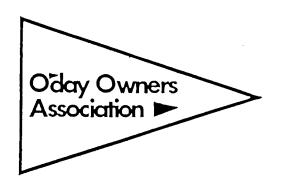
#### O'DAY 240

BOAT'S NAME
HOME PORT
REGISTRATION NUMBER
OWNER'S NAME AND ADDRESS
RADIO CALL NUMBER
SAIL NUMBER
SAID NOMBER
HULL IDENTIFICATION NUMBER
KEY NUMBERS
VEI HOMBERS
ENGINE SERIAL NUMBER

1-7-88



Dear O'Day Owner:

Congratulations on your purchase of a brand new O'DAY sailboat. We hope it will bring you years of carefree enjoyment.

Please take time to review all the contents of this owner's packet. There is much useful and valuable information included.

Perhaps the most important item is your warranty card. Please be sure to fill it out and return it <u>TODAY</u>...no postage is necessary. In return, <u>ONE</u> free O'Day Tee-Shirt will be sent to you. If your Warranty Card has been removed from the owner's packet or been lost, please contact The O'Day Corporation at 848 Airport Road, Fall River, MA, 02720, 508-678-5291, and we will send you a replacement. We wish to impress upon you, the owner, the importance of the Warranty Card.

- 1. It registers your boat under your name in our files. This will allow us to contact you directly, if any factory retrofits or repairs are necessary this could be <a href="VERY IMPORTANT">VERY IMPORTANT</a> to you.
- 2. The U. S. Coast Guard requires us to keep a file, so that we may notify owners in case of a major recall. This file can only be accurate if we have your address. Otherwise, we must attempt to contact you through your dealer.
- 3. It automatically enrolls you in the O'DAY Owners Association, which includes all owners of O'Day sailboats from 12 to 40 feet in length. A free newsletter, which includes tales of adventure, race results, photos, tuning maintenance tips, plus announcements of new products is published three times a year. This is your newsletter, and we welcome your ideas and suggestions at any time. The Association also conducts rendezvous where owners can get together for social activities, casual racing, and good times.

Fair winds and smooth sailing,

7-11-88

#### IMPORTANT SAFETY INFORMATION

Sailing is wonderful recreation, but it is important that you take certain simple safety precautions.

The following are some of the more important boating safety precautions. We discuss most more fully later on in this booklet, but put them here for your quick review.

- 1. <u>LEARN TO BE A GOOD SAILOR</u>. It takes time and, often, thorough instruction to learn to be both a safe and effective sailor. Unless you have already received instruction, you should attend the classes in your area or take a home study "Skipper's Course." Write your nearest Coast Guard or local U.S. Power Squadron office for further information.
- 2. DANGER OF LIGHTNING AND ELECTRICAL POWER LINES. If your boat is struck by lightning or if the mast or rigging makes contact with an electrical power line, you may be seriously burned or killed. Even though your O'DAY boat has a lightning ground system which complies with industry standards, this still MAY NOT protect you if lightning should strike the boat and WILL NOT protect you if the mast hits an overhead power line. To best protect yourselves from these hazards:
- (a) Check the weather forecast before going sailing; if thunderstorms or lightning is predicted, do not go out.
- (b) If you are out and find that lightning is present in your area, stay as far away as possible from the mast, boom, standing rigging, and all other metallic objects. These are all electrical conductors, which will carry electric current and cause severe shock, injury or death. Seek shelter as soon as possible.
- (c) When launching your boat, stepping the mast, and when sailing, be very careful not to allow the mast or rigging to touch any overhead wire. BEWARE OF ALL OVERHEAD WIRES; high-voltage power transmission lines are usually not insulated and frequently look very similar to overhead telephone lines, yet they carry lethal currents. Consult nautical charts for the areas where you are sailing to make sure that there are no electrical lines which are hanging low enough that they might touch your mast or rigging. Know how the top of your mast stands from the water so that you will know whether you will pass safely beneath electrical power lines.
- 3. <u>SAFETY ACCESSORIES</u>. Never use your boat without carrying all of the required safety accessories, such as fire extinguisher, distress signaling equipment, and personal flotation devices.

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- 4. FLOAT PLAN; WEATHER. Leave a float plan (giving details on where you are going, with whom, and when you plan to be back) so that you can be located and so that someone will know if you are overdue and be able to start a search for you. Carefully check the weather before you go out and periodically during your sail. No matter how well designed any boat is, there are weather conditions which it cannot withstand. While your boat has been designed to be self-righting under most circumstances, this does NOT mean that your boat will always right itself if capsized. Wet sails or rough weather conditions might even prevent this. Furthermore, exposure to cold water for even a few minutes or to warm water for a longer period of time can cause hypothermia (a decrease in the body's temperature) and be fatal. Make sure you know what weather conditions you are going to encounter and that you are well trained in bad-weather seamanship, in case the weather changes unexpectedly.
- 5. REFUELING. Exercise extreme care when refueling your boat. (See Fueling Procedure.) You could cause an explosion or fire, which could badly burn or kill you. Be sure to exhaust all fuel vapors and personally sniff to make sure there is no odor or fuel in bilge and engine areas before starting your engine. Never take a lighted match or work with an open flame (for example, a blow torch) in or around the fuel storage compartment, because even a low level of vapors may be present and catch on fire or explode. Clean up all fuel spills immediately.
- 6. <u>IMPAIRED CAPACITY</u>. Do not operate your boat while under the influence of alcohol or drugs. Check with your physician with regard to prescription medicines.

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#### BACKGROUND INFORMATION

The O'DAY 240 represents one of the best values in today's sailboat market. The design and construction of this boat reflect over twenty years of experience and knowledge gained in the building of over 60,000 boats.

Drawing on this experience and information gathered from sailors around the country, C. Raymond Hunt Associates has designed a strong, attractive and comfortable boat, which will provide many years of sailing pleasure. Hunt Associates is a well-known design firm whose credits include custom and production power boats, the original Boston Whalers, IOR racing yachts, police, and pilot boats, as well as a string of successful production sailboats for O'Day and Cal.

The O'Day Corporation chooses to utilize an outside design firm, even though it would be more economical to use an in-house naval architect. Due to a lack of outside influences, an in-house designer often tends to stagnate and will sometimes produce the same design over and over. An independent naval architect has to produce new, innovative designs in order to attract new business. The wealth of experience and willingness to innovate that is typical of C. Raymond Hunt Associates, is an expense that many other manufacturers are unwilling to bear. The O'Day Corporation feels that it is well worth the added expense.

This manual is designed to thoroughly familiarize you with the O'DAY 240, while providing a wealth of information on this design in particular and on sailing in general. In the General section, you will find all the boat dimensions and features listed in detail. The Operation section provides further particulars on every aspect of the O'DAY 240, including construction details, operation instructions, and general information. The remaining sections - Commissioning, Maintenance, and Manuals - all contain important information about those aspects of boat ownership.

The O'Day Corporation reserves the right to change specifications without notice, and this manual may not reflect all such changes. Since we are always striving to improve our product, modifications and improvements are constantly in process and, therefore, it is possible that a particular boat may contain features different from those enumerated in this manual. It is impractical to revise this manual for each such modification. It is our policy to make improvements whenever it is appropriate without waiting for corresponding updates in our manual.

Full information on optional equipment may not be contained herein. Contact the option manufacturer or your  $\underline{\text{O'DAY}}$  boat dealer for more information.

Parts orders can be placed through your local O'Day dealer, or by calling 508-678-5291 and asking for our Parts Department.

#### BACKGROUND INFORMATION - Continued

Certain situations may arise where we may refer you to a local ship's store or parts manufacturer for hardware. This will be to insure you the fastest service possible.

PLEASE BE SURE TO READ AND UNDERSTAND THIS MANUAL AND ALL OTHERS INCLUDED WITH YOUR BOAT, BEFORE OPERATING ANY OF THE BOAT'S SYSTEMS. In addition to information contained in this manual, there are certain federal, state, and local regulations pertaining to the safe and legal operation of pleasure craft that you should familiarize yourself with. Local governmental agencies and boating groups can help you become aware of these regulations. Additionally, be sure to read and understand the accompanying safety information sheet.

Have Fun, and Good Sailing!

THE O'DAY CORPORATION

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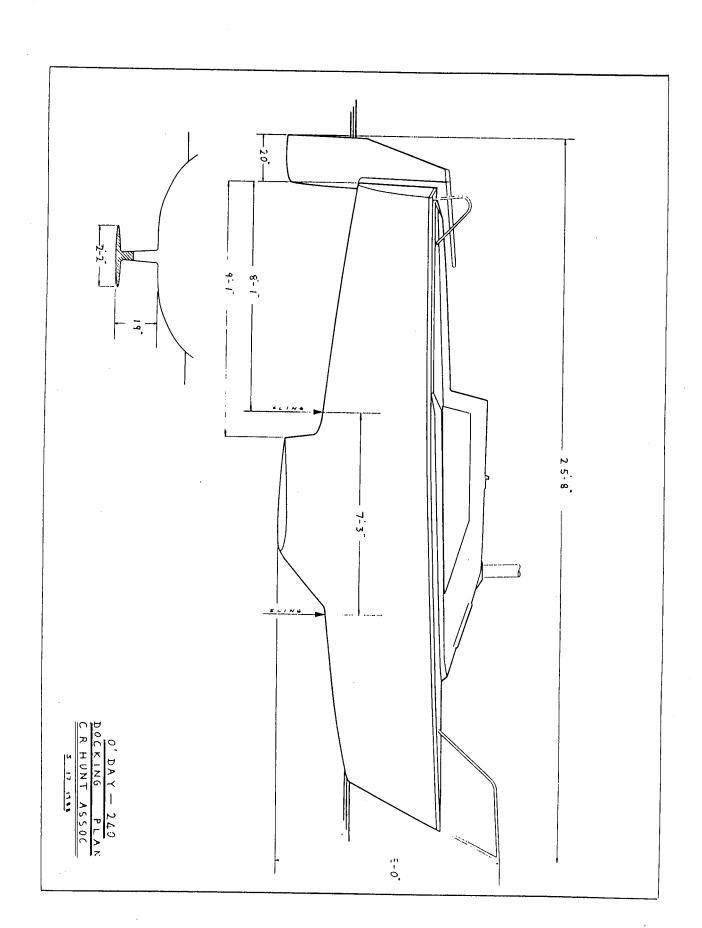
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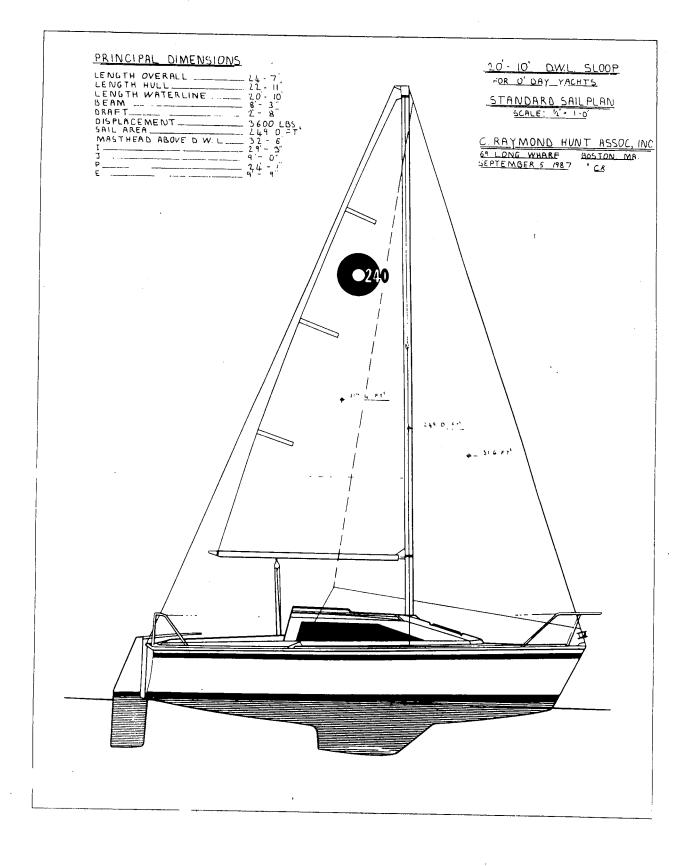
## GENERAL

#### O'DAY 240

#### STANDARD BOAT DIMENSIONS

HULL DIMENSIONS		
Length Overall Length of Hull Length of Waterline Beam Draft Displacement Ballast	24'7" 22'11" 20'10" 8'3" 2'8" 3,600 Lbs. 1,200 Lbs.	7.45 Metres 6.94 Metres 6.30 Metres 2.50 Metres .81 Metres 1,620 Kilograms 540 Kilograms
RIG DIMENSIONS	:	
J P E	29'3" 9'0" 24'1" 9'9"	8.86 Metres 2.73 Metres 7.30 Metres 2.95 Metres
STANDARD SAIL AREA		
Mainsail 130% Genoa Total	117 Sq. Ft. 170 Sq. Ft. 287 Sq. Ft.	10.53 Sq. Metres 15.30 Sq. Metres 25.83 Sq. Metres
Masthead Above DWL	33'2"	10.06 Metres
MISCELLANEOUS		
Berths Fresh Water Capacity Recommended Horsepower	4-5 12 Gallons 6-12	45.60 Litres
Icebox Capacity	50 Quarts	47.50 Litres





GENERAL ARRANGEMENT SEALE (-10 C RAYMOND HUNT ASSOC ASLENG WHARF DESTEN I 10-10 DWL SLOOP 0 DAY 240 \*\*\*\*\* \*\*\*\*\*\* LIZIARETTE 110000 PRINCIPAL DIMENSIONS
LEWATH WALL
LEWOTH WATERLINE
DEATH
DIAMET

Same 5

#### DEALER'S RESPONSIBILITIES

Your O'DAY dealer is a professional. He can provide you with the service and expertise that will help you to enjoy your O'DAY. Rely on him for assistance in selecting any additional equipment you may need and in seeing that it is properly installed.

