



## COBALT 1978 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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## **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.

## **B.I.A. Certification**

Boating Industry Association 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.

### **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 washing with warm water and a mild soap. Aply 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 t soap has been applied. Other cleaning suggestions — Chewing gum may be removed by careful scraping and by the application of kerosene naphtha. Tars, Asphalt, Creosote — each of the items will stain the vinyl if allowed to remain contact. Wipe off as quickly as possible and clean the area using a cloth dampened with kerosene 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 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.

### 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

### 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.)

### 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.

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 cur-

tains.

**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 be practical to try to describe them here. Keep your unit clean is the best answer.

**HEAT** - Under certain conditions can cause plasticizer migration. Any vinyl coated fabric enclosed in a polyethylene container and subjected to sunlight is subjected to potential migration of the vinyl plasticizers. This will result in creasing appearing in the vinyl component and a stiffening effect on the fabric. Polyethylene bags/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 UV treated to resist ultraviolet effects. The best protection, however, is to avoid long periods of wage in areas subjected to direct sunlight.

**SALT WATER** - Corrosive effects of salt water well as chemicals from industrial installations can corrode brass or aluminum fittings of fasteners. Your canvas has snap fasteners made

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.

## 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 while short top bow is 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, 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 luff 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 bow 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

Driver and passenger sleeper seats may be moved fore and aft. To attain desired position, pull the inboard release button, located on the front edge of the seat mechanism. This will free the seat to move either direction. Release button lock.

To lay seat down in sleeper position, pull outboard release knob on front edge of seat mechanism, also pull and hold inboard release knob. Releasing both knobs will allow center of seats to separate and lie flat.

For lounge position, (passenger seat only) place seat in sleeper position. Raise center of back cushion slightly while lifting up forward cushion. Cushion will latch automatically at a lounge angle. To release, pull angled cushion aft, lift up on latch behind and return to flat sleeper position.

To upright seat from sleeper position, raise center slightly, pull inboard release button. Push front two cushions aft to lock, push rear cushion forward until backs join and lock.

To raise entire sleeper seat for access to storage in base, release rear mounted hasp and raise entire mechanism. (Caution: Be sure seat adjustment mechanism is locked into position before raising.)

Captains 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 captains 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.

#### 4. Instrument Panel

1. Clock — Electrically wound. (Not illuminated.)
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
5. Rudder Indicator — Shows position of drive unit in reference to the center line of boat.
6. Tachometer
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

140	30-60 PSI @ 2000 RPM
165	30-60 PSI @ 2000 RPM
170	30-60 PSI @ 2000 RPM
198	30-55 PSI @ 2000 RPM
228	30-55 PSI @ 2000 RPM

260	30-55 PSI @ 2000 RPM
OMC	
140	30-50 PSI @ 3000 RPM
185	30-50 PSI @ 3000 RPM
225	30-50 PSI @ 3000 RPM
240	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.**

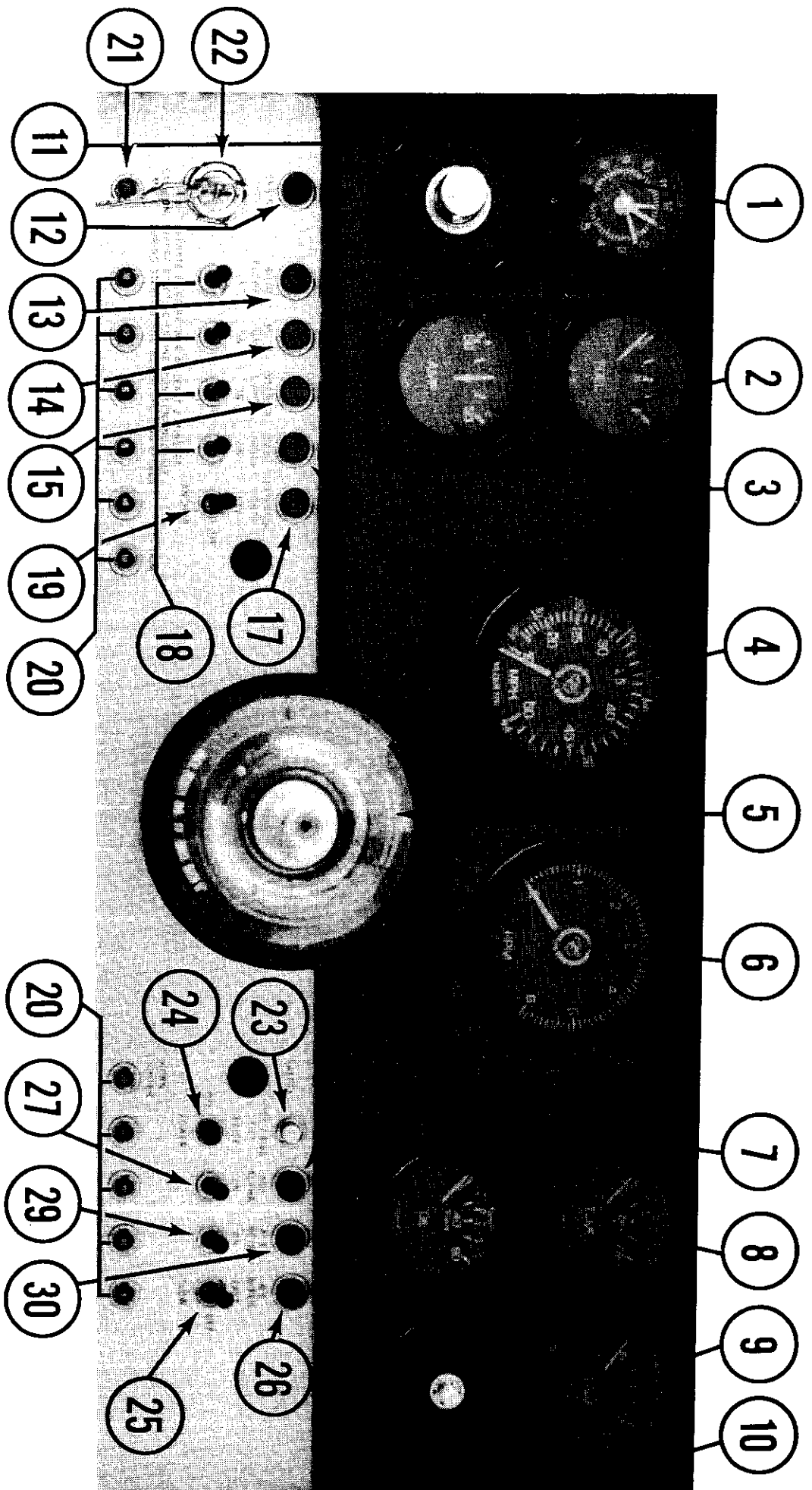
8. Temperature Gauge — Temperature may fluctuate slightly while running. Maximum temperature may vary depending on type of engine.

