

## MAINTENANCE

Occasionally deck fitting leaks may occur due to flexing of the hull and deck, movement or stress on the fitting, or deterioration of the sealant or gasket. The flexing of hull and deck is normal and may occur during racing, sailing in very heavy winds, or upon hauling or launching. These deck leaks can be easily cured by removing the leaking fittings, cleaning the fitting base and deck area thoroughly, rebedding the fitting with a good marine sealant.

A.

### SAIL CARE

No matter which sailmaker you have or what sails you add, there are certain things you can do to prolong their life.

Most sails are cloth and should be protected from rubbing and chafe. This chafe most frequently occurs on spreaders, shrouds, and lifelines. These areas should have padding on them, or your sailmaker can attach chafe patches on the sails themselves. The sails should be checked frequently for small rips or any stitching that appears loose. Sail tape, thread, and sailmakers' needles could prevent a major expense.

Ultraviolet light can break down or degrade the sailcloth. Whenever possible, the sail should be bagged or covered by sailcovers. Sailcovers are available through your local dealer. After use, your sails should be furled or folded. This will ensure that your sails maintain their shape for as long as possible. When the mainsail is furled, the outhaul should be slacked. Also, before furling or folding, the sails should have any salt water hosed off, and they should be dried to prevent mildew formation. Additionally, the battens should be removed when the mainsail is furled.

Excessive "flogging" of the mainsail or jib is the greatest cause of sail damage. Avoid "flogging" the sails whenever possible.

When the jib is furled, be sure to furl it with the acrylic sun cover to the outside. If you install a furling jib, be sure to furl it with the acrylic sun cover to the outside. Be sure to wind it tightly so that the cover completely covers the sail. Also, ease the jib halyard when leaving the boat for a week or more to ease tension on the luff.

## B. INTERIOR MAINTENANCE

While your O'DAY sailboat is designed to be as maintenance free as possible, there are certain chores which must be performed periodically in order to keep the boat clean. Much of this work can be done in fairly short order and should be done on a bright, sunny day, in order to ventilate the boat and air cushions, curtains, etc.

### 1. CURTAINS

The curtains should be washed once or twice a year in order to prevent dirt and grease buildup, which encourages mildew. The curtains can be easily removed. NOTE: "ACCORDION" TYPE CURTAINS SHOULD BE CLEANED BY HAND, NOT IN A WASHING MACHINE.

### 2. CUSHIONS

The interior cushions are made from several different fabrics and materials. Generally, any upholstery shampoo should be safe for cleaning; but, one should test an area on the cushion back before going ahead with the full cushion. DO NOT DRY CLEAN OR WASH. "Scotchguard" or other fabric protector is STRONGLY RECOMMENDED when the cushions are new and after each cleaning.

### 3. PORTS AND HATCHES

The ports and hatches in your O'DAY 280 have plastic frames and acrylic plastic inserts. The frames should be protected with a good polish and the acrylic "window" should be cleaned with warm, soapy water frequently. DO NOT use abrasive cleaners or solvents. A plastic polish will help protect the ports. Severe scratching can sometimes be reduced with a light duty, automotive rubbing compound and polish.

Once a month the opening port or hatch gasket and gasket contact area should be cleaned thoroughly with soapy water and coated with a LIGHT coat of petroleum jelly or silicone spray. Oil the hinge and dog pins.

### 4. ICEBOX

Clean the icebox after each use with a bleach and water mixture to prevent mildew. Also, leave the icebox lid open, when the icebox is not in use to enable air to circulate.

DO NOT leave standing water in the icebox, as it will promote mildew and accelerate odors.

### 5. SINKS

Stainless steel sinks can be cleaned with any good stainless steel cleaner or with any nonabrasive cleaner. DO NOT use steel wool or bronze wool. A stainless polish will help prevent stains. Molded fiberglass sinks should be cleaned with a nonabrasive cleaner made for fiberglass tubs. A coat of good automotive wax will help maintain the luster of fiberglass sinks and shower surfaces.

