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#### Owner's Manual



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

## INTRODUCTION

Congratulations on your purchase of the Axis 110 or Forge 110 ATV. This Owner's / Operator's manual will provide you information regarding safe operation, operational instructions, maintenance and care. Fully understanding this manual and following all of the instructions herein will provide the knowledge needed to have a safe and enjoyable ATV operation.

For questions regarding operation and maintenance of this ATV Please call Hisun Motors Corp USA at 972-446-0760 or visit us at <a href="https://www.hisunmotors.com">www.hisunmotors.com</a>

## SAFETY - NOTICE TO PARENTS

This is a Category Y-10+ ATV. A Category Y-10+ ATV is a youth model ATV that is intended for use by children age 10 or older. Never allow a child to operate this ATV who is under age 10. Continually supervise any child who is under age 16.

Children differ in skills, physical abilities, and judgment. Some children may not be able to operate an ATV safely. Parents should supervise their child's use of the ATV at all times. Parents should permit continued use only if they determine that the child has the ability to operate the ATV safely.

#### Owner's Manual

THIS ATV IS NOT A TOY AND COULD BE HAZARDOUS TO OPERATE. An ATV handles differently from other vehicles including motorcycles and cars. A collision or rollover can occur quickly, even during routine maneuvers such as turning, driving on hills and over obstacles.

## TRAINING COURSE

Adults and children should take an ATV training course before operating an ATV for the first time. For a training course with an authorized instructor in your area contact your dealer or call SVIA 1-800-887-2887

# IMPORTANT MANUAL INFORMATION

It is important this manual is read from cover to cover carefully by the ATV owner and all operators. Parents should review the manual carefully with their children. Never allow anyone to operate the ATV without first reading and understanding the Owner's/Operator's manual.

#### Owner's Manual

This Owner's/ Operator's manual should be a permanent part of the ATV and should remain with the vehicle at all times. The manual should also remain with the vehicle if sold.

**FAILURE TO FOLLOW THE WARNINGS CONTAINED IN THIS MANUAL CAN RESULT IN SERIOUS INJURY OR DEATH.** Particularly important information is distinguished in this manual using the following notations:



The Safety Alert Symbol means **ATTENTION!** 

## YOUR SAFETY IS INVOLVED!



Failure to follow **WARNING** instructions could result in severe injury or death to the machine operator, a bystander or a person inspecting or repairing the machine.

**CAUTION:** 

**A CAUTION** indicates special precautions that must be taken to avoid damage to the machine.

NOTE:

**A NOTE** provides key information to make procedures easier or clearer.

## IMPORTANT NOTICE

Hisun Motors Corp USA is concerned about the environment and believes in conserving and protecting all natural resources. For this reason, owners should recycle, trade in, or dispose as appropriate, batteries, oil and tires.

This manual is based on the latest product information available at the time of publication. Hisun Motors Corp USA has a policy of continually improving its products. Due to improvements, or other changes, there may be some discrepancies. We reserve the right to make product changes at any time, without notice and without incurring any obligation to make the same or similar changes to vehicles previously built or sold.

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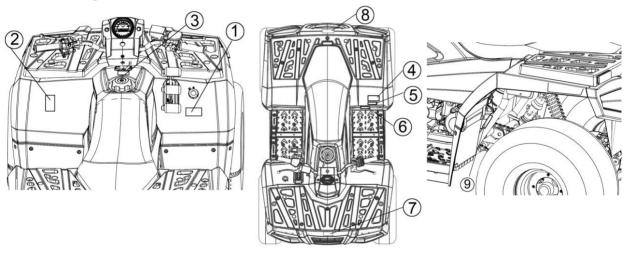
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## LOCATION OF THE WARNING AND SPECIFICATION LABELS

# **FOR Utility model**



Read and understand all of the labels on your ATV. They contain important information for safe and proper operation of your ATV.

Never remove any labels from your ATV. If a label becomes difficult to read or comes off, a replacement label is available from your dealer.

1





#### **A** WARNING

Improper ATV use can result in SEVERE INJURY or DEATH.









ALWAYS USE AN APPROVED HELMET AND PROTECTIVE GEAR ON PUBLIC PASSENGERS ROADS

CARRY NEVER USE NGERS WITH DRUGS OR ALCOHOL

#### **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 increase risk of losing control.

#### ALWAYS :

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

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

# WARNING

- ·Use only 91 Octane or higher gasoline.
- Use Non-Ethanol gasoline when possible for better performance and engine.
- Never use E-85 gasoline in this engine as use of E-85 gasoline will void the warranty.

(4)

## **A WARNING**



Operation of this ATV by children under the age of 10 increases the risk of severe injury or death.

Adult supervision required for children under age 16.

NEVER permit children under age 10 to operate this ATV.



## A WARNING

Improper tire pressure or overloading can cause loss of control.

Loss of control can result in severe injury or death.

Cold tire pressure:

Front: 4psi(28kPa) Rear: 7psi(49kPa)

Maximum weight capacity:220lbs.(100kg)



This ATV is subject to Hisun Motors Corp., U.S.A. Corp., U.S.A. Action Plan approved by U.S. Consumer Product Safety Commission on March 23, 2012.



# **A WARNING**

Overloading can cause loss of control. Loss of control can result in severe injury or death.

Maximum weight capacity:22lbs.(10kg)



## **A WARNING**

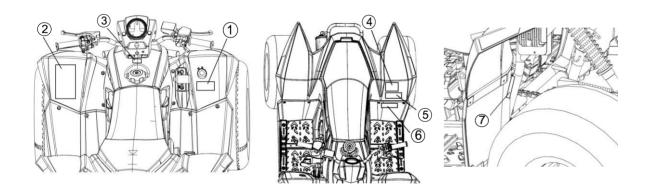
Overloading can cause loss of control. Loss of control can result in severe injury or death.

Maximum weight capacity:33lbs.(15kg)

(9)



# **FOR Sport model**



Read and understand all of the labels on your ATV. They contain important information for safe and proper operation of your ATV.

Never remove any labels from your ATV. If a label becomes difficult to read or comes off, a replacement label is available from your dealer.

(1)



(2)



seriously affect handling and control.

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

## 1-7 Location of the Warning and Safety Labels

#### **A WARNING**

Improper tire pressure or overloading can cause loss of control.

Loss of control can result in severe injury or death.

• Cold tire pressure:

Front: 4psi(28kPa) Rear: 7psi(49kPa)

Maximum weight capacity: 187 lbs. (85kg)

**(5**)

# **A WARNING**

- Use only 91 Octane or higher gasoline.
- \*Use Non-Ethanol gasoline when possible for better performance and engine.
- Never use E-85 gasoline in this engine as use of E-85 gasoline will void the warranty.

**(4)** 

(3)

# **A WARNING**



Operation of this ATV by children under the age of 10 increases the risk of severe injury or death.

Adult supervision required for children under age 16.

NEVER permit children under age 10 to operate this ATV.



This ATV is subject to Hisun Motors Corp., U.S.A. Corp., U.S.A. Action Plan approved by U.S. Consumer Product Safety Commission on March 23, 2012.



MFG, BY: Chengqing Huansong Science And Technology Industrial Co.,Ltd
V.I.N.:

DATE:

Certifies that this ROV complies with the American National Standard for
Four Wheel ALL-Terrain Vehicles, ANS//SVIA 1-2010 Standard.

TYPE OF VEHICLE: ATV



**AN ATV IS NOT A TOY AND CAN BE HAZARDOUS TO OPERATE.** An ATV handles differently from other vehicles including motorcycles and cars. A collision or rollover can occur quickly, even during routine maneuvers such as turning, riding on hills or over obstacles. Always take the proper precautions while operating this ATV.

#### **SEVERE INJURY OR DEATH** can result if you do not follow these instructions:

- Read this manual and all labels carefully and follow the operating procedures described.
- Never operate an ATV without proper training or instruction. <u>Take a Training Course.</u>
- Always follow the age recommendation:

## A child under 16 years old should never operate an ATV without adult supervision

- Never allow a child under age 10 to operate an ATV without adult supervision, and never allow continued use of an ATV by a child if he or she does not have the abilities to operate it safely.
- Never operate an ATV without wearing an approved motorcycle helmet that fits properly.
   You should also wear eye protection (goggles or face shield), gloves, boots, long-sleeved shirt or jacket, and long pants.

- Never consume alcohol or drugs before or while operating this ATV.
- Never operate at speeds too fast for your skills or the conditions. Always go at a speed that
  is proper for the terrain, visibility and operating conditions, and your experience.
- Never attempt wheelies, jumps, or other stunts.
- Always inspect your ATV each time you use it to make sure it is in safe operating condition.
   Always follow the inspection and maintenance procedures and schedules described in this manual
- Always keep both hands on the handlebars and both feet on the footboards of the ATV during operation.
- Always go slowly and be extra careful when operating on unfamiliar terrain. Always be alert to changing terrain conditions when operating the ATV.
- Never operate on excessively rough, slippery or loose terrain until you have learned and practiced the skills necessary to control the ATV on such terrain. Always be especially cautious on these kinds of terrain.
- Always follow proper procedures for turning as described in this manual. Practice turning at low speeds before attempting to turn at faster speeds. Do not turn at excessive speed.
- Never operate the ATV on hills too steep for the ATV or for your abilities. Practice on

#### 2-3 Safety Information

smaller hills before attempting larger hills.

- Always follow proper procedures for climbing hills as described in this manual. Check the
  terrain carefully before you start up any hill. Never climb hills with excessively slippery or
  loose surfaces. Shift your weight forward. Never open the throttle suddenly. Never go over
  the top of a hill at high speed.
- Always follow proper procedures for going down hills and for braking on hills as described in this manual. Check the terrain carefully before you start down any hill. Shift your weight backward. Never go down a hill at high speed. Avoid going down a hill at an angle that would cause the vehicle to lean sharply to one side. Go straight down the hill where possible.
- Always follow proper procedures for crossing the side of a hill as described in this manual.
- Avoid hills with excessively slippery or loose surfaces. Shift your weight to the uphill side of the ATV. Never attempt to turn the ATV around on any hill until you have mastered the turning technique described in this manual on level ground. Avoid crossing the side of a steep hill if possible.
- Always use proper procedures if you stall or roll backwards when climbing a hill. To avoid stalling, use proper gear range and maintain a steady speed when climbing a hill. If you

- stall or roll backwards, follow the special procedure for braking described in this manual. Dismount on the uphill side or to a side if pointed straight uphill. Turn the ATV around and remount, following the procedure described in this manual.
- Always check for obstacles before operating in a new area. Never attempt to operate over large obstacles, such as large rocks or fallen trees. Always follow proper procedures when operating over obstacles as described in this manual.
- Always be careful when skidding or sliding. Learn to safely control skidding or sliding by
  practicing at low speeds and on level, smooth terrain. On extremely slippery surfaces,
  such as ice, go slowly and be very cautious in order to reduce the chance of skidding or
  sliding out of control.
- Never operate an ATV in fast flowing water or in water deeper than that recommended in this manual. Remember that wet brakes may have reduced stopping ability. Test your brakes after leaving water. If necessary, apply brakes several times to let friction dry out the linings.
- Always be sure there are no obstacles or people behind you when you operate in reverse.
- When it is safe to proceed in reverse, go slowly.

