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MAINTENANCE

GENERAL INFORMATION

Your boat was constructed to the standards of the National Marine Manufacturer's Association.

Materials

Your new boat is constructed from a variety of high quality materials. These materials work together to provide a vessel that is uniquely suited to the marine environment.

Fiberglass

Many of the pieces used to build your boat, such as the hull, deck and shower stalls, are made of molded fiberglass. Dozens of fiberglass components are used to make a 500 COCKPIT. Many of the fiberglass parts in your boat are further reinforced by laminating core materials between layers of fiberglass. Natural materials like balsa wood and plywood are used as are a variety of synthetic materials like "cormat" and aluminum.

The exterior or exposed surface of many fiberglass parts is coated with a layer of gelcoat. Gelcoat acts as a cosmetic and protective layer, much like the paint on your car. Below the waterline hull surfaces have a layer of vinylester under the gelcoat.

The exterior walking surfaces of your boat have been textured with nonskid. This provides a solid footing surface on the boat's deck, walkways, ladder steps and swim platforms.

Wood

Several different types of wood are used in your 500 COCKPIT.

Fir Plywood

Several carefully selected types and thicknesses of premium quality, exterior grade plywood are used throughout your boat to construct and reinforce a variety of components.

Finish Plywood

Finish plywood is used on the interior of your boat to fabricate bulkheads, door panels and cabinets. Plywood has outer layers of high grade veneer, and a fir or pine inner plywood core.

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Be careful if you sand the finish plywood portions of your boat's interior. Heavy sanding will damage the veneer.

Solid Mahogany Lumber:

High grade, mahogany lumber is used in a variety of dimensions in areas that provide structural strength to the boat and interior framework.

Solid Maple or Teak:

Maple is the primary wood in the 500's decor. It is accented with teak. Teak is used because it adds a warm, comfortable feeling to a boat's interior.

Information on how to care for your boat's woodwork can be found in Section 8.4 of your Owner's Guide.

Metal

Stainless steel and aluminum are used throughout your 500 COCKPIT. These metals provide high strength-to-weight ratios, are nonmagnetic, and are highly resistant to moisture.

The safety rails on the 500 COCKPIT are welded from stainless steel rail. Information on how to care for the rails and hardware of your boat can be found later in this section.

High Pressure Laminate (HPL)

HPL is used within the 500 COCKPIT to surface bulkheads, cabinets and counter tops. These laminates are selected for their strength and durability, are easy to clean, and add colorful highlights to the inside of your boat.

Formed Plastics

Formed plastic is used in a variety of ways throughout the interior and exterior of your boat. Plastic offers a high strength-to-weight ratio and excellent resistance to the affects of moisture. A few of the areas where formed plastics are used are in the boats water and sanitation tanks, bridge seat forms, venturi windshield and electrical wire covers.

Fabrics, Wall Covering and Carpet

A wide variety of fabrics can be found throughout the interior and exterior of your boat. Woven fabrics are used for interior mattresses and chairs, and vinyl fabrics are used for exterior cushions and helm seats. The vinyl coating of the interior wall coverings and headliner makes them easy to clean. The carpet and fabric selected for your boat are of premium grade and have been treated with a popular stain resistant product.

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Construction

Your 500 COCKPIT was built using a modular construction technique. This method of building boats uses the physical properties of many components to add strength and rigidity to the boat's hull and deck. The interior liners of the boat are securely bonded to the hull and deck to increase strength while minimizing the boat's overall weight.

Hull

The hull is made of numerous layers of various types of laminated fiberglass. Its strength is derived from laminating several carefully selected, hand laid layers of fiberglass material that have been impregnated and bonded together with polyester resin. Your hull does not contain any balsa wood coring materials. The actual thickness of your boat's hull varies depending upon the structural requirements of a particular area. The thickness, however, generally increases as you go from the sheer to the keel area of the hull.

Carver protects the underwater portion of your hull from marine growth with a layer of antifouling bottom paint.

CAUTION

DO NOT install an item into or through the hull without sealing the area penetrated by the fastener or fitting. Improper or inadequate sealing may lead to hull leaks or serious hull damage. Consult your Carver Dealer for recommendations on what type and brand of sealer to use.

