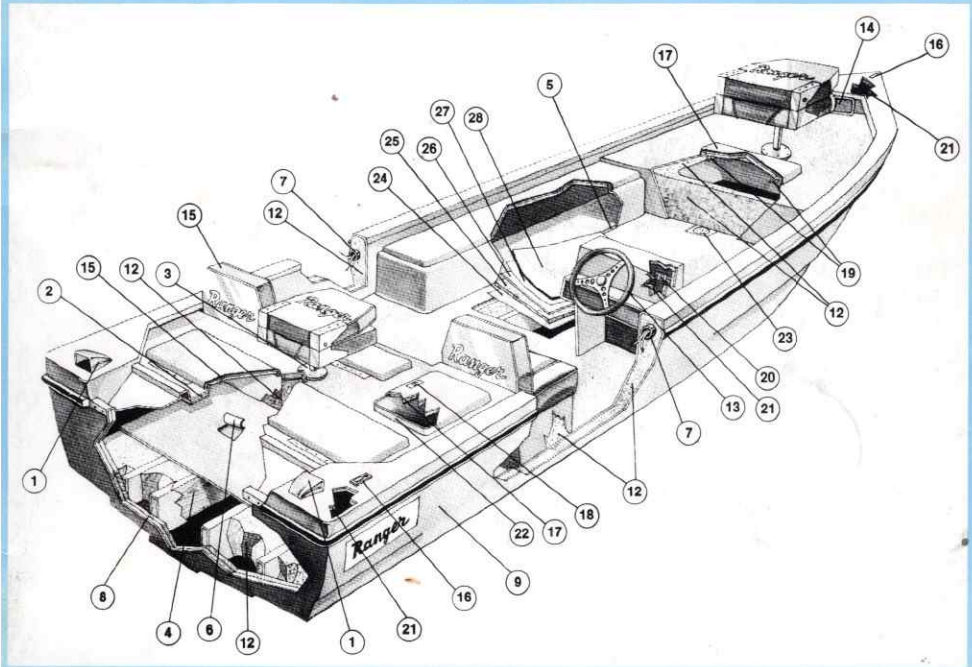


# Ranger<sup>®</sup> Dan M. OF ARKANSAS

## Boat Owners Manual



SEE PAGE 13

MANUFACTURED BY  
WOOD MANUFACTURING COMPANY, INC.

P.O. BOX 262 • FLIPPIN, ARKANSAS 72634

Member  
Executive  
Advisory  
Board



BASS RESEARCH FOUNDATION



SUPPORTING MEMBER

## RULES OF THE ROAD FOR OUTBOARDING



- Keep clear of sailing craft and rowboats. Yield right of way to slower boats.
- Always keep to the right.
- Do not use your motor near swimmers or skin divers.
- Learn the sign language of the various buoys and warning signals. These are your nautical traffic signs, posted for your safety and convenience.

## COASTAL WARNING DISPLAY SYSTEM

The United States Weather displays coastal warning signals (RED and BLACK flags by day, RED and WHITE lights by night) whenever winds dangerous to navigation are forecast. Learn these signals and heed them. Ignoring them can be dangerous to you.

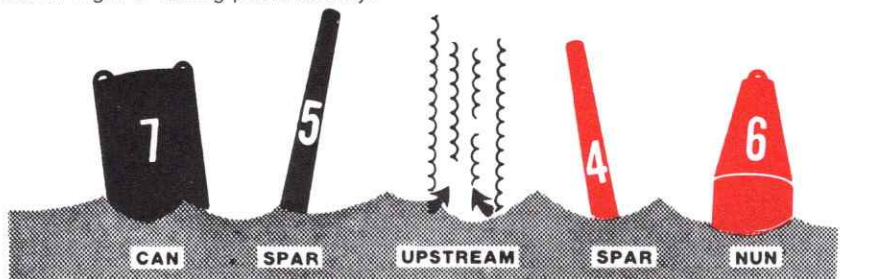


## BUOYS . . . YOUR WATERWAY SIGNPOSTS

There are three basic types of buoys: NUN (cone shaped), SPAR (spar shaped) and CAN (cylindrical shaped).

Going upstream, the RIGHT (Starboard) side of the channel is marked with even numbered RED buoys, nuns or spars: the LEFT (Port) side of the channel is marked with odd numbered BLACK buoys, cans or spars. BLACK and WHITE vertically striped buoys indicate the middle of a channel. Always pass close to these buoys.

BLACK and RED horizontally striped buoys are obstruction markers, wrecks, channel junctions, etc., areas where caution is necessary. A red band at the top means the channel is to the left of the buoy; a black band, to the right. Various other buoys are used, buoys with lights and audible signals for night or during poor visibility.





## INTRODUCTION

CONGRATULATIONS on your judgment in purchasing a Ranger Bass Boat!

You will find that Ranger has justly earned its reputation of being the No. 1 bass boat.

The following suggestions will help you to better understand and enjoy your boat.

The dealer from whom you purchased your boat should see that you have the right engine horse power and the right prop, as well as install or adjust the engine at the proper height for optimum performance.

Your boat should be placed on a trailer that fits your boat by supporting its weight on "pads" or "bunks". Rollers may be used to load or unload your boat, but they should be positioned so the boat does not rest on the rollers.

When your boat is parked on your fitted trailer, the **front should always be higher than the rear**. The livewell valve should be open and the transom drain plug removed to allow any water to escape.

A canvas cover is very desirable when you are trailering your boat or have it parked. The cover will protect it from road film, dirt, and the sun's rays.

Next, you should familiarize yourself with the instruments; tachometer, speedometer, depth finder, trolling motor, and numerous other accessories that are available.

NOW, you should be ready for a ride in your new boat! This will be a great experience if you exercise caution and observe safety rules and regulations.

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Before you launch your boat, install your transom drain plug, close your livewell valve, unhook tie-downs, trailering arms, motor supports, and/or latches. Slowly back trailer into water and unhook winch rope. Put on life jacket and attach lanyard of emergency stop switch to your person, if boat is equipped with one. (If not, we feel it is worth considering.) Start engine and back your boat off trailer. This should be easy if the trailer is in deep enough water.

Now you are ready for a great thrill! You are in command of your very own boat, which will be your friend for a long time if you treat it right.

Before you "open her up", let's ease along with the motor trim all the way down (in). Turn the steering wheel each direction and see if you feel any exceptional slack. If you have any questions, stop immediately and look the steering system over. Look under the console and at the engine for anything that looks loose, disconnected, broken, or otherwise suspicious. You should do this often, both on the water and at home. After you are satisfied that everything is in order, make sure all occupants have their Personal Flotation Devices on properly and that nothing is blocking your vision.

Now, let's begin to push the throttle forward. You should be able to get the boat to plane very quickly. Back off on the throttle a little and get the feel of the boat at this speed. Keep increasing the throttle slowly, a little at a time, until you are going as fast as you feel safe--never faster!

As you increase the throttle, you will notice on some models that at one point, the boat may tend to porpoise somewhat (the front bounces up and down). If you increase the throttle a little more, the porpoise bounce will stop. This is a natural behavior for a boat with a built in "rocker", which is desirable for top-end performance. The amount of porpoising is relative to the location of the weight in your boat. You will find that by moving your tackle box, ice box, etc. from front to back and vice versa will have an effect on this responsive, high performance boat.

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Now that you are under full power, with a clear lake ahead, you should start experimenting with your power trim. You will notice as you operate the "up" button in very short intervals, the front of the boat begins to rise and the spray will come out from under the boat farther back. Keep pushing the "up" button and keep one eye on your tach and your ears open for a different sound from your engine. As you trim your boat up, you may trim too high and over-rev your engine, causing damage to it or causing your prop to blow out. If this happens, hit the "down" button on your trim immediately and then start bringing it up slowly again.

Another reaction to over trimming your boat is that under some load conditions, it may start to porpoise. This can be corrected by very briefly tapping the "down" button on your trim. Trimming your engine back down is easy. Normally, it should be done before backing the throttle off, except in an emergency. You will find that you should have your engine in a different trim position for different speeds and load conditions, as well as different water conditions. You will learn these things as you become more familiar with your new boat.

It is impossible to describe all the different situations you may encounter, so remember, **common sense** is the best safety precaution. Stay alert and keep away from dangerous situations.

A pleasant experience of "a first ride in your new boat" must come to an end sometime. Most likely, you have purchased a "drive on trailer" with your boat. Loading the boat on a trailer of this type is simple if you have the trailer in the right position. The right position is determined by how steep the ramp is. Here again, you will have to experiment with the proper depth to have your trailer in. The most common mistake is backing the trailer too deep in the water. A little time experimenting with different positions can save you valuable time and embarrassment. To load, head bow of boat in between guide rollers or guide bunks and use motor thrust to drive boat forward onto trailer until bow contacts bow stand block. When you have loaded your boat on your trailer, fasten winch rope to bow, tighten winch, and lock before pulling it out of the water. Trim or tilt

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your engine up to prevent damage to your lower unit or prop. Drive your vehicle out of other people's way. Stop to remove the drain plug, open livewell valve, and stow your gear. You should also install a transom saver, or a brace that attaches to trailer frame and fits over lower unit of your engine to prevent damage to your transom while your boat is in transit.