The dealer will inspect the boat upon arrival at his yard. When the boat is commissioned, he will check all the systems and equipment and correct any problems that may arise. Should there be any defects covered by the O'DAY warranty, the dealer will correct them as soon as possible and file any warranty claims with The O'Day Corporation. All warranty matters must be handled by an authorized O'DAY dealer.

Should you need any parts for your  $\underline{O'DAY}$  product, contact your local dealer, or by calling 508-678-5291 and asking for our Parts Department. The dealer can obtain quick delivery from  $\underline{O'DAY}$ . By utilizing his assistance, you can be assured of receiving the proper parts and of proper installation as well.

The O'Day Corporation assumes no liability for damage incurred in transit.

O'Day

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#### OWNER'S RESPONSIBILITIES

Every O'DAY is covered by our 1-year Limited Warranty (See Limited 1-Year Warranty sheet for further information) for one year after commissioning by the original retail customer, but in no event later than two years from the date of shipment by The O'Day Corporation. Always refer to our Limited Warranty for complete warranty information. Within 30 days of taking delivery of your boat, fill out the warranty registration card and return it to The O'Day Corporation. The U. S. Coast Guard requires that all manufacturers keep records of people who have purchased their products. This is necessary in case a defect notification or product recall is needed. The only way The O'Day Corporation can maintain these files is to have you send in the completed card. If you have any questions or comments, please include these with the card. We will get back to you.

When you sell your O'DAY, please drop us a note with the hull number, your name, and the name and address of the new owner.

It is important that you contact your dealer as soon as possible when problems are noted. This will assure prompt service and prevent the problem from worsening.

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#### SAFETY NOTE

Due to the shoal-draft nature of the O'Day 240 and due to The O'Day Corporation's desire to give you as much control as possible, the bottom of the rudder is close to the keel bottom. Due to this fact, under certain loading conditions, the rudder may become the lowest point on the boat. EXTREME CARE must be taken under these conditions to avoid grounding or other impact, which could cause rudder damage.

Additionally, care should be taken that the rudder and outboard motor propeller do not touch. At certain angles of the rudder and outboard; i.e., with the tiller pushed to port and the outboard tiller pushed to starboard, the rudder and propeller could hit.

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#### (Reprinted by Permission of U.S. Coast Guard)

#### BE PREPARED

Take a Safe Boating Course from the Coast Guard. You can call 800-336-BOAT for information on courses in your area.

Carry all safety equipment required by Federal and State law. Federal requirements are discussed in "Federal Requirements for Recreational Boats" which can be acquired from U.S. Coast Guard Office of Boating, Public, and Consumer Affairs, Washington, D.C., 20593. State requirements will come from your local State Boating Administration. The Coast Guard also recommends: a first-aid kit, a pump or bailer, a transistor or weather radio, extra fuel, a paddle, anchor and line, and extra drinking water, also, if not a requirement, flares.

Get a Coast Guard Auxiliary Courtesy Examination. This is a free, confidential, safety inspection. Call your local Coast Guard Auxiliary for details.

Be familiar with the use of distress signals and PFD's.

#### AVOID FIRES

Handle fuels carefully.

Read the engine owner's manual for proper fuel-system maintenance.

Inspect your engine's fuel system periodically.

Heed fire extinguisher regulations and keep them in good condition.

#### While refueling:

- a. Fill portable tanks on the dock.
- b. Tie the boat securely.
- c. Extinguish cigarettes and all flames on the boat. Turn off all engines and electrical equipment.
- d. Keep the hose nozzle in contact with the fuel can or fill.
- e. Wipe up all fuel spillage.
- f. Ventilate the engine and fuel compartment.
- g. Check boat for fumes.

#### FOR SAFE BOATING - Continued

#### BEFORE GETTING UNDERWAY

Leave a float plan: An example of a float plan follows:

Check the weather: Do not venture out if the weather threatens.

#### WHILE UNDERWAY

PFD's should be worn by children and non-swimmers AT ALL TIMES. EVERYONE SHOULD WEAR THEM, IF CONDITIONS BECOME HAZARDOUS.

Do not operate a boat if <a href="INTOXICATED">INTOXICATED</a>, <a href="FATIGUED">FATIGUED</a>, or <a href="STRESSED">STRESSED</a>. These human factors cause 50% of all boating accidents.

Keep a good lookout: This is especially true of sailboats. Keep a watch to leeward <u>UNDER</u> the headsail.

Keep away from swimmers, divers, and skiers.

Obey State and Federal laws. Know your local laws and "rules of the road."

Respect bad weather: Try to get to shore, if the weather turns bad. Get and carry a radio with a NOAA "weather band" on FM 162.40-162.55MHZ.

#### IF TROUBLE OCCURS

Radio for help. Use the emergency VHF Channel; i.e., 156.8MHZ.

Put on PFD's immediately.

Stay with the boat. In cold water, huddle together to prevent hypothermia.

#### FLOAT PLAN (See next page.)

Make copies of this page and use one before each trip. Fill it out and leave it with a reliable person, who will notify the Coast Guard or other rescue organization, if you fail to return on time. DO NOT FORGET TO CANCEL THE FLOAT PLAN UPON YOUR RETURN.

#### COMING ABOARD

Here's	a check list approach for your crew: (Not necessarily in of importance.)
	Check bilge for excessive water.  CHECK WEATHER CONDITIONS AND TIDES.  Check food supply.  Foul weather gear.  Linen, sleeping bags.
	Fuel.
	Water.
	Sun screens and sunglasses.
	Tools.
· · · · · · · · · · · · · · · · · · ·	Docking and anchor gear.
	Check radio operations.
	Navigation charts and instruments.
	FLOAT PLAN TO A FRIEND OR COAST GUARD.
	Fuel for stove.
	Cooking and eating utensils.
<del></del>	Check battery water level. Engine oil level.
	Check for loose electrical connections on engine.
	Doors and drawers secured.
· · · · · · · · · · · · · · · · · · ·	Check rudder and tiller. Inspect pintles and gudgeons.
	Check mast for rigging irregularities and tightness.
	Halyards and sheets are clear and ready to run.
	No lines or other obstructions near the propeller or bow.
	Anchor ready to run.
	Check lifelines for tightness.
	Turn on fuel and water lines.
	Stow all loose gear.

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#### GOING ASHORE

	Sails dry and stowed.
	Fuel lines and water lines turned off.
	Bilge pumped dry.
<del></del>	Wallet, jewelry, and other valuables are not left onboard.
	Charger on (if applicable).
· · · · · · · · · · · · · · · · · · ·	Hatches and ports locked.
	Topsides clean.
	Appropriate thru-hull valves closed.
<del></del>	Clean interior of food and rubbish.
<del></del>	Fenders in place.
	Halyard secured away from mast.
	Dock lines secured.
	Loose gear stowed.
	Sails furled and covered.
	All covers in place.
	Main companionway locked.
	CHECK IN WITH WHOMEVER KEPT YOUR FLOAT PLAN.
1-7-88 O'Day 2	

#### FLOAT PLAN

Description of Deck Color Make	Boat: TypeStripe ColoOther Disti	r Hull Reginguishing Mark	Color stration #
Persons Aboard Name	NumberAg	eAddres	s & Phone
Vame	Ag		s & Phone
Name	Ag	e Addres	s & Phone
Engine Type	н.	P	Fuel Capacity
Safety Equipments Elashlight Raft or Dinghy	nt: PFD's	Flares	MirrorEPIRB
Radio	Туре	Frequ	encies
Prip Expectation of the Expectation of the Expectation of Event and in no event	Dns: Leave at _	Expect to ret	rom
automobile Lice Color and Make	ense No of Car	St	ate arked at
If not returned	l by	, call t	he Coast Guard or
Dhana Numbana			-

#### COMING ABOARD

nere's a check list approach for your crew: (Not necessarily order of importance.)	in
Check bilge for excessive water.  CHECK WEATHER CONDITIONS AND TIDES.  Check food supply.  Foul weather gear.  Linen, sleeping bags.  Fuel.  Water.	
Sun screens and sunglasses.	
Tools.	
Docking and anchor gear.	
Check radio operations.	
Navigation charts and instruments.	
FLOAT PLAN TO A FRIEND OR COAST GUARD.	
Fuel for stove.	
Cooking and eating utensils. Check battery water level.	
Check battery water level.	
Engine oil level.	
Check for loose electrical connections on engine.	
Doors and drawers secured.	
Check rudder and tiller. Inspect pintles and gudgeons. Check mast for rigging irregularities and tightness.	
Halyards and sheets are clear and ready to run.	
No lines or other obstructions not the	
No lines or other obstructions near the propeller or boy Anchor ready to run.	Ν.
Check lifelines for tightness.	
Turn on fuel and water lines.	
Stow all loose gear.	

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#### GOING ASHORE

	Sails dry and stowed.
	Fuel lines and water lines turned off.
-	Bilge pumped dry.
	Wallet, jewelry, and other valuables are not left onboard.
	Charger on (if applicable).
	Hatches and ports locked.
	Topsides clean.
	Appropriate thru-hull valves closed.
	Clean interior of food and rubbish.
	Fenders in place.
	Halyard secured away from mast.
	Dock lines secured.
<del> </del>	Loose gear stowed.
	Sails furled and covered.
<del></del>	All covers in place.
	Main companionway locked.
	CHECK IN WITH WHOMEVER KEPT YOUR FLOAT PLAN.
1-7-88	

#### GLOSSARY

AFT - in the neighborhood or direction of the stern.

BATTEN - A thin wooden or plastic strip placed in a pocket in the leech of a sail to help hold its form.

 $\underline{\text{BLOCK}}$  - Pulley consisting of a frame in which is set one or more sheaves or rollers. Ropes are run over these rollers.

BOOM - Spar at the foot of the mainsail.

BOOM VANG - Tackle secured to the bottom of the boom about 3' aft of the gooseneck. The other block attaches to an eye at the base of the mast. The vang's purpose is to keep the boom steady and horizontal while sailing.

BOW - The forward part of a boat.

CENTERBOARD - A keel-like device that can be hoisted or lowered in a trunk that acts as a keel in some shoal-draft boats.

CENTERBOARD PENDANT - Line used to raise and lower centerboard.

CHAINPLATES - Strips of metal fastened to the boat's hull or deck
designed to take the stress of stays.

CLEAT - A fitting to which ropes are made fast.

<u>CLEVIS PIN</u> - A small stainless steel pin that has a hole in one end for a cotter pin and is used to secure stays to chainplates and mast fittings.

CLEW - The aftermost lower corner of a sail.

 $\frac{\text{COCKPIT}}{\text{occupants}}$  - An open area lower than a boat's deck where the

COTTER PIN - A straight or circular split metal pin used to hold a clevis pin in place.