Deck

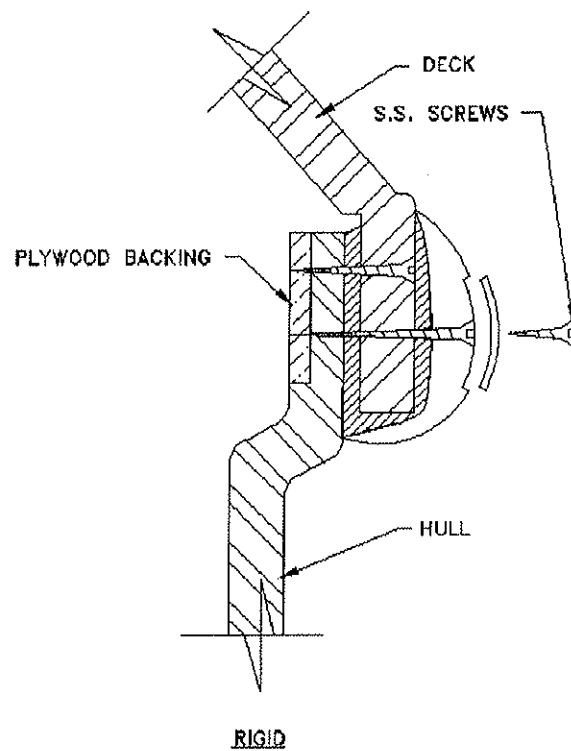
The deck of the CARVER 500 COCKPIT uses a complex system of laminated fiberglass to give it the ability to support the superstructure of the boat. All exterior surfaces, including the nonskid areas are coated with pigmented gelcoat. Where equipment and hardware are fastened, wooden or metal backing plates are used. Many of these backing plates can't be seen on a completed boat because they are actually laminated into the fiberglass. High stress areas receive additional layers of fiberglass laminates as reinforcement. The hull and deck are fastened together using the Carver "shoe box" hull-to-deck joint. This joint creates a strong and highly water tight union between these two critical components of your boat.

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Interior Modules

Carver utilizes a modular construction process. Major components and cabin modules are built independent of the hull and deck. These components are then fitted into the hull before the deck is positioned and secured.

Modules are designed to work with the hull and deck to add strength to the boat.



Carver "shoe box" hull-to-deck joint

MAINTENANCE

Maintenance Schedule

This section provides guidelines that will make you aware of the areas within your boat that need periodic attention. Time periods listed in this section are only rough guidelines. The more frequent your boat is used, the more often periodic maintenance needs to be performed. Boats used in salt water will require more maintenance, especially on the exterior of the boat.

OEM supplied manuals include information on detailed maintenance procedures that you should follow. Read these manuals and follow the component manufacturers suggestions.

Maintenance tasks have been divided into 4 categories:

TYPE "A" MAINTENANCE

Type A maintenance should be performed 48 hours after a new boat has been launched AND 48 hours after a boat has been launched following a period of onshore storage.

TYPE "B" MAINTENANCE

Type B maintenance should be performed after the first 25 hours of operation following initial launching and after periods of onshore storage.

TYPE "C" MAINTENANCE

Type C maintenance should be performed twice each season, every 6 months or every 100 hours, whichever period is more frequent.

TYPE "D" MAINTENANCE

Type D maintenance is performed seasonally, every 12 months or after every 200 hours of use, whichever period is more frequent.

A maintenance log is included at the end of this owner's guide. The items on the log correspond to the items on the following pages. Make several copies of the log. As you go through your routine maintenance, use the log to check the projects you have completed on the maintenance schedule.

A blank log sheet has been provided for your use when you do maintenance on your engine, generator, and head. Make a copy of this page and write in the suggested items from your OEM materials.

MAINTENANCE

General Maintenance Schedule

	TYPE A 48 hours after launching	TYPE B 25 engine hours after launching	TYPE C 6 months or 100 engine hours	TYPE D 12 months or 200 engine hours
ENGINES & DRIVE SYSTEM				
Maintenance as outlined in engine manual	As recommended by the manufacturer			
Inspect water intake hoses and connections		X	X	X
Inspect exhaust system hoses & connections	X	X	X	X
Inspect exhaust guard cover				X
Check prop for balance and nicks				X
Check strut bearings				X
Check rudder alignment				X
Check all thru-hull fittings				X
Inspect shaft log	X	X	X	X
Check engine and shaft alignment	X	X	X	X
Spray ignition switch with contact cleaner				X
Tighten engine mounts		X		X
Weigh Halon bottle			X	X
CONTROL SYSTEM				
Throttle and shift adjustments		X		X
Test neutral safety switch				X
Lubricate cables and controls				X
STEERING SYSTEM				
Inspect linkage and connections		X		X
Inspect hydraulic fluid level	X	X	X	X
Inspect rudder packing nut	X	X	X	X
Inspect tiller tie bar linkage			X	
X				
Inspect trim tab reservoir		X	X	X
BILGE SYSTEM				
Check and tighten garboard drain plug	X	X		X
Check and test bilge pumps	X	X	X	X
Inspect shower sump pump			X	X
Check and test bilge blower	Each time before starting engines or generator			

