

1971

COBALT BOATS
OWNERS MANUAL



COBALT 1981 RUNABOUTS

Welcome to the world of Cobalt and its family of proud owners.

The name, Cobalt, has become the symbol of excellence in the world of boating. Behind this name are the creators and makers who believe quality and owner satisfaction are unquestionably the most important parts of every boat we build.

No other boat is more respected for styling, comfort, convenience and attention to detail. Your concern for proper operation, care and maintenance will provide you with many years of boating satisfaction.

This manual was prepared to acquaint you with the operation and maintenance of your Cobalt. We suggest you read this manual carefully and follow the recommendations to assure enjoyable and trouble-free operation.

It is also to your own personal advantage to become well acquainted with the rules and general "know how" of boating.

For service and assistance, remember to call upon your Cobalt dealer. He will be happy to assist you in matters concerning maintenance, warranty and any other questions you may have concerning your Cobalt.



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I. EQUIPMENT AND GOVERNMENT REGULATIONS

Lights

Motorboats under 26 feet in length underway between sunset and sunrise must display proper lights. A boat at anchor must display a white anchor light less than 20 feet over the hull and that must be visible for at least one mile to a boat approaching from any direction.

Whistle or Horn

All boats 16 feet to 26 feet in length (Class 1) are required to carry a horn or whistle which is audible at least one mile. It may be hand, mouth, or power operated.

Fire Extinguisher

All I/O boats up to 26 feet in length (Class A and Class 1) are required to carry at least one B-1 type approved and portable fire extinguisher. Your Cobalt is standard equipped to meet all of the above requirements.

Life Saving Devices

All boats must carry one Coast Guard approved type 1, 2, or 3, (wearable) device for every person on board. In addition, each boat over 16 feet in length is required to carry one approved type 4 throwable life saving device such as a ring life buoy or buoyant cushion. When the approval stamps are no longer legible and the equipment cannot otherwise be identified as being approved, the equipment must be replaced with currently approved equipment.

Additional Recommended Equipment

Although not required by law, the conscientious boatman will make sure that his boat is equipped with the following items:

1. Compass
2. Distress signal flares
3. Flashlight
4. First aid kit
5. Anchor and anchor line
6. Tool kit
7. Paddle

Inland Lakes

All boats operating on inland lakes are under the jurisdiction of state governments. You should always check your local state laws for specified equipment necessary when navigating their waterways.

II. B.I.A. CERTIFICATION

Boating Industry Associations is a National Trade Association serving all elements of the Recreational Boating Industry.

Its members include manufacturers of all types of boating equipment — outboard and inboard boats, sailboats, marine engines, outboard motors, boat trailers, boating accessories and supplies.

B.I.A. certification means but one thing. When you, as a boat owner, have this certification, you can be assured that lighting, ventilation, steering, flotation, capacity, fuel system, horsepower rating and anything that will insure your safety are within the rigid U.S. Coast Guard requirements.

Your Cobalt is B.I.A. Certified and meets U.S. Coast Guard standards.

III. INTERIOR/EXTERIOR CARE

1. Vinyl Interior/Upholstery Care

The vinyl fabric in your Cobalt's interior was especially selected to take the tough punishment of the elements and hard usage of an active boater. One big, single caution, however, in the care of your interior is to avoid contact with sharp objects. With all its toughness and wear qualities it is no match for a screwdriver you forgot to take out of your back pocket before sitting down.

Keeping your Cobalt interior clean and beautiful is easy. Ordinary dirt can be removed by washing with warm water and a mild soap. Apply soapy water to a large area and allow to soak for a few minutes. Brisk rubbing with a cloth should then remove most dirt. This procedure may be repeated in case of stubborn or imbedded dirt. A soft bristle brush may be used after the soap has been applied. Other cleaning suggestions — Chewing gum may be removed by careful scraping

and by the application of kerosene or naphtha. Tars, Asphalt, Creosote — each of these items will stain the vinyl if allowed to remain in contact. Wipe off as quickly as possible and clean the area using a cloth dampened with kerosene or naphtha. Paint should be removed immediately. Do not use paint remover or liquid type brush cleaner. Use a white cloth dampened with kerosene or naphtha. Nail polish and nail polish remover — these substances will cause permanent harm to the vinyl. Fast and careful wiping or immediate blotting after contact will minimize the staining. Spreading of liquid while removing should be avoided. Waxing and refinishing — waxing improves the wearability and cleanability of the vinyl. Use any hard wax.

CAUTION SHOULD BE EXERCISED IN USING FLAMMABLE SOLVENTS.

2. Vacuuming

A very effective and easy way to keep your interior ship shape is giving it a good vacuuming. You may use your own canister type or the ones available at a car wash. The vacuum cleaner allows you to pick up in tight areas such as under bow, jump and lounge seats. It's also a great way to clean up any debris in the bilge area. (If you're at a car wash, it's a good idea to use the pressure nozzle to wash the bilge area prior to vacuuming.)

3. Carpet Care

The carpet in your Cobalt is made of 100% polyester. It will not rot or mildew. Scrubbing with soapy water will handle most tough jobs. A simple hosing for mild cleanups will bring out that new look again. If your carpet accidentally gets stained with grease and normal soap and water won't clean it, you can use gasoline or acetone on a rag, provided it is used sparingly.

CAUTION: Use extreme caution while using any flammable liquids. Make sure you are in a well ventilated area.

4. Teakwood Care

While it is generally said that teakwood is maintenance free, it is better to consider teakwood as a material that requires a minimal amount of work to maintain.

If the care of teakwood is completely ignored, after a long period of time you can expect its color to turn gray. In addition to the fading of its color, the surface finish will tend to become rough. This roughing results and gradually becomes more apparent as the oil in the wood evaporates or dries out causing a shrinking and separation of the wood's grain.

For appearance sake and to avoid this "roughing" it is suggested that you use an application of the teak oil that was supplied with your Cobalt. Instructions for

use are on the label.

5. Canvas/Top/Camper Care

Boat canvas is, in most cases, subjected to more severe punishment than practically any other type of canvas or fabric item.

Moisture, dirt, chemicals from industrial fallout, heat, ultraviolet rays and salt water (in some cases), are all factors anxious to destroy your boat top. These elements can do serious damage if left unchecked. Let's take these elements one at a time and see what we can do to slow their destructive process.

MOISTURE — Can cause shrinkage, mold, (and mildew if fabric is not properly treated). The best method of prevention is to allow all canvas items to dry thoroughly while installed on the boat. Shrinkage can occur anytime an article is allowed to dry while loose. Most shrinkage will occur the first few months after initial installation. When canvas items are erected on the boat and properly adjusted, shrinkage can only occur in areas of looseness. Stern curtains, cockpit covers or other similar items should be installed loose enough to allow for some shrinkage. Mold and mildew can be avoided by keeping your unit clean and well ventilated.

