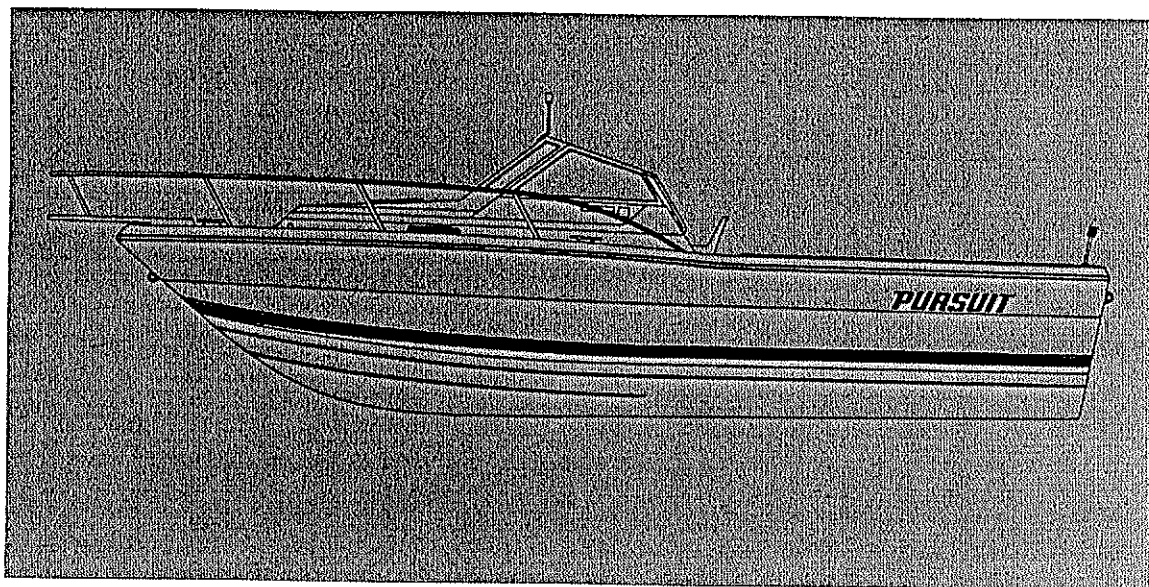




OWNER'S MANUAL

2550 Cuddy Outboard



B5

92/018

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

NOTES:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

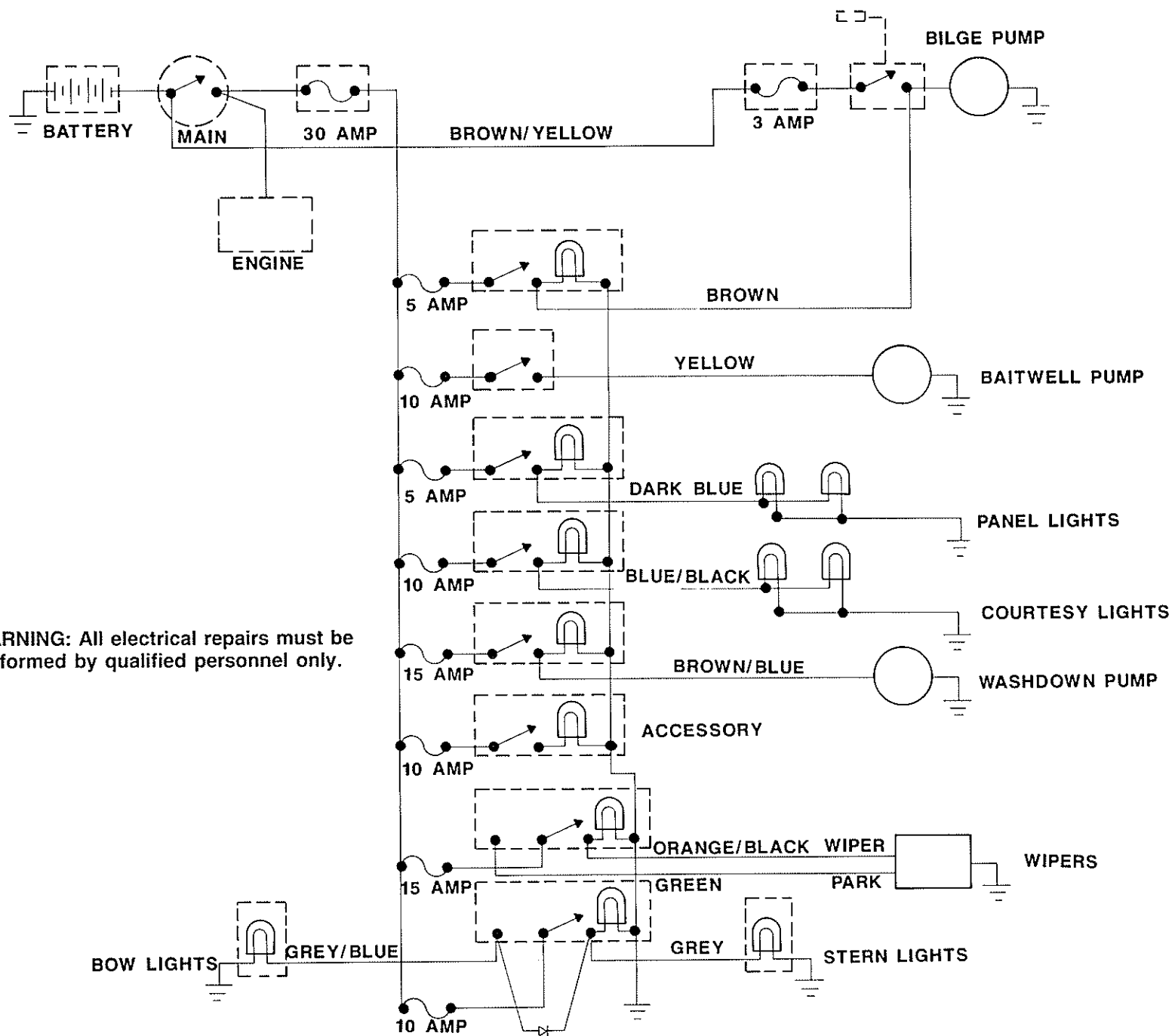
THE CONTENTS OF THIS BOOK

Introduction	3
The Boater's Dictionary	4
The Operating Controls	
The Main Gauge Panel	5
The Battery Main Switch	5
The Accessory Switch Panel	6
The Ignition Switch	6
The Control Handle	7
The Steering Wheel	7
The Oil Tank	8
The Capacity Specification Plate	8
The Horn Button	9
The Fire Extinguisher	9
The Compass	10
The Washdown Pump Connection Option	10
How To Prepare Your Boat For Operation	
How To Fill The Fuel Tank	11
How To Fill The Fresh Water Tank	12
How To Fill The Baitwell With Water	12
To Remove The Water From The Baitwell	12
How To Open And Close The Windshield Vent	13
Do These Procedures Before Each Use Of The Boat	13
How To Operate The Boat	
Recommended Safety Check Procedure	15
How To Start The Boat	16
To Stop The Boat	16

Maintenance

The Electrical System	17
The Engine	17
The Engine Lube Oil	17
How To Clean And Set The Spark Plugs	18
The Cooling System	18
The Ventilation System	18
The Bilge Pump	19
The Fresh Water System	19
The Sanitary System	19
How To Maintain The Exterior Surface Of The Boat	20
How To Maintain The Interior Of The Boat	20
Below The Water Line Of The Boat	21
Service Inspection	21
How To Prepare The Boat For Lay-Up	
The Bilge Area	22
The Engine	22
The Batteries	22
How To Support The Boat During Storage	23
Storage	23
To Commission The Boat	24
Model 2550 Cuddy Outboard Specifications	25
Drawings And Parts Lists	
Model 2550 Cuddy Outboard Replacement Parts —	
Exterior Profile	26,27
Model 2550 Cuddy Outboard Replacement Parts — Exterior	28,29
Model 2550 Cuddy Outboard Replacement Parts — Interior	30,31
The Mechanical, Fuel & Plumbing Drawing	32,33
The Electrical System Drawing	34

MODEL 2550 CUDDY OUTBOARD ELECTRICAL SCHEMATIC 11/89



WARNING: All electrical repairs must be performed by qualified personnel only.



Dear Pursuit® Owner:

All of us at S2 Yachts are pleased that you have selected one of our products as your boat. As I'm sure you've discovered during the selection and decision process, your Pursuit® has been designed, engineered and built with care and precision.

Please allow me to note this personal philosophy. When I started this company, my goal was to provide you, our customer, with the finest quality boat available. Everything we have achieved since that time has been with that same goal in mind.

The information in this owner's manual has been assembled to assist you with your Pursuit® Sport Yacht for maximum enjoyment. Please read this manual completely and always operate your boat safely and courteously.

Thank you for selecting a Pursuit®. We all wish you many years of boating fun and safety.

Sincerely,

Leon R. Slikkers
Chief Executive Officer

**MODEL 2550 CUDDY OUTBOARD
MECHANICAL, PLUMBING & STEERING 11/89**

Ref. No.	Code No.	Description	No. Req'd
1	324011	Switch - Main	1
2	345010	Pump - Washdown	1
3		Oil Tank	ref.
4	345070	Switch - Bilge Pump	1
5	345071	Pump - Bilge	1
6	899550	Pipe - Aerator	1
7	334018	Circulator	1
8	328153	Hose - Fuel Vent	kit
9	334021	Cap - Fuel	1
10	334022	Vent - Fuel	1
11	534321	Shield - S.S.	1
12	328153	Hose - Fuel Fill	kit
13	534077	Cap - Water Fill	1
14	328153	Hose - Water Vent	1
15	334022	Vent - Water	1
16	534321	Shield - S.S.	1
17	319108	Tank - Water	1
18	328153	Hose - Sink Drain	kit
	535041	Porta Potti	1
	708455	Head w/Holding Tank Option	1

Ref. No.	Code No.	Description	No. Req'd
19	328004	Hose - Vent	per ft.
20	334028	Vent	1
21	534321	Shield - S.S.	1
22	534079	Cap - Waste	1
	328140	Hose - Clean-Out	per ft.
23	328146	Hose - Water	per ft.
24	322014	"Y" Valve	1
25	747407	Tube - Drain Keelson	1
26	315020	Steering Wheel - 15"	1
27	316015	Cable - Steering	1
28	326113	Adapter - 3/8 P x 3/8 T	ref.
29	326111	Adapter - 3/8 FM x 3/8 HB Brass	ref.
30	328153	Hose - Fuel Tank to Engine	ref.
31	335002	Battery Box	ref.
32		Cylinder - Steering	ref.
33	334130	Plug - Main Drain	1

S2 reserves the right to make changes or improvements to its boats without notice.

