## Dear Correct Craft Owner:

Congratulations on your purchase of a Sport Nautique 216 / Air Nautique 216. You have chosen a boat that is unequaled "on the waters of the world" for water-skiing and wakeboarding.

Since 1925, we have manufactured some of the finest products boat builders can produce.

Your boat was manufactured with the latest marine technology and materials. You have bought into a legacy handed down by W. C. Meloon over 78 years ago. His dedication to building boats to the glory of God remains true today as the cornerstone of our commitment in bringing to you the finest in water sports boats. We continue to lead this industry in technology and design innovation. Our heritage is a source of pride. Years of experience, including that of four generations of Meloons have gone into the building of your boat. We hope that you will enjoy it to the fullest.

Take a moment to review this owners manual for your boat. We have assembled this manual to inform you about your boat and educate you further on boating. There are many tips and tricks on care and maintenance sprinkled throughout the manual, along with some cautions that will apply to your boat. Boating is very important to us and we would like you to enjoy many years of boating.

Welcome into the Nautique family.

Sincerely,

\*MZ

Walter N. Meloon President/Chief Executive Officer

Trust in the Lord with all thine heart; and lean not unto thine own understanding. In all thy ways acknowledge him, and he shall direct thy paths. Proverbs 3:5-6

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# Chapter 1

#### **O** V E R V I E W

#### Specifications Sport Nautique 216 / Air Nautique 216

Length (without platform) 21' 7.5"'	(6.59 m)
<i>Length (with platform)</i> 23' 5.5"	(7.15 m)
Beam (measured rubrail to rubrail) 91"	(2,31 m)
Draft	(0.61 m)
Water line to top of Air Nautique	
Flight Control Tower	(2,1 m)
Water line to top of Air Nautique	
Flight Control Tower (folded forward) 58"	(1.47 m)
Water ballast tank Capacity (Approx 400 lbs.) 50 Ge	al (189 ltr)
Approximate Weight 3280 lbs. (	(1,315 kg)
Lifting Rings (Distance between) 19'9"	(6.02 m)
Fuel Capacity	(114 ltr)
Max Capacity 10 people/1325 lbs	(602 kg)



# Welcome to the Sport Nautique 216 / Air Nautique 216 family.

We realize you may be anxious to get your boat in the water. This manual has been written to

familiarize and educate you about your boat so you will be more comfortable out on the water. Your boat is built to provide you with the finest watersports boat in the world. Whether you are slalom skiing or ripping on a wakeboard, we trust you and your family will enjoy this boat for many years.

Let's start by taking a look at the dash pod to familiarize yourself with the locations of the gauges and switches. For 2003 Correct Craft offers three different packages of options for your Nautique. These packages feature equipment or gauges. Based on your purchase package, these may be

standard on your boat. Consult your dealer for clarification of the featured package on your Nautique.

#### Dash Pod and Console Layout

Standard equipment on your boat are the following gauges: oil pressure, engine coolant temperature, speedometer, tachometer/ hour meter, fuel level, voltage. Other equipment based on your package may



Dash Pod

include: air/water temp gauge, clock, depthfinder, standard stereo remote control or digital stereo remote control, Correct Craft Cruise or Perfect Pass Digital Pro speed control. The optional gauges can be positioned on the console located to the right of the drivers knee.

CAUTION: The keypad and switch control box will be damaged beyond repair if the boat battery cables or the main power leads to the keypad and switch control box are reversed. Be sure to use caution and avoid reversing these connections.

## **Keyless Ignition and Serial Switching**

The ignition switch system is keyless and has three modes of operation.



Keyless Ignition

## Locked Mode

When the boat battery is first connected, the unit is in locked mode. In this mode, the horn, bilge pump, bilge blower, and code buttons are operational.

## **Unlocked Mode**

Unlocked mode is entered after the user successfully enters the user code, presses, and releases the start button. When the code keys are pressed, the system indicator light to the right of the start button will turn on while the key is pressed down. This indicates the button has actually been pushed. When the system is unlocked, power is supplied to the boat and the system indicator light will turn on. At this point all keypad buttons are operational and actuating these buttons will control the corresponding boat functions. To put the unit back in locked mode, the user must successfully enter the user code then press the stop button. When the code keys are pressed, the system indicator light to the right of the start button will turn off while the keys are pressed down. Power will be cut to all of the accessories with the exception of the horn, bilge pump, bilge blower and code buttons.

## Run Mode

First enter the unlocked mode.

Pressing and releasing the start button quickly will put the unit in run mode. When this is done, power is supplied to the engine ignition, but the engine will not crank and the ignition indicator light just left of the start button is turned on. If the start button is not pressed again within 15 minutes the unit will exit run mode by shutting off power to the ignition and re-enter unlocked mode. If the user presses and holds the start button, power is supplied to the ignition and starter for as long as the user holds the start button down. All accessory buttons are operational in this mode as well. Pressing the stop button will shut off the engine and the unit is then put back in unlocked mode.

After the engine starts, release the start button.

## Automatic Reversion to Locked Mode

If no keypad activity takes place for ten hours after unlocking, the system will automatically revert to the locked mode. This helps to minimize battery drain.

## Automatic Back-lighting

Pressing any keypad button will automatically turn the keypad back-lighting on for ten seconds. This feature is useful for those that use their boat after dark to find the appropriate keypad buttons.

## Multiple Keyless Ignition Codes

The keyless ignition system has provision for three different ignition codes. Any of the three codes may be used to unlock or lock the system.

The "Master Embedded Code" is programmed into the system at Correct Craft Inc. and is not changeable, remaining with the boat for its life. This code can be used to unlock the system, to lock the system and to erase the two user codes.

The "Primary User Code" is programmed into the system by the owner with the dealer's help at the time of boat delivery. This code is used to unlock the system, to lock the system, and to add or change the "Secondary User Code".

The "Secondary User Code" is programmed into the system by the owner when necessary. This code is only used to unlock or lock the system. The "Secondary User Code" is excellent to use for limited access to the boat.

## Programming and/or Changing Primary or Secondary User Code

Note: To help prevent battery drain, when you are finished using the boat make sure you STOP the engine and LOCK the PME ignition system (two steps). Note: The "System Indicator Light" is on the right-hand side of the ignition keypad. The "Ignition Indicator Light" is on the left-hand side of the ignition keypad.

## Programming the Primary User Code

Make sure that the system indicator light is off. Until a primary user code is set, the keyless ignition will behave as follows. Pressing start once will unlock the system while pressing it a second time will start the engine. Pressing stop once will turn off the engine while pressing it a second time will lock the system.

To program the primary user code, press the 1/2 button and the 7/8 button at the same time, putting the system in code programming mode. The system indicator light will be flashing.

Enter a code from two to eight characters long and press start. For verification, re-enter the code and press start again. The system indicator light should stop flashing and stay on. If the light does not stop flashing, press stop and begin again.

To lock the system re-enter either the primary user code or the master embedded code and press stop.

## Changing the Primary User Code

NOTE: The current primary code must be used to change to another primary code.

Make sure that the system indicator light is off. Enter the primary user code then press the 1/2 button and the 7/8 button at the same time. This puts the system in code programming mode. The system indicator light will be flashing.

Enter a code from two to eight characters long and press start. For verification, re-enter the code and press start again. The system indicator light should stop flashing and stay on. If the light does not stop flashing, press stop and begin again.

To lock the system re-enter either the new primary user code or the master embedded code and press stop. Please note, changing the primary code will erase the secondary user code. The secondary code will need to be re-entered.

## Programming or Changing the Secondary User Code

NOTE: The secondary code will only lock or unlock the system & can not be used for any reprogramming

Make sure that the system indicator light is off. Enter the primary user code and press the 1/2 button and the 5/6 button at the same time putting the system in code programming mode. The system indicator light will be flashing.

Enter a code from two to eight characters long and press start. Re-enter the code and press start again. The system indicator light should stop flashing and stay on. If the light does not stop flashing, press stop and begin again.

To lock the system re-enter any of the three codes and press stop.

## Erasing the User Codes

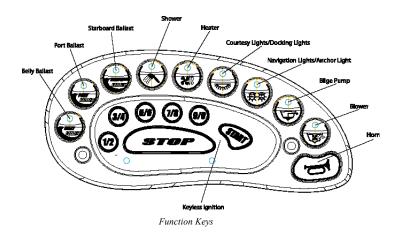
Make sure the system indicator light is off. Enter the master embedded code and press the 1/2 button and the 7/8 button at the same time. This will erase

the system user codes.

The keyless ignition will now behave as if there are no codes in memory. Pressing the start button will unlock the system and pressing the stop button will lock it without entering a code. To program a primary user code, make sure the system indicator light is off and press the 1/2 button and the 7/8 button at the same time. This puts the system in code programming mode. The system indicator light will be flashing. Follow the last two steps above to complete programming the primary user code.

## **Key Functions**

The following paragraphs describe the functions of individual keys on the keypad. The keys will be described in order left to right. Each of the keys, except for the "horn" key, has an indicator light on the top of the key. The indicator light will be on if the function controlled by that key is on.



## LCS or Ballast Control

The first three keys control the Launch Control System fill and drain pumps, if the boat is equipped with a ballast tank or tanks. Various configurations can include one single tank, two side tanks, or two side tanks and a forward mounted tank. If the boat is equipped with a single tank the key labeled "belly" will control the pumps for the tank. The keys for the two side tanks are labeled "port" or "starboard" and the forward-mounted tank key is labeled "belly."

To turn on the fill pumps for any tank, push and quickly release the appropriate key. This also turns on the indicator light at the top of the key. Pushing and holding the appropriate key for a short time turns on the drain pumps and also causes the indicator light for that key to begin flashing. Pushing and releasing one of the keys, with either fill or drain pumps on, will turn off the pumps.

Please see the manual section covering optional LCS or ballast tanks for complete operating instructions.

## Shower

The shower is turned on or off by pressing and releasing the key. The indicator light is on whenever the shower is on.

## Heater

The heater key controls four different heater functions. Pushing and releasing the "heater" key scrolls from "off" to "low speed" to "medium speed" to "high speed" and back to "off." The indicator light for this key is on if the heater is running at anyof the three speeds.

## **Courtesy / Docking Lights**

A quick push and release of this key turns on the indicator light and the courtesy lights, while a push and slight hold turns on the indicator light and the docking lights. Both the courtesy and docking lights can be turned on at the same time, but only if the courtesy lights are turned on first. If either or both of the two light functions are on, please note that the indicator light turns on and a push and release will turn off any of the lights that are on.

## Navigation / Anchor Light

A quick push and release of this key turn on the navigation lights and the indicator light, while a push and slight hold will only turn on the anchor light and will also cause the indicator light to flash. A push and release of the key turns off either of the lights.

## **Bilge Pump**

The bilge pump(s) is turned on or off by pressing and releasing the key. The indicator light is on whenever the pump(s) is on.

## **Bilge Blower**

The bilge blower is turned on or off by pressing and releasing the key. The indicator light is on whenever the blower is on.

## Horn

The horn key is strictly a momentary switch. The horn will blow whenever the key is pushed and will stop when the key is released.

## **Dash Pod Switches**

All dash pod switches interface with a sealed circuit breaker box located under the bow. The circuit breaker box consists of sixteen soft opaque flexible vinyl tubular shields which cover sixteen circuit switches. When the circuits are functioning, the tubular shield is somewhat flexible. A tripped circuit breaker will extend and fill the tubular shield, causing it to be inflexible. To locate a tripped circuit breaker, run your fingers over the two rows of switches and locate the switch shield that has become inflexible. To re-set, simply press in the extended circuit switch shield.

#### Bilge pumps

The bilge pump switch turns on the bilge pumps. There is a bilge pump down by the pylon and another bilge pump back by the rudder. When you push the bilge pump key on the keypad, both pumps will come on and run for several moments to "sense" if there is water in the bilge. If there is water in the bilge, they will remain on until the water is pumped out. If there is no water in the bilge, they will turn off. If you want immediate pump action, turn the switch off and then back on



Bilge Pump

again. The pumps will turn on periodically to determine if there is water in the bilge. If so, they will remain on until the water is pumped out. Trash in bilge can hurt bilge pump and fill pumps for ballast systems.

Note: The "Bilge" switch must be turned on for this feature to operate. This will not drain significant power from the battery unless the bilge pumps are required to run frequently because of a leak or excessive rainwater. This pumping system should not be relied on over an extended period of time. We suggest you frequently inspect your boat.

## **Bilge Pump Only Mode**

This feature is activated by a switch located below the gauges on the side console. The switch has three positions, on, off



PME Bypass

and bilge. If the boat is going to sit for more than a few days with the bilge pump on, it is important that the switch is set in the "bilge" position to minimize battery drain. This will activate the bilge pump and shut off power to the Serial Switching and Keyless Ignition System. It is important to remember that the engine or other accessories can not be used unless the switch is in the "on" position.

Located with the switch is a circuit breaker and indicator light for the bilge pump. The circuit breaker is only active when the switch is in the "bilge" position. The indicator light will come on anytime the bilge pump is activated.

#### Navigation Lights

This switch controls the navigation lights. The law requires the bow light and the 360 degree light (located at the transom) be turned on while running the boat after sunset or before dawn.

### Anchor

This switch turns on the 360 degree light. Insert this light pole into the receptacle located on the transom and push the anchor switch on the pod to turn this light on. This light is required by law to be on after sunset and before dawn when the boat is not moving.

