



1998 COBALT BOATS

INTRODUCTION

Your new Cobalt is a high quality, luxury marine vehicle, designed and built to provide safe and pleasurable boating. It is manufactured from the finest materials available, to the highest standards in the industry. Like a fine automobile or aircraft, given good care, regular service, and proper operation, your Cobalt will deliver outstanding performance for many years.





TABLE OF CONTENTS

1. EQUIPMENT AND GOVERNMENT REGULATIONS

Educational Opportunities	1.1
Safety Equipment and Boating Regulations	1.1
Navigation Lights	1.1
Horn or Whistle	1.1
Fire Extinguisher	1.2
Lifesaving Devices	1.2
Navigation on Inland Lakes	1.2
Navigation in Coastal and Intra-Coastal Waters	1.2

2. MARINE SAFETY STANDARDS

General	2.1
---------	-----

3. INTERIOR/EXTERIOR CARE

Vinyl Interior/Upholstery Care	3.1
Care and Cleaning of Vinyl	3.1
Dark Storage Areas	3.3
Leather Care	3.3
Vacuuming	3.3
Carpet Care	3.4
Canvas Top Care	3.4
Fiberglass Finish Care	3.5
Stainless Steel Trim and Hardware Care	3.6

4. BOAT OPERATION

Erecting Canvas Top	4.1
Side Curtains & Stern Curtain	4.2
Camper Top	4.2
Bimini Top	4.3
Tonneau Covers	4.4

Mooring Covers	4.5
Stowage of the Canvas Top	4.5
Canvas Maintenance	4.6
Captain's Chair Adjustment and Operation	4.6
Motor Box	4.7
Cuddy Cabin Access Doors	4.7
Instrument Panels	4.8
Engine Controls	4.9
Power Trim	4.10
Ignition Safety Switch	4.10
Steering System	4.11
Warning Label	4.12
High Speed Operation	4.13
Lifting Your Cobalt	4.14
Fold Down Boarding Ladder	4.14
Water Ski Towing	4.14
Deck Hatch	4.15
Fuel Filling	4.15
Head Compartment	4.16
Side Bench Seat, 272	4.16
Swim Platform	4.16
Telescoping Anchor Light	4.17
Shaft Alignment - Ski boat models only	4.17
Packing Seal - Ski boat models only	4.17
Refrigerator	4.18
110 VAC Operation	4.18
Shore Power	4.18
Hot Water Tank	4.18
Cabin Electric Panel	4.19
Stove	4.19
Shower Compartment	4.19
Water System	4.19
Air Compressor	4.20
Battery Charger and Isolator	4.20
Windlass	4.20
Air-Conditioning	4.20
Global Positioning System (GPS)	4.21
Waste Water Indicator Gauge	4.21
Heater	4.21
Stereo System	4.21
Docking Lights	4.21
Trim Tabs	4.22

Extra Battery and Switch	4.22
Portable Head	4.22

5. PROPELLERS AND PROPELLER CHART

General Information	5.1
Stainless Steel	5.1
Pulling Power	5.2
Application Charts	5.2

6. TECHNICAL INFORMATION

Engine Operation/ Maintenance/ Servicing	6.1
The Break-In Period	6.1
Winterizing and Off-Season Storage	6.1
Fuel Requirements	6.3
Circuit Breakers	6.3
Fuses	6.3
Lighting/Bulb Replacement	6.4
Specifications	6.5

7. WARRANTY PROCEDURE AND OWNER RESPONSIBILITY

The Cobalt Warranty	7.1
Owner Responsibility	7.2
Extended Powertrain Warranty	7.3
If You Sell Your Cobalt	7.3

8. TROUBLE SHOOTING

Engine Won't Start	8.1
Starter Won't Crank	8.2
Engine Runs Erratically	8.2
Engine Vibrates	8.2
Engine Runs But Boat Makes Little or No Progress	8.3
Performance Loss	8.3
Fuel Injection Engines	8.3

9. SERVICE RECORD PAGES

.....	9.1
-------	-----





EQUIPMENT AND GOVERNMENT REGULATIONS

EDUCATIONAL OPPORTUNITIES

Most boaters can enhance their enjoyment of boating experiences through increased knowledge of safe operation, navigation, and regulation of pleasure boats. The U.S. Coast Guard Auxiliary, U.S. Power Squadron, and The American Red Cross offer courses covering a wide range of boating knowledge and skills, Water Safety, First Aid, and CPR. Cobalt encourages your participation in these programs.

SAFETY EQUIPMENT AND BOATING REGULATIONS

The Federal Boat Safety Act of 1971 (FBSA/71) established minimum safety standards for boats and associated equipment, specified by the U.S. Coast Guard. In addition, the National Marine Manufacturers Association and the American Boat and Yacht Council work with boat builders to develop voluntary standards that exceed base requirements.

The safety equipment on your Cobalt meets or exceeds the standards of the U.S. Coast Guard, N.M.M.A., and the A.B.Y.C.

NAVIGATION LIGHTS

All power boats underway between sunset and sunrise must display proper navigation lights. All boats at anchor must display a proper anchor light.

HORN OR WHISTLE

All boats over 16 feet in length must be equipped with an operable horn or whistle, audible from one mile.

FIRE EXTINGUISHER

All inboard / outboard boats must carry an appropriate portable fire extinguisher in operable condition and accessible location.

LIFESAVING DEVICES

All boats must carry one U.S. Coast Guard approved type 1, 2, or 3, wearable, personal flotation device, of the proper size, for each person on board.

All boats over 16 feet in length must carry one U.S. Coast Guard approved type 4 throwable lifesaving device, such as a ring buoy or buoyant cushion.

To meet requirements, each lifesaving device must have a currently legible U.S. Coast Guard approval stamp permanently affixed.

ADDITIONAL RECOMMENDED SAFETY EQUIPMENT

In spite of all efforts to the contrary, problems or mishaps sometimes occur while boating. The items listed below should help make unexpected events more manageable:

- Anchor and anchor line
- Compass
- Area charts
- First aid kit
- Distress signals (flag for daylight, flares for darkness)
- Flashlight and spare batteries
- Portable radio
- Tool kit

NAVIGATION ON INLAND LAKES

Boats operating on inland lakes may be required to comply with local City, County, State, and Federal regulations concerning equipment, navigation, and environmental issues. These regulations vary considerably with locale. Contact your dealer, local marinas, or the State Boating Law Administrator for specific local information.

NAVIGATION IN COASTAL AND INTRA-COASTAL WATERS

The U.S. Coast Guard has primary responsibility for regulation of these waters. State and Local authorities may also regulate boating activities. Operation in these waters may require knowledge of the International Rules of the Road, Aids to Navigation, Inland Rules, and/or local regulations. Contact your dealer or the local Coast Guard office for specific information.



MARINE SAFETY STANDARDS

The **American Boat and Yacht Council, Inc.** is an independent organization dedicated to developing and maintaining the highest level of marine equipment safety standards for U.S. boat manufacturers. Working closely with the **U.S. Coast Guard** and other authorities, the **A.B.Y.C.** reviews marine equipment and systems, including electrical systems, ventilation, steering, flotation, load capacity, fuel systems, and others that may have impact on your safety.

The **National Marine Manufacturers Association** is an independent organization involved in a wide range of activities aimed toward the promotion and improvement of all aspects of boating. Members include manufacturers of boats, engines, and marine equipment of all types.

One division of the **N.M.M.A.** provides an inspection and certification program to members. Inspections are performed to the rigid and detailed standards of the **A.B.Y.C.** and certification requires compliance with all applicable standards and recommendations.

Every Cobalt is built to meet or exceed all applicable standards of these organizations at the time of manufacture. Each model is inspected and certified prior to introduction, and periodic inspections of the entire model line are conducted in-plant to insure continued compliance.

We wish you safe and happy boating!



3

INTERIOR/EXTERIOR CARE



VINYL INTERIOR/UPHOLSTERY CARE

The vinyl fabric in your Cobalt's interior has been especially selected to take the tough punishment of the elements and hard usage of an active boater. Avoid sharp objects that may cut or tear your vinyl.

The vinyl in your Cobalt has been coated with PreFixx protective finish. It's designed to be cleaned easily, over and over, without showing signs of wear. With PreFixx protection, it is possible to remove stains that could never be removed before. There are three families of sunscreen ingredients which may contribute to the staining of the vinyl in your Cobalt.

- Aminobenzoic acids - e.g. PABA
- Hydroxy benzophenones - e.g. Oxybenzone
- P-methoxycinnamic acid - e.g. Octyl methoxycinnamate

This list should not be considered inclusive, although it does represent a large selection of sunscreens which are known to stain vinyls, even treated with PreFixx. In actuality, almost any sunscreen with a high percentage - two percent or above - of active ingredients is a potential stainer.

Special care should be taken to prevent dark colored rubber products from coming in contact with the vinyl upholstery. The optional mooring cover comes with black rubber straps and these straps could stain the vinyl permanently.

CARE AND CLEANING OF VINYL

Day-to-day soil. Remove ordinary dirt and smudges with a mild soap and warm water solution. Dry with a soft, lint-free cloth or towel. For more difficult stains, use of a stronger detergent is recommended; provided the detergent manufacturer's instructions are followed closely.

Special cleaning problems. The following steps are recommended to clean stains on PreFixx-protected vinyl upholstery. Many difficult stains can be removed when

these cleaning agents are used in the following order.

Step 1 cleaners: Nonabrasive household cleaners to be used with a cloth, damp sponge or fine bristle brush.

- All-Purpose Spray Cleaner.
- Clorox™, Soft Scrub® with bleach.
- Household cleaners and bleaches. Rinse cleansed area with fresh water and dry with a clean cloth.

Step 2 cleaners:* Solvent-type cleaner to be liberally applied with a cloth, damp sponge or fine bristle brush.

- Rubbing alcohol (isopropyl alcohol).
- Lighter fluid (naphtha). Rinse cleansed area with fresh water and dry with a clean cloth.

Step 3 cleaners: Strong, active cleaners to be applied with a soft cloth or damp sponge. Use no more than six rubs; if stain persists, contact manufacturer. Dry with another cloth, then rinse with clear water and dry.

- Nail polish remover (acetone/water)

3



NOTE

It is extremely important to clean the stained area as quickly as possible, making sure the recommended cleaning steps are followed in order.

Recommended Cleaning solutions for PreFixx-coated Nautolex vinyls

Staining Agent	Cleaning Step
Spray paint	1 - 2 - 3
Ballpoint pen	1 - 2 - 3
Lipstick	1 - 2 - 3
Yellow mustard	1 - 2 - 3
Bird droppings	1 - 2 - 3
Crayons	1 - 2
Eye shadow	1 - 2
Oily spot	1 - 2
Petroleum Products	1 - 2
Coffee	1
Tea	1
Hair oil tonic	1
Blood	1
Urine	1
Grape juice	1
Olive oil	1
Chocolate	1
Ketchup	1
Baby oil	1

**DANGER**

FLAMMABLE LIQUIDS ARE EXTREMELY DANGEROUS AND SHOULD BE USED ONLY IN WELL VENTILATED AREAS. AVOID OPEN FLAME OR SPARK.

DARK STORAGE AREAS

Often, when a boat is stored completely covered or in a dark building, the vinyl will darken or become “dingy” looking. If this happens, simply place the boat in direct sunlight for a few hours and the vinyl will brighten up.

3

LEATHER CARE

For Spots and Spills wipe up excess liquid immediately with a clean absorbent cloth or sponge. If necessary, use clean luke warm water only and let air dry naturally. If water is used, clean the entire area where the spot occurred. An example would be the entire seat cushion or entire arm. Do not dry wet areas with hair dryers, etc.

For Stubborn Spots and Stains use a mild non-detergent cleaner such as a bar of Ivory soap or Amway L.O.C.. Apply the soap to a clean wet sponge, wash, then rinse well. Let air dry naturally.

For Butter, Oil or Grease wipe excess butter, oil or grease off the leather with a clean dry cloth, then leave it alone as the spot should dissipate into the leather in a short period of time. Do not apply water or try to wash a butter, oil or grease spot.

Do Not Use Saddle Soap, cleaning solvents, furniture polish, oils, varnish, abrasive cleaners, soaps or ammonia water.

**NOTE**

1) These are recommended or suggested methods of cleaning, but the manufacturer is not responsible for damage incurred while cleaning. 2) Always try the cleaning method in a hidden area first to test the results.

VACUUMING

A very effective and easy way to keep your interior ship shape is giving it a good vacuuming. The vacuum cleaner allows you to reach in tight areas such as under the bow, and other storage areas. It's also a great way to clean up any debris in the bilge area.

CARPET CARE

The carpet in your Cobalt is made of the finest materials available. Scrubbing with soapy water will handle most tough jobs. A simple hosing for mild cleanups will bring out that new look. If your Cobalt has snap-in carpet you can remove it and power wash at a coin operated car wash. Please thoroughly air dry before reinstallation into your boat. Your dealer can suggest methods of cleaning difficult stains in your carpet.