INTRODUCTION

This manual has important information for the use and safe operation of your Pursuit.® Read and understand the manual before operating your boat. Keep this manual, and tell all operators to read the manual.

For the safe operation of this boat, read and understand all warnings and cautions. Look for these symbols:

“  **WARNING**” means: If you do not follow the instructions in a warning, injury or death can occur to you or other people.

“  **CAUTION**” means: If you do not follow the instructions in a caution, damage can occur to the boat or equipment.

All directions given in this book are as seen from the stern looking toward the bow.

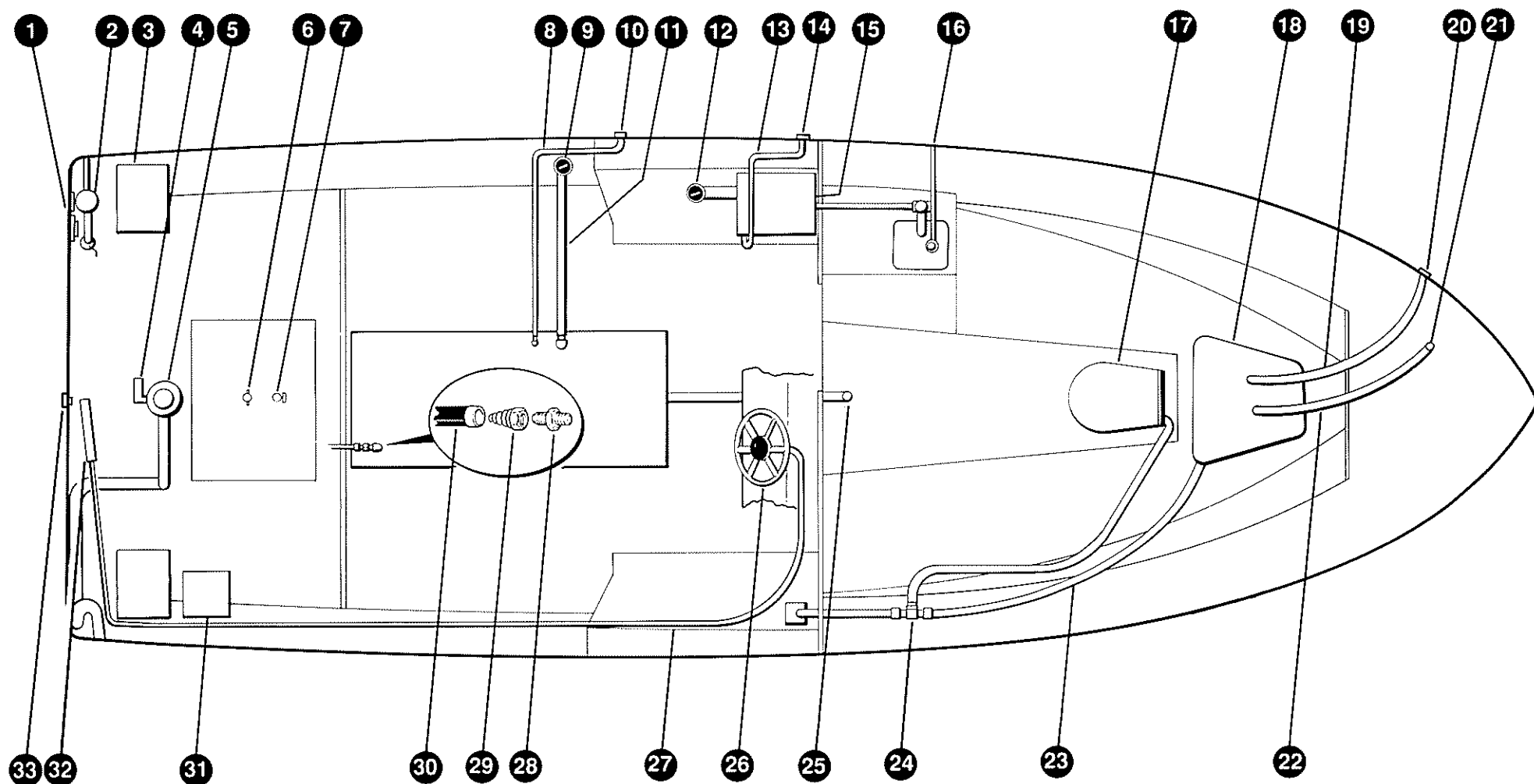
IMPORTANT NOTE: Your boat uses internal combustion engines and flammable fuel. Every precaution has been taken by S2 to reduce the risks associated with possible injury and damage from fire or explosion, but your own precaution and good maintenance procedures are necessary in order to enjoy safe operation of your boat.

Owner manuals from the manufacturers of the engines, the generator, the head, the stove, the refrigerator, etc., are included in the literature packet. Read these manuals. To validate the warranty on these parts, fill out the warranty cards and return the cards to the manufacturers.

A guide to power boat ownership and operation, “You and Your Boat”, is included in the literature packet. **Read it carefully.**

After the boat is delivered, make sure you and your dealer fill out the “Delivery Launching Record and Boat Registration” form. Return the copy marked “S2 Yachts” to S2 Yachts, Inc., 725 E. 40th Street, Holland, Michigan 49423-5392 USA.

MODEL 2550 CUDDY OUTBOARD
MECHANICAL, PLUMBING & STEERING 11/89



THE BOATER'S DICTIONARY

Aft: At, near or toward the stern.

Anchor Rode: Anchor rope.

Athwartship: From side to side of a boat.

Bedding: Caulking compound or application of caulking compound.

Bilge: Inside bottom of the boat's hull.

Bow: The front of the boat.

Bow Rail: A protective guard around the bow of the boat.

Bulkhead: Vertical partitions dividing the hull.

Castoff: To let loose, set free.

Chine: The outer edge of the boat where the bottom meets the side.

Cleat: Hardware to wrap the mooring line around.

Companionway: Doorway.

Cradle: A frame to support the boat while the boat is out of the water.

Deck: The portion of the boat from the gunwales up.

Fender: A cushion or pad to prevent damage to the side of the boat.

Forward: Toward the front.

Galley: The kitchen.

Gunwales: An upper edge of the hull side.

Hatch: A cover for an opening.

Head: Toilet.

Helm: The wheel by which a boat is steered.

Limber Hole: Holes through the bulkhead or stringer to allow water to pass to the pump.

Lay-Up: To put in storage.

Marine Gear: The transmission.

Moored: To keep a boat in place by means of a rope or anchor.

Porthole: An opening in the side of the boat to let in air and light.

Portside: The left side of a boat when facing the bow.

Prop: Propeller.

Rubrail: A protective guard on the gunwale of a boat.

Rudder: A hinged flat piece at the rear end of the boat that directs the boat.

Scupper: An opening in the hull of a boat to let water run off the cockpit floor.

Seacock: A valve on any underwater thru-hull.

Starboard: The right side of a boat when facing forward.

Shaft Log: A tube through which the prop shaft passes through the bottom of the boat.

Slings: Straps by which the boat is lifted.

Stern: The hind part of a boat.

Strake: A rib on the bottom side of the hull running fore and aft.

Stringer: A support member inside the hull.

Strut: The metal casting bolted to the bottom of the hull to support the cutlass bearing for the propeller shaft.

Stuffing Box: A chamber through which the propeller shaft passes.

Taffrails: The rails around the stern of the boat.

Thru-Hulls: A fitting through the hull of the boat.

Thru-Hull Strainer: A filter attached to the thru-hull fitting.

Transom: The vertical portion of the hull at the back of the boat.

Underwater Gear: Any component that is fastened to the outside of the hull under water.

**MODEL 2550 CUDDY OUTBOARD
REPLACEMENT PARTS — INTERIOR 11/89**

Ref. No.	Code No.	Description	No. Req'd
1	335001	Fire Extinguisher	1
2	335064	Stereo	1
3	336032	Light - Fluorescent	1
4	535207	Faucet	1
5	535002	Sink	1

Ref. No.	Code No.	Description	No. Req'd
6	535041	Porta Potti	1
	535037	Head Option	1
7	335066	Speaker	2
8	534322	Rings - Locking Rod	4
9	334017	Plug - Bailer	1
10	327033	Light	1

S2 reserves the right to make changes or improvements to its boats without notice.

THE OPERATING CONTROLS

The Main Gauge Panel. See figure 1.

The panel is on the main console. Because different types of engines are used to power the boat, the following gauges may or may not be installed in the panel.

The Speedometer. The speedometer indicates the speed of the boat in miles per hour.

The Tachometer. The tachometer measures the rpm of the engine.

The Oil Pressure Gauge. The gauge monitors the oil pressure of the engine.

The Engine Temperature Gauge. The gauge indicates the operating temperature of the engine.

The Fuel Gauge. The gauge indicates the amount of fuel in the fuel tank.

The Engine Alarm. The alarm monitors the engine for low oil pressure and high temperature. If the engine alarm system activates during the operation of the boat, stop the engine. Investigate the cause. Make sure the problem is corrected before you start the engine.

The Hour Meter. The meter keeps a record of the operating time for the engine.

The Volt Gauge. The gauge shows the voltage for the battery. The normal voltage is between 11 and 14.5 volts.

The Oil Level Gauge. The gauge indicates the amount of oil in the VRO tank.

