

.....

Dear Valued Customer,

Welcome to the Monterey Life!

We would like to extend to you our "Thank You" for choosing a Monterey boat!

You have made an investment in our product and we are confident you will enjoy many years of boating pleasure. Your new boat has been built to the standards set forth by the United States Coast Guard and National Marine Manufacturers Association. We are proud to have you in our "Family!"

At this time, we need you to read your owner's manual and become familiar with all systems on your boat. Make certain that you and your dealer have filled out and mailed your warranty registration card back to us here at the factory. It is very important to us and it is also a U.S. Federal Regulation.

This manual is an important aid in the operation and maintenance of your boat. The information is intended as a guide and cannot cover every question you may have about your boat and boating in general. We encourage you to contact your dealership for any additional information you might need. If there is a question about your boat that can't be answered by your dealer, please contact our factory direct by calling the Monterey Boats Customer Service Department, (352) 529-9181 or online if you prefer at: www.info@montereyboats.com.

If you are new to boating, we recommend you participate in a boating class or group to gain more knowledge and confidence. Contact your dealer, local U.S. Coast Guard or U.S. Power Squadron Organizations for information in your area.

With proper care, routine service and preventive maintenance, your Monterey boat will not only reward you with enjoyment, but with reliability, dependability and one of the higher resale values in today's boating industry.

Enjoy your new boat and please respect our environment at all times. Always remember to practice safe boating procedures for your protection as well as those around you.

Sincerely,

The M.O.S.T. (Monterey Owners Support Team)



# **NOTES**



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Your Monterey owner's manual has been written to include a number of safety instructions to assure the safe operation and maintenance of your boat. These instructions are in the form of **DANGER**, **WARNING**, **and CAUTION** statements. The following definitions apply:





All instructions given in this book are as seen from the stern looking toward the bow, with starboard being to your right, and port to your left. A glossary of boating terms is included.

**IMPORTANT NOTE:** Your boat uses an internal combustion engine and flammable fuel. Every precaution has been taken by Monterey to reduce the risks associated with possible injury and damage from fire or explosion, but your own precaution and good maintenance procedures are necessary in order to enjoy safe operation of your boat.



# **State of California Safety Requirements**



# WARNING



# **PROPOSITION 65**

A WIDE VARIETY OF COMPONENTS USED ON THIS VESSEL CONTAIN OR EMIT CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS AND OTHER REPRODUCTIVE HARM.

### **EXAMPLES INCLUDE:**

- ENGINE AND GENERATOR EXHAUST.
- ENGINE AND GENERATOR FUEL, AND OTHER LIQUIDS SUCH AS COOLANTS AND OIL, ESPECIALLY USED MOTOR OIL.
- · COOKING FUELS.
- CLEANERS, PAINTS, AND SUBSTANCES USED FOR VESSEL REPAIR.
- WASTE MATERIALS THAT RESULT FROM WEAR OF VESSEL COMPONENTS.
- LEAD FROM BATTERY TERMINALS AND FROM OTHER SOURCES SUCH AS BALLAST OR FISHING SINKERS.

### TO AVOID HARM:

- KEEP AWAY FROM ENGINE, GENERATOR, AND COOKING FUEL EXHAUST FUMES.
- WASH AREAS THOROUGHLY WITH SOAP AND WATER AFTER HANDLING THE SUBSTANCES ABOVE.

California Health & Safety Code §§ 25249.5-.13

# State of California Emission Requirements

Your boat may be equipped with an engine that meets the special requirements outlined by the California Air Resources Board (CARB). If so, the engine is designed to meet strict requirements and the boat will have a special tag and one of the following labels affixed to it.

The tag and the label are required by CARB. The label has 1, 2, 3 or 4 stars and must be affixed to your boat if it is to be operated in the state of California and/or bordering waters. For more information visit: http://www.arb.ca.gov.











Please fill out the following information section and leave it in your Monterey owner's manual. This information will be important for you and Monterey service personnel to know, if you may need to call them for technical assistance or service.

BOAT					
MODEL:	HULL SERIAL #:				
PURCHASE DATE:	DELIVERY DATE:				
IGNITION KEYS #:	REGISTRATION #:				
DRAFT:	WEIGHT:				
BRIDGE CLEARANCE:					
	ENGINE				
MAKE:	MODEL:				
SERIAL#:					
	OPTIONS				
F	PROPELLER				
MAKE:	NUMBER OF BLADES:				
DIAMETER/PITCH:	MODEL:				
PROP #1 PART #:					
	TRAILER				
MAKE:	MODEL:				
SERIAL #:	GVRW:				
DEALER	MONTEREY				
NAME:	PHONE:				
PHONE:	REPRESENTATIVE:				
SALESMAN:	ADDRESS:				
SERVICE MANAGER:					
ADDRESS:	E-MAIL:				

All information, illustrations, and specifications contained in this manual are based on the latest product information available at the time of publication. Monterey Boats reserves the right to make changes at anytime, without notice, in colors, materials, equipment, specifications, and models.





# **M-45 Export Documentation**

# (For Export Only)

To be in compliance with European directives for recreational boats as published by the International Organization for Standardization (ISO) in effect at the time this boat was manufactured, we are providing the following information.

Manufac	turer:					
Name	SEABRING MARINE INDUSTRIES, INC., d.b.a. Monterey Boats					
	Address 1579 SW 18th St.					
	Williston, FL			Zip Code:	32696	
Identifica	ation Numbe	ers:				
Hull Identifica	ation Number	US-RGF				
Engine Seria	l Number					
Intended	l Design Cat	egory:				
	☐ Ocea	an (Cat A)		Inshore (Cat C)		
	Offsh	nore (Cat B)		Sheltered Waters (Ca	it D)	
Weight a	ınd Maximur	n Capacities	<b>S</b> :			
Unladen Wei	ight - Kilograms (P	ounds)				
Maximum Load - Weight- Kilograms (Pounds)						
Number of P	eople					
Maximum Ra	ated Engine Horse	power - Kilowatts	(Horsepo	wer)		
Certifica	tions:					
Certifications & Components Covered		See	Declaration of conformit	У		
Boat certified b	y IMCI (#0009) under o	certificate BMOHT025				





# **M-65 Export Documentation**

# (For Export Only)

To be in compliance with European directives for recreational boats as published by the International Organization for Standardization (ISO) in effect at the time this boat was manufactured, we are providing the following information.

Manufa	cturer:								
Name	SEABRING MARINE INDUSTRIES, INC., d.b.a. Monterey Boats								
	Addres	Address 1579 SW 18th St.							
	Williston	n, FL			Zip Code:	32696			
Identific	eation Nu	ımber	s:						
Hull Identific	cation Numb	er	US-RGF						
Engine Seri	ial Number								
Intende	d Design	Cate	gory:						
		Ocean	(Cat A)		Inshore (Cat C)				
		Offsho	re (Cat B)		Sheltered Waters (Ca	at D)			
Weight	and Max	imum	Capacitie	s:					
Unladen We	eight - Kilogr	ams (Pou	unds)						
Maximum L	oad - Weigh	t- Kilogra	ms (Pounds)	_					
Number of I	People								
Maximum F	- Rated Engine	Horsepo	wer - Kilowatts	(Horsepo	ower)				
Certifica	ations:								
Certifications & Components Covered		See	Declaration of conformit	у					
Boat certified	by IMCI (#0009	) under cer	tificate BMOHT025	5					



All instructions given in this book are as seen from the stern looking toward the bow with starboard being to your right, and port to your left. The information and precautions listed in this manual are not all inclusive. It may be general in nature in some cases and detailed in others and is designed to provide you a basic understanding of your Monterey boat and some of the responsibilities that go along with owning/operating your boat.

The suppliers of some of the major components such as the engine, pumps, and appliances, provide their own owner's manuals which have been included with your boat. You should read the information in this manual and the manuals of other suppliers completely and have a thorough understanding of all component systems and their proper operation before operating your boat.

REMEMBER - IT IS YOUR RESPONSIBILITY TO ENSURE THAT YOUR BOAT IS SAFE FOR YOU AND YOUR PASSENGERS. ALWAYS EXERCISE GOOD COMMON SENSE WHEN INSTALLING EQUIPMENT AND OPERATING THE BOAT.

# **Warranty and Warranty Registration Cards**

The Monterey Limited Warranty Statement is included with your boat. It has been written to be clearly stated and easily understood. If you have any questions after reading the warranty, please contact the Monterey Boats Customer Service Department

Monterey, engine manufacturers, and the suppliers of major components maintain their own manufacturer's warranty and service facilities. It is important that you properly complete the warranty registration cards included with your boat and engine and mail them back to the manufacturer to register your ownership. This should be done within 15 days of the date of purchase and before the boat is put into service. A form for recording this information for your records is provided at the beginning of this manual. This information will be important for you and service personnel to know, if and when you may need service or technical information.

The boat warranty registration requires the Hull Identification Number "HIN" which is located on the starboard side of the transom, just below the rubrail. The engine warranty registration requires the engine serial numbers. Refer to the engine owner's manual for the location of the serial numbers.



Hull ID # On Starboard Side of Transom

## **IMPORTANT:**

The terms and conditions of the Monterey Boats Limited Warranty are outlined in the warranty statement included in this manual. The manufacturer will automatically honor the warranty to the original purchaser for 15 days from the date of purchase. However, during that 15 day period, owners must comply with the steps outlined in the warranty statement to validate their warranty.

All boat manufacturers are required by the Federal Boat Safety Act of 1971 to notify first time owners in the event any defect is discovered "which creates a substantial risk of personal injury to the public." It is essential that we have your warranty registration card complete with your name and mailing address in our files so that we can comply with the law if it should become necessary.

Your Monterey Boats Dealer will assist you in filling in the hull number and other data required on your Registration Card. Check to see that your card is complete and signed. Detach and mail. Your Warranty Registration Card will be added to our permanent files.

### Notice:

Your dealer will also submit the registration electronically "on-line."



# **Transferring the Limited Structural Warranty**

For a transfer fee, MONTEREY BOATS will offer to extend a Transferable Limited Structural Hull Warranty to subsequent owners of Monterey boats. Refer to the Monterey Limited Warranty Statement for the terms and conditions of the Transferable Limited Structural Hull Warranty and the procedure to transfer the warranty.

# **Product Changes**

Monterey is committed to the continuous improvement of our boats. As a result, some of the equipment described in this manual or pictured in the catalog may change or no longer be available. All information, illustrations, and specifications contained in this manual are based on the latest product information available at the time of publication. Monterey Boats reserves the right to make changes at anytime, without notice, in colors, materials, equipment, specifications, and models. If you have questions about the equipment on your Monterey, please contact the Monterey Boats Customer Service Department.

### Service

All warranty repairs must be performed by an authorized Monterey Dealer. Should a problem develop that is related to faulty workmanship or materials, as stated in the Limited Warranty, you should contact your Monterey dealer to arrange for the necessary repair. If you are not near your dealer or another authorized Monterey dealer or the dealer fails to remedy the cause of the problem, then contact Monterey within 15 days. It is the boat owner's responsibility to deliver the boat to the dealer for warranty service.



# **Registration and Numbering**

Federal law requires that all undocumented vessels equipped with propulsion machinery be registered in the State of principal use. A certificate of number will be issued upon registering the boat. These numbers must be displayed on your boat. The owner/operator of a boat must carry a valid certificate of number whenever the boat is in use. When moved to a new State of principal use, the certificate is valid for 60 days.

In order to be valid, the numbers must be installed to the proper specifications. Check with your dealer or state boating authority for numbering requirements. The Coast Guard issues the certificate of number in Alaska; all others are issued by the state.

### **Insurance**

In most States the boat owner is legally responsible for damages or injuries he or someone else operating the boat causes. Responsible boaters carry adequate liability and property damage insurance for their boat. You should also protect the boat against physical damage and theft. Some States have laws requiring minimum insurance coverage. Contact your dealer or state boating authority for information on the insurance requirements in your boating area.

## **Reporting Boating accidents**

All boating accidents must be reported by the operator or owner of the boat to the proper marine law enforcement authority for the state in which the accident occurred. Immediate notification is required if a person dies or disappears as a result of a recreational boating accident.

If a person dies or there are injuries requiring more than first aid, a formal report must be filed within 48 hours.

A formal report must be made within 10 days for accidents involving more than \$500.00 damage or the complete loss of a boat.

A Boating Accident Report form is located near the back of this manual to assist you in reporting an accident. If you need additional information regarding accident reporting, please call the Boating Safety Hotline, 800-368-5647.

### **Education**

If you are not an experienced boater, we recommend that the boat operator and other people that normally accompany the operator, enroll in a boating safety course. Organizations such as the U.S. Power Squadrons, United States Coast Guard Auxiliary, State Boating Authorities and the American Red Cross offer excellent boating educational programs. These courses are worthwhile even for experienced boaters to sharpen your skills or bring you up to date on current rules and regulations. They can also help in providing local navigational information when moving to a new boating area. Contact your dealer, State Boating Authority or the Boating Safety Hotline, 800-368-5647 for further information on boating safety courses.

# **Required Equipment**

U.S. Coast Guard regulations require certain equipment on each boat. The Coast Guard also sets minimum safety standards for vessels and associated equipment. To meet these standards some of the equipment must be Coast Guard approved. "Coast Guard Approved Equipment" has been determined to be in compliance with USCG specifications and regulations relating to performance, construction, or materials. The equipment requirements vary according to the length, type of boat, and the propulsion system. Some of the Coast Guard equipment is described in the Safety Equipment chapter of this manual. For a more detailed description, obtain "Federal Requirements And Safety Tips For Recreational Boats" by contacting the Boating Safety Hotline 800-368-5647 or your local marine dealer or retailer.

Some state and local agencies impose similar equipment requirements on waters that do not fall under Coast Guard jurisdiction. These agencies may also require additional equipment that is not required by the Coast Guard. Your dealer or local boating authority can provide you with additional information for the equipment requirements for your boating area.





Your Monterey boat is inspected at each step of the manufacturing process. Before leaving the factory, every Monterey boat undergoes a thorough check for systems operation, fit and finish. Your Monterey Dealer also performs a Pre-Delivery inspection prior to final delivery. When the new boat is delivered to you, the customer, a final check is performed during orientation. Both the Pre-Delivery and Final Delivery inspections are documented to ensure trouble free operation and returned to Monterey Boats.

At the time of new boat delivery, your Monterey Dealer will ask you to sign the completed Inspection Report at the same time as the Warranty Registrations for the boat and other accessory equipment. By signing these documents, you acknowledge that you have reviewed and understand all information.

FOR ALL 2011 A	IL MENTER MC	, DELS	
			MONTERE BOATS
Boat Number (HIN): <b>RGF</b>	Boat Model:		1579 S.W. 18 <sup>th</sup> Street
Selling Dealer:	Dealer Code	<u> </u>	Williston, FL 32696 Tel 352-529-9181 Fax 888-922-6287
Engine Brand:	Engine Mode	d:	
Engine Serial #1:	Drive Serial	#1:	
Engine Serial #2:	Drive Serial	#2:	
- Date of Sale:	Warran	ty Start Date:	
Owner Name (Last, First):			
Address:			
Pro City: Sta	vince/	Postal Code/	Country
E-Mail Address:			
Phone:		Phone:	
Indicate Status with the following Ke		THE FOLLOWING OF	
BOAT	ey. V 01 1 - OK, 2 -		• • • • • • • • • • • • • • • • • • • •
Boat gel coat, striping & graphics		ENGI Oil pressure	NE - AFTER STARTING: (in water)
Upholstery fit, clean and free of defects Sundeck/Sun Island/lounger operation		Fuel line con	nectors - no leaks
Canvas fit, clean and free of defects		Engine has r	no water or oil leaks er engine specs, in gear
Cabin Doors, port lights, hatches, cabinet & All thru-hull fittings, ball valves, head drain,	head doors, latches	Ignition timi	ng check with timing light or scan tool
well drain, drain plug-hull, wet bar drain are			orks properly - forward, neutral, reverse read correctly
Windshield fit Ladders			tem - no leaks
EOUIPMENT			SEA TRIAL
Running Lights (Navigation)		Boat perforn Port engine	
Cabin lights, cockpit lights Toilet (Head) operation & hoses			ngine operation
Stereo – Radio, CD, remote control		Steering -op	
Bilge Pumps – Auto float switch		Stern drive t	rim operation register normal
Air Conditioner/Heater – operation & compos Water pressure system (let pressure stand 1	.5 minutes to see if	Maximum R.	
pump goes on) & heater		Technical Check Perfor	med by
Stove, coffee maker, oven, refrigerator, ice Generator – Operation & components secure			
Bilge Blower(s)	•	Technician	Date
Wipers & Horn Shore power (AC)			E-DELIVERY FINAL CHECK
Tables			y equipment operates (Mech. & Elect.) tains, cushions & canvas installed
Plumbing Hose Clamps Battery – Polarity, Voltage, Tight Connection	ne		gine and accessory literature
Battery Switch(es) - Operation		Boat properl	y cleaned, interior and exterior
ENGINE - BEFORE STARTING			g, lights, wheels & brakes
Engine mounts – tight Fuel system operation - no leaks			<u>OWNER ORIENTATION</u> miliarize Owner with operation of all features
Engine compartment components not missin	g, disconnected,	and options	on boat
loose, kinked, pinched or could chafe Hose clamps on engine & exhaust		Sea Trial wit	n Owner wners Manual
Steering system operation, components sect	ure, steering wheel	Review of W	arranties
straight Drains cooling system closed (Closed cooling	s coolant lovel)		wner Responsibilities ervice & Maintenance Procedures
Throttle control, operation & adjustment	, coolaite level)		are & Cleaning
Shifter control, operation & adjustment Stern drive oil level at full mark		Owner Orientation Perf	formed by:
Crankcase & power steering oil levels at full	mark	omici orientation i en	5,1.
Stern drive trim operation Prop Size:		Dealer Personnel	Date
Prop installed correctly with grease, nut(s),	cotter pins		
Prop rotation – Forward & Reverse Neutral start switch, engine will not start in	goar		ee with the checklist. I have read and terev Boats Lifetime Limited Warranty
Transom plate seal has no leaks – water, oil		as it appears on the	
COMMENTS:		Signature of Boat Own	er Date



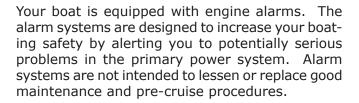
# **NOTES**



# SAFETY EQUIPMENT

# 1.1 General

Your boat and outboard engine have been equipped with safety equipment designed to enhance the safe operation of the boat and to meet U.S. Coast Guard safety standards. The Coast Guard or state, county and municipal law enforcement agencies require certain additional accessory safety equipment on each boat. This equipment varies according to length and type of boat and type of propulsion. The accessory equipment typically required by the Coast Guard is described in this chapter. Some local laws require additional equipment. It is important to obtain "Federal Requirements And Safety Tips for Recreational Boats," published by the Coast Guard, and copies of state and local laws to make sure you have the required equipment for your boating area.



This chapter also describes safety related equipment that could be installed on your boat. This equipment will vary depending on the type of engine and other options installed by you or your dealer.

# 1.2 Engine Alarm

Most outboard engines are equipped with an audible alarm system mounted in the helm area that monitors selected critical engine systems. The alarm will sound if one of these systems begins to fail. Refer to the engine owner's manual for information on the alarms installed with your engine.

## If the alarm sounds:

Immediately throttle the engine back to idle.

- Shift the transmission to neutral.
- Monitor the engine gauges to determine the cause of the problem.
- If necessary, shut off the engine and investigate until the cause of the problem is found.



Throwable Device & Personal PFD

# 1.3 Neutral Safety Switch

Every control system has a neutral safety switch incorporated into it. This device prohibits the engine from being started while the shift lever is in any position other than the neutral position. If the engine will not start, slight movement of the shift lever may be necessary to locate the neutral position and disengage the safety cutout switch. Control or cable adjustments may be required to correct this condition should it persist. See your Monterey dealer for necessary control and cable adjustments. Refer to the Helm Control Systems chapter for more information on the neutral safety switch.

# 1.4 Engine Stop Switch

Your boat is equipped with a engine stop switch and lanyard. When the lanyard is pulled it will engage the switch and shut off the engine. We strongly recommend that the lanyard be attached to the driver and the stop switch whenever the engine is running. If the engine will not start, it could be because the lanyard is not properly inserted into the engine stop switch. Always make sure the lanyard is properly attached to the engine stop switch before attempting to start the engine.

### **Notice:**

In some states, a lanyard attached to the driver at all times is required by law.



# 1.5 Required Safety Equipment

Besides the equipment installed on your boat by Monterey, certain other equipment is required by the U.S. Coast Guard to help ensure passenger safety. Items like a sea anchor, working anchor, extra dock lines, flare pistol, life vests, a line permanently secured to your ring buoy, etc., could at some time save your passengers' lives, or save your boat from damage. Refer to the "Federal Requirements And Safety Tips For Recreational Boats" pamphlet for a more detailed description of required equipment. You also can contact the U.S. Coast Guard Boating Safety Hotline, 800-368-5647, for information on boat safety courses and brochures listing the Federal equipment requirements. Also, check your local and state regulations.

The Coast Guard Auxiliary offers a "Courtesy Examination." This inspection will help ensure that your boat is equipped with all of the necessary safety equipment. The following is a list of the accessory equipment required on your boat by the U.S. Coast Guard:

# **Personal Flotation Devices (PFDs)**

PFDs must be Coast Guard approved, in good and serviceable condition, and of appropriate size for the intended user. Wearable PFDs must be readily accessible, meaning you must be able to put them on in a reasonable amount of time in an emergency. Though not required, the Coast Guard emphasizes that PFDs should be worn at all times when the vessel is underway. Throwable devices must be immediately available for use. All Monterey boats must be equipped with at least one Type I, II or III PFD for each person on board, plus one throwable device (Type IV).

### **NOTICE:**

Many state laws now require that children 13 years old and under must wear a PFD at all times.

Anyone being towed on skis, wakeboards and other water sports equipment is considered a passenger on the boat and must wear a Coast Guard approved life jacket at all times.

## **Visual Distress Signals**

All boats used on coastal waters, the Great Lakes, territorial seas, and those waters connected directly to them, must be equipped with Coast Guard approved visual distress signals. These signals are either Pyrotechnic or Non-Pyrotechnic devices.

## **Pyrotechnic Visual Distress Signals:**

Pyrotechnic visual distress signals must be Coast Guard approved, in serviceable condition, and readily accessible. They are marked with a date showing the service life, which must not have expired. A minimum of three are required. Some pyrotechnic signals meet both day and night use requirements. They should be stored in a cool, dry location. They include:

- Pyrotechnic red flares, hand held or aerial.
- Pyrotechnic orange smoke, hand-held or floating.
- Launchers for aerial red meteors or parachute flares.

# WARNING



PYROTECHNICS ARE UNIVERSALLY RECOGNIZED AS EXCELLENT DISTRESS SIGNALS. HOWEVER, THERE IS POTENTIAL FOR INJURY AND PROPERTY DAMAGE IF NOT PROPERLY HANDLED. THESE DEVICES PRODUCE A VERY HOT FLAME AND THE RESIDUE CAN CAUSE BURNS AND IGNITE FLAMMABLE MATERIAL. PISTOL LAUNCHED AND HAND-HELD PARACHUTE FLARES AND METEORS HAVE MANY CHARACTERISTICS OF A FIREARM AND MUST BE HANDLED WITH CAUTION. IN SOME STATES THEY ARE CONSIDERED A FIREARM AND PROHIBITED FROM USE. ALWAYS BE EXTREMELY CAREFUL AND FOLLOW THE MANUFACTURER'S INSTRUCTIONS EXACTLY WHEN USING PYROTECHNIC DISTRESS SIGNALS.

### **Non-Pyrotechnic Devices**

Non-Pyrotechnic visual distress signals must be in serviceable condition, readily accessible, and certified by the manufacturer as complying with U.S. Coast Guard requirements. They include:

- Orange Distress Flag (Day use only)
  - The distress flag is a day signal only. It must be at least  $3 \times 3$  feet with a black square and ball on an orange background. It is most distinctive when attached and waved from a paddle or boat hook.
- Electric Distress Light (Night use only)

The electric distress light is accepted for night use only and must automatically flash the international SOS distress signal. Under "Inland Navigation Rules," a high intensity white light flashing at regular intervals from 50-70 times per minute is considered a distress signal.



# **Sound Signaling Devices**

The navigation rules require sound signals to be made under certain circumstances. Recreational vessels also are required to sound fog signals during periods of reduced visibility. Therefore, you must have some means of making an efficient sound signal.

# **Navigation Lights**

Recreational boats are required to display navigation lights between sunset and sunrise and other periods of reduced visibility (fog, rain, haze, etc.) Navigation lights are intended to keep other vessels informed of your presence and course. Your boat is equipped with navigation lights required by the U.S. Coast Guard at the time of manufacture. It is up to you to make sure they are operational and turned on when required.

# **Fire Extinguishers**

At least one fire extinguisher is required on all Monterey boats. Coast Guard approved fire extinguishers are hand-portable, either B-I or B-II classification and have a specific marine type mounting bracket. It is recommended that the extinguishers be mounted in a readily accessible position

# Fire extinguishers require regular inspections to ensure that:



- Pressure gauges or indicators read in the operable range.
- There is no obvious physical damage, corrosion, leakage or clogged nozzles.

Refer to the "Federal Requirements And Safety Tips For Recreational Boats" pamphlet or contact the U.S. Coast Guard Boating Safety Hotline, 1-800-368-5647, for information on the type and size fire extinguisher required for your boat.

Refer to the information provided by the fire extinguisher manufacturer for instructions on the proper maintenance and use of your fire extinguisher.



# **CAUTION**



INFORMATION FOR AGENT FE-241 AND FE-227 FIRE EXTINGUISHERS IS PROVIDED BY THE MANUFACTURER. IT IS ESSENTIAL THAT YOU READ THE INFORMATION CAREFULLY AND COMPLETELY UNDERSTAND THE SYSTEM, IN THEORY AND OPERATION, BEFORE USING YOUR BOAT.

# 1.6 Bilge & Fuel Fires

Fuel compartment and bilge fires are very dangerous because of the presence of gasoline or diesel fuel in the various components of the fuel system and the possibility for explosion. You must make the decision to fight the fire or abandon the boat. If the fire cannot be extinguished quickly or it is too intense to fight, abandoning the boat may be your only option.

If you find yourself in this situation, make sure all passengers have a life preserver on, go over the side and swim well upwind of the boat. This will keep you and your passengers well clear of any burning fuel that could be released and spread on the water as the boat burns or in the event of an explosion. When clear of the danger, check about and account for all those who were aboard with you. Give whatever assistance you can to anyone in need or in the water without a buoyant device. Keep everyone together in a group for morale and to aid rescue operations.



# WARNING



ALL TYPES OF FUEL CAN EXPLODE. IN THE EVENT OF A FUEL COMPARTMENT OR BILGE FIRE, YOU MUST MAKE THE DIFFICULT DECISION TO FIGHT THE FIRE OR ABANDON THE BOAT. YOU MUST CONSIDER YOUR SAFETY, THE SAFETY OF YOUR PASSENGERS, THE INTENSITY OF THE FIRE AND THE POSSIBILITY OF AN EXPLOSION IN YOUR DECISION.



# 1.7 First Aid

It is the operator's responsibility to be familiar with the proper first-aid procedures and be able to care for minor injuries or illnesses of your passengers. In an emergency, you could be far from professional medical assistance. We strongly recommend that you be prepared by receiving training in basic first aid and CPR. This can be done through classes given by the Red Cross or your local hospital.

Your boat also should be equipped with at least a simple marine first-aid kit and a first-aid manual. The marine first-aid kit should be designed for the marine environment and be well supplied. It should be accessible and each person on board should be aware of its location. As supplies are used, replace them promptly. Some common drugs and antiseptics may lose their strength or become unstable as they age. Ask a medical professional about the supplies you should carry and the safe shelf life of prescription drugs or other medical supplies that may be in your first-aid kit. Replace questionably old supplies whether they have been used or not.

In many emergency situations, the Coast Guard can provide assistance in obtaining medical advice for treatment of serious injuries or illness. If you are within VHF range of a Coast Guard Station, make the initial contact on channel 16 and follow their instructions.

# 1.8 Additional Safety Equipment

Besides meeting the legal requirements, prudent boaters carry additional safety equipment. This is particularly important if you operate your boat offshore. You should consider the following items, depending on how you use your boat.

### Satellite EPIRBS

EPIRBs (Emergency Position Indicating Radio Beacon) operate as part of a worldwide distress system. When activated, EPIRBs will send distress code homing beacons that allow Coast Guard aircraft to identify and find them quickly. The satellites that receive and relay EPIRB signals are operated by the National Oceanic and Atmospheric Administration (NOAA) in the United States. The EPIRB should be mounted and registered according to the instructions provided with the beacon, so that the beacon's unique distress code can be used to quickly identify the boat and owner.



Typical First Aid Kit

### **Marine Radio**

A marine radio is the most effective method of receiving information and requesting assistance. VHF marine radios are used near shore and single sideband radios are used for long range communication.

There are specific frequencies to use in an emergency. The VHF emergency channel is 16 in the United States. You should read the owners manual for your radio and know how to use it in an emergency or for normal operation. If you hear a distress call you should assist or monitor the situation until help is provided.

# Additional Equipment to Consider:

Cell Phone	Spare Anchor
Fenders	Heaving Line
Mirror	First Aid Kit

Tool Kit Flashlight & Batteries

Anchor Search light
Boat Hook Sunburn Lotion

Mooring Lines Ring Buoy or Boat Cushion

Binoculars Whistle or Horn
Extra Clothing Portable Radio
Chart and Compass Marine Hardware

Food & Water Spare Keys Sunglasses Spare Parts

Spare Propeller Spare Propeller Hub Kit



# 1.9 Caution & Warning Labels

The caution and warning labels shown are examples of the labels that could be on your boat. The actual labels and their location could vary on your boat.

Caution and warning labels must remain legible for the safety of you and your passengers. If a label becomes missing or damaged it must be replaced. Immediately contact your dealer or Monterey Customer Service for a replacement.



### **CAUTION**

TO AVOID INJURY, GLASS DOOR MUST BE SECURED IN A CLOSED AND LOCKED POSITION WHEN BOAT IS UNDERWAY. USE BOTH TURN LOCKS TO SECURE DOOR

### WARNING



CARBON MONOXIDE (CO) CAN CAUSE BRAIN DAMAGE OR DEATH.

ENGINE AND GENERATOR EXHAUST CONTAINS ODORLESS AND COLORLESS CARBON MONOXIDE GAS.

SIGNS OF CARBON MONOXIDE POISONING IN CLUDE NAUSEA, HEADACHE, DIZZINESS, DROWSINESS, AND LACK OF CONSCIOUSNESS.

GET FRESH AIR IF ANYONE SHOWS SIGNS OF CARBON MONOXIDE POISONING.

SEE OWNER'S MANUAL FOR INFORMATION REGARDING CARBON MONOXIDE POISONING.

## WARNING



GASOLINE VAPORS CAN EXPLODE. BEFORE STARTING ENGINE:

CHECK ENGINE COMPARTMENT FOR GASOLINE OR VAPORS. OPERATE BLOWER FOR FOUR MINUTES. RUN BLOWER BELOW CRUISING SPEED.

### WARNING



AVOID SERIOUS INJURY OR DEATH FROM FIRE OR EXPLOSION RESULTING FROM LEAKING FUEL. INSPECT SYSTEM FOR LEAKS AT LEAST ONCE A YEAR.

### A

### **WARNING**



SEAT NOT TO BE OCCUPIED WHILE UNDERWAY OR ENGINE IS RUNNING.

## DANGER



CARBON MONOXIDE (CO) CAN CAUSE BRAIN DAMAGE OR DEATH.

ENGINE AND GENERATOR EXHAUST CONTAINS ODORLESS AND COLORLESS MONOXIDE GAS.

CARBON MONOXIDE WILL BE AROUND THE BACK OF THE BOAT WHEN THE ENGINES OR GENERATORS ARE RUNNING.

MOVE TO FRESH AIR, IF YOU FEEL NAUSEA, HEADACHE, DISSINESS, OR DROWSINESS.



### **DANGER**



IN THE EVENT OF FIRE, DO NOT OPEN ENGINE HATCH. IMMEDIATELY SHUT DOWN ENGINE, GENERATOR, AND BLOWERS, DISCHARGE ENTIRE CONTENTS OF FIRE EXTINGUISHER THROUGH THE FIRE PORT. AVOID INHALATION OF TOXIC FUMES.

**VENTILATE SPACE BEFORE ENTERING** 

### $\Lambda$

### WARNING



VISIBILITY FROM THE SEATED POSITION AT THIS HELM STATION IS LIMITED. AVOID SERIOUS INJURY OR DEATH FROM COLLISIONS. OPERATION FROM A STANDING POSITION MAY BE NECESSARY TO MAINTAIN A LOOKOUT AS REQUIRED BY USCG NAVIGATION RULES AND COLREG.

# WARNING



ROTATING PROPELLER MAY CAUSE SERIOUS INJURY OR DEATH. SHUT OFF ENGINE WHEN NEAR PERSONS IN THE WATER.



# WARNING



FALLING OVERBOARD CAN CAUSE INJURY OR DEATH. CLOSE THE TRANSOM GATE WHENEVER THE BOAT IS UNDERWAY.

### \_\_\_\_

# WARNING



AVOID ELECTRICAL SHOCK. PLUG INTO GROUND FAULT CIRCUIT INTERRUPT (GFCI) PROTECTED AC OUTLET.

## WARNING



ROTATING PROPELLER MAY CAUSE SERIOUS INJURY OR DEATH.

DO NOT APPROACH OR USE LADDER WHEN ENGINE IS RUNNING.



# **NOTES**



# **OPERATION**

# 2.1 General

Before you start the engine on your Monterey, you should have become familiar with the various component systems and their operation and have performed a "Precruise System Check." A thorough understanding of the component systems and their operation is essential to the proper operation of the boat. This manual and the associated manufacturers' information is provided to enhance your knowledge of your boat. Please read them carefully.

Your boat must have the necessary safety equipment on board and be in compliance with the U.S. Coast Guard, local and state safety regulations. There should be one Personal Flotation Device (PFD) for each person. Non-swimmers and small children should wear PFDs at all times. You should know and understand the "Rules of the Road" and have had an experienced operator brief you on the general operation of your new boat. At least one other person should be instructed on the proper operation of the boat in case the operator is suddenly incapacitated.

The operator is responsible for his safety and the safety of his passengers. When boarding or loading the boat, always step onto the boat, never jump. All passengers should be properly seated whenever the boat is operated above idle speed. Your passengers should not be allowed to sit on the seat backs, gunnels, bows, or transoms whenever the boat is underway. The passengers also should be seated to properly balance the load and must not obstruct the operator's view, particularly to the front.

Overloading and improper distribution of weight can cause the boat to become unstable and are significant causes of accidents. Know the weight capacity and horsepower rating of your boat. Do not overload or overpower your boat.

You should be aware of your limitations and the limitations of your boat in different situations or sea conditions. No boat is indestructible, no matter how well it is constructed. Any boat can be severely damaged if it is operated in a manner that exceeds its design limitations. If the ride is hard on you and your passengers, it is hard on

the boat as well. Always modify the boat speed in accordance with the sea conditions, boat traffic and weather conditions.

Remember, it is the operator's responsibility to use good common sense and sound judgement in loading and operating the boat.

# 2.2 Rules of the Road

As in driving an automobile, there are a few rules you must know for safe boating operation. The following information describes the basic navigation rules and action to be taken by vessels in crossing, meeting or overtaking situations while operating in inland waters. These are basic examples and not intended to teach all the rules of navigation. For further information consult the "Navigation Rules" or contact the Coast Guard, Coast Guard Auxiliary, Department of Natural Resources, or your local boat club. These organizations sponsor courses in boat handling, including rules of the road. We strongly recommend such courses. Books or videos on this subject also are available from your local library.

# **NOTICE:**

Sailboats not under power, paddle boats, vessels unable to maneuver, vessels engaged in commercial fishing and other vessels without power have the right of way over motor powered boats. You must stay clear or pass to the stern of these vessels. Sailboats under power are considered motor boats.

# **Crossing Situations**

When two motor boats are crossing, the boat on the right has the right of way. The boat with the right of way should maintain its course and speed. The other vessel should slow down and permit it to pass. The boats should sound the appropriate signals.

# **Meeting Head-On or Nearly-So Situations**

When two motor boats are approaching each other head-on or nearly head-on, neither boat has the right of way. Both boats should reduce their speed and turn to the right so as to pass port side to port side, providing enough clearance for safe passage. The boats should sound the appropriate signals.



### **Overtaking Situations**

When one motor boat is overtaking another motor boat, the boat that is being passed has the right of way. The overtaking boat must make the adjustments necessary to provide clearance for a safe passage of the other vessel. The boats should sound the appropriate signals.

### The General Prudential Rule

In obeying the Rules of the Road, due regard must be given to all dangers of navigation and collision, and to any special circumstances, including the limitations of the vessels, which may justify a departure from the rules that is necessary to avoid immediate danger or a collision.

## **Night Operation**

Recreational boats are required to display navigation lights between sunset and sunrise and other periods of reduced visibility such as fog, rain, haze, etc. When operating your boat at night you should:

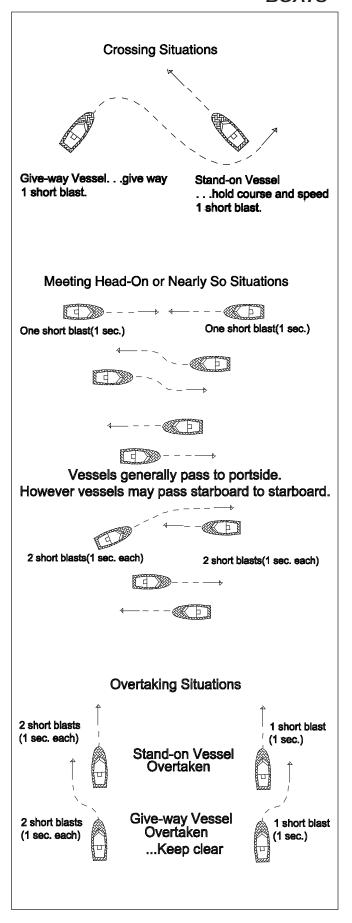
- Make sure your navigation lights are on and working properly. Navigation lights warn others of your position and course and the position and course of other vessels.
- All navigation rules apply. If the bow light of another vessel shows red, you should give way to that vessel, if it shows green, you have the right of way.
- Slow down and never operate at high speeds when operating at night, stay clear of all boats and use good common sense. Always be ready to slow down or steer clear of other vessels, even if you have the right-of-way.
- Avoid bright lights that can destroy night vision, making it difficult to see navigation lights and the lights of other boats. You and your passengers should keep a sharp lookout for hazards, other boats and navigational aids.

# **Navigation Aids**

Aids to navigation are placed along coasts and navigable waters as guides to mark safe water and to assist mariners in determining their position in relation to land and hidden dangers. Each aid to navigation is used to provide specific information. You should be familiar with these and any other markers used in your boating area.

### **NOTICE:**

Storms and wave action can cause buoys to move. You should not rely on buoys alone to determine your position.