MAINTENANCE

	A 48 hours after launching	B 25 engine hours after launching	C 6 months or 100 engine hours	D 12 months or 200 engine hours
ELECTRICAL SYSTEM				
Inspect and clean batteries			X	X
Check battery fluid level		X	X	X
Check operation of all 12 volt equipment	X	X	X	
Check operation of all AC equipment		X	X	X
Inspect shore power cord			X	X
Inspect generator water intake and discharge		X	X	X
Inspect zincs			X	X
Generator maintenance	As recommended by the manufacturer			
FUEL SYSTEMS				
Clean engine fuel filters		X	X	X
Inspect for fuel leaks	X	X	X	X
Inspect fuel hoses for signs of chafe		X	X	X
Check propane system for leaks		X	X	X
Inspect propane storage system			X	X
FRESH WATER SYSTEM				
Flush water tank and system			X	X
Clean in-line water filter			X	X
INTERIOR				
Head maintenance	As recommended by head manufacturer			
Inspect thru-hull fittings	X	X	X	X
Clean refrigerator			X	X
Clean stove			X	X
Lubricate door hinges and locks			X	X
Clean vinyl fabrics and wall coverings				X
Spot clean woven fabrics				X
Spot clean carpet				X
EXTERIOR				
Check compass for magnetic deviation				X
Check trim tab system for leaks		X		X
Check deck hardware tightness & caulking				X
Clean vinyl upholstery			X	X
Clean plexiglass surfaces				X
Lubricate hinges, latches and locks			X	X
Wash weather covers				X

MAINTENANCE

	A	B	C	D
	48 hours after launching	25 engine hours after launching	6 months or 100 engine hours	12 months or 200 engine hours

FIBERGLASS SURFACES

Clean fiberglass				X
Wax hull and all non-tread areas				X
Repair chipped fiberglass			X	X

WOODWORK

Clean interior woodwork				X
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MAINTENANCE

Exterior Maintenance

Fiberglass Surfaces

The exterior fiberglass surfaces of the 500 COCKPIT are coated with a protective layer of gelcoat. Gelcoat offers a hard, smooth and durable surface. It does, however, contain very small pores that will collect dirt and discolor if the surface is not kept clean.

Washing the boat with fresh water after each outing will help keep the gelcoat clean. This is especially important for boats that are used in salt water. Periodically wash the boat with fresh water and a mild soap solution. **DO NOT USE ABRASIVE CLEANERS.** Abrasive cleaners will scratch and dull the gelcoat surface. Use a sponge to wash smooth surfaces and a stiff nylon or natural bristle brush to wash nonskid surfaces.

Wax all non-tread areas at least once a season. Use a high quality, non-yellowing, marine wax. Waxing your boat will provide a shiny surface and it will seal the pores in the gelcoat surface and make it easier to keep clean.



WARNING

DO NOT wax the nonskid surfaces. It will make them slippery and dangerous to walk on.

Gelcoat will eventually become dull with age, much like the paint on your car. When it becomes dull we suggest cleaning the gelcoat with an electric buffer and a fine grade polishing compound. Be careful, as the continued and overly frequent use of abrasive polishing compounds will eventually erode the gelcoat surface. Use the finest grade compound that will accomplish the task. Ask your Carver Dealer what brand and grade of polish to use.

Stress cracks are a common occurrence on all fiberglass boats. In the majority of instances these cracks are cosmetic and limited to the gelcoat surface only. Gelcoat stress cracks are rarely an indication of structural failure. If you discover stress cracks on your boat contact your Carver Dealer.

NOTE: The repair of cosmetic non-structural gelcoat stress cracks is not included under the terms of the Carver Limited Warranty.

Gelcoat Repair

Cosmetic repair of minor gelcoat nicks and scratches is not difficult nor does it require the use of special or unique tools. Any boat owner with a little practice can make visually satisfying repairs. Repairs to fiberglass laminates or structural fiberglass components are best left to the experienced technicians at your Carver Dealer.

A gelcoat repair kit is available from your Carver Dealer (Carver part number 82036-03). This kit includes color matched gel, gel hardener, and detailed instructions on making gel repairs.

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Gelcoat Blisters

While fiberglass is a durable and economical material, it is not indestructible as is often assumed by many boaters. The most commonly known problem associated with fiberglass is blistering. These blisters generally form in the gelcoat or in the outer most layer of laminate. They can range in size from microscopic, to two inches or larger in diameter.

The appearance of fiberglass blisters does not indicate structural problems or faulty hull lamination. Gelcoat blisters are formed through a natural process and are quite common.

If you discover blisters on the underwater portions of your boat's hull, contact your Carver Dealer.

Anti-Fouling Bottom Paint

The underwater surfaces of your boat are coated with a high-quality, factory-applied coat of antifouling bottom paint, applied after the hull has been carefully dewaxed and primed. Carver uses Rule KL-990 Epoxycop, a tough, abrasion-resistant paint for moderately-fouling water conditions. The paint has a high copper load and antifouling elements that will retard the growth of marine life on the bottom of your boat's hull. The antifouling elements within this paint have a limited life span, usually about 12 months. Because of this, Carver suggests you repaint the hull with a fresh coat of bottom paint on an annual basis. Be sure to use Rule KL-990 Epoxycop to avoid compatibility problems. Failure to do so can void your bottom paint warranty.

