



POLARIS®

**2001
WATERCRAFT**

**OWNER'S SAFETY AND
MAINTENANCE MANUAL**

<https://www.boat-manuals.com/>

 **WARNING**

The engine exhaust from this product contains chemicals known to cause cancer, birth defects or other reproductive harm.

TO THE OWNER

Congratulations and thank you for choosing this Polaris Watercraft! It has been engineered with your riding enjoyment and safety in mind.

This Owner's Manual provides safety, operating, care and maintenance information that you and all operators and passengers of the watercraft should be familiar with before operating this watercraft. Once you've read and understand the information, permanently store this manual in a **waterproof bag** in the storage compartment of the watercraft. If the watercraft is sold, the Owner's Manual and video tape should remain with it.

When you purchased this watercraft, your dealer provided you with this Owner's Safety and Maintenance Manual which covers important aspects of watercraft safety. In addition you received a video tape pertaining to watercraft safety. Review this information on a regular basis. If you have purchased this vehicle from someone other than a Polaris dealer, you can still obtain information and service from any authorized Polaris dealer. If your Owner's Manual is misplaced, you should get a replacement copy from your Polaris dealer.

Anyone who operates this watercraft must read the Owner's Manual provided with this machine. Failure to follow the warnings and precautions contained in the manual when operating and riding this watercraft can result in severe injury or death to the operator, passenger and/or bystanders.

If you have questions about the operation or maintenance of this watercraft or need training, consult an authorized Polaris dealer.

TO THE OWNER

The information contained in this manual is deemed accurate at the time of publication. However, it is our intention to continually strive for improved product quality and performance. Therefore, Polaris Industries Inc. reserves the right to change specifications without notice or obligation.

Illustrations included in this manual are general representations of parts having a similar function. Your model may differ.



**The Polaris Preferred
Registered Owners
(PRO) Family
Your Owners Program**

As the owner of a new Polaris vehicle, you are entitled to a FREE two-year membership in the Polaris PRO Family--the Preferred Registered Owners Family. It's an owners program for Polaris owners like you, people who have chosen the finest recreational vehicle available, people who share an interest in Polaris and its products.

Once your new vehicle's warranty is registered, you will receive a PRO Family membership packet that will include:

- ◆ A letter of welcome to the PRO Family
- ◆ A PRO Family card with your name and membership number
- ◆ A colorful sticker of the PRO logo
- ◆ A PRO merchandise brochure and order form.

As a PRO Family member, you're entitled to opportunities such as:

- ◆ A free subscription to *PRO Spirit*, the official magazine of the PRO Family
- ◆ The chance to buy insurance for your Polaris vehicle. The toll-free insurance telephone number is: 1-800-473-0111
- ◆ The chance to arrange travel through the Polaris Travel Center. The toll-free travel telephone number is: 1-800-267-1915
- ◆ The chance to serve as a PRO Field Evaluator and provide feedback on your new vehicle

- The chance to take part in national PRO snowmobile, ATV or personal watercraft rides
- The chance to purchase exclusive PRO Family merchandise
- And more!

To order PRO merchandise, you'll complete the order form you receive with your membership packet. Take the form to your Polaris dealer and pay for the merchandise. The merchandise will be shipped directly to your home from the PRO merchandise fulfillment center.

Watch for your PRO membership packet and the next issue of PRO *Spirit* magazine. This quarterly magazine will keep you informed about Polaris news and events, and special PRO merchandise, travel, and ride opportunities.

Enjoy your new Polaris vehicle, and welcome to the family--
The Polaris PRO Family.

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GENERAL SAFETY AND DESCRIPTION OF LABELS

SAFETY ALERT

The following precautionary signal words are used throughout this manual to convey the following messages:



This is the safety alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury. Your safety is involved!

WARNING

Indicates a potential hazard which could result in serious injury or death.

CAUTION

Indicates a potential hazard which may result in minor personal injury or damage to the watercraft.

CAUTION

Indicates a situation which may result in damage to the watercraft.

NOTE

The word "NOTE:" in this manual will alert you to key information or instructions.

GENERAL SAFETY AND DESCRIPTION OF LABELS

NOTE: Important warning and instruction labels have been placed on the vehicle for your protection. Read and follow the instructions on each label carefully. In the event any label becomes illegible or comes off, contact your Polaris dealer for a replacement. Any safety decal needing replacement will be provided by Polaris at no charge.

This decal illustration is provided for shape identification only. The text found on this decal is provided on the following pages.



GENERAL SAFETY AND DESCRIPTION OF LABELS

Safety/Warning Decal Text

To reduce the risk of SEVERE INJURY or DEATH:

WEAR A PERSONAL FLOTATION DEVICE (PFD).

All riders must wear a Coast guard approved PFD that is suitable for personal watercraft (PWC) use.

WEAR PROTECTIVE CLOTHING.

Severe internal injuries can occur if water is forced into body cavities as a result of falling into water or being near jet thrust nozzle. Normal swimwear does not adequately protect against forceful water entry into rectum or vagina. All riders must wear a wet suit bottom or clothing that provides equivalent protection (see Owner's Manual). Footwear, gloves and goggles/glasses are recommended.

KNOW BOATING LAWS.

Polaris Industries Inc. recommends a minimum operator age of 16 years old. Know the operator age and training requirements for your state. A boating safety course is recommended and may be required by your state.

ATTACH ENGINE SHUT-OFF CORD (LANYARD) to wrist and keep it free from handlebars so that engine stops if operator falls off. After riding, remove cord from PWC to avoid unauthorized use by children or others.

RIDE WITHIN YOUR LIMITS AND AVOID AGGRESSIVE MANEUVERS to reduce the risk of loss of control, ejection, and collision. This is a high performance boat-not a toy. Sharp turns or jumping wakes or waves can increase the risk of back/spinal injury (paralysis), facial injuries, and broken legs, ankles and other bones. Do not jump wakes or waves.

GENERAL SAFETY AND DESCRIPTION OF LABELS

DO NOT APPLY THROTTLE WHEN ANYONE IS AT REAR OF PWC-turn engine off or keep engine at idle. Water and/or debris exiting jet thrust nozzle can cause severe injury.

DO NOT OVERLOAD. It will significantly reduce stability and control. Never exceed rider or weight capacity. See capacity label.

KEEP AWAY FROM INTAKE GRATE while engine is on. Items such as long hair, loose clothing, or PFD straps can become entangled in moving parts resulting in severe injury or drowning.

NEVER RIDE AFTER CONSUMING DRUGS OR ALCOHOL
READ AND FOLLOW OWNER'S MANUAL

If Owner's Manual is missing, contact a Polaris Dealer for a replacement.

GENERAL SAFETY AND DESCRIPTION OF LABELS

Gasoline Warning Located near gas tank fill location.

⚠ WARNING

Gasoline is highly flammable and explosive. A fire or explosion can cause severe injury or death. Stop engine before refueling. Refuel in a well ventilated area. Never refuel while smoking or in the vicinity of an open flame or sparks.

⚠ CAUTION

Check engine oil every time you refuel. Oil fill is under front compartment door. Running the engine without oil will cause major engine damage.

7077768

⚠ WARNING

RIGHTING CAPSIZED BOAT



- To prevent injury do not place hands or objects into pump inlet, intake grate or nozzle.
- To prevent major engine damage: Make sure engine is stopped by pulling lanyard from engine stop switch and turn boat to upright position in a clockwise direction.

10/3685

Located at rear of watercraft and positioned upside down allowing the operator to read it when the boat is in the capsized position.

GENERAL SAFETY AND DESCRIPTION OF LABELS

This decal is located on the dash of your watercraft. The illustration is provided for shape identification only. The text is found below.



Collisions result in more **INJURIES AND DEATHS** than any other type of accident for personal watercraft (PWC).

TO AVOID COLLISIONS:

SCAN CONSTANTLY for people, objects and other watercraft. Be alert for conditions that limit your visibility or block your vision of others.

OPERATE DEFENSIVELY at safe speeds and keep a safe distance away from people, objects, and other watercraft.

- Do not follow directly behind PWCs or other boats.
- Do not go near others to spray or splash them with water.
- Avoid sharp turns or other maneuvers that make it hard for others to avoid you or understand where you are going.
- Avoid areas with submerged objects or shallow water.

TAKE EARLY ACTION to avoid collisions. Remember PWCs and other boats do not have brakes.

DO NOT RELEASE THROTTLE WHEN TRYING TO STEER away from objects - you need throttle to steer. Always check throttle and steering controls for proper operation before starting PWC.

Follow navigation rules and state and local laws that apply to PWCs.

See Owner's Manual for more information.

GENERAL SAFETY AND DESCRIPTION OF LABELS

Polaris Industries Inc.
2100 Highway 55
Menasha, Minnesota
55340-9770

This Boat Is Not Required To
Comply With The Following U.S.
Coast Guard Safety Standards In
Effect On The Date Of Certification.

- Display of Capacity Information
- Safe Loading
- Flotation
- Electrical System
- Fuel System
- Powered Ventilation

As Authorized By U.S. Coast Guard.
Grant Of Exemption (CGB 91-013).

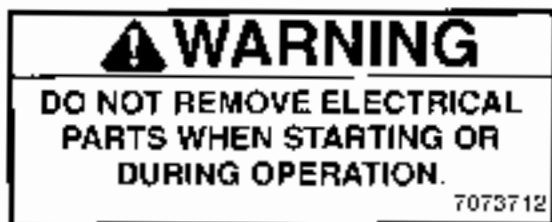
**PUSH BUTTON TO
RESET ELECTRICAL SYSTEM**



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Located on electrical box
(inside engine compartment).
See page 118 for exact location.

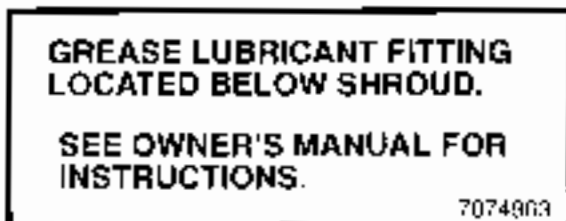
GENERAL SAFETY AND DESCRIPTION OF LABELS



Located on the engine water manifold.



Located near fire extinguisher container
(on top of storage compartment cover).



Located on coupler shroud.

GENERAL SAFETY AND DESCRIPTION OF LABELS

WARNING

Do Not Remove Electrical Part When Starting Or During Operation.

High Voltage Shock Hazard.

707538J

Located on the cooling rail of engine

WARNING

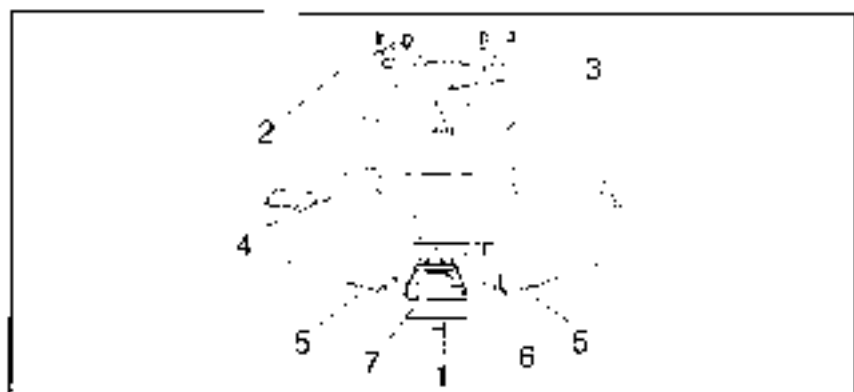
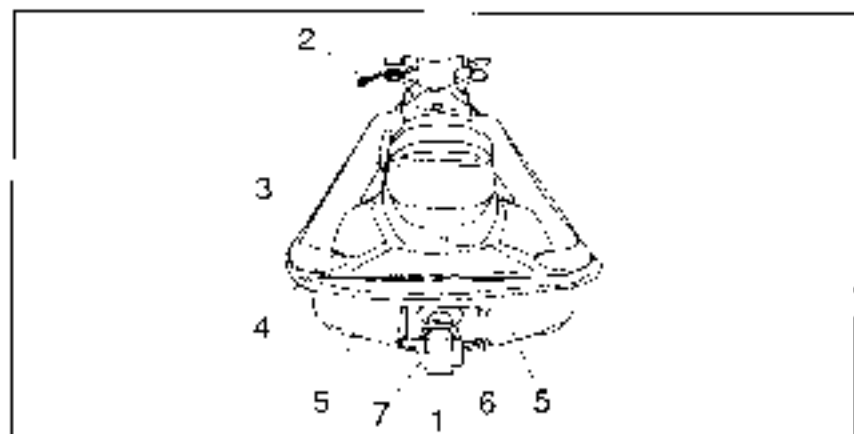
Gasoline vapors may cause fires or explosions. Do not overfill fuel tank. Keep the craft away from open flames and sparks. Do not start craft if liquid gasoline or vapors are present. Always completely open the seat/engine compartment cover to ventilate before starting engine. Always replace seat/engine compartment cover before starting.

7078311

LOCATION OF MAIN COMPONENTS AND CONTROLS

1. **Jet Pump Outlet Nozzle** - Controls the direction of the craft via the handlebars and is the exit for the jet output.
2. **Safety Lanyard Wrist Cord** - The lock plate end is fastened to the engine stop switch on the handlebar. Wrist band end is fastened to operator's wrist or PFD. Engine will not start if lanyard lock plate and switch are not engaged. If disengaged during operation the engine will stop.
3. **Seat Latch** - Secures the seat in position. When released, provide access to engine compartment. **NOTE:** The number of latches will depend on the model. Some boats have 1 latch and some have 2.
4. **Boarding Platform/Footrest** - To assist riders while boarding. The place for operator and passenger's feet while riding the watercraft.
5. **Drain Plug(s)** - When water gets into the bilge it can be drained through this plug. Remove the watercraft from the water before draining the bilge. Be sure the plug is securely closed before launching the watercraft.
6. **Exhaust Outlet**
7. **Reverse Gate (closed)**

LOCATION OF MAIN COMPONENTS AND CONTROLS



LOCATION OF MAIN COMPONENTS AND CONTROLS

Controls, Instruments and Features

Refer to illustrations on following pages.

1. **Seat/Engine Compartment** - Removing seat provides access to the engine, battery, electrical box, exhaust system, and other components.
2. **Handlebars** - Control the direction of the watercraft.
3. **Fire Extinguisher Compartment** - Provides secure storage for required fire extinguisher.
4. **Hood** - Provides access to fire extinguisher, oil tank and additional storage space.
5. **Air Intake Openings** - Air enters here to supply engine and ventilate engine compartment
6. **Fuel Tank Cap** - Turn the cap counterclockwise to remove and clockwise to replace.
7. **Grab Handle** - Used to assist the riders while boarding or riding as a passenger.
8. **Warning Light** - Some models are equipped with an oil level gauge on the multi-function meter which will flash "OIL" and a red light if low. Refer to the specifications on pages 140-143 to determine if your boat is equipped with this feature.
9. **Fuel Valve** - Polaris watercraft have either a two position fuel valve or no valve. Please Refer to the specifications on pages 140-143 to determine if your boat is equipped with a valve. **Two Position Rotating Valve** - ON allows fuel to operate the watercraft; OFF stops the fuel supply to the carburetor. Return to ON after filling the gas tank.
10. **Sponson** - Enhances vehicle stability and turning ability in water
11. **Seat Strap** - To be used to aid in boarding. Allows a passenger to hang on while riding.
12. **Reverse**
13. **Instrumentation MFD (Multi-Function Display) or MFI (Multi-Function Instrument)**

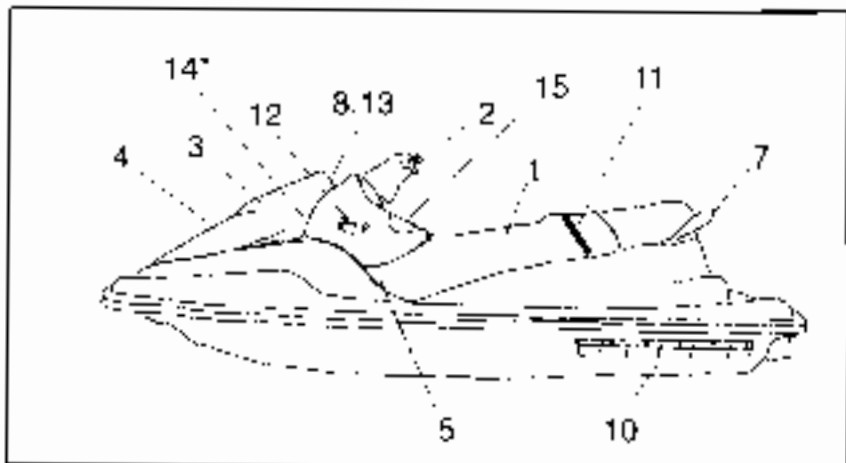
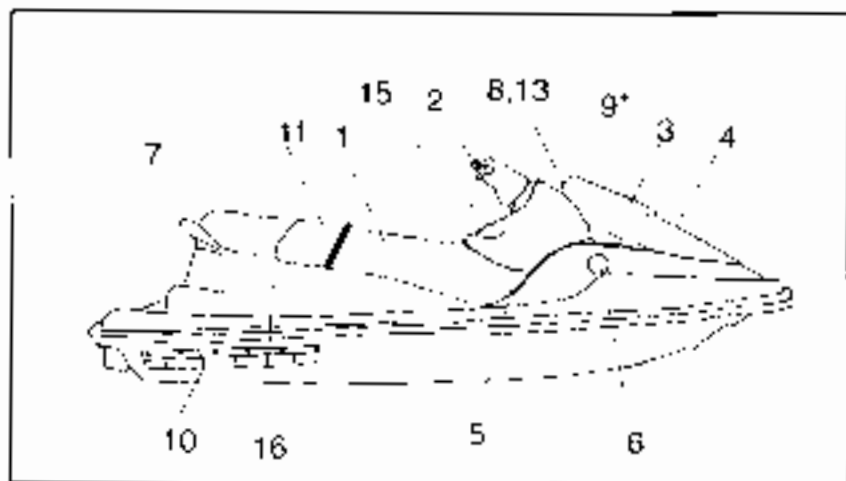
LOCATION OF MAIN COMPONENTS AND CONTROLS

Controls, Instruments and Features

14. **Oil Fill Cap** - Turn the cap counterclockwise to remove and clockwise to replace.

15. **Glove Box**

16. **Electrical Box (CDI)** Houses circuit breakers and fuses.



* under compartment door

LOCATION OF MAIN COMPONENTS AND CONTROLS

Controls, Instruments and Features

Refer to illustrations on following pages.

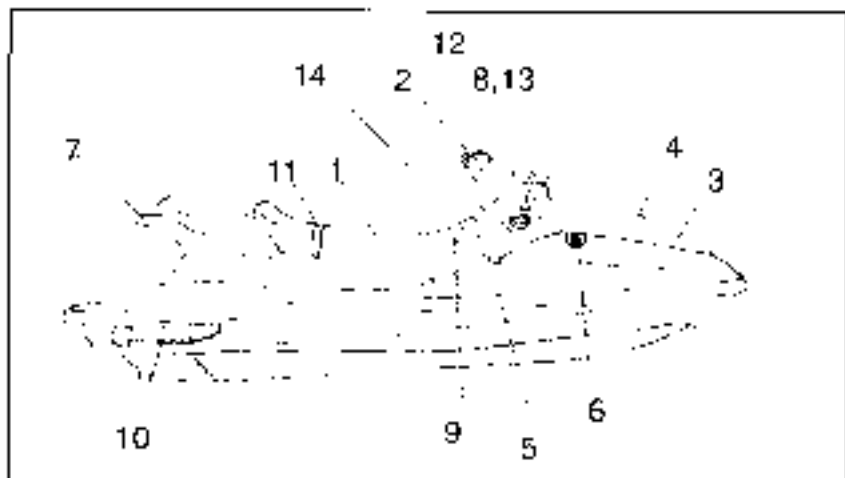
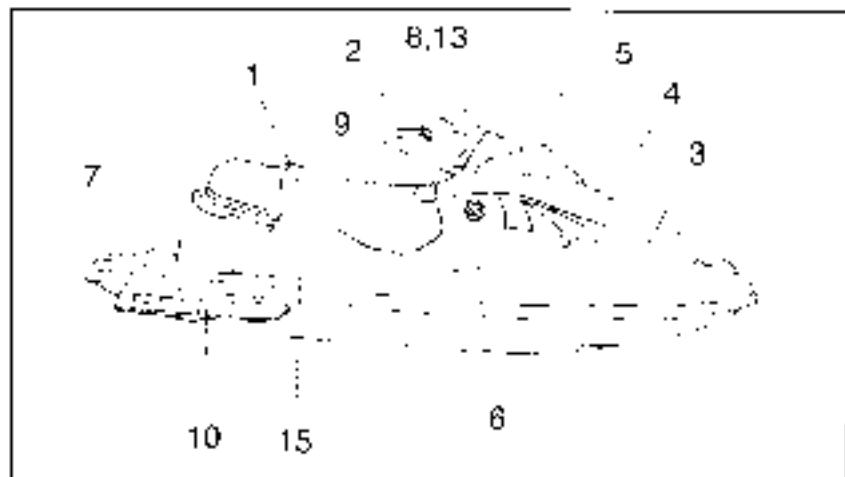
1. **Seat/Engine Compartment** - Removing seat provides access to the engine, battery, electrical box, exhaust system, and other components.
2. **Handlebars** - Control the direction of the watercraft.
3. **Fire Extinguisher Container** - Provides secure storage for required fire extinguisher.
4. **Hood** - Provides access to fire extinguisher, oil tank and additional storage space.
5. **Air Intake Openings** - Air enters here to supply engine and ventilate engine compartment.
6. **Fuel Tank Cap** - Turn the cap counterclockwise to remove and clockwise to replace.
7. **Grab Handle** - Used to assist the riders while boarding or riding as a passenger.
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12. **Reverse**
13. **Instrumentation MFD** (Multi-Function Display) or **MFI** (Multi-Function Instrument)

LOCATION OF MAIN COMPONENTS AND CONTROLS

Controls, Instruments and Features

14. Glove Box

15. **Electrical Box (CDI)** Houses circuit breakers and fuses.



LOCATION OF MAIN COMPONENTS AND CONTROLS

Refer to illustrations on following pages.

