

# Seasonal Hull Prep

Defender has great prices on everything you'll need to start the season right. Our Seasonal Hull Prep list can help save time and make shopping more efficient. Don't waste a trip to the boat - bring everything you need to complete your project the first time.

[Boat soap](#) - mild cleaner safe for multiple surfaces

[Hull cleaner](#) - chemical cleaner often used to clean waterline, exhaust, and rust stains

[Bucket](#) - great for mixing soap, or providing a water source if a spigot is not nearby

[Water hose](#) - be sure you have enough length to reach the nearest spigot

[Drying towel](#) - the hull should be dry before applying any compounds or waxes

[Scrub brush/pad](#) - use soft bristle brush or white non-marking scrub pads

[Chip brush](#) - inexpensive disposable brush often used for bottom paint where perfect finish is not required.

[Cup](#) - small container useful for applying smaller amounts of cleaner, compound, or paint

[Spray nozzle](#) - controls your spray and eliminates the need to turn open/close the spigot repeatedly

[Buffer/polisher](#) - saves time during gelcoat restoration, random orbital models can be less prone to user error than rotary ones.

[Buffer pads](#) - use stronger material versions for higher cutting compounds and use the softest pads available for applying wax.

[Compound](#) - "cutting" material of varying grit that removes outer layers of oxidized gelcoat and exposes brighter gelcoat underneath.

[Wax/Sealant](#) - gloss enhancing protective material that blocks UV rays, oils, and stains.

[Restorer wax](#) - one step wax that has higher cut compound in it, best used with a buffer.

[Extension cord/s](#) - use thicker gauge extension cords for longer electrical runs and/or high powered vacuums, sanders, and polishers

[Finishing material](#) - sometimes called swirl remover. Used following compound or as a first step for lightly oxidized hulls that leaves a smooth, high gloss finish

[Rags](#) - clean rags make removing residual compound, finishing material, and wax a much easier job and provides the best results.

[Cleaner wax](#) - one step wax product that has light cut compound in it, best used with a buffer

[Polish](#) - protective finish that does not contain carnuba wax. Many of these products claim to provide longer lasting protection than traditional waxes.

## Protective Gear and Cleanup

[Gloves](#) - disposable rubber gloves are the most popular for painting

[Goggles](#) - should fit your head properly to protect against sanding dust, chips, and paint

[Head sock/hood](#) - cleaning bottom paint out of your hair is not fun.

[Respirator/mask](#) - protects your lungs from harmful sanding and compound residue.

[Large Trash bags](#) - bring bags big enough to dispose of any rags, brushes, tray liners, and dropcloths you use.

[Paint suit](#) - protects your body and clothes from sanding residue and paint

[Solvent cleaner or water](#) - clean re-usable brushes and roller cages

[Towels/rags](#) - bring more than you think you need

# Seasonal Hull Prep and DIY Guide

## Bottom Cleaning and Preparation

**Sandpaper/discs** - 80 grit is most commonly used for antifouling prep

**Tape** - use high quality tape to achieve perfect paint lines

**Tarp/Dropcloth** - helps collect paint chips, sander residue, and paint drips

**Vacuum** - reduce sanding residue to protect yourself, the environment, and prevent potential stains on adjacent boats

**Sander** - random orbital sanders with vacuum hose attachments are recommended

**Brushes** - inexpensive chip brushes can help get paint places some rollers can't reach

**Roller cage** - available in a variety of sizes, smaller boats and dinghy's may be easier with shorter roller cages

**Rollers** - available in varying nap thickness and materials. Consult your paint can for recommendation

**Paint tray** - essential for use with rollers

**Tray liner** - disposable liner that makes cleaning paint trays a breeze

**Stir stick** - paints may settle after sitting for extended periods. It is recommended that paint is thoroughly mixed before application.

**Knife** - can be helpful laying drop cloth, opening paint cans, or used as a scraper

**Paint scraper** - used to remove any loose paint before re-coating

**Primer** - promotes effective adhesion of the bottom paint to the hull. Bare areas exposed under loose paint should be primed before applying more bottom paint.