### **Navigational Aids Chart** REMEMBER 1. OVERTAKING - PASSING: Boat being passed has the right-of-way. KEEP CLEAR. THESE 2. MEETING HEAD ON: Keep to the right. RULES 3. CROSSING: Boat on right has the right-of-way. Slow down and permit boat to pass. STORM WARNINGS <-- PORT STARBOARD -> Yield DANGER right-of-way ZONE to boats (Dead ahead in your to 2 points DANGER abaft your 2 RED FLAGS 2 SQUARE **RED FLAG** SQUARE ZONE! starboard Small craft Gale **RED FLAG RED FLAGS** beam) (winds to (winds up to BLACK BOX **BLACK BOX** (Hurricane) 33 knots) 47 knots) (Storm) WHISTLE SIGNALS BRIDGE SIGNALS DAY NIGHT (Flag) (Lights) ONE LONG BLAST: Warning signal SOUND VISUAL (Coming out of slip) VESSEL: Open VESSEL: Open ONE SHORT BLAST: Pass on my port side BRIDGE: OK TWO SHORT BLASTS: Pass on my starboard side BRIDGE: OK Same Same THREE SHORT BLASTS: Engine(s) in reverse VESSEL: Replies: FOUR OR MORE BLASTS: Danger signal $\langle \bullet \rangle \langle \bullet \rangle$ RADIO: VHF CH. 13 LATERAL AIDS AS SEEN ENTERING FROM SEAWARD SAFE WATER MID-CHANNELS OR FAIRWAYS PORT SIDE STARBOARD SIDE NO NUMBERS — MAY BE LETTERED ODD NUMBERED AIDS **EVEN NUMBERED AIDS** □ WHITE LIGHT ONLY MORSE CODE Mo (A) GREEN LIGHT ONLY RED LIGHT ONLY FLASHING CONTROL OF THE PROPERTY OF THE PROPER FLASHING OCCULTING CONTRACTOR OCCULTING QUICK FLASHING QUICK FLASHING RW BW ISOPHASE ISOPHASE יער שום SP "G" SPHERICAL AND OR SOUND PREFERRED CHANNEL NO NUMBERS — MAY BE LETTERED COMPOSITE GROUP FLASHING (2+1) G \*9' R "8" FIG 4sec FIR 4sec LIGHTED BUOY GREEN LIGHT ONLY RED LIGHT ONLY LIGHTED BUOY RG B LIGHTED PREFERRED CHANNEL TO PORT TOPMOST BAND CHANNEL TO STARBOARD TOPMOST BAND GREEN RED CAN SG DAYMARK



# 2.3 Pre-Cruise Check Before Starting the Engine:

- Check the weather forecast and sea conditions before leaving the dock. Decide if the planned cruise can be made safely.
- Be sure all required documents are on board.
- Be sure all necessary safety equipment is on board and operative. This should include items like the running lights, spotlight, life saving devices, etc. Refer to the Safety Equipment chapter for additional information on safety equipment.
- Make sure you have signal kits and flare guns aboard, and they are current and in good operating condition.
- Be sure you have sufficient water and other provisions for the planned cruise.
- Leave a written message listing details of your planned cruise with a close friend ashore (Float Plan). The float plan should include a description of your boat, where you intend to cruise, and a schedule of when you expect to arrive in the cruising area, and when you expect to return. Keep the person informed of any changes in your plan to prevent false alarms. This information will tell authorities where to look and the type of boat to look for in the event you fail to arrive.
- Check the amount of fuel on board. Observe the "rule of thirds:" one third of the fuel for the trip out, one third to return and one third in reserve. An additional 15% may be consumed in rough seas.
- The engine fuel filter should be checked for leaks or corrosion.
- Turn the battery switch on.
- Check the bilge water level. Look for other signs of potential problems. Monitor for the scent of fuel fumes.

- Test the automatic and manual bilge pump switches to make sure the system is working properly.
- Have a tool kit aboard. The kit should include the following basic tools:

Spark plug wrench
Spark plug gap gauge
Screwdrivers
Lubricating oil
Jackknife
Basic 3/8" ratchet set
Allen wrench set
Wire crimping tool
End wrench set
Diagonal cutting pliers

Hammer
Electrician's tape
Offset screwdrivers
Pliers
Adjustable wrench
Vise grip pliers
Needle nose pliers
Wire connector Set
Medium slip-joint pliers
DC electrical test light



# WARNING



THERE MUST BE AT LEAST ONE PERSONAL FLOTATION DEVICE ON BOARD FOR EVERY PERSON ON BOARD AND ONE THROW-OUT FLOTATION DEVICE. CHECK THE U.S. COAST GUARD STANDARDS FOR THE CORRECT TYPE OF DEVICE FOR YOUR BOAT.

Have the following spare parts on board:

Extra light bulbs
Fuses and
Main 12 volt fuses
Assorted stainless bolts
Drain plugs
Propellers
Propeller nuts
Fuel hose and clamps
Engine cooling pump
Impeller Kit
Clamps
Steering fluid

Spark plugs circuit breakers Assorted stainless screws Flashlight and batteries Engine oil Fuel filters Wire ties Hydraulic oil Assorted hoses Rags

engine alternator belt

 Make sure all fire extinguishers are in position and in good operating condition.



# **2.4 Operating Your Boat** After Starting the Engine:

- Visibly check the engine to be sure there are no apparent water, fuel or oil leaks.
- Check the operation of the engine cooling system by monitoring the water flowing from the bypass ports.
- Check the engine gauges. Make sure they are reading normally.
- Check the controls and steering for smooth and proper operation.
- Make sure all lines, cables, anchors, etc. for securing a boat are on board and in good condition. All lines should be coiled, secured and off the decks when underway.
- Have a safe cruise and enjoy yourself.

### Remember:

When you operate a boat, you accept the responsibility for the boat, for the safety of passengers and for others out enjoying the water.

- Alcohol and any drugs can severely reduce your reaction time and affect your better judgement.
- Alcohol severely reduces the ability to react to several different signals at once.
- Alcohol makes it difficult to correctly judge speed and distance or track moving objects.
- Alcohol reduces night vision and the ability to distinguish red from green.



# WARNING



YOU SHOULD NEVER OPERATE YOUR BOAT WHILE UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.

- Make sure one other person on the boat is instructed in the operation of the boat.
- Make sure the boat is operated in compliance with all state and local laws governing the use of a boat.



# **WARNING**



DO NOT OPERATE THE BOAT UNLESS IT IS COMPLETELY ASSEMBLED. KEEP ALL FASTENERS TIGHT. KEEP ADJUSTMENTS ACCORDING TO SPECIFICATIONS.

# WARNING



FAILURE TO FOLLOW THE BREAK-IN PROCEDURE MAY RESULT IN REDUCED ENGINE LIFE OR EVEN SEVERE DAMAGE IN YOUR OUTBOARD ENGINE. MAKE SURE YOU FOLLOW THE BREAK-IN PROCEDURE EXACTLY.

- Avoid sea conditions that are beyond the skill and experience of you and your crew. Learn to understand weather patterns and indications for change. You should monitor NOAA weather broadcasts before leaving port and periodically while boating. If the weather deteriorates or a storm approaches, seek shelter in a safe harbor.
- Use caution during periods of reduced visibility due to weather or operation conditions.
   Reduce speed and designate a passenger to be a lookout for other boats, obstacles and navigational markers until you reach port or conditions improve.
- Your Monterey is a heavy boat that will produce a large wake at certain speeds. You are responsible for damage and injury caused by your boat's wake. Always observe No-Wake zones and be aware that your wake can endanger small vessels and their passengers. Always be courteous and slow down to reduce your wake when passing smaller boats.
- Before operating the boat for the first time, read the engine break-in procedures. The break-in procedures are found in the owner's manual for the engine. The manual is in the literature packet.
- As different types of engines are used to power the boat, have the dealer describe the operating procedures for your boat. For more instructions on "How To Operate The Boat," make sure you read the instructions given to you in the owner's manual for the engine you have selected.



### **Notice:**

For more instructions on safety, equipment and boat handling, enroll in one of the several free boating courses offered. For information on the courses offered in your area, call the "Boating Course Hotline," 1-800-368-5647 or on the WEB at www.uscgboating.org.

### **Notice:**

If the running gear hits an underwater object, stop the engine. Inspect the propulsion system for damage. If the system is damaged, contact your dealer for a complete inspection and repair of the unit.

# To stop the boat, follow this procedure:

- Allow the engine to drop to idle speed.
- Make sure the shifting lever is in the neutral position.

### **Notice:**

If the engine has been run at high speed for a long period of time, allow it to cool down by running the engine in the idle position for 3 to 5 minutes.

- Turn the ignition key to the "OFF" position.
- Raise the trim tabs to the full up position.
   Some boats are equipped with trim tabs that will automatically retract when the engine is turned off.

# **After Operation:**

- If operating in saltwater, wash the boat and all equipment with soap and water. Flush the engine using fresh water. Refer to the engine owner's manual for instructions on flushing your outboard engine.
- Check the bilge area for debris and excess water.
- Fill the fuel tank to near full to reduce condensation. Allow enough room in the tank for the fuel to expand without being forced out through the vent.
- Turn off all electrical equipment except the automatic bilge pumps.
- If you are going to leave the boat for a long period of time, put the battery main switch in the "Off" position and close all seacocks.
- Make sure the boat is securely moored.



# CAUTION



TO PREVENT DAMAGE TO THE BOAT, CLOSE ALL SEACOCKS BEFORE LEAVING THE BOAT.

# 2.5 Docking, Anchoring & Mooring Docking and Dock Lines

Maneuvering the boat near the dock and securing the boat requires skill and techniques that are unique to the water, wind conditions and the layout of the dock. If possible, position a crew member at the bow and stern to man the lines and assist in docking operations. While maneuvering close to the dock consideration must be given to the wind and current. You should anticipate the effect these forces will have on the boat and use them to help put the boat where you want it. It is important to practice in open water using an imaginary dock enough to develop a sense for the way your boat handles in a variety of docking scenarios. You must be able to foresee the possibilities and have solutions in mind before problems occur.

Approaching a dock or backing into a slip in high winds or strong currents requires a considerable amount of skill. If you are new to boat handling, you should take lessons from an experienced pilot to learn how to maneuver your boat in tight quarters in less than ideal conditions. You should also practice away from the dock during windy conditions.

Dock lines are generally twisted or braided nylon. Nylon is strong and stretches to absorb shock. It also has a long life and is soft and easy on the hands. The line's size will vary with the size of the boat. Typically a 30 to 40 foot boat will use 5/8-inch line and a 20 to 30 foot boat will use 1/2-inch line. The number of lines and their configuration will vary depending on the dock, the range of the tide and many other factors. Usually a combination of bow, stern and spring lines is used to secure the boat.

# Maneuvering to the Dock

Approach the dock slowly at a 30 to 40 degree angle. Whenever possible, approach against the wind or current. Turn the engine straight & shift to neutral when you feel you have enough momentum to reach the dock. Use reverse while turning the steering wheel towards the dock to slow the boat and pull the stern towards the dock as the boat approaches. Straighten the engine and use



the engine to stop the boat if it is still moving forward against the pilings. If you executed your approach properly, the boat will lightly touch the pilings at the same time the forward momentum is stopped. Have the dock lines ready and secure the boat as soon at it stops. Use fenders to protect the boat while it is docked. Keep the engine running until the lines are secured.

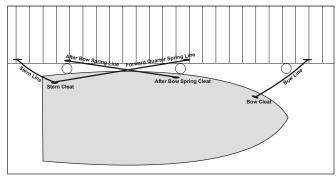
# **Backing into a Slip**

Approach the slip with the stern against the wind or current and the engine straight ahead. Use the engine and turn the steering wheel to maneuver the boat into alignment with the slip. Reverse the engine and slowly back into the slip. Shift from reverse to neutral frequently to prevent the boat from gaining too much speed. Move the stern right and left by shifting the engine in and out of gear and turning the wheel in the direction you want the stern to go. When nearly in the slip all the way, straighten the engine and shift to forward to stop. Keep the engine running until the lines are secured.

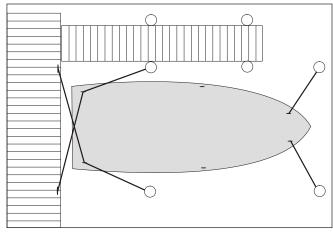
# **Securing Dock Lines**

Securing a boat along side the dock typically requires a bow and stern line and two spring lines. The bow and stern lines are usually secured to the dock at a 40° angle aft of the stern cleat and forward of the bow cleat. The after bow spring line is secured to the dock at a 40° angle aft of the after bow spring cleat. The forward quarter spring is secured to the dock at a 40° angle forward of the stern cleat. The spring lines keep the boat square to the dock and reduce fore and aft movement while allowing the boat to move up and down with the tide.

Securing a boat in a slip is somewhat different. It typically requires two bow lines secured to pilings on each side of the bow, two stern lines secured to the dock and two spring lines that prevent the boat from hitting the dock. The bow lines are typically secured with enough slack to allow the boat to ride the tide. The stern lines are crossed. One line runs from the port aft boat cleat to the starboard dock cleat and the other line runs from the starboard aft boat cleat to the port cleat on the dock. The stern lines center the boat, control the forward motion and allow the boat to ride the tide. Two forward quarter spring lines typically are secured to the stern cleats and to mid ship pilings or cleats. The spring lines keep the boat from backing into the dock while allowing it to ride the tide.



Securing The Boat Along Side A Dock (Typical)



Securing The Boat In A Slip (Typical)

# **Leaving the Dock**

Always start the engine and let it warm up for 10 to 15 minutes before releasing the lines. Boats steer from the stern and it is important that you achieve enough clearance at the stern to maneuver the boat as quickly as possible. Push the stern off and maneuver such that you get stern clearance quickly. Proceed slowly until well clear of the dock and other boats.

# Mooring

Approach the mooring heading into the wind or current. Shift to neutral when you have just enough headway to reach the buoy. Position a crew member on the bow to retrieve the mooring line with a boat hook and secure the line. Keep the engine running until the line is secured.

# **Leaving a Mooring**

Start the engine and let it warm up for several minutes before releasing the mooring line. The boat will already be headed into the wind, so move it forward enough to loosen the line and untie it. Back the boat away from the mooring until you can see the buoy. Move the boat slowly away from the mooring.



### **Anchoring**

Make sure the bitter end of the anchor line is attached to boat before dropping the anchor. Bring the bow into the wind or current and put the engine in neutral. When the vessel comes to a stop, lower the anchor over the bow. Pay out anchor line so that it is at least 5 to 7 times the depth of the water and secure the line to a cleat. Use caution to avoid getting your feet or hands tangled in the line. Additional scope of 10 times the depth may be required for storm conditions. Check landmarks on shore or your GPS position to make sure the anchor is not dragging. If it is dragging, you will have to start all over. It is prudent to use two anchors at the bow if your are anchoring overnight or in rough weather.

Do not set a bow and stern anchor when mooring, only anchor from the bow. The stern anchor will not allow the boat to swing with the current and wind. If your are anchored in a mooring with other boats, your boat will not swing with the other boats in the mooring, creating a potential for contact with another boat when the tide or wind changes. Additionally, having the stern to the wind or tide creates a potentially hazardous situation for the boat and crew.

# **Releasing the Anchor**

Release the anchor by driving the boat slowly to the point where the anchor line becomes vertical. It should release when you pass that point. If the anchor doesn't release right away, stop the boat directly above the anchor and tie the line to the cleat as tight as possible. The up and down movement of the boat will usually loosen the anchor within a minute. Make sure you secure the anchor and properly stow the line before operating the boat.



# WARNING



NEVER ANCHOR THE BOAT BY THE STERN. THE STERN OF THE BOAT IS VULNERABLE TO SWAMPING FROM WAVE ACTION. ADDITIONALLY, WIND AND CURRENT WILL PUT MORE STRESS ON THE ANCHOR WHEN IT IS ATTACHED TO THE STERN. ONLY ANCHOR THE BOAT BY THE BOW

# 2.6 Controls, Steering or Propulsion System Failure

If the propulsion, control or steering system fails while you are operating the boat, bring the throttle to idle and shift to neutral. Decide whether you need to put out the anchor to prevent the boat

from drifting or to hold the bow into the seas. Investigate and correct the problem if you can. Turn the engine off before opening the engine cowling to make repairs. If you are unable to correct the problem, call for help.

# 2.7 Grounding, Towing & Rendering Assistance

The law requires the owner or operator of a vessel to render assistance to any individual or vessel in distress, as long as his vessel is not endangered in the process.

If the boat should become disabled, or if another craft that is disabled requires assistance, great care must be taken. The stress applied to a boat during towing may become excessive. Excessive stress can damage the structure of the boat and create a safety hazard for those aboard.

Freeing a grounded vessel or towing a boat that is disabled, requires specialized equipment and knowledge. Line failure and structural damage caused by improper towing have resulted in fatal injuries. Because of this, we strongly suggest that these activities be left to those who have the equipment and knowledge, e.g., the U.S. Coast Guard or a commercial towing company, to safely accomplish the towing task.



# DANGER



THE MOORING CLEATS, SKI TOW FITTINGS, WAKEBOARD TOWERS AND ARCHES ON MONTEREY BOATS ARE NOT DESIGNED OR INTENDED TO BE USED FOR TOWING PURPOSES. THE CLEATS ARE SPECIFICALLY DESIGNED AS MOORING CLEATS FOR SECURING THE BOAT TO A DOCK, PIER, ETC. THE SKI TOW FITTINGS ARE SPECIFICALLY DESIGNED FOR PULLING WATER SKIERS. DO NOT USE THESE FITTINGS FOR TOWING OR ATTEMPTING TO FREE A GROUNDED VESSEL.

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# WARNING



WHEN TOWING OPERATIONS ARE UNDERWAY, HAVE EVERYONE ABOARD BOTH VESSELS STAY CLEAR OF THE TOW LINE AND SURROUNDING AREA. A TOW LINE THAT SHOULD BREAK WHILE UNDER STRESS CAN BE VERY DANGEROUS, AND COULD CAUSE SERIOUS INJURY OR DEATH.



# **A**

# WARNING



RUNNING AGROUND CAN CAUSE SERIOUS INJURY TO PASSENGERS AND DAMAGE TO A BOAT AND ITS UNDERWATER GEAR. IF YOUR BOAT SHOULD BECOME GROUNDED, DISTRIBUTE PERSONAL FLOTATION DEVICES AND INSPECT THE BOAT FOR POSSIBLE DAMAGE. THOROUGHLY INSPECT THE BILGE AREA FOR SIGNS OF LEAKAGE. AN EXPERIENCED SERVICE FACILITY SHOULD CHECK YOUR UNDERWATER GEAR AT THE FIRST OPPORTUNITY. DO NOT CONTINUE TO USE YOUR BOAT IF THE CONDITION OF THE UNDERWATER EQUIPMENT IS QUESTIONABLE.

# 2.8 Flooding or Capsizing

Boats can become unstable if they become flooded or completely swamped. You must always be aware of the position of the boat to the seas and the amount of water in the bilge. Water entering the boat through the transom door or over the stern gunnels can usually be corrected by turning the boat into the waves. If the bilge is flooding because of a hole in the hull or a defective hose, you may be able to plug it with rags, close the thru-hull valve or assist the bilge pump by bailing with buckets. Put a mayday call in to the Coast Guard or nearby boats and distribute life jackets as soon as you discover your boat is in trouble.

If the boat becomes swamped and capsizes, you and your passengers should stay with the boat as long as you can. It is much easier for the Coast Guard, aircraft, or other boats to spot, than people in the water. If your boat is equipped with an EPIRB, make sure it is activated. When activated, EPIRBs will send distress code homing beacons that allow Coast Guard aircraft to identify your boat and find you quickly.

# 2.9 Fishing

Fishing can be very exciting and distracting for the operator when the action gets intense. You must always be conscious of the fact that your primary responsibility is the safe operation of your boat and the safety of your passengers and other boats in the area.

You must always make sure the helm is properly manned and is never left unattended while trolling. If you are fishing in an area that is crowded with other fishing boats, it may be difficult to follow the rules of the road. This situation can become especially difficult when most boats are trolling. Being courteous and exercising good common sense is essential. Avoid trying to assert your right of way and concentrate on staying clear and preventing tangled or cut lines and other unpleasant encounters with other boats. Also keep in mind that fishing line wrapped around a propeller shaft can damage the seal in the lower unit.

# 2.10 Water Skiing & Wakeboarding

Your boat is equipped for water skiing and wakeboarding. If you have never driven skiers before, you should spend some hours as an observer and learning from an experienced driver. If you are an experienced driver, you should take some time to become familiar with the boat and the way it handles before pulling a skier. The driver should also know the skier's ability and drive accordingly.

Always use high quality tow ropes with attachment loops when pulling wakeboarders or skiers and only attach the tow rope to the ski tow fittings on the transom, arch or wakeboard tower. Never use mooring cleats or grab rails to pull skiers. They are not designed for towing skiers and injury to skiers or passengers and/or damage to the boat could result.

The tow rope should always be attached using the attachment loops and never tied to the ski tow or to any type of metal hook attached to the tow fitting. Tied ski ropes are very difficult to remove and metal hooks will damage the ski tow fitting and the fiberglass around it. Metal hooks also can cause injury to your skiers if the metal hook breaks under the strain of the tow.

When attaching a tow rope using the attachment loops, hold the attachment loop in one hand and pull a length of rope on the handle side of the loop through the loop, creating another 6" loop. Slide the loop just created over the ski tow fitting and pull the handle side of the rope to tighten the loop around the tow fitting. This procedure will attach the rope securely to the ski tow, be easy to remove and will not come off if the skier or wakeboarder falls.





# WARNING



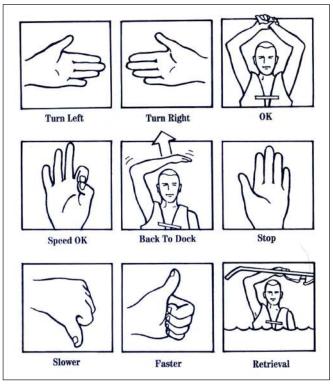
THE OPTIONAL ARCH SKI TOW FITTING IS DESIGNED FOR TOWING WATER SPORTS DEVICES ONLY. DO NOT TOW MORE THAN ONE PERSON AT A TIME FROM THE ARCH. IMPROPER USE OR OVERLOADING THE ARCH MAY CAUSE DAMAGE TO THE ARCH AND/OR BOAT AND COULD IMBALANCE THE BOAT CAUSING HANDLING DIFFICULTIES.

- DO NOT ALLOW PASSENGERS TO SIT BEHIND THE ROPE ATTACHMENT POINT WHEN THE ARCH SKI TOW FITTING IS IN USE.
- DO NOT ALLOW THE LOOSE END OF A TOW ROPE TO DANGLE FROM THE ARCH DOWN INTO THE COCKPIT DURING WATER SPORTS ACTIVITIES.

FAILURE TO ADHERE TO THESE GUIDELINES MAY CAUSE PERSONAL INJURY OR DEATH TO PASSENGERS.

# The following safety precautions should be observed while towing water skiers:

- Water ski only in safe areas, away from other boats and swimmers, out of channels, and in water free of underwater obstructions. The area should be at least 5 feet deep, 3000 feet long and have at least 100' between each side of the boat and any obstructions.
- Make sure that anyone who skis can swim. Do not allow people who cannot swim to water ski.
- Be sure that the skier is wearing a proper life jacket. A water skier is considered on board the boat and a Coast Guard approved life jacket is required. It is advisable and recommended for a skier to wear a flotation device designed to withstand the impact of hitting the water at high speed.
- Make sure to inspect the ski equipment and tow rope before each ski session. Never use equipment that is damaged or with loose screws, torn boots, severe corrosion or tears in the fabric. You should also inspect the ski tow rope and replace if it is frayed, has unnecessary knots or damage. Never use a ski tow line that is questionable.
- Always carry a second person on board to observe the skier or wakeboarder so that your full attention can be given to the safe operation of the boat. The operator should pay attention to driving the boat and have the observer keep him updated on the skier.
- Never ski after dark. It is hazardous and illegal. Neither the boat operator or skier can see well enough to navigate at skiing or wakeboarding speeds safely at night.



Common Hand Signals for Water Sports Activities

- Never spray swimmers, boats, rafts or other skiers. The risk for a collision makes this dangerous for the skier and people being sprayed.
- Some lakes have an approved tow pattern for skiing. Always make sure to follow the pattern on these lakes.
- Never follow directly behind another boat while pulling skiers. Always stay a safe distance behind or off the side of other boat traffic. If the boat you are following stops unexpectedly, you may not be able to respond quick enough endangering your skier and occupants of both boats.
- Never follow behind another boat pulling a skier for any reason, even if you are not pulling a skier. If the skier you are following falls, you may not be able to respond quick enough and could run over the skier.
- When pulling multiple skiers, make sure the ropes are the same length. Never pull multiple skiers with tow ropes of different lengths.



- Always make sure to slowly pull the slack out of the ski rope and wait for the OK from the skier before advancing the throttle to ensure the rope is not wrapped around the skier and that the skier is ready. Never advance the throttle until the skier provides the ready signal.
- When turning around to pick up a fallen skier, make sure to look for other boat traffic in the direction of the turn before you turn the boat.
- Approach a skier in the water from the downwind side and be certain to stop the motion of the boat and your motor before coming in close proximity to the skier.
- Give immediate attention to a fallen skier. A fallen skier is very hard to see by other boats and is extremely vulnerable. When a skier falls, be prepared to immediately turn the boat and return to the skier.
- Never leave a fallen skier alone in the water for any reason and have an observer display a skier down flag to alert other boaters that your skier has fallen.
- Agree on hand signals to be used between the observer and skier to communicate. This is important to eliminate confusion and ensure the safety of your skiers, wakeboarders or tubers. Refer the Hand Signals drawing on this page for signals that are commonly used during water sports activities.
- Make sure the observer watches for the skier's signal to indicate he or she is OK. If the signal is not seen immediately, assume the skier is injured and in need of immediate assistance. Be prepared to respond quickly.
- For additional information on water skiing, including hand signals and water skiing manuals, contact the American Water Skiing Association in Winter Haven, Florida, 813-324-4341.

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## WARNING



MOVING PROPELLERS ARE DANGEROUS. THEY CAN CAUSE DEATH, LOSS OF LIMBS, OR OTHER SEVERE INJURY. DO NOT USE THE SWIM PLATFORM OR SWIM LADDER WHILE THE ENGINE IS RUNNING. STOP THE ENGINE IF DIVERS, SWIMMERS OR SKIERS ARE ATTEMPTING TO BOARD. ALWAYS PROPERLY STORE THE LADDER BEFORE STARTING THE ENGINE.

# 2.11 Teak Surfing

Teak Surfing is a new and dangerous boating fad that involves an individual holding on to the swim platform of a vessel while a wake builds up then lets go to body surf the wave created by the boat; hence the term- "Teak Surfing." This activity puts that individual directly in the path of the boat's exhaust and poisonous carbon monoxide. Because of the multiple dangers associated with teak surfing and the carbon monoxide problem in particular, the Coast Guard has issued a safety alert that strongly advises the public not to engage in teak surfing and warns that teak surfing may cause carbon monoxide poisoning and even fatalities.

Teak surfing not only exposes an individual to potentially fatal concentrations of carbon monoxide from the engine exhaust, it exposes them unnecessarily and dangerously to the boat's propeller. The danger is compounded by the fact that individuals do not usually wear a life jacket when teak surfing.

Teak surfing is an extremely dangerous activity and you should never allow anyone to "Teak Surf" behind your boat or be in the water near the ladder or swim platform while the engine is operating.

# WARNING



TEAK SURFING (HOLDING ONTO THE SWIM PLATFORM WHILE BOAT IS UNDERWAY) IS EXTREMELY DANGEROUS AND CAN CAUSE SEVERE INJURY OR DEATH. TEAK SURFING PUTS AN INDIVIDUAL DIRECTLY THE PATH OF THE BOAT'S EXHAUST AND EXPOSES THEM TO POISONOUS LEVELS OF CARBON MONOXIDE. IT ALSO EXPOSES AN INDIVIDUAL TO THE POSSIBILITY OF BEING THROWN INTO THE PROPELLER. YOU SHOULD NEVER ALLOW ANYONE TO TEAK SURF BEHIND YOUR BOAT OR TO BE IN THE WATER NEAR THE LADDER OR SWIM PLATFORM WHILE THE ENGINE IS RUNNING.

# 2.12 Man Overboard

If someone falls overboard, you must be prepared to react quickly, particularly when you are offshore. The following procedures will help you in recovering a person that has fallen overboard.

 Immediately stop the boat and sound a man overboard alarm and have all passengers point to the person in the water.



- Circle around quickly and throw a cushion or life jacket to the person, if possible, and another to use as a marker.
- Keep the person on the driver side of the boat so you can keep him in sight at all times.
- Make sure to approach the person from the downwind side and maneuver the boat so the propellers are well clear of the person in the water.
- Turn off the engine when the person is alongside and use a ring buoy with a line attached, a paddle or boat hook to assist him to the boat. Make sure you don't hit him with the ring buoy or the boat.
- Pull the person to the boat and assist him on board.
- Check the person for injuries and administer first aid if necessary. If the injuries are serious, call for help. Refer to the Safety Equipment chapter for more information on first aid and requesting emergency medical assistance.

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# WARNING



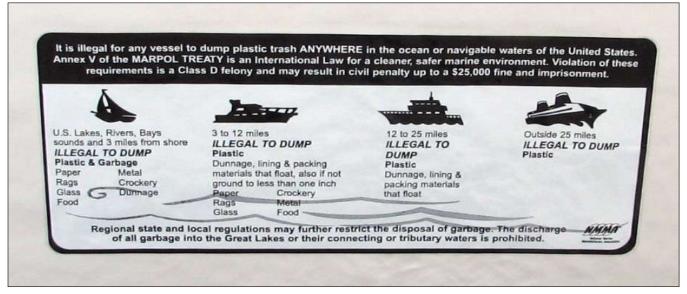
MOVING PROPELLERS ARE DANGEROUS. THEY CAN CAUSE DEATH, LOSS OF LIMBS, OR OTHER SEVERE INJURY. DO NOT USE THE SWIM PLATFORM OR SWIM LADDER WHILE THE ENGINE IS RUNNING. STOP THE ENGINE IF DIVERS OR SWIMMERS ARE ATTEMPTING TO BOARD. ALWAYS PROPERLY STORE THE LADDER BEFORE STARTING THE ENGINE.

# 2.13 Trash Disposal

The discharge of plastic trash or trash mixed with plastic is illegal anywhere in the marine environment. U.S. Coast Guard regulations also restrict the dumping of other forms of garbage. Regional, state and local restrictions on garbage discharges also may apply.

Responsible boaters store refuse in bags and dispose of it properly on shore. You should make sure your passengers are aware of the local waste laws and the trash management procedure on your boat.

Federal law requires that vessels of 26 feet or longer must display in a prominent location, a durable placard at least 4 by 9 inches notifying the crew and passengers of the discharge restrictions (Marpol Treaty). If your boat is over 26' in length, a label for this purpose has been shipped with the boat and is attached prominent location in the cockpit. It is the boat owner's responsibility to make sure this placard remains mounted and legible in accordance with the law.



Marpol Treaty Placard - Displayed On In-Floor Storage Compartment Hatch



# 2.14 Maximum Capacities Plate

Coast Guard rules require boats less than 20 feet (6 meters) to display a gross weight and personcapacity plate provided by the manufacturer.

Boat manufacturers in the National Marine Manufacturers Association (NMMA) program will display a gross weight and person-capacity plate on boats up to 26 feet (7.9 meters).

The person/load capacity is determined by the US Coast Guard. The capacity plate is usually located near the helm in clear view of the operator. The limits indicated on the capacity plate are enforceable by law. Occupant seating charts in Appendix H show the proper seating position for you and your passengers on boats less than 26 feet (7.9 Meters).

You should never exceed the "U.S. Coast Guard Maximum Capacities" indicated on the capacity plate.

Larger boats will display a Yacht Certification plate indicating compliance with the NMMA and U.S. Coast Guard requirements.



Typical M45 Capacity Plate

Note that the plate shown is for reference purposes only. Always refer to the capacity plate on your boat for actual maximum load capacities and persons.



# 2.15 Trailering Your Boat

If you trailer your boat, make sure that your tow vehicle is capable of towing the weight of the trailer, boat and equipment and the weight of the passengers and equipment inside the vehicle. This may require that the tow vehicle be specially equipped with a larger engine, transmission, brakes and trailer tow package.

The boat trailer is an important part of your boating package. The trailer should be matched to your boat's weight and hull. Using a trailer with a capacity too low will be unsafe on the road and cause abnormal wear. A trailer with a capacity too high, can damage the boat. Contact your boat or trailer dealer to evaluate your towing vehicle and hitch, and to make sure you have the correct trailer for your boat.

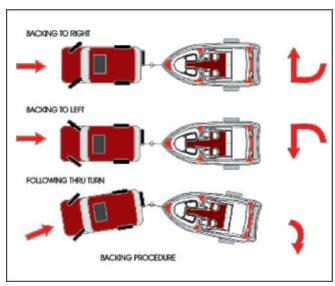
#### **NOTICE:**

Your Monterey is a heavy boat and care must be taken when selecting the trailer. We recommend that you use a bunk style trailer that incorporates a combination of heavy duty rollers, to support the keel and long bunks running under and parallel to the stringers to support the hull. Avoid using a full roller trailer that does not have bunks. Roller trailers have a tendency to put extreme pressure points on the hull, especially on the lifting strakes, and have damaged boats. The situation is worse during launching and haul out. Damage resulting from improper trailer support or the use of a full roller trailer will not be covered by the Monterey Warranty.

#### **NOTICE:**

Contact your boat or trailer dealer to evaluate your towing vehicle and hitch, and to make sure you have the correct trailer for your boat.

 Make sure the trailer is a match for your boat's weight and hull design. More damage can be done to a boat by the stresses of road travel than by normal water operation. A boat hull is designed to be supported evenly by water. So, when it is transported on a trailer it should be supported structurally as evenly across the hull as possible allowing for even distribution of the weight of the hull, engine and equipment.



Backing Procedure for Boat Trailers

- Make sure the trailer bunks and rollers properly support the hull and do not put pressure on the lifting strakes. The rollers and bunks must be kept in good condition to prevent scratching and gouging of the hull.
- The capacity rating of the trailer should be greater than the combined weight of the boat, motor, and equipment. The gross vehicle weight rating must be shown on the trailer. Make sure the weight of the boat, engine, gear, fuel and trailer is not more than the gross vehicle weight rating.
- Make sure the boat is securely fastened on the trailer to prevent movement between the boat and trailer. The bow eye on the boat should be secured with a rope, chain or turnbuckle in addition to the winch cable or strap. Additional straps may be required across the beam of the boat.

#### **NOTICE:**

Your boat or trailer dealer will give instructions on how to load, fasten and launch your boat.





# WARNING



BOATS HAVE BEEN DAMAGED BY TRAILERS THAT DO NOT PROPERLY SUPPORT THE HULL. ALWAYS MAKE SURE THE TRAILER BUNKS AND ROLLERS ARE ADJUSTED SO THEY ARE NOT PUTTING EXCESSIVE PRESSURE ON THE LIFTING STRAKES AND ARE PROVIDING ENOUGH SUPPORT FOR THE HULL. HULL DAMAGE RESULTING FROM IMPROPER TRAILER SUPPORT IS NOT COVERED BY THE MONTEREY WARRANTY.

## **Before Going Out On The Highway:**

- Side curtains, clear connector, back drop and aft curtain must be removed when trailering. Canvas enclosures are not designed to withstand the extreme wind pressure encountered while trailering and will be damaged. Always remove and properly store the enclosure before trailering your boat.
- If your boat is equipped with a wakeboard tower or an arch, make sure the arch or wakeboard tower is not to high to go under carports and overhangs when the boat is on your trailer. If necessary lower the arch or tower for trailering.
- Make sure the tow ball and trailer coupler are the same size and bolts and nuts are tightly secured.
- The coupler must be completely over the ball and the latching mechanism locked down.
- Make sure the trailer is loaded evenly from front to rear as well as side to side and has the correct weight on the hitch. Too much weight on the hitch will cause the rear of the tow vehicle to drag and may make steering more difficult. Too little weight on the hitch will cause the rig to fishtail and will make controlling the tow vehicle difficult. Contact your trailer manufacturer or dealer for the correct weight on the hitch for your trailer.

- The safety chains must be attached crisscrossing under the coupler to the frame of the tow vehicle. If the ball was to break, the trailer would follow in a straight line and prevent the coupler from dragging on the road. Make sure the trailer emergency brake cable or chain is also installed to the tow vehicle frame.
- Make sure the lights on the trailer function properly.
- Check the brakes. On a level parking area roll forward and apply the brakes several times at increasing speeds to determine if the brakes on the tow vehicle and trailer are working properly. In most states all trailers with gross vehicle weight of over 1500 LBS (680 kg) are required to have brakes.
- Make sure the tow vehicle has side view mirrors that are large enough to provide an unobstructed rear view on both sides of the vehicle.
- Check the tires and wheel bearings.

#### **NOTICE:**

Make sure your towing vehicle and trailer are in compliance with all state and local laws. Contact your state motor vehicle bureau for laws governing the towing of trailers.



# **NOTES**

# **PROPULSION SYSTEM**

## 3.1 General

Your boat is designed to be powered with a 2-cycle or 4-cycle outboard motor. 4-cycle outboard engines do not use an oil injection system and are not equipped with a remote oil tank. They have an oil sump in the crankcase that must be kept full of the type of oil recommended by the engine manufacturer. The oil must be checked before each use and changed regularly.

Each manufacturer of the various outboard motors provides an owner's information manual with its product. It is important that you read the manual(s) very carefully and become familiar with the proper care and operation of the engine and drive system. A warranty registration card has been furnished with each new engine and can be located in the engine owner's manual. All information requested on this card should be filled out completely by the dealer and purchaser and then returned to the respective engine manufacturer as soon as possible.



Typical Mercury Outboard Engine



### WARNING



DO NOT ATTEMPT TO SERVICE ANY ENGINE OR DRIVE COMPONENT WITHOUT BEING TOTALLY FAMILIAR WITH THE SAFE AND PROPER SERVICE PROCEDURES. CERTAIN MOVING PARTS ARE EXPOSED AND CAN BE DANGEROUS TO SOMEONE UNFAMILIAR WITH THE OPERATION AND FUNCTION OF THE EQUIPMENT.



# WARNING



DO NOT INHALE EXHAUST FUMES! EXHAUST CONTAINS CARBON MONOXIDE THAT IS COLORLESS AND ODORLESS. CARBON MONOXIDE IS A DANGEROUS GAS THAT IS POTENTIALLY LETHAL.

# 3.2 Drive System Corrosion

Each outboard motor is a complete drive system with the gear case being just forward of the propeller and connected to the power head with a vertical drive shaft. All engines require some maintenance. Routine maintenance recommended for your engine is outlined in the engine

owner's manual. Routine maintenance is normally the primary concern unless the boat is to be kept in saltwater for extended periods of time. Then the main concerns are marine growth and galvanic corrosion.

Marine growth occurs when components are left in the water for extended periods and can cause poor performance or permanent damage to the exposed components. The type of growth and how quickly it occurs is relative to the water conditions in your boating area. Water temperature, pollution, current, etc. can have an effect on marine growth.

Galvanic corrosion is the corrosion process occurring when different metals are submerged in an electrolyte. Seawater is an electrolyte and submerged engine components must be properly protected. Outboard motors are equipped with sacrificial anodes to prevent galvanic corrosion problems. The anodes must be monitored and replaced as necessary. For locations and maintenance, refer to the engine owner's manual.



When leaving the boat in the water, tilt the motor as high as possible. This will decrease the risk of marine growth around the cooling inlets, propeller and exhaust ports and damage from galvanic corrosion.



# **CAUTION**



DO NOT PAINT THE OUTBOARD MOTOR WITH ANTIFOULING PAINTS DESIGNED FOR BOAT HULLS. MANY OF THESE PAINTS CAN CAUSE SEVERE DAMAGE TO THE ENGINE. CONTACT YOUR MONTEREY DEALER OR ENGINE MANUFACTURER FOR INFORMATION ON THE PROPER PAINTING PROCEDURES.

# 3.3 Engine Lubrication 2-Cycle Engine Lubrication

2-cycle outboard motors are lubricated by a variable ratio oil injection system. The oil tank is mounted on the engine or in the bilge near the transom.

Always monitor the oil level before each cruise by checking the gauge or indicator lights in the helm (not available on all engine installations) or visually checking the oil level using the reference marks on the tank.

When additional oil is needed, use only the type of oil specified by the engine manufacturer. Refer to the engine owner's manual for oil specifications and additional information on the oil injection system.