For the most enjoyment possible, familiarize yourself completely with your boat and if you are a novice, there are publications on seamanship recommended to make your boating safe and enjoyable.

We wish to remind you that pleasant boating is safe boating and the best safety rules are your **common sense** and **sound judgment**.



Forrest L. Wood  
President

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## LIVEWELL OPERATION ON HI-PERFORMANCE MODELS

The push/pull valve located behind the driver's seat is the water intake for both front and rear livewells. When running down the lake, the valve should be pushed down in order to keep water in the livewells and keep the fish or bait alive. If the push/pull valve is left open while the boat is on plane, the water will rush out of the livewells and through the drain pipe out into the lake.

## AERATOR OPERATION

Turn on the aerator pump switch (rear livewell aerator switch located on console, front livewell aerator switch located on bow panel) and water will spray on the water already present in the livewell producing aeration. Inside the livewell there is an adjustment valve to control the flow of water spraying into the well. All livewells have an overflow so that excess water will be returned to lake.

**CAUTION: LIVEWELLS SHOULD BE DRAINED WHEN BOAT IS TO BE STORED. THE BOAT SHOULD BE TILTED BOW UP BY USE OF THE TRAILER JACK FACILITATING DRAINAGE OF WATER FROM LIVEWELL PLUMBING AND THEREFORE AVOIDING ANY DANGER OF FREEZING AND DAMAGING THE PIPES IN COLDER WEATHER OR ANY REMAINING WATER TURNING STAGNANT IN WARM WEATHER.**

## TRAILERING YOUR BOAT

Proper trailering of your boat is very important to its performance. An important consideration when buying a boat trailer is the support it affords the boat. A trailer with longitudinal runners capable of being positioned to the optimum location in relation to the hull shape should be selected. **Rollers in the center line of the trailer are for loading purposes only — they should not be against the keel of the boat.** A series of rollers on which the hull rests is undesirable. They should be positioned to prevent the boat keel from hitting trailer cross members while launching and loading. Make sure your boat is loaded and tied down properly before trailering.



**CAUTION:** TRANSOM SAVER OR SUPPORT FROM TRAILER TO LOWER UNIT OF ENGINE IS VERY DESIRABLE TO LESSEN THE CHANCE OF DAMAGE TO TRANSOM WHILE TRAILERING.

## STORAGE OF BOAT

The trailer tongue should be raised to a position to have the bow of the boat higher than the stern during storage, with the transom drain plug removed. This position will allow rain water to drain from the hull.

**CAUTION:** DRAIN PLUG SHOULD ALWAYS BE REMOVED FROM TRANSOM WHILE BOAT IS PARKED ON A TRAILER OR IN DRY STORAGE. THIS HELPS PREVENT WATER FREEZING AND DAMAGE TO HULL.

## CARE AND MAINTENANCE

### AERATOR SYSTEM

Very little maintenance is required for your aerator system. Do not put plastic baits or other small objects in your livewell that could clog your aerator pump or lines as this would necessitate disassembling your system. The spray nozzle of the aerators may become plugged by fish scales and other small debris. If this occurs the nozzle (located inside livewell) should be unscrewed and cleaned. The cable which operates your livewell flow is stainless steel and a small amount of thin oil applied periodically should keep it working smoothly. The push/pull valve in the sump area should have a light coat of grease applied periodically. Livewell systems should always be drained during cold weather to prevent pipes from freezing.

### POWER PEDESTALS

**WARNING:** POWER UNIT IS UNDER PRESSURE DO NOT TAMPER WITH IT.

These pedestals are constructed to the highest standard of workmanship and will give many years of trouble free service. A minimum amount of care in its use will insure the trouble free service that it is capable of. Periodically apply a thin film of light weight oil to the power unit piston. DO NOT abuse the pedestal by putting excessive strain on the seat and power unit when it is in the full up position. Always lower the seat to its full down position when the boat is underway and during storage. This is for your safety as well as protection of the power unit.

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**WARNING:** While the gasoline engine is being used, do not allow anyone to sit on a boat seat which is elevated above gunwale level. Such conduct may result either in the driver's vision being blocked or in the occupant of the seat being thrown overboard. Either of these possibilities could result in an accident involving the possibility of injury to or death of the occupants of the boat.

The stainless steel power pedestals are warranted for one full year against defects in materials and workmanship. Should power pedestal fail, your claim can be greatly expedited by returning pedestal to Currey Machine and Tool Co., P.O. Box 716, Monticello, Arkansas, 71655. Pedestals will be returned COD \$2.00 for handling charge plus postage. Repairs of units not under warranty will be charged at regular rate. Power pedestal warranty card must be on file with CMT to validate warranty.

## **OPERATION INSTRUCTIONS — POWER PEDESTALS ONLY**

To raise the seat simply lift your weight slightly out of the seat and lift lever up. To lower the seat keep your weight in seat and lift lever up.

## **NON—ADJUSTABLE PEDESTALS**

Non-adjustable pedestals require only a small amount of grease applied to the teflon bushing and the  $\frac{5}{8}$  inch shaft which fits into the teflon busing. This will keep them from squeaking and should make them turn easier.

## **KEY LOCKS**

Key locks are constructed of chrome plated alloy, and the cams are stainless steel. A few squirts of thin oil, such as WD-40, periodically should keep them turning freely. If they are ever subjected to salt water, be sure that all the salt is washed out of the locks and oil applied to them.

## **CARPET**

The carpet in your boat has a duraflex backing resistant to gas and oil. Your carpet may be scrubbed with soap and water. A car wash is suitable.

**CAUTION: GAS AND OIL MAY BE HARMFUL TO THE ADHESIVE QUALITIES OF THE CARPET GLUE, UNLESS REMOVED PROMPTLY WITH SOAP & WATER.**

## UPHOLSTERY

To best clean and condition Naugahyde®, all colors, the quick and easy way use spray on Cleaner/Conditioner by Naugahyde®. Nourishing conditioners restore luster and help Naugahyde® and other vinyls keep their natural softness. Special cleaners in this product protect against dirt, grime, and accidental spills. **Order spray can, (SPR-10) or squeeze bottle of creme, (CRE-13).**

To loosen stubborn soil or embedded dirt in textured surfaces, use a soft nylon brush, wipe with a damp sponge and respray as needed. Buff with a clean dry cloth. Regular use of this Cleaner/Conditioner by Naugahyde® helps keep vinyls soft, supple, like new longer.

To remove chewing gum, tars, paint, shoe polish and heel marks, use a cloth dampened with kerosene or naphtha. Ball point ink may sometimes be removed if rubbed immediately with a damp cloth using water or rubbing alcohol.

**CAUTION: DO NOT USE ACETONE, PAINT REMOVER OR OTHER STRONG SOLVENTS ON YOUR UPHOLSTERY.**

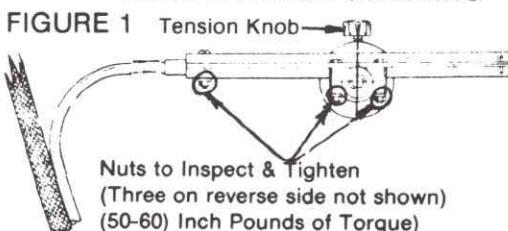
## STEERING

**SAFETY CAUTION: THE STEERING IN YOUR BOAT IS ONE OF THE MOST IMPORTANT ITEMS AND SHOULD BE CHECKED BY THE DRIVER EVERY TIME HE GOES OUT IN THE BOAT. YOU SHOULD SCHOOL YOURSELF AND MAKE IT A HABIT TO CHECK THE STEERING METHODICALLY.**

## RACK AND PINION

If you have a Ranger High Performance boat and it has been equipped with steering from the factory, it will be Rack and Pinion steering as shown in figure 1, page 4, which gives you an under the console view. If you have one of these models, here are some things to check: make sure all the nuts circled in Figure 1, page 4, (there are 6) are tight. If you have any doubt and want to tighten them, use a torque wrench and tighten no more than 50-60 inch pounds of torque. On twin steering models, there will be two racks under the console.