## 2-5 Safety Information

- Always use the size and type tires specified in this manual.
- Always maintain proper tire pressure as described in this manual.
- Never modify an ATV through improper installation or use of accessories.
- Never exceed the stated load capacity for an ATV. Cargo should be properly distributed and securely attached. Reduce speed and follow instructions in this manual for carrying cargo or pulling a trailer. Allow greater distance for braking.

#### **WARNING**

#### POTENTIAL HAZARD

Starting or running the engine in a closed area.

## WHAT CAN HAPPEN

Exhaust fumes are poisonous and may cause loss of consciousness and death within a short time.

## **HOW TO AVOID THE HAZARD**

Always operate your ATV in an area with adequate ventilation.

#### **WARNING**

#### POTENTIAL HAZARD

Improper handling of gasoline.

#### WHAT CAN HAPPEN

Gasoline can catch fire and you could be burned.

#### **HOW TO AVOID THE HAZARD**

Always turn off the engine when refueling. Do not refuel right after the engine has been running and is still very hot.

Do not spill gasoline on the engine or exhaust pipe/muffler when refueling.

Never refuel while smoking, or while in the vicinity of sparks, open flames, or other sources of ignition such as the pilot lights of water heaters and clothes dryers.

When transporting the ATV in another vehicle, be sure it is kept upright. Otherwise, fuel may leak out of the fuel tank.

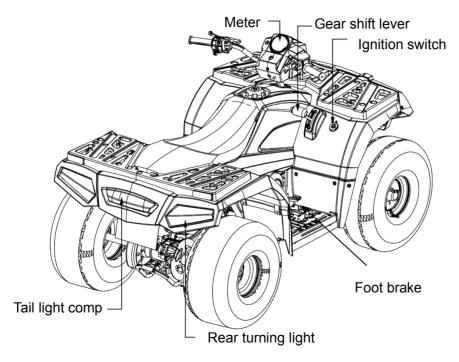
#### WHAT CAN HAPPEN

Gasoline is poisonous and can cause injuries.

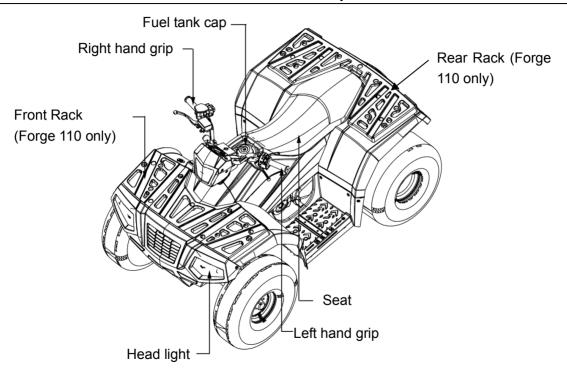
#### **HOW TO AVOID THE HAZARD**

If you swallow some gasoline or inhale a lot of gasoline vapor, or get some gasoline in your eyes, see your doctor immediately. If gasoline spills on your skin, wash with soap and water. If gasoline spills on your clothing, change your clothes.

# **DESCRIPTION AND VEHICLE IDENTIFICATION**



## **Description and Vehicle Identification 3-2**



#### 3-3 **Description and Vehicle Identification**

## NOTE:

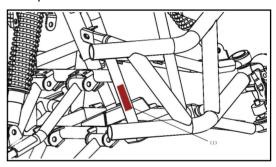
The ATV you have purchased may differ Vehicle identification number slightly from the figures shown in this manual.

## Identification number records

Record the vehicle identification number (VIN) and the engine identification number in the spaces provided. These numbers will be needed when calling for service and/or ordering parts. The VIN number is also needed for registering your ATV in certain states

## 1. VEHICLE IDENTIFICATION NUMBER:

The vehicle identification number is stamped into the frame.

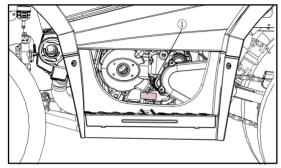


Vehicle identification number 1

#### NOTE:

The vehicle identification number is used to identify your machine.

## Engine identification number



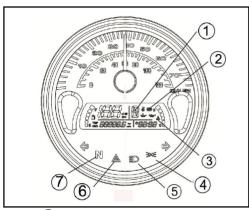
Engine identification number 1

# NOTE:

The engine identification number also is used to identify your machine.

#### 4-1 Control Functions

## Indicator and warning lights



- ① Gear position "F" & "R"
- ② Gear position Park "P"
- 3 Coolant temp warning light
- 4 Clearance lamp
- 6 High beam light
- 6 Hazard light
- 7 Neutral "N"

## Gear position "F" & "R"

Moving the shift lever to gear "F" (forward), indicator "F" will illuminate; Moving the shift lever to gear "R" (reverse), indicator "R" will illuminate.

#### Park "P"

When placing the ATV in neutral with the Park brake set, the "P" (park), indicator will illuminate.

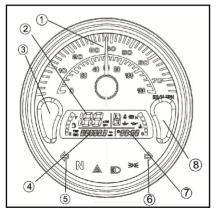
# Coolant temp warning light

Ensure the coolant temp warning light is off before restarting the ATV. Never run the ATV when the coolant temperature light is on. Running the engine when the coolant temperature light is on could cause damage to the ATV

#### CAUTION:

Overloading the ATV may cause the engine to overheat which will illuminate the coolant temperature light.

## **Multi-function meter**



- 1 Speed
- ② Speedometer
- 3 Odometer button
- ④ Trip Odometer
- ⑤ Left turn
- ⑥ Right turn
- 7 Clock
- Clock button

# **Setting Trip Odometer**

Depress the Odometer button to access Trip A or Trip B.

To reset Trip A or B, depress the Odometer button and hold for 3 seconds.

# Setting Clock

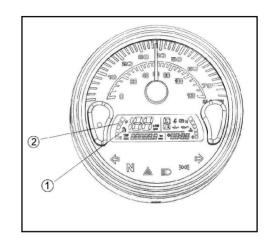
Depressing the clock button will Toggle between settings

#### 4-3 Control Functions

- 1 Toggle Clock button to clock settings
- 2 hold button in for 3~5 seconds
- 3 Press "KM/MILE" button to set the hour
- 4 Press "TRIP/000" button to set the minute
- 5 Press time button for 3~5 seconds then release to finish setting

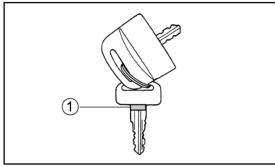
## Fuel level gauge

Fuel meter reflects the remaining volume of gasoline. It will change from Green to Red while running and from RED to GREEN when filling.



- ① Fuel
- ② Fuel gauge

# **Master Key Switch**



Master switch Key 1

## **Master Key Switch**

ON:

Turn Master key clockwise to the "ON" position. In this position, the ATV can be started when the Emergency shut off button is placed in the Position and the starter button is held on. When the master key switch

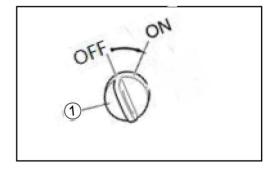
is "ON" the lights can also be turned on.

## OFF:

Turn Master key counterclockwise to the "OFF" position. In this position the ATV will shut off and cannot be started. All electrical functions will be turned off.

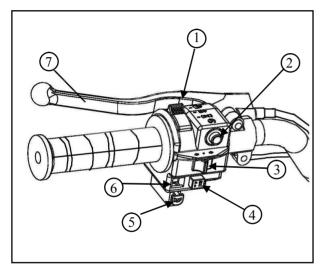
Always turn the master key switch to the off position when the ATV is not in use.

## <u>START</u>



#### 4-5 Control Functions

## **Left Hand Controls**



- 1 Light switch
- Electric start button
- 3 Turn signals

- 4 Emergency shut off button
- (5) Horn
- 6 Hazard Lights
- Continuous Test Continuous Con

# **Light Switch**

Turn lights on and off with the light switch. There are 3 positions: High beam, Off, Parking

## **Electric start button**

To start the engine the Electric start button needs to be depressed until engine starts. Note: In order for the electric start button to start the engine the Main Key switch needs to be placed in the "ON" position and the Emergency stop button needs to be placed in the on  $\bigcap$  position.

CAUTION:		

Never allow the starter motor to run over 5 seconds at a time. If the engine does not start within 5 seconds, wait 5 seconds then try again.

Never hold the starter button after the engine has started. Doing so could cause damage the starter motor and engine.

## Turn signals

Turn signals are activated by placing the turn signal switch left or right.

# **Emergency Shut Off button**

The ATV can be turned off at any time by depressing the Emergency shut off button to

the  $\nearrow$  position. The Emergency Shut Off button needs to be in the ON  $\bigcirc$  position for the engine to start.

#### Horn

The Horn is activated by depressing the horn button.

# **Hazard lights**

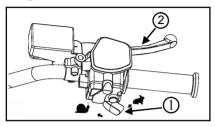
The Hazard lights are activated by depressing the Hazard button.

#### Left hand brake lever

Brakes are activated by pulling in the left hand brake lever. Parking brake is activated by setting the parking brake.

#### 4-7 Control Functions

# **Right Hand Controls**



- Throttle control
- ② Right brake lever

#### **Throttle**

Press throttle control with thumb when you want the ATV to go forward. Throttle should return to idle position when released.

## **▲** WARNING

#### POTENTIAL DANGERS

Throttle cable not operating properly

#### **WHAT COULD HAPPEN**

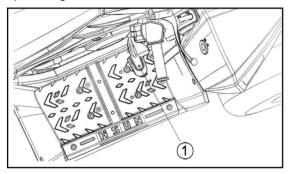
Throttle could stick open or closed resulting in an accident

#### **HOW TO AVOID**

Check condition of the throttle control before each ride. Make sure throttle snaps back to idle when released.

## Foot brake lever

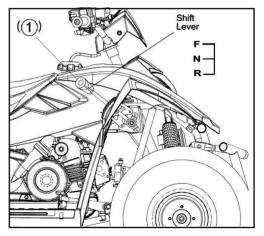
Reduce the speed or stop the ATV by pressing the foot brake lever.



Foot Brake Lever

## Shift lever

Once the ATV has stopped and the brake is set, you can shift the ATV, by using the shift lever, into forward, neutral or reverse.