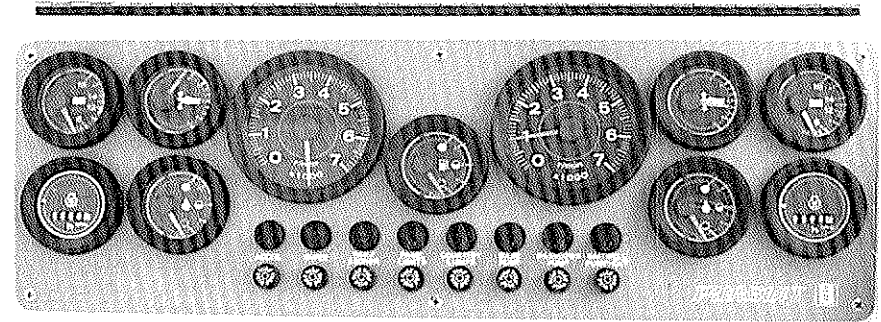


Figure 1

The Battery Main Switch. See figure 2.

There is a battery switch in the starboard battery compartment and in the port battery compartment. The switches are mounted on the side wall of the compartments. The switches control the 12-volt electrical system of the boat. To activate the system, the battery main switches must be in the "On" position.



CAUTION: To prevent damage to the alternator, do not turn the main switch off while the engine(s) is running.

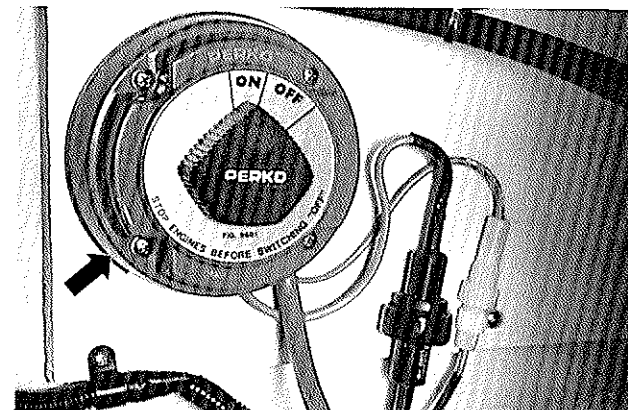
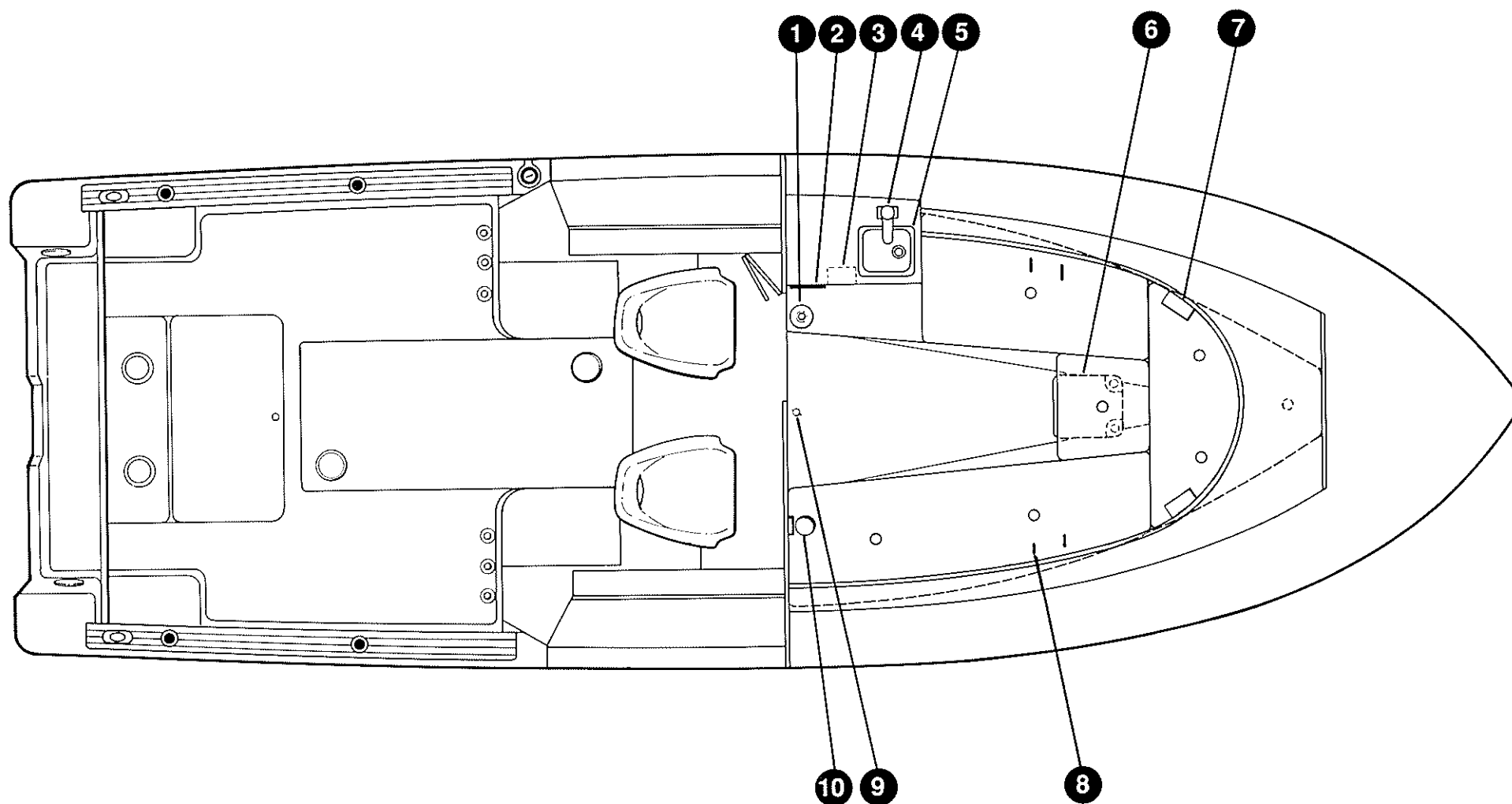


Figure 2

MODEL 2550 CUDDY OUTBOARD
REPLACEMENT PARTS — INTERIOR 11/89



The Accessory Switch Panel. See figure 3.

The accessory switch panel is on the main console below the gauges. The fuse that protects the switch is below the switch it protects. The following switches are on the accessory panel:

The Switch For The Windshield Wipers (1). To activate the wipers, put the switch in the "Up" position.

The Nav/Anc Switch (2). The navigation-anchor switch is a three-position switch. Put the switch in the "Up" position to turn on the navigation lights. Put the switch in the "Down" position to turn on the anchor light. The center position of the switch is the "Off" position.

The "Panel Lights" Switch (3). The switch will illuminate the lights for the control panel. To activate the switch, put the switch in the "On" position.

The Switch To Activate The Courtesy Lights (4). To illuminate the courtesy lights, put the switch in the "Up" position.

NOTE: The bilge pump will start automatically when there is water in the bilge area. To start the pump manually, use the switch on the accessory panel to activate the pump.

⚠ CAUTION: To prevent damage to the pump, do not operate the bilge pump when there is no water in the bilge area.

The Switch For The Bilge Pump (5). The bilge pump is installed in the base of the transom. To start the pump manually, put the switch in the "On" position.

The Switch For The Washdown Pump (6). The pump is in the aft starboard compartment. To activate the pump, put the switch in the "On" position.

The Switch For The Baitwell Pump-Out (7). The switch controls the discharge pump for the baitwell. To activate the pump, put the switch in the "On" position.

The Ignition Switch. See figure 4.

The ignition switch is on the port side of the console. The switch controls the starting and stopping of the engine.

NOTE: The ignition switch shown may not be the switch installed in your boat.

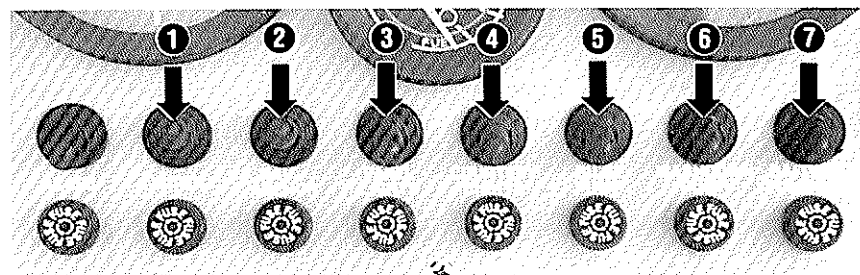


Figure 3

NOTE: Each accessory switch is protected by a fuse. The fuse to protect each switch is below the switch.



Figure 4

**MODEL 2550 CUDDY OUTBOARD
REPLACEMENT PARTS — EXTERIOR 11/89**

Ref. No.	Code No.	Description	No. Req'd
1	534082	Plate - Deck 6" Smooth	2
2	534032	Plate - Hawse Pipe	2
3	842037	Hatch - Battery Box Port	1
4	534523	Rack - Rod	2
5	336020	Light - Courtesy	2
6	534031	Holder - Rod	2
	534312	Holder - Rod Medium	2
7	335065	Speaker	2
8	534523	Rack - Rod	2
9	842025	Hatch - Seat Port Side	1
10	334021	Cap - Fuel Fill	1
11	334022	Vent - Fuel	1
	534321	Shield - S.S.	1
12	334022	Vent - Water Fill	1
	534321	Shield - S.S.	1
13	534077	Cap - Water Fill	1
14	504022	Door - Companionway	1
15	747457	Hatch - Forward Deck	1
16	753404	Pulpit - Bow	1
17	747453	Locker - Anchor	1

Ref. No.	Code No.	Description	No. Req'd
18	708452	Wiper - Windshield Option	1
	334034	Motor - Wiper	ref.
	334035	Blade - 11"	ref.
	334036	Arm - Adjusting	
19	325017	Compass	1
20	543224	Nameplate	1
21	315020	Wheel - Steering	1
22	325368	Panel - Instrument	ref.
23	708496	Radio - VHF w/Antenna	1
24	534081	Plate - Deck 4"	1
25	747523	Seat - Companion and Helm	2
26	842026	Hatch - Seat Starboard Side	2
27	334069	Horn	1
28	534116	Plate - Inspection 6"	4
29	842038	Hatch - Battery Box Starboard	1

S2 reserves the right to make changes or improvements to its boats without notice.

The Control Handle. See figure 5.

