

M - SERIES OWNERS MANUAL M3 - M3/MSX - M5 - M5/MSX









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)



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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.





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.

В	OAT
MODEL:	HULL SERIAL #:
PURCHASE DATE:	DELIVERY DATE:
IGNITION KEYS #:	REGISTRATION #:
DRAFT:	WEIGHT:
BRIDGE CLEARANCE:	
EN	GINE
MAKE:	MODEL:
SERIAL #:	
OP	TIONS
PROF	ELLERS
MAKE:	NUMBER OF BLADES:
DIAMETER/PITCH:	MODEL:
PROP #1 PART #:	PROP #2 PART #:
TR	AILER
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.



M3 Specifications

HULL LENGTH OVERALL	23'10" / 7.26 m
BEAM	8' 6" / 2.59 m
WEIGHT DRY 1 BATTERY & NO OPTIONS	4500 lbs / 2041 kg
WEIGHT DRY 2 BATTERIES, ARCH, MAX OPTIONS	4800 lbs / 2177 kg
DEAD RISE	20°
DRAFT WITH DRIVE UP	20.75" / .53 m
DRAFT WITH DRIVE DOWN	36.25" / .92 m
BRIDGE CLEARANCE TOP OF WINDSHIELD, NO ARCH	4'9"/ 1.45 m
BRIDGE CLEARANCE WITH STANDARD OPTIONS & ARCH	7' 8" / 2.34 m
FUEL CAPACITY	50 gal / 189 L
WATER TANK CAPACITY	10 gal / 38 L
WASTE TANK CAPACITY Manual Flush 12	gal - Vacuflush 9 gal / 45.42 L - 34.06 L
MAXIMUM HORSEPOWER	320 hp / 239 kw
MAXIMUM PERSON WEIGHT	1322 lbs / 600 kg
MAXIMUM PERSONS / GEAR WEIGHT	1764 lbs / 800 kg

Note: Dry weight is the average weight of the base boat without fuel, water, waste, or gear.



M5 Specifications

HULL LENGTH OVERALL	25' 10" / 7.26 m
BEAM	8'6" / 2.59 m
WEIGHT DRY 1 BATTERY & NO OPTIONS	5,200 lbs / 2360 kg
WEIGHT DRY 2 BATTERIES, ARCH, MAX OPTIONS	5600 lbs / 2540 kg
DEAD RISE	20 °
DRAFT WITH DRIVE UP	21"/.53 m
DRAFT WITH DRIVE DOWN	37"/.93 m
BRIDGE CLEARANCE TOP OF WINDSHIELD, NO A	RCH5' 1" / 1.54 m
BRIDGE CLEARANCE WITH STANDARD OPTIONS	& ARCH 8'0"/2.41 m
FUEL CAPACITY	80 gal / 302.83 L
WATER TANK CAPACITY	15 gal / 56.78 L
WASTE TANK CAPACITY	Manual Flush 12 gal - Vacuflush 9 gal / 45.42 L - 34.06 L
MAXIMUM HORSEPOWER	425 hp / 317 kw
MAXIMUM PERSON WEIGHT	1332 lbs / 600 kg
MAXIMUM PERSONS / GEAR WEIGHT	1764 lbs / 800 kg

Note: Dry weight is the average weight of the base boat without fuel, water, waste, or gear.



Manufacturer:



M3 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.

Name	SEABI	RING MARINE	INDUS	TRIES, II	NC., d.b.a.	Montere	y Boats	
	Addres	ss 1579 SW 18th	St.					
_	Willisto	n, FL				Zip Code:	32	696
Identificati	on Nu	ımbers:						
Hull Identification	n Numb	er <u>US-</u>	RGF					
Engine Serial N	umber							
Intended D	esign	Category	:					
		Ocean (Cat	A)		Inshore	(Cat C)		
		Offshore (Ca	at B)		Sheltere	d Waters	(Cat D)	
Weight and	d Max	imum Cap	acities	s:				
Unladen Weigh	t - Kilogr	ams (Pounds)			2,041 kg	/ 4,500	lbs	
Maximum Load	- Weigh	t- Kilograms (Po	ounds)		800 kg /	1764 lbs		
Number of Peop	ole	8 ped	ople					
Maximum Rated	d Engine	Horsepower - h	Kilowatts	(Horsep	ower)	_	223.7 kv	/ / 320 hp
Certification	ons:							
Certifications &	Compon	ents Covered	_	See	e Declaration	n of confor	mity	
Boat certified by IN	1CI (#0009 ₎) under certificate B	МОНТ025	5				





M5 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	SEABR	RING MARINE	INDUS ⁻	ΓRIES, IN	IC., d.b.a. Monter	rey Boat	S
	Addres	s 1579 SW 18th S	St.				
	Williston	ı, FL			Zip Cod	e:	32696
Identifica	ation Nu	mbers:					
Hull Identifica	ation Numbe	er <u>US-I</u>	RGF				
Engine Seria	al Number						
Intended	l Design	Category:					
		Ocean (Cat A	۹)		Inshore (Cat C)	
		Offshore (Ca	t B)		Sheltered Waters	s (Cat D)	ı
Weight a	ınd Maxi	mum Capa	acities	s:			
Unladen We	ight - Kilogra	ams (Pounds)	_		2,359 kg / 5,200) lbs	
Maximum Lo	oad - Weight	- Kilograms (Po	unds)		1,764 kg / 800) lbs	
Number of P	eople _	8 pe	ople				
Maximum Ra	ated Engine	Horsepower - K	Cilowatts	(Horsepo	ower)	316.9	kw / 425 hp
Certifica	tions:						
Certifications	& Compone	ents Covered	_	See	Declaration of conf	ormity	
Boat certified b	y IMCI (#0009)	under certificate Bl	МОНТ025				



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. Please 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. Please 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.

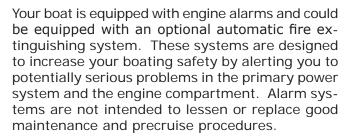
				MONTERE		
				BOATS		
Boat Number (HIN): RGF Boat Model:						
Selling Dealer:		::		Tel 352-529-9181 Fax 888-922-6287		
Engine Brand:	Engine Mode	el:		www.montereyboats.com		
Engine Serial #1:	Drive Serial	#1:				
Engine Serial #2:	Drive Serial	#2:				
Date of Sale:	Warran	ty Start Date:				
Owner Name (Last, First):						
Address:		Postal Code/	Cou	ntry		
E-Mail Address:						
				internal purposes only.)		
Phone:						
PLEASE, INSPECT AND				A Not Appliants		
Indicate Status with the following Key: √c	or 1 – OK, 2 –	needs Correction		• •		
Boat gel coat, striping & graphics		Oil pr	ENGINE - AFTER ST ressure	TARTING: (in water)		
Upholstery fit, clean and free of defects Sundeck/Sun Island/lounger operation		Fuel I	line connectors - no le			
Canvas fit, clean and free of defects			ne has no water or oil l speed per engine spec			
Cabin Doors, port lights, hatches, cabinet & head do All thru-hull fittings, ball valves, head drain, galley of	ors, latches	Igniti	on timing check with t	iming light or scan tool		
well drain, drain plug-hull, wet bar drain are secure,		Gear Instru		forward, neutral, reverse		
Windshield fit		Exhau	uments read correctly ust system - no leaks			
Ladders			SEA TR	ΤΔΙ		
<u>EQUIPMENT</u> Running Lights (Navigation)		Boat Port e	performance SEATR	IAL		
Cabin lights, cockpit lights		Port 6	engine operation			
Toilet (Head) operation & hoses			oard engine operation ing -operation	1		
Stereo – Radio, CD, remote control Bilge Pumps – Auto float switch		Stern	drive trim operation			
Air Conditioner/Heater – operation & components se	cure	Instru	uments register norma	al		
Water pressure system (let pressure stand 15 minut	es to see if	Maxir	mum R.P.M	_		
pump goes on) & heater		Technical Check	Performed by			
Stove, coffee maker, oven, refrigerator, ice maker Generator – Operation & components secure						
Bilge Blower(s)		Technician		Date		
Wipers & Horn Shore power (AC)			PRE-DELIVERY F	INAL CHECK		
Tables		All ac	cessory equipment op	erates (Mech. & Elect.)		
Plumbing Hose Clamps			ets, curtains, cushions oat, engine and access			
Battery – Polarity, Voltage, Tight Connections Battery Switch(es) - Operation			properly cleaned, inte			
			er wiring, lights, wheel			
ENGINE - BEFORE STARTING Engine mounts - tight			OWNER ORIE	NTATION		
Fuel system operation - no leaks			w & familiarize Owner	with operation of all features		
Engine compartment components not missing, disco loose, kinked, pinched or could chafe	nnected,		ptions on boat Frial with Owner			
Hose clamps on engine & exhaust			w of Owners Manual			
Steering system operation, components secure, stee	ering wheel		w of Warranties	.1114.1		
straight Drains cooling system closed (Closed cooling coolant	t level)		w of Owner Responsib w of Service & Mainte			
Throttle control, operation & adjustment			w of Care & Cleaning			
Shifter control, operation & adjustment		Owner Orient-ti	ion Dorformed by			
Stern drive oil level at full mark Crankcase & power steering oil levels at full mark		Owner Orientati	ion Performed by:			
Stern drive trim operation						
Prop Size:	ina	Dealer Personne	el	Date		
Prop installed correctly with grease, nut(s), cotter pi Prop rotation – Forward & Reverse	ins	I have read ar	nd agree with the ch	necklist. I have read and		
Neutral start switch, engine will not start in gear		understand th	e Monterey Boats L	ifetime Limited Warranty		
Transom plate seal has no leaks – water, oil		as it appears o	on the back of this f	orm.		
COMMENTS:		Signature of Bo		Date		



SAFETY EQUIPMENT

1.1 General

Your boat and inboard 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

Your boat is equipped with an engine alarm that monitors water temperature and oil pressure. The alarm is equipped with a buzzer and/or a light located in the helm. The alarm will sound if the water temperature reaches 205 degrees F. or the oil pressure drops below 6 P.S.I.

If there is a problem with one of these systems, it will sound an alarm until the problem is found and resolved.



Throwable Device and Personal PFD

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.

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. Please refer to the Helm Control Systems chapter for more information on the neutral safety switch.



1.4 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 CAREFULAND 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 x 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

Inboard boats less than 26 feet are required to carry one fire extinguisher. 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 the extinguisher 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.

Please 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.

1.5 Bilge and 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.

1.6 Fire Port

Your boat is equipped with a fire port installed in the engine compartment hatch near the transom door as standard equipment. In the event of a fire in the engine compartment, do not open the hatch. This will supply more air to the fire making it more difficult to extinguish. Instead, leave the engine compartment hatch closed and insert the nozzle of the fire extinguisher into the fire port and discharge the extinguisher. Once the fire is



extinguished, leave the engine compartment hatch closed until the compartment has had a chance to cool. This is particularly important when using FE-241 fire extinguishers. FE-241 is heavier than air and interferes with the combustion process. If the engine compartment hatch is opened too soon, the extinguishing agent could escape and a flash back could occur if the hot components have not cooled below a combustible temperature.



WARNING



DO NOT OPEN THE ENGINE COMPARTMENT HATCH IMMEDIATELY!! THIS FEEDS OXYGEN TO THE FIRE AND FLASH BACK COULD RESULT. ALLOW THE ENGINE COMPARTMENT TO COOL FOR AT LEAST 15 MINUTES BEFORE CAUTIOUSLY INSPECTING FOR CAUSE OR DAMAGE. HAVE AN APPROVED PORTABLE FIRE EXTINGUISHER CLOSE AT HAND AND READY FOR USE. DO NOT BREATH FUMES OR VAPORS CAUSED BY THE FIRE!

1.7 Automatic Fire Extinguishing System (Optional)

The engine compartment can be equipped with an automatic fire extinguishing system. The equipment has been chosen and located to provide sufficient volume and coverage of the entire engine compartment area. While the system ensures excellent bilge fire protection, it does not eliminate the U.S. Coast Guard requirement for hand held fire extinguishers. The automatic fire extinguishing system is automatically activated when the temperature in the engine compartment reaches a specific temperature, usually around 165° F.

The boat is equipped with an indicator light at the helm. Under normal circumstances, whenever the ignition key is turned on, the green indicator light will glow. This indicates that the system is operating and ready for activation if necessary. If the indicator light does not glow when the ignition switch is turned on, either the system has discharged or there is a problem that should be corrected before using the boat.

The green light on the fire extinguisher panel will go off and an alarm will sound if activation should occur during the operation of the boat. You may also hear a rushing air sound as the extinguishing agent discharges.



Typical Fire Port



Fire Extinguisher Panel in Helm

Typically, the extinguishing agent will shut down the engine when it discharges. If the engine continues to run, it should immediately be shut down manually, provided it is safe to do so. You should also shut off the blower and the main battery switch. The engine can be restarted once the fire extinguishing agent has dissipated from the engine compartment.

When sufficient time has elapsed for the fire to be extinguished and a flashback is no longer possible, find and fix the problem, then activate the battery switch and the engine can be restarted.



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WARNING



IF ACTIVATION SHOULD OCCUR, IMMEDIATELY SHUT DOWN THE ENGINE. TURN OFF ALL ELECTRICAL SYSTEMS, POWERED VENTILATION AND EXTINGUISH ALL SMOKING MATERIALS. DO NOT OPEN THE ENGINE COMPARTMENT HATCH IMMEDIATELY!! THIS FEEDS OXYGEN TO THE FIRE AND FLASH BACK COULD RESULT. ALLOW THE EXTINGUISHING AGENT TO SOAK THE ENGINE COMPARTMENT FOR AT LEAST 15 MINUTES AND WAIT FOR HOT METALS OR FUELS TO COOL BEFORE CAUTIOUSLY INSPECTING FOR CAUSE OR DAMAGE. HAVE AN APPROVED PORTABLE FIRE EXTINGUISHER AT HAND AND READY FOR USE. DO NOT BREATH FUMES OR VAPORS CAUSED BY THE FIRE!!



WARNING



THE OWNER'S MANUAL PROVIDED BY THE FIRE EXTINGUISHING SYSTEM MANUFACTURER SHOULD BE INCLUDED WITH YOUR BOAT. IT IS ESSENTIAL THAT YOU READ THE INFORMATION CAREFULLY AND COMPLETELY UNDERSTAND THE SYSTEM IN THEORY AND OPERATION BEFORE USING YOUR BOAT. IF YOU DID NOT RECEIVE THE FIRE EXTINGUISHING SYSTEM OWNER'S MANUAL, PLEASE CONTACT YOUR DEALER OR THE MONTEREY CUSTOMER SERVICE DEPARTMENT.



Automatic Fire Extinguishing System in the Engine Compartment

1.8 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.

1.9 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.

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

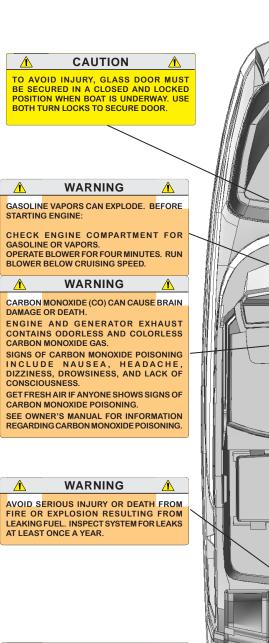
Anchor Search light
Boat Hook Sunburn Lotion
Mooring Lines Ring Buoy
Binoculars Whistle or Horn
Extra Clothing Portable Radio
Chart and Compass Marine Hardware

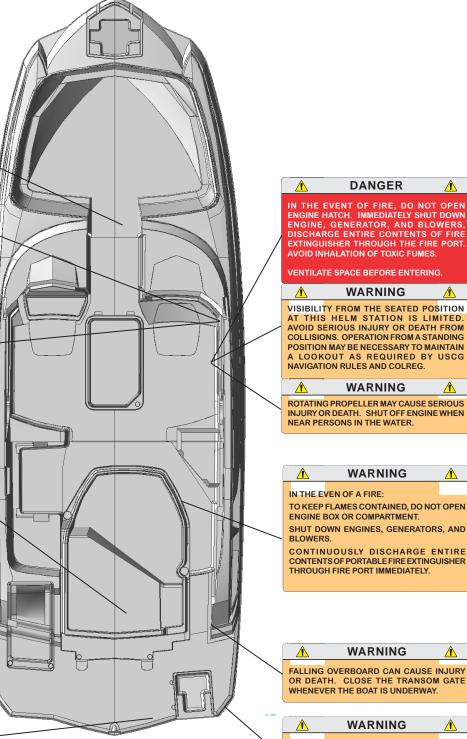
Food & Water Spare Keys Sunglasses Spare Parts

Spare Propeller

1.10 Caution and 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.







GENERATORS ARE RUNNING.

