from the inside of your boat.
- **Gas containers.** Be sure to add Fuel Stabilizer & Conditioner PLUS and Ring Free PLUS before filling them up, and keep them in a cool, dark place if possible. Containers available through Yamaha feature a "Spill-Proof Spout" which shuts off automatically when the container reaches capacity. This helps prevent spills and helps them comply with emissions requirements.



TAKE CHARGE OF YOUR ELECTRICAL SYSTEM



Today's modern boats and onboard electronics require juice to run. That's why your electrical system is one of the most important systems on your boat. Because boats constantly operate on or are near water, electrical system care is even more important, especially in highly corrosive saltwater environments. Make sure your electrical system is ready to perform with these simple checks and procedures.



Check the wiring and connections.

The electrical system's job is to carry voltage from one place to another. If the voltage can't make the journey, or if it's diminished when it gets there, the receiving device will not function properly, if at all. The goal is to have as much voltage (or electrical energy) arrive at Point B as left Point A. As electricity passes through a device, some parasitic loss is normal.

However, corrosion impedes electricity's ability to travel, which can cause significant voltage loss or intermittent voltage. Either can wreck the good times, but with simple visual inspections and physical actions these scenarios can usually be avoided.

Some electrical corrosion can be easy to see, such as corrosion on battery posts or electrical panel connections. Other damage can be more difficult to see, such as internal corrosion that has rotted some or all of the individual strands inside a wire's cover. You can use an ohmmeter to check electrical connections and wires for excessive resistance. There should be no more than 0.1-0.2 ohm resistance between electrical connectors on each end of a wire. Any more than that and you should investigate further.

Don't forget the batteries.

Make sure to use the right size and type recommended in your owner's manual. If there's any question about a battery's performance, have it load tested. Any auto parts store can do this for you, or you can do it yourself with the right equipment.

Caution: Make sure that there are no fuel fumes present when making, breaking, or checking battery connections and condition. Give the area the "sniff test" to check for fumes. If in an enclosed area, run the blower or thoroughly air out the space, or take the battery outside to test it. Please plan and protect accordingly.

All battery cable connections must be clean, tight and use hex nuts and lock washers (not old-fashioned wing nuts). Loose connections can cause frustrating intermittent issues or a full-time "no run" condition. A dirty or corroded connection can impede electricity's ability to travel, and a battery terminal connection may be corroded, yet appear clean. To avoid any doubt, always remove the terminal connection and clean both sides of the connecting materials down to bare, shiny metal, then reinstall and tighten the connection properly.

Don't forget the house batteries.

Most larger boats that have multiple electrical demands also have house batteries. House batteries are additional batteries and are separate from the starting battery. They are used to ensure that a boat with high electrical loads won't drain the starting battery when in use and leave a boater stranded. Many large Yamaha boats have a separate battery isolator/charging leads specifically for charging these separate batteries. With proper wiring and components the charging system will be able to charge the starting battery/batteries first to help keep the voltage up and ready to go. Once fully charged, it will automatically "switch" the charge to the house battery/batteries.

Check the electrical connections.

Corrosion often occurs where wires meet. Visually check electrical blocks under the dash and/or in the bilge. Also, check any connections on gauges or add-on electrical equipment like battery switches, plotters, or fish-finders. Wiggle wires and connections to check for looseness. If either is found, disconnect and clean the connection with emery cloth or fine-grit sand paper, then reinstall and tighten properly.

Don't spare the spray.

If you haven't already sprayed connections with Yamalube® Silicone Protectant & Lubricant, open engine hatch and liberally spray the engine(s). Not only will it help prevent corrosion, but it will help keep rubber parts (like your hatch seal) supple and able to do their job effectively.

Note: Do not spray silicone on any oxygen (O₂) sensors that your boat may have.

We've got the goods.

Yamaha offers a complete range of electrical system care products, including original-equipment NGK® spark plugs, Yamalube Yamashield™ Protectant and Lubricant, Yamalube Silicone Protectant & Lubricant, and Yamalube Contact Cleaner. They're the best you can get for your boat, and they're all available through your local authorized Yamaha boat dealer.