The control handle is on the starboard side of the console. The handle(s) control the rpm of the engine(s) and the shifting of the marine gear.

NOTE: The control handle shown may not be the control handle installed in your boat.

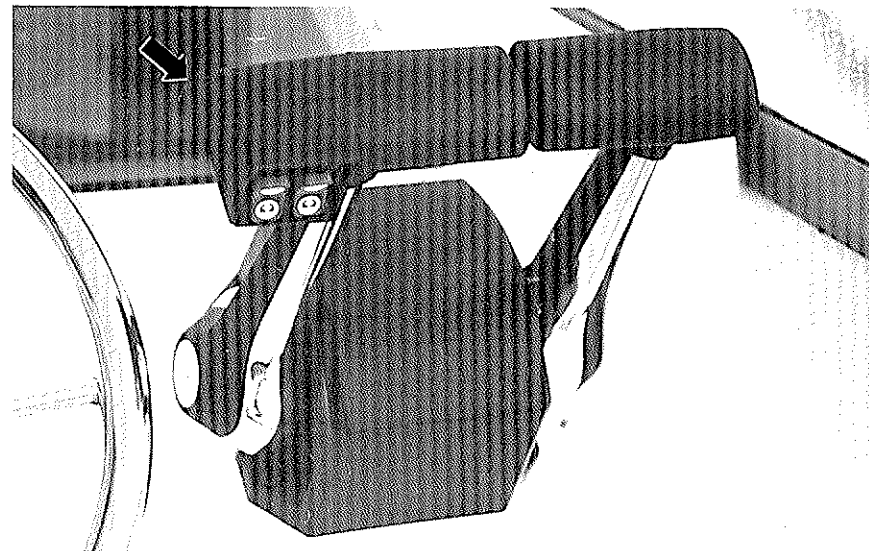


Figure 5

The Steering Wheel. See figure 6.

The steering wheel is on the main console. The steering wheel controls the direction of the boat.

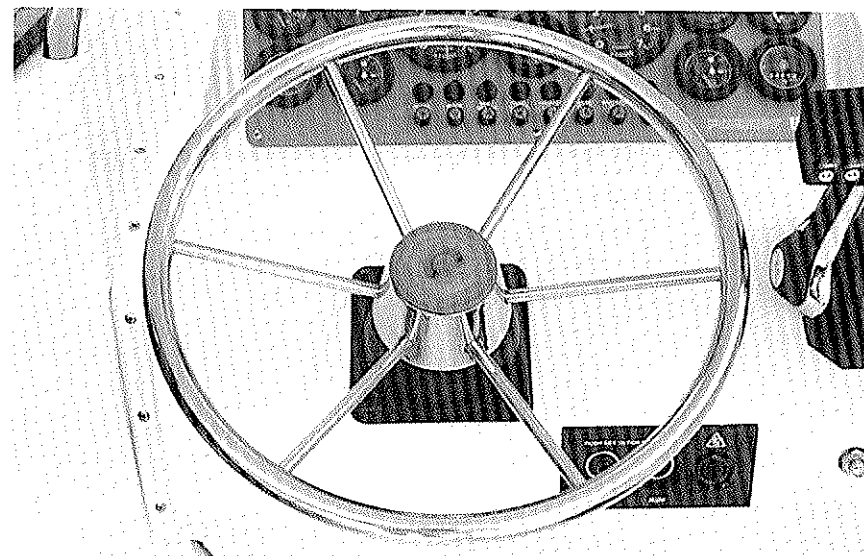
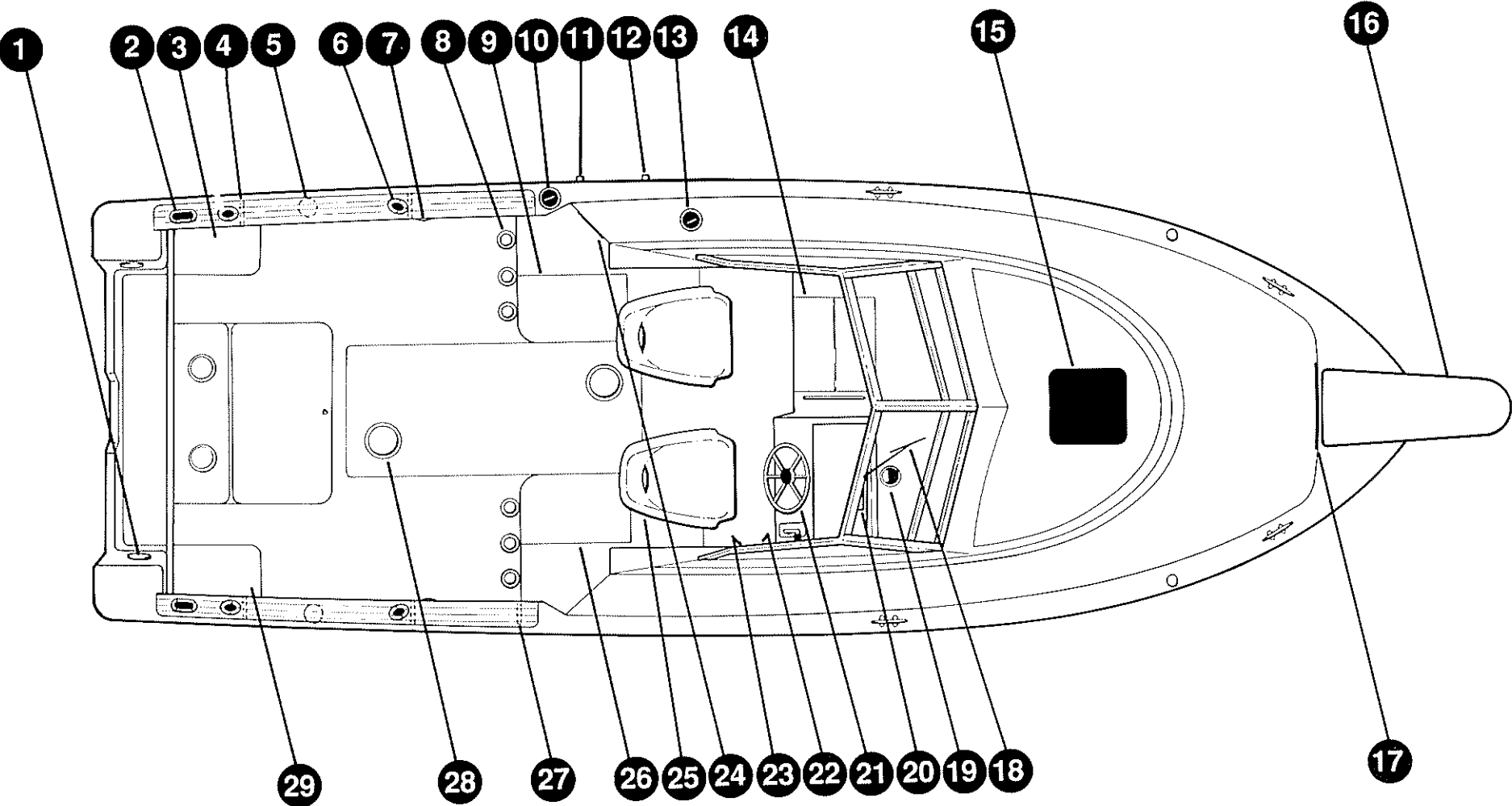


Figure 6

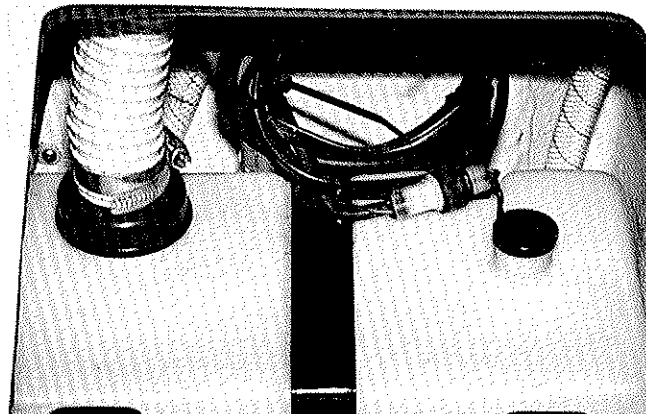
MODEL 2550 CUDDY OUTBOARD
REPLACEMENT PARTS — EXTERIOR 11/89



The Oil Tank. See figure 7.

The engine that powers the boat is a two stroke engine that needs a lubricant and gasoline mixture.

To get access to the oil tank that holds the lubricant, remove the deck plate aft of the wavegate on the port side of the boat. The lubricant is automatically measured into the fuel line. For the recommended lubricant and fill location, read the manual for the engine.



The Capacity Specification Plate. Not shown.

The plate is on the forward starboard side of the cockpit. The maximum safe capacity load for the 2550 Cuddy Outboard is 10 persons, or 1,800 lbs. The maximum total combined safe capacity weight of persons, motor and gear is 2,885 lbs.



WARNING: To prevent loss of control or capsizing of the boat, make sure you do not exceed the maximum safe capacity load set for your boat.

**MODEL 2550 CUDDY OUTBOARD
REPLACEMENT PARTS — EXTERIOR PROFILE 11/89**

Ref. No.	Code No.	Description	No. Req'd
1	334133	Eye - Stern w/Plate	2
2	327044	Light - Stern	1
3	543335	Logo - Pursuit	2
4	542043	Rubrail	per ft.
	541025	Flat Bar - Aluminum	per ft.
	652011	Rope	per ft.
	549067	Cap - Rope Gunnel	1
5	534531	Handrail	1
6	543207	Logo - S2 2"	2
7	543224	Nameplate - 2550	1

Ref. No.	Code No.	Description	No. Req'd
8	538080	Windshield	1
9	539120	Light - Port	2
10	327001	Light - Side	2
11	534166	Bowrail	1
12	534019	Cleat	4
13	334025	Eye - Bow	1

S2 reserves the right to make changes or improvements to its boats without notice.

The Horn Button. See figure 8.

The horn button is on the starboard side of the console. Press the button to activate the horn.

