# Malibu Boats

## 1997 Models



Manufacturers of Malibu and Flightcraft Boats



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### 1997 Operation & Maintenance Manual

Fourth Edition First Printing August 1, 1993

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### I. GENERAL INFORMATION

Over the years, you have watched us grow into one of the most respected boat builders in the world. And undoubtedly, somewhere you have run into at least one. Malibu owner who proudly speaks of the "Malibu Difference". That difference they so proudly speak of could be the special way we have serviced them over the years. We call it "going the distance". Or maybe they are referring to the way their Malibu consistently outperforms other ski boats that they have driven. We can't deny that we are different. Our passion for building the perfect ski boat is only surpassed by our commitment to total customer satisfaction.

We, at Malibu Boats, thank you for choosing us as your boat manufacturer and assure you that your satisfaction and boating enjoyment will continue to be our #1 priority.

### Safety

Safety is not an option with Malibu Boats; it's a requirement. That is why our Research and Development department spends countless hours developing safer and more comfortable features for skiers and their families.

Even though your Malibu boat has been constructed to meet all U.S. Coast Guard and National Marine Manufacturers Association (N.M.M.A.) requirements, it is still your responsibility as the boat owner to ensure that the boat is operated in a safe fashion.

U.S. Coast Guard regulations require that certain safety equipment be present on your boat during operation. Besides the U.S. Coast Guard regulations, other local and/or international law enforcement agencies may have similar requirements. You should check with your local marine enforcement agency regarding any such requirements before using the waterways.

This manual is not a replacement for a course on boating safety. We highly recommend that if you are unfamiliar with the use and operation of a boat, you seek advice and training from a qualified individual or organization. Check with your local Malibu dealer for more information on boating safety classes in your area.

### **Specifications**

### **Echelon**

Overall Length:

Engine Mounting:

20' 2.500 lb. Beam: Engine: 90"

Weight Top Speed:

45 MPH FibECS II Fuel Capacity: Stringers:

Mercruiser Magnum 38 Gallons Composite

Echelon LX

Overall Length:

20' 2.650 lb. Beam:

90"

Weight

45 MPH Top Speed: FibECS II Engine Mounting:

Engine: Fuel Capacity: Stringers:

38 Gallons Composite

Mercruiser Magnum

Response

Overall Length:

20'

Beam:

90"

Weight

Top Speed: Engine Mounting: 2.450 lb. 45 MPH FibECS II Engine: **Fuel Capacity:** Stringers:

Mercruiser Magnum

38 Gallons Composite

Response LX

Overall Length:

20'

Beam:

Weight

2.450 lb. 45 MPH Engine: Fuel Capacity: Mercruiser Magnum

Top Speed: **Engine Mounting:** 

FibECS II

Stringers:

38 Gallons Composite

Sunsetter LX

Overall Length:

21'

Beam:

93"

Weight Top Speed: 2.800 lb. 45 MPH

Engine: Fuel Capacity: Mercruiser Magnum

**Engine Mounting:** 

FibECS II

Stringers:

38 Gallons Composite

Sunsetter VLX

Overall Length:

21'

Beam:

93"

Weight

2.900 lb. 45 MPH

Engine: Fuel Capacity: Mercruiser Magnum 35 Gallons

Composite

Top Speed: Engine Mounting:

FibECS II

Stringers:

### **Tantrum**

Overall Length:

**Engine Mounting:** 

20'

FibECS II

Beam:

86"

Weight

2,100 lb. Top Speed: 45 MPH Engine: Fuel Capacity: Stringers:

Mercruiser Magnum 38 Gallons Composite

Flightcraft Barefooter

Overall Length:

**Engine Mounting:** 

20'

Beam:

86"

Weight Top Speed:

1,900 Lb. 60 MPH Transom

Engine: **Fuel Capacity:** 

Stringers:

Mercury 200 XRI 41 Gallons

Composite

### II. FEATURES AND OPTIONS

### **Features**

	- Indiana de la constante de l	-				-		
DESCRIPTIONS	TAN	SUN	SVĽX	ELX	ECH	RES	RIES	FCB
Mercruiser 350 C.I. Magnum H.O 265 H.P.	S	S	N/A	S	S	S	S	N/A
Voreitsch 2509 ex (#V Гартил Эн нюж 290 н 127 жж. 1997	<b>*0</b>	0=2	NA -	0	0 %	0	9	N/A
Malibu Monsoon 320 H.P. PFI	0	0	S	0	0	0	0	N/A
Mercuiser, Black Scopion 315 H.B.P.E.J.	0	0	NVA	O/s	0	0	<b>O</b> ***	N/A
EFI Mercury 200 XRI Outboard - 200 H.P.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	S
1-1 Gear Ratio Transmission	S	S	1.5:1	S	S	9	Ş	N/A
10-Segment Stopwatch	N/A	0	0	0	0	0	0	N/A
24/24/01FPC Rolling Griffich	S	S	s	S	572	S	9-2	Ş
4-Color Gelcoat	N/A	S	S	N/A	N/A	S	S	N/A
(5,90ld) (\$3loon)	NA	0 %	<b>ö</b> -	*S: ·	<b>S</b> **:	0	ō.	<b>S</b>
Adjustable Driver's Seat	S	S	S	S	S	\$	S	S
Air:Water:Temp indicator	NA	0 🐔	0	O	Ó	Ö	o.	N/A
"All Fiberglass Hull, Deck, Stringers, and Floor Liner"	\$	\$	\$	\$	\$	s	S	S
Alisanes Scalifadianes	N/A	S	<b>s</b> .	S	S	S	S	S
Teleflex Analog Clock	N/A	0	0	0	0	0	0	0
Automatic Blige Pump :	S#	<b>.s.</b>		8.	S	8	<b>S</b>	s /
Automatic Blower Operation	N/A	0	.0	Ç	0	O	0	N/A
Bareroot Comp Package 2 Swivel Buckets & Aft Speedo	AVA.	NA :	N/A	N/A	N/A	N/A	N/A	0
Bimini Top	0	0	0	0	0	0	٥	0
Bow Lifting Eye	Ġ.	0.5	<b>P</b>	<u> </u>	0	O	Q.	0