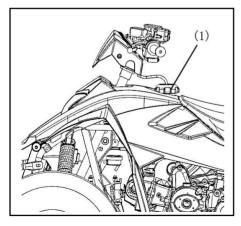
Shift lever

#### 4-9 Control Functions

## Fuel cap

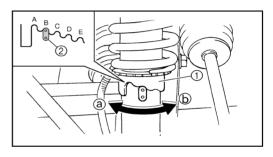
Fuel cap can be removed by turning counter clockwise. Fuel cap can be installed by turning clockwise.

## ① Fuel tank cap



# Adjustment of front and rear shocks

Increase load capacity by turning adjustment ring (1) toward A. Reduce load capacity by turning adjustment ring toward B.

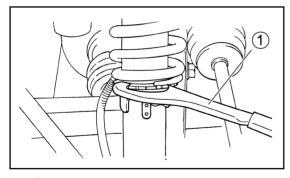


Adjustment ring

## CAUTION:

Use specified spanner wrench to adjust shocks

Note: Always adjust both front shocks to same settings.



Specified spanner

## WARNING

### POTENTIAL DANGERS

Front shocks adjusted to different settings

## **WHAT COULD HAPPEN**

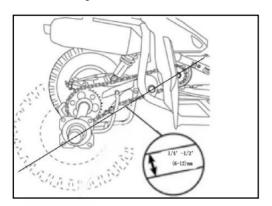
Loss of stability which could result in an accident

## **HOW TO AVOID**

Make sure both, left and right, front shocks are adjusted to the same settings.

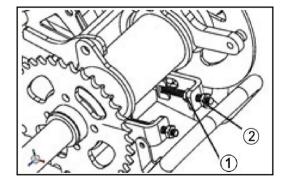
## **4-11 Control Functions**

# **Chain adjustment**



Chain should have ½" to ½" slack when pushed up in the center.

To adjust chain, loosen Nuts(1). To tighten chain, turn nuts (2) clockwise. To loosen chain, turn nuts (2) counter clockwise.



## WARNING

## POTENTIAL DANGERS

Inspecting or adjusting chain while the engine is running.

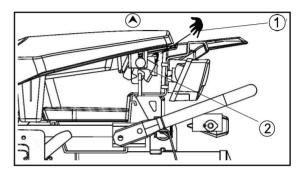
## **WHAT COULD HAPPEN**

Finger or hand could get caught between chain and sprocket which could result in severe injury.

## **HOW TO AVOID**

Turn off engine before attempting to inspect or adjust chain.

#### Seat removal



As shown in figure, seat is removed by pressing lever (2) with hand while pushing on seat at the same time.

# 5-1 Pre Operation Check List

# Before operating this ATV, check the following points:

ITEM	ROUTINE	MARKER
Brakes	<ul> <li>Check the operation, free play, fluid levels and look for any fluid leaks.</li> <li>Add DOT 4 brake fluid if necessary.</li> <li>Check to see if the disc brake rotor and the brake pads are worn beyond limits.</li> </ul>	
Parking Brake	Check to see if the parking brake functions normally.	
Fuel	Check the fuel level.     Fill with fuel if necessary.	
Engine oil	<ul> <li>Check the oil level.</li> <li>Fill with oil if necessary.</li> </ul>	
Throttle	Check the throttle cable operation and free play.	
Wheels and tires	Check the tire pressure, wear and look for any damage.	
Idle	<ul> <li>Check to see if the idle speed is normal.</li> <li>Take it to a dealer for adjustment if necessary.</li> </ul>	
Lights and switches	Check for proper operation of switches and that the lights all work.	
Axle boots	Check each boot for tears or leaks.	
Instrument Panel	Check and be sure all the instrument indicators are working properly.	
Warning Lights	Check and be sure all the warning lights function normally on the panel.	
EFI System	Check for any fault codes on the panel; repair the EFI system if necessary.	
Gear Shift Lever	Check for proper operation	

# **WARNING**

Failing to inspect and maintain your ATV could be hazardous.

Not following the pre-ride inspection procedures could result in loosing control of the ATV resulting in an accident or damage to the ATV

Always perform a Pre-ride inspection before each ride.

## 5-3 Pre Operation Check List

## Brake System.

# Before riding the ATV, always inspect the brake system

Inspect the fluid level in the master cylinder, if low, add dot 4 brake fluid.

Inspect brake fluid hoses, fittings and master cylinder for leaks. If a leak is found, contact your Hisun Authorized service center for repair.

# Braking test

Test brakes for proper operation at slow speeds. If brakes are not working properly, contact your Hisun Authorized service center for repair.

## **▲** WARNING

## **POTENTIAL DANGERS**

Brakes not working properly

#### WHAT COULD HAPPEN

Can cause an accident which could result in severe injury or death.

#### **HOW TO AVOID**

Inspect brakes each time before operating the ATV.

# FUEL Fill fuel tank with gasoline

Fuel recommended: unleaded gasoline with an octane rating of 91 or above Fuel Tank Capacity: 1.85 gal. (7L)

#### **CAUTION:**

Never use leaded gasoline Leaded gasoline can will cause damage to engine components

# Mixed fuel (alcohol-gasoline)

Do not use gasoline mixed with over 5% methyl alcohol. Over 5% methyl alcohol will damage engine components.

Do not use gasoline mixed with over 10%

ethyl alcohol. Over 10% ethyl alcohol will damage engine components.

## **▲** WARNING

#### **POTENTIAL DANGERS**

Gas spilling on a hot engine.

## WHAT COULD HAPPEN

Spilling gasoline on a hot engine could result in a fire.

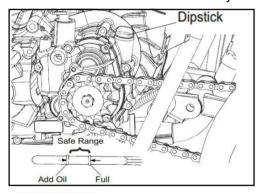
#### **HOW TO AVOID**

Do not overfill fuel tank. Wait for engine to cool down before filling with gasoline.

## 5-5 Pre Operation Check List

# **Engine oil**

Check engine oil level before each ride. The engine oil should be between the "Full" and "Add Oil" line. Add oil if necessary.



## CAUTION:

Never mix any additives to the engine oil. Furthermore, oil titled "ENERGY CONSERVING "11" or higher should never

be used.

## Tires

## WARNING

## **POTENTIAL HAZARD**

Operating this ATV with improper tires, or with improper or uneven tire pressure.

## **WHAT CAN HAPPEN**

Use of improper tires on this ATV, or operation of this ATV with improper or un-even tire pressure, may cause loss of control, increasing your risk of accident.

#### Tire size:

	Туре	Size	
Front	19×7-8	6PR	
Rear	18×9.5-8	6PR	

#### **Tire Pressure**

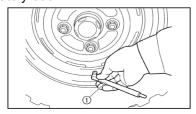
The tires should be inflated to the recommended pressures before each ride:

Front tires: 4psi (0.28kgf/cm<sup>2</sup>, 28kpa) Rear tires: 7psi (0.49kgf/cm<sup>2</sup>, 49kpa)

Exceeding the recommended tire pressures could result in tire failure. Fill tires slowly to the required pressures.

Use a low pressure tire gauge (1)

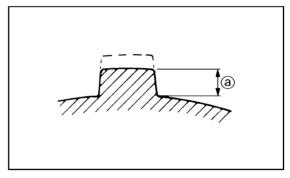
Check tire pressure when tires are completely cool.



#### Tire wear limit

Inspect tread wear

As shown in the figure below, replace tires before tread thickness (a) becomes less than .12in. (3mm)



Tread thickness

# Starting a cold engine

## **A** WARNING

#### POTENTIAL HAZARD

Operating an ATV without being familiar with all controls.

#### WHAT CAN HAPPEN

Loss of control, which could result in a severe injury or death

## **HOW TO AVOID THE HAZARD**

Read the Owner's Manual carefully. If there is a control or function you do not understand, contact your dealer or your Authorized Dealer.

## WARNING

## **POTENTIAL HAZARD**

Freezing control cables in cold weather.

## WHAT CAN HAPPEN

You could be unable to control the ATV, which could lead to an accident or collision.

#### **HOW TO AVOID THE HAZARD**

When riding in cold weather, always make sure all control cables work smoothly before you begin riding.

# STARTING ENGINE

To start the engine

- Make sure the hand brake lever is pulled in and the parking brake is set before attempting to start the engine.
- Place the shift lever in neutral. Note:

ATV will not start unless it is in neutral

- 3. Place fuel valve to the "ON" position.
- 4. Place the emergency stop switch located on the handlebars, to the "RUN" position.
- 6. Depress the start button engaging the starter motor.

Note: Do not push the

start button more than 5 seconds at a time, doing so, could damage the starter motor.

## 6-3 Operation

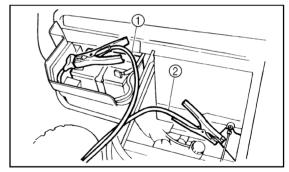
# **Jump Starting the ATV**

Avoid using an auxiliary booster located on a battery charger to jump the ATV. It is best to use another 12V battery such as a car or ATV battery. If using a car battery to jump the ATV, do not start the car or have the car running while jumping. A car running will put out to much power which will damage the ATV. To jump the ATV, please follow the instructions below.

- 1. Open battery cover.
- 2. Make sure the key to the ATV is turned off.
- 4. Connect the positive (red) jumper cable to the positive pole on the good battery then place the other end of the positive jumper cable on the ATV positive

pole on the drained battery.

Place the negative (black) jumper cable on the good battery then place the other end of the negative cable on a paint-less location on the ATV. A paint-less location will assure a good ground.



- ① Jumper cable positive pole
- ② Jumper cable negative pole

- 6. Start the engine. (Refer to Starting Engine in the manual)
- 7. When engine starts, disconnect the jumper cables and install battery cover.

## WARNING

Never connect jumper cables to the original batteries negative pole.

Never connect jumper cables, positive to negative poles.

Always pay close attention when attaching jumper cables to the positive and negative terminals. Crossing positive to negative could result in an explosion and/or damage to the ATV.

## Warming up engine

To prolong engine life, always warm up the engine before starting off. This allows the oil to warm up and circulate through the engine components. Never start a cold engine and rev up. Allow a cold engine to warm up at idle for approximately 3 to 5 minutes before driving.

Gear	shift	lever	and	reverse
opera	tion			

NOTE:

Before shifting ATV into forward, neutral or reverse, stop the vehicle and remove hand from the throttle.

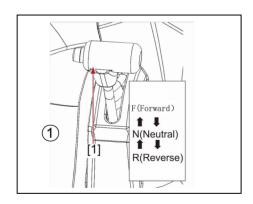
1. Stop ATV and remove hand from the throttle.

## 6-5 Operation

2. Activate brake lever, then shift into the desired position.

NOTE:

Make sure the gear shift lever is fully engaged in the correct position before applying the throttle.



① Gear shift range

3. Release brake and accelerate gradually.

# Gear shift lever: Shifting to reverse

- 1. Stop vehicle and remove hand from the throttle.
- Hold the brake.
- 3. Move gear shift lever from neutral to reverse.