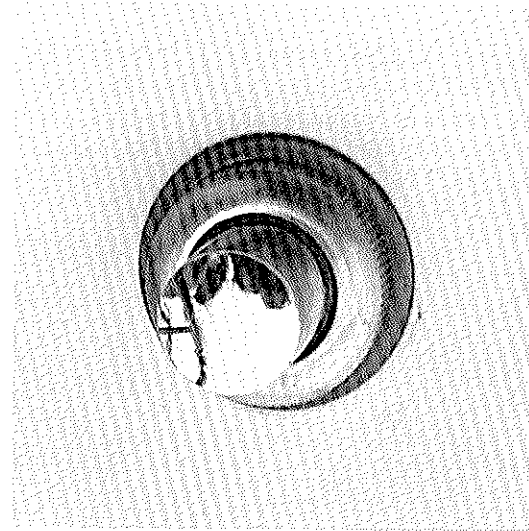


Figure 8

The Fire Extinguisher. See figure 9.

The fire extinguisher is in the cabin on the aft port wall. For instructions on how to use the fire extinguisher, read the label on the fire extinguisher.

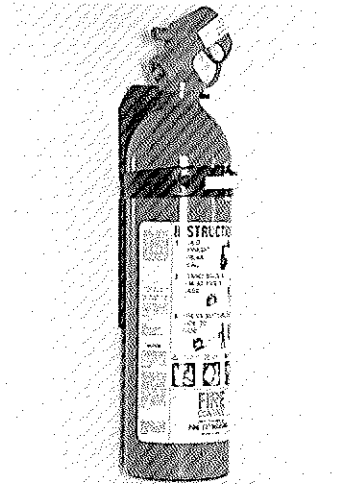
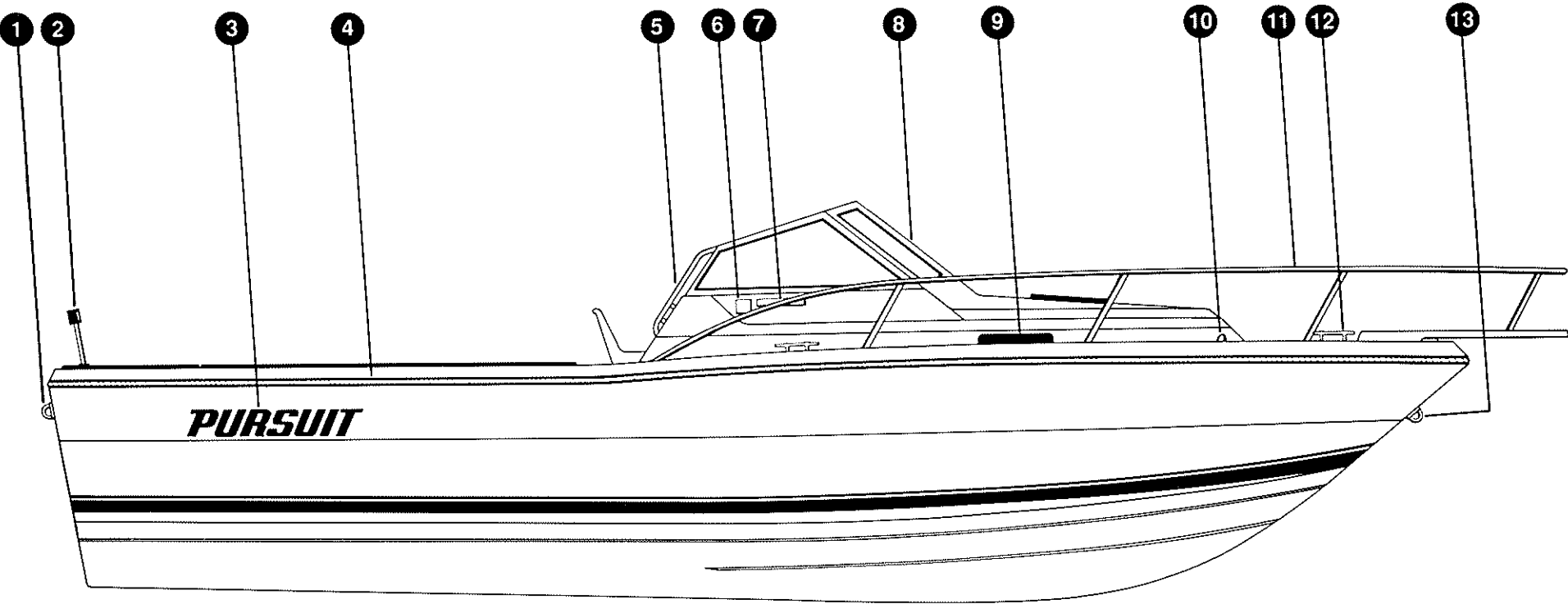


Figure 9

MODEL 2550 CUDDY OUTBOARD
REPLACEMENT PARTS — EXTERIOR PROFILE 11/89



The Compass. See figure 10.

The compass is on top of the console. To adjust the compass for your area, read the instructions on "Compass Compensation" given to you in the literature packet.

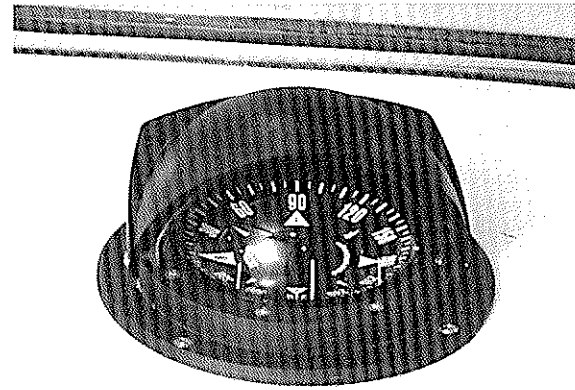


Figure 10

The Washdown Pump Connection Option. See figure 11.

The pump is in the compartment aft of the wavegate on the starboard side of the boat. The washdown pump connection is on the port side of the boat.

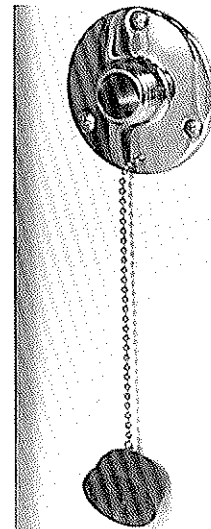


Figure 11

MODEL 2550 CUDDY CABIN SPECIFICATIONS

Power Selection: Single or Twin Outboard

Specifications:

L.O.A. w/Pulpit	26'6"
L.O.A. w/o Pulpit	24'9"
Beam	8'6"
Hull Draft	1'3"
Approximate Dry Weight	3,300 lbs.
Maximum Horsepower	400
Standard Fuel Capacity	149 U.S. gals.
Water Capacity	5 U.S. gals.
Holding Tank Capacity	15 gals.
Sleeping Capacity	2
Cockpit Length	11'4"
Height Above Waterline	5'11"

HOW TO PREPARE THE BOAT FOR OPERATION

The fuel system of your boat is designed to use regular or unleaded gasoline.

How To Fill The Fuel Tank

 **WARNING:** Fuel is very flammable. Be careful when filling the fuel tank. **NO SMOKING.** Never fill the tank while the engines, motors, and fans are running. Fill the fuel tank in an open area.

 **CAUTION:** To prevent damage to the fuel system, use only leaded or unleaded gasoline for the gasoline engines. Do not use a fuel which contains harsh additives or is an alcohol blend. Any damage done to the fuel system which is the result of use of an alcohol blend will not be covered by the S2 Warranty.

NOTE: The engine is a two stroke cycle engine that needs a lubricant and gasoline mixture. The lubricant is automatically measured into the fuel line. For the recommended lubricant and fill location, read the manual for the engine.

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

1. Make sure all switches are in the "Off" position.
2. Make sure the boat is securely moored.
3. Make sure all passengers leave the boat.
4. Estimate how much fuel is needed.

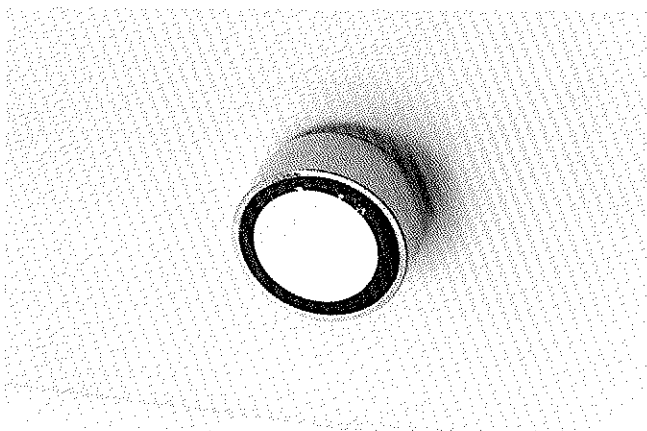


Figure 12

NOTE: When the fuel tank is full, fuel will come out through the fuel vent fitting. See figure 12. The fuel vent is in the port side of the boat.

5. A special key to unlock the fuel cap is given to you. Insert the key in the slot in the fuel cap. The fuel cap is in the covering board on the port side of the boat. See figure 13.

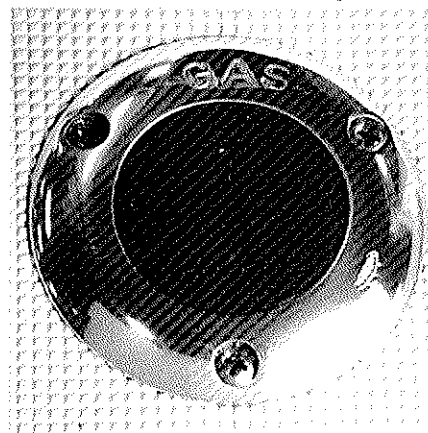


Figure 13

6. Turn the key counterclockwise to unlock the cap.
7. Remove the cap.
8. Put the nozzle in the fuel opening.

 **WARNING:** To prevent static sparks when filling the tank, make sure the nozzle is in contact with the fuel opening.

 **WARNING:** Make sure you do not spill any fuel. If fuel is spilled, use a cloth to remove the fuel.

9. Fill the fuel tank.
10. Remove the nozzle.
11. Install the fuel cap.

 **WARNING:** Make sure the fuel compartment lid is open for five minutes before the engine(s) or electrical equipment are started.