DIRT — Can create a starting point for mold when moisture is present. Cleaning periodically with a mild

detergent and water while unit is erected on the boat will extend the canvas life and provide a better appearance. Cleaning can be accomplished with a sponge, soft scrub brush or by using one of the serve-yourself car washes. Unit should always be erected fully and adjusted to a tight, smooth appearance before washing. Allow unit to air dry thoroughly before removing curtains.

CHEMICALS — From industrial fallout can cause decay of vinyls and fabrics if allowed to accumulate for long periods of time. There are so many different types of chemicals involved it would not be practical to try to describe them here. Keeping your unit clean is the best answer.

HEAT — Under certain conditions can cause plasticizer migration. Any vinyl coated fabric when enclosed in a polyethylene container and subjected to sunlight is subjected to potential migration of the vinyl plasticizers. This will result in cracks appearing in the vinyl component and a stiffening effect on the fabric. Polyethylene bags or tubes are meant only for protection during shipping and handling. **DO NOT USE THEM FOR STOWAGE.**

ULTRAVIOLET DEGRADATION — Most synthetic fabrics or nylon parts today are U.V.R. treated to resist ultraviolet effects. The best protection, how-

ever, is to avoid long periods of stowage in areas subjected to direct sunlight.

SALT WATER — Corrosive effects of salt water, as well as chemicals from industrial installation, can corrode brass or aluminum fittings of fasteners. Your canvas has snap fasteners made of stainless steel. These can be protected by keeping them clean and occasionally lubricating them with petroleum jelly.

In summary, the things you can do to protect your canvas items for extended years of enjoyment are:

1. Keep it clean. **DO NOT** use harsh cleaners.
2. Side curtains and rear window should demand extra care to prevent scratching. Ideally, they should be washed with clear water, preferably hosed off, wiping it with your hand at the same time. Do not attempt to use a cloth or chamois skin. Any dirt or grit in the cloth may result in scratches. Clear water and using your (clean) hand is the safest way.
3. Be sure that the top is completely dry before stowing.
4. Keep unit well ventilated when stowed. **NO POLY BAGS.**
5. Keep fasteners clean and lubricated.

The materials used to produce your boat top and

curtains are the best obtainable. Reasonable care will assure you of a long life and many years of service.

IV. BOAT OPERATION

1. Erecting Top

The following is the recommended procedure for erecting the canvas top:

- a. Remove top and extension legs from "top storage area."
- b. Attach extension legs to top slides on each side of the boat. (Attaches with quick disconnect pins.)
- c. Slide top bow onto extension legs with short top bow closest to windshield.
- d. Remove storage boot and unroll canvas.
- e. Open frame and snap front of canvas to windshield.
- f. With extension legs in top adjustment brackets, lift and push extension legs to their most forward position.
- g. Snap aft canvas to each side of the boat.
- h. Optional side curtains should now be attached to windshield and sides of boat with zippers and snaps.
- i. Grasp extension legs near adjustment bracket and pull aft, tightening the entire assembly.

- j. Attach optional stern curtain to top with zipper. Begin snapping to boat from center rear. Snap sides from rear to front.
- k. Install optional bow tonneau cover.
 1. Open zipper on tonneau cover.
 2. Open walk-thru doors.
 3. Slide aft end of cover into luft slot at bottom of windshield.
 4. Snap cover to boat.
 5. Raise tonneau pole.
 6. Close zipper.
 7. Close center windshield section and snap to bottom.
 8. Walk-thru doors may be closed if desired.

2. Stowage of the Top

The following is the recommended procedure for folding and storage of the top:

- a. Disconnect the rear flaps from the side of the boat and allow them to hang free.
- b. Disconnect the top snaps from the windshield. (At this point, the two bows should still be separated.)
- c. Grasp the two bows and fold them together. (Allow the canvas to gather between the bows.)

- d. Pull the flaps that were attached to the side of the boat toward the center of the boat.
- e. Still holding the bows and side flaps with one hand, use the remaining hand to pull the remaining material through the closed bows toward the back of the boat.
- f. Roll the canvas around the bows. (As you roll the canvas, insure its tightness and pull the sides of the canvas to prevent wrinkling.
- g. Slide the boot over the canvas and snap.
- h. Remove the top from the “top bow extension legs” and stow the top in the “top storage compartment.”
- i. Remove the extension legs and stow them in the “top storage compartment.”

3. Seat Adjustment

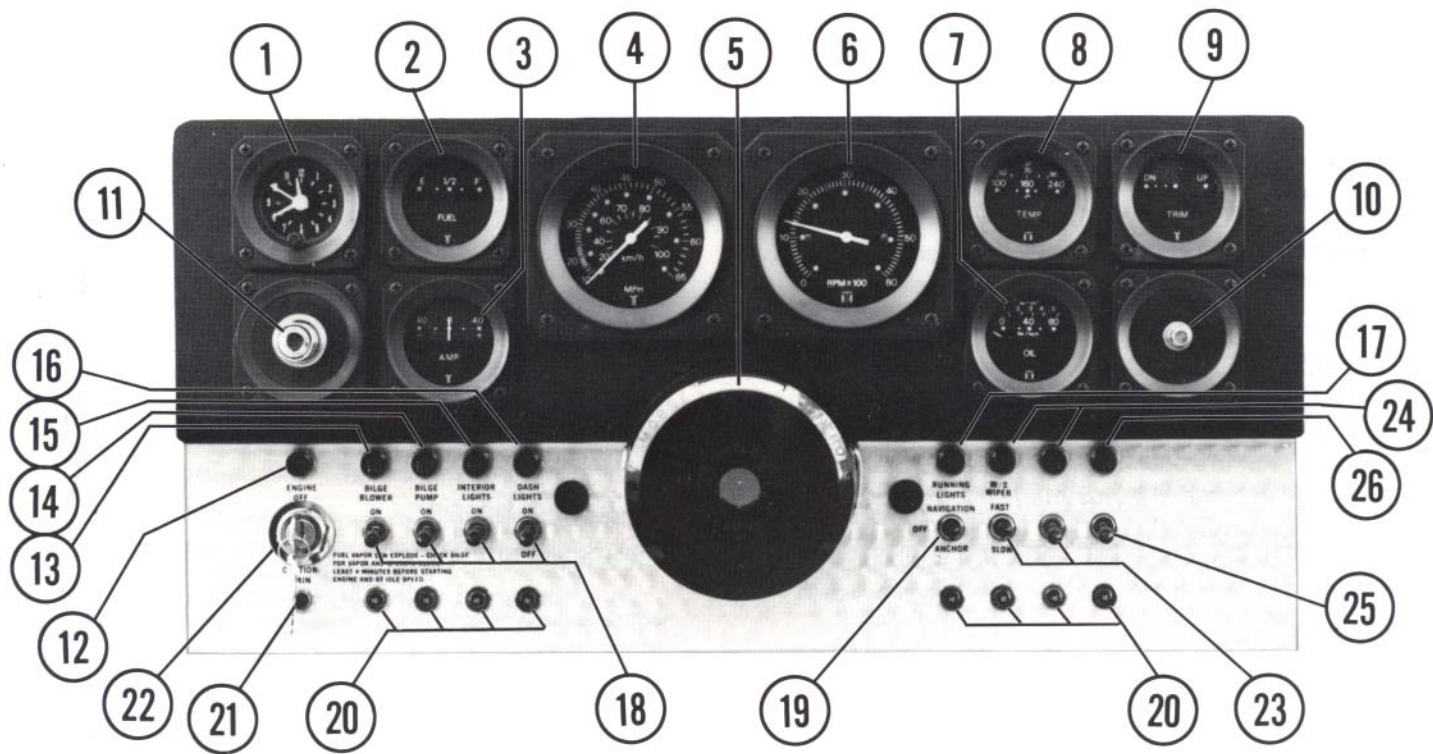
The driver's seat is adjustable fore and aft. To attain desired position, lift the release handle mounted under the forward lip of the driver's seat cushion, move seat, and release handle. Make sure handle retracts fully and seat is locked in place.