### RACK & PINION STEERING



**CAUTION: TIGHTEN TENSION KNOB FOR HIGH SPEED DRIVING AND LOOSEN FOR EASY MANEUVERABILITY AT LOW SPEEDS.**

FIGURE 1

**ROTARY STEERING**

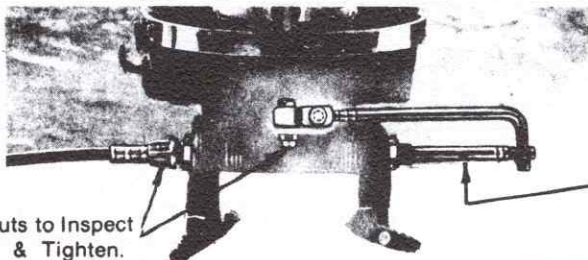
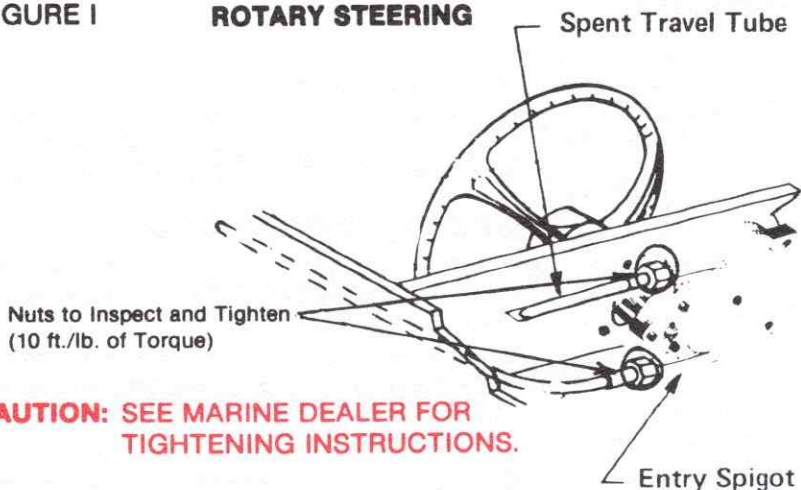
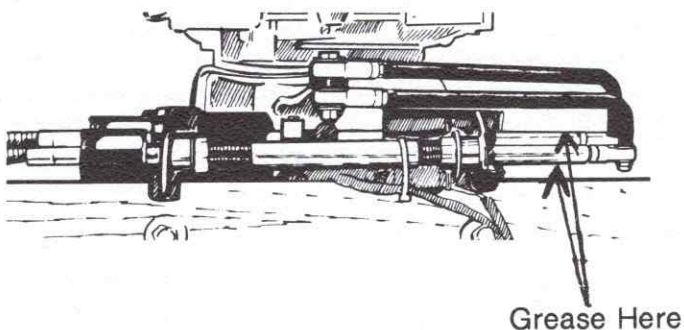
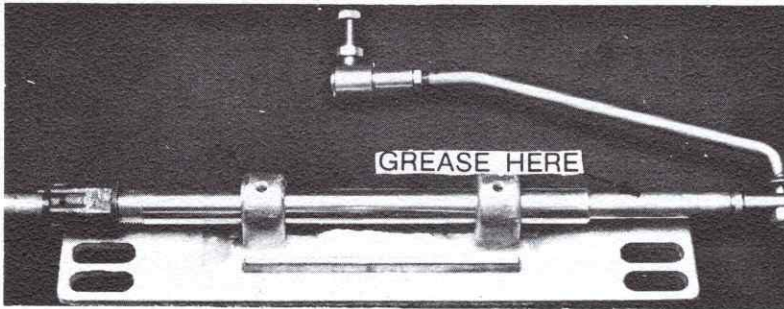


FIGURE 2

FIGURE 3





**CAUTION: SEE AUTHORIZED MARINE DEALER FOR TIGHTENING INSTRUCTIONS.**

### **ROTARY STEERING**

If you have a Ranger model 14-4, any 16 foot model, R, TR, DTR, 1600 V-3, or conventional 18 foot, model that has been equipped with steering from the factory, it will be Rotary Steering, as shown in Figure 1, page 5; which gives you an under the console view.

### **STEERING CONNECTIONS AT ENGINE**

Rotary Steering or Rack and Pinion Steering will be connected at the engine by similar methods shown in either Figure 1, page 6, Figure 3, page 5, or Figure 2, page 5. Inspect and tighten all nuts.

**SAFETY CAUTION: THESE NUTS ARE MORE LIKELY TO LOOSEN BECAUSE OF VIBRATION, AND SHOULD BE CHECKED OFTEN. IF IN DOUBT, SEE YOUR AUTHORIZED MARINE DEALER FOR TIGHTENING INSTRUCTIONS.**

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Ranger Boat Company does not manufacture or sell any of these connector kits. Therefore, we will not make any recommendations on how to install them. If you have any doubt, return boat to your Ranger dealer or authorized marine dealer for inspection or correction.

A small amount of grease applied to the points shown in Figure 1, page 6, and Figures 2 and 3, page 5, should make your steering turn smoother, and should be all the maintenance required.

## GEL-COAT

The gel-coat (color) used on your Ranger is of the highest quality available today. To keep it looking new and in good condition these tips will prove helpful.

- (1) A light-duty rubbing compound (available at most auto-part stores) is recommended for stains such as mold, waterlines on hull, fine scratches on finish or just to bring out that "look new" shine.
- (2) Automotive wax or polish is good for preserving the shine and building an "armor coat" to prevent scratches and will also help protect hull while in wet storage.

**CAUTION: DO NOT USE ACIDS OR OTHER STRONG CHEMICALS TO CLEAN YOUR BOAT.**

Careful as you may be, you will get that scratch from the dock, trailer, or beach that will need some attention. Most Ranger dealers are equipped to do fiberglass repair, however, minor scratches may be repaired by the owner using these instructions. Touch-up gel-coat may be ordered through your dealer.

- (1) Prepare surface to be repaired by washing with acetone, xylene or methylene chloride. **These materials are flammable.** Read and follow the supplier's handling instructions carefully. These materials are usually available from plastic and fiberglass supply houses in larger cities.

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- (2) Using RANGER TOUCH-UP GEL COAT ONLY, mix 1% to 2% catalyst (MEK) with the desired amount of gel-coat. (Do not mix catalyst until you are ready to patch.)
- (3) With a putty knife, trowel catalized gel-coat in desired area, leaving it slightly higher than the original surface to allow for shrinkage.
- (4) When patch has dried, carefully sand with No. 600 grit wet sandpaper, then buff with rubbing compound to restore shine. DO NOT use an electric buffer; it may overheat and damage the boat's surface.

**CAUTION: DO NOT SAND METAL-FLAKE FINISH. A DIFFERENT PROCEDURE IS USED FOR PATCHING METAL FLAKE. YOU SHOULD CONTACT YOUR RANGER DEALER OR FIBERGLASS REPAIR SHOP FOR MORE INFORMATION.**

## INSTALLATION INSTRUCTIONS

**CAUTION: USE A SILICONE SEALER WHEN ADDITIONAL HOLES ARE REQUIRED IN THE HULL OR TRANSOM. ALSO USE SEALER AROUND ANY BOLTS OR SCREWS INSTALLED IN THE FLOOR OF THE BOAT.**

### TROLLING MOTOR

The port and starboard section of the gunwale in the bow of the boat has reinforcement on the under side for drilling and bolting on accessories. Washers should always be used on the under side when bolting on trolling motor. All of the bolt holes available should be utilized to insure stability.

### DEPTH SOUNDERS

Depth sounders may be mounted on the top side of the console. Some fishermen prefer their depth sounder on the bow of the boat. Stiffeners have been added to the under side of the bow for accessories. We recommend that ¼ inch bolts with nuts and washers be used to attach items.

# TRANSOM HEIGHTS

AND

## PROPELLER RECOMMENDATIONS

MERCURY & MARINER	PROPELLER Material	Dia. x Pitch	VTHS	BOAT MODEL and APPROX. STH	JOHNSON & EVINRUDE	PROPELLER Material	Dia. x Pitch	VTHS
50-70 hp	Alum.	10 3/8 x 13		Warrior 1&2		Alum.	14 x 13	
	"	10 1/4 x 14		21"		"	13 3/4 x 15	
	QSS	10 3/8 x 13	21-22 1/2		50-70 hp	SST	13 3/4 x 15	21-22 1/2
	"	10 1/4 x 14				"	13 3/8 x 17	
40-50 hp	Alum.	10 3/8 x 13		1600V & V2		Alum.	10 1/2 x 11	
	"	10 1/4 x 14	20 1/2 -	20 1/2"	35 hp	"	10 x 13	20 1/2 -
	QSS	10 3/8 x 13	22 1/2			Alum.	14 x 13	22 1/2
	"	10 1/4 x 14			50-55 hp	"	13 3/4 x 15	
						SST	12 1/2 x 15	
						"	12 1/4 x 15	
50-70 hp	Alum.	10 3/8 x 13		1600V1 & V3		Alum.	12 1/2 x 13	
	"	10 1/4 x 14		20 1/2"		"	12 1/2 x 15	
	QSS	10 3/8 x 13			50-60 hp	SST	12 1/2 x 13	
	"	10 1/4 x 14				"	12 1/4 x 15	
			20 1/2 -					20 1/2 -
	Alum.	13 x 19	22 1/2			Alum.	13 3/4 x 17	22 1/2
80 hp	"	12 3/4 x 21			70-75 hp	"	13 x 19	
	QSS	13 1/4 x 19				SST	13 3/8 x 17	
	"	13 x 21				"	13 x 19	
70 hp	QSS	10 3/8 x 13		158V - 22 1/2"		SST	13 3/4 x 15	
	"	10 1/4 x 14			70 hp	"	13 3/8 x 17	
	QSS	13 1/2 x 17	22 1/2 -			SST	13 3/8 x 17	22 1/2 -
80 hp	"	13 1/4 x 19	23 1/2		75 hp	"	13 x 19	23 1/2
	QSS	13 x 21						