LET'S BEGIN WITH CHOOSING THE OIL ENGINE OIL & LUBE



You've heard the expression "choose wisely." When it comes to choosing an engine oil and filter to protect your Yamaha, this couldn't be more true. Using the correct oil and filter at the recommended intervals is the single most important thing you can do for your boat.

Checking your oil level.

The oil level check procedure for your Yamaha boat is a bit different than the procedure for your car. It's easy to get an accurate reading if you follow the procedure outlined in your owner's manual. A few things to keep in mind:

- Always check your engine level with the engine up to full operating temperature.
- It is OK if the oil level is anywhere within the hash marks of the oil level dipstick.
- If you do need to top off your engine oil, be sure to use Yamalube® 4W 10W-40 Oil.



What oil should I use?

The engine in your Yamaha boat is vastly different from your automotive engine; so avoid regular automotive engine oils. Use a motor oil specifically formulated for the rigors of the marine environment, like Yamalube® 4W for four-stroke boats, and Yamalube 2W for two-stroke boats.

Let's look at a few reasons why:

- 1 **Engine load.** The typical loads placed on your boat are much heavier than on your automobile, having to overcome a much greater amount of drag to create performance. This means your boat is working much harder than your automobile's engine. Yamalube 4W and 2W marine engine oils contain specific anti-wear additives to account for this.
- 2 **Engine speed.** Your boat operates at a much higher RPM than your automobile's engine. It must rev higher to create higher speeds, rather than just changing gears like your car. That means your engine may run all day long at 4500-6000 RPM, rather than the 2500 RPM your car reaches at highway speeds. That's tough on your oil, and can literally shear (or split) the molecules in ordinary automotive oil, reducing lubricity. Yamalube 4M and 2M have special shear-stable polymers to combat this and provide superior lubrication at all times.

- 3 **Operating temperature.** Boats are cooled using raw water, which is often cool to very cold. On the other hand, saltwater will begin to crystallize if its temperature is raised above 170° F, potentially causing blockage in the cooling passages and leading to engine overheat and possible damage. Because of these two factors, your boat operates full-time at a temperature much lower than your automobile, and requires very different qualities in its lubricating oil. Yamalube marine oils have detergents, dispersants and viscosity index improvers to meet these marine-specific challenges head-on.
- 4 **Operating environment.** Your boat is constantly near water, sucking in very humid air directly off the water's surface in order to operate. This humid air also gets inside combustion chambers through open valves when it's not in use. And in a saltwater environment, that air is even more corrosive. It's one of the harshest environments imaginable for an engine. Yamalube 4W and 2W are purposely formulated with special anti-corrosion agents to help combat and prevent corrosive effects of this environment.

Yamalube boat engine oils provide specific protection other oils don't, using a proprietary blend of marine-specific anti-wear additives, shear-stable polymers, corrosion inhibitors, detergents, dispersants and viscosity index improvers. In short, they're far superior to automotive engine oils in their strength of protection, durability and corrosion resistance.



Aren't all oil filters pretty much the same?

Outwardly, perhaps. But it's what's on the inside that counts most. Yamaha oil filters are manufactured specifically to protect Yamaha engines, using only the finest components and construction methods available. This includes a special filter media and metal filter media bases (instead of cardboard), to help them achieve a level of durability and filtration far superior than most "off-the-shelf" oil filters. From the quality of the materials used to their high-quality construction, they simply outperform and out-protect most aftermarket alternatives.

What Yamalube oils are right for my boat?

Yamalube 4W Formulated to protect your investment from the harsh effects of cold starts, hours of trolling and high-load, high-speed operation, its special anti-corrosive additives are particularly suited for the harsh marine environment.

Yamalube 2W Formulated to provide outstanding protection for two-stroke, water-cooled boats, its special blend of additives helps combat ring stick, corrosion, varnish and wear. It's a standard by which other two-stroke oils are judged.

Can I change my own oil?