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

9. Trim Gauge — Shows the position of the drive unit in reference to the bottom (keel) of boat.
10. Horn Button — Horn is mounted under deck on starboard side.
11. Lighter

2. 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.
3. Bilge Blower Indicator — Indicates when bilge blower is operating.
4. Bilge Pump Indicator — Indicates when bilge pump is operating in manual or automatic mode.
5. Interior Light Indicator — Indicates when interior lights are on.
6. Dash Light Indicator — Indicates with dash instrument lights.
7. Exterior Light Indicator — Indicates with navigation or anchor lights.
8. Two Position Switches — Control appropriate equipment.
9. 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. Master Circuit Breaker — All equipment on dashboard and equipment controlled from dash, receives power through this breaker.
22. Ignition Key Switch
- 23./24. Button and switch must be used together to raise outdrive to trailer position.
25. Three position switch for optional windshield wiper.
26. Indicator light for optional windshield wiper.
27. Auxiliary Alpha Two Position Switch — Can be used for optional equipment.
28. Indicator Light — For auxiliary equipment.
29. Bowrider Models — Auxiliary Beta two position switch can be used for optional equipment. 19CD Only — Momentary windshield control switch.
30. Indicator Light — For auxiliary equipment.



## 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 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.

### MERCURUISER

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

## 6. Steering System

of the bottom of the handle and move forward.

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

### Steering/Propeller Torque

Steering or propeller torque is always present in any drive system. In some systems, it is more noticeable than in others. If your boat has power steering (MerCruiser V-8 Only) you will not encounter this torque. If your boat is not equipped with power steering (OMC), you will notice this torque at speeds greater than 12-15 MPH. Torque can be compensated for, although not completely eliminated, by a combination of two adjustments.

The first is the trim tab mounted on the stern drive, behind and above the propeller. This should normally be adjusted by an experienced mechanic. However, you may adjust this tab yourself in small increments in one direction or the other to your personal liking.

The second is by use of the power trim. Please consult the section entitled "Power Trim" for further information.

## 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/SelectTrim

Your power trim is controlled directly from the engine control handle. MerCruiser has either a rocker switch or buttons. OMC has a rocker switch to control the trim. This trim gives you the ability to compensate for load and water conditions. Power trim will help compensate for propeller torque.

### 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 or to initial acceleration.
2. After the boat has attained planing speed (18-24 MPH) the trim should be raised maximum speed and handling characteristics.
3. If the trim is raised too high, porpoising (bouncing) and cavitation (propeller vibration) can occur.
4. The trim should be raised for correct steering. This is especially true for non-power steering models. If the trim is in the wrong position, you will encounter difficulty steering in one direction or the other. To correct this, move the trim up or down as necessary so that you have even steering force in both directions.
5. It will be necessary to readjust the trim angle as boat speed changes.
6. The Trim Tab on the outdrive may need to be adjusted to correct for steering torque. Check with your Authorized Dealer for this adjustment.

## 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.

### 19 Closed Deck Models

The entire bow area is a large, ideal storage area. Most any large or small item can be stored here: life jackets, water skis, anchors, etc.

### Cockpit Area — All Models, Standard Interior

In the cockpit, the storage areas include:

1. Bulkhead Storage Pocket
2. Glove Compartment — Lockable
3. Driver and Passenger Side Compartment — Lockable

**NOTE:** Use the same key as the glove compartment.

4. Side Panel Ski Storage — Excellent for water skis, fishing tackle, etc.

### 5. Sleeper Seat Base Storage

To Open — Release the hasp located underneath the rear sleeper seat cushion and raise the entire seat assembly.

### 6. Jump Seat Base Storage

To Open — Grasp the bottom jump seat cushion, raise slightly and pull forward. Then pull the back cushion forward to gain access to area below. This is an excellent area for ski lines, anchors and lines, etc.

### 7. Top Storage Compartments

17' and 18' Models

To Open — First open both jump seats, release the top storage cover straps and lift to open. 19' Models

Lift on finger pull to raise cover.

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

### 5. Bench Seat Base Storage

To Open — Grasp the forward edge of the bench seat bottom cushion, raise slightly and pull forward. Then grasp the aft edge of the cushion and raise to gain access to storage below.

### 6. Top Storage

The top and the optional camper top are stored behind the bench seat back cushion. To gain access, open bench seat storage per item

#5, then pull the bench seat back cushion forward. The straps holding the top in place have snaps at the top of the strap.

7. Aft Storage  
This is accessible by removing the sundeck cushion and opening lid.

## 9. Warning Labels

Your 1978 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 (Bowlerider 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? Leaking Fumes?)
- BATTERY (Fully charged? Proper water level?)
- ENGINE (In neutral?)
- CAPACITY PLATE (Are you overloaded or overpowered?)
- WEATHER CONDITIONS (Safe to out?)
- ELECTRICAL EQUIPMENT (Lights, horn, pump, etc.?)
- EMERGENCY GEAR (Fire extinguisher, Bailer? Paddle? Anchor and line? Signal device? Tool kit? Etc.?)

RECOMMENDED SAFETY RULES

- REMAIN SEATED WHILE UNDERWAY
- AVOID USING REAR PAD OR SUN-DECK 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.