#### Accessories

There is an accessory button provided that controls power to a yellow wire coiled up near the control box. Power to this wire is protected by a 10-amp circuit breaker. Attaching an accessory to this wire should be done by someone knowledgeable in DC electrical wiring.

### Ventilation Blower

This switch turns on the blower in the bilge. This blower must be turned on for four (4) minutes prior to engine ignition and also at anytime when the boat is operated at slow speeds.

### 12 Volt Plug

This plug can be utilized to power cellular phones, video cameras or various other electronics. This plug is powered through a ten (10) amp breaker.

## Engine Warning Light

This light is in the center of the dash pod between the speedometer and the tachometer and indicates high engine temperature.

Horn This is a momentary switch.

## Gauges on the Pod

- Volt This gauge tells you how many volts the alternator is producing. During normal running, it should read 13-14 volts. Running a heater, shower or stereo amplifier will draw power from the alternator and possibly drop voltage below normal. If this occurs, the battery will not charge correctly.
- Temp This tells you the temperature of the coolant in the engine.
- Oil Pressure This gauge tells you the engine oil pressure.

• Tachometer / Hour Meter This gauge indicates the revolutions per minute the engine is turning, and the total accumulated engine hours.

• Speedometer Your Nautique is equipped with a speedometer by Faria. For a detailed analysis of your speedometer, refer to the Faria speedometer section

at the end of this chapter or in Chapter 2.

- Emergency Cut-off Switch There is an emergency cut-off switch for the protection of you and your passengers. The clip at the end of the cord must be attached securely to the driver. Check the system by attaching the clip to the switch, start the boat and then pull the clip off the switch. The engine should stop. UNDER NO CIRCUMSTANCES SHOULD YOU OPERATE THE BOAT IF THIS SYSTEM DOES NOT FUNCTION PROPERLY. If it does not function correctly, contact your Correct Craft dealer to have the problem corrected.
- Throttle The throttle control consists of the throttle lever, a lock out ring and a neutral button. The neutral button is a push-button at the bottom of the throttle lever which allows the throttle to be advanced without the transmission being engaged. The throttle lever must be in the neutral position to start the engine.



The throttle arm has three detent positions.

Note: When in a detent position the throttle arm

will resist movement, but can be moved with sufficient pressure. Neutral detent is straight up. Forward detent is approximately 30 degrees toward the bow, and reverse detent is approximately 30 degrees toward the stern. Moving the throttle from neutral detent to either forward or reverse detent will shift the boat into that gear. The engine will remain at idle speed. To increase (forward or reverse) engine speed and therefore boat speed, continue to rotate the throttle arm past the detent.

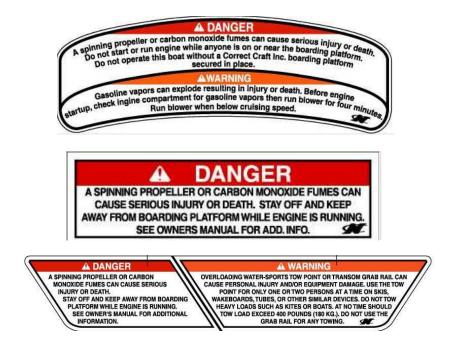
Note: When shifting out of neutral, it is best to pause in the appropriate detent before applying additional throttle.

The lockout ring mechanism prevents unintentional shifting into forward or reverse. To operate the throttle lever, you must lift the lockout ring. **DO NOT** shift quickly from forward into reverse. Stay in the neutral position until the boat has lost speed before shifting into reverse. Shifting should not be attempted above 1200 RPM except in emergency situations.

## CAUTION: LOADING AND UNLOADING OF PASSENGERS FROM A DOCK OR FROM THE WATER SHOULD ONLY BE DONE AFTER THE ENGINE HAS BEEN TURNED OFF.

#### **Boarding Platform Safety**

The boarding platform of your boat is a very convenient feature that greatly enhances the water towed sports experience. There are however, some serious safety concerns regarding the use of the platform. Correct Craft, Inc. has placed warning labels at the driver's position, on the deck at the rear of the occupant area, and on the transom.



It is very important to read and be familiar with the information contained in these labels and to always adhere to the boat operation practices described on them. The United States Coast Guard issued a SAFETY ALERT on August 28, 2001 that cover some of the issues of improper use of the boarding platform. The SAFETY ALERT and portions of the accompanying information follow:

## SAFETY ALERT:

The United States Coast Guard advised boaters not to "Teak/Drag Surf." Recent boating fatalities revealed that carbon monoxide (CO) emitted from a vessel's exhaust resulted in CO poisoning and the death of at least six teak surfers. "Teak/Drag Surfing" places the individual in position directly exposed to the CO in the engine's exhaust. This may result in a loss of coherent responses and even death. In addition, "Teak/Drag Surfing" dangerously exposes the individual to a possible propeller injury, and since it is done without a life jacket (PFD), it significantly increases the probability of drowning. Therefore, the Coast Guard stresses, "Teak/Drag Surfing" is a very dangerous activity and advises boaters not to participate in it.

The Coast Guard pointed out that carbon monoxide is one of the most dangerous gases. It strikes before you know you are exposed and it impairs in a way that can and too often doeslead to death. That is why it is so important to the Coast Guard that in every circumstance where it can be avoided, it is. "Why is it dangerous? It is like playing with a loaded gun," Evans said. He then noted, "As I explained in the previous advisory, "Teak/Drag Surfing" entails individuals taking hold of the swim platform of a vessel while it is underway. After a large wake builds up, they let go of the platform and body surf. This puts the individual directly in the path of the vessel's exhaust where they breathe in dangerous levels of carbon monoxide. If that in itself is not dangerous enough, the individuals are also in a position that a slight miscalculation may throw them in to a spinning propeller. "And, it doesn't stop there, Evans said, in order to "Teak/Drag Surf" you cannot wear a life jacket, the two do not go together. So, all this is a receipe for tragedy. A tragedy that the Coast Guard wants to see averted, and that is why we are re-issuing this alert."

### Pylon

The ski pylon is manufactured from high strength aluminum alloy that is engineered for durability. It is hard coat anodized and impregnated with a PTFE (teflon) material. If the pylon becomes loose, stop using the pylon and take the boat to your Correct Craft dealer for service.

PYLON--WARNING/CAUTION--AVOID PERSONAL INJURY. THIS WATER SKI PYLON WAS DESIGNED FOR WATER SKIING ONLY. ANY OTHER USES, SUCH AS PARASAILING, KITE FLYING, TOWING OTHER BOATS AND/OR USING AN EXTENDED PYLON, ECT., MAY OVERSTRESS THE PYLON POSSIBLY CAUSING PERSONAL INJURY AND/OR EQUIPMENT DAMAGE. DO NOT SIT BEHIND (AFT) THE TOW PYLON WHEN TOWING SKIERS.

CAUTION: ALTHOUGH THE EXTENDED PYLON AND BAREFOOT BOOMS HAVE BECOME POPULAR ADDITIONS TO MANY TOURNAMENT INBOARDS, CORRECT CRAFT STRONGLY OBJECTS AND OPPOSES THE USE OF ANY PYLON EXTENSION WHETHER UP OR TO THE SIDE OF ANY OF IT'S PRODUCTS. THE USE OF PYLON EXTENSIONS CAN ALTER THE HANDLING CHARACTERISTICS OF THE BOAT, POSSIBLY RESULTING IN DANGEROUS INSTABILITY, WHICH COULD THEN LEAD TO LOSS OF CONTROL; A SITUATION WHICH COULD CAUSE SERIOUS OR FATAL INJURY TO THE BOAT DRIVER, PASSENGER(S), PERSON(S) BEING TOWED, AND ANYONE ELSE WHO MIGHT BE IN THE VICINITY OF SUCH A MISHAP.

CAUTION: CORRECT CRAFT DOES NOT APPROVE OF ANY STRUCTURAL CHANGES, ADDITIONS OR MODIFICATIONS TO OUR PRODUCTS. ANY TIME A DEALER OR CONSUMER MAKES A CHANGE(S) TO OUR PRODUCT, THEY DO SO AT THEIR OWN RISK AND SOLE LIABILITY. CORRECT CRAFT, INC. WILL NOT BE HELD LIABLE FOR UNAUTHORIZED CHANGES, WHETHER DELETIONS OR ADDITIONS, TO THE ORIGINAL EQUIPMENT / PRODUCT MANUFACTURED AND SOLD BY CORRECT CRAFT, INC., EVEN IF SUCH CHANGES, ADDITIONS, ECT. ARE MADE BY AN "AUTHORIZED" DEALER, CUSTOMER, PROMOTIONAL REPRESENTATIVE OR ANY

#### OTHER PERSON, KNOWN OR UNKNOWN TO CORRECT CRAFT, INC.

#### Lifting rings

Your boat has lifting rings at the bow and at the stern. These are designed to lift your boat in a steady and secure manner. Be certain to use a winch that has a lifting capacity sufficient for your boat. See boat weight specs in the front of this manual. These weights are dry weight. You must add the weight of the battery, fuel, and gear to the dry weight.

#### CAUTION: DRAIN THE BILGE AND/OR LAUNCH CONTROL SYSTEM AND/OR AFTERMARKET WATER BLADDERS(S) TO ELIMINATE EXCESS WATER BEFORE YOU LIFT THE BOAT.

Note: Only use a hook that will pass easily through the lifting ring without binding. This is very important. A hook that is too large or off-center could break the lifting ring.

#### **Capacity Plate**

The capacity plate is used by boat manufacturers participating in the National Marine Manufacturers Association certification program. Correct Craft has submitted your model for inspection and compliance with their guidelines.

The capacity plate has the following information permanently printed on it. It is attached to the boat by the throttle for the operator to read before they drive the boat.

• The total weight of persons, gear and other items which the boat is capable of carrying under normal conditions. This weight must include any water added to ballast other than the Launch Control System.



Capacity Plate

• The maximum number of persons allowed on the boat.

This information on the capacity plate applies under normal conditions and special care must be used in any other than normal conditions.

Check the capacity plate on your boat and abide by these limits.

NOTE: CORRECT CRAFT, INC. INSTALLS A PERMANENT WAKE ENHANCEMENT BALLAST TANK SYSTEM IN SOME MODELS. THE FULL WEIGHT OF THIS SYSTEM HAS ALREADY BEEN CONSIDERED IN THE BOAT WEIGHT AND THEREFORE DOES NOT INFLUENCE MAXIMUM CAPACITY, UNLIKE PORTABLE BALLAST TANKS OR WEIGHTS, WHICH MUST BE INCLUDED AS PART OF THE GEAR WEIGHT. CAUTION: A FULLY LOADED NAUTIOUE WILL HANDLE DIFFERENTLY THAN A LIGHTLY LOADED ONE. DRIVE AND YOUR NAUTIQUE WITH THIS IN MIND. TURN AS WAKEBOARDING HAS DEVELOPED, WE HAVE WITNESSED THE ADVENT OF BALLAST SYSTEMS WHICH ADD WEIGHT AND INCREASE THE SIZE OF THE WAKE. THE SIMPLEST BALLAST SYSTEM ON THE MARKET IS THE WATER BALLAST TYPE, SUCH AS THE 'LAUNCH PAD". IT IS NOT UNCOMMON TO SEE OPERATORS USE SUCH SYSTEMS AND THEN PUT ADDITIONAL PEOPLE IN THEIR BOAT. PLEASE BE ADVISED CAN THAT THIS PRACTICE LEAD TO **OVERLOADING OF YOUR BOAT.** EACH CORRECT CRAFT, INC. BOAT HAS A REQUIRED CAPACITY LABEL THAT MEETS THE MAXIMUM WEIGHT OF PEOPLE, GEAR, AND BALLAST THAT CAN BE PLACED IN THE BOAT. ALWAYS BE AWARE OF THE LOAD IN YOUR BOAT AND DO NOT LOAD THE BOAT IN EXCESS OF THE LISTED CAPACITY. THE OUEST FOR THE "PHATTEST" WAKE HAS CAUSED SOME TO EXCESSIVELY **OVERLOAD THEIR BOATS. THIS MAY ADVERSELY AFFECT** THE OPERATION OF THE BOAT, POSSIBLY RESULTING IN INJURY TO PERSONS INSIDE AND/OR OUTSIDE OF THE BOAT. AVOID PERSONAL INJURY. DO NOT OVERLOAD YOUR NAUTIOUE.

#### Hull Identification Number

The hull identification number is a requirement of the U.S. Coast Guard for boat manufacturers. It is a standardized numbering system that assigns a specific sequence of numbers and letters to a specific boat. This number is molded into the hull. You will find it on the right-hand side of the transom just below the rubrail. Write this number down in your records and keep it in a safe place away from the boat.

Here is a brief explanation to help you understand the hull number:

The first three digits represent Correct Craft, Inc.(CTC). The next five digits are the boat's serial number. The following digit is a letter from "A" through "L" designating the month the boat was made.

There are three remaining numbers. The first of these represent the last digit of the year the boat was built. The final two numbers state the MODEL year. A boat built in July of 2002 is actually a 2003 model boat.

## **Driver's Seat Adjustment**

There is a lever under the driver's seat on the left side that allows the seat to slide.



Drivers Seat Adjustment

## Fueling

There is a fuel fill on the port and starboard side for added convenience. Remove the slotted fuel fill cap to put gas in the boat. There is a special "key" for this cap. Use caution when fueling your boat. Never fuel your boat unattended. Use care to avoid being splashed by fuel, or spilling fuel.