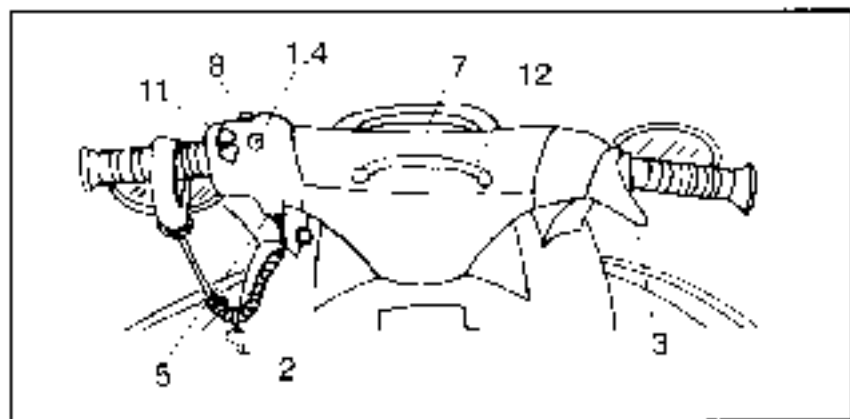
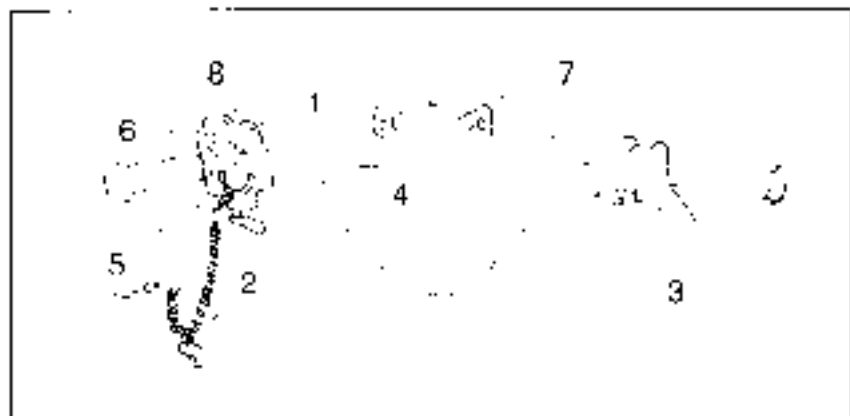
1. **Starter Button** - Depress and hold the starter button to start engine. Release it as soon as the engine starts. Do not depress the starter button for more than ten seconds at a time. **NOTE:** Lanyard and lock plate must be attached to the engine stop switch or engine will not start.
2. **Choke** - The choke is used to help in starting a cold engine. It is not to be used when starting a warm engine. (Does not apply to fuel injected models.)
3. **Throttle** - Controls the speed of the watercraft. When squeezed, the engine accelerates; when fully released the engine returns to an idle.
4. **Engine Stop Button** - The red engine stop button on the left handlebar will stop the engine when necessary. The engine stop button is a component of the engine stop switch. Press to stop the engine.
5. **Engine Stop Switch** - The lock plate end of the lanyard cord is attached to the engine stop switch on the left handlebar.
6. **Quick Trim Switch** - A switch which positions the trim feature up or down. See page 78 for detailed explanation of trim feature.
7. **Multi-Function Display** - See pages 90-93 for detailed explanation of multi-function meter.
8. **Bilge Button** - The blue or gray button on top of the switch assembly. Whenever the engine is running, the bilge pump will be running. When the engine is shut down, pushing and holding this button will operate the bilge pump. This should be used if water is noted in the hull during the pre-operation inspection and **prior to restarting the engine after capsizing.**
9. **Fuel Gauge** - Found on the Multi-Function Display or Multi-Function Instrument.

LOCATION OF MAIN COMPONENTS AND CONTROLS

10. **Fuel Valve** - Polaris watercraft have either a two position fuel valve or no valve. Please refer to the specifications on pages 140-143 to determine if this feature is on your boat. **Two Position Rotating Valve** - ON allows fuel to operate the watercraft; OFF stops the fuel supply to the carburetor. Return to ON after filling the gas tank.

11. **Polaris Electric Reverse Control (PERC)** - two buttons used to raise or lower the reverse gate. Refer to page 68 for a detailed explanation of the PERC feature.

12. **Hand Hold** - A soft, flexible handle for front passengers to use.



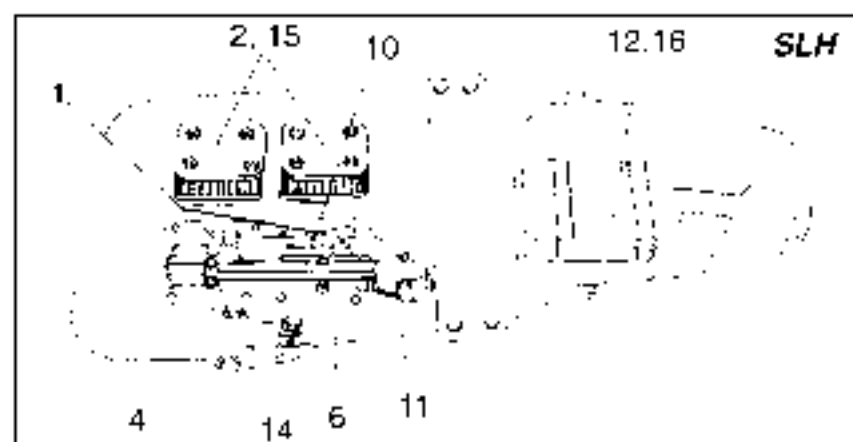
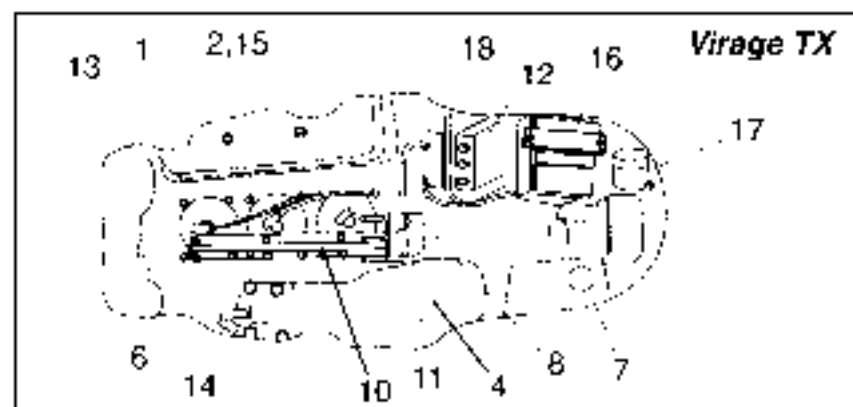
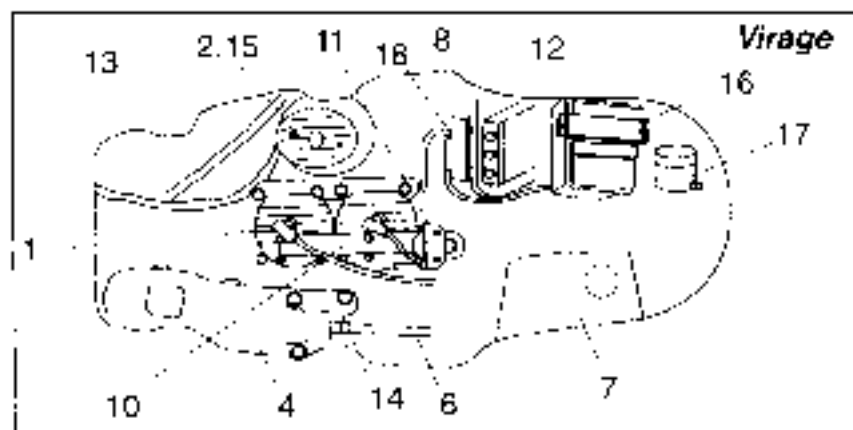
LOCATION OF MAIN COMPONENTS AND CONTROLS

Refer to illustrations on following pages.

Under Seat Engine Compartment

1. Spark plugs
2. Airbox cover
3. Driveshaft shroud. See page 110 for detail.
4. Exhaust pipe
5. Water temperature sensor
6. Exhaust cooling hose
7. Exhaust silencer
8. Engine water outlet hose (underneath thermostat assembly)
9. Oil fill location (not shown)
10. Water manifold
11. Thermostat assembly
12. Electrical box (circuit breaker and fuses)
13. Fuel/water separator
14. Exhaust Coolant Filter
15. Air filter
16. Battery
17. Bilge Pump
18. Starter Solenoid

LOCATION OF MAIN COMPONENTS AND CONTROLS



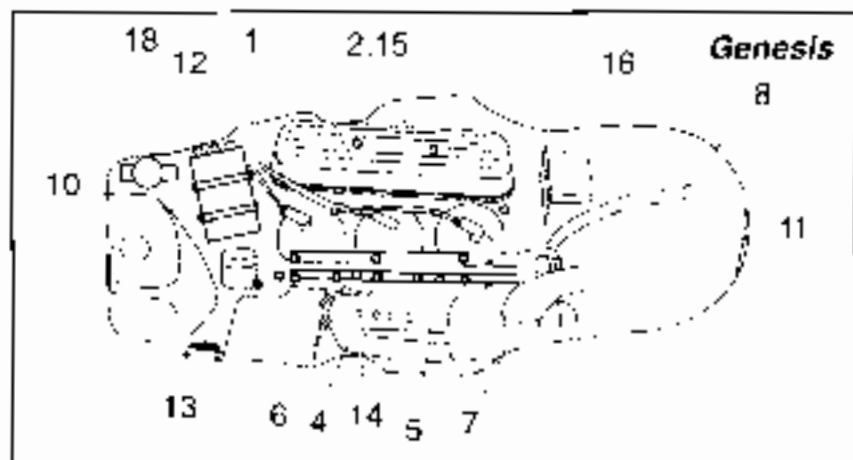
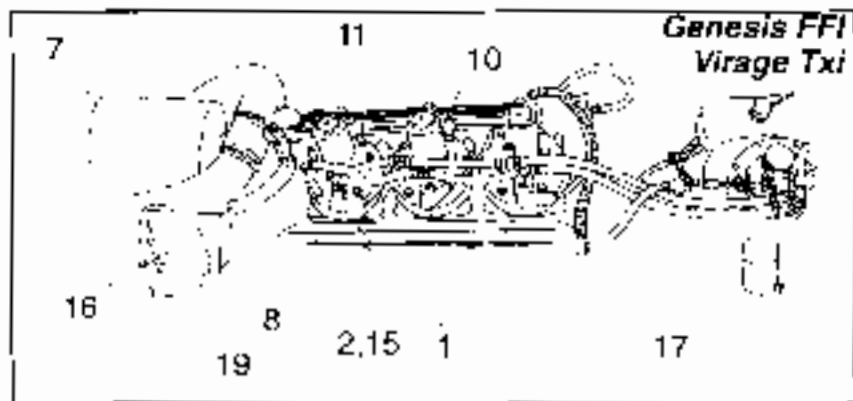
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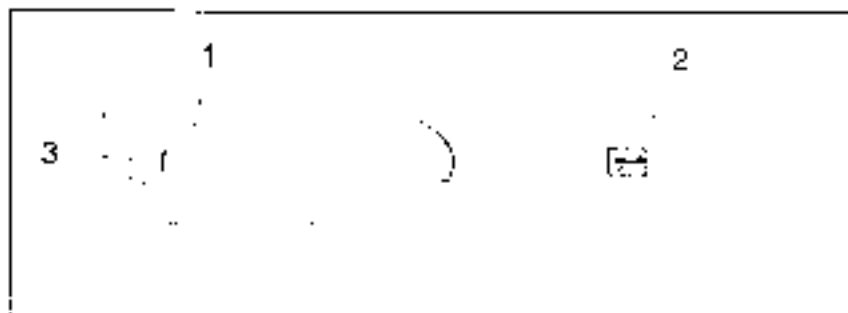
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5. Water temperature sensor
6. Exhaust cooling hose
7. Exhaust silencer
8. Engine water outlet hose (underneath thermostat assembly)
9. Oil fill location (not shown)
10. Water manifold
11. Thermostat assembly
12. Electrical box (battery underneath on some models)
13. Fuel/water separator
14. Exhaust Coolant Filter
15. Air filter
16. Battery
17. Capacitor
18. Solenoid
19. EMM (engine management module)(found only on fuel injected models).

LOCATION OF MAIN COMPONENTS AND CONTROLS



LOCATION OF MAIN COMPONENTS AND CONTROLS

1. **Jet Pump Intake Grate** - The grate protects the impeller and drive shaft as well as riders of the watercraft
2. **Drive Shaft** - Located underneath the intake grate. Transmits the power from the engine to the impeller.
3. **Ride Plate** - Covers and protects the jet pump and provides leveling control for the watercraft.



WARNING

Any operator of a Polaris watercraft must know and practice the following guidelines for personal safety and the safety of their passenger(s). Severe injury or death can result from failure to follow these instructions as well as the warning labels on the watercraft. Never permit a guest to operate this watercraft unless the guest has read and understands all warning labels and the Owner's Manual.

Read the entire manual to have a thorough understanding of this watercraft and its operation. Read and understand all warning labels before operation.

- ▶ This watercraft is not a toy. It is a high performance powerboat. Operating it requires learned and practiced skills. All operators and passengers should become familiar with the necessary techniques before attempting maneuvers. Always run the watercraft at a speed which is proper for the water conditions and your level of experience.
- ▶ The minimum operator age for this watercraft is 16 years of age. Operators between 16 and 18 years of age require close adult supervision. Operation must be in accordance with all applicable boating rules and regulations.

OPERATION WARNINGS

- ▶ **This watercraft does not have brakes.** The watercraft is stopped by releasing the throttle and gliding to a stop by the natural drag of the water. **Allow a minimum of 300 feet (90 m) to coast to a stop from full throttle.**
- ▶ **Jet thrust is required to steer and turn the vehicle.** Never completely release the throttle and attempt to turn at more than a trolling speed because the watercraft will not turn. Practice until you are comfortable with turning and stopping, and always before carrying a passenger.
- ▶ Know and observe all local, state, and federal boating regulations and speed limits. Boating laws and navigational rules are designed for the safety of everyone sharing the waterways.
- ▶ **If your machine is not a Virage (three passenger) or Genesis (four passenger), do not tow** water-skiers, kneeboards, or any object or person behind the watercraft. Towing can cause loss of steering control and will create a hazardous condition which could result in severe injury or death.
- ▶ **Virage and Genesis models are capable of towing.** However, be aware of the following: towing can cause reduced steering control. Be extremely careful when towing other watercraft, skiers, or objects behind this watercraft as they have a significant impact on handling and steering. Observe local and state laws regarding water-skiing and other towable objects.

OPERATION WARNINGS

- ▶ Do not allow passengers to stand on the boarding platform while the watercraft is running or in motion. Passengers should always remain seated.
- ▶ Never go over a ski jump or attempt to jump waves or other objects in the water. You can severely damage the watercraft and injure yourself due to impact, loss of visibility, watercraft control and reduced reaction time.

▶ **Before starting the watercraft the operator must always attach the lanyard cord to his/her left wrist or PFD ensuring it's snug. This will immediately stop the engine if the operator falls off. Be sure the lanyard is free and not wrapped around the handlebars or controls.**



When the watercraft is not in service be sure to disconnect the lanyard from the engine stop switch. This will prevent accidental starting of the watercraft.

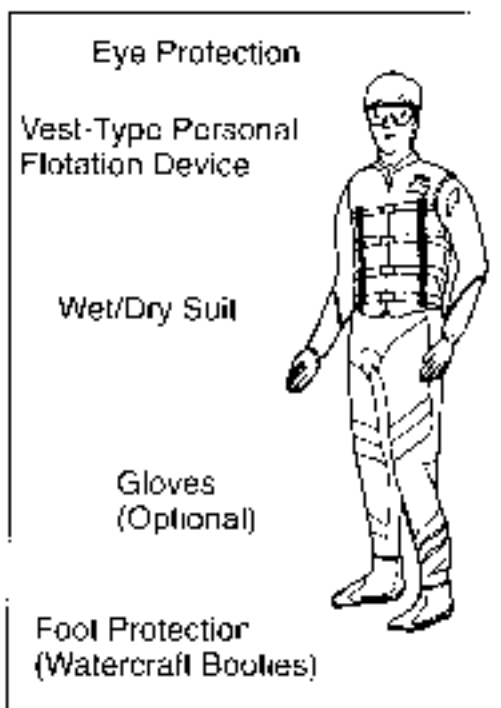
OPERATION WARNINGS

► The operator and passenger must wear a U.S. Coast Guard approved personal flotation device (PFD) at all times because of the drowning hazards associated with boating. Polaris recommends a vest-type PFD (type 1, 2, or 3). The seat of the watercraft IS NOT a flotation device.

A helmet may not provide adequate protection against all foreseeable impacts and may aggravate some injuries. For example, if you fall into the water

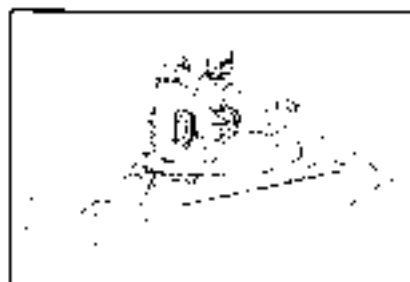
and are wearing a helmet, the helmet could catch the water and could cause choking, severe and permanent injuries or death. A helmet also could increase the possibility of an accident if it reduces your visibility or ability to hear or if its weight increases fatigue. A helmet may provide increased personal injury protection, in some situations. For example, a helmet might provide head protection from impact with the watercraft or during a collision with other watercraft or an obstacle.

It is recommended that all riders of the watercraft wear additional personal protection including watercraft booties and a wet/dry suit. These items will protect riders from exposure and potential hazards in the water such as debris and hidden objects. Adequate eye protection should be worn at all times because water spray can interfere with vision.



OPERATION WARNINGS

► The Polaris watercraft are designed to carry up to 4 passengers (depending on the model) in addition to the operator. Check the specifications on pages 140-143 to determine your boat's rider capacity. Never allow more than the specified rider capacity on the watercraft. Overloading the watercraft significantly reduces watercraft stability and control which could result in an accident. When more than one person is riding, the watercraft handles differently, which means that the operator must have enough prior riding experience to handle the watercraft with a passenger(s) aboard. **NOTE:** Check the specifications on pages 140-143 for the maximum watercraft load capacity for your watercraft.



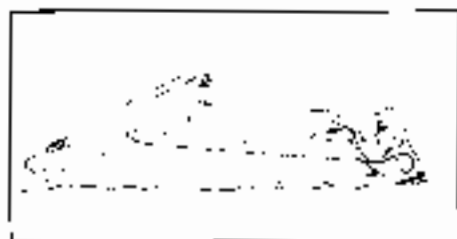
► Do not use the watercraft unless it has an approved fire extinguisher on board. This is a federal regulation. Know how to reach your fire extinguisher quickly in case of fire, and know how to use it before you go out on the water. If you have any doubts about your ability to extinguish the fire, swim away from the craft as quickly as possible. Immediately seek help from other boats or those ashore.



OPERATION WARNINGS

- ▶ Be aware of severe weather conditions. Observe weather forecasts and conditions before venturing out. Do not operate the watercraft when visibility is poor. Operation of the watercraft in bad weather can result in severe injury or death due to exposure (hypothermia) or accidents due to rough water conditions and poor visibility.
- ▶ Be aware of the danger of hypothermia (sub-normal body temperature) which can result in severe injury or death in a very short time. Hypothermia can begin in water as warm as 80°F (27°C). Ride with another watercraft when going into remote areas or large areas of open water. Take along a flare gun when going into remote areas to signal for help if necessary.
- ▶ Re-boarding the watercraft in deep water can be strenuous. Practice boarding in chest-deep water to be sure you are physically able to re-board.

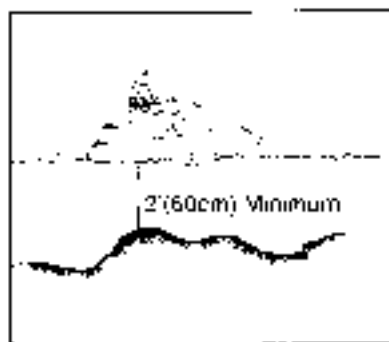
▶ The stream of water produced by the jet pump, and falling into the water at high speed can cause severe personal injury, especially to body orifices (eyes, mouth, ears, rectum, etc). Nor-



mal swimming attire may not provide adequate protection. All riders must wear a wet suit bottom or clothing that provides equivalent protection. The jet pump output is especially dangerous if a passenger falls to the rear from a moving watercraft; and to persons behind a moving watercraft. If a passenger falls from the watercraft, release the throttle immediately to avoid injury. Do not exceed idle speed if any person is within 50 feet (15 m) of the rear of the watercraft.

OPERATION WARNINGS

► Watch for dangerous obstacles above and below the water surface at all times and especially in shallow water. Use extra caution when riding in unfamiliar areas. Never ride in water that is less than two feet (60 cm) deep. Do not operate at more than an idle speed in water that is less than six feet deep. If you are thrown from the watercraft you could hit an underwater object which could result in severe injury or death. Collision with underwater obstacles or people could cause severe injury or death.



- Never ride in water that is less than two feet (60 cm) deep. Do not operate at more than an idle speed in water that is less than six feet deep. Ingesting sand into the cooling system will cause the engine to overheat, resulting in possible severe engine or pump damage.
- Always perform the pre-operation check (beginning on page 46) before starting and riding the watercraft. Check fuel and oil levels and all controls, especially the throttle lever, handlebars, and steering nozzle. This can protect you from accidents and the machine from damage in the event something is not functioning properly.
- Riding personal watercraft is strenuous. All riders should be in good physical condition. If you are pregnant consult your physician before riding any watercraft.

OPERATION WARNINGS

► If the watercraft has been beached or sitting in shallow water, it will be necessary to clear out any sand or small rocks before boarding and restarting the watercraft. Remove the particles by bouncing the back of the machine up and down in at least 24" of water.

► Starting, turning, and accelerating without checking for other boats and objects in your path can cause an accident. **Always look behind you and to each side when starting out and before making sudden turns.** Always be aware of obstacles, swimmers and other watercraft around you. A collision can cause severe injury or death.



► Quick turns or abrupt changes in speed can cause a passenger to lose his/her balance, fall off and/or become injured. The operator should alert the passenger before making sudden moves.



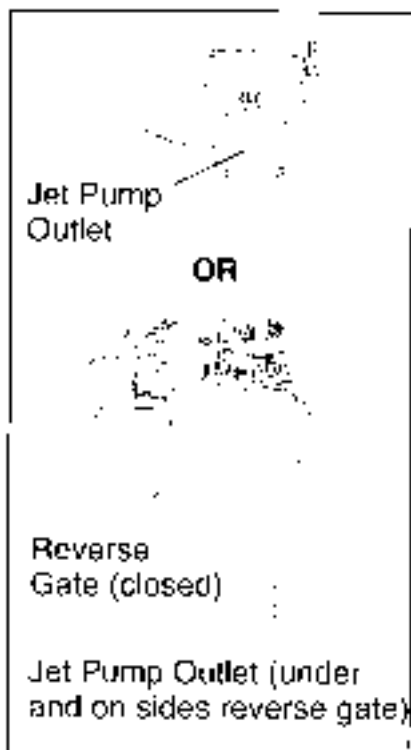
► Routine service and adjustments to the watercraft are critical for the safe operation and life of the watercraft. Follow the prescribed maintenance and service recommendations in this manual. Have an authorized Polaris dealer perform the service work.

OPERATION WARNINGS

► While the engine is running, do not allow hands, feet, ropes, straps, clothing, or long hair to come in contact with the jet pump water intake on the bottom of the watercraft.

Never insert any object into the intake or outlet of the jet pump. Never start or operate the watercraft with the inlet grate, ride plate, or any guards or shields removed. Severe injury, death or drowning could result from coming in contact with the jet pump or driveline components of the watercraft.

To prevent serious injury due to accidental starter engagement, be sure the engine is off, the safety lanyard is disconnected before removing weeds or debris which may have collected in or around the jet pump intake.



OPERATION WARNINGS

▶ Never touch or remove electrical parts when starting or during operation of the watercraft. Severe injury or death could result from electrical shock.

▶ If the watercraft is capsized it must be uprighted in a clockwise direction as viewed from the rear in order to minimize the possibility engine damage. **Important:** Follow engine draining procedure found on page 84 and 86. Be sure the lanyard is removed from the engine stop switch.



▶ Operator and passenger should keep their feet firmly on the floorboards while the watercraft is in motion. It is possible to lose your balance, fall overboard, or possibly injure your feet from objects in the water. **The passenger should face forward and firmly hang onto the operator's waist except in towing situations** where the spotter faces the rear and uses the grab handle to hold on.

▶ Never operate the watercraft after sunset or before sunrise. It is NOT equipped to be ridden in the dark, which makes it unsafe and illegal to operate.

▶ Be aware of other watercraft, people swimming, and other obstacles while operating the watercraft and maintain a safe distance. This is especially important for an inexperienced operator. A collision can cause severe injury or death.

▶ Never attempt to lift the watercraft without the aid of a trailer and winch or other heavy lifting device. Severe back injury or other injury could result.

OPERATION WARNINGS

- ▶ Do not modify this watercraft or any of its components. Modifications to this machine could create safety hazards and reduce machine reliability as well as make it unsafe or illegal to operate. Any modifications to this watercraft will void your warranty.
- ▶ Safe operation of this rider-active craft requires good judgement and physical skills. Persons with cognitive or physical disabilities who operate this vehicle have an increased risk of overturns and loss of control which could result in serious injury or death.
- ▶ Do not operate this watercraft while under the influence of alcohol or drugs.
- ▶ **Sobering Facts About Boating Under the Influence**

More than half of all the people who drown had consumed alcohol prior to their accident.