# **4-Cycle Engine Lubrication**

4-cycle outboard engines have an oil sump in the crankcase that must be kept full of the type and grade of oil recommended by the engine manufacturer. It is normal for 4-cycle engines to consume a small amount of oil. Therefore, the oil must be checked before each use and changed at regular intervals as instructed by the engine owner's manual. As with 2-cycle engines, use only the type of oil specified by the engine manufacturer.

# 3.4 Engine Cooling System

Outboard engines are raw water (seawater) cooled. Water is pumped through the water inlets, circulated through the engine block and relinquished with the exhaust gases through the propeller hub. The water pump uses a small impeller made of synthetic rubber. The impeller and water pump cannot run dry for more than a few seconds. In most outboard motors, some cooling water is diverted through ports below the engine cowling. This allows the operator to visually check the operation of the cooling system. When the engine is started, always check for a steady stream of water coming out of those ports.

#### Notice:

If the boat is used in salt or badly polluted water, the engines should be flushed after each use. Refer to the engine owner's manual for the proper engine flushing procedure.



# CAUTION



NEVER RUN AN OUTBOARD MOTOR WITHOUT WATER FLOWING TO THE WATER PUMP. SERIOUS DAMAGE TO THE WATER IMPELLER OR ENGINE COULD RESULT.

# 3.5 Propellers

Propellers convert the engine's power into thrust. They come in a variety of styles, diameters and pitches. The one that will best suit the needs of your boat will depend somewhat on your application and expected average load. Propeller sizes are identified by two numbers stamped on the prop in sequence. The 1st number in the sequence (example 14" x 21") is the diameter of the propeller and the 2nd number is the pitch. Pitch is the theoretical distance traveled by the propeller in each revolution.

Always repair or replace a propeller immediately if it has been damaged. A damaged and therefore out of balance propeller can cause vibration that can be felt in the boat and could damage the engine gear assembly. Refer to the engine owner's manual for information on propeller removal and installation.



# 3.6 Performance Issues & Propellers

It is extremely important that the boat is propped to run at or very near the recommended top RPM with an average load. If top engine RPM is above or below the recommend range, the propeller must be changed to prevent loss of performance and possible engine damage.

#### **Notice:**

Before changing a propeller to correct boat performance problems, be sure other factors such as engine tuning, bottom and running gear growth, etc. are not the source of performance changes. Always be sure the load conditions are those normally experienced, before changing the propeller.

Your boat was shipped with a propeller that typically provides optimum performance for your boat. However there are factors that can affect performance and propeller requirements.

#### Some are as follows:

- You should be sure the load conditions are those normally experienced. If the boat ran in the required RPM range when it was new and you have not added any additional gear or heavy equipment and have not damaged the propeller, there is a good chance the propeller is not the problem.
- The addition of heavy equipment like life rafts, additional coolers, etc., will cause additional load on the engine. Consequently, a different propeller may be required.
- Boats operated at high altitudes (above 2000 feet). Engines operated at high altitudes will not be able to develop as much horsepower as they do at or near sea level. Consequently, different a propeller may be required.

## **Notice:**

Outboard engines can be damaged and the engine warranty void if the boat is not propped correctly. Always consult your Monterey dealer or authorized engine service dealer when making changes to the propeller or if the boat does not run near the top recommended RPM.



Typcial Mercury Propeller



Typical Yamaha Propeller





Typical Engine Instrumentation

# 3.7 Helm & Engine Instrumentation

The helm station is equipped with a set of engine instruments and/or alarms. These instruments allow the operator to monitor the engine operational conditions. Close observation of these instruments allows the operator to operate the engine at the most efficient level and could save the engine from serious costly damage. The instrumentation is unique to the boat model and type of engine installed in your boat.

Some or all of the following gauges and instruments may be present.

#### **Tachometer**

The tachometer displays the speed of the engine in revolutions per minute (RPM). This speed is not the boat speed nor necessarily the speed of the propeller. The tachometer may not register zero with the key in the "OFF" position.

Most tachometers have an LCD screen that digitally displays data for specific engine systems and for functions of some optional equipment. Keys on each side of the display allow the operator to scroll through the available data monitored by the display. The functions monitored will vary depending on the engine model and other optional equipment installed on your boat.

Tachometer features are unique to the tachometer and engine or engines installed in your boat. A quick reference guide that provides information and instructions for most tachometer and engine applications used in sport boat models is located in Appendix \*.

Contact your dealer if you need assistance with the operation and features for the tachometer in your boat.

# Some or all of the following data could be available on the tachometer LCD display:

- Time of day
- Total engine hours
- Engine speed (RPM)
- Vessel speed
- Oil pressure
- Engine coolant temperature
- Engine water pressure
- Battery voltage
- Fuel level in tank
- Fuel consumption
- Engine trim position
- Engine steering position
- Depth
- Air temperature
- Water temperature
- Compass heading





# CAUTION



MAINTAINING MAXIMUM, OR CLOSE TO MAXIMUM RPM FOR EXTENDED PERIODS CAN REDUCE THE LIFE OF THE ENGINE. NEVER EXCEED THE MAXIMUM RECOMMENDED OPERATION RPM OF THE ENGINE.

## **Speedometer**

The speedometer indicates the speed of the boat in miles per hour. Most speedometers measure the water pressure against a small hole in a pickup tube located in the engine lower unit or mounted on the bottom of the transom.

## **Temperature Gauge**

The temperature gauge indicates the temperature of the engine cooling system. A sudden increase in the temperature could signal a blocked cooling passage or a water pump malfunction



# CAUTION



CONTINUED OPERATION OF AN OVERHEATED ENGINE CAN RESULT IN ENGINE SEIZURE. IF AN UNUSUALLY HIGH TEMPERATURE READING OCCURS, SHUT THE ENGINE OFF IMMEDIATELY. THEN INVESTIGATE AND CORRECT THE PROBLEM.

# **Oil Pressure Gauge**

The oil pressure gauge monitors the engine lubrication system pressure. The oil pressure indicated when the engine is new is usually the reference for normal oil pressure for that engine. A drop in oil pressure is a possible indication of oil pump problems, a leak or fuel diluted oil.

#### **Fuel Gauge**

The fuel gauge indicates the amount of fuel in the fuel tank. This gauge is merely a relative indication of the available fuel supply and not a calibrated instrument.

## Voltmeter

The voltmeter displays the voltage for the battery and the charging system. The normal voltage is 11 to 12.5 volts with the engine off, and 13 to 14.5 volts with the engine running.

#### **Hour Meter**

The hour meter keeps a record of the operating time for the engine. The hour meter is normally located in the tachometer.

## Tilt/Trim Gauge

The tilt/trim gauge monitors the position of the engine. The upper range of the gauge indicates the tilt, which is used for trailering and shallow water operation. The lower range indicates the trim position. This is the range used to adjust the hull angle while operating your boat on plane. Refer to Chapter 2 and the engine owner's manual for more information on the operation of the power tilt and trim.

## **Depth Gauge**

The Depth gauge indicates the depth of the water below the bottom of the boat. The gauge is equipped with a shallow water alarm. The alarm will sound at a depth preset by the operator.

# **Fuel Management (Optional)**

Fuel management systems are optional and could be installed on your boat as part of the engine monitoring system. On most engines, the fuel management gauge is built into the tachometer digital display and can monitor miles per gallon, total gallons used and total gallons remaining.

If you have a fuel management system installed on your boat, please refer to the engine or fuel management manual for information on that system.

## **Engine Alarm**

Outboard engines are equipped with an audible alarm system mounted in the helm area that monitors selected critical engine systems. The alarm will sound if one of these systems begins to fail. Refer to the engine owner's manual for information on the alarms installed with your engine.

If an engine alarm sounds, immediately shut off the engine, if safe to do so, until the problem is found and corrected.



## **Compass**

The compass is on top of the console. To adjust the compass for your area, read the instructions on "Compass Compensation" given to you in the literature packet. The compass cannot be adjusted accurately at the factory because it must be compensated for the influence of the electrical equipment and electronics unique to your boat. Therefore, the compass should be adjusted by a professional after the electronics are installed and before operating the boat.

### **Instrument Maintenance**

Electrical protection for instruments and ignition circuitry is provided by a set of fuses or circuit breakers located on the engine. The ignition switch should be sprayed periodically with a contact cleaner/lubricant. The ignition switch and all instruments, controls, etc. should be protected from the weather when not in use. Excessive exposure can lead to gauge and ignition switch difficulties.



Typical Compass



# **HELM CONTROL SYSTEMS**

## 4.1 General

The helm controls consist of three systems: the engine throttle and shift controls, the steering system, and the trim tab control switches. These systems provide the operator with the ability to control the direction and attitude of the boat from the helm station.

Each manufacturer of the control components provides an owner's manual with its product. It is important that you read the manuals and become familiar with the proper care and operation of the control systems.

# 4.2 Engine Throttle & Shift Controls

The shift and throttle controls on your boat may vary depending on the engine used. The following description is typical of most cable and electronic outboard engine remote controls. Refer to the engine or control manual for specific information on the controls installed on your Boat.

## **Cable Engine Controls**

The cable engine throttle and shift control system consists of three major components: the control handle, the throttle cable, and the shift cable. The cables are all the push-pull type. Two cables are required for each engine and control. One connects the remote throttle control to the engine and the other connects the remote shift control to the engine shift linkage.

The helm on your boat is designed for a side mount control with a single lever that operates as a gear shift and a throttle. General operation will include a position for neutral (straight up and down), a forward position (the 1st detent forward of neutral), and a reverse position (the 1st detent aft of neutral). Advancing the control lever beyond the shift range advances the throttle in forward or reverse. Each control is equipped with a means of permitting the engine to be operated at a higher than idle RPM while in neutral for cold starting and warm-up purposes.



Mercury Side Mount Control & Stop Switch

## **Electronic Engine Controls**

Electronic engine controls are optional on some outboard engines and standard equipment on others. The shift and throttle control features may vary depending on the engine used. The following control description is typical of most side mount electronic control installations.

The helm is designed for a side mount control with a single lever that operates as a gear shift and a throttle. The electronic control system consists of three major components: the electronic control head, the control processors and applicable harnesses. The controls are completely electronic and there are no cables.



The controls have a single lever for the engine that operates as a gearshift and a throttle. General operation will include a position for neutral (straight up and down), a forward position (the 1st detent forward of neutral) and a reverse position (the 1st detent aft of neutral). Advancing the control lever beyond the shift range advances the throttle in forward or reverse. Each control is equipped with a means of permitting the engine to be operated at a higher than idle RPM while in neutral for cold starting and warm-up purposes. The control lever is equipped with an adjustable control head detent and friction settings.

Switches built into the control or control handle are used by the operator to select available features. The most common features activated by control switches are:

- Starter lockout, which prevents the engine from being started in gear.
- Gear lockout, which allows the engine RPM to be advanced in neutral safely.
- Battery voltage warning indicator that warns the operator of high or low voltage supplied to the system (audible alarm).
- Trolling feature that allows the operator to increase the engine speed in 50 RPM increments while operating at trolling speeds between 600 1000 RPM.

These features and others not mentioned require specific procedures to activate and operate them properly. Some of the procedures and features are unique to the engine and other options installed on your boat. It is essential that you read the owner's manual for the controls and be completely familiar with their operation before using your boat.



# **CAUTION**



ALWAYS RETURN THE ENGINE THROTTLE LEVER TO THE EXTREME LOW SPEED POSITION BEFORE SHIFTING. NEVER SHIFT THE UNIT WHILE ENGINE SPEED IS ABOVE IDLE RPM.



Typical Yamaha Side Mount Control & Emergency Stop Switch



Typical Mercury Electronic Control & Switches



# 4.3 Neutral Safety Switch

Every control system has a neutral safety switch. This device prohibits the engine from being started while the control lever is in any position other than the neutral position. If the engine will not start, slight movement of the control lever may be necessary to locate the neutral position and disengage the safety cutout switch. Control system adjustments may be required to correct this condition, should it persist. See your Monterey dealer for necessary control and cable adjustments.

The neutral safety switch should be tested periodically to ensure that it is operating properly. To test the neutral safety switch, make sure the engine is tilted down and move the control lever to the forward position with the engine off. *Make sure the control lever and throttle is set to the idle position.* Activate the starter switch just long enough to briefly engage the starter. *Do not hold the starter switch in the start position long enough to start the engine.* 

#### **NOTICE**

Some outboard engines are equipped with a computer controlled start feature that will keep the starter engaged until the engine starts if the neutral safety switch fails and allows the starter to engage.

The starter should not engage. Repeat this test with the control lever in reverse and the engine throttle at idle. Again, the starter should not engage. If the starter engages with the control lever in any position other than the neutral position, then the neutral safety switch is not functioning properly and you should contact your dealer and have the neutral safety switch repaired by a qualified technician before using your boat. If the engine starts in gear during this test, immediately move the control lever to the neutral position and turn the engine off.



# WARNING



IN SOME SITUATIONS, IT MAY BE POSSIBLE TO ACCIDENTALLY START THE ENGINE IN GEAR WITH THE THROTTLE ABOVE IDLE IF THE NEUTRAL SAFETY SWITCH IS NOT OPERATING PROPERLY. THIS WOULD CAUSE THE BOAT TO ACCELERATE UNEXPECTEDLY IN FORWARD OR REVERSE AND COULD RESULT IN LOSS OF CONTROL, DAMAGE TO THE BOAT, OR INJURY TO PASSENGERS. ALWAYS TEST THE NEUTRAL SAFETY SWITCH PERIODICALLY AND CORRECT ANY PROBLEMS BEFORE USING THE BOAT.



Typical Control Handle Tilt & Trim Switch

## 4.4 Power Tilt & Trim

All outboard engines have a tilt and trim feature. Most outboard engines a have tilt/trim switch built into the engine shift and throttle control that allows the operator to control the position of the engine from the helm. The switch on the control lever grip activates the tilt/trim for the engine.

Moving the outboard closer to the boat transom is called trimming "in" or "down." Moving the outboard further away from the boat transom is called trimming "out" or "up." In most cases, the boat will run best with the outboard adjusted so the hull will run at a 3 to 5 degree angle to the water.

The term "trim" generally refers to the adjustment of the outboard within the first 20° range of travel. This is the range used while operating your boat on plane. The term "tilt" is generally used when referring to adjusting the outboard further up for shallow water operation or trailering. For information on the proper use and maintenance of the power tilt and trim, please refer to the engine owner's manual.





# **CAUTION**



THE ENGINE HOSES AND CABLES CAN BE DAMAGED BY TILTING THE ENGINE TO THE FULL UP POSITION WITH THE ENGINE TURNED TO THE WRONG POSITION. MOST BOATS REQUIRE THE STEERING WHEEL TO BE TURNED COMPLETELY TO STARBOARD BEFORE TILTING THE ENGINE TO THE FULL UP POSITION. YOU SHOULD MONITOR THE ENGINE AS IT TILTS TO DETERMINE BEST FULL TILT ENGINE POSITION FOR YOUR BOAT.



# **WARNING**



EXCESSIVE TRIM FOR THE OPERATING CONDITIONS, EITHER TRIM UP OR DOWN, CAN CAUSE BOAT INSTABILITY, PROPELLER CAVITATION, OR MAKE STEERING THE BOAT MORE DIFFICULT. IF THE BOAT BEGINS TO FEEL UNSTABLE OR IS HARD TO STEER, SLOW DOWN AND ADJUST THE TRIM ANGLE.

# 4.5 Engine Stop Switch

Most outboard boats are equipped with an engine stop switch and lanyard at the helm. When the lanyard is pulled it will engage the switch and shut off the engine. We strongly recommend that the lanyard be attached to the driver whenever the engine is running. If the engine will not start, it could be because the lanyard is not properly inserted into the engine stop switch. Always make sure the lanyard is properly attached to the engine stop switch before attempting to start the engine.

Refer to the engine owner's manual for more information on the engine stop switch.



Typical Yamaha Engine Stop Switch & Lanyard



# **4.6 Steering System** Steering Wheel

All steering systems are equipped with a tilt steering wheel at the helm. The steering wheel can be tilted to five different positions by activating the tilt lock lever located on the bottom side of the steering wheel mounting bezel. When the lever is released, it automatically locks the steering wheel at or close to the selected angle.

## **Manual Hydraulic Steering System**

The standard steering system is hydraulic and made of two main components: the helm assembly and the hydraulic cylinder. The helm unit acts as both a fluid reservoir and pump. Turning of the helm or steering wheel pumps the fluid in the hydraulic hoses and activates the hydraulic cylinder causing the motor to turn. A slight clicking sound may be heard as the wheel is turned. This sound is the opening and closing of valves in the helm unit and is normal.

# **Power Assist Hydraulic Steering**

A power assisted steering system is an available option. The system is comprised of two hydraulic circuits: a manual system, which is the control element, and a hydraulic power assist pump, which is the working element.

The manual system is hydraulic and made of three main components: the helm assembly, hydraulic hoses and the steering cylinder. The fluid reservoir for the system is built into the power assist pump assembly and the helm acts as a pump. Turning of the steering wheel, pumps fluid through the hydraulic hoses and activates the hydraulic steering cylinder causing the motor to turn. A slight clicking sound may be heard as the wheel is turned. This sound is the opening and closing of valves in the helm pump unit and is normal.

The power system is an electronically controlled, 12 volt hydraulic pump that boosts the fluid pressure being sent from the helm pump to the steering cylinder to provide "Power" for the steering system which results in much easier effort at the steering wheel, even under heavy loads. In the event of a power loss or failure of the hydraulic assist pump, the steering system will automatically revert to a manual hydraulic system. The manual system operates as described previously in this section and will require more effort on the steering wheel to turn the motor.



Steering Wheel



Typical Power Steering Assist Pump

#### **Hydraulic Steering Cylinder**

Single outboard engines with hydraulic steering are equipped with one hydraulic steering cylinder mounted on the engine that is connected directly to the engine tiller arm.

# **Electronic Steering**

Electronic steering is optional on some engines. The system is 100% electronic and there are no mechanical connections between the steering wheel and the engine.

For safety and improved tight quarter maneuvering, the controlling software on most systems



senses engine speed and adjusts maximum steering angle and steering wheel resistance to preset limits as the engine speed increases or decreases. The steering angles and steering wheel resistance at specific engine speeds are programed into the system at the factory and are not adjustable.

If a fault occurs in the steering system, the controlling software will sense the fault and limit the engine RPM as a safety precaution and alert the operator. Each steering control system has emergency procedures that are specific to the steering system and type of fault detected. It is very important to follow the correct procedure to enable the operator to return safely to port for repairs. Refer to the engine manufacturer owner's manuals for specific information on the operation, maintenance and emergency procedures for the steering system installed in your boat.



Typical Trim Tab Plane

# 4.7 Trim Tabs (Optional)

Trim tabs are optional equipment. The trim tab planes are mounted to the hull on the transom below the swim platform. Dual rocker switches in the helm are used to control the trim tabs. The switches are labeled and control bow up and down movements. They also control starboard and port up and down movements. Bow up and bow down will control the hull planing attitude, while port and starboard up and down provides control for hull listing.

An indicator next to each switch displays the position of your trim tabs. The display indicates trim tab deflection. When the indicator is at the bottom of the display, the tabs are in the "full-up" (bow up) position. When the indicator is at or near the top of the display, the tabs are fully extended (bow down).

The trim tabs are programmed to automatically retract when the engine is shutdown to keep the actuators clean and set the tabs in the full "UP" position when leaving the dock. Refer to the trim tab operating manual for more information on the operation and programming of the trim tabs.

Before leaving the dock, make sure that the tabs are in the full "UP" position. If they are not, press and hold the control in the bow up position for ten (10) seconds to fully retract the tabs.



Lenco Trim Tab Control Switch

#### **NOTICE:**

The trim tabs can be damaged by boat trailers if the bunks extend beyond the transom or the boat is not centered properly. They can also be damaged by fork lifts at dry stack marinas during lifting. To reduce the possibility of damage, always make sure the tabs are in the full up position before loading your boat on a trailer or having it lifted by a fork lift.



Always establish the intended heading and cruise speed before attempting to adjust the hull attitude with the trim tabs. After stabilizing speed and direction, move the trim tabs to achieve a level side to side running attitude being careful not to over trim.

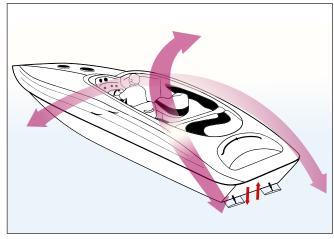
After depressing a trim tab switch, always wait a few seconds for the change in the trim plane to take effect. Avoid depressing the switch while awaiting the trim plane reaction. By the time the effect is noticeable, the trim tab plane will have moved too far and thus the boat will be in an overcompensated position.

When running at a speed that will result in the boat falling off plane, lowering the tabs slightly, bow down, will improve the running angle and operating efficiency. Positioning trim tabs too far in the down position can reduce operating efficiency and cause substantial steering and handling difficulties.

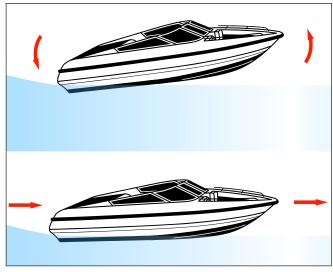
Be extremely careful when operating in a following sea. The effect of trim tabs is amplified under such conditions. Steering and handling difficulties can result from improper trim tab usage, particularly in a following sea. Always raise the tabs to the full bow up position in these conditions.

When running at high speeds be sure that the tabs are in the full "UP" position. Only enough trim plane action should be used to compensate for any listing. Trim tabs are extremely sensitive at high speeds. Adjust for this and be prepared to slow down if difficulties arise.

When running into a chop, a slight bow down attitude will improve the ride. Be careful not to over trim. Handling difficulties may result.



Tabs Control Port & Starboard Listing



Trim Tabs Control Bow Up & Bow Down



# 4.8 Control Systems Maintenance Control Maintenance

Periodic inspection of the control systems and all connections should be made. Signs of rust, corrosion, wear or other deterioration should immediately be serviced. Generally, periodic lubrication of all moving parts and connections with a light waterproof grease is in order.

Lubrication should be performed as often as necessary to keep the system operating smoothly.

Control system adjustments may become necessary. If adjustments become necessary, see your Monterey dealer.



## WARNING



DO NOT ATTEMPT CONTROL ADJUSTMENTS UNLESS YOU ARE FAMILIAR WITH SERVICING CONTROL SYSTEM PROCEDURES. CONTROL MISADJUSTMENT CAN CAUSE LOSS OF CONTROL AND SEVERE ENGINE OR LOWER UNIT DAMAGE.

# **Hydraulic Steering System Maintenance**

A periodic inspection of all steering hoses, linkage and helm assemblies should be made. Signs of corrosion, cracking, loosening of fasteners, excessive wear or deterioration should be corrected immediately.

The fluid level for hydraulic steering should be checked frequently and maintained at the proper level. For hydraulic steering without assist, the fluid level at the vent/fill plug at the helm should be maintained at no less than 1/2" below the bottom of the filler cap threads.

The fluid level for power assist hydraulic steering should be maintained at no less than 1/2" below the bottom of the fill plug hole on the hydraulic power assist pump reservoir located in the bilge. Only use power steering fluid recommended by the steering system manufacturer when adding fluid.

Generally, periodic lubrication of all moving parts and connections with a light waterproof grease is in order. Check the hydraulic hoses and fittings for chaffing, rub marks and leaks. Replace if necessary. Failure to do so could lead to steering system failure that would result in loss of control.

When new or after repairs, hydraulic steering system may need to have all air purged from

the system. Only use hydraulic steering fluid recommended by the steering system manufacturer. Difficult steering and premature seal failure can result if the wrong fluid is used in the steering system. Review the information provided by the steering system manufacturer for proper specifications and details on system service and maintenance.

# **Electronic Steering And Control Systems Maintenance**

Electronic steering and control systems are supplied by the engine manufacturer. The systems have maintenance requirements that are specific to the engine and control options installed in your boat.

You should refer to the engine and controls systems owner's manuals for information and maintenance on the control and steering system installed in your boat. Their recommendations should be followed exactly.

The engine controls and steering systems are fully electronic and activated by micro processors and controlling software in each engine controller. If adjustment becomes necessary do not attempt to address the problem yourself. You should contact your Monterey or outboard engine dealer for assistance.



# **WARNING**



IMPROPERLY ADJUSTED ELECTRONIC ENGINE CONTROLS CAN CAUSE LOSS OF CONTROL AND SEVERE ENGINE DAMAGE. IF YOUR CONTROLS ARE NOT OPERATING PROPERLY, DO NOT ATTEMPT CONTROL SYSTEM ADJUSTMENTS YOURSELF. CONTACT YOUR MONTEREY OR ENGINE DEALER FOR ASSISTANCE AND DO NOT USE THE BOAT UNTIL THE SITUATION IS CORRECTED.

# **Engine Lubrication**

Refer to the engine owner's manual for maintenance and lubrication instructions for the outboard engine.



#### **Trim Tab Maintenance**

The trim tab actuators are electric and require no routine maintenance except to periodically inspect the tab actuators for corrosion or marine growth and test the system to ensure that it is operating properly.

Marine growth can interfere with the proper operation of the trim tab planes and actuators. To reduce problems due to marine growth, always return the trim tabs to the full "UP" position after operating the boat and periodically inspect and clean marine growth from the actuators and planes.

If the boat is kept in the water, the trim tab planes must be equipped with a sacrificial anode to prevent galvanic corrosion. Galvanic corrosion is the corrosion process occurring when different metals are submerged in an electrolyte. Seawater is an electrolyte and submerged metal components must be properly protected. The anodes will need to be changed when they are 75% of their original size. Refer to the Routine Maintenance chapter of this manual for information on maintaining sacrificial anodes.

To discourage any marine growth on tabs or actuators, antifouling paint can be applied. When applying paint to the actuators, make sure it is fully retracted. Do not paint the stainless ram above the area that is exposed when retracted. The bottom paint will damage the O-ring seals when the ram is retracted and allow seawater to enter the actuator motor. Contact your dealer or the trim tab manufacturer for information regarding the correct bottom paint for the trim tabs.

Refer to the trim tab owner's manual for additional maintenance information, specifications, trouble-shooting and operating instructions.



Trim Tab Plane & Anode



# **NOTES**



# **FUEL SYSTEM**

# 5.1 Gasoline Fuel Systems General

The Gasoline fuel system used in Monterey boats sold in the United States is designed to meet or exceed the emission control standards of the Environmental Protection Agency (EPA) and the requirements of the U.S. Coast Guard, the Boating Industry Association and the American Boat and Yacht Council in effect at the time of manufacture.

#### **Notice:**

This boat is equipped with an EPA compliant fuel system. Do not alter or bypass any of the components that are installed. See your dealer for any fuel related service.

Boats sold internationally (all countries other than the United States and Canada) are equipped with fuel systems that are not equipped with U.S. EPA required emission controls but do meet or exceed the requirements of the U.S. Coast Guard, the Boating Industry Association and the American Boat and Yacht Council in effect at the time of manufacture.

#### **Notice:**

Beginning with 2016 models, all boats sold in Canada will be equipped with fuel systems designed to meet or exceed emission control standards of the USA EPA. These boats are certified for use in Canadian waters by the Canadian government.

All gasoline fuel systems have been factory inspected and pressure tested in accordance with regulations in effect at the time of manufacture. This inspection assures that the system is air tight, leak proof and safe. It is the responsibility of the purchaser to maintain it in that condition. Make frequent inspections to assure that no deterioration or loosening of connections is resulting from vibration.



## **DANGER**



DO NOT LET THE ODOR OF GASOLINE GO UNCHECKED. ANY ODOR OF GASOLINE MUST BE IMMEDIATELY INVESTIGATED AND STEPS TAKEN TO PROTECT THE BOAT AND ITS OCCUPANTS UNTIL THE PROBLEM IS CORRECTED. IF THE ODOR OF GASOLINE IS NOTICED, SHUT OFF ALL ENGINE AND ELECTRICAL EQUIPMENT. INVESTIGATE AND CORRECT THE SITUATION IMMEDIATELY. HAVE ALL PASSENGERS PUT ON PERSONAL FLOTATION DEVICES AND KEEP A FIRE EXTINGUISHER READY UNTIL THE SITUATION IS RESOLVED.

#### **Fuel Withdrawal Tube**

The fuel withdrawal tube is positioned in the fuel tank to achieve optimum fuel usage, fuel line routing, etc. At certain speeds and hull trim angles, the fuel supply at the withdrawal tank location can increase or decrease accordingly. Be extremely careful when attempting to operate the boat when low on fuel. Though some fuel may be in the tank, the relative trim angle of the boat may cause the fuel to flow away from the withdrawal.

#### **Fuel Gauge**

This indicates the amount of fuel in the tank. Due to the mechanical nature of the fuel sender and fuel tank shapes, variations in readings during various speeds of operation may occur. This system is merely a relative indication of the available fuel supply and not a calibrated instrument.

# Fuel Fill and Vent System - U.S. Fuel Systems

In order to comply with U.S. EPA emission regulations, boats sold in the United States and Canada are equipped with special fuel systems that do not vent directly to the atmosphere. The system is equipped with a "keyless" fuel cap located on the port gunnel that is marked "GAS." The fill cap is not vented and the fill system is completely sealed when the cap is closed.

There is a fuel tank vent built into the fuel fill. Another vent equipped with vapor emission control components in the hull side provides ventilation for the tank when the fuel fill system is sealed. While the tank is being filled, most air displaced by the fuel escapes through the fuel fill vent. The fuel fill and



vent system are designed such that an automatic shutoff valve in the marina fuel pump will stop the flow before fuel can be ejected into the vent system when the tank is full. You should never attempt to "TOP OFF" the tank after the pump shutoff valve has activated. This could force fuel into the vent system and damage emission control components.

The fuel fill cap is opened by turning the cap counter clockwise until it can be removed. After refueling, replace the fill cap and tighten until it clicks, indicating that the cap has been properly closed and the fill system is sealed. Wash the areas around the fuel fill if any fuel splashed on the deck or hull during filling operations. Residual fuel left on the deck and hull sides can be dangerous and will yellow the fiberglass or damage the striping.

Be sure to use the proper type and grade fuel. Refer to the engine owner's manual for additional information.

## **Fuel Fill - International Fuel Systems**

Boats sold in countries other than the United States and Canada are not equipped with sealed fuel fill systems or vapor emission control components. The fuel tank is vented through the fill fitting and cap. A "keyless" fuel cap is located on the port gunnel that is marked "GAS." The fuel fill cap is designed to seal out water and allow the fuel tank to vent to the atmosphere when the cap is installed and tight.

The fuel fill is opened by turning the cap counter clockwise until it can be removed. After fueling, install the fuel cap and tighten. Be sure to use the proper type and grade fuel. Refer to the engine owner's manual for additional information.

#### Notice:

Do not overtighten the fuel cap on boats with international fuel systems. If the cap is overtightened, the O-ring seal could be damaged allowing water to contaminate the fuel system.



## WARNING



DO NOT CONFUSE FUEL FILL DECK PLATES WITH THE WATER OR WASTE FILL DECK PLATES. THESE PLATES ARE ALSO LABELED ACCORDINGLY. IF GASOLINE IS ACCIDENTALLY PUMPED INTO THE WATER OR WASTE TANK, DO NOT ATTEMPT TO PUMP IT OUT YOURSELF. WATER AND WASTE PUMPS ARE NOT DESIGNED TO PUMP FUEL AND A FIRE OR EXPLOSION COULD RESULT. CONTACT YOUR DEALER OR THE MONTEREY CUSTOMER SERVICE DEPARTMENT FOR ASSISTANCE IN HAVING THE FUEL PROFESSIONALLY REMOVED.



Fuel Fill

## **Fuel Vent - U.S. Fuel Systems**

In order to comply with U.S. EPA regulations, the fuel tank is equipped with a special vent located on the hull side and vent system emission control components. A carbon filled canister in the vent hose between the fuel tank and the vent absorbs fuel vapors before they can escape to the atmosphere and returns them to the fuel tank.

Carbon canisters can be damaged if they are repeatedly exposed to liquid fuel. Special valves in the vent system and the automatic shutoff valve on marina fuel pump nozzles prevent the tank from being overfilled and forcing fuel into the vent system. You should never attempt to "top off" the tank after the pump nozzle shutoff has activated. This could force fuel into the vent system that can damage the carbon canister or other components.

## **Fuel Vent - International Fuel Systems**

Boats sold in countries other than the United States are equipped with fuel tank vent systems incorporated into the fuel fill. The fuel fill cap is designed seal out water and allow the fuel tank to vent to the atmosphere when the cap is installed and tight.

While the tank is being filled, the air displaced by the fuel escapes through the vent and fuel fill . When the tank is full, a small amount of fuel could be ejected from the fuel fill/vent.

After fueling, replace the fill cap, and wash the areas around the fuel fill. Residual fuel left on the deck and hull sides can be dangerous and will yellow the fiberglass or damage the striping.



# 5.2 Engine Fuel Delivery System

The fuel system on your boat has one fuel tank. The Fuel withdrawal line is equipped with an antisiphon valve where the line attaches to the fuel tank. This valve prevents gasoline from siphoning out of the fuel tank should a line rupture.



# WARNING



DO NOT REMOVE THE ANTI-SIPHON VALVE FROM THE SYSTEM. SHOULD THE VALVE BECOME CLOGGED, CLEAN AND REINSTALL OR REPLACE.

The fuel filter is installed in the stern bilge. The filter is the water separator type and should be serviced frequently to assure an adequate supply of clean, dry fuel to the engine. Note that some engines have the fuel filter mounted on the engine and there is no filter in the bilge.

It is recommended that the filter is inspected periodically and the element changed as needed. A valve located near the fuel withdrawal tube on the tank provides a means to turn off the fuel supply while servicing the fuel filter or any fuel system component.

There is a primer bulb in the fuel line near the filter that is used to prime the fuel system after service or as required. See Fuel System Maintenance and the engine owner's manual for additional information on the fuel filter and the outboard engine fuel system.



# WARNING



BEFORE STARTING THE ENGINE, ALWAYS OPEN ALL HATCHES, WINDOWS, AND DOORS TO COMPLETELY VENTILATE THE BOAT AFTER SERVICING THE FUEL SYSTEM.



Typical Outboard Engine Fuel Filter & Primer Bulb

# 5.3 Fueling Instructions

Boats sold in the United States and Canada are built with fuel systems designed to meet emission control standards established by the U.S. Environmental Protection Agency. Boat sold internationally (all countries other than the United States and Canada) are built with fuel system that are not equipped with U.S. EPA required emission controls.

The fueling procedure is somewhat different for each fuel system design. Consequently, fueling instructions in this section that are specific to each type of fuel system are identified as being for either boats with U.S. fuel systems or boats with international fuel systems. Procedures for preparing the boat for fueling at a marina and preparing the boat for operation when fueling is completed are the same for both fuel systems. Make sure to the follow the correct fueling procedure for the system installed in your boat.



### DANGER



FUEL IS VERY FLAMMABLE AND THE VAPORS CAN EXPLODE. BE CAREFUL WHEN FILLING THE FUEL TANK. NO SMOKING. NEVER FILL THE TANK WHILE AN ENGINE IS RUNNING. FILL THE FUEL TANK IN AN OPEN AREA. DO NOT FILL THE TANK NEAR OPEN FLAMES.





## WARNING



TO PREVENT DAMAGE TO THE FUEL SYSTEM, USE ONLY A GOOD GRADE OF GASOLINE. DO NOT USE A FUEL THAT CONTAINS HARSH ADDITIVES OR MORE THAN A 10% ETHANOL ALCOHOL BLEND. ANY DAMAGE DONE TO THE FUEL SYSTEM THAT IS THE RESULT OF USE OF A HIGHER ALCOHOL BLEND IS NOT COVERED BY THE MONTEREY WARRANTY. REFER TO THE ENGINE MANUFACTURER OWNER'S MANUAL REGARDING FUEL REQUIREMENTS FOR YOUR ENGINE.

## **Preparing the Boat for Fueling - All Boats**

# Use the following procedure to prepare the boat for fueling at a marina fuel pump:

- Make sure the boat is securely moored and all engines are off.
- Make sure all switches are in the "OFF" position.
- Make sure all passengers leave the boat.
- Close all doors and hatches.



## WARNING



GASOLINE FUEL VAPORS THAT ACCUMULATE IN THE BILGE COMPARTMENT WHILE FUELING CAN EXPLODE!! FUEL VAPORS ARE HEAVIER THAN AIR AND CAN ACCUMULATE IF THEY ARE CARRIED BY THE WIND INTO THE BILGE COMPARTMENT THROUGH OPEN DOORS, HATCHES OR VENTS. ALWAYS CLOSE DOORS AND HATCHES BEFORE FUELING.

 Estimate how much fuel is needed and avoid overfilling the fuel tank.



# **WARNING**



STATIC ELECTRICITY GENERATED BY FLOWING FUEL CAN CAUSE A FIRE OR EXPLOSION. TO PREVENT STATIC SPARKS WHEN FILLING THE TANK, MAKE SURE THE NOZZLE IS ALWAYS IN CONTACT WITH THE FUEL FILL OPENING.

# Fueling Boats Instructions For Boats Sold in the United States and Canada.

In order to comply with U.S. EPA emission regulations, boats sold in the United States and Canada are equipped with special fuel systems that prevent fuel vapors from entering the atmosphere when fueling operations are complete.

These fuel systems meet U.S. EPA emission standards and are designed to maintain a specific air space at the top of the fuel tank that provides proper tank ventilation and protection for emission control components. Special valves in the fuel tank vent system, the fuel fill and a shutoff valve in marina fuel pump nozzles are designed to automatically stop the fuel flow when the tank is full and maintain this air space.

#### **NOTICE**

When the fuel tank is full, the shutoff valve in the fuel pump nozzle will activate and automatically shut off the flow, indicating that the tank is filled to the maximum level. You should stop filling the tank at this point and never attempt to "top off" the tank. Attempting to "top off" the tank could damage fuel level control valves or force fuel into the vent system which could damage vapor emission control components.

# To fill the fuel tank on boats with vapor emission control systems, follow this procedure:

- The fuel cap is designed to be opened by hand and does not require a key. Turn the cap counterclockwise to remove it for fueling.
- Make sure the fuel pump nozzle is equipped with an automatic shutoff valve. Then put the nozzle in the fuel fill opening and make sure it stays in contact with the fuel fill fitting during the entire fueling operation.
- Fill the tank until the nozzle shutoff valve clicks and automatically stops the fuel flow.
- Remove the nozzle.
- Install the fuel cap and tighten until the cap clicks, indicating that the cap is tight and the system is sealed.

# Fueling Boats with International Fuel Systems

Boats sold in countries other than the United States and Canada are not equipped with sealed fuel fill systems or vapor emission control components. The fuel tank is vented to the atmosphere through the fill fitting and cap. Consequently, the fueling process for boats equipped with international fuel systems is somewhat different than for boats sold in the United States.



#### NOTICE:

When the fuel tank is full, some fuel will surge out through the fuel fill/vent. The fuel tank vent is built into the fuel fill fitting located on the gunnel. Monitor the vent/fill closely while fueling to prevent fuel from spilling into the water.

# To fill the fuel tank on boats with international fuel systems, follow this procedure:

- The fuel cap is designed to be opened by hand and does not require a key. Turn the cap counterclockwise to remove it for fueling.
- Put the nozzle in the fuel fill opening and make sure it stays in contact with the fuel fill fitting during the entire fueling operation.
- Fill the tank slightly less than the rated capacity to avoid spilling fuel out of the vent/ fuel fill and to allow for expansion.
- Remove the nozzle.
- Install and tighten the fuel cap. Make sure you don't overtighten the fuel cap and damage the O-ring seal.



## WARNING



SPILLED FUEL CAN CAUSE A FIRE OR AN EXPLOSION. MAKE SURE YOU DO NOT SPILL ANY FUEL. IF A SMALL AMOUNT OF FUEL IS SPILLED ON THE FIBERGLASS, USE A CLOTH TO REMOVE THE FUEL AND PROPERLY DISPOSE OF THE CONTAMINATED CLOTH. IF FUEL IS SPILLED ON THE WATER, EXERCISE EXTREME CAUTION. FUEL FLOATS ON THE SURFACE OF THE WATER AND CAN IGNITE. IF FUEL IS SPILLED INTO THE WATER, IMMEDIATELY EVACUATE THE AREA AND NOTIFY THE MARINA AND THE PROPER OFFICIALS.