The passenger's seat is not adjustable.

To lay the sleeper seats down, simply grasp the forward edge of the seat cushion and lift until mechanism

releases. Then extend into the sleeper position. On the driver's side, it will also be necessary to lift the release handle to slide the front of the mechanism to its' most forward position. Reverse this procedure to replace in normal position.

While in the sleeper position, the after-most cushion can be raised and locked into a lounge position. To lock, press the support legs to an over center position. These are located under the cushion and are exposed when the cushion is raised.



4. Instrument Panel (See Fig. #1)

1. Clock — Electrically wound.
2. Fuel Gauge
3. Amperes Gauge — Shows amount of current being absorbed by battery from alternator. Should indicate some amount of positive (+) charge when engine is running at all speeds except idle.
4. Speedometer (Miles Per Hour)
5. Rudder Indicator — Shows position of drive unit in reference to the center line of boat.
6. Tachometer (Revolutions Per Minute)
7. Oil Pressure Gauge — Pressure can vary according to type of engine. It is normal for a hot engine to have low pressure at idle, (depending on type of oil, pressure may drop as low as 10 PSI at idle). Oil pressure should be maintained as follows:

MerCruiser

In Line Engines 30-60 PSI @ 2000 RPM

V-8 Engines 30-55 PSI @ 2000 RPM

OMC

V-8 Engines 30-50 PSI @ 3000 RPM

Volvo

V-8 Engines 30-50 PSI @ 3000 RPM

DANGER: Should oil pressure drop below 30

PSI at the indicated RPM, there is a malfunction in the engine or gauge or a low level of oil. Check immediately before further operation.

8. Temperature Gauge — Temperature may fluctuate slightly while running. Maximum temperature may vary depending on type of engine.

DANGER: Should water temperature reach 180 degrees Fahrenheit, your engine is overheating and should be checked immediately for probable cause.

9. Trim Gauge — MerCruiser and OMC — Shows the position of the drive unit in reference to the bottom (keel) of boat.

Voltmeter — Volvo — Indicates the condition of the charge in the battery.

10. Horn Button — Horn is mounted under deck on starboard side.
11. Lighter
12. Engine Off Indicator — Indicates when ignition is in “on” position and engine is not running, or with loss of oil pressure. A buzzer will sound at the same time.
13. Bilge Blower Indicator — Indicates when bilge blower is operating.

14. Bilge Pump Indicator — Indicates when bilge pump is operating in manual or automatic mode.
15. Interior Light Indicator — Indicates when interior lights are on.
16. Dash Light Indicator — Indicates with dash instrument lights.
17. Exterior Light Indicator — Indicates with navigation or anchor lights.
18. Two Position Switches — Control appropriate equipment.
19. Three Position Exterior Light Switch — Up position, navigation (running) lights, which include combination red and green bow light, stern light and forward portion only of mast light. Center position, off. Down position, anchor lights, which are forward and aft position of mast light only.
20. Circuit Breakers — Push to reset if necessary. If the button continues to pop out, consult your Authorized Cobalt Dealer.
21. Main Circuit Breaker — Supplies power to the ignition switch.
22. Ignition Key Switch.
23. Auxiliary Two Position Switches — Can be used for optional equipment.

24. Indicator Light — For auxiliary equipment.
25. Bowrider Models — Auxiliary two position switch can be used for optional equipment. 19CD Only — Momentary windshield control switch.
26. Indicator Light — For auxiliary equipment.
27. Dash Lights — Indicates with instrument lights.

5. Engine Control

The engine control in your Cobalt is supplied by the engine manufacturer. It controls shifting, throttle and incorporates the power trim control which is covered in another section entitled "Power Trim."

OMC

Engine will start only in neutral. To move handle from neutral position (vertical), lift the red button under handle, then move handle. Moving handle forward will engage forward gear initially. Continuing forward movement will advance throttle. Moving handle aft will engage reverse gear initially. Continued aft movement will advance throttle.

Cold Starting — While handle is in neutral position, pull entire handle away from side of boat and move handle forward. This will allow you to advance the throttle while leaving the shift mechanism in neutral.

MERCUISER

The same procedure is used for MerCruiser as for the OMC, except it is not necessary to lift button to release from the neutral position. For cold starting, while handle is in the neutral position, depress the button in the center of the bottom of the handle and move forward.

VOLVO

Engine will start only in neutral. Moving handle forward will engage forward gear initially. Continuing forward movement will advance throttle. Moving handle aft will engage reverse gear initially. Continued aft movement will advance throttle.

Cold Starting — While handle is in the neutral position, pull aluminum knob out. This will allow you to advance the throttle while leaving the shift mechanism in neutral.

6. Steering System

The steering system in your Cobalt is the finest available in the boating industry today. It is a mechanical system, with power assist.

Steering/Propeller Torque

Steering or propeller torque is always present in any drive system. In some systems, it is more noticeable than in others. Your boat has power

steering and you should not encounter this torque to any significant degree. If you encounter movement in the steering wheel when released, please check with your dealer. It may be necessary to adjust the power steering assembly.