NOTE:

When in reverse, the reverse light on the front meter will illuminate. If the reverse light does not come on, please contact a service center.

4. Before going in reverse, look behind the ATV for obstacles or people.

5. While operating in reverse, keep looking behind for obstacles or people

## **WARNING**

### **POTENTIAL HAZARD**

Improper reverse operation

## WHAT CAN HAPPEN

You can run into something or somebody which could result in server injury.

### **HOW TO AVOID THE HAZARD**

Check for obstructions and people behind the ATV before and while operating in reverse.

# **Engine Break-In**

There is never a more important period in the life of your vehicle than the period between zero and 20 hours.

For this reason, we ask that you carefully read the following material. Because the engine is brand new, you must not put an excessive load on it for the first several hours of running.

During the first 20 hours, the various parts in the engine wear and polish themselves to the correct operating clearances.

During this period, prolonged full throttle operation or any condition which might result in excessive engine heating must be avoided. However, momentary (2-3 seconds maximum) full throttle operation under load does not harm the engine.

Each full throttle acceleration sequence should be followed with a substantial rest

## 6-7 Operation

period for the engine by cruising at lower r/min so the engine can rid itself of the temporary buildup of heat. If any abnormality is noticed during this period, consult a dealer.

#### 0-10 Hours:

Avoid continuous operation above half throttle. Allow a cooling off period of five to ten minutes after every hour of operation. Vary the speed of the vehicle from time to time. Do not operate it at one set throttle position.

## 10-20 Hours:

Avoid prolonged operation above 3/4 throttle. Rev the vehicle freely but do not use full throttle at any time.

# **Parking**

Stop ATV, move the gear select lever to park Neutral (N). Set the parking brake.

## Parking on a slope

## WARNING

### **POTENTIAL HAZARD**

Parking the vehicle on a slope or uneven terrain.

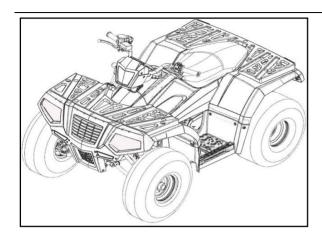
#### WHAT CAN HAPPEN

The vehicle may lose control resulting in an accident.

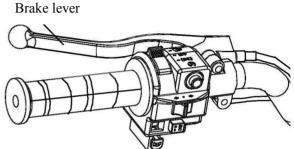
#### **HOW TO AVOID THE HAZARD**

Do not park the vehicle on a slope or uneven terrain. If stopping on a slope make sure the vehicle is stationary before exiting.

# Operation 6-8



- 1. Stop the vehicle with brakes applied.
- 2. Shut down the engine.



Parking brake

3.Park the vehicle with parking brake applied.

# **Accessories and loading**

### **Accessories**

Accessories can affect the handling and control of your ATV. Keep the following in mind when considering an accessory or operating an ATV which has accessories. Choose only accessories designed for your ATV.

Accessories should be rigidly and securely mounted. An accessory which will shift position or come off while you are riding could affect your ability to control the ATV. Do not mount an accessory where it could interfere with your ability to control the ATV. Examples include (but are not limited to) a heavy or bulky object attached to the handlebars which could make steering

difficult, an accessory that limits your ability to move around on the seat, or one that limits your view.

Use extra caution when riding an ATV with accessories. The ATV may handle differently than it does without accessories.

# Loading

Cargo on front and back carrier racks can change the stability and handling of the ATV. You must use common sense and good judgment when carrying cargo. Keep the following points in mind:

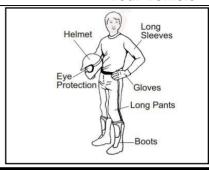
Never exceed the weight limits shown. An overloaded ATV can be unstable.

# RIDING YOUR ATV Safety Gear

Always wear a DOT or SNELL certified motorcycle/ATV helmet. A helmet helps protect against serious head injuries in the event of an accident. A helmet is the most important safety gear item you can wear. Consult with a motorcycle/ATV dealer for the correct size and type of helmet that is right for you.

Always wear eye protection when riding an ATV such as a face shield or goggles. While riding an ATV you can be hit in the eyes by any of the following: dust, branches, rocks, debris from other riders, bugs, etc.

Wear protective clothing: Long sleeve shirt, gloves, long pants and over the ankle boots. Riding an ATV exposes the rider to many hazards, wearing protective clothing can help protect the rider from injury.



## WARNING

## **POTENTIAL HAZARD**

Operating this ATV without wearing an approved motorcycle helmet, eye protection, and protective clothing

# WHAT CAN HAPPEN

Operating this ATV without wearing an approved motorcycle helmet, eye protection, and protective clothing

could increase your chances of a head and/or eye injury, and the possibility of death in the event of a severe accident. HOW TO AVOID THE HAZARD

Always wear an approved motorcycle helmet that fits properly and wear eye protection (goggles or face shield), gloves, boots, long-sleeved shirt or jacket and long pants.

# Learn how to operate the atv

This ATV is designed for recreational use for for riders 10 and over. This section, Driving Your Vehicle, provides general ATV riding instructions for recreational riding. The skills and techniques described in this section,

however, are appropriate for all types of riding. Riding your ATV requires special skills acquired through practice over a period of time. Take the time to learn the basic techniques well before attempting more difficult maneuvers.

Riding your new ATV can be a very enjoyable activity, providing you with hours of pleasure. But it is essential to familiarize yourself with the operation of the ATV to achieve the skill necessary to enjoy riding safely. Before you begin to ride, be sure you have read this Owner's Manual completely and understand the operation of the controls. Pay particular attention to the safety information. Please also read all caution and warning labels on your ATV.

# RIDE WITH CARE AND GOOD JUDGEMENT

## Get training if you are inexperienced.

Beginners should get training from a certified instructor.

Become familiar with this ATV at slow speeds first, even if you are an experienced operator. Do not attempt to operate at maximum performance until you are totally familiar with the machine's handling and performance characteristics

NOTE:

Never shift the gear into reverse until the vehicle is stopped. Or it may damage the

engine and transmission chain.

# **Turning**

Turning improperly could cause loss of traction, loss of control, accident or overturn. Always follow proper procedures for turning as described in the owner's manual. Always avoid turn at high speeds. Put your weight on the footrest to the outside of the turn and lean your upper body into the turn. Never turn abruptly or at sharp angles. Never turn at high speeds. Practice turning at slow speeds before attempting to turn at faster speeds.

#### 7-4 Your Vehicle

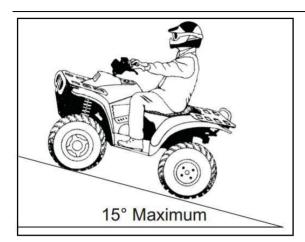
# Brake Climbing uphill

Improper hill climbing could cause loss of control or overturn. Always follow proper procedures for climbing hills as described in the owner's manual. Use proper riding skills to keep your ATV from overturning on hills. Be sure that you can maneuver your ATV effectively on flat ground before attempting any incline. Even then practice riding first on gentle slopes. Try more difficult climbs only after you have developed your skills. In all cases avoid inclines with slippery or loose surfaces, or obstacles that might cause you to lose control

Operating on excessively steep hills could cause an overturn. Never operate on hills too steep for the ATV or for your abilities. Never

operate the ATV on hills steeper than 15 degrees.

The maximum gradient: 15°



In all cases avoid inclines with slippery or loose surfaces, or obstacles that might cause you to lose control.

#### ♠ WARNING

### **POTENTIAL HAZARD**

Drive on steep slop terrain.

## **WHAT CAN HAPPEN**

It may cause turn over to drive on steep uphill.

## **HOW TO AVOID HARZARD**

Never operate on hills too steep for the ATV or for your abilities. Never operate the ATV on hills steeper than 15 degrees.

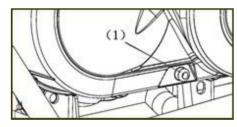
Never crest a hill at high speed, for an obstacle, a sharp drop, or another vehicle or person could be on the other side of the hill. If you realized that you have misjudged being able to make it to the top when climbing a hill,

#### 7-6 Your Vehicle

you should turn around the ATV early while you still have the operation space.

# Riding downhill

Improperly descending a hill could cause loss of control or overturn. Whenever possible, ride your ATV straight down a hill. Avoid sharp angles which could allow the ATV to roll over. Carefully choose your path and ride slowly.



1. CVT belt box drain plug

# When approaching obstacles

If you failed to avoid the roadblock you may stop the vehicle and check the road conditions then choose the safest path to avoid turnover.

## WARNING

## **POTENTIAL HAZARD**

incorrect driving

## **HAZARDS MIGHT OCCUR**

loss control or collision might cause turnover

#### **HOW TO AVOID**

When you approach a new zone, check whether there is any roadblock first.

Be more careful when you ride over a large roadblock.

Regular examining and adjusting.

Regular examining, adjusting and lubricating will keep the vehicle in the best condition.

Safe driving is the first responsibility for driver

The key points you should pay attention to when you examining, adjusting and lubricating the vehicle are as below:

### WARNING

## **POTENTIAL HAZARD**

Check the engine when functioning.

## **HAZARDS MIGHT OCCUR**

Your body parts or clothes might get stuck into the moving parts cause injury.

Electronic parts might cause fire.

#### **HOW TO AVOID**

Turn the engine down when maintaining

Maintaining manual aims to help you to accomplish vehicle maintaining works.

The tools which be provided are enough for you to accomplish the maintaining works.

#### 7-8 Your Vehicle

## **▲** WARNING

## **POTENTIAL HAZARD**

Driving nonstandard modified vehicle:

## **HAZARDS MIGHT OCCUR**

If you assemble and modify the vehicle incorrectly, it might cause hazards under some circumstances.

## **HOW TO AVOID**

Any inappropriate vehicle modifying is strictly prohibited.

## **Periodic Maintenance And Adjustment**

Following the proper maintenance procedures and time table for maintenance listed in this manual is important for the safety of the rider and the life span of the ATV. When riding in harsh conditions, such as water, mud and dust, the maintenance procedures should be performed more often.

## WARNING

Turn off the engine when performing maintenance unless otherwise specified. Have a dealer perform service if you are not familiar with servicing an ATV.

## **▲** WARNING

## **POTENTIAL HAZARD**

Operating this ATV with improper modifications.

#### WHAT CAN HAPPEN

Improper installation of accessories or modification of this vehicle may cause changes in handling which can result in an accident.

#### **HOW TO AVOID THE HAZARD**

Never modify this ATV using improper installation or use of accessories. All parts and accessories added to this vehicle should be components designed for this ATV and should be installed and used following instructions. If you have questions, consult an authorized ATV dealer.