Even if you are not intoxicated, any amount of alcohol can be a threat to your safety. Just one beer will impair your balance, vision, judgment and reaction time, thus making you a potential danger to yourself and others.



So remember, don't drink alcohol or take drugs if you are planning to have fun in or on the water.

- ▶ **Outdoor Exposure**

Long hours of boating, exposure to noise, vibration, sun, glare and wind can produce a human fatigue and dehydration condition that can affect your balance, vision, judgment and reaction time and can increase your risk of an accident that may cause bodily injury or death. If you combine alcohol consumption with this condition, you can increase your risk of an accident that may cause bodily injury or death.

OPERATION WARNINGS

▶ Cold Water Survival

Your life may depend on a better understanding of cold water. Many suspected drowning victims actually die from cold exposure or hypothermia.

Hypothermia is a condition in which the body loses heat faster than it can produce it. Violent shivering develops which may give way to confusion and a loss of body movement

▶ To Avoid Hypothermia:

- Dress warmly
- Wear proper gear and stay as dry as possible
- Seek a warm environment at the first sign of hypothermia (mild shivering)

▶ If You Fall In The Water:

- Don't discard clothing
- While wearing your life jacket, draw your knees up toward your chest and hold them there with your arms in the HELP (Heat Escape Lessening Posture) posture

NAVIGATIONAL RULES

This watercraft must be operated in accordance with all rules and regulations governing it and the waterway on which it is operated.

These rules are used and enforced internationally as well as by the U.S. Coast Guard and local law enforcement. Any operator of this watercraft should be aware of these rules and obey them when encountering other vessels.

The following rules are condensed and are provided only for your convenience. Consult a U.S. Coast Guard Auxiliary or Department of Motor Vehicles for a complete set of rules governing the waters where you will be riding. You may also obtain this information when registering your watercraft.

Right-of-way And Give-way

In nautical terms the "stand-on" (privileged) vessel has the right-of-way and the "give-way" (burdened) vessel must yield or give-way.

Stand-on Vessel

The vessel with the right-of-way has the duty to continue its course and speed, except to avoid an immediate collision. By maintaining course and speed other vessels should be able to determine how best to avoid you.

Give-way Vessel

The vessel which does not have the right-of-way is responsible to take positive action to stay out of the way of the stand-on vessel. Normally, you should not cross in front of the stand-on vessel. You should slow down or change direction briefly and pass behind the stand-on vessel. Your actions should be clear and understandable by the stand-on vessel.

Rule 2

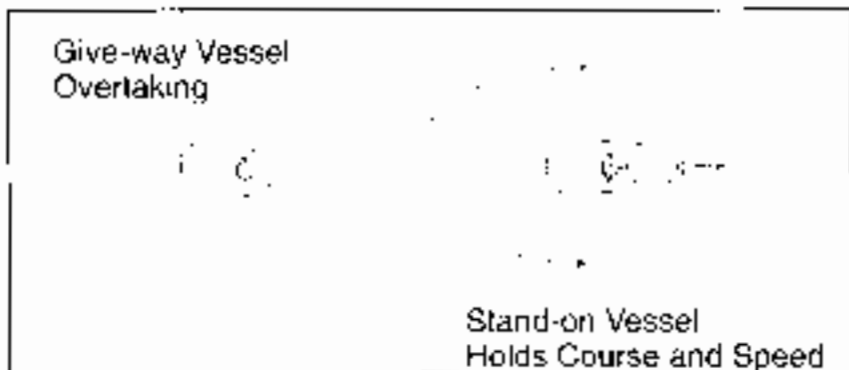
Rule 2 is "The General Prudential Rule" in the International Rule. It tells the operator to follow standard procedures except when a collision will occur, unless both vessels try to avoid the collision. In this case, both vessels become "give-way" vessels.

NAVIGATIONAL RULES

Encountering Vessels

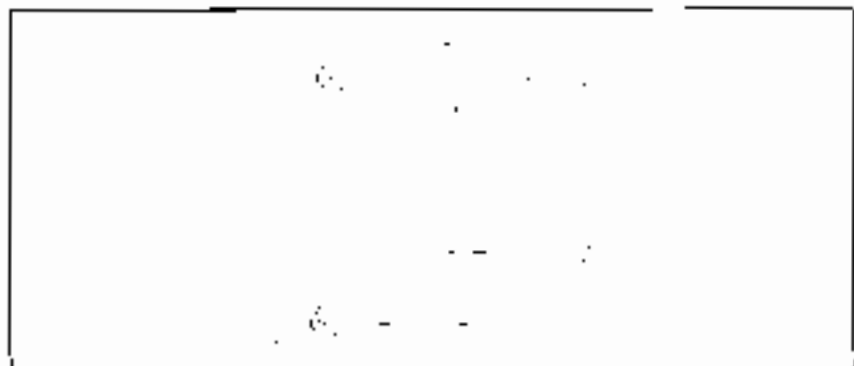
There are three main situations in which you may encounter other vessels:

- Overtaking (passing);
- Meeting (approaching another vessel head-on) and
- Crossing (travelling across another vessel's path).



Overtaking Vessels

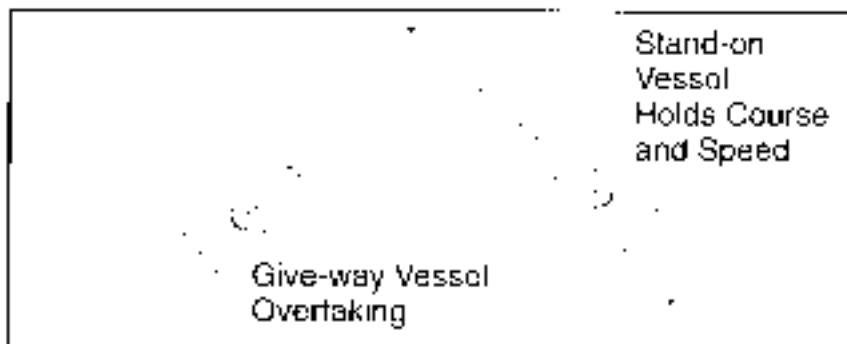
If you are passing another vessel, you are the "give-way" vessel. The other vessel is expected to maintain its course and speed. You must stay out of its way until you are past it. The same would be true if you were the "stand-on" vessel. Maintain your course and speed until the other vessel has passed you.



Meeting Vessels

If you are meeting another power vessel head-on, and you are close enough to possibly collide, neither vessel has the right-of-way. Both vessels must alter course to avoid an accident. You should keep the other vessel to your port (left) side. This rule does not apply if you will be clear of the other vessel by maintaining your course and speed.

NAVIGATIONAL RULES



Crossing Paths

When two power vessels are crossing each other's path close enough to run the risk of collision, the vessel having the other on the starboard (right) side must avoid the other. If the other vessel is on your starboard (right) you must keep out of its way as you are the "give-way" vessel. If the other vessel is on your port (left) side, maintain your course and direction as you are the "stand-on" vessel. This is providing that the "give-way" vessel gives you the proper right-of-way.

Non-motorized Craft (Sailboats, Canoes, Etc.)

Non-motorized craft are normally given the right-of-way except:

- When a non-motorized craft is overtaking a power vessel the power vessel has the right-of-way.
- Non-motorized craft should stay clear of fishing vessels
- In a narrow channel a non-motorized craft should not interfere with the safe passage of a power vessel.

Fishing Vessel Right-of-way

All vessels which are fishing with nets, lines or trawls are considered "fishing vessels" under International Rules. Vessels with trolling lines are not considered fishing vessels. Fishing vessels have the right-of-way regardless of position. They cannot interfere with the passage of other vessels in narrow channels.

NAVIGATIONAL RULES

TO AVOID COLLISIONS:

SCAN CONSTANTLY for people, objects and other watercraft. Be alert for conditions that limit your visibility or block your vision of others.

OPERATE DEFENSIVELY at safe speeds and keep a safe distance away from people, objects, and other watercraft.

- Do not follow directly behind PWCs or other boats.
- Do not go near others to spray or splash them with water.
- Avoid sharp turns or other maneuvers that make it hard for others to avoid you or understand where you are going.
- Avoid areas with submerged objects or shallow water.

TAKE EARLY ACTION to avoid collisions. Remember PWCs and other boats do not have brakes.

DO NOT RELEASE THROTTLE WHEN TRYING TO STEER away from objects - you need throttle to steer. Always check throttle and steering controls for proper operation before starting PWC.

Follow navigation rules and state and local laws that apply to PWCs.

Reading Buoys And Markers

United States waters are marked for safe navigation through the use of buoys and markers with various shapes, colors, numbers and lights to show the boater the proper course. The same is true for waters in particular states.

Marking may vary by geographic location. Consult local authorities before riding your watercraft in unfamiliar waters.

Launch Ramp Etiquette

Be considerate and efficient when launching your watercraft. Prepare your craft beforehand, and perform all safety checks before you get to the water. Launch as quickly as possible.

FUEL AND OIL RECOMMENDATIONS

Gasoline is extremely flammable and explosive under certain conditions.

WARNING

- Always check for fumes prior to starting engine
- Always exercise extreme caution whenever handling gasoline.
- Always refuel with the engine stopped; and outdoors or in a well ventilated area
- Do not smoke or allow open flames or sparks in or near the area where refueling is performed or where gasoline is stored.
- Do not over fill the tank (Do not fill the tank neck).
- If you get gasoline on your skin or clothing, immediately wash it off with soap and water and change clothing.
- Never start the engine or let it run in an enclosed area. Gasoline powered engine exhaust fumes are poisonous and can cause loss of consciousness and death in a short time.
- Shut off fuel valve whenever the watercraft is stored, parked, or being transported.

WARNING

The engine exhaust from this product contains chemicals known to cause cancer, birth defects or other reproductive harm.

FUEL AND OIL RECOMMENDATIONS

Fuel

Refer to the specifications on pages 140-143 for the proper fuel octane requirement for your boat.

CAUTION

The use of non-recommended fuel or oil could result in engine component and fuel system deterioration and will void your warranty.

Since this watercraft features an oil injection system it is not necessary to pre-mix the gasoline and oil. The only deviation from this is during the engine break-in period (see page 59).

Refueling

Keep the watercraft horizontal while fueling. If your machine is equipped with a fuel valve, shut it off. Carefully remove the gas cap.

Use fresh, seasonal gasoline which has been stored in a clean container. To get the best performance from gasoline only purchase what is needed for a month or less of operation.

WARNING

Always stop the engine and disconnect the lanyard lock plate from the engine stop switch before refueling.

If you do not, you run the risk of igniting the gasoline, causing an explosion that would cause serious injury or death.

The use of a funnel or flexible spout will help avoid gasoline spillage on the watercraft. Always wipe spills off immediately.

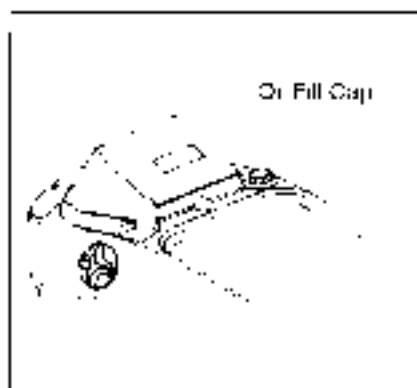
OIL INJECTION SYSTEM

Use only Polaris 2-cycle oil.

The oil fill is located under the front door. Check the oil level every time you go boating and add oil as necessary. Do this with the engine off and the lanyard lock plate removed from the engine stop switch.

To check the oil, first make sure the watercraft is level. Remove the oil tank cap and look at the oil level, or remove the storage bucket or seat and check the oil level. Add recommended oil as necessary. Do not overfill. Wipe up any oil spillage immediately. Visually inspect the oil for water or foreign matter. If either is present change the oil.

All models are equipped with an oil level gauge on the instrumentation. The gauge will flash "OIL" and a red light if low. Other models emit a "low oil tone" when oil is low. Add oil immediately when your machine indicates the need.



CAUTION

The use of **unrecommended** oil could result in engine damage or poor performance. It will also void your warranty.

If the engine is run without oil, severe engine damage will occur. If you discover an empty oil tank, have the watercraft serviced immediately by an authorized Polaris dealer.

Always tighten cap securely to prevent water from contaminating oil. Severe engine damage will occur if water becomes mixed into the oil.

WATERCRAFT EQUIPMENT

Standard Equipment

- Watercraft Owner's Safety and Maintenance Manual
- Watercraft Safety Video tape PN 9915821
- Riding Rules Brochure PN 9913957
- Lanyard with wristband, lock plate and whistle
- Tool Kit containing:
 - wrench
 - flat screwdriver
 - Allen wrench
 - spark plug wrench with Phillips head screwdriver

Replacement Parts

If replacement of parts becomes necessary contact an authorized Polaris dealer. Whenever possible provide part numbers.

Optional Equipment

- U.S. Coast Guard approved fire extinguisher (UL 5-B:C Rating) PN 2871012
- Registration numbers
- Tow rope (for emergency use) PN 2871310
- Flare gun (for emergency use) PN 2871533
- Safety and riding gear, including approved personal flotation devices for operator and passenger (see page 26)
- Polaris Premium or Polaris Premium Gold Synthetic or Polaris Nature-Oil (biodegradable Synthetic two-cycle oil)
- Polaris cable lubricant PN 2870510
- Polaris dielectric grease, 2 oz. bottle PN 2871027
- Polaris grease, premium marine PN 2871066
- Polaris bunk kit (trailer conversion) PN 2871039
- Waterproof lubricant spray, 12 oz. PN 2871064
- Emergency Signal Kit PN 2871206
- Emergency Survival Kit PN 2871204

WATERCRAFT EQUIPMENT

PDFs (Personal Flotation Devices)

High Performance Adult 4-Buckle PDF (Red/Black/Gray)

Size	X-S	S	M	L	XL	XXL	XXXL
2850192	01	02	03	06	09	12	14

Action Series Adult 4-Buckle PDF (Black/Gray)

Size	X-S	S	M	L	XL	XXL
2859139	01	02	03	06	09	12

High Performance Series Adult Racing PDF (Red/Black/Gray)

Size	X-S	S	M	L	XL	XXL	XXXL
2850193	01	02	03	06	09	12	14

Adult Universal PDF (Electric Blue)

Size	Universal	Over size
2850196	01	02

Youth Life Vest (Blue/Green)

Size	S (30 - 50 lbs)	M (50-60 lbs)	L (50-90 lbs Tall)
2850195	02	03	06

Child's Heads-up Life Vest (Electric Blue)

S (30-50 lbs)
2859144

Youth PFD (Electric Blue)

S (50-60 lbs)
2859144

PRE-OPERATION CHECK

WARNING

Inspect the watercraft each time before starting and riding to ensure it is in proper working order. If proper inspection is not done severe injury or death could result. See page 132 for additional inspection information.

If you smell fuel in the hull of the craft, *do not operate the craft*. Instead, take it to your dealer immediately for inspection.

Before inspection, remove lanyard and lock plate from the engine stop switch located on the handlebars.

Following is a check list that should be performed before riding the watercraft. The next few pages contain detailed information regarding these checks.

Item	What To Do	See Page
Fuel/water separator	Visually inspect for water and drain if present.	58
Fuel/oil tank levels	Check fuel/oil; add as necessary; visually inspect for presence of water.	48
Jet pump water intake	Inspect and remove debris if present; be sure intake grate is secure; push rear of watercraft up and down to flush sand out of water intake before starting.	49

PRE-OPERATION CHECK

Item	What To Do	See Page
Throttle	Check for proper operation	50
Steering	Check for proper operation, visually inspect control cable	50
Fire extinguisher	Inspect condition and expiration date	51
Storage compartment	Check for secure latching	52
Engine Cover	Check for secure latching	52
Battery	Check fluid level and condition; vent hose must be clear and open	54
Hull	Inspect hull for damage or cracks, clean off marine growth	55
Drain plugs/bilge	Inspect and clean, it should not leak; be sure it is tight and secure	55
Loose parts/hoses	Inspect for loose parts/hoses and connections	51
Seat	Check that seat is securely fastened	53
Loose ropes/straps/ clothing/long hair	Be sure that there are no loose ropes, straps, clothing, etc., Long hair is tied back and secured	55
Riding gear	Check operator and passenger for complete gear and proper fit	56
Switches/buttons	Check operation	57
Lanyard cord/stop switch	Check condition and operation	57
Reverse System	Check operation	66
Bilge	Pump out any water (button on switch pad)	57

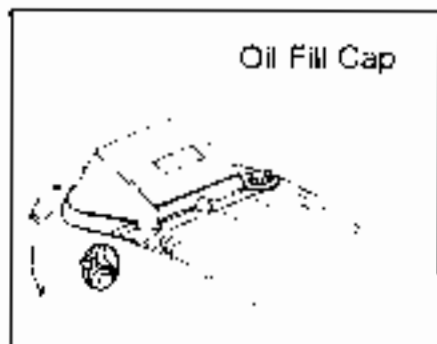
PRE-OPERATION CHECK

✓ Fuel And Oil Tank Levels

Remove fuel cap. With watercraft horizontal and fuel valve off (if equipped), fill the fuel tank with gasoline recommended on pages 140-143 of this manual. Heed the warnings about gasoline found on page 40.

NOTE: If the fuel or oil levels become low, the Multi-Function Display will display a flashing warning light. Proceed to shore and refuel. Refer to the specifications found on pages 140-143 to determine if your boat is equipped with this feature. **Know your machine before riding.**

To check the oil level, turn the cap counterclockwise and remove it to look inside the oil tank. You can also remove the storage tray inside the storage compartment or seat to view the oil level in the oil tank. Add recommended oil as necessary.



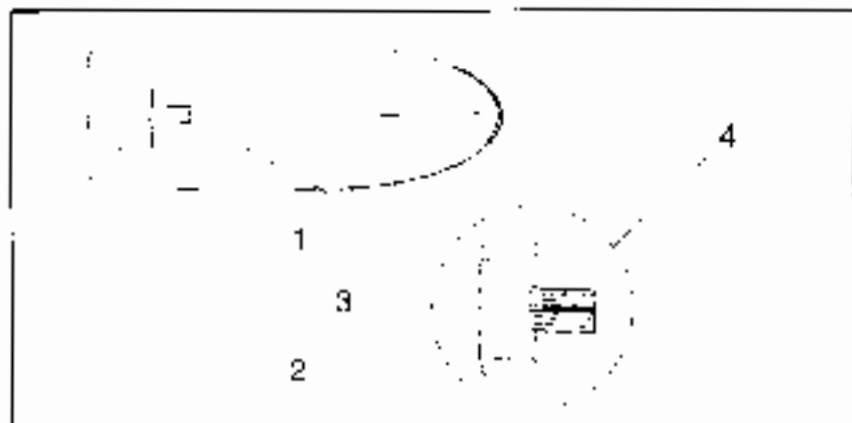
Visually inspect the oil for water or other contaminants. If either of these is present, have the oil changed and bleed the system to remove all contaminants.

Read the oil recommendations found on page 59 for proper lubrication during the break-in period.

PRE-OPERATION CHECK

✓ Jet Pump Intake

- | | |
|----------------|-----------------|
| 1. Ride Plate | 2. Impeller |
| 3. Drive Shaft | 4. Intake Grate |



The lanyard lock plate must be removed from the stop switch. Battery cables must also be disconnected before continuing this inspection.

Carefully check the jet pump intake for debris such as weeds, shells or anything which may restrict the intake of water. Damage could occur if the intake is clogged, causing engine overheating and jet pump damage. If any obstruction cannot be removed have an authorized Polaris dealer service it immediately.

After launching, walk the watercraft into water at least 2 feet (60 cm) deep and bounce the back of the watercraft up and down several times to flush out any sand and debris that may be in the pump.

CAUTION

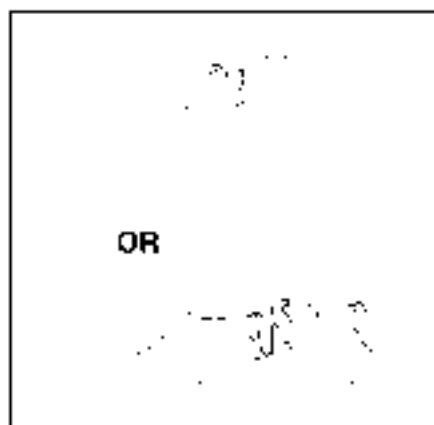
Ingestion of sand into the cooling system will cause the engine to overheat, resulting in possible severe engine damage

PRE-OPERATION CHECK

✓ Throttle

Always check throttle operation prior to starting the engine.

Pull or squeeze the throttle several times to be sure the throttle lever moves freely through its full range. It should spring back to its original position when released.



✓ Steering

Check handlebars for free movement throughout their full range. Make sure the jet pump outlet nozzle changes direction as handlebars are turned from left to right and vice versa.

Be sure handlebars and handlebar grips are not loose. Visually inspect the control cable to insure that it is in working condition.



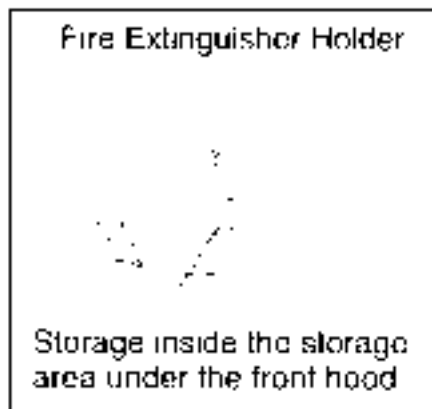
PRE-OPERATION CHECK

✓ Loose Parts/Hoses

Inspect the watercraft for any loose nuts, bolts, fasteners and hoses. Be sure that all hose clamps are tight. Replace cracked or deteriorating hoses.

✓ Fire Extinguisher

The operator of this watercraft is required by law to carry a fire extinguisher on board. Be sure a fire extinguisher is inside the container designed for its containment (inside the front storage area under the front hood). Be sure it is in working condition and fully charged.



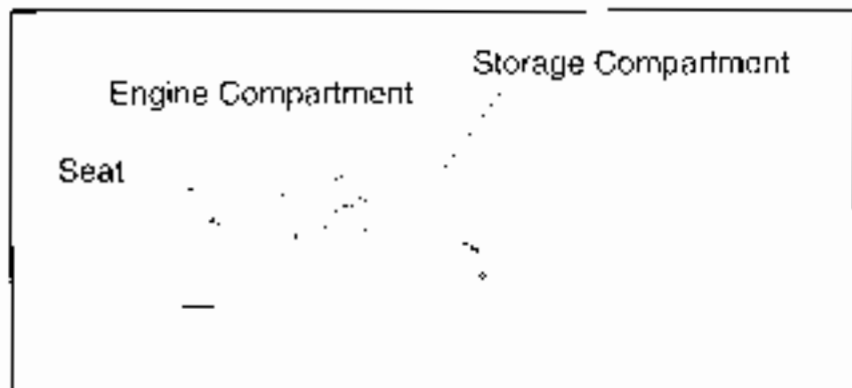
A fire extinguisher is not standard equipment with this watercraft. If you do not have one, contact your Polaris dealer or a fire extinguisher dealer to purchase one which meets UL5-B:C rating and is Coast Guard approved.

PRE-OPERATION CHECK

✓ Engine Compartment

Be sure the seat and engine cover are properly positioned and securely latched before operating the watercraft.

If used in salt water, Polaris recommends the inside of the hull (engine and components) be sprayed with waterproof lubricant spray PN 2871064 after every use.



✓ Storage Compartment

Be sure the storage compartment door is in place and securely latched.

PRE-OPERATION CHECK

✓ Seat

NOTE: This illustration is a general representation provided only to help the operator locate the seat latches.



To access the engine/storage compartment of all other models, disengage the seat latch. On Genes s models there is a latch on the rear of each seat.

Be sure the seat(s) is (are) properly positioned and secured before operating the watercraft.

The seat is not a **Personal Flotation Device (PFD)** and will not provide life saving flotation. Always wear a PFD when operating or riding watercraft

PRE-OPERATION CHECK

✓ Battery

Never remove or tighten battery cables or attempt to change a battery if you smell fuel fumes. Instead, take the craft to your dealer for immediate inspection.