Wandering/Fishtailing

Wandering is a characteristic of all deep vee bottom boats at slow speed. There is no cure for wandering, however, a very basic operational technique can be applied which will minimize this characteristic. If the steering wheel is moved back and forth to compensate for wandering, invariably, the situation will be accentuated. If the steering wheel is left in a centered position, the boat will wander back and forth slightly, however, the overall course of the boat will be a straight one.

The steering is the most important system in the entire boat from a safety standpoint. It should be inspected by a qualified mechanic at regular service intervals.

7. Power Trim/SelecTrim

Your power trim is controlled from the engine control handle area. MerCruiser has buttons in the handle to control the trim. OMC has a rocker switch to control the trim. Volvo's power trim/tilt is controlled by

the throttle control mounted switch or, on some models, by the toggle switch located in the side panel just ahead of the throttle control.

Power trim gives you the ability to compensate for load and water conditions.

General

The power trim changes the drive unit angle in reference to the transom of the boat. Regardless of engine type, a few basic operating techniques should be applied.

1. The drive unit should be lowered fully prior to initial acceleration.
2. After the boat has attained planing speed (18-24 MPH) the trim should be raised for maximum speed and handling characteristics.
3. If the trim is raised too high, porpoising (bouncing) and cavitation (propeller slippage) can occur.
4. It will be necessary to readjust the trim angle as boat speed changes.

8. Storage Areas

Bow Area — Bowrider Models

There is storage located under the seat cushions of the bow. This area is accessible by lifting the pull strap on the cushion. Because of a lack of ventilation, wet

items should not be stowed in these areas.

Cockpit Area — Standard Interior

In the cockpit, the storage areas include:

1. Bulkhead Storage Pocket (Except 19CD)
2. Glove Compartment — Lockable
3. Floor Ski Storage — Excellent for water skis, fishing tackle, etc.
4. Top Storage Compartment — Lift on finger pull to raise cover.
5. Sleeper Seat Base Storage — To open — release seat mechanism as described in section 3 (Seat Adjustment). Access is attained with seats in a partially lowered position.
6. Motor Box Storage — To open — Raise motor box — items may be stored in areas either side of the engine.

Cockpit Area — Optional Sundeck Interior. Items 1 through 4 are the same as the standard interior.

5. Aft Storage — This is accessible by opening the sundeck lid. Further access is obtained by sliding the bench seat forward exposing the forward ends of the aft storage compartments. (See optional sundeck interior operation.)

Cockpit Area — Optional Sun Lounge Interior. Items

1 through 4 are the same as the standard interior.

5. Aft bench seat base storage — Access may be gained by removal of the bench seat cushion, (lift slightly and pull forward).
6. Port side bench seat base — Grasp the inboard edge of the bench seat bottom cushion, raise slightly and pull inboard. Then grasp the outboard edge of the cushion and raise to gain access to storage area.
7. Storage Console — Access gained through side mounted door.

9. Warning Labels

Your 1981 Cobalt has several warning labels displayed to point out safety hazards. The areas are as follows:

1. Boarding Ladder/Swim Platform
“WARNING: Under no circumstances should anyone be allowed to enter or exit your Cobalt from the boarding ladder or swim platform while engine is running.”
2. Engine Flame Arrestor
“Leaking fuel is a fire and explosion hazard. Inspect fuel system regularly. Examine fuel tank for leaks or corrosion at least annually.”

3. Dashboard
“Operate Bilge Blower at least two minutes before starting engine. Run continuously during starting and below cruising speeds.”

4. Windshield Door (Bowrider Models Only)
CAUTION: Windshield door must be latched open or shut while running. Do not allow door to swing free at any time.”

5. Windshield Wing, Driver's Side Cobalt Check List

For maximum enjoyment and safety, check each of these items BEFORE you start your engine:

- DRAIN PLUG (Securely in place?)
- LIFE-SAVING DEVICES (One for every person on board?)
- STEERING SYSTEM (Working smoothly and properly?)
- FUEL SYSTEM (Adequate fuel? Leaks? Fumes?)
- BATTERY (Fully charged? Proper water level?)
- ENGINE (In neutral?)
- CAPACITY PLATE (Are you overloaded or overpowered?)
- WEATHER CONDITIONS (Safe to go out?)
- ELECTRICAL EQUIPMENT (Lights, horn, pump, etc.?)

— EMERGENCY GEAR (Fire extinguisher? Bailer? Paddle? Anchor and line? Signalling device? Tool kit? Etc.?)

RECOMMENDED SAFETY RULES

- REMAIN SEATED WHILE UNDERWAY
- AVOID USING REAR PAD OR SUNDECK WHILE ENGINE IS RUNNING
- DO NOT USE BOARDING LADDER WHILE ENGINE IS RUNNING
- TURN OFF ENGINE AND ALL ELECTRICAL SYSTEMS WHILE RE-FUELING
- TURN OFF ENGINE WHEN SWIMMERS ARE NEAR BOAT.

10. Trash Receptacle

Most Cobalt's are equipped with a trash receptacle. It is located on the port, forward kick panel under the glove compartment. To remove this compartment, first open fully. Then lift up and pull out from the bottom. After it clears the lower lip, lower and remove. To reinstall, reverse the process. There is no trash receptacle on a sun lounge interior model.

11. Lifting Rings on Your Cobalt

The lifting rings on your Cobalt have been strength tested by an independent testing laboratory and were

found to be capable of withstanding almost 2½ times the weight of the boat.

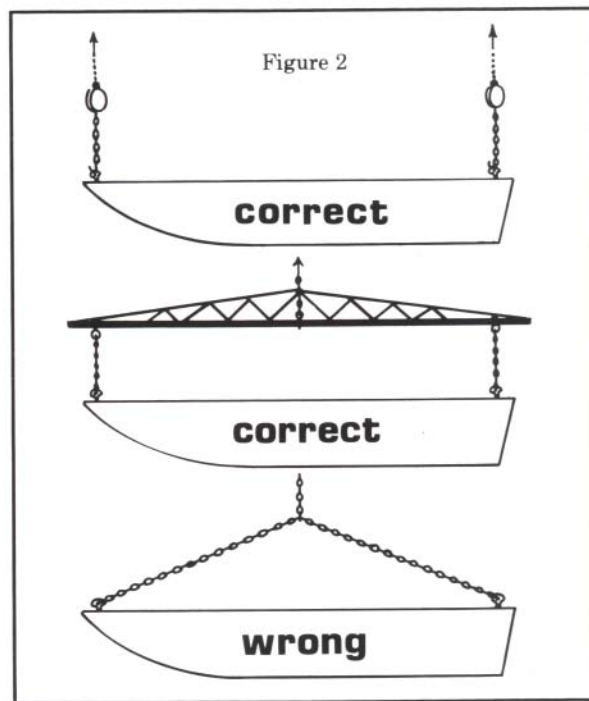


Fig. #2 illustrates the correct and incorrect hook-up for lifting.