<sup>1 12-</sup>Volt DC Power Outlet

できたいのは、 <b>できたいでは、これでは、これには、これには、これが、これのことを</b>	:*************************************	٠٠٠٠٠٠	**** 100 00	m.s. in an wagin	war on the speciments	ince of Services and	~4++ <b>P</b> /+~.	· ····**(): #8+xxxxxx**
DESCRIPTION:	TAN	SUN	SVLX	ELX	ECH	RES LX	RES	FCB
Bow Storage	\$	N/A	N/A	N/A	S	S	Ŝ	S
	2	6	O-	Q.	0	ō.	0	0.73
Carpeted Motor Box Base	S	S	N/A	S	S	\$	S	N/A
Center Foor Locker	NA	S	\$	N/A <sup>2</sup>	NIA	NA	ÑA	S
Circuit Breakers	\$	S	s	S	Ŝ	S	ŝ	S
Chromo Cas Cap & Vent		S	<b>S</b> = [	S	8	\$	6	NA
Coaming Pads	S	S	S	\$	\$	S	S	S
Computron ATD (Advanced) Technology Dash)	NA	0	0	Ö	0	0		NA.
Convex Rear View Mirror	s	\$	\$	s	S	S	s	s
Digital Cock	ŅĀ.	<u>o</u>		þ	ď.	.0	0	
District Communication								
Digital Speedometer	N/A	0	0	0	0	0	0	NA
Depth Meter/Alarms	N/A	0	0	o 0	o 0	0 0 2 %	o 0#	N/A
	N/A N/A	<b>o</b>	0	0 0	0	0 0.21 0	0	N/A N/A
Depth Meter/Alarmo		0	2 2	0	o.	0.25	ō.	
Depth Meter/Alarm	N/A N/A	0	2 2	0	o.	0.25	ō.	
Depth Meter/Alarm  Digital Tachometer  Drivers Air Lumbar Support	N/A N/A	0	<b>o</b>	<b>6</b> . 2	0 0 0	0.25 0 S	0	N/A N/A
Depth Meter/Alarm  Digital Tachometer  Driver's Air Lumbar Support  Dual Airguide Speedometers  FibECSIi(Patented Fiberglass*	N/A N/A	0	<b>o</b>	<b>6</b> . 2	0 0 0	0.25 0 S	0	N/A N/A
Depth Meter/Alarms  Digital Tachometer  Drivers Air Lumbar Support  Dual Airguide Speedometers  FibECSIf(Patented Fiberglass Engine Chassis System)	N/A N/A O	0 / 0 5 5 5	0 0 8 8	O S	0 0 5 8	0 25 0 5 5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N/A N/A S
Depth Meter/Alarms  Digital Tachometer  Drivers Air Lumbar Support  Dual Airguide Speedometers  FibECSI(Patented Fiberglass Engine Chassis System):	N/A N/A O	0 / 0 5 5 5	0 0 8 8	O S	0 0 5 8	0 25 0 5 5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N/A N/A S
Depth Meter/Alarms  Digital Tachometer  Drivers Air Lumbar Support  Dual Airguide Speedometers  FibECSII(Patented Fiberglass Engine Chassis System):  Gas Motor Box Lifts  Graphic Speed Analyzer:	N/A N/A O S	0. 0 0 S S S S S	0 0 5 5 5 5	O S S S	0 0 8 8 8 8	© 1 © 2 S 2 S 3 S 3 S 3 S 4 S 4 S 4 S 5 S 7 S 7 S 7 S 7 S 7 S 7 S 7 S 7	0 0 8 8 6	N/A N/A S S N/A

<sup>&</sup>lt;sup>2</sup> Effective 8/20/96

<sup>&</sup>lt;sup>3</sup> Original FibECS

<sup>&</sup>lt;sup>4</sup> Electronic Hydraulic Hatch Lift

DESGRIPTIONES	AN S	SUN	SVLX		ECH	RES LX	REST	FCB
Heavy duty Transom Tie Down Rings 9.	S	·\$ **	S	.S.	S	8	S.v.	
Hom	\$	S	S	S	S	S	S	\$
Hole Water-Shower Be	<b>0</b> .	0,	0	0	<b>0</b> .2	Ö		## ****//
Deluxe Hot Water Shower	N/A	N/A	N/A	0	0	N/A	N/A	N/A
Hydro-Profile Carroch took S System S 2 Parks		<b>S</b>	N/A	\$	S. S	<b>S</b> .	Si.	N/A==
Indirect Storage Lighting	S	S	S	S	S	S	S	S
Integrated Geleval Graphics	IVA 3	\$	S		S	Ŝ.	S	\$
Lighted Bow Storage	S	s	S	S	S	S	S	\$
Lighted Sunnel Storage, &	, <b>S</b> .	S	S	s	S	\$	ŠŽ.	
Lockable Glove Box	N/A	S	s	S	S	S	S	\$ ,
Malibu Electronic Andrews (Management System Andrews (1995)	#81/Ac# 687 40*	0	<b></b>	O	ō.	0.	O. 44 7 A+40	NA.
Mercruiser Audio Alarm Warning System	S	s	S	S	S	S	S	N/A
Moldes-In-Piberglass (Ce Chesi	N/A	\$12	5	S	S	<b>S</b> .,	Sin	
Netted Storage	S	S	S	S	S	S	\$	S
Observer Sen (A) = cng)	, S <sub>F</sub>	8.2	\$	S	S	\$		5
Lockable Bow Storage	N/A	N/A	N/A	N/A	\$	N/A	N/A	N/A
	9:2	S.	S	S == 3	S		912	
Padded Motor Box With Stainless Steel Hinges	S	S	S	S	S	\$	S	N/A
Royverny/phoretell/ranies	S	8	\$	S	SI	S	S	S
Patented Swivel Head Pylon	S	S	S	S	s	S	S	S
Polyethylene-Seat-Frames and Seat Bases:	S	Š.		S	ś	<b>S</b>	<b>S</b>	
Pop Up Cleats	0	0	0	0	O	0	0	0

DESCRIPTION	TAN	SUN	SVLX	ELX	ECH	RES LX	RES	FCB
Rear Storage	N/A	S	S	N/A	NA	N/A	N/A	s
Rear Sun Deck	N/A	S	s	N/A	N/A	\$	S	\$
Recessed Driver's Footwell	N/A:	S	s	s	ş	S	S	S
Removable Rear Access Panel	S	s	\$	S	S	\$	s	\$
Removable Teak Swim Step	N/A5	S	s	_3 -	s	S	S	N/A
Side Ski Storage	\$	s	\$	s	S	s	s	S
Stainless Steel Bow Ralls	N/A	S	S	S	N/A	S	N/A	NA
Step Pads	S	s	s	s	s	\$	\$	s
Storage Under Bow Seats	N/A	s	S	s	N/A	ÑA	NA	N/A
Surged Carpet Edges	N/A	s	s	\$	s	\$	s	s
"Stereo: Deluxa IVG w/CD Changer 240 Watt Amp Supworter	N/A	9	0	0	0	0	0	0
Tachometer	s	s	S	S	s	s	s	s
Transferable Lifetime Limited Warranty	S	S	S	S	\$	September	S	S
Interior Safety Handles	S	s	s	S	s	s	S	\$
Transom Grab Handle	N/A	s	S	S	<b>\$</b>	S	S	S
Triple Fins	0	\$	1 Fin	s	s	S	\$	1 Fin
Wrap Around Walk-Thru- Tempered Safety Glass Windshield	N/A <sup>®</sup>	S.	3	Ś	S	S	<b>S</b>	IN/A
Custom Wood Grain Dash & Throme Package	N/A	0	0	0	0	0	0	N/A
	Respons		_	NN	Sunsetter		Stand	-
LX	Respons	e <b>L</b> X	:S	VLX	Sunsetter VLX	G	Optio	nai
TAN Tankrum FCB	Flightera	ft Barefor	oter			N/A	Not A	wailabie

<sup>&</sup>lt;sup>5</sup> Fiberglass Swim Platform

<sup>&</sup>lt;sup>6</sup> Contoured Lexan Windshield

### **Equipment Descriptions**

#### Removable Swim Platform

A removable swim step is located at the stern of the boat to provide easy access into and out of the water for both skiers and swimmers. To remove the swim step, simply remove the pins located on each side of the platform and lift up.

#### Driver's Seat

The driver's seat may be adjusted by moving the seat forward or backwards while pulling to the left the lever located under the front left of the seat. Once the seat is in place, you may release the lever to secure it.

Adjustments to driver's seats equipped with a lumbar support can be done by pressing the button located on the left underside. To decrease the amount of support, press your back against the seat and press the button. To increase the amount of support, lean forward while pressing the button.