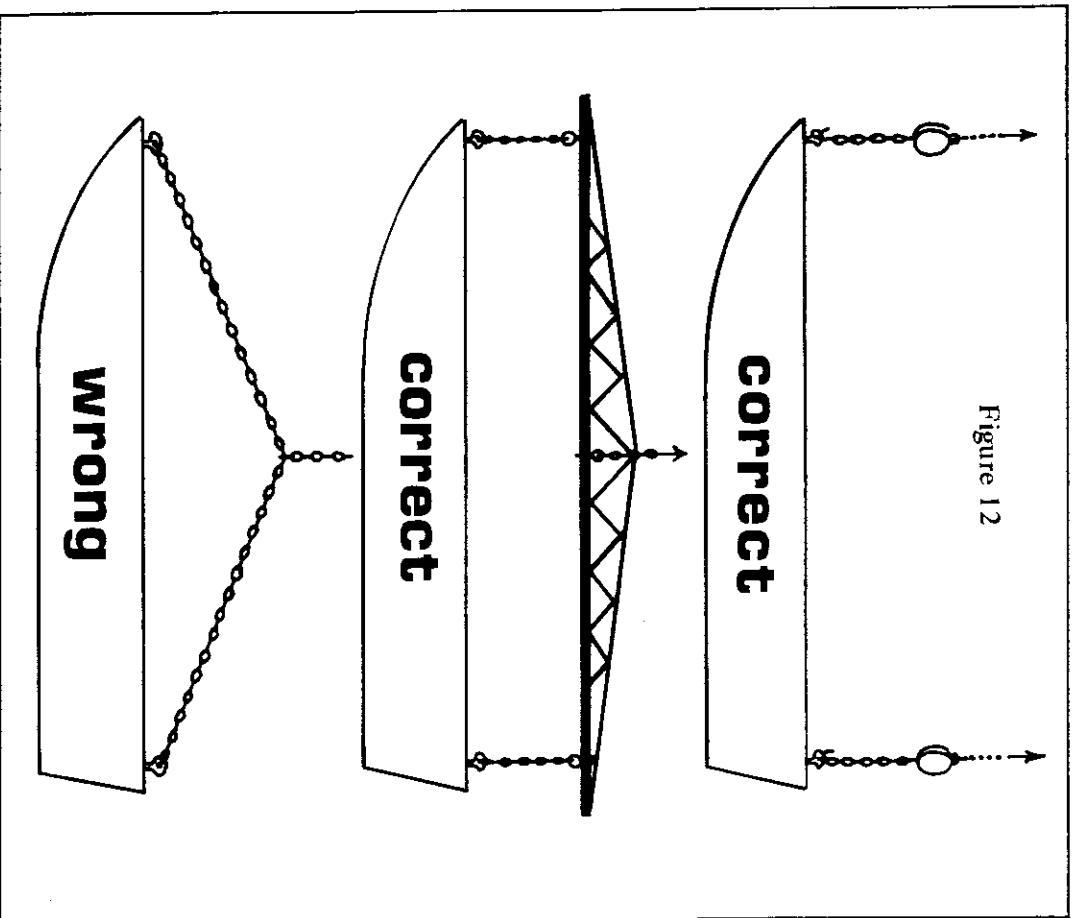
10. Trash Receptacle

Your Cobalt is equipped with a trash receptacle on the bowrider models. It is located on the port, forward kick panel under the glove compartment. On the 19CD, it is directly ahead of the driver's seat. 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 process.

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 2-1/2 times the weight of the boat.

Fig. 12 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.

Fig. 12 illustrates the correct and incorrect hookup for lifting.

## 12. Fold Down Boarding Ladder

**THIS LADDER MUST ONLY BE USED WHILE ENGINE IS OFF.** (See warning label section). To lower, unsnap securing strap and lower. 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. Motor Cowling and Jump Seat Removal Standard Interior

The jump seats can be removed by first opening the seat and then removing the thumb screws (two per seat) on the inside of the seat base.

The motor cowling can be removed by releasing the four springloaded disconnects (two outboard, two inboard forward on the motor box), connecting the optional rear speakers (quick connect at floor level) and sliding the entire assembly forward. It is not necessary to remove jump seats first.

## Optional Sundeck Interior

First, move the bench seat by opening the curtain, remove the three thumb screws and disconnect the optional speaker wiring (disconnect at seat base at floor level). Seat assembly can now be removed. Then remove six thumb screws (four or mounted, two top mounted). While slightly raising the forward edge of sundeck, slide motor ahead and out of the way.

## 15. Optional Equipment

1. Swim Platform  
To avoid damage to the optional swim platform, always be sure the outdrive unit is in straight ahead position before tilting the drive all the way up.
2. Camper Top  
See "Erecting The Top" and follow the same procedure.

### 3. AM/FM Stereo or 8-Track 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.

### 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 propeller.

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

### Pulling Power

If you need extra pulling power, you can obtain by decreasing the pitch of your propeller by two greens. This will not endanger the engine or drive as long as the manufacturer's recommended top R 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 same pitch size.

## PROPELLER CHART

### Standard Equipment — Aluminum Optional Equipment — Stainless Steel

17TH	Size	Material	Cobalt #	Mfg. #
Merc 140	15-14 x 21C	Aluminum	11086	Michigan SMC 380C
Merc 140	13-3/4 x 21C	Stainless	11078	Merc 48-74268A4
Merc 165	15-1/4 x 21C	Aluminum	11086	Michigan SMC 380C
Merc 165	13-3/4 x 21C	Stainless	11078	Merc 48-74268A4
Merc 470	15 x 23C	Aluminum	11087	Michigan SMC 382C
Merc 470	13-1/2 x 23C	Stainless	11076	Merc 48-75058A4
OMC140	13 x 19C	Aluminum	—	OMC 382765
OMC140	13 x 19C	Stainless	—	OMC 382142

**18TH**

Merc 165	15-1/2 x 19C	Aluminum	11084	Michigan SMC 378C
Merc 165	14 x 19C	Stainless	11079	Merc 48-74266A4
Merc 470	15-1/2 x 19C	Aluminum	11084	Michigan SMC378C
Merc 470	14 x 19C	Stainless	11079	Merc 48-74266A4
Merc 898	15-1/2 x 19C	Aluminum	11084	Michigan SMC 378C
Merc 898	14 x 19C	Stainless	11079	Merc 48-74266A4
Merc 228	15-1/2 x 19C	Aluminum	11084	Michigan SMC 378C
Merc 228	14 x 19C	Stainless	11079	Merc 48-74266A4
Merc 260	15-1/4 x 21C	Aluminum	11086	Michigan SMC 380C
Merc 260	13-3/4 x 21C	Stainless	11078	Merc 48-74268A4
OMC 185	15 x 17C	Aluminum	11093	OMC 387160
OMC 185	14-1/2 x 19C	Stainless	11097	OMC 387159
OMC 225	14-1/2 x 19C	Aluminum	11094	OMC 387161
OMC 225	14-1/4 x 21C	Stainless	11096	OMC 387520
OMC 240	14-1/4 x 21C	Aluminum	11095	OMC 387162
OMC 240	14-1/4 x 23C	Stainless	11098	OMC 389019