80 hp	QSS	13 $\frac{1}{2}$ x 17	178V, 1750V,	90 hp	SST	12 3/4 x 21
	"	13 $\frac{1}{4}$ x 19	1780V	75 hp	"	13 3/8 x 17
90 hp	QSS	13 $\frac{1}{4}$ x 19	21 -	90 hp	SST	13 x 19
	"	13 x 21	22 $\frac{1}{2}$		"	12 3/4 x 19
115 hp	QSS	13 $\frac{1}{4}$ x 19		115 hp	SST	12 3/4 x 21
	"	13 x 21			"	12 3/4 x 19
90 hp	QSS	13 $\frac{1}{4}$ x 19	189V, 1850V	90 hp	SST	12 3/4 x 19
	"	13 x 21	21 $\frac{1}{2}$		"	12 3/4 x 21
115 hp	QSS	13 $\frac{1}{4}$ x 19		115 hp	SST	12 3/4 x 19
	"	13 $\frac{1}{4}$ x 19			SST	12 3/4 x 19
140 hp	QSS	13 $\frac{1}{4}$ x 19	21 $\frac{1}{2}$ -	140 hp	"	12 3/4 x 21
	"	14 x 19	23 $\frac{1}{2}$		"	14 $\frac{1}{4}$ x 21
150 hp	Chopper	13 3/4 x 21		150 hp	"	14 $\frac{1}{4}$ x 23
	"	14 x 22				
	"	14 x 24				
50-60 hp	QSS	10 3/8 x 13	320V, 325V	50-60 hp	SST	12 $\frac{1}{2}$ x 13
	"	10 1/4 x 14	21"		"	12 $\frac{1}{4}$ x 15
70 hp	QSS	10 3/8 x 13		70-75 hp	SST	13 $\frac{1}{4}$ x 17
	"	10 1/4 x 14			"	13 x 19
90 hp	QSS	13 x 21	21 -	90 hp	SST	12 3/4 x 19
	"	12 3/4 x 23	22 $\frac{1}{2}$		"	12 3/4 x 21
115 hp	QSS	13 1/4 x 19		115 hp	SST	12 3/4 x 19
	"	13 x 21			"	12 3/4 x 21
80 hp	QSS	13 $\frac{1}{2}$ x 17	330V, 335V	80 hp	SST	13 $\frac{1}{4}$ x 17
	"	13 $\frac{1}{4}$ x 19	22 5/8"		"	13 x 19
90 hp	QSS	13 $\frac{1}{4}$ x 19		90 hp	SST	12 3/4 x 19
	"	13 x 21	22 5/8-		"	12 3/4 x 21
115 hp	QSS	13 $\frac{1}{4}$ x 19	23 $\frac{1}{2}$	115 hp	SST	12 3/4 x 19
	"	13 x 21			"	12 3/4 x 21
140 hp	QSS	13 $\frac{1}{4}$ x 19		140 hp	SST	12 3/4 x 19
	"	13 x 21			"	12 3/4 x 21
	QSS	13 $\frac{1}{4}$ x 19	350V		SST	12 3/4 x 19
	"	13 x 21	22 5/8		"	12 3/4 x 21

20 hp	13 x 21		22 5/8	90 hp	"	12 3/4 x 21
115 hp	QSS " 13 1/4 x 19		22 5/8- 24 5/8	115 hp	SST	12 3/4 x 19
140 hp	QSS " 13 3/4 x 19			140 hp	"	12 3/4 x 19
150 hp	QSS " 13 x 21			150 hp	SST	12 3/4 x 21
	Chopper " 13 3/4 x 21				"	14 1/4 x 21
	" 14 1/2 x 24				"	14 1/4 x 23
	" 14 x 24					
115 hp	QSS " 13 1/4 x 19		370V, 375V	115 hp	SST	12 3/4 x 19
140 hp	QSS " 13 1/4 x 19		22 5/8	140 hp	SST	12 3/4 x 19
150 hp	QSS " 13 x 19		22 5/8-	140 hp	SST	14 1/2 x 19
175 hp	QSS " 13 3/4 x 21		24 1/2	175 hp	"	14 1/4 x 21
	Chopper " 14 x 19				SST	14 1/4 x 21
	" 13 3/4 x 21				"	14 1/4 x 23
	" 14 x 24					
	" 14 x 26					
80-90 hp	QSS " 13 1/2 x 17		380V	90 hp	SST	13 3/8 x 17
115 hp	QSS " 13 x 19		22"	115 hp	"	13 x 19
140 hp	QSS " 13 1/4 x 19			140 hp	SST	12 3/4 x 19
150 hp	QSS " 13 3/4 x 19		22 -	150 hp	SST	12 3/4 x 19
	Chopper " 14 x 19		23 1/2		"	14 1/2 x 19
	" 13 3/4 x 21				"	14 1/4 x 21
175 hp	QSS " 14 x 19			175 hp	SST	14 1/2 x 19
	" 13 3/4 x 21				"	14 1/4 x 21

Alum. = Aluminum

QSS = Quicksilver Stainless Steel

SST = OMC Stainless Steel

## NOTE:

Some of our boat models are standard with dual or twin steering. We strongly recommend this for boats being rigged with a 150 h.p. engine or larger. Safety and performance go together.

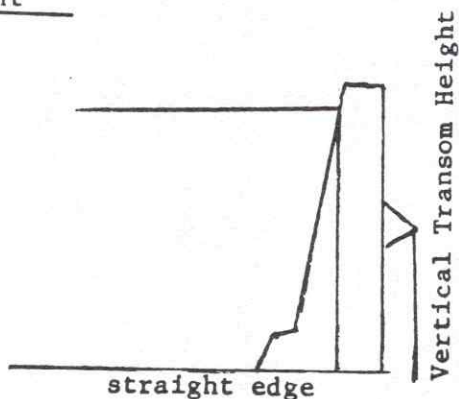
Solid motor mounts are very helpful in high speed driving in 150 h.p. and above engines. All motor manufacturers offer these as high-performance accessories. "BALANCED WEIGHT is a big factor."

### **STEERING CABLES TO ENGINE — ATTACHING KIT**

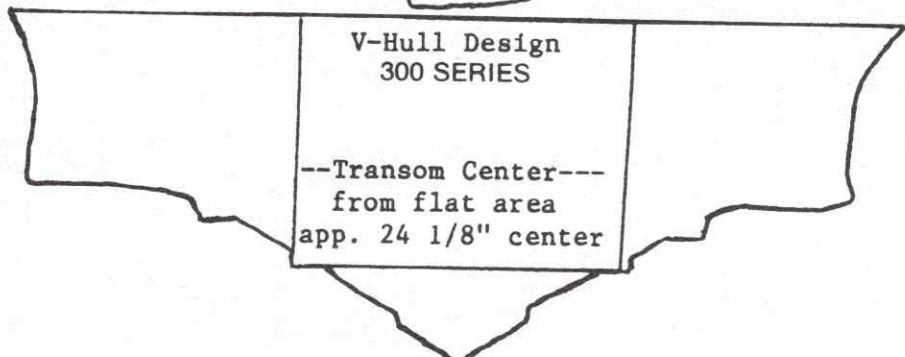
Consult your outboard motor dealer for the proper type steering attaching kit for your outboard engine. Use only those attaching kits manufactured or recommended by your engine manufacturer.

