

# 2024 Hammerhead Torpedo

**Owner's Manual** for Maintenance and Safety



Read, understand, and follow all of the instructions and safety precautions in this manual and on all product labels.

Failure to follow the safety precautions could result in serious injury or death.



Operating, servicing, and maintaining a passenger vehicle or off-road vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle.

For more information go to www.P65Warnings.ca.gov/passenger-vehicle.



For videos and more information about a safe riding experience with your Polaris vehicle, scan this QR Code® with your smartphone or visit: www.polaris.com/en-us/safety



## 2024 Owner's Manual

## Hammerhead® Torpedo

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The original instructions for this vehicle are in English. Other languages are provided as translations of the original instructions.

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Thank you for purchasing a POLARIS vehicle, and welcome to our world-wide family of POLARIS enthusiasts. Be sure to visit us online at *www.polaris.com* for the latest news, new product introductions, upcoming events, career opportunities and more.

Here at POLARIS we proudly produce an exciting line of utility and recreational products. We believe POLARIS sets a standard of excellence for all utility and recreational vehicles manufactured in the world today. Many years of experience have gone into the engineering, design, and development of your POLARIS vehicle, making it the finest machine we've ever produced.

For safe and enjoyable operation of your vehicle, be sure to follow the instructions and recommendations in this owner's manual. Your manual contains instructions for minor maintenance, but information about major repairs is outlined in the POLARIS Service Manual and can be performed by a factory certified Master Service Dealer (MSD) technician.

Your POLARIS dealer knows your vehicle best and is interested in your total satisfaction. Your POLARIS dealership can perform all of your service needs during and after the warranty period.

For the most up-to-date owner's manual visit *https://www. polaris. com/en-us/owners-manuals.* 

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## INTRODUCTION SAFETY SYMBOLS AND SIGNAL WORDS

The following signal words and symbols appear throughout this manual and on your vehicle. Your safety is involved when these words and symbols are used. Become familiar with their meanings before reading the manual.

#### A DANGER

DANGER indicates a hazardous situation which, if not avoided, WILL result in death or serious injury.

WARNING indicates a hazardous situation which, if not avoided, COULD result in death or serious injury.

#### 

CAUTION indicates a hazardous situation which, if not avoided, COULD result in minor to moderate injury.

#### NOTICE

NOTICE provides key information by clarifying instructions.

#### IMPORTANT

IMPORTANT provides key reminders during disassembly, assembly, and inspection of components.

The Prohibition Safety Sign indicates an action NOT to take in order to avoid a hazard.



The Mandatory Action Sign indicates an action that NEEDS to be taken to avoid a hazard.

## HAMMERHEAD WARNING

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Failure to heed the warnings and safety precautions contained in this manual can result in severe injury or death. Your HAMMERHEAD vehicle is not a toy and can be hazardous to operate. This vehicle handles differently than cars, trucks or other off-road vehicles. A collision or rollover can occur quickly, even during routine maneuvers like turning, or driving on hills or over obstacles, if you fail to take proper precautions. Read this owner's manual. Understand all safety warnings, precautions and • operating procedures before operating the vehicle. Keep this manual with the vehicle. • You MUST be at least age 6 to operate this vehicle. No person under the age of 6 may ride as a passenger in this vehicle. All riders must be able to sit with backs against the seat and both hands on the steering wheel (if driving) or on a passenger hand hold. Always keep hands, feet and all other body parts inside the vehicle at all times. Always wear a helmet, eye protection, gloves, long-sleeve shirt, long pants and over-the-ankle boots. Do not operate this vehicle at night or during periods of limited visibility. Never use this vehicle with drugs or alcohol, as these conditions impair judgment and reduce operator reaction time. Complete the steps outlined in the New Operator Driving Procedures section. Never allow a guest to operate this vehicle until the guest has watched the instructional video and has completed the New Operator Driving Procedures.

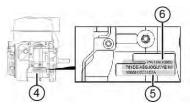
## **VEHICLE IDENTIFICATION NUMBERS**

Record your vehicle's identification numbers in the spaces provided. Remove the spare key and store it in a safe place.



- 1 Vehicle Identification Number
- Engine Serial Number\*
- ③ Manufacturing Data Label
- ④ Engine Model Number Location
- (5) Serial Number
- 6 Model Number

\*Engraved on the side of the block to the right of the recoil.



Vehicle Model Number:	
Vehicle Identification Number (VIN):	
Engine Serial Number:	

## SAFETY EQUIPMENT MODIFICATIONS

Your HAMMERHEAD vehicle is designed to provide safe operation when used as directed.

#### 

Modifying this vehicle in any way can change the top speed, stability and handling performance of this vehicle. Modifications that increase speed, decrease stability or change performance may present a greater risk to inexperienced or younger operators and could result in loss of control and serious injury or death. Use only HAMMERHEAD-approved accessories to modify this vehicle. Review all vehicle changes prior to operating.

The HAMMERHEAD limited warranty on your HAMMERHEAD vehicle will be terminated if any non-HAMMERHEAD-approved equipment and/or modifications have been added to the vehicle that increase speed or power.

## SAFE RIDING GEAR

Always wear a helmet, eye protection, gloves, long-sleeve shirt, long pants, over-the-ankle boots and seat belt (if equipped) at all times. Protective gear reduces the chance of injury.

#### **RIDER COMFORT**

Under certain operating conditions, heat generated by the engine and exhaust system can elevate temperatures in the rider cab area. The condition occurs most frequently when a vehicle is being operated in high ambient temperatures at low speeds and/or high load conditions for an extended period of time. The use of certain windshield, roof and/or cab systems may contribute to this condition by restricting airflow.

Any discomfort due to heat buildup in this area can be minimized by wearing proper riding apparel and by varying speeds to increase airflow.

- 1 Helmet
- Eye Protection
- ③ Long Sleeves
- ④ Gloves
- 5 Long Pants
- 6 Over-the-Ankle Boots



### **CLOTHING**

Wear long sleeves and long pants to protect arms and legs.

#### HELMET

Wearing a helmet can prevent a severe head injury. Whenever riding this HAMMERHEAD vehicle, always wear a helmet that meets or exceeds established safety standards. Clasp the buckle and pull each strap tight to ensure the helmet is properly secured to the head.

Parents should verify that young operators have a helmet that fits, and should obtain one of proper size if it does not fit before allowing operation.

Approved helmets in the USA and Canada bear a U.S. Department of Transportation (DOT) label.

Approved helmets in Europe, Asia and Oceania bear the ECE 22.05 label. The ECE mark consists of a circle surrounding the letter E, followed by the distinguishing number of the country which has granted approval. The approval number and serial number will also be displayed on the label.





### **EYE PROTECTION**

Do not depend on eyeglasses or sunglasses for eye protection. Whenever riding this HAMMERHEAD vehicle, always wear shatterproof goggles or use a shatterproof helmet face shield. HAMMERHEAD recommends wearing approved Personal Protective Equipment (PPE) bearing markings such as VESC 8, V-8, Z87.1, or CE. Make sure protective eye wear is kept clean.

### **GLOVES**

Wear gloves for comfort and for protection from sun, cold weather and other elements.

### BOOTS

Wear sturdy over-the-ankle boots for support and protection. Never ride a HAMMERHEAD vehicle with bare feet or sandals.

## SAFETY WARNINGS

#### 

Failure to operate this vehicle properly can result in a collision, loss of control, accident or rollover, which may result in serious injury or death. Heed all safety warnings outlined in this section of the owner's manual and in the safety DVD provided with your vehicle.

Be sure to read all of the following warnings about driving hazards and how to avoid them. These warnings are provided for your child's safety. Be sure to explain to your young driver that the hazards outlined in this section of this owner's manual MUST be avoided at all times. See the OPERATION section of this owner's manual for proper operating procedures.

FOR MORE INFORMATION ABOUT SAFETYcall POLARIS at 1–800–342– 3764.

#### **OPERATING WITHOUT INSTRUCTION**



Operating this vehicle without proper instruction increases the risk of an accident. The operator and the supervising adult must understand how to operate the vehicle properly in different situations and on different types of terrain.

All operators must read and understand this owner's manual and all warning and instruction labels before operating the vehicle. Never allow a guest to operate

this vehicle until the guest has read this manual and all product labels.

#### **OPERATOR RESTRICTIONS / AGE RESTRICTIONS**



Operation is prohibited for anyone under 6 years of age.

Never operate with a passenger under the age of 6. All riders must be able to sit with backs against the seat, both feet flat on the floor and both hands on the steering wheel (if driving) or on a passenger hand hold.

#### SAFETY

#### **RIDER HEIGHT**

Some riders may be too tall to ride safely in this vehicle. Do not operate or ride in this vehicle if the clearance between the top of your helmet and the overhead cab frame is **less than 2 inches (5 cm)**.

#### **SEAT BELTS**

Riding in this vehicle without wearing the seat belt increases the risk of serious injury in the event of rollover, loss of control, other accident or sudden stop. Seat belts may reduce the severity of injury in these circumstances. Riders *must* wear seat belts at all times. Always make sure the seat belts are secured for both the operator and passenger before riding.

### **USING ALCOHOL OR DRUGS**

A WARNING

Never consume alcohol or drugs before or while operating this vehicle.

Operating this vehicle after consuming alcohol or drugs could adversely affect operator judgment, reaction time, balance and perception.

### FAILURE TO INSPECT BEFORE OPERATING

A WARNING

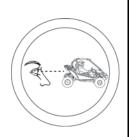
Failure to inspect and verify that the vehicle is in safe operating condition before operating increases the risk of an accident.

Always perform the pre-ride inspection before each use of your vehicle to make sure it's in safe operating condition.

Always follow the inspection and maintenance procedures and schedules described in this manual.







#### SAFETY

#### **PROTECTIVE APPAREL**



Riding in this vehicle without wearing an approved helmet and protective eye wear increases the risk of a serious injuries in the event of an accident.

Operator and passenger must always wear an approved helmet that fits properly and eye protection (goggles or face shield).

### **CARRYING A PASSENGER**

Never carry a passenger until you have operated this vehicle for at least four hours and have completed the steps in the New Operator Driving Procedures.

#### **CARRYING MULTIPLE PASSENGERS**



A passenger must always be seated in a passenger seat with seat belt secured.

Carrying more than one passenger in this vehicle can affect the operator's ability to steer and operate the controls, which increases the risk of loss of control and accident or rollover.

Never carry more than one passenger in this vehicle.

#### **OPERATING ON PAVEMENT**

This vehicle's tires are designed for off-road use only, not for use on pavement. Operating this vehicle on paved surfaces (including sidewalks, paths, parking lots and driveways) may adversely affect the handling of the vehicle and may increase the risk of loss of control and accident or rollover. Avoid operating the vehicle on pavement. If it's unavoidable, travel slowly, travel short distances and avoid sudden turns or stops.

#### **OPERATING ON PUBLIC ROADS**



Operating this vehicle on public streets, roads or highways could result in a collision with another vehicle.

Never operate this vehicle on any public street, road or highway, including dirt and gravel roads (unless designated for off-highway use).