#### Ski Locker Latch

Push down on the raised portion of the latch and the handle of the latch will pop up. Lift the ski locker door with this handle. Due to various environmental conditions, equipment and other items should not be left in storage compartments for a long time. All storage compartments that get wet or damp should be left open to the air to dry.

#### Love Seat

Access storage under the bow area by lifting up on the bottom of the love seat cushion. The entire love seat will hinge upward to allow access. You can leave this seat in the "up" position to help dry the carpet.

#### Jump Seat

This optional seat can be placed between the love seat and the drivers seat or behind the drivers seat.

#### Walk Through Windshield Opening/Latching

There are two latches on the inside starboard edge of the walk-through windshield. Rotate both of these latches until the door can be opened. Always have this closed and latched when towing the boat.

#### Dash Cooler

The dash cooler can be used to store misc. items or drinks. There is a drain installed in this box. Do not depend on this cooler to keep valuables or electronics dry. We suggest keeping these sort of items in a specialized dry bag.

#### **Stereo Option**

All Nautiques are stereo ready. Signature models have been pre-wired for your dealer to install a stereo. Limited and Team Edition Nautiques come with a Clarion stereo with Clarion speakers or a Kicker upgrade speaker system. Correct Craft mounts all of its stereos in the glove box on the dash of your Nautique. A standard or digital remote control is mounted on the lower left side of the *Stereo* dash pod. The digital remote control displays all necessary control functions at your fingertip. Consult your

Stereo Remote Control

necessary control functions at your fingertip. Consult your dealer for the stereo configuration in your boat.

## Engine Box Latching/Lifting

There are two rubber latches that hold the top of the engine box to the base. Pull on the top of these latches and the upper part or the engine box will be released. Lift up on the engine box handle and the gas shocks will help you lift the engine box. This "clam-shell" design allows you to check the engine without lifting the entire engine box. You can leave the top open to dry the bilge.

#### Engine Cooling Water Intake Shut-Off Valve

Your boat is equippd with a shut-off valve (seacock) on the engine cooling water intake. This valve can be viewed and manipulated by opening both upper and lower sections of the engine box. The valve is located on the starboard side of the transmission. The valve is open whenever the handle is in line with the valve body. It is closed when the handle is perpendicular to the valve body. The valve can be left in the open position all the time unless emergency conditions require closing the valve to stop a leak or eliminate the possibility of leakage.

#### Stern Seat Bottom Cushion

The stern seat bottom cushion can be removed by releasing the port and starboard hold down strap. The seat cushion can then be lifted out of the boat and stored under the bow.

#### **Bow Features of Your Nautique**

The open bow section of your boat has removeable cushions. The center section can be removed and stored in the trunk or under the love seat. The cushion on the starboard side of the bow section can be removed exposing an insulated cooler. Storage on the port side and front section is also revealed by the removal of cushions. The speaker mods on both the port and starboard side house optional speakers, as well



Engine Box Latching



Engine Cooling Water Intake Shut-Off Valve



Stern Seat Bottom Cushion



Bow Section

as a standard hot plug.

## Trunk

There is 17cubic feet of storage available inside the trunk (less with the ballast tank system). This is an excellent place to store skis, wakeboards and other gear.

## Manual Latch Release in Trunk

Should the hatch latch need to be released from the inside there is a ringed pin that when pulled from the inside will release the latch mechanism.

## **Fuel Tank Location**

The fuel tank is located beneath the stern seat. To inspect the hose connections, lift the trunk lid and remove the curtain behind the fuel tank.

## Launch Control System (Ballast Tank Valves)

Your Nautique may come equipped with rigid ballast tanks. Correct Craft offers a unique fill and empty system. By opening the flow rite valves located underneath the dash to your left knee and then pressing the port and starboard ballast button on the keypad on the right side of the dash, the tanks will fill. When the tanks are full, press the buttons again and the pump will turn off. Then close the valves. To empty, reverse this process by opening the valves and



Manual Latch Release



Flow Rite valves

press and momentarily hold the port and starboard ballast buttons causing a blinking light to appear. Monitor your ballast tank gauge located on the console to determine when the tanks are empty. Then turn off pump and close valves.

## Winterization of Optional Launch Control System

In order to winterize the Launch Control System, take the following steps:

1. Make sure the launch control system seacocks (located in the bilge - see your local dealer) are open. Empty the system completely using the drain pumps.

2. Remove the stern seat base, engine box, and removable floor section from the boat. Each tank has a drain hose located adjacent to the muffler on the appropriate stringer. Remove the cap from the drain hose and allow the tank to drain until it stops. Reach under the fuel tank and remove the empty hoses from the empty pumps. Remove the fill hoses from the fill pumps under the front of the engine. Raise and lower the bow of the boat while the system is draining to insure that water is removed from the pumps.

3. Re-install all hoses, put the caps back on the drains hoses, and put the rest of the boat together.

## Folding Instructions for Optional Flight Control Tower

In order to fold the Flight Control Tower forward, grasp the knobs found under the support structure on the port and starboard sides of the tower. Unscrew the threaded bolts. Rock the tower forward. The tower will rest on the grab rails of the bow section of the boat. In the folded position, it is also recommended that the tower be securely strapped to the grab rails. In order to reposition the tower in the upright position, simply reverse the steps.

## Flight Clips

One set (4) of flight clips will hold a maximum of 4 wakeboards. Do not attempt to overload Flight Clips with more than one piece of equipment per slot. When loading boards into flight clips always insert boards into individual slots so that the board bottoms are facing each other. Always visually inspect bungee to insure that the locking ball is securely in the locking claw (see illustration). WARNING! Avoid personal injury or property damage caused by flying objects. Remove any items from flight clips when trailering boat.



## **Boarding Platform Removal**

Flight Clips

Pull the two pins that are located in the mounting brackets and lift the platform vertically.

## **Battery Location**

The battery is located under the floor in front of the motor box.

## **Optional Correct Craft Cruise**

Turn system **ON** (light blinks slowly, indicating system is armed)

Drive to desired speed, prese ENGAGE and the system takes control of the throttle (Light stays on steady)

Pull back on the throttle and the system disengages. (Light blinks rapidly, indicating RESUME function is ready)

Accelerate again and the system resumes control <u>automatically</u> at the last speed used.

RESUME key feature will recall the last speed used even if the system was shut off, completely powered down or the DISENGAGE function was used. To go back to the previous speed, press RESUME and drive to the desired speed.

Press both keys and the system will DISENGAGE,but remains armed. (Light blinks slowly) This feature may be used when the operator wishes to go to manual driving. To return to the last speed used, press the RESUME key and drive to the desired speed. If the speed is to be changed, drive to that speed and press engage.

INCREASE / DECREASE key can be pressed when the system is engaged to change speed in 25 RPM increments to fine tune the speed.

## User tips:

Always return to neutral and let the engine idle for two or three seconds before turning the engine off Regularly check the black servo knob on the control unit to make sure it is turned snugly in a clockwise direction. To do this, turn the engine off and lift the top half of the engine box. Please note, the servo knob cannot be moved if the engine is on.

Regularly check the set screw on the side of the black knob for tightness.

The boat speed will decrease in sharp turns. If you are towing skiers, you may wish to manually increase the throttle or use the DISENGAGE feature to maintain speed in sharp turns.

When towing wakeboarders, accelerate slightly past desired speed prior to engaging the speed control.

## **Standard Faria Instruments**

All Signature Series Nautiques feature 5" Faria speedometers and tachometers. These gauges are white faced with large tick marks for easy reading with high contrast pointer. The gauges are paddle wheel driven with potentiometer adjustments. Should your boat be packaged as a Limited or Team Edition, refer to the Faria Serial Bus chapter regarding your speedometer and tachometer.

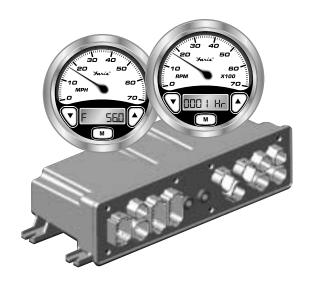


Faria Analog Tachometer



Faria Analog Speedometer





# **Serial Bus** for CorrectCraft<sup>®</sup> Pleasurecraft GM Engines

# **Owner's Manual**

- Visual /Audible Alert Messages
- Easy Installation
- Waterproof Connections
- Easy to Read Digital Displays
- Easy to use Depth Sounder
- Multiple Interfaces



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## System

The system consists of:

- One Gateway box to interface with MEFI IV ECU and external senders and sensors.
- One 5" Tachometer with Fuel Monitor
- One 5" Speedometer with Depth Sounder
- optional second 5" Speedometer
- Various 2" instruments, including but not limited to
  - Voltmeter
  - Oil Pressure gauge
  - Fuel gauge
  - Engine Temperature gauge
  - others as specified.

## **Initial Setup**

The setup function is normally only used for a new installation. It is not required to follow this procedure every time the instruments are turned on.

The tachometer is used to initialize the fuel tank size required for the fuel management function. Press the "mode M" button while the power is turned on, to enter the "setup" mode.



Mode Button

The LCD will show the current fuel tank size selection. The choices are displayed with the "Up" or "Down" buttons. After selecting the closest tank size, press and hold the "mode M" button for 3 seconds to save the selected size and start normal instrument operation.



Select from one of the following fuel tank capacity options:

29 gallon 30 gallon (default) 35 gallon 39 gallon 50 gallon

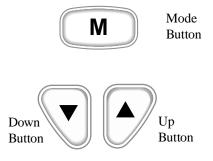
# Operation

## General

The Faria® Serial  $Bus^{TM}$  system is designed to receive information from the engine ECU and various individual sensors throughout the boat. This information is transformed into digital data which is distributed to analog and digital instruments via a single cable consisting of two shielded, twisted pairs of conductors.

Each instrument selects the data which is applicable and displays it as if it was being received from the sender directly. One of the two pairs of conductors carries the data while the other pair of conductors carry the power for the instruments.

The tachometer and speedometer each have three push buttons which allow the different functions of each instrument to be activated. Following is a description of these functions.



Page 2

## Speedometer / Depth Sounder

The Serial Bus Speedometer / Depth Sounder provides both the functions of a speedometer and a depth sounder. The analog speedometer is a stepper motor instrument which looks like a standard analog device but which is actually a digital instrument. On small pointer movements you may occasionally see the pointer moving in the one third degree "steps" that represent the accuracy of the instrument.

#### **Speedometer Calibration**

The analog speedometer displays the speed of the boat through the water. The speedometer is calibrated at the factory for normal installations which use a pitot tube sensor. As significant variation has been found in various installations, the speedometer can be easily calibrated to a known reference such as a radar gun or GPS. The LCD will display;



When the unit is operating in normal mode (i.e. pitot status information on the LCD), push and hold the "mode M" button down for 2 seconds will cause the speedometer to go to the calibration mode.



The LCD will show "AdJUST".



Run the boat at a constant 30 MPH as

measured by the GPS or radar. Adjust the speedometer pointer by pressing the "Up" or "Down" buttons until the speedometer matches the GPS or radar speed.



When finished, press the "mode M" button to exit the adjustment screen. The operator has the option of saving or canceling the adjustment procedure. The options can be selected using the "Up" or "Down" buttons. To save the calibration setting, press and hold the "mode M" button for 2



Mode Button

seconds when the display shows "SAVE"



To exit the adjustment procedure without saving, press and hold the "mode M"



button for 2 seconds when the display shows "NO SAVE". Multiple runs in opposite directions may be necessary to compensate for errors due to water currents.



The speedometer also measures the water pressure in the pitot tubes when power is first turned on. This measurement is subtracted from later readings to correct for the pressure caused by the weight of water over the pitot pick-up.

For maximum accuracy, the boat should not be moving when the key is turned on, especially in a re-start condition. If the boat is moving, the pressure in the pitot will be greater than normal, resulting in the speedometer reading low.

**Dual Pitot Operation** The system is designed to be operated with two pitot pick-ups for speed sensing. The speed displayed is based on the pitot with the highest pressure. On the speedometer LCD display, the active pitot sensor will be identified by a "P" or "S". It is normal to see the display switch between the port and starboard pitot sensors, especially in high speed turns.

Both pitot sensors are continuously monitored, and blockage in either sensor will be detected. If a sensor becomes blocked, the system will switch to the clear pitot sensor. An "XX" will flash in place of the "P" or "S" on the speedometer LCD to indicate which sensor is blocked.



Port Sensor - Starboard blocked



Starboard Sensor - Port blocked

Clean the pitot sensor to restore normal operation.

### **Depth Sounder**

The depth sounder is turned on and off with the ignition switch. The depth sounder can also be turned off at any time, while in depth display mode, by pressing and holding the "mode M" button while the depth sounder counts down a three second delay.



Mode Button

The depth display will then indicate "OFF".



Press and hold the "mode M" button to turn the depth sounder back on.



Mode Button

The LCD screen displays the depth sounder data. When there are no alarm conditions, the water depth is displayed. If the signal is weak or lost, or there is no transducer connected, then the display will alternate between the last known depth and three horizontal bars.



## Canceling depth alarms

A depth alarm warning can be temporarily canceled by pressing both "Up" and "Down" buttons on the speedometer, simultaneously. After one minute, the



alarm will resume if the condition that caused the alarm is not corrected. The operator can cancel the alarm as many times as necessary, until the condition is corrected.

The depth alarm warning will replace any information on the LCD screen. Canceling the alarm will restore the LCD to the original display. If not already in the depth mode, this would be a good time to switch to it (using the "mode M" button) in order to monitor water depth.