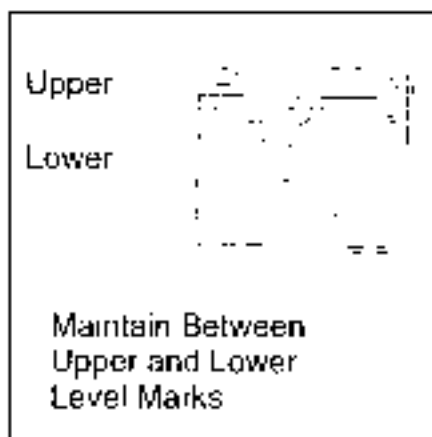
It is very important that the battery is in good condition and fully charged. A weak battery can leave you stranded. Never operate the watercraft with a battery that is too weak to start the engine on its own or shows signs of loss of power.

Be sure the battery is securely fastened in its mounting position.

Check the battery fluid level and add distilled water if level is low. It should be between the "upper" and "lower" level

See that terminal connections are tight and that there are no leaks. Inspect vent hose for kinks or blockage.

Never allow a spark to occur while charging or removing the battery, or when tightening the cables. This could cause an explosion, resulting in severe personal injury or death.



PRE-OPERATION CHECK

✓ Hull

Inspect the hull for cracks or damage. Do not ride the watercraft if the hull is damaged. Remove marine growth if present using non-abrasive cleaner.

✓ Drain Plugs/Bilge

To remove the drain plug turn the plug counterclockwise until loose and remove. To install, clean the plug and plug hole of sand and debris, insert the plug and turn clockwise until tight.

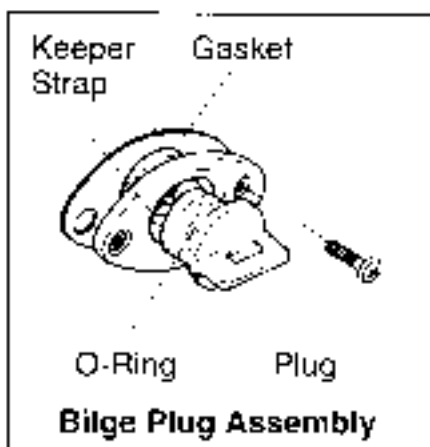
NOTE: Some models have more than one drain plug.

While the watercraft is out of the water remove the drain plug. Carefully flush out the bilge with fresh water. Allow the bilge to drain completely. Wipe out the bilge with dry shop cloths and reinstall the drain plug.

Once the watercraft is launched, remove the seat, and check for leaks.

✓ Loose Straps/Ropes/Clothing/Long Hair

Be sure there are no loose straps, ropes, cords or belt-like objects hanging from the watercraft or riders. Long hair should be tied back and secured.



⚠ WARNING

Make certain any long straps, ropes, clothing, long hair or anything similar are tied back and secured.

These objects can become tangled in the jet pump impeller and cause severe injury or death.

PRE-OPERATION CHECK

✓Riding Gear

The operator and passenger should wear a Coast Guard approved personal flotation device (life jacket or vest) which fits properly, as well as eye and foot protection. A wet/dry suit is also recommended.

Normal swimming attire may not provide adequate personal protection. Wear heavy, well constructed swimwear for body orifice protection.

A whistle attached to your lanyard is a good idea in case you need to summon help.

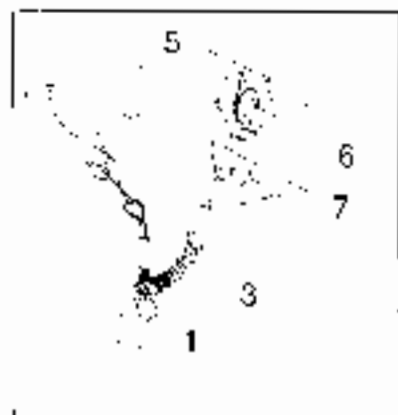
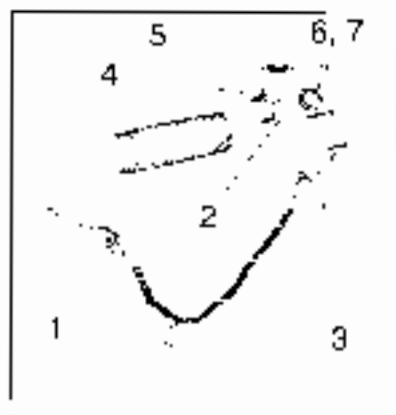
To protect prescription eyewear and sunglasses against loss or damage wear goggles that fit securely over them.

PRE-OPERATION CHECK

✓ Switches/Buttons

When the watercraft is in the water perform the following checks:

- Pump water out of the engine compartment using the bilge pump (blue button). Refer to page 16 for more information. Look inside the engine compartment for fuel or water leaks and have them repaired if present. Do not ride the watercraft until leaks are repaired.
- Start the engine and let it run for a few seconds. Remove the lanyard lock plate from the engine shut-off switch. The engine should stop immediately. If it doesn't, press the stop button or turn the choke lever until the engine dies. Do not ride the watercraft, and have it serviced by an authorized Polaris dealer before riding it again.
- Start the engine again and run it for a few seconds. Then depress the engine "stop" button until the engine stops.



1. Lanyard

3. Lock Plate

5. Bilge

7. Stop Button

2. Reverse

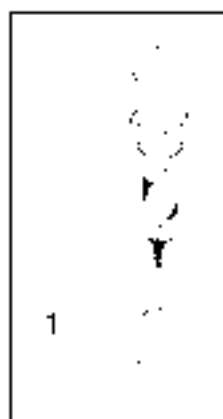
4. Forward

6. Start

PRE-OPERATION CHECK

✓ Fuel/Water Separator

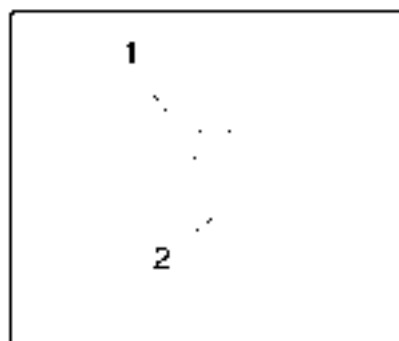
Visually inspect the bowl for water collected at the bottom of the bowl (1). (See illustration). If water is present it will appear as a clear liquid at the bottom of the bowl. Turn off fuel valve and remove bowl by turning counterclockwise. Take care not to spill fuel while removing. Wipe up spills immediately with a shop cloth. Dispose of fuel properly and follow all gasoline handling precautions as outlined on page 40. Re-install separator bowl making sure the O-ring is in place. Hand tighten securely.



NOTE: The fuel/water separator is located either under the front compartment door behind the storage bucket on the starboard side or inside the engine compartment. See illustration. Inspect only when the watercraft is **not** on water.

NOTE: The fuel/water separator is integral to the fuel pump module on fuel injected models. It is **not serviceable**.

1. Deck
2. Fuel/Water Separator



ENGINE BREAK-IN PROCEDURE

CAUTION

Failure to follow the recommended break-in procedure can severely damage the engine.

Careful treatment of a new engine will result in more efficient performance and longer life for the engine.

Polaris recommends the use of a 50:1 gas/oil premix in the fuel tank for the **first tank full** of fuel to provide additional lubrication during the **break-in period**. A 50:1 ratio is one pint (.5 l) oil to six gallons (23 l) gas.

After the break-in period the oil injection system provides the necessary engine lubrication without the need for pre-mixed fuel.

During the break-in period varying throttle speeds will contribute to good engine break-in. Do not subject a new engine to heavy loads or full-throttle operation for extended periods. Do not carry a passenger during the break-in period.



CAUTION

When starting the engine, be sure the watercraft is in water at least 2 feet (60 cm) deep. If the engine is run in water less than two feet deep, sand, weeds and debris may be sucked into the jet intake and damage the impeller or injure bystanders. Ingestion of sand into the cooling system will cause the engine to overheat, resulting in possible severe engine damage.

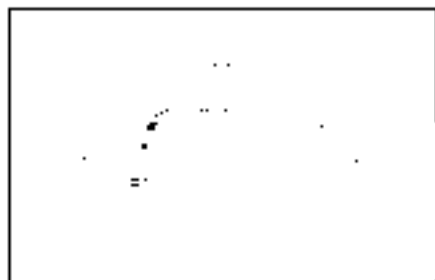
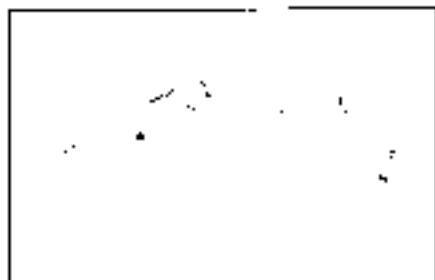
ENGINE BREAK-IN PROCEDURE

1. Launch the watercraft. Push the rear of the watercraft up and down several times. Check the throttle for free operation and start the engine. Let the engine warm up for about a minute before departing.
2. The lowest possible speed should be used for the first five minutes of operation.
3. Gradually open the throttle to half speed.
4. Vary throttle speeds up to 3/4 speed during the break-in period.

Principles Of Operation

The engine is directly coupled to a driveshaft which, when running, rotates the impeller. The impeller is situated where the water is drawn up underneath the watercraft. The water travels through the impeller and is accelerated producing thrust to move the watercraft forward. Pulling or squeezing the throttle lever increases engine speed (watercraft speed).

Turning the handlebar pivots the jet pump nozzle (water outlet) which controls the watercraft's direction. The throttle must be applied in order to turn the watercraft



Safety Notes

- ✓ You must have thrust to turn. Keep the throttle depressed to maintain thrust and control, to aid in steering and avoiding potential contact with objects or people in the water.
- ✓ The more the throttle is depressed while turning the sharper the turn will be. Practice these maneuvers in open water to understand and acquire a feel for turning.
- ✓ The watercraft behaves differently with a passenger on board, requiring more operator skill. Practice these skills alone before taking a passenger on board.

OPERATION

Before operating this watercraft you should:

1. Have viewed the Watercraft Safety Video tape provided with the watercraft (PN 9915228);
2. Have read and understand this Owner's Manual;
3. Be familiar with all controls and functions of the watercraft;
4. Have performed the pre-operation check found on page 46

If you have any questions about the features or controls of this watercraft consult your local Polaris dealer.

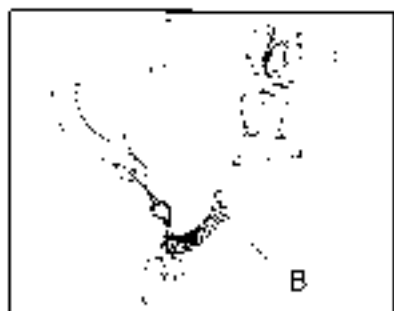
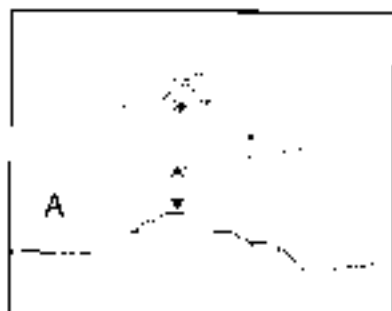
CAUTION

When starting the engine, be sure the watercraft is in water at least 2 feet (60 cm) deep. If the engine is run in water less than two feet deep, sand, weeds and debris may be sucked into the jet intake and damage the impeller or injure bystanders. Ingestion of sand into the cooling system will cause the engine to overheat, resulting in possible severe engine damage.

Starting The Engine

1. Always launch the watercraft in water at least 2 feet (60 cm) (A) deep, which is free of weeds and debris that could be sucked into the impeller. Be aware of swimmers, other boats and obstacles in order to avoid contact with them.
2. Push the rear of the watercraft up and down several times to flush out any sand that could be trapped in the pump.
3. Turn the fuel valve to "on", if applicable.
4. Carefully board the watercraft and sit down.
5. Attach the lanyard (B) wrist band to your left wrist or PFD.
6. Fasten the lanyard lock plate to the engine stop switch on the handlebars by pushing the lock plate around the barrel of the switch.

Be sure the lanyard is not tangled around the handlebars or controls.

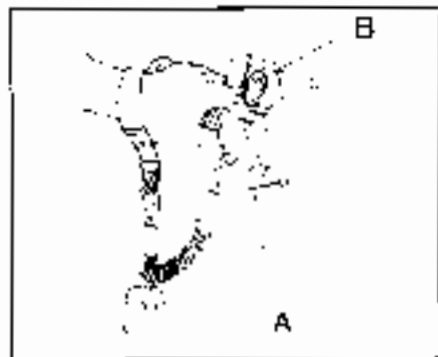


OPERATION

NOTE: The engine will **not** start if the lanyard lock plate is removed from the engine stop switch.

7. Move/pull the choke lever (A) all the way out. If the engine is already warm do not use the choke.

IMPORTANT: The choke is located on the console of some models.



8. Push the starter switch (B) with your left hand while easing the throttle open with your right hand
9. As soon as the engine starts, release the starter switch and throttle. Only enough throttle should be applied to keep the engine running.
10. After the engine starts, slowly reduce the amount of choke until the engine is warm and choking is no longer required.

NOTE: The choke system functions best with the throttle partially opened. This will aid in cold starting. Release the throttle as soon as the engine starts.

NOTE: If the engine was run out of gas or the fuel/water separator bowl drained, it may take two or three attempts to start. Do not run the starter for more than ten seconds at a time as damage to the starter may result.

NOTE: Fuel injected models do not have a manual choke.

⚠ WARNING

Be seated and alert when starting the watercraft. Starting the engine immediately generates forward thrust which could cause the operator to fall from the machine causing serious injury or death.

If The Engine Does Not Start

If the engine does not start within 10 seconds, release the starter switch. Wait 10 seconds before trying again to avoid damaging the starter.

CAUTION

Do not depress the starter switch while the engine is running or while the starter is still spinning. This causes starter wear and may cause the starter to fail.

Depending on your model, either pull the choke lever out or push choke lever in a clockwise direction. If the engine is already warm do not use the choke. If the engine does not start after several attempts see the troubleshooting section of this manual beginning on page 136.

NOTE: Fuel injected models are not equipped with a manual choke

OPERATION

Stopping The Engine

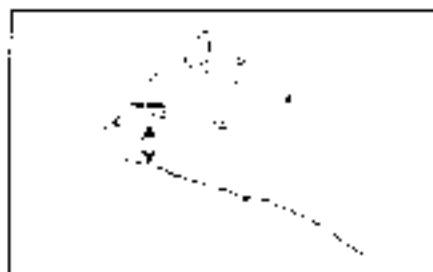
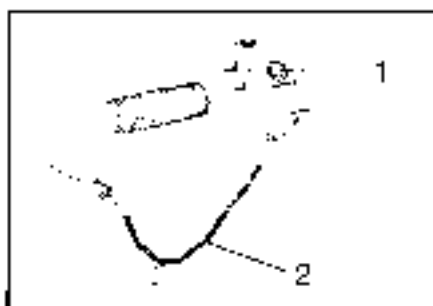
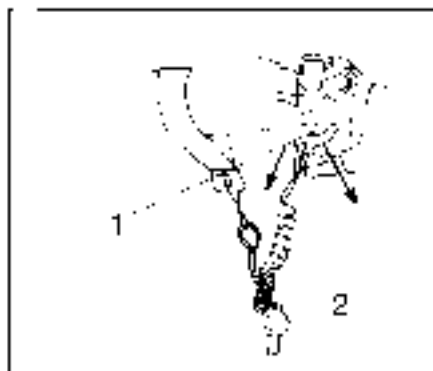
To keep directional control of the watercraft the engine should be kept running until the watercraft has quit moving.

Release the throttle lever. When the engine has slowed to an idle, push in the stop button (1) with your left thumb. When the button is pushed, the engine stops immediately. Another way to stop the engine is by pulling the lanyard lock plate (2) off the engine stop switch.

Once the engine has stopped, you will lose all steering control of the watercraft.

Be sure there is at least 2 feet (60 cm) of water under the watercraft when stopping to make sure damaging debris isn't sucked into the impeller or cooling system.

Remove the lanyard lock plate. Never leave the lanyard attached to an unattended watercraft.



Launching The Watercraft

WARNING

Before launching be aware of weather conditions; make sure there are no boats, swimmers or other obstructions nearby. Failure to be aware of these details could cause an accident, resulting in severe injury or death.

Launching In Shallow Water

1. Never operate the watercraft in less than 2 feet (60 cm) of water. Guide the watercraft to an area that is deep enough. bounce the rear of the watercraft up and down to flush out the pump, then board it from the side or rear.
2. Attach the lanyard lock plate to the engine stop switch and fasten the lanyard wrist band to your left wrist or PFD.
3. Grasp the right handlebar grip. With both feet on the footrests, start the engine, and ease the throttle open.

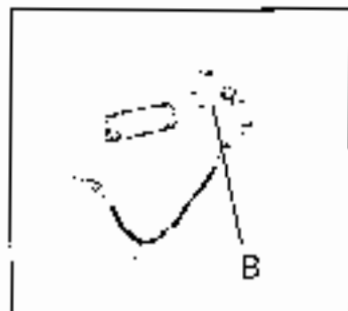
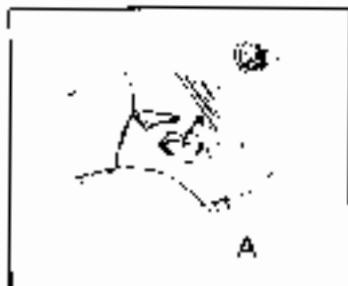
OPERATION

Reverse Operation

Some Polaris watercraft have reverse capabilities. See page 143 to determine if your watercraft has this feature.

Reverse Lever

1. To activate reverse, pull reverse lever (A) all the way up. Lever will remain in full up position.
2. Turn the handlebar and apply throttle carefully as required to maintain steering control of the watercraft.
3. To return to forward, push reverse lever to "forward" position.



Polaris Electric Reverse Control (PERC™)

1. To activate reverse, depress the reverse switch (B) (labeled RVS). Varying degrees of reverse engagement are possible, depending on the duration the reverse button is depressed.
2. Turn the handlebar and apply throttle carefully as required to maintain steering control of the watercraft.
3. To return to forward, depress the forward button (labeled FWD) until the reverse gate is in the full up position.

NOTE: Engine RPM is limited during reverse operation. While in reverse, the multi-function gauge will flash a warning light and the corresponding LCD message "REVERSE" will be visible. Be certain reverse gate is in the full forward position before resuming normal operation or your speed will be limited by the RPM limiter.

CAUTION

Do not operate at high throttle settings for long periods. Cavitation damage could occur to impeller or pump.

WARNING

Do not attempt to activate reverse while moving forward above planing speed. Loss of control could occur resulting in damage to the watercraft or severe personal injury to the operator or passenger(s).

Practice boarding the watercraft before riding in deep water. Anyone who is a passenger should also practice boarding in shallow water.

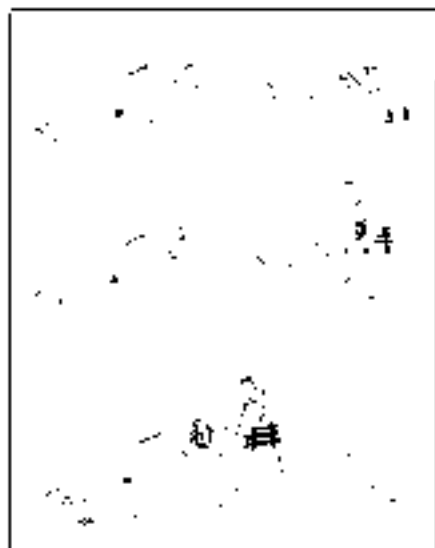
OPERATION

Boarding And Starting In Deep Water (Operator Only)

Watercraft engine must be turned off.

1. Swim to the rear of the watercraft. Grip the boarding handle near the rear of the seat and pull yourself up onto the boarding platform. The seat strap will aid in boarding.

NOTE: Not all models are equipped with a seat strap. Refer to pages 140-143 for your model's specifications.



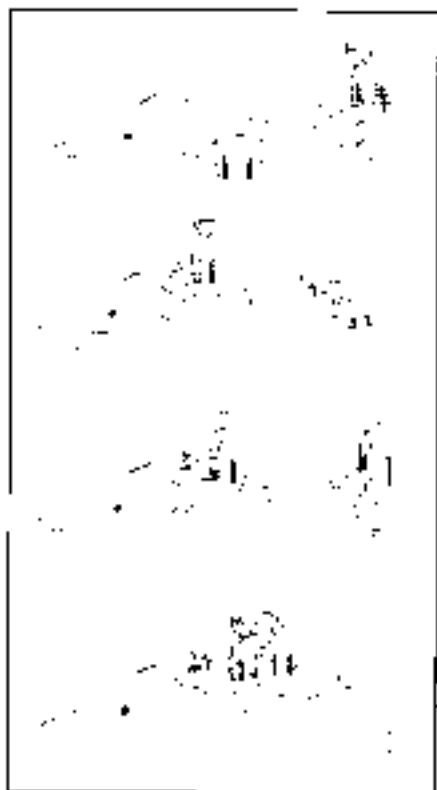
NOTE: Some models are equipped with a boarding step for boarding convenience. Refer to pages 140-143 for your model's specifications.

2. Move up to the seat and straddle it.
3. Attach the lanyard lock plate to the engine stop switch and see that the lanyard wrist band is secure on your left wrist.
4. Engage the choke knob completely. If the engine is already warm do not use the choke.
5. Push the starter switch with your left hand.
6. As soon as the engine starts, release the starter switch and throttle, decreasing the choke gradually until the engine is fully warmed. Only enough throttle should be applied to keep the engine running.
7. Ease the throttle open and be prepared for acceleration.

Boarding With A Passenger (In Shallow Or Deep Water)

Watercraft engine must be turned off.

1. The operator should climb on board as previously explained and straddle the seat. Attach the lanyard lock plate to the engine stop switch and fasten the lanyard wrist band to his/her left wrist or PFD. **Do not start the engine yet.**
2. The passenger should move (or swim) to the rear of the vehicle.
3. The passenger should pull him/herself on board using the grab handle. Both operator and passenger should try to balance the watercraft while the passenger is boarding.
4. The operator should see that the passenger is holding on tightly and that their feet are both on the footrests. Once this is done, start the engine.



OPERATION

Load Limit

The heavier the combined weight of operator and passenger, the more difficult it is to balance the watercraft while boarding. The combined weight of operator and passenger should never exceed the recommended weight. Check page 140 for your boat's load limit.

During boarding the passenger should steady the watercraft while the operator boards. The operator can then help balance it while the passenger boards.

Rough Water Operation And Jumping

⚠ WARNING

Whenever possible avoid riding in rough water and/or adverse weather conditions. Riding the watercraft in these conditions could cause loss of control which could result in injury or death to the operator and/or passenger.

The watercraft should not be used to jump waves. It is not recommended (and is illegal in some states) to operate the watercraft in or near the surf line.

When riding in rough conditions it is possible for the operator to hit his/her chest or face on the watercraft or handlebars and be injured. It is also possible to be thrown from the watercraft in rough conditions which could make it difficult to get back to and re-board the watercraft.



Turning

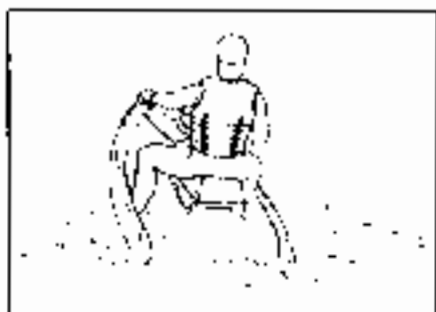
Turning the watercraft requires using the throttle (thrust from the jet pump) and turning the handlebars.

High thrust makes the watercraft turn more sharply. Lower thrust makes the watercraft turn less sharply.

Remember, do not release the throttle when trying to steer. You need the throttle to steer.

✓ Making sharp turns at high speeds may cause the watercraft to "spin out" and possibly throw the rider(s) from the watercraft. Make gradual turns at high speeds.