**19CD and 19BR**

Merc 228	15-1/2 x 19C	Aluminum	11084	Michigan SMC 378C
Merc 228	14 x 19C	Stainless	11079	Merc 48-74266A4
Merc 260	15-1/4 x 21C	Aluminum	11086	Michigan SMC 380C
Merc 260	13-3/4 x 21C	Stainless	11078	Merc 48-74268A4
OMC 225	15 x 17C	Aluminum	11093	OMC 387160
OMC 225	14-1/2 x 19C	Stainless	11097	OMC 387519
OMC 240	14-1/2 x 19C	Aluminum	11094	OMC 387161
OMC 240	14-1/4 x 21C	Stainless	11096	OMC 387520

## TECHNICAL INFORMATION

### 1. Engine Operation/Maintenance/Serviceing

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 checkups, 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; periodic 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 heartbreaking 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

6. Store in dry covered place, 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	Possible Cause	Action
Engine won't start	1. Lack of Fuel	Check fuel.
	2. Clogged anti-syphon valve	See authorized Cobalt Dealer.
	3. Clogged fuel tank pick-up	See authorized Cobalt Dealer.
	4. Clogged fuel filter	Replace fuel filter.
	5. Plugged fuel line or defective pump.	Fuel pump may be defective. Inspect pumpsight glass for fuel leakage from fuel pump. See authorized service dealer.
	6. Carburetor float valve stuck	Tap float chamber with a screwdriver handle to free needle valve.
	7. Damp spark plugs	Dry ceramic with clean dry cloth.
	8. High tension leads wet and/or loose	Dry and tighten connections at spark plugs, distributor and coil.
	9. No spark	Check high tension lead on coil.

- 10. No spark
- 11. Water in fuel supply or old gasoline

Check for loose connections on coil.

Check fuel supply for water contamination. If gasoline is old or if water is present, drain fuel tank and flush with fresh gasoline.

Starter won't crank engine

- 1. Ignition Switch
- 2. Throttle Position

If inoperative, see Dealer.

Check to see that remote control is in start position.

Change position of throttle lever slightly.

- 3. Dead battery

Check level of electrolyte, disconnect battery Charge battery.

- 4. Battery connections loose or corroded

Check for loose connections and corrosion. Clean connections and tighten.

- 5. Starter connections loose

Check connections and tighten. If solenoid clicks when attempting to start engine, check battery connections. If condition persists, see your Authorized Service Dealer.

See your Authorized Service Dealer.

Engine runs erratically

- 1. Automatic choke out of adjustment

- 2. Water and/or dirt

in fuel filter

Clean and inspect filter.

- 3. Fuel pump malfunction

Check operation of pump. Replace fuel pump. See your Authorized Service Dealer.

Engine vibrates

4. Fuel tank vent and line plugged
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

Check for restrictions in line and vent. Blow out line and vent.

Check for bent, broken or damaged propeller. Check for weeds on propeller or gearcase.

Adjust carburetor.

Check spark plug electrodes and ceramic. Clean and regap. Replace plugs, if necessary.

Insure all connections are clean and tight.

Correct firing order, see engine manufacturer's owner's manual for specifications.

Check timing and dwell specifications of engine. See your engine manufacturer's owner's manual.

## SERVICE RECORD

Engine runs but boat makes little or no progress

1. Fouled or damaged propeller

Check for weeds on propeller, sheared drive pin, bent or broken propeller. Remove weeds, check drive pin (OMC) or replace a damaged propeller. Check outdrive and hull for excessive marine growth.

Performance loss

1. Throttle not fully open
2. Improper fuel

Check to see that throttle opens fully at carburetor.

Fill tank with correct fuel.

3. Overheating  
Check cooling system. Remove weeds from water intake. Check alternator belt tension.  
Readjust rudder trim tab.  
Reduce load.
4. Boat overloaded  
Distribute boat load evenly.
5. Boat trim  
Select proper propeller pitch and diameter.
6. Improper propeller selection  
(See chart in owner's manual).
7. Excessive bilge water  
Check for excessive water, drain bilge.
8. Boat hull condition  
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.