DAMAGE OR DEATH

DANGER

CARBON MONOXIDE (CO) CAN CAUSE BRAIN

ENGINE AND GENERATOR EXHAUST CONTAINS ODORLESS AND COLORLESS

CARBON MONOXIDE WILL BE AROUND THE BACK OF THE BOAT WHEN THE ENGINES OR

MOVE TO FRESH AIR, IF YOU FEEL NAUSEA,

HEADACHE, DISSINESS, OR DROWSINESS

ROTATING PROPELLER MAY CAUSE SERIOUS

DO NOT APPROACH OR USE LADDER WHEN

INJURY OR DEATH.

ENGINE IS RUNNING

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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:

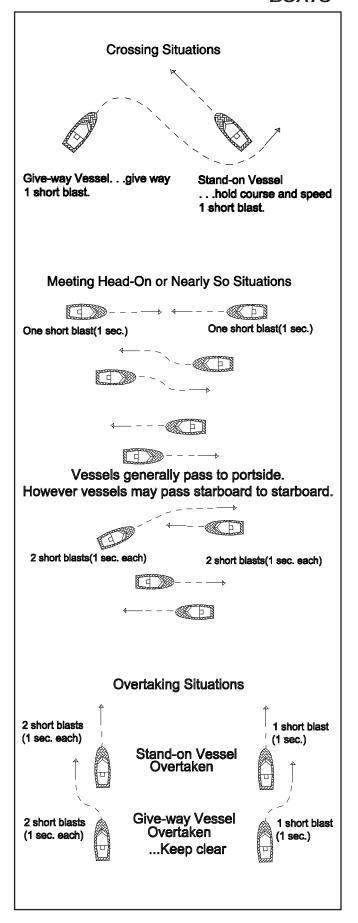
- Make sure your navigation lights are on and working properly. Navigation lights warn others of your position and course and the position and course of other vessels.
- All navigation rules apply. If the bow light of another vessel shows red, you should give way to that vessel, if it shows green, you 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 **RED FLAG** 2 RED FLAGS SQUARE 2 SQUARE ZONE starboard Small craft RED FLAG **RED FLAGS** Gale beam) (winds to BLACK BOX BLACK BOX (winds up to 47 knots) (Hurricane) 33 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 or 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 $\langle \longrightarrow \langle \longrightarrow \rangle$ 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) □ □ DE GREEN LIGHT ONLY RED LIGHT ONLY FLASHING STATES FLASHING OCCULTING OCCULTING QUICK FLASHING QUICK FLASHING RW RW ISOPHASE RW W **ISOPHASE** SP "G" SPHERICAL AND OR SOUND PREFERRED CHANNEL NO NUMBERS — MAY BE LETTERED COMPOSITE GROUP FLASHING (2+1) G "9" R '8' CD D LI FIG 4sec FIR 4sec LIGHTED BUOY GREEN LIGHT ONLY RED LIGHT ONLY LIGHTED BUOY RG B FI (2+1) LIGHTED PREFERRED PREFERRED CHANNEL TO PORT TOPMOST BAND CHANNEL TO STARBOARD TOPMOST BAND GREEN RED GR NUN CAN SG DAYMARK DAYMARK



2.3 Pre-Cruise CheckBefore 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. Please 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 switch to make sure the system is working properly.

- Turn on the bilge blower. Check the blower output and operate four (4) minutes before starting the engine. The blower also should be activated when operating below cruising speed.
- 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
Transmission oil
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 Propellers Fuel filters Wire ties Hydraulic oil Assorted hose Rags Pump & alternator belts

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



2.4 Operating Your Boat After Starting the Engine:

- Check the engine gauges. Make sure they are reading normally.
- 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 temperature gauge frequently until the engine temperature stabilizes at normal operating temperature.
- Check the steering and engine controls for 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.

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WARNING



DO NOT OPERATE THE BOAT UNLESS IT IS COMPLETELY ASSEMBLED. KEEPALL FASTENERS TIGHT. KEEPADJUSTMENTS ACCORDING TO SPECIFICATIONS.

- Always operate the blower when operating the boat below cruising speed to help cool the engine compartment and remove dangerous fumes.
- 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, especially when the ballast tank on MSX models is full. 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.

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 the engine to cool down by running it 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.

After Operation:

- If operating in saltwater, wash the boat and all equipment with soap and water.
- 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 pump.
- 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 sea cocks.
- Make sure the boat is securely moored.



CAUTION



TO PREVENT DAMAGE TO THE BOAT, CLOSE ALL SEA COCKS BEFORE LEAVING THE BOAT.

2.5 Docking, Anchoring and MooringDocking and Dock Lines

Maneuvering the boat near the dock and securing the boat requires skill and techniques that are unique to the water and 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 giving 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 operator 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 outdrive straight & shift to neutral when you feel you have enough momentum to reach the dock. Use reverse on the engine while turning the steering wheel toward the dock to slow the boat and pull the stern toward the dock as the boat approaches. Straighten the outdrive 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 outdrive 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 or turning the wheel. When nearly in the slip all the way, straighten the outdrive and shift to forward to stop. Keep the engine running until the lines are secured.

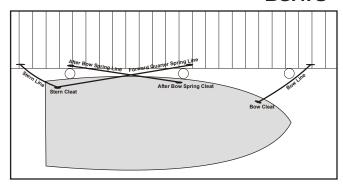
Securing Dock Lines

Securing a boat that is tied 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 line is secured to the dock at a 40° angle forward of the stern cleat or the stern spring 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.

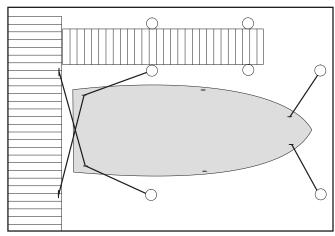
Securing a boat in a slip is somewhat different. It typically requires two bow lines secured to pilings on each side of the bow, two stern lines secured to the dock and two spring lines that prevent the boat from hitting the dock. The bow lines are typically secured with enough slack to allow the boat 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.

Leaving the Dock

Always start the engine and let it warm up for several 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



Securing The Boat Along Side A Dock (Typical)



Securing The Boat In A Slip (Typical)

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 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 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 if your are anchoring overnight or in rough weather.

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 AND 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 going into the engine compartment to make repairs. If you are unable to correct the problem, call for help.

2.7 Collision

If your boat is involved in a collision with another boat, dock, piling or a sandbar, your first priority is to check your passengers for injuries and administer first aid if necessary. Once your passengers situations are stabilized, thoroughly inspect the boat for damage. Check below decks for leaks and

the control systems for proper operation. Plug all leaks or make the necessary repairs to the control systems before proceeding slowly and carefully to port. Request assistance if necessary. Haul the boat and make a thorough inspection of the hull and running gear for damage.

2.8 Grounding, Towing and 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.



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.





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.

2.9 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.

2.10 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.

2.11 Water Skiing and 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



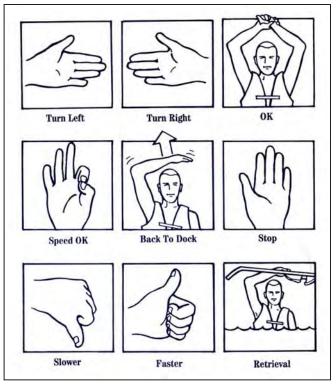
THE ARCH AND WAKEBOARD TOWER ARE DESIGNED FOR TOWING WATER SPORTS DEVICES ONLY. DO NOT TOW MORE THAN ONE PERSON AT A TIME FROM THE TOWER OR ARCH. IMPROPER USE OR OVERLOADING THE TOWER MAY CAUSE DAMAGE TO THE TOWER AND/OR BOAT AND COULD IMBALANCE THE BOAT CAUSING HANDLING DIFFICULTIES.

- DO NOT ALLOW PASSENGERS TO SIT BEHIND THE ROPE ATTACHMENT POINT WHEN THE WAKEBOARD TOWER OR ARCH ARE IN USE.
- DO NOT ALLOW THE LOOSE END OF A TOW ROPE TO DANGLE FROM THE ARCH OR TOWER 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.



- Never drive the boat or participate in any water sports activity like skiing, tubing or wakeboarding while under the influence of alcohol or drugs. Alcohol can severely impair your judgement, ability to respond and depth perception.
- 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.



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.

2.12 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 PROPELLERS. 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.



2.13 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.



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.

2.14 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.

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 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.
- 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:

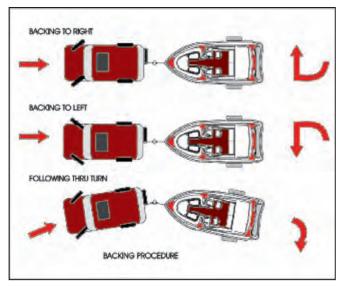
Your boat or trailer dealer will give instructions on how to load, fasten and launch your boat.



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.



Backing Procedure for Boat Trailers

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 (680kg) 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.



PROPULSION SYSTEM

3.1 General

Your boat is designed to be powered with a single inboard engine and outdrive system. Each manufacturer of the various inboard/outboard drive systems 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.



WARNING



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

3.2 Drive Systems

The inboard engine is mounted in the stern and coupled to a transom mounted outdrive which does all shifting, steering, and propulsion functions. The outdrive is supplied by the engine manufacturer and has specific lubrication and maintenance requirements.

Proper engine alignment is very important. This was done by the factory when the engine was installed and should be checked once per season with Volvo engines and once every three years with Mercruiser engines thereafter. If you experience excessive vibrations or suspect that the engine is out of alignment, please contact your Monterey dealer.

Marine growth and galvanic corrosion is a concern if the boat is to be kept in the water. Marine growth occurs when components are left in the water for extended periods and can cause poor



Typical Mercruiser Gas Engine

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. If the boat is to be left in saltwater, the hull and outdrive must be protected with antifouling paint. It is extremely important that the proper antifouling paint is used on each component. Contact your Monterey dealer for information on the proper paint to use in your area.

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. Outdrives are equipped with sacrificial anodes to prevent galvanic corrosion problems. The anodes must be monitored and replaced as necessary.

On some outdrives, the standard anode may not provide an acceptable level of protection when a drive is used in fresh water and a magnesium anode must be used. A magnesium anode, when used for combined operation in both fresh and saltwater, or water with a low salt content, will deteriorate quicker and must therefore be replaced



more often. For recommendations regarding corrosion protection for the engine or outdrive, please refer to the engine owner's manual.



CAUTION



SOME OUTDRIVES REQUIRE SPECIAL ANODES FOR FRESH WATER AND A DIFFERENT TYPE OF ANODE FOR SALTWATER TO PROTECT THE DRIVE FROM GALVANIC CORROSION. PLEASE CONTACT THE ENGINE MANUFACTURER OR YOUR MONTEREY DEALER FOR THE PROPER ANODE TO USE IN YOUR BOATING AREA.



CAUTION



MANY ANTIFOULING PAINTS DESIGNED FOR BOAT HULLS CAN CAUSE SEVERE DAMAGE TO THE OUTDRIVE. DO NOT PAINT THE OUTDRIVE OR ALLOW IT TO COME IN CONTACT WITH ANTIFOULING PAINTS DESIGNED FOR BOAT HULLS. CONTACT YOUR MONTEREY DEALER OR ENGINE MANUFACTURER FOR INFORMATION ON THE PROPER PAINTING PROCEDURES.

3.3 Engine Exhaust System

Inboard/outboard engines use the exhaust system to expel exhaust gases and cooling water. Engine exhaust exits the rear of the boat through the exhaust system. The system consists of engine exhaust manifolds, exhaust hoses and the outdrive.

A periodic inspection of the coolant hoses, exhaust hoses and related parts should be made to ensure that leaks, heat deterioration or damage has not resulted. Replace them as necessary. Refer to the engine owner's manual for more information on the exhaust system in your boat.



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.

3.4 Engine Cooling System

All marine engines use surface water as a cooling medium. The cooling water enters the system through a water intake in the outdrive and is expelled through the exhaust system. Water

is pumped through the water inlets, circulated through the engine block or heat exchanger, and relinquished with the exhaust gases through the outdrive. 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.



CAUTION



RUNNING THE ENGINE WITHOUT WATER FLOWING TO THE WATER PUMP CAN CAUSE SERIOUS DAMAGE TO THE WATER PUMP IMPELLER OR ENGINE. NEVER RUN THE MOTOR WITHOUT WATER FLOWING TO THE WATER PUMP.

NOTICE:

If the boat is used in salt or badly polluted water, engines without fresh water cooling should be flushed after each use. Refer to the engine owner's manual for the proper engine flushing procedure.

Fresh Water Cooling (Optional on some engines)

Your boat could be equipped with a fresh water cooling system. Installation of a "Fresh Water" or Closed" cooling system that is cooled by a heat exchanger and the seawater cooling system provides adequate engine cooling without exposing the internal engine cooling system to the harmful effects of surface water. This system is optional with the gasoline engine on your boat. The engine owner's manual provides additional information regarding service and maintenance of this equipment.



CAUTION



A RUPTURED COOLING OR EXHAUST HOSE CAN CAUSE SEVERE ENGINE DAMAGE OR ALLOW A LARGE AMOUNT OF WATER TO FLOW INTO THE BILGE. SHOULD AN ENGINE INTAKE, EXHAUST OR COOLING HOSE RUPTURE, TURN THE ENGINE OFF IMMEDIATELY. PROCEED UNDER TOW IF NECESSARY, TO A SERVICE FACILITY FOR APPROPRIATE REPAIRS. MAINTAIN A CLOSE VISUAL WATCH ON THE PROBLEM HOSE AND THE BILGE WATER LEVEL.



3.5 Propellers

The outdrive can be equipped with a single propeller or dual, counter rotating propellers that convert the engine's power into thrust, depending on engine and outdrive selected for your boat. Propellers come in a variety of styles, diameters and pitches. Pitch is the theoretical distance traveled by the propeller in each revolution.

The propeller(s) that will best suit the normal needs of your boat will depend somewhat on your application and expected average load. Propeller sizes are identified by a number or code stamped on the prop. 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 outdrive gear assembly.

Please refer to the outdrive owner's manual for specific information on propellers and the proper installation procedure.



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

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

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

NOTICE:

Before changing propellers 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 propellers.



Typical Mercruiser Bravo III Propellers



Volvo DP Propellers

- The addition of heavy equipment like excessive gear, additional coolers, etc., will cause additional load on the engine. Consequently, a different propeller or propellers may be required.
- 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 a propeller, there is a good chance the propeller or propellers are not the problem.
- Boats operated at high altitudes (above 2000 feet). Engines operated at high altitudes will not be able to develop as much horse power as they do at or near sea level. Consequently, a different propeller or propellers may be required.





Standard Speedometer and Tachometer with Hour Meter

3.7 Helm and 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 type of inboard/outboard motor installed on your Monterey. 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(s). The tachometer may not register zero with the key in the "OFF" position.

Tachometers in MSX models with Tow Control may also have a key pad and LCD screen used in selecting the features included with this option. The features and controls for Tow Control are unique to the engine installed in the boat. Refer to the Helm Control Systems chapter and the engine and/or control systems manuals for more information on the Tow Control system in your boat.



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 outdrive. 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. Please refer to Chapter 2 and the engine owner's manual for more information on the operation of the outdrive power tilt and trim.

Trim Tab Indicator Gauges

Monitors the position of the optional trim tabs. The trim tabs should always be returned to the full up position whenever the boat is moored or before lifting the boat with a lift or loading it on a trailer.

Depth Gauge

The depth gauge indicates the depth of the water below the bottom of the boat. The gauge is



Volt Meter and Fuel Gauge



Oil and Temperature Gauge



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. The fuel management gauge is used to monitor the gallons per hour and also total gallons used. 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

Inboard 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 the engine instruments and ignition circuitry is provided by circuit breakers located on the engine. The navigational electronics are protected by the electronics breaker in helm breaker panel. The ignition switch and instrument wire connectors 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.



Depth Sounder and Engine Tilt/Trim Gauge



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 and 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 inboard/outboard 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 outdrive 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.



Mercruiser Side Mount Control and Stop Switch

Electronic Engine Controls

Electronic engine controls are standard on boats with the MSX package and with some engine packages on the standard M3 and M5 models. Some controls are equipped with a separate keypad on the helm or a key pad built into the tachometer and some have no key pad with all functions controlled by switches on the control or control handle. 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.



NOTICE:

Boats equipped with the MSX package will have Tow Control built into the control system and some features will operate differently than the standard electronic controls described in this section. Refer to the Tow Control section in this chapter for additional information on electronic controls with the optional Tow Control feature.

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. Some controls are completely electronic and there are no cables. Some control processors have electronically controlled servos that are connected to the engine and transmission control levers by cables.

Movement of the control handle sends a signal to the control processor, located in the engine compartment, that operates the engine throttle and shift control lever. General operation will include a position for neutral (straight up and down or slightly aft of vertical), 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 adjustable control head detent and friction settings.