# Preparing the Boat for Operation - All Boats

Use the following procedure to prepare the boat for operation when fuel operations are complete:

- Open all hatches, windows and doors.
- Check the fuel compartment and below the deck for fuel odors. If you smell fuel, do not start the engine.



## DANGER



GASOLINE FUEL VAPORS THAT ACCUMULATE IN THE BILGE COMPARTMENT WHILE FUELING CAN EXPLODE!! TO REDUCE THE RISK OF A FIRE AND/OR EXPLOSION AFTER FILLING THE FUEL SYSTEM, ALWAYS OPEN ALL HATCHES, WINDOWS, AND DOORS TO COMPLETELY VENTILATE THE BOAT BEFORE STARTING THE ENGINE.

# 5.4 Fuel System Maintenance

Periodically inspect all connections, clamps and hoses for leakage and damage or deterioration. Replace as necessary. Spray the valves, tank fuel gauge sender and ground connections with a metal protector.

Frequently inspect and lubricate the fuel fill cap O-ring seal with Teflon or silicone grease. The O-ring seal prevents water from entering the fuel system through the fuel fill cap and should be replaced immediately if there is any sign of damage or deterioration.

Contaminated fuel may cause serious damage to your engine. The filters must be checked for water and other contamination frequently. Gasoline engine filters must be changed at least once each year or more frequently depending on the type of engine and the quality of the fuel. Refer to the engine manufacturer's instructions for information on servicing and replacing the fuel filter elements.

The age of gasoline can affect engine performance. Chemical changes occur as the gasoline ages that can cause deposits and varnish in the fuel system as well as reduce the octane rating of the fuel. Severely degraded fuel can damage the engine and boat fuel tank and lines. Therefore, if your boat is not being run enough to require at least one full tank of fresh fuel a month, a fuel stabilizer should be added to the gasoline to protect the fuel from degradation. Your dealer or the engine manufacturer can provide additional information on fuel degradation and fuel stabilizers recommended for your engine.

In many states, most gasoline is blended with ethanol alcohol. Ethanol is a strong solvent and can absorb water during periods of storage. You should refer to the engine operating manual for information regarding alcohol blended fuels and how it affects the operation of your marine engine.





# WARNING



AFTER THE FILTER ELEMENT HAS BEEN CHANGED, PRIME THE FUEL SYSTEM AND CHECK ALL FITTINGS FOR LEAKS BEFORE AND AFTER STARTING THE ENGINE FOLLOWING ANY FUEL SYSTEM SERVICE.



# WARNING



BEFORE STARTING THE ENGINE, ALWAYS OPEN ALL HATCHES AND DOORS TO COMPLETELY VENTILATE THE BOAT AFTER SERVICING THE FUEL SYSTEM.



# **WARNING**



TO REDUCE THE POSSIBILITY OF A FIRE OR EXPLOSION, MAKE SURE ALL ELECTRICAL SWITCHES ARE IN THE "OFF" POSITION BEFORE SERVICING THE FUEL SYSTEM.



# **DANGER**



AVOID SERIOUS INJURY OR DEATH FROM FIRE OR EXPLOSION RESULTING FROM LEAKING FUEL, INSPECT SYSTEM FOR LEAKS AT LEAST ONCE A YEAR. DO NOT DRAIN ANY FUEL INTO THE BILGE.



# **ELECTRICAL SYSTEM**

## 6.1 General

Your Monterey is equipped with a 12 volt DC electrical system and could be equipped with an optional 120 volt AC battery charging system. The battery charger draws current from a shore power outlet at dockside. The DC system draws current from one or two onboard batteries.

Your boat and engine charging system is designed for 12 volt, lead acid wet cell marine batteries. They will require similar maintenance as those found in automobiles.

All wires in the electrical system are color coded to make identifying circuits easier. Wiring schematics have been included with this manual to aid in following an individual circuit of the boat.

# 6.2 12 volt System

The 12 volt system is a standard marine system. One battery with an ON - OFF switch is standard equipment. A dual battery system is optional.

The batteries are located in the aft bilge compartment. The single battery system is controlled by an ON - OFF switch and dual batteries are controlled by an OFF - 1 - 2 - 1 & 2 battery selector switch located in a compartment near the transom door. The batteries can be charged by the engine or by the optional battery charger when hooked to shore power.

All 12 volt power is distributed to the 12 volt accessories through individual circuit breakers located in the 12 volt breaker panels. A DC Main circuit breaker, located near the battery switch, protects the system from an overload. Other circuit breakers located near the selector switch protect the circuits for the bilge pump automatic float switch, aft seat and ignition. Optional, heavy duty breakers protect the circuits for the optional boat and tower amplifiers. Most 12 volt accessories are operated directly by switches in the helm accessory switch panels or separate accessory switch panels.

Circuit breakers or fuses located on the engine protect the ignition, charging system and gauges.

Some 12 volt accessories are operated directly by a circuit breaker in the breaker panels while others are operated by a switch fed by the panel breakers. Most of the 12 volt accessories on the deck and in the cockpit are operated by switches in the helm switch panel.



# **CAUTION**



PROPER FUSE OR BREAKER PROTECTION MUST BE PROVIDED FOR ALL 12 VOLT EQUIPMENT ADDED. DO NOT OVERLOAD THE ACCESSORY CIRCUIT BREAKERS OR OTHER CIRCUITRY THROUGH ADDITIONAL 12 VOLT EQUIPMENT.

## **Batteries and Battery Switch**

The DC electrical system on your boat is designed for wet cell, marine batteries. Do not attempt to use gel cell, absorbed wet mat or other non wet cell batteries. The engine charging system and the optional battery charger are not designed to recharge these batteries which could cause unusually short battery life, engine starting problems and damage to the DC charging systems. You also should not mix the size or brand of the wet cell batteries. Always consult your Monterey dealer before changing the type of batteries in your boat.

Your boat has provision for one or two batteries. Single battery systems are standard and dual battery systems are optional. The batteries should be of the size and capacity recommended by the manufacturer of your engine. See the engine owner's manual. These specifications should be considered to be the minimum size battery required.

Monterey currently recommends Group 31, 1000CCA/1250MCA marine batteries for the M-45 and M-65 models. You should contact your dealer or Monterey Customer Service if you have questions regarding the batteries on your boat.

#### **Single Battery Switch**

The battery switch is located in a compartment on the starboard side of the cockpit near the transom door. The switch feeds the engine and the 12 volt accessory panels. The standard single battery switch has two positions, OFF & ON. When the





Dual Battery Switch Panel with Circuit Breakers & Engine Hatch Jumper Terminals



Dual Battery Switch Panel w/ Circuit Breakers, Engine Hatch Jumper Terminals & Sound System Amplifiers

battery switch is ON, the engine and accessory circuits are activated simultaneously and current flows from the battery to the engine, accessories and electronics. When the switch is in the OFF position, the engine and all DC circuits are deactivated except for the automatic bilge pump switch, which remains activated.

#### **Dual Battery Switch**

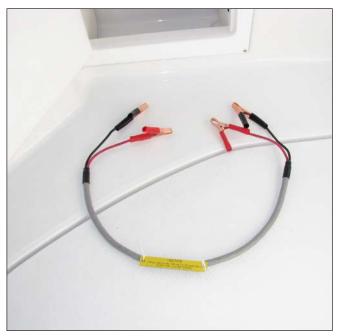
The dual battery switch has four positions, OFF - 1 - 2 and 1 & 2. The operator can set the switch to supply 12 volt power by either battery # 1 or battery # 2 separately or by both batteries simultaneously. The selector switch also directs the charging current when the engine is operating.

For example: When the switch is on battery # 1, the engine and the 12 volt system will be supplied power by battery # 1. Battery # 2 will be isolated and in reserve. Battery # 1 will be charged by the alternator. When the selector switch is on bat-

tery # 2, the engine and the 12 volt system will be supplied power by battery # 2. Battery # 1 will be isolated and in reserve. Battery # 2 will then be charged by the alternator.

When the selector switch is on "1 & 2," the batteries are connected in parallel so the engine and the 12 volt system will be supplied power by both batteries. Both batteries will be charged by the alternator. The "1 & 2" position should only be used when starting the engine, as this requires extra electrical power, or when both batteries are low and need charging. Otherwise, it is recommended that the selector switch be set on battery # 1 or battery # 2 when the engine is operating. While in port or at anchor, the battery selector switch should be set to either the battery # 1 or the battery # 2 position. This will keep one battery in reserve for starting the engine. The battery switch should be turned to the "OFF" position when leaving the boat unattended.





Access Hatch Jumper Harness & Connectors



Access Hatch Jumper Teminal - Caps Removed

### **NOTICE:**

Current is supplied to the bilge pump automatic float switch, electronic engine control memory and stereo memory when the batteries are connected, even if the battery switch is off.

#### **NOTICE:**

Two jumper terminals located near the battery switch and an included harness provide the ability to supply 12 volt power from a jumper battery to the aft seat/access hatch actuator circuit to raise the aft seat and hatch if the boat battery(s) are dead. These terminals and the harness provided are only for activating the access hatch actuator system and not for starting the engine or charging the batteries.



Jumper Harness Connected To Terminals





Helm Switch Panels

## 12 volt Accessory Switch Panels

The main accessory switch panels and the engine start switch are located at the helm. The circuit breakers that protect the accessories and activate the engine starting circuits are located in a breaker panel in the storage compartment behind the helm.

# The following is a description of the accessories controlled by the main accessory switch panels:

### **Ignition Switch**

The ignition switch is a key activated switch, located near the helm below the steering wheel, which starts and stops the engine. The switch has OFF - ON and momentary START positions. To start the engine, make sure the engine is down and your hand is on the engine control handle in the neutral position. Turn the ignition key to the START position. When the engine starts, release the key and the switch will automatically go to the run position. Stop the engine by turning the key to the OFF position. The ignition circuit is protected by a circuit breaker in the battery switch panel and circuit breakers or fuses located on the engine.

#### Nav/Anc

The switch is a three-position switch. The middle position is OFF. Moving the switch in one direction will activate the navigation lights. Moving the switch in the opposite direction activates the anchor light.

#### **Dock Lts**

Activates the docking lights in the bow.

#### **Cockpit Lts**

Activates the lights that illuminate the cockpit, bow seating area, stern storage compartment, helm storage compartment and aft bilge compartment.

## Acc

Reserved for additional 12 volt equipment.

#### **Aft Cockpit Hatch**

This switch is an ON - OFF - ON momentary switch that controls the electric actuator that raises the aft bilge access hatch and aft seat. Press the top of the switch to raise the hatch. Press the bottom of the switch to close hatch. The switch automatically returns to the OFF position when it



is released. Note that the battery switch must be turned on and the transom door opened for the hatch lifter to operate.

#### Bilge

Manually activates the aft bilge pump which is installed in the aft bilge. The pump moves water out through the thru-hull fitting in the hull. To start the pump, place the switch in the ON position.

#### **NOTICE:**

The bilge pump will start automatically when there is sufficient water in the bilge to activate the automatic float switch built into the pump. The automatic float switch is protected by a circuit breaker located in the battery switch panel and is always supplied current when the battery(s) are connected. Refer to the Drainage Systems chapter for more information on the bilge pump system.

#### Water Sys (Optional)

Activates the fresh water pump. The pump is the pressure demand type. The pressure switch built into the pump automatically controls the water pump when the system is activated and properly primed.

If this option is not installed, this switch will be reserved for additional 12 volt equipment.

#### **Arch LT**

Reserved for additional 12 volt equipment.

If your boat is equipped with the wakeboard tower package, this switch will activate the lights in the arch that illuminate the cockpit.

#### Acc

Reserved for additional 12 volt equipment.

#### Horn

Activates the boat horn.

### **Additional Accessory Switch Panels**

Additional switch panels are located in various locations in the helm, cockpit and head compartment. The following is a description of additional panels that may be on your boat and the accessories they control:

## **Trim Tab Switch (Optional)**

Located in the helm. This switch controls the trim tabs located on the transom of the boat. Refer to the Helm Control Systems chapter for detailed information on the operation of the trim tabs.

### **Engine Trim and Tilt Switch**

Located in the helm. This switch is usually installed in the engine control handle. It controls the trimming and tilting of the outdrive. Refer to the Helm Control Systems chapter and the engine owner's manual for information regarding the proper use of the tilt and trim switch.

#### **Helm Stereo Control Pad**

Located in the helm. Controls the stereo that is mounted in the stereo compartment near the transom door. Refer to the stereo owner's manual for details on operating the stereo control pad.

## **Stern Mount Stereo Control Pad (Optional)**

Located in the stern just aft of the transom door. Controls the stereo that is mounted in the cockpit. Refer to the stereo owner's manual for details on operating the stereo control pad.

#### **Holding Tank Macerator (M-65 Option)**

The holding tank overboard discharge macerator pump is optional equipment on M-65 models. The switch panel is located in the head compartment. It is a momentary switch that activates the macerator discharge system for the holding tank. Refer to the Marine Head System in the Interior Equipment chapter for additional information on the operation of the overboard macerator discharge system.

#### 12 volt Receptacles

Provides electrical current for portable 12 volt equipment. There are two 12 volt accessory plugs. One in the helm panel near the accessory switches and one on the port side of the cockpit, near the passenger seat.

#### **MP3 Connection**

Located in the helm near the 12 volt receptacle. Provides an input for MP3 players to connect to the boat stereo system.

# 6.3 DC Accessory Breaker Panels

Power is distributed to most of the 12 volt accessories through individual circuit breakers located in the DC breaker panels. There are two DC breaker panels, the battery switch breaker panel in the compartment on the starboard side of the cockpit and the main DC breaker panel located in the storage compartment forward of the helm. The DC Main breaker located in the battery switch panel protect the system from an overload. Some 12 volt accessories are operated directly by the circuit breaker in the panels while others are operated by switches fed by the panel breakers.



### **Battery Switch Panel Breakers**

The following is a description of the accessories controlled by the "push to reset" breakers in the battery switch panel.

## **Boat Amplifier (Optional)**

A heavy duty circuit breaker that provides protection and power for the stereo amplifier for the boat speaker system. This breaker is supplied current when the battery selector switch is activated. If this circuit breaker is tripped by an overload, a red lever will be exposed near the center of the breaker. Reset the breaker by raising the lever until it locks in the horizontal position.

## **Tower Amplifier (Optional)**

A heavy duty circuit breaker that provides protection and power for the stereo amplifier for the Wakeboard Tower speaker system. This breaker is supplied current when the battery selector switch is activated. If this circuit breaker is tripped by an overload, a red lever will be exposed near the center of the breaker. Reset the breaker by raising the lever until it locks in the horizontal position.

#### **Bilge Pump**

Provides protection and power for the bilge pump automatic float switch. This "push to reset" breaker is always supplied current when the batteries are connected.

### **Ignition**

Provides protection and continuous power for the computer memory for the engine. This "push to reset" breaker is always supplied current when the batteries are connected.

#### **Aft Seat**

Provides protection and power to the main circuit for the actuator that raises the aft seat and bilge access hatch. This "push to reset" breaker is supplied current when the battery switch is activated. Another breaker in the helm breaker panel provides circuit protection for the aft seat control switch in the helm switch panel.

#### **DC Main**

The primary circuit for the main DC panel near the helm is protected and powered by this circuit breaker. Other circuit breakers located in the main DC breaker panel protect the individual DC circuits. This "push to reset" breaker is supplied current when the battery switch is activated.



Battery Switch Panel & Optional Amplifier Circuit Breaker



Barrery Switch Panel Circuit Breakers



## Main Helm Switch Circuit Breaker Panel

The main helm switch breaker panel is located in the storage compartment forward of the helm. The following is a description of the accessories protected by the "push to reset" breakers in the main DC breaker panel:

## **Nav Lights**

Provides protection and electrical current to the switch that activates the navigation lights.

## **Cockpit Lights**

Provides protection and electrical current to the switch that activates the cockpit lights.

## **Docking Lights**

Provides protection and electrical current to the switch that activates the docking lights.

#### Acc #1

Reserved for additional 12 volt equipment.

#### Acc #2

Reserved for additional 12 volt equipment.

#### Horn

Provides protection and electrical current to the switch that activates the horn.

#### **Stereo**

Provides protection and electrical current to the stereo located on the starboard side of the cockpit.

#### **Head Sys (M-65 Option)**

Provides protection and electrical current to the switches in the head compartment that control the optional electric head system.

#### **Macerator (M-65 Option)**

Provides protection and electrical current to the holding tank monitor and the optional macerator pump switch in the head compartment.

#### **Aft Seat**

Provides protection and electrical current to the switch that controls the reclining aft seat.

#### **Blower**

Reserved for additional 12 volt equipment.



Main Helm Switch Circuit Breaker Panel

#### Hatch

Provides protection and electrical current to the switch that controls the electric actuator that raises the aft bilge access hatch and aft seat.

#### **Trim Tabs**

Provides protection and electrical current to the switches that control the optional trim tabs.

#### Water System (Optional)

Provides protection and electrical current to the switch that activates the pump for the optional fresh water system. A pressure switch automatically controls the water pump when the system is activated and properly primed.

#### **12V**

Provides protection and electrical current directly to the 12 volt accessory plugs in the cockpit.

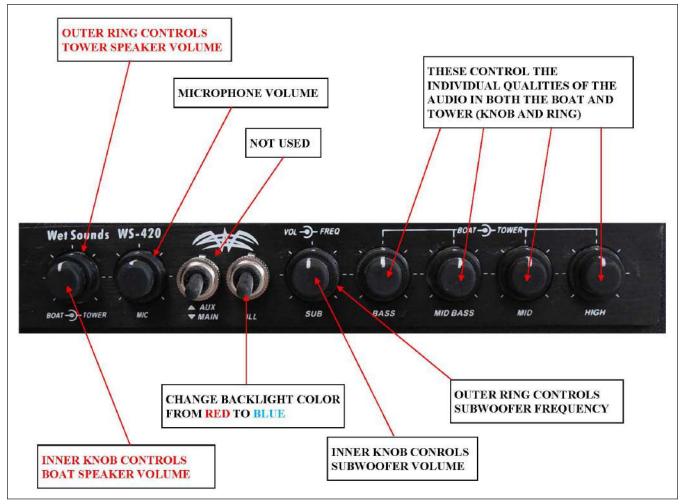
#### **Electronics**

Provides protection and electrical current directly to the electronics in the helm.

#### **Engine Main Breakers or Fuses**

The primary circuits for the engine are protected by circuit breakers or fuses on each engine. They are supplied power whenever the engine battery switches are on. Refer to the engine owner's manual for information on the location and operation of the engine circuit breakers.





Wet Sounds Equalizer Control Panel

# 6.4 Wet Sounds Audio System (Optional M-65 & M-45)

The Wet Sounds Audio System is included with the Wakeboard Tower package. The audio system consists of:

- (1) Wet Sounds SYN4 amplifier (controls the tower speakers)
- (1) Wet Sounds SYN6 amplifier (controls the boat speakers and subwoofer)
- (4) WS65 6.5" Full range in-boat speakers
- (1) 10" dual voice coil subwoofer
- (2) MB8 tower speakers
- (2) Pro60 tower speakers
- (1) WS420 Parametric Equalizer with microphone

The amplifiers have been preset for best performance at the factory. These settings were obtained using the "Rock" EQ setting on the head unit. Make sure the EQ setting on the head unit has not been changed. The optimum settings have

been included in this guide for your reference should you ever need to return the amplifiers to their original settings.

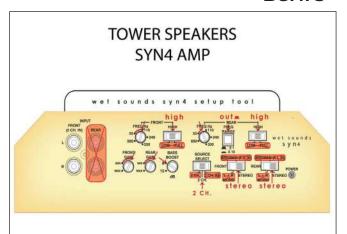
#### **Normal Operation:**

Each knob on the equalizer has an inner knob and an outer ring that can be adjusted (except for the microphone volume). The inner knob controls that setting for the boat speaker and the outer ring controls that setting for the tower speakers. For normal operation, all audio knobs on the equalizer should be set to zero (indicator lines at 12 o'clock position). When first starting your audio system, turn the volume knob to the 12 o'clock position and the outer ring all the way to left (tower speakers off). This is the normal listening position. Use the volume control on your head unit or one of the remote controls to adjust the volume to your desired listening level. Do not exceed 30 on the volume level to avoid excess distortion. If this level







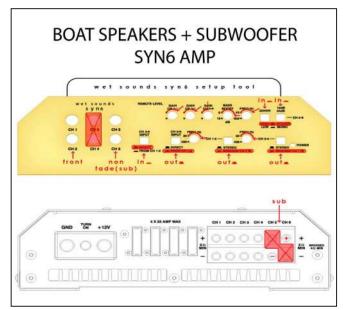


Tower Speaker Settings

is exceeded, the subwoofer may clip. This will temporarily shut the boat amplifier down and a fault flash will occur on the amplifier LED. Lower the volume and the amplifier will automatically reset.

The fault will stay in memory until the power is cycled on and off. If additional volume in the boat is desired, slowly turn the volume knob up on the equalizer. To turn on the tower speakers, slowly turn the volume ring on the equalizer to the right.

Adjust the tower speaker volume level to the desired level. If additional modifications to the quality of the music are desired, slowly adjust any of the 4 audio knobs on the equalizer (Bass, Mid-Bass, Mid, and High). The knob and ring will turn together unless you deliberately turn them separately. For almost all applications, the knob and ring should be set together.



**Boat Speaker Settings** 

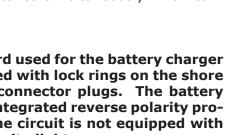


# 6.5 120 volt Battery Charging System **Battery Charger AC Electrical System**

The optional battery charging system is fed 120 volt AC current by a power cable connected to a shore side outlet and the shore power inlet located in the stern near the transom door. It is wired totally separate from the 12 volt DC system and charges all batteries simultaneously when connected.

#### **NOTICE:**

The power cord used for the battery charger is not equipped with lock rings on the shore side or boat connector plugs. The battery charger has integrated reverse polarity protection and the circuit is not equipped with a reverse polarity light.





Shore Power Inlet Plug



# **DANGER**



TO REDUCE THE POSSIBILITY OF AN ELECTRICAL SHOCK, IT IS IMPORTANT THAT THE AC GROUND SYSTEM IS FUNCTIONING PROPERLY AND THAT A PROPER CONNECTION EXISTS BETWEEN THE SHORE POWER CORD AND THE SHORE POWER INLET AND THE OUTLET GROUND CIRCUITS. IF THERE IS ANY DOUBT ABOUT THE INTEGRITY OF THE GROUND CIRCUIT, A QUALIFIED MARINE **ELECTRICIAN SHOULD BE CONTACTED IMMEDIATELY AND** THE SHORE POWER SHOULD BE DISCONNECTED UNTIL THE NECESSARY REPAIRS ARE COMPLETED.

**ELECTRICAL SHOCKS FROM 120 VOLT CIRCUITS CAN** CAUSE SEVERE INJURY OR DEATH. TO REDUCE THE RISK OF ELECTRICAL SHOCK IN WET WEATHER, AVOID MAKING CONTACT WITH THE SHORE CABLE OR MAKING A CONNECTION TO A LIVE SHORE OUTLET. NEVER SPRAY WATER ON ELECTRICAL CABLES WHILE WASHING DOWN DECKS.

# Recommended Procedure For Making a **Shore Connection**

If the dockside outlet includes a disconnect switch or circuit breaker, turn it to the "OFF" position. To avoid strain on the cable make sure it has more slack than the mooring lines. Dress the cable so that it cannot be damaged by chafing between the boat and the dock. Make sure the cable does not come in contact with the water. Then connect the cable in the plug inlet making sure the connection plug includes a three-prong plug with a ground wire. Turn the dock side disconnect switch or circuit breaker to the "ON" position and check that the battery charger is operating properly. If the battery charger is not working, turn off the shore disconnect switch and remove the cable. Contact your dealer or a qualified electrician to find and correct the problem.



# WARNING



DO NOT ATTEMPT TO CORRECT THE WIRING YOURSELF. **ELECTRIC SHOCK CAN CAUSE SEVERE INJURY OR EVEN** DEATH. ALWAYS HAVE A QUALIFIED ELECTRICIAN CHECK WIRING.

KEEP CHILDREN AWAY FROM ANY ELECTRICAL CABLES OR EQUIPMENT.



# WARNING



UNDETECTED FAULTS IN THE AC BATTERY CHARGING SYSTEM COULD CAUSE THE WATER AROUND THE BOAT TO BECOME ENERGIZED. THIS COULD CAUSE A SEVERE SHOCK OR EVEN DEATH TO SOMEONE IN THE WATER NEAR THE BOAT. NEVER SWIM OR ALLOW SWIMMING AROUND THE BOAT WHEN THE BATTERY CHARGING SYSTEM IS ACTIVATED BY THE SHORE POWER CONNECTION.

# Disconnecting procedure for shore power connection

Turn the disconnect switch or circuit breaker on the dockside outlet to the "OFF" position.

Disconnect the cable from the dockside outlet and replace the outlet caps. Disconnect the cable from the boat and replace the inlet cap. Store cable.



#### **Battery Charger Operation**

AC electrical current is supplied directly to the automatic battery charger which is mounted in the aft bilge compartment. The battery charger automatically charges and maintains the 12 volt batteries simultaneously when activated. It is fully automatic and continuously monitors the state of charge for each battery. Led lights indicate charge status.

Charging for the batteries also can be monitored by using the voltmeter in the engine gauge cluster. With the charger activated, turn the ignition key switch to the "ON" position. DO NOT START THE ENGINE. Then read the voltage on the volt meter. If the batteries are in good condition and charging properly, the voltmeter will indicate between 12 and 14.5 volts. If the reading is below 12 volts, then the battery is not accepting a charge or the charger is not working properly. Always turn the ignition switch off immediately after the monitoring is complete.

The wires that supply DC charging current to the batteries are protected by an internal fuse in the battery charger and external fuses, one for each battery output wire, located near each battery. The external fuses protect the DC charging circuit from the batteries to the charger. The internal fuses in the charger protect the DC charging circuit from the charger to the batteries. See the battery charger manual for more information.

# 6.6 Bonding System

Your boat is equipped with a bonding system that interconnects the engine underwater metal hardware to the engine block to ensure that they are of the same electrical potential. Sacrificial anodes of the size and type recommended by the engine manufacturer are attached to the engine. If your boat is equipped with optional trim tabs, they will be isolated from the boat bonding system and equipped with sacrificial anodes to protect each tab plane assembly. Anodes deteriorate before the other metals, thereby protecting the underwater metals from galvanic corrosion or stray electrical current. Since the anodes are sacrificial, it is important to monitor them and replace the them when they have deteriorated to 50 - 75% of their original size.

The engine bonding system is connected to the DC ground and, if your boat is equipped with the optional battery charger, the earth ground wire for the AC electrical system. It provides a path



Battery Charger

to the safety earth ground in the event of a fault in the shore earth ground connection.

# 6.7 Electrical System Maintenance 12 volt DC Electrical System Maintenance

At least once a year, spray all exposed electrical components behind the helm, in the transom area and in the plugs with a protector. Removable light fixture lenses should be removed and wiped clean with a damp cloth and reinstalled. Some LED light fixtures are sealed and not serviceable.



#### WARNING



WHEN REPLACING LIGHT BULBS IN MARINE LIGHT FIXTURES, ALWAYS USE A BULB WITH THE SAME RATING AS THE ORIGINAL. USING A DIFFERENT BULB COULD CAUSE THE FIXTURE TO OVERHEAT AND MELT OR SHORT CIRCUIT.

#### **Notice:**

Most LED lights are sealed and cannot be serviced.

Inspect all boat and engine wiring for proper support, sound insulation, and tight terminals, paying particular attention to portable appliance cords and plugs.

Check all below deck wiring to be sure it is properly supported, that the insulation is sound, and that there are no loose or corroded terminals. Corroded terminals should be thoroughly cleaned with sandpaper or replaced, tightened securely and sprayed with a metal and electrical protector.



Check the electrolyte level in wet cell batteries regularly and add distilled water as necessary. If the batteries are frequently charged by the automatic battery charger, the electrolyte level will have to be checked more often. The correct fluid level in the cells is usually approximately 1/4 to 1/2 inch above the plates. If fluid is needed, fill to the proper level with distilled water. **Do not over fil!** 

#### Notice:

AGM (Absorbed Glass Mat) batteries, Gel Cell batteries or lead acid maintenance free batteries with cells that are sealed do not require inspection or service.

Keep the battery tops clean and dry. Dirt and water can conduct electricity from one post to the other causing the battery to discharge. The battery posts should be kept free of corrosion. Remove the cables and clean the posts and cable clamps with a battery post cleaner or sandpaper as required. Coating the battery posts and cable clamps with Teflon or silicone grease will protect them and reduce corrosion.

Battery cables, both hot and ground, must be replaced when they show signs of corrosion or fraying. Deteriorated cables cause a considerable voltage loss when high currents are drawn, such as starting the engine.

#### **DANGER**



A BATTERY CAN EXPLODE IF A FLAME OR SPARK IGNITES THE HYDROGEN GAS THE BATTERY EMITS WHILE BEING CHARGED. NEVER USE AN OPEN FLAME IN THE BATTERY STORAGE AREA. AVOID STRIKING SPARKS NEAR THE BATTERY.



# FRESH WATER SYSTEM

#### 7.1 General

The fresh water system consists of a potable water tank, distribution lines and a distribution pump. The pump is equipped with an automatic pressure switch and is located behind a removable panel in the storage compartment forward of the helm. The water tank is located in the bilge below the cockpit near the bow. The tank is filled through a labeled deck plate located on the starboard side of the deck.



#### **CAUTION**



DO NOT FILL SYSTEM WITH ANYTHING OTHER THAN WATER. SHOULD THE SYSTEM BECOME CONTAMINATED WITH FUEL OR OTHER TOXIC FLUIDS, COMPONENT REPLACEMENT MAY BE NECESSARY.



#### WARNING



WATER AND WASTE PUMPS ARE NOT DESIGNED TO PUMP FUEL AND A FIRE OR EXPLOSION COULD RESULT. DO NOT CONFUSE FUEL FILL DECK PLATES WITH THE WATER OR WASTE FILL DECK PLATES. THESE PLATES ALSO ARE LABELED ACCORDINGLY. IF GASOLINE OR DIESEL FUEL IS ACCIDENTALLY PUMPED INTO THE WATER OR WASTE TANK, DO NOT ATTEMPT TO PUMP IT OUT YOURSELF. CONTACT YOUR DEALER OR THE MONTEREY BOATS CUSTOMER SERVICE DEPARTMENT FOR ASSISTANCE IN HAVING THE FUEL PROFESSIONALLY REMOVED AND COMPONENTS OF THE FRESH WATER SYSTEM REPLACED AS NECESSARY.

# 7.2 Fresh Water System Operation

Fill the water tank slowly through the labeled deck plate. After filling the water tank, partially open all faucets and/or activate shower heads. The Water Sys switch in the helm should be on. Allow the pump to run until all of the air is purged from the system and a steady stream of water is flowing from each outlet. Then, turn off the shower heads and faucets one by one. As the pressure builds, the pump will automatically shut off.

When properly primed and activated the water system will operate much like the water system in a home. An automatic pressure sensor keeps the system pressurized. If the system has been recently filled or has not been used for an extended



Fresh Water Fill

period, air bubbles may accumulate at the pump and the system may have to be reprimed.

Whenever the boat is left unattended, the Water Sys switch should be placed in the "OFF" position.



#### CAUTION



DO NOT ALLOW THE FRESH WATER PUMP TO RUN DRY. THE FRESH WATER PUMP WORKS ON DEMAND AND WILL NOT SHUT OFF AUTOMATICALLY WHEN THE TANK IS EMPTY. THIS CAN RESULT IN DAMAGE TO THE PUMP. ALWAYS TURN THE WATER SYS SWITCH OFF WHEN THE FRESH WATER SYSTEM IS NOT IN USE.

### **Shower Operation**

There is a shower located at the transom on the starboard side, near the transom door. Another shower could be installed near the forward hatch as an option. The retractable shower head is stored in a recessed compartment and equipped with an ON/OFF valve.





M-65 Head Compartment Sink Sprayer



Transom Shower

Make sure the Water Sys switch on the helm switch panel is on, then turn the water valve on the shower head on. To conserve water, use the valve on the shower head to turn the water on and off as you shower.

When showering is complete, make sure the valve on the shower head is turned completely off and carefully feed the shower hose back into the compartment and close hatch. A net in the engine compartment behind the shower isolates the hose and keeps it from becoming tangled or snagged with other compartments in the engine compartment.

# 7.3 Fresh Water System Maintenance

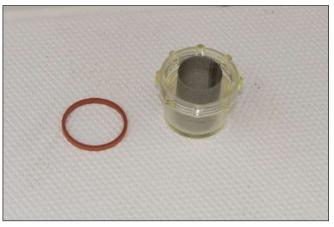
Information supplied with water system components by the equipment manufacturers is included with this manual. Refer to this information for additional operation and service data.

# The following items should be done routinely to maintain your fresh water system:

- Periodically remove and clean the water strainer located at the intake side of the pressure pump. To clean the strainer, make sure the Accessory switch is off. Rotate the strainer bowl counterclockwise to release it. Remove and clean the screen with fresh water. Lubricate the O-ring lightly with Teflon or silicon grease and reinstall the screen and strainer bowl.
- Periodically spray the pump and metal components with a metal protector.



Fresh Water Pump & Strainer



Typical Fresh Water Pump Strainer Removed for Cleaning



- The batteries must be properly maintained and charged. Operating the pressure pump from a battery with a low charge could lead to pump failure.
- Add a commercially available potable water conditioner to the water tank to keep it fresh.

#### **Sanitizing the Fresh Water Tank**

The fresh water system should be sanitized if it has not been used for a long period or you are unsure of the quality of the water in the system.

# The following steps can be used to sanitize the system:

- Activate the system and open all faucets and pump out as much water as you can.
- Make a chlorine solution by mixing two ounces of household chlorine bleach in a gallon of water. This mixture will treat approximately fifteen gallons. If the water tank on your boat is larger or smaller than 15 gallons, then adjust the mixture accordingly. Always mix the chlorine with water in a separate container first and never add straight chlorine to the fresh water tank.
- Fill the water tank half full with fresh water and pour the mixture into the water tank. Top off the tank.

- Activate the system and allow the water to run for about one minute at each faucet. Let the treated water stand for 4-6 hours.
- Drain the system by pumping it dry and flush with several tank fills of fresh water.
- The system should now be sanitized and can be filled with fresh water. If the chlorine smell is still strong, it should be flushed several more times with fresh water.



## **CAUTION**



THE BATTERIES MUST BE PROPERLY CHARGED. OPERATING THE FRESH WATER PUMP FROM A BATTERY WITH A LOW CHARGE MAY LEAD TO A PUMP FAILURE.

#### **NOTICE:**

The quality of the water in marine fresh water systems can be questionable. We recommend that you avoid using the water from the fresh water system for drinking and cooking. You should only use bottled water for these purposes.

The fresh water system must be properly winterized prior to winter lay-up. See section on winterizing.



# **NOTES**



# **DRAINAGE SYSTEMS**

#### 8.1 General

Most water in the cockpit area is drained by gravity to the bilge and where it is pumped overboard by the bilge pump. The rear drain rails for the aft bilge access hatch and rear compartments drain by gravity to overboard thru-hull fittings in the hull sides. You should check the drain system frequently to ensure it is free flowing and that the hoses on the thru-hull fittings are secure and not leaking.

## 8.2 Bilge Drainage

The stern bilge pump is activated both manually, by a switch in the helm switch panel, and automatically, by a float switch built into the pump. The automatic switch remains activated when the battery switch is in the "OFF" position and the batteries are connected. The bilge pump pumps water out of a thru-hull fitting located above the waterline in the starboard rear hull side.

#### **NOTICE:**

See Electrical Systems for additional information on bilge pump operation.

When the boat is out of the water the bilge can be drained by a garboard drain located in the transom near the bottom of the hull. The plug should be removed whenever the boat is hauled out of the water and installed just prior to launching. It is important to check the drain plug regularly to make sure it is tight.



A LOOSE DRAIN PLUG WILL ALLOW SEAWATER TO ENTER THE BILGE AND COULD CAUSE THE BOAT TO SINK. IT IS VERY IMPORTANT TO CHECK THE DRAIN PLUG FREQUENTLY TO ENSURE IT IS PROPERLY TIGHTENED.

#### **NOTICE:**

Any oil spilled in the bilge must be thoroughly removed and properly disposed of before operating the bilge pump. The discharge of oil from the bilge is illegal and subject to a fine.



Typical Bilge Pump with Automatic Float Switch



Transom Drain Plug





#### WARNING



THE FEDERAL WATER POLLUTION CONTROL ACT PROHIBITS THE DISCHARGE OF OIL OR OILY WASTE INTO OR UPON THE NAVIGABLE WATERS OF THE UNITED STATES OR THE WATERS OF THE CONTIGUOUS ZONE IF SUCH DISCHARGE CAUSES A FILM OR SHEEN UPON, OR A DISCOLORATION OF THE SURFACE OF THE WATER, OR CAUSES A SLUDGE OR EMULSION BENEATH THE SURFACE OF THE WATER. VIOLATORS ARE SUBJECT TO A PENALTY OF \$10,000.

# 8.3 Cockpit & Deck Drains Cockpit and Engine Compartment

Water is drained from the cockpit through the drain system for the aft bilge access hatch. The forward side of the hatch is equipped with a gutter that drains the water to the bilge where it is pumped overboard by the bilge pump. The rear of the engine hatch is equipped with a separate gutter that drains the water overboard to fittings in the hull sides.

### Wet Bar Sink Drains (Optional on M-65 models)

The sink is drained by gravity to a thru-hull fitting in the hull side. The drain should be flushed out periodically to keep it clean and free flowing.

#### **Cockpit Storage Compartments**

The helm storage compartment, cockpit storage compartments and the storage areas below the bow seats are drained by gravity to the cockpit deck or to the bilge. Water drains from the cockpit through the aft access hatch drain system to the bilge. The head compartment and below deck storage compartment drain by gravity to the bilge.

#### **Rope Locker Drains**

The rope locker drains overboard through a fitting in the starboard hull side. It is important to inspect the drain frequently to remove any accumulated debris.

#### **Transom Storage Compartment**

The storage compartment below the port side of the aft transom seat is equipped with a separate gutter that drains water overboard to fittings in the hull sides.



Engine Compartment & Cockpit Drainage



Rope Locker Drain

# 8.4 Grey Water System (Optional M-65 Models)

If your boat is equipped with this option, all sink drains are drained by the sump system which pumps the waste water to the waste/grey water holding tank in the bilge. The sump system is controlled by an automatic float switch in the sump and is protected by a circuit breaker in the battery switch panel. The sump system is activated whenever the battery switch is on and is located in the below deck storage compartment bilge.

The fluid level in the waste/grey water holding tank is monitored by a lighted LED symbol in the in the lower starboard corner of the toilet control panel in the head compartment. The symbol lighted green indicates the waste tank is less than



half full. Symbol lighted yellow indicates the tank is at least half full. Symbol lighted red indicates the waste tank is full.

When the waste/holding tank is full, it must be pumped out by an approved waste dumping station. You should monitor the waste level carefully and not allow the tank to become full. A lockout system built into the toilet prevents it from flushing when the holding tank is full. Never attempt to flush the toilet or operate the sinks or shower when the tank is full. An overfilled waste tank will force waste into the holding tank vent filter. This will clog the holding tank vent filter, prevent the sinks from draining and could cause damage to the holding tank. It will also cause unpleasant odors or flood the head compartment floor.

#### **Notice:**

The overboard macerator discharge pump option for the waste holding tank is not available with the grey water system.