#### **OPERATING AT EXCESSIVE SPEEDS**



Operating this vehicle at excessive speeds increases the operator's risk of losing control. Always operate at a speed that's appropriate for the terrain, the visibility and operating conditions and your skills and experience.

#### **TURNING IMPROPERLY**

Turning improperly could cause loss of traction, loss of control, accident or rollover. Always follow proper procedures for turning as described in this owner's manual.

Avoid sharp turns. Never turn while applying heavy throttle. Never make abrupt steering maneuvers. Practice turning at slow speeds before attempting to turn at faster speeds.

#### **JUMPS AND STUNTS**



Exhibition driving increases the risk of an accident or rollover. DO NOT do power slides, "donuts", jumps or other driving stunts.

Avoid exhibition driving.

#### **CROSSING HILLSIDES**

Driving on a sidehill is not recommended. Improper procedure could cause loss of control or rollover. Avoid crossing the side of any hill unless absolutely necessary.

If crossing a hillside is unavoidable, always follow proper procedures as described in this owner's manual.

### PHYSICAL CONTROL OF THE VEHICLE

Removing hands from the steering wheel or hand holds or removing feet from the floor while riding increases the risk of loss of control and accident or rollover.

The operator should always keep both hands on the steering wheel during operation. A passenger should always be seated in the passenger seat with both feet on the floor and with both hands securely grasping the hand holds.

Always keep hands and feet inside the vehicle at all times.

#### **DRIVING DOWNHILL IMPROPERLY**



Driving down a hill improperly could cause loss of control or rollover.

Always follow proper procedures for driving down a hill as described in this owner's manual.

#### **IMPROPER HILL CLIMBING**



Improper hill climbing could cause loss of control or rollover. Use extreme caution when operating on hills. Always follow proper procedures for hill climbing as described in this owner's manual.

Never operate the vehicle on hills steeper than 15 degrees.

#### **STALLING WHILE CLIMBING A HILL**



Stalling or rolling backwards while climbing a hill could cause a rollover. Maintain a steady speed when climbing a hill.

If you lose all forward speed:

Apply the brakes gradually until the vehicle is fully stopped. Place the transmission in reverse and slowly allow the vehicle to roll straight downhill while applying light brake pressure to control speed.

#### **OPERATING IN UNFAMILIAR TERRAIN**



Failure to use extra caution when operating on unfamiliar terrain could result in an accident or rollover. Unfamiliar terrain may contain hidden rocks, bumps, or holes that could cause loss of control or rollover.

Travel slowly and use extra caution when operating on unfamiliar terrain. Always be alert to changing terrain conditions.

### **OPERATING ON SAND OR SLIPPERY TERRAIN**



Operating on sand or on excessively rough, slippery or loose terrain could cause loss of traction, loss of control, accident or rollover.

Always use extra caution when operating on sand or on rough, slippery or loose terrain. Do not operate on *excessively* rough, slippery or loose terrain.

#### **OPERATING IMPROPERLY IN REVERSE**



Improperly operating in reverse could result in a collision with an obstacle or person. Always follow proper operating procedures as outlined in this manual.

Before shifting into reverse gear, always check for obstacles or people behind the vehicle. When it's safe to proceed, back slowly.

#### SAFETY

## **OVERLOADING THE VEHICLE**

Overloading the vehicle or carrying/towing loads may cause changes in stability and handling, which could cause loss of control or an accident.

- Never tow objects or carry loads with this vehicle.
- Never exceed the maximum weight capacity for this vehicle.

## **OPERATING OVER OBSTACLES**



Improperly operating over obstacles could cause loss of control or rollover.

Before operating in a new area, check for obstacles. Avoid operating over large obstacles such as large rocks and fallen trees. Always follow the proper procedures outlined in this manual when operating over obstacles.

#### **OPERATING THROUGH WATER**



Operating through deep or fast-flowing water can cause loss of traction, loss of control, rollover or accident. Never operate in fast-flowing water or in water that exceeds the floor level. Always follow proper procedures for operating in water as described in this owner's manual. Wet brakes may have reduced stopping ability. After leaving water, test the brakes. Apply them lightly several times while driving slowly. The friction will help dry out the pads.

### **OPERATING ON FROZEN BODIES OF WATER**



Operating on frozen bodies of water can result in the vehicle and/or riders falling through the ice.

Never operate this vehicle on a frozen body of water.

#### **IMPROPER TIRES AND MAINTENANCE**

Operating this vehicle with improper tires or with improper or uneven tire pressure could cause loss of control, accident or rollover.

Always use the size and type of tires specified for your vehicle. Always maintain proper tire pressure as described in this owner's manual and on safety labels.

### **OPERATING A DAMAGED VEHICLE**

#### 

Operating a damaged vehicle can result in an accident. After any rollover or other accident, have a qualified service dealer inspect the entire machine for possible damage, including (but not limited to) seat belts, rollover protection devices, brakes, throttle, and steering systems.

### REFUELING

Gasoline is highly flammable and is explosive under certain conditions. Always exercise extreme caution whenever handling gasoline.

- Never allow a child to refuel or handle gasoline.
- Never carry fuel or other flammable liquids on this vehicle. Failure to follow this instruction could lead to serious injury or death.
- · Always stop the engine when refueling.
- · Always refuel outdoors or in a well ventilated area.
- Do not smoke or allow open flames or sparks in or near the refueling area or where gasoline is stored.
- · Never refuel while a person is in the vehicle.
- Do not over fill the tank. Do not fill the tank neck.
- If gasoline spills on your skin or clothing, immediately wash it off with soap and water and change clothing.

### **EXPOSURE TO EXHAUST**

#### 

Engine exhaust fumes are poisonous and can cause loss of consciousness or death in a short time. Never start the engine or let it run in an enclosed area. Operate this vehicle only outdoors or in well-ventilated areas.

## HOT EXHAUST SYSTEMS

#### 

Exhaust system components are very hot during and after use of the vehicle. Hot components can cause burns and fire. Do not touch hot exhaust system components. Always keep combustible materials away from the exhaust system.

Use caution when traveling through tall grass, especially dry grass and when traveling through muddy conditions. Always inspect the underside of the vehicle and areas near the exhaust system after driving through tall grass, weeds, brush, other tall ground cover, and muddy conditions. Promptly remove any grass, debris or foreign matter clinging to the vehicle and pay particular attention to the exhaust system area.

### UNAUTHORIZED USE OF THE VEHICLE

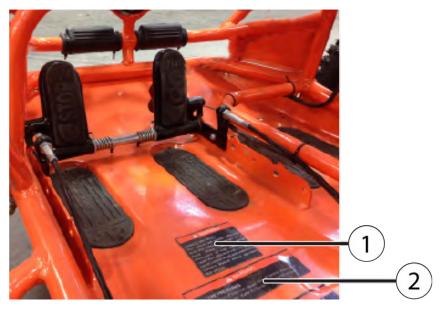
Leaving the keys in the ignition can lead to unauthorized use of the vehicle by someone under the age of 6 or without proper training. This could result in an accident or rollover. Always remove the ignition key when the vehicle is not in use.

## SAFETY LABELS AND LOCATIONS

Warning labels have been placed on the vehicle for your protection. Read and follow the instructions on each label carefully. If any of the labels shown in this manual differ from the labels on your vehicle, always read and follow the instructions of the labels on the vehicle.

If an informational or graphic label becomes illegible or comes off, contact your HAMMERHEAD dealer to purchase a replacement. Replacement safety labels are provided by HAMMERHEAD at no charge.

- ① Age Restrictions / Tire Pressure Warning
- General Warning



### **GENERAL WARNING**

#### 

#### Improper vehicle use can result in SEVERE INJURY or DEATH

#### NEVER allow vehicle to be operated:

- Without all occupants first viewing and understanding the safety video and warning labels.
- With more than one passenger.
- On excessively steep hills.
- On paved surfaces pavement may seriously affect handling and control.
- With non-approved accessories they may seriously affect stability.
- At speeds that are too fast for the operators skills, the conditions and/or the terrain.
- Remove any guards or place hands or feet near moving components.
- Consume alcohol or drugs before or while operating this vehicle.
- Never drive during the night lights are for daytime use only.

#### ALWAYS require Operator and/or Passenger to:

- Wear seat belts and grab hand holds (passenger)
- · Keep hands and feet inside vehicle.
- Use an approved helmet, ear protection and protective gear for all occupants.
- Tie-up and secure long hair and loose clothing.
- Avoid quick turns of the steering wheel and driving stunts, such as jumps, donuts, or power slides.
- Reduce speed and use extra caution when carrying a passenger.
- Watch for branches and other hazards that could enter vehicle.
- Check throttle and brake controls before starting.







#### AGE RESTRICTIONS / TIRE PRESSURE WARNING

#### 

- Operation of this vehicle by children under the age of 6 increases the risk of severe injury or death.
- Adult supervision required for children under age 16.
- NEVER permit children under age 6 to operate or ride in this vehicle.
- VEHICLE OVERTURN could cause severe injury or death. The brush bars are not designed or intended to provide rollover protection.
- Never remove brush bars.



#### TIRE PRESSURE IN PSI (kPa) FRONT: 15 (103) REAR: 15 (103)

MAXIMUM WEIGHT CAPACITY: 120 lbs (54 kg) includes weight of operator, passenger, and accessories.

LOCATE AND READ OWNER'S MANUAL. FOLLOW ALL INSTRUCTIONS, AND WARNINGS.

IF OWNER'S MANUAL IS MISSING, CONTACT A DEALER FOR A REPLACEMENT.

## **REPORTING SAFETY DEFECTS (CANADA)**

To report a safety defect to Transport Canada, you may either fill out an online defect complaint form at their website (English: http://www.tc/gc/ca/recalls, French: http://www.tc.gc.ca/rappels) or contact their Defect Investigations and Recalls Division by calling toll-free 1-800-333-0510 (Canada) or 819-994-3328 (Ottawa-Gatineau area / International).

#### FEATURES AND CONTROLS

## FEATURES AND CONTROLS COMPONENT LOCATIONS



- ① Brush Guards
- Hip Bars
- ③ Brake Pedal
- (4) Throttle Pedal
- **(5)** Engine Kill Switch
- (6) Ignition Switch

## SEAT BELTS

This HAMMERHEAD vehicle is equipped with lap seat belts for the operator and passenger. Always make sure the seat belts are secured for the operator and passenger before riding. Riding in this vehicle without wearing the seat belt increases the risk of serious injury in the event of rollover, loss of control, other accident or sudden stop. Seat belts may reduce the severity of injury in these circumstances. Riders *must* wear seat belts at all times. Always make sure the seat belts are secured for both the operator and passenger before riding.

### SEAT BELT INSPECTION

Inspect all seat belts for proper operation before each use of the vehicle.