B. INTERIOR MAINTENANCE - Continued

6. HIGH-PRESSURE LAMINATE

The high-pressure laminate in the galley, head areas, and countertops can be cleaned with a good nonabrasive cleaner and a soft cloth. Be careful of adjacent teak surfaces. DO NOT set hot pots, plates, etc., directly on the countertop - use a hot pad. Wipe up spills promptly.

7. HEADS/HOLDING TANKS

The plastic seat of the w/c and its china bowl should be cleaned once a week with hot water and soap. BEWARE of using high-strength cleaners in the head, as they may damage the seals in the pump system. Also, one should carefully maintain the rubber valve on the vented loop in the head discharge line. The vented loop is the black plastic device located in the sail locker. This valve on the top of the loop, should be removed, cleaned, and lightly greased to ensure proper function.

NOTE: IF YOU PUMP INTO A FULL HOLDING TANK OR AGAINST A CLOSED "Y" VALVE OR OVERBOARD DISCHARGE VALVE, YOU COULD BUILD UP ENOUGH PRESSURE TO BLOW WASTE THROUGH THE VALVE AND CLOG IT.

A rebuild kit should be purchased for your head, and the head should be disassembled and rebuilt at least once a year. When the head is apart, lightly grease all seals and mating surfaces with petroleum jelly.

Any time there is any problem with the head, be sure and correct it immediately.

Also, due to the length of hose, the vented loop will have standing liquid in it. If the head is not pumped thoroughly, flushing clear water through it, waste may stand in the line. If the "joker" valve in the head is clogged or defective, this waste may flow back into the bowl. Be sure to pump your head thoroughly and keep it in top condition.

8. STOVE

The standard stove supplied by O'DAY is a two-burner non-Pressurized alcohol cooktop. The stove owner's manual explains its use fully. BE SURE TO READ THE MANUAL BEFORE USING THE STOVE.

The stove surface should be cleaned after each use to prevent grease buildup - be sure to let it cool down first. At least once a month, the stove should be removed and the surrounding area cleaned. Grease buildup in this area can be considerable and can be a fire hazard.

The proper fire extinguisher should be kept within handy reach of the stove. Be sure you understand the fire

B. INTERIOR MAINTENANCE - Continued

8. STOVE - Continued

extinguisher's operation, and be sure the extinguisher is recharged at the recommended intervals.

The following precautions refer to ALL types of stoves. Refer to your owner's manual for the specific instructions for your stove.

- A. Always close all stove and fuel valves, when the stove is not in use.
- B. Never leave a lit stove unattended.
- C. Never leave pots on a hot stove.
- D. Use extreme caution, when lighting the stove.

10. TEAK

Your interior teak was oiled at the factory. The vertical bulkheads, drawer fronts, handrails, trim, etc., were done with teak oil. The teak and holly sole was varnished. Oil and varnish manufacturers change periodically, so no one manufacturer can be recommended. Most oils are compatible, but, again, we recommend that you test for compatibility in an inconspicuous area. Wear areas should be oiled or varnished quickly. Follow the manufacturer's recommendations.

BE SURE TO HAVE ADEQUATE VENTILATION WHEN USING ANY CLEANERS, OILS, PAINTS, VARNISHES, ETC.

11. BILGE

Dirt from sweeping crumbs, etc., should not be swept into the bilge, as it may clog or jam the bilge pump strainers. At least twice a season, the bilge should be cleaned using one of the commercially available bilge cleaners and a scrub brush. Empty the bilge after you clean it, using the MANUAL bilge pump as it will pass particles which may be stirred up easier than the electric pump. Don't forget to clean the separate bilge area under the engine. Sponge the bilge dry.