1978 MODEL YEAR

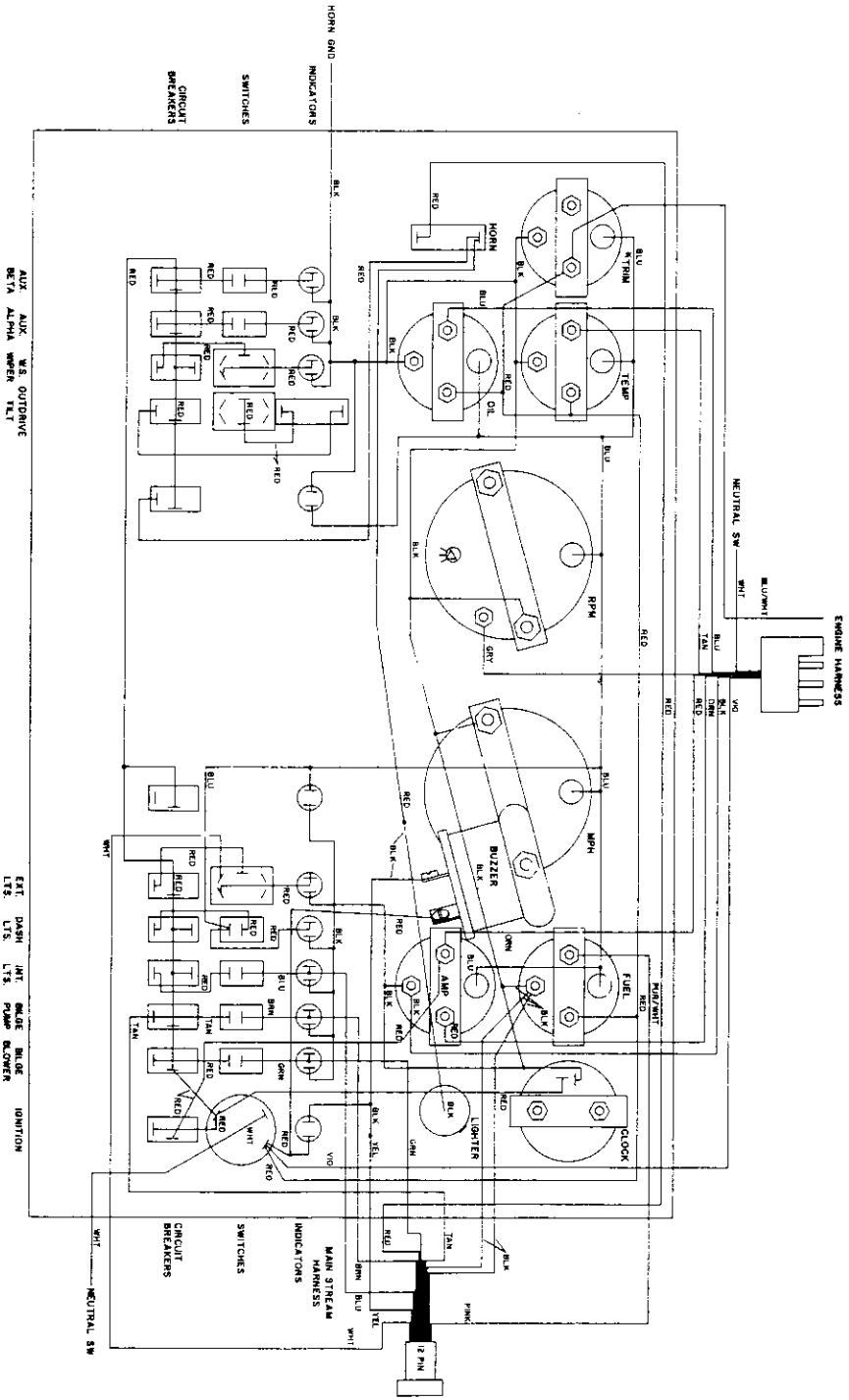
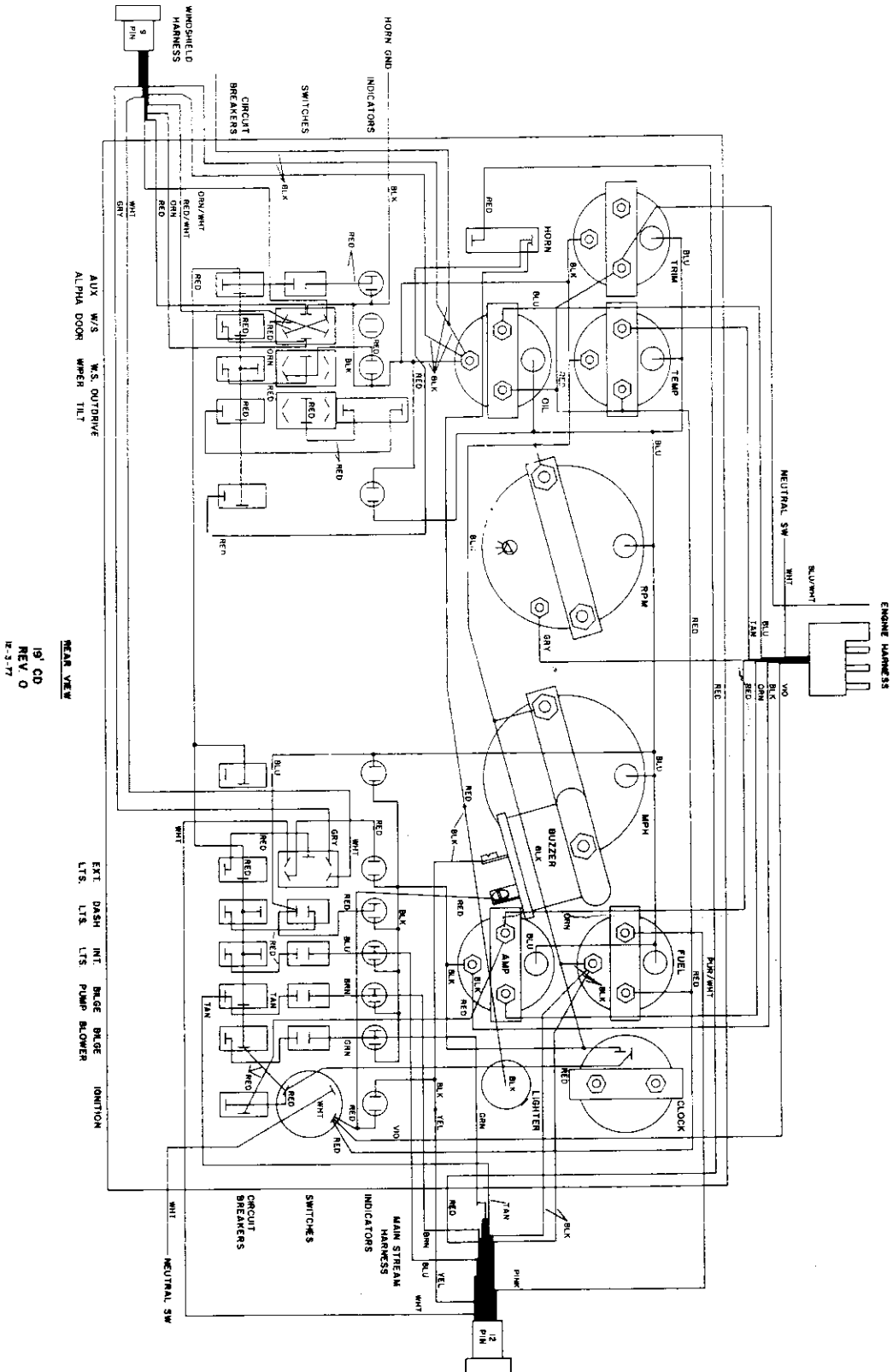
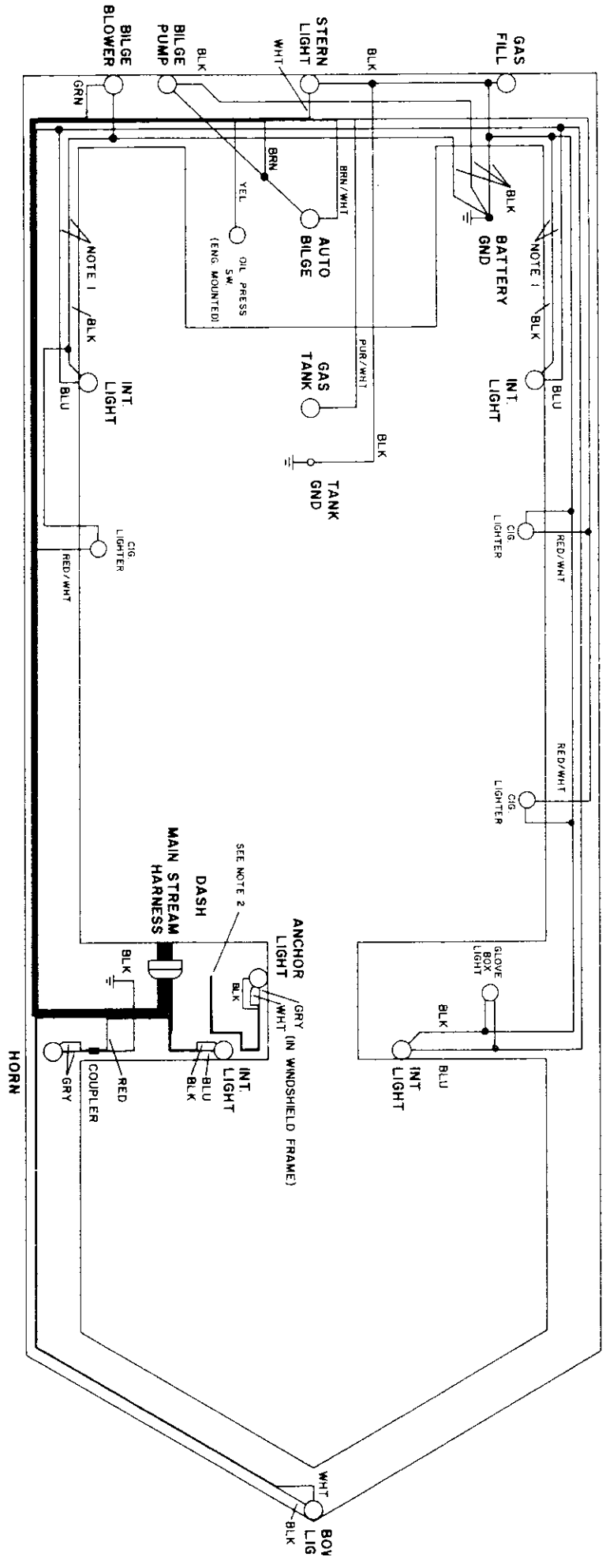