DOWNHAUL - A device used to tighten the luff of a sail.

FAIRLEAD - An eye used to lead line in the direction desired.

FOOT - The lower edge of a sail.

 $\frac{FURLING}{mainsail} \frac{GEAR}{to}$  - A mechanical device which allows the jib or mainsail to be rolled up on its stay or spar for stowing.

GOOSENECK - A metal device that secures the boom to the mast.

12-22-87 C-O GLOSSARY - Continued

 $\frac{\text{GUDGEON}}{\text{pintle}}$  - A metal socket attached to the transom to receive the pintle of the rudder.

GUNWALES - The upper edge of a boat's side, where it meets the deck.

HALYARD - A line for hoisting (or raising) the sails.

HEAD - The upper corner of a sail.

HEADBOARD - The fitting at the head of a sail with a hole in it to receive the main halyard.

 $\frac{\text{HEADSTAY}}{\text{headstay}}$  - The foremost stay on a sailboat. A jib is set on a

HULL - Main body of a boat.

JIB - A triangular sail set forward of the mast.

<u>JIB SNAPS</u> - Small fittings that are attached to the luff of a jib, which secure the jib to the headstay.

 $\underline{\text{JIBE}}$  - The action of the mainsail when shifting from one side of the boat to the other, when heading down wind.

JIFFY REEFING - (See Reefing.) A quick method of reefing the mainsail, sometimes with one line.

LAZY JACKS - Light lines running from the mast to the boom. Their purpose is to contain the mainsail when it is lowered and to support the boom.

LEECH - The after edge of a sail.

LEEWARD - Away from the wind.

LINE - The common expression for a rope in use.

LUFF - The forward edge of a sail.

MAINSAIL - The principal sail on the main mast.

MAINSHEET - The line used to trim a mainsail.

 $\underline{\text{MAST}}$  - An aluminum tube designed to stand on end so as to support a boom, plus one or more sails.

MASTHEAD - The top of the mast.

MASTHEAD FITTING - The fitting at the top of the mast.

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C-0

GLOSSARY - Continued

 ${{{MAST}\over{position}}}$  - A metal fitting that holds the base of the mast in

 $\underline{\text{OUTHAUL}}$  - A line used to haul the clew of a sail out to the end of the boom.

<u>PINTLES</u> - Pins on the forward side of a boat's rudder, designed to rest in and pivot on the gudgeons secured to the transom.

PORT - The left side of a vessel facing forward.

REEFING - To reduce a sail by rolling or folding up part of it.

RIGGING - The wire supporting the spars is called standing rigging (stays or shrouds) and the ropes used in setting and trimming sails are known as running rigging (halyards and sheets).

 $\frac{\text{ROLLER}}{\text{rolling}}$  - A means of reducing sail on a main or jib by rolling the sail around a rod or wire.

RUDDER - A vertical plate attached to the stern of a boat, used in steering it.

SELF-RESCUING - A feature which enables the crew to right and sail away a boat which has capsized.

 $\frac{\mathtt{SHACKLE}}{\mathtt{ends.}}$  - A U-shaped piece of metal with a pin across the open

SHEET - A rope used to trim a sail.

SHROUD - Same as a stay.

SLACK - The opposite of taut. Slack away or off - to pay out.

SLOOP - A one-masted vessel with two or more sails.

SPAR - A mast, a boom, etc.

<u>SPREADERS</u> - Aluminum tubes that project from a mast in a traverse direction in order to keep a stay at proper tension and to help hold the mast erect.

STARBOARD - The right side of a boat, facing forward.

STAY - A length of wire used to support a spar.

 $\underline{\text{STEMHEAD}}$   $\underline{\text{FITTING}}$  - The fitting nearest the bow on the deck where the headstay attaches.

STEP - To step a mast is to set it in position.

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C-0

GLOSSARY - Continued

STERN - The after part of a boat.

TABERNACLE - A fitting designed so that the mast can be lowered when passing under obstructions; also facilitates stepping and unstepping the mast.

TACK - The lower forward corner of a sail.

TILLER - A piece of wood connected with the rudder head. By this the rudder is moved as desired.

TOPPING LIFT - A wire and/or rope that attaches to the top of the mast and fastens to the end of the boom. Its purpose is to hold the end of the boom up when the mainsail is lowered.

 $\overline{\text{TRIM}}$  - To trim sails. To put them in correct relation to the wind by means of sheets.

TRUNK - A centerboard housing.

TURNBUCKLE - A device used to maintain correct tension on rigging.

WINDWARD - Toward the wind.

12-22-87 C-0

# CUMMISSIUNING

### COMMISSIONING

#### COMMISSIONING

Your O'DAY dealer will supervise the commissioning and testing of your new boat. His knowledge and experience will insure that all systems and components will function properly when the boat is delivered to you. Please be sure to go over all systems with him, so that you understand their operations and safety features.

We have included some guidelines and instructions in this section to aid you and your dealer.

1-5-88 O'DAY

#### PRE-LAUNCH CHECK LIST

1.	All thru-hull valves operational, closed and tightened.	
2.	Optional battery secured, filled, and charged.	
3.	Rigging installed on spar; cotter pins spread and taped.	
4.	Masthead sheaves free to rotate; lubricated.	
5.	Mast lights working.	
6.	All required safety equipment on board.	
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NOTE: THIS IS A BASIC PRE-LAUNCH CHECK LIST. THERE ARE MANY OTHER ITEMS WHICH CAN BE AND SHOULD BE CHECKED BY THE COMMISSIONING PERSONNEL.

1-7-88 O'Day 240

#### POST-LAUNCH CHECK LIST

1.	All thru-hull valves open and water tight.	
2.	Mast stepped and rigging tight.	
3.	Chainplate rods tight.	
4.	Turnbuckles attached; cotter pins spread and taped.	
5.	Boom and running rigging installed.	
6.	Rudder and tiller operational; all nuts tight.	
7.	Rudder pinned.	
8.	Water tank filled.	
9.	Faucets work and lines checked for leaks.	
10.	Optional alcohol stove filled; system checked for leaks	
11.	Electrical equipment operational.	
12.	Manual bilge pump operational.	
13.	Toilet operational.	
14.	Deck hardware checked for leaks.	
15.	Check all lifeline turnbuckles, pelican hooks, and end fittings for tightness.	
16.	Recheck all thru hulls and hose clamps.	
17.	WARRANTY AND MANUALS DELIVERED TO OWNER.	
18.	WARRANTY CARD SENT TO THE O'DAY CORPORATION.	
1-7-8	88 W 240	

#### LIFELINES AND STANCHIONS

Your lifelines and stanchions contribute to the safety of your boat. Care should be taken to be sure all pins and fittings are secure and that any cotter rings are taped, so that they do not snag sails or other equipment. A monthly check of the turnbuckles, pelican hooks, and connector loops should be made to assure that there is adequate thread on the screw fittings.

If your stanchions have two screws in the base, which hold the stanchion tube to the base, the screws should be checked once a month for tightness.

1-7-88 O'Day 240

#### RIGGING DIMENSIONS

The following table shows the critical dimensions and materials used for the standing and running rigging on your O'DAY. In the event you should need to replace any of the rigging, you can order the materials through your O'DAY dealer. If this is not convenient, this table will allow you or a local rigger to obtain the proper materials. We would strongly recommend actually measuring any standing rigging before replacing, to assure 100% accuracy.

The halyards on your  $\underline{\text{O'DAY}}$  are low stretch Yacht Braid. This material was chosen for its handling ease and durability. Because of the way it is manufactured, it will not stretch as much as normal rope does.

All running rigging should be checked periodically for chafe or damage and replaced when necessary. If excessive wear is noted on running rigging, check all blocks and sheaves to be sure they are free to rotate and are properly aligned.

All standing rigging should be inspected for cracks in the swages, proper installation of cotter pins, and wear on clevis pins. Replace any damaged or suspect rigging <a href="IMMEDIATELY">IMMEDIATELY</a>.

As you may have noticed on some sailboats, the swaged ends of the shrouds will ooze rust and in severe cases the swage will split. One way to prevent this problem is to lightly heat up the swaged section and place a bar of beeswax against the 1 x 19 stainless steel wire. As it melts, the beeswax will run into the swaged section, sealing it from the elements.

Your jib furling gear is manufactured by an outside supplier and furnished to O'DAY. Please call the manufacturer for any parts and refer to your manual or consult your dealer with any questions.

9-3-87 O'Day

# STANDING RIGGING SPECIFICATIONS

# O'DAY 240 WITH ISOMAT SPARS

EXTRA	OS NG I B&E 5/16 NOT IN PCL 4" Head to Hole		· ·	
FITTING B	7854-5-8-8	7854-4-8-8	7854-4-8-8	7854-4-8-8
FITTING A	5262-005	Stemball with 9 x 19 & 26 x 11	Stemball with 9 x 19 & 26 x 11	Stemball with 9 x 19 & 26 x 11
PCL	29' 11 1/2" 2*	31'9"	29' 6 3/4"	15′9"
SIZE/CONST	5/32"	5/32"	5/32"	5/32"
TITLE	Headstay	Backstay	Cap	Ď1

<sup>1\*</sup> Changed as a result of stepping

With Hull Number 60 3-17-88

<sup>2\*</sup> Changed per letter 3-3-88

RUNNING RIGGING SPECIFICATIONS

# O'DAY 240 WITH ISOMAT SPARS

T-Lift Tail	T-Lift	Jib Sheet	Main Sheet	Main Halyard	TITLE
1/4"	1/4"	3/8"	3/8"	3/8"	SIZE
LS-WHITE	LS-WHITE	LS-BLUE	LS-RED	ULS-RED	TYPE
15'	24'	52′	39'	70'	LENGTH
SH 93-42	EYE	WHIP	EYE	OS 6553	A END
BURN	EYE	WHIP	WHIP	WHIP	B END
		ONE			EXTRA INFO

With Hull Number 60 6-1-88

#### WIRE RIGGING

Damage to wire rigging, even imperceptible nicks, can substantially reduce the strength of the wire. Such damage can lead to sudden and unpredictable rigging failure, loss of the mast and possible injury to occupants.

Accordingly, it is good practice to have your rigging regularly inspected by a professional rigger. In addition, you should carefully inspect the full run of all stays at least twice each year. Special attention should be given to the swage areas and any area that is subject to wear or damage, such as the headstay where the spinnaker pole may hit, or the spreader tip area.

If there is any damage or deterioration, such as broken strands or nicks, or if there is any question as to the condition of a piece of rigging, replace the rigging immediately.

9-2-87 C/O

#### TO RIG THE MAST

#### STANDING RIGGING

First, lay the mast and boom on two or three sawhorses, being careful to support them well. Next, remove the protective plastic wrapper from around both being careful not to scratch the mast or cut any lines tied to the mast or boom. The spreaders should be taped to the mast - remove them. Clean the mast thoroughly with soap and water. Apply a good coat of wax to the mast and spreaders. Now is the time to check all sheaves for free movement and check all mast areas for sharp edges which should be smoothed out.

The standing rigging is in the rigging box and consists of:

- 1 Headstay
- 1 Backstay
- 2 Upper Shrouds
- 2 Lower Shrouds

Untape the rigging, and identify each piece. Lay the rigging out straight. The bottom end of each piece of rigging has a turnbuckle at the lower end. Remove the cotter pins from the turnbuckle and unscrew the turnbuckle body from the wire. BE  $\underline{\mathtt{BE}}$ not to lose the round washer that is loose on the wire from the wire itself. DO NOT remove it. Set the turnbuckle and pins aside. On the top of the mast is a removable plate held down by two screws. Remove the plate, being careful not to lose the screws. On the top of the mast are 4 "cups" cast into the aluminum. These "cups" act as seats for the half-round terminal balls that are on the upper end of the rigging, allowing the rigging to rotate slightly to achieve the correct alignment. Now, insert the headstay in the forward cup, threaded end first. Pull it through until the terminal ball and its washer are seated in the cup. BE SURE that the captive washer is under the terminal ball, or damage to the mast may result. Next, put the backstay through the aftermost hole in the masthead in the same manner as the headstay. Now insert the upper shrouds in each side socket. Bring them out through the slot in the mast about 6" below the masthead. DO NOT cross the shrouds, lead them out the slot on the same side as the socket. Reinstall the mast cap. Finally, install the lower shrouds, as with the other wires, by dropping them through the aft sockets on the spreader bases located half way down the mast. Install the turnbuckles on all shrouds and stays. Leave them nearly all the way open so only the holes show. Now, install the spreaders on their bases by slipping the spreader over the spreader base and putting the clevis pin through from the top. Insert the split ring through the hole in the cotter pin to keep it from falling out. Tape the pin and ring securely. NOTE: Be sure the rubber grommet is inserted in the hole in the spreader base before installing the clevis pin.