CANVAS TOP CARE

3

Boat canvas, in most cases, is subjected to more severe punishment than any other type of canvas or fabric item. Moisture, dirt, heat, ultraviolet rays, salt water, and chemicals from industrial fallout are all factors anxious to destroy your boat canvas. These elements can do serious damage if left unchecked. Following are some ways to slow the destructive process of canvas:

Moisture can cause shrinkage, mold, and mildew. 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 will only occur in areas of looseness. Mold and mildew can be avoided by keeping the canvas 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. The unit should always be erected fully and adjusted to a tight, smooth appearance before washing. Allow unit to air dry thoroughly before removing.

Chemicals from industrial fallout can cause decay of vinyls and fabrics if allowed to accumulate. There are many different types of chemicals involved. Keeping your canvas clean and covered is the best answer to prevent decay from chemical fallout.



NOTE

Do not use polyethylene bags or tubes for stowage of canvas.

Ultraviolet degradation. Most synthetic fabrics or nylon parts today are U.V.R. treated to resist ultraviolet effects. The best protection, however, is to avoid long periods of stowage in areas subject to direct sunlight.

Salt water. Corrosive effects of salt water, as well as chemicals from industrial fallout, can corrode brass or aluminum fittings or fasteners. Your canvas has snap fasteners made of chrome plated brass and 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 the rear window demand extra care to prevent scratching. Ideally, they should be washed with clear water, preferably hosed off, wiping them 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. When storing canvas with windows or side curtains, they should be rolled rather than folded to prevent kinking and cracking.
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 them of a long life and many years of service.

For storage, we recommend an optional mooring cover of marine canvas duck that has the ability to breathe. Do not use convertible tops, side curtains, aft curtains, tonneau covers, etc. for long term storage. These tops were not designed for long term storage and do not provide good protection for your boat. Adequate ventilation is not possible and mold/mildew will form. For more information on appropriate covering for long term storage, please see your Cobalt Dealer.

FIBERGLASS FINISH CARE

The finish on your Cobalt is known as gelcoat. The gelcoat used by Cobalt is the finest available on the market today. With all its properties, it is not impervious to the elements and many types of water conditions.

The best way of taking care of your gelcoat finish is with prevention and proper care.

A multi-purpose boat soap* should be used to clean exterior fiberglass/gelcoated surfaces on your Cobalt after each use. This product, depending upon the ratio mixed, is designed to clean anything from dirty hull and decks to greasy engines. Always rinse and wipe off the finish with a damp towel or chamois.

A fiberglass restorer/wax* should be used to remove heavy oxidation, characterized by chalky/faded surface as well as rust and exhaust stains. This product will not only remove the oxidation but also leaves a wax protection on the cleaned surface in one easy application.

Paste wax* will help retard the UV light damage. We suggest three coats be

applied at the end or the beginning of the season, depending on the type of winter boat storage (covered, enclosed storage facility), and again mid-season.

To extend the life of your gelcoat finish, Cobalt recommends the use of marine canvas duck mooring covers totally covering the top deck of the boat for maximum protection. Additionally, if your boat is to be stored where the sun is constantly on the side or transom of the boat, you should consider having some custom skirting made to compliment the mooring cover. Tonneau covers, although supply adequate short term protection to the interior, will not protect the gelcoat finish. Please check with your Cobalt dealer for further information on this subject.

*3M carries a complete line of fiberglass care products

3 STAINLESS STEEL TRIM AND HARDWARE CARE

Cobalt engineers strive to insure the brightwork and hardware on your boat is made of the highest finish quality materials available within the design/function envelope. Continuing research identifies, tests, and evaluates new materials and products as they become available. Upgrades are made when added value to the customer is proven.

“Stainless steel” is actually a grouping of steel alloys that employ base materials such as nickel, chromium, and molybdenum in varying portions. Each blend possesses different characteristics in terms of strength, durability, finish quality, and rust and corrosion resistance. These materials are used to produce parts that are cosmetically superior to regular carbon steel, are rust and corrosion resistant, yet retain favorable physical properties for functional uses. Cobalt utilizes the highest finish quality material appropriate to the exacting structural requirements of each application.

Stainless steel, though highly resistant, is still capable of rusting, particularly in the marine environment. Initial signs of rust and corrosion, left untreated, may result in pitting and permanent damage to components. The following steps will help protect against such occurrence:

Preventive steps

1. Clean and wax metal brightwork twice yearly and prior to extended storage. In saltwater or other harsh environments, more often as needed. Many metal polish / cleaners are commercially available that contain wax for one-step convenience.
2. Rinse with fresh water and wipe dry with towel or chamois before storing.

Rust / corrosion removal

1. Remove rust or corrosion promptly using a good metal cleaner / polish. Delay may contribute to permanent finish damage.
2. Apply metal or automotive wax after cleaning for additional protection.
3. Do not use steel wool or other coarse abrasives.

4. Do not clean with acids or bleach.
5. Should you have reason to replace hardware or fasteners, be certain that replacements are correct materials. Consult your dealer for further information.
6. Use of a good “breathable” storage cover will provide additional protection.

**CAUTION**

THESE SOLVENTS ARE HIGHLY FLAMMABLE. EXERCISE PROPER CARE IN CLEANING AND NOTIFY PERSONNEL IN AREA OF DANGER. WEAR RUBBER GLOVES DURING ALL CLEANING ACTIVITY. USE CAUTION IN CLEANING AROUND STITCHING AND WOODEN OR OTHER DECORATIVE TRIM, SINCE THESE SOLVENTS COULD SERIOUSLY DAMAGE SUCH AREAS.



4

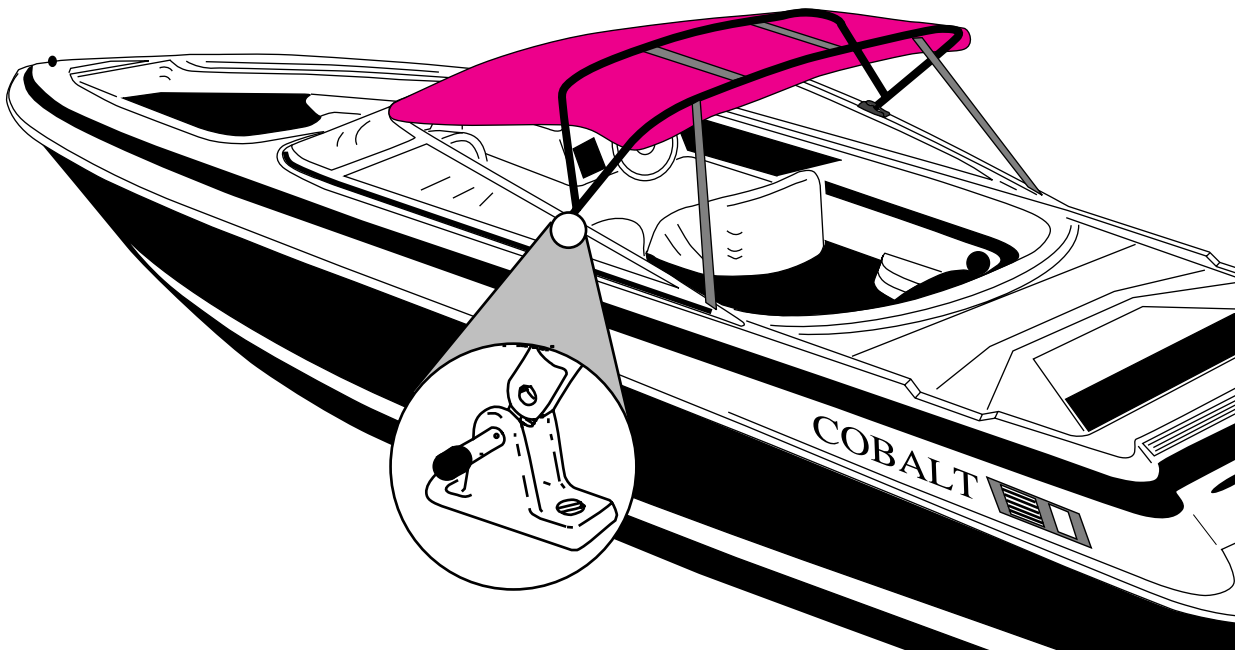
BOAT OPERATION



ERECTING CONVERTIBLE TOP

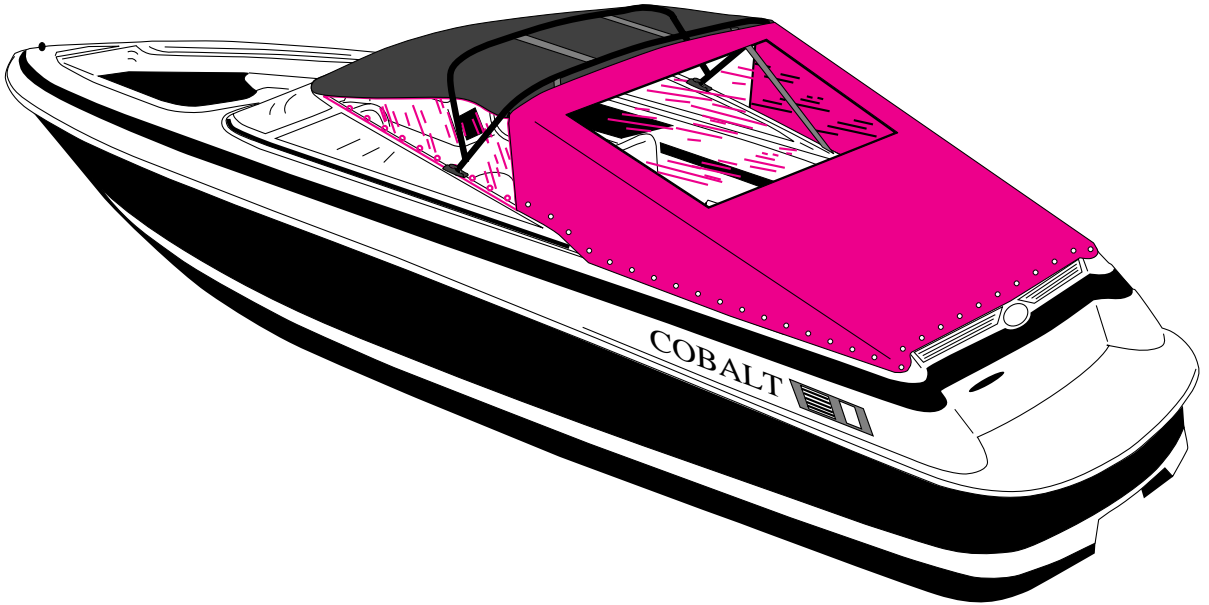
1. Remove canvas top assembly from “top storage area”.
2. Attach top bow ends to top mounts on each side of the boat. Use quick disconnect pins.
3. Remove storage boot and unroll canvas top.
4. Open frame and snap front of canvas to windshield.
5. Snap the straps to the eyelets on the windshield frame or deck.
6. Adjust straps for tight fit.

4



SIDE CURTAINS & STERN CURTAIN - OPTIONAL

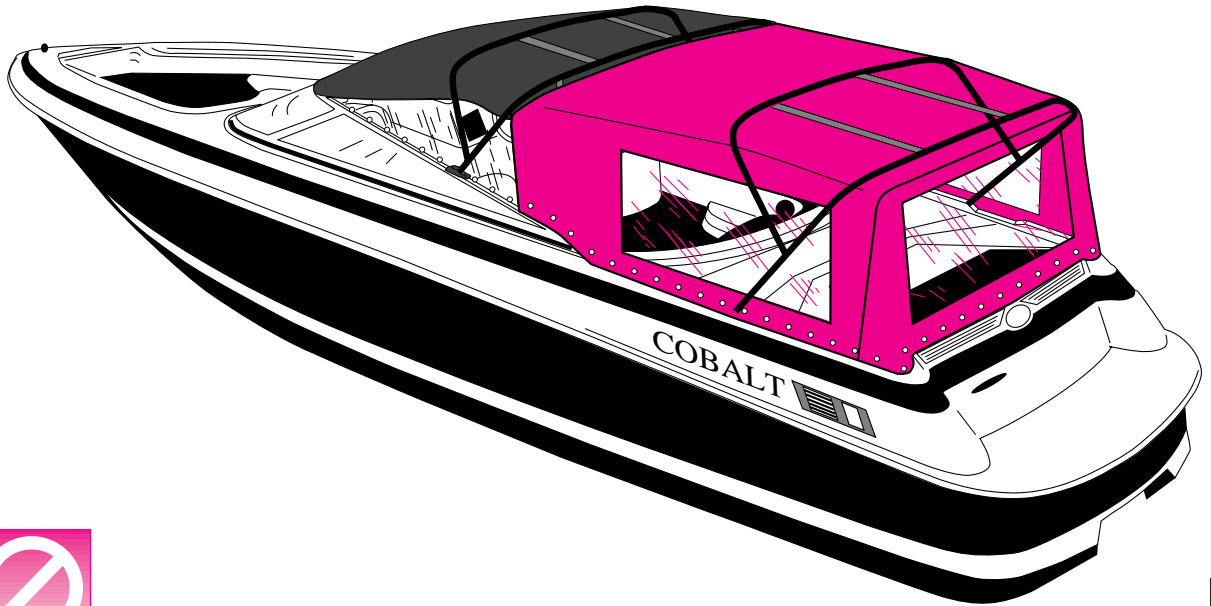
1. Zip the side curtains to the top.
2. Snap curtains to windshield and deck.
3. Zip the stern curtain to the canvas top, snap the curtain to the deck, starting at the center rear of the curtain and working forward evenly.