Absolutely, but you don't have to. If you'd rather leave it to your Yamaha boat dealer, they will be happy to take care of it for you in their specially trained and properly equipped service department. That also means you won't have to dispose of the used oil yourself. But if you prefer to do it yourself, your Yamaha boat dealer can set you up with a Genuine Yamalube Oil Change Kit, specific to your Yamaha boat. Everything you'll need to do the job right. Kits are available in Yamalube 4W.





ODDS AND ENDS OTHER KEY ITEMS



There are a few other important things to keep an eye on. Check your owner's manual for your particular boat's schedule, and keep note of when to check on them by watching your hour meter.



Accessing your boat's pump cleanout ports.

Open the rear platform hatch. Remove the access port caps to let any water drain that has pooled on them. If the boat will be stored on the trailer nearby, leave the caps out until you prepare to launch the boat again. If the boat will be transported on the trailer any distance, temporarily reinstall the caps and close the hatch until you get home. Open the hatch again when you arrive and remove the caps as before. Leave the caps loose until you plan to transport the boat on the trailer again.

Note: Leaving the access port caps out when you are not using or transporting the boat helps keep them from becoming stuck in the access ports.

Spark plugs.

As a general rule, remove and inspect boat spark plugs every one hundred hours or every other season and check for proper color and wear. They should be a light brownish color and have relatively sharp edges. When necessary, replace with the exact manufacturer and part number that your Yamaha boat stipulates. The brand type and style of spark plugs used in your boat are by design. They contain specific performance attributes that are engineered into your boat. Those little markings and numbers on your spark plugs contain a wealth of information about heat range, thread depth, etc. So don't second-guess or try to cross-reference here. Your boat's performance depends on it.

Thermostats and pop-off valves.

These are responsible for regulating the operating temperature of your boat. Simple and effective, they're best observed through any signs of change in the engine's operating temperature. Operating in saltwater can cause deposits to build up, causing the valves to stick open, which can over-cool the boat and prevent it from reaching proper operating temperature. Small bits of debris in the cooling water can get lodged between mating surfaces and cause the same condition. If this happens, removal and cleaning is most often the fix. Check your owner's manual for specific replacement recommendations.



BABY YOUR BABY EXTERNAL APPEARANCE



Nothing matches the pride you feel in your clean, well-maintained boat. Keeping your rig looking and performing like new has longevity benefits, too. Here are some tips and easy procedures you should perform regularly to help protect and preserve your baby.

Make it easy on yourself. Just like you clean the inside of your boat by fresh water flushing after each trip, thoroughly spray down your boat with fresh, clean water. Use a soft cloth and a mild, marine-specific cleaning agent, like Yamaclean® Pro Wash Spray, then rinse it again.

Note: Don't use liquid dish soap or ordinary household detergents when washing your boat. They remove waxes and other protective coatings your boat needs.

To protect and preserve. Don't be afraid to spray the entire engine(s) liberally with Yamalube® Yamashield™. It not only helps give your powerhead that just-detailed look, but also helps prevent the effects of corrosion.

Look out below. Check for signs of scratching or scratches to the bottoms finish. This is a sign you are operating the boat in water that is too shallow.

Keep it covered. When not in use or when trailering, protect your boat from the elements with a custom-fit Yamaha boat cover.

Whether washing, waxing, caring for your upholstery, polishing stainless steel, cleaning carpet or deodorizing life jackets and wet storage areas, you'll find the the marine-specific formulas to do it right at your local Yamaha boat dealer. Just look for the yellow stripe on the Yamalube label.

Tip: If the products you need are not currently in stock, ask that they be ordered, and accept no substitutions. Insist on killer clean. Insist on Genuine Yamalube cleaners and care products.



NOW'S THE TIME TO THINK ABOUT EXTENDED STORAGE



Preparing for extended storage efficiently and effectively means you'll have a worry- and hassle-free experience when you return to using your Yamaha boat.