12. GENERAL

When leaving the boat for any period of time, be sure to raise the covers of lockers, prop up cushions, leave doors open, and generally make all of the areas of the boat accessible to a smooth-air flow. This will help prevent mildew and "musty" odors in a boat that is closed for a long period.

## C. EXTERIOR MAINTENANCE

### 1. GELCOAT

The best thing that can be done for gelcoat is to regularly wash it with detergent and water. Do not use an abrasive cleaner on gelcoat smooth surfaces, as they will scratch and dull them and may scratch them enough to allow water under, which could cause a blister. Secondly, the hull and all smooth surfaces (avoid the nonskid or places where you might step) should be thoroughly waxed at least twice a year with a good fiberglass wax. Please note that if you use a silicone wax, it may make it very difficult to do good fiberglass gelcoat repairs or to paint the boat, as the silicone gets into the gelcoat and prevents adhesion of paints and gelcoat.

Gelcoat repair can be easily done by an owner, but GOOD gelcoat repair requires an expert. We recommend that, unless you are very experienced in gelcoat repair, you leave these repairs to an expert. Your O'Day dealer should be able to assist you in this. Remember, keep your boat clean and wax it twice a year, and you will prolong the life of your gelcoat. Gelcoat patch kits are available from The O'Day Corporation. Contact the Parts Department or your dealer.

### 2. MAST AND BOOM

Your mast and boom are made of a special marine aluminum that has been anodized for corrosion protection. Halyards, lines, etc., should be kept from chafing on the mast or boom for long periods, as it could remove the anodizing. Once a year the mast and boom should be waxed with a good paste wax for added protection.

Ideally, the spar should be removed from the boat once a year, so that close examination can be made of all fittings, tangs, sheaves, pins, etc. At this time, the spar should be waxed and all moving parts lubricated. Check carefully for worn parts.

### 3. RUNNING AND STANDING RIGGING

Your running rigging is made of either low-stretch dacron line or stainless steel wire or both. The sheets, reef lines, and halyards are dacron. All this running rigging should be thoroughly inspected for chafe at least twice a year. This inspection is especially important on halyards that sit in the same place constantly while the sail is hoisted.

All sheets and halyards should be washed once a year to prolong their life by removing dirt and salt from the fibers. The sheets and reef lines should be coiled tightly and can be washed in a heavy duty washing machine with mild soap. The halyards can be messengered (tie thin string to one end) and removed from the mast, coiled, and placed in a cloth bag and washed as the sheets.

C. EXTERIOR MAINTENANCE - Continued

3. RUNNING AND STANDING RIGGING - Continued

The standing rigging should be inspected once a month. All swage fittings should be inspected for cracks, and the wires should be checked for broken strands. All cotter pins, clevis pins, and turnbuckles should be checked also. REMEMBER, THE STANDING RIGGING SUPPORTS THE MAST AND SHOULD BE GIVEN CAREFUL ATTENTION.

Turnbuckles should be checked to see that they have sufficient threads exposed and that cotter pins are in place. The cotter pins in the turnbuckles should be taped to prevent snagging. Additionally, the threads should be cleaned and lubricated once a year.

The spreaders should be checked to be certain that they both have the same angle. The inboard spreader fastenings should be checked and taped. The spreader tip should be checked to see that it is tight to the shroud and well protected with spreader boots or tape.

Occasionally, new rigging may develop a thin layer of rust near the swages. This is caused by impurities in the dies that form the wire adhering to the wire after the manufacturing process is completed. This oxidation will stop forming after two or three cleanings with a good stainless polish. One way to prevent rust around the swage fitting and to prolong the life of the swage fittings is to lightly heat up the swage fitting and to place a bar of beeswax on the wire just above the fitting. As it melts, the beeswax will run into the swage and seal it.

Remember, ANY defect in standing or running rigging is cause for IMMEDIATE REPLACEMENT of that part.