Mode Button

## **Depth Sounder Alarm Settings** Note: *Speedometer display must be in depth display mode to change settings.*

To change the depth sounder alarm settings the "mode M" button must be held down until the depth display changes to the alarm settings mode.



There are four menus in the alarm settings mode. Pressing and releasing the mode switch quickly will cycle through the different options.

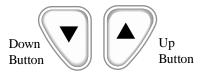
## Shallow alarm

Alarm sounds when water depth equals or is less than the set value.

The display will show "S X.X"



which is the current setting for the shallow alarm. Pressing the "Up" or "Down" buttons will change the shallow setting.



Holding the "mode M" button in for 2 seconds will save the new shallow setting and change the display back to the normal depth mode. **Set to zero to disable alarm.** 



Mode Button

## Deep alarm

Alarm sounds when water depth equals or is greater than set value.

The display will show "d XX.X", which is the current setting for the deep alarm.



Pressing the "Up" and "Down" buttons will change the deep setting.



Holding the "mode M" button in for 2 seconds will save the new deep setting and change the display back to the normal depth mode. **Set to zero to disable alarm.** 



Mode Button

## Keel offset

Adjust depth sounder to measure depth below keel or drive instead of sensor.

The display will show "K X.X" which is



the current setting for the keel offset. Pressing the "Up" or "Down" buttons will change the keel offset setting.



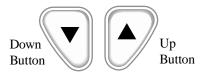
Holding the "mode M" button in for 2 seconds will save the new keel offset setting and change the display back to the normal depth mode. The Keel offset is normally a negative number.



## Units

Change the unit of measure.

The display will show "UNIT FT" for feet, "UNIT FA" for fathoms, or "UNIT M" for meters. Pressing the "Up" or "Down"



buttons will cycle through the choices. Pressing and holding the "mode M" button will save the units shown in the display will save the units shown in the display and change the display back to the normal depth mode.



Feet (default)

Meters



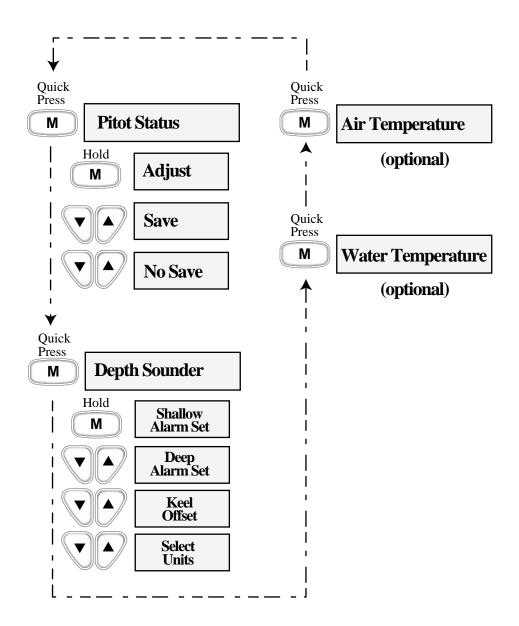




## Fathoms



## Speedometer Display Sequence



## Figure 1

## Tachometer / Fuel Monitor

The Serial Bus Tachometer / Fuel Monitor instrument provides both the functions of a tachometer and a fuel - engine monitoring system. The analog tachometer is a stepper motor instrument which looks like a standard analog device but which is actually a digital instrument. On small pointer movements you may occasionally see the pointer moving in the one third degree "steps" that represent the accuracy of the instrument.

The tachometer LCD screen displays several functions. The displayed data includes "engine hours", "time remaining", "engine temperature", "oil pressure", "system voltage", and engine alarm conditions.

Pressing the "mode M" button will select



Mode Button

the various functions as shown in **Figure 2**.

In order to minimize "false" alarms, the "low fuel" and "low voltage" alarms only function when the engine is known to be running based on the presence of tachometer data.

Several alarm conditions may also be displayed in the LCD display when needed:

- 1 Low fuel
- 2 Low oil pressure
- 3 High engine temperature
- 4 Low voltage
- 5 Engine RPM reduction due to engine controller command

- 6 RPM limit
- 7 Knock sensing system malfunction
- 8 Ignition system malfunction
- 9 Manifold pressure sensor (MAP) malfunction
- 10 Manifold temperature sensor malfunction
- 11 Throttle position sensor (TPS) malfunction
- 12 Coolant sensor malfunction

Alarm messages will be displayed on the tachometer LCD display. Messages 1-5 will also include a flashing red light. All messages will be displayed until either the problem is corrected or the operator manually cancels the warning message.

## Canceling system alarms

To manually cancel system warning messages, simultaneously press both the "Up" and "Down" buttons on the tachometer.



This will disable the warning message temporarily. If the problem is not corrected in 1 minute (5 minutes for low fuel), the warning will be displayed again. The operator can cancel as often as desired.

## **Engine Hourmeter**

Displays the number of hours that the engine has been operated. The display will show "XXXX.XHr".



## **Hours Remaining**

The "time remaining" display shows how many hours the boat can operate based on the fuel remaining in the tank and the current fuel usage rate.



#### **Engine Temperature**

Displays the Coolant Temperature of the Engine. There are no adjustments available.



### Voltmeter

Displays the System Voltage. There are no adjustments available.



## **Oil Pressure**

Displays currant Oil Pressure. There are no adjustments available.



## **Instrument Lights**

The navigation light switch must be on for the instrument lights to function. The "Up" and "Down" buttons on the tachometer control the instrument lighting brightness.

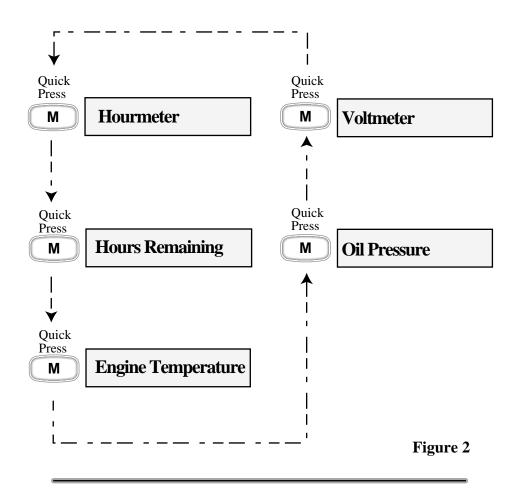
Pressing the "Up" button increases light intensity.



Pressing the "Down" button decreases light intensity.



## **Tachometer Display Sequence**



#### LCD Alarm Condition Displays.

Alarm messages will be displayed on the Tachometer LCD display. All messages will be displayed until either the problem is corrected or the operator manually cancels the warning message.

Messages will display as a many screens shown sequentially,

#### **Canceling System Alarms**

To manually cancel system warnings

messages, simultaneously press both the "Up" and "Down" buttons on the



tachometer. This will disable the warning message temporarily. If the problem is not corrected in 1 minute (5 minutes for low fuel), the warning will be displayed again. The operator can cancel as often as desired.

## Severe Conditions- Includes a Flashing Red Light

Low Battery Voltage (Flashing Red Light)



High Engine Temperature (Flashing Red Light)



Low Oil Pressure (Flashing Red Light)



Low Fuel Level (Flashing Red Light)



**RPM Reduction in Progress (Flashing Red Light)** 



## Warnings

**Engine Speed Limiter Active** 



**Knock Detection System Malfunction** 



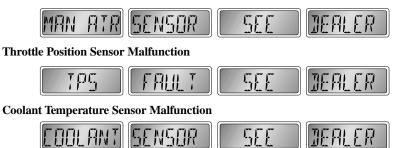
Spark Delivery System Malfunction



Manifold Pressure System Malfunction



Manifold Air Temperature Sensor Malfunction



## Faria Serial Bus Installation and Wiring Guide (Pleasurecraft Engines)

The system consists of:

- One Gateway box to interface with MEFI IV ECU and external senders and sensors.
- One 5" Tachometer with Fuel Monitor
- One 5" Speedometer with Depth Sounder
- One 5" Optional Speedometer
- Various 2" instruments, including but not limited to
  - Voltmeter
  - Oil Pressure gauge
  - Engine Temperature gauge
  - Fuel Level gauge
  - others as specified.

## Installation

Installation of the Faria Serial Bus system is accomplished as follows:

## Gateway Box

The "gateway" box is the central unit of the system. As all of the senders and other information source peripherals connect to the "gateway", the "gateway" box should be mounted in a protected area in the best location to provide the maximum cabling benefit.

The "gateway" box power cable must be installed to allow connection to "battery positive" (always on), "battery negative" (ground), and a source of "switched power" which turns on with the engine ignition switch (see Figure 3 and Table 1).

The "Faria Bus" cable must be routed from the "gateway" box to the instrument panel area to connect the instruments to the data bus and instrument power (see Figure 4).

The remainder of the connections to the "gateway" box are described below.

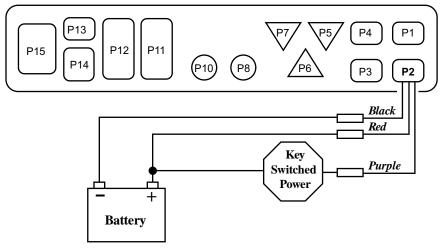
## Instruments

The instruments are mounted using the provided back-clamps and mounting hardware. Each instrument comes with a bus connection cable (12"). The main "Faria Bus" cable from the "gateway" box is connected to the most convenient instrument using either of the two four (4) pin connectors provided on the instrument case (\*except when a Faria Serial Bus Pilot or a Faria Speedometer-PerfectPass Cruise instrument is installed, see note below).

Each additional instrument is connected to the previous instrument using one of the 12" bus connection cables. The cable may be connected to either of the two connectors provided on the instrument case (see Figure 2).

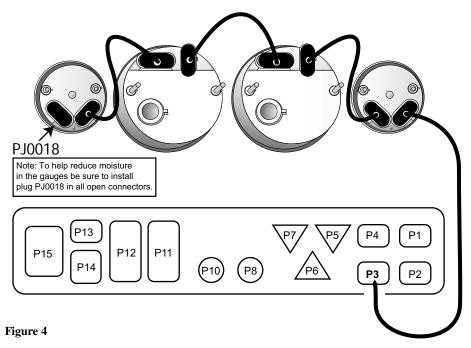
\*NOTE: The Faria Serial Bus Pilot and the Faria Speedometer-PerfectPass Cruise instruments are "end of the bus" instruments. Only the provided four (4) pin connector is to be connected to the "Faria Bus". See special instructions for use of the six (6) pin connector on these instruments.

# Typical Power Connections



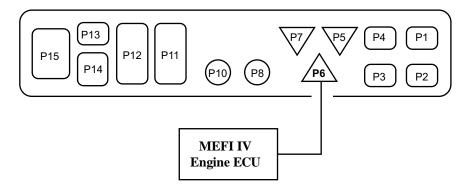


# Typical Instrument Connections



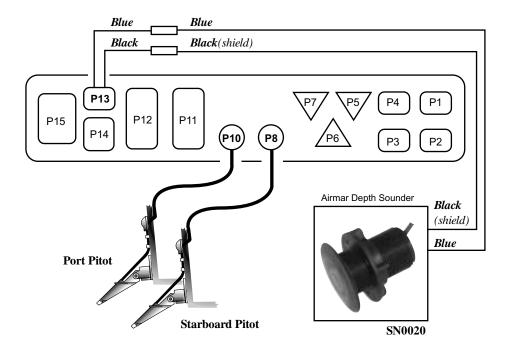
Page 14

## Pleasurecraft GM Engine ECU Connection



## Figure 5

## Transducer and Pitot Tubes Connections



## Miscellaneous Connections

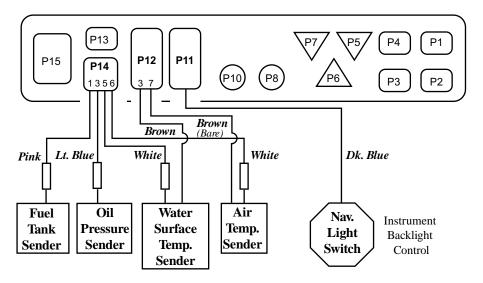


Figure 7

Table1

Connector	Contacts	Pin	Pin Function	Wire Color	
P1	2		Not used		
P2	4	1	Battery Positive (always on)*	Red	
		3	Switched Power from Ignition switch circuit	Purple	
		4	Ground	Black	
P3	4	All	Faria® Bus Data and Instrument Power	N/A	
P4	2		Not Used	(PJ0015)	
P5	3		Not Used	(PJ0016)	
P6	3		MEFI IV Engine ECU	N/A	
P7	3		Not Used	N/A	
P8	PP		Starboard Pitot		
P9	PP		Not Used		
P10	PP		Port Pitot		
P11	12		Navigation Lights Input	Dk. Blue	
P12	12	3	Ground (Temp. Sensor)	Brown	
		7	Ground (Temp. Sensor)	Brown	
P13	2	1	Depth Sounder Transducer signal (AirMar Transducer)	Blue	
		2	Depth Sounder Transducer Ground (AirMar Transducer)	Black	
P14	6	1	Fuel Tank Sender	Pink	
		3	Oil Pressure Sensor	Lt. Blue	
		5	Water Surface Temperature	White	
		6	Air Temperature	White	
P15	8		Not Used		

\*5 amp Fuse Recommended

# Notes

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# Chapter 3

#### ENGINE OVERVIEW

It is the owners responsibility to check all of the items below to be certain all preparation steps have been completed before you use your boat. Checking these items periodically will soon become habitual. If leaks or other abnormal conditions are found, stop using the boat and contact your Correct Craft dealer to have the problem(s) corrected.