- 1. Push the latch plate into the buckle until it clicks. The latch plate must slide smoothly into the buckle. A click indicates that it's securely latched.
- 2. Push the red release latch in the middle of the buckle to make sure it releases freely.
- 3. Pull each seat belt completely out and inspect the full length for any damage, including cuts, wear, fraying or stiffness. If any damage is found, or if the seat belt does not operate properly, have the seat belt system checked and/or replaced by an authorized dealer.
- 4. To clean dirt or debris from the seat belts, sponge the straps with mild soap and water. Do not use bleach, dye or household detergents.

## **ENGINE ON / OFF SWITCH**

The vehicle is equipped with an engine ON/OFF Switch. Toggling the switch to the OFF position shuts down the engine. Before driving this vehicle, test the Engine ON/OFF Switch to assure that it operates properly. Place the switch in the ON position and follow the starting procedure outline in this manual. Once the engine is running, toggle the Engine ON/OFF Switch to the OFF position and verify the engine shuts down.

## **BRAKE PEDAL**

Depress the brake pedal to slow or stop the vehicle. Apply the brakes while starting the engine.

## THROTTLE PEDAL

Push the throttle pedal ① down to increase engine speed. Spring pressure returns the pedal to the rest position when released. Always check that the throttle pedal returns normally before starting the engine. Make sure there's adequate throttle pedal freeplay. See the Throttle Freeplay Adjustment section for procedures.



## MECHANICAL SPEED CONTROL SYSTEM

The adjustable throttle limiting bolt is located behind the throttle pedal. Use the following procedure to control how far the throttle opens.

- 1. Loosen the jam nut.
- 2. Unscrew the bolt to the desired stopping point.
- 3. Re-tighten the jam nut.

Do not remove the adjustable throttle limiting bolt. Removal of the throttle limiting bolt could cause throttle cable damage, engine damage, or irregular throttle control.

## **FUEL CAP**

The fuel tank filler cap(①) is located in the rear of the vehicle, behind the seats. When refueling, always use unleaded gasoline with a mini-mum pump octane number of 87 R+M/2 octane.

Non-ethanol fuel is recommended. *Do not use fuel with ethanol content greater than 10 percent, such as E-85 fuel.* 



## **RIDE COMMAND+ (IF EQUIPPED)**

Your vehicle may come equipped with RIDE COMMAND+ technology, which gives you access to your vehicle's custom information including Vehicle Health, Vehicle Locator and Issue Diagnostics along with a variety of features via the Polaris mobile app. You will need a cellular connection to view these features.

To learn more about RIDE COMMAND+, including equipped or compatible vehicles, specific features, and to access the RIDE COMMAND+ User Guide, visit ridecommand. polaris.com/ridecommand+ or scan the QR code:



Disclaimer: RIDE COMMAND+ only available in North America.

## OPERATION IMPORTANT INFORMATION

Failure to operate the vehicle properly can result in a collision, loss of control, accident or rollover, which may result in serious injury or death. Read and understand all safety warnings outlined in the safety section of this owner's manual.

## **VEHICLE BREAK-IN PERIOD**

The break-in period for your new HAMMERHEAD vehicle is defined as the first five (5) hours of operation.

No single action on your part is as important as a proper break-in period. Careful treatment of a new engine and drive components will result in more efficient performance and longer life for these components. Perform the following procedures carefully.

#### NOTICE

Excessive heat build-up during the first three hours of operation will damage close-fitted engine parts and drive components. Do not operate at full throttle or high speeds during the first three hours of use.

Mixing brands or using a non-recommended oil may cause serious engine damage. Always use the recommended oil. Never substitute or mix oil brands.

#### **ENGINE AND DRIVETRAIN BREAK-IN**

- 1. Fill the fuel tank with gasoline. Always exercise extreme caution whenever handling gasoline. See the Refueling section for details.
- 2. Check the oil level. See the Oil Check section for details. Add the recommended oil as needed to maintain the oil level in the safe operating range.
- 3. Complete the steps detailed in the New Operator Driving Procedures section.
- 4. Avoid aggressive use of the brakes. See Brake System Break-in section for details.
- 5. Vary throttle positions. Do not operate at sustained idle.
- 6. Perform regular checks on fluid levels, controls, and areas outlined on in the Pre-Ride Inspection section's checklist.

- 7. Change the engine oil at five (5) hours.
- 8. Adjust and lubricate the drive chain at five (5) hours.

#### **BRAKE SYSTEM BREAK-IN**

Apply only moderate braking force for the first 50 stops. Aggressive or overly forceful braking when the brake system is new could damage brake pads and rotors.

### **CENTRIFUGAL CLUTCH WITH CHAIN BREAK-IN**

A proper break-in of the centrifugal clutch will ensure a longer life and better performance. Break in the clutch by operating at slower speeds during the break-in period as recommended. Avoid aggressive acceleration and high speed operation during the break-in period.

## PRE-RIDE INSPECTION

Failure to inspect and verify that the vehicle is in safe operating condition before operating increases the risk of an accident. Always inspect the vehicle before each use to make sure it's in safe operating condition.

ITEM	REMARKS	REF.
Brake system/pedal travel	Ensure proper operation	page 29 page 57
Front suspension	Inspect, lubricate if necessary	page 47
Rear suspension	Inspect, lubricate if necessary	page 47
Steering	Ensure free operation	page 58
Tires	Inspect condition and pressure	page 23 page 58
Wheels/fasteners	Inspect, ensure fastener tightness	page 59
Frame nuts, bolts, fasteners	Inspect, ensure tightness	-
Fuel and oil	Ensure proper levels	page 47
Grass and Debris	Remove grass, leaves, foreign matter, and other flammable material or debris, especially near the exhaust system	-
Throttle	Ensure proper operation	page 56
Indicator lights/switches	Ensure proper operation	_
Air Filter	Inspect and clean or replace	page 54

ITEM	REMARKS	REF.
Brake Light	Ensure proper operation	_
Seat Belts	Check length of belt for damage, check latches for proper operation	page 28

## SAFE OPERATION PRACTICES

- 1. Visit the Recreational Off-Highway Vehicle Association® web site (rohva.org) and take the free on-line training course. Complete the recommended safety training before operating this vehicle.
- 2. Do not allow anyone under 16 years of age or without a valid driver's license to operate this vehicle.
- 3. Never operate with a passenger under the age of 12. Never carry more one passenger in a 2-seat vehicle. Never allow a passenger to ride in the cargo box.
- 4. Engine exhaust fumes are poisonous. Never start the engine or let it run in an enclosed area.
- 5. Never operate with accessories not approved by HAMMERHEAD for use on this vehicle.
- 6. Operate this vehicle off-road only. Never operate the vehicle on pavement or on any public street, road or highway, including dirt and gravel roads.
- Drive in a manner appropriate for your skills and operating conditions. Never operate at excessive speeds. Never attempt wheelies, jumps, or other stunts. Keep both hands on the steering wheel during operation.
- 8. Never consume alcohol or drugs before or while operating this vehicle.
- 9. Always use the size and type of tires specified for your vehicle. Always maintain proper tire pressure.
- 10. Never operate a damaged vehicle. After any rollover or accident, have a qualified service dealer inspect the entire machine for possible damage.
- 11. Never operate the vehicle on a frozen body of water unless you have first verified that the ice is sufficiently thick to support the weight and moving force of the vehicle, you and your passenger, and your cargo, together with any other vehicles in your party.
- 12. Do not touch hot exhaust system components. Always keep combustible materials away from the exhaust system.
- 13. Always remove the ignition key when the vehicle is not in use to prevent unauthorized use.

## STARTING THE ENGINE

#### 

Always depress the brake before starting the engine. Neglecting to do so can result in loss of control.

This vehicle is pull-start only. Before starting the engine, put on all required protective clothing and buckle the seat belt. To start the vehicle:

- 1. Fully depress the brake, then turn the key to the ON position. At the same time, an adult should be positioned at the rear of the vehicle.
- 2. If the engine is cold, have an adult switch on the choke. A warm engine will not require using the choke.

#### TIP

The choke is fully ON when pushed completely to the right. The choke is fully OFF when pushed completely to the left. It can be adjusted gradually depending on how much choke is needed for starting.

- 3. Have an adult pull the rope to turn over the engine.
- 4. Once the engine starts, allow it to warm up for several minutes before operating.
- 5. When the engine is ready for operation, the brake pedal can be released. The throttle pedal can now be used.

## **STOPPING THE ENGINE**

- 1. Release the throttle pedal completely and brake to a complete stop.
- 2. Stop the engine by toggling the "Engine ON/OFF" switch to "OFF" position.
- 3. Turn key to off position

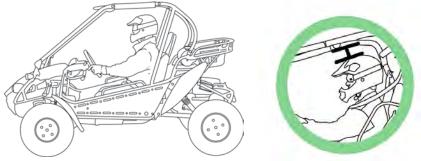
### BRAKING

- 1. Release the throttle pedal completely. (When the throttle pedal is released completely and engine speed slows to near idle, the vehicle has no engine braking).
- 2. Press on the brake pedal evenly and firmly. Practice starting and stopping (using the brakes) until you're familiar with the controls.

# PARKING THE VEHICLE

- 1. Stop the vehicle on a level surface. When parking inside a garage or other structure, be sure that the structure is well ventilated and that the vehicle is not close to any source of flame or sparks, including any appliance with pilot lights.
- 2. Stop the engine.
- 3. Remove the ignition key to prevent unauthorized use.

# **NEW OPERATOR DRIVING PROCEDURES**



- 1. Read and understand this owner's manual and all warning and instruction labels before operating this vehicle.
- Visit the Recreational Off-Highway Vehicle Association® web site (rohva.org) and take the free on-line training course. Hands-on training is also available through ROHVA®.
- 3. Review the sections of this owner's manual about starting the engine, stopping the engine, braking, and parking.
- 4. Perform the steps detailed in the Pre-Ride Inspection section.
- 5. The driver and passenger must wear helmet, eye protection, gloves, long-sleeve shirt, long pants, over-the-ankle boots and seat belt at all times.
- 6. Do not operate or ride in this vehicle if the clearance between the top of your helmet and brush bar is less than 2 inches (5 cm).
- 7. Select a level open area to practice driving. Make sure you have permission to drive in this area.
- 8. Make sure all passengers secure their seat belts.
- 9. Do not carry a passenger until you have at least four hours of driving experience with this vehicle.
- 10. Start the engine. See the Starting the Engine section for details.

- 11. Check your surroundings. Make sure the area is clear of people and obstacles.
- 12. Keeping both hands on the steering wheel, slowly release the brakes and press the throttle with your right foot to begin driving.
- 13. Drive slowly at first. Practice starting, stopping, turning, using the throttle and brakes and driving in reverse on applicable models. Learn how the vehicle handles when making both left and right turns at a slow speed.
- 14. Increase speed only after mastering all maneuvers at a slow speed.
- 15. After you become skilled at making turns and begin to operate at faster speeds, follow these precautions:
  - Avoid sharp turns. Make turns gradually.
  - Never turn while applying heavy throttle.
  - Never turn the steering wheel abruptly.
  - Operate at speeds appropriate for your skills, the conditions and the terrain.
  - DO NOT attempt to do power slides, "donuts", jumps or other driving stunts.