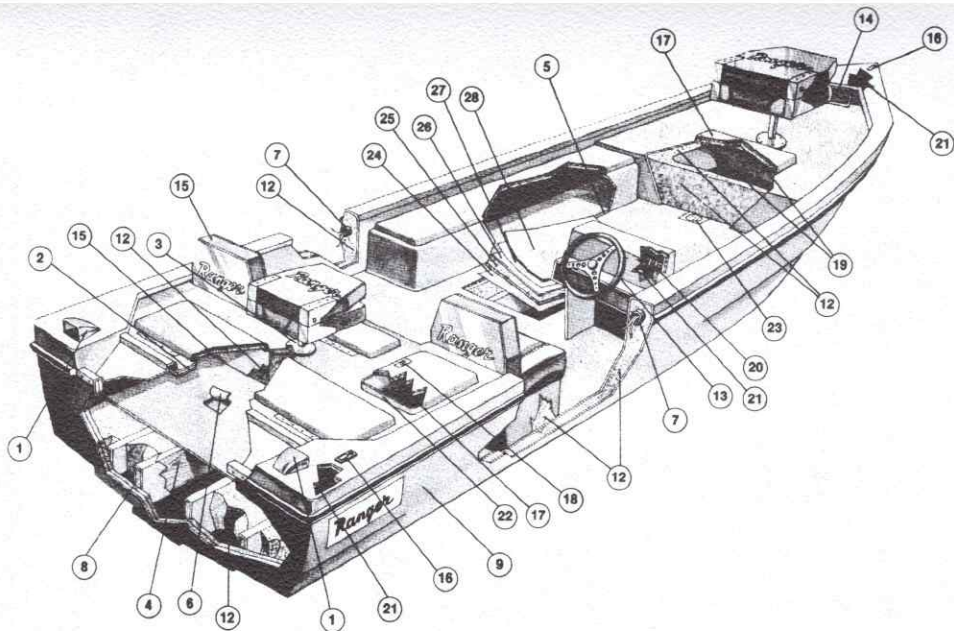
#### Approximate Factory Built Transom Heights

Coast Guard Motor Rating	Height
Warrior I & II 70 hp	21"
1600 V & V2 55 hp	20½"
1600 VI & V3 80 hp	20½"
158V 90 hp	22½"
178V, 1750V & 1780V 115 hp	21"
189V & 1850V 150 hp	21½"
320V & 325V 110 hp	21"
330V & 335V 140 hp	22 5/8"
350V 150 hp	22 5/8"
370V & 375V 175 hp	22 5/8"
380V 175 hp	22"



---Transom center from sides---		
158	V-Hull Design	1750
178		1780
188		1850





1. All battery and gas storage compartments are ventilated to outside atmosphere.
2. All storage compartment lids are hinged over fiberglass reinforced with  $\frac{3}{4}$ " plywood.
3. Pedestal seat base plates are mounted on  $\frac{3}{4}$ " plywood encased with fiberglass.
4. Four full-length stringers made with  $\frac{3}{4}$ " plywood are completely encased in fiberglass before the floor goes down.
5. All storage compartments are carefully laminated to floor with fiberglass to form leakproof seal.
6. All dry storage, rod storage, gas and battery storage and livewells that do not have a gel-coated surface are double protected with a sealer coat of polyester primer that fills any tiny pin holes that might exist. On all our high performance models, with exception of battery and gasoline storage, all compartments are either carpeted or have gel-coated interior surfaces.
7. All wiring harness is manufactured and color coded by Ranger. Wiring is carried through gunwales down each side of the boat through 1" p.v.c. plastic pipe.
8. Transom is 2 thicknesses of  $\frac{3}{4}$ " plywood laminated together, and encased on all sides with fiberglass for extra strength.
9. Ranger gel-coat (or outer surface) is a minimum of 15 mils in thickness. This provides a longer lasting finish.
10. The fiberglass and resin formula used in the construction of a Ranger hull provides the highest degree of strength without adding excess weight.
11. Livewells are plumbed to drain completely and quickly.
12. Flotation is strategically located throughout the boat to provide level flotation in the event the boat is ever swamped. Every cavity that is not a storage box or livewell, is filled with polyurethane foam flotation material. The material when injected into a Ranger boat is in a foam stage similar to shaving cream. As it expands, it becomes rigid, adding considerable strength to the structure plus a flotation material that is second to none.

13. On all high performance models, rack and pinion steering with racing steering wheel gives easy handling control of a Ranger.
14. A forward wiring access for easy hook-up of electrical accessories.
15. Upholstery and seats are designed and constructed by Ranger using vinyl fabrics especially developed for the boating industry.
16. Stow-away running light connections front and rear are attached with stainless steel screws.
17. Lids to storage boxes are reinforced with wood encased in fiberglass.
18. Flush mounted key locks are used to secure storage boxes.
19. On most models, livewells have splash guards to keep water from splashing out into the boat.
20. Easily accessible fuse panel.
21. Bow, stern and console areas suitable for mounting accessories such as anchors, trolling motors, instruments etc., are reinforced with plywood encased in fiberglass.
22. Every dry storage box has a lip approximately  $\frac{3}{4}$ " high surrounding the box which helps keep surface water from running in and keeps inside contents dry.
23. Floor drains, front and rear, will allow water to drain to rear of boat where it may be pumped or drained out.
24. Bottom side of all floors are undercoated with resin to keep water out.
25. Floors made of  $\frac{3}{4}$ " plywood, hand cut and fitted to each individual boat, then permanently bonded to stringers.
26. Fiberglass approximately  $\frac{1}{8}$ " thick on top side of floor to encase plywood and give sandwich effect.
27. A sealer coat of polyester primer over complete interior, not including gel-coated surfaces, to fill any pin holes that might remain.
28. Carpet used in a Ranger boat exceeds all industry standards for marine carpeting. Its fibers are 100% polypropylene and its backing is gas and oil resistant Duraflex.

## **INSTRUMENTATION**

Your boat may come equipped with the appropriate instruments, but if you desire to install additional ones, all that is required is a hole saw the appropriate size or a jigsaw. The console has reinforcement on the under side for support.

## **ELECTRIC ANCHOR**

Some electric anchors are designed to mount on the top side of the gunwale. Reinforcement is provided on the under side for bolting through. Other electric anchors are designed to be installed with the motor mounted on the under side of the gunwale. There is room to do this on the bow or stern and ample reinforcement to support it. (Excess foam may be removed to accomplish this.)

## **BUILT IN GAS TANKS AND BATTERY BOXES**

When installing built in gas tanks, battery boxes, or any type of hold-downs, it is important NOT TO ATTACH SCREWS CLOSER THAN EIGHT INCHES TO THE PORT AND STARBOARD SIDE OF THE REAR STORAGE. THE SCREWS MAY PROTRUDE THROUGH THE HULL OF THE BOAT AND CAUSE LEAKAGE. CAUTION SHOULD BE TAKEN WHEN DRILLING HOLES IN THE REAR STORAGE FOR THE SAME REASONS.

## **BILGE PUMPS**

When installing bilge pumps in the bilge area, the pump should be sitting flat on the floor. NEVER PUT SCREWS VERTICALLY THROUGH THE BOTTOM OF THE BOAT. Most bilge pumps are made to attach with screws running horizontal to the hull.

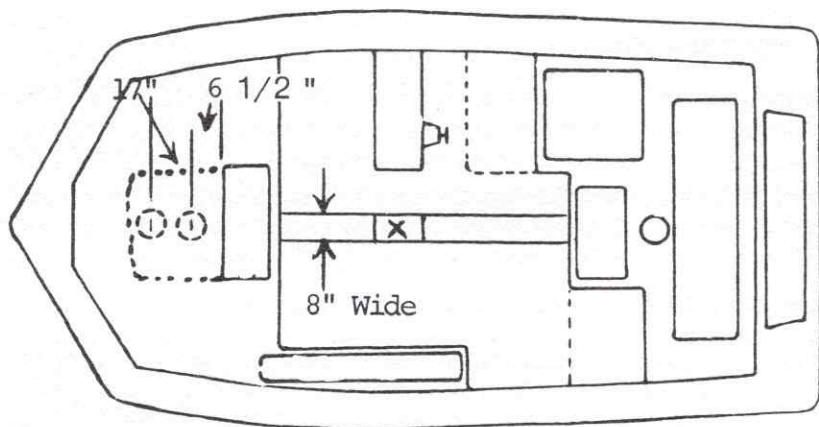
## **TIE-UP DEVICES**

If cleats or chocks are attached to gunwale, bolts with nuts and washers are recommended. If the area is inaccessible from the under side, we recommend a size 10 stainless steel screw.

## POWER PEDESTALS

Power pedestals are standard on all our high performance models. The power pedestal base on the rear casting platform cannot be moved. The front base may be mounted from 6½ to 17 inches forward from the hinge on the front livewell lid. These measurements will enable you to reach into the livewell and put a nut and washer on the bolts. We recommend ¼ inch bolts, with self locking nuts

FIGURE 1



A power pedestal base may be mounted on the floor of the main cockpit area. It must be installed on the centerline of the boat between the front of the rear livewell tunnel 8" wide where the base between the front of the rear livewell bulkhead and the back of the front livewell bulkhead. There is a tunnel 8" wide where the base can be installed. We recommend using ¼" stainless steel bolts through the upper side and ¼" T-nuts on the under side. WE DO NOT recommend installing a pedestal base with lag screws. (Figure 1, page 12).

## FLOOR DRAINS

The floor drains in your boat serve a definite purpose and should be kept clean. Rain water will drain to the low point in the rear of the hull and can be removed by an installed bilge pump or removing the drain plug located on the bottom of the transom while in dry storage.

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In the event the boat is swamped, water will fill the center section of the hull through the floor drains and will act as a ballast keel to help prevent the boat from capsizing.