# Periodic maintenance chart for the emission control system

- For an ATV, which is not equipped with an odometer or an hour meter, follow the monthly maintenance intervals.
- For an ATV, which is equipped with an odometer or an hour meter, follow the km (miles) or hours maintenance intervals.
- If the ATV isn't used for a long period of time, the monthly maintenance intervals should be followed.
- A dealer should perform items marked with an asterisk, as they require special tools, data and technical skills.

	ROUTINE			INITIAL			EVERY	
ITEM		Whichever	Month	1	3	6	6	12
		Comes first	Km (Miles)	320 (198)	1,200 (745)	2,400 (1450)	2,400 (1450)	4,800 (2900)
			Hours	20	75	150	150	300
Valves*	Check valve clearances.     Adjust if necessary.			0		0	0	0
Spark plug	Check the plug condition. Adjust the gap and clean. Replace if necessary.			0	0	0	0	0
Air filter element	Clean. Replace if necessary.			Every 20-40 hours (More often in wet or dusty areas.)				
Crankcase breather system*	Check breather hose for cracks or damage.     Replace if necessary.			,		0	0	0
Exhaust system*	Check for leaks. Tighten if necessary. Replace gasket(s) if necessary.					0	0	0
Spark arrester	Clean.					0	0	0
Sensor	Clean.			To clean for each 500km (312ml)				
Fuel line*	Check fuel hose for cracks or damage.     Replace if necessary.					0	0	0

# Periodic Maintenance and Adjustment 8-3

# **General maintenance and lubrication chart**

ITEM	ROUTINE			INITIAL			EVERY	
		Whichever Comes first	Month	1	3	6	6	12
			Km (Mi)	320 (200)	1,200 (750)	2,400 (1,500)	2,400 (1,500)	4,800 (3,000)
			Hours	20	75	150	150	300
Engine oil	Replace (Warm engine before	re draining.)		0		0	0	0
EFI	<ul> <li>Use EFI diagnostic apparatu</li> </ul>	s for inspection		0		0	0	0
catalyzer	Check the exhaust     Replace the muffler if necessary					0		0
oil filter	Check for leaks around the seal     Replace it if necessary			0	0	0	0	0
Engine filter element	Clean Replace if necessary.			0		0		0
Engine oil strainer	• Clean.			0		0		0
Brakes*	Check operation/fluid leaks/See NOTE.     Correct if necessary.			0	0	0	0	0
Clutch*	Check operation.     Adjust if necessary.			0		0	0	0
Wheels*	<ul><li>Check balance/damage/run</li><li>Replace if necessary.</li></ul>	out.		0		0	0	0
Wheels bearings*	Check bearing assemblies for looseness/damage.     Replace if damaged.			0		0	0	0
Steering system*	Check operation. Repair if damaged. Check toe-in. Adjust if necessary.			0	0	0	0	0

## 8-4 Periodic Maintenance and Adjustment

		Whichever		INITIAL			EVERY	
			Month	1	3	6	6	12
ITEM	ROUTINE	Comes first	Km (Mi)	320 (200)	1,200 (750)	2,400 (1,500)	2,400 (1,500)	4,800 (3,000)
			Hours	20	75	150	150	300
Front and rear suspension*	r • Check operation. • Correct if necessary.					0		0
Rear arm pivot*	Lubricate every 6 months with lithium-soap-based grease.					0	0	0
Fittings and fastener*	Check all chassis fittings and fasteners.     Correct if necessary.			0	0	0	0	0
Lights and a witches*	Check operation. Adjust headlight beams.		0	0	0	0	0	
EFI	Use EFI diagnostic apparatus for inspection		0	0	0	0	0	

<sup>★</sup>Since this may require special tools, data and technical skills, have a dealer perform this service.

#### NOTE:

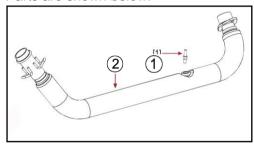
Brake fluid replacement:

- Recommended brake fluid: DOT 4
- When disassembling the master cylinders or calipers, replace the brake fluid.
- Periodically check the brake fluid level and add fluid as required.
- For the inner parts of the master cylinders and calipers, replace the oil seals every two years.

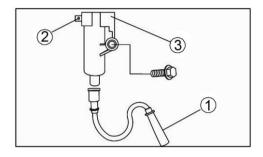
## **EFI System**

An EFI system is different from a carbureted engine. An EFI engine is composed of advanced parts such as an ECU, EFI wires, and sensors.

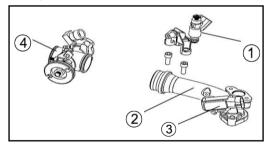
#### Parts are shown below:



- ① Oxygen sensor
- ② Exhaust pipe



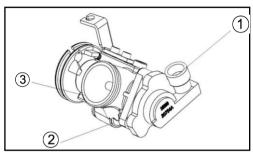
- ① High voltage wire ② Ignition signal plug
- ③ Ignition coil



- 1 Fuel injector
- 2 Elbow pipe, inlet pipe

## 8-6 Periodic Maintenance and Adjustment

- ③ Intake air temperature sensor/ pressure sensor
- 4)Duct, dampers



①Air damper degree sensor ②Idle speed step motor ③Air damper

#### **Throttle Valve**

Adjusts the inlet air flow

**Idle speed step motor** Stabilizes the idle speed

# Fuel Injection Tap Injects fuel into the fuel cylinder.

## Inlet temperature sensor

Monitors the air intake temperature to the engine, the ECU automatically adjusts the fuel injection according to the temperature.

## Inlet pressure sensor

Monitors the inner pressure of the inlet line, the operation of the engine is determined both by the throttle valve's angle and the inlet line pressure. The ECU adjusts the injectors based on the inner pressure and the angle of the throttle valve. The output power and torque are adjusted by changing the injection quantity.

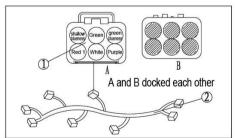
## **Ignition signal**

The generator provides the ECU with the proper ignition timing signal.

At the center of the EFI system, this model adopts a specially designed microcomputer chip controller, which controls the injection quantity by calculating the information gathered by the sensors. This enables the engine to operate with better fuel consumption and less emissions.

## **EFI** system examination

If the EFI system fails, the associated fault code is shown on the display panel. You can diagnose the system using an EFI scanner (purchased from your dealer). This scanner provides detailed fault code information. An owner's manual for the fault code is available.



1 Diagnostic apparatus 2 EFI cables

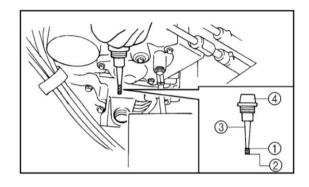
## Oil and oil filter

Always check the oil level before starting the ATV. Change the oil at intervals listed in the Maintenance chart.

## Checking oil level

- 1. Place ATV on a flat surface
- 2. Remove oil cap (4)
- 3. Check oil level on the dipstick (3)
- 4. If oil is below the minimum oil level (2) add oil until the maximum oil level is reached (1). Note: Do not fill above maximum oil level (1).

Oil type: SAE10W-30 or SAE10W-40

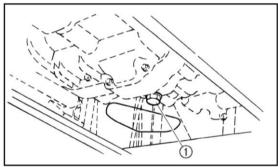


- 1) The maximum oil level
- ② The minimum oil level
  - 3 Dipstick 4 Oil cap

## Periodic Maintenance and Adjustment 8-9

## Changing engine oil

- 1. Start the engine and allow to warm up approximately 2 3 minutes then shut off.
- 2. Place an oil reclaim container under the ATV.
- 3. Remove the oil drain bolt (1) and allow the oil to drain into the container.



- (1) Oil drainage bolt
- 4. Once the oil is drained re-install the oil drain bolt (1) and tighten to the proper torque.

Torque spec – Oil drain bolt 22ft-lbf (3.0m-kgf, 30Nm)

Oil capacity

Without changing the oil filter:

2.01 US qt (1.67 lmp qt,1.90L ) Changing the oil filter:

2.11 US qt (1.76lmp qt,2.00L)

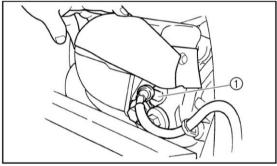
#### NOTE:

In order to avoid clutch slippage (because the oil also lubricates the clutch), do not mix any other chemicals with the oil.

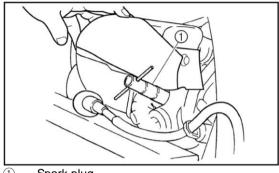
Do not use "CD" standard oil or any other standard higher than the specified oil. Do not use "ENERGY CONVERSING II" oil or other oils higher than this standard.

# Checking the spark plug

- 1. Locate the spark plug
- 2. Remove the plug cap (1) from the spark plug.



- ① Spark plug cap
- 3. Remove the spark plug with the spark plug wrench supplied in the tool kit.



Spark plug

## Inspection

Inspect the plug for carbon deposits and clean if necessary. If plug shows excessive carbon, replace the plug.

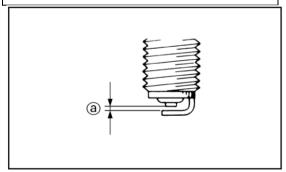
Specified spark plug CR7HSA

#### Periodic Maintenance and Adjustment 8-11

#### **Spark Plug Gap**

1. Use a thickness feeler gauge to inspect the spark plug gap. If not within specification, change the gap.

Clearance of spark plug gap 0.024-0.028in (0.6-0.7mm)



a Clearance of spark plug

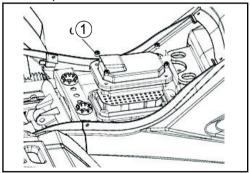
Re-install the inspected plug or new plug until finger tight. Finish tightening plug with a wrench. If the plug is a new plug, tighten approximately 1/2 turn more with the wrench.

If plug is an old plug, tighten approximately 1/8 turn more with a wrench.

Spark Plug Torque 12.7 ft-lbf (1.75 m-kgf, 17.5Nm)

#### Air Filter Removal and Cleaning

- 1. Locate the Air Filter housing under the seat.
- 2. Remove screws (1) holding the air filter cover in place.



Air filter cover screws

#### 8-12 Periodic Maintenance and Adjustment

- 3. Gently remove the sponge air filter element from the air filter housing.
- 4. Gently clean the sponge air filter element with water.
- 5. Squeeze out excess water from the element. Allow the element to dry completely.

#### WARNING

#### **POTENTIAL HAZARD**

Using a low flash point solvent or gasoline to clean the air filter element. POSSIBLE HAZARDS

Can catch fire which could result in severe injury

#### **HOW TO AVOID THE HAZARDS**

Use water to clean element.

#### CAUTION:

Be careful not to tear the element while cleaning.

- 6. If air filter element is damaged, replace.
- 7. Apply Air filter oil to the sponge element then squeeze out excess oil.