#### 8.5 Wakeboard Tower Drains

There is a hole drilled in the front leg bases on towers to prevent water from being trapped within the legs and provide a wire chase for accessories. A small hole is drilled in the tubing at the base of the other legs, which are not drilled for a wire chase, that allows water to drain. Additional drain holes are drilled in the tubing to drain other areas as required.

Always make sure the leg drain holes are clear when the boat is laid up for the winter. Water trapped inside the legs could freeze and cause the legs to split.

# 8.6 Drainage System Maintenance

It is essential that the following items be done periodically to maintain proper drainage of your boat:

- Clean the aft bilge access hatch drain rails and fittings with a hose to remove debris that can block water drainage.
- Clean the bilge pump strainer of debris and check the bilge for foreign material that can cause the automatic switch to malfunction.



Head Compartment Toilet Control Panel



Bilge Pump Automatic Switch Test Switch

 Frequently test the bilge pump automatic float switch. This is accomplished by touching and holding the test button on the side of the pump for five seconds until the pump is activated. You can also use a garden hose to raise the water level in the bilge until it is high enough to activate the automatic switch.



- If your boat is equipped with the optional grey water system, periodically clean and inspect the drain sump system. Remove accumulated debris and flush with fresh water. Frequently test the automatic pump switch for proper operation.
- Flush all gravity drains with fresh water to keep them clean and free flowing.

#### NOTICE:

All drains and pumps must be properly winterized before winter lay-up.

#### **NOTICE:**

Never use harsh chemical drain cleaners in marine drain systems. Permanent damage to the hoses and fittings may result.



# **VENTILATION SYSTEM**

### 9.1 Head Compartment Ventilation

Ventilation to the M-65 head compartments is provided by an opening port window equipped with a removable screen.

The window is secured by adjustable cam levers. The cam levers should be adjusted so they are tight enough to seal the window in the closed position, but not so tight that the window becomes difficult to secure.

Always make sure the window is closed and secured with the cam levers whenever the boat is underway. Sea spray could enter the compartment through the open window and damage equipment while cruising.



Ventilation to the cockpit and access to the bow seating area is provided by the opening center windshield panel and a walk-through door below the windshield.

#### **Windshield Center Panel**

The windshield center panel is opened by releasing the locks on the inside of the windshield and swinging the panel open. A magnetic stop on the deck automatically secures the panel in the open position. To close the windshield panel, pull on the bottom of the panel until the magnetic latch releases. Then close the panel and secure it with the locks. Make sure the panel is properly secured in the open or closed position before cruising.



#### CAUTION



USE CAUTION WHEN OPENING CENTER WINDSHIELD PANEL. THE MAGNET THAT HOLDS THE PANEL OPEN IS VERY POWERFUL AND COULD CAUSE INJURY OR DAMAGE TO VESSEL IF THE PANEL SLAMS AGAINST THE STOP.

TO AVOID INJURY, THE CENTER WINDSHIELD SECTION MUST BE SECURED IN THE OPEN OR CLOSED POSITION WHEN VESSEL IS IN MOTION. MAKE SURE TO USE BOTH LOCKS WHEN SECURING THE WINDSHIELD SECTION IN THE CLOSED POSITION.



M-65 Head Compartment Port Window



Windshield Panel & Walk-Through Door Closed



#### **Bow Walk-Through Door**

An acrylic door secured with a flush, push to close latch provides the ability to close off the walk-through area below the opening windshield panel when desired. The door is designed to nest against the helm storage compartment door when it is open. The latch secures the door in the open or closed position. To secure the door in either position, push the door until the latch catches. Both doors need to be opened simultaneously to access the helm storage compartment when the walk-through door is nested and latched against the storage compartment door.

Always make the walk-through door is securely latched in the open or close position before operating the boat. Periodically clean and lubricate the latches to protect them from corrosion and help keep them operating properly.



Your boat is equipped with a bilge compartment ventilation system consisting of intake and exhaust ducts. The system reduces condensation, mold and mildew in the bilge.

A flow of air into the bilge compartment is provided by two vents located on either side of the deck. Exhaust ventilation designed into the vents provides a flow of air out of the compartment. The vents are designed with special baffles that prevent seawater or spray from entering the bilge while providing adequate air movement for the engine.



Windshield Panel & Walk-Through Door Open



Windshield Walk-Through & Helm Access Doors

#### 9.4 Maintenance

- Periodically lubricate all hinges and latch assemblies with a light oil.
- Periodically clean and coat gasket materials with silicone to help keep them pliable.
- Periodic inspection and cleaning of the bilge compartment ventilation ducts is necessary to ensure adequate air circulation. A buildup of leaves, twigs, or other debris can severely reduce ventilation. It also is important to be sure that the drains in the vent baffles are open to prevent excessive seawater from accumulating in the vents and overflowing into the compartment.



Bilge Compartment Vents

# **EXTERIOR EQUIPMENT**

#### 10.1 Deck

#### **Rails and Deck Hardware**

The rail system and hardware fittings have been selected and installed to perform specific functions. Hand rails are installed to provide a handhold in certain areas of the boat. You should make sure you keep at least one hand on the handholds as you move about the boat.

Fenders or mooring lines should be secured to the cleats and not to rails or stanchions. The cleats on your boat are retractable and flush with the deck when not in use. To use the cleats, pull up on the center of the cleat until it locks in the mooring position. Be sure a clear lead exists when running dock lines or anchor lines. A line inadvertently run around a stanchion or over the rail could cause damage.



All fittings must be inspected periodically for loose fit or wear and damage. Any problems should be corrected immediately.



#### WARNING



MONTEREY BOATS ARE NOT EQUIPPED WITH HARDWARE DESIGNED FOR TOWING PURPOSES. THE MOORING CLEATS ARE NOT TO BE USED FOR TOWING ANOTHER VESSEL OR HAVING THIS BOAT TOWED.



Retractable Cleat Pulled Out



Cleat Retracted

### **Anchor/Rope Locker**

The anchor locker is in the bow of the boat and accessed through a hatch in the deck. The anchor line is always stored in the rope locker and there is an eye fitting to secure the bitter end of the anchor line. Always make sure the rope locker and deck hatch are closed and properly latched before getting underway.

If the anchor is stored in the anchor locker, it must be properly secured to prevent it from bouncing in the locker and causing damage to the hull or anchor locker. The locker is designed for one fluke style anchor that is properly secured in the cradle. Do not store additional anchors or any heavy object in the anchor locker. Spare anchors and weights for



Rope Locker & Fluke Style Anchor Cradle



floating markers will bounce and damage the boat if they are stored in the anchor/rope locker. Always store and secure additional anchors and weights in a storage compartment in the cockpit, as far aft as possible.

### **CAUTION**



A LOOSE ANCHOR IN THE ANCHOR LOCKER WILL BOUNCE AND CAN DAMAGE THE BOAT. THE ANCHOR MUST BE POSITIONED SO IT DOES NOT REST AGAINST THE HULL SIDES AND BE PROPERLY SECURED IN ITS CRADLE AT ALL TIMES WHEN IT IS STORED IN THE ANCHOR LOCKER. DAMAGE RESULTING FROM THE ANCHOR BOUNCING IN THE ANCHOR LOCKER IS NOT COVERED BY THE MONTEREY WARRANTY.

The forward bow ladder rests above the anchor and anchor line when it is in the stored position. To use the anchor, the ladder must be lifted and rotated forward in the deployed position to allow the anchor and anchor line to be removed from the locker. Once the anchor is deployed and the line secure, make sure the ladder is rotated to the stored position, then close the hatch.

Periodically remove the anchor line from the locker, rinse it with fresh water and allow it to dry in the sun. Cleaning the anchor line regularly will reduce odors in the locker and increase the life of the line.

The line should also be inspected for abrasions or signs of deterioration. Replace the line if it shows any sign of damage or deterioration.



The bow eye assembly includes a stainless steel bow plate that protects the hull from scuffs and scratches from the trailer bow roller. Whenever possible, the trailer bow roller should be adjusted so that it is positioned on the plate, just below the bow eye.

#### **Bow Ladder**

A telescoping boarding ladder is recessed into the rope locker below the bow hatch. To use the ladder, make sure the engine is off and the boat is securely moored or anchored with the lines at the bow clear of the hatch and ladder.

Open the anchor/rope locker hatch and rotate the ladder out of the storage recess making sure the bracket rotates with the ladder from inside the rope locker to the deployed position in the bow recesses, extending the ladder forward of the rubrail. Release the strap securing the steps and pull the lower step to extend the ladder. Close and securely latch the anchor locker hatch before using the ladder.



Bow Eye & Plate



Ladder Folded In Anchor Locker



Ladder Extended

The ladder must be retracted and folded into the rope locker before starting the engine.



#### Windshield

Your boat is equipped with a heavy duty aluminum windshield with tinted glass. The center windshield panel opens to provide ventilation and access to the bow seating area.

The panel is opened by releasing the locks on the inside of the windshield and swinging the panel open. A magnetic stop on the deck automatically secures the panel in the open position. To close the windshield panel, pull on the bottom of the panel until the magnetic latches releases. Then close the panel and secure it with the locks. Make sure the windshield panel is properly secured in the open or closed position before cruising.



Windshield - Center Panel Open



#### CAUTION



USE CAUTION WHEN OPENING WINDSHIELD CENTER PANEL. THIS MAGNET IS VERY POWERFUL AND COULD CAUSE INJURY OR DAMAGE TO VESSEL IF THE PANEL SLAMS AGAINST THE STOP.

TO AVOID INJURY, THE CENTER WINDSHIELD SECTION MUST BE SECURED IN THE OPEN OR CLOSED POSITION WHEN VESSEL IS IN MOTION. MAKE SURE TO USE BOTH LOCKS WHEN SECURING THE WINDSHIELD SECTION IN THE CLOSED POSITION.

If the boat is operated in saltwater, the windshield should be washed after each use with soap and water to keep it clean. Saltwater allowed to remain on the windshield frame will eventually begin to attack the aluminum and cause corrosion, usually around fasteners and hardware mounted to the windshield. Snaps or any hardware mounted to the windshield must be properly sealed and isolated with caulk or a Teflon sealer to prevent salty moisture and galvanic corrosion from damaging the frame. Poor maintenance or improperly mounted hardware and snaps can void the warranty on the windshield.

Refer to the Routine Maintenance chapter for more information on the care and maintenance of anodized or powder coated aluminum.



Typical Windshield Center Section Latches (The latches and windshield frame shown may be slightly different than your boat and are for reference only)



#### 10.2 Hull

#### **Swim Platform and Stern Ladder**

Your boat is equipped with an integral, fiberglass swim platform located in the stern of the boat. The standard swim platform is equipped with a gelcoat non-skid surface. A synthetic teak (SeaDek) inlay is optional. The synthetic teak surface is maintenance free other than routine cleaning.

A telescoping boarding ladder is recessed into a compartment in the swim platform below a hatch. The compartment is drained overboard to a thruhull fitting below the platform. To use the ladder, make sure the engine is off and the steering wheel is turned straight ahead or slightly to port to move the propeller as far away from the ladder location as possible. Open the hatch and rotate the ladder out of the recess to the down position. Release the strap securing the steps and pull the bottom step to extend the ladder. The ladder must be retracted and folded into the recess before starting the engine.



#### WARNING



MOVING PROPELLERS ARE DANGEROUS. THEY CAN CAUSE DEATH, LOSS OF LIMBS, OR OTHER SEVERE INJURY. DO NOT USE THE SWIM PLATFORM OR SWIM LADDER WHILE THE ENGINE IS RUNNING. STOP THE ENGINE IF DIVERS OR SWIMMERS ARE ATTEMPTING TO BOARD. ALWAYS PROPERLY STORE THE LADDER BEFORE STARTING THE ENGINE.



Ladder Folded Below Hatch



Ladder Folded Out W/ Steps Retracted

#### **Unassisted Boarding Situations**

When using the swim platform ladder in an unassisted boarding situation in deep water, hold the swim platform and brace your feet against the transom for stability. Then open the ladder hatch and rotate the ladder out of the recess to the down position with your free hand. Hold the side rail of the ladder for stability, then release the strap securing the ladder in the retracted position. Use your free hand and feet to extend the ladder. Use the ladder side rails for stability while boarding. Remember to retract the ladder and fold it into the recess before starting the engine.



Ladder Folded Out & Extended



#### **Ski Tow Pylon**

A removable ski tow pylon that mounts in the center of the platform, just aft of the rear facing transom seat, is optional equipment. To install the pylon, raise the aft cockpit hatch to provide access to bilge and the pylon base plate receiver.

Slide the pylon through the flush collar in the platform and into the base plate receiver in the bilge. Align the hole in the pylon with the hole in the base receiver and insert the pin to secure the pylon.

#### Using the Ski Pylon

The tow pylon is designed for pulling one or two averaged sized skiers or wakeboarders. Always use high quality tow ropes with attachment loops when pulling wakeboarders or skiers. The tow rope should always be attached to the pylon using the attachment loops and never tied to the pylon or to any type of metal hook. Tied ski ropes are very difficult to remove and metal hooks will damage the ski tow. Additionally, metal hooks can cause injury to your skiers or damage the engine cowling if the metal hook breaks under the strain of the tow.

When attaching a tow rope using the attachment loops, hold the attachment loop in one hand and pull a length of rope on the handle side of the loop through the loop, creating another 6" loop. Slide the loop just created over the pylon and pull the handle side of the rope to tighten the loop around the tow fitting. This procedure will attach the rope securely to the pylon, be easy to remove and will not come off if the skier or wakeboarder falls.

Refer to Water Skiing in the Operation chapter for safety information on operating the boat with a skier.

#### **Transom Storage Compartment**

There is a large storage compartment located on the transom below the port side of the aft transom seat. A 12 volt light activated by the Cockpit Lts switch at the helm illuminates the compartment. An round access plate in the starboard wall of the compartment provides access to the aft cockpit hatch actuator and the emergency quick release pin that allows the hatch to be opened manually if the electric actuator should fail. There are also straps that hold ski ropes or mooring lines and storage clips for the removable stern light on boats without a wakeboard tower.



Ski Tow Pylon



Ski Pylon Base Plate Receiver & Pin



Transom Storage Compartment



The compartment drains to the bilge and is equipped with "dry deck" padding to allow for better drainage and air circulation in the compartment. A drain rail around the hatch channels water away from the compartment and overboard through a fitting in the hull side.

A gas spring holds the hatch in the open position and a flush twist latch holds it closed. The latch handle can be stored in the open or secured position. There is a large red dot in the handle that indicates that the latch is in the open position and the hatch is not secure. Always make sure the hatch is closed with the latch in the secured position before operating the boat above idle speed.

#### **Trim Tabs (Optional)**

The trim actuators are mounted to the hull at the transom. The trim tabs are an important part of the control systems. Refer to the Helm Control Systems chapter for detailed information on the trim tabs.

#### **Underwater Lights (Optional)**

LED underwater lights are mounted in the transom, below the water line. The lights are activated by the Underwater Lts switch at the helm and should only be used when the boat is in the water with the lights submerged.

#### **Docking Lights**

Located at the bow above the bow eye. These lights provide lighting forward of the bow while docking or maneuvering in tight quarters at night. They are activated by the Docking Lts switch in the helm switch panel and should only be used during docking, mooring or anchoring situations. Never use docking lights while cruising. They are not legal for night navigation and may obstruct the visibility of the bow navigation lights to oncoming vessels.



Transom Storage Compartment & Actuator Pin Access Hatch



Underwater Lights & Trim Tabs



**Docking Lights** 



#### 10.3 Cockpit General

Some of the hatches and doors in the cockpit are secured with special flush mounted, twist lock latches with handles that store flush in the latch. Others are secured with push to close latches. Gas charged springs are used on some hatches that help raise the hatches and hold them in the open position.

The latch handles on the twist lock latches can be stored in the open or secured positions. There is a red dot in the handle that indicates that the latch is in the open position and the hatch is not secure. Always make sure the hatches are closed with the latches in the secured position before operating the boat above idle speed.



#### WARNING



IN CERTAIN CONDITIONS, OPEN EXTERIOR DOORS AND HATCHES THAT ARE NOT SECURED PROPERLY CAN SLAM CLOSED UNEXPECTEDLY AND CAUSE INJURY TO PASSENGERS OR DAMAGE TO THE BOAT. MOST DOORS AND HATCHES ARE EQUIPPED WITH SPECIAL FASTENERS, HATCH LIFTERS, OR SNAPS AND/OR STRAPS, TO SECURE THEM IN THE OPEN POSITION. ALWAYS MAKE SURE THAT THESE HATCHES AND DOORS ARE PROPERLY SECURED WHENEVER THEY ARE IN THE OPEN POSITION.

#### **Transom Door**

A transom door is incorporated into the rear of the cockpit. The door is secured automatically in the open or closed position by a special latch system built into the door hinge. Notches in the hinge secure the door in the full open or full closed position when the male door notches align with the female notches in the hinge. To open or close the door, lift the door slightly to release it, then swing it to the desired position. When the door reaches the full open or closed position, it will drop into the notch and be secured.

The transom door should be opened only when the boat is not in motion. The door must be secured in either the full open or full closed position. Never leave the transom door unsecured.

#### **NOTICE:**

Periodically inspect the transom door fittings for wear, damage, or loose fit. Any problems should be inspected and corrected immediately.



Unlatched

Latched



Transom Door Closed (Door must be in the open position before the aft cockpit hatch can be raised)



#### WARNING



OPERATING THE BOAT UNDER POWER WITH THE TRANSOM DOOR OPEN MAY ALLOW PERSONS TO FALL OVERBOARD AND INTO BOAT PROPELLERS OR TO BE LOST IN OPEN WATER. ALWAYS CHECK TO MAKE SURE THE TRANSOM DOOR IS PROPERLY CLOSED AND SECURED BEFORE STARTING THE ENGINE AND NEVER OPERATE THE BOAT UNDER POWER WITH THE TRANSOM DOOR OPEN.



#### **Starboard Cockpit Storage Compartments**

Compartments for the stereo, battery switch panel, waste basket and storage for lines or small items are located in the starboard side of the cockpit, just forward of the transom door. Acrylic doors secured with push to close latches provide access to the compartments.

#### **Aft Bilge Access**

The aft bilge access hatch is raised by an electric actuator that is activated by the Aft Cockpit Hatch switch in the helm switch panel. The electric actuator raises and lowers the hatch and provides adequate access to service the components in the engine compartment.

The transom door must be secured in the open position and the aft bench seat folded before the hatch can be lifted. Magnetic interlock switches built into the transom door and hatch activate the circuit for actuator and allow the hatch to be lifted only when the transom door is open. The interlock system is necessary to prevent the transom door and hatch from being damaged when the hatch is lifted. Always make sure the transom door is secured in the open position and the bench seat folded before attempting to lift the hatch.

If the boat battery is dead, the hatch can be raised by using a jumper battery connected to the emergency jumper terminals in the battery switch panel using the jumper harness provided with your boat. To raise the hatch using a jumper battery, remove the plastic caps on the emergency jumper terminals and connect the red clamps on the harness to the positive terminal on the jumper battery and red emergency terminal. Then connect the black clamps to the negative battery terminal first and then to the black emergency terminal. Once the jumper battery is connected, use the Aft Cockpit Hatch switch in the helm switch panel to raise the hatch.

If a jumper battery is not available or the electric actuator fails, the hatch can be raised manually by disengaging the actuator from the hatch. To lift the hatch manually, open the stern storage compartment on the port side of the aft transom seat and remove the access plate on the starboard side of the compartment. Reach through the open access plate and remove the quick release pin in the hinge fitting at the top of the actuator.

Once the pin is removed, the hatch can be lifted to the open position. The hatch is heavy and requires two people to lift it. Additionally, you should be



Transom Door Open, Stereo Compartment Door & Battery Switch Compartment Door



Aft Cockpit Hatch Raised



Emergency Aft Cockpit Hatch Jumper Harness



prepared to support the hatch in the open position with  $2 \times 4$  or similar support of the proper length. The support must be installed so that it can't slip and allow the hatch to fall. Repair the hatch actuator and properly attach it to the boat and hatch before performing any other service to components in the aft bilge compartment.

### WARNING



THE HATCH IS HEAVY AND CAN DAMAGE THE BOAT OR CAUSE SEVERE INJURY TO PEOPLE WORKING IN THE BILGE COMPARTMENT IF IT FALLS. ALWAYS HAVE A PERSON MONITOR THE TEMPORARY HATCH SUPPORT TO MAKE SURE IT CANNOT SLIP WHILE THE HATCH ACTUATOR IS BEING REPAIRED. NEVER ENTER THE COMPARTMENT WHILE IT IS SUPPORTED BY THE TEMPORARY SUPPORT WITHOUT SOMEONE HOLDING THE SUPPORT TO ENSURE IT CAN'T SLIP AND ALLOW THE HATCH TO FALL.



Aft Cockpit Hatch Actuator Emergency Quick Release Pin

#### **Aft Facing Seat**

The starboard aft facing seat is standard on the M-65. It is equipped with a carry on, slide-out cooler in the compartment below the seat. The cooler is accessed through a door in the side of the seat base that is secured with a push to close latch. The cooler is mounted on a slide track in the compartment. When the door is open, the cooler can be slid out of the compartment for easy access or removal. Always make sure the cooler is slid into the compartment with the door securely latched before operating the boat above idle speed.



M-65 Standard Aft Facing Jump Seat & Slide-Out Cooler

#### Wet Bar (Optional on the M-65)

The wet bar is optional on the M-65 and standard equipment on the M-45. It is equipped with a sink, counter top and storage area. The counter top and hinged sink cover are made of Karadon. A grab rail on the wet bar provides a hand hold when moving about the cockpit.

The sink is plumbed to the fresh water system and is drained by gravity to a thru-hull fitting in the hull side above the waterline. To use the sink, open the Karadon lid and rotate the faucet to the operating position. Make sure the Water Sys switch in the helm switch panel is on. The faucet works like faucets in your home when the water system is activated. Always lower the faucet to the stored position and close the lid when the sink is not being used.



M-45 Wet Bar





M-45 Wet Bar, Sink & Storage Compartment



Foldaway Bench Folded Flush In Access Hatch

#### **Wet Bar Storage Compartment**

The storage access door is secured in the closed position with a push to close latch that is flush to the door. To open, pull the latch handle to release the latch. To close, push the door until the latch catches. Periodically clean and lubricate the latch to protect it from corrosion and help keep it operating properly.

#### **Foldaway Aft Bench Seat**

Your boat is equipped with a forward facing bench seat built into the aft bilge access hatch in the rear of the cockpit. The seat is designed to fold flush against the hatch when it is not in use.

To use the seat, release the latch and pull the handle near the top of the seat base out of the recess toward the cockpit. The side supports move out with the seat as it folds out. When the seat is half way out, lift the rear of the seat with one hand while pushing the front of the seat down with the other hand until it rotates to the seat position.

To store the seat, lift the front of the seat with one hand while pushing the rear of the seat down with the other hand until the seat rotates to the half closed position. Push the top of the seat firmly into the recess. Secure the seat with the latch when it is completely folded into the recess.

#### **Cockpit Lounge Seat**

The cockpit lounge seat provides seating in the rear of the cockpit. The foldaway aft bench seat is the forward facing seat for the lounge and must be folded out to the seat position to complete the lounge.

There is a cooler below the port lounge seat cushion that drains to the cockpit. The cooler is



Foldaway Bench In Seat Position



M-45 Lounge Seat Cooler

accessed by lifting the front of the cushion slightly, then pulling it forward and clear of the backrest so it can be raised to the full up position.





M-65 Lounge Seat, Cooler & Armrest W/ Cup Holders



Aft Transom Seat

On M-65 models, there is another cushion forward of the cooler with a storage compartment below the seat. There is also a fold down armrest with drink holders.

#### **Aft Transom Seat**

This is an aft facing bench seat located in on the transom, just forward of the swim platform. This seat should only be used when the boat is at anchor or securely moored. You should never allow anyone to sit in the rear facing seat when the engine is running.



#### **WARNING**



OPERATING THE BOAT UNDER POWER WITH THE AFT TRANSOM SEAT OCCUPIED MAY ALLOW PERSONS TO FALL OVERBOARD AND INTO BOAT PROPELLER OR TO BE LOST IN OPEN WATER. THE SEAT SHOULD NEVER BE OCCUPIED WHILE THE BOAT IS UNDERWAY OR THE ENGINE IS RUNNING.

### **Helm and Passenger Bucket Seats**

The helm and passenger pedestal seats are equipped with a flip up bolster to provide more room between the seat and helm or dash area. The bolster converts the seat to a raised seating position and allows the operator and passenger to select the standard seating height or a higher position for better visibility when needed. To convert the seat to the raised cushion position, lift the front of the seat cushion to raise the bolster and push it back above the seat cushion.

The helm and passenger seats are pedestal mounted seats that swivel and adjust fore and aft. There are two levers and a tension knob on the



Helm Seat Bolster In Seat Position



Helm Seat Bolster In Raised Seat Position





Helm Seat Adjustment Levers & Friction Knob



FWD/AFT Facing Lounge Seat Backrest In Forward Seat Position

seat base. Lifting the lever located at the port front of the seat base allows the seat to be adjusted fore and aft. Lifting the lever on the starboard side of the seat base releases the pivot lock and allows the helm seat to be swiveled on the pedestal. The helm seat will automatically lock when it is swiveled back to the operating position. A friction knob adjusts the tension of seat base to the pedestal. It should be adjusted to allow the seat to be swiveled when the swivel lock is released and tight enough to eliminate play between the seat base and the pedestal. The friction knob also can be tightened to secure the seats in position and prevent them from swiveling if desired.

# FWD/Aft Facing Lounge Seat (Optional)

The seat replaces the port pedestal seat and connects to the cockpit Lounge seat. It is equipped storage below the seat cushion and an adjustable backrest cushion.

The backrest has three positions. In the aft position, it is a back rest cushion for the forward facing passenger seat. In the forward position, it makes a rear facing lounge seat that connects to the port side of the aft bench seat. The center position provides an upright, aft facing backrest.

The backrest is moved by lifting the center of the back rest and moving it toward the desired position. When the backrest reaches the desired position it will drop slightly and lock. Make sure the backrest is locked in the aft, center or forward position before operating the boat.



FWD/AFT Facing Lounge Seat Backrest In Rear Facing Seat Position (Center)



FWD/AFT Facing Lounge Seat Backrest In Rear Facing Lounge Position



#### Helm

The steering, engine controls, engine instruments and switches for exterior equipment and navigation lights are located on the helm station. The helm station is designed to provide good visibility, room for electronics and a more functional control station.

The steering wheel is located on the rear of the helm console. The engine shift and throttle control is on the side of the cockpit, next to the helm. The helm switch panels are just forward of the steering wheel and the engine ignition switch is located on the port side of the steering wheel. The circuit breakers for accessories activated by the helm switches are located in a panel in the storage locker, forward of the helm. Molded-in electronics storage is located in the center of the helm, forward of the steering wheel.

The back of the helm station is accessed through a removable panel in the large storage compartment just forward of the helm. This panel provides access to service the helm equipment, accessory switch panels and other components installed in the helm. The circuit breakers that protect the circuits activated by the helm switches and the electronics are located in a panel just below the helm access panel.

#### **Helm Storage Compartment**

There are two matched acrylic doors secured with flush, push to close latches that provide access to the large storage compartment forward of the helm. The outside door is used to close off the walk-through area below the opening windshield panel when desired and is designed to "nest" to the storage compartment door when it is open. To secure the door in either position, push the door until the latch catches. Both doors open simultaneously to access the storage compartment when the walk-through door is nested to the storage compartment door. Periodically clean and lubricate the latches to protect them from corrosion and help keep them operating properly.

A 12 volt light activated by the Cockpit Lts switch at the helm illuminates the compartment. The compartment is equipped with special mounting brackets for the cockpit table and optional bow filler cushions. It is also where the amplifiers for the stereo options are mounted.



M-45 Helm



Helm Storage Compartment & Walk-Through Doors



Cockpit Table In Storage Brackets
In Helm Storage Compartment



The doors could be damaged or hurt a passenger by the motion of the boat if they are allowed to swing free. Always make sure the doors are latched in rough water or when the boat is underway.

#### **Head Compartment**

A large head compartment is located forward of the passenger seat. A molded fiberglass door secured with a lockable, push to close latch provides access to the compartment. A grab rail on the door provides a hand hold for passengers and a lockable compartment provides storage for small items.

The door could be damaged or hurt a passenger by the motion of the boat if it is allowed to swing free. It should be in the closed position and latched when not being used, particularly in rough water and whenever the boat is underway. When closing the door, make sure you push the door against the door jam with enough pressure to allow the latch to secure the door. Periodically clean and lubricate the latch to protect it from corrosion and help keep it operating properly.

The M-45 head compartment is designed to accommodate a portable marine toilet. It is equipped with a light that is activated by the Cockpit Lts switch at the helm and an ON/OFF switch on the light fixture in the head compartment.

The M-65 head compartment is designed to accommodate a portable marine toilet or an optional porcelain marine toilet with a holding tank. It is equipped with a freshwater sink, vanity and light that is activated by the Cockpit Lts switch at the helm and an ON/OFF switch on the light fixture in the head compartment. Refer to the Interior Equipment chapter for additional information on the head compartment equipment and operation.



#### WARNING



NEVER LEAVE THE HEAD DOOR UNLATCHED. THE HEAD DOOR IS HEAVY AND SWINGS EASILY. IF THE DOOR IS LEFT UNLATCHED, IT COULD SWING UNEXPECTEDLY AS THE BOAT ROCKS, DAMAGING THE DOOR OR CAUSING AN INJURY TO A PASSENGER. TO AVOID INJURY TO PASSENGERS OR DAMAGE TO THE BOAT, ALWAYS CLOSE AND SECURE COMPARTMENT DOOR WHENEVER THE HEAD COMPARTMENT IS NOT BEING USED, THE BOAT IS IN MOTION OR IN ROUGH WATER CONDITIONS.



Head Compartment Door, Latch & Storage Compartment



M-45 Head Compartment



#### **In-Floor Storage Compartment**

There is a large storage compartment located below the cockpit floor between the helm and passenger seats. The compartment drains to the bilge and is equipped with "dry deck" padding to allow for better drainage and air circulation in the compartment. A drain rail around the hatch channels water away from the compartment to the bilge.

A gas spring holds the hatch in the open position and a flush twist latch holds it closed. The latch handle can be stored in the open or secured position. There is a large red dot in the handle that indicates that the latch is in the open position and the hatch is not secure. Always make sure the hatch is closed with the latch in the secured position before operating the boat above idle speed.

M-65 models with the optional grey water system could be equipped with a sump pump that is located in bilge and accessed through this compartment. Refer to the Drainage Systems chapter for information on the grey water system.

#### **Bow Seats and Storage Compartments**

The bow area is equipped with seats, a grab rail and built in drink holders that drain to the bilge. The anchor locker and retractable forward boarding ladder are located just forward of the aft facing bench seat at the front of the bow seating area. The area is illuminated by LED lights recessed into the seat bases. The lights are activated by the Cockpit Lts switch in the helm switch panel.

The removable cockpit table can be mounted to a bracket on the rear side of the bench seat base. The table and pedestal are stored in special mounting brackets built into the storage compartment just forward of the helm. Refer to the cockpit table section in this chapter for instructions on installing the table.

The bow seat area is accessed by releasing the two latches on the center windshield panel and opening it. A magnetic stop on the deck automatically secures the windshield section in the open position. Use caution when opening the windshield walk-thru. The magnet is very powerful and could cause injury or damage to the deck or windshield if the window is allowed to slam against the stop. To close the windshield panel, pull on the bottom of the panel until the magnetic stop releases. Then close the panel and secure it with the locks. Make sure the center section is properly secured in the open or closed position before cruising.



In-Floor Storage Compartment



M-45 Aft Facing Bow Bench Seat & Storage

Always make sure the center windshield panel is secured in the open or closed position and that passengers in the bow seating area are properly seated before operating the boat above idle speed. The passengers also should not be restricting the forward visibility of the operator.

### M-45 Bow Seating

The M-45 bow seat area is equipped with a molded in, rear facing bench seat with storage below the center cushion. There are also removable forward facing seats with foldout supports just forward of the windshield that convert the seating area to forward or aft facing lounge seats. The removable seat cushions are stored in special brackets in the helm storage compartment when not being used.

The supports fold against the side of the cockpit to create an open area when not being used and





M-45 Bow Lounge Seat Cushions Removed & Foldout Supports Latched Against The Sides Of The Cockpit



M-45 Bow Lounge Seat Cushions Installed & Foldout Supports Latched Open

are secured in the seat or stored positions with sliding barrel bolt latches. To use the forward facing seats, release the latches and swing the seat supports out until they are parallel with the side of the cockpit. Securely latch the supports and install the seat cushions. When the supports are in the seat position, there is storage below each seat.

Optional Bow filler cushions convert the bow seating area to a sun lounge. The filler cushions rest on molded fiberglass supports built into the seat bases.

#### M-65 Bow Seating

The M-65 bow seat area is equipped with a molded in, aft facing bench seat with storage below the seat cushions. There are also forward facing seats with folding armrests and storage below forward of the windshield. Removable filler cushions convert the seating area to forward or aft facing lounge seats. The removable filler cushions are stored in special brackets in the helm storage compartment when not being used. The seat cushions rest on molded fiberglass supports built into the seat bases.



#### WARNING



PASSENGERS RIDING BOW SEATING AREA WHILE CRUISING COULD RESTRICT THE OPERATOR'S VISIBILITY. THIS IS A FREQUENT CAUSE OF ACCIDENTS. POSITION PASSENGERS SO THEY DON'T BLOCK THE OPERATOR'S VISIBILITY OR MOVE THEM TO SEATS IN THE MAIN COCKPIT WHILE THE BOAT IS CRUISING.



M-45 Bow Lounge Seat Cushions & Optional Bow Filler
Cushions Installed



M-65 Bow Rear Facing Bench Seat



M-65 Bow Bench Seat Storage Compartments



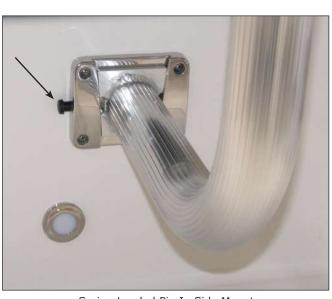
M-65 Bow Seats - Lounge Insert Installed

### **Cockpit Table**

A removable cockpit table mounts to a bracket on the rear side of the bow aft facing bench seat base. The table and pedestal are stored in special mounting brackets built into the storage compartment just forward of the helm. A spring loaded pin in the side of the mounting bracket secures the table pedestal in the bracket and prevents it from working loose while the boat is underway.

To use the table, remove the table and pedestal from the storage compartment. Pull the safety pin in the side of the mounting bracket and insert the pedestal base firmly in the bracket, then release the pin and make sure it extends into the pedestal base to secure the pedestal to the base. Then install the table on the pedestal. Reverse the process to remove the table.

The table should only be used while running at slow speeds, at the dock or at anchor. Always remove and properly stow the table and pedestal before cruising or pulling skiers or wakeboarders.



Spring Loaded Pin In Side Mount



M-65 Bow Lounge Seat Cushions & Optional Bow Filler Cushions Installed



Cockpit Table

To prevent damage to the table or storage compartment, make sure to secure the table with the rotating latch when it is stored in the mounting brackets. Also make sure the pedestal is securely fastened to the brackets next to the table.



## 10.4 Bimini Top & Canvas

The canvas for Monterey boats is custom fit to each boat. An optional bow cover protects the seats and equipment forward of the windshield. The bimini top and boot is standard equipment and designed with a relatively flat profile and a snug fit. The canvas is fit to the boat at the factory and the bimini top must be installed properly in order for the optional clear connector and side curtains to fit.

To install the bimini top, attach the main leg ball ends to the deck hinge sockets. Secure them with the quick release pins and leave the rear stanchions loose. Next, open the bimini and attach the front straps to the metal eye straps on the top of the windshield frame. Attach the rear stanchion ball ends, one at a time, to the rear deck hinge sockets located aft of the windshield. Use your body weight on the rear corner of the bimini to pull down and stretch the fabric until the stanchion ball end aligns with the socket in the deck hinge. Insert the stanchion ball end in the socket and secure it with the quick release pin. Repeat for the other side. If the top is still adjusted to factory specifications, the top will be level and the canvas tight.

#### **NOTICE:**

The front straps of the bimini must be secured to the windshield before the rear stanchions are secured to the deck. If the rear stanchions are secured first, it will be very difficult to secure the front straps without loosening them. If the front straps are loosened, the bimini top will be too loose and the clear connector and side curtains will not fit properly and appear to be too short.

#### **Side Curtains and Clear Connector**

Side curtains and a clear connector are optional. To install the curtains, close the center windshield section and attach the clear connector to the zipper at the front of the top and snap it to the top of the windshield frame beginning with the center snaps. If the bimini top is adjusted properly, the clear connector will have to be stretched just enough to pull out the wrinkles and reach the snaps on the windshield. The front straps will continue to bear the main load of the top.

Once the clear connector is completely installed, the side curtains can be put on. Attach the side curtains to the zippers on the sides of the bimini and to the front connector. Snap the curtains to the windshield and the deck beginning with the forward snaps on the windshield. If the bimini is adjusted properly, the side curtains will have to



Bimini Top Folded On Rear Stanchions W/ Boot Installed



Bimini Top Open

be stretched slightly to pull out the wrinkles and reach the snaps. The main load for the top should remain on the front straps and the rear stanchions. If you have the optional drop curtain, attach it to the zipper on the back of the top and to the rear of the side curtains. Snap the drop curtain to the deck and cockpit.

There is a panel in the clear connector that can be rolled up and secured by straps near the top of the bimini. This roll up panel allows the walk-thru feature of the cockpit and windshield to be used when the bimini and clear connector are installed.

The side curtains and clear connector should be stored either rolled or flat, without folds or creases. Folding the curtains will make permanent creases that could cause the vinyl to crack.

#### **NOTICE:**

Cold weather can make the clear vinyl material on the curtains stiff and difficult to stretch to the snaps. This can particularly difficult with new canvas that has been stored off the boat. Laying the curtains in the sun for 30 minutes during the heat of the day will make installing them much easier in cold weather.



#### 10.5 Wakeboard Tower

An aluminum wakeboard tower is available as optional equipment. The tower is made of welded, powder coated aluminum. It is designed to accommodate the canvas top, radio antennas and navigation lights. It is also equipped with a ski tow designed for towing one average sized person.

Special care must be taken when mounting additional hardware on the tower, particularly in saltwater. Fasteners will require fiber washers and sealing with caulk or Tef Gel to isolate the fastener from the aluminum and prevent damage to the powder coating when the fastener is installed.

The tower should be washed with soap and freshwater after each day of boating in saltwater. Refer to Powder Coated and Painted Aluminum in the Routine Maintenance chapter for additional information on maintaining aluminum fabrications.

The tower is mounted to special fasteners bolted to the deck and designed to rotate forward to reduce the clearance height required for covered storage or trailering. A stainless steel safety cable hidden inside the each side of the tower prevents it from rotating too far and damaging the windshield and/or tower.

To fold the tower, insert the special tool in the hole in each rear tower leg. Rotate the tool clockwise until it stops to release the tower lock. Have someone support the tower as the last lock is released to prevent the tower from falling forward. Once both locks are released, slowly lower the tower until it is supported by the cables in the down position. To raise the tower, make sure both locks are in the unlocked (released) position. Then raise the tower and have someone hold it in the up position. Insert the tool in each rear leg hole and turn it counterclockwise to secure the tower. Make sure the tool is removed and properly stowed.

Refer to the instructions located at each rear leg lock for additional information on releasing and securing the leg locks.

#### **NOTICE:**

A special welded bracket that supports the tower in the down position is standard with the wakeboard tower option and must be used when it is rotated forward while trailering.

The tower is equipped with a ski tow designed for pulling one average sized skier or wakeboarder.



Wakeboard Tower



Tower Tilt Lock

You should never tow more than one skier or wakeboarder from the tower. Towing more than one skier will put too much strain on the fabrication and could cause damage to the tower and deck. Refer to the Ski Tow Pylon section in this chapter for additional information on using the tower ski tow fitting.