To prep the boat for painting, lightly rough up the existing paint with 80 grit or 100 grit sandpaper. Paint can be applied by brush, roller or spray. For multiple-season protection in moderately-fouling waters, apply an additional medium to heavy coat of KL-990 Epoxycop (Mfgr's #K52 black). For severely-fouling conditions, apply an additional medium to heavy coat of KL-990 Super Epoxycop (Mfgr's #K62 black). For both products, allow a 3 to 6 hour dry time between coats if two coats are applied. KL-990 paints are available through most marine distributors nationwide.

Caulking and Sealants

Deck fittings, rail bases, window frames and all underwater fittings have been sealed with the finest quality sealants available. These sealants however will not last indefinitely. The working action of the boat and the expansion and contraction caused by variations in outside temperature will eventually break down the sealant.

Fittings that have begun to leak must be resealed. Remove the fitting and clean the old sealant from both mating surfaces. Reseal the fitting using the sealant recommended by your Carver Dealer.

MAINTENANCE

Stainless Steel Rails and Hardware

Stainless steel is not rust resistant nor is it stain resistant. When left in contact with the marine environment it will rust and corrode. Proper care will help keep the stainless fittings on your boat looking bright and shiny.

Wash your boat with fresh water after each outing. Boats used in salt water should be washed with fresh water at least once per week, even if they have not been used. Clean stainless rails and fittings with soap and water. Glass cleaner is also good for cleaning stainless steel. Rust must be removed as soon as it is discovered. Failure to remove rust will lead to irreversible pitting. Use brass, silver or chrome polish to remove rust on stainless steel. Waxing stainless fittings and rails will help keep them in top shape. Use the same wax you use on the fiberglass surfaces of the boat.

CAUTION

NEVER use abrasives like sandpaper or steel wool to clean stainless steel fittings or rails. NEVER use mineral acids or bleach to clean stainless steel. NEVER let stainless steel come into prolonged contact with iron, steel or other metals which cause contamination leading to rust or corrosion.

Decorative Striping Tape

A variety of decorative stripes are used on the exterior of the 500 COCKPIT. Striping tapes are custom made to Carver's color and size specifications. Replacement striping tape is only available through authorized Carver Dealers. To remove a damaged section of tape, heat the area with a hair dryer. This will soften the adhesive and make the tape easier to remove. Adhesive residue can be removed with acetone.

CAUTION

Be careful when fueling your boat. Avoid spilling fuel on the decorative boot stripe or any other tape. Spilling fuel on the striping tape will damage the tape.

Windows

The window and hatch frames on your 500 COCKPIT are fabricated from aluminum. Some of these frames are painted with enamel. Clean painted and unpainted frames with fresh water and a mild soap solution. Use a sponge to clean window frames. Using a brush or abrasive cleaner will scratch and damage the appearance of the painted frame surface.

The cabin windows on the 500 COCKPIT are made from tempered glass. Clean these surfaces with a soft rag and glass cleaner. The bridge wind screen is made from formed plexiglass. **DO NOT** use glass cleaner to clean plexiglass. Use a mild solution of soap and fresh water.

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Exterior Vinyl Upholstery

The exterior vinyls on the 500 COCKPIT are made to resist the effects of sun, heat, acid rain, and soiling under normal conditions. Exterior vinyl can be cleaned with a mild solution of soap and water. Please consult the cleaning recommendations on the following insert. All cleaning methods must be followed by a thorough rinse with water. An occasional treatment with a vinyl protectant will enhance the appearance of your boat's exterior cushions and upholstery. Avoid saturating the exterior cushions with water.

Cleaning Supplies Include:

Ivory Dishwashing Liquid and water
Clean, white towels
Medium-soft brush
Fantastik Spray Cleaner

**NOTE: The following cleaners should not be used on seats repaired by Dr. Vinyl.
These cleaners will damage the repair spot.**

Denatured Alcohol
3M Citrus Cleaner (order call 404-447-7132)
Ammonia and hydrogen peroxide

- 1) Basic Stains, Grease, Pencil, Dirt:
- Use Ivory Soap and water or Fantastik Spray Cleaner applied with a medium-soft brush
- 2) Tough Stains, Adhesive, Teak Oil, Rust:
- Use 3M Citrus Cleaner; rinse with soap and water
- 3) Ink
- Use Denatured alcohol
- 4) Mildew Stains:
- To kill bacteria creating the mildew, vigorously brush the stained area with a 4-to-1 mixture of water and ammonia; rinse with water
- 5) Tough Mildew Stains:
- Apply a mixture of one teaspoon ammonia, one-fourth cup of hydrogen peroxide, and three-fourths cup of distilled water; rinse with water.