If your control system is equipped with a key pad, it will typically have integrated switches and indicator lights or an LCD which allow the operator to control all aspects of the boat's propulsion system. The most common features activated or monitored by the keypad or control handle switches are:

- Starter lockout, which prevents the engine from being started in gear.
- Gear lockout (throttle only), 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)



Volvo Side Mount Electronic Control with EVC Panel and Emergency Stop Switch

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, drive system and other options installed on your boat. It is essential that you read the owner's manual for the control system and be completely familiar with its 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.





Mercruiser Smart Tow Tachometer and Key Pad

Tow Control System (MSX Premier Package) Mercury Smart Tow

M3 and M5 boats equipped with the MSX Package and Mercruiser engines are equipped with Mercury "SmartCraft" electronic controls and Smart Tow technology. A key pad and LCD screen built into the tachometer allows the operator to set and adjust the cruise speed with an RPM-based cruise control and a Launch Control that determines the intensity of acceleration you want out of the water.

To activate the system, the operator uses the key pad and LCD screen on the tachometer to select from five Launch Control profiles for the pull intensity your rider wants out of the water and enters the rpm end point for the desired speed. When the control handle is advanced to the forward, full throttle position, the control system recognizes the settings and automatically accelerates the boat

at the preset intensity to the speed selected and maintains that speed to avoid going to fast or too slow for your skier or wake boarder. Minor speed adjustments can be made in Smart Tow Mode using the - or + buttons on the key pad. Any movement of the control handle will cancel Smart Tow mode and return the system to manual control.

The information in this manual is an overview of the operation of the Smart Tow control system. Your engine Operator's Manual provides complete information on the operation and maintenance of the control system. It is essential that you read the manual and completely understand the Smart Tow system features and operation before operating your boat. Please contact your dealer or the Monterey Customer service department if you have any questions regarding the operation of the control system.





Volvo Aquamatic Tow Control Tachometer, Tow Control Panel and EVC Panel

Volvo Aquamatic Tow Control (MSX Premier Package)

M3 and M5 boats equipped with the MSX Package and Volvo engines are equipped with Volvo Aquamatic electronic controls and Tow Control technology. A key pad on the EVC panel and the LCD screen on the tachometer or Tow Control Panel key pad and LCD screen allows the operator to set and adjust the rpm end point for the desired speed. When activated, Tow Control automatically accelerates the engine until it reaches your pre-set engine speed and maintains that speed to avoid going too fast or too slow for your skier or wake boarder.

To activate the system, the operator uses the key pad on the EVC and the LCD screen on the tachometer or Tow Control Panel key pad and LCD screen to enter the rpm end point for the desired speed. When the control handle is advanced

to the forward, full throttle position, the control system recognizes the setting and automatically accelerates the engine at its peak to the preset speed selected. Minor speed adjustments can be made in Tow Mode using the - or + buttons on the key pad. Any movement of the control handle will cancel Tow Mode and return the system to manual control.

The information in this manual is an overview of the operation of the Volvo Tow Control system. Your engine Operator's Manual provides complete information on the operation and maintenance of the control system. It is essential that you read the manual and completely understand the Tow Control system features and operation before operating your boat. Please contact your dealer or the Monterey Customer service department if you have any questions regarding the operation of the control system.



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 outdrive 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. 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.

4.4 Outdrive Power Tilt and Trim

All inboard/outboard drive systems have a tilt and trim feature for the outdrive. This allows the operator to control the position of the outdrive from the helm. Moving the outdrive closer to the boat transom is called trimming "in" or "down."



Mercruiser Control Emergency Stop Switch and Lanyard

Moving the outdrive further away from the boat transom is called trimming "out" or "up." In most cases, the boat will run best with the drive unit 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 outdrive 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 outdrive 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.





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 Steering System

Your Monterey is equipped with power assisted cable steering. Power assisted steering is standard equipment on Mercruiser and Volvo powered boats. Turning the steering wheel moves the gears in the helm, pushing or pulling the cable assembly and turning the outdrive. An engine driven hydraulic power steering pump and cylinder assist the cable steering, which reduces the effort required to turn the boat.

The steering wheel can be tilted to five different positions by activating the tilt lock lever located on the bottom side of the helm station. When the lever is released, it automatically locks the steering wheel at or close to that angle.

An oil reservoir near the engine hydraulic pump allows for easy system fluid check and fill. It is important that the fluid level in the reservoir be checked frequently and maintained at or near the maximum level. Only use hydraulic fluid recommended by the engine manufacturer.

Refer to the Engine and steering manufacturers' owner's manuals for specific information on the steering system.

4.6 Trim Tabs (Optional M3 & M5)

Trim tabs are optional on the M3 and M5 models and included with the MSX package. The trim tabs 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-



Typical Trim Tab Plane



Trim Tab Control Switch

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 wired so they automatically retract when the ignition switch is turned off.

Before leaving the dock or loading the boat on a trailer, make sure that the tabs are in the full "UP" position by holding the control in the bow up position for ten (10) seconds.



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.

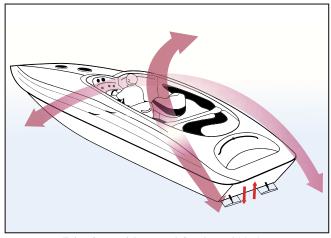
When running at a speed that will result in the boat falling off plane, lowering the tabs slightly, bow down, will improve the running angle and operating efficiency. Positioning trim tabs too far in the down position can reduce operating efficiency and cause substantial steering and handling difficulties.

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.

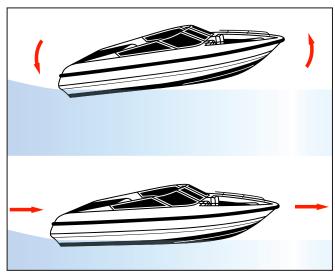
When running at high speeds be sure that the tabs are in the full "UP" position. Only enough trim plane action should be used to compensate for any listing. Trim tabs are extremely sensitive at high speeds. Adjust for this and be prepared to slow down if difficulties arise.

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

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



Tabs Control Port and Starboard Listing



Trim Tabs Control Bow Up & Bow Down

down). The trim tabs are wired so they automatically retract when the ignition switch is turned off.

4.7 Control Systems MaintenanceControl Maintenance

Periodic inspection of the control systems and all connections should be made. Signs of rust, corrosion, wear, or other deterioration should be serviced immediately. 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 adjustment becomes necessary, see your Monterey dealer.





WARNING



IMPROPERLY ADJUSTED ENGINE CONTROLS CAN CAUSE LOSS OF CONTROL AND SEVERE ENGINE OR OUTDRIVE DAMAGE. DO NOT ATTEMPT CONTROL SYSTEM ADJUSTMENTS UNLESS YOU ARE FAMILIAR WITH CONTROL SYSTEM SERVICING PROCEDURES.

Steering System Maintenance

A periodic inspection of all steering hoses, linkage and helm assemblies should be made. Signs of corrosion, cracking, loosening of fastenings, leaking fluid, excessive wear, or deterioration should be corrected immediately. The transom area in the engine compartment should be checked for leakage around the outdrive and for wires, hoses and cables that may be rubbing against the steering cylinder or tiller arm.

You also should make sure that there are no wires or cables secured to the steering cable near the power steering cylinder. The cable is attached to the power steering cylinder control valve and must be free to move slightly to activate the valve. Hard or erratic steering is an indication that the steering cable is not moving freely.

Generally, periodic lubrication of all moving parts and connections with a light waterproof grease is in order. Failure to do so could lead to steering system failure that would result in loss of control.

The engine driven power steering system has specific fluid and maintenance requirements. The fluid level and belt tension should be checked frequently. Outdrives are equipped with grease fittings and must be lubricated periodically. Please refer to the engine owner's manual for maintenance information on the power steering system and lubricating the outdrive.

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.



Trim Tab Plane and Anode

If the boat is kept in the water, the trim tabs must be equipped with a zinc 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 zinc 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.



FUEL SYSTEM

5.1 General

The gasoline fuel system used in Monterey boats is designed to 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.

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, 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.



Typical Keyless Fuel Fill

Fuel Fill

A "keyless" fuel fill is located on the port gunnel that is marked "GAS." The fuel fill is opened by lifting the tab and 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. 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 OR DIESEL FUEL 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 Vent

There is a fuel vent built into the fuel fill. While the tank is being filled, the air displaced by the fuel escapes through the vent. When the tank is full, fuel will be ejected from the fuel fill/vent.

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

5.2 Gasoline Fuel 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 prevent gasoline from siphoning out of the fuel tank should a line rupture.



WARNING



IF A FUEL LINE SHOULD LEAK, ANTI-SIPHON VALVES PREVENT A SUBSTANTIAL AMOUNT OF FUEL FROM FLOWING INTO THE BILGE. SHOULD AN ANTI-SIPHON VALVE BECOME CLOGGED, CLEAN AND REINSTALL OR REPLACE. DO NOT REMOVE THE ANTI-SIPHON VALVE FROM THE SYSTEM. ANTI-SIPHON VALVES ARE REQUIRED, BY THE U.S. COAST GUARD, TO BE INSTALLED IN ALL BOATS EQUIPPED WITH A GASOLINE ENGINE.

Fuel Filter

Each gasoline engine is equipped with a spin on, water separator type fuel filter located on the engine. The filter should be checked frequently and changed at least annually to assure an adequate supply of clean, dry fuel to the engine.

It is recommended that the filter be inspected after the first 25 hours of use and then serviced as needed. Always follow the engine or filter manufacturer's instructions when servicing or replacing the fuel filters.



WARNING



BEFORE STARTING THE ENGINE, ALWAYS OPEN ALL HATCHES, WINDOWS, AND DOORS AND RUN THE BLOWER FOR AT LEAST FOUR (4) MINUTES TO COMPLETELY VENTILATE THE BOAT AFTER SERVICING THE FUEL SYSTEM.



Typical Gas Engine Fuel Filter

5.3 Fueling Instructions



DANGER



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

CAUTION



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

To fill the fuel tank at a marina, follow this procedure:

- Make sure the boat is securely moored.
- Make sure all switches are in the "OFF" position.
- Make sure all passengers leave the boat.



• Close all doors and hatches and make sure the blower is off to prevent fuel fumes from entering the engine compartment.



WARNING



GASOLINE FUEL VAPORS THAT ACCUMULATE IN THE BILGE OR ENGINE COMPARTMENT WHILE FUELING CAN EXPLODE!! FUEL VAPORS ARE HEAVIER THAN AIR AND CAN ACCUMULATE IF THEY ARE CARRIED BY THE WIND INTO THE BILGE AND ENGINE COMPARTMENT THROUGH OPEN DOORS, HATCHES OR VENT. VAPORS CAN ALSO BE DRAWN INTO THE ENGINE COMPARTMENT BY THE BLOWERS. ALWAYS TURN THE BILGE BLOWERS OFF AND CLOSE DOORS AND HATCHES BEFORE FUELING.

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

NOTICE:

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

- The fuel cap is equipped with a flush, retractable tab and does not need a key. Raise the tab and turn it counter clockwise to open the cap.
- Remove the cap.
- Put the nozzle in the fuel opening and make sure it stays in contact with the fuel fill opening.



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.



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.

- Fill the tank slightly less than the rated capacity to avoid spilling fuel out of the vent or the fuel fill and to allow for expansion.
- Remove the nozzle.
- Install the fuel cap.
- Open all hatches, windows and doors. Run the blower for at least four minutes to completely ventilate the boat.
- 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 CABIN OR ENGINE COMPARTMENT WHILE FUELING CAN EXPLODE!! TO REDUCE THE RISK OF A FIRE AND/OR EXPLOSION AFTER FILLING THE FUEL SYSTEM, ALWAYS RUN THE BLOWER FOR AT LEAST FOUR (4) MINUTES AND 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. Please 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



LEAKING FUEL IS DANGEROUS AND CAN CAUSE A FIRE AND/OR EXPLOSION. AFTER THE FILTER ELEMENT HAS BEEN CHANGED, PRIME THE FUEL SYSTEM AND CHECK ALL FITTINGS FOR LEAKS BEFORE AND AFTER STARTING THE ENGINE.



WARNING



DO NOT DRAIN ANY FUEL IN THE BILGE. THIS COULD LEAD TO A FIRE OR EXPLOSION. CHECK ALL FUEL LINE FITTINGS

FOR LEAKS BEFORE AND AFTER STARTING THE ENGINE FOLLOWING ANY FUEL SYSTEM SERVICE.



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.



WARNING



BEFORE STARTING THE ENGINE, ALWAYS OPEN ALL HATCHES AND DOORS. THEN RUN THE BLOWER FOR AT LEAST FOUR (4) MINUTES TO COMPLETELY VENTILATE THE BOAT AFTER 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 on the M3 and M5 models and standard on MSX models.

The batteries are located in the engine compartment, forward of the engine. 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 main helm circuit breaker, located near the battery switch, protects the system from an overload. Other circuit breakers, located near the selector switch, protect the circuit for the automatic float switch for the bilge pump, 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.



M3 Single Battery Switch Panel with Circuit Breakers and Engine Hatch Battery Jumper Terminals

Main breakers 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 M3 & M5 models. You should contact your dealer or Monterey Customer Service if you have questions regarding the batteries on your boat.

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 battery switch has two positions, OFF & ON. When the 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.

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



M5 Dual Battery Switch Panel with Circuit Breakers and Engine Hatch Jumper Terminals



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





Helm Switch Panels

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 battery # 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.

NOTICE:

Current is supplied to the automatic float switch for the bilge pump, 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 engine hatch electrical circuit to open the engine compartment if the boat battery(s) are dead. These terminals and the harness provided are only for activating the engine hatch opening system and not for starting the engine or charging the batteries.

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 panel:

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 outdrive 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 breaker located in the main DC breaker panel and main breakers located on the engine.

Nav/Anchor Lights

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 Lights

Activates the docking lights in the bow.

Cockpit Lights

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

Blower

This switch supplies electrical current to the blower that provides ventilation to the engine compartment.



WARNING



GASOLINE VAPORS CAN EXPLODE. BEFORE STARTING THE ENGINE, OPERATE THE BLOWER FOR FOUR (4) MINUTES. OPEN THE ENGINE COMPARTMENT HATCH, INSPECT THE FUEL SYSTEM AND CHECK FOR THE ODOR OF GASOLINE VAPORS. ALWAYS OPERATE THE BLOWER WHILE THE ENGINE IS OPERATING BELOW CRUISE SPEED. UNDER NO CIRCUMSTANCES SHOULD THIS PROCEDURE BE OVERLOOKED.

Engine Hatch

The engine hatch switch is an ON - OFF - ON momentary switch that controls the electric actuator for the engine hatch. Press the top of the switch to raise engine 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, the transom door open and the aft lounge seat up (retracted) for the hatch lifter to operate.

Bilge Pump

Manually activates the aft bilge pump which is installed in the bilge just forward of the engine. 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 System

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.

Horn

Activates the boat horn.

Accessory (Hardtop Lights MSX)

Reserved for additional 12-volt equipment. If your boat is equipped with the MSX package, this switch will activate the lights in the hardtop that illuminate the cockpit.

Accessory (Ballast Fill/Drain)

Reserved for additional 12-volt equipment. If your boat is equipped with the MSX package, this switch will be an OFF - ON - OFF switch that controls the ballast pump for the seawater tank. Press Fill to pump water into the tank and Drain to remove the water. Refer the Ballast System chapter for additional information on the operation of the ballast pump.

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. Please 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. Please 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 above the swim platform near the aft seat. 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.

Back to Back Aft Seat Switch

Located next to the stereo in the stereo compartment near the transom door. A momentary ON - OFF - ON switch that controls the 12-volt motor that extends and retracts the aft seat above the engine compartment. Press and hold the top of the switch to extend (recline) the seat. Press and hold the bottom of the switch to retract (raise) the seat to the up position. Release the switch and the seat stops in the current position.

Holding Tank Macerator (Optional)

The holding tank overboard discharge macerator switch panel is located in the head compartment next to the holding tank monitor. 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.

Automatic Fire Extinguisher Indicator Panel (Optional)

The panel is equipped with a light that indicates the status of the automatic fire extinguishing system. When the green light is lit, it indicates the system is charged and ready. If the green light is not lit, the system has discharged.

If the system discharges, the fire extinguishing agent will shut down the engine, which can be restarted once the fire extinguishing agent has dissipated from the engine compartment. Refer to the Automatic Fire Extinguishing System in the Safety Equipment chapter and the manufacturer's owner's manual for more information on the operation of the automatic fire extinguishing 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 starboard side of the cockpit, just aft of the helm seat.