The following instructions are vitally important:

- Lift the top half of the engine box. Check to see if all the engine drain plugs are in. Make sure the hull drain plug down in the bilge and also the drain plug at the transom are installed.
- Look at all the hoses to make sure they are installed and the hose clamps are tight. Close the engine box and turn on the blower (switch is on the dash). Run the blower at least four (4) minutes. This helps to remove fuel vapors that might be down in the bilge before starting engine. Remember, if you have detected the presence of fuel vapors, do not start engine until source has been determined, any problems corrected and vapors removed.

## Very Important!

- Check all gasoline line connections. These connections are located at the fuel tank, the Fuel Control Cell and the fuel injection system. All Correct Craft boats are equipped with anti-siphon valves on the outlet fittings of the fuel tanks to reduce the chance of fuel siphoning from the fuel tank if a fuel hose leaks or is severed.
- Fill the fuel tank and check for leaks. Check again for leaks after the engine has run for a few minutes.

## Check list before starting:

- 1) Engine oil level boat must be sitting level.
- 2) Transmission oil level boat must be sitting level.
- 3) Shifting linkage and detent in forward, neutral and reverse.
- 4) Leaks (water, fuel and oil).
- 5) Coolant level (if the engine is freshwater cooled).
- 6) Operation of the throttle and transmission shift control.
- 7) Battery condition.
- 8) Visually inspect for any loose mounting fasteners.
- 9) Verify the emergency engine cut off switch located by the throttle is fully functional. Clip the safety lanyard securely to your body at all times while you are driving.
- Once the boat is in the water, remove the inspection plate behind the engine box in the floor and visually check for water leaking at the stuffing box. This stuffing box must drip a moderate amount of water to properly lubricate the drive shaft. If the water is rapidly coming in, pull the boat out and have the

dealer adjust the stuffing box. There is a detailed instruction for this in the boat care section.

• Check to make sure there are no ropes, gear bags, arms/legs near the belts and pulleys of the engine. Severe injury can result by becoming entangled in the belts of the engine while it is running. Make sure the boat is deep enough in the water to supply the water intake with water to cool the engine. Move the throttle into the neutral position. This is in the "straight up" position.

WARNING: Before you start your engine, always ventilate the engine compartment by running the blower for four (4) minutes to remove any fuel fumes that may be in the bilge. This is especially important after repairing or refueling to check for fuel spills or leaks before starting the engine.

- Close the engine box before starting engine.
- Start the engine.

CAUTION: Do not continue to operate the starter for more than 30 seconds without pausing to allow the starter motor to cool off for five (5) minutes. This allows the battery to recover between starting attempts.

WARNING: In order to prevent personal injury to you or others, whenever the engine is running the engine box must be closed. Never operate the engine with the engine box open or while someone is in the area of an open engine box. Never open the engine box unless the engine is turned off and rotating parts are stationary and remain in a stationary position. Rotating machinery can cause injury and even death if an accident should occur. IT IS RECOMMENDED THAT ALL WORK ON THE ENGINE BE DONE BY TRAINED AND QUALIFIED SERVICE PERSONNEL.

During the warm up period, scan the gauges for correct operation of all the systems:

- Oil pressure 35-80 PSI (Approx..) at 2000 RPM
- Cooling water flow and water temperature 140-170 degrees
- Cooling water temperature for fresh water systems: 170 210 Degrees
- Volts should rise to around 13 14 volts or higher

• Idle RPM (600 - 700) in gear

CAUTION: Do not operate at high RPM's in neutral. Do not shift into forward or reverse at engine speeds above idle RPM's.

CAUTION: Do not operate engine without cooling water flowing through the water pump or the neoprene water pump impeller will become damaged, and severe engine damage may result.

If the fuel injected engine does not start:

• If the fuel filter has just been changed or if the fuel system has been run dry,

it will be necessary to cycle the ignition start button from the "stop" position to the "start"position several times until the fuel pumps build adequate pressure. The cycling of the ignition is necessary because the fuel pumps will run only 1-2 seconds when the ignition is turned on, unless the engine starts. The throttle control should stay in neutral during engine ignition. If the throttle is advanced, it is possible for the computer to think that the engine is flooded and initiate a "clear flood" condition which will shut off fuel to the engine and not allow it to start. The idle speed flare normally encountered on hot or cold start is perfectly normal. This is programmed into the computer. When the engine starts the idle speed will jump to approximately 1,500 rpm and quickly decrease to somewhere between 750 and 900 rpm.

- Check for gasoline and cooling water leaks on the engine.
- Check for cooling water circulation (look at the water filter at the rear port side of the engine for water movement).

### Flooded engine

If your engine does become flooded, use caution when attempting to start the engine. Push in the transmission disengagement button at the bottom of the throttle arm and push the throttle to full throttle position. By pushing the button in, the shift linkage is disengaged and the transmission remains in neutral during the starting procedure. Run the starter until the engine starts.

To protect your investment, we suggest that you bring your boat back to your local dealer after 25 hours of operation for an inspection of the shaft alignment, stuffing boxes adjustment, and have the fuel system checked for leaks. This is not a free service. Follow Pleasure Craft Marine's (PCM) recommendations in the maintenance section for additional service to the engine. (See PCM Owner's Manual) Consult your dealer to determine what charges will apply.

When the engine starts, move the throttle lever back until the engine is running about 2,500 RPM or less. Check the gauges for normal readings and let the engine run for a minute to burn the excess fuel. If the gauge readings are abnormal, shut the engine off immediately and contact your Correct Craft dealer. When the engine runs normally, check the engine for fuel, water and exhaust leaks. If there are leaks, these must be corrected before you continue.

NOTE: Read the "Notice to Dealer" sticker inside the engine box. These preparation checks have probably been completed by your dealer, but it is the owner's responsibility to check these items. This will also help you become more familiar with your boat.

After your initial run:

- Check oil level in the engine
- Check the transmission oil level
- Check for leaks (water, fuel and oil)
- Engine frame bolts and mounts are tight
- Throttle and shift control operates correctly

WARNING: If the engine backfires when you try to start it, the problem may be more serious than flooding. DO NOT CONTINUE TRYING TO START THE ENGINE: CONTACT YOUR CORRECT CRAFT DEALER OR A QUALIFIED TECHNICIAN TO CORRECT THE PROBLEM. To keep on trying to start the engine under these conditions could cause engine damage or physical harm to you and those around you.

### **Break In Procedure**

Make sure all your passengers are properly seated before starting the break in procedure. After the engine is thoroughly warmed up and you have driven the boat into a large open area, open the throttle to wide open until the maximum RPM's are reached. Do not exceed 5,000 RPM. Reduce the throttle to 2,800-3,000 RPM's and cruise at or below this speed for 1/2 hour. Reduce the speed to idle, open the throttle wide and operate at that speed for one minute; reduce to the previous cruising speed for a few minutes and repeat. Accelerating from idle speed to full throttle loads the engine and assists in seating the piston rings. This cycle can be repeated from time to time during the first five hours of operation, but full throttle should not be used for longer than 1-2 minutes.

WARNING: Follow these procedures only when conditions are such that you can drive the boat safely..

# CAUTION Do not attempt to break in an engine by letting it idle at the dock.

GENERAL NOTES

The maximum RPM of the engine at full throttle under normal load conditions can be controlled by propeller pitch, diameter and design. It is essential that the propeller does not underload or overload the engine.

**Propeller Overloading**, resulting in low RPM's at wide open throttle will give poor performance, poor fuel economy and eventually result in engine damage.

**Propeller Underloading**, if operated with a propeller that has too little pitch or diameter, poor performance will result.

NOTE: Running your boat in shallow water can cause sand and silt to be pulled into the cooling system. This can create excessive water pump wear and may clog the water passages in the engine. Heavy weed growth in the water can plug the raw water strainer and oil coolers and cause engine damage. There is a raw water filter located near the rear of the engine that filters the water before it goes into the transmission cooler and then the engine. Check this every time you use the boat to make sure it is not clogged.

# Chapter 4

CAUTIONS AND WARNING LABELS

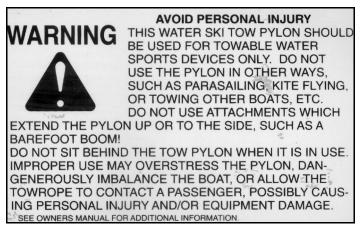
## **Cautions and Warning Labels**

The following are the warning/information labels that should be on your boat. It is your responsibility to maintain the readability of these labels and to follow their warnings.

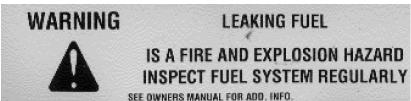
If your warning labels are not intact or are unreadable, please contact Correct Craft for a replacement set. These labels serve the vital function of warning you and your passengers of possible dangers and must remain in good condition on your boat.

NOTE: The warning / information label is listed next to each below.

## Tow Pylon



## Inside Engine box & on Fuel Tank

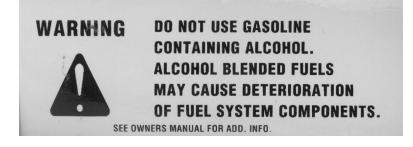


## Water Strainer

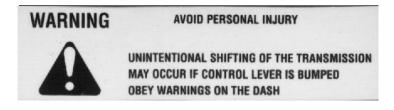


AVOID EQUIPMENT DAMAGE ! DO NOT LOSE SEAL RING WHEN CLEANING WATER STRAINER ELEMENT AND CANISTER. IF IT IS LOST DO NOT OPERATE ENGINE UNTIL THE SEAL RING IS REPLACED.

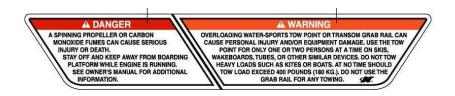
Fuel Fill



## **Throttle Control**



## **Transom Warning Label**



## **Cross Member/Boarding Platform**



## Engine



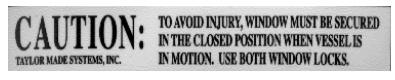
**Flame Arrestor** 



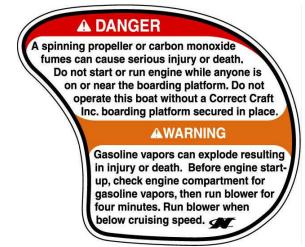
**Flight Clip** 

Avoid personal injury or property damage caused by flying objects. Remove any items from flight clips when trailering boat.

## Walk Thru Windshield



Dash Pod



## **Fuel Control Cell**

## **Fuel Control Cell**

#### **OPERATOR INSTRUCTIONS**

Caution! Visually inspect unit for leakage before operating engine. If leakage is present, do not operate engine. Contact service technician immediately.

#### SERVICE INSTRUCTIONS

Danger: Improper installation or use may cause exposion/fire resulting in bodily injury or death. Service only by a qualified technician. Read/follow all instructions. Run engine & check for fuel leakage after installation, replacing element or draining bowl. Do not remove bowl except during element change or contamination, ingestion, or bowl o-ring swelling may result.

Frequency of water draining or element replacement is determined by contamination level in fuel. Replace element at least once a year or when power loss occurs, whichever comes first.

#### To Drain Water: With Engine Off

- 1. Disconnect two wire electrical harness.
- 2. Remove 7/16 brass plug. Drain water into container.
- 3. Apply pipe sealant suitable for gasoline to 7/16 brass plug.
- 4. Insert into canister, tighten 7/16 brass plug.
- Cycle ignition key several times to prime electric fuel pumps and fill canister with fuel. Inspect drain for leaks.
- 6. Start engine and inspect for leaks.

#### To Replace Element: With Engine Off

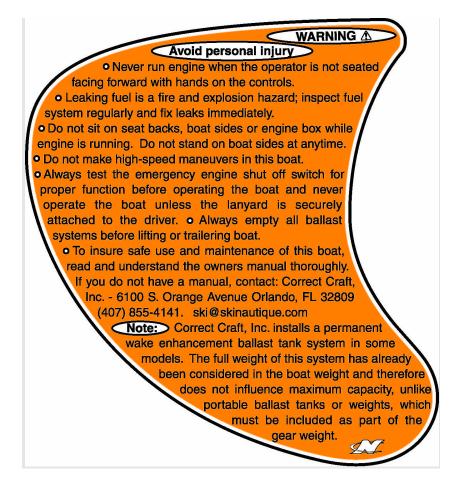
- 1. Disconnect two wire electrical harness.
- 2. Remove 7/16 brass plug. Drain water into container.
- 3. Remove canister by turning with oil filter wrench.
- Slide canister downward over the suspended filter element. It may be necessary to pull the unit to one side to remove.
- 5. Remove fuel filter element from the suspended pump by pulling the filter downward.
- 6. Visually inspect all internal components, i.e. hoses, wires, etc.
- 7. Push on new fuel filter element over electric fuel pump.
- 8. Remove old o-ring from the head of the canister.
- 9. Install new o-ring in the same location. Lubricate the o-ring with a light oil.
- 10. Apply pipe sealant suitable for gasoline to 7/16 brass plug.
- 11. Insert into canister, Tighten 7/16 brass plug.
- 12. Grease threads on canister. Tighten firmly back into head with oil wrench.
- Cycle ignition key several times to prime electric fuel pumps with fuel. Inspect drain for leaks.
- 14. Start the engine and inspect for leaks.

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#### WARNING: DO NOT ATTEMPT TO SERVICE ANY OTHER PARTS ON THIS UNIT!