Returning your boat to the canal behind your Florida vacation home. Hitting the water the first warm day after ice-out. Either way, you want to get in and go, not spend time performing tasks that should've already been done. Or worse, fixing damage created in the offseason. Take proper precautions. This is not the time to hurry or compromise. Your Yamaha dealer has the goods if you prefer to DIY. Otherwise, they will be happy to take care of these procedures for you.

Tip: Don't wait to call your dealer about winterization. The threat of the season's first freeze is too late!

- **Look it over.** Few things are more important than the visual inspection you do before extended storage. Start at the bow of the boat and work your way towards the stern. Look for anything that appears damaged, missing or out of place, and repair or replace as needed.

- **Replace it now.** Your boat's engine oil has been working hard to suspend and carry away debris and potential corrosives resulting from the combustion process. Don't wait for spring to change it. Get rid of this nasty oil and the oil filter before you lay up for storage.

Tip: Be sure to lube all grease zerks with the correct grease stipulated in your owner's manual to help force out any water that may be residing there.

Tip: Charge battery fully before storage, and have them load tested to make sure they're going to be up to the task come spring. It's best to check the charge monthly and keep them topped off if you can. If your boat's stored outside during the cold winter months, don't risk them freezing. Bring your batteries indoors to a cool, dry place.

- **Fog it down.** Fogging oil helps protect vital internal engine components during periods of inactivity by coating them with a thick petroleum-based lubricant. This helps prevent rust and corrosion from forming and protects during start-up. For most modern fuel-injected four strokes, use Yamalube® EFI Fogging Oil. This is an additive you put in a small tank of fuel and run through the engine to properly lubricate the internal components. An excellent choice is Yamalube Stor-Rite Engine Fogging Oil. Just spray it through the warm intakes a few times until the exhaust turns white, then spray equally into all intakes continuously until the engine stalls. Both products are easy to use and highly effective.

Note: As always, be sure to read and heed all product instructions for proper application procedures.



- **Keep it dry.** Water can form in the fuel system during extended storage periods, due to natural condensation. In addition, ethanol fuels can draw water directly from the atmosphere through the tank's vent. Make doubly sure to run the proper storage amount of Yamalube Fuel Stabilizer & Conditioner PLUS in your fuel, and thoroughly course it through the entire fuel system prior to shut down. Always store with the tank ⁷/₈ full of fuel to help prevent over-accumulation of condensation. Also, never plug or cap the fuel tank vent, as the vent allows for natural expansion and contraction within the fuel system. Plugging the vent may potentially cause damage to fuel tanks and fittings.

- **Clean it up.** Give your boat a thorough cleaning before extended storage. Always make sure that any item or area in your boat is bone-dry before closing it up or sealing it off. Where applicable, a coat of sealant or wax will serve as a well-worth-it protectant.

Tip: This may be the best time to pull the boat out of the water and clean the hull as necessary. Remove any marine growth or barnacles with a thorough washing or sanding. Make sure to adhere to local legal and environmental requirements and appropriate safety precautions during these procedures.

- **Get it ready.** Just prior to extended lay-up is an excellent time to perform routine annual maintenance, and to take care of any outstanding service issues. Check the anchor, chains, dock lines and fenders too. Replace any worn or damaged items now so you'll be ready to hit the water when it's time. Also, check the boat for any loose items that need repair. If needed, one of our exclusive Yamalube Yamabond® formulas will hold things tight.

- **Drain it.** If applicable, drain the shower storage tank to less than half full if your boat is to be stored in freezing weather. Freezing water can damage the tank. On boats with ballast tanks, loosen the caps on the ballast pumps to drain water from the pump body. Re-tighten the fasteners after the water is drained from all tanks.

- **Trailers, lifts, and lights.** This is a great time to check your trailer or your boat house. Any loose, sagging or rotted bunks, lift straps or rollers should be replaced. Check trailer wheel bearings for signs of water intrusion and repair as necessary. Grease trailer bearings and lift roller assemblies using Yamalube Marine Grease. Its corrosion-resistant formula resists wash-off. Yamalube Yamashield™ is an excellent choice for lubricating winch cables, and Yamalube Brake & Contact Cleaner will help clean and restore proper taillight and dock light connections, while helping keep your trailer's brakes clean and in good working order, too (if applicable).