## FLOTATION

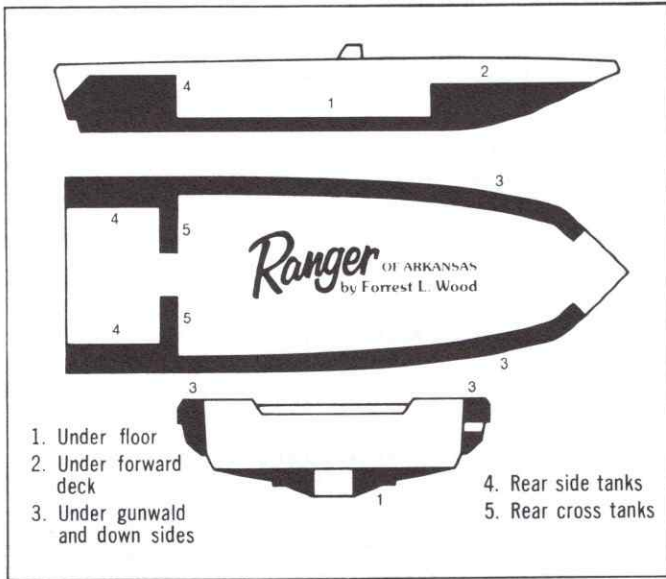
In addition, you will find something that we have placed inside your boat for your protection--LEVEL FLOTATION. (See Figure 1 and 2, page 14). This is something we hope you will never need, but if your boat is swamped, it will keep it in a level attitude, enabling you to remain in your boat while awaiting rescue. Most of our models have been tested and certified as such by Wyle Laboratories, Huntsville, Alabama.\* Additional flotation information may be obtained by consulting our current brochure or by calling our office.

## INBOARD/OUTDRIVE MODELS

**SAFETY CAUTION: VENTILATE ENGINE COMPARTMENT BY OPENING ENGINE HATCH OR, IF EQUIPPED WITH BILGE BLOWER, OPERATE FOR 5 MINUTES TO REMOVE ANY GAS FUMES FROM ENGINE COMPARTMENT.**

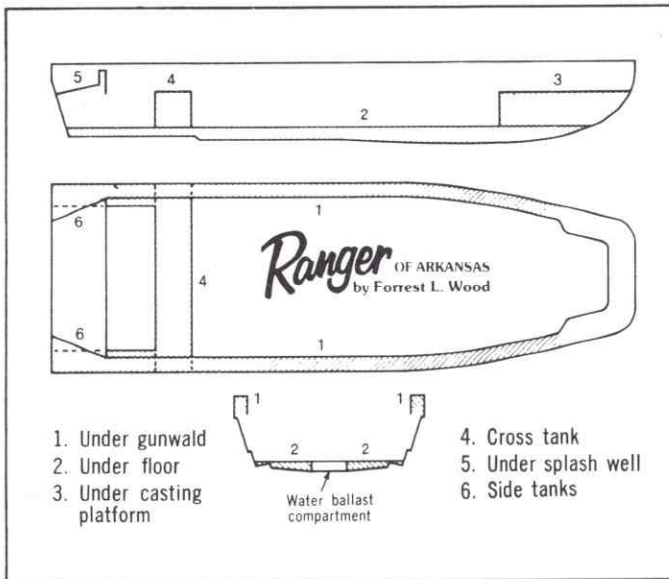
For proper engine operation, read the owner's manual supplied by the engine manufacturer. Any necessary repairs must be made by an authorized service center of the engine manufacturer. Wood Manufacturing Co., Inc. is not authorized to make repairs on engines or associated equipment. Of particular importance is the draining of water from the engine block during storage periods in cold weather.

FIGURE 1



Foam Flotation — High Performance Models

FIGURE 2



Foam Flotation — Traditional Models



## WIRING DIAGRAMS

### STANDARD AND MONITOR I-12 VOLT HOOK-UP ONLY

The receptacle in your boat should be wired as shown in Figures 1 and 3, page 20. To hook-up leads on trolling motor to plug 12 volt only: HOOK GROUND wire of trolling motor to ROUND terminal of plug. Hook 12 volt wire of trolling motor to LEFT BLADE terminal of plug.

### STANDARD AND MONITOR I-24 VOLT HOOK-UP ONLY

The receptacle in your boat should be wired as shown in Figures 2 and 4, page 20. To hook-up leads on trolling motor to plug 24 volt only: Hook GROUND wire of trolling motor to ROUND terminal of plug. Hook 24 volt wire of trolling motor to RIGHT BLADE terminal of plug.

### STANDARD AND MONITOR I-12 or 24 VOLT HOOK-UP

The receptacle in your boat should be wired as shown in Figure 2 and 4, page 20. To hook-up leads on trolling motor to plug 12 or 24 volt: Hook ground wire of trolling motor to ROUND terminal of plug. Hook 12 volt wire of trolling motor to LEFT BLADE terminal of plug. Hook 24 volt wire of trolling motor to RIGHT BLADE terminal of plug.

### MONITOR II, III & IIIA HOOK-UP

**CAUTION: DO NOT HOOK MAIN LEADS TO BATTERIES UNTIL ALL OTHER CONNECTIONS HAVE BEEN MADE.**

If your boat is installed with a Monitor II, III or IIIA system, the receptacle in your boat should be wired as shown in Figure 1, page 19. Instructions to hook-up leads on trolling motor to plug.:

For 12 volt operation only:

Attach positive lead to terminal W. Attach negative lead to terminal C. Follow instructions included with each plug.

(See Figure 1, page 19).

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For 12 or 24 volt operation:

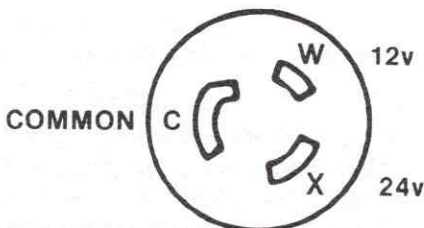
Attach 12 volt lead to terminal W. Attach 24 volt lead to terminal X.  
Attach common lead to terminal C. (Figure 1, page 16).

To connect charger to plug, attach NEGATIVE lead to terminal C.  
Attach POSITIVE lead to terminal W.

Hook-up main battery leads RED to BATTERY 1+  
BLACK to BATTERY 1-  
ORANGE to BATTERY 2+  
WHITE to BATTERY 2-

**CAUTION: HOOKING UP MAIN LEADS IN ANY OTHER MANNER COULD RESULT IN SEVERE DAMAGE TO BOTH BATTERIES AND PANEL.**

FIGURE 1



## OPERATING INSTRUCTIONS

Always disconnect Trolling Motor Plug from panel when not in use. This is for your safety as well as discouraging corrosion between the Trolling Motor Plug and the Trolling Motor Receptacle.

When adding accessories, make sure you use the POSITIVE and NEGATIVE terminal from the same battery. Red and black are battery #1; Orange and White are battery #2.

When operating a 12 volt only system, the switch should be in the 12 volt position.

While charging, the switch MUST BE in the charge position.

**CAUTION: DO NOT MOVE SWITCH WHILE CHARGER IS CONNECTED TO THE PANEL.**

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by Forrest L. Wood

**SAFETY CAUTION:** DO NOT HOOK MAIN LEADS TO BATTERY UNTIL ALL OTHER CONNECTIONS HAVE BEEN MADE.

FIGURE 1  
STANDARD 12 VOLT HOOK-UP

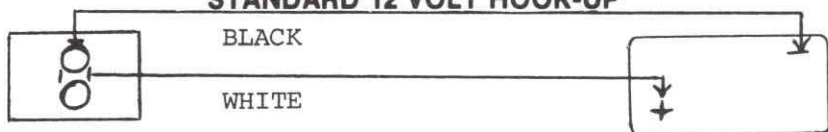


FIGURE 2  
STANDARD 24 VOLT HOOK-UP

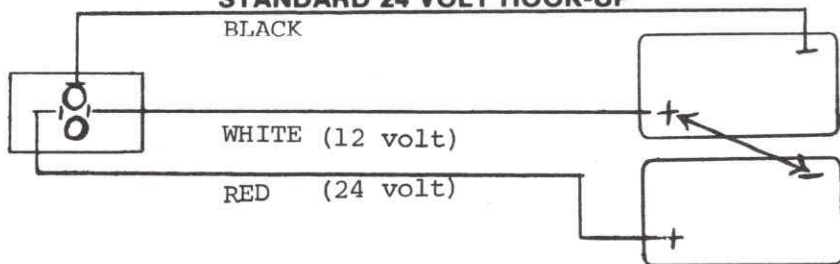


FIGURE 3  
MONITOR I - 12 VOLT HOOK-UP

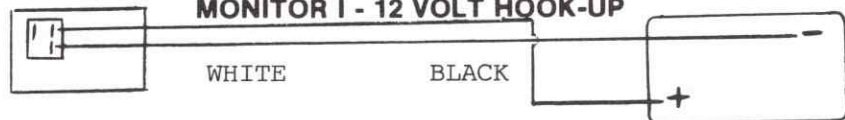
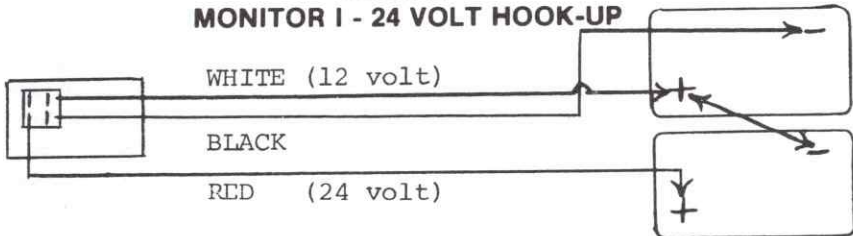


FIGURE 4  
MONITOR I - 24 VOLT HOOK-UP



## Medallion Tach to Mercury Motor — Connect at Throttle Box

To use the Model MT-576 tachometer with a Mercury outboard engine with Thunderbolt ignition, make this wiring change. Remove the engine cover and locate the terminal block containing green, brown, white, and red wires. Also, locate the rectifier with two yellow/red wires and a solid red wire. Remove the brown wire from the terminal block, (usually second from top) and connect to either of the yellow/red wires on the rectifier. (If the brown wire needs lengthening, use a good quality 16 gauge stranded wire.) This will provide an alternator signal at the shift control box tachometer plug. Connect the 5 foot grey wire provided to the tachometer input stud. Ground the tachometer by connecting a 16 gauge black wire from either tachometer mounting stud to a good ground in the boat wiring system. Connect the light lead to the light switch. Insert the blade terminal on the grey wire into the shift control box tachometer plug as shown in Figure 1 below.