4

CAMPER TOP - OPTIONAL

1. Install “Convertible Top” as outlined.
2. Remove “Camper Top” from storage area.
3. Attach legs to “Camper Top” mounts (toward rear of boat) on each side of the boat.
4. Remove storage boot and unroll “Camper Top” canvas.
5. Open “Camper Top” frame and zip front of “Camper Top” canvas to rear of “Convertible Top”.
6. Zip side curtains to “Convertible Top”.
7. Zip aft curtain to “Camper Top”, starting at the center rear of the curtain and working forward evenly.
8. Snap side curtains and camper top to deck and/or windshield.

**DANGER**

DO NOT OPERATE YOUR COBALT WITH THE STERN CURTAIN OR CAMPER TOP CANVAS COMPLETELY CLOSED. THE COCKPIT MUST BE OPEN TO AVOID CARBON MONOXIDE FUMES AND TO PROVIDE PROPER FUEL COMPARTMENT VENTILATION. EXHAUST FUMES FROM COMBUSTION ENGINES CONTAIN CARBON MONOXIDE. BOATS WITH CANVAS ENCLOSED ARE MORE LIKELY TO COLLECT EXHAUST FUMES. EXPOSURE TO CARBON MONOXIDE CAN CAUSE HEADACHE, DROWSINESS, NAUSEA, UNCONSCIOUSNESS, OR DEATH. KEEP COCKPIT AND CABIN AREAS WELL VENTILATED WHEN ENGINE IS RUNNING.

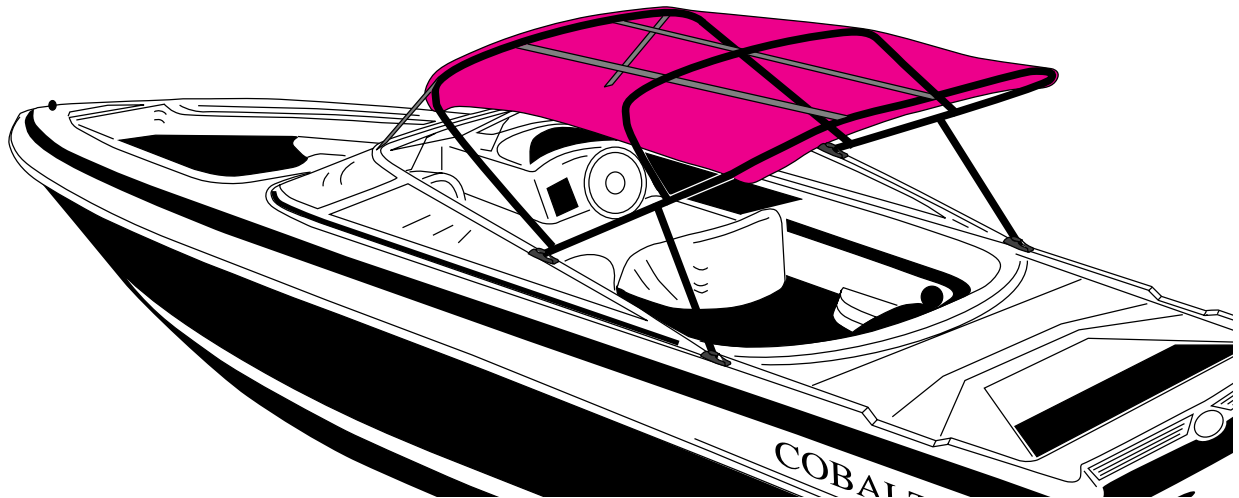
4

BIMINI TOP - OPTIONAL

1. Due to the length of the bows, there is no storage provided for the optional bimini top on some models.
2. Attach top bow to top mount on each side of the windshield wing.
3. Install support legs to top and mounting brackets on the deck aft of the windshield. Some models use adjustable straps in lieu of the support legs.
4. Attach forward straps to the eyelets and adjust straps for tightness of the canvas.

**WARNING**

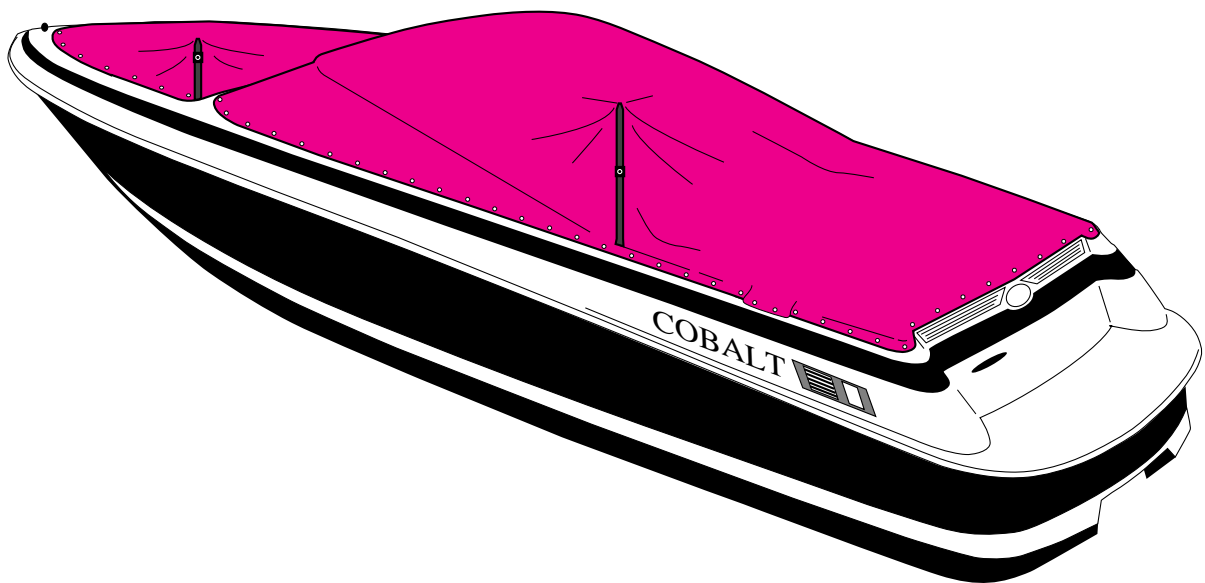
THE OPTIONAL "BIMINI TOP" IS FOR LOW SPEED OPERATION ONLY, (LESS THAN 25 MPH AIR SPEED). IF IT IS USED IN HIGHER AIR SPEED THAN 25 MPH, IT COULD COME LOOSE OR COMPLETELY OFF, CAUSING INJURY TO THE OCCUPANTS OF THE BOAT.



BOW TONNEAU COVER - OPTIONAL (BOWRIDERS ONLY)

4

1. Open walk-thru doors.
2. Starting at bow and working aft, snap cover to boat.
3. Close windshield center door and snap the canvas to the underside of the door.
4. Install the adjustable tonneau cover pole adjust to “tent” the cover.
5. Walk-thru doors may be closed if desired.



COCKPIT TONNEAU COVER - OPTIONAL

1. Unroll cover and snap to the deck starting at the center of the windshield. Snap to the forward outside edge of the windshield only.
2. Install tonneau support pole to underside of cover (just in front of rear seat) with snap and adjust pole to approximate height of windshield. Some models have two support poles.
3. Snap aft end of cover to back deck starting in center and working outboard (note: you may have to readjust the support pole for proper fit).
4. Continue snapping up sides.

MOORING COVERS - OPTIONAL

Cobalt mooring covers are made from marine canvas duck, a cotton/polyester material, the best material for storage of your Cobalt. It has the ability to breathe properly, a trait other materials, especially synthetics, do not have to the same degree. Mooring covers are recommended by Cobalt for any storage longer than a few days. Mooring covers are not recommended for trailering in that they cannot be tied down tightly enough in trailering conditions to keep them from moving around slightly on the gelcoated fiberglass surface. This movement can damage the gelcoat causing a dullness or even scratching.

4



NOTE

For storage, we recommend an optional mooring cover made of marine canvas duck that has the ability to breathe and properly protect the gelcoat finish on the deck of your Cobalt. Do not use convertible tops, side curtains, aft curtains, tonneau covers, etc. for long term storage. These tops were not designed for long term storage. Adequate ventilation is questionable and mold/mildew may form. For more information on appropriate covering for long term storage, please see your Cobalt dealer.

STOWAGE OF THE CANVAS TOP

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

- a. Disconnect the straps 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 bows and fold them together. (Allow the canvas to gather between the bows.)
- d. Roll the canvas around the bows. (As you roll the canvas, assure its tightness and pull the side of the canvas to prevent wrinkling.)

- e. Slide the boot over the canvas and zip.
- f. Remove the top from the top mounts and stow the top in the “top storage area”.

**NOTE**

Make sure all canvas is completely dry before storage to prevent mildew.

CANVAS MAINTENANCE

To clean fabric, soak (with occasional agitation) in a solution with the following proportions of Clorox and Ivory Flakes.

- 1/2 cup (4 oz.) Clorox
- 1/2 cup (4 oz.) Ivory
- 1 gallon lukewarm water
- Let the fabric remain soaking in this solution until most of the stains disappear or for 20 minutes.
- The fabric may be washed in an automatic washer on the COLD cycle using 2 cups (16 oz.) Clorox and one cup (8 oz.) Ivory Flakes. Line dry the canvas.

4

**NOTE**

UNDER NO CIRCUMSTANCE are these fabrics to be put in HOT WATER. UNDER NO CIRCUMSTANCE are these fabrics to be run through the HOT drying cycle of an automatic dryer. FABRIC SHOULD BE LINE DRIED. UNDER NO CIRCUMSTANCE ARE THESE FABRICS TO BE STEAM PRESSED AT A DRY CLEANER.

If leaking occurs after washing this may be the result of insufficient rinsing. If the fabric continues to leak after a very thorough rinsing, it may be necessary to apply a coat of air drying water repellent. This should be done on a warm, sunny day, giving the application sufficient time to completely dry. Such water repellents are available through Scotchgard or 3-M Company products.

CAPTAIN'S CHAIRS ADJUSTMENT AND OPERATION

Pedestal Mount - all models except 190 The captain's chairs are adjustable fore and aft and also rotate. There are two large handles under the seat. Turning counter-clockwise loosens the slide mechanism and swivel and clockwise tightens them. Loosen either or both, place the chair in the desired position and tighten securely to hold in place.

Your captain's chair(s) has the flip-up position for greater visibility and maneuverability while docking. You can sit on the raised cushion or stand in front of the cushion.

Model 190 The driver's captain's chair is adjustable fore and aft and also rotates. There is a large handle on the inboard side of the mechanism that when loosened, allows the seat to slide fore and aft.

To rotate the seat assembly, there is a handle on the forward edge of the mechanism that can be lifted. The chair can be turned while holding the handle up. Releasing the handle will allow the rotation mechanism to lock in increments of 45°.

**WARNING**

DRIVING WHILE STANDING UP IS AN EXTREMELY HAZARDOUS PRACTICE. DO NOT DRIVE WHILE STANDING AT SPEEDS GREATER THAN "IDLE SPEED".

**CAUTION**

ALL SEATS MUST BE IN A LOCKED/SECURED POSITION WHILE THE BOAT IS UNDERWAY.

MOTOR BOX ASSEMBLY

4

Manual - The motor box raises and lowers manually. Do not allow to slam shut when closing.

Electric - The electric motor box assembly is controlled by a switch on the dash. If you experience a battery failure, the assembly can be opened manually. In the 272 make sure the side seat is completely closed or the electric motor box will not open.

**CAUTION**

THE MOTOR BOX IS HEAVY. WHILE OPENING MANUALLY, ASK A PASSENGER TO PROPERLY SECURE THE SAFETY SUPPORT ROD LOCATED ON THE UNDERSIDE OF THE ASSEMBLY (ONE ON EACH SIDE IN A 272) INTO THE FLOOR RECEPTACLE.

**WARNING**

RUNNING THE ENGINE WITH THE MOTOR BOX OPEN EXPOSES ROTATING MACHINERY WHICH CAN CAUSE INJURY TO THE OCCUPANTS OF THE BOAT.

CUDDY CABIN ACCESS DOOR

Sliding Door, 233, 253, 293 The sliding door assembly can be in the open or closed position while running. Make sure the door is secured in either the open or closed position. Do not allow to slide free.

INSTRUMENT PANEL

1. Fuel Gauge - shows approximate amount of fuel remaining in tank.
2. Voltmeter/Dynamo - shows the condition of charge in the battery. It only indicates while the ignition is in the "ON" position. With the engine at idle or not running, it may show as low as 10 to 12 volts. With the engine running at cruising speeds and above, it should show 12 to 14 volts.
3. Speedometer (Miles Per Hour)
4. Tachometer - (Revolutions Per Minute)
5. 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).

Please consult the engine owner's manual supplied with your boat concerning the oil pressure the engine in your boat should attain.

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



WARNING

SHOULD WATER TEMPERATURE REACH 180 DEGREES FAHRENHEIT, YOUR ENGINE IS OVERHEATING AND SHOULD BE CHECKED IMMEDIATELY FOR PROBABLE CAUSE.