R143112

## **Side Console**



## **Flight Control Tower**

## 

Failure to follow these guidelines can result in injury or death. Do not tow more than two persons at one time from this tow tower. The tow tower should only be used for waterskis, wakeboards, or recreational towables and not for parasailing, kite flying, or towing other boats, etc. Do not add any attachments that are not installed by Correct Craft, Inc. Do not climb on, sit on, stand on, jump off, or dive off the tow tower. Never allow passengers to sit behind the towrope attachment point. Never allow loose towrope ends to dangle. Always be certain that all bolts are in place and tight before and during use. When the tower is up watch for low obstacles such as tree limbs, bridges, power or lines. Before trailering your boat make sure that the tow tower is in down position the and properly secured.

## **Capacity Plate**



# Chapter 5

#### BOAT HANDLING GUIDELINES/SAFETY REGULATIONS

- Always observe the rules of the road and use common sense and courtesy on the water. If you think of it as driving a car, it becomes a bit easier. If a boat is coming towards you, you should pass that boat keeping it on your port (left) side.
- In a "crossing situation," that is, another boat passing in front of you, if the boat is on your starboard (right) side, that boat has right-of-way.
- In an "overtaking situation," the boat being overtaken (passed) has the rightof-way. The overtaking boat should pass on the port side of the boat being overtaken with a single blast of the horn. If you have to pass a boat on the starboard side for some safety reason, two blasts from the horn are required.
- When you encounter an unpowered boat like a sailboat or canoe, these boats ALWAYS have the "right-of-way". If a sailboat is using a engine, it must follow the "Rules of the Road."
- Do not demand the right-of-way, even if you are correct. The only correct move is to avoid a collision.
- NEVER OPERATE YOUR BOAT UNDER THE INFLUENCE OF ALCOHOL OR OTHER CONTROLLED SUBSTANCES!! This puts you and your passengers in danger as well as other boaters on the water.
- While the engine is running, and during the boat mooring, all occupants should be properly seated. Do not sit on engine box, seat backs, or gunnels, etc. You COULD fall overboard and be hit by the propeller. If you are sitting up in the open bow seating area, be careful not to obstruct the vision of the driver. Do not allow objects, arms or legs or any other body parts to hang over the bow or gunnels.
- Look carefully before turning, especially when you are turning around to pick up a fallen skier. Someone else may not be following the "Rules of the Road."
- Keep a visual check for boats behind your boat. This is an area where accidents can happen very quickly.
- Do not stand while the boat is moving.
- Sit in the driver's seat while the boat is moving and INSIST that your passengers remain properly seated.
- Do not sit on the gunnels, deck, seat backs, boarding platform or engine box while the engine is running or while the boat is moving.
- Make sure you have a properly sized Coast Guard Approved PFC (Personal Flotation Device) on board and easily accessible for each person.

• There are no brakes to help you stop your boat. Boat speed, water current and wind can affect your ability to stop safely. The driver must use caution and sound judgment at all times to maintain control of the boat, especially to maintain a reasonable distance from all potential areas of danger. Slow down in all areas of potentially hazardous navigation and in all conditions of reduced visibility. Be alert for posted speed limits, swimming areas, no wake zones and other restrictions. Common sense plus courtesy add up to safety.

States have varying regulations regarding water sports activity. Check the local and state agencies in your area to determine laws regulating boating and water sports. These laws were written to protect boaters and water sports enthusiasts. Some states require that the driver have a qualified observer in the boat while pulling a skier. Learn and follow the laws where you will be boating. Correct Craft recommends that you have a qualified observer in the boat with the driver at all times when a person is skiing.

There are free pamphlets available regarding such things as Rules of the Road, Navigational Aids and Federal Requirements for Recreational Boats. Your dealer can supply these, as can organizations such as the United States Coast Guard Auxiliary and the U. S. Power Squadrons. Check with your state's boating publications. Regulations vary from state to state.

## Chapter 6

## BOAT CARE

There are some engine maintenance functions that are best performed by your dealer. Maintenance items that can be done by you or your dealer are listed below. We suggest that you familiarize yourself with these even if you have your dealer service your boat.

The old adage "An ounce of prevention is worth a pound of cure" applies to your boat. Here are some tips that will help keep your boat in good running order and in good condition.

1. Read the instructions regarding your engine very carefully.

2. Check for fuel line leaks every time you use the boat.

3. NEVER start your engine if gasoline odor is present. Gasoline fumes are highly explosive. Before starting your engine, open the engine box, inspect the engine compartment for gasoline fumes and operate the blower for at least four minutes. Your boat has two struts that hold the engine box up. Run your blower when operating at slow speeds. If fuel vapors are present, do not start the engine. Check all hoses and fittings to determine the source of the vapor. Make the necessary adjustments or take the boat to your local dealer to eliminate the fuel vapor.

4. When servicing the ignition switch or any wiring, always disconnect the battery cables from the battery.

5. Check for water circulation when the engine is running. Exhaust should contain steady flow of water. In closed cooling systems, make sure the coolant in the cooling system is at the proper level.

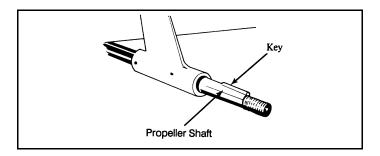
### BILGE PUMPS

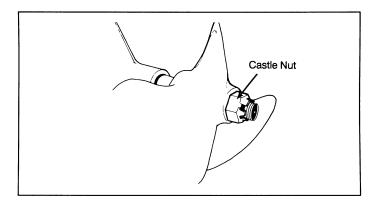
Check your bilge pumps often to make sure they are operating efficiently. There are two bilge pumps; one is at the rear of the boat near the rudder and the other is under the floor by the ski pylon. To keep the pumps from getting clogged, remove any debris that you find in the bilge. Wash the bilge with a good biodegradable household detergent or a bilge cleaner available at a marine supply store. Rinse with water with your bilge pumps running. If either pump seems to lag, remove the top of the pump from the base and check the impeller to make sure there is no debris stuck inside. See your dealer if there is still a problem with either pump.

**PROPELLER** Here are a few tips for the installation of the propeller.

## CAUTION: A propeller can be very sharp so be careful when you handle it. It's a good idea to wear a pair of protective gloves when handling any propeller.

1. Before placing the propeller on the shaft, take a look at the keyway on the shaft and in the propeller. Make sure the key slides freely in the shaft keyway as well as the propeller keyway. You may need to file the flat sides of the key and the keyway to remove burrs. Rotate the shaft until the keyway is "up". Place the key in the shaft keyway. Rotate the propeller so the keyway in the propeller is aligned with the keyway on the shaft. (See illustration.) Once aligned, push the propeller onto the shaft. You'll hear a solid "thunk" as the propeller is seated. The propeller will only slip on in one direction.

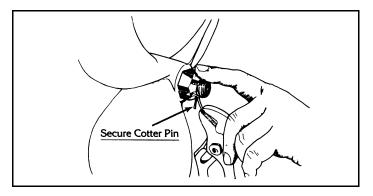




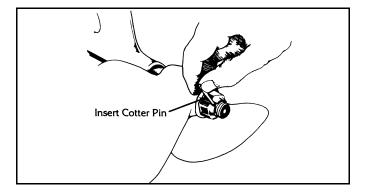
2. Put the castle nut on the shaft and wrench tighten.

3. When the castle nut is tight, look for the cotter pin hole and insert the stainless steel cotter pin through the shaft. (see illustration). With a light tap, drive the cotter pin down through the slot and hole so that its rounded top rests snugly against the hole. Bend the loose ends of the cotter pin back against the shaft with a pair of pliers and tap them lightly to secure.

To remove propeller, remove the cotter pin. Loosen the castle nut to the end of shaft. Do not completely remove castle nut. Use a propeller puller available at most marine supply stores to remove the propeller. Use a new cotter pin when you replace the prop (see illustration).



A FINAL CAUTIONARY NOTE: BE CAREFUL HANDLING YOUR PROPELLER. A SHARP PROPELLER CAN CAUSE A PAINFUL CUT!!

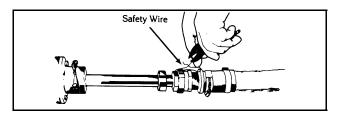


## PROPELLER SHAFT STUFFING BOX

The stuffing box is designed to prevent water from coming through the through-hull fittings. These are found on the propeller shaft where the shaft goes through the hull and where the rudder comes up through the bottom of the boat. These devices contain a lubricated fibrous packing that acts as a seal.

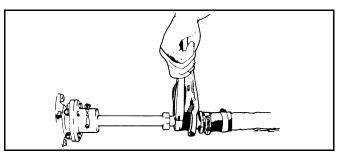
The propeller shaft stuffing box should be checked frequently (with the engine off) for excessive leakage other than a few drops per minute. This rate is acceptable and expected. To inspect the shaft stuffing box, remove the inspection plate in the floor behind the engine box. If you view a steady stream of water or an excessive drip rate, you need to tighten the stuffing box. If tightening is required, follow the procedures with careful attention.

1. You will need two pipe wrenches, twelve inches of .032 gauge stainless steel safety wire, flat blade screw driver and wire cutters. Remove the engine box. Remove the floorboard between the engine box and the stern seat.

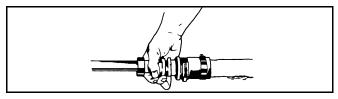


2. Cut and discard the safety wire (this wire prevents the packing gland nut from loosening.) See illustration.

3. Hold the gland nut (large nut) with a pipe wrench and loosen the locking nut with another pipe wrench. See illustration.

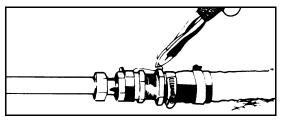


4. Now, HAND-TIGHTEN the gland nut until the dripping slows down to about 6 - 10 drips per minute. See illustration.



5. Using wrenches as in step three, re-tighten the locking nut against the gland nut. Make sure that it is VERY TIGHT. If you still experience leakage, consult your dealer.

6. Loosen one of the hose clamps at the rear of the assembly. Rotate the assembly until the safety wire eyelet is on top, and retighten the hose clamps.



7. Replace the safety wire as shown in the illustration.

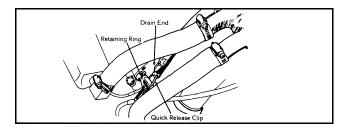
NOTE: BE SURE TO REPLACE THE SAFETY WIRE. THIS IS VERY IMPORTANT. USE A STAINLESS STEEL SAFETY WIRE OF AT LEAST .032 GAUGE.

## **Through-Hull Fittings**

All fittings that actually pass through the hull on the wetted surface are caulked in. These are not serviceable and should not be tampered with.

### Oil Drain System

The first oil change should be done after 25 hours. All the rest of the oil changes should be done after every 50 hours. There is a drain hose attached to the bottom of the oil pan with is a small plug screwed into the loose end of the hose. Remove the hull drain plug and stick the end of the drain hose through the drain hole in the bottom of the boat.



Make sure there are no kinks or sharp bends in the hose. Remove the plug at the end of the hose and drain the oil into a container under the boat.

The engine will drain most efficiently when the oil is warm. Allow several minutes for the oil to settle and drain.

**NOTE:** BE SURE THE ENGINE IS OFF WHEN YOU ARE DRAINING YOUR OIL. (See PCM Owner's Manual for step-by-step instructions)

### Salt Water Boating

IF YOU USE YOUR BOAT IN SALT WATER, FLUSHING YOUR ENGINE AND COOING SYSTEM IS A MUST. Flushing the system by running the boat in fresh water is a good way to flush the engine, but it must be done immediately. If this is not possible, Correct Craft offers a optional fresh water flush kit. The relief valve in this fitting prevents excessive water pressure from being applied to your engine. We strongly recommend the use of this system for boats that are used in salt water.

#### **Battery Maintenance**

WARNING: The battery cables should be removed from the battery when the boat is placed in storage, on display, or in transit. This will eliminate the possibility of the engine accidentally starting without a supply of cooling water and damaging the engine.

Here are several suggestions for the care and cleaning of your marine battery:

- DO wear eye protection and rubber gloves when working on or around batteries.
- DO take care when connecting or disconnecting a battery charger. Be sure the charger is turned off and unplugged from power source when you clip on/off the connecting clamps. Make sure you have a solid connection with the charging clamps. Poor connections are common causes of electrical arcs which can cause an explosion. Follow the instructions.
- DO use a voltmeter or hydrometer to check the battery charge condition.
- DO NOT smoke or bring a flame near a battery at any time.
- DO NOT have your head directly above a battery when making or breaking electrical connections.
- DO NOT use a metal object to spark between battery posts to check if the battery is charged.
- DO NOT make or break electrical circuits at the battery terminals; a spark usually occurs when a live circuit is opened or made.

To clean your battery, remove and wash down the battery case with a diluted ammonia or baking soda/water solution to neutralize the acid, then flush with fresh water. Keep the fill/vent caps tight so the neutralizing solution does not get into the battery cells.

The electrolyte level should be checked every 30 days. Add distilled water to maintain the level between the top of the plates and the bottom of the fill/vent cap. Do not overfill and remember that batteries contain sulfuric acid which can cause severe burns.

### Winterizing Your Boat

Winter storage procedures vary depending on climate, type of storage and length of storage. Check with your dealer/storage facility manager for their advice on what works best in your climate.

When storing your boat up on a rack system, it is important that the racks adequately support the hull bottom.

If you do not have a trailer, then a cradle should be used that takes into account the even distribution of weight.