Always clean stains immediately. DO NOT use 409 Cleaner or Armor-All.

Exterior Carpet

Rinse the bridge and deck carpet with fresh water when cleaning the other portions of the boat's exterior. When the exterior carpet becomes soiled remove the carpet from the boat and wash with hot water and any brand of carpet detergent suitable for hot water extraction. To remove stains refer to the materials provided by the manufacturer of the carpet, which is included in the OEM materials pouch.

MAINTENANCE



VINYL CLEANING & CARE

Important information concerning your G&T vinyls. G&T vinyls are made to withstand the effects of sun, heat, acid rain, and soiling under normal conditions. Please consult these cleaning recommendations.

Steps	1	2	3
Betadine	B	A	
Chewing Gum	D	A	B
Eyeshadow	B		
Motor Oil	B		
Spray Paint	B	E	
Mildew or Wet Leaves*	C	A	B
Shoe Polish*	D	B	E
Yellow Mustard	A	B	C
Oil Base Paint (fresh)	D	B	E
Oil Base Paint (dried)	D	A	B
Suntan Lotion*	A	B	E

Steps	1	2	3
Tar/Asphalt	D	A	B
Lipstick	A	B	
Latex Paint	A	B	E
Crayon	D	B	
Ketchup	A	B	
Grease	D	B	E
Ballpoint Ink*	A	B	E
Household Soil	A	B	
Permanent Marker*	B	C	E
Coffee, Tea, Chocolate	B		

- A. Medium-soft brush, warm soapy water/Rinse/Dry
 - B. Fantastik Spray Cleaner/Rinse/Dry
 - C. One (1) tablespoon ammonia, one-fourth (1/4) cup of hydrogen peroxide, three-fourth (3/4) cup of water/Rinse/Dry
 - D. Wipe or scrape off excess (Chill gum with ice)
 - E. 3M Citrus Base Cleaner Rinse/Dry (617-733-1110*55)
 - F. Denatured Alcohol/Rinse/Dry
- Note: All cleaning methods must be followed by a thorough rinse with water.
- *Suntan lotion, shoe polish, wet leaves, and some other products contain dyes that stain permanently.

Certain household cleaners, powdered abrasives, steel wool and industrial cleaners can cause damage and discoloration and are not recommended. Dry cleaning fluids and lacquer solvents should not be used as they will remove the printed pattern and gloss. Waxes should be used with caution. Many contain dyes or solvents that can permanently damage the protective coating. Always remove stains immediately.

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 1726 Henry G Lane, Maryville, TN 37801, (800) 247-9901 — 475 36th Street, S.E., Grand Rapids, MI 49548, (800) 967-7753

For More Personalized Information About Our Products and Services:

1-800-247-9901

DO NOT USE
 409 CLEANER
 OR
 SILICONE BASE PRODUCTS!!!



IMPORTANT INFORMATION
 REGARDING YOUR VINYL

WHILE YOUR VINYL IS MADE TO WITHSTAND THE ELEMENTS, IT IS IMPORTANT TO CARE FOR IT BY KEEPING IT CLEAN AT ALL TIMES. MANY SUBSTANCES MAY STAIN YOUR VINYL IF LEFT ON OVER A PERIOD OF TIME. REMEMBER TO REMOVE ANY CONTAMINANT AND CLEAN VINYL IMMEDIATELY.

MAINTENANCE

Canvas

White Vinyl

White exterior enclosures are made from vinyl coated materials. Clean this material with a sponge and mild soap solution. Heavy dirt can be removed using a vinyl cleaner. Treat the vinyl with a vinyl protectant product twice each season.

Sunbrella

Colored canvas enclosures are made from Sunbrella fabric. Sunbrella should be cleaned regularly before dirt is allowed to accumulate and become embedded in the fabric. The fabric can be cleaned without removing it from the stainless steel bow supports. Brush off all loose dirt and hose down with a mild solution of natural soap and lukewarm water (no more than 100 degrees F.). Rinse with fresh water to remove soap. **DO NOT USE DETERGENTS.**

For stubborn stains: Remove the fabric from the bow supports. Soak fabric for 20 minutes in a solution of no more than 1/2 cup (4 oz.) Clorox and 1/4 cup (2 oz.) natural soap per gallon of lukewarm water (no more than 100 degrees F.). Rinse with fresh water to remove soap and let air dry.

WARNING

Excessive soaking in Clorox can damage sew threads. Cleaning Sunbrella using the method described above may remove part of the fabric's water repellency. Treat the fabric with an application of an air-curing fluorocarbon water repellent treatment to restore water repellency.