8. Re-install air filter element in air filter housing

#### NOTE:

The air filter element should be cleaned once every 20-40 hours. If ATV is ridden in wet, muddy or dusty conditions, the air filter element should be cleaned more often. Each time the air filter is cleaned and re-installed, the air filter housing should be inspected for air leaks or damage of any kind

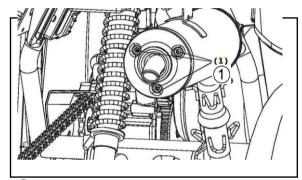
#### **CAUTION:**

Operating the ATV without the air filter installed can cause severe engine damage. Never operate the ATV with a damaged or missing air filter element.

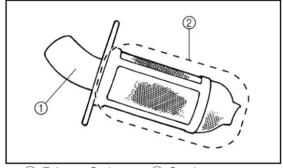
#### Periodic Maintenance and Adjustment 8-13

## **Cleaning Spark Arrestor**

1. Locate and remove the 3 bolts (1) holding the spark arrestor in place on back of the muffler.



- 1 Spark Arrestor bolts
- 2. Remove spark arrestor(2) from muffler.
- 3. Gently tap the spark arrestor on a hard surface to remove sediment.
- 4. Use a wire brush to loosen and remove any additional sediment (2).



- ① Exhaust Outlet
- ② Spark arrestor
- 4. Re-install the spark arrestor
- 5. Re-install the 3 bolts (1) that hold the spark arrestor in place.

Torque spec - Spark Arrestor bolts 6.9 ft-lbf (0.95 m-kgf, 9.5N-m)

#### WARNING

#### **POTENTIAL HAZARD**

Cleaning the spark arrestor while the engine is hot.

#### **POSSIBLE HAZARDS**

Attempting to clean the Spark Arrestor while the engine is hot could result in in severe burn injuries.

#### **HOW TO AVOID THE HAZARDS**

Make sure muffler is cool before cleaning Spark Arrestor.

#### **Idle Adjustment**

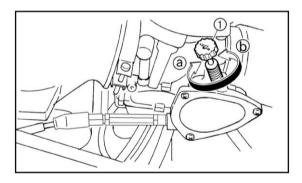
To adjust idle speed:

- 1. Locate the idle adjustment screw (1)
- 2. Allow the engine to warm up approximately five minutes
- 3. With the engine running, turn the idle adjustment screw in or out (a,b) at small increments until the correct idle is achieved.

#### NOTE:

A service center can perform this adjustment. A diagnostic tachometer is required for this adjustment.

specified idle-speed 1450-1550 r/min



(1) Idle adjustment

#### Valve clearance

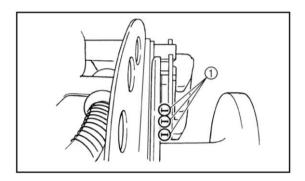
Adjusting the valves should be done by an authorized service center or comparable servicing dealer. Proper valve gap will help ATV to run at peak performance. Follow the valve gap adjustment intervals listed in the maintenance chart.

Proper Valve Clearance Intake: 0.08 – 0.12 mm Exhaust: 0.13 – 0.17 mm

#### 8-16 Periodic Maintenance and Adjustment

#### Check the front brake pads

To inspect front brake pad wear, locate the wear marks located on the brake pad assembly scale. If wear is past the last mark on the caliper assembly the brake pads will need to be replaced.

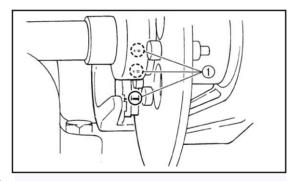


## CAUTION:

Remove wheels before checking brake pads.

## Check rear brake pads

To inspect rear brake pad wear, locate the wear marks located on the brake pad assembly scale. If the wear marks are not visible on the caliper assembly the brake pads will need to be replaced.



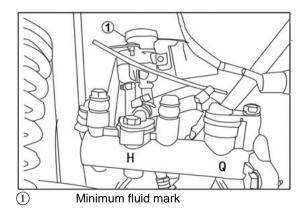
1 Brake pad wear indicators

Check brake fluid level

#### Changing brake fluid

Brake fluid should be replaced by an authorized Hisun Authorized service center

- Replace seals every two years.
- Replace brake hoses every four years.



When checking brake fluid, make sure the brake fluid bottle is level. Brake fluid

should be above the minimum mark on the bottle. Add brake fluid if necessary. Low or no brake fluid could cause air to enter the braking system which could cause a loss of braking ability.

If brake fluid is low, check the brake system for leaks or brake pads for wear.

## Adding or changing brake fluid

Fill with recommended brake fluid.

Recommended brake fluid: DOT 4

- Mixed brake fluids can produce chemical reactions and affect braking function. Always use the same type of brake fluid when adding.
- Never allow water to enter into the brake fluid container, doing so could result in air pockets and brake failure.
- Brake fluid can corrode plastic and painted surfaces. Wipe up any drips or spills after filling.

#### 8-18 Periodic Maintenance and Adjustment

#### **Battery**

This ATV is equipped with a sealed-type battery. Therefore it is not necessary to check the electrolyte or add distilled water in the battery. If the battery seems to have discharged, consult a dealer.

#### CAUTION:

Do not try to remove the sealing caps of the battery cells. You may damage the battery.

#### **WARNING**

#### **POTENTIAL HAZARD**

Failure to handle batteries or battery electrolyte carefully.

#### WHAT CAN HAPPEN

You could be poisoned. You could be severely burned by the sulfuric acid in battery electrolyte. Batteries produce explosive gases.

#### **HOW TO AVOID THE HAZARD**

Avoid contact with skin, eyes or clothing.

Always shield eyes when working near batteries. Keep out of reach of children.

Antidote:

**EXTERNAL:** Flush with water.

INTERNAL: Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Get prompt medical attention.

EYES: Flush with water for 15 minutes and get prompt medical attention. Keep batteries away from sparks, flames, cigarettes or other sources of ignition. Ventilate when charging or using in a closed space.

## **Battery maintenance**

1. When the ATV is not used for a month or longer, remove the battery and store it in a cool, dark place. Completely recharge the battery before reinstallation.

#### **Battery**

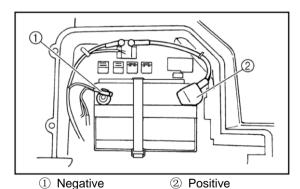
The battery is a sealed type battery. There is no need to check electrolyte level or add water to battery.

#### Periodic Maintenance and Adjustment 8-19

#### **CAUTION:**

Sealed battery need a special battery charger. Using a common type of battery charger will result in a shorter life.

2. Verify that cables are properly routed when install battery to the vehicle.



Displace fuses

The main fuse and main fuse box are placed at the rear portion of the ATV. To

access the fuse box shut off the main switch. Follow the steps below to inspect fuses:

1. Make sure key is in the OFF position.

#### **CAUTION:**

To avoid short circuits make sure the key is in the OFF position.

- 2. Open fuse box and locate bad fuse (fuse is bad if amperage bar in fuse is melted). If unsure if fuse is bad, check fuse with a fuse tester.
- 3. Replace fuse with a new one.
- 4. Once fuse is replaced, test new fuse under load by turning on switch.
- 5. If fuse fails again, contact a service center for repair. Do not continue to run your ATV if a fuse continues to fail until a service center has repaired the issue.

.

## **WARNING**

#### **Potential Danger**

Use incorrect fuse

#### **DANGERS MAY OCCUR**

Using an incorrect fuse can cause severe damage to the ATV and could result in a fire.

#### **HOW TO AVOID DANGEROUS**

Always use specified fuses and never use a replacement with defective materials.

## Changing headlight bulb

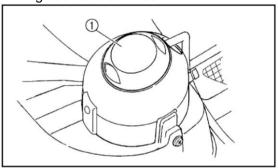
If a headlight bulb burns out, replace it as follows:

1. Pull off bulb holder cover (1) at the rear of the headlight.

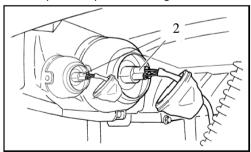
Note: Depending on your model, the headlight bulb cover on back of the headlight may just pull straight off or need to be pushed in and turned counter clockwise

2. Remove bulb holder (2) form headlight

housing by pushing in bulb holder and turning counter clockwise.



Cap of rear part of headlight



2 Cap of headlight bulb holder

#### 3. Remove defective bulb

## **₩** WARNING

#### **HIDDEN DANGER**

Headlight bulb may still be hot if lights were just turned off

#### **WHAT COULD HAPPEN**

Severe burns if touched

#### **HOW TO AVOID DANGER**

Make sure bulb is cool before touching or removing.

4.

① Do not touch the glass portion of the bulb.

#### **CAUTION:**

Do not touch the glass portion of the bulb with your fingers. Touching the glass with your fingers will allow oil from your skin to affect the transparency of the glass, light bulb luminosity and will shorten the life of the bulb. If you do touch the bulb, or the bulb comes in contact with oil or gasoline, clean bulb with alcohol and a clean rag.

- 5. Install new bulb into bulb holder by pressing in retainer and turning clockwise.
- 6. Reinstall the bulb and bulb holder into the headlight assembly by pushing in and turning clockwise.
- 7. Reinstall bulb holder cover.

#### **CAUTION:**

To keep moisture out of the headlight assembly make sure the bulb holder cover is installed correctly.

#### 8-22 Periodic Maintenance and Adjustment

- 8. Close the front cover.
- 9. If necessary, reconnect lights to wire harness.

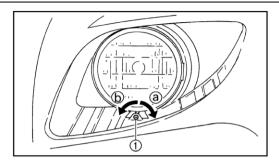
### Headlight beam adjustment

To raise the beam, turn the adjusting screw in direction (a).

To lower the beam, turn the adjusting screw in direction (b).

## CAUTION:

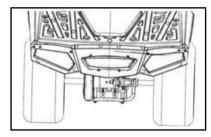
It is advisable to have a dealer make this adjustment.



1. Headlight beam adjusting screw

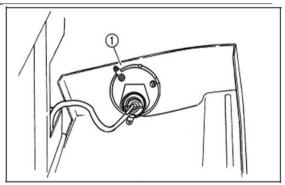
#### Periodic Maintenance and Adjustment 8-23

## Replacing taillight bulb.



Steps for replacing brake and tail light bulb:

- 1. Remove tail light bulb holder socket by turning counter clockwise.
- 2. Remove bulb from socket assembly by pushing in gently and turning bulb counter clockwise.
- 3. Insert new bulb by pushing in socket assembly and turning clockwise
- 4. Reinstall tail light bulb holder into the tail light assembly by pushing in and turning clockwise.



Taillight socket

## **ATV Troubleshooting**

This section provides troubleshooting for the ATV.

Some ATV maintenance requires special techniques. If you encounter a problem which you cannot solve, please contact a dealer.