If you do not have a dealer or marina nearby and must arrange winter storage yourself, contact your regional warehouse.

If you use a mooring cover, DO NOT put it on when the interior of the boat is wet and/or hot. It will trap moisture that may lead to mildew on the carpet and/or vinyl. Make sure your mooring cover allows air to circulate, even if you have to leave a portion of the cover off.

The raw water filter bowl remains full of water even after the rest of the raw water system has been drained. To properly winterize your boat, the filter bowl should be removed and emptied. Be careful to not lose the rubber O-ring that seals the bowl to the cap. If the water is not removed, the bowl could be damaged by freezing and cause overheating problems during the next season.

## Check For Water In Your Fuel System

A small amount of water left in the system for several months can result in damage. If you are storing your boat for the winter, it is a good practice to remove any water in the fuel system.

The Fuel Control Cell can be drained by removing the drain plug at the bottom of the canister. Loosen the incoming fuel hose to provide an incoming air source. Clamp the incoming fuel line to minimize the amount of fuel that may drain. Once the canister is drained, coat the threads of the drain plug with a fuel resistant pipe thread sealer, then replace and tighten the plug. Reconnect the fuel hose, and tighten the hose clamp. It is imperative that the threads be sealed properly to avoid a possible fuel leak.

Check your Fuel Control Cell once each year for signs of water in the canister. If it appears there is an undue amount of water build-up in the canister, see your Correct Craft Dealer for service.

An empty fuel tank can accumulate water inside by repeated cycles of condensation on the inner surfaces of the tank. If the fuel tank is kept at about 3/4's full during storage times, much less water can condense, limiting the build up of water in the fuel tank.

We recommend filling the tank to 3/4's full at the most during storage to eliminate the possibility of fuel expansion caused by temperature changes.

This minimizes overflow of fuel from the fuel vent. Not only can this overflow be hazardous, but it will also adversely affect decals and pin striping on the boat.

Always allow room in the tank for fuel expansion caused by temperature differences. Add a fuel stabilizer that slows down the rate of fuel decomposition. You can purchase this material at most marinas or auto supply stores. Add the stabilizer to the tank and then fill the tank to approximately 3/4's full.

Run the engine to circulate fuel throughout the system. This will help keep gasoline from degrading and causing problems in the fuel system. Remember to always follow the fuel stabilizer manufacturer's recommendations for proper mixing.

Note: GASOLINE EXPANDS WHEN THE TEMPERATURE INCREASES. NEVER STORE YOUR BOAT WITH MORE THAN ABOUT 3/4'S OF A TANK.

## **Gelcoat** Care

Regular maintenance is the key word to keeping your hull and deck surfaces in good-looking condition. Some of the things that will affect your boats finish are sun exposure, residue from trees or minerals in the water.

To help maintain the shine of your boat, wash the hull with a mild biodegradable detergent after each use. This will help to remove any debris and waterborne materials that are on the hull. Use a soft sponge or towel and dry with a chamois cloth to prevent water spots.

Wax the hull sides and deck regularly. Waxes and polishes are available at a marine supply stores. Read the directions on these products carefully before you use them.

The hull bottom is an especially important area to keep clean since any buildup of water scum and algae will increase create drag and reduce the boat's efficiency. If you must leave your boat in the water, there are marine cleaners available to remove algae build-up on your hull. Some of these can be caustic. Pay special attention to the cautions on the label of these coatings. Ask your dealer for advice on which work best in your area.

If your boat's gelcoat develops a chalky look over a period of time due to exposure to sun, there are gelcoat buffing and polishing compounds available at marine supply stores. DO NOT use common household scouring pads or powders.

If you will be keeping your boat in the water for ANY period of time, we suggest that the wetted surface of the hull be painted with an epoxy paint formulated for blister protection.

## Teak Care

Teak is a unique wood used for marine applications. It is an open cell wood that is highly resistant to the dry-rot associated with many other woods and is also highly resistant to marine organisms. Don't coat the teak on your boat with any kind of varnish or polyurethane coatings. There are several teak oils available at marine supply stores.

When the teak on your boat is new, it has a medium brown color. After a period of time, exposure to the elements will cause it to turn a weathered gray color. If you want to refinish the teak, we suggest you purchase a teak cleaner from a marine supply store. Follow the instructions on the teak refinishing bottles. You should use these products in an open space with eye protection, rubber gloves and good ventilation. Be very careful to avoid spilling these products on any part of your body.

### Metal Care

Keep all metal work rinsed and wiped dry. Periodically polish it with a commercially available metal polish.

#### **Glass** Care

Your windshield, mirrors and gauge faces all deserve the same attention as the other parts of your boat. Clean them often with commercially available glass cleaners.

#### Vinyl Maintenance and Cleaning

Correct Craft has selected the finest marine grade vinyl for your Nautique. It is important to keep it clean at all times. There are some substances that will stain the vinyl if you leave them on for even a short period of time. Remove any contaminant and clean the area immediately. Do not use 409 Cleaner or any Silicone based products. Certain household cleaners, powdered abrasives, steel wool and industrial cleaners can cause damage and discoloration. Do not use these cleaners. Dry cleaning fluids and lacquer solvents should not be used.

Use the chart below to clean some of the common stains:

Ste	p #1	Step #2	Step	#3
Chewing gum	D	А		D then A
Eyeshadow	E	В		E then B
Engine oil	В	В		В
Spray paint	С	В		В
Mildew or wet leaves *	D	В		А
Shoe polish *	А	В		
Yellow mustard	D	В		
Oil based paint (fresh)	D	В		
Oil based paint (dried)	А	В		
Suntan lotion *	D	В		
Tar/Asphalt	А	В		
Lipstick	А	В		
Latex paint	А	В		
Crayon	D	В		
Ketchup	А	В		
Grease	D	В		
Ball-point ink *	Е	В		
Permanent marker *	Е	В		
Coffee, tea, chocolate	В	В		

#### COMMON STAINS AND STEPS TO TREAT:

A. Medium-soft brush, warm soapy water/rinse/dry

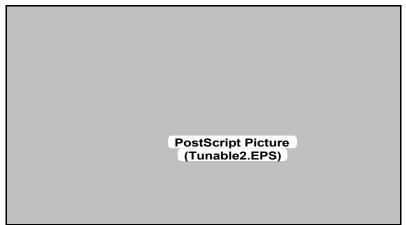
- B. Meguiar's Quick Clean #52
- C. One(1) tablespoon ammonia, one fourth (1/4) cup hydrogen peroxide, 3/4 cup water rinse/dry
- D. Wipe or scrape off excess (chill gum with ice)
- E. Denatured Alcohol/rinse/dry

After all cleaning methods, rinse well with water.

\*Suntan lotion, shoe polish, wet leaves and some other products contain dyes that stain permanently.

## TUNABLE RUDDER

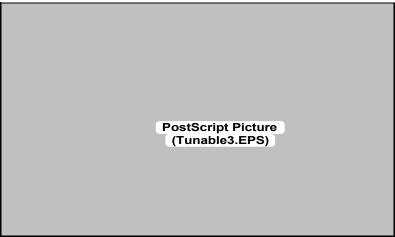
The Tunable Rudder is designed to offer easy adjustment of steering. This system utilizes a composite tuning foil which is located at the upper aft corner of the rudder blade. To adjust the foil a Phillips head screwdriver will be needed. Loosen the two machine screws located in the relief slots of the tuning foil. Mfgd. under license from National Products, Inc. U.S. Patent 5,746,147.



Loosening Tuning Foil (Z-trim)

If the boat is pulling left, rotate the foil to the left and tighten screws. If boat is pulling to right, rotate the foil to the right and tighten screws. Always remember that movement of the trailing edge of the foil to one side will cause the steering to pull to the opposite side.

Note: After each adjustment, test run and adjust again if necessary.



Adjusting Tuning Foil left or right

6.12

# Chapter 7

## TRAILER/TRAILERING

## Hitch

If you don't already have a trailer hitch installed on your vehicle, go to a reputable installer to have the proper size hitch installed. Always use a hitch rated with the appropriate capacity to match the trailer and boats gross weight.

WARNING: Do not attempt to tow more than one trailer at a time behind your vehicle. Attempting to tow an additional trailer will adversely affect the trailer tongue weight and loss of vehicle control and/or injury or death may occur.

## CAUTION: Never install a bumper mounted hitch on your vehicle. Always use a hitch that is attached to the frame of your vehicle.

## Wiring

The trailer requires wiring from your vehicle to the trailer lights. This can usually be done by the hitch company.

### Security

There are several locking devices available at marine supply stores that will aid in securing your boat whether or not it is attached to your vehicle.

Towing Your Boat Consult this checklist prior to trailering your boat.

- Check wheel lug nuts for tightness.
- Be sure the trailer tongue is securely on the hitch and the safety chains from the trailer are secured to the vehicle.
- There needs to be a cable or strap securing the bow eye of the boat to the trailer. Make sure this is tight and is secure.
- Be sure the trailer electrical connector is plugged in. Allow sufficient slack for cornering. Check brake lights, turn signals, emergency flasher and running lights.
- Be sure your gear inside the boat and seat cushions can not shift or fly out of the boat during trailering.
- Make certain the walk-through door of the windshield is closed and latched while the boat is being trailered.
- If you are using any sort of water "ballast" system to add weight to the boat, make certain it has been drained before you put the boat on the trailer. These systems can adversely affect the tongue weight of the

trailer. Your boat is not designed to carry exceptionally heavy loads. This can adversely effect the proper balance of the boat/trailer combination and cause tire failure and/or loss of control.

- If your boat is equipped with a bow winch, make sure that the boat is properly located on the trailer and the winch strap/cable is tight.
- Make sure the boarding platform bracket pins are in place before trailering.

## Long Trips

Each time you stop on a long trip, check the following:

- Tightness of the wheel lug nuts and the bearing lubricant.
- Make sure the boat is still positioned snugly against the bow stops.
- Examine the hitch connection to be sure it is firmly attached and the safety chains are securely fastened.
- Make sure that all trailer lights are still functioning properly.
- Re-examine the contents of your boat to insure that no items such as life jackets or other gear have shifted and may fly out while you are on the road.

## Chapter 8

# CORRECT CRAFT LIMITED WARRANTY (BOATS AND ENGINES AS ORIGINALLY MANUFACTURED/INSTALLED BY CORRECT CRAFT)

The Correct Craft warranty is backed by a family tradition of boat building experience since 1925.

### Lifetime Limited Warranty

Correct Craft, Inc. warrants to the original purchaser of each new Correct Craft boat that, under normal authorized use, the deck, hull and stringer system shall remain free from structural defect in material and workmanship for as long as the boat is owned by the original purchaser.

#### **Transferable Lifetime Limited Warranty**

In addition, Correct Craft offers a transferable Lifetime Limited Warranty covering the deck, hull and stringer system as detailed in the Lifetime Limited Warranty above. This policy may be transferred (for a nominal fee) to the second (2nd) purchaser during a period of five (5) years from the date of delivery to the original purchaser. See your local dealer for details.

Exception: The "Lifetime" and "Transferable" warranties do not cover the engine, gelcoat nor any other components fastened or applied to the hull or deck. Gelcoat discoloration, blisters, or bubbles and cracks are not considered structural defects.

### Five (5) Year Limited Warranty, Non-Transferable

Correct Craft, Inc. warrants to the original purchaser that each new Correct Craft boat and engine, as originally manufactured by Correct Craft, shall under normal authorized use be free of defect in material and workmanship for a period of five (5) years from the date of delivery to the original purchaser. This coverage applies to factory-installed components including gelcoat (blisters or cracks if not caused by impact or collision) boat parts, options, engine, engine parts, or other components not manufactured by Correct Craft, Inc. This "Five (5) Year Limited Warranty" shall not apply to normal maintenance of boat or engine, or any component thereof, including but not limited to alignment, adjustments, connectors, tune-up and parts, saltwater/brackish water corrosion, and wear items including, but not limited to non-skid material, battery, bushings, packing material, belts, bulbs, filters, seals, gaskets, o-rings, water pump impellers.

Exceptions: This warranty shall not apply to...

• Any Correct Craft boat or engine which has been used at any time for commercial or racing purposes, as a demonstrator or in a promotional

program, ski school or ski show.

- Normal maintenance of boat or engine, or any part thereof, including but not limited to alignment, adjustments, connectors, tune-up and parts, saltwater/brackish water corrosion, and wear items including, but not limited to, non-skid material, battery, bushings, packing material, belts, bulbs, filters, seals, gaskets, o-rings, water pump impellers.
- Gelcoat finish or colorfastness of gelcoat finish, chrome plated, anodized or aluminum finish or colorfastness of finish.
- Damage or malfunction of a boat, or any component thereof, resulting from owner use, lack of maintenance, improper maintenance, impact, misuse, negligence, collision, delay of repair (unless specifically and directly authorized by the Correct Craft warranty department in writing), trailer or trailer design, improper or inadequate trailering or cradling of the boat.
- Any addition, modification or repair of the boat, or any component thereof, caused by, resulting from or in connection with any party other than Correct Craft, Inc., or any defect or product failure caused by, resulting from or in connection with any such addition, modification or repair.
- Any and all consequential damages including, but not limited to, costs incurred for haul-out, launching, towing, and storage charges, telephone or rental charges of any type, inconveniences, or loss of time or income.