# **DRIVING WITH A PASSENGER**

- 1. Complete the steps detailed in the New Operator Driving Procedures section.
- 2. Perform the steps outlined in the Pre-Ride Inspection section.
- 3. Do not carry a passenger until you have at least four hours of driving experience with this vehicle.
- 4. Make sure the passenger is at least 6 years of age. All riders must be able to sit with backs against the seat, both feet flat on the floor and both hands on the steering wheel (if driving) or on a passenger hand hold.
- 5. Make sure the passenger has at least 2 inches (5 cm) of clearance between his helmet and the brush bars.
- 6. Never carry more than one passenger in this vehicle.
- 7. Never allow a passenger to ride on the back of the vehicle. Allow a passenger to ride only in the passenger seat.
- 8. Make sure the passenger is wearing helmet, eye protection, gloves, long-sleeve shirt, long pants and over-the-ankle boots.
- 9. Make sure the passenger secures the seat belt.
- 10. Tell your passenger to always keep hands and feet inside the vehicle at all times.

- 11. Drive slowly. Vehicle handling may change with a passenger on board. Always travel at a speed appropriate for your skills, your passenger's skills, and operating conditions. Avoid unexpected or aggressive maneuvers that could cause discomfort or injury to a passenger.
- 12. Always follow all operating guidelines as outlined on safety labels and in this manual.

# **DRIVING ON SLIPPERY SURFACES**

When driving on slippery surfaces such as wet trails, loose gravel, sand or ice, be alert for the possibility of skidding and sliding.

Follow these precautions when driving in slippery conditions:

- 1. Slow down before entering slippery areas.
- 2. Be alert, watch the path ahead and avoid quick turns, which can cause skids.
- 3. Correct a skid by turning the steering wheel in the direction of the skid. *Never* apply the brakes during a skid.

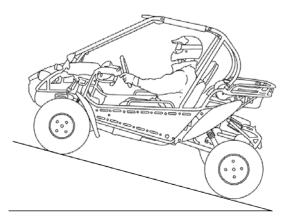


#### OPERATION

# **DRIVING UPHILL**

Whenever traveling uphill, follow these precautions:

- 1. Always check the terrain carefully before ascending a hill. Never drive on hills with excessively slippery or loose surfaces.
- 2. Avoid excessively steep hills (15° maximum).



- 3. Drive straight uphill.
- 4. Drive at a steady rate of speed. Never press the throttle suddenly.
- 5. Avoid unnecessary changes in speed or direction.
- 6. Never go over the crest of a hill at a high speed. An obstacle, a sharp drop, or another vehicle or person could be on the other side of the hill.
- If the vehicle stalls while climbing a hill, apply the brakes. Place the transmission in reverse and slowly allow the vehicle to roll straight downhill while applying the brakes lightly to control speed.

# **DRIVING ON A SIDEHILL (SIDEHILLING)**

Driving on a sidehill is not recommended. Driving on a sidehill improperly cause loss of control or rollover.

If crossing a hill is unavoidable, follow these precautions:

- 1. Drive slowly and use extreme caution.
- 2. If the vehicle begins to roll over, or if it feels as if it may roll over, *immediately* turn downhill.

- 3. Avoid obstacles and changes in terrain that may lower or raise one side of the vehicle or cause the vehicle to slide.
- 4. If the vehicle begins to slide downhill, immediately turn downhill to stop the slide, or stop the vehicle and maneuver slowly and carefully until the vehicle can be driven straight downhill.

# **DRIVING DOWNHILL**

Whenever driving down a hill, follow these precautions:

- 1. Avoid excessively steep hills (15° maximum).
- 2. Slow down. Never travel down a hill at high speed.
- 3. Always check the terrain carefully before driving down a hill. Never drive on hills with excessively slippery or loose surfaces.
- 4. Avoid driving down a hill at an angle, which would cause the vehicle to lean sharply to one side. Always drive straight downhill.
- 5. Apply the brakes *lightly* to keep speed slow.

# DRIVING THROUGH WATER

Your vehicle can drive through shallow water. Make sure the water is no deeper than the floor of the vehicle. Follow these precautions when driving through water:

- 1. Check water depth. Never drive through water that is deeper than the floor level.
- 2. After driving through water, test the brakes. Apply them lightly several times while driving slowly. The friction will help dry out the pads.

#### NOTICE

Major engine damage can result if the vehicle is not thoroughly inspected after operation in water. Perform the services outlined in the Periodic Maintenance Chart section. Give special attention to engine oil, transmission oil and all grease fittings.

If your vehicle becomes immersed or is operated in water that exceeds the floor level, service is required before starting the engine. Your HAMMERHEAD dealer can provide this service. If it's impossible to bring the vehicle in before starting the engine, perform the service outlined in the Vehicle Immersion section, and take the vehicle in for service at the first opportunity.

#### OPERATION

# PARKING ON AN INCLINE

A rolling vehicle can result in serious injury. Avoid parking on an incline. If parking on an incline is unavoidable, follow these precautions:

- 1. Place the transmission in neutral.
- 2. Apply the brakes.
- 3. Keeping the brakes applied, stop the engine.
- 4. Engage the interlock brake.
- 5. Always block the rear wheels on the downhill side.

# **DRIVING OVER OBSTACLES**

Follow these precautions when driving over obstacles:

- 1. Always check for obstacles before driving in a new area.
- 2. Look ahead and watch the terrain. Always be alert for hazards such as logs, rocks and low hanging branches.
- 3. Drive slowly and use extra caution when driving on unfamiliar terrain. Obstacles are not always clearly visible.
- 4. Do not drive over large obstacles such as large rocks and fallen trees. If it's unavoidable, use extreme caution and drive slowly.
- 5. Always have a passenger dismount and move away from the vehicle before driving over an obstacle that could cause a rollover.

# EMISSION CONTROL SYSTEMS NOISE EMISSION CONTROL SYSTEM

Do not modify the engine, intake or exhaust components, as doing so may affect compliance with U.S.A. EPA noise control requirements (40 CFR 205) and local noise level requirements.

# **OPERATION ON PUBLIC LANDS IN THE U.S.A.**

Your vehicle has a spark arrester that was tested and qualified to be in accordance with the USFS standard 5100-1a. Federal law requires that this spark arrester be installed and functional when the vehicle is operated on public lands.

Operation of off-road vehicles on public lands in the U.S.A. is regulated by 43 CFR 420. Violations are subject to monetary penalties. Federal regulations can be viewed online at *https://ecfr.federalregister. gov/current/title-43/subtitle-B/chapter-I/part-420*.

# **CRANKCASE EMISSION CONTROL SYSTEM**

This engine is equipped with a closed crankcase system. Blow-by gases are forced back to the combustion chamber by the intake system. All exhaust gases exit through the exhaust system.

# ELECTROMAGNETIC INTERFERENCE

This spark ignition system complies with Canadian ICES-002.

This vehicle complies with the EMC requirements of UN ECE Regulation 10.

Non-ionizing Radiation: This vehicle emits some electromagnetic energy. People with active or non-active implantable medical devices (such as heart monitoring or controlling devices) should review the limitations of their device and the applicable electromagnetic standards and directives that apply to this vehicle.

# MAINTENANCE PERIODIC MAINTENANCE CHART

Any qualified repair shop or person may maintain, replace or repair the emission control devices or systems on your vehicle. An authorized HAMMERHEAD dealer can perform any service that may be necessary for your vehicle. HAMMERHEAD also recommends HAMMERHEAD parts for emissions-related service, however equivalent parts can be used.

It is a potential violation of the Clean Air Act if a part supplied by an aftermarket parts manufacturer reduces the effectiveness of the vehicle's emission controls. Tampering with emission controls is prohibited by federal law.

Owners are responsible for performing the scheduled maintenance identified in this owner's manual.

Careful periodic maintenance will help keep your vehicle in the safest, most reliable condition. Inspection, adjustment and lubrication of important components are explained in the periodic maintenance chart.

Inspect, clean, lubricate, adjust and replace parts as necessary. When inspection reveals the need for replacement parts, genuine HAMMERHEAD parts are available from your HAMMERHEAD dealer. Equivalent parts may be used for emissions-related service.

Record maintenance and service in the Maintenance Log section.

Service and adjustments are important for proper vehicle operation. If you're not familiar with safe service and adjustment procedures, a qualified dealer can perform these operations.

Vehicles subjected to heavy or severe use patterns must be inspected and serviced more frequently.

# **SEVERE USE DEFINITION**

- · Frequent immersion in mud, water or sand
- · Frequent or prolonged operation in dusty environments
- · Short trip cold weather operation
- Racing or race-style high RPM use
- · Prolonged low speed, heavy load operation
- Extended idle

Pay special attention to the oil level. A rise in oil level during cold weather can indicate contaminants collecting in the oil sump or crankcase. Change oil immediately if the oil level begins to rise. Monitor the oil level, and if it continues to rise, discontinue use and determine the cause. Your dealer can assist.

# MAINTENANCE CHART KEY

SYMBOL	DESCRIPTION
XU	Perform these procedures more often for vehicles subjected to severe use.
D	Have an authorized dealer or other qualified person perform these services.

#### 

Improperly performing the procedures marked with a **D** could result in component failure and lead to serious injury or death. Have an authorized dealer or other qualified person perform these services.

Perform all services at whichever maintenance interval is reached first. Record maintenance and service in the Maintenance Log.

			NTENANCE INT CHEVER COME		
	ITEM		CLNDR	MILES (KM)	REMARKS
	Steering	-		-	
	Front suspension	-		-	
	Rear suspension	-		-	
	Tires	-		-	
	Brake fluid level	-	Daily	-	Check each day before driving the vehicle. Make adjustments
	Brake pedal travel	1	Daily	-	as needed. See the Pre-Ride Checklist.
	Brake system	-		-	
	Wheels/fasteners	-		-	
	Frame fasteners	-		-	
	Engine oil level	-		-	
	Fuel Tank		Daily		Add Carbon Clean with each fuel fill
XU	Air filter	-	Daily	-	Inspect; clean often; replace as needed
	Airbox Sediment Tube		Daily		Drain when deposits are visible
	Daytime running lights/taillight	-	Daily	-	Check operation

			NTENANCE INT CHEVER COME		
	ITEM		CLNDR	MILES (KM)	REMARKS
	Drive chain	-	Daily	-	Inspect; adjust, lubricate, replace as needed
	CVT housing (if equipped)	-	Weekly	-	Drain water as needed, check often if driving in wet conditions
<b>XU</b> D	Brake pad wear	10	Monthly	100 (160)	Inspect periodically
D	Choke (if equipped)	10	Monthly	100 (160)	Check for proper operation; your dealer can assist
	Idle Speed	10	Monthly	100 (160)	Check, adjust as needed
	Valve Clearance (Initial)	10	Monthly	100 (160)	Valve lash adjustment: Every 40 hours after first 10 hour adjustment
хu	Engine oil change (break-in)	5	Monthly	-	Perform a Break-in Oil Change at one month
	Drive chain (break-in)	5	Monthly	-	Adjust and lubricate
	Fuel System	25	Monthly	-	Inspect; check lines and fittings for leaks and abrasion
	Battery	25	Monthly	250 (400)	Check terminals; clean; test
XU	Main gearcase oil	25	Monthly	250 (400)	Inspect level; change yearly
хu	Engine breather filter (if equipped)	25	1 M	150 (250)	Inspect; replace if necessary
хu	Engine oil change	30	6 M	300 (480)	Change Oil; Use 10w40 (SN) Conventional Engine Oil
хu	General lubrication	50	3 M	500 (800)	Lubricate all fittings, pivots, cables, etc.
	Shift Linkage	50	6 M	500 (800)	Inspect, lubricate, adjust
D	Steering	50	6 M	500 (800)	Lubricate
хu	Front Suspension	50	6 M	500 (800)	Lubricate
хu	Rear Suspension	50	6 M	500 (800)	Lubricate
D	Choke Cable	50	6 M	500 (800)	Inspect; adjust; lubricate; replace if necessary. Your dealer can assist.