4. FURLING GEAR

With the sail removed, maintenance of the furling gear is simple. The rod should be cleaned at least once a year with a solvent (paint thinner, etc.) to remove any build up of dirt or grease. Clean the grooves carefully at this time also. Next, the foil should be lightly coated with a good wax to ease hoisting. Don't get wax in the grooves, but rather spray the grooves with a teflon spray.

See the furler owner's manual for additional information.

5. WINCHES, BLOCKS, TACKLES, ETC.

Winches should have a teardown and regreasing at least every six months. Follow the manufacturer's instructions, and only use a high-density winch grease. Check all winch bolts for tightness at least once a month. Hose off the winch with fresh water after each sail.

C. EXTERIOR MAINTENANCE - Continued

5. WINCHES, BLOCKS, TACKLES, ETC. - Continued

Blocks, tackles, and stoppers should be rinsed weekly with fresh water and have a LIGHT spray with a silicone lubricant twice a year. Be sure to check bolt tightness on all blocks, ESPECIALLY turning blocks.

6. LIFELINES, STANCHIONS, BOW AND STERN PULPITS

Do not neglect the turnbuckles, clevis pins, cotter pins, and pelican hooks on the lifelines - check them weekly. Be sure the turnbuckles and pelican hooks have enough thread and are secure. It is not recommended that one hang fenders from the lifelines. A roll under a dock could put a severe enough strain on the fender to bend the stanchion.

Clean the stanchions and pulpits with soap and water periodically. and polish with a good stainless polish. Occasionally, stainless hardware will show some rusting. A couple of polishings should eliminate all problems. Never use steel wool on stainless, as it will leave small pieces of steel, which may cause rusting.

Clean the lifelines with a good soap and water solution to maintain a white look. Be sure to tape any cotter pins at the bow 6pulpit of the lifelines to prevent tearing of sails.

Check all pulpits and stanchions for security. Tighten bolts, as necessary, for security and to prevent leaks.

7. TEAK

We do not recommend letting your teak "go natural," as this may lead to cracking of the wood. When your teak starts to get gray and dirty, it is the time to clean and re-oil. Be sure to wipe up any spilled or excess oil, as it may stain your gelcoat. BE SURE TO HAVE ADEQUATE VENTILATION, WHEN USING ANY CLEANERS, OILS, PAINTS, VARNISHES, ETC.

## BASIC RULES FOR BATTERY CARE AND MAINTENANCE

1. Check liquid level in all cells once every week or two. Add water as required. Bring liquid level to 3/8 inch above top of separators. It is much better to add water in small amounts frequently than to put too much in and flood out the electrolyte, thus causing damage to adjacent wiring and equipment, plus loss of acid.

Generally, the local drinking water in the United States is safe for use in batteries; but to be sure, check with your battery supplier.

ADD WATER ONLY. Add no battery dopes, special liquid, or powders. These are harmful or useless.

2. Before adding water, take a hydrometer reading of one cell. (Don't use same cell each time; change around.) If above 1.225 specific gravity, battery is sufficiently charged. If below 1.225 specific gravity, remove battery for bench charge. If level is too low to read, add water and take hydrometer reading the next day.
3. After adding water, examine hold-downs. Make certain battery is secure. Hold-downs should make a snug fit, but not necessarily the tightest fit, or the container may be forced out of shape. Examine cables and terminals for tightness, corrosion, and wear. Corrosion occurs from the spilled electrolyte getting on metal, other than lead. Lead does not corrode. To remove corrosion, scrape or brush it off. Then immerse the part in an alkaline solution, such as baking soda, in the proportions of one pound soda to a gallon of water. One can tell when all the electrolyte is neutralized by observing when the bubbling stops. Wash with water, dry, and apply a prepared grease available from battery dealers.
4. Examine battery for broken or cracked covers, case, and cracks in sealing compound. If any of the above defects are present, remove battery at once and have repaired. Acid loss from any of the above defects will shorten battery life. Acid escaping through cracked covers or sealing compound will cause corrosion of terminals, cables, carrier, and adjacent parts.
5. Batteries should be recharged if hydrometer reading is below 1.225.
6. DO NOT LEAVE A BATTERY ON CHARGE FOR MORE THAN 48 HOURS. STOP CHARGE when two hydrometer readings recorded two hours apart show no increase, or when terminal voltage readings recorded two hours apart show no increase.