 **WARNING:** To reduce the risk of a fire and/or explosion, do not start the engine(s) when fuel fumes are present. Fuel fumes are dangerous and harmful to your health.

 **WARNING:** Make sure all gasoline odors are investigated immediately.

12. Check the fuel compartment and below deck for fuel odors. If you smell fuel, do not start the engine.

TO COMMISSION THE BOAT



WARNING: Do not operate the boat unless it is completely assembled. Keep all fasteners tight. Keep adjustments according to specifications.

To prepare the boat for commission, follow this procedure:

NOTE: It is important and recommended the fitting out procedure for the marine gear be done by a qualified service person. Read the owner's manual for the engine for the recommended procedure.

1. Install the batteries.



WARNING: Before launching the boat, make sure the hull drain plug is installed.

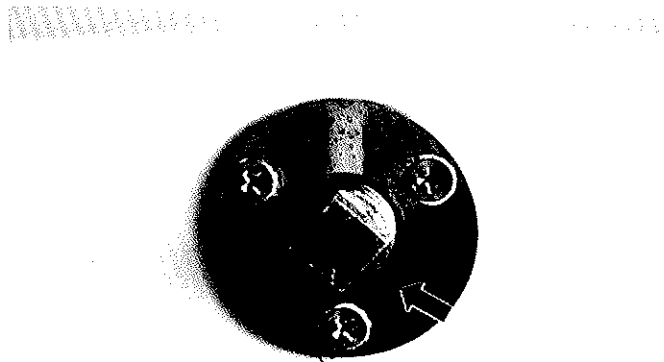


Figure 25

2. Install the hull drain plug. See figure 25.
3. Clean and wax the boat.
4. Install all upholstery, mattresses and rugs.

How To Fill The Fresh Water Tank

The fill cap to the fresh water tank is midship on the port side of the boat forward of the gas fill cap. See figure 14.

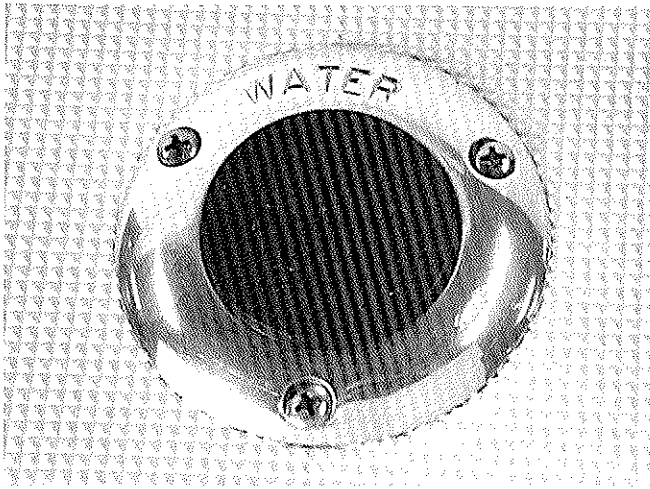


Figure 14

To fill the tank, follow this procedure:

1. A special key to unlock the fill cap is given to you. Insert the key in the slot in the cap.
2. Turn the key counterclockwise to unlock the cap.
3. Remove the cap.
4. Fill the tank with clean fresh water.

NOTE: The water tank is full when water comes out of the water vent. The water vent fitting is in the port side of the boat. See figure 15.

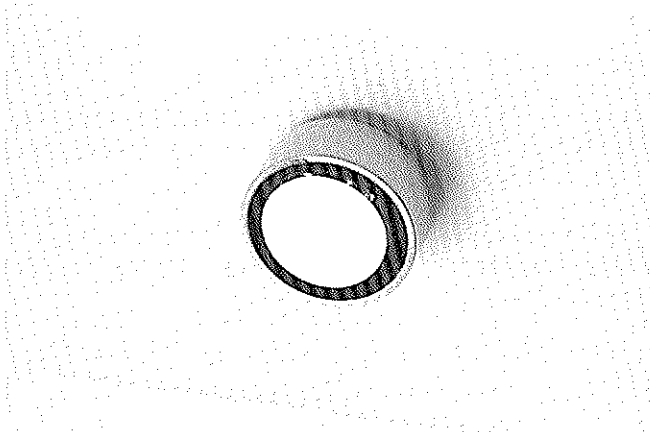


Figure 15

5. Put the cap in position.
6. Turn the key clockwise to lock the water cap in position.

NOTE: The water pressure pump is a demand type pump. If the fresh water tank is empty and the breaker switch for the pump is in the "On" position, the pump will continue to run. Make sure the switch is in the "Off" position when there is no water in the tank.

How To Fill The Baitwell With Water

To fill the baitwell with water, follow this procedure:

1. Open the valve. To open the valve, turn the knob (1) counterclockwise.
2. After the baitwell has filled with water, close the valve. To close the valve, turn the knob clockwise.

To remove the water from the baitwell, follow this procedure:

NOTE: This procedure takes two people, one to operate the boat and one to remove the drain tube from the baitwell.

1. While the boat is running, remove the drain tube (2) from the bottom of the baitwell. To remove the drain tube, turn the rod (3) counterclockwise. See figure 16.

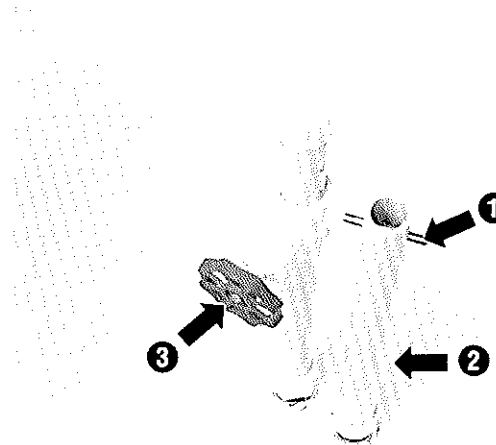


Figure 16

2. After all water has drained from the well, install the drain tube.

How To Support The Boat During Storage

Your trailer is the best support for your boat during storage. Before you store the boat on a trailer for a long period of time, follow this procedure:

1. Make sure the rollers and pads support the hull of the boat.
2. Make sure the trailer hitch is level and there is support under the hitch.
3. Make sure the outdrive is in the down position.
4. Check the tires once each season. Add enough air for the correct amount of inflation for the tires.

NOTE: Read the owner's manual for the trailer for the correct amount of inflation for the tires.

Storage

Proper storage is very important to prevent serious damage to the boat. If the boat is to be stored indoors, make sure the building has enough ventilation. It is very important that there is enough ventilation both inside the boat and around the boat.

NOTE: If the boat is to be stored indoors or outdoors, open all drawers, clothes lockers, cabinets, and doors a little. If possible, remove the upholstery, mattresses, clothing, and rugs.

If the boat is to be stored outdoors and a cover is to be used, build a frame over the boat to support the canvas or plastic cover. Make sure the frame is a few inches wider than the boat so that the canvas will clear the rails. Make sure the cover is fastened securely. A loose flapping cover will damage the gelcoat surface.

How To Open And Close The Windshield Vent

To open the windshield vent, follow this procedure:

1. Turn the knob counterclockwise.
2. Push the knob forward.
3. Turn the knob clockwise to lock the vent in the open position.
4. To close the vent, turn the knob counterclockwise.
5. Pull the knob back until the vent is closed.
6. Turn the knob clockwise to lock the vent in the closed position.

Do These Procedures Before Each Use Of The Boat

1. Check the fuel supply. If the fuel is needed, read "How To Fill The Fuel Tank".

 **WARNING:** Do not operate the boat when fuel fumes are present. Fuel fumes are dangerous and harmful to your health.

2. Check the fuel compartment for fuel leaks and fumes. Make sure all fuel lines and fittings are tight. See figure 17.

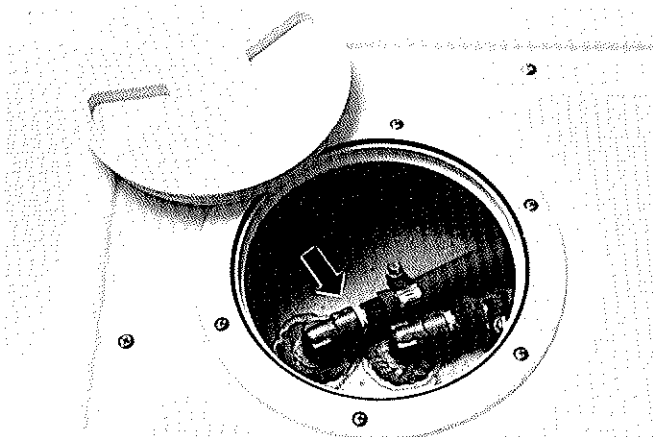


Figure 17

3. Put the battery main switch in the "On" position. See figure 18.

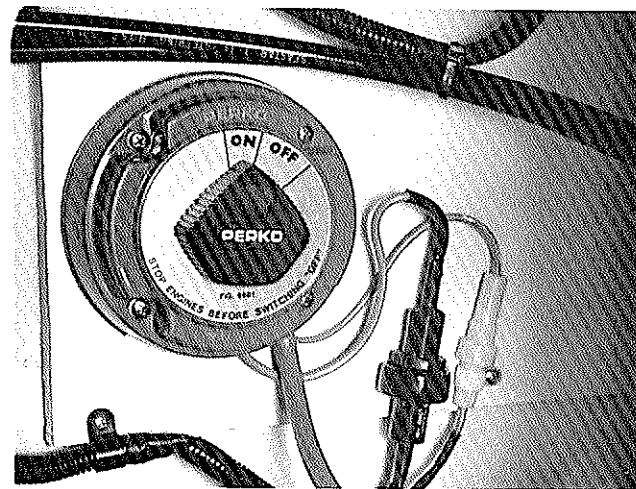


Figure 18

4. Check the engine oil level.

 **CAUTION:** To prevent damage to the engine, do not operate the boat when the oil level mark is below the "Add" mark.

To check the oil level, remove the dipstick from the engine. If the oil level mark is on or below the "Add" mark, add oil. To add oil, remove the oil filler cap. Make sure the oil does not pass the "Full" mark on the dipstick. Read the engine manual for the correct type of oil.