# TO RIG THE MAST - Continued STANDING RIGGING - Continued

After the spreader is installed on the mast, remove the screw securing the spreader end cap, remove the spreader end casting and the spreader insert. The spreader insert protects the spreader end from chafe, so it must be in the spreader end before the upper shroud is run over the spreader tip. Run the upper shroud over the spreader tip, making sure it runs over the after most upright of the spreader insert. Next, insert the spreader end cap and re-secure. Finally, install the spreader boot, and tape the spreader tip well to prevent chafe.

You should now install the running rigging in the mast. The running rigging is found in the rigging box and consists of:

- 1 Main Halyard
- 1 Topping Lift
- 1 Topping Lift Pennant (Hull #60 and above)
- 1 Main Sheet
- 1 Jib Sheet

The main halyard should be run through the mast, starting at the masthead, with the messenger provided. Tie the messenger securely to the halyard tail, tape over to provide a smooth surface, then pull through the mast and out the sheave box at the mast base. Tie the ends of the main halyard together securely at the mast base to prevent it from slipping back into the mast.

Next, attach the topping lift to the masthead by removing the stainless steel pin that is in the masthead just forward of the backstay attachment, placing the eye spliced in the topping lift tail over it and replacing the pin.

Attach the masthead light to the masthead. Wire it to the wires coming out the top of the mast.

Finally, assemble the Cruising Design Roller Furling system and install it on the headstay. Instructions for assembly of this unit are found in its box and your owner's packet.

#### STEPPING THE MAST

You should go over the stepping procedure very carefully with your dealer before taking your boat. Be sure you understand how the procedure works, as injury to people or damage to the boat can result from improper procedure.

CAUTION: BE SURE TO ALWAYS CHECK THE AREA YOU ARE RAISING THE MAST IN FOR OVERHEAD POWER WIRES. ANY CONTACT BETWEEN THE MAST AND OVERHEAD POWER WIRES WILL CAUSE SEVERE INJURY OR DEATH.

NOTE: CHECK THE MAST LIGHT FOR FUNCTION BEFORE STEPPING THE MAST.

6-7-88 O'Day 240

## TO RIG THE MAST - Continued STEP THE MAST

Lay the mast on the deck of the boat with the mast base resting on the bow pulpit and the mast track down. Pad the mast at the sliding hatch to prevent any damage to the deck.

Now, attach the backstay to the backstay chainplate. Be sure the backstay leads straight and does not go under any other shrouds. Also, be sure the backstay leads <u>UNDER</u> the stern pulpit. Attach the upper shroud turnbuckle and lower shroud turnbuckle to the chainplate on deck outboard of the cabin. Attach the lower shroud to the inboard hole and the upper shroud to the outboard hole. Again, be sure the shrouds lead fair. <u>NOTE: TO PHYSICALLY STEP THE MAST FOR THE FIRST TIME, YOU SHOULD HAVE AT LEAST THREE ADULTS</u>. As you become more familiar with the procedure, you may be able to do it with two adults. Remove the mast step pins and set them beside the step. Now bring the mast aft until the mast foot is directly over the mast step. Bring the foot down to the step so that the holes in the foot line up with the hole in the aft end of the step. Install the pin and insert the cotter ring.

You are now ready to put the mast up. Once again, check to be sure the backstay, lower shrouds, and upper shrouds are all attached and that they run fair. Be sure the turnbuckles are unscrewed, so that only a small amount of thread is left inside the turnbuckle barrel. BEFORE PUTTING UP THE MAST, CHECK AGAIN FOR OVERHEAD POWER WIRES. Now, have one person take the headstay and pull on it, while the other two people push up the mast, pivoting it on the pin. Be sure to keep the mast straight and not twist it, as you could bend the pin on the mast foot or damage the mast step. The mast should go up smoothly and set flush on the CAUTION: DO NOT FORCE THE MAST! IF IT CATCHES GOING UP, CHECK ALL SHROUDS AND STAYS. CHECK THE TURNBUCKLES TO BE SURE THEY ARE LEADING STRAIGHT. As soon as the mast is up, while one person applies forward tension, attach the forestay to the forward hole in the stemhead fitting. Next, install the forward pin in the mast step and its cotter ring. Now, tighten up all the turnbuckles just enough to take the slack out. Check to make sure all the turnbuckle clevis pins have a cotter pin in them to prevent them from falling out. Next, tighten the headstay, backstay, and upper shroud turnbuckles hand tight. Occasionally, sight up the back of the mast to ensure that the mast is straight. Tighten the lower shrouds just snug. After installing the furling gear, pin all the turnbuckles with the cotter pins provided. Spread the cotter pins well open, and tape them to prevent snagging. NOTE: AFTER A FEW SAILS, THE RIGGING MAY STRETCH SLIGHTLY MAKING RETIGHTENING NECESSARY.

#### INSTALLING THE JIB FURLER

Follow the manufacturer's instructions included with the furler for installation instructions.

6-7-88 O'Day 272 240

# TO RIG THE MAST - Continued ATTACHING THE BOOM

To attach the boom, remove the shackle located at the gooseneck mounted on the mast and take out the vertical stainless steel pin. BE CAREFUL not to lose the several pieces involved. Note how they are installed.

After removing the pin, extract the horizontal plastic cylinder from the black plastic upright. Slide the boom gooseneck jaws over the plastic upright and slide the cylinder back through the boom jaws and plastic upright. Reinstall the stainless pin, being sure the stainless steel washer is on top of the plastic upright. Re-attach the tack shackle to hold the pin in.

#### TO RIG THE TOPPING LIFT (Hull #60 and on)

The standing part of the topping lift was already installed when you rigged the mast. To rig the rest of the adjustable lift, take the topping lift tail from the rigging box. Run the line up, and tie it to the eye in the standing part. Using the messenger provided, pull the topping lift tail through the starboard pulley on the boom end out the gooseneck. Raise the boom to the correct height, and cleat the tail off on the cleat provided under the boom. Do not use the cam at the gooseneck.

#### RIGGING THE MAINSHEET

To rig the mainsheet, take the upper mainsheet block (the one with the line attached) and hang it from the eye on the bottom side of the boom just above the traveler. Now attach the loose fiddle block to the traveler car mounted on the traveler on the bridge deck. Now reeve the mainsheet down, through the upper sheave in the fiddle block from back to front, up through the upper block from front to back, down through the lower sheave in the fiddle block from back to front and through the cam cleat jaws. Tie a stopper knot in the end.

#### TO ATTACH THE RUDDER

On the stern of the boat are two gudgeons into which are inserted the pintles of the rudder. After the rudder is hung on the transom, insert the rudder-lock pin in the hole in the top pintle. This is to prevent rudder loss.

#### TO HOIST OR RAISE THE MAINSAIL

To hoist the mainsail, first insert the battens in their pockets. The battens each fit a different pocket, and you may wish to label them. They slide in against an elastic in the pocket and then lock into the pocket on the leech.

6-7-88 O'Day 240

#### TO HOIST OR RAISE THE MAINSAIL - Continued

Now take the foot of the mainsail, insert it into the slot on the boom, starting near the gooseneck. Slowly feed the sail in until it is fully on the boom. Fasten the tack grommet to the shackle on the gooseneck. Shackle the outhaul line to the outhaul grommet. Note: The Sail May Feed Stiffly at First, But Will BECOME EASIER AS TIME GOES ON, But DON'T FORCE IT. Tension the outhaul line where it comes out below the gooseneck, but do not force "TENSION" LINES INTO IT.

Next, fasten the main halyard to the forward hole in the headboard and feed the luff slugs past the aluminum "GATE" located above the gooseneck. Hoist the sail fully, and cleat the halyard. Move the gate back into place so that the slugs will not come out. Rig the reefing line. (See Jiffy Reefing.) The sail may then be lowered and furled on the boom.

#### TO HOIST AND OPERATE THE ROLLER FURLING JIB

NOTE: THE ROLLER FURLING JIB IS DESIGNED TO GIVE EASE OF SETTING AND FURLING THE JIB. IT IS NOT DESIGNED TO SUBSTITUTE FOR PROPER STORM SAILS.

Install the furling system per the manufacturer's instructions. Install the furling line on the drum in a clockwise manner. Run the furling line back on port side through the fairlead and the stanchion base loops to the cleat aft.

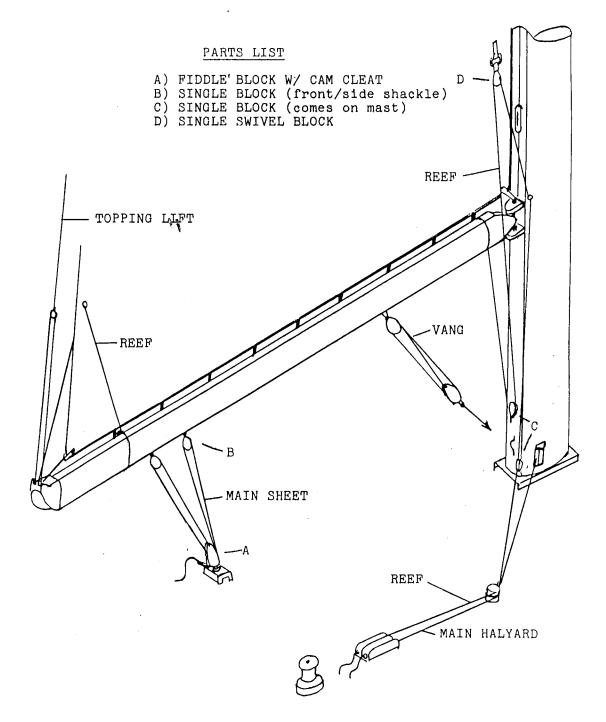
#### HOISTING THE SAIL

To hoist the sail, tie the plain end of the halyard to the head of the jib. NOTE: DO NOT tie the sail to the plastic "traveller" slide or you may damage the furler. Next, hoist the sail be pulling on a messenger line which must be attached to the plastic traveller. Tension the luff of the jib by passing the tension line from the sail tack through the furling drum eye. Store excess messenger line and tension line by wrapping them around the furler throat. BE CAREFUL that there are no loose ends to foul the furler.

For further advice and instructions on hoisting, furling, etc., see your furler owner's manual or contact the manufacturer of the jib furler and see Section H of the Operation Section.

The jib can now be furled by pulling on the furling line. Keep LIGHT tension on one of the jib sheets while furling. BE SURE that both sheets are free to run. IF there is any resistance, STOP pulling the furling line. Furling and unfurling should always be done with the boat facing into the wind. To unfurl the jib, first uncleat the furling line to make sure it is free to run. Uncleat both jib sheets. Face the boat into the wind and pull the leeward jib sheet until the jib is fully unfurled. Then re-cleat the furling line.
6-7-88

O'Day 240



ODAY 240 RIGGING 7/12/88 JPF

#### HOISTING THE SAIL - Continued

We recommend that the plastic furling drum and foil be washed with fresh water at least once a month. We also recommend that the jib be taken down and stowed away, if the boat is left for an extended period.

The jib sheet is attached to the clew of the jib and led aft, outside the shrouds to the block mounted on the track on the side decks, and then to the winch. The block can be adjusted fore and aft to optimize the jib lead.

6-7-88 O'Day 240

#### H. OPERATION OF THE JIB FURLING SYSTEM

The jib furling system on your O'DAY 240 is made by one of the finest sail furling system manufacturers in the world. This unit is designed to allow quick furling of the jib, as well as some reefing of the jib. The 130% genoa is radial cut and has heavier leech and foot panels, which allow it to be reefed. Treated fabric provides UV protection when the genoa is furled. Always be sure to furl the sail with the UV cover on the outside.

#### HOISTING THE SAIL

Please read your furling system installation/owner's manual carefully before hoisting the sail for the first time. The manual is very descriptive on how to attach and hoist the jib. Just be sure that the sail is attached to the free end of the halyard, rather than to the black plastic "traveller".