✓ Always look behind you before turning to avoid collision with other watercraft.



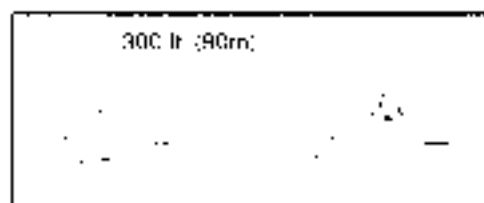
OPERATION

Stopping

The operator of the watercraft should experiment with stopping in order to become familiar with this procedure. Stopping is affected by gross weight (watercraft and rider), wind direction, and water surface conditions.

The watercraft is not equipped with a brake system. It is stopped by using the natural drag of the water when the throttle is released. Coast toward the desired stopping area with the engine idling.

From full speed it can take the watercraft as much as 300 feet (90 m) after the throttle is released to come to a stop. This distance is approximate and is supplied only for reference.



Slow watercraft to an idle before stopping the engine. Push the engine stop button when approaching shore and you are close to your intended stopping area. This will help prevent sand and debris from entering the pump and cooling system, causing damage.

⚠ WARNING

Do not release the throttle when trying to steer away from objects. You need the throttle to steer.

Riders should keep feet, arms and hands inside the watercraft while approaching a dock or other fixed or floating object or injury could result.

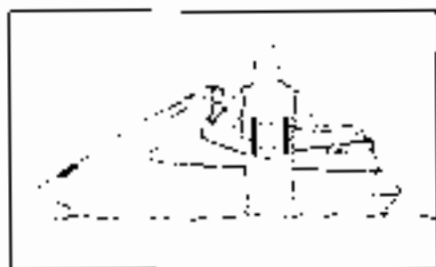
OPERATION

Beaching

CAUTION

Never run the watercraft up onto a beach with the engine running. Sand, pebbles, weeds and debris can enter the jet pump and cause severe damage to it and the impeller. Ingestion of sand into the cooling system will cause the engine to overheat, resulting in possible severe engine damage.

1. Slowly approach the beach and stop the engine in no less than 2 feet (60 cm) of water. Make sure there are no swimmers, boats or other obstacles close to the watercraft. Remember, turning the watercraft is impossible if the engine is stopped.



2. Get off the watercraft and guide it to the beach.



3. Before restarting, inspect the impeller/jet pump area for sand and debris. Move the watercraft to at least 2 feet (60 cm) of water and push the rear of the watercraft up and down in the water to help flush sand and debris out of the pump.

OPERATION

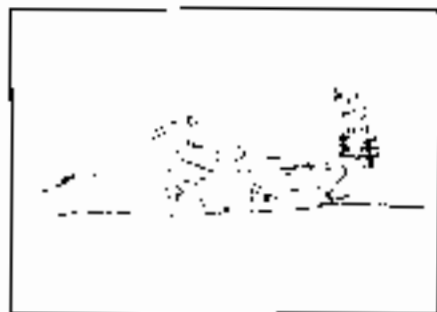
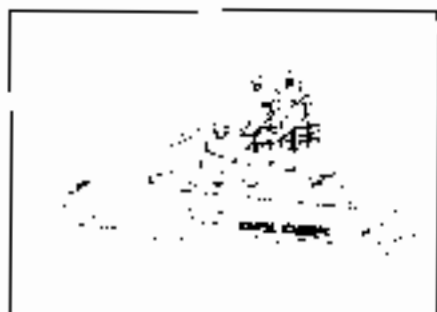
Riding With Passenger(s)

Passenger capacity varies between models. Check your capacity label and refer to page 140 to determine passenger capacity. Never exceed the recommended load limit.

The watercraft handles differently with more than one person on board and is not as easy to maneuver. The operator must have had enough practice riding alone to acquire the necessary skills to take a passenger for a ride.

✓ Any passenger should read the Owner's Manual and follow all safety warnings. Passengers must wear an approved personal flotation device and other recommended safety gear. They should be good swimmers and in good physical condition as reboarding in deep water can be strenuous.

✓ The passenger should firmly hang onto the operator's waist or seat strap and should keep both feet on the footrests.



OPERATION

- ✓ Do not give a ride to a person whose feet do not reach the footrests when seated straddling the seat.
- ✓ Passengers should always sit behind the operator and be facing toward the bow of the watercraft
- ✓ The operator should make sure his/her passenger is properly situated and holding on before taking off. The operator should also communicate sudden maneuvers to his/her passenger to create a safer and more enjoyable ride.

OPERATION

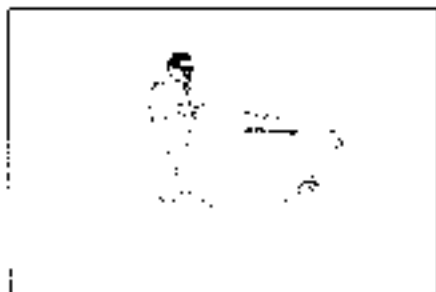
Electric Trim Feature

Some Polaris watercraft are equipped with electric trim. It is adjusted using the rocker switch on the left handlebar (see page 16) and monitored on the Multi-Function Display.

The trim adjusts the attitude of the watercraft to eliminate porpoising and to maximize handling control in all weight conditions; e.g. one or two passengers, full or low fuel.

Here are some examples of what the trim will do:

- When the trim is adjusted to +5, the front of the watercraft will lift. This will also help in levelling the craft with a full tank of fuel.
- When the trim is adjusted to -5, the front of the watercraft will lower. This can improve ride and handling with two passengers.



Experience a variety of trim positions in all water surface conditions. When trimmed properly, the watercraft will travel smoothly through the water without pushing the bow down into the water or bouncing excessively.

Experiment with the trim in a variety of water surface conditions and varying passenger weights until you determine which trim positions work for you and the watercraft weight distribution.

Post Operation Check And Care

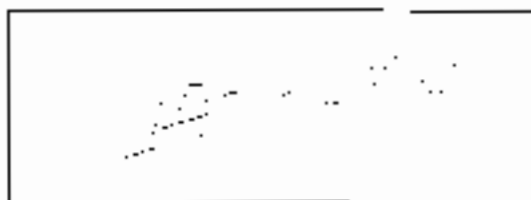
NOTE: Remove the watercraft from the water every day to inhibit marine organism growth on the hull.

1. Remove the watercraft from the water.
2. Purge the residual water from the exhaust system by starting the engine and revving the engine repeatedly at partial throttle for about ten seconds until water stops coming out of the exhaust system.

CAUTION

Never operate the engine for more than 15 seconds or hold the engine at full throttle while the watercraft is out of the water. The engine may overheat and seize.

3. Wash down the hull, jet pump intake and outlet with fresh water
4. Remove the drain plug(s). Allow any water in the bilge to drain out. Rinse the engine compartment with a generous amount of fresh water. After the water has drained, wipe the engine compartment (bilge) dry. Install the seat. Install the drain plugs once you are sure the opening is clean.



OPERATION

NOTE: If the watercraft is going to be stored, block the seat (engine compartment) open about 1/2" (1.3 cm) to provide air circulation and prevent condensation from forming. If the seat is saturated with water, stand it on end to drain.

NOTE: Drain and flush the engine. See instructions on page 100.

5. Clean the impeller of weeds or other debris it may have collected during the ride. Be sure lanyard lock plate is removed from engine stop switch on handlebars and that the battery cables are disconnected.

WARNING

Serious injury will result if the jet pump is cleaned with the engine running.

Stop the engine, remove the lanyard lock plate from the engine stop switch and disconnect battery cables. Make sure the starter switch cannot be activated while performing this operation. Turning the engine while removing debris from the pump can cause severe personal injury and/or damage to the watercraft.

If used in salt water, Polaris recommends that the inside of the hull (engine and components) be sprayed with waterproof lubricant spray PN 2871064 after each use.

Engine Overheat**CAUTION**

A clogged intake and/or impeller can cause overheating and/or damage to jet pump and impeller parts.

Polaris watercraft are equipped with devices which limit engine RPM should the engine overheat. This feature is designed to help prevent engine damage due to engine overheating.

If the high temperature indicator light or "hot" warning message displays, and the engine RPM is limited, stop the engine immediately.

Clean the jet pump and impeller as outlined below.

If the engine still overheats after cleaning the jet pump and impeller, take the watercraft to an authorized Polaris dealer for immediate service.

Another condition which may cause the RPM limiter to activate is a plugged thermostat assembly. See page 130 for more information.

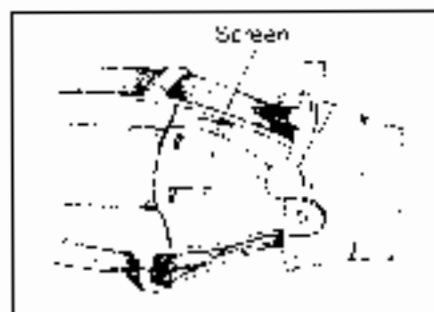
When the condition which causes the engine to limit is corrected, normal operation can be resumed by releasing and reapplying the throttle.

OPERATION

Cleaning The Jet Pump And Impeller

Never attempt to clean the jet pump intake and impeller while the engine is running. Always shut off the engine and remove the lanyard lock plate from the engine stop switch.

Clean the jet pump intake and impeller and flush the cooling system. Check the screen in the pump stationary nozzle for plugging.



CAUTION

Operation of the engine with the intake system removed could damage the engine.

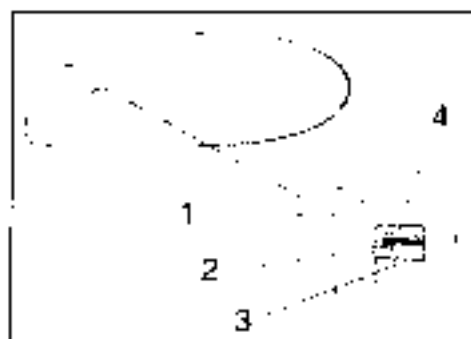
CAUTION

Whenever possible avoid running the watercraft in weedy areas. If this is unavoidable, vary the watercraft speed. Weeds tend to accumulate more rapidly at steady and trolling speeds.

SPECIAL PROCEDURES

On Land Cleaning

1. Ride Plate
2. Drive Shaft
3. Impeller
4. Intake Grate



1. Shut off the engine and remove the watercraft from the water.
2. Remove the lanyard lock plate from the engine stop switch and disconnect the battery cables.
3. Carefully clean the jet pump intake area. Inspect the area for damage. If damaged, take the watercraft to an authorized Polaris dealer for service.

SPECIAL PROCEDURES

Capsized Watercraft

WARNING

This watercraft does not right itself if it has been capsized. The operator and passenger must know how to right the watercraft or they could become stranded which could result in severe injury or death.

Severe engine damage could also result from not righting a capsized watercraft as soon as possible.

1. To prevent major engine damage when the watercraft is capsized, be sure the engine is stopped immediately. The engine will overheat if running while capsized.

2. Upright the vehicle immediately by turning it in a clockwise direction (as viewed from rear) only!



3. Swim to the rear of the vehicle; board and start it according to directions. **NOTE:** Before starting, push bilge pump button to pump out any water in the hull.
4. If the engine does not start shortly after being uprighted make no further attempts to start it. Severe engine damage could result.
5. Follow the procedures for submerged (waterlogged) engine.

Submerged (Waterlogged) Engine

CAUTION

If the watercraft has remained in a 180° (capsized) position for more than two minutes all fuel and oil lines must be inspected for presence of water and/or air. Severe engine damage could result if the engine is operated with air or water in the lines.

If the engine becomes water-flooded, follow these procedures immediately. If water is left in the engine it will cause severe engine damage.

1. Remove the watercraft from the water. Remove the drain plug and empty the water out of the bilge
2. Take the watercraft to an authorized Polaris dealer immediately. If this is not possible call him/her immediately.

WARNING

Before removing water from a submerged engine, make sure the lanyard cord and lock plate are removed from the engine stop switch. Accidental starting during this procedure could cause severe personal injury.

SPECIAL PROCEDURES

Submerged (Waterlogged) Engine

Following are procedures for removing water from a submerged engine. Only attempt this if you are mechanically experienced and have assistance lifting the watercraft.

1. Remove the watercraft from the water. Remove the lanyard cord from the engine stop switch. Put the watercraft onto a flat surface, leaving room to roll it.
2. Remove the drain plug and empty the water out of the bilge. Remove the seat. Remove the air intake to drain the flame arrestor. Remove the spark plugs.
3. Tip the watercraft clockwise (starboard) until the spark plug holes are just below horizontal.
4. While holding the watercraft in this position, turn the driveshaft by hand to rotate engine until the water has run out.
5. Upright the watercraft.
6. Inspect, dry and install new spark plugs. Install the air intake.

SPECIAL PROCEDURES

7. Check the battery vent hose for obstruction. drain water from the hose if present.
8. Check gas and oil for the presence of water. If water is present take the watercraft to an authorized dealer for immediate service. Do not run the watercraft if water is present in the gas or oil. Verify that no air is present in the oil line.
9. Grease driveshaft and bearing housing following instructions on page 110.
10. Reinstall drain plug. Reinstall the seat.
11. Follow starting procedures as described on page 63.

Towing The Watercraft In Water

If the watercraft becomes inoperable in the water it can be towed. Tie about 20 feet (6 m) of tow rope to the eye located on the bow. Slowly tow the watercraft to shore at idle speed.

SPECIAL PROCEDURES

Battery Information

If the watercraft battery is run down, it should be removed and charged.

See the maintenance section of this manual for battery charging recommendations. pages 119 to 123

WARNING

A weak battery can leave you stranded which could result in severe injury or death. Never operate the watercraft with a battery that is very weak and may not start the engine on its own.

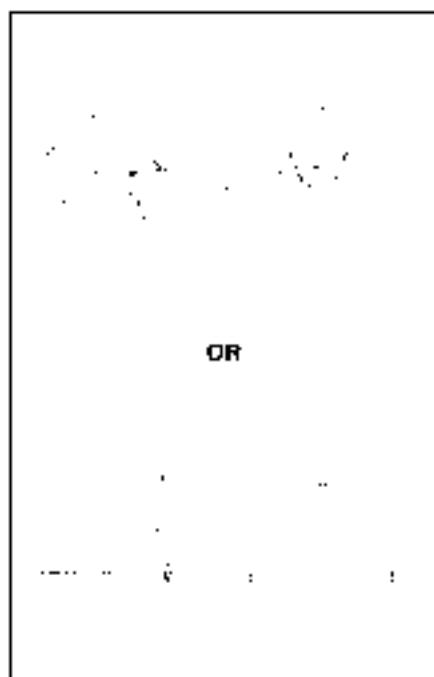
WARNING

If your watercraft has a fuel valve, always turn it off when transporting or storing the watercraft. Fuel valve location varies with certain models. Know your machine before operating.

Transporting The Watercraft

Tie the watercraft at the bow and stern so it is firmly restrained on the trailer and does not move. Use additional cables if necessary. There should be no movement between the watercraft and trailer. Do not route ropes or tie downs over the seat because they could cause permanent damage to the seat. Protect the watercraft body from ropes by putting padding or something similar between the rope and body.

Make sure the seat is securely latched



Be sure the trailer matches the watercraft's weight and design and that it meets trailer laws and regulations in your area.

When transporting the watercraft it is recommended that it be protected by a Polaris watercraft cover.

INSTRUMENTATION OPERATION

Multi-Function Display (MFD) Operation Summary

Polaris has three types of Multi-Function-Displays (MFDs) with varying functions. Not all Polaris watercraft are equipped with MFDs. Be familiar with your machine and its capabilities before you ride.

The Polaris multi-function display allows you to see such important information as run time, distance run, maximum speed, current speed, fuel level and more at the touch of a button. Following is a summary of operating instructions for this feature.



Operation and Modes

NOTE: Not all MFDs have all these functions.

HOUR: Secondary display function controls multi-LCD when selected by mode key. HOUR annunciator is on when in HOUR mode. Actual engine run hours are displayed in .1 hour increments from 0 to 999.9 hours. HOURS can be neither reset nor lost when power is removed due to nonvolatile EEPROM memory.

CLOCK: CLOCK is a secondary display function and controls multi-LCD when selected by mode key. CLOCK annunciator is on when in CLOCK mode. To set the time, first enter CLOCK mode and then hold the SET key for 2-4 seconds to enter CLOCK SET mode. Both keys are now used to adjust the time. MODE selects the digit, SET advances the digit. Press MODE when complete to start the clock (colon begins to flash).

INSTRUMENTATION OPERATION

PEAK SPEED/RPM: While in TACH mode, pressing the SET key will display both the peak speed and maximum sustained RPM since the last reset or auto-off occurred. While displayed, holding the SET key for 4 seconds will reset the peak memories.

Key Functions and Display

MODE KEY: Toggles multi-LCD display modes as pressed. Annunciators scroll from left to right to indicate selection.

SET KEY: Function varies with selected mode. Used to temporarily disable warning indications, to access peak speed and RPM while in TACH mode, reset distance in DIST mode, select MPH - Km/H while in VOLT mode, and to set time while in CLOCK mode.

LCD DISPLAY: Displays variety of both essential and performance data: speed, RPM, fuel level, oil level, trim position, distance, voltage, engine hours, clock, peak speed, peak RPM, and warning conditions (low fuel, low oil, low power, high temperature).

WARNING LED: Super bright LED flashes to alert rider of warning condition. Actual condition is then displayed in multi-LCD readout.

SPEED: Primary display function, controls left LCD at all times. Displays speed with .1 MPH resolution from 5-75 MPH. Input is received from patented jet intake fin.

TACH: Default secondary display function, controls Multi-LCD at power on or when selected by MODE key. RPM annunciator is on when in TACH mode. Displays RPM with 10 RPM resolution.

FUEL: Primary display function controls left hand bar graph at all times. Displays in 1/8 tank increments. Toggles low "FUEL" display and warning LED when fuel reaches 1/8 level. "FUEL" will flash in display regardless of Multi-LCD display mode.

INSTRUMENTATION OPERATION

OIL: Primary display function controls right hand bar graph at all times. Displays in 1/4 tank increments. Toggles low "OIL" display and warning LED when oil reaches 1/4 level. "OIL" will flash in display regardless of Multi-LCD display mode

TRIM: (not on all models) Primary display function controls top bar graph at all times. Trim position is shown from -5 to +5 in .5 increments. Because of the safety clutch in the trim motor, it may be necessary to re-synchronize the TRIM display if the nozzle should be deflected upward. This is accomplished by running the trim motor until both the trim nozzle and display are at their limits (either up or down).

DIST: Secondary display function controls Multi-LCD when selected by mode key. DIST annunciator is on when in DIST mode. Distance is displayed in .1 mile increments from 0 to 999.9. Distance can be reset by pressing the SET key for 4 seconds while in DIST mode.

VOLT: Secondary display function controls Multi-LCD when selected by mode key. VOLT annunciator is on when in VOLT mode. Voltage is displayed in .1 volt increments from 5 to 18 volts.

ENGLISH/METRIC: While in the VOLT mode, pressing and holding SET will toggle the instrument between MPH and KPH. The distance function is automatically toggled at the same time.

LOW POWER: If battery voltage drops below 10.9 volts, the Multi-LCD display will flash "LOPR". If this occurs, the speed and distance functions will cease until power is restored.

HIGH TEMP.: When a hot engine signal is received, the Multi-LCD display will flash "HOT" and the warning LED will light.

INSTRUMENTATION OPERATION

WARNING RESET: When warning conditions occur, pressing the SET key will deactivate the warning depending on the condition. **HOT:** Only LED is disabled for 5 minutes. **FUEL:** Both LED and LCD are disabled for 5 minutes. **OIL:** Both LED and LCD are disabled for 15 minutes.

ON/AUTO ON: When system is off, a single press of MODE key will turn the MFD on. When the engine is started, the MFD will automatically power on.

AUTO OFF: After 5 minutes of no activity, the system automatically shuts itself off. The internal clock continues to keep time. Memory functions (distance, hours, MPH/KILO) are retained, and the clock, fuel level, and oil level will be displayed.

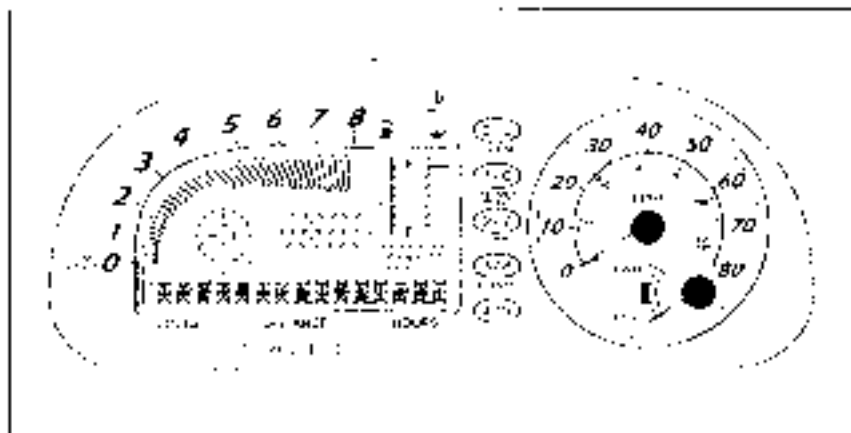
COMPASS: (if equipped) Compass is displayed at all times, the arrow indicating the current heading.

INSTRUMENTATION OPERATION

Multi-Function Instrument (MFI) Operation Summary

Your model may not have all of the features listed. Underlined features are only found on 24 and 25 function versions of the MFD.

The Multi-Function Instrument (MFI) simultaneously displays a great deal of important vehicle information such as speed, RPM, fuel and oil levels, clock, compass heading, engine hours, and warning conditions. Additionally, the MFI acts as a command center for security and interfaces to an optional depth sensor to provide a built in digital depth gauge.



DISPLAY SUMMARY

The MFI is configured with a Liquid Crystal Display (LCD) display on the left, a function/numeric keypad in the center, and an electronically driven analog speedometer and reverse (PERC) indicator on the right. The LCD contains a highly responsive analog tachometer, fuel and oil gauges, a 16-point compass, clock, battery voltmeter, resettable distance meter, and non-volatile engine hour meter. To the right and under the fuel and oil gauges is a digital depth gauge, which automatically activates if the optional depth sensor is installed.

INSTRUMENTATION OPERATION

The bottom row of alphanumeric characters is a versatile display that normally displays battery voltage, distance traveled, and engine hours. Those displays will be overwritten in the event of a warning condition, or if an optional function is selected, such as security lock, speed limit, or real time digital display.

PRIMARY FUNCTIONS

ON/AUTO: The MFI will automatically "wake-up" when the engine start button is pressed or alternately by pressing and holding any button for 1 second.

AUTO OFF: The MFI will return to sleep mode after 5 minutes of inactivity. While in sleep mode, the clock continues to show time, and the fuel level, oil level, and the compass rose are displayed. If the SECURITY LOCK is active, the display will also show "LOCKED."

TACHOMETER: The analog tachometer visually displays the revolutions per minute (RPM) of the engine in 200 rpm increments from 0 to 8000 rpm. For more accurate RPM readings, see "DISPLAY" below.

FUEL GAUGE: Displays fuel level in exact 1/8 tank increments. Toggles "LOW FUEL" warning and flashes the warning LED when fuel reaches 1/8 level. Pressing any key will disable the flashing LED for 15 minutes.

OIL GAUGE: Displays oil level in exact 1/4 tank increments. Toggles "LOW OIL" warning and flashes the warning LED when oil reaches 1/4 level. Pressing any key will disable the flashing LED for 15 minutes.

COMPASS: The compass displays true vehicle heading relative to magnetic north with a resolution of 16 points per revolution. The triangular pointer rotates to indicate the direction of travel.

INSTRUMENTATION OPERATION

CLOCK: The center of the LCD display contains a digital clock. To set the clock, simply press and hold the "CLOCK SET" button until the clock digits begin to flash. Each subsequent press of the CLOCK button advances the time by 1 minute. Pressing and holding the button will automatically advance the digits more rapidly. Once the intended time is reached, simply release the button. After 5 seconds, the MFI will automatically exit the "clock set" mode.