7. Trim Gauge - Shows the position of the drive unit in reference to the bottom of the boat.
8. Horn Button - The horn, itself, is located under the deck.
9. 12 VDC Receptacle
10. Two Position Switch - Controls equipment as labeled.
11. Three Position Exterior Light Switch NAV. position - navigation (running) lights, bow light and stern light.
Center position - off.
ANC. position - stern light only.



WARNING

NEVER OPERATE YOUR BOAT AT NIGHT WITHOUT ALL OF THE REQUIRED LIGHTS OPERATING. (THIS INCLUDES BOW LIGHT AND STERN LIGHT.)

12. Circuit Breakers - Push to reset if necessary. If the button continues to pop out, consult your Authorized Cobalt Dealer.

13. Ignition Key Switch

14. Motor box electric actuator - Controls motor box electrically. If battery is low or disconnected, the motor box can be raised manually. Simply grasp the lower forward edge of the assembly and raise. Use the safety support rod to support the assembly in the open position.



NOTE

The motor box assembly is very heavy. Caution should be exercised when opening manually.



NOTE

15. Hour meter - Indicates engine running time.

Items 16 - 18 are dealer adjustable to suit your individual needs.

4

16. Depth Sounder - Your Cobalt may be standard or optionally equipped with a Humminbird Depth Sounder. Included in your owner's packet are the instructions pertaining to the operation of this unit. Consult your Cobalt Dealer for further information.

17. Water Temperature Gauge - Indicated outside water temperature. Most accurate when engine is off.

18. Compass - Your Cobalt may be standard or optionally equipped with a Faria Compass. The sensor is located either in the anchor locker or in a cockpit storage area and is adjustable. Please consult your Cobalt dealer for further information.

19. Dimmer Switch - Your Cobalt may be equipped with a dimmer switch which controls the intensity of the dash lights including the compass light.

ENGINE CONTROL

The engine controls shifting, throttle and incorporates the power trim control which is covered in another section entitled "Power Trim".



NOTE

We cannot overemphasize the importance of proper use of the throttle/shift control, especially from the standpoint of safety. Please consult the engine owner's manual supplied with your new Cobalt and consult your Authorized Cobalt Dealer for specific instructions about your throttle/shift control.

The following are general instructions:

Side mount control

The engine will start only in neutral. To move handle from neutral position squeeze the button on the handle. Moving handle forward engages forward gear initially. Continuing forward movement will advance throttle. Moving handle aft engages reverse gear initially. Continued aft movement will advance throttle.

Cold Starting - While handle is in the neutral position, depress button in the center of the bottom of the handle and move forward. Please consult the engine owner's manual.

Binnacle Mount Control

The operation of this control is the same as the side mount control except there is no button on the handle to release the control from neutral. All other throttle shift functions remain the same.

4

**WARNING**

JAMMING THE THROTTLE INTO THE FORWARD OR REVERSE POSITION CAN CAUSE AN ABRUPT MOVEMENT OF THE BOAT. DO NOT JAM THE THROTTLE LEVER FORWARD OR BACKWARD.

POWER TRIM

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, 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 and the attitude of the boat changes. Also, load changes in the boat can require readjustment of the trim angle.

IGNITION SAFETY SWITCH

Your Cobalt is equipped with an ignition safety switch. It is located on the face of the side mount control or near the lower edge of the driver's control panel.

The driver should always attach the lanyard to his or her person. If the driver leaves the driver's station, the lanyard will shut off the ignition immediately preventing the boat from moving under power.

If the lanyard is lost, the switch may be overridden for temporary engine operation but only in emergencies. Contact your Cobalt dealer immediately if a replacement lanyard is needed.

**NOTE**

If the engine has been shut down with the safety switch, immediately place the control in neutral and restart to prevent internal damage to the engine. Please consult your Cobalt dealer for further information.

**CAUTION**

DO NOT ALLOW YOUR COBALT TO BE OPERATED WITHOUT THE PROPER USE OF THE IGNITION SAFETY SWITCH AND LANYARD.

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 in all sterndrive installations.

4

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. These adjustments should only be made by a qualified service person. The steering system in your Cobalt is one of the most important systems and should be checked on a regular basis by an Authorized Cobalt Service Dealer for proper operation.

Wandering/Fishtailing

Wandering is a characteristic of all deep vee hulls 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.

**WARNING**

THE STEERING IS THE MOST IMPORTANT SYSTEM IN THE ENTIRE BOAT FROM A SAFETY STANDPOINT. HAVE THIS SYSTEM INSPECTED AND MAINTAINED ON A FREQUENT, PERIODIC BASIS BY A QUALIFIED SERVICE TECHNICIAN.

WARNING LABELS

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

Boarding Ladder/Swim Platform

**DO NOT USE BOARDING LADDER
WHILE ENGINE IS RUNNING**

Engine Flame Arrestor



WARNING



LEAKING FUEL IS A FIRE AND EXPLOSION HAZARD. INSPECT SYSTEM REGULARLY. EXAMINE FUEL SYSTEM FOR LEAKS OR CORROSION AT LEAST ANNUALLY.

© NMMA 1990/ NO.200

Dashboard

WARNING - GASOLINE VAPORS CAN EXPLODE.
BEFORE STARTING ENGINE:
-CHECK ENGINE COMPARTMENT FOR GASOLINE OR VAPORS
-OPERATE BLOWER FOR 4 MINUTES
-RUN BLOWER BELOW CRUISING SPEED.

Cabin Door

WARNING!
SECURE DOOR WHEN CRUISING
DO NOT SIT, STAND, OR PLACE
HEAVY OBJECTS ON DOOR.

KEEP CABIN DOOR CLOSED WHEN
ENGINES OR GENERATOR ARE RUNNING.

DO NOT USE
CAUSTIC MATERIALS TO CLEAN.
WASH WITH MILD SOAP AND WATER.

Windshield Wing, Driver's Side Cobalt Check List

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?)
- 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(S) WHEN SWIMMERS ARE NEAR BOAT.

4

HIGH SPEED OPERATION

a. Maneuverability

When operating any boat at high speed, a great deal of caution must be exercised. This is particularly true during turns. Gradual turns can be completed at high speed by a competent driver but it must be emphasized that sudden turns at any speed and particularly at high speed can be especially dangerous. It is possible to throw passengers from their seats and even from the boat if caution is not exercised. Remember, common sense is the rule for safe boating.



WARNING

MANEUVERABILITY ABOVE 50 MPH IS LIMITED. SUDDEN TURNS MAY CAUSE LOSS OF CONTROL.

**WARNING**

WAKE JUMPING - YOUR COBALT IS NOT DESIGNED FOR WAKE JUMPING. WHEN CROSSING ANOTHER BOAT'S WAKE, THROTTLE BACK TO PREVENT YOUR BOAT FROM LEAVING THE WATER. WAKE JUMPING IS VERY DANGEROUS. IT IS POSSIBLE FOR THE BOAT TO RE-ENTER THE WATER ON ITS SIDE, TRANSOM, OR BOW. YOU AND YOUR PASSENGERS COULD SUFFER SERIOUS INJURY. ALSO, DAMAGE TO THE BOAT COULD TAKE PLACE CAUSING A HAZARDOUS CONDITION.

LIFTING YOUR COBALT

**WARNING**

Please consult your Cobalt dealer for the proper method of lifting your Cobalt.

THE SKI TOW CANNOT BE USED TO LIFT THE BOAT. IT CAN ONLY BE USED FOR WATER SKIING. IT IS NOT STRESSED FOR TOWING ANOTHER BOAT OR FOR PARASAILING. THE TRANSOM MOUNTED EYES SHOULD BE USED FOR PULLING A HEAVIER LOAD.

4

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.

**DANGER**

DO NOT USE BOARDING LADDER WHILE ENGINE IS RUNNING. CAUTION: THE STERN DRIVE UNIT HAS MANY SHARP EDGES, ESPECIALLY THE PROPELLER. EXERCISE CAUTION WHEN NEAR THE STERN DRIVE UNIT.

WATER SKI TOWING

**WARNING**

The ski tow hook may be used for one or more lines for water ski towing only.

WHENEVER A SKIER OR SWIMMER IS CLOSE TO THE BOAT, SHUT OFF THE ENGINE TO PREVENT SERIOUS INJURY.

**WARNING**

THE SKI TOW CANNOT BE USED TO LIFT THE BOAT. IT CAN ONLY BE USED FOR WATER SKIING. IT IS NOT STRESSED FOR TOWING ANOTHER BOAT OR FOR PARASAILING. THE TRANSOM MOUNTED EYES SHOULD BE USED FOR PULLING A HEAVIER LOAD.

**CAUTION**

THE STERN DRIVE UNIT HAS MANY SHARP EDGES, ESPECIALLY THE PROPELLER. EXERCISE CAUTION WHEN NEAR THE STERN DRIVE UNIT.

DECK HATCH**Cabin Models**

The deck hatch is manually operable. To open, simply release the one or two hasps on the edge of the hatch, make sure the support bracket adjusters are loose, and raise the hatch to the desired position and secure the adjusters.

4

**CAUTION**

DO NOT USE A RAISED HATCH FOR A SUPPORT OR HAND HOLD WHILE ON THE DECK. BE SURE HATCH IS FIRMLY SECURED WHILE UNDERWAY

FUEL FILLING

The fuel system in your Cobalt is externally vented allowing air into the fuel tank as the engine uses fuel and as the tank is being filled. The chrome vent fitting is on the side of the boat.

When filling your Cobalt, a small amount of overflow can occur when the tank becomes full. Be prepared to wash down the area to protect the fiberglass finish and the gunwale trim. The trim is made of a vinyl material and fuel may stain it if not cleaned promptly.

**WARNING**

YOUR FUEL SYSTEM SHOULD BE CHECKED BEFORE EACH OPERATION. AT LEAST ONCE A YEAR, HAVE YOUR FUEL SYSTEM THOROUGHLY CHECKED BY A CERTIFIED COBALT SERVICE TECHNICIAN. GASOLINE IS HIGHLY FLAMMABLE; EXTREME CAUTION SHOULD BE USED AT ALL TIMES.

**DANGER**

GASOLINE IS HIGHLY FLAMMABLE. USE EXTREME CAUTION WHEN HANDLING GASOLINE!

HEAD COMPARTMENT - 23LS, 25LS, 252, 272, 293

1. Make sure the head compartment door assembly is closed and latched while the boat is underway. Do not allow to swing freely.
2. For operation of the porti potti, electric head, pump out or macerator, please check the manuals supplied in your owner's packet.

SIDE BENCH SEAT, 272

4

1. This seat can only be used with the motor box in the closed position.
2. To open, pull support leg out and down. Then slide seat assembly away from the side of the boat. Secure seat with the slide lock located at back edge of the cushion.
3. To close, simply reverse the process.
4. Make sure the side seat is securely closed or the electric motor box will not work.

**NOTE**

Do not attempt to raise the motor box manually with this seat open or damage to the seat will occur.

RETRACTABLE SWIM PLATFORM - 272

1. The battery switch must be in the "ON" position to operate the platform.
2. Can be raised or lowered by operating the toggle switch on the upper back deck or by the second switch under the lower edge of the platform on the port side.
3. Before raising platform, make sure the boarding ladder is completely stowed and the retaining strap is fastened in place.

**WARNING**

MAKE SURE THE ENGINE IS SHUT OFF BEFORE USING THE SWIM PLATFORM.

SWIM PLATFORM (202CS, 203CS)

The swim platform cannot be jumped on. Jumping on the swim platform can be dangerous and can also cause damage to the mounting brackets.

**WARNING**

MAKE SURE THE ENGINE IS SHUT OFF BEFORE USING SWIM PLATFORM.

TELESCOPING ANCHOR LIGHT

To activate, turn on the navigation light switch. The anchor light will first rise into position, then illuminate. When the light switch is turned off, the light will immediately turn off and, after a 1.5 second computer check, the pole will automatically retract into its below-deck storage position. The top of the lens will be flush with the top of the deck ring. If the light does not retract automatically, do not force down, contact your Cobalt dealer.

To operate the S.O.S. distress signal, turn on the anchor light and allow it to fully extend and illuminate. Wait a minimum of two seconds as the light runs a circuit check. Anytime thereafter, you may toggle the light switch (rapidly turning the light off, then immediately back on). The light will start to flash the Morse Code S.O.S. the light will continue flashing the S.O.S. until it is toggled again. The light will then light constantly. You may turn the anchor light off in either mode and it will retract automatically.

4

SHAFT ALIGNMENT - SKI BOAT MODELS ONLY

The alignment of the transmission and propeller shaft is factory set to within a maximum of 0.003 inches. Noise and vibration will result if the transmission and propeller shaft become mis-aligned. This alignment must be checked annually. Please consult your Cobalt Dealer for further information.

PACKING SEAL - SKI BOAT MODELS ONLY

A packing seal, located where the propeller shaft passes through the hull bottom, keeps water from entering the boat. During the first two-three hours of your new Cobalt's operating life, the seal should be allowed to drip water inside the hull at a rate of one drip per second (with the shaft turning). After the break in period, adjustment of this packing seal may be necessary. Please consult your Cobalt Dealer for further information. The packing seal must be checked annually.

**NOTE**

Always allow the packing seal to drip a slight amount for lubrication purposes.