For the first few hoists, the sail may be tight, but as long as it feeds into the slot freely, it will be okay. For the first feed, have one person feed the sail in while another hoists the sail.

#### TO FURL THE SAIL

To furl the sail, uncleat the furling line and make sure the sheets are clear and free to run. Pull on the furling line, while keeping light tension on the sheets. This light tension on the sheets will insure that the sail wraps tightly. Keep rolling the sail up until the sail is fully wrapped around the furling foil. Take one or two extra turns to wrap the sheets around the sail. This will keep the sail tight. Cleat the furling line. Lightly tension and cleat the sheets. NOTE: IF ANY TENSION OR RESISTANCE to rolling up the jib is felt, STOP IMMEDIATELY AND CHECK THE SYSTEM, furling line, sheets, and aloft. The sail should roll easily at all times. You should not have to winch the sail in!

When rolling up the jib at sea, never try to roll the jib up downwind. Come into the wind, keeping the front one half of the sail luffing. Roll up the sail as above.

Be sure to always furl the jib in the proper direction so the acrylic cover strip is on the outside.

#### REEFING THE SAIL

To reef the sail, proceed as above "furling the sail" except only roll in as much sail as you wish. Then cleat the furling line tightly, re-adjust the sheet lead blocks, and proceed. The sail is marked at 120% and 100% areas for your convenience.

NOTE: THE REEFING ABILITY OF THE 130% GENOA IS A CONVENIENCE, BUT NOT A SUBSTITUTE FOR A PROPER HEAVY WEATHER JIB OR STORM SAIL IN SEVERE CONDITIONS.

#### REEFING THE SAIL - Continued

NOTE: THE GENOA WILL NOT EFFECTIVELY REEF BELOW A 100% JIB.

#### UNFURLING THE SAIL

To unfurl the 130% genoa, release both genoa sheets and make sure they are clear to run. Uncleat the furling line and make sure it is clear to run. Come slightly off head to wind. Pull on the leeward sheet until the sail has come out the desired amount. Recleat the furling line.

NOTE: YOU SHOULD NOT HAVE TO WINCH THE SAIL OUT. IF ANY RESISTANCE IS MET, STOP AND INSPECT THE SYSTEM.

NOTE: THE ONE ITEM THAT CAUSES THE MOST TROUBLE WITH FURLING SYSTEMS IS EXTRA HALVARDS. HALVARDS LED TO THE
PULPIT, LIFELINES, ETC., WILL OFTEN BECOME CAUGHT UP
IN THE HEAD SWIVEL AS THE SAIL IS FURLED OR UNFURLED.
KEEP ALL HALVARDS AS TIGHT AGAINST THE MAST AS POSSIBLE. SPINNAKER HALVARDS SHOULD BE LED OUTSIDE AND
BEHIND THE UPPER SHROUDS AND KEPT TIGHT.

Check the manual from the furling gear manufacturer for further tips and maintenance information.

#### BOAT STORAGE

Whenever a boat is pulled from the water, for work or storage, care must be taken to provide adequate and proper support of the hull. This is especially true of wing-keel sailboats. With wing-keeled boats, it is especially important that the boat be level and that pressure is not placed on one or the other wing "TIP." Pressure on the tip may cause distortion or damage to the keel or hull. We do recommend the use of an O'Day Corporation cradle.

It is  $\underline{\text{NOT}}$  recommended that the weight of the boat be rested solely on the keel. Because of the small area of the keel bottom, the localized loads on the hull in the area of the keel would be severe and could result in permanent damage to the shape or structure of the boat.

If poppets are used for support, they should be located so that the pads are under bulkheads, berth fronts or pan stringers, so that the load is dispersed (see Docking Plan). Failure to properly position the poppets could result in hull depression. Be sure to use an adequate number of supports, and locate them to prevent the boat from tipping fore or aft. A storage cradle designed for this boat is available through your dealer.

When hauling any boats with a propeller shaft, be sure to disconnect the coupling before lifting the boat. This will prevent bending of the shaft, as the boat changes shape when lifted.

Do not careen (lean the boat over on its side) a wing-keel sail-boat. The hull, keel, and rudder should survive any accidental groundings. However, care must be taken to keep the boat as balanced and upright as possible to prevent excessive loads. A wing-keeled boat should not be allowed to "dry out" with the tide. The wing shape may allow an abrupt change of attitude as the boat dries out, causing structural damage and possible personal injury.

DANGER: WHEN YOU ARE HAULING, LAUNCHING, AND SAILING NEAR LOW OVERHEAD WIRE, YOU MUST BE VERY CAREFUL THAT THE MAST NOT TOUCH THE WIRES. THE MAST COULD CONDUCT HIGH VOLTAGE ELECTRICITY TO THE PEOPLE ON BOARD AND CAUSE SEVERE BURNS OR DEATH. THE BOAT'S LIGHTNING GROUND SYSTEM WILL NOT PROTECT YOU FROM THE HIGH VOLTAGE POWER FROM POWER LINES.

7-6-88 O'Day 240/272/302/322

#### BOTTOM COATINGS

Since the beginning of the fiberglass boat building industry manufacturers have had the problem of occasional blistering on underwater surfaces. These blisters are caused by osmotic pressure of a solvent (water), which can pass through a membrane (the gelcoat) to reach a salt (a material which will dissolve in the solvent). This can occur nearly ANY time through nearly ANY gelcoat finish. Much has been written in the past few years in trade journals, chemical journals, and in the general literature discussing this problem and suggesting possible solutions. Thus far, there has been no universally accepted reason as to why this occurs in some boats and not others, nor is there a totally accepted preventive cure of fix once blisters occur.

Although gelcoat surfaces ARE NOT covered under The O'Day Corporation's 1-Year Warranty, we feel that as a manufacturer we would like to assist our customers in finding a solution to this problem. The best available information seems to indicate that coating the boat's underwater surfaces with an impermeable epoxy coating will assist in the prevention of gelcoat blisters. This epoxy should be a type that is recommended by the manufacturer for underwater use and should be done when the boat is new, if at all possible. A boat that has been in the water may also benefit from, having this epoxy put on, but it is best to be done before the boat is first launched.

The O'Day Corporation strongly recommends the use of chemical washes to prepare the boat's surface for bottom painting. Sanding will remove some of the protective gelcoat surface and could, therefore, increase the chances of blistering.

The O'Day Corporation uses the finest available materials and the best technique in the manufacture of their product. Gelcoat blistering is a recognized fact of life in the marine fiberglass industry, the chances of which MAY BE reduced by the use of an impermeable barrier coat on the bottom at the time of initial commissioning. Application of epoxy bottom coating, as discussed above, does not alter the fact that external gelcoat finishes are not covered by The O'Day Corporation's Limited 1-Year Warranty.

3-30-88 O'Day

# **OPERATION**

### CONSTRUCTION DETAILS AND GENERAL INFORMATION

#### A. HULL

The hull is hand laid up in a large female mold into which successive layers of material are laid. The mold can be rotated from side to side during the laminating process, allowing the workers to place the fiberglass more accurately and also to allow better resin penetration than would be possible with an upright mold.

The exterior of the boat is an isothphalic NPG gel coat which is sprayed into the mold after the stripe areas have been masked off. Next, the masking is removed and the stripe color is sprayed on. Next, layers of multidirectional glass fiber are laid into the mold to prevent pattern transfer from the successive layers of laminate. Finally, alternating layers of multidirectional fiber and bi-directional roving are applied until the correct layup thickness is attained. The thickness will vary, depending on loads applied and will generally increase from sheer to the keel

The interior pan acts as a structural reinforcing member for the hull. The pan is bonded to the hull in every conceivable place in order to make the pan and hull act as a single unit.

#### B. DECK

The deck is hand laid up using glass strand fibers and woven roving. The deck is balsa cored for strength and weight reduction. In areas of high stress or compression, the balsa core is replaced with either plywood core, aluminum sheet, or solid glass. The nonskid area is molded in, and the deck is gelcoated as with the hull.

#### C. HULL-TO-DECK JOINT

The O'DAY 240 hull/deck joint is one of the strongest in the industry. It is formed by setting a flanged deck down over the hull edge. (See diagram.) The deck is brought down on the hull and carefully mounted. The deck is then lifted and the two mating surfaces are coated with the bonding material. The bonding material used has unique properties in that it is a slightly flexible bonding/sealant. The joint is then fastened every 6" with #10 stainless steel self-tapping screws. A plastic rub rail is then screwed on with #10 SS screws, alternating with the hull/deck joint screws. This gives a mechanical fastener approximately every three inches as well as the chemical bond on the sealant. The plastic rub rail then has a flexible plastic insert added to absorb minor bumps.

The use of mechanical fasteners and a slightly flexible chemical bond allows a very slight movement here, which might otherwise crack a fiberglassed joint.

PLASTIC RUB RAIL INSTALLED WITH #10 OVALHEAD S.S. SELF TAPPING SCREWS ON ALTERNATE 6" CENTERS D∈ćĸ THE HULL TO DECK JOINT IS RUBBER RUB BEDDED IN A POLYDRATHANE RAIL INSERT ADHESIVE AND FASTENED EVERY 6" WITH #10 OVAL HEAD S.S. SELF TAPPING SCREWS 0'DAY 192, 240 \$272 HULL TO DECK JOINT 3MAY88 DFM SCALE! FULL SIZE

#### D. KEEL

The keel is an external, bolted on, lead casting. The keel is bolted to an external stub with three 3/4" stainless steel bolts. Additionally, between the hull and keel casting is an epoxy adhesive. The external lead keel is generally recognized as the best way of attaching ballast in order to get the weight as low as possible. Also, an external lead keel provides much better impact resistance than either external iron or internal ballast of any type. The wings also aid in stability and give additional "lift."

#### E. MAST AND RIGGING

Your O'DAY sailboat is equipped with a mast and rigging system that is designed to withstand extreme loads.

The mast and boom are extrusions of special marine-grade aluminum that are anodized to protect them from the elements. This anodizing, while more expensive than painting, is a much better coating, as it is less likely to come off through abrasion.

The standing rigging that supports the mast is 1 x 19 stainless steel wire. The upper ends of the shrouds and stays are connected inside the mast or spreader base. This provides cleaner airflow and less chance of snagging a sail, while providing a "toggle" action which reduces wear on the wire. The lower ends are swaged onto chrome bronze turnbuckles which also have a toggle at the lower end. Swaging is a process by which the turnbuckle part is actually squeezed <u>INTO</u> the strands of wire.

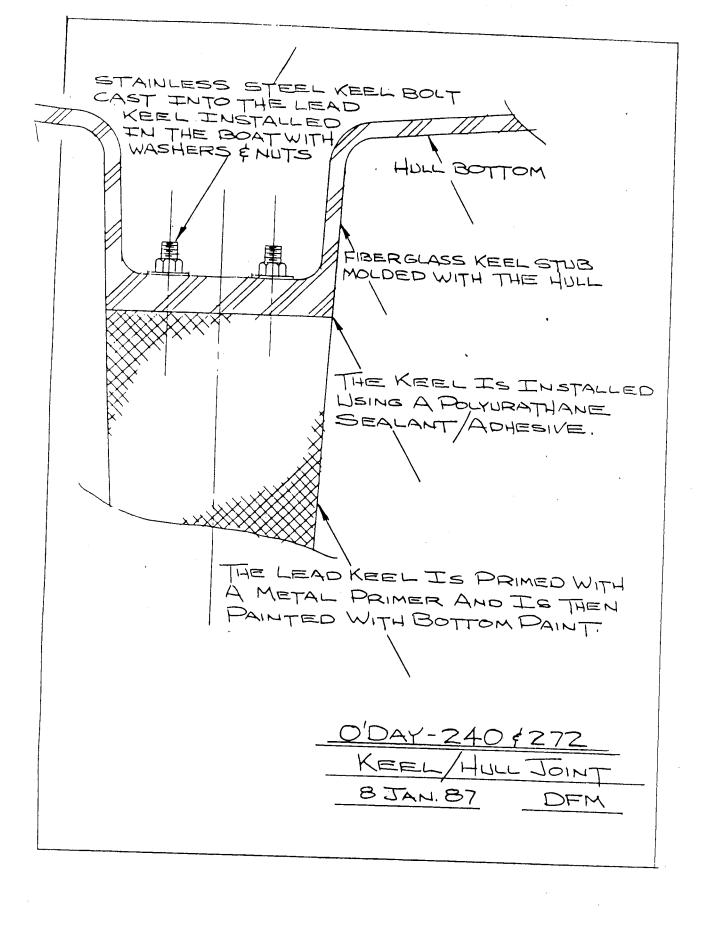
Since the standing rigging actually holds up the mast, The O'Day Corporation is not tempted to undersize the rigging. We would rather use the next larger size than use rigging that is "adequate" for the job.