 **WARNING:** Make sure the bilge pump is in good operating condition. Do not use the boat if the pump is malfunctioning. Replace the pump immediately.

 **WARNING:** Large debris will clog the bilge pump and hoses and cause switch malfunctioning.

5. Inspect the bilge area. Remove all debris from the bilge area.

HOW TO PREPARE THE BOAT FOR LAY-UP

The Bilge Area

Remove all water from the bilge area. To remove the water, follow this procedure:

 **WARNING:** Make sure the boat is out of the water before removing the hull drain plug.

1. Remove the hull drain plug. The plug is in the outside of the transom below the gimbal. See figure 23.

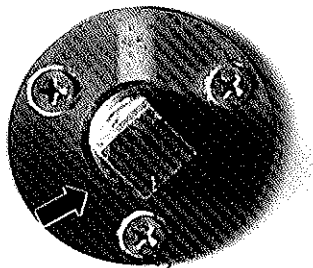


Figure 23

2. Pump out all water that does not drain from the compartment.
3. Use a sponge and wipe the bilge area until all water is gone.

The Engine

To prepare the engine and exhaust system for lay-up, read the owner's manual for the engine for the recommended preparation procedures.

The Batteries

To prepare the batteries for storage, follow this procedure:

1. Make sure the batteries are fully charged.



WARNING: To prevent an explosion, charge the batteries only in an area with good ventilation.

2. Put the battery main switches in the "Off" position. See figure 24.

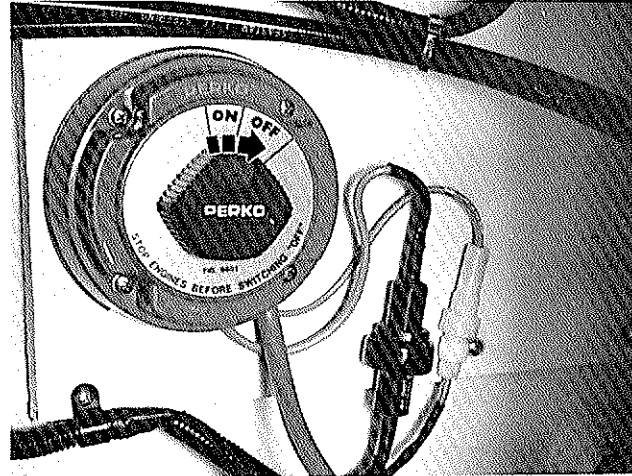


Figure 24



WARNING: Lead acid batteries generate gases which can cause an explosion. **NO SMOKING.** Always wear eye protection and protective clothing when working near batteries. Remove all jewelry. Do not put tools or other metal objects across the battery terminals or the tops of the batteries.

3. Disconnect the batteries.
4. Clean the batteries.
5. Add distilled water as needed to the batteries.
6. Apply a coat of petroleum jelly to the battery cable terminals.
7. Put the batteries in a dry building with good ventilation. Make sure the batteries are protected from freezing temperatures.

6. Test all switches on the accessory panel. See figure 19. Make sure the switches activate the equipment they control, and all equipment is in good operating condition.

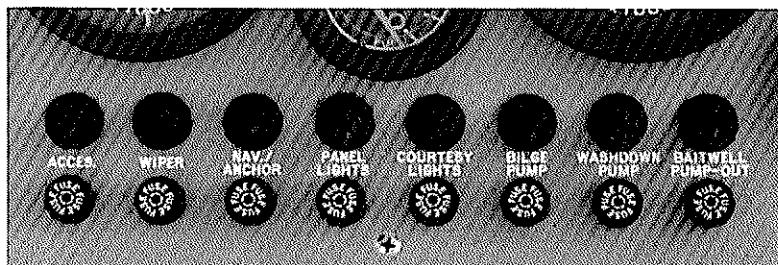


Figure 19

7. Put the outdrive in the full-in position.

Below The Water Line Of The Boat

When the boat is removed from the water, clean the outer bottom surface. Algae, grass, or dirt is easier to remove when alive or wet. Use a hard bristle brush to clean the surface.



CAUTION: To prevent damage to the fiberglass, do not sand the outer bottom surface of the boat.

If the outer bottom surface has been painted with anti-fouling paint, contact your dealer for recommended maintenance procedures.

Service Inspection

Contact the nearest S2 authorized dealer once a year for a maintenance inspection of the boat and to make any repairs. Use only genuine boat parts for repair.

When contacting your dealer or S2 Yachts, Inc. for parts or repair, make sure you give the hull number of the boat. The hull number is in the upper starboard area of the transom.

HOW TO OPERATE THE BOAT

Recommended Safety Check Procedure

The following is a recommended safety check procedure for getting underway.

1. Make sure you have signal kits and flare guns aboard, and they are in good operating condition.
2. Make sure you have a complete First Aid Kit aboard.
3. Have a tool kit aboard. The kit should include the following basic tools:

Spark plug wrench	Hammer
Spark plug gap gauge	Electrician's tape
Screwdriver	Lubricating oil
Pliers	Jackknife
Adjustable Wrench	Vise grip
Pipe Wrench	



WARNING: There must be at least one personal flotation device on-board for every person on-board and one throw-out flotation device. Check the U.S. Coast Guard standards for the correct type of device for your boat.



WARNING: Protecting persons on the boat is the owner's responsibility. Stop the engine before using the swim platform, or taking skiers aboard.

4. Make sure life preservers and life rings are on-board and in good condition.
5. Have the following spare parts on-board:

Extra light bulbs	Spark plugs
Fuses	Flashlight and batteries
Drain plug	Engine oil
Propeller	Fuel filters
Propeller nut and washer	Fuel hose and clamps



WARNING: Vaporizing liquid extinguishers give off toxic fumes; use only Coast Guard approved fire extinguishers.

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



CAUTION: To prevent damage to the anchor lines, mooring and towing lines, do not stow wet cordage in the rope locker or below decks.

7. Make sure all lines, cables, anchors, etc. for securing a boat are on-board and in good condition. Make sure all lines are coiled, secured and off the decks when underway.
8. When you operate a boat, you accept the responsibility for the boat, for the safety of passengers and for others out enjoying the water.

Remember:

1. Alcohol severely reduces the ability to react to several different signals at once.
2. Alcohol makes it difficult to correctly judge speed and distance, or track moving objects.
3. Alcohol reduces night vision, and the ability to distinguish red from green.

Do not operate the boat while under the influence of alcohol.

To Operate The Boat



WARNING: To reduce the risk of a fire or explosion, do not start the engines when fuel fumes are present. Fuel fumes are dangerous and harmful to your health.



WARNING: Make sure all inspection plates to the fuel tank are open for five minutes before the engines or electrical equipment are started.



WARNING: Make sure one other person on the boat is instructed in the operation of the boat.



WARNING: Make sure the boat is operated in compliance with all state and local laws governing the use of a boat.

NOTE: For more instructions on safety, equipment and boat handling, enroll in one of the several free boating courses offered. For information on the courses offered in your area, call the "Boating Course Hotline", 1-800-336-2628.

How To Maintain The Exterior Surface Of The Boat

CAUTION: Do not use abrasive cleaners on fiberglass. Abrasive cleaners dull the surface and will allow dirt to penetrate into the finish.

After each use of the boat, follow this procedure:

1. Rinse the boat with clean water.
2. Use a clean sponge and a mixture of detergent and water to wash the fiberglass surfaces.
3. Use a stiff fiber brush to wash the non-skid surfaces.
4. Rinse the boat with clean water.

At least once a year, apply wax and polish the smooth gelcoat surfaces. Use a good automotive wax or a boat wax. Before applying the wax, read the directions given with the wax.

After the boat is exposed to the direct sunlight for a period of time, the color in the gelcoat tends to fade, dull or chalk. A heavier buffing is required to bring the gelcoat back to its original luster. For power cleaning use a light cleaner such as Mirror Glaze #1. To clean the boat by hand, use a heavier automotive cleaner. Before cleaning the surfaces, read the instructions given with the cleaner. After cleaning the surfaces, apply wax and polish all fiberglass surfaces except the non-skid areas.

A pamphlet called "Congratulations Welcome To The Fiberglass Fleet" is included in the literature packet. For more information on the care of fiberglass, read the pamphlet.

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

The windows and hatches are made of plexiglass.

CAUTION: Do not use chemical solvents on plexiglass. Solvents scratch the plexiglass and damage the window sealant and hatch gaskets.

Use a mild soap and water, or a plexiglass cleaner to clean the windows and hatches.

How To Maintain The Interior Of The Boat

To keep the interior of the boat clean and dry, follow this procedure:

1. Clean below the decks just like you would a home interior. To preserve the woodwork, use a teak oil on all woodwork. Use a vacuum cleaner to pick up dirt in the cabin.
2. Air and sunlight are very good cleaners. Put cushions, blankets, sleeping bags, etc., up on deck in the sunshine to air and dry out.
3. If cushions or other equipment get wet with salt water, use clean fresh water to rinse off the salt crystals. Salt crystals retain moisture and will cause damage. Dry the equipment thoroughly.
4. If you leave the boat for a long period of time, put all cushions on their sides and open all lockers.

CAUTION: Do not use chemical solvents on plexiglass. Solvents scratch the plexiglass and damage the window sealant and hatch gaskets.

5. Use a mild soap and water, or a plexiglass cleaner to clean the windows.

NOTE: A cleaning kit to help maintain the exterior and interior of your boat, see figure 22, can be obtained from S2 Yachts.



Figure 22

The kit contains a Vinyl Shampoo, Marine Polish, Hull Cleaner, Boat Wash, Vinyl Conditioner, Sponge and a white S2 Bucket.

Call 1-800-843-3172 to order the Starbrite* Kit, part number CK9880.

**Starbrite is a registered trademark of Star Brite, Inc.*

To Start The Boat

As different types of engines are used to power the boat, have the dealer describe the operating procedures for your boat. For more instructions on "How To Operate The Boat", make sure you read the instructions given to you in the owner's manual for the engine you have selected.



WARNING: Do not operate the boat if the drive unit is damaged.