DO NOT SUBJECT CANVAS FABRICS TO EXCESSIVE HEAT. Fabric must be air dry before storage and stored in a dry, ventilated area.

Enclosure Curtains

The enclosure curtain's clear vinyl windows are easily scratched if cleaned incorrectly. Because of this, use only **NON-ABRASIVE** cleaners and a soft cloth to clean these surfaces. Glass cleaner and a clean, soft cloth can be used to remove water spots. Dirt and dust can be removed with a very mild soap solution and a clean, soft cloth. **DO NOT** use paper towel to clean the clear vinyl enclosure windows. Paper towel will scratch the windows.

There are several cleaners available that are made specifically for vinyl windows. If you elect to purchase and use one of these cleaners, try the product on a small, inconspicuous area to make sure the product does not damage or scratch the vinyl surface.

MAINTENANCE

Interior Maintenance

One of the best things you can do on a continued basis to maintain the interior of your boat is to make sure the cabin is well ventilated. Do not allow moisture to accumulate in the boat's interior. This will lead to a damp, musty environment. Mildew will form if the interior of the boat is damp. Ventilate the boat's interior whenever possible.

Woodwork

Solid hardwood and hardwood veneer is used throughout the interior of the 500 COCKPIT. Treat the interior woodwork of your boat like you treat your finest furniture. Dust the interior woodwork on a regular basis with lemon oil and a soft rag. Avoid using wax based furniture polish.

Avoid laying wet or damp towels or clothing on or against the finished hardwood surfaces.

Carver finishes interior woodwork with MOHAWK POUR-N-WIPE FINISH #603-3017. This is an industrial/commercial grade finish that is not commonly found at local paint and hardware stores. You can order MOHAWK POUR-N-WIPE (Carver part number 81069-00) through your Carver Dealer. Follow the manufacturers instructions on the product packaging when applying this product to your wood surfaces.

High Pressure Laminate (HPL)

HPL is used on many of the cabinet faces and counter tops within the boat's interior. HPL is extremely durable and is easy to clean. Clean the laminated surfaces with a cleaner made for use on household counter tops. Avoid using the counter tops as cutting surfaces. Cutting or slicing on the HPL surfaces will permanently scratch them.

Woven Fabrics

The fabrics used on the interior of the boat have been treated with a popular stain retardant product. The manufacturer of many of the fabrics used on the 500 COCKPIT has provided Carver with the following recommendations on cleaning interior woven fabrics. Woven fabrics are used to make drapes, pillow shams and bed spreads. Sofas and barrel chairs are also covered with woven fabrics. The following instructions can also be used to clean woven (fuzzy) headliner.

Cleaning Supplies Include:

Westley's Clear Magic (order call 1-800-545-0982)
Lendow Glass Cleaner (order call 1-313-777-2236)
Lift-Off-Spot Remover (order call 1-216-881-4070)
Clean white towels
Clothes shaver
Source of compressed air (if available)

MAINTENANCE

1) Basic Stains, Ink, Grease, Pencil, Dirt:

- Use Westley's Clear Magic

2) Adhesives, Teak Oil, Gum, Tar:

- Use Lift-Off Spot Remover

3) Water Stains:

While fabric is still wet, use an air hose and nozzle to go over the wet area. This will force the stain into the back of the fabric.

For stains that have dried, spray Lendow Glass Cleaner over the stained area. Let the foam dissipate, then rub the area with a clean white towel. Repeat.

4) Tough Stains, Set Water Stains:

Always try the technique outlined in #3 first. If that doesn't remove the stain...

Spray Westley's Clear Magic on the area, going 2" around the stain or, if possible, bring wetness to a break point, such as a bulkhead. Spray water on the area as directed on the product bottle. Let set about 5 minutes. Rub the area with a clean towel, rotating the towel as the stain is removed. As you rub, go a little beyond the wetness with the towel, flaring the edges.

Allow to dry or blow complete area with compressed air. Repeat if necessary or try the Lendow cleaner. After the stain is removed, use the clothes shaver to remove "fuzzies".

MAINTENANCE



FABRIC CLEANING & CARE

Important information concerning your G&T Marine Headliner and Fabrics

Steps	1	2	3
Water Stain	B	C	E
Motor Oil	A		
Spray Paint	A	D	F
Mildew	A	E	
Yellow Mustard	A	D	
Wet Leaves*	A		
Oil Base Paint	A	D	F
Suntan Lotion*	A	F	
Chewing Gum	D		
Tar	D	A	
Lipstick	A		

Steps	1	2	3
Ketchup	A		
Grease	A	D	
Ball Point Ink	A		
Household Soil	A		
Permanent Marker*	A	F	
Coffee, Tea	A		
Chocolate	A		
Adhesive	D		
Teak Oil	D		
Latex Paint	A	D	F
Crayon	A	D	

- A. White cloth - Westley's Clear Magic. 1-800-545-0982
- B. White cloth - Westley's Clear Magic - air hose.
- C. Lendow Glass Cleaner. 313-777-2236
- D. Lift Off Spot Remover. 216-881-4070
- E. Clothes shaver to remove lint.
- F. Follow instructions of staining agent manufacturer.