- **Wrap it up.** Yamaha offers storage covers for boats that will provide protection from the elements. Many Yamaha boat dealers offer shrink-wrapping services. This method encapsulates your boat until you're ready to resume the good times and keeps it looking as good as it did when you wrapped it. Be sure to ask your local Yamaha boat dealer about it.

- **Make it fun. Make it easy.** Seem overwhelming? It's really not. It's just learning a few procedures and taking time to do them right. Try dividing the chores up among members of your crew. It'll be less work for each of those involved, and the whole process will go faster. Got kids? Give them each a few appropriate tasks to perform and help them understand the importance of their contribution. This will help create a sense of pride and belonging when they're out on the boat next season. Still too much? No worries. Just contact your local Yamaha boat dealer. They'll be glad to take care of all this for you.



DON'T FORGET THINGS TO REMEMBER



Over the years, Yamaha has learned a thing or two about keeping boating fun and enjoyable—not to mention safe. And proper maintenance plays a big role in this. Here are a few related thoughts to carry with you when preparing for good times out on the water.

Keep it simple.

Always be prepared, especially from a maintenance angle, and don't let an easy-to-fix problem spoil your fun. Remember to carry a small tool kit with basic hand tools at all times. Your local Yamaha boat dealer can help put this all together.

- A small tool kit with basic hand tools.
- An electrical repair kit, with electrical tape, fuses, and electrical repair items like connectors, crimping pliers and extra wire.



Trailers need love, too.

Your trailer takes the good times to the water, but it is an often-neglected item when it comes to maintenance. It's not difficult to do, and it's important. Here are a few tips:

- **Lug nuts and a jack.** Check the torque on your trailer's lug nuts regularly. Carry the appropriate tools in your tow vehicle, and make sure you always have the correct jack should a flat trailer tire occur. It's easiest to just put the proper tools in your tow vehicle and leave them there.
- **Carry a spare.** If your trailer doesn't have a spare tire, get one and mount it to the frame. Then, make sure to air it up and check it regularly for the proper pressure. You want it ready and capable to help if it's ever needed.
- **Bunks and rollers.** Anything loose should be tightened, and anything sagging or rotted should be replaced. Make sure all bunks or rollers maintain proper contact with the bottom of the boat to prevent development of hooks or rockers in the hull's surface over time.
- **Hubs and wheels.** Check trailer wheel bearings for signs of water intrusion. Repair as necessary. Periodically grease trailer bearings using a high-quality, corrosion- and water-resistant formula like Yamalube® Marine Grease.
- **Cables and winches.** Carefully monitor the condition of your trailer's winch cable, particularly if it's made of metal. Replace the cable if there are any signs of cuts, abrasion or chaffing to prevent possible injury that could occur if it were to break under load. Make sure the winch handle is free of bends or cracks and is tightened down properly, too. Yamalube Yamashield™ is an excellent choice for lubricating and helping protect winch cables and assemblies from the damaging effects of corrosion.
- **Lights.** Help prevent frustrating trailer light issues with simple care and maintenance. Yamalube Silicone Spray will help clean, dry and restore proper taillight connections. It's great for dock lights, too.
- **Brakes.** Whether your trailer's brakes are electrically operated or surge, proper periodic attention is required, particularly in saltwater environments. Make sure to rinse your wheels and brakes thoroughly with fresh, clean water after every dunking.



You can't take it with you. Seriously.

Many areas of the country are experiencing the rampant spread of invasive species like zebra mussels and hydrilla. These "hitchhikers" can easily be transported from waterway to waterway by unsuspecting boaters through trailering. To help prevent their spread, visually inspect your boat and trailer every time you pull out of the water and remove any you find. Make this part of your regular routine after trailering your boat. The waterway you're headed to next will thank you for it!

CONFIDENCE YOU CAN COUNT ON WHY YAMAHA?