REFRIGERATOR

The refrigerator receives its power from the ship's electrical system (12 VDC). Inside the refrigerator is the thermostat control. The electrical system must be energized correctly at the 12 VDC/110 VAC control panel. The master 12 VDC switches must be turned on as well as the switch marked refrigerator.

110 VAC OPERATION - 293 ONLY

When your Cobalt is connected to shore power (110 VAC) and the battery charging system is energized (controlled from the cabin control panel) the refrigerator can be used extensively without affecting the charge of the ship's batteries.

If your Cobalt is equipped with the optional 110 VAC generator assembly, you can also use the refrigerator as long as the battery charger is turned on.

SHORE POWER - 293 ONLY

4

When your Cobalt is connected to shore power (110 VAC), any or all of the ship's electrical systems can be operated. The two 30-amp shore power cords must be plugged into the proper shore power receptacles and the boat receptacles located in the aft storage compartment. Energize the system at the cabin control panel by turning on the master switch(es) and then energize the appropriate switches. For example, to operate the battery charger, follow the above procedure and turn on the switch marked battery charger. With the battery charger operating, any of the 12 VDC systems; i.e., refrigerator, lighting, etc., can be used without fear of running the ship's batteries low.

The shore power system is protected by circuit breakers located in the glasses/bottle storage compartment directly behind the refrigerator on the port side. The breakers are in a panel at the back of the compartment. Note that when the shore power system is connected (110 VAC) and the correct switches are lined up at the cabin control panel, including the battery charger, the batteries in the boat will be charged. The position of the ship's battery switches (starboard, side storage compartment) is irrelevant to the battery charging operation. However, the 12 VDC system in the boat will not operate unless the main battery switches are turned on.

For further information referencing the ship's shore power system, please consult your authorized Cobalt dealer.

HOT WATER TANK - 293 ONLY

Your Cobalt is equipped with a six-gallon hot water heater. This unit operates in two modes. If your Cobalt is connected to shore power (110 VAC) simply energize the appropriate switches at the cabin control panel to turn on the 110 volt power and the switch marked "water heater". This can be done with either the shore power or the optional generator.

During engine(s) operation, engine coolant (hot water) is circulated through a coil in the water heater, heating the fresh water. Note the hot water system as well as the entire fresh water system in your Cobalt must be winterized for proper storage.

CABIN ELECTRIC PANEL - 293 ONLY

This panel controls all of the ship's optional and accessory electrical systems.

12 VDC

This panel has one master switch controlling the individual items as noted. Note that each switch is a circuit breaker type switch.

110 VAC

The 110-volt system has three master switches. The top switch is the primary circuit running off shore power #1 (noted at inlets in rear storage area on transom). The second switch is for shore power #2. The third switch can be energized in lieu of the second switch (mechanically locked out) to allow one shore power feed (#1) to feed both #1 and #2 circuits. This should be used when there is only one circuit available at your shore station. If it is set-up in this manner, air-conditioning cannot be used.

Once the main master switch(es) is energized, the appropriate function can be energized using the switches as noted. Note that each switch is a circuit breaker type switch.

STOVE - 293 ONLY

The cabin-mounted, single burner, electric stove operates only on 110 VAC when the ship's optional generator is running or the boat is connected to shore power with the appropriate switches energized.

SHOWER COMPARTMENT - 293 ONLY

With the ship's water system turned on, the shower can be used by raising the nozzle of the sink faucet.

WATER SYSTEM - 293 ONLY

Your Cobalt is equipped with a 31-gallon capacity water system (37-gallons including hot water heater). The system is operated by a 12 VDC water pump located in the engine compartment. It is necessary for the ship's batteries to be turned on and the appropriate switch on the cabin electrical panel to be energized for the water system to operate. Consult your Cobalt Dealer for winterization requirements.

AIR COMPRESSOR - 293 ONLY

Your Cobalt is equipped with an inflation device located in the port side, aft storage locker. This is a 12 VDC system and will operate when the ship's batteries are turned on.

BATTERY CHARGER AND ISOLATOR - 293 ONLY

Your Cobalt is equipped with a charging system. Anytime your boat is connected to shore power or the optional generator is running with the appropriate switches at the cabin panel energized, the battery charger will operate and keep both batteries fully charged.

In addition, the system includes an isolator system, protecting the occupants of the boat and people in the water around the boat from danger should an electrical malfunction occur at the dock side power connector. Please consult your Cobalt Dealer for further information in reference to these isolators.

4 WINDLASS - OPTIONAL, 293 ONLY

The Windlass system gets its power from the ship's electrical system (12 VDC) via a control panel located in the starboard side storage compartment of the cockpit next to the battery switches. The knob on the panel must be depressed to energize the system denoted by the indicator light on the panel. The windlass can be operated at the driver's helm (indicator light must be illuminated) or from the foredeck. There are foot operated switches located under the anchor locker door.

The Windlass system can also be operated manually. In the anchor locker on the foredeck, you will find a crank housed in a storage pouch on the aft bulkhead of the locker. Please consult the operator's manual supplied with the Windlass system for proper operation of the system in the electric and manual modes.



CAUTION

BE EXTREMELY CAREFUL WHEN ON THE FOREDECK. SEA/WIND CONDITIONS MAY MAKE USE OF AREAS OUTSIDE THE COCKPIT DANGEROUS.

AIR-CONDITIONING - OPTIONAL, 293 ONLY

The air-conditioning system operates only on 110 VAC and will not operate unless the boat is connected to shore power or the optional generator is running. With the boat connected to shore power or with the optional generator running, it is necessary to energize the 110 VAC system at the cabin control panel and turn on the appropriate switch marked "air-conditioning". The controller for the air-conditioning is in the cabin on the starboard side in the area of the cedar lined closet. Please consult the owner's manual supplied with your Cobalt referencing the operation of the air-conditioning system. Note this is a heat pump system and will

not only air-condition the cabin, but also supply heat on cold days. Marine air-conditioning heat pump systems must be winterized for proper storage.

GLOBAL POSITIONING SATELLITE (GPS) SYSTEM - OPTIONAL, 293 ONLY

The GPS system in your Cobalt performs many functions. The system can precisely tell you your location, form a trip record, a speed log, and many other functions. In addition, individual mapping chips can be purchased through your Cobalt dealer for most lakes, rivers, and coastal areas of the United States and Canada. Please consult your Cobalt dealer for further information referencing these chips. Take some time to thoroughly read and understand the manuals supplied with your GPS to take advantage of the system to its fullest capability.

WASTE WATER INDICATOR GAUGE - OPTIONAL, 293 ONLY

The indicator system shows the level of water in the water tank (31-gallon capacity) and the holding tank (25-gallon capacity). The panel is a three-light panel and indicates as follows:

Water Tank

Red Light - Empty

Amber Light - Full

Amber & Green Lights - Full

Waste Tank

Green Light - Empty

Amber Light - Full

Red & Amber Lights - Full

HEATER - SKI BOAT OPTION ONLY

Consult the owner's manual supplied with the heater for proper operation.

STEREO SYSTEM - OPTIONAL

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

DOCKING LIGHTS - OPTIONAL

Docking lights are to be used for docking only. It is illegal to use your docking lights while cruising. Please consult your Cobalt dealer for further information.

TRIM TABS - OPTIONAL

The trim tabs are a separate system in themselves and are not to be used in lieu of the engine power trim system.

- Before accelerating, make sure the tabs are both fully raised.
- Do not use the tabs until the boat has reached the desired speed and the power trim has been adjusted to the proper setting.
- Operate only one tab at a time and in small increments. As the tab takes effect, you will notice it causes the boat to veer off course slightly. Correct for this as it happens.

Basic operating techniques - To correct for a bow high attitude

1. Make sure both tabs are fully raised.
2. Accelerate the boat to planing speed.
3. Lower both tabs simultaneously for approximately five seconds or until desired effect is attained.
4. If not, raise or lower both tabs until desired attitude is obtained.
5. After desired attitude is obtained, one trim tab may be adjusted independently of the other to compensate for listing.
6. Make it a habit to raise both tabs each time the boat is slowed to less than planing speed.

4

**NOTE**

If in doubt, raise the tabs completely and repeat the procedure.

EXTRA BATTERY AND SWITCH - OPTIONAL (DOES NOT APPLY TO 293)

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 “position 2” rather than the “all” 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. In the off position, the entire boat is isolated electrically, including the automatic bilge pump circuit and the radio memory circuit (does not apply to the 293).

PORTABLE HEAD - OPTIONAL

Please consult the owner’s manual supplied with the head for proper operation.



PROPELLERS

PROPELLERS - GENERAL

Nothing is more important to the proper performance of your boat than the condition of the propeller(s). Even minor damage (often invisible to the naked eye) can adversely affect the boat's performance. Common symptoms of damage to propellers 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; additions of extra equipment and accessories or passengers; marine growth on the bottom; and, engine condition. Other factors include damage to the prop(s), tides, water temperature and direction of wind. Some of these factors are directly correctable by repair or maintenance. Others are beyond human control.



CAUTION

INCORRECT PROPELLER APPLICATION CAN CAUSE ADVERSE HANDLING CHARACTERISTICS. DO NOT CHANGE TYPE OR SIZE OF PROPELLER WITHOUT CONSULTING YOUR COBALT DEALER!

STAINLESS STEEL

Some Cobalts are standard equipped with stainless propellers. In this instance, do not substitute aluminum propellers. Adverse handling and top speed characteristics may be experienced.

PULLING POWER

If you need extra pulling power, you can obtain this by decreasing the pitch of your propeller(s) by two degrees. This will not endanger the engine or drive unit as long as the manufacturer's recommended top RPM's are not exceeded.

PROPELLER SIZE APPLICATION CHART

Model	Mfgr	Engine	Drive	Fuel system	std. ratio	Option	php	Prop Dscpt	Mfg. part #
190	Merc	3.0L	ALpha	2 BBL	2.00	2.40	140	13.5 x 23	48-78124A4
190	Merc	4.3L	ALpha	2 BBL	1.81	2.00	190	13 3/4 x 21	48-78122A40
190	Merc	4.3L	Bravo 3	2 BBL	2.43	NA	190		
190	Merc	4.3LH	ALpha	4 BBL	1.62	1.81	205	14.5 x 19	48-832830A45
190	Merc	4.3LH	Bravo 3	4 BBL	2.20	2.43	205	26's	48-823667A6/68A6
190	Merc	4.3L EFI	ALpha	Throttle-Body	1.62	1.81	210	14.5 x 19	48-832830A45
190	Merc	4.3L EFI	Bravo 3	Throttle-Body	2.20	2.43	210		
190	Merc	5.0L	ALpha	2 BBL	1.62	1.81	220	14.5 x 19	48-832830A45
190	Merc	5.0L	Bravo 1	2 BBL	1.65	NA	220		
190	Merc	5.0L	Bravo 3	2 BBL	2.20	2.43	220		
190	Merc	5.0L EFI	ALpha	Throttle-Body	1.47	1.62	240	14.5 x 19	48-832830A45
190	Merc	5.0L EFI	Bravo 1	Throttle-Body	1.65	NA	240		
190	Merc	5.0L EFI	Bravo 3	Throttle-Body	2.20	2.43	240	26's	48-823667A6/68-A6
190	Volvo	4.3GL	SX	2 BBL	1.79	1.89	190	14 1/4 x 21 RH	3850302-5
190	Volvo	4.3GL	DP	2 BBL	2.32	NA	190		
190	Volvo	4.3GS	SX	4 BBL	1.79	1.89	205	14 1/4 x 21 RH	3850302-5
190	Volvo	4.3GS	DP	4 BBL	2.32	NA	205	F5	3851495-6
190	Volvo	4.3Gi	SX	Throttle-Body	1.79	1.89	205	14 1/4 x 21 RH	3850302-5
190	Volvo	4.3Gi	DP	Throttle-Body	2.32	NA	205	F5	3851495-6
190	Volvo	5.0GL	SX	2 BBL	1.60	1.79	220	14 1/4 x 21 RH	3850302-5
190	Volvo	5.0GL	DP	2 BBL	1.95	2.32	220		
190	Volvo	5.0Gi	SX	2 BBL	1.60	1.79	250	14 1/4 x 21 RH	3850302-5
190	Volvo	5.0Gi	DP	2 BBL	1.95	2.32	250	F6	3851496-4
Model	Mfgr	Engine	Drive	Fuel system	std. ratio	Option	php	Prop Dscpt	Mfg. part #
200	Merc	3.0L	ALpha	2 BBL	2.00	2.40	140		
200	Merc	4.3L	ALpha	2 BBL	1.81	2.00	190	14.5 x 19	48-7812040
200	Merc	4.3L	Bravo 3	2 BBL	2.43	NA	190		
200	Merc	4.3LH	ALpha	4 BBL	1.62	1.81	205	14.5 x 19	48-7812040
200	Merc	4.3LH	Bravo 3	4 BBL	2.20	2.43	205		
200	Merc	4.3L EFI	ALpha	Throttle-Body	1.62	1.81	210	14.5 x 19	48-7812040
200	Merc	4.3L EFI	Bravo 3	Throttle-Body	2.20	2.43	210		
200	Merc	5.0L	ALpha	2 BBL	1.62	1.81	220	14.5 x 19	48-7812040
200	Merc	5.0L	Bravo 1	2 BBL	1.65	NA	220		
200	Merc	5.0L	Bravo 3	2 BBL	2.20	2.43	220		
200	Merc	5.0L EFI	ALpha	Throttle-Body	1.47	1.62	240	15x17	48-832828A45
200	Merc	5.0L EFI	Bravo 1	Throttle-Body	1.65	NA	240	15 1/4 x 19 RH	48-13700A41
200	Merc	5.0L EFI	Bravo 3	Throttle-Body	2.20	2.43	240	26's	48-823667A6/68A6
200	Merc	5.7L	ALpha	2 BBL	1.47	1.62	250	14.5 x 19	48-7812040
200	Merc	5.7L	Bravo 1	2 BBL	1.65	NA	250		
200	Merc	5.7L	Bravo 3	2 BBL	2.20	2.43	250		