Keep in mind however that there is a proper way to lift your Cobalt. Lifting pressure should always be vertical from the rings. Improper lifting could cause damage. If only one hoist is used, a spreader bar should be employed to avoid side strain on the rings.

12. Fold Down Boarding Ladder

THIS LADDER MUST ONLY BE USED WHILE ENGINE IS OFF. (See warning label section). Be sure ladder is raised and secured prior to starting engine. Caution should be used while using this ladder, in that any substance can be slippery when wet.

13. Water Ski Towing

Water ski lines may be attached to the rear lifting ring. If two or more lines are used, either the lifting ring or the transom-mounted eyes may be used.

14. Optional Sundeck Interior Operation

Captain's chairs on both driver and passenger sides adjust fore and aft. Turn L-shaped handle counterclockwise to loosen, slide seat to desired position. Turn L-shaped handle clockwise to tighten.

Only the captain's chair on passenger side will swivel. To face aft, slide seat all the way aft, release round knob located opposite L-shaped handle and turn seat

counterclockwise. Adjust fore and aft position after seat is turned around.

The bench seat has two functions:

a. Storage/Engine Access

The seat slides forward to expose the forward end of the aft storage areas. First remove the lock pins located on the forward outboard corners of the seat base. Then grasp the two handles on the front of the base and pull evenly. Reverse procedure to close this access.

b. Lounge position

First, slide the bench seat forward following the above procedure. Then remove the support legs from their base sockets (located on the back of the seat) and clip them into their storage clips. Then lower the back of the seat onto the support ledge of the motor box.

15. Engine Accessibility

- a. Standard Interior — Open engine box by using teak handle. Do not lift on the underside of the jump seat cushion. When closing the motor box, do not allow the box to “slam shut”.
- b. Sundeck/Sun Lounge Interior — Open sundeck lid. For further access, open slide bolt on each side

panel and then open bi-fold doors for access to the sides of the engine.

16. Optional Equipment

1. Swim Platform

To avoid damage to the optional swim platform, always be sure the outdrive unit is in the straight ahead position before tilting the outdrive all the way up.

2. Camper Top

See "Erecting The Top" and follow the same procedure.

3. AM/FM Stereo 8-Track or Cassette Player

There are separate instructions in the owner's packet that give specific instructions for operation.

4. Remote Control Spotlight

- a. Has both flood and spot beams controlled by a three position switch on the spotlight control panel.
- b. Rotates more than 360 degrees and will travel up and down by using "joy stick" control.
- c. Speed at which spotlight moves is controlled by the black knurled knob.

5. Docking Lights

Controlled by "aux" switch on dash.

6. Trim Tabs

See specific instructions in the owner's packet for correct operation.

7. Extra Battery and Switch

This option gives you the ability to isolate the entire boat from the batteries and switch to either or both batteries. Under normal situations, the switch should be in position #1 or #2 rather than the "both" position. This will keep one battery in reserve should the other fail. Battery selection should be made with engine off only. We recommend alternating batteries on a daily basis.

V. PROPELLERS AND PROPELLER CHART

Propellers — General

Nothing is more important to the proper performance of your boat than the condition of the propeller. Even minor damage (often invisible to the naked eye) can adversely affect the boat's performance. Common symptoms of damage to these lower appendages are a sudden drop in RPM, vibration or sudden loss of speed.

A propeller is measured by two dimensions: (1) the diameter and, (2) the pitch. The diameter is determined by measuring the distance from the center of the propeller to the tip of one blade and multiplying that figure by two. Pitch is expressed in the number of inches a prop will advance in a solid medium in one revolution.

Operational characteristics of your boat, including its' speed, may change due to several factors: atmospheric conditions; addition of extra equipment and accessories or passengers; marine growth on the bottom; and, engine condition. Other factors include damage to the prop, tides, water temperature and direction of wind. Some of these factors are directly correctable by repair or maintenance. Others are beyond human control. A few which may be considered permanent operating conditions may be compensated for by a change in prop. Such a change should not usually be undertaken without the advice of a knowledgeable and experienced boatman or your dealer unless you

are prepared to spend much time and money on hit and miss methods that may or may not result in improved performance.

All Cobalt runabouts come standard equipped with an aluminum propeller that has been found by test and experience to be the most suitable for all around service.

Stainless Steel

For the ultimate in top speed, stainless steel propellers will increase top speed by two to four MPH. However, they will do so at the sacrifice of some of the pulling power for water skiing and heavy loads.

Pulling Power

If you need extra pulling power, you can obtain this by decreasing the pitch of your propeller by two degrees. This will not endanger the engine or drive unit as long as the manufacturer's recommended top RPM is not exceeded and should only be done with an experienced driver at the helm. Generally, an aluminum propeller will out-pull a stainless steel propeller of the same pitch size.

**1981 RUNABOUT
Standard Prop Chart**

	18TH	18DV	19'
170 OMC (V-6)	14½ x 19 (387161)	14½ x 19 (387161)	N/A
185 MER	15¼ x 21C (SMC 380C)	15¼ x 21C (SMC 380C)	N/A
200 OMC	14½ x 19 (387161)	14½ x 19 (387161)	N/A
198 MER	15½ x 19C (SMC 378C)	15½ x 19C (SMC 378C)	N/A
230 OMC	14½ x 19 (387161)	14½ x 19 (387161)	15 x 17 (387160)
228 MER	15¼ x 21C (SMC 380C)	15¼ x 21C (SMC 380C)	15½ x 19C (SMC 378C)
225 Volvo	15 x 19 LH (SMC 293)	15 x 19 LH (SMC 293)	*14 x 19 LH (SMC 346)
260 OMC	14¼ x 21 (387162)	14¼ x 21 (387162)	14½ x 19 (387161)
260 MER	15¼ x 21C (SMC 380C)	15¼ x 21C (SMC 380C)	15¼ x 21C (SMC 380C)
260 Volvo	*15 x 21 LH (SMC 295)	*15 x 21 LH (SMC 295)	*15 x 21 LH (SMC 295)

*Estimate

1981 RUNABOUT
Optional Stainless Prop Chart

	18TH	18DV	19'
170 OMC (V-6)	14¼ x 21C (387520)	14¼ x 21C (387520)	N/A
185 MER	14 x 19C (48-88440A4)	14 x 19C (48-88440A4)	N/A
200 OMC	14¼ x 21C (387520)	14¼ x 21C (387520)	N/A
198 MER	14 x 19C (48-88440A4)	14 x 19C (48-88440A4)	N/A
230 OMC	14¼ x 21C (387520)	14¼ x 21C (387520)	14½ x 19C (387519)
228 MER	14 x 19C (48-88440A4)	14 x 19C (48-88440A4)	14 x 19C (48-88440A4)
260 OMC	14¼ x 21C (387520)	14¼ x 21C (387520)	14½ x 19C (387519)
260 MER	13¾ x 21C (48-88442A4)	13¾ x 21C (48-88442A4)	13¾ x 21C (48-88442A4)

NOTE: No Stainless Props Available on Volvo

VI. TECHNICAL INFORMATION

1. Engine Operation/Maintenance/Service

Included with your owner's packet is your engine manual. This manual was prepared by the engine manufacturer and contains virtually everything you'll need to know concerning operation and care of your engine. It is a good idea to read this manual thoroughly and become acquainted with this information.