			NTENANCE INT CHEVER COME		
	ITEM		CLNDR	MILES (KM)	REMARKS
	Carburetor Float Bowl	50	6 M	500 (800)	Drain bowl periodically, and prior to storage.
	Carburetor Intake Ducts	50	6 M	500 (800)	Inspect duct for proper sealing/air leaks
D	Valve Clearance	50	-	500 (800)	Adjust valve lash every 40 hours after first 10 hours
D	Fuel system/filter	100	12 M	600 (1000)	Inspect; Clean/Replace if necessary. Check for leaks at tank cap, filter, and carburetor.
хu	Spark plug	100	12M	600 (1000)	Check, Replace as necessary, torque to specification
хu	Engine mounts	100	12 M	1000 (1600)	Inspect
	Exhaust muffler/ pipe	100	12 M	1000 (1600)	Inspect
D	Ignition timing	100	12 M	1000 (1600)	Inspect
xu	Wiring	100	12 M	1000 (1600)	Inspect for wear, routing, security; apply dielectric grease to connectors subjected to water, mud, etc.
D	Clutches (drive and driven)	100	12 M	1000 (1600)	Inspect; clean; replace worn parts
	Drive belt	100	12 M	1000 (1600)	Inspect; replace as needed
D	Front wheel bearings	100	12 M	1000 (1600)	Inspect; replace as needed
D	Brake fluid	200	24 M	2000 (3200)	Change every two years
	Spark arrestor	300	36 M	3000 (4800)	Clean out
D	Toe adjustment		-	-	Inspect periodically; adjust when parts are replaced

# LUBRICATION RECOMMENDATIONS

Check and lubricate all components at the intervals outlined in the Periodic Maintenance Chart, or more often under severe use, such as wet or dusty conditions. Items not listed in the chart should be lubricated at the general lubrication interval.

	ITEM	LUBE	REFERENCE
	Engine Oil	10w30 Conventional Engine Oil	page 47
	Drive Chain	Chain Lube or SAE 80/90	page 49
	A-Arm Pivots	All Season Grease or	Grease at general lubrication interval, also
XU	Steering Arm Pivots	grease conforming to NLGI No. 2	after washing vehicle or driving in water.

XU - Perform these procedures more often for vehicles subjected to severe use.

# ENGINE OIL OIL RECOMMENDATIONS

Always check and change the engine oil at the intervals outlined in the Periodic Maintenance Chart section. HAMMERHEAD recommends the use of 10w30 Conventional Engine Oil for this vehicle.

#### NOTICE

Mixing brands or using a non-recommended oil may cause serious engine damage. Always use the recommended oil. Never substitute or mix oil brands.

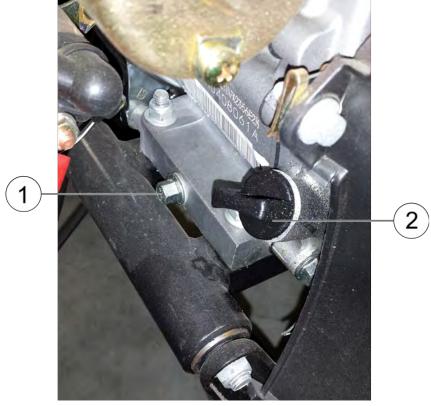
# **OIL CHECK**

Check the engine oil level with the engine stopped and with the engine in a level position.

- 1. Remove either side mounted filler cap dipstick or high oil fill dipstick and wipe it clean.
- 2. Insert the dipstick into the filler neck and turn clockwise until fully seated. Then remove the dipstick by turning it counter-clockwise. Check the oil level shown on the dipstick.
- 3. If the oil level is low, fill to the edge of the oil filler hole with the recommended oil.

Securely screw in the filler cap/dipstick. Running the engine with a low oil level can cause engine damage. Always check the engine oil before start up.

#### OIL CHANGE



#### NOTICE

Running the engine with a low oil level can cause engine damage.

#### FLUID CAPACITY

Oil Capacity for 208cc engine = 16 oz (.473 liter)

Drain the used oil while the engine is warm. Warm oil drains quickly and completely. Avoid contact with hot oil.

- 1. Place a suitable container below the engine that will catch the oil as it drains.
- 2. Remove the filler cap/dipstick (2) and the drain plug (1).

- 3. Allow the used oil to drain completely, then reinstall the drain plug, and tighten it securely. Do not over tighten. Dispose of used motor oil in a manner that is compatible with the environment. We suggest you take used oil in a sealed container to your local recycling center or service station for reclamation. Do not throw used oil in the trash, pour it on the ground, or pour down a drain.
- 4. With the engine in a level position, fill to the marks on the dipstick with the recommended oil.
- 5. Securely screw in the filler cap/dipstick.

TIP

If you are having trouble removing the drain bolt, loosen the 4 bolts that hold the engine to the frame so that it lifts the engine up approximately 0.25 in (6.35 mm).

# **DRIVE CHAIN LUBRICATION**

Lubricate the drive chain with chain spray lube or an approved chain lube at the general lubrication interval specified in the Periodic Maintenance Chart section. Lubricate more often under severe use, such as in dirty or wet conditions.

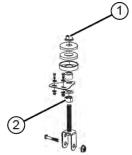
#### NOTICE

Washing the drive chain with a high pressure washer or gasoline can cause premature wear and drive chain failure. Don't use a high pressure washer or gasoline to clean the drive chain.

Adjusting or operating the vehicle with improper rear drive chain slack can result in severe damage to the transmission and drive components. Always make sure the slack is within the stated specifications.

### **DRIVE CHAIN SLACK ADJUSTMENT**

- 1. Loosen upper nut①.
- Turn lower nut② clockwise in 1/2 turn increments, then turn upper nut until tight. Follow this procedure until chain is at proper tension. Chain should have 1/4" to 1/2" deflection.
- 3. Repeat the above steps until chain is adjusted to desired fit.



# SPARK PLUG SPARK PLUG GAP / TORQUE

NOTE

Electrode Gap

.027 - .030 inches (0.7 - 0.8 mm)

### 

A hot exhaust system and engine can cause burns. Wear protective gloves when removing a spark plug for inspection.

NOTICE

Using non-recommended spark plugs can result in serious engine damage. Use HAMMERHEAD-recommended spark plugs or their equivalent.

Spark plug condition is indicative of engine operation. The spark plug firing end condition should be read after the engine is warmed up and the vehicle is driven at higher speeds. Immediately check the spark plug for correct color.

# SPARK PLUG CONDITION

#### NORMAL SPARK PLUG

The normal insulator tip is gray, tan or light brown. There will be few combustion deposits. The electrodes are not burned or eroded. This indicates the proper type and heat range for the engine and the service.

#### TIP

The tip should not be white. A white insulator tip indicates overheating, caused by use of an improper spark plug or incorrect throttle body adjustments.

### WET FOULED SPARK PLUG

The wet fouled insulator tip is black. A damp oil film covers the firing end. There may be a carbon layer over the entire nose. Generally, the electrodes are not worn. General causes of fouling are excessive oil, use of non-recommended oil or incorrect throttle body adjustments.

### SPARK PLUG REMOVAL AND REPLACEMENT

NOTICE

Using an incorrect spark plug may cause engine damage.

#### NOTICE

A loose spark plug can overheat and damage the engine. Over- tightening the spark plug can damage the threads in the cylinder head.

- 1. Use a spark plug wrench to remove the spark plug.
- Inspect the spark plug each time you change the oil. The electrodes should be kept clean and free of carbon. The presence of carbon or excess oil will reduce proper engine performance. If possible, check the spark plug gap (area between electrodes) using a wire feeler gauge.
- 3. Install the spark plug carefully to avoid cross threading. Screw in spark plug by hand until it stops turning.
- 4. Tighten the spark plug with a 13/16-inch (20.6 mm) spark plug wrench. Tighten 1/4 turn after the spark plug seats.



#### NOTE

It is advisable to replace the spark plug at least once a year to insure easy starting and good engine performance.

# VALVE ADJUSTMENT PROCEDURE

NOTE

In order to properly set the valves, the engine must be at TDC on the compression stroke. To find TDC on the compression stroke, roll the engine over until the intake valve closes and stops at TDC.

# INTAKE VALVE CLEARANCE ADJUSTMENT

- 1. Remove the valve cover and secondary air pipe assembly.
- 2. Verify cam lobes are pointed down.
- 3. Insert correct thickness feeler gauge between end of intake valve stem and adjuster screw.
- 4. When clearance is correct, hold adjuster screw and tighten locknut securely.

- 5. Re-check the valve clearance.
- 6. Repeat adjustment procedure if necessary until clearance is correct with locknut secured.

#### MEASUREMENT

Valve Clearance 0.004" (0.10 mm)

#### **EXHAUST VALVE CLEARANCE ADJUSTMENT**

- 1. Remove the valve cover and secondary air pipe assembly.
- 2. Verify cam lobes are pointed down.
- 3. Insert correct thickness feeler gauge between end of exhaust valve stem and adjuster screw.
- 4. Loosen locknut and turn adjuster screw until there is a slight drag on feeler gauge.
- 5. When clearance is correct, hold adjuster screw and tighten locknut securely,
- 6. Re-check the valve clearance.
- 7. Repeat adjustment procedure if necessary until clearance is correct with locknut secured.

#### MEASUREMENT

Valve Clearance 0.0047" (0.12 mm)

# **CENTRIFUGAL CLUTCH WITH CHAIN SYSTEM**

#### 

Failure to comply with the instructions in this warning can result in severe injury or death.

Do not modify any component of the Centrifugal Clutch with Chain system. Doing so may reduce its strength so that a failure may occur at a high speed. The Centrifugal Clutch with Chain system has been precision balanced. Any modification will cause the system to be out of balance, creating vibration and additional loads on components.

The Centrifugal Clutch with Chain system rotates at high speeds, creating large amounts of force on clutch components. Extensive engineering and testing has been conducted to ensure the safety of this product. However, as the owner, you have the following responsibilities to make sure this system remains safe:

- Always follow all recommended maintenance procedures. See your HAMMERHEAD dealer, or other qualified person, for service and repair assistance.
- This Centrifugal Clutch with Chain system is intended for use on HAMMERHEAD products only. Do not install it in any other product.
- Always make sure the Centrifugal Clutch with Chain system housing is securely in place during operation.