The warranty for the tower will be void if it is modified in any way or overloaded by towing too many skiers or wakeboarders. Additionally, if items like antennas, spotlights and other accessories are mounted improperly or in the wrong location, the warranty could be voided. If you intend to add equipment or make modifications to the tower, you should contact your dealer or Monterey Customer Service to make sure the equipment you would like to add or the intended modification will not void the warranty.





Tower Top & Enclosure

#### **Wakeboard Tower Top and Enclosure**

The convertible top is designed with a relatively flat profile and a snug fit. The canvas is fit to the boat at the factory and the top must be installed properly in order for the optional clear connector and side curtains to fit.

The front and rear sections of the top are folded against the tower and covered with storage boots when the top is in the folded or down position. To open the forward top, remove the boot on the forward portion of the top. Open the top by pulling the main bow toward the front of the boat until it stops. Release the Velcro pockets securing the stanchions to the main bows and remove the quick release pins in stanchion hinges on the tower. Close the pockets after the stanchions have been removed. Use your body weight on the front corner of the top to pull down and stretch the fabric until the stanchion ball end is aligned with the socket in the hinge on the tower. Insert the stanchion ball end in the socket and secure it with the quick release pin. Repeat on the other side. The top canvas should be stretched tight when both stanchions are secured in the tower hinge.

To open the rear top, remove the boot on the rear portion of the tower. Open the top by pulling the main bow towards the rear of the boat until it stops. Release the stanchions from the main bow and remove the quick release pins in the stanchion hinges on the tower. Use your body weight on each side of the top bow to pull down and stretch the fabric until the stanchion ball end is aligned with the socket on the hinge on the tower. Insert the stanchion ball end in the socket and secure it with the guick release pin.



Forward Canvas Stanchion



Rear Canvas Stanchion



Repeat on the other side. The top canvas should be stretched tight when both stanchions are secured in the tower hinge.

#### Side Curtains and Clear Connector

Side curtains and a clear connector are optional. To install the curtains, close the center section of the windshield and attach the clear connector to the zipper at the front of the top and snap it to the top of the windshield frame beginning with the center snaps. If the top is adjusted properly, the clear connector will have to be stretched just enough to pull out the wrinkles and reach the snaps on the windshield. The front bow will continue to bear the main load of the top.

Once the clear connector is completely installed, the side curtains can be put on. Attach the forward side curtains to the zippers on the sides of the top and to the front connector. Snap the curtains to the windshield, deck and tower beginning with the forward snaps on the windshield. If the top is adjusted properly, the side curtains will have to be stretched slightly to pull out the wrinkles and reach the snaps. The main load for the top should remain on the bows and the tower.

If you have the optional drop curtain and rear enclosure, attach it to the zippers on the rear of the top and side curtains. Then snap the drop curtain to the tower and deck beginning with the forward snaps on the tower.

There is a panel in the clear connector that can be rolled up and secured by straps on the forward top. This roll up panel allows the walk-thru feature of the cockpit and windshield to be used when the top and clear connector are installed.

The side curtains and clear connector should be stored either rolled or flat, without folds or creases. Folding the curtains will make permanent creases that could cause the vinyl to crack.

#### NOTICE:

Cold weather can make the clear vinyl material on the curtains stiff and difficult to stretch to the snaps. This can be particularly difficult with new canvas that has been stored off the boat. Laying the curtains in the sun for 30 minutes during the heat of the day will make installing them much easier in cold weather.



#### **WARNING**



THE WAKEBOARD TOWER SHOULD BE USED FOR TOWING WATER SPORTS DEVICES ONLY. IMPROPER USE MAY OVERSTRESS THE TOW TOWER, IMBALANCE THE BOAT, OR ALLOW THE TOW ROPE TO CONTACT PASSENGERS.

- WHEN USING THE TOWER, WATCH FOR LOW BRIDGES, OVERHANGING TREE LIMBS OR POWER LINES THAT MAY COME IN CONTACT WITH THE TOWER.
- DO NOT USE THE TOWER FOR TOWING PARASAILS, KITES, OR OTHER WATERCRAFT.
- DO NOT TOW MORE THAN ONE PER PERSON AT A TIME FROM THE TOW TOWER.
- DO NOT ALLOW PASSENGERS TO SIT BEHIND THE ROPE ATTACHMENT POINT WHEN THE TOWER IS IN USE.
- DO NOT ALLOW THE LOOSE END OF A TOW ROPE TO DANGLE DOWN INTO THE COCKPIT.
- CHECK TO BE CERTAIN ALL BOLTS ARE IN PLACE AND THAT THEY ARE TIGHT BEFORE USING THE TOWER.

FAILURE TO ADHERE TO THESE GUIDELINES MAY CAUSE PERSONAL INJURY OR DEATH.

# 10.6 Cockpit & Bow Covers

Cockpit and bow covers are optional on most bow rider models. Bow covers fasten to snaps in the deck and are secured to the cockpit cover at the windshield base with velcro. A support pole in the middle of the cover provides support to prevent puddling.

Cockpit covers fasten over the windshield to snaps on the deck and to hook and loop fasteners at the rear of the cockpit. A support pole in the middle of the cover provides support to prevent puddling.

#### **Bow Cover Installation**

To install the canvas, start with the bow cover and work toward the back of the boat. Snap the bow cover to the deck beginning with the snaps at the bow and work toward the windshield. When all the bow cover snaps are fastened, install the support pole and make sure it is adjusted to make the canvas snug and raise the center enough for proper water drainage.

#### **Cockpit Cover Installation**

Close and latch the opening windshield panel. Find the front of the cockpit cover and place it over the windshield. Snap the cover to the snaps on each side of the forward windshield base. Secure the velcro flap on the cockpit cover to the flap on the bow cover.



Insert the support pole in the center of the cockpit cover and make sure it is adjusted slightly higher than the windshield. Continue fastening the snaps on the port and starboard sides of the cover as you work your way to the rear of the boat. When you get near the aft seat, double check the support pole. Make sure it is vertical and adjusted to snug the canvas and provide proper water drainage. Adjust the pole if necessary.

Step onto the swim platform and fasten the rear of the cover to the deck.

# 10.7 Aftermarket Hardtop, Wakeboard Tower or Arch

Monterey does not recommend installing an after market wakeboard tower, hardtop or arch. An improperly designed or installed fabrication can cause structural damage to the deck and void the Monterey Limited Warranty. Additionally, Monterey will not be responsible for any damage resulting from the installation of a fabrication not installed at the Monterey factory. If you intend to install an aftermarket hardtop or arch on your boat, please contact your authorized Monterey dealer.

Refer to the Routine Maintenance section for more information on maintaining aluminum fabrications and precautions for adding additional equipment and fasteners.



# INTERIOR EQUIPMENT

# 11.1 Head Compartment

#### M-65 Head Compartment

The M-65 head compartment is equipped with a sink that has a retractable cold water hose and spray handle. The vanity counter top is made of Karadon and there is storage below the sink and the vanity. The compartment drains by gravity to the bilge. Lighting is provided by a 12 volt overhead light activated by the Cockpit Lts switch in the helm switch panel and a switch on the light fixture. Additional lighting and ventilation is provided by an opening port window.

The vanity door is secured with a dual action, push to lock latch. To open the cabinet door, push on the latch knob. The knob is spring loaded and will pop out one inch, providing a finger hold and releasing the dead bolt on the latch mechanism. A slight pull is required to release the friction latch and open the door. The door will be held closed by the friction latch while at anchor or at the dock. To close and secure, make sure the door is completely closed and push the knob in. The knob will stay in and the locking mechanism will be activated.

A portable marine toilet (Porta-Potti) is standard. A manual or electric marine toilet with holding tank and pump-out deck fitting are optional.

The compartment floor is covered with synthetic wood. This material looks and feels like real wood, but requires no maintenance other than to keep it clean.



M-65 Head Compartment & Marine Toilet



#### M-45 Head Compartment

The M-45 head compartment is equipped with a light and some room for storage. The compartment drains by gravity to the bilge. The light is activated by the Cockpit Lts switch on the helm switch panel and a switch on the light fixture in the head compartment.

A portable marine toilet (Porta-Potti) is standard. A manual marine toilet with holding tank and pump-out deck fitting is optional.

The compartment floor is covered with synthetic wood. This material looks and feels like real wood, but requires no maintenance other than to keep it clean.

# 11.2 Portable Marine Head System

The portable head is standard on the M-65 and M-45. The system is made up of two major components, an upper tank and a lower tank. The upper tank contains the fresh water supply, a bellows pump, a seat and the lid. The bottom tank contains the flush valve, a waste holding tank, a chemical storage compartment and the drain nozzle. The components are secured together by a clamping mechanism when the portable head is ready for use.

In some areas the law requires that portable heads be equipped with an optional permanent deck mounted pump out system to evacuate the waste with a dock side pump. Boats with a portable head pump out will be equipped with a deck fitting marked "WASTE" located on the deck. Since this system is required to be permanent, the bottom waste tank cannot be removed and the only way to evacuate the system is by a dock side pump. The waste pump out system is an option on all M-65 and M-45 models.

To use the portable head, add the recommended amount of holding tank deodorant to the waste tank and fill the fresh water tank. To flush after use, pull the waste valve handle straight out, then press the flushing bellows one or more times to rinse. To close and seal the waste holding tank, simply push the valve handle all the way in. Monitor the level in the waste tank and empty as necessary.

#### **Portable Toilet Maintenance**

To keep your portable head operating properly it must be emptied and properly cleaned periodi-



M-45 Head Compartment



Typical Portable Marine Toilet



cally. Refer to the manufacturer owner's manual for detailed instructions on the proper operation of your portable head.

#### **NOTICE:**

In some areas the law requires a waste pump out system on portable heads. If your boat is equipped with the waste pump out, make sure you know the laws for the areas in which you boat before modifying or removing the pump out system.

The portable head must be properly winterized before winter lay-up or for cold weather use. Refer to the manufacturer owner's manual for winterizing and cold weather instructions



A manual marine toilet is available as optional equipment on M-45 and M-65 models. Flush water is supplied by a thru-hull fitting located in the forward bilge, below a hatch in the in-floor storage compartment and a raw water supply line.

Before using, make sure the valve at the thru-hull fitting is on. Then open the inlet valve on the head and pump to wet the inside of the bowl. After use, close the inlet valve and pump to discharge the waste to the holding tank. Once the waste is discharged, the toilet should be pumped dry.

The waste is pumped directly into the holding tank where it remains until it is pumped out by a waste dumping station or the optional overboard discharge pump when legal to do so.

#### NOTICE:

In many areas it is illegal to flush head waste directly overboard. Violation of these pollution laws can result in fines or imprisonment. Always know the law for the areas in which you boat. Never dump head or holding tank waste overboard illegally.

## 11.4 Electric Marine Head System

A 12 volt electric marine toilet is available as optional equipment on M-65 models. The toilet is connected to the pressurized fresh water system which results in less odor in the head compartment. It has an automatic pumping device that fills and empties the bowl. Once a button on the control is pressed, the entire cycle is completely



Typical Manual Flush Marine Toilet



Typical Electric Marine Toilet

automatic. The system uses very little water, approximately 2.27 quarts (2.5 liters) per flush.



To use the toilet, press the "Add Water" button on toilet control panel to add a preset amount of water to wet the bowl which prevents organic residues dirtying the ceramic sides. After using the toilet, pressing the "Flush" button starts an automatic flushing cycle that moves the waste to the holding tank and leaves the bowl completely clean and dry in the rest position.

The head contains an integrated, high-speed turbine grinding pump that transfers waste to the holding tank where it remains until it is pumped out by a waste dumping station or the overboard diaphragm discharge system.

The fluid level in the waste/holding tank is monitored by a lighted LED symbol in the in the lower starboard corner of the toilet control panel. The symbol lighted green indicates the holding tank is less than half full. The symbol lighted yellow indicates the tank is at least half full. The symbol lighted red indicates the tank is full and flushing is not recommended. A lockout system built into the control panel prevents the toilet from flushing when the holding tank is full.

Refer to the toilet manufacturer owner's manual for more information on the operation of the marine head system.

#### **NOTICE:**

In many areas it is illegal to flush head waste directly overboard. Violation of these pollution laws can result in fines or imprisonment. Always know the law for the areas in which you boat. Never dump head or holding tank waste overboard illegally.

## 11.5 Head System Holding Tank

The holding tank is located in the bilge. When the tank is full, the red LED light on the toilet control panel will be lit, indicating that flushing is not recommended. The tank must either be pumped out by an approved waste dumping station through the waste deck fitting or the optional overboard discharge pump.

A lockout system built into the toilet prevents it from flushing when the holding tank is full. You should not attempt to bypass the lockout and flush the toilet when the tank is full. An overfilled holding tank will force waste into the holding tank vent filter. This will clog the vent filter and could cause damage to the holding tank. It will also cause unpleasant odors in the cabin and cockpit.



Electric Head Control Panel In Head Compartment



Typical M-65 Holding Tank & Optional Overboard Discharge Pump



Waste Deck Fitting



To pump out the holding tank with the overboard waste discharge system, open the valve at the discharge thru-hull fitting in the bilge. Activate and hold the momentary overboard macerator switch in the toilet control panel. Monitor the fluid level closely as the tank is pumped. Release the switch to turn off the overboard pump when pumping is complete. Then close the ball valve at the thru-hull fitting.

#### **Notice:**

Monitor the pumping operation as the overboard discharge pump drains the holding tank. Be prepared to turn the pump off immediately when draining is complete.

#### **Notice:**

In order to comply with current State, Federal and Coast Guard regulations, the valve at the discharge thru-hull fitting must be turned off and secured whenever the boat is operating in areas where the discharge of sewage is prohibited.



## CAUTION



IN MANY AREAS IT IS ILLEGAL TO PUMP HEAD WASTE DIRECTLY OVERBOARD. VIOLATION OF THESE POLLUTION LAWS CAN RESULT IN FINES OR IMPRISONMENT. ALWAYS KNOW THE LAW FOR THE AREAS IN WHICH YOU BOAT. NEVER DUMP HEAD OR HOLDING TANK WASTE OVERBOARD ILLEGALLY.



Typical Holding Tank Vent Filter

## **Head System Maintenance**

The head should be cleaned and inspected for leaks regularly.

The holding tank should be pumped out and flushed as needed. Periodically add chemical to the holding tank to help control odor and to chemically break down the waste. See the head manufacturer owner's manual for additional operating and maintenance information.

The vent hose for the holding tank is equipped with a charcoal filter to reduce odor from the holding tank. The filter should be changed once a year or if the holding tank has become overfilled, which will plug the filter and could cause damage to the waste system.

#### **NOTICE:**

The head system must be properly winterized before winter lay-up. Please refer to the Seasonal Maintenance chapter and the manufacturer owner's manual for winterizing instructions.



# **NOTES**



## **ROUTINE MAINTENANCE**

## 12.1 Exterior Hull & Deck

**Hull Cleaning Below The Water Line** 

When the boat is removed from the water, clean the outer bottom surface immediately. Algae, grass, dirt and other marine growth is easier to remove while the hull is still wet. Use a pressure cleaner or a hard bristle brush to clean the surface.

# Marine Growth, Bottom Paint and Osmosis Blistering

If the boat is to be left in saltwater for extended periods, the hull must be protected from marine growth by antifouling paint. Because of variations in water temperature, marine growth, and pollution in different regions, a qualified boat yard in your area should be consulted when deciding what bottom paint system to apply to your hull. This is extremely important as pollution and marine growth can damage fiberglass hulls.

Your Monterey hull is manufactured using state-ofthe-art materials and processes. A layer of super tough, Ashland "AME" Resin with high density and superior adhesion properties provides an exceptionally effective barrier to osmotic blistering. Osmosis is caused by a chemical reaction between water and substances in the hull laminate below the waterline. If water breaches the exterior gelcoat and barrier layer, it can react with the chemical components in the laminate creating acidic substances. These substances create pressure behind the gelcoat which causes blisters.



## CAUTION



SANDBLASTING THE HULL BOTTOM WILL DAMAGE THE FIBERGLASS. USE A FIBERGLASS WAX REMOVER AND SAND TO SCUFF THE GELCOAT SURFACE. THE INSTRUCTIONS AND RECOMMENDATIONS OF THE BARRIER COATING AND ANTIFOULING PAINT MANUFACTURERS SHOULD BE FOLLOWED EXACTLY.



## CAUTION



BARRIER COATINGS AND BOTTOM PAINT SHOULD BE APPLIED ONLY BY QUALIFIED MARINE PROFESSIONALS IN A BOAT YARD OR DEALERSHIP THAT SPECIALIZES IN THEIR APPLICATION. USE ONLY STANDARD, HIGH QUALITY ANTIFOULING PAINTS AND BARRIER COATINGS FROM NAME BRAND MANUFACTURES SUCH AS INTERLUX AND PETTIT.



## CAUTION



DO NOT ALLOW THE HULL ANTIFOULING PAINT TO CONTACT THE OUTBOARD ENGINE. MOST ANTIFOULING PAINTS DESIGNED FOR HULL BOTTOMS CONTAIN COPPER AND CAN CAUSE SEVERE GALVANIC CORROSION DAMAGE TO THE LOWER UNIT. USE ONLY ANTIFOULING PAINT DESIGNED FOR OUTDRIVES AND OUTBOARD MOTORS. ALWAYS LEAVE A ONE INCH BARRIER BETWEEN THE HULL BOTTOM PAINT AND ENGINE.

Most bottom paints require some maintenance. Proper maintenance is especially important when the boat is in saltwater and not used for extended periods or after dry storage. If the hull bottom has been painted with antifouling paint, contact your dealer for the recommended maintenance procedures.

#### **Sacrificial Anodes**

Sacrificial anodes are installed on the outboard engine. Additional anodes are installed on the trim tab planes.

The anodes are less noble than copper based alloys, aluminum, cast iron and stainless steel. They will deteriorate first, protecting the more noble engine and underwater hardware against galvanic corrosion. Anodes should be checked monthly and changed when they are 75% of their original size. Additionally, anodes that are subjected to frequent wetting and drying require periodic scuffing with sandpaper to remove scale and oxidation to maintain their effectiveness.

When replacing the anodes, make sure the contact surfaces are clean, shiny metal and free of paint and corrosion. Never paint over the anode. The bonding system should be inspected by a qualified marine electrician once a year to make sure all connections are sound and there is continuity throughout the system.

Boats stored in saltwater will normally need to have the anodes replaced every 6 months to one year. Anodes requiring replacement more frequently may indicate a stray current problem within the boat or at the slip or marina. Anodes that do not need to be replaced after one year may not be providing the



proper protection. Loose or low quality anodes could be the problem. There could also be a problem in the bonding system. Contact your dealer for the proper size and type of anodes to be used and the specific installation procedure.

#### NOTICE:

Using the recommended sacrificial anode is more critical when stainless steel propellers are installed. Consult your dealer or the engine manufacturer for information on the proper anode for your boating area.

### **Fiberglass Gelcoat Surfaces**

- Keep the gelcoat surface out of direct sunlight or covered when it is not in use.
- Wash gelcoat frequently (daily in salt or polluted environments) with mild detergent and plenty of fresh water. Remove any stains quickly. Gelcoat is microscopically porous, so long term staining may become permanent.
- Regularly (monthly in salt or polluted environments) wax gelcoat surfaces with marine grade wax recommended for fiberglass finishes. The washing and waxing of your boat will have the same beneficial effects as they have on an automobile finish. The wax will fill minute scratches and pores thus helping to prevent soiling and will extend the life of the gelcoat.

#### **DON'TS**

- Do not use plastic or other nonporous (nonbreathable) materials to cover gelcoat surfaces.
   Trapped moisture from condensation can cause gelcoat damage. Shrink wrap storage covers must be properly ventilated, including hull sides.
- Do not use abrasives, bleaches, ammonia, acids or harsh detergents. See your dealer for special marine formulations. Harsh abrasive and chemical cleaners are not recommended because they can damage or dull the gelcoat, reducing its life and making it more susceptible to stains.
- NEVER apply wax or buffing compound to a gelcoat surface in direct sunlight.
- Do not attempt to remove stains and scratches. Chalking, stains, and minor scratches can be removed in most cases with careful rubbing and polishing with appropriate chemicals and is best done by a professional - see your dealer.

After the boat is exposed to the direct sunlight for a period of time, the color in the gelcoat tends to fade, dull or chalk. A heavier buffing is required to bring the gelcoat back to its original luster. For power cleaning use a light cleaner. To clean the boat by hand, use a heavier automotive cleaner. Before cleaning the surfaces, read the instructions given with the cleaner. After cleaning the surfaces, apply wax and polish all fiberglass surfaces except the nonskid areas.

If the fiberglass should become damaged and need repair, contact your dealer for an authorized repair person to make the repairs.

#### **Stainless Steel Hardware**

Marine grade stainless steel components such as hardware, cleats, eyes and rails offer superior corrosion resistance. When properly maintained, stainless steel will not rust or stain, even in harsh saltwater environments. However, if not maintained, stainless steel can rust, discolor or even corrode. The following guidelines will help keep stainless steel looking good for years to come.

#### DO'S

- Clean stainless steel frequently (daily in salt or polluted environments) with mild soap and plenty of water. Any cleaner safe for use on glass is usually safe for stainless.
- Remove rust spots (especially around welds) immediately with a brass, silver or chrome cleaner.
   Irreversible pitting will develop under rust allowed to remain on stainless for any period of time.
- Remove rust stains on gelcoat. See dealer for recommended product.
- Protect stainless with waxes or polishes suitable for marine use.

#### **DON'TS**

- Do not use coarse abrasives like sandpaper or steel wool which may actually cause rusting.
- Do not use acids or bleaches which may etch the naturally occurring protective coating.
- Do not leave stainless steel in contact with iron, steel or other metals which cause contamination leading to rust or corrosion.



#### **GEMLUX MAINTENANCE INSTRUCTIONS**

Job	Cleaning Agents	Method	Comments
Routine Cleaning	Soap and Water	Apply with a sponge or soft cloth. Dry area completely.	Once your stainless is free of discoloration and/or bleeding, spray GEMLUX Passivation Solution directly onto stainless. Allow
Stubborn stains, discoloration or bleeding	GEMLUX Cleaning Wax	Apply with soft, dry cloth.	to cure for 30-60 seconds. Rinse with fresh water and dry the area. This solution will help re-passivate the stainless steel.

#### **Gemlux Stainless Steel Hardware**

Most of the stainless steel hardware on your boat is made of Gemlux, polished stainless steel. In order to ensure that your Gemlux stainless steel maintains its beautiful finish, it is critical that you care for it properly.



## CAUTION



YOUR STAINLESS STEEL CAN BE DAMAGED BY EXPOSURE TO ACIDS AND OTHER CORROSIVE AGENTS FOUND IN MANY CLEANING PRODUCTS. A PARTIAL LIST OF ADDITIVES THAT MAY CAUSE STAINING AND A WEAKENING OF THE FINISH IS PROVIDED BELOW. USE OF THESE AND OTHER SIMILAR SOLUTIONS TO CLEAN YOUR BOAT CAN CAUSE YOUR STAINLESS STEEL TO BLEED AND WILL VOID YOUR WARRANTY.

Chlorsuphonic Acid	Sodium Hypochlorite
Ferrous Lodide	Sulphuric Acid
Hydrobromic Acid	Muriatic Acid
Iodine	On & Off Cleaner
Sodium Chlorite	Rust StainsAway
Sulphur Chloride	Ferrous Chloride
Bleach	Hydrochloric Acid
Comet	Hydrofluoric Acid
EZ-ON EZ-OFF Cleaner	Sodium Bifluoride
Ferric Chloride	Stannic Chloride
Fluorine	SnoBol
Hydrofluosilicic Acid	Soft Scrub
Silver Chloride	Marine Spray Nine
	•

When using the boat in saltwater, the hardware should be washed with soap and water after each use. Frequent cleaning of your stainless steel with soap, water and Gemlux Cleaning Wax will help maintain the finish. Always rinse the metal thoroughly with clean water and dry completely. Clean soft cloths or pads should be used. The use of steel wool pads or other highly abrasive brushes or sponges are not recommended and will damage the surface.

Contamination of the surface by chemicals, dirt or other material hinders the passivation process and traps corrosive agents, thus reducing corrosion protection. If your stainless is exposed to such chemicals it should be re-passivated with Gemlux Passivation solution.

For purchase information on the Gemlux Cleaning Wax or Gemlux Passivation Solution, contact Gemlux at: Phone: 888-436-5891 Fax: 904-269-5905 or on the web at www.gemlux.com.



## **CAUTION**



UNDER NO CIRCUMSTANCES SHOULD ANY ABRASIVE MATERIALS SUCH AS SANDPAPER, BRONZE WOOL, OR STEEL WOOL BE USED ON STAINLESS STEEL. DAMAGE TO THE HARDWARE WILL RESULT.



#### **Anodized Aluminum Surfaces**

Anodized aluminum should be washed periodically with soap and water to keep it clean. If the boat is used in saltwater or polluted water, the aluminum should be washed with soap and water after each use. Saltwater allowed to remain on anodized aluminum will penetrate the anodized coating and attack the aluminum.

If your boat is used in saltwater and equipped with a bimini or convertible top, it will require special attention to the anodized aluminum just below the top. This area is subject to salt build up from salty condensation and sea spray. It is also frequently overlooked when the boat is washed and will not be rinsed by the rain. Consequently, the aluminum just below the top is more likely to become pitted than the exposed aluminum on the structure. Make sure the aluminum in this area is washed frequently with soap and water and rinsed thoroughly. Pay particular attention to places where the top material contacts the frame.

Once a month coat the entire frame with a metal protector made for anodized aluminum to protect against pitting and corrosion caused by the harsh effects of saltwater. Do not use automotive or boat wax designed for paint or gel coat on anodized aluminum. The wax can contaminate the aluminum and damage the anodized surface.



## **CAUTION**



ONE DRAWBACK TO METAL PROTECTORS IS THAT THEY CAN MAKE THE METAL SLIPPERY. THEREFORE, METAL PROTECTORS SHOULD NOT BE USED ON TOWER LADDERS, STEERING WHEELS AND OTHER AREAS WHERE A GOOD GRIP AND SURE FOOTING IS IMPORTANT.

Stains can be removed from anodized aluminum with a metal polish or fine polishing compound. To minimize corrosion, use a caulking compound or Teflon based sealer to bed hardware and fasteners mounted to aluminum fabrications. If the anodized coating is badly scratched it can be touched up with paint. With proper care, anodized aluminum will provide many years of service.

#### **Powder Coated or Painted Aluminum**

Powder coated or painted aluminum should be washed periodically with soap and water to keep it clean. If the boat is used in saltwater or polluted water, the aluminum should be washed with soap and water after each use. Saltwater allowed to remain on powder coated or painted aluminum will penetrate the coating and attack the aluminum, usually around fasteners and hardware mounted to the aluminum.

If your boat is used in saltwater and equipped with a wakeboard tower, it will require special attention to the aluminum just below the top. This area is subject to salt build up from salty condensation and sea spray. It is also frequently overlooked when the boat is washed and will not be rinsed by the rain. Consequently, the aluminum just below the top is more likely to become pitted than the exposed aluminum on the structure. Make sure the aluminum in this area is washed frequently with soap and water and rinsed thoroughly. Pay particular attention to places where the top material contacts the frame.

Once a month check for damage, scratches and corrosion, particularly around fasteners and hardware. Nicked or badly scratched paint and powder coating can be sanded and touched up with enamel paint. Corrosion around fasteners will have to be sanded, then touched up with paint. The fasteners will require fiber washers and sealing with caulk or a Teflon based sealer to isolate the fastener from the aluminum and prevent damage to the paint or powder coating when the fastener is installed. Periodically applying automotive or boat wax to the surface will provide additional protection from the harsh effects of saltwater.

Always repair scratches, nicks and corroded areas as soon as possible. Corrosion left unaddressed will lift the paint or powder coating, allowing moisture to travel between the coating and the aluminum causing the corrosion to spread below the coating and damage the aluminum.

If excessive chipping and peeling occurs, it could be an indication of an electrical fault in the boat or aluminum fabrication. You should contact a qualified marine electrician to inspect your boat immediately and correct the problem if you suspect that your boat may have a fault in the aluminum frame. You should also contact Monterey Boats Customer Service.



#### **NOTICE:**

Boats that are towed behind larger vessels require special attention to the aluminum hardware. The salt spray, salty steam, and chemicals in exhaust gases are particularly corrosive and will eventually penetrate and damage the surface of anodized, painted or powder coated aluminum. It is imperative that the boat and the aluminum are cleaned thoroughly at the completion of each trip or at the end of each day on long cruises to reduce accelerated deterioration of the anodizing or powder coating and premature corrosion to the aluminum.

#### **Chrome Hardware**

Use a good chrome cleaner and polish on all chrome hardware.

#### **Acrylic Plastic Glass**

Acrylics and Plexiglas have properties that make them ideal for the marine environment. Components such as cabin doors and deck hatches need special care to prevent scratches and other damage. The following guidelines will help keep acrylics and Plexiglas looking good for years to come.

#### DO'S

- Wash your hatches, windshield connector, side curtains and other clear plastic pieces, as well as other acrylic components on your boat with a mild soap and plenty of lukewarm water.
- Use a clean, soft cloth, applying only light pressure.
- Rinse with clear water and dry by blotting with a damp cloth or chamois.
- Grease, oil or tar may be removed with a good grade of hexane, aliphatic naphtha or kerosene. These solvents may be obtained at a paint or hardware store and should be used in accordance with the manufacturer's recommendations.
- To maintain a high-luster finish on your acrylics, we recommend that after properly cleaning, apply Meguiar'sTM Mirror Glaze #10 with a soft towel. Note: If slight scratches appear on acrylics, use Meguiar'sTM Mirror Glaze #17

#### NOTICE:

Clear plastic (Isinglass) is subject to ultraviolet (sunlight) degradation over time. It may turn yellow-brown (a burnt appearance) and get brittle.

## Two things that can accelerate this degradation are:

- 1. Direct contact with aluminum or stainless steel frames. Use "Standoffs."
- 2. In salt water areas, dried salt crystals on the plastic will amplify sunlight. Wash after each use and/or windy days.

#### **DON'T'S**

- Do not subject acrylic material to high temperatures when polishing.
- Do not use glass cleaning sprays, cleaners containing ammonia, scouring compounds, or solvents like acetone, alcohol, gasoline, benzene, carbon tetrachloride or lacquer thinner.
- Do not use masking tapes, duct tapes or packing tapes on your acrylic materials.
- Do not drill holes in your acrylic materials without proper drill bits (special bits are used in acrylic material to avoid damage).

# 12.2 Upholstery, Canvas & Enclosures Marine Interior Vinyl Upholstery

The vinyl upholstery used on the seats, cushions, bolsters and headliners should be cleaned periodically with mild soap and water. Any stain, spill or soiling should be cleaned up promptly to prevent the possibility of permanent staining. When cleaning, always rub gently. Avoid using products containing ammonia, powdered abrasive cleaners, steel wool, ink, strong solvents, acetone and lacquer solvents or other harsh chemicals as they can cause permanent damage or shorten the life of vinyl. Never use steam heat, heat guns or hair dryers on vinyl.

Stronger cleaners, detergents and solvents may be effective in stain removal, but can cause either immediate damage or slow deterioration. Lotions, sun tan oil, waxes and polishes, etc., contain oils and dyes that can cause stiffening and staining of vinyl.



# The following are typical stains and cleaning tips for marine vinyl:

- For normal cleaning In general most common stains can be cleaned using warm, soapy water and clear water rinses. Moderate scrubbing with a medium bristle nylon brush will help to loosen soiling material from the depressions of embossed surfaces. For stubborn stains, use commercially available mild detergents in accordance with manufacturers instructions.
- Full strength rubbing alcohol or mineral spirits may be tried cautiously as a last resort on very stubborn stains, if the above suggestions do not work. Indiscriminate use of any solvent or solvent containing cleaner can severely damage or discolor vinyl.

## Certain stains may become permanently set unless they are removed immediately. The procedure for the removal of more severe staining agents are outlined below:

- Ballpoint Ink, Permanent Marker Ink spots will stain vinyl permanently. Immediate wiping with rubbing alcohol in a well-ventilated area will remove much of the stain.
- Oil based paint The use of turpentine in a well ventilated area will remove any fresh paint. Dried paint must be moistened carefully with a semisolid gel-type stripper so that the softened paint can be gently scraped away. Rinse with soap and water.



## CAUTION



DIRECT CONTACT WITH PAINT STRIPPERS WILL REMOVE THE PRINT PATTERN FROM VINYL. PAINT STRIPPERS ARE VERY CORROSIVE. TAKE CARE TO AVOID SKIN CONTACT BY WEARING PROTECTION.

- Latex paint Fresh paint can be wiped off with a damp cloth. Hot soapy water will normally remove dried latex.
- Tar, Asphalt Remove immediately as prolonged contact will result in a permanent stain.
   Use a cloth lightly dampened with mineral spirits and rub the stain gently, working from the outer edge of the stain towards the center in order to prevent spreading. Rinse with soap and water.

- Crayon, mustard, ketchup Sponge with mild soap and water. For stubborn stains that may have set, use a cloth soaked in diluted mild detergent with gentle rubbing. Any remaining stain should be washed with diluted bleach. Rinse repeatedly with clean water.
- Chewing gum Scrape off as much as possible with a dull knife. Rubbing with an ice cube will assist and make it easier to remove when scraping. The remaining gum should then be removed in a well ventilated area using a cloth saturated with mineral spirits. Use light rubbing. Rinse thoroughly with clean water.
- Lipstick, grease, oil, eye shadow, shoe polish

   Apply a small quantity of mineral spirits by means of a cloth with gentle rubbing. Take care not to spread the stain by smearing it beyond its original source. No time should be lost in removing shoe polish as it contains a dye that will cause permanent staining. Rinse thoroughly with water.
- Candy, ice cream, coffee, tea, fruit stains, liquor, wine, suntan lotion, soft drinks. Use clear lukewarm water and a sponge repeatedly. Any loose material should be gently scraped with a dull knife. Any soiled area remaining after drying should be gently rubbed with a cloth spotted with a mild detergent solution. Rinse thoroughly with clean water.
- Blood, leaf residue Sponge the area with a clean cloth soaked in cool water. If stubborn stains remain, use household ammonia and rinse repeatedly with a clean, wet cloth. Do not use hot water or soapsuds, as this will set the stain.
- Bird excreta, nausea stains Sponge the area with soapy water containing diluted bleach until the stain is removed. Rinse thoroughly with water.
- Urine Stains Sponge with soapy water containing a small amount of household ammonia.
   Rinse thoroughly with clean water.
- Surface mildew Wash with diluted bleach using a soft nylon brush for stubborn growth. Rinse repeatedly with clean cold water.



# The following are typical stains and cleaning tips for interior marine vinyl:

- Dry soil, dust and dirt, dried on dirt Remove with a soft cloth. Wash with a soft cloth or nylon brush dampened with water.
- Variations in surface gloss Wipe with a water dampened soft cloth and allow to air dry.
- Stubborn dirt Wash with a soft cloth or soft nylon brush dampened with Ivory Soap® and water. Rinse with clean water.
- Stubborn spots and stains Spray with Tannery Car Care Cleaner® and rub with a soft cloth. Rinse with clean water.
- Liquid spills Wipe immediately with a clean absorbent cloth. Rinse with clean water.
- Food grease and oily stains Spray immediately using either Fantastik Cleaner® or Tannery Car Care Cleaner®, wiping with a soft cloth. Take care not to extend the area of contamination beyond its original boundary. Rinse with clean water.

#### **Additional Warnings for Vinyl Fabrics:**

- Detergents should not be used on a regular or repeated basis for normal cleaning.
- Powdered abrasives, cleaners containing abrasives, steel wool and industrial strength cleaners are not recommended for vinyl.
- Any lacquer solvent will cause immediate, irreparable damage to the vinyl.
- Wax should never be used on any vinyl upholstery, as it will cause premature embrittlement and cracking.
- Dilute chlorine bleach before using. Never use at full strength.
- If flammable solvents such as alcohol, turpentine or varsol are used for cleaning, then only small quantities should be employed in a well ventilated area. Exercise proper care by advising any personnel in the area and keep away from any ignition source. Always wear protective gloves.

#### **Marine Interior Fabrics**

Spot clean only with water based shampoo or foam upholstery cleaner. Pretest a small, inconspicuous area before proceeding. Do not over wet. Do

not use solvents to spot clean. Pile fabrics may require brushing with a nonmetallic, stiff bristle brush to restore appearance.

#### **NOTICE:**

Water extraction or steam cleaning is not a recommended cleaning method. Cushion covers should not be removed and laundered.

To prevent overall soiling, frequent vacuuming or light brushing with a nonmetallic, stiff bristle brush to remove dust and grime is recommended. When cleaning a spill, blot immediately to remove spilled material. Clean spot or stains from the outside to the middle of the affected area to prevent circling.

Use a professional furniture cleaning service when an overall soiled condition has been reached.

# Marine Exterior Vinyl Upholstery with PreFixx® Coating

Monterey Boats uses OMNOVA white, smoother and embossed pleated vinyl material with PreFixx top coating. All other accent embossed white and colored vinyl requires different care and maintenance.

## **PreFixx Cleaning Instructions**

PreFixx is engineered so that upholstery can be cleaned again and again without showing signs of wear. With easy cleanablility, proven stain and abrasion resistance, PreFixx protective finish can reduce maintenance costs and frequent reupholstery.

#### **Durability**

Creates a barrier that resists stains from penetrating to the surface of the vinyl for proven, long-lasting protection. With laboratory-tested stain resistance and improved wear properties, BoltaSoft® upholstery treated with PreFixx protective finish can retain a "like-new" appearance longer.

## **Easy Maintenance**

Enables most common stains like dirt and smudges to wipe off easily. Many difficult stains like ballpoint ink also can be cleaned with active solvents, such as nail polish remover, without damaging the PreFixx protective finish (when recommended cleaning instructions are followed).

#### **Normal Care and Cleaning**

Remove ordinary dirt and smudges with a mild soap and water solution and a clean, soft cloth or towel. Dry with a soft, lint-free cloth or towel.



#### CARPET STAIN REMOVAL INSTRUCTIONS

Miscellaneous Stains	Removal Process
Coffee, Tea, Coke, Dye, Fruit Juice, Ice Cream, Motor Oil, Clay, Grease, Blood, Catsup, Chocolate, Milk, Rust, Latex Paint, Water Colors, Berry Stains, Egg, Salad Dressing, Wine, Furniture Polish, Fish Formula, Mayonnaise or urine.	Apply warm water and household detergent in minimal amounts to the stained area.  Sponge or scrape until stain is removed and wash thoroughly with clean water.
Persistent Stains	Removal Process
Chewing Gum, Crayon, Ink, Wax, Lipstick, Tar Polish or Oil Paint.	Apply warm water and household detergent. Work well into the stained area, then flush with warm water.



### CAUTION



THE USE OF VINYL "CONDITIONERS" OR "PROTECTANTS" IS NOT RECOMMENDED AND SHOULD BE AVOIDED ON VINYL UPHOLSTERY TREATED WITH PREFIXX PROTECTIVE FINISH.

## **Special Cleaning Problems**

Although BoltaSoft upholstery treated with Pre-Fixx protective finish is resistant to most common stains, the dyes and pigments in some staining agents have the ability to create a permanent stain if not treated properly. To clean difficult stains from upholstery treated with PreFixx protective finish, locate the staining agent in lists below and follow its recommended cleaning method. For best results, treat all stains immediately.

Cleaning Tip: To determine the method and type of cleaners, the source of the stain should be identified.

Staining Agents: Baby oil, ketchup, chocolate, motor oil, olive oil, grape juice, urine, blood, hair oil tonic, tea, coffee and betadine. Use Method 1.

Staining Agents: Eye shadow, crayon and grease. Use Method 1. If stains remain, use Method 2.

Staining Agents: Tobacco tar (nicotine) permanent felt tip marker, yellow mustard, lipstick, ballpoint pen and spray paint. Use Method 1 If stains remain, use Method 2. For stubborn stains still remaining, use Method 3.