Typical Remote Mounted Stereo Control Pad



12-Volt Accessory Receptacle and MP3 Connection



Wet Sounds Equalizer Control Panel

MP3 Connection

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

Wet Sounds Equalizer Control Panel (MSX Package)

The knobs on this panel control the audio qualities of the optional Wet Sounds boat and tower premium sound system and loud speaker. A toggle switch in the panel controls the backlight color of the panel. Please refer to the Wet Sounds Audio section of this chapter detailed instructions.



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, below the stereo and the main DC breaker panel located in the storage compartment, forward of the helm. Main breakers 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" and main DC breakers in the battery switch panel located in the compartment below the stereo.

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 MSX 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 automatic float switch on the aft bilge pump. This "push to reset" breaker is always supplied current when the batteries are connected. Another breaker in the main DC breaker panel provides circuit protection for the manual switch.

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.



Typical Main DC Circuit Breaker Panel

Aft Seat

Provides protection and power to the main circuit for the actuator that moves the reclining aft seat. 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 located in the panel next to the stereo.

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.

Main DC Breaker Panel

The main DC breaker panel is located on the starboard side of the cockpit 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 in the compartment on the star-board side of the cockpit.

Head Sys

Provides protection and electrical current directly to the vacuum pump on the electric head system. A vacuum switch on the pump automatically controls the pump and maintains proper vacuum in the system.

Macerator

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

Provides protection and electrical current to the switch that activates the bilge blower in the engine compartment.

Ignition

Provides protection and electrical current to the engine ignition switch.

Trim Tabs

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

Water System

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

Engine Hatch

Provides protection and electrical current to the switch that controls the electric engine hatch lifter.

12V

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

Bilge

Provides protection and electrical current to the switch that manually activates the aft bilge pump.

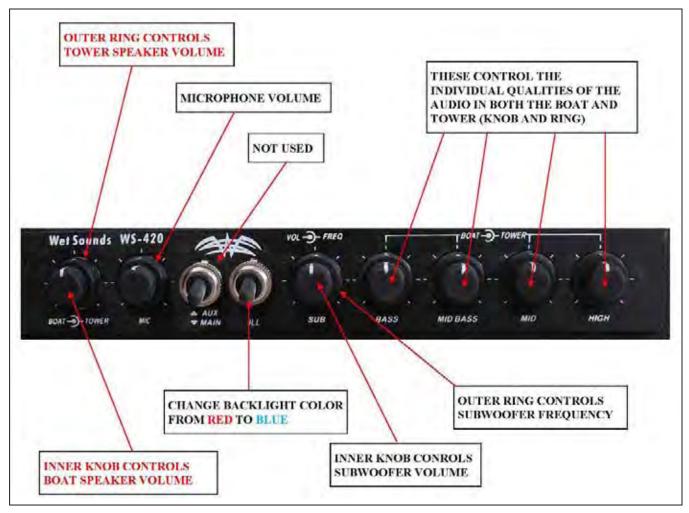
Electronics

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

Engine Main Breakers

The primary circuits for the engine is protected by heavy duty, "push to reset" breakers 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

6.3 Wet Sounds Audio System (Optional M5 and M3)

The Wet Sounds Audio System is included with the MSX package on the M3 and M5. 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

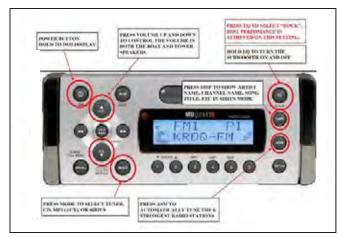
The amplifiers have been preset for best performance at the factory. These settings were obtained using the "Rock" EQ setting on the MB Quart head unit. Make sure the EQ setting on the MB Quart head unit has not been changed. The optimum settings have been included in this guide

for your reference should you ever need to return the amplifiers to their original settings.

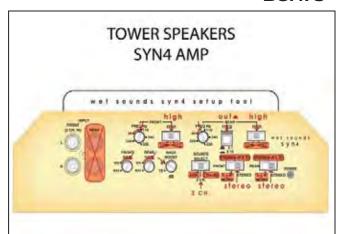
Normal Operation:

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 MB Quart head unit or one of the remote controls to adjust the volume to your desired listening level. Do not exceed 30 on the MB Quart volume level to avoid excess distortion. If this level is exceeded, the subwoofer may clip. This will temporarily shut the boat amplifier down and a fault flash will occur on the amplifier





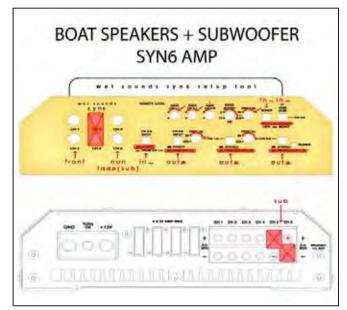




Tower Speaker Settings

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



6.4 120-Volt Battery Charging System (Optional M3 and M5)

Battery Charger AC Electrical System

The 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, 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 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 engine compartment. The battery charger automatically charges and maintains the 12-volt batteries simultaneously when activated. It is fully automatic and equipped with led lights to indicate the state of charge for each battery.

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.

6.5 Bonding System

Your boat is equipped with a bonding system that interconnects the outdrive 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 outdrive. 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.

6.6 Electrical System Maintenance

12-Volt AC Electrical System Maintenance
At least once a year, spray all exposed electrical components behind the helm and in the plugs, with a protector. Exterior light fixture bulbs should be removed and the metal contact areas coated with a non-water soluble lubricant like Teflon or silicone grease. The sockets should be sprayed with a protector. Care must be taken not to get any oil or grease on the glass portion of the bulbs as this will cause the bulb to overheat and burn out.



CAUTION



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.

Inspect all wiring for proper support, sound insulation, and tight terminals. 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. Inspect all engine wiring.



Check the electrolyte level in the 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 fill!

NOTICE:

Some batteries are sealed and do not require or allow the inspection of the electrolyte.

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.

Î

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.

AC Electrical System Maintenance

Periodically inspect all wiring for nicks, chafing, brittleness, improper support, etc. Examine the shore power cord closely for cracks in the insulation and corrosion in electrical connectors. Spraying receptacles and electrical connections with an electrical contact cleaner or a metal and electrical protector will reduce corrosion and improve electrical continuity.

Inspect all wiring for proper support, sound insulation and tight terminals.

The entire AC circuitry, especially the shore power cord, should be seasonally tested for proper continuity by an experienced electrician. This will detect any shorts, open wires, or ground faults.

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WARNING



CORROSION ALLOWED TO BUILD ON THE ELECTRICAL CONNECTORS CAN CAUSE A POOR CONNECTION RESULTING IN SHORTS, GROUND FAULTS OR POOR GROUND CONNECTIONS. ELECTRICAL CONNECTORS SHOULD BE CHECKED AT LEAST ANNUALLY AND CLEANED AS REQUIRED. DO NOT ALLOW CORROSION TO BUILD ON CONNECTIONS.



WARNING



ELECTRIC SHOCK CAN CAUSE SEVERE INJURY OR EVEN DEATH. THE AC AND DC ELECTRICAL SYSTEMS ALWAYS SHOULD BE DISCONNECTED FROM THE POWER SOURCE BEFORE INSPECTING OR SERVICING THE SYSTEM. NEVER SERVICE ANY COMPONENT OF AN ELECTRICAL SYSTEM WHILE IT IS ENERGIZED.



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 in the engine compartment 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.



Fresh Water Fill



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 supply tank slowly through the labeled deck plate. After filling the water tank, turn the Water System switch in the helm switch panel on and activate the transom shower and all fresh water faucets. Allow the pump to run until all of the air is purged from the system and a steady stream of water is flowing from the hose. Turn off the shower and faucets. 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 period, air bubbles may accumulate at the pump and the system may have to be re-primed.

The water system is equipped with a strainer on the intake side of the pump. The strainer should be checked periodically and cleaned as necessary.

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

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.

Make sure the Water System 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.



CAUTION



DO NOT ALLOW THE WATER PUMP TO RUN DRY. THE 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 SYSTEM SWITCH OFF WHEN THE FRESH WATER SYSTEM IS NOT IN USE.



Transom Shower

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.
- 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.



Transom Shower Head and Hose

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.



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BALLAST SYSTEM (MSX)



Ballast Tank Level Indicator

8.1 General

MSX Premier Package models are equipped with a ballast system that enables the operator to adjust the size of the wake by increasing or decreasing the weight of the boat. This is accomplished by filling or pumping out a seawater tank located in the bilge near the bow.

The ballast water pump is supplied by hoses connected to ball valves and thru-hull fittings located in the bilge below a hatch in the cockpit ski storage compartment. It is a self-priming, flexible impeller pump with an onboard circuit breaker. The breaker will trip if the pump overheats and automatically reset when the pump cools.

A sea strainer near the pumps protects the system from debris. Always make sure the ball valves are open before attempting to operate the ballast system.



Ballast Tank Pump Control Switch





Ballast Pump Water System

Operating the System

The ballast pump is reversible is used to fill and drain the ballast tank. It is controlled by the ballast switch in the helm switch panel. The ballast level indicator on the starboard side of the helm allows the operator to monitor the water level in the ballast tank.

A full ballast tank adds considerable weight to the forward section of the boat which moves the center of gravity forward and can have a negative effect on handling at high speeds. Therefore the ballast tank should be filled to the desired level just prior to wakeboarding or tubing operations and pumped completely out for normal operation or pulling skiers at high speeds.



WARNING



IN SOME HIGH SPEED SITUATIONS A FULL BALLAST TANK CAN CAUSE BOAT HANDLING TO BECOME DIFFICULT OR UNPREDICTABLE. THIS COULD CAUSE DAMAGE TO THE BOAT OR INJURY TO YOUR PASSENGERS. ALWAYS EMPTY THE BALLAST TANK WHEN WATER SPORTS ACTIVITIES ARE COMPLETE AND BEFORE OPERATING THE BOAT NORMALLY OR AT HIGH SPEEDS.

The ballast switch is a three position ON - OFF - ON switch. To fill the ballast tank, make sure the thru-hull valve is open and activate the switch in the FILL position until the tank reaches the desired level, then turn the pump off. To drain the ballast tank, activate the switch in the DRAIN position and monitor the water level in the tank until it is empty, then turn the pump off. Always monitor the water level while filling or draining the ballast tank and never allow the tank to overfill or the pump to run dry.

NOTICE:

The ballast pump will be damaged if it is allowed to run dry for more than a few seconds. Always monitor the water level in the ballast tank as it drains and turn the pump off immediately when it is empty.

8.2 Ballast System Maintenance

The following items should be done routinely to help maintain your ballast water system:

 Check hoses, particularly the seawater supply lines, for signs of deterioration.



- Remove and clean the seawater strainer for the pump as required.
- Spray the pump with a protective oil periodically.
- Operate the thru-hull valve at least once a month to keep it operating properly.

Sea Strainer

Seawater is supplied to the ballast pump from a thru-hull fitting located in the bilge below a hatch in the ski storage compartment. A sea strainer between the pump and thru hull fitting protects the system from contaminants that could damage the pump. Make sure the seawater pump receives adequate seawater by periodically cleaning the sea strainer basket.

Cleaning the Sea Strainer

- Close the water intake valve.
- Open the top of the strainer and remove the screen.
- Thoroughly flush the screen and the inside of the strainer to remove foreign matter.
- Lubricate the seal.
- Reassemble the strainer making sure that all fasteners are tight.
- Open the intake valve.
- Activate the ballast pump with the switch in the Fill position. Allow the pump to prime and partially fill the ballast tank, then turn the pump off. Inspect the strainer and hoses for leaks.

The pump is self-priming and should begin moving water within 15 or 20 seconds. If it doesn't begin pumping there may be an air leak at the strainer. Turn the pump off and make sure the thru-hull valve is on. If the valve is on, remove the lid on the strainer. Check that the strainer is assembled properly and the seal area for the lid is clean. Install the lid and make sure it is seated properly, then try the pump again. If it still won't pump, there is a problem in the pump and you should contact your dealer for assistance.



Sea Strainer with Basket Removed



Sea Strainer Lid and Strainer Basket



CAUTION



SHOULD A HOSE RUPTURE, TURN THE PUMP OFF IMMEDIATELY. ALWAYS CLOSE THE THRU-HULL VALVE WHEN PERFORMING MAINTENANCE ON A SEAWATER PUMP.

THE BALLAST SYSTEM MUST BE PROPERLY WINTERIZED PRIOR TO WINTER LAY-UP. SEE SECTION ON WINTERIZING.



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DRAINAGE SYSTEMS

9.1 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 engine 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.

9.2 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 float 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.



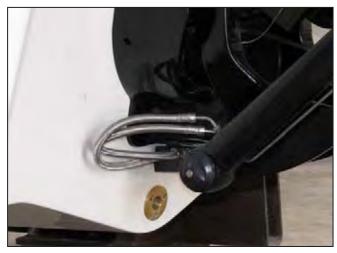
A LOOSE DRAIN PLUG WILL ALLOW SEAWATER TO ENTER THE BILGE AND COULD CAUSE THE BOAT TO SINK. IT IS VERY IMPORTANT TO CHECK THE DRAIN PLUG FREQUENTLY TO ENSURE IT IS PROPERLY TIGHTENED.

NOTICE:

See Electrical Systems for additional information on bilge pump operation.



Typical Bilge Pump with Automatic Float Switch



Transom Drain Plug

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.





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.

9.3 Cockpit and Deck Drains

Cockpit and Engine Compartment

Water is drained from the cockpit through the drain system for the engine compartment hatch. The forward side of the engine compartment 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 to overboard to fittings in the hull sides.

Wet Bar Sink Drains (Optional on M5 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 them clean and free flowing.

Cockpit Storage Compartments

The helm and stern storage compartments and the storage areas below the bow seats are drained by gravity to the cockpit deck. Water drains from the cockpit through the engine compartment hatch drain system to the bilge. The head compartment and below deck storage compartment drain by gravity to the bilge. Water in the bilge is drained overboard by the bilge pump.

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.

9.4 Grey Water System (Optional M5 Models Only)

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



Engine Compartment and Cockpit Drainage



Rope Locker Drain

whenever the battery switch is on and is located in the bilge below the cockpit ski/wakeboard storage compartment floor.

The fluid level in the waste/grey water holding tank is monitored by the "Tank Watch Monitor" in the head compartment. When the 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. The toilets will not flush when the tank is full and an overfilled holding tank will force waste into the vent filter. This will clog the filter, prevent the sinks from draining and could cause damage to the holding tank. It will also cause unpleasant odors in the cockpit and head compartment.



NOTICE:

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

9.5 WakeBoard Tower Drains (MSX Models)

There is a hole drilled in the starboard front leg base on towers to prevent water from being trapped within the leg 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.

9.6 Drainage System Maintenance

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

 Clean the engine 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.
- Frequently test the automatic bilge pump switch for proper operation. This is accomplished by raising the float switch 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 pump.
- 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.



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VENTILATION SYSTEM



Port Side Engine Compartment Vent

10.1 Engine Compartment Ventilation

All Monterey inboard boats are equipped with an engine compartment ventilation system consisting of intake ducts, exhaust ducts and an exhaust blower. The ventilation system is designed to meet or exceed the requirements of the United States Coast Guard in effect at the time of manufacture and remove fuel vapors and excess heat from the engine room.

Free Air System

A flow of air into the engine 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 engine compartment. The exhaust area of the vents have ducts that reach to the lower part of the engine compartment. This provides adequate air movement while operating at or near cruise speeds.

The vents are designed with special baffles that prevent seawater or spray from entering the engine or storage compartments while providing adequate air movement for the engine. The air flow from the port vent flows from the deck vent, through the port transom storage compartment and then to the engine compartment through vents in the side of the inside wall of the compartment. Therefore, it is important not to fill



Starboard Engine Compartment Vent

this compartment with dunnage to the point the stowed items severely restrict the air flow.

Forced Ventilation

An electric blower provides ventilation to the engine compartment prior to start up of the engine and while operating below cruise speed. The blower is activated by a switch at the helm and is located in the vent hose on the starboard side of the engine compartment. When activated, the blower will remove bilge fumes through the bilge exhaust vents. Refer to the Electrical Systems chapter for more information on blower operation.



Inspect the blower frequently to make sure it is operating properly. Always replace worn or defective components with new components of the same type. Refer to the Electrical Systems chapter for more information on blower operation.

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DANGER



GASOLINE VAPORS CAN EXPLODE. BEFORE STARTING THE ENGINE, OPERATE THE ENGINE COMPARTMENT BLOWER FOR FOUR (4) MINUTES, OPEN THE ENGINE ACCESS HATCH, INSPECT THE FUEL SYSTEM, AND CHECK THE ENGINE FOR THE ODOR OF GASOLINE VAPORS. ALWAYS OPERATE THE BLOWER WHILE THE ENGINE IS AT IDLE. UNDER NO CIRCUMSTANCES SHOULD THIS PROCEDURE BE OVERLOOKED.