#### Observer Seat

The observer seat is located in the front of the boat next to the driver's seat. The observer seat is designed to accommodate two or three persons, depending on the model, and faces toward the rear of the boat to allow the observer a clear view of a skier.

### Rear Passenger Seats

The passenger seats located in the rear of the boat are designed to comfortably seat three persons. On all models except Echelon, Echelon LX, and Sunsetter VLX the bottom of the rear passenger seat can be slid forward and placed on top of the arm supports to provide a sun deck.

### Front Passenger Seats

These seats are located in the bow of the boat and can provide comfort for up to three persons. You can lift up and out on the seat cushions to access storage areas located under the seats.

### Patented Pivoting Head Tow Pylon

The ski pylon is the solid aluminum post located directly in front of the motor box.

#### WARNING

Malibi Boats patented Swiver-Head aki pylon is designed for normal water sking activities: fatore, jumping, kneeboarding, micks, and barefooting. Any other uses such as parasalling, kiteflying, jowing pyramids of skiens jetc. They over stress the pylon and possibly cause personal?

### Walk-Thru Windshield

This windshield design incorporates a section between the driver and observer seats that can be opened to allow easy access to the bow of the boat. To open, turn the safety latches and push the windshield gently forward. Lay the windshield panel gently back against the rubber stop. Before operating your boat, be sure the window is closed and the safety latches are properly secured.

### Tilt Steering Wheel

The tilt steering wheel allows for maximum driver comfort. To adjust the height of the wheel, simply press down on the lever located under the wheel. Move the wheel to the position that is most comfortable for yourself. When the wheel is in the desired position, simply release the lever to lock the wheel into place.

#### **Motor Box**

The upholstered motor box reduces engine noise and provides protection for the passengers on board. To open, stand on the port side of the box near the observer seat, grasp the handle near the floor, and pull open. The motor box is equipped with either one or two gas filled shock absorbers (depending on the model) to provide support for the compartment when opened.

### Locking Glove Box

On most boat models, a built-in locking glove box can be found directly behind the observer's seat.

### **Battery**

The boat's battery is located behind the Observer's seat on all models except the Flightcraft Barefooter and Sunsetter VLX. On the Barefooter and Sunsetter VLX the battery can be found in the stem storage area.

### Bow Storage Area

Access to a large storage area located in the bow of all models is accessible by lifting up the bottom of the observer's seat back. The size of this storage area differs between the open and closed bow versions. On all open bow boats, the seat cushions in the bow can be removed to provide additional access. On the Echelon closed bow models, locks are provided to allow for the secure storage of personal items. This lock uses the same key as the one used for the ignition switch

### Gunnel Ski Storage

Conveniently located on both sides of the boat, these storage areas are ideal for the storage of skis, and other items.

### Floor Ski Storage

Located on the floor between the driver's and observer's seats on open bow models is a panel that when lifted provides access to a large area that can be used primarily for storage of skis. This area can also be used to store beverages if desired.

#### Bow Eye

The bow eye is located on the front of the boat's hull. Its primary functions include leading the boat off or onto the trailer, securing the boat to the dock, and for securing the boat to the trailer.

### Stern Eyes

The stern eyes are located on the top of each side of the transom. The stern eyes are used for securing the boat to the dock and trailer, and for hoisting.

### **Bow Lights**

As required by the U.S. Coast Guard, all Malibu boats are equipped with the proper bow and stern navigational lights. The bow light is located at the tip of the bow near the lifting ring. This light is two colored, red and green, and is used to keep other vessels aware of your presence and course when operating your boat at night.

### Stern Lights

A covered two-prong connector can be found on the top of the transom. The stern light is simply plugged into this connector when needed.

### **Transom Drain Plug**

This plug is located in the center of the transom at the bottom and is provided to allow for drainage of the bilge area when needed.

### Bilge Drain Plug

A T-handled brass bilge drain plug is located in the engine compartment of all models except for the Flightcraft Barefooter. To access, lift the motor box and look aft of the ski tow pylon and forward of the engine. On the Sunsetter VLX the T-handle can be found by lifting the rear passenger seat. The T-handle is located just below the V-drive unit.

### WARNING

Be sure that both the transom and bilge drain plugs are securely in place before placing the boat in the water.

#### **Fuel Vent**

The fuel vents are located on the starboard deck portion of the transom on all models except the Barefooter. The fuel vents for the Barefooter are located under the front cowling. These vents are designed to allow for the release of gasoline fumes from the fuel tank and bilge area.

#### Fuel Tank

The fuel tank is located behind the back of the rear passenger seat on all models except the Barefooter and Sunsetter VLX. On the Barefooter, the fuel tank is located in the bow of the boat and the Sunsetter VLX in the center Floor Area. The refilling cap is located on the top portion of the starboard gunnel. On the Barefooter the fill cap is on the right front deck.

### Speedometer Pickups

The speedometer pickups are located on each side of the boat at the bottom of the transom. The pressure applied to these pickups determines the measured speed of the boat. Clean pick-up tubes frequently to keep lake debris from lodging in tubes. Debris can affect accurate reading from speedometers.

### Transom Grab Handle & Rear Ski Tow Ring

The stern grab rail is located on the deck of the transom, in the middle. At the center of the grab rail is a hook which can be used to pull skiers if desired.

### Molded-In Self Draining Ice Chest

This item is located under the seat cushion of the observer's seat. The ice chest drains into the bilge area.

### Computron ATD®

This state-of-the-art computer system is an option for most models. For more information on the use of this system, see the appropriate section in this manual.

### Mercruiser Audio Alarm System

This engine monitoring system can be found on all boat models that are equipped with a Mercruiser engine. This system monitors several key aspects of the operation of the engine and provides for an audible alarm if any of the monitored components require attention. For more information, refer to the engine owner's guide that is provided with your boat.

### 12-Volt DC Accessory Outlets

All models except Tantrum and Flightcraft are equipped with two 12-volt DC Accessory Outlets; one on the electrical panel below the dash and one in the glove box. These outlets provide power from your boat's battery to accessory equipment such as, cellular phones, video cameras, marine spot lights, etc. Tantrum and Flightcraft models do not have the extra glove box outlet.

#### **Automatic Blower**

This blower will automatically turn on and operate from the time the ignition switch is turned on until the engine exceeds 1500 R.P.M.'s. This blower will also automatically operate at anytime during operation when the engine R.P.M.'s go below 1500.

### Automatic Bilge Pump

All models are equipped with an automatic bilge pump that will begin to operate at anytime the level of water in the bilge area exceeds 2".

#### Hot Water Shower

If your boat is equipped with a hot water shower, you should find instructions for its use in the information packet you received with your boat.

#### Heater

If your boat is equipped with a heater, you should find instructions for its use in the information packet you received with your boat.

### Lowrance Depth Finder

If your boat is equipped with this option, you should find instructions for its use in the information packet you received with your boat.

### Pop-Up Cleats

Pop-Up cleats are available for all boat models. These cleats will sit flush on the side of the boat's deck when depressed. To pop-up the cleats simply press the screw/button located in the center of the cleat. To depress the cleat simply press the cleat downward until it locks into place.

### Fuel Flow Analyzer

The fuel flow analyzer is available as an option on models equipped with Computron ATD. Refer to the instructions located in the information packet you received with your boat for instructions on the use of this item.

### JVC Detachable Face Stereo

If your boat is equipped with this option please refer to the instructions in the information packet.

### Pullout Stereo

If your boat is equipped with a pullout stereo, you should have received complete instructions on the use of the stereo in the information packet shipped with your boat.