The recommended cleaners used in Cleaning Methods 1, 2 and 3 are progressively more aggressive. Often, it is better to begin with the least aggressive cleaner and move the next strongest only if the stain remains. NEVER EXCEED a staining agent's recommended cleaner or cleaning method, however.

#### Method 1

Use one of the following cleaners with a soft cloth or damp sponge. Rinse area with fresh water, and then dry with a clean, lint-free cloth.

- Formula 409® All-Purpose Spray Cleaner
- Fantastik® Spray Cleaner

#### Method 2

Use a solvent-type cleaner, such as rubbing alcohol (isopropyl alcohol). Rinse cleaned area with fresh water, and then dry with a clean, lint-free cloth.

#### Method 3

Use a strong, active solvent cleaner diluted in water (70% water/30% solvent cleaner), such as nail polish remover (acetone/water). Clean with a soft cloth or damp sponge. Stain should be removed with less than six (6) rubs. If the stain persists after six rubs, the stain has set and probably cannot be removed. Rinse cleaned area with fresh water, and then dry with a clean, lint-free cloth.





## WARNING



SOME SOLVENTS ARE HIGHLY FLAMMABLE. EXERCISE PROPER CARE IN CLEANING AND NOTIFY PERSONNEL IN AREA OF DANGER. WEAR RUBBER GLOVES DURING ALL CLEANING ACTIVITIES. USE CAUTION IN CLEANING AROUND BUTTONS, STITCHING AND WOODEN OR DECORATIVE TRIM, SINCE THESE SOLVENTS COULD SERIOUSLY DAMAGE SUCH AREAS.

## **Exterior Carpet**

Exterior carpet manufactured by Syntec® Industries is produced with a special blend of resilient fibers to withstand traffic and retain its beauty.

Carpets manufactured by Syntec are inherently stain-resistant. To keep your carpet at its best, we recommend regular vacuuming for general cleaning, soap and water for hard-to-remove spots and an approved cleaner for deep cleansing and to revitalize the carpet.

#### **Stain Removal**

If a spill does occur, it can easily be removed by following the stain removal chart. All stains should be removed as soon as possible, as this enhances the ability to remove the stain.

#### **NOTICE:**

Most stains should be removed easily from Olefin fibers. If the stain persists, the cleaning procedure should be repeated to ensure stain removal. Remember, the sooner the stain removal process begins, the easier the stain will be to remove. Under no circumstances should any solvent normally associated with the dry cleaning of apparel (perchlorethylene, carbon tetrachloride, etc,) be utilized, as permanent damage to the fiber will result.

#### **Canvas and Side Curtains**

Acrylic (Sunbrella) canvas should be rinsed frequently with clear, fresh water and cleaned periodically by using a mild soap and water. Scrub lightly and rinse thoroughly to remove the soap. Do not use detergents. The water should be cold or luke warm, never hot. Scrub with a soft brush and rinse thoroughly. Allow to air dry.

The top or accessories should never be folded or stored wet.

After several years, the acrylic canvas may lose some of its ability to shed water. If this occurs, wash the fabric and treat it with a commercially available water proofing designed for this purpose. Monterey recommends 303 High Tech Fabric Guard.

To apply waterproofing, wash the canvas and allow it to dry completely. Then apply a thin, even coat of waterproofing, allowing the first coat to air dry. Apply a second coat for increased protection.

#### **NOTICE:**

Some leakage at the seams is normal and unavoidable with acrylic enclosures.

#### **NOTICE:**

Some boats are equipped with acrylic (Sunbrella) canvas that is coated with a permanent water proofing called Sea Mark. Canvas treated with Sea Mark will not lose its ability to shed water and never needs to be retreated.

Side curtains and clear connectors can be cleaned with mild soap and water. They should not be allowed to become badly soiled. Dirt, oil, mildew, and cleaning agents containing ammonia, will shorten the life of the vinyl that is used for clear curtains. After cleaning the curtains and allowing them to dry, apply a non-lemon furniture polish or an acrylic glass and clear plastic protector to extend the life of the curtains.

Vinyl curtains should be stored either rolled or flat, without folds or creases. Folding the curtains will make permanent creases that could cause the vinyl to crack.

#### NOTICE:

Do not use any polish containing lemon scents or lemon. The lemon juice will attack the vinyl and shorten its life.

Snaps should be lubricated periodically with Teflon or silicone grease. Zippers should be lubricated with silicone spray, paraffin or a product designed to lubricate zippers in marine canvas.

The bimini top, side curtains, clear connector, back drop and aft curtain must be removed when trailering. Canvas enclosures are not designed to withstand the extreme wind pressure encountered while trailering and will be damaged. Always remove and properly store the enclosure before trailering your boat.



#### NOTICE:

Your Monterey boat is basically an open vehicle. Therefore, in spite of well-designed and well-fitting canvas enclosures, your boat is not waterproof. We have made every effort to design these enclosures to conform with the boat, but a certain amount of leakage may occur, especially at the seam lines. After cleaning with soap and water, allow seams to thoroughly dry. A sealant can be applied on the seams to somewhat close the needle holes according to the manufacturer's instructions.



## WARNING



DO NOT OPERATE THE ENGINE, FUEL CONSUMING HEATERS OR BURNERS WITH THE CANVAS ENCLOSURES CLOSED. THE COCKPIT MUST BE OPEN FOR LEGAL VENTILATION AND TO PREVENT THE POSSIBLE ACCUMULATION OF CARBON MONOXIDE FUMES, WHICH COULD BE LETHAL.



## WARNING



CARBON MONOXIDE IS A LETHAL, TOXIC GAS THAT IS COLORLESS AND ODORLESS. IT IS A DANGEROUS GAS THAT WILL CAUSE DEATH IN CERTAIN LEVELS.



## CAUTION



NEVER TRAILER YOUR BOAT WITH THE CANVAS ENCLOSURE (INCLUDING SIDE CURTAINS, AFT CURTAIN, WINDSHIELD CONNECTOR, BOW COVER AND COCKPIT COVER) UP. MONTEREY BOATS' CANVAS IS NOT DESIGNED TO WITHSTAND THE HIGH WIND LOADS OF TRAILERING. SEVERE WIND DAMAGE CAN OCCUR SUCH AS TORN MATERIAL, FASTENER PULL-OUT AND FRAME DISTORTION. DAMAGE CAUSED BY TRAILERING IS NOT COVERED UNDER THE LIMITED WARRANTY.

## 12.3 Cabin Interior

The cabin interior can be cleaned just like you would clean a home interior. The wood floors and steps can be vacuumed and cleaned with a mixture of water and Murphy's Oil Soap or white vinegar and water. Wipe the wood dry with a clean towel. To preserve the cherry and teak woodwork, use furniture polish with wax. To maintain the carpeting, use a vacuum cleaner.

Because air and sunlight are very good cleansers, periodically put cushions, sleeping bags, etc. on deck, in the sun and fresh air to dry and air out. If cushions or equipment get wet with saltwater,

remove and use clean, fresh water to rinse off the salt crystals. Salt retains moisture and will cause damage. Dry thoroughly and reinstall.

Vinyl headliner material should be cleaned periodically as explained in the previous section. Avoid using products containing ammonia, bleach, or harsh chemicals as they can shorten the life of vinyl.

If you leave the boat for a long period of time, put all cushions on their sides, open all interior cabin and locker doors, and hang a commercially available mildew protector in the cabin.

## CAUTION



ALWAYS READ THE LABEL CAREFULLY ON MILDEW PROTECTORS. REMOVE THE PROTECTOR AND ALLOW THE CABIN TO VENTILATE COMPLETELY BEFORE USING THE CABIN.

### **Karadon Surfaces**

A mild liquid detergent and water or ammonia-based cleaners will remove most dirt and stains from Karadon. For heavy cleaning, oil, and grease, use Fantastik® spray cleaner. Rinse with a clean cloth moistened with fresh water. Wipe dry with a clean cloth.

In most cases, Karadon can be repaired if accidentally damaged. Minor damage, including scratches, general or chemical stains, scorches or burns, and minor impact marks, can be repaired with a light abrasive cleanser and a Scotch-Brite® pad. For heavier damage, light sanding and machine buffing may be necessary so contact your dealer or a professional.

- Avoid exposing Karadon to strong chemicals, such as paint removers, oven cleaners, etc. If contact occurs, quickly flush the surface with water.
- Remove nail polish with a non acetone-based polish remover and flush with water.
- Do not cut directly on Karadon counter tops.



## 12.4 Bilge, Pumps & Components

To keep the bilge clean and fresh, it is recommended that you use a commercial bilge cleaner on a regular basis. Follow the directions carefully. All exposed pumps and metal components in the bilge should be sprayed periodically with a protector to reduce the corrosive effects of the high humidity always present in these areas.

Periodically check the bilge pump for proper operation and clean debris from the strainer and the automatic switch. Inspect all hoses, clamps and thru-hulls for leaks and tightness on a regular basis. Operate all thru-hull valves at least once a month to keep them operating properly.

## 12.5 Engine & Fuel

Proper engine maintenance is essential to the proper performance and reliability of your outboard engine. Maintenance schedules and procedures are outlined in your engine owner's manual. They should be followed exactly.

If the boat is used in saltwater, flush the cooling system after each daily use. To flush the system when the boat is out of the water, follow the procedure outlined in your engine owner's manual.

Proper engine operation requires a good supply of clean, dry fuel. Improper marina fuel storage techniques, limited boat usage, etc. can cause the fuel to become contaminated.

The age of fuel can affect engine performance. Chemical changes occur as the fuel ages that can cause deposits and reduce the octane rating of the fuel. Severely degraded fuel can damage the engine and boat fuel tank and lines. Therefore, if your boat is not being run enough to require at least one full tank of fresh fuel a month, a fuel additive should be added to protect it from degrada-

tion. Your dealer or the engine manufacturer can provide additional information on fuel degradation and fuel stabilizers recommended for your engine.

In many states, most gasoline is blended with ethanol alcohol. Ethanol is a strong solvent and can absorb water during periods of storage. You should refer to the engine operating manual for information regarding alcohol blended fuels and how it affects the operation of your marine engine.

## 12.6 Drainage System

It is essential that the following items be done periodically to maintain proper drainage of your boat:

- Clean the cockpit drains with a hose to remove debris that can block water drainage.
- Frequently test the automatic bilge pump switch for proper operation. This is accomplished by touching and holding the test button on the side of the pump for five seconds until the pump is activated. You can also use a garden hose to flood the bilge until the water level is high enough to activate the pump.
- Flush all gravity drains with fresh water to keep them clean and free flowing.
- Operate the thru-hull valves once a month and service as required.

#### **NOTICE:**

All drains and pumps must be properly winterized before winter lay-up.



## **CAUTION**



NEVER USE HARSH CHEMICAL DRAIN CLEANERS IN MARINE DRAIN SYSTEMS. PERMANENT DAMAGE TO THE HOSES AND FITTINGS MAY RESULT.



# **NOTES**



## **SEASONAL MAINTENANCE**

# 13.1 Lay-up & Storage Before Hauling:

- Pump out the head and holding tank. Flush the holding tank using clean water and a deodorizer. Pump out the cleaning solution.
- The fuel tank should be left nearly full to reduce condensation that can accumulate in the tank. Allow enough room in the tank for the fuel to expand without leaking out the vent.
- The age of fuel can affect engine performance. Chemical changes occur as the fuel ages that can cause deposits and reduce the octane rating of the fuel. Severely degraded fuel can damage the engine and boat fuel tank and lines. Therefore, if your boat is not being run enough to require at least one full tank of fresh fuel a month, a fuel additive should be added to protect it from degradation. Operate the boat for at least 15 minutes after adding the additive to allow the treated fuel to reach the engine.
- Your dealer or the engine manufacturer can provide additional information on fuel degradation and fuel additives recommended for your engine. For more recommendations for your specific area, check with your dealer.
- Drain water from the fresh water system.
- Consult the engine owner's manual for detailed information on preparing the engine for storage.

#### Lifting

It is essential that care be used when lifting your boat. Make sure the spreader bar at each sling is at least as long as the distance across the widest point of the boat that the sling will surround. Put the slings in position. The fore and aft slings should be tied together to prevent the slings from sliding on the hull.



## CAUTION



BOATS CAN BE DAMAGED FROM IMPROPER LIFTING AND TRANSPORTING WITH FORK LIFTS. CARE AND CAUTION MUST BE EXERCISED WHEN TRANSPORTING A BOAT WITH A FORK LIFT. NEVER HOIST THE BOAT WITH A SUBSTANTIAL AMOUNT OF WATER IN THE BILGE.

SEVERE GEL COAT CRACKING OR MORE SERIOUS HULL DAMAGE CAN OCCUR DURING HAULING AND LAUNCHING IF PRESSURE IS CREATED ON THE GUNWALES (SHEER) BY THE SLINGS. FLAT, WIDE BELTING SLINGS AND SPREADERS LONG ENOUGH TO KEEP PRESSURE FROM THE GUNWALES ARE ESSENTIAL. DO NOT ALLOW ANYONE TO HAUL YOUR BOAT WHEN THE SPREADERS ON THE LIFT ARE NOT WIDE ENOUGH TO TAKE THE PRESSURE OFF THE GUNWALES.

#### **Supporting The Boat For Storage**

A trailer, elevating lift, or a well-made cradle is the best support for your boat during storage.

# When storing the boat on a trailer for a long period:

- Make sure the trailer is on a level surface and the bow is high enough so that water will drain from the bilge and cockpit.
- Make sure the engine is in the down position.
- The trailer must properly support the hull. The bunks and rollers should match the bottom of the hull and should not be putting pressure on the lifting strakes.
- Make sure the hitch is properly supported.
- Check the tires once each season. Add enough air for the correct amount of inflation for the tires.

#### **NOTICE:**

Read the owner's manual for the trailer for the correct amount of inflation for the tires.





#### When storing the boat on a lift or cradle:

- The cradle must be specifically for boat storage.
- Make sure the cradle or lift is well supported with the bow high enough to provide proper drainage of the bilge.
- Make sure the engine is in the down position.
- The cradle or lift must be in the proper fore and aft position to properly support the hull.
   When the cradle or lift is in the correct location, the bunks should match the bottom of hull and should not be putting pressure on the lifting strakes.



## CAUTION



BOATS HAVE BEEN DAMAGED BY TRAILERS, LIFTS, AND CRADLES THAT DON'T PROPERLY SUPPORT THE HULL. ALWAYS MAKE SURE THE BUNKS AND ROLLERS ARE ADJUSTED SO THEY ARE NOT PUTTING PRESSURE ON THE LIFTING STRAKES AND ARE PROVIDING ENOUGH SUPPORT FOR THE HULL. HULL DAMAGE RESULTING FROM IMPROPER CRADLE OR TRAILER SUPPORT IS NOT COVERED BY THE MONTEREY WARRANTY.

## **Preparing The Boat For Storage:**

- Remove the bilge drain plug, if installed.
- Thoroughly wash the fiberglass exterior, especially the antifouling portion of the bottom.
   Remove as much marine growth as possible.
   Lightly wax the exterior fiberglass components.
- Remove all oxidation from the exterior hardware, and apply a light film of moisture displacing lubricant, wax or a metal protector.
- Remove the propeller and grease the propeller shaft using light waterproof grease.
- Remove the batteries and store in a cool place. Clean using clear, clean water. Be sure the batteries have sufficient water and clean terminals. Keep the batteries charged and safe from freezing throughout the storage period.

#### **NOTICE:**

Refer to the Electrical System chapter, for information on the maintenance of the AC and DC electrical systems.

- Coat all faucets and exposed electrical components in the cabin and cockpit with a protecting oil.
- Clean out, totally drain and completely dry the storage compartments and sinks.
- Thoroughly clean the interior of the boat.
   Vacuum all carpets and dry clean drapes and upholstery.
- Remove cushions, open as many locker doors as possible. Leaving as many of these areas open as possible will improve the boat's ventilation during the storage period.

#### **NOTICE:**

It is recommended that a mildew preventer be hung in the head compartment or cabin before it is closed for storage.

Clean the exterior upholstery with a good vinyl cleaner and dry thoroughly. Spray the weather covers and boat upholstery with a spray disinfectant. Enclosed areas such as the in-floor compartments, storage locker areas, etc. should also be sprayed with this disinfectant.

# 13.2 Winterizing Fresh Water System

The entire freshwater system must be completely drained. Disconnect all hoses and blow all the water from the system. Make sure the freshwater tank is completely drained. Use only very low air pressure when doing this to prevent possible system damage. Because of the check valve mechanism built in the pump, blowing the lines will not remove the water from the freshwater pump. Remove the outlet hose on the pump. Turn the pump on and allow it to pump out any remaining water....about a cupful.

A recommended alternative to the above-mentioned procedure is the use of commercially available nontoxic, freshwater system antifreeze. After draining the potable water tank, lines and water heater, pour the antifreeze mixture into the freshwater tank, prime and operate the pump until the mixture flows from all freshwater faucets. Make sure antifreeze has flowed through all of the freshwater drains.

For additional information, refer to the Freshwater System chapter.



#### **Portable Head**

The portable head must be properly winterized by following the manufacturer's winterizing instructions in the portable head owner's manual.

#### **Marine Toilet**

The marine toilet must be properly winterized by following the manufacturer's winterizing instructions in the marine toilet owner's manual. The fresh water supply will be winterized with the fresh water system. Drain the discharge hoses completely turning off the fresh water supply so the bowl stays dry and flushing the toilet several times. The head holding tank and macerator discharge pump must be pumped dry and three gallons of potable water antifreeze poured into the tank through the deck waste pump out fitting. After the antifreeze has been added to the holding tank, open the overboard discharge valve and activate the macerator pump (if your boat is equipped with the optional overboard discharge system) until the antifreeze solution is visible at the discharge thru-hull.

#### **NOTICE:**

Make sure you follow the marine toilet manufacturer's winterizing instructions exactly.

#### **Grey Water System**

The drain sump system must be properly winterized. Clean debris from the drain and sump. After the system is clean, pump the drain sump as dry as possible. Then pour a potable water antifreeze mixture into each sink drain until antifreeze has been pumped through the entire system and into the waste tank.

#### Bilge

Coat all metal components, wire busses, and connector plugs in the bilge with a protecting oil. It is also important to protect all strainers, sea cocks and steering components. The bilge pump and bilge pump lines must be completely free of water and dried out when the boat is laid up for the winter in climates where freezing occurs. Compartments in the bilge that will not drain completely should be pumped out and then sponged until completely free of water. Dry the hull bilge and self-bailing cockpit troughs. Water freezing in these areas could cause damage.

#### **Wakeboard Tower**

It is imperative that all drain holes in the legs are open and that the legs are completely free of water. Remove the canvas and thoroughly clean and store in a safe, dry place. Coat all wire con-

nectors and bus bars in the helm compartment with a protecting oil.

Clean the aluminum frame with soap and water and dry thoroughly. Apply an aluminum metal protector to the entire frame on anodized aluminum to reduce corrosion and pitting. Powder Coated and painted aluminum should be waxed.

#### **Special Notes Prior To Winter Storage**

If the boat will be in outside storage, properly support a storage cover and secure it over the boat. It is best to have a frame built over the boat to support the canvas. It should be a few inches wider than the boat so the canvas will clear the rails and allow passage of air. If this cover is fastened too tightly there will be inadequate ventilation and this can lead to mildew, moisture accumulation, etc. It is essential to fasten the canvas down securely so that the wind cannot remove it or cause chafing of the hull superstructure. Do not store the boat in a damp storage enclosure. Excessive dampness can cause electrical problems, corrosion, and excessive mildew.

Whenever possible, do not use the enclosure curtains in place of the winter storage cover. The life of these curtains may be significantly shortened if exposed to harsh weather elements for long periods.



## CAUTION



PLACING AN ELECTRIC OR FUEL BURNING HEATING UNIT IN THE BILGE AREA CAN BE POTENTIALLY HAZARDOUS AND IS NOT RECOMMENDED.

Proper storage is very important to prevent serious damage to the boat. If the boat is to be stored indoors, make sure the building has enough ventilation. It is very important that there is enough ventilation both inside the boat and around the boat.

#### **NOTICE:**

If the boat is to be stored indoors or outdoors, open all drawers, clothes lockers, cabinets, and doors a little. If possible, remove the upholstery, mattresses, clothing, and carpets. Then hang a commercially available mildew protector in the cabin.





#### **Outboard Engine**

The engine should be flushed with fresh water for at least 15 minutes prior to winter storage. This will remove salt, sand and other contaminates that can damage the engine. It is also important to "Fog" the cylinders, change the gear oil and change the oil. Coat the engine with a protector, wax the exterior and properly store and charge the batteries. You should refer to the engine owner's manual or contact your dealer for specific instructions on winterizing your engines.

## 13.3 Recommissioning



## WARNING



DO NOT OPERATE THE BOAT UNLESS IT IS COMPLETELY ASSEMBLED. KEEP ALL FASTENERS TIGHT. KEEP ADJUSTMENTS ACCORDING TO SPECIFICATIONS.

#### **NOTICE:**

It is important and recommended that the fitting out procedure for the marine gear be done by a qualified marine technician. Read the engine owner's manual for the recommended procedure.

#### **Reactivating The Boat After Storage:**

- If your boat is bottom painted, apply a fresh coat of bottom paint on the hull and engine. Check the engine for damage and follow the manufacturer's instructions for recommissioning.
- Check the engine mounting bolts to make sure they are tight.
- Inspect thru-hull fittings.
- Install the propeller. Refer to the engine owner's manual for information on installing the propeller.

- Install the drain plug in the hull.
- Charge and install the batteries.
- Perform all routine maintenance.
- Check all hose clamps for tightness.
- Pump the antifreeze from the fresh water system and flush several times with fresh water.
- Check and lubricate the steering system.
- Clean and wash the boat.
- Install all upholstery, cushions and canvas.
- Check the fluid levels in the engine.

#### **After Launching:**

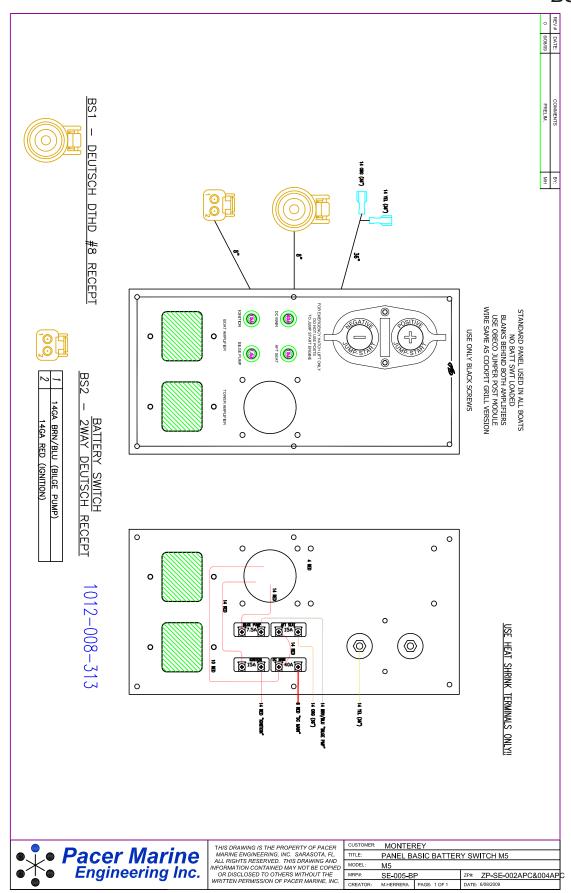
- Carefully check the engine and all water systems for leaks. Operate each system one at a time checking for leaks and proper operation.
- Check the bilge pump automatic and manual switch.
- Prime the fuel system and start the engine.
- When the engine starts, check the cooling system port below the engine cowling for a strong stream of water. This ensures that the cooling pump is operating.
- Carefully monitor the gauges and check for leakage and abnormal noises. Monitor the temperature gauge closely until it stabilizes at normal operating temperature to ensure that the cooling pump is operating properly.
- Operate the boat at slow speeds until the engine temperature stabilizes and all systems are operating normally.



# **Schematics** OMONTEREY MERCURY (INCLUDING DTS) \* MONTEREY BOATS. THIS DOCUMENT AND ANY INFORMATION ... COPIED OR SHARED WITH OTHERS WITHOUT THE WRITTEN MONTEREY BOATS. ALL RIGHTS ARE RESERVED. BATTERY 2 1 REV: MERCURY DTS CLEAN POWER DATE: BATTERY CHARGER 2 STEREO UPGRADE GROUND DG (M5) TO ENGINE EMERGENCY HATCH LIFT GROUND MERCURY DTS ACCESSORY POWER DESCRIPTIC DRAWING NUMBER: 1012-008-300 STARTING STANDARD BOAT BATTERY WIRING SCHEMATIC **VOLVO (INCLUDING EVC-GAS)** 1 DATE: 09/16/09 SHEED: 1 OF 1 **(** 1 STEREO UPGRADE GROUND EMERGENCY HATCH LIFT GROUND HULL HARNESS DC GROUND BY: N.T.S.

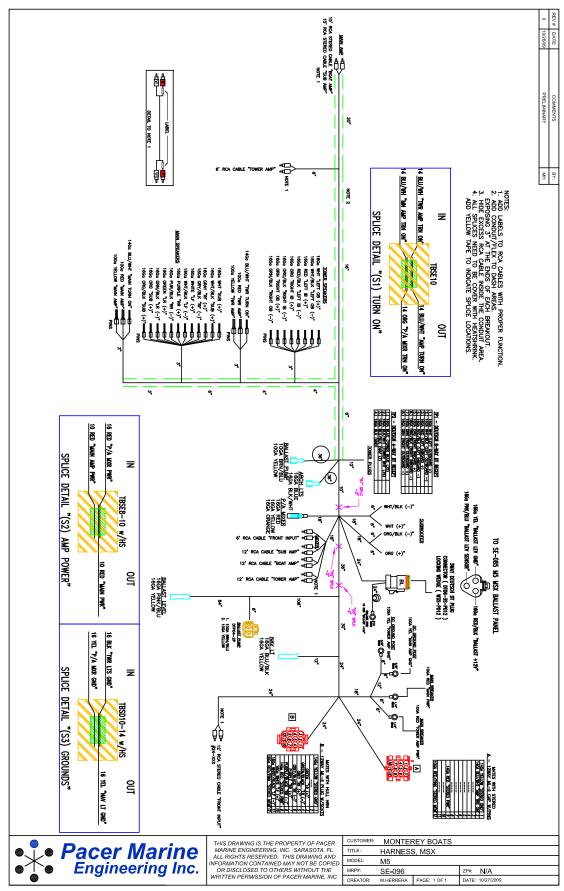
M65 Standard Battery Wiring





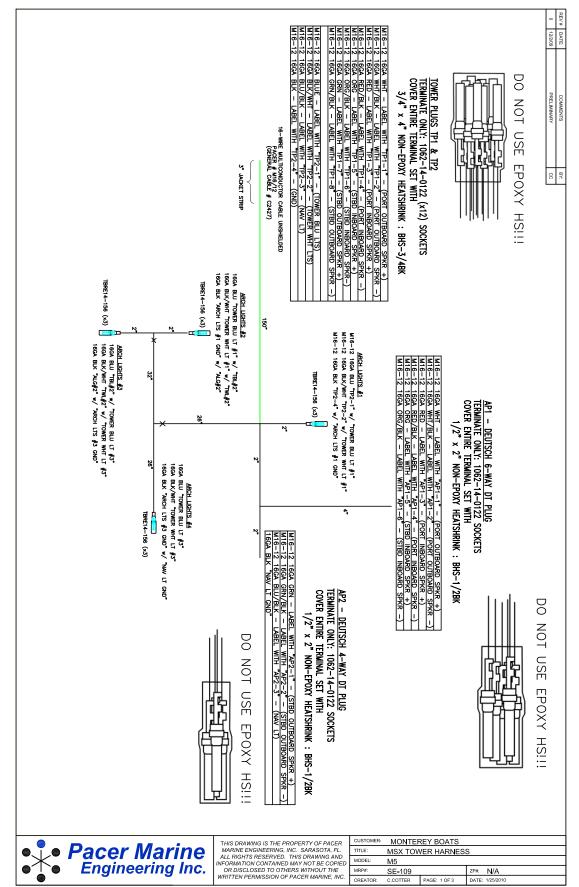
Standard Battery Switch Panel





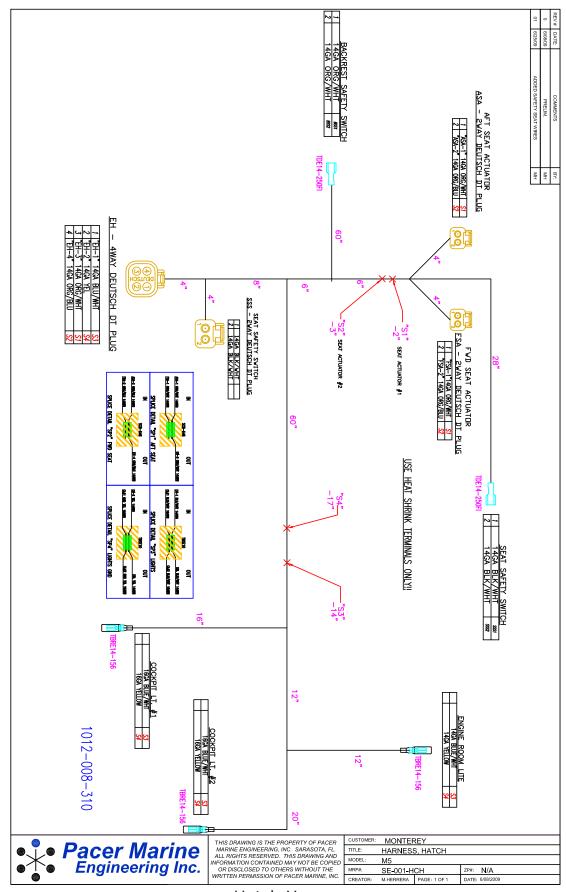
M65 Harness





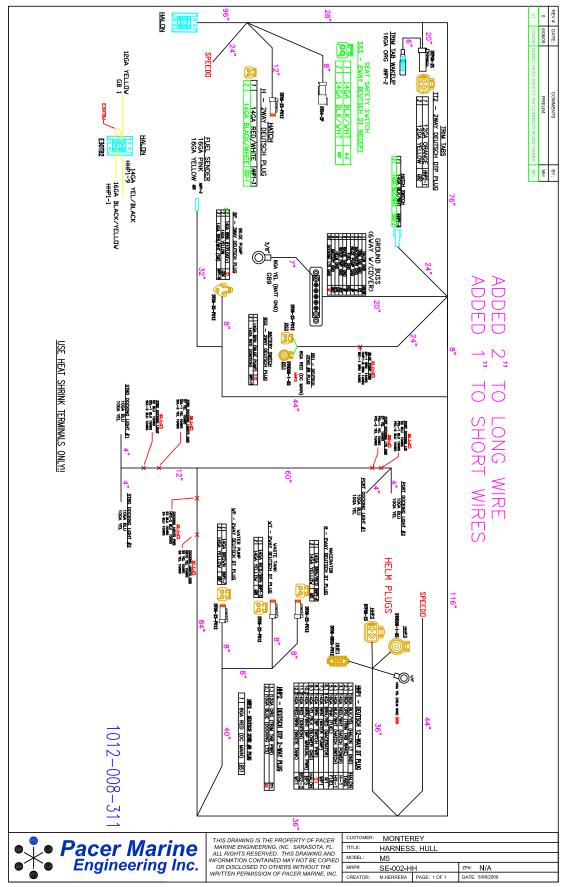
M65 Tower Harness





Hatch Harness

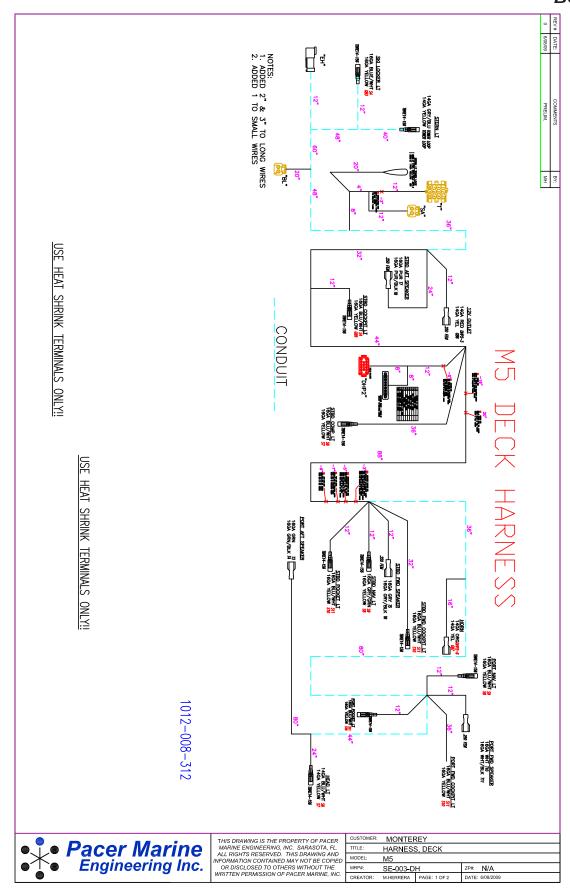




**Hull Harness** 

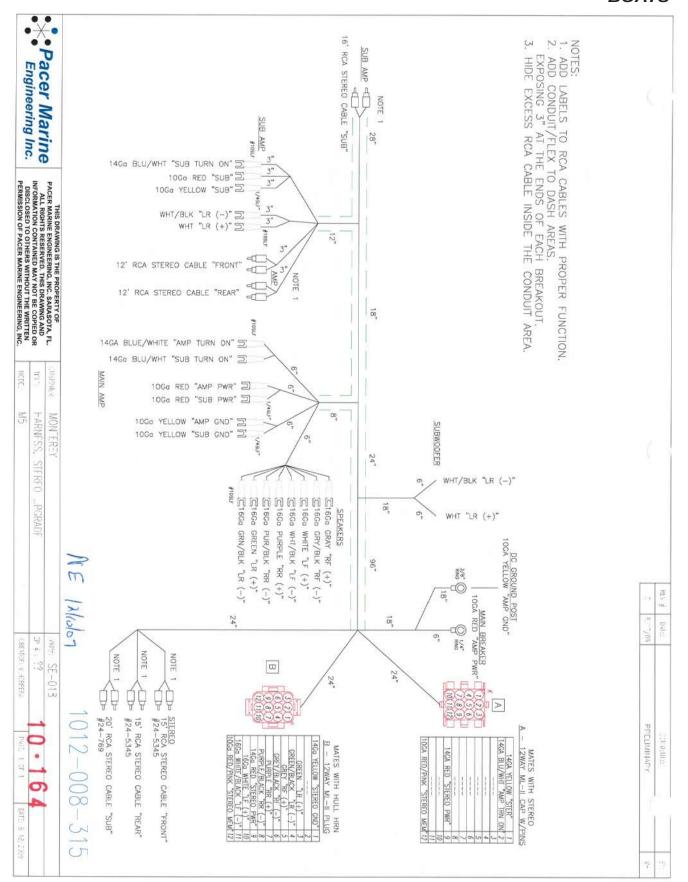


**Schematics** 

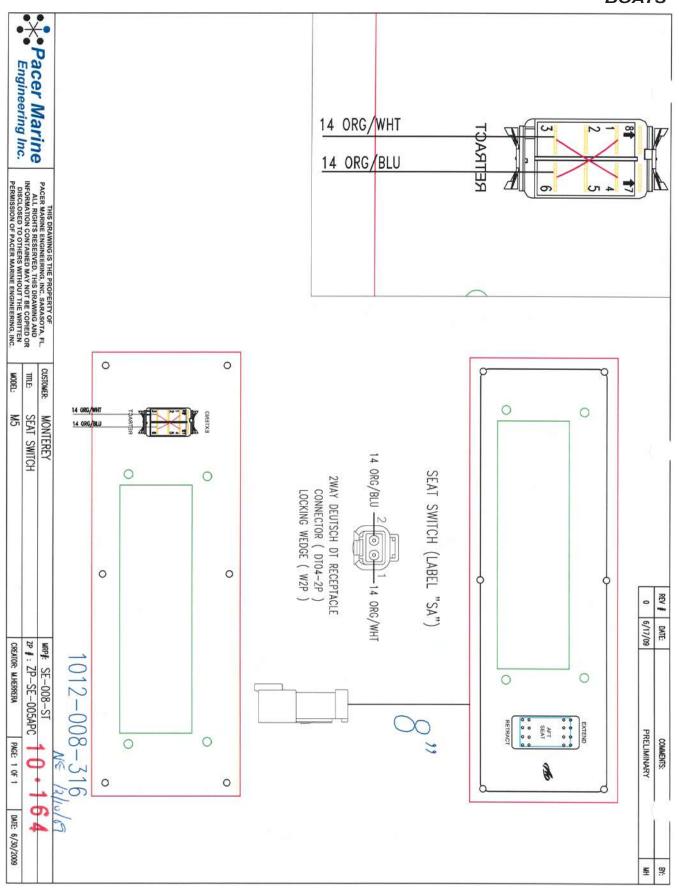


**Deck Harness** 



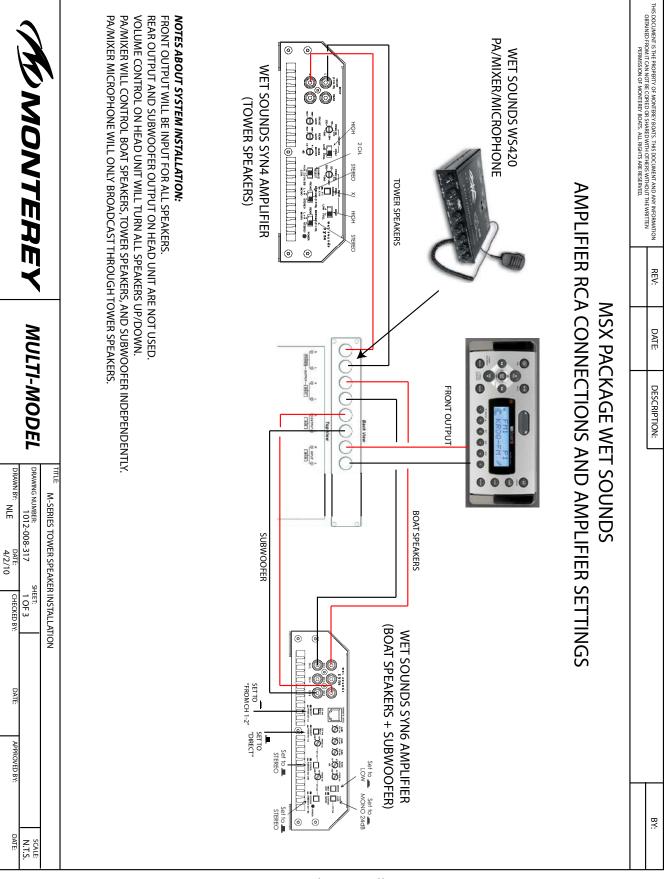


Stereo Upgrade Harness

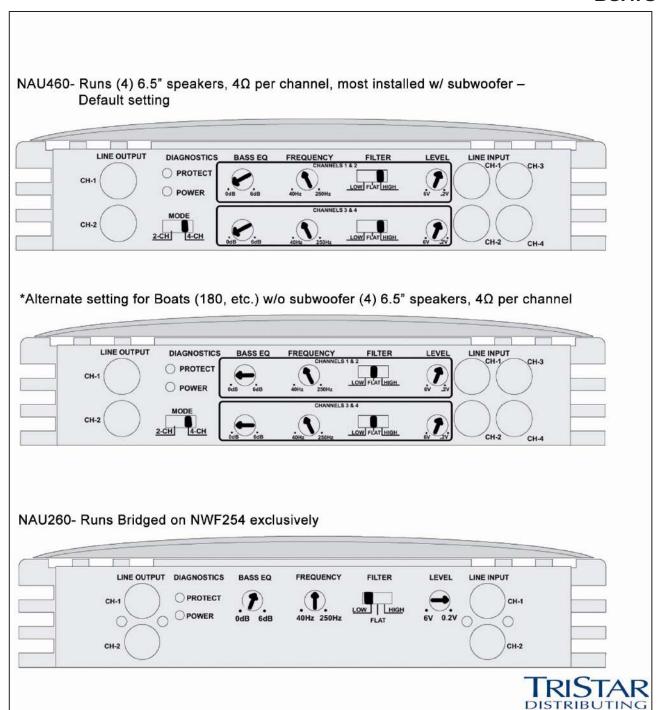


Stereo Panel





Wet Sounds Installation



# **NOTES**



# **Maintenance log**

Date	Hours	Dealer	Service/Repairs



Date	Hours	Dealer	Service/Repairs

## **Float Plan**

Monterey Boats recommends filling out a float plan each time you use your boat for an offshore day trip or a long

_	lame of person reporting and	telephone number.	
T R	Description of boat.  Type Legistration No.  Jame		Length
8. E	ngine typ <u>e</u> lo. of Engine <u>s</u>	Fuel Capacity_	H.P
4. S	Survival equipment: (Check as PFDS Smoke Signals Paddles Anchor	s appropriate)  Flares  Flashlight  Water  Raft or Dinghy	Mirror Food Others EPIRB
5. R	adio Yes	No	Туре
Т	utomobile licen <u>se</u> ype color	Trailer Licens	
7. P N -	ersons abo <u>ard</u> lame	Age Ad	
- 3. [	oo any of the persons aboard Yes No	have a medical problen If yes, wha <u>t?</u>	1?
F	rip Expectations: Leave at romxpect to return by nd no later than	Going to	
10.	Any other pertinent info.		
	f not returned <u>by</u> all the COAST GUARD, or (Loo	cal aut <u>hority)</u> (time)	
	elephone Numbers.		