WARNING



ALWAYS RUN THE EXHAUST BLOWER WHEN OPERATING THE BOAT BELOW CRUISE SPEEDS TO ENSURE ADEQUATE VENTILATION AND COOLING OF THE ENGINE COMPARTMENT.



Port Storage Compartment Vents Located in Engine Compartment



WARNING



OBSTRUCTING THE VENTILATION SYSTEM WILL RESTRICT AIR IN AND OUT OF THE ENGINE COMPARTMENT. THE AIR FLOW THROUGH THE PORT TRANSOM WAKEBOARD STORAGE COMPARTMENT IS IMPORTANT FOR PROPER AIR FLOW VOLUME. THIS COMPARTMENT IS DESIGNED FOR ITEMS LIKE SKIS, KNEEBOARDS AND WAKEBOARDS THAT DON'T RESTRICT THE AIRFLOW. MAKE SURE THE AIRFLOW IN THIS COMPARTMENT IS NEVER RESTRICTED BY OVERLOADING IT WITH ITEMS THAT WILL BLOCK THE VENTS. DO NOT OBSTRUCT OR MODIFY THE VENTILATION SYSTEM.



Port Wakeboard Storage Compartment with Through Ventilation to the Engine Compartment



10.2 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 engine 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 engine compartment.

• The bilge blower is permanently lubricated and requires no maintenance. Blower operation can and should be tested by placing a hand over the exhaust starboard exhaust vent. Do not rely on the sound of the blower. A substantial amount of air should be exhausted by the blower. Frequently check the intake vents for obstructions, preferably before each cruise.

NOTICE:

Should blower noise become excessive, the source of the noise should be found and corrected before operating the boat.



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EXTERIOR EQUIPMENT

11.1 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.

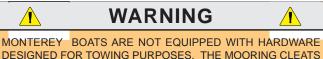
Fenders or mooring lines should be secured to the cleats and not to rails or stanchions. The cleats on your boat are retractable and flush with the deck when not in use. To use the cleats, pull up on the center of the cleat until it locks in the mooring position. Be sure a clear lead exists when running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



Retractable Cleat

NOTICE:

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



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



Anchor/Rope Locker and Retractable Bow Boarding Ladder

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 anchor locker is designed for one fluke style anchor that is properly secured in the cradle. Do not store additional anchors or any



Rope Locker and Danforth Style Anchor Cradle



heavy object in the anchor locker. Spare anchors and weights for floating markers will bounce and damage the hull or rope locker 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 to the recess 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.

Bow Eye and Bow Plate

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.



Bow Eye and Plate



Bow Boarding 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. Pull to extend the ladder out to the open position. Close and securely latch the anchor locker hatch before using the ladder.

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



Windshield

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

The section is opened by releasing the locks on the inside of the windshield. A magnetic stop on the deck automatically secures the windshield section 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 center section is properly secured in the open or closed position before cruising.



Windshield with Helm Storage Door Latched Open



CAUTION



USE CAUTION WHEN OPENING WINDSHIELD WALK-THRU. THIS MAGNET IS VERY POWERFUL AND COULD CAUSE INJURY OR DAMAGE TO VESSEL

TO AVOID INJURY, THE CENTER WINDSHIELD SECTION MUST BE SECURED IN THE OPEN OR CLOSED POSITION WHEN VESSELIS 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 aluminum.

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11.2 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 (flexi Teek or SeaDek) inlay is optional. The synthetic teak surface is maintenance free other than routine cleaning.



Windshield Center Section Latches



Swim Platform and Transom Ski Tow



A telescoping boarding ladder is recessed into a compartment in the swim platform below a special hatch. The compartment is drained overboard to a thru-hull fitting below the platform near the outdrive. 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 props as far away from the ladder location as possible. Open the hatch on the starboard side of the swim platform. Rotate the ladder out of the recess to the down position. Pull to extend the ladder out to the open position. 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.

Transom Ski Tow

A stainless steel ski tow fitting is mounted to the center of the swim platform above the outdrive. The tow fitting 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 using the attachment loops and never tied to the ski tow or to any type of metal hook. Tied ski ropes are very difficult to remove and metal hooks will damage the ski tow and the fiberglass around it and 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.

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



Stern Boarding Ladder



Transom Ski Storage Compartment and Actuator Pin Access Hatch

Transom Storage Compartment

There is a large storage compartment located on the port side of the transom below the rear facing bench seat. A 12-volt light activated by the Cockpit Light switch at the helm illuminates the compartment. Another hatch in the starboard wall of the compartment provides access to the engine hatch actuator and the emergency quick release pin that allows the engine hatch to be opened manually if the electric hatch actuator should fail. There are also straps that hold ski ropes or mooring lines.

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

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

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 Lights 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.

11.3 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.



Docking Lights





Unlatched

Latched



Transom Door Closed (Door must be in the open position to open the engine hatch)

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.



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

Engine Access

The engine hatch is raised by an electric actuator that is activated by the Engine Hatch switch in the helm switch panel. The electric actuator raises and lowers the engine 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 lounge seat fully retracted before the engine hatch can be lifted. Magnetic interlock switches built into the transom door and aft seat activate the circuit for engine hatch actuator and allow the hatch to be lifted only when the transom door is open and the seat is fully retracted. The interlock system is necessary to prevent the transom door, engine hatch and aft seat from being damaged when the hatch is lifted. Always make sure the transom door is secured in the full open position and the aft seat is retracted before attempting to lift the engine hatch.



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



Engine Access Hatch



Emergency Engine Hatch Jumper Harness



If the boat battery is dead, the engine 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 Engine Hatch switch in the helm switch panel to raise the engine 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 engine hatch. To lift the hatch manually, open the stern storage compartment on the port side of the engine hatch 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.

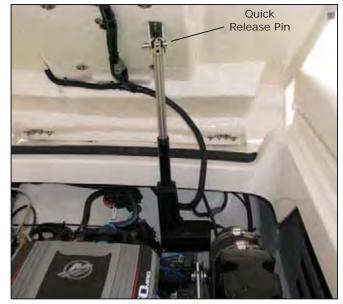
Once the pin is removed, the engine hatch can be lifted to the open position. The engine hatch is heavy and requires two people to lift it. Additionally you should be prepared to support the hatch in the open position with 2 x 4 of the proper length. The support must be installed so that it can't slip and allow the engine hatch to fall. Repair the engine hatch actuator and properly attach it to the boat and engine hatch before performing any other service to components in the engine compartment.



WARNING



THE ENGINE HATCH IS HEAVY AND CAN DAMAGE THE BOAT OR CAUSE SEVERE INJURY TO PEOPLE WORKING IN THE ENGINE COMPARTMENT IF IT FALLS. ALWAYS HAVE A PERSON MONITOR THE TEMPORARY ENGINE HATCH SUPPORT TO MAKE SURE IT CANNOT SLIP WHILE THE ENGINE HATCH ACTUATOR IS BEING REPAIRED. NEVER ENTER THE ENGINE 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.



Engine Hatch Actuator and Emergency Quick Release Pin



M5 Standard Aft Facing Jump Seat and Slide-Out Cooler

Aft Facing Jump Seat

The starboard aft facing jump is standard on the M5. The M5 models are 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 inside the compartment with the door securely latched before operating the boat above idle speed.



Wet Bar (Optional on the M5)

The wet bar is optional on the M5 and standard equipment on the M3. 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 System 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.

M5 Wet Bar Slide-Out Cooler

The M5 models are equipped with a carry-on slide-out cooler in the compartment below the sink. The cooler is accessed through a door in the side of the wet bar that is secured with a push to close 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.

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 the cooler is slid inside the compartment with the door securely latched before operating the boat above idle speed.

M3 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.

Cockpit Lounge Seat

The cockpit lounge seat provides seating in the rear of the cockpit. The rear sun lounge section converts from a back to back bench seat to a sun lounge and raises with the engine hatch. When the reclining sun lounge seat is retracted, it provides a rear facing bench seat 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.



M3 Wet Bar, Sink and Storage Compartment



M5 Cockpit Lounge Seat and Cooler



M5 Lounge Cooler and Fold Down Armrest





Lay Down Sun Lounge - Extended

There is a cooler below the port lounge seat cushion that drains to the cockpit and there are drink holders located on each end of the lounge. The cooler is 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.

On M5 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.

The sun lounge seat is equipped with an electric actuator that extends the seat and converts the lounge from a back to back bench seat to a sun lounge. The aft seat actuator is controlled by the Aft Seat switch in the panel next to the stereo. To convert the seat to a sun lounge, press and hold Extend until the seat is fully extended and all cushions are flat. To return the lounge to a back to back bench seat, make sure the lounge backrest cushion is in the full down position, then press and hold Retract until the seat is in the full up position.

Notice:

The seat must be in the fully retracted position before the engine hatch can be raised.

The hinged rear cushion of the lounge seat has four positions controlled by a sliding support located below the cushion that is visible when the seat is fully extended. When the support is in the full aft position, the cushion is flat and makes a full lay down sun lounge. This is the default position when the seat is first extended and the cushion must be in this position before the lounge seat can be retracted to the upright position. The three notched positions in the support track allow the cushion to be converted to a backrest and set at



Sun Lounge with Backrest Up



Sliding, Adjustable Support for Sun Lounge Backrest

different angles whenever the lounge is fully extended. The backrest is raised by lifting the rear of the cushion and sliding the support forward to the desired position. When the support reaches the desired position, allow it to drop slightly into the notch in the track to lock the back rest. To change the backrest position, lift the rear of the cushion until the support lifts out of the notch and slide it to the new position. Make sure to support the weight of the cushion with one hand while positioning the support to prevent the cushion from accidently dropping and pinching your hand or fingers.





Cockpit Table and Pedestal

For the safety of your passengers, always make sure the aft lounge seat is retracted to the full up position whenever the engine is running and the boat is underway. The backrest secures the cockpit and lounge seat area and prevents someone from accidently falling overboard when it is in retracted position. Remember, never allow someone to be on the rear facing bench seat when the engine is running.

Cockpit Table

A removable cockpit table mounts to a bracket on the rear side of the cockpit lounge seat base or the base of the bow seats. 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 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 at 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. 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.



Table Safety Pin



Table in Storage Brackets



Passenger and Helm Seats w/ Bolsters Down



Helm and Passenger Seats

The helm and passenger seats are equipped with a flip up bolster to provide more room between the seat and the 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 seats that swivel and adjust fore and aft. There are two levers on the seat base. Lifting the lever located at the port front of the seat base allows the seat to be adjusted fore and aft. Releasing the lever locks the seat in that position. A friction knob below the slide adjustment lever adjusts the tension of seat base on the pedestal. It should be adjusted tight enough to allow the seat to be swiveled when desired and 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.

Helm

The steering, engine control, 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 helm below the steering wheel. The circuit breakers for the helm activated accessories are located in a panel in the storage locker, forward of the helm and molded-in electronics storage is located in the center of the helm, forward of the steering wheel.

An optional GPS/chart plotter/depth sounder may be installed in the helm and an electronic depth sounder with a shallow water alarm is standard. Electronic Navigational equipment manufacturers provide detailed instruction manuals with their products. You should read them carefully and review the operation of the electronics with your dealer at the time of delivery.



Passenger and Helm Seats w/ Bolsters Up



Helm Seat Adjustment Levers



M5 Helm



The back of the helm station is accessed through a hatch in the large storage compartment just forward of the helm. This hatch 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 hatch.

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-thru 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-thru 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 Light switch at the helm illuminates the compartment. The compartment is equipped with special mounting brackets for the cockpit table and bow filler cushions. It is also where the amplifiers for the stereo options are mounted.

The door could be damaged or hurt a passenger by the motion of the boat if it is allowed to swing free. Always make sure the door is latched in either position 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 top of 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



Helm Storage Compartment w/ table and Cushion Brackets



Outer Door Latched to Close Off Bow Area Walk-Thru



Helm Storage Compartment Door Latched Closed w/ Walk-Thru Door Nested in Open Position



Head Compartment Door



lubricate the latch to protect it from corrosion and help keep it operating properly.

The M3 head compartment is designed to accommodate an optional portable marine toilet. It is equipped with a light that is activated by the Cockpit Lights switch at the helm and an ON/OFF switch on the light fixture in the head compartment.

The M5 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 Lights 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.



In-Floor Storage Compartment



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.

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.

M5 models with the optional grey water system could be equipped with a sump pump that is located below an access hatch in the floor of this compartment. Refer to the Drainage Systems chapter for information on the grey water system.



M3 Aft Facing Bow Bench Seat and Storage

MSX models are equipped with a ballast pump and sea strainer that is mounted in the rear of this compartment. If your boat is equipped with the MSX package, you should be careful when moving skis and wakeboards in and out of this compartment to avoid hitting and damaging the pump and strainer.

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 reverse facing bench seat at the front of the bow seating area. The area is illuminated by LED lights recessed into the seat bases (M3 and M5) and cockpit sides (M5). The lights are activated by the Cockpit Lights switch in the helm switch panel.





M3 with Bow Lounge Seat Cushion Removed and Foldout Support Latched in the Stored Position



M3 with Bow Lounge Seat Cushion Installed and Foldout Support Latched in the Open, Seat Support Position

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.

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.

M3 Bow Seating

The M3 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



Walk-thru Windshield Panel Open and secured to Magnetic Stop



M3 Bow Seat Area with Lounge Seat Insert Cushions and Cockpit Table Mounting Bracket





M5 Bow Rear Facing Bench Seat Storage



M5 Bow Seats with Lounge Insert

in the helm storage compartment when not being used. The supports fold against the forward bench seat to create an open cockpit area when not being used and 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 from the bench seat until they are parallel with the side wall of head or helm storage compartment. Securely latch the supports and install the seat cushions. When the supports are in the seat position, there is storage below each seat.

M5 Bow Seating

The M5 bow seat area is equipped with a molded in, rear 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 at the front of the forward facing seats and rear edge of the bench seat.



M5 Forward Facing Bow Seat and Arm Rest

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.



11.4 Bimini Top and Optional 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 legs to the deck hinges using 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 stanchions, one at a time, to the rear deck hinges located near the rear of the windshield. Use your body weight on the rear corner of the bimini to pull down and stretch the fabric until the stanchion eye end lines up with the hole in the deck hinge. Secure each eye end to the deck hinge with the quick release pins. 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.

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 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 walkthru 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.

11.5 Arch & Tower (Optional)

An aluminum wakeboard tower is available as optional equipment for M3 and M5 models. An aluminum arch with a ski tow is optional on M5 models.

The M3 tower is made of anodized 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.

The M5 arch is painted aluminum and 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 arch or 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 paint or anodizing when the fastener is installed. Periodically applying automotive or boat wax to the painted M5 arch will provide additional

protection from the harsh effects of saltwater and ultraviolet rays. The arch or tower should be washed with soap and freshwater after each day of boating in saltwater. Refer to Anodized Aluminum or Powder Coated and Painted Aluminum in the Routine Maintenance chapter for additional information on maintaining aluminum fabrications.

The M5 arch is mounted to special fasteners bolted to the deck with stainless steel Allen Head bolts 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 arch prevents it from rotating too far and damaging the windshield and/or arch. To fold the arch, loosen the forward bolts slightly, then remove the rear bolts. Have someone support the arch as the last rear bolt is being removed to take the strain off the bolt and prevent the arch from dropping suddenly when the bolt is removed. Once the bolt is removed, slowly lower the arch until it is supported by the cables in the down position. Reverse this process to raise the arch and tighten the bolts securely.

Don't overtighten the mounting bolts and never use impact wrenches and power tools on the bolts. The bolts and fasteners are stainless steel which will cause the bolt threads to gall if the bolts are turned too fast by power tools. Galling is the term for thread damage that occurs from heat build up in the threads of stainless steel fittings as they are tightened. Galling will destroy the threads and lock up the fasteners before they are tight, destroying the fasteners and rendering them unusable.

NOTICE:

A special welded bracket that supports the arch is standard with the arch option and must be used if the arch is rotated forward while trailering.

The tower for the M3 and the Arch for the M5 are equipped with a ski tow designed for pulling one average sized skier or wakeboarder. You should never tow more than one skier or wakeboarder from the any tower or arch. Towing more than one skier will put too much strain on the fabrication and could cause damage to the arch, tower and deck. Refer to the Transom Ski Tow section in this chapter for more information on using the arch or tower ski tow fitting.

The warranty for the arch will be void if it is modified in any way or overloaded by towing too many



M5 Arch



Arch Mounting Bolts

skiers or wakeboarders. Additionally, if items like antennas, spotlights and other accessories are mounted improperly or in the wrong location, the warranty could be void. If you intend to add equipment or make modifications to the arch, 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 on the arch.