### III. OPERATION AND USE

This section contains important information about the safe operation and use of your new Malibu boat. We urge you to read this entire section of the manual before operating your new boat and recommend that you keep this manual in your boat for future reference.

### **Fueling**

It is very important to take special precautions to avoid spillage while fueling your boat. Gasoline vapors are heavier than air and will develop in the lower cavities of the boat, such as, the bilge.

Below is a list of some guidelines you should follow when fueling your boat:

- Extinguish all cigarettes and other flame or spark producing items.
- Make sure all power is off, and do not operate any electrical switches.
- Be sure to wipe off any spillage that may have occurred.
- Operate the bilge blower for a minimum of four minutes before starting the engine.

### Trailering

The information contained in this section on trailering describes procedures used by many boaters. We recommend, however, that you always follow the specific information provided by the manufacturer of your trailer.

### **Load Carrying Capacity**

The certification label attached by the manufacturer on the left forward side of the trailer will show the maximum load carrying capacity of the trailer. The label is required to show the Gross Vehicle Weight Rating (GVWR), which is the load carrying capacity plus the weight of the trailer itself. Be sure that the total weight of your boat, gear, and trailer do not exceed the GVWR.

Consult your trailer dealer for other state regulations concerning brakes, lighting, and other equipment options.

#### Tie-Downs

Insuring that your boat is held securely in place on the trailer's hull supports, especially when underway, is extremely important. Regardless of your trailer's make or model, there are two key areas to consider:

Bow Tie-Downs A bow stop to hold the front of your boat in place is located on the winch stand. It should be positioned so that the winch line pulls straight and is parallel to the trailer frame. A separate tie-down should then be attached to hold the boat downward and forward. This may be accomplished by a line from the boat's bow eye to an attachment point on the trailer frame or winch stand.

#### Rear Tie-Downs

It is very important to be sure that the transom of your boat is resting fully and securely on the supports provided at the rear end of the trailer, and that it remains in place when parked or underway. Special rear tie-downs are available for this purpose. Check often to be sure the rear tie-downs are securely locked in place and that they are tight enough to prevent any movement of the boat.

### **Backing the Trailer**

Backing the boat trailer may sometimes be a difficult task. It is recommended that you practice backing the trailer in a vacant lot or open area before attempting it in a congested area.

Follow these basic rules when backing:

- Turn the front car wheels in the opposite direction in which the trailer is to travel.
- Back car normally once the trailer turn is started.
- Have your vehicle equipped with a right hand mirror which is required by law when towing.

### Launching

Following are some helpful tips to assist you with launching your boat:

- Before launching, check the type and condition of the ramp. Ramps are usually made of cement but often times are made of asphalt or even sand. When wet, these ramps can get very slick and can cause additional difficulties when launching your boat.
- Have someone assist you when backing your boat. Back the trailer to the edge of the water and stop. Be sure to properly secure your vehicle.
- 3. Prepare for placing the boat in the water by removing any tie-down straps, disconnecting tail light connections, and attaching a line to the bow eye fitting. If you are using an outboard, be sure that the outboard unit is in the "up" position. Be sure to re-install the bilge drain plug if it has been removed.
- To launch, back the trailer into the water to a point where the boat will clear the bottom. Stop and secure the vehicle.
- Unlock the winch line from the boat. Push the boat into the water and have your assistant guide the boat with the bow line.
- Once the boat is cleared of the trailer, pull your vehicle out of the water and park it.

### **Reloading Procedures**

To reload, repeat the unloading procedures in reverse. Other important tips to remember are:

- 1. Try to idle coast on to the trailer, do not power on to the trailer.
- When pulling the boat on to the trailer, be sure the boat is centered as much as possible. The distance between the boat and runner board should be approximately equal on both sides.
- Make sure the boat is securely in place before moving the trailer.

### Throttle

The throttle lever is located to the right of the driver. When the throttle is vertical, it is in the idle position.

Located at the base of the throttle you will find the shift lock. Pulling outward on this button disengages the transmission thereby allowing for use of the throttle without engaging the transmission. This is needed for starting or warm-up of the engine. Be sure to position the throttle vertically (in idle) before re-engaging the transmission by depressing the button.

When engaging the transmission from idle to either forward or reverse, you must pull up on the safety collar located directly below the throttle lever knob.

For more information regarding the safe operation and maintenance of your boats throttle, refer to the separate instructions located in the information packet shipped with your boat.

### Starting

Starting procedures will vary depending on the type and model of engine that has been installed in your Malibu. Consult the engine owner's manual for more specific information regarding starting, operation, and troubleshooting for your particular engine.

Pay close attention to the information regarding the break-in period listed in your engine owner's manual. Top engine performance is dependent upon following the guidelines listed.

### Pre-Start Checklist

A routine pre-starting procedure should always be carried out before the first start-up of the day. Below is a list of basic, necessary checks to perform before starting your engine.

Check oil and transmission fluid levels.

- Check fuel supply.
- 3. Inspect the engine compartment for water or fuel leaks.
- 4. Operate bilge pump until bilge's are dry.
- Operate blower for a minimum of four minutes to expel fumes.

### **Starting the Engine**

Please refer to your engine owner's manual for the proper starting procedures.

### Docking

Docking procedures for the new boat owner usually bring surprising results. Remember, operate your boat at slow speeds to avoid accidents and practice docking to gain experience and confidence.

Once away from the dock, practice docking in open water with an imaginary dock. Pull up to the dock at a slow rate of speed. Shift the boat into neutral and drift slowly toward the dock. Shift the boat into reverse slightly to slow or stop the boat altogether.

### Steering

It is important that you get the "feel" of your Malibu boat's steering system. Turn the wheel from full left to full right, and make sure the rudder is turning accordingly. The system should operate freely and smoothly.

### High Speed Operation

A great deal of caution must be exercised when operating any boat at high speeds. This is particularly true during turns. Gradual turns can be completed at high speed by a competent driver but it must be emphasized that sudden turns at any speed and particularly at high speed can be especially dangerous. It is possible to throw passengers from their seats and even from the boat if caution is not exercised.

### Warning Labels

The following warning labels are displayed on your Malibu to point out safety hazards:

### DANGER

Swim platform should not be used when engine is running.

### WARNING

Gasoline Vapors Can Explode
Before starting engine, operate blower
for 4 minutes and check engine
compartment for gasoline leaks or
vapors. Run blower below cruising
speed.

### -- WARNING

Leaking fuel is a fire and explosion hazard. Inspect system regularly. Examine fuel system for leaks or corrosion at least annually.

### **WARNING**

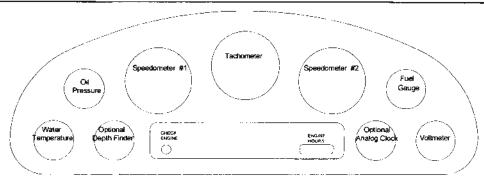
Maneuverability above 50 MPH is limited. Sudden turns may cause loss of control. Read owner's manual.

(Flightcraft Only)

### IV. INSTRUMENTATION

The following information is broken down into three different sections. The first section discusses the standard gauges that are found on all Malibu Boats. The next section discusses the optional Malibu Electronic Management System and the last section discusses the state-of-the-art Computron ATD (Advanced Technology Dash).

### Standard Gauges



Standard Dash

#### **Tachometer**

The tachometer registers the operating speed of the motor's crank shaft in revolutions per minute. This output may be used as an alternative to a speedometer if weight and water conditions permit.