*Suntan lotions, wet leaves, permanent markers and some other products contain dyes that permanently stain.

Always clean immediately. Test an unseen area of fabric before cleaning stain.

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MAINTENANCE

Carpet

The carpet used on the interior of the boat has been treated with a popular stain retardant product. Care for this carpet as you would care for the carpet within your home. Vacuum often, shampoo as needed.

When your boat is new, the carpet will shed and need to be vacuumed frequently. This is normal. The shedding will stop after a few weeks.

Interior Fiberglass and Plexiglass

Interior Fiberglass

Gelcoated fiberglass is used to form interior components such as the shower stall, lower station helm module and the master stateroom bed platform. Interior fiberglass can be cleaned with any household cleaner that has been made for cleaning fiberglass. Many of these types of cleaners are marketed as "tub and tile" cleaners. Do not use abrasive cleaners on the interior fiberglass surfaces. Abrasive cleaners will scratch and dull the shiny gelcoat surface.

Plexiglass

Plexiglas is used to fabricate the shower door and mirrored face of the head compartment medicine cabinets and other areas of your boat. **DO NOT USE GLASS CLEANER TO CLEAN THESE SURFACES!!!** Glass cleaner will etch the polished surface.

Clean plexiglass with water and mild liquid detergent. Avoid use of abrasive cleaners and aromatic solvents. Remove fine scratches with fine automotive acrylic rubbing and polishing compound.

MAINTENANCE

Mechanical System

Engines / Generator

Maintain engines and generator in accordance with the instructions provided in the respective manufacturer's owner's manual.

There is an in-line sea water strainer installed in each engine and generator water intake lines. These strainers must be opened and cleaned at least every 30 days. If you are operating the boat in dirty waters or areas with a high degree of aquatic vegetation, inspect these strainers more frequently. A clogged strainer will restrict the intake of sea water which could lead to an overheated engine.

Thru-Hull Valves

Inspect the thru-hull valves on a monthly basis. Make sure the connections between the hose and the valve are tight. Look for water leaks around the area where the valve and hull meet.

Every 30 days open and close each valve two or three times. This will guard against the valve seizing in the open or closed position. While doing this make sure the valve handle is securely fastened. Tighten any loose handles.

Propeller Shaft Stuffing Box



DANGER

Inspect propeller shaft stuffing boxes ONLY when the engines are off. The engine compartment contains moving and hot machinery. KEEP YOUR HANDS, FEET AND BODY OUT OF THE ENGINE COMPARTMENT WHILE ONE OR BOTH OF THE ENGINES ARE RUNNING.

The propeller shaft extends through a water tight fitting called a shaft log. Check the shaft log every month. A slight seepage of water through the shaft log while the shaft is turning is normal. However, there should be minimal, if any seepage when the shaft is not turning. Tighten the shaft log packing nut if more than 6 drops of water seep through the shaft log in a minute.

Use two wrenches to tighten the packing nut. Use one wrench on the packing nut and the other on the jam or lock nut. The propulsion system on your boat is "counter rotating." The thread rotation utilized in the shaft log packing nut is specified in accordance with the propeller shaft rotation. If the shaft rotates clockwise (viewed from the stern), the packing nut utilizes a left hand thread. A right hand thread is used on packing nuts where the shaft turns counterclockwise. In the case of the 500 COCKPIT the port shaft log uses a right hand thread and the starboard shaft log is left hand thread.

MAINTENANCE

Slightly tighten the packing nut and tighten the lock nut. **DO NOT OVER TIGHTEN THE PACKING LOG.** Make minor adjustments and tighten just enough to reduce the seepage to a drop or two a minute. Over tightening the packing log will damage the shaft log.

Rudder Port

The rudder port provides a water tight fitting for the rudder shaft. It is normal for a slight amount of water to seep between the rudder shaft and the rudder port packing. The rudder shaft port packing nut should be tightened if more than 6 drops of water seep through the port every minute.

Tighten the rudder port packing nut using the same technique used to tighten the shaft log packing nut. Make note however that both rudder port packing nuts use right hand threads. Tighten the packing nut **ONLY ENOUGH** to bring the seepage to 1 or 2 drops a minute. If you tighten the nut too tight it will make steering difficult.

Props

Nicked or out-of-balance props will affect performance and smooth operation. Damaged props also can develop serious vibrations that may lead to drive train damage.