Arch/Tower Convertible Top Enclosure

The canvas for Monterey boats is custom fit to each boat. 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 arch and covered with storage boots when the top is in the folded or down position. To open the rear top, remove the boot on the rear portion of the top and zip the top to the zipper on the rear of the arch. Open the top by pulling the main bow towards the rear of the boat until it stops. Remove the quick release pins on the deck hinges for the stanchions that are mounted on the arch and release the Velcro straps securing the stanchions to the main bows. Then attach the adjustable stanchions to the deck hinges. Secure each stanchion socket to the deck hinge with the quick release pins. Use your body weight on each rear corner of the top to pull down and stretch the fabric until the spring loaded button in the inner stanchion tube lines up with the hole in the outer tube and locks into place. The top canvas should be stretched tight when both stanchions are locked in the out position.

To open the front top, remove the boot on the front portion of the top and zip the top to the zipper on the front of the arch. Release the stanchions from the lower deck hinges and open the top it by pulling the main bow towards the front of the boat until it stops. Use your body weight on each side of the top bow to pull down and stretch the fabric until the stanchion socket will fit into the upper deck hinge on the forward side of the arch. Repeat on the other side and secure each stanchion socket to the deck hinge with the quick release pins. The top canvas should be stretched tight when both stanchions are secured in the upper deck hinge.

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 arch beginning with the forward snaps on the windshield. If the top is adjusted properly, the side curtains will have to



Convertible Top Deck Hinges and Quick Release Pins

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 arch.

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 arch and deck beginning with the forward snaps on the arch.

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.

11.6 Wakeboard Tower & Hardtop (MSX Models)

The wakeboard tower and hard top consists of a laminated fiberglass top mounted to a welded alu-



MSX Hardtop and Tower

minum frame that is bolted to the deck. The ski tow, anchor light, GPS antenna and wet sounds speakers are located on the tower arch above the hardtop. The starboard rear leg is used as the wire chase for lights, speakers and antennas mounted to the tower.

The tower ski tow is designed for pulling one average sized skier or wakeboarder. You should never tow more than one skier or wakeboarder from the tower arch. Towing more than one skier will put too much strain on the tower and could cause damage to the tower and deck. Refer to the Transom Ski Tow section of this chapter for more information on using the tower ski tow fitting.

Do not mount any heavy equipment to the fiberglass hard top. The hard top is not designed to support the weight of heavy accessories and could be damaged. Make sure to leave the aft section clear for the tow rope.

The warranty for the hard top or tower will be void if the structure is modified in any way or if heavy accessories are mounted to the top. Additionally, if items like antennas, spotlights, wakeboard racks and other accessories are mounted to the tower in the wrong location, the warranty could be void. If you intend to add equipment or make modifications to the hard top or tower, you should contact Monterey Customer Service to make sure the equipment you would like to add or the intended modification will not void the warranty on the fiberglass top or the aluminum structure.



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 CONE 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 CLIMB ON, HANG ON, SIT ON TOP, JUMP OR DIVE OFF THIS TOW TOWER AT ANY TIME.
- 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.

Hardtop Canvas Enclosure

Because the aluminum frames vary slightly, the side curtains, front clear connector and drop curtain are custom made to each boat at the factory. To install the curtains, close the center section of the windshield and slide the front clear connector into the slide track at the front of the top and snap it to the windshield beginning with the center snaps. The clear connector will have to be stretched just enough to pull out the wrinkles to reach the snaps on the windshield.



Once the clear connector is completely installed, the side curtains can be put on. Slide the side curtains into the slide tracks on each side of the top and to the zippers on the front connector. Snap the curtains to the windshield and deck beginning with the forward snaps. The side curtains will have to be stretched slightly to pull out the wrinkles and reach the snaps.

If you have a drop curtain, slide it into the slide track on the back of the hard top and attach it 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 at the front of the hardtop. This roll up panel allows the walk-thru feature of the cockpit and windshield to be used when the clear connector is 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 whether.

Raising the Tower/Hardtop (MSX Models)

The hardtop/tower on MSX models can be folded to reduce the height for shipping and storage. Special supports are included with the boat to support the hardtop in the folded position. The supports mount to existing screw holes in the hardtop and the proper oval head screws must be inserted in the holes in the hardtop when the supports are removed.

Use the following procedure to raise the tower/hardtop from the folded position. Reverse this procedure to lower the hardtop and tower.

- 1. Remove all straps securing the hardtop.
- 2. Remove the legs from the helm storage compartment and unwrap the padding.

- 3. Remove the bolts from the legs.
- 4. Apply anti-seize to the bolts and loosely attach one bolt to the lower end of each front leg securing the leg to the tower frame. The legs are labeled port and starboard, up and down.
- 5. Using a hoist or 4 people, one on each corner of the top, raise the top and tower until the top bolt hole in the front legs aligns with the hole in the tower fitting. A fifth person will install the leg bolts. Apply anti-seize to the bolts and install the bolts in the upper end of the forward legs. It may be necessary to move the tower from side to side slightly to align the bolt holes and allow the bolts to engage properly in the threaded holes.
- 6. Use an Allen wrench to tighten the bolts in the aft legs first, then the bolts in the front legs.
- 7. Remove the screws securing the forward support to the hardtop and remove the support. Replace the support screws with #8 X 1" oval head screws supplied with the leg bolts.
- 8. Remove the rear support.



CAUTION



DO NOT USE POWER TOOLS TO LOOSEN OR TIGHTEN THE BOLTS AS DAMAGE TO THE THREADS WILL OCCUR. USE HAND TOOLS ONLY.

11.7 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

12.1 Head Compartment

M5 Head Compartment

The M5 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 light switch in the helm switch panel and a switch on the light fixture.

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.

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.

M3 Head Compartment

The M3 head compartment is equipped with a light, some room for storage and an optional portable head. The compartment drains by gravity to the bilge. The light is activated by the Interior Lights switch on the helm switch panel and a switch on the light fixture in the head compartment.

12.2 Marine Head Systems Portable Head System (Standard)

The portable head is standard on the M5 and M3. 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



M5 Head Compartment and Vacuflush Marine Toilet



M3 Head Compartment

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 M5 and M3 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 periodically. Please 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. Please refer to the manufacturer owner's manual for winterizing and cold weather instructions

Manual Porcelain Head System (Optional M5)

A manual marine toilet is provided as optional equipment on M5 models. The 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



Portable Marine Toilet



Typical Manual Flush Marine Head

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.

Manual Head System Holding Tank

The holding tank is located in the bilge below the cockpit floor. When the tank is full it must either



be pumped out by an approved waste dumping station through the waste deck fitting or the optional overboard discharge pump.

To pump out the holding tank with the overboard waste discharge system, open the valve at the discharge thru-hull fitting in the forward bilge and activate the momentary switch in the Overboard Discharge switch panel. Monitor the fluid level as the tank is pumped and release the switch and to turn off the discharge pump when pumping is complete, then close the ball valve at the thru-hull fitting.

NOTICE:

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

NOTICE:

In order to comply with current State, Federal and Coast Guard regulations, the Overboard Discharge Valve must be off and secured with a lock or wire tie strap whenever the boat is operating in areas in which 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.

Manual 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.

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.



Vacuflush Marine Head System

Vacuflush Head System (Optional M5)

A VacuFlush marine head system is optional on M5 models. VacuFlush systems use a small amount of water (one pint to one quart) and vacuum which is generated by the 12-volt vacuum pump to flush. The toilet is connected to the pressurized fresh water system. Using fresh water results in less odor in the head compartment and cockpit.

To use the toilet, make sure the Water System switch in the helm switch panel is on. Then add water to wet the bowl by lifting the foot activated flush lever slightly until the desired water level is reached. Flush the toilet by pressing the flush lever all the way down for approximately three seconds or until contents clear the bowl. A sharp popping noise is normal when the vacuum seal is broken and flushing action begins. It is also normal for a small amount of water to remain in the bowl after flushing.

The waste is transferred into the holding tank where it remains until it is pumped out by a waste dumping station or the optional overboard macerator discharge system. The waste moves through a one-inch opening in the toilet base. Incoming air fragments the waste as it passes through the base opening. This process eliminates the need for macerators or mechanical motors in the toilet base.

The vacuum generator is mounted on the holding tank and contains stored vacuum. System



vacuum is monitored by a vacuum switch which is located on the vacuum generator tank. When the switch senses a drop in vacuum in the system, it automatically signals the pump to energize and bring the vacuum back to operating level. This process is normally completed in less than two minutes.

It is normal for the stored vacuum to leak down slightly between flushes, causing the vacuum pump to run for a short period. The pump should not run more than once every three hours after the last flush for recharging the system. A holding tank fluid level monitor and macerator pump out switch is located in the head compartment just above the vanity counter top. Refer to the toilet manufacturer owner's manual for more information on the operation of the VacuFlush marine head system.

VacuFlush Holding Tank and Optional Macerator Discharge Pump

The VacuFlush holding tank and vacuum generator are located in the bilge below the cockpit. If the optional overboard macerator discharge pump is installed on your boat, it is located on the holding tank and discharges waste to a thru-hull fitting in the forward bilge below the access hatch in the in-floor storage compartment.

When the tank is full, the tank monitor will show full and the vacuum pump will not run. The tank must either be pumped out by an approved waste dumping station through the waste deck fitting in the deck or be pumped overboard with the optional macerator discharge pump, when legal to do so.

To operate the macerator discharge pump, open the seacock at the overboard discharge thru-hull fitting and activate the momentary macerator switch in the head compartment. Monitor the fluid level until the tank is emptied. Release the switch and close the discharge seacock when pumping is complete.

NOTICE:

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

NOTICE:

In order to comply with current State, Federal and Coast Guard regulations, the Overboard Discharge Valve must be off and secured with a lock or wire tie strap whenever the boat is operating in areas in which the discharge of sewage is prohibited.

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CAUTION



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.

VacuFlush Head System Maintenance

The head should be cleaned and inspected for leaks regularly. Monitor the cycle time of the vacuum pump. If it cycles more than once every two or three hours or runs longer than three minutes after a flush, there may be a leak in the system or the vacuum pump may require service. Always make sure to leave enough water in the bowl to cover the flush valve and bowl seal. Periodically, lubricate the seal with Teflon grease. This will help keep the seal soft and pliable.

The holding tank should be pumped out and flushed as needed. Periodically add chemical to the head to help control odor and to chemically break down the waste. The macerator and vacuum pumps should be sprayed with a metal protector periodically to reduce corrosion. 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. See the manufacturer owner's manual for additional operating and maintenance information.



ROUTINE MAINTENANCE

13.1 Exterior Hull and 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-of-the-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 OUTDRIVE. MOST ANTIFOULING PAINTS DESIGNED FOR HULL BOTTOMS CONTAIN COPPER AND CAN CAUSE SEVERE GALVANIC CORROSION DAMAGE TO THE OUTDRIVE UNIT. USE ONLY ANTIFOULING PAINT DESIGNED FOR OUTDRIVES AND OUTBOARD MOTORS. ALWAYS LEAVE A ONE INCH BARRIER BETWEEN THE HULL BOTTOM PAINT AND OUTDRIVE.

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 inboard engine's freshwater cooling system, catalytic converter raw water exhaust manifold and the outdrive. 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 scraping 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:

Your Volvo Penta or Mercruiser product has been shipped with Aluminum anodes. Aluminum is effective in both saltwater and in fresh water. If you will be boating in saltwater exclusively, we recommend switching the anodes to Zinc. If you will be boating in fresh water exclusively, we recommend switching the anodes to Magnesium. Using the recommended 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.



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	deaning Wax Apply with soft, dry cloth. to cure for seconds. If fresh wate the area. The will help retainless.	

- 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 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, please 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 wakeboard tower and fiberglass hardtop, 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 and fiberglass hardtop, 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:

- 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).



13.2 Upholstery, Canvas and 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.



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.

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.



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.

13.3 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.

13.4 Bilge and Engine Compartment

To keep the bilge clean and fresh, use a commercial bilge cleaner regularly. Follow the directions carefully. The engine and engine compartment should be kept clean and free of oil accumulation and debris. All exposed pumps and metal components, including the engine and drive gear, should be sprayed periodically with a protector to reduce the corrosive effects of the high humidity always present in these areas.

Maintenance intervals are outlined in the engine owner's manuals. Their recommendations should be followed exactly.

Periodically check the bilge pump for proper operation and clean debris from the strainers and float switch. Inspect all hoses, clamps and thru-hulls for leaks and tightness on a regular basis and operate all thru-hull valves at least once a month to keep them operating properly.

A flow of air into the bilge is provided by vents located in the deck near the engine compartment. Periodic inspection and cleaning of the ventilation ducts is necessary to ensure adequate air circulation.

Engine

Proper engine maintenance is essential to the proper performance and reliability of your inboard engine. Maintenance schedules and procedures are outlined in your engine owner's manual. They should be followed exactly.

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 cetane or 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. Your dealer or the engine manufacturer can provide additional information on fuel degradation and fuel stabilizers recommended for your engine.

13.5 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 lifting the float switch 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.



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SEASONAL MAINTENANCE

14.1 Lay-up and 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.
- Drain the water from the ballast tank. Make sure to monitor the tank as it pumps out and turn the pump off immediately when pumping is complete. Remember that the pump will be damaged if it is allowed to run dry for more than a 15 or 20 seconds.
- 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.

- Make sure the outdrive 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.

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 outdrive 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.

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 propellers and grease the propeller shafts 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.

14.2 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 please refer to the Freshwater System chapter.

Ballast System

Make sure the ballast tank was completely pumped out before the boat was hauled, if not, pump it out. Make sure to monitor the tank as it pumps out and turn the pump off immediately when pumping is complete. Remember that the pump

will be damaged if it is allowed to run dry for more than a 15 or 20 seconds.

Close the thru-hull valve and remove the lid on the intake strainer for the ballast pump. Pour 1 gallon of potable water anti-freeze into the strainer while running the ballast pump in the Fill position on the switch. Turn the pump off immediately when the strainer empties. Then install the strainer lid and open the thru-hull valve. This will protect the pump and the ballast system water lines from freezing.

Refer to the Ballast System chapter for additional information on the ballast water system.

Engine Raw Water Systems

Drain all of the sea strainers, heat exchangers and raw water supply and discharge lines for the engine raw water supply pump. On seawater cooled engines, make sure to drain both sides of the engine block, exhaust manifolds and other components by following the engine manufacturer's winterizing instructions. Make sure all seawater has drained from the exhaust system. Once this is accomplished, pour a non toxic marine engine antifreeze mixture into a large pail and put the engine raw water intake lines into the solution. Run the engine until the antifreeze solution is visible at the transom exhaust port or the propeller exhaust hub, then shut the engine off.

NOTICE:

Properly winterize the engine and fuel system by following the engine manufacturer's winterizing procedures located in your engine owner's manuals or contact a Monterey dealer.

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 and Hardtop

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 connectors 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.

I

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.



14.3 Recommissioning



WARNING



DO NOT OPERATE THE BOAT UNLESS IT IS COMPLETELY ASSEMBLED. KEEPALLFASTENERS TIGHT. KEEPADJUSTMENTS 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 outdrive
- Inspect outdrive and thru-hull fittings.
- Install the propellers. Refer to the outdrive owner's manual for information on installing propellers.
- Install the drain plug in the hull.
- Charge and install the batteries.
- Check the engine for damage and follow the manufacturer's instructions for recommissioning.
- Check the engine mounting bolts to make sure they are tight.
- 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 and outdrive.

After Launching:

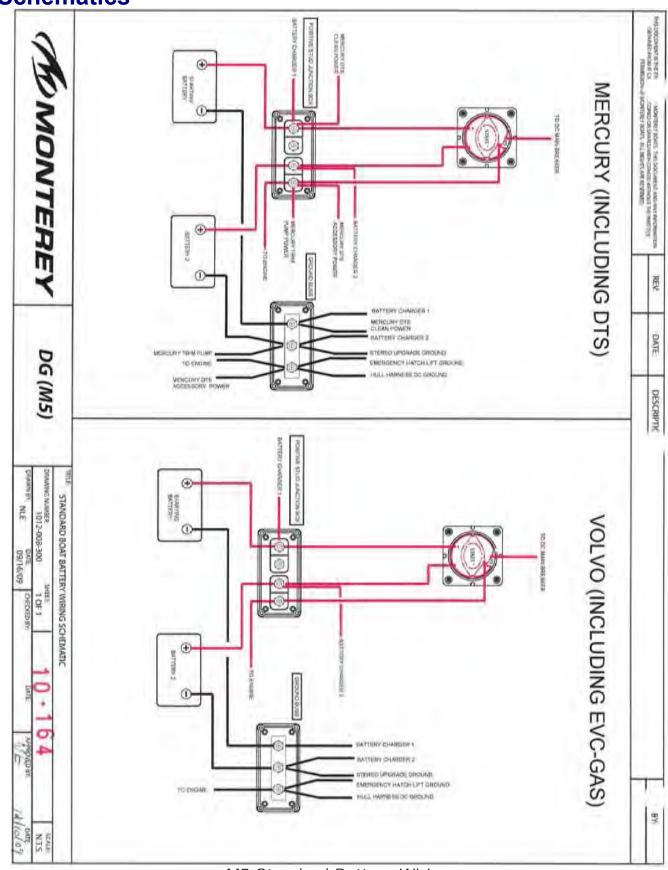
- Carefully check the engine and all water systems for leaks. Operate each system one at a time checking for leaks and proper operation.
- Check the bilge pump automatic and manual switch.
- Prime the fuel system and start the engine.
- Carefully monitor the gauges and check for leakage and abnormal 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.