### **Speedometers**

Dual speedometers are provided as a standard feature on all models except the Tantrum (provided as an option). Dual speedometers are provided to improve the reporting accuracy of your water speed in miles per hour. These speedometers are adjustable by turning the knobs on the face of the gauge.

### **Fuel Gauge**

The fuel gauge indicates the quantity of fuel remaining in the tank when the ignition is in the "ON" position. It is recommended that the tank be filled when the gauge indicates 1/4 full.

### Oil Pressure Gauge

The oil pressure gauge indicates the oil pressure in the engine while the engine is running. If the oil pressure reading is below the normal range, stop the engine immediately and check the oil level with the dipstick.

### Water Temperature Gauge

The temperature gauge indicates the temperature of the engine coolant as it circulates inside the engine.

#### Voltmeter Gauge

The voltmeter indicates whether the battery is charging or discharging. The needle should be in the normal (approx. 14 volts) range while the engine is running.

### Engine Hours Gauge

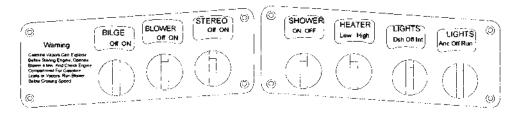
The engine hours gauge acts as an odometer for the engine. Engine hours should always be noted so maintenance and lubricant changes may be performed at proper intervals.

### **Check Engine**

This light is activated by a switch supplied by Mercruiser. This light will illuminate and a warning buzzer will sound if there is low engine oil pressure, high engine coolant temperature, or low transmission fluid pressure.

#### **Accessory Panel**

This panel is on the dash just below the standard gauges and is used to activate the accessory features listed.



Bilge Pump

The bilge pump switch is used to activate the bilge pump so that any excess water in the bilge area may be drained out. You should know that the bilge pump has a sensor in the bilge area and will turn on automatically whenever two inches or more of water is detected.

Blower

This switch activates the blower for the engine compartment. The primary function of the blower is to eliminate any furnes in the motor compartment when starting the engine or during Idling.

Stereo

This switch must be on for your stereo to have power. Please see the stereo's owner's manual for operating instructions.

Accessory This switch is used to supply power to 12-

volt accessory receptacle.

Navigational Lights This switch activates all of your navigational

lighting.

Anchor Light This switch is used to activate the stern light.

Keep this light on after dusk whenever your

boat is at rest in the open waterway.

Interior Lights This switch is used to activate the interior

lights. The interior lights include lights in the gunnel's, storage compartments, and

dashboard.

### Malibu Electronic Management System

Malibu Electronic Management System is Malibu's state of the art dashboard design that uses solid state technology to place six separate monitoring and actuating functions at your fingertips.

1	,	MALI	BU ELECT	ONIC	MANAGÉN	MENT S	YSTEM		
	BLOWER AUTO	LOW FUEL	LOW BATTERY	HIGH TEMP	LOW OIL PRESSURE	CHECK ENGINE	ENGINE HOURS		!
1	$\bigcirc$	()	$\bigcirc$	0	$\bigcirc$	0		7)	<i>!</i>

Figure 2

### Malibu Electronic Management System Indicator Panel (figure 2)

This panel is located on the standard dash just below the tachometer and speedometer gauges.

Automatic Blower This fight is an indicator light that the engine

compartment's blower is operating. This light will automatically be illuminated whenever the boat is operating below 1500

R.P.M.'s.

Low Fuel This light indicates that you should consider

re-fueling you boat. This light will be

displayed when your fuel tank is below 15%

of capacity.

Low Battery This light indicates that there could be a

possible problem with the battery.

High Water Temperature This light indicates that high water

temperature condition exists in your engine.

Check for leaks or impeller damage.

Low Oil Pressure

This light indicates that low oil pressure has been detected in the engine. This is a serious condition and should be acted upon

immediately.

Check Engine

This light is activated by a switch supplied by Mercruiser. This light will illuminate and a warning buzzer will sound if there is low engine oil pressure, high engine coolant temperature, or low transmission fluid pressure.

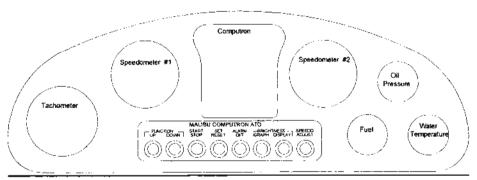
Engine Hours Meter

This meter will help you identify how much your boat is being used and at what time the engine will require servicing. It will run whenever the ignition switch is on.

### Computron ATD® Control System

Most models can also be equipped with the optional Computron ATD, an on-board software based computer system. The only one of its kind installed on tournament tow boats. The Computron's user friendly system allows the driver complete control of twelve (12) separate functions that are displayed in digital alpha-numeric format on the dash and actuated by either the steering wheel buttons (option) or on your accessory switch panel located on the dash. The Computron ATD system will also engage an automatic blower when the key switch is on and engine RPM's are less than 1500.

The optional steering wheel control is equipped with remote function select buttons and a stop watch (not available on woodgrain steering wheel). The select buttons are infra-red coupled to eliminate any wires or mechanical connections through the steering hub. While it might seem you are sitting in a high tech aircraft cockpit, this unique software based computer makes for the integration of a highly reliable and innovative system.



### Computron Dash fig. 3

Set/Reset Switch

Alarm

### **Computron ATD Control Panel (Figure 3)**

This panel is located on the center of your dash console behind to the steering wheel, several function switches and controls have been added for its use with the Computron ATD.

Function Up	This button is used to change the current function of the Computron ATD system. This switch corresponds to the Function Up switch located on the steering wheel. Refer to the following sections on the use of this switch.
Function Down	This button is also used to change the current function of the Computron ATD system and also corresponds to the same switch located on the steering wheel. Refer to the following sections on the use of this switch.
Start/Stop Switch	This button is used to start and stop certain functions of the Computron system. This

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f	unction	ns o	f the	Cor	nputr	on s	ystem	. This
Ş	witch	COL	respo	nds	with	the	(SS)	button
I	ocated	on t	the st	eerin	g who	eel.		

This button is used to set and reset certain
functions with the Computron ATD system.
This switch corresponds with the (SR) button
located on the steering wheel.

locate	a on the	2101	ernig w	Heel			
	button	-					
Comp	utron's	audi	ible al	arm	syste	m.	The
	utron sy					_	
when	set, wi	II SO	ound a	n ai	adible	aları	m to

signal that you are in waters that are at or below the minimum depth setting. If you will be operating your boat in shallow waters, you can use this switch to temporarily turn the alarm off.

Graph Brightness Knob

This knob allows the driver to change the brightness of the digital speed analyzer graph display.

Display Brightness Knob

This knob allows the driver to change the brightness of the digital function display located below the graphic speed analyzer graph. In the Computron ATD's "Demo" mode, this knob is used to vary the readings for the digital tachometer and speedometer.

Speedometer Adjustment

This knob allows for the adjustment of the Computron's digital speedometer.

### Computron Display Module (Figure 3)

This module is located at the top center of the dash board and is the main display for the Computron ATD system. The display module is broken into two separate sections.

Speed Control Graph

This portion of the Computron display module is used to assist the driver in maintaining desired skiing speeds. This display consists of three green lights in the center surrounded by several red lights. Using the Computron's "Set Speed" function, the driver is able to set a desired speed. If the speed of the boat is the same as the set speed, the green lights will be illuminated. If the speed of the boat is slower than the set speed, the red lights to the left of the green will begin to light up. If the speed is faster than set speed the red lights to the right of the green will be illuminated.