DEPTH GAUGE: Before activating the DEPTH GAUGE function, the depth sensor must first be installed. After installation is complete, press and hold both the 3/8 and 4/9 buttons simultaneously for several seconds to activate the DEPTH GAUGE function. The display will read "SONAR ON", and the depth digits under the fuel and oil gauges will display depth in either feet or meters. If the sensor is not found, the MFI will automatically cancel the DEPTH GAUGE function. The DEPTH GAUGE will display water depth below the hull from 0 to 199 feet (0 to 75 meters). The readout is accurate to approximately 45 mph (70 kph). The display will flash "- -" if tracking is lost. To disable the DEPTH GAUGE, simply press and hold the 3/8 and 4/9 buttons simultaneously for several seconds until "SONAR OFF" is displayed.

VOLTMETER: The left side of the multi-purpose display contains the battery VOLTMETER. Battery voltage is displayed from 5 to 18 volts in .1 volt increments. A battery voltage of less than 10.9 volts will trigger the "LOW POWER" warning message, indicating battery voltage is approaching a "no start" condition.

DISTANCE METER: The center of the MFI contains a resettable DISTANCE METER. Distance is displayed from 0 to 999.9 miles (0-999.9 km) in .1 increments. To reset the DISTANCE METER, simply press and hold the DISTANCE RESET button until the distance displayed returns to "000.0".

INSTRUMENTATION OPERATION

HOUR METER: The right side of the multi-purpose display contains the engine HOUR METER. Actual engine operating hours are displayed in .1 hour increments from 0 to 999.9 hours. The HOUR METER cannot be reset, and is retained even when power is removed due to nonvolatile EEPROM memory.

SPEEDOMETER: The right side of the MFI contains an analog speedometer. While the speedometer is traditional in appearance, it is actually controlled by the system microprocessor, and is extremely accurate.

DIRECTION: The lower portion of the analog display contains a forward/reverse direction indicator. The pointer on the gauge moves in synchronization with the reverse gate as it is lowered over the jet nozzle when actuated by the electric thumb switch. The indicator is useful in establishing a "neutral" position between forward and reverse. The LED will flash when the reverse gate is not fully forward. Pressing any key will disable the LED for 5 minutes.

SECURITY LOCK: Briefly pressing and releasing the LOCK button will cause the lock status to be displayed, either "LOCKED" or "UNLOCKED". Pressing and holding the LOCK button for several seconds initiates the SECURITY LOCK function. The MFI will display "ENTER CODE _ _ _". Enter the code using the 5-button keypad. The factory set default code is "1234". An asterisk (*) will appear with each press of a numeric button. If the proper code has been entered, the display will show the new lock status. If previously "LOCKED", the security lock will switch to "UNLOCKED" and the vehicle may be started normally. If previously "UNLOCKED", the security lock will switch to "LOCKED" and the vehicle will not start.

INSTRUMENTATION OPERATION

If starting the engine is attempted while the security lock is set to "LOCKED", the warning LED will flash, the engine will not start, and the MFI will indicate "LOCKED", followed by "ENTER CODE _ _ _". If an improper code entered, the MFI will display "INVALID CODE", and exit code entry mode.

CODE SET MODE: The factory set default security code is "1234", however, the code may be changed to any 4 digit number. To select your own code, enter CODE SET mode by pressing and continuing to hold the LOCK button for several seconds until "CHANGE CODE" is displayed (the display will first show the lock status, followed by "ENTER CODE _ _ _", and finally "CHANGE CODE". The MFI will then display "OLD CODE _ _ _ _". Enter the code as if locking or unlocking the vehicle. If the correct code is entered, the display will then show "NEW CODE _ _ _ _". Select any 4-digit code. The display will then read "CONFIRM CODE _ _ _ _". Enter the same code to confirm your selection. "CODE CONFIRMED" will display for several seconds if the second entry of the new code matches the first. If the second code entered does not match the first, "INVALID CODE" will be displayed and the CODE SET MODE is cancelled.

DISPLAY: Pressing the DISPLAY button toggles the MFI between NORMAL DISPLAY mode and DIGITAL DISPLAY mode. The lower display will show VOLTS/DISTANCE/HOURS when in NORMAL mode, and real-time digital RPM and SPEED when in DIGITAL mode. When first entering DIGITAL DISPLAY mode, the MFI briefly displays the last recorded peak RPM and SPEED. While the peak values are being displayed, holding the DISPLAY button for several seconds will reset the peak values. Pressing the DISPLAY button while in DIGITAL DISPLAY mode toggles the display back to the standard VOLT/DISTANCE/HOURS display.

INSTRUMENTATION OPERATION

ENGLISH/METRIC: To change units between English and metric, press and hold the 1/6 button and the 2/7 button simultaneously for several seconds. When in metric mode, "km" appears in the distance meter, and the "MTRS" icon will illuminate in the depth gauge if activated.

WARNING INDICATIONS: LOW FUEL - 1/8 tank or less of fuel remaining; LOW OIL: 1/4 tank or less of oil remaining. ENGINE OVERHEAT - overheated engine; LOW BATTERY - battery voltage below 10.9 volts; REVERSE indicates reverse has been initiated; CHECK ENGINE (DFI only) - indicates a warning condition from the DFI engine control.

EXTENDED STORAGE AND WINTERIZATION

When the watercraft will not be used for a month or more, preventative maintenance is required to keep watercraft parts from deteriorating. This procedure also ensures the operator that the next time it's used it will be in top condition.

An authorized Polaris dealer can do the required preventative maintenance for you or you can do it yourself with a minimum of tools.

Engine And Cooling System Flushing

Clean the cooling system according to instructions found on page 127 - 129.

Engine/Fuel System Draining

Engine draining is automatic. You will, however, need to make sure the exhaust system is drained. To do this start the engine and briefly rev it.

WARNING

Gasoline is highly flammable and explosive under certain conditions.

Read and heed gasoline warnings found on page 40.

1. When preparing your watercraft for off-season storage we recommend that you add 10 oz. of fuel conditioner/stabilizer such as Gold Eagle brand STA-BIL (Polaris PN 2870652) to the fuel tank, then top off with fresh fuel.
2. Fog the engine with rust preventative oil (PN 2870791). Follow the recommended procedures on page 102.

NOTE: Using a fuel stabilizer and topping off the fuel tank eliminates the need to drain the fuel system.

EXTENDED STORAGE AND WINTERIZATION

If you prefer to drain the fuel tank, use the following procedure:

1. Drain the fuel tank with a siphon or pump.
2. Leave the fuel cap loose to prevent condensation from forming in the fuel tank.

Perform steps 3 and 4 simultaneously.

3. Fog the engine with rust preventative oil (PN 2870791), available from your Polaris dealer. Follow the recommended procedures indicated on the can.
4. Start the engine and run it at part throttle to dry out the carburetors. Do not run the engine for more than 15 seconds while the watercraft is out of the water. Wait five minutes between 15 second running periods.

EXTENDED STORAGE AND WINTERIZATION

Watercraft Engine Fogging Procedure

Important: Failure to perform the following preventive maintenance can result in serious engine corrosion during off season or extended storage. In order to prevent rust and corrosion on internal engine parts (i.e. crankshaft, bearings, pistons, rings, cylinder walls) Polaris highly recommends the use of Polaris fogging oil (PN 2870791) as a recommended storage procedure

The fogging oil coats all internal parts for prevention of rust and corrosion, which in turn will extend the life of the engine.

1. Remove the bolt(s) securing the air intake cover and remove the cover.
2. Remove intake cover and air filter element.
3. Start the engine and spray Polaris fogging oil into each carburetor throat to ensure that all internal parts are properly coated. Spray fogging oil for two to three seconds in each intake throat and repeat until the engine is flooded with fogging oil. Then stop the engine immediately.

CAUTION

Never operate the engine for more than 15 seconds while the watercraft is out of the water. The engine may overheat and seize.

4. Reinstall filter element(s) and air intake covers.

EXTENDED STORAGE AND WINTERIZATION

Cleaning

1. Remove the drain plug and clean the bilge and engine area with hot water and mild detergent (such as dish soap) or with bilge cleaner. Rinse and drain thoroughly. Wipe up remaining water with clean dry shop cloths. Do not use abrasive cleaners. Store the watercraft with the drain plug removed and the seat propped open slightly to inhibit condensation from forming in the engine compartment.
2. Wash the exterior of the watercraft with fresh water and a mild detergent. Rinse thoroughly.
3. Inspect and thoroughly clean the jet pump intake, outlet and impeller area. If damage to these areas is visible have it serviced by an authorized Polaris dealer.

CAUTION

Never clean the watercraft with strong detergents, abrasives, degreasers, paint thinner, acetone, window cleaners, ammonia or products containing alcohol. They can damage finishes, decals, vinyl and plastics and accelerate UV breakdown which could cause color change and premature deterioration of parts.

4. After cleaning, protect and shine the watercraft using a regular furniture polish or non-abrasive silicone wax. Protect the seat and handlebar unit with a vinyl protector.
5. Spray the exterior of the engine with a protector and lubricant PN 2871064.

EXTENDED STORAGE AND WINTERIZATION

6. Cover the watercraft with an opaque tarp or your Polaris watercraft cover and store it in a clean, dry place.

Lubrication

1. Remove the spark plugs and pour about one tablespoon of Polaris Premium 2-cycle oil or Polaris Premium Gold Synthetic 2-cycle oil into each cylinder.
2. Inspect (change if necessary) and grease the spark plug threads and install the spark plugs.
3. Lubricate choke, throttle, and steering cables. See page 107.
4. Lubricate all areas recommended in the maintenance section beginning on page 107.
5. Remove and store the battery properly. See recommendations on pages 119-123.

EXTENDED STORAGE AND WINTERIZATION

Pre-season Preparation

See the chart on the next page for the necessary procedures to be performed when taking the watercraft out of storage and prior to starting it. Have an authorized Polaris dealer perform their portion or all of the pre-season service work. You may do parts of it yourself if you have the proper skills and tools. You must still perform the "Pre-Operation Check" before riding the watercraft each day.

WARNING

Observe all warnings and cautions mentioned throughout this manual which pertain to the work being performed. Your **safety** is involved!

Additional Inspections

To keep your watercraft safe and performing in top condition be sure to follow the additional recommended inspections as shown on the following chart.

Have an authorized Polaris dealer perform their portion or all of the recommended inspections. You may do parts of it yourself if you have the proper skills and tools.

Daily Pre-operation Inspection

Items included in the "Pre-Operation Inspection" (pages 46 -58) are not necessarily included in the following inspection chart.

MAINTENANCE

DESCRIPTION	Per- form	Per- form	Monthly or 20 Hrs	3 Months or 50 Hrs	6 Months or 100 Hrs	See Page
Change engine oil and filter	✓	○	○	○	○	76
Change gear oil	✓	○	○	○	○	101 and 102
Check engine coolant level		○		○		102-103
Check engine oil level	✓	○		○		102
Check engine oil pressure		○		○		103-104
Check fuel level	✓	○	○	○	○	116
Check water level	✓	○	○	○	○	77
Check water pump		○				116
Check water pump drive belt tension		○				126-128
Check water pump drive belt condition		○	○			129-130
Check water pump drive belt alignment	✓	○			○	130
Check water pump drive belt tension and condition	✓	○				130
Check water pump drive belt alignment	✓	○				131
Check water pump drive belt tension and condition	✓	○				131
Check water pump drive belt alignment	✓	○				131
Check water pump drive belt tension and condition	✓	○				131-132
Check water pump drive belt alignment	✓	○				132
Check water pump drive belt tension and condition	✓	○				132
Check water pump drive belt alignment	✓	○				132
Check water pump drive belt tension and condition	✓	○				132-133
Check water pump drive belt alignment	✓	○				133-134
Check water pump drive belt tension and condition	✓	○				134
Check water pump drive belt alignment	✓	○				134
Check water pump drive belt tension and condition	✓	○				134-135
Check water pump drive belt alignment	✓	○				135-136
Check water pump drive belt tension and condition	✓	○				136-137
Check water pump drive belt alignment	✓	○				137
Check water pump drive belt tension and condition	✓	○				137-138
Check water pump drive belt alignment	✓	○				138
Check water pump drive belt tension and condition	✓	○				138-139
Check water pump drive belt alignment	✓	○				139

○- Dealer performed ○- Operator performed

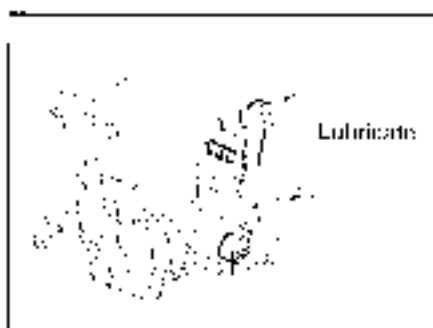
NOTE: See page 43 for additional page references.

* Every 15 hours or monthly, whichever occurs first. ** Check drive belt alignment monthly. Proceed as specified.

MAINTENANCE/LUBRICATION

As with all watercraft, proper lubrication and corrosion protection are necessary to maintain performance and ensure years of service.

For greasing the Polaris watercraft use a marine grease (water-resistant/salt-resistant E/P type, PN 2871066).



Throttle Cable And Choke Cables

1. Lubricate the throttle cable and choke cable inner cables using Polaris cable lube PN 2870510.
2. Depress the throttle lever and squirt Polaris cable lube onto the cable
3. Push and release the throttle several times to work the lubricant down the cable.



MAINTENANCE/LUBRICATION

Steering Cable Joints And Inner Wire

1. Lubricate the steering cable joints on the steering nozzle end using Polaris cable lube PN 2870510
2. Lubricate the steering cable joints on the steering nozzle end using Polaris cable lube PN 2870510.
3. Expose the steering cable inner cable and apply Polaris cable lube to it. Lubricate the steering nozzle end and the handlebar end.

NOTE: Cable seals can be moved to allow oil into the cable. Make sure seals are put back in proper location after oiling.

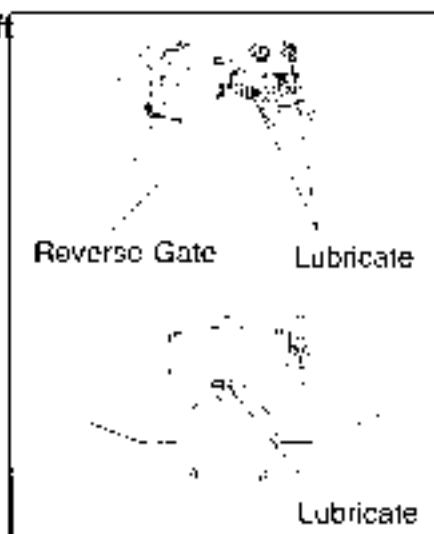
MAINTENANCE/LUBRICATION

Steering Nozzle Pivot Shaft

Lubricate the steering nozzle shaft pivot connections using Polaris cable lube PN 2870510.

Steering Handle Pivot Shaft

Lubricate the handle pivot shaft and bushing using lubricant PN 2871066. If the steering shaft has loosened, tighten it.

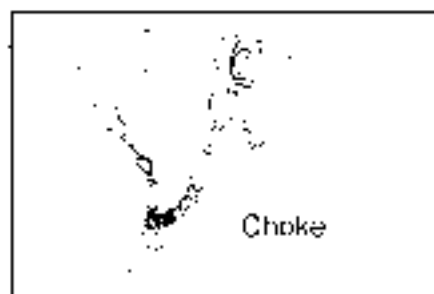


Choke (if equipped)

Turn the choke lever and apply Polaris cable lube PN 2870510 to the knob shaft. **NOTE:** On some models, the choke is located on the console.

Seat Latch And Hooks

Grease the locking mechanism of the seat latch at the rear of the seat opening.



Carburetor And Oil Injection Pump

Grease springs, exposed portions of cable and shafts at the carburetor(s) or throttle bodies. Grease often if used in salt water.

Electrical Connections

Apply a dielectric grease on battery posts and exposed cable connections (Polaris PN 2871027), supplied with watercraft.

MAINTENANCE/LUBRICATION

Drive Shaft Lubrication

Some models require periodic lubrication of the drive shaft coupler. Familiarize yourself with your model. The plastic driveshaft shroud is designed to protect you from dangerous moving parts. Its rotation is necessary to lubricate the drive-shaft coupler. Follow the instructions below in order to avoid personal injury.

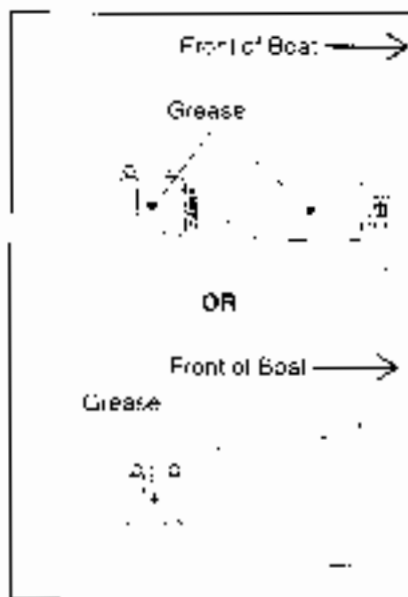
1. Remove the lanyard cord and lock plate from the engine stop switch.
2. Remove the watercraft seat. Remove battery ground (negative) cable.
3. Loosen the clamp holding the plastic driveshaft shroud in place and rotate it 180°. See pages 18-21 for location.
4. Using a grease gun with a needle point, (available from your Polaris dealer PN 2871174) lubricate coupler at the grease fitting until the driveshaft to coupler boot just begins to expand. Use premium marine grease PN 2871066.
5. Reposition the driveshaft shroud (open side down) and torque the clamp screw to 20 to 25 in. lbs.
6. Reconnect battery ground (negative) cable.
7. Reinstall the seat.

To grease the drive shaft and coupler splines, the pump assembly must be removed. This maintenance procedure should be performed by your dealer on an annual basis. If the boat is frequently used in salt water, this procedure should be done semi-annually.

MAINTENANCE/LUBRICATION

Bearing Housing

Using a grease gun (some models may require you use a needle tip PN 2871174) lubricate the bearing housing at the grease fitting until grease purges past the seals. Use premium marine grease PN 2871066.



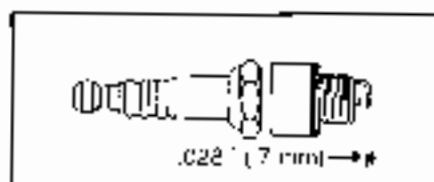
⚠ CAUTION

Any time water has been at or above the coupler level, grease the drive shaft coupler to prevent damage to these parts. Lubrication after every 25 hours of operation is also recommended.

MAINTENANCE

Spark Plugs

Always use the spark plugs recommended on page 141. The correct gap is .028 in./.7 mm and should be measured with a wire thickness gauge.



CAUTION

If the engine in your boat requires a resistor plug, (in BPR8ES, the R indicates it is a resistor plug), never substitute a non-resistor spark plug.

A slightly brownish tip is considered good. The engine is running properly and the carburetor is adjusted correctly.

A black tip indicates several potential problems: the wrong spark plug (wrong heat range) is being used; excessive idling; carburetor idle speed mixture or high speed mixture is too rich; or there is a malfunction with the RPM limiter.

A light grey or white tip indicates: the wrong spark plug (wrong heat range) is being used; carburetor idle speed mixture is too lean; there is a plugged fuel filter; or there is a leaking engine seal or gasket.

A yellow tip is caused by salt water mist ingestion. This is a conductive coating which will eventually cause fouling. This is a normal situation.

CAUTION

If the spark plug tip is black or grey have the watercraft serviced by an authorized Polaris dealer as soon as possible.

A spark plug with cracked porcelain or damaged threads should be changed immediately. If the electrodes are badly worn or burned the plug should also be replaced.

If the spark plug is in good condition, clean it with a clean shop cloth and/or wire brush. Adjust the gap to .028 in/.7 mm using a wire thickness gauge.

Spark Plugs

CAUTION

Never attempt to remove the spark plug with a warm engine. The exhaust system or engine could burn you causing injury.

When installing or removing spark plugs be careful not to damage the porcelain insulator

WARNING

High tension voltage is present in the spark plug wires when the engine is running. Never touch spark plug wires when the engine is being cranked or run.

Wipe off any water on the spark plug or inside the cap. Push the cap down on the plug until it clicks. Use dielectric grease PN 2871066 on the inside of the spark plug cap to prevent corrosion.

Before installing a **used** plug, wipe off threads and apply dielectric grease PN 2871066. Also clean the gasket surface. Install the spark plug and torque to 18 ft. lbs. If a torque wrench is not available 1/4 to 1/2 turn past finger-tight is close to the correct torque.

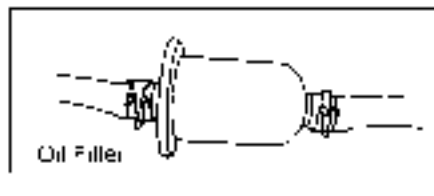
MAINTENANCE

⚠ WARNING

If your machine is equipped with a fuel valve, shut it "off". Gasoline is extremely flammable and explosive under certain conditions. Do not smoke or allow flames or sparks in the work area. Be sure the work area is well ventilated. See gasoline warnings on page 40.

Fuel Tank

When the fuel tank needs cleaning or if water is found in the gas tank have the watercraft serviced immediately by an authorized Polaris dealer



Oil Filter

CAUTION

The in-line oil filter is a special type and must not be substituted. The filter should be changed annually by an authorized Polaris dealer during the pre-season inspection. Do not attempt to clean this filter.

CAUTION

The fuel lines should be inspected regularly. Special attention should be given to fuel system line condition after periods of storage. Normal deterioration from weathering and fuel compounds can occur. See your dealer if you suspect any deteriorated components.

Carburetor Adjustment

The carburetor is vital to engine operation and performance. Adjustment of the carburetor should only be done by an authorized Polaris dealer. Idle speed can also be adjusted by your dealer.

CAUTION

The carburetor was set at the factory and is very sensitive if adjusted. Do not attempt to change the settings or engine damage and poor performance could result.

NOTE: If the watercraft will be used at a high altitude, above 3000 feet (1000 m), have an authorized Polaris dealer adjust the carburetor to allow for the thinner atmosphere. FFI engines compensate for high altitude automatically.

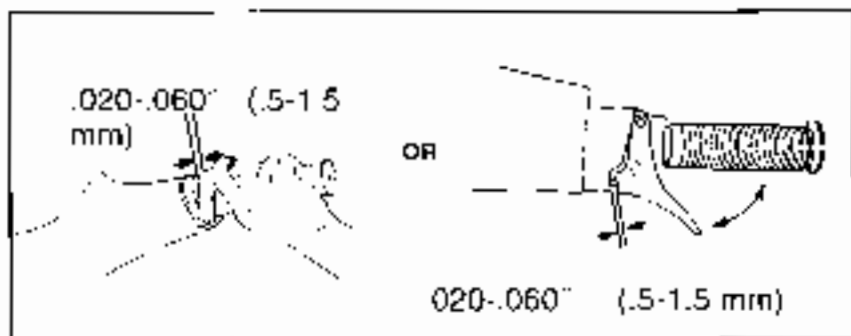
MAINTENANCE

Steering Cable Inspection

1. The handlebars and steering nozzle should operate smoothly. If movement is stiff have your authorized Polaris dealer service it.
2. Turn the handlebars from lock to lock and check to be sure that the clearances between the steering nozzle and the rear hull are even on both sides. If the alignment is not even, have your authorized Polaris dealer service it.