# CENTRIFUGAL CLUTCH WITH CHAIN SYSTEM DRYING

There may be some instances when water is accidently ingested into the Centrifugal Clutch with Chain system. Use the following instructions to dry it out before operating.

#### NOTE

Exposure to salt water will cause corrosion to metal components. If your vehicle is operated in salt water areas, rinse it off frequently with fresh water.

- Start the engine. Apply varying throttle for 10-15 seconds to expel the moisture and air-dry the clutches. Do not hold the throttle wide open for more than 10 seconds.
- 2. Allow the engine RPM to settle to idle speed.
- 3. Your vehicle requires service as soon as possible. A HAMMERHEAD dealer or other authorized person can assist.

# **AIR FILTER**

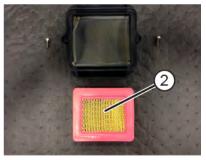
This unit is equipped with a foam-style air filter and should be replaced after every 20 hours of operating.

#### NOTE

Operating in usually dusty conditions may require more frequent replacement.

- 1. Remove air filter and cover (1) by releasing the tab
- 2. Clean any excess dirt, oil, or dust from the air cleaner box with a mild detergent and water solution.
- 3. Thoroughly dry the air box.
- 4. Replace the air filter element<sup>(2)</sup>.
- 5. Replace the cleaner cover.





# SPARK ARRESTOR

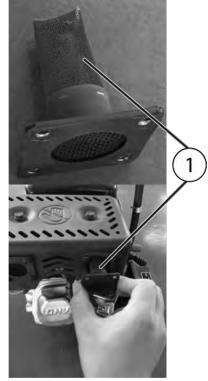
#### 

Failure to heed the following warnings while servicing the spark arrestor could result in serious injury or death.

- Do not perform service on the spark arrestor while the system is hot. Allow components to cool sufficiently before proceeding.
- · Wear eye protection and gloves.
- Never operate without the spark arrestor.
- Never run the engine in an enclosed area. Exhaust contains poisonous carbon monoxide gas.

To remove accumulated carbon, clean the spark arrestor at the intervals recommended in the Periodic Maintenance Chart section.

- 1. Remove the six bolts and remove the arrestor from the end of the muffler.
- 2. Use a non-synthetic brush to clean the arrestor screen. A synthetic brush may melt if components are warm. If necessary, blow debris from the screen with compressed air.



1 Arrestor Screen

- 3. Inspect the screen for wear and damage. Replace the arrestor if damage is found.
- 4. Reinstall the arrestor.
- 5. Torque the bolts to 5 ft. lbs. (7 Nm).

# THROTTLE SYSTEM

Failure to check or maintain proper operation of the throttle system can result in an accident and lead to serious injury or death if the throttle pedal sticks during operation.

Never start or operate this vehicle if it has a sticking or improperly operating throttle pedal. Immediately contact your HAMMERHEAD dealer or other qualified person for service if throttle problems arise. Always check the pedal for free movement and return before starting the engine and occasionally during operation.

# THROTTLE FREEPLAY

If the throttle pedal has excessive play due to cable stretch or misadjustment, it will cause a delay in throttle response, especially at low engine speed. The throttle may also not open fully. If the throttle pedal has no freeplay, the throttle may be hard to control, and the idle speed may be erratic.

Check the throttle pedal freeplay at the intervals outlined in the Periodic Maintenance Chart. Adjust the freeplay if necessary.

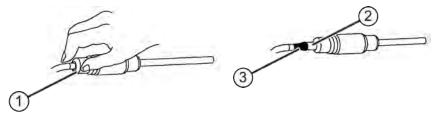


# THROTTLE FREEPLAY INSPECTION

- 1. Start the engine. Allow it to warm up thoroughly.
- 2. Measure the distance the throttle pedal moves before the engine begins to pick up speed.

#### THROTTLE FREEPLAY ADJUSTMENT

Access the throttle cable adjuster through the right front wheel well.



- 1. Slide the cable adjuster boot off the cable adjuster.
- 2. Squeeze the end of the rubber boot() and slide it far enough to expose the end of the in-line cable adjuster().
- 3. Loosen the adjuster lock nut3.
- 4. Move the cable adjuster until desired freeplay is achieved at the throttle pedal. While adjusting, lightly flip the throttle pedal up and down.
- 5. Tighten the lock nut.
- 6. Apply a small amount of grease to the inside of the boot and slide it over the cable adjuster to its original position.

# BRAKES

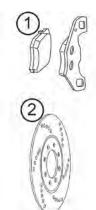
The rear brake is a mechanical disc type brakes activated by the brake pedal.

Always check brake pedal travel before each use of the vehicle. When applied, the brake pedal should feel firm.

If you discover any irregularities in brake system operation, including excessive pedal travel, contact your dealer for proper diagnosis and repairs.

# **BRAKE INSPECTION**

- 1. Check the brake pads for wear, damage and looseness.
- Brake Pad
   Rear Disc
- 2. Inspect the brake pad wear surface for excessive wear.
- 3. Change pads when the friction material is worn to 0.04" (1 mm).
- Check the surface condition of the brake discs. Measure the thickness of the front and rear discs. Replace a disc if the thickness is less than 1" (2.5 mm).



# STEERING WHEEL INSPECTION

Check the steering wheel for specified freeplay and smooth operation at the intervals outlined in the Periodic Maintenance Chart section.

- 1. Position the vehicle on level ground.
- 2. Lightly turn the steering wheel left and right.
- If there is excessive freeplay or strange noises, or the steering feels rough or "catchy," have the steering system inspected by an authorized HAMMERHEAD dealer or other qualified service facility before operating the vehicle.

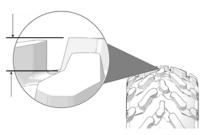
# TIRES

### 

Operating your vehicle with worn tires will increase the possibility of skidding, loss of control and an accident, which could result in serious injury or death. Always replace tires when the tread depth measures 1/8†(3 mm) or less. Improper tire inflation or the use of non-standard size or type of tires may adversely affect vehicle handling, which could result in vehicle damage or personal injury. Always maintain proper tire pressure. Always use HAMMERHEAD-approved size and type of tires for this vehicle when replacing tires.

# TIRE TREAD DEPTH

Always replace tires when tread depth is worn to 3 mm (1/8") or less.



# FRONT WHEEL HUB TIGHTENING

Front wheel bearing tightness and spindle nut retention are critical component operations. All service must be performed by your authorized dealer or other qualified service facility.

Ø/ ()

### FRONT WHEEL REPLACEMENT

- 1. Position the vehicle on a level surface.
- 2. Loosen the castle nut slightly.
- 3. Elevate the side of the vehicle by placing a suitable stand under the frame.
- 4. Remove the castle nut.
- 5. Remove the wheel.
- 6. Reverse steps to install.

### REAR WHEEL REPLACEMENT

#### 

Improperly installed wheels can adversely affect tire wear and vehicle handling, which can result in serious injury or death. Always ensure that all nuts are torqued to specification. Do not service axle nuts that have a cotter pin installed. A HAMMERHEAD dealer or other qualified person can assist.

- 1. Position the vehicle on a level surface.
- 2. Place the transmission in neutral. Engage the interlock brake. Stop the engine.
- 3. Remove the cotter pin and then 14 mm nut.
- 4. Slide off wheel and hub assembly. It is only necessary to remove one castle nut to remove the wheel by itself.



### WHEEL NUT TORQUE SPECIFICATIONS

Check the wheel nut torques occasionally and when they've been loosened for service.

LOCATION	NUT TORQUE
Front Wheel	36 ± 10 ft. lbs. (50 ± 10 Nm)
Rear Wheel	36 ± 10 ft. lbs. (50 ± 10 Nm)

# **VEHICLE IMMERSION**

#### NOTICE

If your vehicle becomes immersed, major engine damage can result if the machine is not thoroughly inspected. Take the vehicle in for service before starting the engine. A HAMMERHEAD dealer or other authorized person can assist.

If it's impossible to take your vehicle to a dealer before starting it, follow the steps outlined below.

- 1. Move the vehicle to dry land.
- 2. Check the air box. If water is present, dry the air box and replace the filter with a new filter. Thoroughly dry the air pre-filter. See the Air Filter section for details.
- 3. Remove the air box drain plug to drain any water. Reinstall the drain plug securely.
- 4. Remove the spark plug.
- 5. Loosen carburetor drain screw.
- 6. Turn the engine over several times using the electric start.
- 7. Re-tighten the carburetor drain screw.
- 8. Dry the spark plug and reinstall it, or install a new plug.
- 9. Attempt to start the engine. If necessary, repeat the drying procedure.
- 10. Take the vehicle in for service as soon as possible, whether you succeed in starting it or not. A HAMMERHEAD dealer or other authorized person can provide the required service.

#### CLEANING AND STORAGE WASHING THE VEHICLE

Keeping your HAMMERHEAD vehicle clean will not only improve its appearance but it can also extend the life of various components.

#### NOTICE

High water pressure may damage components. HAMMERHEAD recommends washing the vehicle by hand or with a garden hose, using mild soap. Certain products, including insect repellents and chemicals, will damage plastic surfaces. Do not allow these types of products to contact the vehicle.

The best and safest way to clean your HAMMERHEAD vehicle is with a garden hose and a pail of mild soap and water.

- 1. Use a professional-type washing cloth, cleaning the upper body first and the lower parts last.
- 2. Rinse with clean water frequently.
- 3. Dry surfaces with a chamois to prevent water spots.

#### Washing Tips

- · Avoid the use of harsh cleaners, which can scratch the finish.
- Do not use a power washer to clean the vehicle.
- Do not use medium to heavy duty compounds on the finish.
- Always use clean cloths and pads for cleaning and polishing. Old or reused cloths and pads may contain dirt particles that will scratch the finish.

If a high pressure water system is used for cleaning (not recommended), exercise extreme caution. The water may damage components and could remove paint and labels. Avoid directing the water stream at the following items:

- · Wheel bearings
- Radiator
- · Centrifugal Clutch with Chain inlet and outlet ducts
- Brakes
- · Cab and body panels
- Labels and decals
- · Electrical components and wiring

If an informational or graphic label becomes illegible or comes off, contact your HAMMERHEAD dealer to purchase a replacement. Replacement *safety* labels are provided by HAMMERHEAD at no charge.

Grease all zerk fittings immediately after washing. Allow the engine to run for a while to evaporate any water that may have entered the engine or exhaust system.

### **POLISHING THE VEHICLE**

HAMMERHEAD recommends the use of common household aerosol furniture polish for polishing the finish on your HAMMERHEAD vehicle. Follow the instructions on the container.

#### Polishing Tips

- Avoid the use of automotive products, some of which can scratch the finish of your vehicle.
- Always use clean cloths and pads for cleaning and polishing. Old or reused cloths and pads may contain dirt particles that will scratch the finish.