The running rigging, i.e., sheets, reeflines, halyard, etc., are all color coded for ease of identification and are constructed of low-stretch dacron braid. This braid is long wearing and easy to handle, while providing good tension to the sail. The O'DAY 240 also has all running rigging, with the exception of outhaul and topping lift, led aft to the cockpit, which enhances ease of sailing and makes sailing safer, since no one has to go forward to hoist sail, reef, or trim sails.

Further information on the mast and rigging can be found in the commissioning and maintenance sections.

#### F. RUDDER

The rudder of your O'DAY 240 is made of a high-density, polyurethane foam core, surrounded by a fiberglass skin. If your boat is kept in the water, your rudder should be treated like the boat's bottom and bottom painted. The top pintle has a hole in it. There must be a pin (supplied) in this hole while sailing, in order to prevent the rudder from coming out. Always take care to



#### F. RUDDER - Continued

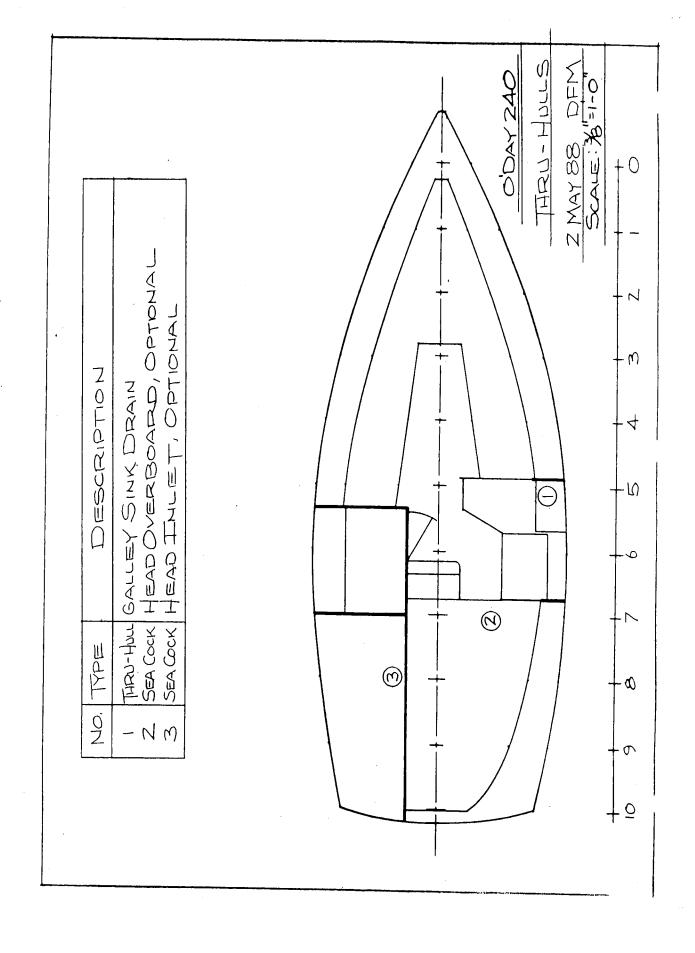
prevent interference between the rudder and motor, which could possibly occur at certain rudder/outboard angles. Always check the rudder tiller connection for tightness.

#### G. THRU HULLS AND SHUT OFF VALVES

In any boat it is necessary to have some holes below the water-line for the intake and discharge of fluids. These have been kept to a minimum in the O'DAY 240. Since there are openings below the waterline, there must also be a reliable method of closing them in the event of failure of a hose or fitting. These shut-off valves are a vital part of your boat's watertight integrity, and careful attention must be paid to them.

Before launching and periodically throughout the season, the thruhull fittings and their valves should be thoroughly checked. The thru-hull nuts should be checked for tightness, the hose clamps checked for tightness, the hose checked for defects, and the valve should be checked for proper operation.

Whenever the boat is left unattended, and whenever the connected unit is not being used, the thru-hull valve should be <a href="CLOSED!">CLOSED!</a> This will prevent flooding in case of a hose or fitting failure on the unit.



#### I. INTERIOR

The interior headliner is an acrylic fabric that gives a finished appearance to the inside of the boat. This fabric provides both thermal and sound insulation as well. The interior teak woodwork is oiled.

#### J. PLUMBING

The plumbing systems in the O'DAY 240 were designed for efficiency and ease of use. The boat has one plastic 12 gallon tank standard and is located under the starboard settee. This tank has a deck fill.

The water-tank level can be checked by sighting through the tank side. Check the tank vent periodically to be sure it is not clogged which will cause slow filling. The tank can be filled with the blue deck fill located on the starboard coaming. Be careful of the water you use, some marina water may have a bad taste.

#### K. TO RIG THE SINGLE LINE REEF

The O'Day 240 is equipped with a single line reef led aft to the cockpit. This eases the task of reducing mainsail area, adding to the safety of the boat.

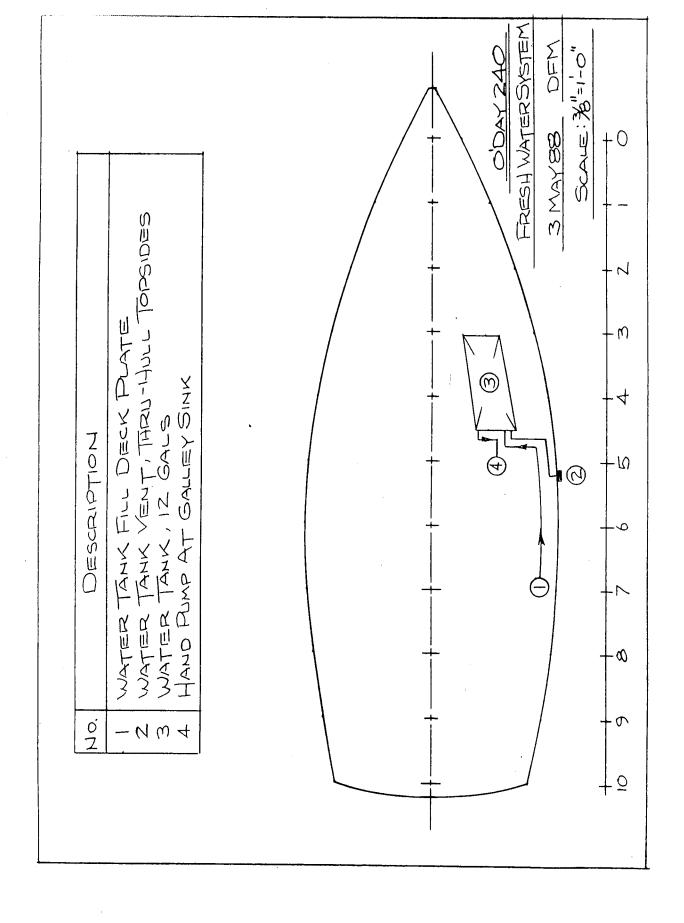
To rig the reef, first hoist the mainsail in light air at the dock and cleat the mainsheet. Uncoil the reef lines tied to the boom ends. Take the line on the aft end of the boom, on port side, up the port side of the leech of the mainsail, through the grommet about 4' up the leech and down the starboard side. Tie a bowline under the boom and through the grommet on the foot of the sail directly under the reef grommet.

On the gooseneck end of the boom, the reef line exits the bottom of the boom and leads through the upper most of the two blocks on the aft face of the mast (block "C" on diagram). The line is then led up to the block attached to the reef point on the luff of the sail (block "D" on diagram). Next bring the line down through the guide ring beside the gooseneck, then through the lower block on the mast through the deck turning block and back to the rope clutch on the cabin top.

When you reef, you may need to tighten up the boom topping lift so that the boom does not drop in the cockpit when the main halyard is lowered. If you only ease the topping lift a small amount when you go sailing, you may not need to tighten it up.

To reef, simply ease the main halyard to the correct spot and pull on the reef line until both reef grommets are firm on the boom. It is strongly recommended that you practice reefing at the dock in calm weather until it is second nature. Also, you can mark the main halyard at each reef point, so that you can ease the halyard immediately to the correct point.

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NOTE: THE STANDARD HEAD SYSTEM IN THE O'DAY 240 IS A PORTABLE TOILET. PLEASE SEE THE MANUFACTURER'S INSTRUCTIONS FOR OPERATION.

#### L. OPTIONAL HOLDING TANK/WASTE SYSTEM

The  $\underline{\text{O'DAY}}$   $\underline{240}$  has a waste system that, when properly used, meets most federal, state, and local standards. As The O'Day Corporation cannot be aware of all local rules for localities, we recommend that you check local rules and codes.

The <u>O'DAY 240</u> system (see Diagram) is fairly simple. In its standard form, it consists of an inlet thru-hull valve to allow flushing water into the w/c, a holding tank to contain the effluent, and a deck discharge fitting to allow removal of the waste from the holding tank at an approved discharge system. There is one holding tank with a capacity of 16 gallons. We recommend that the holding tank be pumped at every opportunity and that waste not be left in the tank for more than 48 hours. After each emptying, be sure to use one of the many holding tank chemicals that are available. These chemicals aid in the breakdown of solids and prevent gas buildup in the tank. Certain of the chemicals may contain harmful substances. Be sure to read the directions.

The discharge system on your O'DAY yacht is very simple. All waste is pumped into a holding tank and retained there until it is pumped out, through the deck fitting, at a shore station. This system operates as follows:

- 1. Open head intake thru hull.
- 2. Turn valve on head pump to "FLUSH".
- 3. Pump head pump 12-15 times.
- 4. Turn valve on head pump to "PUMP DRY".
- 5. Pump head pump until bowl is dry.
- 6. Close head intake thru hull.
  - NOTE: ALWAYS LEAVE THE HEAD PUMP VALVE IN THE "PUMP DRY" LOCATION.
  - NOTE: ALWAYS USE A HOLDING TANK CHEMICAL FREQUENTLY.
  - NOTE: SOME CHEMICALS CONTAIN FORMALDEHYDE, WHICH MAY
    - CAUSE IRRITATION.
  - NOTE: CHECK CONDITION OF HOLDING TANK FREQUENTLY; OVER-
    - FILLING CAN BURST THE TANK.
  - NOTE: CHECK VENT LINES FREQUENTLY TO BE SURE THEY ARE
  - <u>OPEN</u>
  - NOTE: SEE MAINTENANCE SECTION FOR INFORMATION ON THE
    - VENTED LOOP.

#### OPTIONAL HOLDING TANK/WASTE SYSTEM - Continued

#### TO EMPTY THE HOLDING TANK:

1. Open the deck fitting marked "WASTE".

2. Attach shore station pump-out hose.

Operate shore station pump until tank is empty. з. IF THE TANK VENT IS CLOGGED, THE PUMP MAY Remove pump-out hose.

4.

5.

Re-cap "WASTE" deck fitting.

NOTE: ADD HOLDING TANK CHEMICAL, WHENEVER THE TANK IS EMPTIED.

Be sure to close the head inlet valve after each use, to eliminate any possibility of flooding.

- M. HOLDING TANK/WASTE SYSTEM OPTIONAL OVERBOARD DISCHARGE
- C. To discharge the holding tank thru the deck fitting. Cont'd.

4. Remove pump-out hose.

5. Re-cap "WASTE" deck fitting.

NOTE: ADD HOLDING TANK CHÉMICAL, WHENEVER THE TANK IS EMPTIED.

D. To discharge holding tank overboard.

NOTE: DISCHARGE OF THE HOLDING TANK OVERBOARD IS ONLY LEGAL IN UNRESTRICTED WATERS. CHECK WITH THE COAST GUARD OR LOCAL REGULATIONS.

- 1. Open discharge thru hull.
- 2. Make sure the "Y" valve is turned so that the line to the holding tank is open and that the line to the discharge thru hull is closed.

NOTE: IF THE VALVE IS TURNED SO THAT THE LINE TO THE DISCHARGE THRU HULL IS OPEN, WASTE MAY BE PUMPED BACK INTO THE HEAD.