#### WARNING

#### **POTENTIAL HAZARD:**

Checking the fuel system while smoking or near an open flame.

#### **WHAT CAN HAPPEN:**

Fuel can ignite or explode, causing severe injury or property damage.

#### **HOW TO AVOID THE HAZARD:**

Do not smoke when checking the fuel system. Make sure there are no open flames or sparks in the area, including pilot lights from water heaters or furnaces.

## Periodic Maintenance and Adjustment 8-25

Sheet	Sheet 1: Body Panel troubleshooting				
S/N	Problems	Solutions			
		Check if the frame and support brackets are deformed or broken.  Repair and touch-up with paint as necessary			
1	Panel damaged during off-road driving	2. Replace any damaged body panels.			
		3. Re-attach new stickers and install warning placards with rivets.			
		Inspect bottom frame for damage and repair if needed			
2	Skid plate is damaged	2. Inspect bottom of engine for damage, make sure there are no leaks, repair if needed			
		3. Replace with new skid plate as necessary			

Sheet 2: Brake system troubleshooting

S/N	Problems	Solutions			
	Brake system seizing	Check if parking brake releases when returned to off position.			
1		Check brake discs on front and rear wheels for deformation.			
		3. Inspect brake calipers on front and rear wheels. Inspect hydraulic			

## 8-26 Periodic Maintenance and Adjustment

		•
		cylinder on calipers for blockage. Inspect calipers for any deformation
		1. Check if the brake disc wear limit has been exceeded. Replace disc if
		necessary
		2. Check whether the rotors or the disc brake pads have worn beyond limits
		or are contaminated by oil or other material which could reduce the braking
		performance. Change parts if necessary
2	Brake performance degradation	3. Check brake lines for leaks. Change brake lines if necessary.
-		4. Inspect push rod to master cylinder. Replace master cylinder if
		deformed.
		5. Check if brake lines have any air. If they do, use special brake bleeding
		tools to remove air.
		6. Check to see if there is sufficient brake fluid in brake reservoir. Brake
		fluid should be above the minimum mark.
3	When driving, front or rear brakes make sound or brake discs or rotors	Check if brake discs are deformed. Replace if needed.
		Check hydraulic cylinder on brake calipers for blockage, and
		calipers for deformation. Replace if needed.
turn red because of heat		Compete for defermation.

Sheet 3: Electrical system troubleshooting

S/N	Problems	Solutions	
	Lights not working	Check to be sure the light switch is working. Replace if needed	
1		2. Check to see if wires are damaged. Replace if needed	
		3. Check to see if the lights are damaged or blown out. Replace if	

## Periodic Maintenance and Adjustment 8-27

		needed
5		Check speed sensor for damage. Replace if needed
2	Display is abnormal on the display panel	Check display panel for damage. Replace if needed
	ine display parier	3. Check surface of speed sensor for oxidation. Replace if needed
	Shutdown switch does not turn off the engine.	1. Check to see if the shutdown switch has a problem. Replaced if needed
3		2. Check wires for damage. Replace or repair wire if needed
		3. Check to see if the ECU or the EFI systems is damaged. Have a service center repair if needed

Sheet 4: Operational troubleshooting

S/N	Problems	Solutions	
1	Steering is loose	Check to see if the nuts on the steering column, steering knuckles and steering stem are loose. Tighten if necessary.      Check steering column for damage.	
2	Front wheels shake when	<ol> <li>Inspect tie rods for looseness or damage. Replace if needed</li> <li>Inspect tie rods for looseness or damage. Replace if needed</li> <li>Check lug nuts on front wheels for looseness. Tighten if needed.</li> </ol>	
	driving.	Inspect bearings in the front wheel hub for damage or excessive wear.  Replace bearings if necessary,	

## 8-28 Periodic Maintenance and Adjustment

		4. Check all rubber bushings for damage in front end assembly.	
Replace if needed.			
3	Rear wheels shake while driving	Check bearings in the rear axle assembly for damage. Replace if needed	
		Check swing arm bearing for damage. Replace if needed	
		3. Check retainer nuts holding rear wheels on for looseness or damage.	
		4. Check internal splines of rear wheel hub and outer splines of rear axle for excessive wear or damage. Replace axle or wheel hub if needed.	
		5. Check all rubber bushings for damage in rear end assembly.	
		Replace if needed.	

## Sheet 5: Engine troubleshooting

S/N	Problems	Solutions
		1. Make sure key and emergency shut off switch are at the "ON" position.
	Engine will not start	2. Check fuel level
1		3. Check to make sure spark plug is secure and that the spark plug cap is
		attached.
		4. Inspect electrical circuits. A service center can perform this
		diagnostic.
2	Engine idle cannot be	Inspect throttle cable, make sure it is not sticking
	adjusted using computer	2. Check to see if the ECU is damaged. Service center can diagnose.
3	Idle Unstable	1. Check battery with voltage meter, if voltage is lower than the specified

## Periodic Maintenance and Adjustment 8-29

		value, recharge or replace battery. A service center can perform this diagnosis
		2. Check to see if the output voltage of the rectifier when the engine is idling is lower than the specified value. A service center can perform this diagnosis
	3. Check to determine if the EFI system has problems. A service center can perform this diagnosis	
		Check for air leaks in the air filter or air inlet pipe. Replace if needed
4	Engine backfires	2. Check to see if the connection between the exhaust pipe and engine or the exhaust pipe and muffler has an air leak. Replace or repair if needed
		3. Check grade of gasoline, if too low, engine may backfire.
5	Engine is hard to start at lower temperatures.	1. Check battery voltage in cold weather. Battery may need to be recharged.
5		2. If outside temperature is below 0° F, move the ATV to a warmer place. Once ATV warms up it should start.

#### 9-1 Cleaning and Storage

#### Cleaning

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

- 1. Before Cleaning
  - a. Cover exhaust port with a plastic bag and a rubber band.
  - b. Make sure spark plug is installed as well as the air filter cover to prevent water from entering engine.
- 2. Wash ATV with mild soap and water
- 3. Rinse with low pressure clean fresh water.

#### CAUTION:

If a pressure washer system is used for cleaning (not recommended), exercise extreme caution. High pressure water can damage components and can remove paint and decals. Avoid directing the high pressure water stream at the following items: Wheel bearings, brake components, transmission seals, engine, radiator etc.

- 4. Dry surfaces with a clean, scratch proof, cloth or chamois to prevent water spots.
- 5. Clean and protect the seat with a vinyl protectant.
- 6. Wax metal painted surfaces and smooth plastics with a scratchproof wax.

#### **▲** WARNING

#### **POTENTIAL HAZARD**

Diving the ATV with wet brakes

#### WHAT COULD HAPPEN

Poor braking performance which could result in an accident.

#### **HOW TO AVOID**

After cleaning ATV, drive at slow speeds and apply the brakes to allow friction to dry out the pads. Make sure brakes are working properly before normal operation.

#### **STORAGE**

1. Fill the fuel tank with fresh gasoline and fuel stabilizer (fuel stabilizer can be purchased at your dealer or any motorcycle, small engine or car parts store). Start engine and allow to run for 5 minutes so the stabilizer can disperse through the fuel tank and carburetor.

#### Fuel Stabilizer:

To get the correct ratio of fuel stabilizer to gasoline, follow the manufacture instructions on the fuel stabilizer.

- 2. Change engine oil.
- 3. Remove spark plug and add a teaspoon of SAE10W30 OR 10W40 motor oil in the spark plug hole then re-install the spark plug.
- 4. Without attaching the spark plug cable to

#### 9-3 Cleaning and Storage

the spark plug, turn the engine over a few times by pressing the starter button. This will lubricate and protect the pistons and piston housing walls from moisture.

- 5. Re-attach the spark plug wire on the spark plug
- 6. Lift up the ATV and place on jack stands or similar objects. The ATV should be stored with the wheels off the ground.
- 7. Cover the exhaust port with a plastic bag and rubber band to keep any moisture from entering.
- 8. Apply a thin coat of oil to all metal part surfaces. Do not apply oil to any plastic, vinyl or rubber parts.
- 9. Remove battery from the ATV. Fully

charge battery and store out of the sun in a cool, dry place. Check battery voltage each month during storage and recharge as needed to maintain a full charge.

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Inspect and repair ATV as needed before storage.

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- 8. Apply a thin coat of oil to all metal part surfaces. Do not apply oil to any plastic, vinyl or rubber parts.
- 9. Remove battery from the ATV. Fully

charge battery and store out of the sun in a cool, dry place. Check battery voltage each month during storage and recharge as needed to maintain a full charge.

#### **CAUTION:**

Inspect and repair ATV as needed before storage.

Model	Axis 110 / Forge 110
Dimensions:	
Overall length	66.3 in (1683 mm)
Overall width	40.9 in (1039 mm)
Overall height	40.6 in (1033mm)
Seat height	25.2 in (640 mm)
Wheelbase	44.1 in (1120 mm)
Ground clearance	4.7 in (120 mm)
Minimum turning radius	122 in (3100 mm)
Basic weight:	
With oil and full fuel tank	375 lbs (170kg)
Engine:	-
Engine type	4-stroke, Air cooled, SOHC
Cylinder arrangement	Single cylinder
Displacement	108cm <sup>3</sup> for HS110ATV
Bore × stroke	52.4×50 mm(2.06×1.97 in)

## 10-2 Specifications

Model	Axis 110 / Forge 110
Compression ratio Starting system Lubrication system	9.5:1 Electric starter Wet sump
Engine oil: Type	-4° 14° 32° 50° 68° 86° 104° 122°F
Recommended engine oil classification	API Service SE, SF, SG type or higher  CAUTION:  In order to prevent clutch slippage (since the engine oil also lubricates the clutch), do not mix any chemical additives. Do not use oils with a diesel specification of "CD" or oils of a higher quality than specified. In addition, do

Model	Axis 110 / Forge 110
Quantity: Without oil filter cartridge replacement With oil filter cartridge replacement	not use oils labeled " ENERGY CONSERVING II" or higher.
	2.01 US 2 L (1.67 Imp qt. 2 L) 2.11 US qt. (1.76 Imp qt. 2.0 L)
Final gear case oil:	
Type	SAE80 API GL-4 Hypoid gear oil
Quantity	0.84 US qt (0.7 Imp qt, 0.8L)
Air filter:	Wet filter element type
Fuel:	
Type	UNLEADED GASOLINE ONLY
Fuel tank capacity	1.85US gal (1.54 lmp gal, 7 L)
Throttle valve: Type / quantity	D26/1
Spark plug:	
Type/manufacturer	CR7HSA
Spark plug gap	0.023-0.028 in (0.6-0.7 mm)
Clutch type:	Wet, centrifugal automatic