Inspect your props often. Carry a swim mask in the boat so you can take a look at the props while swimming. Have the propellers balanced by an established propeller repair shop at least once a year. Repair or replace damaged props.

A TIP FROM CARVER - *"Consider purchasing and carrying a spare set of props onboard your boat. Many marine dealers do not carry a full inventory of replacement propellers. A spare set will allow your vacation or cruise to continue in the event you should damage your boat's primary set of props."*



The blades of a propeller are sharp. Wear gloves when handling a propeller.

Struts

Propeller shaft struts require very little maintenance. Within each strut is a strut or cutlass bearing that provides a smooth surface for the shaft to rotate. These bearings occasionally need to be replaced. Replacement will be needed more often in water that has a lot of sand or abrasive material suspended in it. Have your marine technician inspect the strut bearings whenever the boat is pulled. Have the bearing replaced upon the technician's recommendation.

MAINTENANCE

12 Volt System

The majority of 12 volt difficulties that are experienced on a boat are caused by poor battery maintenance. The factory installed batteries on the 500 COCKPIT should provide several years use if properly maintained. Factory installed batteries are heavy duty batteries that have the ability to be discharged and recharged repeatedly without damaging the battery. However, completely discharging and overcharging a battery can result in a shortened battery life span.

Avoiding the following two situations will dramatically extend the useful life of your boat's batteries:

- 1) Do not store batteries that are only partially charged. Recharge batteries to a voltage reading between 12.3 and 12.6 volts before storing. Monitor the voltage reading every 30 days during storage and recharge if the voltage drops below 12.3 volts.
- 2) Don't overcharge your batteries. Stop charging the batteries when voltage is between 12.3 and 12.6 volts. Don't continuously trickle charge the batteries. Even trickle charging a fully charged battery will reduce its useful life.

While using the boat, use the voltmeters to frequently monitor the charge level of each battery bank. Monitor the charge level with the engines turned off (static condition). Use the onboard battery charger or the engine alternator to recharge the batteries when they are not fully charged. A fully charged battery bank will indicate between 12.3 and 12.6 volts on the voltmeter.

Avoid charging batteries that are already fully charged. Engine alternators will not overcharge the batteries. The AC battery charger installed on your boat however will switch to a trickle charge mode but will not "automatically" turn itself completely off.



CAUTION

Disconnect the batteries when performing maintenance tasks on the 12 volt system. Failure to do so could lead to electrical shock.

Inspect the batteries every 30 days. Clean any corrosion that has developed on the battery terminals. Spray a terminal protector on the terminals and battery cable eye connections. Make sure the battery cables are securely fastened to the terminals. Tighten the wing nuts SLIGHTLY beyond finger tight with a pliers.

Check the level of fluid in each battery cell. Top off low cells with "distilled" water. The fill level is marked along the side of the battery case.

Spray the connections for the bridge instruments and switches with an electrical connection protector every 6 months.

MAINTENANCE

Water, Bilge and Sanitation System Maintenance

Water System Maintenance

Maintain your boat's water system by emptying, flushing, and sanitizing the system at least once per season. Products are available at your local marine supply store that are made to sanitize fresh water systems.

Clean the in-line water filter every 6 months or twice per season. This filter is located near the pressure water pump. Two water tank vents have been installed through your boat's hull, one on the port side and one on the starboard. These vents include a screen over the opening to prevent dirt and insects from entering the vent hose. Clean these vent screens every 6 months or twice a season. Refer to the **Above The Waterline Thru-Hull Fittings** portion of **Section 9** for water vent locations.

Clean the shower sump frequently. Hair, dirt and soap scum will collect in the sump and if left unattended will eventually clog the sump pump system.

Bilge

Keeping your boat's bilge clean is important. A dirty bilge will lead to clogged bilge pumps and unwanted cabin odors.

Wipe all oil and dirt from the bilge. Treat the bilge with a commercially available bilge cleaning detergent twice a season. Clean the bilge pumps twice a season. Wipe any dirt or oil from the exterior surface of the pump. Clean the float switch so that it operates freely. Remove dirt from the bilge pump inlet screen.

Sanitation System

A marine sanitation system that is not maintained properly can create a variety of unpleasant problems. Unlike other systems within the boat that only require periodic attention, sanitation system maintenance is an ongoing process that must be maintained to avoid problems.

Always use waste system deodorizer. Use the brand recommended by your Carver Dealer. A boat's head and sanitation system is not like the toilet and sewer in a home. Do not flush any items down the head that the head was not designed to accommodate. Instruct non-boating guests on how to use the head before problems arise. Refer to the OEM supplier's manual for further advice on how to use, service and maintain the head.

Flush the holding tank with clean water EVERY TIME IT IS EMPTIED. This will help remove the last remnants of waste that may collect within the tank. Empty the holding tank often and when you know the boat will not be used for an extended period.