- 3. Pump the manual holding tank pump, located behind the head, until the tank is as empty as possible. There will still be 1" to 2" of liquid left in the tank.
- 4. Close the discharge thru hull.
- 5. Put a holding tank chemical into the holding tank.

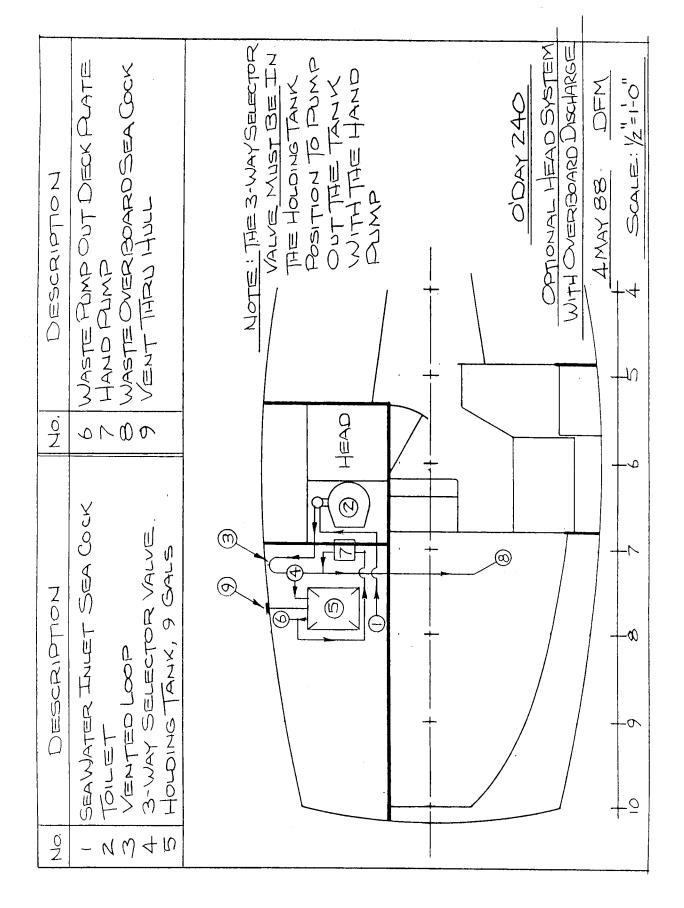
  NOTE: IF THE DECK PUMP OUT FITTING IS NOT CLOSED

  TIGHTLY, THE PUMP MAY NOT WORK EFFECTIVELY.

The overboard discharge option enables the holding tank to be emptied directly overboard in areas where this is legal.

NOTE: THE DISCHARGE VALVE (SEE DIAGRAM) SHOULD BE CLOSED AND THE HANDLE REMOVED IN NO-DISCHARGE AREAS, IN ORDER TO PREVENT ACCIDENTAL DISCHARGE OF WASTE.

In areas of legal overboard discharge, the holding tank can be emptied by simply opening the discharge valve and working the hand pump until the tank is empty. After the tank has been emptied, the discharge valve should be shut and a holding tank chemical added to the head system.



The optional head overboard discharge system will allow the user to either discharge waste directly overboard from the head (in areas where this discharge is permitted) or to pump the waste into a holding tank where the waste can be stored. The holding tank can be emptied in two ways: It can either be pumped out by a shore station, or pumped directly overboard (in areas where this discharge is permitted.)

This system operates as follows:

- A. To discharge directly overboard from the head.
  - NOTE: DIRECT OVERBOARD DISCHARGE IS ONLY LEGAL IN UN-RESTRICTED WATERS. CHECK WITH THE COAST GUARD OR LOCAL REGULATIONS.
  - 1. Open head intake thru hull.
  - 2. Open head discharge thru hull.
  - 3. Turn "Y" valve to open a line directly from the head to the head discharge thru hull.

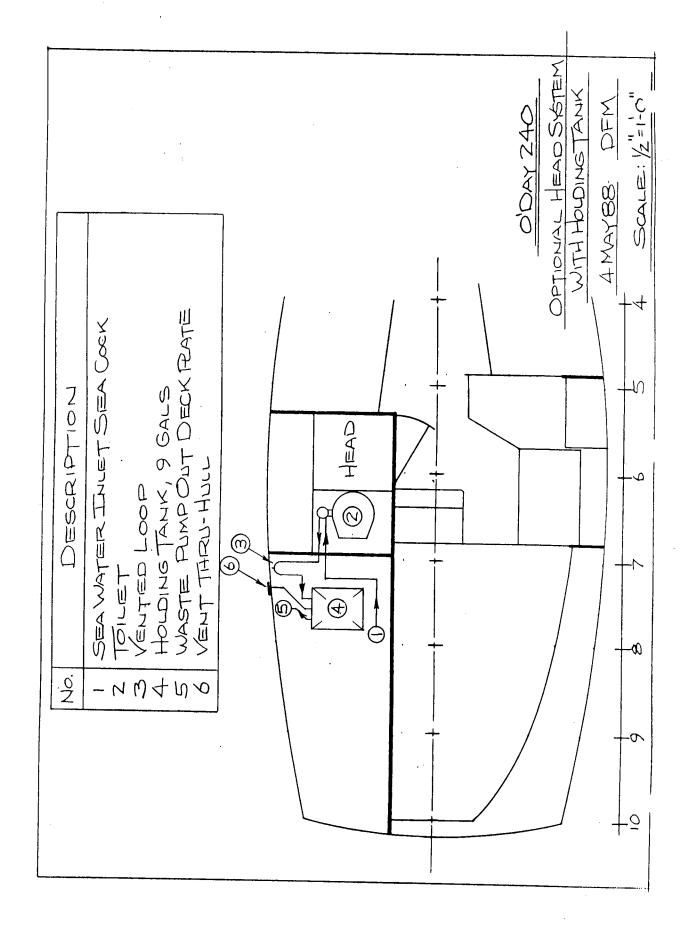
    NOTE: THE "Y" VALVE HANDLE POINTS TOWARD THE LINE THAT IS CLOSED.
  - 4. Turn handle on head pump to "FLUSH."
  - 5. Pump head pump 12-15 times.
  - 6. Turn handle on head pump to "PUMP DRY."
  - 7. Pump head pump until bowl is dry.
  - 8. Shut all thru hulls.
    - NOTE: BE SURE TO LEAVE THE HANDLE ON THE HEAD PUMP IN THE "PUMP DRY" POSITION.
    - NOTE: ALWAYS USE A HOLDING TANK CHEMICAL FREQUENTLY.
    - NOTE: CHECK CONDITION OF HOLDING TANK FREQUENTLY; OVER-FILLING CAN BURST THE TANK.
    - NOTE: SEE MAINTENANCE SECTION FOR INFORMATION ON THE VENTED LOOP.
- B. To discharge into the holding tank.
  - 1. Open head intake thru hull.
  - 2. Turn "Y" valve to open a line to the holding tank.

    NOTE: THE "Y" VALVE HANDLE POINTS TOWARD THE LINE THAT

    IS CLOSED.
  - 3. Turn handle on head pump to "FLUSH."
  - 4. Pump head pump 12-15 times.
  - 5. Turn handle on head pump to "PUMP DRY."
  - 6. Pump head until bowl is dry.
  - 7. Shut intake thru hull.
    - NOTE: BE SURE TO HAVE FRESH HOLDING TANK CHEMICAL IN THE TANK.
- C. To discharge the holding tank thru the deck fitting.
  - 1. Open the deck fitting marked "WASTE."
  - 2. Connect shore station pump-out hose.
  - 3. Operate shore station pump until tank is empty.

    NOTE: A CLOGGED HOLDING TANK VENT LINE COULD RESULT IN

    A COLLAPSE OF THE HOLDING TANK.



#### N. ELECTRICAL SYSTEM

The O'DAY 240 is equipped with a 12 volt DC AC electrical system as standard equipment. The wiring is run to prevent chafe or contact with water, where possible, and is supported as needed. We do recommend that you check all the connections at least once a year for corrosion, loose fittings, etc.

#### DC - 12 VOLT SYSTEM

The DC system is powered by one 12 volt DC battery that must be located in the battery locker under the ladder. The electrical system is controlled by a circuit-breaker panel located on the starboard aft cabin bulkhead. On this panel are circuit breakers for the running lights and interior lights. The interior lights are also controlled by individual switches, as the lights themselves. Please consult USCG regulations for use of the running lights.

As the O'DAY 240 is designed for an outboard, it has no provision for recharging the battery. A good marine type battery charger, connected in a seaman-like manner, or removal of the battery to a separate charger will be necessary to insure a fully-charged battery. Always be sure you have an adequate battery charge before setting out. Many modern outboard engines have alternators that can maintain a battery charge. Consult with your O'Day dealer or outboard representative for information. The condition of the battery should be checked frequently and not allowed to run down. This may ruin the battery. Be sure to check the battery fluid level frequently, and add water as necessary. (See Basic Rules For Battery Care.)

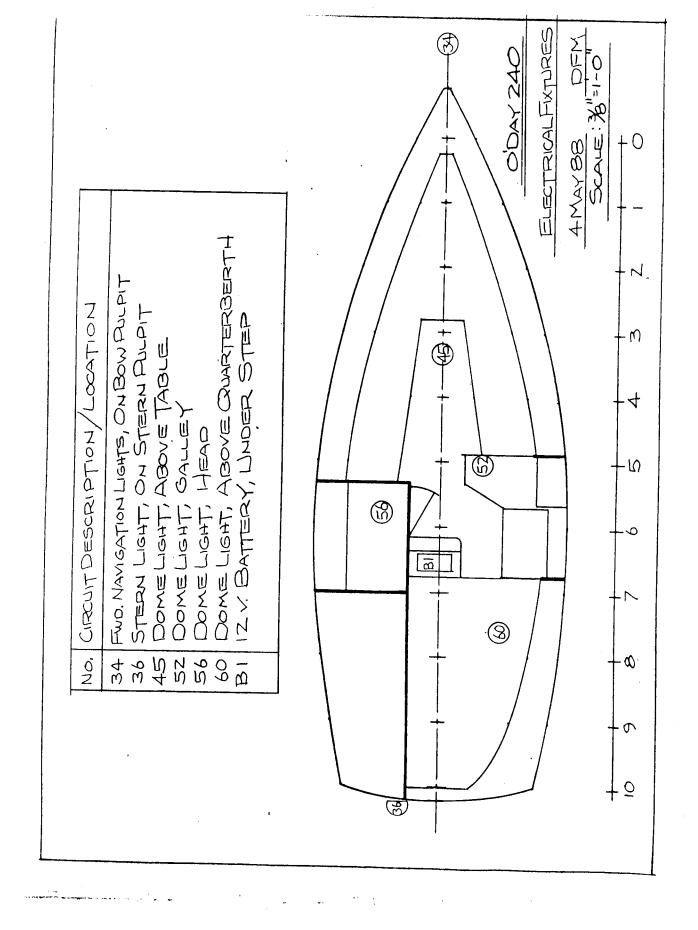
#### CIRCUIT BREAKERS

Accessory loads may be selected as desired by turning on the master-control panel circuit breakers. The circuit breakers will automatically open the circuit by switching themselves to "OFF" in the event of an overload on a particular circuit. Always investigate the cause of the overload and correct any deficiencies before repositioning the circuit breaker to "ON."

ALL WIRES, CONNECTIONS, AND TERMINALS SHOULD BE INSPECTED REGULARLY FOR LOOSE CONNECTIONS, WHICH MAY CAUSE ELECTRICAL SPARKS, HIGH RESISTANCE, OR FIRES. THIS IS ESPECIALLY IMPORTANT FOR ENGINE ACCESSORY WIRING.

The boat is wired with a negative ground, and care should be given to this fact when purchasing any auxiliary electronics.

Access to the electrical panel can be easily gained by removing the panel screws. The panel can then be removed and allow access, so that new connections can be added or maintenance work done.



#### N. <u>ELECTRICAL SYSTEM</u> - Continued

CIRCUIT BREAKERS - Continued

BE SURE TO DISCONNECT ALL BATTERIES BEFORE OPENING THE PANEL, OF SEVERE INJURY MAY RESULT.