**Anti-Fouling Paint** - paint used to prevent marine growth under the waterline

Other \_\_\_\_\_

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***These instructions are a general guideline on hull maintenance and are not meant to replace manufacturer instructions for use. You should consult each product's label for any special considerations, especially chemical interactions, safety precautions, or environmental factors before starting on any project.***

## CLEAN AND PROTECT THE TOPSIDE

1. Starting with a simple wash using boat soap, water, and a soft bristle brush to remove salt and loose debris. This effectively cleans many stains without risk of damaging any surfaces with harsher chemicals.
2. Growth along the waterline can be scrubbed using a white, light-duty cleaning pad that won't scratch.
3. Stubborn waterline, exhaust, and rust stains may require use of a no-scrub hull cleaner. (Read the bottle to be sure the cleaner you choose is safe for your hull's finish and watch for runoff, as some cleaners may damage metal through hulls or trailers).
4. Apply the cleaner with a rag, brush, or sponge and let it sit on the stained surface for a few minutes, then rinse with water.



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5. If your hull is finished with gelcoat, the condition of the surface will determine how much work is needed to restore the color and shine. Dull, chalky, heavily oxidized hulls may require a 3 step restoration process with compound, finishing material, and wax or polish. Light stains or oxidation may be handled with a single application of cleaner wax.



## 3 step Gelcoat Restoration:



**Step 1: Remove oxidation** - Brush your compound on the hull or apply directly to the buffer pad and spread it around before spinning up the buffer to avoid slinging the product. Work in small sections, continuously moving the buffer slowly without applying too much pressure against the hull.

- When finished buffing each section, wipe any leftover compound residue with a clean rag before moving on.

**Step 2: Buff** to a smooth finish: Repeat the same process as compounding but now using your finishing material that will smooth out any swirl marks and will leave a smooth shiny finish. You may need to switch buffing pads to one recommended for your product.

- Wipe any leftover finishing material off with a clean rag.

**Step 3: Protect** - Apply wax or polish using a rag, sponge, or buffer. Follow the instructions on the bottle for how long to let it sit before wiping off.

- For best results, avoid waxing in direct sunlight and use clean rags to make excess wax removal easier and results in a shiny protective finish.



## Care for Painted Hulls:

Care instructions for marine paints can vary greatly from product to product. It's best to stick to the manufacturer's recommendation for cleaning and maintenance as some can be damaged by cleaners commonly used on gelcoat.

## BOTTOM PREP

Start by laying down a tarp or drop cloth under the hull to catch any loose paint, dried marine growth, and paint drips that might fall to the ground while you work. Many boatyards will require this as well as the use of a vacuum sanders to reduce the amount of pollutants getting into the ground. Some of the chemicals and heavy metals in antifouling paints are harmful to the environment and to humans.

- For boats on keel blocks and boat stands, disposable plastic drop cloths can be convenient as they can be cut and shaped around the stands.



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- Consider tying the corners of the dropcloth to the boat stands or plan to have some weighted objects on hand that will help hold the tarp down on windy days.

At this point you should be wearing your safety gear, especially goggles and respirator. You do not want paint chips or dust on your eyes or lungs. Stray sanding dust can also deposit itself on you and your neighbor's decks, causing difficult to remove stains.

Use a scraper or putty knife to remove any loose, flaky paint or barnacles prior to sanding.

- Carefully inspect areas prone to extra marine growth like through hulls, intake strainers, trim tabs, and outboard motor brackets.

You may consider taping off the waterline before you start sanding to help prevent accidental hull scratches. The tape will not provide complete protection, but it can make a difference.



Some people choose to remove and hull anodes before sanding so they can properly prep the areas behind them and ensure that you don't get any antifouling paint on the anodes.

Hook up your electrical cords, sander, and vacuum. To prevent the cord tension from disconnecting itself, tie the cords in a knot at the point where they connect, or use tape or string to hold the connectors together.