BASIC RULES FOR BATTERY CARE AND MAINTENANCE - Continued

6. Continued

If there is no rise in voltage or specific gravity in a period of two hours, further charging is USELESS and MAY DAMAGE BATTERY BEYOND REPAIR. Have your supplier check battery for possible acid adjustment or repair.

7. On this bench recharge, the specific gravity is expected to read certain values before considered serviceable for continued use. The hydrometer reading should be above 1.260. The full charge gravity when new was 1.270 - 1.290. If battery does not register as above, have your battery supplier inspect it. He may be able to adjust acid or make repairs.
8. In cold weather, do not fill cells with water and let stand without running motor long enough to allow water to mix with acid, as freezing might occur.
9. Spare batteries should be recharged at least every 4 or 5 weeks, in order that the specific gravity may be maintained at 1.240 or above.
10. Use a battery with sufficient ability to carry the connected load.
11. Wash dirt and corrosion off top of battery to eliminate intercell discharge.
12. Neutralize corrosion in battery box by washing with solution of baking soda as recommended in No. 3; rinse with water.
13. The amount of water which is needed by the different cells will be a clue to other problems. For example, if each week the water, which was put in the previous week has been used, it is reasonable to expect that too much charging current has passed through the battery; hence, the voltage regulator should be checked.

All cells in the battery should take the same amount of water. If one cell should take more than the others and does this each week, it would be expected that the container is leaking. Whether the leakage is through the bottom of the container, or from the sides of the container, can be determined by examination.

## GASKETS

In our constant effort to upgrade and eliminate potential problems, we have started to use a gasket under the deck hardware to reduce leaking problems. These gaskets do not require large fastener pressures to do their job. If leaking occurs, try just a small (1/2 turn) to the fasteners. Under no circumstances should the fasteners be tightened until the gaskets "ooze" out from under the hardware. At the factory we have also bedded the gasket in silicone sealant.

If there are any questions relative to the above, please do not hesitate to contact us.

## WINTERIZING YOUR BOAT

If you keep your boat in a colder climate, you will probably haul it out. At this time the boat should be "winterized." Winterization comprises a multitude of items (See Periodic Maintenance Schedule) that you can do to your boat to make it easier to re-commission it in the Spring. Obviously, this is an "ideal" list, but there are items here that must be done.

### A. EXTERIOR

1. Remove all slime and growth when the boat comes out of the water.
2. Wax the hull.
3. Remove the mast, remove spreaders and rigging. Messenger all halyards. Take all halyards, sheets, etc., home and wash them. Wax the mast and spreaders. Remember to label everything - it's amazing how your memory will fade by Spring.

### B. INTERIOR

1. If possible, remove EVERYTHING loose. Take it home, eat the food, clean the cushions, sort out all the stuff, and throw away all the junk. Clean everything up.
2. Prop up the bunk tops to allow air to circulate. Open all drawers, doors, etc., a crack to allow air in.
3. If possible, put a light bulb or two in the boat. Drop lights work fine. Use a low wattage 25 or 40 watt bulb. This will keep the interior slightly warm and promote air circulation. Be sure to tie off the light so it does not tip over or hit anything.
4. Empty the bilge and swab it clean and dry. Do not forget the engine bilge.

### C. WATER SYSTEM

1. Empty the water tanks as much as possible. (There will always be a small amount of water left.)
2. Add a potable water antifreeze, sold in marine and RV stores (do not use ordinary antifreeze, it is poisonous), to your water tank and a small amount of water. Pump this water antifreeze mixture thru the water lines to all faucets. Don't forget to pump some from both tanks, if your boat has two.
3. Close the sink drain thru hulls, or plug the sink, if the thru hull is above the waterline.