# **NOTES**



<b>DEPARTMENT OF TRAI U.S. COAST GUARD</b> CO		BOATING A	ACCIDENT REP	ORT	FORM AP	PROVED OMB NO. 2115-0010
		STATE ASSIGNED	O CASE NO			
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	COMPLETE		DICATE THOSE NOT	APPLICABLE	E BY "NA")	
DATE OF ACCIDENT	TIME A	M NAME OF BOD	OY OF WATER	LOCATION	(GIVE LOCA	ATION PRECISELY)
		M	5. G. 111.1.E.K	200,111011	(0.12 200)	
NUMBER OF VESSELS INVOLVED	NEAREST CITY OR TO	DWN	COUNTY	!	STATE	ZIP CODE
(CHECK ALL APPLICABLE) [ ] CLEAR [ ] RAIN [ ] CLOUDY [ ] SNOW [ ] FOG [ ] HAZY	[ ] CHOPPY (WAVES	SS THAN 6") 6" TO 2') 2' TO 6') REATER THAN 6')	AIR	NONE LIGHT (0-1 MODERA STRONG	6 MPH) TE (7-14 MP (15-25 MPH) OVER 25 MP	)   [ ] POOR [ ]
NAME OF OPERATOR		C	OPERATOR ADDRESS	6		
OPERATOR TELEPHONE NUMBER ( ) DATE OF BIRTH MO DAY YR [ ] MALE [ ] FEMALE    DATE OF BIRTH MO DAY YR   OPERATOR'S EXPERIENCE					[ ] U.S. POWER SQUADRON	
NAME OF OWNER			OWNER ADDRESS			
OWNER TELEPHONE NUMB	ER NUMBER OF F ON BOARD		NUMBER OF PEOPLE BEING TOWED			D BOAT? ES [ ] NO
DOAT DECICEDATION OF D	OOLINAENITATIONI NIIIN		NO. 1 (THIS VESSEL)	FIONI NILINADI	ED.	DOATNAME
BOAT REGISTRATION OR D	OCUMENTATION NUM	BER STATE	HULL IDENTIFICAT	HON NUMBE	EK	BOAT NAME
BOAT MANUFACTURER		LENGTH	MODEL			YEAR BUILT
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Call the Coast Guard Infoline 1-800-368-5647 for information on Federal Requirements for Recreational Boats



ACCIDENT DESCRIPTION				
DESCRIBE WHAT HAPPENED (SEQUENCE OF EVENTS. INCLUDE FAILURE OF EQUIPMENT. INCLUDE A DIAGRAM IF NEEDED. CONTINUE ON ADDITIONAL SHEETS IF NECESSARY. INCLUDE ANY INFORMATION REGARDING THE INVOLVEMENT OF ALCOHOL AN/OR DRUGS IN CAUSING OR CONTRIBUTING TO THE ACCIDENT. INCLUDE ANY DESCRIPTIVE INFORMATION ABOUT THE USE OF PFD'S.)				
An agency may not conduct or sponsor and a person is not required to respond to an information collection, unless it displays a currently valid OMB Control Number. The Coast Guard estimates that the average burden for this report form is 30 minutes. You may submit any comments concerning the accuracy of this burden estimate or any suggestions for reducing the burden to: Commandant (G-OPB-1), U.S. Coast Guard, Washington, DC 20593-0001 or Office of Management and Budget, Paperwork Reduction Project (2115-0010), Washington, DC 20503.				



## **NOTES**



### **Glossary of Terms**

Aft: In, near, or toward the stern of a boat.

Aground: A boat stuck on the bottom.

**Amidships:** In or toward the part of a boat midway between the bow and stern.

**Anchor:** A specially shaped heavy metal device designed to dig efficiently into the bottom under a body of water and hold a boat in place.

**Anchorage:** An area specifically designated by governmental authorities in which boats may anchor.

Ashore: On shore.

Astern: Behind the boat, to move backwards.

Athwartship: At right angles to the center line of the boat.

**B**arnacles: Small, hard-shelled marine animals which are found in salt water attached to pilings, docks and bottoms of boats.

**Beam:** The breadth of a boat usually measured at its widest part.

**Bearing:** The direction of an object from the boat, either relative to the boat's direction or to compass degrees.

Berth: A bunk or a bed on a boat.

**Bilge:** The bottom of the boat below the flooring.

**Bilge Pump:** A pump that removes water that collects in the bilge.

Boarding: Entering or climbing into a boat.

**Boarding Ladder:** Set of steps temporarily fitted over the side of a boat to assist persons coming aboard.

**Boat Hook:** Short shaft of wood or metal with a hook fitting at one end shaped to aid in extending one's reach from the side of the boat.

Bow: The front end of a boat's hull.

**Bow Line:** A line that leads forward from the bow of the boat.

**Bow Rail:** Knee high rails of solid tubing to aid in preventing people from falling overboard.

**Bridge:** The area from which a boat is steered and controlled.

**Bridge Deck:** A deck forward and usually above the cockpit deck.

**Broach:** When the boat is sideways to the seas and in danger of capsizing; a very dangerous situation that should be avoided.

**Bulkhead:** Vertical partition or wall separating compartments of a boat.

Cabin: Enclosed superstructure above the main deck level.

Capsize: When a boat lays on its side or turns over.

**Chock:** A deck fitting, usually of metal, with inward curving arms through which mooring or anchor lines are passed so as to lead them in the proper direction both on board and off the boat.

Cleat: A deck fitting, usually of metal with projecting arms used for securing anchor and mooring lines.

Closed Cooling System: A separate supply of fresh water that is used to cool the engine and circulates only within the engine.



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Coaming: A vertical piece around the edges of cockpit, hatches, etc. to stop water on deck from running below.

Cockpit: An open space, usually in the aft deck, outside of the cabin.

Companionway: Opening in the deck of a boat to provide access below.

**Compartment:** The interior of a boat divided off by bulkheads.

Cradle: A framework designed to support a boat as she is hauled out or stored.

Cutlass Bearing: A rubber bearing in the strut that supports the propeller shaft.

**D**<sub>eck</sub>: The floor-like platform of a boat that covers the hull.

**Displacement:** The volume of water displaced by the hull. The displacement weight is the weight of this volume of water.

**Draft:** The depth of water a boat needs to float.

**Dry Rot:** A fungus attack on wood areas.

**Dry-dock:** A dock that can be pumped dry during boat construction or repair.

Electrical Ground: A connection between an electrical connector and the earth.

**Engine Beds:** Sturdy structural members running fore and aft on which the inboard engines are mounted.

**EPIRB:** Emergency Position Indicating Radio Beacon. Operates as a part of a worldwide satellite distress system.

Even Keel: When a boat floats properly as designed.

**F**athom: A measure of depth. One Fathom = 6 feet.

**Fender:** A soft object of rubber or plastic used to protect the topsides from scarring and rubbing against a dock or another vessel.

**Fend off:** To push or hold the boat off from the dock or another boat.

Flying Bridge: A control station above the level of the deck or cabin.

Flukes: The broad portions of an anchor which dig into the ground.

**Fore:** Applies to the forward portions of a boat near the bow.

**Foundering:** When a boat fills with water and sinks.

Freeboard: The height from the waterline to the lowest part of the deck.

Galley: The kitchen of a boat.

**Grab Rail:** Hand hold fittings mounted on cabin tops or sides for personal safety when moving around the boat, both on deck and below.

**Ground Tackle:** A general term including anchors, lines, and other gear used in anchoring.

Grounds: A boat touches the bottom.

Gunwale: The upper edge of a boat's side.

Hand Rail: Rail mounted on the boat, for grabbing with your hand, to steady you while walking about the boat.

**Harbor:** An anchorage which provides reasonably good protection for a boat, with shelter from wind and sea.

**Hatch:** An opening in the deck with a door or lid to allow for access down into a compartment of a boat.

Head: A toilet on a boat.

**Heat Exchanger:** Used to transfer the heat that is picked up by the closed cooling system to the raw cooling water.

Helm: The steering and control area of a boat.

Hull: The part of the boat from the deck down.



**Inboard:** A boat with the engine mounted within the hull of the boat. Also refers to the center of the boat away from the sides.

**Inboard/outboard:** Also stern drive or I/O. A boat with an inboard engine attached to an outboard drive unit.

Reel: A plate or timber plate running lengthwise along the center of the bottom of a boat.

**Knot:** Unit of speed indicating nautical miles per hour. 1 knot = 1 nautical mile per hour (1.15 miles per hour). A nautical mile is equal to one minute of latitude: 6076 feet. Knots times 1.15 equals miles per hour. Miles per hour times .87 equals knots.

Lay-up: To decommission a boat for the winter (usually in northern climates).

Leeward: The direction toward which the wind is blowing.

Length On The Waterline (l.w.l.): A length measurement of a boat at the waterline from the stern to where the hull breaks the water near the bow.

**Limber Hole:** A passage cut into the lower edges of floors and frames next to the keel to allow bilge water to flow to the lowest point of the hull where it can be pumped overboard.

Line: The term used to describe a rope when it is on a boat.

Lists: A boat that inclines to port or starboard while afloat.

L.O.A.: Boat length overall.

Locker: A closet, chest or box aboard a boat.

**Loran:** An electronic navigational instrument which monitors the boat's position using signals emitted from pairs of transmitting stations.

**Lunch hook:** A small light weight anchor typically used instead of the working anchor. Normally used in calm waters with the boat attended.

Midships: The center of the boat.

Marina: A protected facility primarily for recreational small craft.

Marine Ways or Railways: Inclined planes at the water's edge onto which boats are hauled.

**Moored:** A boat secured with cables, lines or anchors.

**Mooring:** An anchor permanently embedded in the bottom of a harbor that is used to secure a boat.

**Nautical Mile:** A unit of measure equal to one minute of latitude. (6076 feet)

**Nun Buoy:** A red or red-striped buoy of conical shape.

**Outboard:** A boat designed for an engine to be mounted on the transom. Also a term that refers to objects away from the center line or beyond the hull sides of a boat.

Pad Eye: A deck fitting consisting of a metal eye permanently secured to the boat.

**Pier:** A structure which projects out from the shoreline.

**Pile or Piling:** A long column driven into the bottom to which a boat can be tied.

**Pitching:** The fore and aft rocking motion of a boat as the bow rises and falls.

**Pitch:** The measure of the angle of a propeller blade. Refers to the theoretical distance the boat travels with each revolution of the propeller.

P.F.D: Personal Flotation Device.

**Port:** The left side of the boat when facing the bow.

**Porthole (port):** The opening in the side of a boat to allow the admittance of light and air.

**Propeller:** A device having two or more blades that is attached to the engine and used for propelling a boat.



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BOATS

**Propeller Shaft:** Shaft which runs from the back of the engine gear box, aft, through the stuffing box, shaft log, struts, and onto which the propeller is attached.

**Pyrotechnic Distress Signals:** Distress signals that resemble the brilliant display of flares or fireworks.

Raw Water Cooled: Refers to an engine cooling system that draws seawater in through a hull fitting or engine drive unit, circulates the water in the engine, and then discharges it overboard.

**Reduction Gear:** Often combined with the reverse gear so that the propeller turns at a slower rate than the engine.

Reverse Gear: Changes the direction of rotation of the propeller to provide thrust in the opposite direction for stopping the boat or giving it sternway.

**Roll:** A boat's sideways rotational motion in rough water.

Rope Locker: A locker, usually located in the bow of a boat, used for stowing the anchor line or chain.

**Rubrail:** Railing (often rubber or hard plastic) that runs along the boat's sheer to protect the hull when coming alongside docks, piers, or other boats.

**Rudder:** A moveable flat surface that is attached vertically at or near the stern for steering.

Sea anchor: An anchor that does not touch the bottom. Provides drag to hold the bow in the most favorable position in heavy seas.

Scupper: An opening in the hull side or transom of the boat through which water on deck or in the cockpit is drained overboard.

Sea cock: Safety valves installed just inside the thru-hull fittings and ahead of the piping or hose running from the fittings.

**Shaft Log:** Pipe through which the propeller shaft passes.

**Sheer:** The uppermost edge of the hull.

Sling: A strap which will hold the boat securely while being lifted, lowered, or carried.

Slip: A boat's berth between two pilings or piers.

**Sole:** The deck of a cockpit or interior cabin.

**Spring Line:** A line that leads from the bow aft or from the stern forward to prevent the boat from moving ahead or astern.

**Starboard:** The right side of a boat when facing the bow.

Steerageway: Sufficient speed to keep the boat responding to the rudder or drive unit.

Stem: The vertical portion of the hull at the bow.

Stern: The rear end of a boat.

Stow: To pack away neatly.

**Stringer:** Longitudinal members fastened inside the hull for additional structural strength.

**Strut:** Mounted to the hull which supports the propeller shaft in place.

Strut Bearing: See "cutlass bearing."

**Stuffing Box:** Prevents water from entering at the point where the propeller shaft passes through the shaft log.

**Superstructure:** Something built above the main deck level.

**Swamps:** When a boat fills with water from over the side.

Swimming Ladder: Much the same as the boarding ladder except that it extends down into the water.

affrail: Rail around the rear of the cockpit.

**Thru-hull:** A fitting used to pass fluids (usually water) through the hull surface, either above or below the waterline.

**Topsides:** The side skin of a boat between the waterline or chine and deck.



Transom: A flat stern at right angles to the keel.

**Travel Lift:** A machine used at boat yards to hoist boats out of and back into the water.

**Trim:** Refers to the boat's angle or the way it is balanced.

**Trough:** The area of water between the crests of waves and parallel to them.

**Twin-Screw Craft:** A boat with two propellers on two separate shafts.

**Underway:** When a boat moves through the water.

Wake: Disrupted water that a boat leaves astern as a result of its motion.

Wash: The flow of water that results from the action of the propeller or propellers.

Waterline: The plane of a boat where the surface of the water touches the hull when it is afloat on even keel.

Watertight Bulkhead: Bulkheads secured so tightly so as not to let water pass.

Wharf: A structure generally parallel to the shore.

**Working Anchor:** An anchor carried on a boat for most normal uses. Refers to the anchor used in typical anchoring situations.

**Windlass:** A winch used to raise and lower the anchor.

**Windward:** Toward the direction from which the wind is coming.

Y acht Basin: A protected facility primarily for recreational small craft.

Yaw: When a boat runs off her course to either side.



## **NOTES**



# **Troubleshooting Guide**

PROBLEM	CAUSE & SOLUTION
CONTROL PROBLEMS	
Hydraulic Steering is slow to respond & erratic and/or the steering wheel feels bumpy.	<ul> <li>Steering system is low on fluid. Fill and bleed system.</li> <li>Steering system has air in it. Fill and bleed system.</li> <li>A component in the steering system is binding. Check and adjust or repair binding component.</li> <li>Engine steering spindle is binding. Grease spindle.</li> </ul>
The boat wanders and will not hold a course at cruise speeds.	<ul> <li>There could be air in the steering system. Fill &amp; bleed the system.</li> <li>Engine steering spindle is binding. Grease spindle.</li> </ul>
Steering is unusually hard.	<ul> <li>The fuse for the power steering circuit has blown. Replace the fuse.</li> <li>An internal fuse in the power steering pump system has blown. Refer to the steering owners manual for fuse location and replace the fuse or contact your dealer for assistance.</li> <li>A steering line is kinked or collapsed. Replace kinked or collapsed line.</li> </ul>
The engine will not start with the shift control lever in neutral.	<ul> <li>The shift control lever is not in the neutral detent. Try moving the shift lever slightly.</li> <li>There is a loose wire on the neutral safety switch in the control. Inspect wires and repair loose connections.</li> <li>The starter or ignition switch is bad.</li> <li>There is a problem with the electronic control system at the helm control, module or at the engine. Have the system serviced by a qualified marine technician.</li> </ul>
The shift lever on cable controls is hard to move.	<ul> <li>The cable worn or corroded. Replace cable</li> <li>The outdrive linkage is corroded and stiff. Lubricate the linkage.</li> <li>The cable is routed incorrectly and has tight bends or is kinked. Reroute or replace the cable.</li> <li>The shift control in the helm control is corroded and binding. Lubricate the control.</li> <li>The shift control linkage at the helm is binding against something. Check and adjust or repair binding component.</li> </ul>



PROBLEM	CAUSE & SOLUTION
PERFORMANCE PROBLEMS	
Boat is sluggish and has lost speed & RPM.	<ul> <li>The boat may be need to have marine growth cleaned from hull and running gear.</li> <li>Propeller may be damaged &amp; need repair.</li> <li>Weeds or line around the propeller. Clean propeller.</li> <li>Boat is overloaded. Reduce load.</li> <li>Check for excessive water in the bilge. Pump out bilge &amp; find &amp; correct the problem.</li> <li>The throttle is not responding properly and the engine is not getting full throttle. Have the throttle control system checked by a qualified marine technician.</li> </ul>
The boat vibrates at cruising speeds.	<ul> <li>Propeller may be damaged &amp; need repair.</li> <li>Propeller or propeller shaft is bent. Repair or replace damaged components.</li> <li>The running gear is fouled by marine growth or rope. Clean running gear.</li> <li>The engine is not trimmed properly. Trim engine.</li> </ul>
ENGINE PROBLEMS	
Outboard engine is running too hot.	<ul> <li>The engine raw water pickup strainer is clogged with marine growth. Clean pick up.</li> <li>The engine raw water pump impeller is worn or damaged. Repair the pump.</li> <li>The engine thermostat is faulty and needs to be replaced.</li> </ul>
Outboard engine alternator is not charging properly.	<ul> <li>The battery cable is loose or corroded. Clean and tighten battery cables.</li> <li>The alternator is not charging and must be replaced.</li> <li>The battery is defective. Replace the battery.</li> </ul>
The engine suddenly will not operate at or above cruise RPM.	<ul> <li>The engine emergency system has been activated. The on board computer has sensed a problem and has limited the RPM to protect the engine. Find and correct the problem.</li> <li>The tachometer is bad and needs to be replaced.</li> <li>The throttle control is out of adjustment. Check the throttle adjustment or cable.</li> </ul>
The engine is loosing RPM. The boat is not overloaded and the hull bottom and running gear are clean and in good condition.	<ul> <li>The fuel filter could be dirty. Inspect and replace the fuel filter.</li> <li>The electronic engine control system on the engine is malfunctioning. Repair the engine control system.</li> </ul>
The engine runs too cold.	<ul> <li>The thermostat is faulty. Replace thermostat.</li> <li>The temperature gauge is not reading properly. Replace the temperature gauge or sender.</li> </ul>



PROBLEM	CAUSE & SOLUTION
The engine starter will not operate.	<ul> <li>The battery switch is off. Turn on switch.</li> <li>The shift control is not fully engaged in neutral. Move shifter from forward to neutral and try again.</li> <li>The fuse or circuit breaker for the starting circuit is blown. Reset the breaker or replace the fuse. Repair circuit if necessary.</li> <li>The battery is weak or low. Charge or replace battery.</li> <li>Corroded or loose battery connections. Tighten, clean and protect connections.</li> </ul>
ACCESSORY PROBLEMS	
The fresh water pump runs, but will not pump water.	<ul> <li>The water tank is empty. Fill the tank.</li> <li>The in-line strainer for the pump is clogged. Clean the strainer.</li> <li>The intake hose is damaged and sucking air. Replace or repair the hose.</li> <li>The pump is defective. Repair or replace the pump.</li> </ul>
The fresh water pump switch is on but the pump fails to run.	<ul> <li>The water system circuit breaker has tripped. Reset the circuit breaker.</li> <li>There is a loose or corroded wiring connection. Find and repair the bad connection</li> <li>The thermal breaker on the pump is tripped. Repair or replace pump.</li> <li>The pressure switch on the pump has failed. Replace the pressure switch.</li> <li>The pump is defective. Repair or replace the pump.</li> </ul>
The fresh water pump fails to turn off after all outlets are closed.	<ul> <li>There is a leak in a pressure line or outlet. Repair the leak.</li> <li>There is an air leak in the intake line. Repair the air leak.</li> <li>The pressure switch is defective. Replace the pressure switch.</li> <li>The voltage to the pump is low. Check for corroded or loose wiring connections or low battery.</li> <li>The strainer is clogged. Clean strainer.</li> <li>The pump is defective. Repair or replace the pump.</li> </ul>
Reduction in water flow from the bilge pump.	<ul> <li>Impeller screen plugged with debris. Clean screen at the base of the pump.</li> <li>The discharge hose is pinched or clogged. Check discharge hose and clean or repair.</li> <li>Discharge hose is sagging below the pump and creating an airlock. Reroute hose so it runs uphill from the pump to the thru-hull fitting.</li> <li>Low voltage to the pump. Check the battery and wire connections.</li> </ul>



PROBLEM	CAUSE & SOLUTION
ACCESSORY PROBLEMS	
The automatic float switch on the bilge pump does not activate the pump.	<ul> <li>The circuit breaker near the battery switch has blown. Reset the circuit breaker.</li> <li>The battery is dead. Charge or replace the battery.</li> <li>The pump impeller is jammed by debris. Clean pump impeller housing.</li> <li>The wire connections in the bilge have corroded. Replace connectors and secure above the bilge waterline.</li> <li>The pump is defective. Replace pump.</li> </ul>
The bilge pump will not run when the manual switch is activated.	<ul> <li>The circuit breaker supplying the switch has tripped. Replace or reset the circuit breaker.</li> <li>The battery switch is off. Turn on the battery switch and bilge pump breaker.</li> <li>The pump impeller is jammed by debris. Clean pump impeller housing.</li> <li>The wire connections in the bilge have corroded. Replace connectors and secure above the bilge waterline.</li> <li>The switch is defective. Replace the switch.</li> <li>The pump is defective. Replace pump.</li> </ul>
Porcelain head will not add water.	<ul> <li>The fresh water pump is not activated. Turn on fresh water pump.</li> <li>The fresh water tank is empty. Fill fresh water tank.</li> <li>The Add Water button in the control panel is not working. Replace control panel.</li> <li>The solenoid on the head fresh water valve is defective. Replace fresh water supply valve.</li> </ul>
Porcelain head will not flush.	<ul> <li>Electric head circuit breaker is tripped. Turn on breaker.</li> <li>The holding tank is full. Pump out the holding tank.</li> <li>There is bad connection at the head pump or the switch. Repair the connection.</li> <li>The Flush button in the control panel is not working. Replace control panel.</li> <li>The head pump is defective. Replace the pump.</li> </ul>
Holding tank will not empty.	<ul> <li>Overboard discharge valve in the bilge is closed. Open discharge valve.</li> <li>Holding tank vent is clogged. Replace vent filter or clean vent.</li> <li>There is a vacuum leak in the hose from the holding tank to the deck pump out fitting. Tighten loose fittings or replace damaged hoses.</li> </ul>
Excessive odor from marine head.	<ul> <li>Back pressure in the holding tank. Pump out holding tank or replace the vent filter.</li> <li>Waste is in the discharge hose. Flush enough to move waste to the holding tank, particularly at the end of each day.</li> <li>No deodorizer in the holding tank. Add deodorizer to the holding tank each time it is pumped out.</li> <li>The waste in the tank is over two weeks old. Pump the holding if it has contained waste for two weeks or more.</li> </ul>

## **Occupant Seating**

### M45 OUTBOARD OCCUPANT POSITIONS





## **NOTES**



## **Specifications**

### **M-45 Specifications**

HULL LENGTH OVERALL	24'/ 7.31 m
BEAM	8' 6" / 2.5 m
WEIGHT DRY	4500 lbs / 2041 kg
DEAD RISE	20°
DRAFT WITH ENGINE UP	16" / 40.6 cm
DRAFT WITH ENGINE DOWN	32" / 81.3 cm
BRIDGE CLEARANCE W/ TOWER	8'/ 2.4 m
FUEL CAPACITY	50 gal / 189.39 L
WATER TANK CAPACITY	10 gal / 38 L
MAXIMUM HORSEPOWER	350 hp / 261 kw
MAXIMUM PERSONS W/ GEAR WEIGHT	2215 lbs / 1004.7 kg
MAXIMUM PERSONS / WEIGHT	14 Persons or 2100 lbs / 952.6 kg

Note: Dry weight is the average weight of the base boat without fuel, water, waste, or gear.



### M-65 Specifications

HULL LENGTH OVERALL W/ SWIM PLATFORM	26' 7" / 8.1 m
BEAM	8'6" / 2.7 m
WEIGHT DRY	5,200 lbs / 2359 kg
DEAD RISE	20 °
DRAFT WITH ENGINE UP	18" / .45.7 cm
DRAFT WITH ENGINE DOWN	33" / 83.8 cm
BRIDGE CLEARANCE W/ TOWER	8' 10" / 2.7 m
FUEL CAPACITY	80 gal / 302.8 L
WATER TANK CAPACITY	15 gal / 56.8 L
WASTE TANK CAPACITY	11gal / 41.6 L
MAXIMUM HORSEPOWER	350 hp / 261 kw

Note: Dry weight is the average weight of the base boat without fuel, water, waste, or gear.

## **Monterey Boats Lifetime Limited Warranty**

MONTEREY BOATS warrants to the original retail purchaser of its product beginning with the 2017 models that it will repair or replace defects in materials and workmanship found to exist in its product during the applicable warranty periods defined below if purchased from an authorized MONTEREY BOATS dealer, subject to the exclusions, limitations, conditions and provisions noted below. All repairs and replacements under the following warranties will be performed by MONTEREY BOATS or an authorized MONTEREY BOATS dealer or representative selected by MONTEREY BOATS at its sole discretion.

#### **LIFETIME LIMITED STRUCTURAL HULL AND DECK WARRANTY:**

MONTEREY BOATS warrants to the original retail purchaser of its product that MONTEREY BOATS will repair or replace the fiberglass hull or deck of its product if it is found to be structurally defective in materials or workmanship for as long as the original retail purchaser owns the product. For purposes of this limited warranty: (1) a structural defect is defined as a defect that causes the hull or deck to be unsafe or unfit for use under normal operating conditions; (2) the fiberglass hull is defined as the single fiberglass molded shell and integral fiberglass structural components including stringers, transom and related structural components which are below the hull flange; and (3) the deck is defined as the single fiberglass molded shell and integral fiberglass structural components attached to the hull flange. This warranty is further subject to the exclusions, limitations, conditions and provisions noted below.

### TEN-YEAR TRANSFERABLE LIMITED STRUCTURAL HULL AND DECK WARRANTY:

Beginning with the 2017 models, MONTEREY BOATS also offers a Ten-Year Transferable Limited Structural Hull and Deck Warranty. Under this warranty, MONTEREY BOATS will repair or replace the fiberglass hull or deck if it is found to be structurally defective in materials or workmanship within the first ten (10) years after the warranty commencement date. For purposes of this warranty: (1) a structural defect is defined as a defect that causes the hull or deck to be unsafe or unfit for use under normal operating conditions; (2) the fiberglass hull is defined as the single fiberglass molded shell and integral fiberglass structural components including stringers, transom and related structural components which are below the hull flange; and (3) the deck is defined as the single fiberglass molded shell and integral fiberglass structural components attached to the hull flange. This warranty may be transferred to subsequent purchasers (hereinafter "new owner") provided the new owner registers the transfer and pays the transfer fee in accordance with the requirements set forth below. This transfer will only apply to the balance of any warranty period left during the ten (10) year period commencing on the warranty commencement date.

1. The request for transfer must be made in writing by the new owner and sent within thirty (30) days of the date of his/her purchase of the boat to:

MONTEREY BOATS 1579 SW 18th Street Williston, Florida 32696

2. The request must include: A copy of the bill of sale with the Hull ID number, the new owner's name and address and a Certified Check or Money Order for the correct transfer fee amount.





3. The transfer fee is \$300.00 for boats with hull lengths under 27', \$500.00 for boats with hull lengths from 27' but under 33', and \$700.00 for boats with hull lengths 33' and over.

In the event fiberglass hull or deck work is required, the new owner must return the boat to the original selling dealer or to a dealer authorized to service MONTEREY BOATS products. The cost of returning the boat to and from MONTEREY BOATS or an authorized MONTEREY BOATS dealer or representative will be the sole responsibility of the new owner. This warranty is further subject to the exclusions, limitations, conditions and provisions noted below.

### **FIVE-YEAR LIMITED HULL BLISTER WARRANTY:**

MONTEREY BOATS warrants to the original retail purchaser of its product that MONTEREY BOATS will repair any osmotic blisters which occur on the underwater gelcoated surfaces of the hull as a result of defects in materials or workmanship within five (5) years from the warranty commencement date according to the following prorated schedule provided that the original factory gelcoat surface has not been altered in any way:

- 1. Up to two (2) years from the warranty commencement date, MONTEREY BOATS will pay 100% of the repair costs.
- 2. After two (2) years but up to three (3) years from the warranty commencement date, MONTEREY BOATS will pay 85% of the repair costs.
- 3. After three (3) years but up to four (4) years from the warranty commencement date, MONTEREY BOATS will pay 65% of the repair costs.
- 4. After four (4) years but up to five (5) years from the warranty commencement date, MONTEREY BOATS will pay 35% of the repair costs.
- 5. After five (5) years from the warranty commencement date, MONTEREY BOATS will pay 0% of the repair costs.

Alterations which will void this warranty include, without limitation, damage, accident repair, sanding, scraping, sandblasting, or improper surface preparation for application of a marine barrier coating or bottom paint. A marine barrier coating must be properly applied to the hull bottom if the boat is to be moored in water for periods of more than sixty (60) days in any ninety (90) day period and a marine barrier coating is also required if the boat is to be bottom painted. This warranty is further subject to the exclusions, limitations, conditions and provisions noted below.

### **THREE-YEAR EXTERIOR COSMETIC GELCOAT LIMITED WARRANTY:**

MONTEREY BOATS warrants to the original retail purchaser of its product that MONTEREY BOATS will correct or repair any cracking or crazing of, and any air voids in, the exterior gelcoat surface of the boat as a result of defects in materials or workmanship within three (3) years from the warranty commencement date according to the following prorated schedule provided that the original factory gelcoat surface has not been altered in any way:

- 1. Up to one (1) year from the warranty commencement date, MONTEREY BOATS will pay 100% of the repair costs.
- 2. After one (1) year but up to two (2) years from the warranty commencement date, MONTEREY BOATS will pay 50% of the repair costs.

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- 3. After two (2) years but up to three (3) years from the warranty commencement date, MONTEREY BOATS will pay 25% of the repair costs.
- 4. After three (3) years from the warranty commencement date, MONTEREY BOATS will pay 0% of the repair costs.

Alterations which will void this warranty include, without limitation, damage, accident repair, sanding, scraping, sandblasting, improper surface preparation for application of a marine barrier coating or paint, or if damage to the exterior gelcoat surface results from or is attributable to the addition of items not installed by MONTEREY BOATS. This warranty expressly excludes from coverage blushing of colored gelcoat below the waterline and is further subject to the exclusions, limitations, conditions and provisions noted below.

### LIMITED WARRANTY FOR NON-STRUCTURAL PARTS AND COMPONENTS:

MONTEREY BOATS warrants to the original retail purchaser of its product that MONTEREY BOATS will repair or replace the following described non-structural parts and components for the reasons and during the periods indicated below measured from the warranty commencement date whether or not separately warranted by the part or component manufacturer:

- 1. Canvas: if it fades or dry rots within five (5) years or if it is found to be defective in materials or workmanship within two (2) years.
- 2. Upholstery: if it is found to be defective in materials or workmanship within three (3) years.
- 3. Generators: if it is found to be defective in materials or workmanship within five (5) years.
- 4. All other non-structural parts and components: if they are found to be defective in materials or workmanship within one (1) year.

#### WHAT IS NOT COVERED:

The limited warranties set forth above do not cover:

- 1. Engines, outdrives, air conditioners, and trim tabs;
- 2. Any boat that has been repaired or altered by persons other than MONTEREY BOATS or an authorized MONTEREY BOATS dealer or representative or modified in any way so as to affect its use and operation;
- 3. Any boat used for racing or for rental or commercial purposes or that has been subject to misuse, neglect, accident or structural modification;
- 4. Normal wear, tear, deterioration (including rust) of hardware, vinyl coverings, vinyl and fabric upholstery, plastic, stainless steel, other metal, wood, and trim tape;
- 5. Any defect caused by the failure of the owner to provide reasonable care and maintenance;
- 6. Installation of engines, generators, air conditioners, wake board towers, parts or other aftermarket accessories produced, installed or attached by anyone other than MONTEREY BOATS;
- 7. Loss of time, inconvenience, loss of the use of the boat or other matters not specifically covered hereunder;
- 8. Any boat purchased from an authorized MONTEREY BOATS dealer located in the United States or Canada that is registered and/or operated outside the United States or Canada; and





9. Any boat which has previously been repossessed from an authorized MONTEREY BOATS dealer. However, this exclusion shall not affect the Lifetime Limited Structural Hull and Deck Warranty set forth above.

#### **GENERAL PROVISIONS:**

ALL GENERAL, SPECIAL, INDIRECT, INCIDENTAL AND/OR CONSEQUENTIAL DAMAGES ARE EXCLUDED FROM THIS WARRANTY AND ARE TOTALLY DISCLAIMED BY MONTEREY BOATS. IT IS THE INTENT OF THE PARTIES THAT THE OWNER'S SOLE AND EXCLUSIVE REMEDY IS THE REPAIR OR REPLACEMENT OF THE PRODUCT OR ITS ALLEGEDLY DEFECTIVE COMPONENT PARTS AND THAT NO OTHER LEGAL OR EQUITABLE REMEDIES SHALL BE AVAILABLE TO SAID OWNER. SOME STATES DO NOT ALLOW THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE INCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES MAY NOT APPLY TO YOU. THIS IS A LIMITED WARRANTY. MONTEREY BOATS MAKES NO WARRANTY OTHER THAN CONTAINED HEREIN. TO THE EXTENT ALLOWED BY LAW ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARISING IN STATE LAW ARE EXPRESSLY EXCLUDED. TO THE EXTENT ALLOWED BY LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY IS LIMITED TO THE DURATION OF THE LIMITED WARRANTY APPLICABLE TO THE PARTICULAR WARRANTED PART, COMPONENT, OR DEFECT. ALL OBLIGATIONS OF MONTEREY BOATS ARE SPECIFICALLY SET FORTH HEREIN. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. MONTEREY BOATS' OBLIGATION WITH RESPECT TO THIS WARRANTY IS LIMITED TO MAKING REPAIRS TO OR REPLACING THE DEFECTIVE PARTS AND NO CLAIM FOR BREACH OF WARRANTY SHALL BE CAUSE FOR CANCELLATION OR RESCISSION OF THE CONTRACT OR SALE FOR ANY BOAT MANUFACTURED BY MONTEREY BOATS.

This Lifetime Limited Warranty commences on the date of delivery to the original retail purchaser or when the boat has been operated for twenty-five (25) hours or on the first day of the twenty-fifth (25<sup>th</sup>) month from the date of shipment from MONTEREY BOATS to an authorized MONTEREY BOATS dealer, which ever occurs first.

MONTEREY BOATS will discharge its obligations under this Lifetime Limited Warranty as rapidly as possible, but cannot guarantee any specific completion date due to the different nature of claims which may be made and services which may be required. This Lifetime Limited Warranty gives you specific legal rights, and you may also have other rights which may vary from state to state. No person, including a MONTEREY BOATS dealer, is authorized to make any repairs or replacements under this Lifetime Limited Warranty without the prior written approval of MONTEREY BOATS. MONTEREY BOATS shall in no way be responsible for any repairs not PRE-AUTHORIZED by a MONTEREY BOATS Customer Service Manager or repairs performed by a repair shop not PRE-AUTHORIZED by a MONTEREY BOATS Customer Service Manager.

MONTEREY BOATS does not authorize any person to create or assume for it any other obligation or liability with respect to its products. The sales personnel or other employees of MONTEREY BOATS dealers are not authorized to make warranties concerning MONTEREY BOATS products. No brochure,



pamphlet or other written or pictorial presentation constitutes a warranty or representation as to any aspect of MONTEREY BOATS products.

MONTEREY BOATS shall have no obligation under this Lifetime Limited Warranty unless and until each of the following conditions are met:

- 1. The original retail purchaser of its product or the MONTEREY BOATS dealer either completes and returns the Warranty Registration to MONTEREY BOATS by mail or facsimile or the MONTEREY BOATS dealer registers the Warranty electronically "online" within fifteen (15) days from the date the product is delivered to the original retail purchaser;
- 2. Notice of each warranty claim is given to the MONTEREY BOATS dealer within a reasonable period of time after discovery of any claimed defect;
- 3. Notice of each warranty claim is made in writing to MONTEREY BOATS within the applicable time periods identified in the respective warranties as measured from the date of purchase by the original retail purchaser; and
- 4. All transportation charges incurred in transporting the boat for warranty work are paid for by the owner.

MONTEREY BOATS reserves the right to make changes at any time, without notice, in prices or to make changes in design, colors, specifications, equipment, options, materials, etc., and MONTEREY BOATS shall be under no obligation to equip or modify product built prior to such changes.

IMPORTANT: Proper registration of the Warranty with MONTEREY BOATS is important for purposes of recording customer information for notification and correction of product defects under the Federal Boat Safety Act.

MONTEREY BOATS is the registered tradename and trademark of SEABRING MARINE INDUSTRIES, INC., a Florida corporation, the warrantor herein.

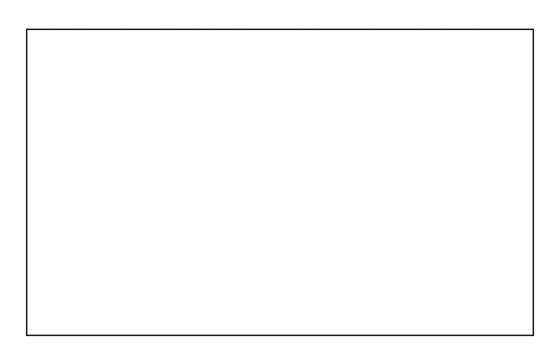
SEABRING MARINE INDUSTRIES, INC.

d.b.a. MONTEREY BOATS

1579 SW 18th Street - Williston, Florida 32696- Phone (352) 528-2628 / Fax (352) 529-2628







### **MONTEREY BOATS**

1579 S.W. 18TH STREET WILLISTON, FL 32696 PHONE: 352-529-9181 FAX: 352-529-9173

WWW.MONTEREYBOATS.COM

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