Install the sanding disc to the sander ensuring the dust holes in the disc line up with the holes in the sander pad.

If using a rotary or random orbital sander, be sure to press the sander against the hull before turning on. If the sander is turned on with nothing to resist its spinning, it can spin too fast and cause gouges in the paint when you apply it to the hull.

Continuously move the sander along the boat bottom until any marine growth is removed and the old paint has a dull, yet even look.

Feather the edges of any low spots or areas where loose paint fell off when you scraped it, taking care to keep the face of the sander flat against the hull. Holding the sander at an angle to the hull can lead to too much pressure in some areas and makes it harder for the vacuum to suck up all the sanding dust you create.

Use hand sand paper or a sanding block in tight or hard to reach areas and be conscious of the sanding dust you create in case it gets on your face or on your boats deck.



When your sanding is finished, inspect any areas where loose paint fell or was scraped off, if the bottom is exposed with no more antifouling paint, you likely will need to apply some primer to ensure that the new antifouling paint adheres properly.



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## TIME TO PAINT

Before painting, keep in mind that paint curing is a chemical process that requires certain conditions to be met for proper adhesion and curing:

- The bottom should be prepped appropriately.
- The paint should be compatible for overcoating any products previously applied.
- The hull's temperature (not the air temperature) should be warm enough to satisfy the paint's required specs.
- The paint should be thoroughly mixed or shaken before applying.
- Use of thinners is usually discouraged. Consult your paint's label.



If you have not done so earlier, tape off the waterline to achieve nice and straight paint lines. 1" tape will work for most though you can choose wider tape if you don't trust your control with a paint roller.



As you get ready to paint, thoroughly shake or stir your paint. Many antifouling paints have a high concentration of solids that can settle at the bottom of the can over time. These solids must be well mixed into the paint for it to perform as advertised.

Before grabbing your roller, pour some paint into a cup and grab your chip brush.

Start by painting any areas that will be hard to properly paint with a roller: chines, through hulls, trim tabs, etc. . .

- Brushing paint on to a dry hull makes it much easier to apply and spread around than when applying shortly after using the roller.

When painting with a brush, dip it into the paint and pull one side of the brush against the edge of the cup to control the amount of paint. Quickly transfer the brush to the hull and brush on a thin layer of paint. Having too much paint on the brush while painting the underside of the boat will lead it to quickly drip down the handle and all over your glove and arm.



When finished with the brushing, give the paint in the can another quick stir and pour into your paint tray, taking care not to overfill.

Dip the roller into the paint, then slowly roll the roller forward against the ribbed portion of the tray to ensure an even paint saturation in the nap.



Starting at the boat's centerline and working upward, apply the roller in slow deliberate back and forth motion achieving a thin even coat. Rolling too fast will lead to paint slinging off the roller on to yourself and your topsides. Use an roller extension to reach tight spots.

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Work especially slowly when approaching the waterline to avoid going past your tape line.

- Starting with less paint on the roller in this area can also help achieve a more even coat.
- Immediately stop painting and clean any areas where you mistakenly painted over the tape line. Try a dry rag first, then a rag with a cleaning solvent if necessary.

Be sure to stir the paint in the can before adding more to your tray. This keeps the solids mixed in properly and enhances viscosity making it easier to roll on the hull.

Take note of the condition of your roller as you work along the hull.

- The roller can start to fall apart after a while, or the paint on the roller can thicken preventing it from soaking up an adequate amount of paint, especially if you've taken a break. Dispose of the roller and install a new one as soon as you see this happening.

When finished with your first coat, consult your paint's overcoating guidelines for how long to wait between applying additional coats or splashing the boat for the season.

When finished with your final coat of paint, pull the tape off the waterline, and begin the cleanup process.

- Clean your roller cage with solvent cleaner and dry before storing.
- Roll up your drop cloth from the edges to the center so that any paint or debris stays contained
- Install any hull anodes you've removed.