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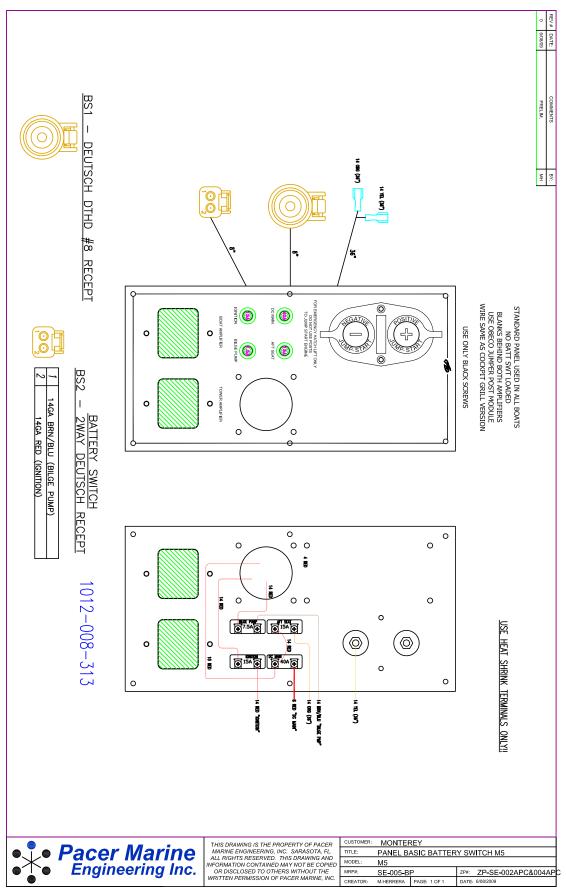
MONTEREY