Figure 1



Figure

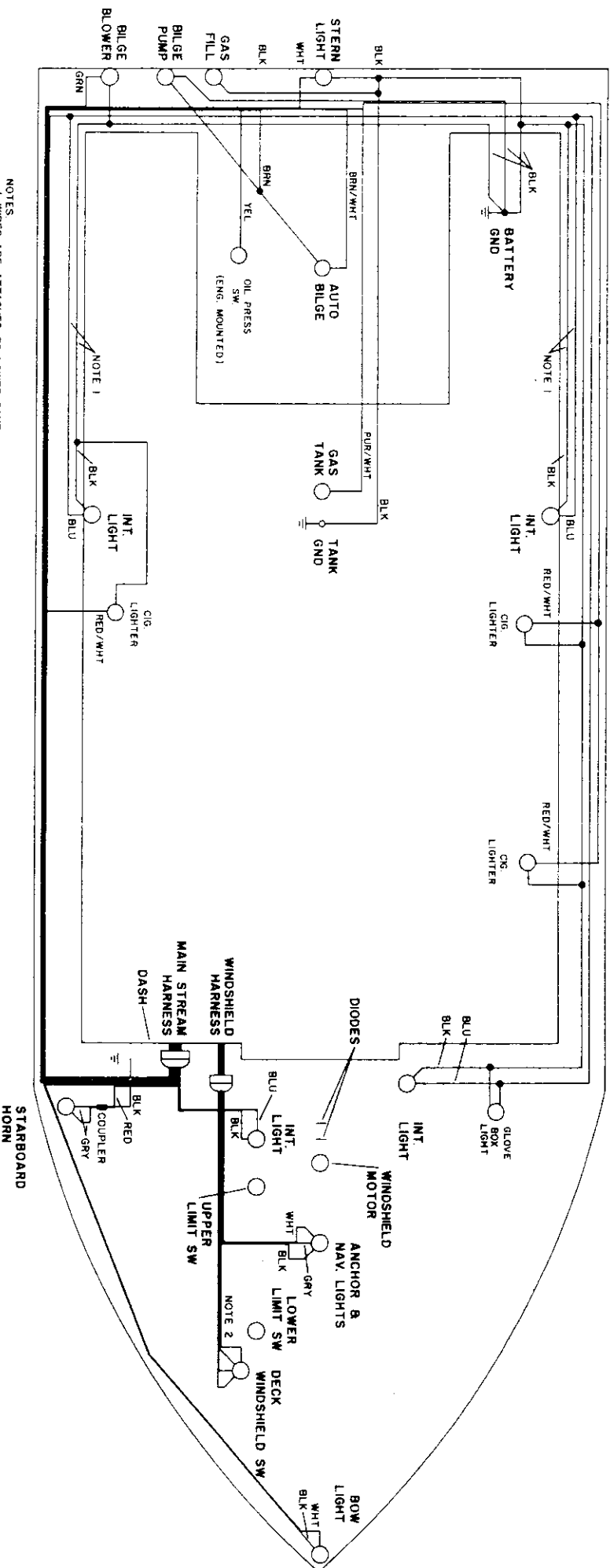


NOTES:  
 1 WIRES ATTACHED TO LOWER SIDE PANEL  
 2 ANCHOR LIGHT WIRED DIRECTLY TO NAVIGATION LIGHT SWITCH

17'10" & 19' BR STANDARD EQUIPMENT  
 REV 0

12-2-77

Figure 3

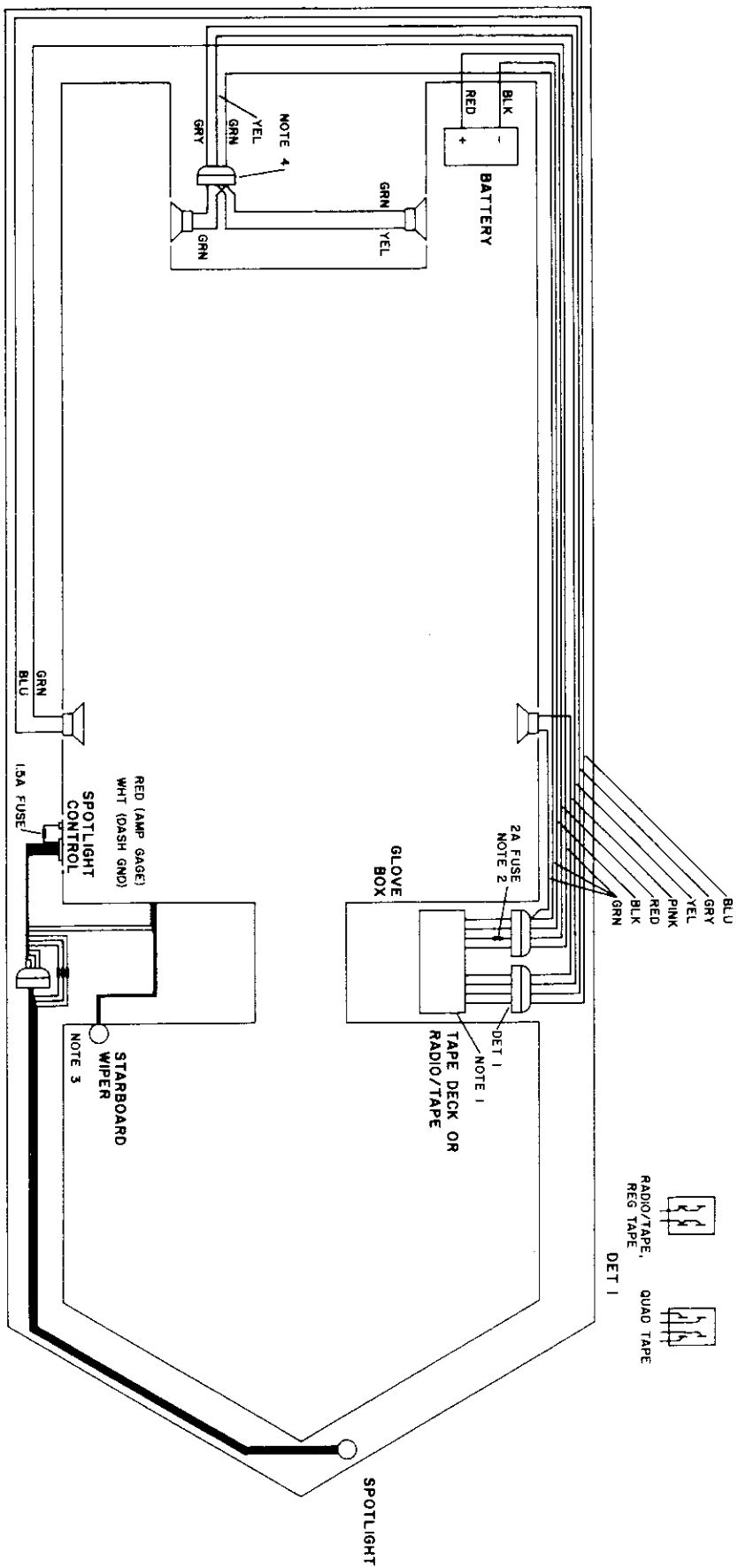


NOTES  
 1 WIRES ARE ATTACHED TO LOWER PANEL.  
 2 SEE WINDSHIELD WIRING DIAG FOR WIRING FROM DECK WINDSHIELD SW ON