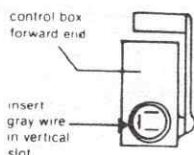


FIGURE 1

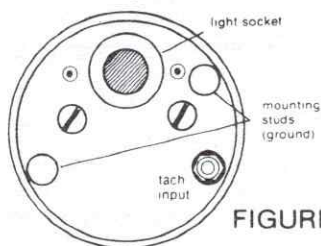
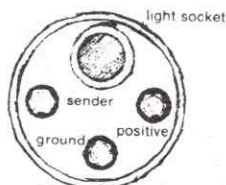


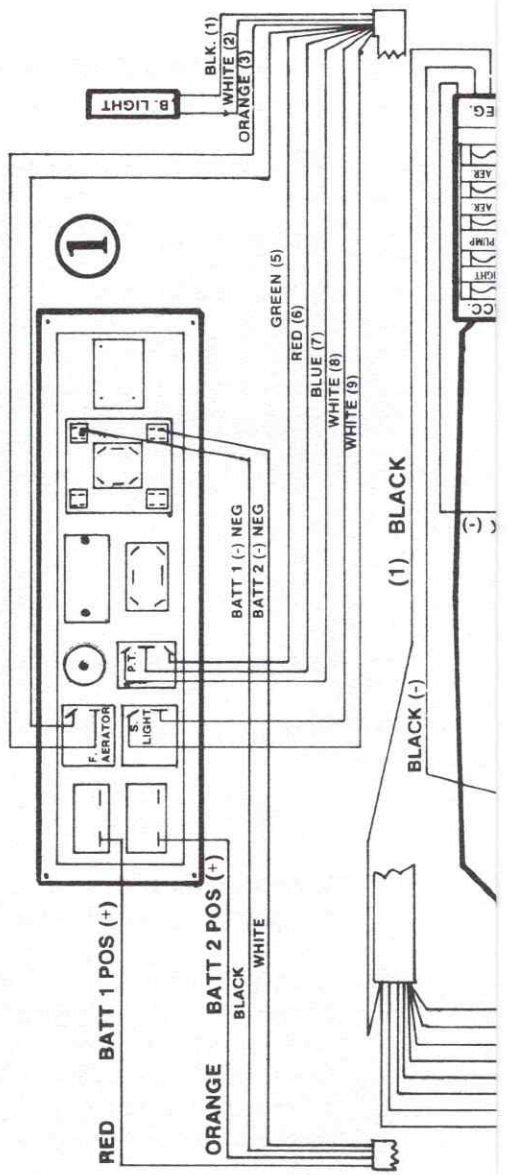
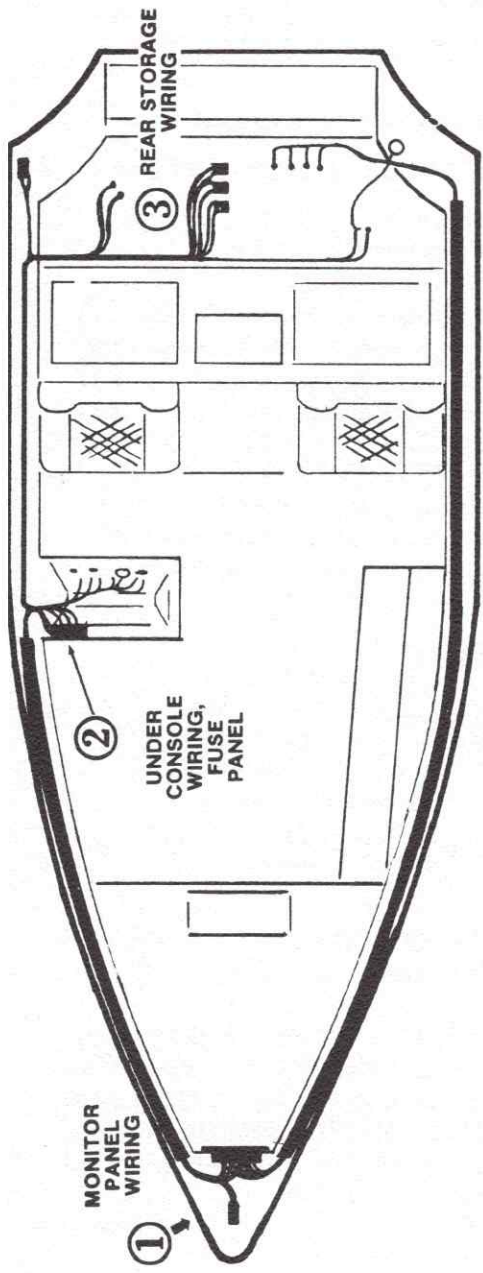
FIGURE 2

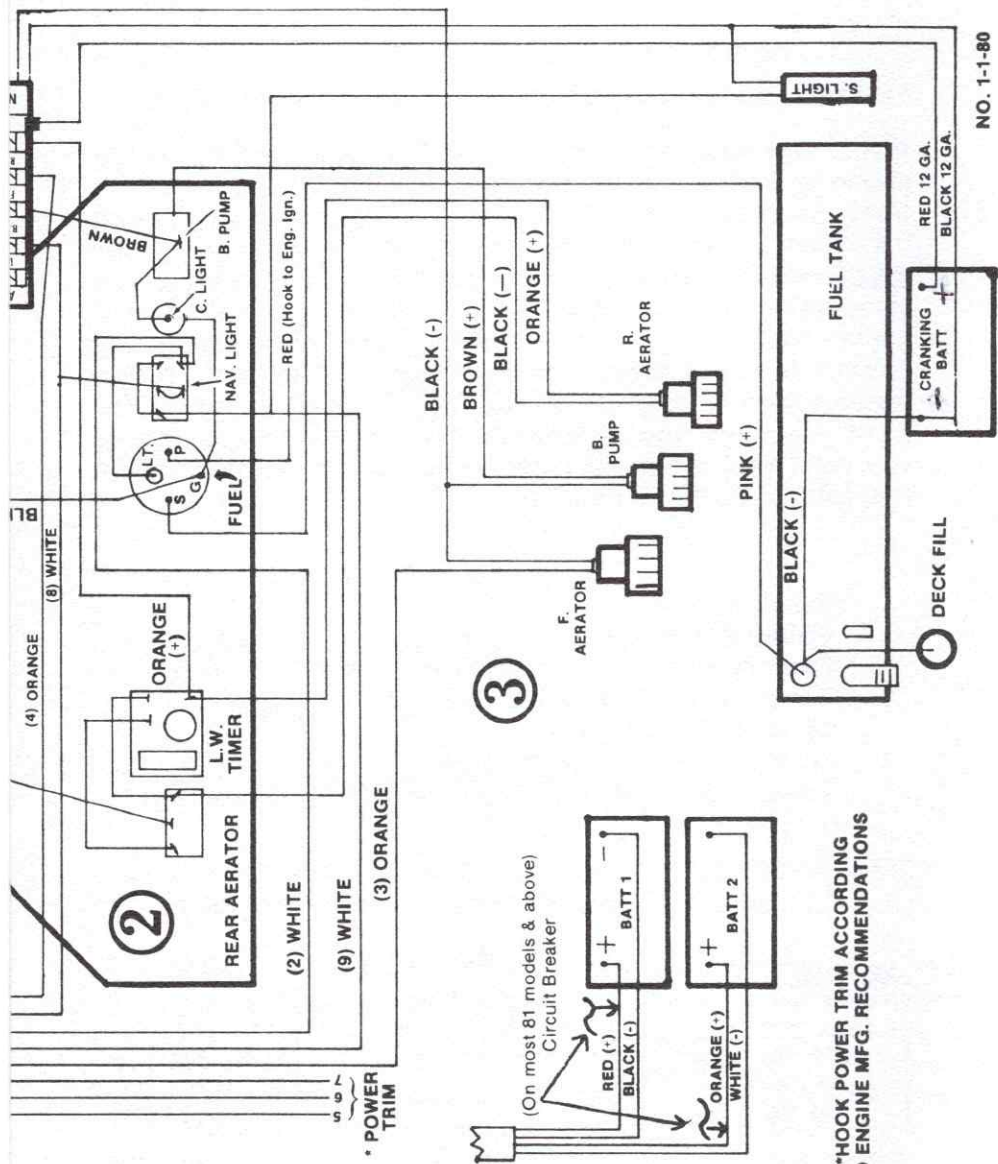
FIGURE 3



Fuel Gauge

The terminals on the back of the gauge are marked "Sender", "Positive", and "Ground". Connect the "Positive" terminal to the 12V electrical system at some point after the ignition switch. Connect the "Sender" terminal to the "Sender" terminal of the tank sending unit. Connect the "Ground" terminal to a common ground. A good quality 16 gauge or larger wire is recommended for these leads.