Aside from your normal routine engine checks and care, it is advisable to let your Cobalt dealer service you. It is also advisable to maintain a service log to record service checks such as oil changes, hour check-ups, etc., so you can determine when it's time for servicing.

2. The Break-In Period

We cannot stress enough, the importance of reading your engine manual and following the manufacturer's instructions for breaking-in your engine. The comments here on this subject are of a general nature. Your engine manual will give you the engine manufacturer's specific recommendations.

The engine is the very heart of your boat. Proper maintenance is essential. In general, it consists of: proper lubrication; clean fuel lines and carburetor; pe-

riodic cleaning and adjustment of spark plugs; and, distributor point and spark timing.

For detailed engine work, we recommend that you obtain the services of an authorized OMC or MerCruiser dealer.

Keep a close check on oil pressure and temperature gauges at all times. Use only the correct octane fuel recommended by the engine manufacturer.

Preventive maintenance will prevent many heart-breaking and sometimes costly repairs.

3. Winterizing and Off-Season Storage

1. Preparing for winter lay up is vital for the preservation of your Cobalt. In frigid zones, you must be particularly attentive to items that can be damaged by freezing.
2. Step by step instructions on what must be done to your engine for winter storage is outlined in your engine manual. Follow these essential instructions carefully. This manual also details procedures for returning your engine to service for in-season usage.
3. Good storage is very important, be it wet or dry. Proper storing or blocking is necessary to properly support the hull when stored dry.

4. Provide adequate ventilation if canvas covered. Be sure there are openings at both ends so that a thru draft is created.
5. Remove battery. Store on wooden shelf or wood base. Store in dry covered place, charged to capacity and check it periodically during the off-season. Recharge monthly.

6. Store with fuel tank full. It is also advisable to add fuel preservative to your tank during winter months or any long periods of non-operation.

4. TROUBLE CHECK CHART

Trouble

Engine won't start

Possible Cause

1. Lack of Fuel
2. Clogged anti—siphon valve
3. Clogged fuel tank pick—up
4. Clogged fuel filter
5. Plugged fuel line or defective pump.
6. Carburetor float valve stuck
7. Damp spark plugs
8. High tension leads wet and/or loose
9. No spark
10. No spark

Action

Check fuel.

See authorized Cobalt Dealer.

See authorized Cobalt Dealer.

Replace fuel filter.

Fuel pump may be defective. Inspect pumpsight glass for fuel leakage from fuel pump.

See authorized service dealer.

Tap float chamber with a screwdriver handle to free needle valve.

Dry ceramic with clean dry cloth.

Dry and tighten connections at spark plugs, distributor and coil.

Check high tension lead on coil.

Check for loose connections on coil.

Starter won't crank engine	<p>11. Water in fuel supply or old gasoline</p> <p>1. Ignition Switch</p> <p>2. Throttle Position</p> <p>3. Dead battery</p> <p>4. Battery connections loose or corroded</p> <p>5. Starter connections loose</p>	<p>Check fuel supply for water contamination. If gasoline is old or if water is present, drain fuel tank and flush with fresh gasoline.</p> <p>If inoperative, see Dealer.</p> <p>Check to see that remote control is in start position.</p> <p>Change position of throttle lever slightly.</p> <p>Check level of electrolyte, disconnect battery. Charge battery.</p> <p>Check for loose connections and corrosion. Clean connections and tighten.</p> <p>Check connections and tighten. If solenoid clicks when attempting to start engine, check battery connections. If condition persists, see your Authorized Service Dealer.</p> <p>See your Authorized Service Dealer.</p>
Engine runs erratically	<p>1. Automatic choke out of adjustment</p> <p>2. Water and/or dirt in fuel filter</p> <p>3. Fuel pump malfunction</p> <p>4. Fuel tank vent and line plugged</p>	<p>Clean and inspect filter.</p> <p>Check operation of pump. Replace fuel pump. See your Authorized Service Dealer.</p> <p>Check for restrictions in line and vent. Blow out line and vent.</p>

Engine vibrates	<ol style="list-style-type: none"> 1. Propeller condition 2. Carburetor out of adjustment 3. Spark plug condition 4. High tension leads loose or deteriorated 5. Incorrect firing order 6. Engine out of time 	<p>Check for bent, broken or damaged propeller. Check for weeds on propeller or gearcase.</p> <p>Adjust carburetor.</p> <p>Check spark plug electrodes and ceramic. Clean and regap. Replace plugs, if necessary.</p> <p>Insure all connections are clean and tight.</p> <p>Correct firing order, see engine manufacturer's owner's manual for specifications.</p> <p>Check timing and dwell specifications of engine. See your engine manufacturer's owner's manual.</p>
Engine runs but boat makes little or no progress	<ol style="list-style-type: none"> 1. Fouled or damaged propeller 	<p>Check for weeds on propeller, sheared drive pin, bent or broken propeller. Remove weeds, check drive pin (OMC) or replace a damaged propeller.</p> <p>Check outdrive and hull for excessive marine growth.</p>
Performance loss	<ol style="list-style-type: none"> 1. Throttle not fully open 2. Improper fuel 3. Overheating 	<p>Check to see that throttle opens fully at carburetor.</p> <p>Fill tank with correct fuel.</p> <p>Check cooling system. Remove weeds from water intake. Check alternator belt tension.</p> <p>Readjust rudder trim tab.</p>