200	Merc	5.7L EFI	ALpha	Throttle-Body	1.47	1.62	260	14.5 x 19	48-7812040
200	Merc	5.7L EFI	Bravo 1	Throttle-Body	1.65	NA	260		
200	Merc	5.7L EFI	Bravo 3	Throttle-Body	2.20	2.43	260		
200	Volvo	4.3GL	SX	2 BBL	1.79	1.89	190		
200	Volvo	4.3GL	DP	2 BBL	2.32	NA	190		
200	Volvo	4.3GS	SX	4 BBL	1.79	1.89	205	14 1/4 x 21 RH	3850302-5
200	Volvo	4.3GS	DP	4 BBL	2.32	NA	205		
200	Volvo	4.3Gi	SX	Throttle-Body	1.79	1.89	205	14 1/4 x 21 RH	3850302-5
200	Volvo	4.3Gi	DP	Throttle-Body	2.32	NA	205		
200	Volvo	5.0GL	SX	2 BBL	1.60	1.79	220	14 1/2 x 19 RH	3850301-7
200	Volvo	5.0GL	DP	2 BBL	1.95	2.32	220	F5	3851495-6
200	Volvo	5.0Gi	SX	Throttle-Body	1.60	1.79	250	14 1/2 x 19 RH	3850301-7
200	Volvo	5.0Gi	DP	Throttle-Body	1.95	2.32	250	F6	3851496-4
200	Volvo	5.7GS	SX	2 BBL	1.51	1.60	250	14 1/2 x 19 RH	3850301-7
200	Volvo	5.7GS	DP	2 BBL	1.95	2.32	250	F6	3851496-4
200	Volvo	5.7GSi	SX	Throttle-Body	1.43	1.60	280	14 1/2 x 19 RH	3850301-7
200	Volvo	5.7GSi	DP	Throttle-Body	1.78	1.95	280	F6	3851496-4
Model	Mfgr	Engine	Drive	Fuel system	std. ratio	Option	php	Prop Dscpt	Mfg. part #
22's	Merc	4.3L	ALpha	2 BBL	1.81	2.00	190		
22's	Merc	4.3L	Bravo 3	2 BBL	2.43	NA	190		
22's	Merc	4.3LH	ALpha	4 BBL	1.62	1.81	205		
22's	Merc	4.3LH	Bravo 3	4 BBL	2.20	2.43	205		
22's	Merc	4.3L EFI	ALpha	Throttle-Body	1.62	1.81	210	14.5 x 19	48-7812040
22's	Merc	4.3L EFI	Bravo 3	Throttle-Body	2.20	2.43	210		
22's	Merc	5.0L	ALpha	2 BBL	1.62	1.81	220	14.5 x 19	48-7812040
22's	Merc	5.0L	Bravo 1	2 BBL	1.65	NA	220		
22's	Merc	5.0L	Bravo 3	2 BBL	2.20	2.43	220		
22's	Merc	5.0L EFI	ALpha	Throttle-Body	1.47	1.62	240	14.5 x 19	48-7812040
22's	Merc	5.0L EFI	Bravo 1	Throttle-Body	1.65	NA	240	15 1/4 x 19 RH	48-13700A45
22's	Merc	5.0L EFI	Bravo 3	Throttle-Body	2.20	2.43	240		
22's	Merc	5.7L	ALpha	2 BBL	1.47	1.62	250	14.5 x 19	48-7812040
22's	Merc	5.7L	Bravo 1	Throttle-Body	1.65	NA	250		
22's	Merc	5.7L	Bravo 3	2 BBL	2.20	2.43	250	24's	48-823665A6/66A6
22's	Merc	5.7L EFI	ALpha	Throttle-Body	1.47	1.62	260	14 1/4 x 21	48-78122A40
22's	Merc	5.7L EFI	Bravo 1	Throttle-Body	1.65	NA	260	14 3/4 x 21	48-13702A45
22's	Merc	5.7L EFI	Bravo 3	Throttle-Body	2.20	2.43	260	26's	48-823667A6/68A6
22's	Merc	350 Mag MPI	ALpha	Multi-Port	1.47	1.62	300	14 1/4 x 21	48-78122A40
22's	Merc	350 Mag MPI	Bravo 1	Multi-Port	1.50	1.65	300	14 3/4 x 21 LH	48-13703A45
22's	Merc	350 Mag MPI	Bravo 3	Multi-Port	2.00	2.20	300	28's	48-823669A6/70A6
22's	Merc	7.4L MPI	Bravo 1	Multi-Port	1.50	1.65	310	14 3/4 x 21	48-13702A45
22's	Merc	7.4L MPI	Bravo 3	Multi-Port	2.00	2.20	310	28's	48-823669A6/70A6
22's	Merc	454 Mag MPI	Bravo 1	Multi-Port	1.50	1.65	385	14 5/8 x 23 LH	48-13705A45
22's	Merc	454 Mag MPI	Bravo 3	Multi-Port	1.81	2.20	385	28's	48-823669A6/70A6
22's	Merc	502 Mag MPI	Bravo 1	Multi-Port	1.50	1.65	415	14 1/2 x 25 LH	48-13707A45
22's	Merc	502 Mag MPI	Bravo 3	Multi-Port	1.81	2.20	415	28's	48-823669A6/70A6
22's	Volvo	4.3GL	SX	2 BBL	1.79	1.89	190		
22's	Volvo	4.3GL	DP	2 BBL	2.32	NA	190		
22's	Volvo	4.3GS	SX	4 BBL	1.79	1.89	205		
22's	Volvo	4.3GS	DP	4 BBL	2.32	NA	205		
22's	Volvo	4.3Gi	SX	Throttle-Body	1.79	1.89	205		
22's	Volvo	4.3Gi	DP	Throttle-Body	2.32	NA	205		
22's	Volvo	5.0GL	SX	2 BBL	1.60	1.79	220	14 1/2 x 19 RH	3850301-7
22's	Volvo	5.0GL	DP	2 BBL	1.95	2.32	220	F5	3851495-6

PROPELLERS

22's	Volvo	5.0Gi	SX	Throttle-Body	1.60	1.79	250	14 1/4 x 23	3850303-3
22's	Volvo	5.0Gi	DP	Throttle-Body	1.95	2.32	250	F6	3851496-4
22's	Volvo	5.7GS	SX	2 BBL	1.51	1.60	250		
22's	Volvo	5.7GS	DP	2 BBL	1.95	2.32	250	F6	3851496-4
22's	Volvo	5.7GSi	SX	Throttle-Body	1.43	1.60	280		
22's	Volvo	5.7GSi	DP	Throttle-Body	1.95	1.95	280	F7	3851497-2
22's	Volvo	7.4Gi	SX	Multi-Port	1.43	1.60	310		
22's	Volvo	7.4Gi	DP	Multi-Port	1.78	1.95	310	F6	3851496-4
Model	Mfgr	Engine	Drive	Fuel system	std. ratio	Option	php	Prop Dscpt	Mfg. part #
23's	Merc	5.0L	ALpha	2 BBL	1.62	1.81	220		
23's	Merc	5.0L	Bravo 1	2 BBL	1.65	NA	220		
23's	Merc	5.0L	Bravo 3	2 BBL	2.20	2.43	220		
23's	Merc	5.0L EFI	ALpha	Throttle-Body	1.47	1.62	240		
23's	Merc	5.0L EFI	Bravo 1	Throttle-Body	1.65	NA	240		
23's	Merc	5.0L EFI	Bravo 3	Throttle-Body	2.20	2.43	240		
23's	Merc	5.7L	ALpha	2 BBL	1.47	1.62	250	14.5 x 19	48-7812040
23's	Merc	5.7L	Bravo 1	2 BBL	1.65	NA	250		
23's	Merc	5.7L	Bravo 3	2 BBL	2.20	2.43	250		
23's	Merc	5.7L EFI	ALpha	Throttle-Body	1.47	1.62	260	15 1/4 x 15	48-78116A45
23's	Merc	5.7L EFI	Bravo 1	Throttle-Body	1.65	NA	260		
23's	Merc	5.7L EFI	Bravo 3	Throttle-Body	2.20	2.43	260	26's	48-823667A6/68A6
23's	Merc	350 Mag MPI	ALpha	Multi-Port	1.47	1.62	300		
23's	Merc	350 Mag MPI	Bravo 1	Multi-Port	1.50	1.65	300	15 1/4 x 19 RH	48-13700A45
23's	Merc	350 Mag MPI	Bravo 3	Multi-Port	2.00	2.20	300	26's	48-823667A6/68A6
23's	Merc	7.4L MPI	Bravo 1	Multi-Port	1.50	1.65	310	14 1/4 x 21 RH	48-1370245
23's	Merc	7.4L MPI	Bravo 3	Multi-Port	2.00	2.20	310	26's	48-823667A6/68A6
23's	Merc	454 Mag MPI	Bravo 1	Multi-Port	1.50	1.65	385	14 5/8 x 23 RH	48-13704A41
23's	Merc	454 Mag MPI	Bravo 3	Multi-Port	1.81	2.20	385	26's	48-823667A6/68A6
23's	Merc	502 Mag MPI	Bravo 1	Multi-Port	1.50	1.65	415	14 1/4 x 25 RH	48-13706A45
23's	Merc	502 Mag MPI	Bravo 3	Multi-Port	1.81	2.20	415	28's	48-823669A6/70A6
23's	Volvo	5.0GL	SX	2 BBL	1.60	1.79	220		
23's	Volvo	5.0GL	DP	2 BBL	1.95	2.32	220		
23's	Volvo	5.0Gi	SX	Throttle-Body	1.60	1.79	250		
23's	Volvo	5.0Gi	DP	Throttle-Body	1.95	2.32	250	F6	3851496-4
23's	Volvo	5.7GS	SX	2 BBL	1.51	1.60	250		
23's	Volvo	5.7GS	DP	2 BBL	1.95	2.32	250	F5	3851495-6
23's	Volvo	5.7GSi	SX	Throttle-Body	1.43	1.60	280	14 1/4 x 21 RH	3850302-5
23's	Volvo	5.7GSi	DP	Throttle-Body	1.78	1.95	280	F7	3851497-2
23's	Volvo	7.4Gi	SX	Multi-Port	1.43	1.60	315		
23's	Volvo	7.4Gi	DP	Multi-Port	1.78	1.95	315	F7	3851497-2
Model	Mfgr	Engine	Drive	Fuel system	std. ratio	Option	php	Prop Dscpt	Mfg. part #
25's	Merc	5.7L	ALpha	2 BBL	1.47	1.62	250		
25's	Merc	5.7L	Bravo 1	2 BBL	1.65	NA	250		
25's	Merc	5.7L	Bravo 3	2 BBL	2.20	2.43	250	24's	48-823665A6/66A6
25's	Merc	5.7L EFI	ALpha	Throttle-Body	1.47	1.62	260		
25's	Merc	5.7L EFI	Bravo 1	Throttle-Body	1.65	NA	260		
25's	Merc	5.7L EFI	Bravo 3	Throttle-Body	2.20	2.43	260		
25's	Merc	350 Mag MPI	ALpha	Multi-Port	1.47	1.62	300		
25's	Merc	350 Mag MPI	Bravo 1	Multi-Port	1.50	1.65	300		
25's	Merc	350 Mag MPI	Bravo 3	Multi-Port	2.20	2.43	300		
25's	Merc	7.4L MPI	Bravo 1	Multi-Port	1.50	1.65	310	15 1/4 x 19 RH	48-13700A45
25's	Merc	7.4L MPI	Bravo 3	Multi-Port	2.00	2.20	310	24's	48-823665A6/66A6
25's	Merc	454 Mag MPI	Bravo 1	Multi-Port	1.50	1.65	385	14 5/8 x 23 RH	48-13704A45