No one knows your Yamaha boat better than Yamaha, including how to care for and maintain it. That's why the engineers that designed and built your boat are some of the same engineers that assist in the formulation of specific products designed to help you care for it. And we offer comprehensive, easy-to-understand information about what to do and when, and what to use and where.



We have the products.

Yamalube® It's the brand behind our reliable motors, and for good reason. They're the only products built around the unique demands, operating characteristics, and applications of Yamaha boats. Using the proper maintenance products is as important as proper maintenance itself, and Yamaha is committed to helping boats last. Yamalube products are all specifically designed and manufactured to help maintain the performance and value of your boat for many years to come. It's all about your satisfaction.

Why is using Genuine Yamaha maintenance and care products important?

- **Factory-approved products versus generic.** The same engineers who designed your boat test and approve Yamalube products; so you know they're right for the job.
- **Engineered to work better.** Yamaha formulates its products to meet the specific needs of your boat. Aftermarket product manufacturers use a one-size-fits-all approach that may not fully protect your boat.
- **Helps protect your investment.** Ultimately, you are solely responsible for the proper maintenance of your boat; so do it right. Whether you choose to do the work or have your authorized Yamaha boat dealer do it, insist on Genuine Yamaha and Yamalube maintenance and care products in order to maximize your performance and best maintain the value of your boat.
- **They're the right tools for the job.** Using Genuine Yamaha maintenance and care products means never having to guess if your investment is adequately or properly protected. That's powerful peace of mind.

We have the information.

Let's face it, the best products in the world do you no good if you don't know how, when, and where to use them. From easy-to-understand maintenance charts, to instructional how-to videos, to on-site seminars with some of our professional staff, Yamaha makes it easy to know what procedures need to be done, and when. This Maintenance Matters® book is proof, and it's just the start.



We have the dealers.

With a nationwide network of approximately 150 authorized Yamaha boat dealers from coast to coast, there's sure to be one nearby that can help. If you choose to do the maintenance yourself, your local dealer has the Genuine Yamaha and Yamalube products, parts and materials you'll need. Or they can do much of your maintenance for you. They have access to all of the maintenance schedules and proper materials for Yamaha boats, and the experience and the tools to do the job right. Either way, Yamaha has you covered.

So whether you get the parts from your Yamaha boat dealer and do it yourself or have them do the work for you, you'll rest assured knowing you're doing your part to help protect and preserve your Yamaha boat.

Note: All the items in this catalog are available through your local authorized Yamaha boat dealer. More information can be found at YamahaBoats.com.



To find necessary parts for changing oil, oil filters, spark plugs and air cleaner elements, visit YamahaBoats.com/Owners-Hub/Maintenance-Matters



When it comes to boats, you get out of them what you put into them. That's why proper maintenance and care is so very important, and you are a big part of making sure it's done and done right. It helps maintain the value of your investment and provide years of trouble-free fun on the water.

Proper maintenance isn't expensive or overly difficult to do. Yamaha's Maintenance Matters contains simple, easy-to-understand information about what to do, how to do it, when to do it and the proper materials to do it with. Additional information and assistance are as close as **YamahaBoats.com** and/or your local authorized Yamaha boat dealer. Do it yourself, or enlist the highly trained services of your Yamaha dealer to help.

Either way, you'll know that by insisting on Genuine Yamaha maintenance and care products, and by following Yamaha-recommended guidelines, your boat will be receiving the best of care. In return, it will reward you year after year with relaxation and enjoyment.

Insist on Yamaha, and only Yamaha.

*Message and data rates may apply. May not be available on all devices.

For the name of your Yamaha boat dealer or for more information on our complete line of Yamaha boats, call 1-800-NUMBER PLEASE or visit us at YamahaBoats.com.

REMEMBER to always observe all applicable boating laws. Never drink and drive. Dress properly with a USCG-approved personal flotation device and protective gear. This document contains many of Yamaha's valuable trademarks. It may also contain trademarks belonging to other companies. Any references to other companies or their products are for identification purposes only, and are not intended to be an endorsement.

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