NOTE: If the drive unit hits an underwater object, stop the engine. Inspect the drive unit for damage. If the unit is damaged, contact your dealer for a complete inspection and repair of the unit.

To Stop The Boat

To stop the boat, follow this procedure:

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

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

3. Turn the ignition key to the "Off" position.
4. If you are going to leave the boat for a long period of time, put the battery main switch in the "Off" position.
5. Make sure the boat is securely moored.



CAUTION: To prevent damage to the boat, close all seacocks before leaving the boat. See figure 20. Make sure the "Auto Bilge" switch is in the "On" position.

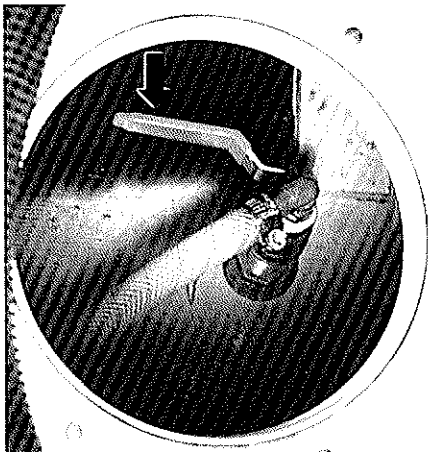


Figure 20

The Bilge Pump

NOTE: An inline fuse protects the automatic bilge pump. The fuse is on the side of the battery switch. See figure 21.

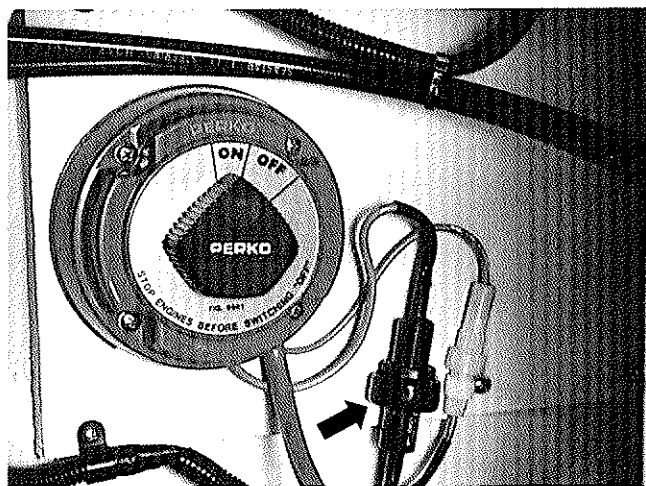


Figure 21

IMPORTANT: Check the fuse frequently to make sure the fuse is good. If the fuse is not good, replace the fuse.

The pump requires no lubrication. Inspect the bilge area. Make sure all connections to the pump and the thru-hull fittings are tight. Inspect the hoses. If the hoses are damaged or worn, have the hoses replaced. Make sure the float moves without restriction. Visually inspect the wiring for loose connections and damaged wires. For electrical repairs, contact a qualified electrician.

The Fresh Water System

If the water system has not been used for a long period of time and you think it may be contaminated, sanitize the system. To sanitize the water system, follow this procedure:

1. Remove the water from the fresh water tank.
2. Pour a mixture of one gallon of water and 1/4 cup of household bleach for every 15 gallons of the tank capacity into the water tank.
3. Fill the rest of the tank with fresh water.
4. Open each faucet to release all air from the water lines.
5. After all air has been released, turn off each faucet.
6. Leave the mixture in the system for three hours and then remove all liquid from the fresh water tank.

7. Flush the system with potable water.
8. Fill the tank with potable water.

If after doing the above procedure, you can smell or taste the bleach mixture, follow this procedure:

1. Remove the water from the tank.
2. Mix one quart of vinegar with five gallons of water. Pour the solution into the fresh water tank.

NOTE: The motion of the boat while in use will cause the vinegar mixture to splash over the interior of the tank.

3. Leave the solution in the tank for several days.
4. Drain all liquid from the fresh water system.
5. Flush the system with potable water.
6. Fill the tank with potable water.

The Sanitary System

When the system needs to be emptied, follow this procedure:

1. Take the yacht to an area where the holding tank can be pumped out.
2. The cap to the waste deck fitting is midship in the covering board on the port side of the boat. A special key to unlock the cap is given to you. Insert the key in the slot in the cap.
3. Turn the key counterclockwise to unlock the cap.
4. Remove the cap.
5. Insert the pump out hose in the opening.
6. Remove all waste from the holding tank.
7. Fill the tank with clean water.
8. Remove the water from the tank.
9. Install the cap.

MAINTENANCE



WARNING: Do not operate the boat unless it is completely assembled. Keep all fasteners tight. Keep adjustments according to specifications.

The Electrical System

Check the electrical system before each use. Make sure all switches activate the equipment they control, and all equipment is in good operating condition.

The boat has a 12-volt electrical system. The 12-volt DC batteries supply power to all electrical equipment on the boat. The batteries are lead-acid type batteries.



WARNING: Lead acid batteries generate gases which can cause an explosion. **NO SMOKING.** Always wear eye protection and protective clothing when working near batteries. Remove all jewelry. Do not put tools or other metal objects across the battery terminals or the tops of the batteries.



WARNING: Before doing any maintenance, make sure all switches are in the "Off" position.

These maintenance procedures must be done to the batteries twice every season:

1. Clean the batteries. To clean the batteries, follow this procedure:
 1. Disconnect the batteries.
 2. Use a cloth and a solution of bicarbonate of soda to wipe the top of the batteries.
 3. Clean the battery terminals.
 4. Reconnect the batteries.
2. Check the batteries and add distilled water as needed. The correct level is within 1/4 inch of the bottom of the tube in each cell.

The batteries are self-charging when the engine is running. If the system is used for a long period of time without the engine running, the batteries may need to be charged.



WARNING: To prevent an explosion, charge the batteries only in an area with good ventilation.



WARNING: Lead acid batteries generate gases which can cause an explosion. To prevent an explosion, turn the timer knob on the charger to the "Off" position before connecting and disconnecting the charger output connector. Keep sparks and flames away from the batteries. **NO SMOKING.**



CAUTION: The negative poles are grounded on the batteries. Reverse polarity will cause damage to the alternator. When using a jumper cable or external charging, always connect the red (+) cable to the positive terminal and the black (–) cable to the negative terminal of the battery.

To charge the batteries, read the owner's manual for the charger for instructions on how to use the charger and charge the batteries.

The Engine

Because different types of engines are used to power the boat, read the owner's manual for the engine for more information on the engine installed in your boat.



WARNING: Before doing any maintenance to the engine, make sure all switches are in the "Off" position.



WARNING: Fuel is very flammable. **NO SMOKING.**



CAUTION: Check the throttle and clutch control system for wear, corrosion, and loose fittings. Keep all connections clean. Make sure all fittings are tight. Have all worn parts replaced.



CAUTION: Check all fittings for leaks. Check all linkage in the steering and rudder system for corrosion, looseness, and wear. Make sure all connections are tight. Have all worn parts replaced.

Check the fluids in the engine before each use of the boat.

The Engine Lube Oil



CAUTION: To prevent damage to the engine, do not operate the boat when the oil level mark is below the "Add" mark.

Remove the dipstick from the engine and check the oil level. If the oil level mark is on or below the "Add" mark, add oil. To add oil, remove the oil filler cap. Make sure the oil does not pass the "Full" mark on the dipstick. Read the engine manual for the correct type of oil.

To change the oil and oil filter, read the instructions given to you in the engine owner's manual.

How To Clean And Set The Spark Plugs

Clean and set the spark plugs after the first 10 hours of use and then after every 100 hours of use or every six months, whichever comes first.

 **CAUTION:** Use only a wire brush and commercial solvent to clean the spark plugs.

To clean and set the spark plugs, follow this procedure:

1. Use a socket wrench to remove the spark plugs from the engine.
2. Use a wire brush and clean the electrodes, insulator, and threads.
3. Wash the spark plugs in a commercial solvent.
4. Use a spark plug gauge and adjust the spark plug gap to .035.
5. Use a socket wrench and install the spark plugs.

NOTE: Replacement spark plugs must be of the same heat range. Change the spark plugs after each 100 hours of use and before each season.

The Cooling System

If the boat is used in saltwater, flush the cooling system after each daily use.

To flush the system when the boat is out of the water, follow this procedure:

1. Install a flush-test device over the water inlet holes on the gear housing.

NOTE: Get the flush-test device from your dealer.

2. Connect one end of a garden hose to the flush-test device.
3. Connect the other end of the garden hose to the water supply outlet.

 **CAUTION:** To prevent damage to the engine, do not use full city water pressure.

4. Turn the faucet for the water supply to the half-way open position.
5. Put the control handle in the "Neutral" position.
6. Start the engine.
7. Put the control handle in the "Idle" position.
8. Let the engine run for 10 minutes or until the discharge water is clean.
9. Stop the engine.

10. Turn off the water supply.

11. Remove the garden hose from the flush-test device and the water supply outlet.

12. Remove the flush-test device.

To flush the system when the boat is in the water, follow this procedure:

1. Make sure the outdrive is in the "Full-Up" position.
2. Install the flush-test device over the water inlet holes in the gear housing.
3. Connect one end of a garden hose to the flush-test device.
4. Connect the other end of the garden hose to the water supply outlet.
5. Put the switch for the outdrive control in the "Down" position to lower the outdrive control all the way.

 **CAUTION:** To prevent damage to the engine, do not use full city water pressure.

6. Turn the faucet for the water supply to the half-way open position.
7. Put the control handle in the "Neutral" position.
8. Start the engine.
9. Put the control handle in the "Idle" position.
10. Let the engine run for 10 minutes or until the discharge water is clean.
11. Stop the engine.
12. Turn off the water supply.
13. Put the switch for the outdrive control in the "Up" position to raise the control.
14. Disconnect the garden hose from the flush-test device and the water outlet.
15. Remove the flush-test device.

The Ventilation System

Visually inspect the ventilation system after each use of the boat.

1. Make sure the exhaust hoses are in position in the lowest part of the bilge.
2. Make sure the ducts are clean and free of obstruction.