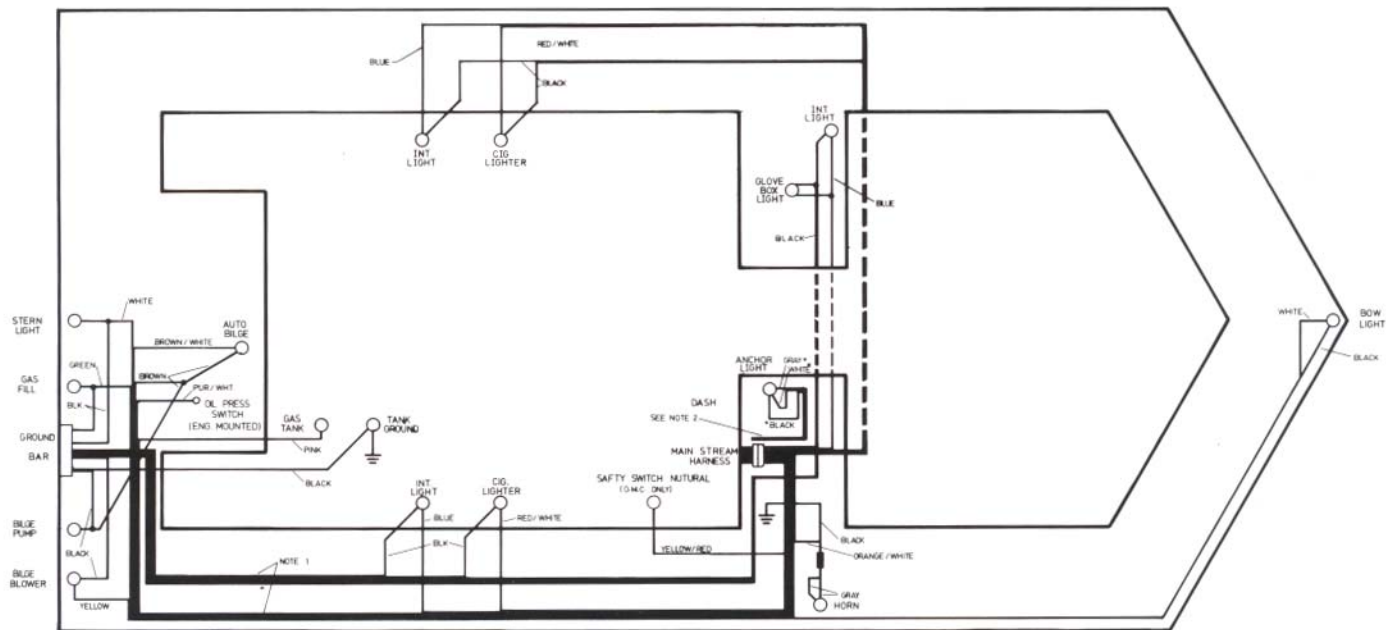
4. Boat overloaded
5. Boat trim
6. Improper propeller selection
8. Boat hull condition

Reduce load.
Distribute boat load evenly.
Select proper propeller pitch and diameter.
(See chart in owner's manual).
Clean if growth is present.

5. Electrical System

Your Cobalt electrical system was designed for easy maintenance. Most wiring and looms are readily accessible. Looms from the control panel rest in a channel under the starboard deck.

The following diagrams outline the electrical system. It is recommended that you let your Cobalt dealer service any difficulties.

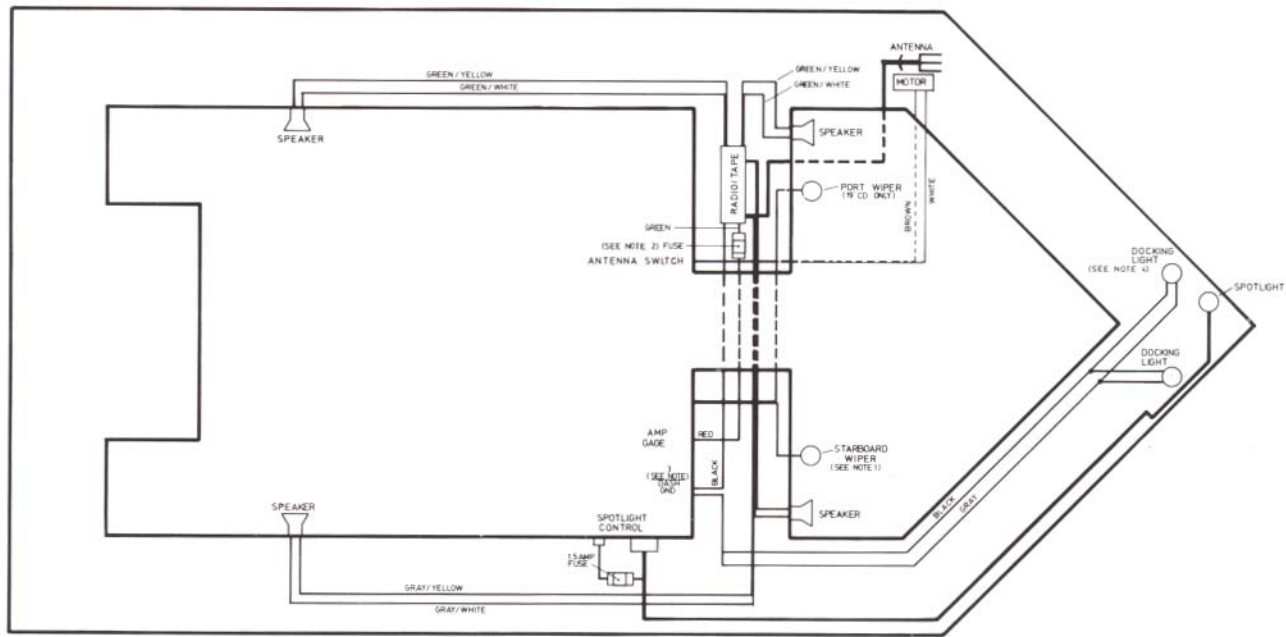


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NOTES

- 1 WIRES ARE ATTACHED TO THE HULL WITH CLIPS.
- 2 ANCHOR LIGHT WIRED DIRECTLY TO NAVIGATION LIGHT SWITCH.
- * 3 IN WINDSHIELD FRAME.
- 4 - - - - UNDER DASH

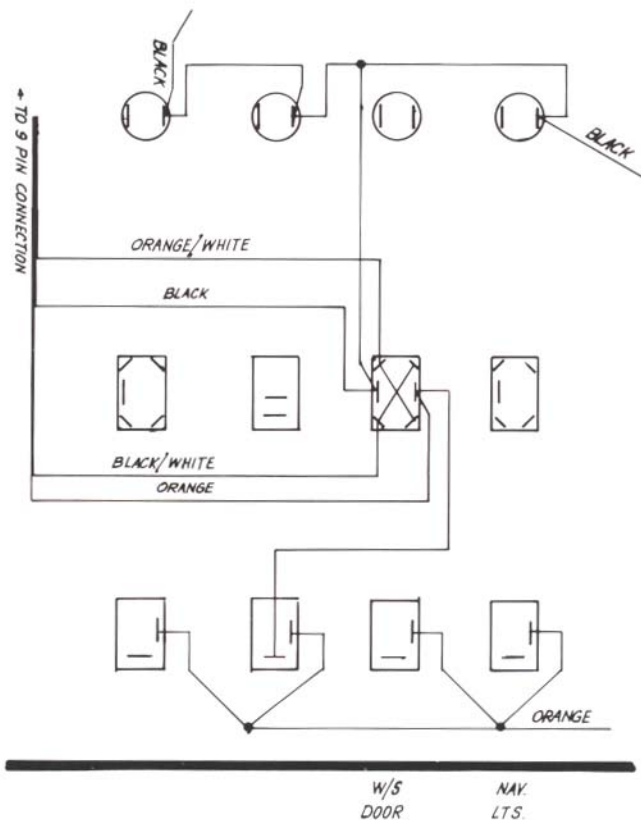
**18' & 19' BR STANDARD EQUIPMENT
1981 MODEL YEAR**