Throttle Cable Inspection

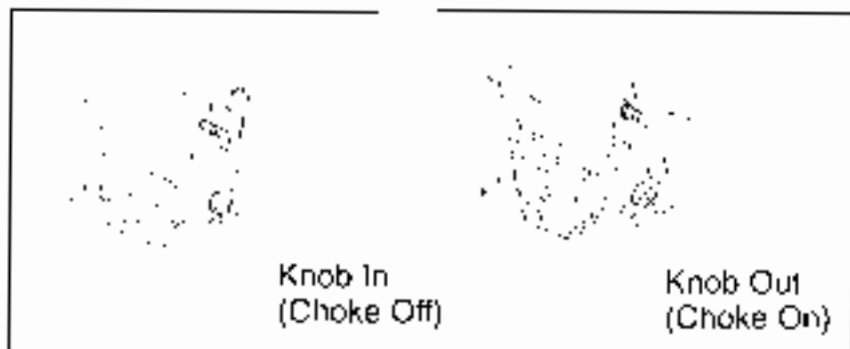
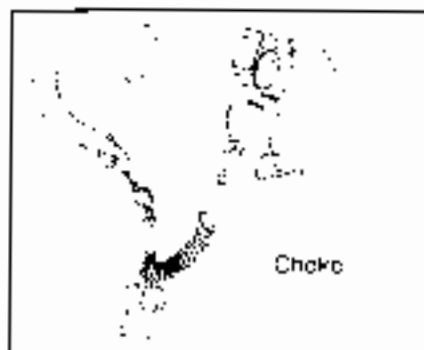
1. Depress and release the throttle lever. It should return to its initial position smoothly. If it does not, have your authorized Polaris dealer service it.
2. Throttle lever free-play should not exceed $.020\text{''}-.060\text{''}$ (.5-1.5 mm). If it does, have it corrected by your authorized Polaris dealer.



Choke Cable Inspection

Turn the choke lever clockwise (looking down) to make sure the choke cable is operating smoothly.

When the lever is turned approximately 180° clockwise the choke valve is fully closed; when the lever is turned fully in a clockwise direction, the valve is fully open. There should be minimal choke cable slack. If the choke is not functioning properly, have it serviced by your authorized Polaris dealer.



MAINTENANCE

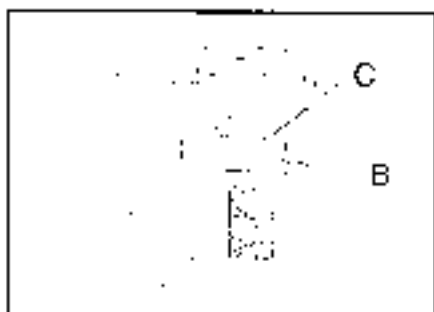
Circuit Breaker

The electrical system is protected with a 15A circuit breaker. **NOTE:** DFI models have both a 15A and 5A circuit breakers. In order to reset the circuit breaker, locate and push the reset button (A) on top of the electrical box.



Fuses

The MFD and Bilge Pump are protected by fuses. The MFD is protected by a 1/4 amp fuse (B) and the bilge pump is protected by a 3 amp fuse (C). Inspect the fuses every season to ensure fuses are not blown. There are spare fuses in the electrical box.



Battery Maintenance And Charging

WARNING

Battery electrolyte is poisonous. It contains sulfuric acid. Serious burns can result from contact with the skin, eyes or clothing.

WARNING

Crossing the terminals of a battery with a tool or a body part can cause severe shock.

Antidote:

EXTERNAL - Flush with water.

INTERNAL - Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Call a physician immediately.

EYES - Flush with water for 15 minutes and get prompt medical attention.

Batteries produce explosive gases. Keep sparks, flame, cigarettes, etc. away. Ventilate when charging or using in closed space. Always shield eyes when working near batteries. KEEP OUT OF THE REACH OF CHILDREN.

MAINTENANCE

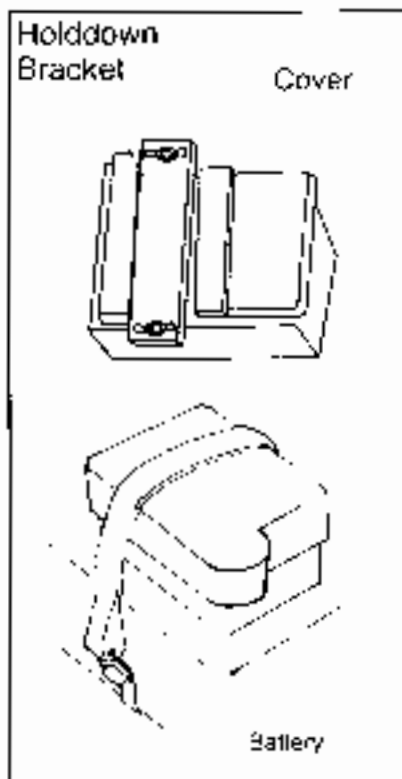
⚠ CAUTION

The battery must be removed from the watercraft for maintenance and charging. Battery electrolyte may spill and damage the watercraft.

Always disconnect the black (negative) cable first. Electrolyte or fuel vapors may be present in the engine compartment and a spark could ignite them which could cause personal injury. When re-installing battery connect black (negative) cable last.

Battery Removal

1. Release the battery by removing the strap(s) or loosening the fasteners and removing the bar.
2. If applicable, move the electrical box out of the way. It does not have to be opened for battery removal. **NOTE:** Some wiring may have to be removed from wire clips for access to battery.
3. Remove the battery vent tube from the battery.
4. Disconnect the black (negative) battery cable first.



5. Disconnect the red (positive) battery cable next.
6. Lift the battery out of the watercraft, being careful not to tip it sideways and spill any electrolyte.

CAUTION

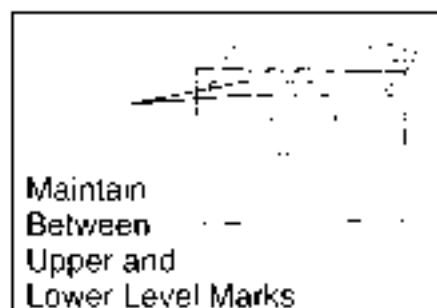
If an electrolyte spill occurs, apply a generous amount of baking soda to the area and then rinse with fresh water.

Replenishing Battery Fluid

A poorly maintained battery will deteriorate rapidly. Check the battery fluid level each day the watercraft is ridden.

The fluid level should be kept between the upper and lower level marks.

To refill use only distilled water. Tap water contains minerals which are harmful to a battery.



CAUTION

Do not allow cleaning solution or tap water to enter the battery. It will shorten the life of the battery.

MAINTENANCE

Battery Connections

Battery terminals and connections should be kept free of corrosion. If cleaning is necessary, remove the corrosion with a stiff wire brush. Wash them off with a solution of baking soda and water (One tablespoon of baking soda to one cup of water). Rinse well with tap water and dry off with clean shop cloths. Coat the terminals with dielectric grease PN 2871066.

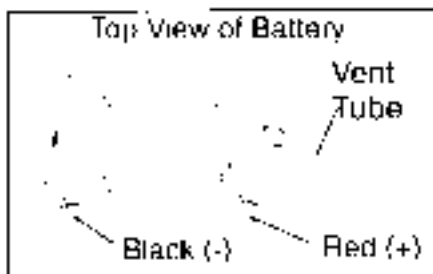
Battery Charging

⚠ WARNING

Keep the battery away from sparks and open flames during charging because the battery gives off gases which are explosive.

If you smell fuel do not attempt to charge the battery. Take the craft to your dealer for immediate inspection.

When using a battery charger connect the battery to the charger before turning on the charger. This prevents the possibility of sparks at the terminals which could ignite the battery gases.



Do not connect charger cables to the battery unless the charger is unplugged.

1. Remove the caps from the cells. Add distilled water if necessary to bring the electrolyte up to the proper level.
2. Connect the battery to a charger. Set the charging rate at 1.9 amps and charge the battery for ten hours.

MAINTENANCE

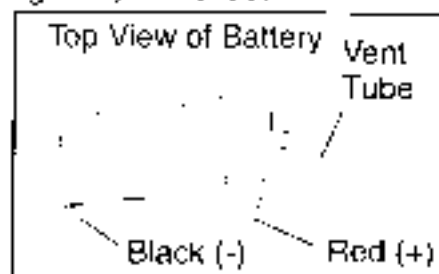
NOTE: During charging, if the electrolyte temperature rises above 115°F (45°C) reduce the charging rate to lower the temperature. Increase the charging time.

3. After the battery is charged, check the fluid level. If it has dropped add distilled water to bring the electrolyte up to the proper level.
4. Check the results of charging. The specific gravity of each cell must be 1.26 at room temperature. The voltage should be 14.5 - 15.5 V during charging. 12.2 - 12.8 V after charging.

Battery Installation

Always connect battery cables in the order specified Red (positive) cable first, black (negative) cable last

1. Install the battery in its holder.
2. Install the battery vent tube. It must be free from obstructions and securely installed. If not, battery gases could accumulate and cause an explosion. Avoid skin contact with electrolyte, severe burns could result.



3. First connect and tighten the red (positive) cable.
4. Second connect and tighten the black (negative) cable.
5. Apply dielectric grease PN 2871066 to each cable.
6. Reinstall the battery cover and electrical box over the battery and reconnect straps.

MAINTENANCE

7. Verify that cables are properly routed
8. Verify that the vent hose is not kinked.

Battery Storage

1. Remove the battery. Clean the casing and terminals with baking soda and water (one tablespoon of baking soda to one cup water). Apply dielectric grease PN 2871066 or petroleum jelly to battery terminals and all exposed cable connectors.
2. Top off the battery with distilled water and charge it to a specific gravity of 1.26. Recharge monthly as required to prevent battery discharge and sulfating.
3. Store the battery in a cool, dry place out of direct sunlight.

Salt Water And Unclean Water Care

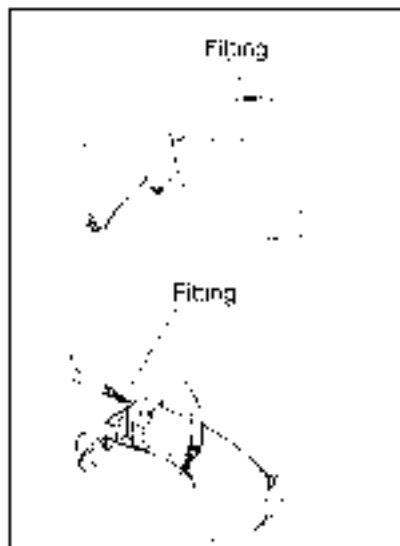
When the watercraft is operated in salt water or water with impurities like silt, sand and other particulates, additional care is required to protect it.

CAUTION

Failure to perform the additional maintenance required when the watercraft is operated in unclean or salt water will result in damage and corrosion to the watercraft and may void your warranty.

Exhaust Coolant Filter

The exhaust coolant filter is located on the top of the exhaust pipe(s) (see page 18 for location detail). This part filters debris from the coolant water, providing an adequate supply of water through the bleed fitting, and insuring proper exhaust temperature for cooling and performance.



MAINTENANCE

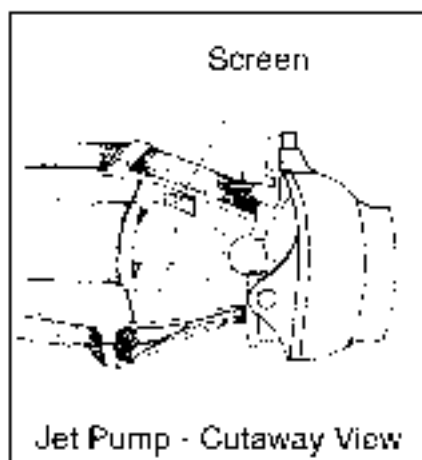
Cleaning Procedure

1. Remove clamp connecting hose to fitting.
2. Using a deep well 9/16" socket, a flare nut wrench, or a 9/16" open end wrench, remove the fitting from the exhaust pipe.
3. Inspect fitting for plugging. Flush with water to clean.
4. Reinstall fitting into exhaust pipe. Tighten securely.
5. Reinstall bleed hose and clamp. Tighten securely.

Jet Pump Water Inlet Screen

The water inlet screen is located inside the stationary nozzle of the jet pump. Its purpose is to screen out grass and debris which could enter the coolant system.

After using the watercraft, visually inspect the screen for build up of contaminants. Clean as required by flushing engine and or screen with fresh water. See flushing procedure below.



If the screen cannot be cleaned by flushing, see your Polaris Dealer for additional cleaning.

Cooling System Flushing

The watercraft uses water for propulsion and cooling.

Flushing the cooling system with fresh water (never anti-freeze) is necessary to neutralize the corroding effects of salt water or water with impurities like silt, sand, alkali and other particulates; as well as to flush out other residue left in the water passages of the watercraft cooling system.

Flush water passages when the watercraft is not going to be ridden again that day or if the watercraft is expected to be stored for an extended time.

MAINTENANCE

If you beach your craft you must flush the cooling system or severe engine damage may occur.

CAUTION

Always follow the recommended flushing procedure when flushing the watercraft cooling system to avoid engine damage.

Never flush a hot engine. Severe engine damage could result.

WARNING

Do not touch any electrical part when the engine is running. Severe personal injury or death could result.

EPA Emissions Regulations

Maintenance, replacement, or repair of the emission control devices and systems may be serviced at any Marine SI engine repair establishment or individual.

Flushing Procedure

Flushing the cooling system with fresh water is necessary to neutralize the corroding effects of salt water or water with impurities like silt, sand, alkali and other particles as well as to flush out other residue left in the water passages of the watercraft cooling system.

Flush water passages when the watercraft is not going to be ridden again that day or if the watercraft is expected to be stored for an extended time.

Use Flush Kit PN 2871443.

1. Attach garden hose to Female Coupler/Hose attachment
2. Snap the male and female together coupler
3. Snap the male and female together coupler
4. Start watercraft engine.
5. immediately turn on the water faucet
6. Rev the engine intermittently for one minute to completely flush the cooling system.
7. Turn off the water faucet.
8. When all water has exited the cooling system, turn off the watercraft engine. **NOTE:** This step should not take longer than 10 seconds.
9. Press button on female coupler/hose attachment to separate from male coupler.

MAINTENANCE

Thermostat Pop Off Assembly

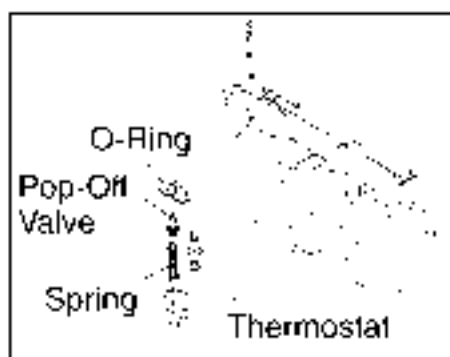
If low end performance of the watercraft begins to deteriorate, and the jet pump intake area is free of debris and weeds, or if the overheat alarm sounds and/or the LED is flashing "hot" on the MFD or MFI, the thermostat popoff assembly should be checked for debris and cleaned out. Also inspect the thermostat pop off assembly if the watercraft has been stored for more than 30 days or has been used in salt water. To do this, use the 3/16" (.5 cm) Allen wrench in the tool kit and a flat screwdriver.

Sand buildup is possible if you beach your craft. This must be cleaned and flushed to avoid engine damage.

CAUTION

If you are not mechanically skilled, or are unsure of how to perform this maintenance function, see your Polaris dealer. If the thermostat pop off assembly is reassembled incorrectly severe engine damage will result within a very short period of operation.

NOTE: This illustration is a general representation of the engine. Your model may differ. Refer to Specification pages 140-143 for details about your model.



NOTE: Do not perform this maintenance while the watercraft is in the water. The thermostat pop off assembly is under tension from an internal spring. When the screws are removed, the assembly will come apart quickly if not held together firmly.

1. Remove screws while holding thermostat pop off assembly firmly together. Carefully take the assembly apart. Be careful not to lose any parts.
2. Check the thermostat pop off assembly for debris, such as seaweed, and clean it out.
3. Check the condition of rubber elements. Also check the thermostat and housing for corrosion. Replace any parts that appear in poor condition.
4. Assemble the thermostat pop off assembly in the correct sequence. The arrow indicates the direction of water flow (away from engine).
5. Attach the thermostat pop off assembly using the screws removed in step one and Loctite 242 (blue)

MAINTENANCE

Anti-corrosion Treatment

Spray all the metal components in the engine compartment with a lubricating type rust inhibitor PN 2871064.

Apply dielectric grease on battery terminals and connections PN 2871066.

NOTE: Never leave shop cloths or tools in the engine compartment or bilge.

Periodic Maintenance Schedule

NOTE: Maintenance intervals are based upon average operating conditions. Watercraft operated in saltwater require daily corrosion protection and engine flushing, and more frequent maintenance and lubrication.

Fogging kits should be added to all Polaris watercraft. The engine should be fogged if the watercraft will not be used for more than 48 hours.

KEY

^ Perform every 15 hrs. or one month when operated in salt water.

** Perform daily when operated in salt water.

***Banded rubber couplers-Pre-Season (Annually), 100 hrs., or when pump is disassembled for maintenance.

MAINTENANCE

- ① Replace pop-off valve, spring, and seals every 100 hours only (not every 6 months).
- ② Replace water separator filter element and o-ring every 100 hours only (not every 6 months).
- ③ Replace inlet and outlet hoses and clamps every 100 hours only.

I=Inspect, adjust, service, or replace if necessary

A=Adjust

C=Clean

R=Replace item

L=Lubricate with recommended lubricant

After washing the engine compartment of the watercraft, protect the metal components with a heavy duty silicone based spray lube or other *non-flammable* metal protectant. Do not use flammable sprays or protectants in the engine compartment. Do not use petroleum based protectants or lubricants in the engine compartment, as most are flammable and also may deteriorate rubber components.

MAINTENANCE

Periodic Maintenance Schedule

DESCRIPTION	Pre-ride	Pre-season	Monthly or 25 hrs	3 Months or 50 hrs	6 Months or 100 hrs	Tune Up Item
ENGINE						
Inspect and service 1-100 Wg. oil daily at start	L1	L				
Check top system (timing, carburetor, etc.) and filter	L1	L				
Balance timing, fuel system		L1		L1		
Balance fuel mixture		L		L		
Engine valves (check and if necessary) (check and adjust)					L	
Remove oil pan and clean, inspect pump		L	L1		L1	
Remove fuel and oil filter and clean		L			L	
Inspect prop (check for wear)		L			L	
Inspect and service belts		L				
Check and adjust drive sprocket		L				
Check and adjust drive sprocket		L				
FUEL SYSTEM						
Drain fuel system (check water)	L1	L				
Inspect and service water filter and flow	L				L	
Check fuel filter		L1				
Inspect fuel injection	L	L1		L		
Check fuel pump and injectors (check for leaks and proper operation)		L1			L	
Check fuel filter	L		L	L	L	
Check fuel filter and filter change (check for leaks and proper operation)					L	
Check system and fuel line for leaks and proper operation	L					
Check system (check for leaks and proper operation)	L					
Check system (check for leaks and proper operation)	L					
JET PUMP						
Check and clean jet pump and nozzle (check for clogs and proper operation)		L1			L1	
Check and clean jet pump		L1	L			
Check and clean jet pump and nozzle	L1	L1				
Check and clean jet pump and nozzle	L	L1				
Check and clean jet pump and nozzle		L1				
Check and clean jet pump and nozzle		L1				
Check and clean jet pump and nozzle		L1				
Check and clean jet pump and nozzle		L1				
Check and clean jet pump and nozzle		L1				
Check and clean jet pump and nozzle		L1				

Periodic Maintenance Schedule

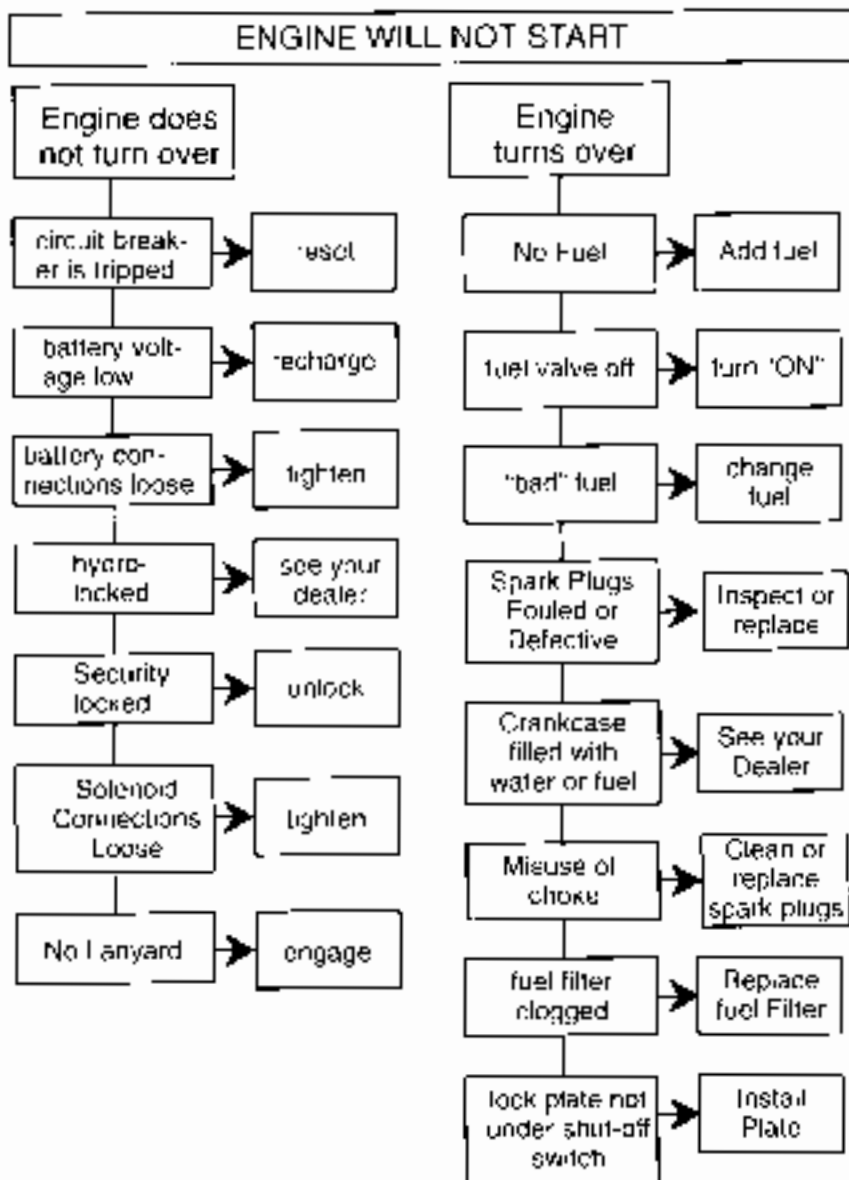
DESCRIPTION	Pre-ride	Pre-season	Monthly or 25 hrs	3 Months or 50 Hrs	6 Months or 100 Hrs	Time Up 2500
ELECTRICAL						
Battery condition inspection	1	1				1
Check condition of charging and electrical system		1				1
Check condition of lights and electrical wiring		1			1	
Inspect and clean electrical connections		1			1	
Inspect and clean engine compartment		1			1	
Inspect and clean fuel tank		1				1
HULL / DECK / STEERING / CONTROLS						
Check and adjust trim and trim tabs		1			1	
Check gear oil		1, 4		1		
Check and adjust throttle	1				1	
Inspect and lubricate steering system	1	1, 6		1, 4		
Check and adjust engine and drive shaft bearings	1					1
Adjust and lubricate steering assembly	1	1				
Check and clean gun	1					
Rig system according to manufacturer's instructions	1					
Check and adjust fuel valve and fuel system		1	1, 4			
Check and adjust						1
Inspect and replace or clean air filter		1	1			

EPA Emissions Regulations

All new FFI (Fuel Fuel Injection) engines manufactured by Polaris Industries are certified to the United States Environmental Protection Agency regulations for the control of air pollution. This certification is dependent on certain adjustments set to factory standards. For this reason factor procedure for servicing must be strictly followed, and wherever practicable, returned to the original intent of the design. Maintenance, replacement, or repair of the emission control devices and systems may be performed by any marine SI engine repair establishment or individual.