**Function Display** 

The middle and bottom portions of the Computron display module are used to assist the driver in displaying and setting the Computron's different functions. The following sections will discuss the setting

and use of the different functions of the Computron ATD system.

### Computron ATD Operation

The Computron ATD system offers several valuable functions that provide additional benefits for enjoyment of your new Malibu Boat. Complete control of the Computron ATD system is performed with the use of only four buttons located on the center panel of the steering wheel. (Optional)

Function Up This button is used to scroll forward through

the available functions of the Computron ATD system. During the setting of certain functions, it is used to increase the value of

a setting.

Function Down This button is used to scroll backward

through the available functions. During the setting of certain functions, this button is

used to decrease the value of a setting.

Set/Reset This button is used during certain operations

to set or reset a setting for a particular

function.

Start/Stop This button is only used to start and stop the

digital stopwatch function.

#### NOTE

The four buttons described above have corresponding switches located on the control panel. The buttons located on the steering wheel are powered by a 9-volt battery located in the steering wheel's front panel directly behind the buttons. These separate switches are provided in the event the battery should lose power during a competition.

### Available Functions

The Computron ATD system provides the driver with complete control over 12 separate functions. The Computron ATD's functions include the following in order of display mode:

Banner

This function causes the Computron system to display the text "CUSTOM BUILT FOR YOUR NAME" when power to the boat is provided. You can change the display of "YOUR NAME" to any 12 digit alpha-numeric characters. To do so, press and HOLD the (SS) button while the banner is displayed.

The Computron system will acknowledge that you wish to change the display by displaying "LET GO". At this time simply release the (SS) button. This will place the Computron system in "Edit" mode. Once in the "Edit" mode, press the (Fit) to scroll the display forward from A to Z, 0 to 9, and then a blank space. Press the (F∜) button to scroll the display backward from a blank space, 9 to 0, and then Z to A. Pressing the (SR) button will move to the next character. in the display to allow editing. Pressing the (SS) button will save your changes and exit the "Edit" mode. Pressing the Alarm Off switch will discard your changes and exit "Edit" mode. To reset the display to "YOUR NAME" simply press and hold both the (SR) and (Fft) buttons while turning the ignition switch from the "Off" position to the "Accessory" position. The Computron system will acknowledge that you wish to change the display to "YOUR NAME" by displaying "LET GO".

Depth Meter

This function provides a digital readout of the water's current depth.

Sea Temperature

This function provides a digital display of the temperature of the water surrounding your boat.

Air Temperature

This function provides a display of the temperature of the air.

Digital Clock

This function provides a display of the current time. To set the clock, press the (SR) button. The display will begin to blink. Once it is blinking, use the (FI) button to change the hours and press the (FI) button to change the minutes. Once time is set correctly, press the (SR) button to save your changes. The display will then stop blinking and the clock has been set.

Voltmeter

This function displays a digital readout of the battery's voltage. The voltmeter indicates whether the battery is charging or discharging. The display should read

approximately fourteen volts while the engine is running.

Engine Hours

The engine hours display acts as an odometer for the engine. Engine hours should always be noted so maintenance and lubricant changes may be performed at proper intervals.

Trip Log

This function displays and allows the reset of the Computron's mileage trip log. To reset the trip log, press the (SR) button.

Set Depth Alarm

This function allows for the setting of the Computron ATD's depth alarm. This function is used to enable an audible alarm that will sound if your boat has ventured into waters that are at or below the depth that has been set. To change the depth alarm, press the (SR) button to enter edit mode. The display will begin to blink. Use the (Fft) and (FI) buttons to change the desired depth. You may enter a range between 3' and 20'. A setting of "- - - -" will disable the alarm altogether. When finished, press the (SR) button to save your changes.

### NOTE

An "Alarm" on/off switch is located on the control panel. This switch provides you with the ability to temporarily disable the audible alarm for the depth meter if you will be operating the boat in shallow waters for a short period of time.

**Tachometer** 

This function will display a digital readout of the engines current R.P.M.'s.

Set Speed

This function provides the driver with the ability to set a desired speed for the boat. This function works in conjunction with the graphic speed analyzer display discussed earlier. To change the desired speed setting, press the (SR) button. The display will begin to blink. Use the (Ff) and (FI) buttons to change the desired speed setting. When finished, press the (SR) button to save your changes.

#### Speedometer

This function will present a digital readout of the boat's current speed. Adjustment of the speed can be performed using the adjustment knob located on the control panel.

#### Stop Watch

This function provides competition level skiers with a ten segment digital stopwatch. To use the stopwatch function, press the (SR) button to reset the stopwatch to zero. When ready, press the (SS) button to begin the timer on the first segment. Press the (SS) again to start timing the second segment. You can time up to ten segments by pressing the (SS) button for each segment. Pressing the (SR) button will stop timing the tenth segment and will place the stop watch in "Review" mode. While in "Review" mode, pressing the (Fft) and (F↓) buttons will allow you to scroll through each of the ten segments. Note that the stop watch will continue to operate at all times while viewing or changing other functions and can be stopped at any time by pressing the (SS) button. However, the stopwatch can only be reset to zero when in the stopwatch function.

Demo Mode

This function is provided to allow dealers and owners to demonstrate the functions of the Computron ATD system while the boat is out of the water. To start the "Demo" mode, simply press and hold the (Fft) and (FU) switches on the Ignition Control Panel while turning the ignition switch from the "Off" position to the "Accessory" position. Please note that the (Fil) and (FU) buttons on the steering wheel panel cannot be used to place the Computron system into the "Demo" mode. The Computron display will acknowledge that you want to enter the demo mode by displaying "LET GO". At this time simply release the (Ffi) and (F↓) All functions on the Computron ATD system are available with the following exceptions:

The depth meter is fixed at 15 Feet.

- The tachometer display can be varied from between 700 and 6000 RPM by turning the "Display Brightness Knob" on the Ignition Control Panel.
- 3) The Speedometer display can be varied from 8 to 50 MPH by turning the "Display Brightness Knob" on the Ignition Control Panel.

To exit the demo mode simply turn off the ignition switch. When you turn the system on again, it will be in the normal operation mode.

#### Caution

Do not use the Demo mode while the engine is running.

## V. CARE AND MAINTENANCE

This section deals with the care and maintenance of your new Malibu boat. Following the guidelines discussed in this section will protect the investment you have made by preserving the beauty and performance of your new boat for years to come.

## General

#### **Propellers**

Even slight propeller damage can mean the loss of one MPH. Greater damage can mean considerably more speed loss. Worse yet, damage usually is not done to each blade uniformly and, therefore, sets up imbalance vibrations that can cause fatigue damage to other parts of the engine or drive system.

At least once a year, more often if you use your boat extensively, you should have your local Malibu dealer inspect the propeller for any possible damage.

At least once a month if you use your boat regularly, you should check and tighten the prop nut.

### Shaft Packing

Located in the bilge under the rear center access panel, is the shaft packing. The shaft packing is a seal where the prop shaft goes through the hull of the boat. This seal should be checked and tightened periodically. Please note that it is normal for a small amount of leakage to occur from this seal. It should leak at about the rate of one drop every ten seconds.