#### PREVENTIVE MAINTENANCE

Electrical systems are adversely affected by moisture and a salt-air environment. Preventive maintenance consists of protecting the system from the elements and periodic inspection for damage created by the elements.

There are several aerosol spray products available for protecting the system.  $\underline{WD-40}$  and  $\underline{CRC}$  are but two of the better-known types.

Periodically check all wire harnesses and connections for secure fastenings, cleanliness, and any signs of physical damage or corrosion. A dirty or corroded terminal will cause resistance and could generate heat. It is extremely important that connections be kept clean.

WARNING: DO NOT PERFORM ANY MAINTENANCE OR REPAIR FUNCTION

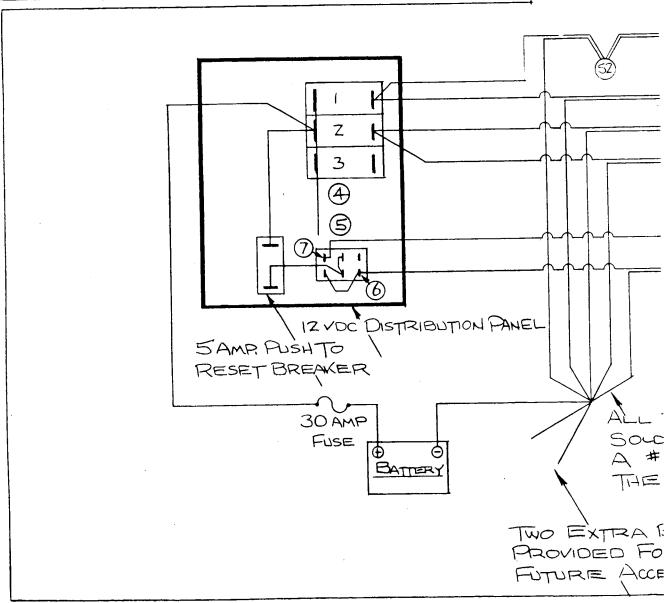
ON A "LIVE CIRCUIT."

WARNING: DO NOT TURN MAIN DC SWITCH OFF WHILE ENGINE IS

RUNNING. THIS COULD CAUSE DAMAGE TO THE

ALTERNATOR.

CIRCUIT BREAKER No.	NAME	SIZE	DEVICE NO'S
- Z 3 4 5	CABINLIGHTS RUNNING LIGHTS SPARE BLANK BLANK	15 A 10 A 10 A	## ## ## ## ## ## ## ## ## ## ## ## ##
6 7	STEAMING LIGHT ANCHOR LIGHT	5 A 5 A	(31) (33)



- DINTERIOR LIGHT	
BOW NAV. LIGHT	
STERN LIGHT	
	·
STEAMING LIGHT	
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3 BLACK WIRE THAT GOES BATTERY	TO 0'DAY 240
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#### O. NAVIGATION LIGHTS

Navigation lights must be in accordance with the rules and regulations of the waters in which you intend to cruise.

In general, navigation lights are to be used from sunset to sunrise in all weather conditions. It is good practice to use the lights any time visibility is reduced by inclement weather.

Your O'DAY 240 is equipped with the following navigation lights:

- A. Red and Green 120 point side lights mounted on the bow pulpit.
- B. White 12 point stern light.
- C. White 32 point combination bow/anchor light mounted on the mast.

A & B are wired to the "running lights" switch on the DC panel.

#### BOW/STEAMING/ANCHOR LIGHT

The O'DAY 240 has a combination Steaming/Anchor light on the masthead. The Steaming light must be used while under power or power and sail at night. The Anchor light should be used while at anchor. There are two systems used.

- 1. If your <u>O'DAY 240</u> has two switches on the panel, one marked Anchor and one marked Bow light, then the following procedure should be followed:
  - a. When the Steaming/Bow light is needed, the switch labeled Bow light or Steaming light should be turned on.
  - b. When the Anchor light is needed, both the Anchorlight switch and the Bow/Steaming light switch should be turned on.

#### We recommend:

- Underway by sail, the running lights (side lights and stern light) must be on.
- Underway by power, the running lights and bow light must be on.
- At anchor, both the "bow light" and "anchor light" switches be on.

#### BOW/STEAMING/ANCHOR LIGHT - Continued

- 2. <u>IF YOUR O'DAY 240</u> has one, three-position switch marked Anchor-Off-Steaming/Bow, the following procedure should be followed.
  - a. When the Bow/Steaming light is needed, the switch should be turned to the Bow/Steaming light position.
  - b. When the Anchor light is needed, the switch should be turned to the Anchor light position.

<u>DANGER: FAILURE TO FOLLOW THESE FUELING DIRECTIONS COULD CAUSE FIRE OR EXPLOSION WHICH COULD RESULT IN SERIOUS BURNS OR DEATH.</u>

When preparing to fuel your boat, the following procedures should be followed to assure safety:

- A. Properly secure the boat to the dock.
- B. Turn off the engine, stove, heater, radio, lights, etc.
- C. Turn all battery switches to OFF.
- D. Close all hatches, ports, etc., to prevent entry of fumes.
- E. Maintain continuous contact between the nozzle and deck plate to prevent a static charge.
- F. Fill tank to a maximum 95% of capacity to allow for expansion.
- G. Clean any spills <u>AFTER</u> replacing and tightening fuel-fill cap.
- H. Before operating the engine or turning battery switch to ON, open all hatches and check for fuel leaks. Open engine room, check for fumes and allow the engine room to ventilate for 5 minutes before starting the engine.

Always be sure the fuel-fill cap is tight, to prevent water and dirt from getting into the fuel tank. Due to the disparity of fuel sources, periodically check the fuel filter soon after each fueling to check for fuel contamination. Those should be drained and cleaned, as needed. The filter elements should be replaced annually.

#### Q. STEERING

The steering gear on your O'DAY 240 has been designed for maximum reliability and ease of operation. Care should be taken before each sail that all gudgeon, pintle, and tiller bolts are tight and that the rudder retaining pin is through the hole in the upper pintle.

The tiller should be disassembled yearly, sanded and varnished. The varnish protects the tiller from weather deterioration. Carefully inspect the tiller for any cracks or other weaknesses that could result in failure. DO NOT HESITATE TO REPLACE the tiller, if you feel there is any question about it.

Due to the shoal draft of your O'DAY 240 and our desire to provide you as large a rudder as possible (for good control), there COULD be certain loading conditions where the rudder is lower than the keel. If these conditions occur, be especially careful sailing in shoal waters, as the keel will not protect the rudder from impact with the bottom. The rudder can break, if impacted, leaving you with minimal steering control.

#### R. ALCOHOL STOVES

Please refer to the manufacturer's manual. They cover the operation of these stoves in detail.

#### WARNING:

- 1. THE FLAME DURING AN ALCOHOL FIRE IS QUITE OFTEN INVISIBLE.
- 2. DO NOT MOUNT THE FIRE EXTINGUISHER NEAR THE STOVE. DURING A FIRE, YOU MAY NOT BE ABLE TO GET TO IT.
- 3. WATER IS ONE OF THE BEST EXTINGUISHERS FOR ALCOHOL FIRES.

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#### S. STOVE USE - (OPTIONAL STOVE)

The stove compartment is designed for an Origo 3000 nonpressurized alcohol stove only. This installation has been approved by the manufacturer. Always follow the manufacturer's instructions on filling.

During use, never allow a burner to be used on full without a pot above it, as the heat could damage the overhead or curtains.

Be careful of using large pans with high heat on the forward burner. Spreading heat could discolor the laminate on the galley bulkhead.

NEVER attempt to refill a hot stove.

NEVER leave a lit stove unattended.

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O'Day 240

# MAINTENANCE

#### 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.

Additionally, many of the O'Day 240's deck fittings have a 3/16" gasket under them. After a period of time these gaskets could deteriorate necessitating replacement.

# 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. When-ever 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. 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.

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#### 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. HEADLINER

The headliner of your boat will collect cooking grease, smoke film, etc. It should be cleaned at least once a month with warm, soapy water. Strong cleansers are not recommended for the fabric or the hull sides, but may be tested on an area of the fabric that cannot be seen, before general use.

#### 2. CUSHIONS

The interior cushions are made from several different fabrics and materials. Generally, any upholstery shampoo should be safe for cleaning; but, as with the headliner, 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 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 <u>LIGHT</u> coat of petroleum jelly or silicone spray. Oil the hinge and dog pins.

#### 4. COOLER

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

As the cooler can be easily removed, we recommend that it be taken home after each sail.

 $\frac{DO\ NOT}{mildew}$  leave standing water in the cooler, as it will promote mildew and accelerate odors.

#### B. INTERIOR MAINTENANCE - Continued

#### 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.

#### 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.

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.

#### 8. STOVE (Optional)

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

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

#### B. INTERIOR MAINTENANCE - Continued

#### 8. STOVE - Continued

- 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.

#### 9. 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.

#### 10. 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.

#### 11. 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,  $\underline{ANY}$  defect in standing or running rigging is cause for  $\underline{IMMEDIATE}$   $\underline{REPLACEMENT}$  of that part.

#### 4. FURLING GEAR

With the sail removed, maintenance of the furling gear is simple. The foil should be cleaned at least once a year with soap 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 <u>LIGHT</u> spray with a silicone lubricant twice a year. Be sure to check bolt tightness on all blocks, <u>ESPECIALLY</u> turning blocks.

# 6. LIFELINES, STANCHIONS, BOW PULPITS AND STERN LOOPS

Do not neglect the turnbuckles, clevis pins, cotter pins, and pelican hooks on the lifelines - check them weekly. Be sure the turnbuckles 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 pulpit 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. $\underline{\text{TEAK}}$

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.

#### 8. OUTBOARD BRACKET

The wood on the outboard bracket should be sanded and varnished at least once a year to prevent delamination of the plywood.

### 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.

 $\frac{\text{ADD}}{\text{powders.}} \frac{\text{WATER}}{\text{These}} \frac{\text{ONLY.}}{\text{These}}$  Add no battery dopes, special liquid, or

- 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 <u>USELESS</u> and <u>MAY DAMAGE BATTERY</u> <u>BEYOND REPAIR</u>. 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.

4-13-87 All

#### 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.

1-12-88 All

#### 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 recommission it in the Spring. Obviously, this is an "ideal" list, but there are items here that must be done.

#### A. EXTERIOR

- 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. Tape spreaders to the mast. 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 <a href="EVERYTHING">EVERYTHING</a> loose. Take it home, eat the food, clean the cushions, sort out all the stuff, and throw away all the junk. Clean everything up.
- 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.

#### C. WATER SYSTEM

- 1. Empty the water tank 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 through the water lines to the faucet.
- 3. Close the sink drain thru hulls, or plug the sink.

#### WINTERIZING YOUR BOAT - Continued

#### D. <u>HEAD SYSTEM</u>

- Empty the holding tank, and flush it out with fresh water several times. Add a holding tank chemical.
- 2. Pump all the water out of the head.
- 3. If possible take the head out of the boat and bring it home. (Portable toilets only.)

#### E. <u>ELECTRICAL SYSTEM</u>

- 1. Remove all electronics.
- 2. Remove the battery. Take it home and occasionally trickle charge them over the winter. (See Basic Rules For Battery Care.) Do not set it on a concrete floor.
- 3. Clean all connections and spray with CRC.

#### F. OUTBOARD ENGINE

Take it home and store it in a safe place. Be <u>VERY</u>
 <u>CAREFUL</u> 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 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	
Zinc Anode		1	1	O/B Replace at least once a year.
Propeller		1	1,4,5	
Bilges	1	1	1,4,7	
Thru Hull Valve	1,2,3	2	1,4,6	
Pumps	1	1,2,5	1,4,5,7,8	
Water Tank	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.
O/B Eng. Clamps	5	5		
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	
Hose Clamps	5	1,5	1,3,4,5	Do not over- tighten.

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# PERIODIC MAINTENANCE SCHEDULE - Continued

		End of First Week	Monthly	Winterizing	Remarks	
Cha	inplates	1,2,5	1,2,4,5	1,2,4,5	Rebed at least twice a year.	
Bil	ges	Check daily	- more oft	en, if the bo	oat is leaking.	
sto	ves	1,5		1,4,5	Optional	
1. 2. 3. 4.	Check condition Check water tightness Lubricate Clean with fresh water			6. Grease 7. Drain and	Check tightness Grease Drain and/or antifreeze Disconnect (see note)	

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