25's	Merc	454 Mag MPI	Bravo 3	Multi-Port	1.81	2.20	385	26's	48-823667A6/68A6
25's	Merc	502 Mag MPI	Bravo 1	Multi-Port	1.50	1.65	415	14 5/8 x 23 RH	48-13704A45
25's	Merc	502 Mag MPI	Bravo 3	Multi-Port	1.81	2.20	415	28's	48-823669A6/70A6
25's	Volvo	5.7GS	SX	2 BBL	1.51	1.60	250		
25's	Volvo	5.7GS	DP	2 BBL	1.95	2.32	250	F5	3851495-6
25's	Volvo	5.7GSi	SX	Throttle-Body	1.43	1.60	280		
25's	Volvo	5.7GSi	DP	Throttle-Body	1.95	NA	280	F6	3851496-4
25's	Volvo	7.4Gi	SX	Multi-Port	1.43	1.60	315		
25's	Volvo	7.4Gi	DP	Multi-Port	1.78	1.95	315	F5	3851495-6
Model	Mfgr	Engine(s)	Drive	Fuel system	std. ratio	Option	php	Prop Dscpt	Mfg. part #
272	Merc	350 Mag MPI	Alpha	Multi-Port	1.47	1.62	300		
272	Merc	350 Mag MPI	Bravo 1	Multi-Port	1.50	1.65	300		
272	Merc	350 Mag MPI	Bravo 3	Multi-Port	2.00	2.20	300		
272	Merc	7.4L MPI	Bravo 1	Multi-Port	1.50	1.65	310		
272	Merc	7.4L MPI	Bravo 3	Multi-Port	2.00	2.20	310	24's	48-823665A6/66A6
272	Merc	454 Mag MPI	Bravo 1	Multi-Port	1.50	1.65	385	14 5/8 x 23 LH	48-13705A45
272	Merc	454 Mag MPI	Bravo 3	Multi-Port	1.81	2.20	385	26's	48-823667A6/68A6
272	Merc	502 Mag MPI	Bravo 1	Multi-Port	1.50	1.65	415	14 5/8 x 23 LH	48-13705A45
272	Merc	502 Mag MPI	Bravo 3	Multi-Port	1.81	2.20	415	26's	48-823667A6/68A6
272	Volvo	5.7GS	SX	2 BBL	1.51	1.60	250		
272	Volvo	5.7GS	DP	2 BBL	1.95	2.32	250		
272	Volvo	5.7GSi	SX	Throttle-Body	1.51	1.60	280		
272	Volvo	5.7GSi	DP	Throttle-Body	1.78	1.95	280		
272	Volvo	7.4Gi	SX	Multi-Port	1.43	1.60	315		
272	Volvo	7.4Gi	DP	Multi-Port	1.78	1.95	315	F5	3851495-6
Model	Mfgr	Engine(s)	Drive	Fuel system	std. ratio	Option	php	Prop Dscpt	Mfg. part #
293	Merc	7.4L MPI	Bravo 1	Multi-Port	1.50	1.65	310		
293	Merc	7.4L MPI	Bravo 3	Multi-Port	2.00	2.20	310	22's	48-823663A6/64A6
293	Merc	454 Mag MPI	Bravo 1	Multi-Port	1.50	1.65	385		
293	Merc	454 Mag MPI	Bravo 3	Multi-Port	2.00	2.20	385	24's	48-823665A6/66A6
293	Merc	502 Mag MPI	Bravo 1	Multi-Port	1.50	1.65	415		
293	Merc	502 Mag MPI	Bravo 3	Multi-Port	1.81	2.20	415	22's	48-823663A6/64A6
293	Merc	Twin 3.0L	ALpha	2 BBL	2.00	2.40			
293	Merc	Twin 4.3L	ALpha	2 BBL	1.81	2.00	190		
293	Merc	Twin 4.3L	Bravo 3	2 BBL	2.43	NA	190		
293	Merc	Twin 4.3LH	ALpha	4 BBL	1.62	1.81	205		
293	Merc	Twin 4.3LH	Bravo 3	4 BBL	2.20	2.43	205		
293	Merc	Twin 4.3L EFI	ALpha	Throttle-Body	1.62	1.81	210		
293	Merc	Twin 4.3L EFI	Bravo 3	Throttle-Body	2.20	2.43	210		
293	Merc	Twin 5.0L	ALpha	2 BBL	1.62	1.81	220		
293	Merc	Twin 5.0L	Bravo 1	2 BBL	1.65	NA	220		
293	Merc	Twin 5.0L	Bravo 3	2 BBL	2.20	2.43	220	26's	48-823667A6/68A6
293	Merc	Twin 5.0L EFI	ALpha	Throttle-Body	1.47	1.62	230		
293	Merc	Twin 5.0L EFI	Bravo 1	Throttle-Body	1.65	NA	230		
293	Merc	Twin 5.0L EFI	Bravo 3	Throttle-Body	2.20	2.43	230		
293	Merc	Twin 5.7L	ALpha	2 BBL	1.47	1.62	250		
293	Merc	Twin 5.7L	Bravo 1	2 BBL	1.65	NA	250		
293	Merc	Twin 5.7L	Bravo 3	2 BBL	2.20	2.43	250	24's	48-823665A6/66A6
293	Merc	Twin 5.7L EFI	ALpha	Throttle-Body	1.47	1.62	260	"19"std SS R&L"	48-16316A4/317A4
293	Merc	Twin 5.7L EFI	Bravo 1	Throttle-Body	1.50	1.65	260		
293	Merc	Twin 5.7L EFI	Bravo 3	Throttle-Body	2.20	2.43	260	28's	48-823669A6/70A6
293	Merc	Twin 350 Mag MPI	ALpha	Multi-Port	1.47	1.62	300		
293	Merc	Twin 350 Mag MPI	Bravo 1	Multi-Port	1.50	1.65	300	"19" Mirage R&L"	48-13700A4/701A4

PROPELLERS

293	Merc	Twin 350 Mag MPI	Bravo 3	Multi-Port	2.00	2.20	300	28's	48-823669A6/70A6
293	Volvo	7.4GI	DP	Multi-Port	1.95	2.32	300	F4	3851494-9
293	Volvo	Twin 4.3GS	SX	4 BBL	1.79	1.89	205	14 1/4 x 21 RH	3850302-5
293	Volvo	Twin 4.3GS	DP	4 BBL	2.32	NA	205	F5	3851495-6
293	Volvo	Twin 4.3Gi	SX	Throttle-Body	1.79	1.89	205	14 1/4 x 21 RH	3850302-5
293	Volvo	Twin 4.3Gi	DP	Throttle-Body	2.32	NA	205	F5	3851495-6
293	Volvo	Twin 5.0GL	SX	2 BBL	1.60	1.79	220		
293	Volvo	Twin 5.0GL	DP	2 BBL	1.95	2.32	220		
293	Volvo	Twin 5.0Gi	SX	Throttle-Body	1.60	1.79	250	21RL&LH SS	3850309/318-1
293	Volvo	Twin 5.0Gi	DP	Throttle-Body	1.95	2.32	250	F6	3851496-4
293	Volvo	Twin 5.7GS	SX	2 BBL	1.51	1.60	250		
293	Volvo	Twin 5.7GS	DP	2 BBL	1.95	2.32	250	F7	3851497-2
293	Volvo	Twin 5.7GSi	SX	Throttle-Body	1.51	1.60	280		
293	Volvo	Twin 5.7GSi	DP	Throttle-Body	1.95	2.32	280		
293	Volvo	KAD44EDC Dsl	DP	Direct Injected	1.68	1.78	243	C4	854854-7



NOTE

Blank spaces indicate the engine/boat combination have not been tested as of printing date.



TECHNICAL INFORMATION

ENGINE OPERATION/MAINTENANCE/SERVICING

Included with your owner's packet is your engine manual(s). This manual was prepared by the engine manufacturer and contains information concerning the operation and care of your engine. Please read this manual thoroughly and become acquainted with this information.

It is advisable to maintain a service log to record service checks, such as oil changes, so you can determine when it's time for servicing. A maintenance log is also required when requesting warranty using the extended warranty supplied with your new Cobalt.

THE BREAK-IN PERIOD

We cannot stress enough, the importance of reading your engine manual(s) and following the manufacturer's instructions for breaking-in your engine(s).

WINTERIZING AND OFF-SEASON STORAGE

Store your Cobalt with the bow slightly elevated; i.e., the same attitude as if the boat were floating at rest. Remove the transom drain plug. If the boat is stored with the bow down, moisture will not be able to move to the engine bilge area and out of the boat. Mold and mildew may form as a result of the inability of moisture to escape. Store all bow cushions in the open position and open all storage areas.

The 202CS and 203CS ski boats have an additional hull drain below the engine which should be removed for storage. It has a large "T" handle on it for easy operation.

Preparing for winter lay up is important. In frigid zones, be particularly attentive to items that can be damaged by freezing. Freeze damage is not covered by warranty.

Engine

Step by step instructions for engine winter storage are outlined in your engine manual(s). Follow these essential instructions carefully. This manual also details procedures for returning your engine(s) to service for in-season usage.

WATER SYSTEM

Consult your Cobalt Dealer for information about this procedure.

Hot Water Heater

Consult your Cobalt dealer for information about this procedure.

Air Conditioning

Consult your Cobalt Dealer for information about this procedure.

Generator and Muffler

Consult your Cobalt Dealer for information about this procedure.

Good storage is very important whether indoors or outdoors. Boat trailers designed for specific model boats provide excellent support for your Cobalt for long term storage. If you are storing your Cobalt by some other means; rack, hoists, blocks, etc., consult your Cobalt Dealer. Your dealer can assist you in making sure your boat has proper support.

It is very important the proper canvas is used as designed. The canvas listed in items 1 and 2 are made of Sunbrella, an acrylic material. Acrylic does not breathe as well as canvas duck, therefore all moisture cannot escape the boat when covered. The mooring cover listed in item 3 is made of marine canvas duck.

1. Canopy Top, Side Curtains, Stern Curtain, Camper Top, Bimini Top

Day or Night Boating

Not designed for storage use

2. Bow Tonneau, Cockpit Tonneau

Trailerling

Overnight Protection

Not designed for storage use

3. Mooring Cover

Storage - short or long term

If a temporary poly cover, such as shrink wrap, is used, provide adequate ventilation to prevent mold or mildew.

Remove battery. Store on a wooden shelf or wood base. Store in a dry, covered place, charged to capacity. Check it periodically during the off-season. Recharge monthly.

**WARNING**

BATTERY ACID CAN CAUSE BLINDNESS IF SPLASHED IN EYES, BURNING OF SKIN AND SEVERE GASTROINTESTINAL DAMAGE IF INGESTED. AVOID CONTACT WITH BATTERY ACID. USE EXTREME CAUTION.

FUEL REQUIREMENTS

The fuel line between the fuel tank and the fuel inlet of the engine is made of a synthetic, flexible material and although it is the best material available, alcohol can deteriorate it, especially during periods of storage. For this reason, it is suggested you have your Cobalt dealer inspect this fuel line at least annually and replace, if necessary.



WARNING

YOUR FUEL SYSTEM SHOULD BE CHECKED BEFORE EACH OPERATION. AT LEAST ONCE A YEAR, HAVE YOUR FUEL SYSTEM THOROUGHLY CHECKED BY A CERTIFIED COBALT SERVICE TECHNICIAN. GASOLINE IS HIGHLY FLAMMABLE; EXTREME CAUTION SHOULD BE USED AT ALL TIMES.

CIRCUIT BREAKERS

Most 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 breaker button in and release. (Breakers do not require fuse replacement). The 190 breaker panel is located under the dash.

FUSES

Some electrical components have in-line fuses in them. Check behind the failed component for the possibility of an in-line fuse if a tripped circuit breaker is not found.

In-line fuse components:

- Depth Sounder - 1 amp
- Air/Water Temperature Gauge - 1 amp
- Telescoping Anchor Light - 3 amp
- Trim Tab Control - 20 amp
- Stereo - 10 or 20 amp
- Sump Pump* - 5 amp
- Tank Level Monitor System* - 3 amp
- CO Monitor* - 1 amp
- Head Blower* - 5 amp

*Fuses are located behind the cabin electric panel

LIGHTING/BULB REPLACEMENT

External Lights

Bow Light Bulb(s)	.....	#71
Stern Light Bulb	.....	#1004

Internal Lights

Open Bulb Utility Light	.....	#1004 or #211
Cuddy Cabin Reading Light	.....	#1141
Black Rectangular Courtesy Light	....	#1044
Chrome Courtesy Light (Round)	....	#90
Overhead Console Light	.....	GE 912
Dome Light	.....	#211

Instrument Lights

Tachometer	.....	194 SF2
Speedometer	.....	194 SD2
Voltmeter	.....	658 S11
Oil Pressure	.....	658 SH2
Temperature	.....	658 SC2
Fuel	.....	658 SC2
Trim	.....	658 SC2

SPECIFICATIONS

190

Centerline	18' 6"	5.64 m
Beam	8' 1"	2.46 m
Dry Weight	2825lbs.	1281 kg
Deadrise	20 deg.	.20 deg
Fuel Capacity	40 gal.	151 L
Draft(drive up)	20"	.50 cm
Freeboard(fwd)	35"	.88 cm
Freeboard(aft)	26"	.66 cm
Transom Height	38"	.96 cm
Bridge Clearance	54"	.137 cm

200

Centerline	19' 6"	5.94 m
Beam	8' 2"	2.49 m
Dry Weight	3080lbs.	1397 kg
Deadrise	20 deg.	.20 deg
Fuel Capacity	40 gal.	151 L
Draft(drive up)	20"	.50 cm
Freeboard(fwd)	35"	.88 cm
Freeboard(aft)	26"	.66 cm
Transom Height	38"	.96 cm
Bridge Clearance	54"	.137 cm