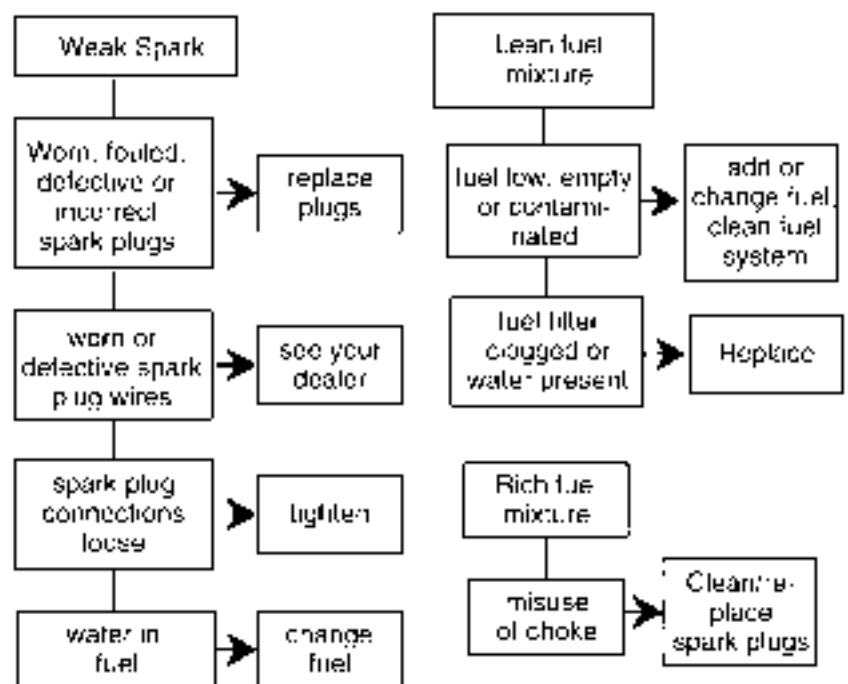
TROUBLESHOOTING

The following information is provided to help you identify probable causes for questions you may have about the operation of the engine. See your Polaris dealer with any additional questions you may have.

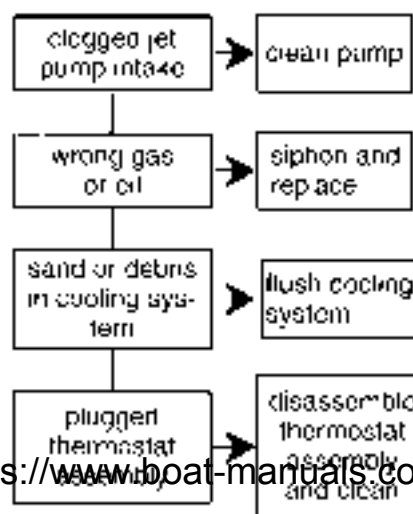


TROUBLESHOOTING

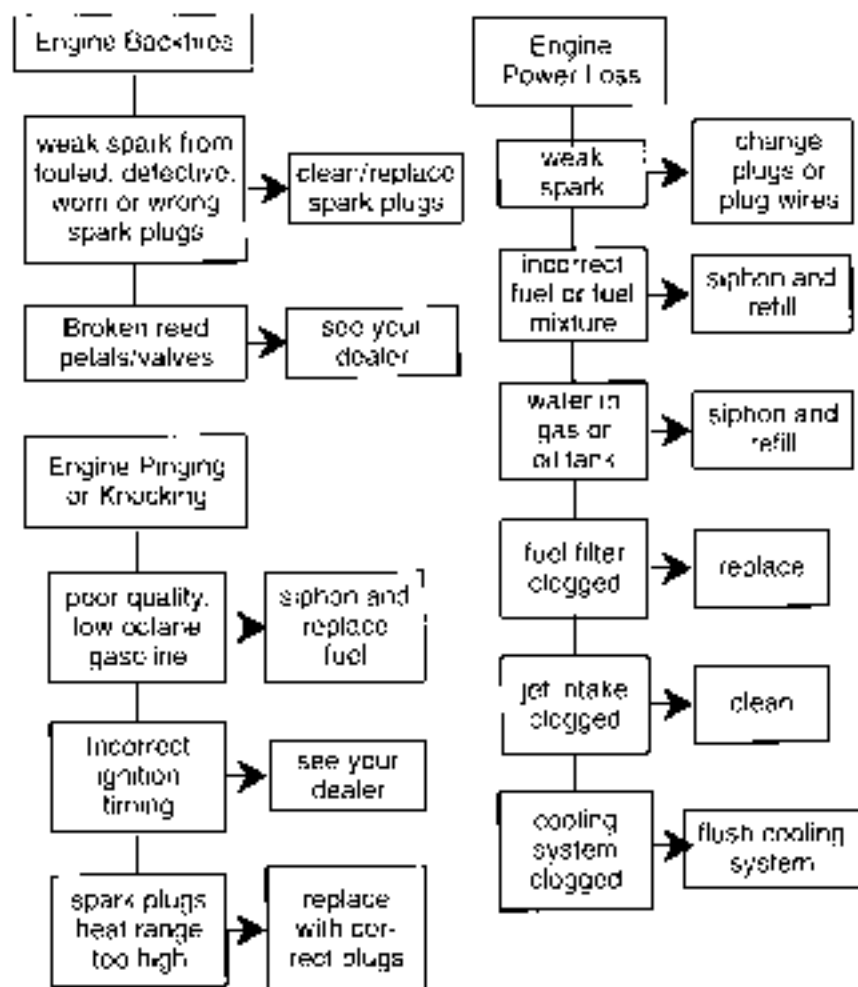
Engine Runs Irregularly, Stalls, Or Misfires



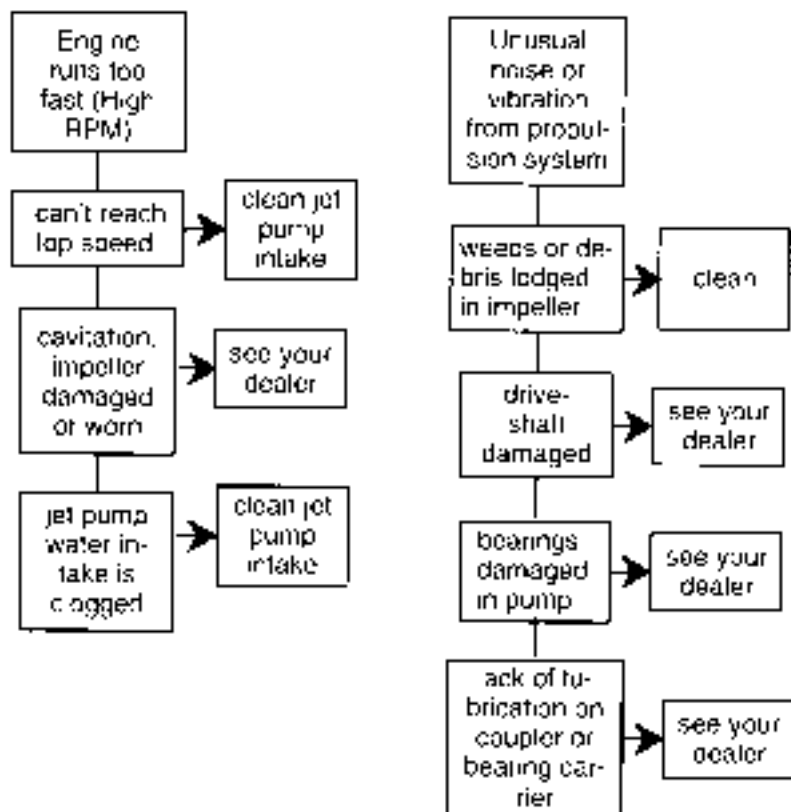
Engine Overheats



TROUBLESHOOTING



TROUBLESHOOTING



Polaris Acknowledges the Following Products Mentioned in This Manual:

STA-BIL, Registered Trademark of Gold Eagle

Loctite, Registered Trademark of Loctite Corporation

SPECIFICATIONS

	SLH	SLX	PRU	Virage TAI	Virage TJ	Virage TX	Genesis	Genesis FFI
CAPACITIES / DIMENSIONS								
Max. Total Weight	1700 3750 lb	1700 3750 lb	1700 3750 lb	1700 3750 lb	1700 3750 lb	1700 3750 lb	1700 3750 lb	1700 3750 lb
Max. Capacity for Passengers	1	2	2	2	2	2	2	2
Max. Capacity for Gear	100 220 kg	100 220 kg	100 220 kg	100 220 kg	100 220 kg	100 220 kg	100 220 kg	100 220 kg
Max. Length (Hull + Deck)	400 880 kg	400 880 kg	400 880 kg	400 880 kg	400 880 kg	400 880 kg	400 880 kg	400 880 kg
Max. Beam (Hull)	1670 3670 mm	1670 3670 mm	1670 3670 mm	1670 3670 mm	1670 3670 mm	1670 3670 mm	1670 3670 mm	1670 3670 mm
Max. Beam (Deck)	1770 3900 mm	1770 3900 mm	1770 3900 mm	1770 3900 mm	1770 3900 mm	1770 3900 mm	1770 3900 mm	1770 3900 mm
Max. Weight (Hull)	100 220 kg	100 220 kg	100 220 kg	100 220 kg	100 220 kg	100 220 kg	100 220 kg	100 220 kg
Max. Weight (Deck)	100 220 kg	100 220 kg	100 220 kg	100 220 kg	100 220 kg	100 220 kg	100 220 kg	100 220 kg
Max. Weight (Total)	200 440 kg	200 440 kg	200 440 kg	200 440 kg	200 440 kg	200 440 kg	200 440 kg	200 440 kg
ENGINE								
Engine Type	Outboard 2-Stroke	Outboard 4-Stroke	Outboard 4-Stroke	Outboard 4-Stroke	Outboard 4-Stroke	Outboard 4-Stroke	Outboard 4-Stroke	Outboard 4-Stroke
Max. Power	200 147 hp	200 147 hp	200 147 hp	200 147 hp	200 147 hp	200 147 hp	200 147 hp	200 147 hp
Max. Torque	100 73.5 Nm	100 73.5 Nm	100 73.5 Nm	100 73.5 Nm	100 73.5 Nm	100 73.5 Nm	100 73.5 Nm	100 73.5 Nm
Max. RPM	5000	5000	5000	5000	5000	5000	5000	5000
Max. Fuel Consumption	30 22.7 l/h	30 22.7 l/h	30 22.7 l/h	30 22.7 l/h	30 22.7 l/h	30 22.7 l/h	30 22.7 l/h	30 22.7 l/h
Max. Oil Consumption	1.5 1.1 l/h	1.5 1.1 l/h	1.5 1.1 l/h	1.5 1.1 l/h	1.5 1.1 l/h	1.5 1.1 l/h	1.5 1.1 l/h	1.5 1.1 l/h
Max. Weight	40 90 kg	40 90 kg	40 90 kg	40 90 kg	40 90 kg	40 90 kg	40 90 kg	40 90 kg
Max. Length	28 610 mm	28 610 mm	28 610 mm	28 610 mm	28 610 mm	28 610 mm	28 610 mm	28 610 mm

* SMC - Sheet Moulded Compound

** FRC - Fiberglass Reinforced Composite

SPECIFICATIONS

	SLH	SLX	PRO 1200	Vrigo TXI	Vrigo	Vrigo TX	Genesis	Genesis FFI
ENGINE (CONT.)								
Engine Displacement	6.0	7.0	10.0	11.0	9.0	10.0	11.0	11.0
Compression Ratio Fuel System	11.5:1	11.5:1	11.5:1	11.5:1	11.5:1	11.5:1	11.5:1	11.5:1
Weight and Height Efficiency	74.0	74.0	100.0	99.0	74.0	99.0	74.0	74.0
Max. Power Minimum RPM	67	75	137	135	96	135	75	75
RPM Torque Maximum	2400	2400-2600	2400-2600	2400-2600	2400	2400-2600	2400-2600	2400-2600
COOLING								
Engine Cooling	Water Cooled Overhead Valves	Water Cooled Overhead Valves	Water Cooled Overhead Valves	Water Cooled Overhead Valves	Water Cooled Overhead Valves	Water Cooled Overhead Valves	Water Cooled Overhead Valves	Water Cooled Overhead Valves
Overhead Valves	Overhead Valves	Overhead Valves	Overhead Valves	Overhead Valves	Overhead Valves	Overhead Valves	Overhead Valves	Overhead Valves
ELECTRICAL								
Alternator Output	5.5A 12V/100 Watts	17 Amp 12V/150 Watts	6.5A 12V/150 Watts	12 Amp 12V/150 Watts	6.5A 12V/150 Watts	6.5A 12V/150 Watts	17 Amp 12V/150 Watts	17 Amp 12V/150 Watts
Ignition System	CD	CD	CD	CD	CD	CD	CD	CD
Spark Plug Type	NGK BPR6E	NGK BPR6E	NGK BPR6E	NGK BPR6E	NGK BPR6E	NGK BPR6E	NGK BPR6E	NGK BPR6E
Spark Plug Gap	.025 Inches	.028 Inches	.025 Inches	.025 Inches	.025 Inches	.025 Inches	.028 Inches	.025 Inches
Starting System	Electric Start	Electric Start	Electric Start	Electric Start	Electric Start	Electric Start	Electric Start	Electric Start
Hour	129 129h	165 165h	170 165h	20 129h	129 129h	129 129h	165 165h	165 165h

SPECIFICATIONS

	SLH	SLX	PRD 1900	Virage TXI	Virage	Virage TX	Genesis	Genesis FFI
CARBURETION								
Carb Type	FFC 1700 Narrow jet slotted jet slotted jet slotted jet	FFC 1600 Wide jet slotted jet slotted jet slotted jet	FFC 1400 Wide jet slotted jet slotted jet slotted jet	FFC 1300 Wide jet slotted jet slotted jet slotted jet	FFC 1200 Wide jet slotted jet slotted jet slotted jet	FFC 1100 Wide jet slotted jet slotted jet slotted jet	FFC 1000 Wide jet slotted jet slotted jet slotted jet	FFC 900 Wide jet slotted jet slotted jet slotted jet
Carburetor Type and Number	1 2000 FFC	1 1600 FFC	1 1400 FFC	FFC 1300 FFC	1 1200 FFC	1 1100 FFC	1 1000 FFC	FFC 900
PROPULSION								
Propeller Material	Fiberglass	Fiberglass	Fiberglass	Fiberglass	Fiberglass	Fiberglass	Fiberglass	Fiberglass
Propeller System	Hub Drive	Hub Drive	Hub Drive	Hub Drive	Hub Drive	Hub Drive	Hub Drive	Hub Drive
Propeller Type	Single Blade Fixed Pitch	Single Blade Fixed Pitch	Single Blade Fixed Pitch	Single Blade Fixed Pitch	Single Blade Fixed Pitch	Single Blade Fixed Pitch	Single Blade Fixed Pitch	Single Blade Fixed Pitch
Propeller Size	18x1 1/2	18x1 1/2	18x1 1/2	18x1 1/2	18x1 1/2	18x1 1/2	18x1 1/2	18x1 1/2
Maximum Water Line Speed R.P.M.	2100 6000	2100 6000	2100 6000	2100 6000	2100 6000	2100 6000	2100 6000	2100 6000
Engine RPM	5400 1425	5400 1425	5400 1425	5400 1425	5400 1425	5400 1425	5400 1425	5400 1425
PERFORMANCE								
Speed	2 10.0	2 10.0	2 10.0	N/A	2 10.0	2 10.0	2 10.0	N/A

(+) - Slim Hub Progressive Pitch

(<) - Radial Blade Progressive Pitch

SPECIFICATIONS

	SLH	SLX	PRO 1900	Virage T21	Virage	Virage T3	Genesis	Genesis FP
FEATURES								
Reversal/Idle	Star Reverser Star/Idle MFD	Star Reverser Power MFD	Star Reverser Power Star/Idle	Power Reverser Electric Power Star/Idle	Star Reverser Star/Idle MFD	Star Reverser Star/Idle MFD	Electric Star Reverser Star/Idle MFD	Electric Star Reverser Star/Idle MFD
Fuel Gauge	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD
Oil and Service	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD
Tachometer	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD
Reverse Switch	N/A	N/A	N/A	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD
Voltage Meter	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD
Temp. Meter	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD
Speedometer	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD
Impeller Status	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD
Fuel in Tank	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	N/A	N/A	N/A	N/A	N/A
Exhaust	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD
Water Temp. Meter	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD	Star/Idle MFD

*Polaris Electric Reverse Control

ACCESSORIES

Polaris has a wide range of watercraft accessories, from wet-suits and life vests to accessory mirrors, touring and towing gear, and performance parts. Contact your Polaris dealer for a full line of available products.

IDENTIFICATION NUMBERS

Record your watercraft I.D. numbers in the spaces provided. This will help when ordering spare parts. Also record these numbers in another place in the event your watercraft is stolen. See page 145 for location of numbers.

PURCHASE DATE

POLARIS MODEL NUMBER

DEALER IMPRINT

HULL I.D. NUMBER

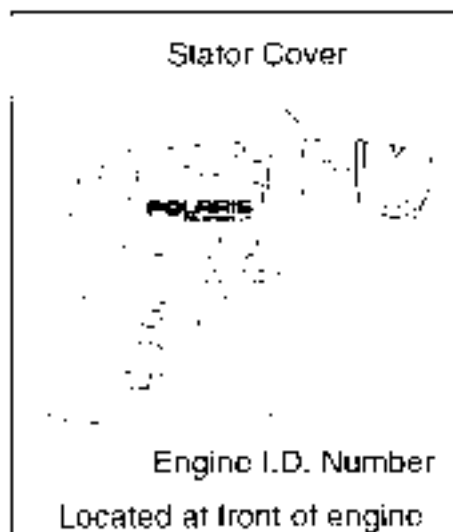
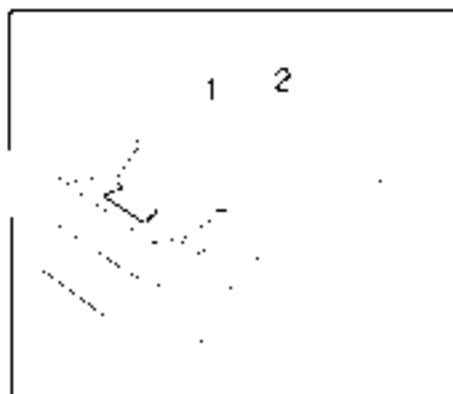
ENGINE I.D. NUMBER

POLARIS INDUSTRIES INC.

IDENTIFICATION NUMBERS

The engine I.D. number and hull I.D. number are used to register the boat. These identification numbers uniquely distinguish this watercraft.

If the watercraft is ever stolen these numbers will help identify it. Keep a record of these numbers in a place separate from the watercraft as well as in the spaces provided on page 144 of this manual. The hull I.D. locations are outside on the rear boarding platform (1) and one inside (2), either next to the pump inlet or in the front under the storage bucket



INSURANCE

Check with your own insurance agent regarding insurance coverage of your personal watercraft. Your dealer may have marine insurance available. He or she should know the requirements of your state, and can help you with the proper policy to protect yourself.

OBTAINING SERVICE AND WARRANTY ASSISTANCE

Read carefully and understand the service data and the Polaris *Warranty* contained in this manual. Contact your Polaris dealer in matters pertaining to replacement parts, service, or warranty. He/She is constantly kept up-to-date on changes, modifications, and tips on personal watercraft maintenance which may supersede information contained in this manual. He/She is familiar with our policies and procedures and will be happy to assist you.

When writing about parts, service, or warranty, always include the following information:

1. Serial number
2. Model number
3. Dealer name
4. Date of purchase
5. Details of trouble experienced
6. Length of time and conditions of operation
7. Indicate previous correspondence

WARRANTY POLICY

LIMITED WARRANTY

Polaris Industries Inc., 2100 Highway 55, Medina, 55340, gives a **ONE YEAR LIMITED WARRANTY** on all components of the Polaris personal watercraft against defects in material or workmanship. This warranty covers the parts and labor charges for repair or replacement of defective parts which are covered by this warranty. This warranty begins on the date of purchase. This warranty is transferrable to another consumer during the warranty period through a Polaris dealer. There is a charge of \$35.00 payable to Polaris Industries Inc.

REGISTRATION

At the time of sale the Warranty Registration Form must be completed by your dealer and submitted to Polaris within ten days. Upon receipt of this registration, Polaris will record the registration for warranty. No verification of registration will be sent to the purchaser as the copy of the Warranty Registration Form will be the warranty entitlement. If you have not signed the original registration and received the "customer copy", please contact your dealer immediately. **NO WARRANTY COVERAGE WILL BE ALLOWED UNLESS YOUR PERSONAL WATERCRAFT IS REGISTERED WITH POLARIS**

Initial dealer preparation and set-up of your personal watercraft is very important in ensuring trouble-free operation. Purchasing a machine in the crate or without proper dealer set-up will void your warranty coverage.

WARRANTY POLICY

WARRANTY COVERAGE AND EXCLUSIONS:

LIMITATIONS OF WARRANTIES AND REMEDIES

This Polaris limited warranty covers all parts and components except for impeller damage caused by ingestion of rocks, sand, or gravel or any other damage caused by operation in shallow water. The warranty also excludes any other failures that are not caused by a defect in material or workmanship.

This warranty does not cover accidental damage, normal wear and tear, abuse or improper handling. This warranty also does not cover any personal watercraft that has been altered structurally, modified, neglected, improperly maintained, used for racing, or used for purposes other than for which it was manufactured, or for any damages which occur during trailer transit or as a result of unauthorized service or the use of unauthorized parts. In addition, this warranty does not cover physical damage to paint or finish, gel coat stress cracks, tearing or puncturing of upholstery material, corrosion, or defects in parts, components or personal watercraft due to fire, explosions or any other cause beyond Polaris' control.

This warranty does not cover the use of unauthorized lubricants, chemicals, or fuels that are not compatible with watercraft. In addition this warranty does not cover stress cracks, submersion, or growth of marine organisms on hull and dock.

The exclusive remedy for breach of this warranty shall be, at Polaris' exclusive option, repair or replacement of any defective materials, or components or products. THE REMEDIES SET FORTH IN THIS WARRANTY ARE THE ONLY REMEDIES AVAILABLE TO ANY PERSON FOR BREACH OF THIS WARRANTY. POLARIS

WARRANTY POLICY

SHALL HAVE NO LIABILITY TO ANY PERSON FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY DESCRIPTION, WHETHER ARISING OUT OF EXPRESS OR IMPLIED WARRANTY OR ANY OTHER CONTRACT, NEGLIGENCE, OR OTHER TORT OR OTHERWISE. Some states do not permit the exclusion or limitation of incidental or consequential damages or implied warranties, so the above limitations or exclusions may not apply to you if inconsistent with controlling state law.

ALL IMPLIED WARRANTIES (INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) ARE LIMITED IN DURATION TO THE ABOVE ONE YEAR WARRANTY PERIOD. POLARIS FURTHER DISCLAIMS ALL EXPRESS WARRANTIES NOT STATED IN THIS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you if inconsistent with controlling state law.

HOW TO OBTAIN WARRANTY SERVICE

If your personal watercraft requires warranty service, you must take it to a Polaris dealer authorized to repair Polaris personal watercraft. When requesting warranty service you must present your copy of the Warranty Registration form to the dealer. (THE COST OF TRANSPORTATION TO AND FROM THE DEALER IS YOUR RESPONSIBILITY). Polaris suggests that you use your original selling dealer; however, you may use any Polaris Servicing Dealer to perform warranty service.

WARRANTY POLICY

Please work with your dealer to resolve any warranty issues. Should your dealer require any additional assistance they will contact the appropriate person at Polaris.

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

If any of the above terms are void because of state or federal law, all other warranty terms will remain in effect.

Engine Oil

1. Always use Polaris engine oil.
2. Never substitute or mix oil brands as serious engine damage and voiding of warranty can result.

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WARNING

Read and understand all warning labels and Owner's Manual before operation. Severe injury or death can result from ignoring warnings or improper use. Never permit a guest to operate this watercraft unless the guest has read and understands all warning labels and the Owner's Manual.

THIS MANUAL SHOULD REMAIN WITH THE WATERCRAFT IN ITS STORAGE BAG AT ALL TIMES.



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SALES INC.



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