19' CD STANDARD EQUIPMENT  
 REV O  
 R-2-77

Figure

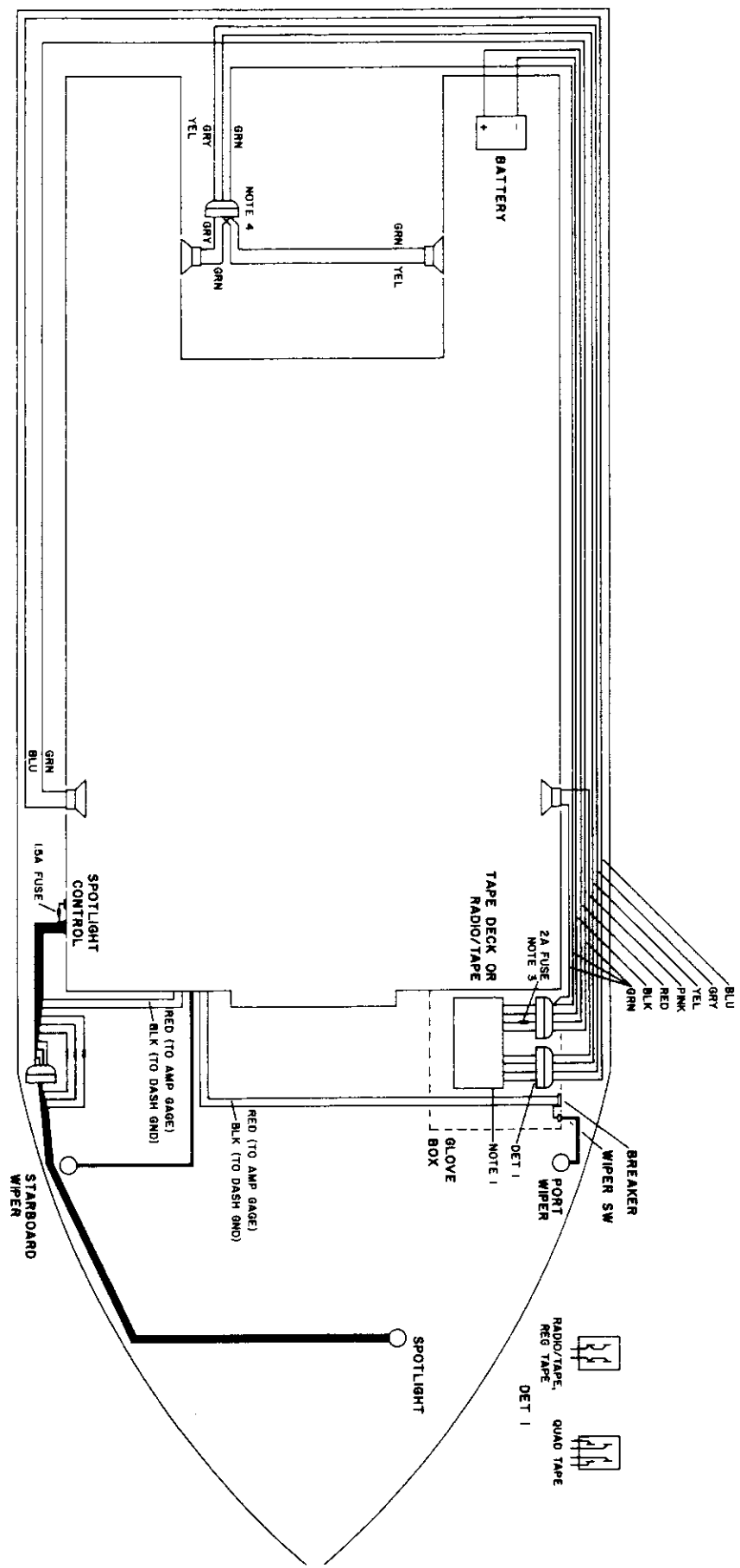
1978 MODEL YEAR



- NOTES:
1. ANTENNA WIRE FOR RADIO HOOKS TO LEFT SCREW IN WINDSHIELD FRAME.
  2. MOUNTED IN GLOVE BOX.
  3. SEE WIPER MOTOR WIRING DIAG & DASH WIRING DIAG FOR WIPER INTERCONNECTION.
  4. EXTENSION HARNESS USED ON SUN DECK MODEL.