# CHROME WHEEL CARE (IF EQUIPPED)

Proper maintenance will protect chrome wheels from corrosion, preserve wheel life and ensure a "like new" appearance for many years. Chrome wheels exposed to road salt (or salt in the air in coastal areas) are more susceptible to corrosion if not properly cleaned. Clean chrome wheels more often if they're exposed to salt or other corrosive elements.

- 1. Wash chrome wheels frequently. Use a mild detergent. Never use abrasive cleaners on plated or painted surfaces.
- 2. Rinse well with clear water. Soap, detergents, salt, dirt, mud, and other elements can cause corrosion.
- 3. Polish the clean chrome wheels periodically. Use an automotive grade chrome polish.
- 4. Routinely and liberally apply a weather resistant wax to each polished chrome wheel. Choose a product suitable for chrome finishes. Read and follow the product labels and instructions.

#### **REMOVING CORROSION**

If light rust is found on the chrome finish, use steel wool (#0000-OTT grade) to remove it. Gently rub the affected areas with the steel wool until the corrosion has been removed. Clean and polish the wheel as outlined above.

# **STORAGE TIPS**

#### NOTICE

Starting the engine during the storage period will disturb the protective film created by fogging and damage could occur. Never start the engine during the storage period.

# CLEAN THE EXTERIOR

Make any necessary repairs and clean the vehicle as recommended. See the Washing the Vehicle section for details..

### STABILIZE THE FUEL

- 1. Fill the fuel tank.
- Add Carbon Clean Fuel Treatment or equivalent fuel treatments or stabilizers. Follow the instructions on the container for the recommended amount. Carbon Clean removes water from fuel systems, stabilizes fuel and removes carbon deposits from pistons, rings, valves and exhaust systems.
- 3. Allow the engine to run for 15-20 minutes in a well ventilated area to allow the stabilizer to disperse through the entire fuel delivery system.

# AIR FILTER / AIR BOX

Inspect and clean or replace the air filter. See the Air Filter section for details. Clean the air box. Drain the sediment tube.

### FLUID LEVELS

Inspect the fluid levels. Add or change fluids as recommended in the Periodic Maintenance Chart section.

# ENGINE OIL

Change the oil. See the Engine Oil section for details.

# INSPECT AND LUBRICATE

Inspect all cables and lubricate all areas of the vehicle as recommended in the Periodic Maintenance Chart section.

# FOG THE ENGINE

- Treat the fuel system with Carbon Clean or other equivalent fuel treatment. Follow the instructions on the container. Start the engine. Allow it to idle for several minutes so the Carbon Clean reaches the injectors. Stop the engine.
- 2. Remove the spark plug and add 2-3 tablespoons of engine oil. To access the plug hole, use a section of clear 1/4" hose and a small plastic squeeze bottle filled with the pre-measured amount of oil.
- 3. Reinstall the spark plug. Torque to specification. See the Spark Plug section for details.
- 4. Apply dielectric grease to the inside of each spark plug cap. *Do not reinstall the cap onto the plug at this step*.
- Turn the engine over several times. Oil will be forced in and around the piston rings and ring lands, coating the cylinder with a protective film of fresh oil.

- 6. If fuel system additive is not used, fuel tank, fuel lines, and injectors should be completely drained of gasoline.
- 7. Reinstall the spark plug cap to the spark plug.

#### STORAGE AREA / COVERS

Be sure the storage area is well ventilated. Do not use plastic or coated materials. They do not allow enough ventilation to prevent condensation, and may promote corrosion and oxidation.

# **REMOVAL FROM STORAGE**

- 1. Make sure the spark plug is tight.
- 2. Fill the fuel tank with fuel.
- Check all the points listed in the daily Pre-Ride Inspection section. Tightness
  of the bolts, nuts and other fasteners should be checked by an authorized
  HAMMERHEAD dealer or other qualified service facility.
- 4. Lubricate at the intervals outlined in the Periodic Maintenance Chart section.

# TRANSPORTING THE VEHICLE

NOTICE

Always tie the frame of the HAMMERHEAD vehicle to the transporting unit securely with suitable straps or rope. Do not attach tie straps to the front control arm bolt pockets.

Follow these procedures when transporting the vehicle.

- 1. Stop the engine.
- 2. Remove the key to prevent loss during transporting.
- 3. Secure the fuel cap and seats. Ensure that the seats are attached correctly and are not loose.
- 4. Wrap the front tie strap through the frame tubes, or attach a tie-down hook around each of the tubes.
- 5. Wrap the rear tie strap around the swing arm.

# SPECIFICATIONS TORPEDO

	Engine/Motor Type	4-Stroke
	Displacement	208cc
	Cooling	Air
	Starting	Pull Start
Engine	Fuel System	Carburetor
Ligine	Fuel Capacity	0.675 Gal
	Fuel Type	Unleaded 89 Octane
	Engine Oil Capacity	16 Oz
	Engine Oil Type	10W-30
	Spark Plug Type	RF6RTC (Torch)
	Drive/Clutch	Centrifugal Clutch
Drivetrain	Drivetype	2 Wheel Drive
Diverain	Transmission/Transaxle	N/A
	Driveline	Chain
	Front Suspension	Dual A-Arm
	Rear Suspension	Swing Arm
	Steering	Rack & Pinion
Chassis	Front Brake	N/A
Ondoolo	Rear Brake	Mechanical Disc
	Seats	Soft Cushion
	Seatbelt	Lap Belt
	Body	Brush Guard
	Length	58"
Dimensions	Width	35"
	Height	43"
	Wheelbase	41.5"

### SPECIFICATIONS

	Distance Seat to Pedal (Front Edge)	17"
	Distance Seat to Pedal (Back Seat)	29"
	Front Tires	13x4.1-6
	Rear Tires	13x5-6
	Wheels	Steel - Black
Tires	Operating Front Tire Pressure	10 PSI
	Max Front Tire Pressure	20 PSI
	Operating Rear Tire Pressure	10 PSI
	Max Rear Tire Pressure	20 PSI
	Bed/Rack Capacity	N/A
	Towing Capacity	N/A
Capacity	Vehicle Capacity	120 lbs
	Fuse	N/A
	Battery	N/A
Weight	Dry Weight	185

ENGINE TUNE-UP SPECIFICATION			
Idle Mixture	Non-Adjustable		
Valve Clearance	.06 mm		
Spark Plug	NGK BPR6ES		
Spark Plug Gap	0.6 - 0.7 mm		
Ignition Timing	Non-Adjustable		
Idle Speed	1700 +/- 100 RPM in Neutral		
Fuel	Unleaded Gasoline Only 87 (R+M)/2 Octane or Higher		
Oil	10W30		

# TROUBLESHOOTING ENGINE TURNS OVER, FAILS TO START

POSSIBLE CAUSE	SOLUTION
Out of fuel	Refuel.
Water is present in fuel	Drain the fuel system and refuel.
Old or non-recommended fuel	Replace with fresh recommended fuel.
Fouled or defective spark plug	Inspect plug and replace if necessary.
No spark to spark plug	Inspect plug and replace if necessary.
Water or fuel in crankcase	Your authorized dealer can assist.
Low battery voltage	Recharge the battery to 12.8 VDC.
Mechanical failure	Your authorized dealer can assist.

# **ENGINE BACKFIRES**

POSSIBLE CAUSE	SOLUTION
Weak spark from spark plug	Inspect, clean and/or replace spark plug
Incorrect spark plug gap or heat range	Set gap to specs or replace plug
Old or non-recommended fuel	Replace with fresh recommended fuel
Incorrectly installed spark plug wires	An authorized dealer can assist
Incorrect ignition timing	An authorized dealer can assist
Mechanical failure	An authorized dealer can assist
Loose ignition connections	Check all connections and tighten
Water present in fuel	Replace with fresh recommended fuel
Exhaust system leak	An authorized dealer can assist

# **ENGINE PINGS OR KNOCKS**

POSSIBLE CAUSE	SOLUTION
Poor quality or low octane fuel	Replace with recommended fuel.
Incorrect ignition timing	Your authorized dealer can assist.
Incorrect spark plug gap or heat range	Set gap to specs or replace plugs.

# ENGINE RUNS IRREGULARLY, STALLS OR MISFIRES

POSSIBLE CAUSE	SOLUTION
Fouled or defective spark plug	Inspect, clean and/or replace spark plugs
Worn or defective spark plug wires	An authorized dealer can assist
Incorrect spark plug gap or heat range	Set gap to specs or replace plugs
Loose ignition connections	Check all connections and tighten
Water present in fuel	Replace with new fuel
Low battery voltage	Recharge battery to 12.8 VDC
Clogged fuel cap vent	Inspect and replace
Incorrect fuel	Replace with recommended fuel
Clogged air filter	Inspect and clean or replace
Throttle control malfunction	An authorized dealer can assist
Other mechanical failure	An authorized dealer can assist

POSSIBLE LEAN FUEL CAUSE	SOLUTION
Low or contaminated fuel	Add or change fuel, clean the fuel system
Low octane fuel	Replace with recommended fuel
Clogged fuel filter	An authorized dealer can assist
Incorrect fuel	Replace with recommended fuel

#### TROUBLESHOOTING

POSSIBLE RICH FUEL CAUSE	SOLUTION
Fuel is very high octane	Replace with lower octane fuel
Stopping/starting without adequate warm-up	Allow engine to warm up before operating and/or stopping
Incorrect fuel	Replace with recommended fuel
Clogged air filter	Inspect and clean or replace

# **ENGINE STOPS OR LOSES POWER**

POSSIBLE CAUSE	SOLUTION
Out of fuel	Refuel
Clogged fuel cap vent	Inspect and replace
Water is present in fuel	Replace with new fuel
Fouled or defective spark plug	Inspect, clean and/or replace spark plug
Worn or defective spark plug wires	An authorized dealer can assist
Incorrect spark plug gap or heat range	Set gap to specs or replace plug
Loose ignition connections	Check all connections and tighten
Low battery voltage	Recharge the battery to 12.8 VDC
Incorrect fuel	Replace with fresh recommended fuel
Clogged air filter	Inspect and clean or replace
Throttle control malfunction	An authorized dealer can assist
Other mechanical failure	An authorized dealer can assist

# WARRANTY LIMITED WARRANTY

HAMMERHEAD Inc., 1200 Lakeside Parkway Ste. 400 Flower Mound, TX 75028 (HAMMERHEAD) provides a ONE HUNDRED and EIGHTY DAY PARTS ONLY LIMITED WARRANTY against defects in material or workmanship for all vehicle frames and engines. HAMMERHEAD further warrants that the spark arrestor in this product will meet the efficiency requirements of USFS standard 5100-1C for at least 1000 hours when subjected to normal use and when maintenance and installation are in accordance with HAMMERHEAD recommendations. This PARTS ONLY LIMITED WARRANTY covers parts charges for repair or replacement of defective parts but does not cover any related labor charges or expense.