\*HOOK POWER TRIM ACCORDING TO ENGINE MFG. RECOMMENDATIONS

## RANGER LIVEWELL CONTROL CENTER SPECIFICATIONS

If your new boat has a livewell control center the aerator control switch is labeled manual, off, and automatic. Moving the switch from off to manual will run your aerator pump continuously. Moving the switch from off to automatic activates the solid state timer which will run your aerator pump for one minute each cycle. The pump off time during this cycle is adjustable with the panel mounted control labeled "timer". This is variable from a minimum time of one minute (control fully counterclockwise) to a maximum of fifteen minutes (control fully clockwise). Increasing this time between pump operations reduces battery drain. During a hot summer day you may need to set your control to operate the pump more frequently than during a cool night.

Supply voltage: 11 to 16 VDC

Output Capacity: 4 Amp. max.

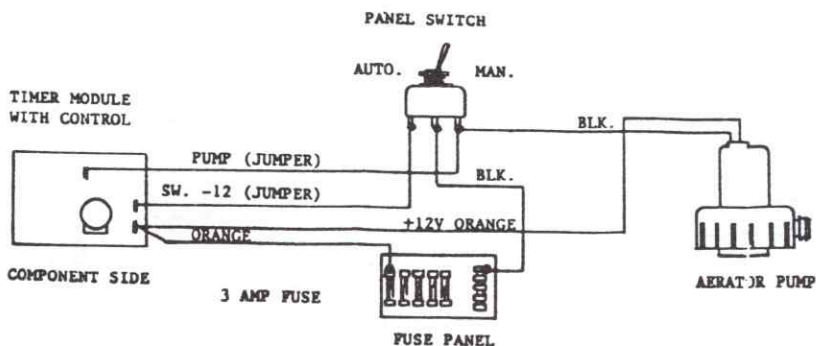
Fuse: Pump manufacturers recommendation, 4 Amps max.

Temp. Range: 32°F to 140°F (0 - 60°C)

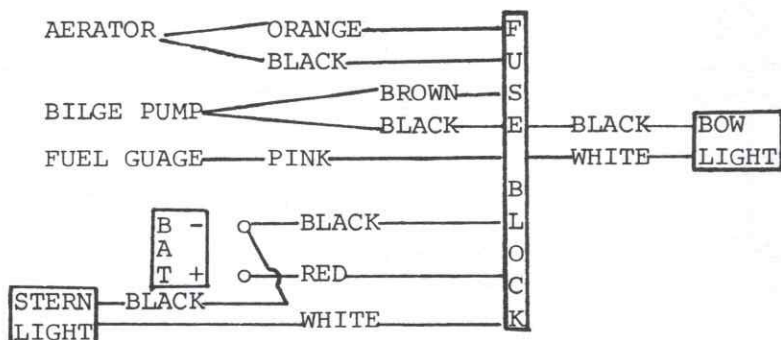
On time: One Minute

Off time: One to fifteen minutes

Timer Power Consumption (off time): 0.030 Amps



## CONSOLE INSTRUMENT PANEL WIRING



## SAFETY

1. Make sure your drain plug is in tight.
2. Check your steering.
3. **Make sure all boat passengers are wearing a PERSONAL FLOTATION DEVICE.**
4. Make sure the LANYARD of your EMERGENCY STOP SWITCH is attached to the driver's life jacket or belt loop.
5. Make sure there are no seats or other articles obstructing the driver's view. If you have a FOLD DOWN SEAT in the bow, make sure no one occupies it and that it is FOLDED DOWN AND SNAPPED. If you have a NON-FOLDING SEAT in the bow, make sure it does not obstruct driver's view. If it does, take it out and lay it in the bottom of the boat.



## COAST GUARD REQUIREMENTS

### HULL IDENTIFICATION NUMBER

All boats manufactured on or after November 1, 1972, have a Hull Identification Number permanently affixed to the outboard side of the transom above the waterline on the starboard side. This number serves to identify each boat. It is recommended that this number be used in any correspondence regarding the boat to the manufacturer.

### CAPACITY INFORMATION

Boats manufactured on or after November 1, 1972, will have displayed near the helmsman seat, rated capacity information as to Maximum Weight Capacity, Maximum Persons Capacity, and in the case of outboard models, the Maximum Horsepower Capacity. We suggest you know these ratings and load your boat accordingly.

(These rules and regulations may be amended or changed periodically, and, while the summary is believed to be accurate at the time of printing, the boat owner should always consult official regulations or local Coast Guard officials for complete, specific, and current requirements.)

### REQUIREMENTS FOR RECREATIONAL BOATS — CLASS A & CLASS I

EQUIPMENT	CLASS A (under 16' in length)	CLASS I (16' but under 26')
NUMBERS	All vessels equipped with propulsion machinery of any type must be properly numbered (registered) in the state of principal use.	
PERSONAL FLOTATION DEVICES	One type I, II, III or IV device for each person on board being towed.	One type I, II or III device for each person on board or being towed <b>and</b> one type IV device in each boat.

EQUIPMENT	CLASS A (under 16' in length)	CLASS I (16', but under 26')
VENTILATION	At least two ventilator ducts fitted with cowls or their equivalent to properly ventilate the bilges of every engine and fuel tank compartment of boats constructed after 4-25-40, using fuel having a flashpoint of 110° F. or less.	
WHISTLE	None required, but "Rules of the Road" require that proper signals be sounded.	One mouth, hand, or power operated type which is audible for at least one-half mile.
BELL	None required, but "Rules of the Road" require that proper signals be sounded.	
FLAME ARRESTORS	One Coast Guard approved device on each carburetor of all gasoline engines, excepting outboard motors, installed after 4-25-40.	
FIRE EXTINGUISHERS (no fixed system)	One B-1 type Coast Guard approved fire extinguisher unless the construction is such that explosive flammable vapors cannot be trapped; there are no closed compartments, no permanently installed fuel tanks on board.	
WITH FIXED SYSTEM	None required.	
LIGHTS	Proper light displays are required to be shown from sunset to sunrise.	

# Ranger<sup>®</sup>

## OF ARKANSAS

BY FORREST L. WOOD

### LIMITED WARRANTY

Ranger of Arkansas warrants each new boat to be free from defects in material and workmanship under normal operating conditions for a period of one (1) full year from date of purchase by the original (first) purchaser. To validate this warranty, the registration card must be completed and returned to Ranger Boat Company within ten days from original purchase. **NO WARRANTY CLAIM WILL BE CONSIDERED UNLESS THE REGISTRATION CARD IS IN OUR FILE.**

We will make all necessary repairs under this warranty free of charge at our factory or will authorize our dealers to make such repairs. No claims for warranty repairs will be considered unless prior approval is received from our office. **TRANSPORTATION TO AND FROM OUR FACTORY WILL BE AT THE OWNER'S EXPENSE.**

This warranty does not apply to the following: (1) Engines, outdrives, controls, propellers or other equipment or accessories carrying their own individual warranties; (2) gel-coat, (3) installation of engines or accessories installed by other than Ranger Boat Co.; (4) any Ranger boat which has been altered, subjected to misuse, negligence, improper trailering, accident or overpowered (according to recommended engine horsepower on capacity information plate). Further, this warranty does not include any damages of any nature whatsoever caused as a consequence of a breach of written or implied warranties.

No other expressed warranties are being made in connection with the purchase of a Ranger boat, and any implied warranties arising in connection with the sale of a Ranger boat are limited in effectiveness to a period of one (1) full year from date of purchase by the original (first) purchaser. Ranger Boat Company neither authorizes any other person to extend any other warranty nor to assume for it any other liability in connection with Ranger Boats.

**CUSTOM BUILT BY FISHERMEN — FOR FISHERMEN**

**Ranger**<sup>®</sup> **BOATS**  
**OF ARKANSAS**

**WOOD MANUFACTURING COMPANY, INC.**  
P.O. BOX 262 • HIGHWAY 178 NORTH  
FLIPPIN, ARKANSAS 72634 • (501) 453-2222