Any defect or damage covered by this warranty shall, at the discretion of Correct Craft, Inc., be repaired free of charge at an authorized dealership or service facility. Repairs will be warranted only for the remainder of the original warranty period. Transportation and/or labor to and from the point of repair will be the responsibility of the owner.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF. THIS LIMITED WARRANTY IS EXPRESSLY MADE IN LIEU OF ALL OTHER EXPRESSED WARRANTIES. DURATION OF ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, SHALL BE LIMITED TO AND COINCIDENT TO THE DURATION OF THESE EXPRESSED WARRANTIES. UNDER NO CIRCUMSTANCES SHALL CORRECT CRAFT, INC. BE LIABLE TO THE PURCHASER OR ANY THIRD PARTY FOR LOSS OF PROFITS OR OTHER DIRECT OR INDIRECT COSTS, LOSSES OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR AS A RESULT OF DEFECTS IN PRODUCTS HEREIN ABOVE WARRANTED.

Some states do not allow limitations on how long an implied warranty lasts. Some states do not allow the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights, and you also have other rights which may vary from state to state. To the extent that your state does not allow any exclusion or limitation expressed herein, such exclusion or limitation will not apply to you. All other allowable limitations or exclusions shall apply to you.

**Note:** This warranty is expressly conditioned upon the completion and return of the warranty registration card to Correct Craft, Inc. Although not obligated to and without creating such an obligation, this will enable us to notify you of any necessary performance or safety modifications to your boat and to verify ownership in case a warranty claim is filed on your boat.

### Procedure

In the event your Correct Craft boat has a claim covered by this warranty, the following procedure shall be allowed to secure performance of warranty obligations:

# 1) Notify the selling dealer within thirty (30) days after the discovery of any claimed defect.

2) You may be required to transport the boat, at your expense, to an authorized dealership or service facility for their inspection and/or repair.

3) Correct Craft, Inc. reserves the right to require further evaluation and/or information regarding a warranty claim against a boat prior to its repair as well as designate the place of repair.

Correct Craft, Inc. reserves the right to make changes in prices, color, specifications, equipment, options, materials, hull, decks, and/or discontinue models at anytime (without notice), and shall be under no obligation to equip or modify boats built prior to such changes.

Correct Craft, Inc. 6100 South Orange Avenue, Orlando, Florida 32809. 407/855-4141, fax 407/851-7844, e-mail address: ski@correctcraft.com.

Effective 2003 Model boats.

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## Chapter 9

### REQUEST FOR WARRANTY TRANSFER OF CORRECT CRAFT, INC. BOATS

### \*\* A COPY OF THE PURCHASE RECEIPT MUST BE INCLUDED \*\*

Correct Craft's Lifetime Limited Warranty against structural defects in the hull, deck and stringer of model 2003 boats can be transferred, for a nominal fee, to the second purchaser within five (5) years from the date of sale to the first purchaser. The sale must be complete within the first five years. The limited warranty will be transferred upon the receipt and verification of: (1) this completed form, (2) a copy of the purchase receipt, (3) a payment of \$500.00 to "Correct Craft, Inc". This data MUST BE RECEIVED WITHIN 15 DAYS OF THE SALE DATE. The warranty will be transferred retroactive to the sale date. Review the warranty policy for details.

NOTE: THIS TRANSFER DOES NOT INCLUDE THE ENGINE.

Original owner\_\_\_\_\_

Boat model / type	 	
Hull number CTC		

#### New owner information:

Name		 
Street / P.O. Box		 
City / State / ZIP Code		 
Date purchased	_ Phone #	 

The criteria listed above must be received within 15 days of the sale date. Submit it to Correct Craft Inc. 6100 South Orange Avenue, Orlando Fl 32809 Attention: Warranty department.

NOTE: Upon verification, the warranty will transfer retroactive to the sale date

If you find that the information contained in this owners manual does not answer your specific question, then we invite you to contact your nearest dealer or your Nautique Service Center for answers or necessary service. A list of the Nautique Service Centers is given below, with the areas that they service.

#### NAUTIQUE SERVICE CENTERS

MID-ATLANTIC CORRECT CRAFT Route 30. Box 188 Speculator, NY 12164 518/548-9763 Connecticut Delaware District of Columbia Maine Maryland Massachusetts New Hampshire New Jersey New York Pennsylvania (Eastern) Rhode Island Vermont Virginia

MID-WEST CORRECT CRAFT

P.O. Box 216 Angola, IN 46703 260/833-2226 Illinois Indiana Iowa Kansas Kentucky Michigan Minnesota Missouri Nebraska North Dakota Ohio Pennsylvania (Western) South Dakota West Virginia Wisconsin

SOUTHWEST CORRECT CRAFT 22450 FM RD 1995 Lindale, TX 75771 903/882-8593 Arkansas Louisiana Oklahoma Texas SOUTHEAST CORRECT CRAFT 7576 South Orange Ave. Orlando, FL 32809 407/851-1965 Alabama Florida Georgia Mississippi North Carolina South Carolina Tennessee

WEST COAST CORRECT CRAFT 3160 Gold Valley Dr. Suite 500 Rancho Cordova, CA 95742 916/638-3382 Alaska Arizona California Colorado Hawaii Idaho Montana Nevada New Mexico Oregon Utah Washington Wyoming

If, for any reason your nearest dealer or the warehouse servicing your territory cannot satisfactorily resolve your problem or answer your questions, then please feel free to contact our Customer Service Department at the main offices of Correct Craft, Inc., either by telephone or by mail.

#### NAUTIQUE FRIEND PROGRAM

It has been proven that experience and word-of-mouth are important promotional tools. Enthusiastic boat owners talk to their friends. Our statistics reveal that a high percentage of our Nautique owners learned about Correct Craft through a friend. We want to show our appreciation to these friends.

One year after the purchase date listed on an owner's warranty card, we send a "NEW OWNER SATISFACTION SURVEY". For the completion and return of this form, we offer a first anniversary gift of a Nautique Gear T-shirt. It is our desire to keep in touch with our Correct Craft family of boat owners. We value our owners' comments and want to hear about the things we do right and/or the things we need to improve. One of the questions asked is, "How did you learn of Correct Craft?" This section adds a statement, "If a friend influenced you, please list his/her name and address." From this information, the President of Correct Craft sends that "Friend" a letter of thanks and a Nautique Gear hat.

When a "Friend" appears on our list the second time, indicating success in encouraging another person to purchase a Nautique, this person receives a personal thank you letter from the President of Correct Craft with a certificate to return with the appropriate size indicated, and receive a Correct Craft T-shirt.

When a "Friend's" name is presented for the third time, this person will receive a personal letter from the President of Correct Craft with a certificate for a Correct Craft polo shirt.

For the fourth and succeeding times a "Friend' is listed, a personal letter will be mailed as well as a certificate for \$50 retail value of Nautique Gear item(s).

Tell the story of your experiences with your boat, your dealer, and Correct Craft. When you are responsible for convincing a non-Correct Craft owner to buy a Nautique, encourage that new owner to give you credit for that introduction on his first anniversary survey form.



Congratulations on your Correct Craft purchase!

Welcome to the Correct Craft Family. We hope you will have many years of boating enjoyment as a Nautique owner.

Join thousands of others in our association created exclusively for Correct Craft owners. You will find that being a Nautique Owners Association (NOA) member can be very rewarding. As a member, you can enjoy great savings. Your Membership allows you to buy Nautique Gear apparel & accessories at a 20% discount on current items. You may purchase admission to the Masters Waterski & Wakeboard Tournament at Callaway Gardens in Pine Mountain, Georgia, at a special NOA discounted price of 50% off the published gate admission rates.

Initial Membership includes:

T-shirt, Hat, Decals and Patches, Lapel Pin, Certificate and Membership Card, and subscription to our *Nautique News* and *NOA Newsletter*. The *Nautique News*, Correct Craft's own magazine, is a great source for latest news about the company, our products, activities and current Nautique Gear wear. The *NOA Newsletter*, the official publication of the Nautique Owners Association, features information about NOA benefits and services, events around the world, member stories, inspirational articles and updates on Correct Craft, Inc.

To show our appreciation for new Nautique owners, Correct Craft is providing a complimentary, one-year Individual Membership (valued at \$40). Registration is automatic upon Correct Craft's receipt of your warranty card. Your free Individual Membership may be upgraded to a Family Membership. Call the NOA Coordinator for additional membership information. Please include names and T-shirt sizes for yourself and up to three immediate family members, if you wish to upgrade to a Family membership.

### **Membership Application**

(Owner)Name	
T-shirt <u>S</u> M L XL	
Address	
City	State Zip
Phone # (H)	_
(W)	
Boat Model	_
Hull Number	_
Family Member #1:	
T-shirtSMLXL	
Family Member #2:	
T-shirtSMLXL	
Family Member #3:	
T-shirtSMLXL	
Please upgrade my free Individual Member	ship to:
Family Membership, \$20 Fee	
Individual Lifetime Membership, One-	time fee of \$250
Method of Payment: Check	
Credit Card: Visa/MasterCard	
Expiration Date:	
Return completed applicationand fee to:	
NOA, 6100 S. Orange Ave., Orlando, FL 32	809/1-888-628-8478

### **Dash Plaque Order Form**

Dash Plaques are available for a price of \$6.00 for 2000 - 2003 baat models and \$10.30 for 1987 - 1000 boats. Please sheck off the shape that metches your boat plaque and mail along with your payment to:

Correct Craft, Altr. Tracy Cumbus-Umpierre, 5100 S. Orarge Ave., Orlando, F. 32804 Allow 4 to 6 weeks for the custom plaque order to be processed, made and shipped.

Desired Saying: (Please Print)	
Hull Number:	
<b>\$6.00</b> Boots made in 2003	Performance Englistered for YOLIR NAME HERE
<b>\$6.00</b> Boats mads in 2000 - 2002	Explosured for THER NAME HETE
\$10.00 Boots made in 1997 - 1999	Performance engineered for: YOUR FAMILY NAME
<b>\$10.00</b> Duals mude in 1990 - 1996	Performance Engineered For: The Smith Family
<b>\$10.00</b> Boots made in 1987-1989	Performance Engineered For: Bob Smith
Plaque will be shipped to: Place Print	
Name:	
Address:	
City:	State: Zip:

### Glossary

Aft Toward, at, or near the stern

Anode An electrode carrying a positive charge

Athwartship Across the boat, at right angles to the fore and aft centerline

**Ballast** Any solid or liquid weight placed in a boat to increase the draft, to change the trim.

Bilge The area under the floor between the stringers

**Bitter end.** The inboard end of a ship's anchoring cable which is secured to the boat.

**Bow** The forward end of the boat

**Bulkhead** A vertical partition or wall that divides one compartment from another

Camber The rise or crown of a deck

Cathode An electrode carrying a negative charge

Rub rail. The rubber extrusion that is fastened over the hull and deck joint

**Cavitation** A phenomenon in which low pressure within a liquid allows vapor bubbles to form

**Centerline** The middle line of a boat, extending from the stem to the stern **Chafing plate** Bent plate for minimizing chafing of lines

Chine Abrupt change in transverse shape where a boats side and bottom come together

**Cleat** A metal fitting that has two "horns" around which ropes may be fastened.

**Davit** A crane arm for hanging a boat above the water

**Deadrise** Transverse angle of the bottom of the hull

Deck The fiberglass portion of the boat above the hull

**Draft** The depth of the boat below the waterline measured vertically to the lowest part of the hull, propeller or rudder.

**Fathom** A measure of length equal to 6 linear feet, used for depths of water and lengths of anchor line.

**Fender** Devices built into or hung over the sides of a boat to prevent the boat from rubbing or chafing against other boats or piers

Fore and aft In line with the length of the boat's longitudinal

**Freeboard** The distance from the waterline to the upper surface of the side of the deck.

Heel The leaning of a boat to one side

Hull The structural body of a boat below the deck

**Keel** The principal fore and aft component of a boats hull bottom, located along the centerline of the bottom; connecting the stem and the stern

**Knot** A unit of speed, equaling one nautical mile per hour; the international nautical mile is 1852 m (6076 ft)

Lee The side away from the wind

Line All rope in a boat or on the dock is referred to as "line".

**Load waterline** The waterline on the boat's hull where it is designed to float **Mid ship** (amidship) In the vicinity of the mid-length of a boat, technically the exact half way between the bow and the stern

**Port** The left hand side of the boat when looking forward Opposite to starboard

**Potable** Fit for drinking (Rhymes with notable)

**Propeller pitch** Theoretical linear distance the propeller would move ahead during one complete revolution of it were turning with zero slippage.

Quay A masonry boat mooring structure usually built along the shore (Rhymes with see)

Rudder A vertical metal device used to steer the boat

**Sacrificial anode** Metal parts fitted to the hull of boat to provide a transfer of ions to the cathodic part of an electrolytic coupling and so protect other parts of the boat that would otherwise waste away through electrolysis

Shot A length of anchor chain equal to 15 fathoms or 90 feet

**Slip** The linear distance between the pitch (or advance) and the actual distance the propeller moves straight ahead through the water

**Spring line** A mooring rope oriented at a small angle to the boats centerline, usually attached to the boat mid ship

**Square propeller** A propeller that has pitch and diameter numbers that are equal (13 x 13)

**Starboard** The right hand side of the boat when looking forward Opposite to port.

**Stem** The hull side intersection with the keel at the bow

Stern The aft end of a boat

Stow To put away, To store cargo in a storage locker

Stringer Members under the floor that stiffen the hull bottom

Tiller An arm, attached to the rudder that turns the rudder

Transverse Pertaining to any member placed 90 degrees to centerline

Waterline The line of the water's edge when the boat is afloat

Wetted surface The area of the immersed hull plus underwater gear