WINTERIZING YOUR BOAT - Continued

F. OPTIONAL INBOARD ENGINE - Continued

9. freeze mixture comes out the exhaust. Do not run the engine dry! Shut down the engine and re-connect the water intake line.
  
10. Put a rag sprayed with CRC or WD40 loosely into the exhaust pipe on the transom. This will keep moisture out of the engine.

G. OUTBOARD ENGINE

1. Take it home and store it in a safe place. Be VERY CAREFUL storing the gas tank, as the gasoline is very flammable.

Finally, cover with a good winter cover and visit once or twice a month to check.

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## PERIODIC MAINTENANCE

The following list of items and their accompanying numbers is in no way intended to be all that should be done to your sailboat. This is only a suggested general list and is not intended to override the individual manufacturer's manual. It also is not arranged in any special order. The numbers are in numerical order and not in priority order. Some numbers and their meanings may also seem redundant, but we feel it is better to be redundant than lax.

ALWAYS FOLLOW THE OWNER'S MANUAL THAT COMES WITH THE ENGINES, HEADS, ETC.

PERIODIC MAINTENANCE SCHEDULE

	End of First Week	Monthly	Winterizing	Remarks
Deck Fittings	5		1,4,5	
Rudder Blade		1	1	
Rudder Connections	6	1,6	1,4,5,6	
Propeller Shaft	1	1	1,4	
Stuffing Box	1,2,5	1,2	1,4	Any excess bilge water may indicate time to lighten or repack.
Zinc Anode		1	1	Replace at least once a year.
Propeller		1	1,4,5	
Bilges	1	1	1,4,7	
Cockpit Drain	2	2,5	2,4,5,7	7 Some cockpit hoses have low points that hold water.
Thru Hull Valve	1,2,3	2	1,4,6	
Pumps	1	1,2,5	1,4,5,7,8	
Water Tanks	2	2	1,4,7	
Piping, Fresh Water	2	2	1,4,7	
Lighting			1,3,4	3=WD-40 or CRC
Battery	1	1,4	1,4,8	4=Clean with baking soda & water solution.
Battery	1	1,4	1,4,8	4=Clean with baking soda and water solution

PERIODIC MAINTENANCE SCHEDULE - Continued

	End of First Week	Monthly	Winterizing	Remarks
Water Filter		1,2,4	1,4,7	I/B Engine
Fuel Filter	1,5	1,5	1,4,5	4=Outside only/I/B
Air Filter	1	1,5	1,5	I/B Engine
Exhaust System	1,2,5	1,2,5	1,4,5,7	I/B Engine
Engine Mounts	1,5	1,5	1,3,,5	I/B Engine
Mast, Boom	1,3	1,3,4,5	1,3,4,5,6	
Standing Rigging	1,5	1,4	1,3,4,5,6	
Running Rigging	1	1,3,4	1,3,4,5,6	
Winches	1,5	1,3,4,5	1,3,4,5	
Engine Alignment	1,2	1,4,5	1,4,5	Disconnect coupling before hauling.
Hose Clamps	5,	1,5	1,3,4,5	Do not over- tighten.
Chainplates	1,2,5	1,2,4,5	1,2,4,5	Rebed at least twice a year.
Bilges	Check daily - more often, if the boat is leaking.			
Stoves	1,5		1,4,5	
1. Check condition			5. Check tightness	
2. Check water tightness			6. Grease	
3. Lubricate			7. Drain and/or antifreeze	
4. Clean with fresh water			8. Disconnect (see note)	

NOTE: OBVIOUSLY DISCONNECTION OF SOME ITEMS SHOULD ONLY BE DONE  
IF THE BOAT IS STORED OUT OF THE WATER.