## **Bilge**

The bilge of your boat can accumulate oil and greasy dirt over a period of time and should be cleaned out periodically. Usually, ordinary soap and water does not remove the accumulation, and something stronger will be needed. Check with your Malibu dealer for their recommendation.

#### <u>Hoses</u>

Fuel lines, vent hoses, and drain hoses should be checked frequently for leaks. If this is occurring around the fitting, tightening of the hose clamps may be all that is necessary. However, if the leak continues, replace the hose immediately to prevent a build-up of fluids or gases. Surface cracking on hoses indicates wear, and replacement is recommended. Use fuel system parts certified for marine use only. Do not substitute automotive parts.

#### Windows and Windshields

The windows and windshields on your Malibu boat are made of tempered safety glass and are similar to the windows in your car. The glass will scratch however, and abrasive cleaners should not be used to clean your windows. Soap and water or automotive glass cleaners may be used.

Windshields' on Tantrums are fitted with Lexan and are very durable but can scratch easy with most cleaners. For the best results use soap and water with a soft cotton towel, rinse windshield and dry.

#### <u>Electrical</u>

Your Malibu boat is equipped with a standard 12-volt battery. The battery comes with a non-metallic box to help contain spills and prevent corrosion.

Check your battery terminals frequently for corrosion and tightness. Clean terminals with a baking soda and water solution and a wire brush. Also, check the fluid levels in the cells. Usually, a level approximately 1/4 to 1/2 inch above the plates is sufficient. If needed, fill with distilled water. Some batteries are sealed and this process is not necessary. Read directions when applicable.

### **Engine Care**

For information on engine service and maintenance, please refer to your engine owner's manual. The maintenance schedule included in this manual outlines safety checks, lubrication, and general service that should be performed at regular intervals. It is recommended that any engine replacement parts used for maintenance or repair be supplied by an authorized Malibu dealer.

#### WARNING

Malibu does not recommend starting your engine with jumper cables under any circumstances. Risk of spark at the battery post can cause igniting of gasoline furnes or hydrogen gas.

## Rudder Stuffing Box

The rudder stuffing box has a grease nipple and should be checked and lubricated annually. The rudder stuffing box is accessed through the rear center access panel. Use only a waterproof grease.

## Winterizing

When the boating and ski season comes to an end, it is recommended that the boat be removed from the water and stored. It is extremely important that proper winterizing procedures are read and followed to

ensure longer boat life. Here is our list of suggestions to keep your boat in top condition:

- Prepare the engine according to the instructions found in your engine owner's manual.
- Clean and dry the boat's interior and exterior thoroughly. Inspect boat hull for residue and remove any if present.
- Clean the bilge area thoroughly and operate the bilge pump to remove any water from bilge lines.
- Remove all seat cushions and open all storage areas.
   Store the seat cushions in a cool and dry place.
- Cover the boat and store it in a garage or other protected facility.
- If the boat is stored on a trailer, you should block the trailer wheels.

## Exterior

Your Malibu boat is highly resistant to weathering, water pollution, and minor scrapes which occur during normal use. However, regular care and maintenance of your boat is a general responsibility for all Malibu boat owners. By following the boat care instructions listed below, you will be able to extend the life and beauty of your Malibu boat.

## Fiberglass and Gelcoat

The fiberglass hull and deck of your Malibu boat consist of a molded shell and exterior gelcoat. The gelcoat protects the fiberglass shell and gives all Malibu boats a smooth and shiny surface. The following are some general instructions which will help you maintain your boat's sleek appearance:

- Wash monthly or more frequently, depending on use. Use a mild dish washing soap and lukewarm or cold water. Rinse your boat with fresh water and wipe down immediately to avoid water spots.
- 2. Wax the boat hulf and deck after every three or four outings to decrease water friction and to lessen the potential for staining or spotting to the gelcoat surface. In cases where the original gelcoat shine cannot be restored by waxing, hand buff the surface using any commercial compound. Be sure to apply several coats of wax over the area that has been polished.

#### WARNING

Never use harsh soaps, porcelain cleaning powders, detergents containing ammonia or chlorine, acetone, or ketone solvents.

#### **Surface Stains**

Stains can appear as a result of dust, road tar, plant sap, rust from metal fittings, and other materials coming in contact with your boat's exterior. Listed below is a step-by-step procedure to remove stains from your boat:

- 1. Wash area with dish washing soap.
- Apply a mild cleanser on a small area (3' by 3').
- Rinse with fresh water.
- Buff with a fine rubbing compound.
- Wax.

If the stain is not removed by the dish washing soap or mild cleanser, then the next procedure is to use either denatured or rubbing alcohol. Common rubbing alcohol is excellent for removing stains.

#### WARNING

Do not use acetone, ketone, or other solvents to remove stains. These chemicals are flammable and may also cause damage to the gelcoat.

#### **Scratches**

Scratches to the gelcoat sometimes occur during normal use. Your dealer can usually restore the gelcoat to like-new condition.

## **Underwater Corrosion**

Corrosion occurs in saltwater conditions from the interaction of the saltwater and the direct current of the battery. To prevent corrosion, it is important to keep the bilge area as dry and clean as possible.

## Care For Boats That Are Moored

Due to gelcoat discoloration, osmosis (blistering), and algae growth, it is not recommended that you leave your boat moored for long periods of time. If your boat will be moored in fresh water or saltwater for extended periods of time, you should do the following:

- Haul-out and clean your boat regularly (every 14-21 days).
   Use soap, water, and plenty of elbow grease.
- Apply wax after cleaning.

You should also check with your local Malibu dealer about anti-fouling paint and other products that can be applied to the hull bottom below the water line.

## Interior

### **Upholstery**

All upholstery items aboard your boat are made of a tough marine vinyl that is easily cleaned with a mild detergent and warm water. After washing the vinyl, be sure to dry it thoroughly.

#### WARNING

Do not use harsh cleaners or silicone based products. Products of this type will shorten the life of the vinyl.

Our materials are mildew resistant, but there are no products available to us that are mildew proof. Therefore, we also recommend that you dry the upholstery thoroughly at the end of each day's boating activity to prevent mildew which will rot the upholstery threads and backing. We also recommend that you tip up all seat base cushions on edge after each use to allow any accumulated water to drain.

## Carpet

Your Malibu boat is equipped with a top quality, all-weather indoor/outdoor carpet. It is essentially waterproof and fade resistant. Occasional vacuuming, and scrubbing with soap and water, will remove embedded dirt and grit.

#### NOTE

Mildew damage is not covered under your warranty

## **Hardware**

Most of the metal hardware on your boat consists of brass, stainless steel, or aluminum and should be cleaned on a periodic basis with soap and water. In fresh water, metal fittings and hardware should be sprayed annually with a rust inhibitor such as WD-40, and every two or three months in saltwater.

#### Teak

Teak or mineral oil treatments should be applied at least four times a year. Teak wood should never be varnished.

# VI. APPENDICES

## Appendix A - Warranty Information

#### Malibu Boats Transferable Lifetime Limited Warranty

Malibu Boats West, Inc. warrants to the Original Retail Purchaser that the hull, deck, liner, upholstery frames, and stringers on every new boat manufactured shall be free from structural defects for as long as the original purchaser owns the boat. Malibu Boats West, Inc. or its selling dealer will, without charge, repair or replace at Malibu's option, any boat or portion thereof proven to its satisfaction to be in defect during the above warranty period. Warranty repairs will be done at the selling dealer's locations or the manufacturers location provided that transportation costs for both directions are prepaid and the claim is made within sixty (60) days after the defect is discovered.