HAMMERHEAD provides a NINETY DAY PARTS AND LABOR LIMITED WARRANTY against defects in material or workmanship for all other components, except those consumable, general wear, and exposed to friction components referenced in the following paragraph. This NINETY DAY LIMITED WARRANTY covers parts and labor charges for repair or replacement of defective parts.

HAMMERHEAD provides a THIRTY DAY LIMITED WARRANTY against defects in material or workmanship on all consumable components, general wear items, or any parts exposed to friction surfaces, stresses, environmental conditions and/or contamination for which they were not designed or not intended; including but not limited to the following items:

- Wheels and Tires
- Suspension Components
- Brake Components
- Seat Components
- Clutches and Components
- Steering Components
- Batteries
- Light Bulbs / Sealed Beam Lamps
- Filters
- Lubricants
- Bushings
- · Cables

- Finished and Unfinished Surfaces
- Carburetor/Throttle Body Components
- Engine Components
- Drive Belts
- Hydraulic Components and Fluids
- Circuit Breakers/Fuses
- Electronic Components
- Spark Plugs
- Sealants
- Coolants
- Bearings
- Vehicle Tops

This THIRTY DAY LIMITED WARRANTY covers parts and labor charges for repair or replacement of defective parts.

The duration of these warranties may vary by international region based upon local laws and regulations. These warranties begin on the date of purchase by the original retail purchaser.

## REGISTRATION

IMPORTANT!

#### ALL UNITS MUST BE REGISTERED WITHIN 14 DAYS OF PURCHASE.

To register your product a copy of the Warranty Registration Form and sales receipt must be forwarded to HAMMERHEAD Off-Road. Your dealer, with your assistance, will complete and forward these items to HAMMERHEAD Off-Road. A copy of the Warranty Registration Card and Buyer Safety Agreement is attached. It is your responsibility to confirm with your dealer within 14 days of purchase that your product has been registered. If you are unable to confirm with your dealer within 14 days of purchase that your product HAMMERHEAD Off-Road within 14 days of purchase.

## WARRANTY COVERAGE AND EXCLUSIONS: LIMITATIONS OF WARRANTIES AND REMEDIES

This HAMMERHEAD limited warranty excludes any failures that are not caused by a defect in material or workmanship. THIS WARRANTY DOES NOT COVER CLAIMS OF DEFECTIVE DESIGN. This warranty also does not cover acts of God, accidental damage, normal wear and tear, abuse or improper handling. This warranty also does not cover any vehicle, component, or part that has been altered structurally, modified, neglected, improperly maintained or used for racing, competition or purposes other than for which it was designed.

This warranty excludes damages or failures resulting from: improper lubrication; improper engine timing; improper fuel; surface imperfections caused by external stress, heat, cold or contamination; operator error or abuse; improper component alignment, tension, adjustment or altitude compensation; snow, water, dirt or other foreign substance ingestion/contamination; improper maintenance; modified components; use of aftermarket or unapproved components, accessories, or attachments; unauthorized repairs; or repairs made after the warranty period expires or by an unauthorized repair center.

This warranty excludes damages or failures caused by abuse, accident, fire, or any other cause other than a defect in materials or workmanship and provides no coverage beyond the 180, 90, or 30-day period set forth above

#### LUBRICANTS AND FLUIDS

- 1. Mixing oil brands or using non-recommended oil may cause engine damage.
- 2. Damage or failure resulting from the use of non-recommended lubricants or fluids is not covered by this warranty.

This warranty provides no coverage for personal loss or expense, including mileage, transportation costs, hotels, meals, shipping or handling fees, product pick-up or delivery, replacement rentals, loss of product use, loss of profits, or loss of vacation or personal time.

THE EXCLUSIVE REMEDY FOR BREACH OF THIS WARRANTY SHALL BE, AT HAMMERHEAD'S OPTION, REPAIR OR REPLACEMENT OF ANY DEFECTIVE MATERIALS, COMPONENTS, OR PRODUCTS. THE REMEDIES SET FORTH IN THIS WARRANTY ARE THE ONLY REMEDIES AVAILABLE TO ANY PERSON FOR BREACH OF THIS WARRANTY. HAMMERHEAD 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. THIS EXCLUSION OF CONSEQUENTIAL, INCIDENTAL, AND SPECIAL DAMAGES IS INDEPENDENT FROM AND SHALL SURVIVE ANY FINDING THAT THE EXCLUSIVE REMEDY FAILED OF ITS ESSENTIAL PURPOSE.

THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS EXCLUDED FROM THIS LIMITED WARRANTY. ALL OTHER IMPLIED WARRANTIES (INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY) ARE LIMITED IN DURATION TO THE ABOVE WARRANTY PERIODS. HAMMERHEAD DISCLAIMS ALL EXPRESS WARRANTIES NOT STATED IN THIS WARRANTY. SOME STATES DO NOT PERMIT THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR ALLOW LIMITATIONS ON THE DURATION OF IMPLIED WARRANTIES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU IF INCONSISTENT WITH CONTROLLING STATE LAW.

# HOW TO OBTAIN WARRANTY SERVICE

If your vehicle requires warranty service, you must take it to a HAMMERHEAD Servicing Dealer. 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.) HAMMERHEAD suggests that you use your original selling dealer; however, you may use any HAMMERHEAD Servicing Dealer to perform warranty service.

In the Country where your product was purchased:

Warranty or Service Bulletin repairs must be done by an authorized HAMMERHEAD dealer. If you move or are traveling within the country where your product was purchased, Warranty and Service Bulletin repairs may be requested from any authorized HAMMERHEAD dealer that sells the same line as your product.

Outside the Country where your product was purchased:

If you are traveling temporarily outside the country where your product was purchased, you should take your product to an authorized HAMMERHEAD dealer. You must show the dealer photo identification from the country of the selling dealer's authorized location as proof of residence. Upon residence verification, the servicing dealer will be authorized to perform the warranty repair.

#### If you move:

If you move to another country, be sure to contact HAMMERHEAD Customer Assistance and the customs department of the destination country before you move. Product importation rules vary considerably from country to country. You may be required to present documentation of your move to HAMMERHEAD in order to continue your warranty coverage. You may also be required to obtain documentation from HAMMERHEAD in order to register your product in your new country. You should warranty register your product at a local HAMMERHEAD dealer in your new country immediately after you move to continue your warranty coverage and to ensure that you receive information and notices regarding your vehicle.

#### If you purchase from a private party:

If you purchase a HAMMERHEAD product from a private party, to be kept and used outside of the country in which the product was originally purchased, all warranty coverage will be denied. You must nonetheless register your product under your name and address with a local HAMMERHEAD dealer in your country to ensure that you receive safety information and notices regarding your product.

# **EXPORTED PRODUCTS**

EXCEPT WHERE SPECIFICALLY REQUIRED BY LAW, THERE IS NO WARRANTY OR SERVICE BULLETIN COVERAGE ON THIS PRODUCT IF IT IS SOLD OUTSIDE THE COUNTRY OF THE SELLING DEALER'S AUTHORIZED LOCATION. This policy does not apply to products that have received authorization for export from HAMMERHEAD. Dealers may not give authorization for export. You should consult an authorized dealer to determine this product's warranty or service coverage if you have any questions. This policy does not apply to products registered to government officials or military personnel on assignment outside the country of the selling dealer's authorized location. This policy does not apply to Safety Bulletins.

# NOTICE

If your product is registered outside of the country where it was purchased and you have not followed the procedure set above, your product will no longer be eligible for warranty or service bulletin coverage of any kind, other than safety bulletins. Products registered to government officials or military personnel on assignment outside of the country where the product was purchased will continue to be covered by the Limited Warranty.

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

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state or in different countries. If any of the above terms are void because of federal, state, local law, all other warranty terms will remain in effect.

#### For questions call HAMMERHEAD Customer Assistance:

United States & Canada: 214-513-1700

#### EMISSIONS CONTROL SYSTEM LIMITED WARRANTY

This emissions control system limited warranty is provided in addition to the HAMMERHEAD Off-Road Inc. standard limited warranty for your vehicle. In the remainder of this Emission Control System Limited Warranty, HAMMERHEAD Off-Road Inc. will be referred to as HAMMERHEAD.

For HAMMERHEAD vehicles containing LIQUID COMBUSTION TECHNOLOGY, LLC engines, please refer to the LIQUID COMBUSTION TECHNOLOGY, LLC EMISSION CONTROL WARRANTY STATEMENT. This LIQUID COMBUSTION TECHNOLOGY, LLC EMISSION CONTROL WARRANTY STATEMENT is provided to you in the LCT ENGINES Operation Manual which was included with your vehicle at purchase. Please contact your local HAMMERHEAD dealer to replace a lost or missing LCT ENGINES Operation Manual. If the dealer is unavailable or unable to provide the needed materials, please contact HAMMERHEAD for assistance.

> Hammerhead Off-Road Inc. 1200 Lakeside Parkway #400 Flower Mound, TX 75028 Telephone: 214-513-1700 or toll-free 1-800-275-1701 Fax: 214-513-1711 Email: mail@hammerheadoffroad.com

# **OFF-ROAD WARRANTY REGISTRATION FORM**

#### **Registration Terms & Conditions**

In order to activate the warranty, please follow the instructions below:

- 1. Make a copy of the Bill of Sale.
- 2. Make a copy of Pre-Delivery Checklist.
- 3. Fill out warranty card and send with all above documents to:

Hammerhead Off-Road Attn: Warranty Registration 1200 Lakeside Parkway Ste. 400 Flower Mound, TX 75028 Or, Fax to 214-513-1738

Or, go online to www.hammerheadoffroad.com under dealer's only section

## HAMMERHEAD OFF-ROAD WARRANTY REGISTRATION CARD (Must be sent in with a copy of sales receipt) VIN#: Model: Dealer Name: Dealer Address (Street / City / State / ZIP): Customer Name: Customer City and State: Customer City and State: Date of Purchase: I Certify that all information provided is true and correct to the best of my knowledge. I understand the exceptions and limitations of the warranty coverage. Customer Signature: Date:

## MAINTENANCE LOG MAINTENANCE LOG

Use the following chart to record periodic maintenance.

 DATE
 MILES (KM) OR HOURS
 TECHNICIAN
 SERVICE PERFORMED / COMMENTS

 Image: Commentation of the second sec

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Improper vehicle use can result in SEVERE INJURY or DEATH

NEVER Operate:

- Without proper training or instruction.
- At speeds too fast for your skills or the conditions.
- On public roads a collision can occur with another vehicle.
- With a passenger passengers affect balance and steering and can increase risk of losing control.

#### ALWAYS:

- Use proper riding techniques to avoid vehicle overturns on hills, rough terrain, and in turns.
- Avoid paved surfaces pavement may seriously affect handling and control.



ALL RIDERS MUST WEAR AN APPROVED HELMET AND PROTECTIVE GEAR. ALL RIDERS MUST WEAR SEAT BELTS. NEVER USE ON PUBLIC ROADS. NEVER USE WITH DRUGS OR ALCOHOL.

READ OWNER'S MANUAL. FOLLOW ALL INSTRUCTIONS AND WARNINGS.





Hammerhead Off-Road is part of the Polaris Family.

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