Schematics

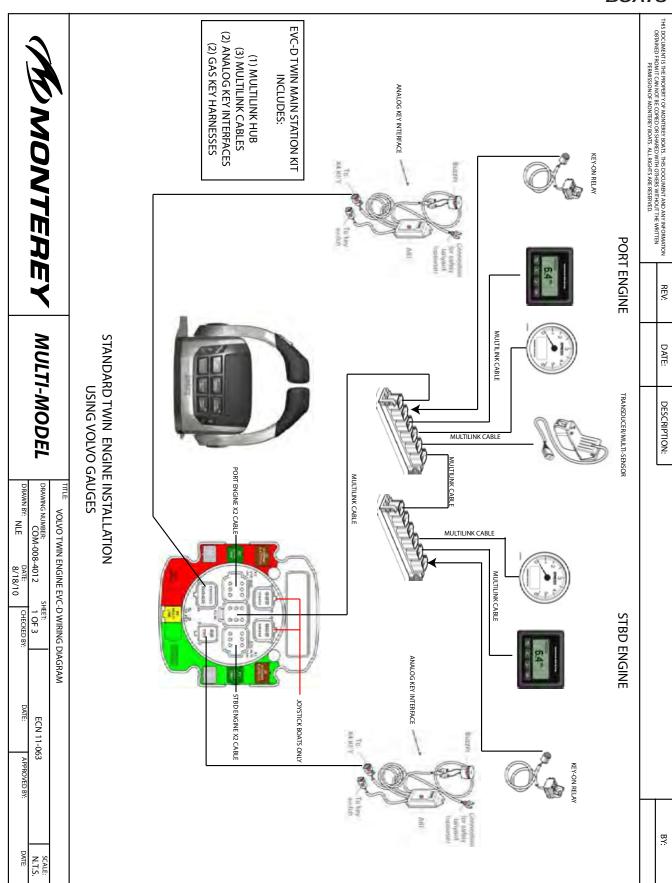


M5 Standard Battery Wiring



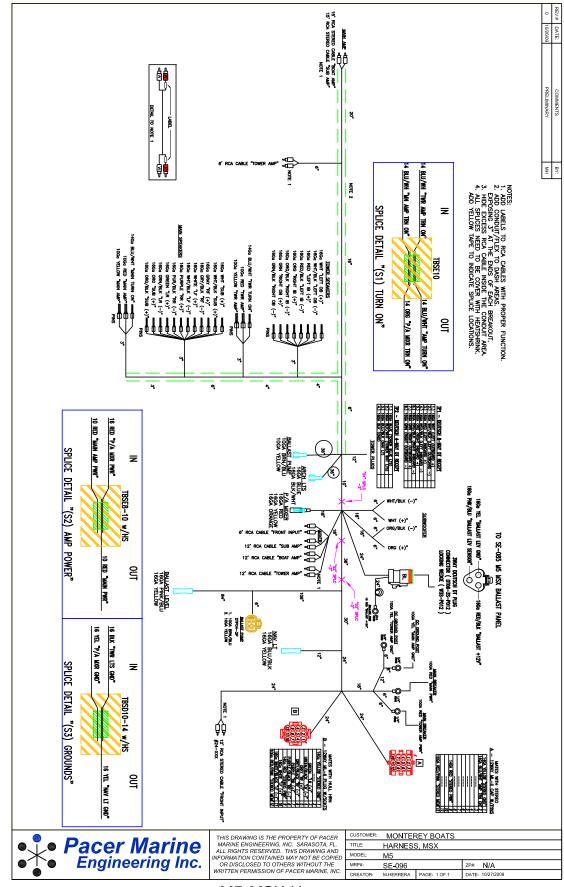


Standard Battery Switch Panel

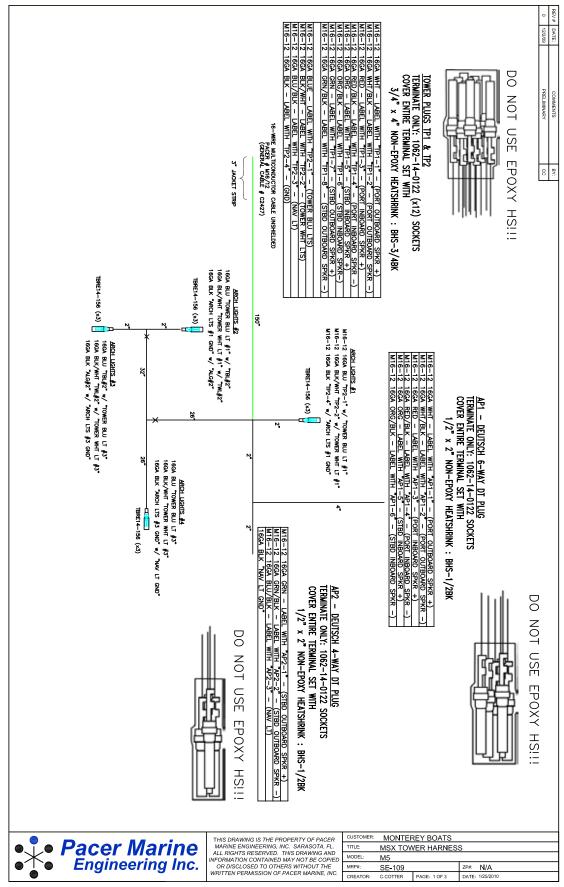


VOLVO EVC-D DIAGRAMS



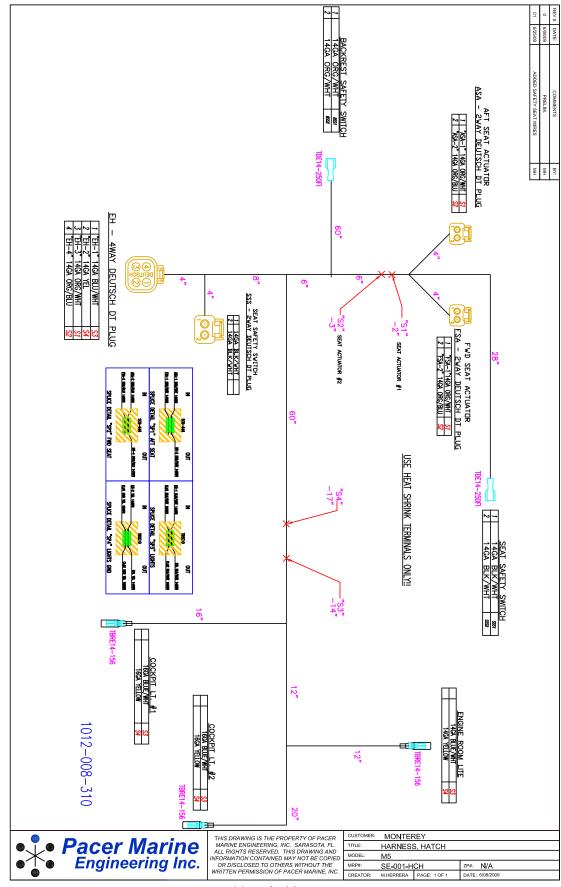


M5 MSX Harness



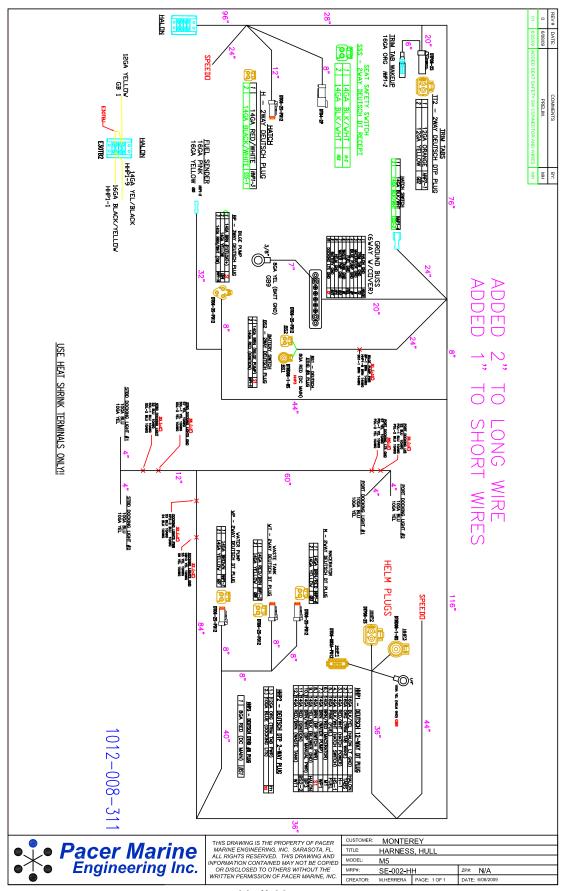
M5 MSX Tower Harness





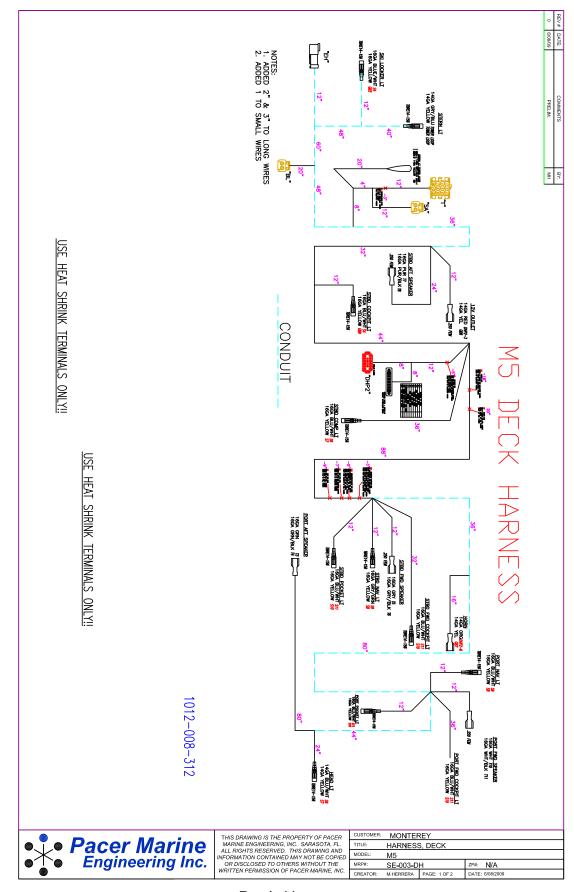
Hatch Harness



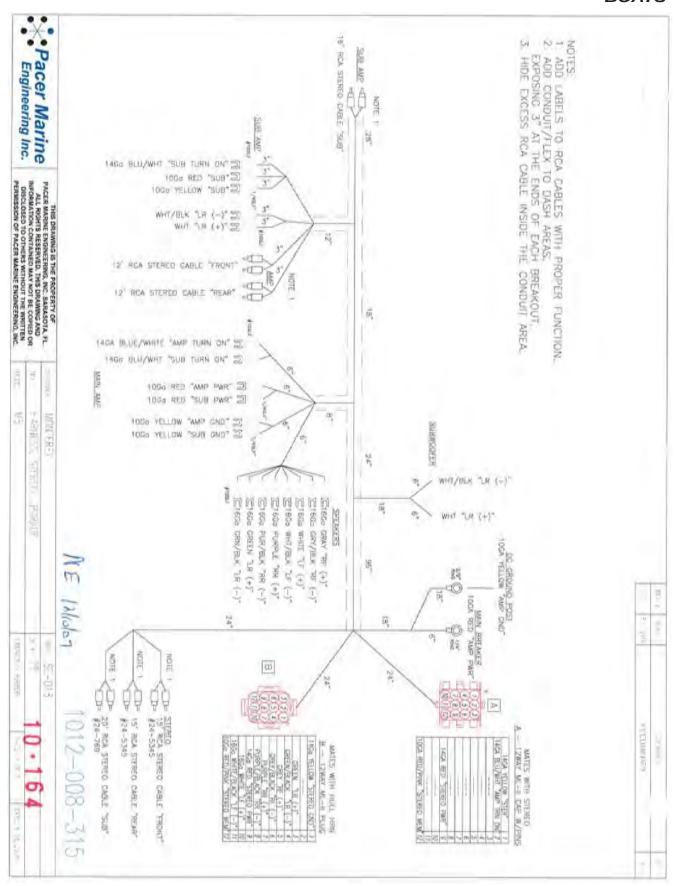


Hull Harness



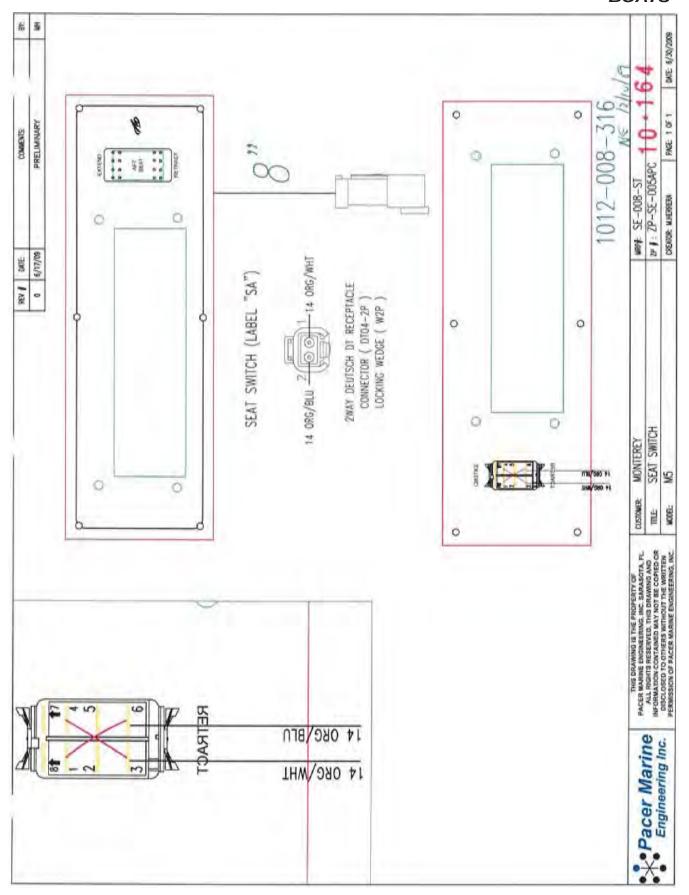


Deck Harness

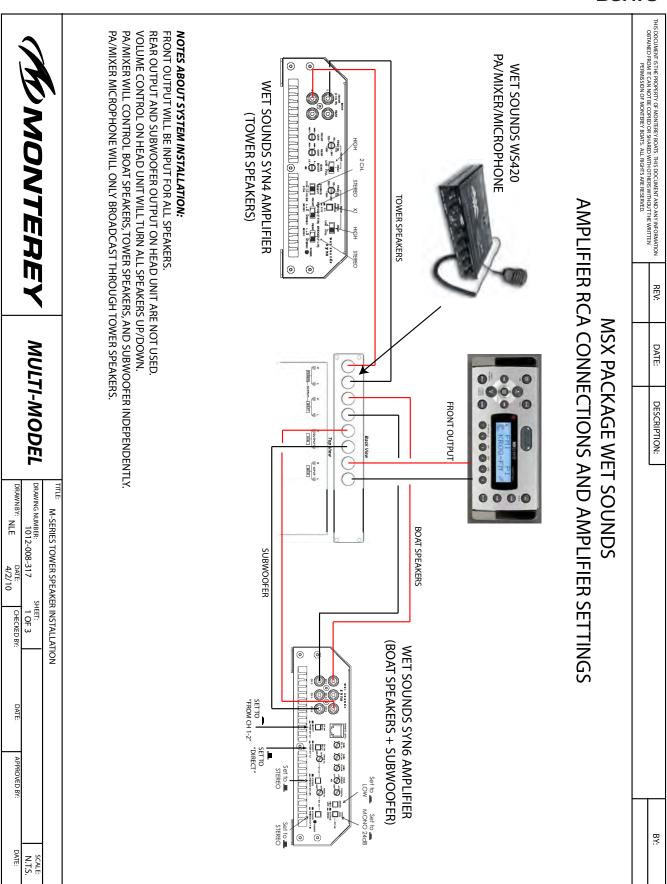


M5 Stereo Upgrade Harness





M5 Stereo Panel



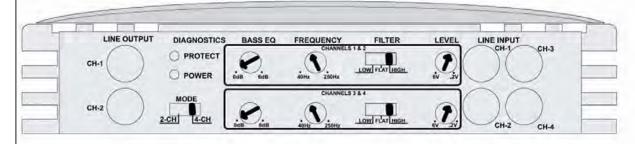
M5 MSX Wet Sounds Installation



Monterey MBQUART Amp Settings



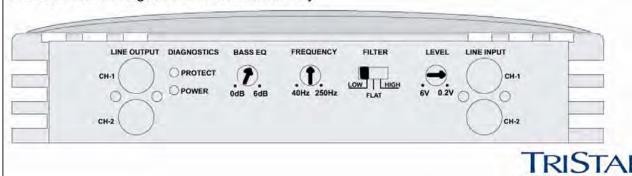
NAU460- Runs (4) 6.5" speakers, 4Ω per channel, most installed w/ subwoofer – Default setting



*Alternate setting for Boats (180, etc.) w/o subwoofer (4) 6.5" speakers, 40 per channel



NAU260- Runs Bridged on NWF254 exclusively

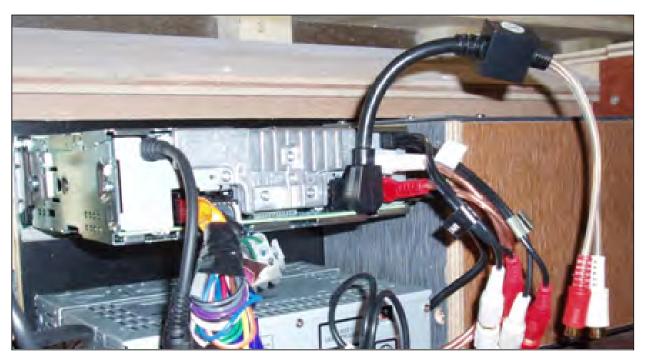


MB QUART AMP SETTINGS





MP3 ADAPTER CONNECTION
IF SIRIUS RADIO INSTALLED, PLUG ADAPTER INTO SIRIUS MODULE



MP3 ADAPTER CONNECTION
IF SIRIUS RADIO NOT INSTALLED, PLUG ADAPTER INTO STEREO

DC Ipod Adapters



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General Maintenance Schedule and log

MAINTENANCE	TUSE NE	TO THE MAN THE PROPERTY OF THE	Tach of	Ceason	RAIL REVO	aded
Clean Hull Below the Waterline				Х		
Bottom Paint Hull					Х	Χ
Check Sacrificial Anodes			Χ			
Replace Sacrificial Anodes					Х	Χ
Wash Boat, Canvas & Hardware	Х		Х			
Wax Exterior				Х		
Clean & Protect Hardware				Х		Х
Polish & Protect Plastic Glass & Clear Connectors				Х		
Clean Exterior Upholstery	Х		Х			Х
Clean Cabin & Interior Upholstery						Х
Service & Inspect Cabin Accessories				Х		
Spray Metal Pumps and Components in Bilge with a Protector				Х		
Clean Bilge				Х		Х
Check Bilge, Engine Components and Water Systems for Leaks	Х		Х			
Inspect & Operate Thru-Hull Valves			Х			
Inspect & Clean Seawater Strainers	Х					Х
Test bilge Pump and High Water Alarm Auto Switches	Х					
Check Engine Alignment					Х	
Inspect Steering & Control Systems	Х					
Service Steering & Control Systems				Х		Х
Inspect Fuel System for Leaks	Х					
Inspect & Service Fuel System				Х		Х
Lubricate Fuel Fill O-Rings						Х
Inspect Fire Extinguishers			Х			
Inspect & Protect Electrical Components & Battery Connections				Х		
Check Battery Electrolyte Service Batteries			Х			
Test and Inspect AC Electrical System & Shore Power Cord				Х		
Check Blower Operation & Safety Equipment	Х					
Check Neutral Safety Switches	Х					



Date	Hours	Dealer	Service/Repairs

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 cruise. Leave this information with a responsible person ashore, like a close friend or relative that you know well.

color	Description of boat.		
Length Other Info	Type	Color	Trim
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- AU

DEPARTMENT OF TRANSPORTATION U.S. COAST GUARD CG-3865 (Rev. 9/95)			G ACCIDENT REPORT FORM AP			PPROVED OMB NO. 2115-0010	
U.O. COACT COARD	,	STATE ASSIGN	IED CASE NO				
STATE ASSIGNED CASE NO THE OPERATOR/OWNER OF A VESSEL USED FOR RECREATIONAL PURPOSES IS REQUIRED TO FILE A REPORT IN WRITING WHENEVER AN ACCIDENT RESULTS IN: LOSS OF LIFE OR DISAPPEARANCE FROM A VESSEL; AN INJURY WHICH REQUIRES MEDICAL TREATMENT BEYOND FIRST AID; OR PROPERTY DAMAGE IN EXCESS OF \$2000 OR COMPLETE LOSS OF THE VESSEL. REPORTS IN DISAPPEARANCE IN DISAPPORTS IN OTHER CASES MUST BE SUBMITTED WITHIN 48 HOURS. REPORTS IN OTHER CASES MUST BE SUBMITTED WITHIN 10 DAYS. REPORTS MUST BE SUBMITTED TO THE REPORTING AUTHORITY IN THE STATE WHERE THE ACCIDENT OCCURRED. THIS FORM IS PROVIDED TO ASSIST THE OPERATOR IN FILING THE REQUIRED WRITTEN REPORT.							H REQUIRES MEDICAL VESSEL. REPORTS IN SUBMITTED WITHIN 10
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NAME OF REVIEW			CEIVED	RECREATIONAL	[] NON-REPORTA		• •
PRIMARY CAUSE							

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.





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.

Barnacles: 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.



MONTEREY

BOATS

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.

Deck: 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.

Fathom: 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.

Keel: 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.



MONTEREY
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.

Yacht Basin: A protected facility primarily for recreational small craft.

Yaw: When a boat runs off her course to either side.



- AND TEDEN

Troubleshooting Guide

PROBLEM	CAUSE AND SOLUTION
CONTROL SYSTEMS	
Stern drive power steering over steers or does not respond properly.	 The steering cable housing is bound near the transom. Free the cable and make sure no cables or wire harnesses are attached to it. The steering cable is kinked, corroded or worn. Replace cable. The power steering sensor valve is corroded or sticking. Service sensor valve. The outdrive steering spindle is binding. Grease outdrive.
Stern drive power steering is slow and jerks while turning the wheel.	 The power steering pump belt on the engine is loose. Tighten or replace the belt. The power steering pump is low on fluid. Fill the pump and check for leaks. The outdrive steering spindle is binding. Grease outdrive.
The engine will not start with the shift control lever in neutral.	 The control is out of adjustment & not activating the neutral safety cut out switch. The shift control lever is not in the neutral detent. Try moving the shift lever slightly. There is a loose wire on the neutral safety switch. Inspect wires and repair loose connections. The starter, ignition switch or neutral safety switch is bad. Replace the defective switch.
The throttle lever is hard to move.	 The cable is worn or corroded. Replace cable The fuel injector linkage is corroded and stiff. Lubricate the linkage. The throttle control in the helm control is corroded and binding. Lubricate the control. The throttle control linkage at the helm is binding against something. Check and adjust or repair binding component.
The shift lever is hard to move.	 The cable worn or corroded. Replace cable The outdrive linkage is corroded and stiff. Lubricate the linkage. The cable is routed incorrectly and has tight bends or is kinked. Reroute or replace the cable. The shift control in the helm control is corroded and binding. Lubricate the control. The shift control linkage at the helm is binding against something. Check and adjust or repair binding

component.

• The engine idle is too high. Adjust engine idle.



PROBLEM	CAUSE AND SOLUTION
PERFORMANCE PROBLEMS	
Boat is sluggish and has lost speed & RPM.	 May need to have marine growth cleaned from hull and outdrive. A Propeller may be damaged & need repair. Weeds or line around the propellers. Clean propellers. Boat is overloaded. Reduce load. Check for excessive water in the bilge. Pump out bilge, then find & correct the problem. The throttle adjustment has changed and the engine is not getting full throttle. Adjust the throttle or throttle cable. The engine is not producing adequate power. Have the engine checked by a qualified technician. The ballast tank on MSX models is full. Pump out the ballast tank.
The boat vibrates at cruising speeds.	 Propeller may be damaged & need repair. A propeller shaft is bent. Repair or replace damaged components. The outdrive is fouled by marine growth or rope. Clean running gear. The outdrive is not trimmed properly. Trim outdrive.
ENGINE PROBLEMS	
The engine is running too hot.	 The raw water supply line to the pump is kinked. Replace hose. The engine raw water pump belt is loose or worn. Tighten or replace the belt. (Mercruiser Engines) The engine raw water pump impeller is worn or damaged. Repair the pump. The engine thermostat is faulty and needs to be replaced. The freshwater cooling heat exchanger is clogged and needs to be cleaned. The exhaust manifolds or riser water ports are clogged and need to be cleaned or the manifold or riser replaced.
The engine alternator is not charging properly.	 The engine alternator belt is loose or worn. Tighten or replace the belt. The alternator is not charging and must be replaced. The isolator in the charging system is not working properly. Replace the isolator. A battery is defective and not accepting a charge.



PROBLEM	CAUSE AND SOLUTION
ENGINE PROBLEMS	
The engine suddenly will not operate at or above cruise RPM.	 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. The tachometer is bad and needs to be replaced. The throttle control is out of adjustment. Check the throttle adjustment or cable.
The engine is loosing RPM. The boat is not overloaded and the hull bottom and running gear are clean and in good condition.	 The fuel filter could be dirty. Inspect and replace the fuel filter. The electronic engine control system on the engine is malfunctioning. Repair the engine control system.
The engine suddenly shuts down and won't restart.	 The automatic fire extinguisher in the engine compartment has activated and the engine was shut down by the extinguishing agent. Check the monitor panel for no green light. If the green light is out, wait 15 minutes, if safe to do so, to ensure a possible fire is out. Then inspect the engine compartment. Correct any problems found and then ventilate the engine compartment and start the engine.
The engine runs too cold.	 The thermostat is faulty. Replace thermostat. The temperature gauge is not reading properly. Replace the temperature gauge or sender.
The engine starter will not operate.	 The battery switch is off. Turn on switch. The shift control is not fully engaged in neutral. Move shifter from forward to neutral and try again. The fuse or circuit breaker for the starting circuit is blown. Reset the breaker or replace the fuse. Repair circuit if necessary The battery is weak or low. Charge or replace battery. Corroded or loose battery connections. Tighten, clean

and protect connections.



PROBLEM	CAUSE AND SOLUTION
ACCESSORY PROBLEMS	
The fresh water pump runs, but will not pump water.	 The water tank is empty. Fill the tank. The in-line strainer for the pump is clogged. Clean the strainer. The intake hose is damaged and sucking air. Replace or repair the hose. The pump is defective. Repair or replace the pump.
The freshwater pump switch is on but the pump fails to run.	 The water system circuit breaker has tripped. Reset the circuit breaker. There is a loose or corroded wiring connection. Find and repair the bad connection The thermal breaker on the pump is tripped. Repair or replace pump. The pressure switch on the pump has failed. Replace the pressure switch. The pump is defective. Repair or replace the pump.
The fresh water pump fails to turn off after all outlets are closed.	 There is a leak in a pressure line or outlet. Repair the leak. There is an air leak in the intake line. Repair the air leak. The pressure switch is defective. Replace the pressure switch. The voltage to the pump is low. Check for corroded or loose wiring connections or low battery. The strainer is clogged. Clean strainer. The pump is defective. Repair or replace the pump.
Reduction in water flow from the bilge pump.	 Impeller screen plugged with debris. Clean screen at the base of the pump. The discharge hose is pinched or clogged. Check discharge hose and clean or repair. 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. Low voltage to the pump. Check the battery and wire connections.
The automatic float switch on the bilge pump raises but does not activate the pump.	 The circuit breaker near the battery switch has blown. Reset the circuit breaker. The battery is dead. Charge or replace the battery. The pump impeller is jammed by debris. Clean pump impeller housing. The wire connections in the bilge have corroded. Replace connectors and secure above the bilge waterline. The automatic switch is defective. Replace the switch. The pump is defective. Replace pump.



PROBLEM	CAUSE AND SOLUTION
ACCESSORY PROBLEMS	
The bilge pump will not run when the manual switch is activated.	 The circuit breaker supplying the switch has tripped. Replace or reset the circuit breaker. The battery switch is off. Turn on the battery switch and bilge pump breaker. The pump impeller is jammed by debris. Clean pump impeller housing. The wire connections in the bilge have corroded. Replace connectors and secure above the bilge waterline. The switch is defective. Replace the switch. The pump is defective. Replace pump.
VacuFlush Head will not flush.	 Electric head breaker is tripped. Turn on breaker. There is a vacuum leak at the flush valve or the waste hose. Repair the leak. The holding tank is full and the sensor in the holding tank has deactivated the vacuum pump. Pump out the holding tank.
VacuFlush Head vacuum pump runs more frequently than it should.	There is a slight vacuum leak in the system. Find and repair the leak.
Holding tank will not empty.	 Overboard discharge valve in the bilge is closed. Open discharge valve. Holding tank vent is clogged. Replace vent filter or clean vent. 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.
Excessive odor from marine head.	 Back pressure in the holding tank. Pump out holding tank or replace the vent filter. Waste is in the discharge hose. Flush enough to move waste to the holding tank, particularly at the end of each day. No deodorizer in the holding tank. Add deodorizer to the holding tank each time it is pumped out. The waste in the tank is over two weeks old. Pump the holding if it has contained waste for two weeks or more.



MONTEREY

Monterey Boats Lifetime Limited Warranty

MONTEREY BOATS warrants to the original retail purchaser of its product beginning with the 2011 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 2011 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.

TWO-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, crazing or fading of, and any air voids in, the exterior gelcoat surface of the boat as result of defects in materials or workmanship within two (2) 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 twelve (12) months from the warranty commencement date, MONTEREY BOATS will pay 100% of the repair costs.
- 2. After twelve (12) months but up to fifteen (15) months from the warranty commencement date, MONTEREY BOATS will pay 55% of the repair costs.
- 3. After fifteen (15) months but up to twenty-four (24) months from the warranty commencement date, MONTEREY BOATS will pay 30% of the repair costs.
- 4. After twenty-four (24) months 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 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 two (2) years.
- 3. 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, generators, 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; and 8. Any boat purchased from an authorized MONTEREY BOATS dealer located in the United States that is registered and/or operated outside the United States.
- 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 (25th) 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.

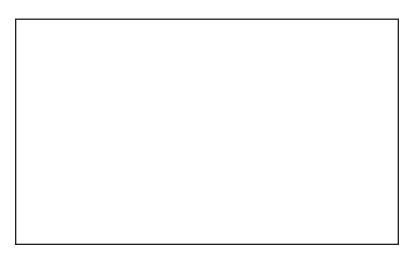
MONTEREY BOATS is the registered tradename and trademark of SEABRING MARINE INDUSTRIES, INC., a Florida corporation, the warrantor herein.

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

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