#### Two Year Transferable Option:

This policy may be transferred (for a minimal fee) to subsequent purchasers during a period of two years from the date of delivery to the original retail purchaser. This warranty does not cover the gelcoat nor any other components fastened or applied to the dash. Gelcoat discoloration, blisters, and cracks are not considered structural defects.

#### This warranty does not apply to the following:

- Any product not manufactured by Malibu Boats West, Inc., including but not limited to engines, drive trains, transmissions, steering systems, instruments, fuel tanks, pumps, underwater gear, propellers, controls or other equipment or accessories installed by Malibu Boats. To the extent that these parts are warranted, Malibu Boats will, if possible, furnish the manufacturer's warranty documents to the original owner.
- Damage or effects of such damage caused by the installation of engines, accessories, or other equipment installed by anyone other than Malibu Boats
- Boats that have been sold or transferred by the original owner outside of the two year transferable option period; boats that have been altered, overpowered, overloaded, or subject to misuse or negligent care.
- Windshield breakage, upholstery colorfastness or mildew damage, paints, plated finishes, gelcoat discoloration or osmosis, and finish distortions.

**Note:** Water can be a very harsh chemical (depending on the alkali, chemical, or iron condition present) and even though we use the best gelcoat available, blisters may still occur on submerged hull surfaces. If your boat is left in the water for more than 2-3 weeks, we suggest you apply a good bottom paint to protect the hull from osmosis and blisters.

You may also remove your boat from the water and allow to thoroughly dry every 1-2 weeks to help prevent this condition. Gelcoat blisters and osmosis are not covered under your Malibu Warranty.

- 5. Boats used for racing or any type of commercial use or service.
- Costs or charges derived from inconveniences of loss of use, commercial or monetary loss due to time loss, or any other special or consequential loss of any kind.

To validate this warranty, it is the responsibility of the original Retail Purchaser to complete and return a warranty registration card within 10 days of the retail purchase date to:

#### Malibu Boats West, Inc., 1861 Grogan Avenue, Merced, CA 95340

Notification of a claim or defect can be made though the selling dealer or by writing directly to Malibu Boats. Information needed for processing a claim includes: name and address of original retail purchaser, boat serial number (embossed on the upper right side of the transom), original retail purchase date, a detailed explanation of the defect and a estimated repair cost. Warranty repair or replacement can only be made after the above information is approved by Malibu Boats. If approved, a warranty authorization number will be issued in writing or by telephone to the approved warranty repair station.

This limited warranty is given in place of and instead of any and all express or implied warranties, and may not be modified in whole or in part by anyone other than Malibu Boats.

Some states do not allow a limitation on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages; therefore, these limitations may not apply to you. This warranty gives you specific legal rights and you may also have other rights that vary from state to state.

Malibu Boats West, Inc., 1861 Grogan Ave., Merced, CA 95340

Phone: (209) 383-7469, Fax: (209) 383-0499.

Effective: 1994 Boat Models.

#### Other Manufacturer Warranties

Along with Malibu's warranty policy, many of the components used to build your Malibu boat are covered by individual warranties from their respective manufacturers. These products all have specific warranty periods and conditions that you should be familiar with should you need assistance. Included in the information packet shipped with your boat you will find information regarding any individual manufacturer's warranty policies for the different equipment installed on your boat. We strongly advise you to make yourself familiar with the different warranties offered before contacting the vendor.

## Appendix B - Owner Service Assistance

#### Problem Resolution

Everyone associated with Malibu Boats is highly concerned with your complete and total satisfaction. Included in this concern is the prompt resolution of any problems that may occur during the life of your Malibu boat. Under almost all conditions, most problems can be adequately resolved by your local Malibu dealer. However, if a problem arises and cannot be handled by your dealer or for which the solution is unsatisfactory to the owner, feel free to contact Malibu directly. When contacting us, please be ready to provide your hull ID# and a detailed description of the problem and the steps that have been taken to resolve the issue. Be sure to have any appropriate documentation ready if it should be needed. Our factory representative will investigate the situation and will dictate the appropriate response should further action be needed to resolve the problem.

#### Local Repair Service

If the need for service should ever arise, the best place to take your boat is your local authorized Malibu Boat dealer. They have the knowledge, technical staff, and equipment needed to properly service your boat.

#### Service Away From Home

If you are away from home and require service to your boat, contact your nearest authorized Malibu dealer. Check the yellow pages of the telephone directory in the area. If you are unable to locate an authorized dealer in the area, contact Malibu directly. We will be happy to give you the name and number of a dealer in the area.

#### Parts and Accessories

To order replacement parts and accessories for your Malibu boat, contact your local authorized Malibu dealer. The dealer has the necessary information to order parts and accessories for your boat if they do not have them in stock.

## Appendix C - Identification Information

The following form should be used by you to record certain important information about your new Malibu boat. This information will come in handy when having your boat serviced or if warranty repairs are required.

OWNER'S NAME:	
ADDRESS:	
CITY, STATE, ZIP:	
HULL ID #:	
MAKE AND MODEL	
ENGINE MAKE & MODEL:	
ENGINE SERIAL NUMBER:	
PROPELLER TYPE & SIZE:	
SELLING DEALER:	
ADDRESS:	
CITY, STATE, ZIP:	
DATE PURCHASED:	
WEIGHT:	
LENGTH:	
BEAM:	
DRAFT:	
TRAILER MAKE & MODEL:	
TRAILER SERIAL NUMBER:	
INSURANCE COMPANY:	
POLICY NUMBER:	

# Appendix D - Service Log

The following form is provided to allow you to track information regarding the services that have been performed to your new Malibu boat.

Date	Engine Hours	Description of Work Performed
		<u></u>
	_	<u></u>
<u> </u>		
ļ		<u> </u>
<u> </u>		

# VII. GLOSSARY & INDEX

## Glossary

AFT: To the rear of the boat near the stern.

Generally used to give directions.

BEAM: The widest portion of the hull.

BILGE: The lowest portion inside the boat. This is

generally the section directly below the engine

compartment.

BOW: The forward portion of the boat.

BULKHEAD: Vertical portion in a boat.

CHINE: The intersection of the sides and bottom of a

"V" bottom boat.

DEADRISE: The degree of angle from the keel to the

chine.

DECK: Upper structure which covers the hull.

DRAFT: Vertical distance from the waterline of the boat

to the lowest part of the boat.

FibECS II; An engine mounting method using fiberglass

instead of aluminum, patented by Malibu Boats West, Inc., that provides for major reductions in noise and vibration found on all

other inboard boats.

FIBERGLASS: Fibers similar to wool or cotton, but made from

fibrous glass. Glass fiber forms include cloth, yarn, mat, milled fibers, chopped strands,

roving, and woven roving.

GELCOAT: A surface, either colored or clear, providing a

cosmetic enhancement and exposure

improvements to a fiberglass laminate.

GUNNEL: The upper edge of a boat's side.

HULL: The bottom section of the boat.

KEEL: The lowest most portion of the bottom of the

boat.

LIFTING STRAKES: Strips molded or attached to the surface of a

hull designed to create lift as speed and

pressure increase with the static water.

PORT: To the left side of the boat.

STARBOARD: To the right side of the boat.

STERN: To the rear of the boat.

STRINGER: Longitudinal members that are fastened inside

the hull of the boat which provide structural

integrity.

TRANSOM: The area forming the stem, or rear, of a boat.

WAKE: The track or path a boat leaves behind while

in motion.

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