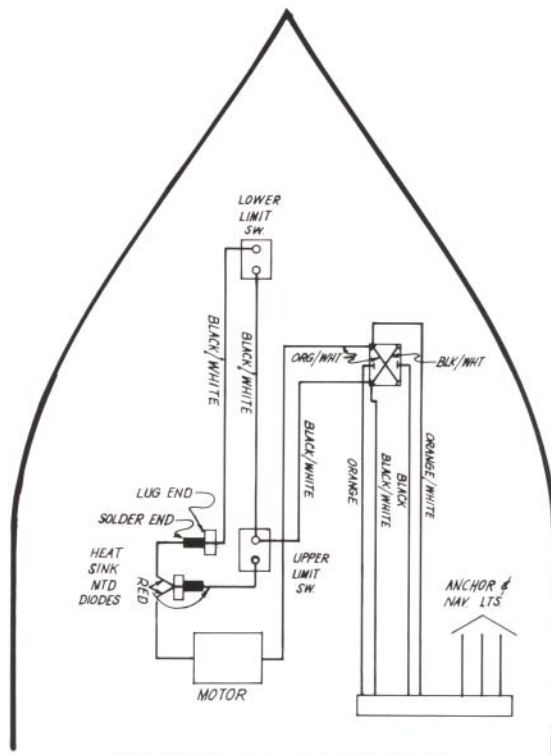
NOTE

- 1 SEE WIPER MOTOR WIRING DIAGRAM & DASH WIRING DIAGRAM FOR WIPER INTERCONNECTION
- 2 FUSE LOCATED BEHIND GLOVE BOX
- 3 DOCKING LIGHTS NEED A 20 AMP CIRCUIT BREAKER INSTALLED ON AUX SWITCH
- 4 AVAILABLE ONLY ON THE 18 DV
- 6 - - - - - WIRING RUNS UNDER DECK

RUNABOUT OPTIONAL EQUIPMENT 1981 MODEL



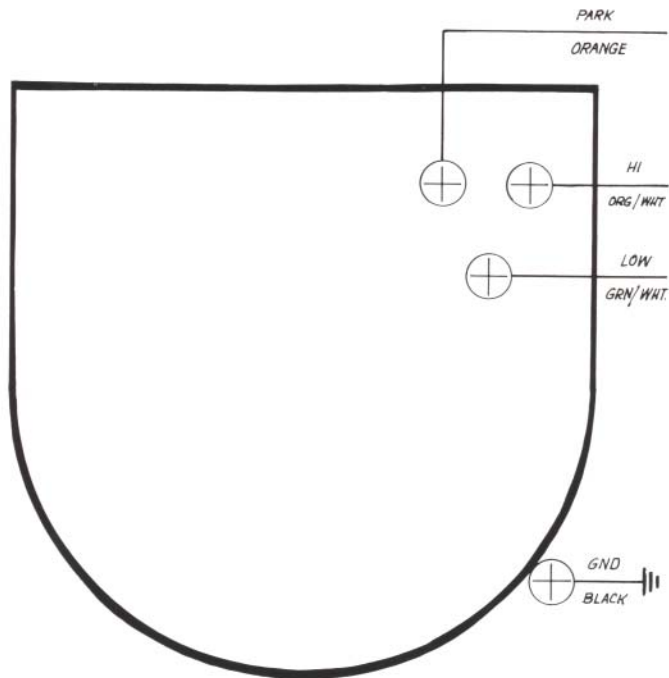
**REAR VIEW
19' C.D. W/S DOOR SW.
1981 MODEL**



WINDSHIELD WIRING DIAG.
 19' C.D.
 1981 MODEL

NOTE:

THIS DIAG. PERTAINS TO ALL MODELS AFTER 1975



**WIPER MOTOR WIRING DIAG.
1981 MODEL**

6. Circuit Breakers

All electrical standard equipment devices are controlled with circuit breakers. These breakers will activate if overloaded and cut power to the switch. To restore power simply push the breakers in and release. (Breakers do not require fuse replacement).

7. Lighting/Bulb Replacement

External Lights

Bow light bulb — #1416 12V 8CP

Anchor light bulb — #1416 12V 8CP

Transom light bulb — #211 12V 12CP

Under dash panel courtesy light —

#GE1004MB1

Rear side panel courtesy light — #211 12V 12CP

INSTRUMENTS

Tachometer — #GE1815

Speedometer — #GE161

Ammeter — #GE161

Oil Pressure — #GE161

Fuel — #GE161

Trim — #GE161

Temperature — #GE161

Clock — #GE1889

8. Battery Warranty

The battery supplied with your Cobalt is a heavy duty battery. With marine usage this battery is warranted by its manufacturer for thirty months from date of purchase and is warrantable on a prorated basis by any Sears store.



Two Year Limited Warranty

Because Cobalt's policy of design for excellence dictates the inclusion of advancements whenever developed, the right is reserved to make changes in these specifications at any time without advance notice.

Cobalt Boats builds the finest quality boat obtainable. We warrant each new hull and deck to be free from structural defects in material and workmanship under normal recommended use for a period of two years from date of delivery to the original purchaser. During this period, warranty repairs will be made without charge by Cobalt Boats at their plant in Neodesha, Kansas, or at Cobalt's option, by an authorized Cobalt dealer. Transportation to and from the plant will be at the owner's expense with all repairs subject to the authorization of factory-trained personnel whose decisions will be final.

This warranty does not apply to (1) engines, outdrives, controls, batteries, or other equipment or accessories carrying their own individual warranties (appropriate adjustment to them being provided by their respective manufacturers); (2) installation of engines or accessories installed by other; (3) windshield breakage, gel coat or upholstery damage and; (4) any Cobalt boat which has been altered, subjected to misuse, negligence or accident, or used for racing purposes.

The warranty listed herein constitutes the only expressed warranty and any implied warranty is limited to two years. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

COBALT BOATS
NEODESHA, KANSAS