17', 18' & 19' BR OPTIONAL EQUIPMENT  
 REV 0  
 10-17-76

Figure 5

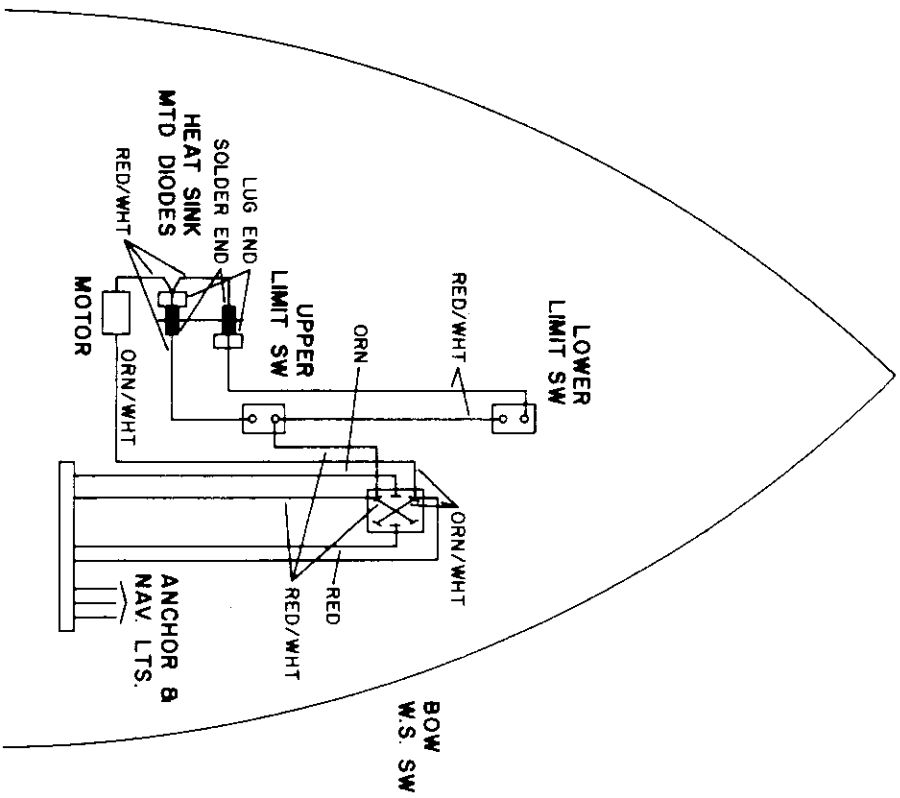


- NOTES
1. ANTENNA WIRE FOR RADIO HOOKS TO LEFT SCREW IN WINDSHIELD FRAME.
  2. SEE WIPER MOTOR WIRING DIAG & DASH WIRING DIAG FOR WIPER INTERCONNECTION.
  3. 2A FUSE MOUNTED IN GLOVE BOX.
  4. EXTENSION HARNESS USED ON SUN DECK MODEL.

19' CD OPTIONAL EQUIPMENT  
 REV O  
 10-18-76

Figure

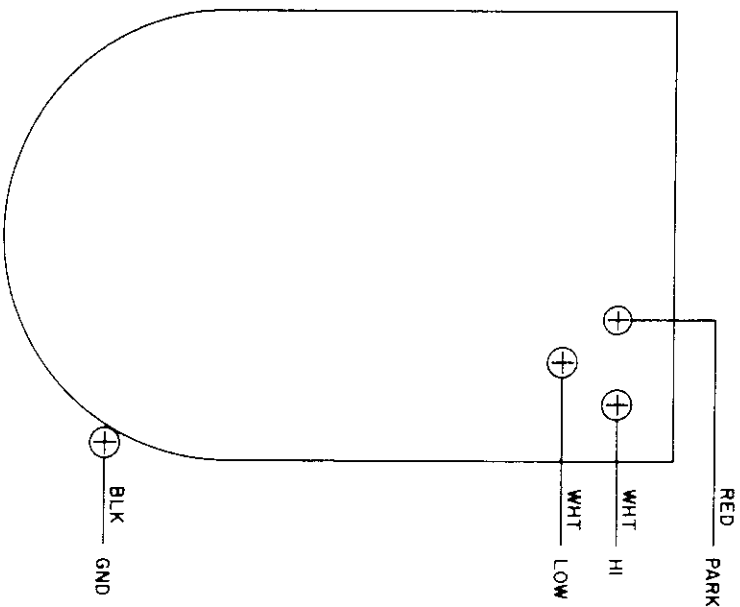
**1978 MODEL YEAR**



**WINDSHIELD WIRING DIAG.**

REV. 0

10-16-76



**WIPER MOTOR WIRING DIAG.**

REV. 0

10-16-76

NOTES:  
1. THIS DIAG PERTAINS TO ALL MODELS AFTER 75.

**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

17'-18' Windshield anchor light bulb — #1416 12V 8CP

19' Anchor light bulb — #90 12V 6CP

Transom light bulb — #211 12V 12CP Internal Lights

Under dash panel courtesy light — #GE1004MB1

**8. Battery Warranty**

The battery supplied with your Cobalt is 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.

Rear side panel courtesy light — #21112V-12C

Instrument Lights

Tachometer — #GE57R or #GE1859R

Speedometer — #GE57R or #GE1895R

Ammeter — #GE53R

Oil Pressure — #GE53R

Fuel — #GE53R

Trim/Voltmeter — #GE53R

Temperature — #GE53R



## **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 2 years.