202CS/203CS

Centerline	20' 2"	6.15 m
Beam	7' 5"	2.26 m
Dry Weight	2800lbs.	1268 kg
Deadrise	na	na
Fuel Capacity	34 gal.	129 l
Draft(drive up)	18"	.46 cm
Freeboard(fwd)	25"	.63 cm
Freeboard(aft)	22"	.56 cm
Transom Height	24"	.61 cm
Bridge Clearance	44"	.111 cm

220

Centerline	21' 11"	6.68 m
Beam	8' 5"	2.57 m
Dry Weight	3410lbs.	1547 kg
Deadrise	20 deg.	.20 deg
Fuel Capacity	50 gal.	189 L
Draft(drive up)	17"	.43 cm
Freeboard(fwd)	34"	.86 cm
Freeboard(aft)	25"	.63 cm
Transom Height	42"	106 cm
Bridge Clearance	54"	.137 cm

232

Centerline	23' 2"	7.06 m
Beam	8' 6"	2.59 m
Dry Weight	3880 lbs.	1533 kg
Deadrise	20 deg.	.20 deg
Fuel Capacity	55 gal.	208 l
Draft(drive up)	17"	.43 cm
Freeboard(fwd)	34"	.86 cm
Freeboard(aft)	21"	.53 cm
Transom Height	43"	109 cm
Bridge Clearance	54"	.137 cm

233

Centerline	23' 2"	7.06 m
Beam	8' 6"	2.59 m
Dry Weight	3880 lbs.	1533 kg
Deadrise	20 deg.	.20 deg
Fuel Capacity	55 gal.	208 l
Draft(drive up)	17"	.43 cm
Freeboard(fwd)	34"	.86 cm
Freeboard(aft)	21"	.53 cm
Transom Height	43"	109 cm
Bridge Clearance	54"	.137 cm

23LS

Centerline	23' 2"	7.06 m
Beam	8' 6"	2.59 m
Dry Weight	3880 lbs.	1533 kg
Deadrise	20 deg.	.20 deg
Fuel Capacity	55 gal.	208 l
Draft(drive up)	17"	.43 cm
Freeboard(fwd)	34"	.86 cm
Freeboard(aft)	21"	.53 cm
Transom Height	43"	109 cm
Bridge Clearance	54"	.137 cm

252

Centerline	25'	7.62 m
Beam	8' 6"	2.59 m
Dry Weight	4350lbs.	1973 kg
Deadrise	20 deg.	.20 deg
Fuel Capacity	73 gal.	276 l
Draft(drive up)	20"	.50 cm
Freeboard(fwd)	41"	104 cm
Freeboard(aft)	26"	.66 cm
Transom Height	48"	121 cm
Bridge Clearance	57"	144 cm

253

Centerline	25'	7.62 m
Beam	8' 6"	2.59 m
Dry Weight	4350lbs.	1973 kg
Deadrise	20 deg.	.20 deg
Fuel Capacity	73 gal.	276 l
Draft(drive up)	20"	.50 cm
Freeboard(fwd)	41"	104 cm
Freeboard(aft)	26"	.66 cm
Transom Height	48"	121 cm
Bridge Clearance	57"	144 cm

25LS

Centerline	25'	7.62 m
Beam	8' 6"	2.59 m
Dry Weight	4350lbs.	1973 kg
Deadrise	20 deg.	.20 deg
Fuel Capacity	73 gal.	276 l
Draft(drive up)	20"	.50 cm
Freeboard(fwd)	41"	104 cm
Freeboard(aft)	26"	.66 cm
Transom Height	48"	121 cm
Bridge Clearance	57"	144 cm

272

Centerline	27' 3"	8.3 m
Beam	8' 6"	2.59 m
Dry Weight	4930lbs.	2236 kg
Deadrise	20 deg.	.20 deg
Fuel Capacity	97 gal.	367 l
Draft(drive up)	23"	.58 cm
Freeboard(fwd)	39"	.99 cm
Freeboard(aft)	34"	.86 cm
Transom Height	52"	132 cm
Bridge Clearance	60"	152 cm

293

Centerline	28' 10"	8.8 m
Beam	9' 6"	2.89 m
Dry Weight(single)	6950 lbs.	3051 kg
Dry Weight(twin)	7950 lbs.	3606 kg
Deadrise(transom)	20 deg.	.20 deg
Draft(sngl, dr up)	19"	0.48 m
Draft(twn dr up)	21"	0.53 m
Cockpit Freeboard	53"	1.3 m
Transom Height	23"	0.6 m
Bridge Clearance	75"	1.9 m
Fuel Capacity	113 gal.	428 l
Freshwater Capacity	31 gal.	117 l





WARRANTY PROCEDURE AND OWNER RESPONSIBILITY

COBALT WARRANTY

Ten-year limited transferable warranty on hull and deck structure, two-year limited transferable warranty on other component parts.

Cobalt Boats warrants the hull and deck, including floor, stringers, motor mounts, transom and deck/hull joints, of each new Cobalt boat to be free from structural defects in material and workmanship under normal recommended use for a period of ten (10) years from the date of delivery to the original retail purchaser.

Cobalt Boats warrants the gelcoat finish, upholstery, components not having their own warranty and all components manufactured by Cobalt Boats, other than the hull and deck, of each new Cobalt boat to be free from structural defects in material and workmanship under normal recommended use for a period of two (2) years from the date of delivery to the original retail purchaser.

This warranty does not apply to (1) engines, outdrives, controls, batteries, or other equipment or accessories which are separately warranted by the manufacturers thereof (appropriate adjustments therefore being provided by the respective manufacturer); (2) engines or accessories installed by persons or parties other than Cobalt Boats; (3) windshield leakage, upholstery damage, carpet damage and gelcoat damage; and (4) any Cobalt boat which has been altered, subject to misuse, negligence or accident, or used for racing or commercial purposes.

The rights and benefits granted under this warranty to the original retail purchaser of a new Cobalt boat shall extend to any owner of such Cobalt boat during the applicable warranty period, commencing with the date of delivery to the original retail purchaser, as set forth herein, provided this warranty is validated by such owner, as set forth herein. In no event shall the owner of any Cobalt boat, covered by this warranty, have any rights or benefits under this warranty which are greater than the rights and benefits which would have been available under this warranty to the original retail purchaser of such Cobalt boat had the original retail purchaser

remained the owner of such Cobalt boat.

Cobalt Boats shall not be liable for special or consequential damages, such as, but not limited to, damages for cost of replacement goods, or damages for claims of third parties against the purchaser, or damages for loss of profits.

To validate this warranty, the original retail purchaser must return the warranty registration card to Cobalt Boats within ten (10) days after purchase of any new Cobalt boat covered by this warranty, and any subsequent owner of a Cobalt boat during the applicable warranty period must give written notice of acquisition of a Cobalt boat to Cobalt Boats within ten (10) days after such purchase.

Notification of any warranty claim, arising within the applicable warranty period, as set forth above, must be made in writing by the owner of the Cobalt boat or by an authorized Cobalt Boats dealer to Cobalt Boats within thirty (30) days after the discovery of the alleged basis for any warranty claim.

During the applicable warranty period, as set forth above, warranty repairs shall be made without charge by an authorized Cobalt Boats dealer or, at the option of Cobalt Boats, by Cobalt Boats at its plant in Neodesha, Kansas. All warranty repairs shall be subject to the authorization of factory-trained personnel of Cobalt Boats, whose decision will be final. Transportation to and from an authorized Cobalt Boats dealer, and/or to and from the Cobalt Boats plant in Neodesha, Kansas, for warranty repairs, shall be at the owners' expense.

In no event shall the liability of Cobalt Boats under this warranty exceed the purchase price of the specific item or items to which this warranty relates.

This warranty constitutes the only express warranty covering a new Cobalt boat. Any implied warranty, which may be determined to pertain to any component of a new Cobalt boat, is limited to ten (10) years on the hull and deck structure, and limited to two (2) years on all other component parts covered by the express warranty as set forth above, except in those states which have other limitations on the duration of an implied warranty.

This warranty gives you specific rights and remedies. In addition, you may also have other rights and remedies which vary from state to state.

OWNER RESPONSIBILITY/WARRANTY PROCEDURE

Before operating your new Cobalt, it is necessary you read and understand this manual. Also, take the time to read the other manuals supplied to you by your dealer.

Warranty Service Requirements

All Cobalt warranty service must be completed by an authorized Cobalt dealer. If you are not able to return your boat to your selling dealership, you must contact him so he may assist you in coordinating the warranty repairs. Any claims against Cobalt

Boats without prior approval from Cobalt Boats on repairs completed by a non-authorized dealership may be denied.

EXTENDED POWERTRAIN WARRANTY

Your Cobalt warranty includes an Extended Limited Powertrain Warranty. Your dealer submitted the necessary forms to implement this warranty. Please read the contract supplied to you by your dealer.

It is important you have your Cobalt serviced per the engine manufacturer's recommended instructions. You must keep, in your possession, records of all service performed should the extended powertrain warranty be needed. This is to prove the required maintenance has been performed.

If you have any questions referencing your Extended Powertrain Warranty, please contact your Cobalt dealer.

IF YOU SELL YOUR COBALT

Your warranties are transferable. If you sell your Cobalt to anyone other than an authorized Cobalt dealer, please call Cobalt Boats for the appropriate warranty transfer information (800-468-5764 or 316-325-2653). If the proper transfer procedures are not followed, future warranty may be denied.





8 TROUBLE SHOOTING

ENGINE WON'T START

Lack of Fuel - Check fuel.

Clogged anti-syphon valve - See Authorized Cobalt Dealer.

Clogged fuel tank pick-up - See Authorized Cobalt Dealer.

Clogged fuel filter - See Authorized Cobalt Dealer.

Plugged fuel line or defective pump. - Fuel pump may be defective. Inspect pump sight glass for fuel leakage from fuel pump. See Authorized Cobalt Dealer.

Carburetor float valve stuck - Tap float chamber with a screw driver handle to free needle valve.

Damp spark plugs - Dry spark plug ceramic with clean, dry cloth.

High tension leads wet and/or loose - Dry and tighten connections at spark plugs, distributor and coil.

No spark - Check for loose connections on coil.

No spark - Check high tension lead on coil.



WARNING

WHENEVER CHECKING FOR ELECTRICAL PROBLEMS USE EXTREME CAUTION. GASOLINE IS FLAMMABLE!

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



WARNING

GASOLINE IS FLAMMABLE USE EXTREME CAUTION WHEN HANDLING GASOLINE!

8

Ignition Safety Switch. - Your Cobalt is equipped with an ignition safety switch located on the lower lip of the dashboard. Make sure the lanyard is installed with the switch holding the lanyard in place.

STARTER WON'T CRANK ENGINE

Ignition switch if inoperative - see Authorized Cobalt Dealer.

Throttle position - Check to see that remote control is in start or neutral position. Change position of throttle only slightly.

Dead battery - Check level of electrolyte, disconnect battery. Charge battery.



WARNING

BATTERY ACID CAN CAUSE BLINDNESS IF SPLASHED IN EYES; BURNING OF SKIN AND SEVERE GASTROINTESTINAL DAMAGE IF INGESTED. USE EXTREME CAUTION.

Battery connections loose or corroded - Check for loose connections and corrosion. Clean connections and tighten.

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

ENGINE RUNS ERRATICALLY

Automatic choke out of adjustment - See your Authorized Cobalt Dealer.

Water and/or dirt in fuel filter - Clean and inspect filter.



WARNING

GASOLINE IS FLAMMABLE. USE EXTREME CAUTION.

Fuel pump malfunction - Check operation of pump. Replace fuel pump. See your Authorized Cobalt Dealer

Fuel tank vent and line plugged - Check for restriction in line and vent. Blow out line and vent.

ENGINE VIBRATES

Propeller condition - Check for bent, broken or damaged propeller. Check for weeds on propeller or gear case.

Carburetor out of adjustment. - See Authorized Cobalt Dealer.

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

High tension leads loose or deteriorated - Insure all connections are clean and tight. See Authorized Cobalt dealer.

Incorrect firing order - Correct firing order, see engine manufacturer's owner's manual.

Engine out of time - See Authorized Cobalt Dealer.

ENGINE RUNS BUT BOAT MAKES LITTLE OR NO PROGRESS

Fouled or damaged propeller - Stop and shut off engine. Check for weeds on propeller, bent or broken propeller. See your Authorized Cobalt Dealer.

PERFORMANCE LOSS

Throttle not fully open - Check to see that throttle opens fully at carburetor.

Improper fuel - Fill tank with correct fuel.

Overheating - Check cooling system. Remove weeds from water intake. Check alternator belt tension.

Boat overloaded - Reduce load.

Boat trim - Distribute boat load evenly.

Improper propeller selection - Select proper propeller pitch and diameter. (See chart in owner's manual).

Excessive bilge water - Check for excessive water, drain bilge.

Boat hull condition - Clean if marine growth is present.

FUEL INJECTION ENGINES

Fuel injection engines have safety circuitry built in that monitors many different functions of the engine and drive system. In many of these engines, a malfunction that the operator may not be aware of, can trigger a safety circuit in the engine causing it to automatically slow down and run rough. Should such a circumstance occur, please check with your Cobalt dealer as soon as possible.