## 10-4 Specifications

Model			Axis 110 / Forge 110
Transmission:			
Primary ration			3.72(67/18)
Secondary ration			1.88(32/17)
Reverse gear			2.12(36/17)
Final drive ratio			2.62(34/13)
Transmission type			CVT-belt automatic
Operation			Right hand operation
Tire:			
Туре			Tubeless
Size		front	19×7-8
		rear	18×9.5-8
Brake:			
Front brake	type		Dual disc brake
	operation		right hand operation
Rear brake	type		single disc brake
	operation		right foot operation
Suspension:			
Front suspension			Double swing arm
Rear suspension			Single swing arm

Model	Axis 110 / Forge 110
Vibration Damper	
Front Vibration Damper	Disc Spring/Oil Hydraulic Vibration Damper
Rear Vibration Damper	Disc Spring/Oil Hydraulic Vibration Damper
Wheel travel:	
Front wheel travel	10.7in (273mm)
Rear wheel travel	11.4in (290mm)
Electrical:	
Ignition system	ECU
Generator system	A.C. magneto
Battery type	YTX5L-BS
Battery capacity	12V4.2 Ah
Headlight type: HS1	

## 10-6 Specifications

Model	Axis 110 / Forge 110
Bulb voltage, wattage ×quantity:	
Head light	12 V, 35 W / 0.5 W×2
Full beam	12 V, /55W×2
Low beam	12 V, /55W×2
Clearance light	LED/0.6W×2
Tail/brake light	2V/5.0W/21.0W
Front turning lights	LED 0.7W×2W
Rear turning lights	LED 0.85×2W
Indicator light:	
Neutral indicator	LED
Forward indicator	LED
Reverse indicator	LED
Parking indicator	LED
Full beam indicator	LED
Turning indicator	LED
Fuses:	
Main fuse	30A
Backup fuse	30A

## **Fault Code of Electronic Injection System**

DTC Number	DTC Description	Related Calibration	HEX	DEC
P0107	MAP Circuit Low Voltage or Open	KsDGDM_MAP_ShortLow	107	263
P0108	MAP Circuit High Voltage	KsDGDM_MAP_ShortHigh	108	264
P0112	IAT Circuit Low Voltage	KsDGDM_IAT_ShortLow	112	274
P0113	IAT Circuit High Voltage or Open	KsDGDM_IAT_ShortHigh	113	275
P0117	Coolant/Oil Temperature Sensor Circuit Low Voltage	KsDGDM_CoolantShortLow	117	279
P0118	Coolant/Oil Temperature Sensor Circuit High Voltage or Open	KsDGDM_CoolantShortHigh	118	280
P0122	TPS Circuit Low Voltage or Open	KsDGDM_TPS_ShortLow	122	290
P0123	TPS Circuit High Voltage	KsDGDM_TPS_ShortHigh	123	291
P0131	O2S 1 Circuit Low Voltage	KsDGDM_O2_1_ShortLow	131	305

## 11-2 Fault Code of Electronic Injection System

P0132	O2S 1 Circuit High Voltage	KsDGDM_O2_1_ShortHigh	132	306
P0031	O2S Heater Circuit High Voltage	KsDGDM_O2_HeaterShortHigh	31	49
P0032	O2S Heater Circuit Low Voltage	KsDGDM_O2_HeaterShortLow	32	50
P0201	Injector 1 Circuit Malfunction	KsDGDM_INJ_CYL_A_Fault	201	513
P0202	Injector 2 Circuit Malfunction	KsDGDM_INJ_CYL_B_Fault	202	514
P0230	FPR Coil Circuit Low Voltage or Open	KsDGDM_FPP_CircuitShortLow	230	560
P0232	FPR Coil Circuit High Voltage	KsDGDM_FPP_CircuitShortHigh	232	562
P0336	CKP Sensor Noisy Signal	KsDGDM_CrankNoisySignal	336	822
P0337	CKP Sensor No Signal	KsDGDM_CrankNoSignal	337	823
P0351	Cylinder 1 Ignition Coil Malfunction	KsDGDM_EST_A_Fault	351	849
P0352	Cylinder 2 Ignition Coil Malfunction	KsDGDM_EST_B_Fault	352	850
P0505	Idle Speed Control Error	KsDGDM_IdleControl	505	1285

## Fault Code of Electronic Injection System 11-3

P0562	System Voltage Low	KsDGDM_SysVoltLow	562	1378
P0563	System Voltage High	KsDGDM_SysVoltHigh	563	1379
P0650	MIL Circuit Malfunction	KsDGDM_MIL_Circuit	650	1616
P1693	Tachometer Circuit Low Voltage	KsDGDM_TAC_Circuit_Low	1693	5779
P1694	Tachometer Circuit High Voltage	KsDGDM_TAC_Circuit_High	1694	5780
P0137	O2S 2 Circuit Low Voltage	KsDGDM_O2_2_ShortLow	137	311
P0138	O2S 2 Circuit High Voltage	KsDGDM_O2_2_ShortHigh	138	312
P0038	O2S Heater 2 Circuit High Voltage	KsDGDM_O2_HeaterShortHigh	38	56
P0037	O2S Heater 2 Circuit Low Voltage	KsDGDM_O2_HeaterShortLow	37	55
P0500	VSS No Signal	KsDGDM_VSS_NoSignal	500	1280
P0850	Park Neutral Switch Error	KsDGDM_ParkNeutralSwitch	850	2128
P0445	CCP short to high	KsDGDM_CCP_CircuitShortHigh	445	1093
P0444	CCP short to low/open	KsDGDM_CCP_CircuitShortLow	444	1092
P0171	BLM Max Adapt(Kohler Special)	KsFDIAG_BLM_MaxAdapt	171	369

## 11-4 Fault Code of Electronic Injection System

P0172	BLM Min Adapt(Kohler Special)	KsFDIAG_BLM_MinAdapt	172	370
P0174	PE System Lean(Kohler Special)	KsFDIAG_PESystLean	174	372



#### Hisun Motors Corp., U.S.A. Emission Control System Warranty Statement

#### YOUR WARRANTY RIGHTS AND OBLIGATIONS

The U.S. Environmental Protection Agency and **Hisun Motors Corp., U.S.A.** (hereinafter "**HISUN**") are pleased to explain the emission control system warranty on your Off-Road vehicle. New off-road motor vehicles must be designed, built and equipped to meet U.S. EPA Federal and California anti-smog standards. HISUN must warrant the emission control system on your vehicle for 5,000 km, or at least 30 months, whichever comes first, provided that there has been no abuse, neglect or improper maintenance of your vehicle. This off-road vehicle was designed to meet the emission standards for 10,000 km, or five years, whichever comes first.

Your emission control system warranty covers components whose failure would increase an engine's emissions of any regulated pollutant

Where a warrantable condition exists, HISUN will repair your vehicle at no cost to you, including diagnosis, parts and labor.



If an emission-related part on your vehicle is defective, the part will be repaired or Hisun Motors Corp., U.S.A. Emission Control System Warranty Statement

replaced by HISUN. This is your EMISSION CONTROL SYSTEM WARRANTY.

**NOTICE!** Use of this vehicle in any type of competitive event completely and absolutely voids this and all other warranties offered by HISUN.

#### **OWNER'S WARRANTY RESPONSIBILITIES**

As the vehicle owner, you are responsible for the performance of the required maintenance listed in your owner's manual. HISUN recommends that you retain all receipts covering maintenance on your vehicle, but HISUN cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

You are responsible for presenting your vehicle to the HISUN dealer as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of



time, not to exceed 30 days.

As the vehicle owner, you should be aware that HISUN may deny your warranty Hisun Motors Corp., U.S.A. Emission Control System Warranty Statement

coverage if your vehicle or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

If you use your vehicle in any type of competitive event, this warranty is immediately and completely void.

If you have any questions regarding your warranty rights and responsibilities, you should contact Hisun Motors Corp., U.S.A., 310 E, University Drive, McKinney, TX 75069 (Phone: 972-446-0760 or Toll Free: 877-838-6188), or the U.S. Environmental Protection Agency at 2000 Traverwood Drive, Ann Arbor, MI 48105.



# Hisun Motors Corp., U.S.A. Limited Warranty on Emission Control System YOUR WARRANTY RIGHTS AND OBLIGATIONS

Hisun Motors Corp., U.S.A. warrants that each new off-road vehicle:

- A. is designed, built and equipped so as to conform at the time of initial retail purchase with all applicable regulations of the United States Environmental Protection Agency, and
- B. is free from defects in material and workmanship which cause such vehicle to fail to conform to applicable regulations of the United States Environmental Protection Agency for the periods specified above.
- I. Coverage. Warranty defects shall be remedied during customary business hours at any authorized HISUN dealer located within the United States of America in compliance with the Clean Air Act and applicable regulations of the United States Environmental Protection Agency. Any part or parts replaced under this warranty shall become the property of HISUN.



- **II.** Limitations This Emission Control System Warranty shall not cover any of the following:
  - A. Repair or replacement as a result of
    - (1) accident,
    - (2) misuse,
    - (3) repairs improperly performed or replacements improperly installed, unless performed by a HISUN authorized dealer,
    - (4) use of improper replacement parts or accessories not conforming to specifications set forth by HISUN, which adversely affect performance and/or
    - (5) Use in competitive racing or related events.
  - **B.** Inspections, replacement of parts and other services and adjustments required for required maintenance.



**C.** Any vehicle equipped with an odometer or hour meter on which the odometer mileage or hour meter reading has been changed so that actual mileage cannot be readily determined.

### III. Limited Liability

**A.** The liability of HISUN under this Emission Control System Warranty is limited solely to the remedying of defects in material or workmanship by an authorized HISUN dealer at its place of business during customary business hours. This warranty does not cover inconvenience or loss of use of the vehicle or transportation of the vehicle to or from the HISUN dealer. HISUN shall not be liable for any other expenses, loss or damage, whether direct, indidental, consequential or exemplary arising in connection with the sale or use of or inability to use the vehicle for any purpose. Some states do not allow the exclusion or limitation of any incidental or consequential damages, so the above limitations may not apply to you.



- **B.** No express emission control system warranty is given by HISUN except as specifically set forth herein. Any emission control system warranty implied by law, including any warranty of merchantability or fitness for a particular purpose, is limited to the express emission control system warranty terms stated in this warranty. The foregoing statements of warranty are exclusive and in lieu of all other remedies. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.
- **C.** No dealer is authorized to modify this Limited Emission Control System Warranty issued by HISUN.
- **IV. LEGAL RIGHTS**. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.
- **V.** This warranty is in addition to the limited vehicle warranty.
- VI. ADDITIONAL INFORMATION. Any replacement part that is equivalent in



performance and durability may be used in the performance of any maintenance or repairs by the owner. However, HISUN is not liable for these parts. The owner is responsible for the performance of all required maintenance. Such maintenance may be performed at a service establishment or by any individual. The warranty period begins when the vehicle is placed into service.

If you have any questions regarding your warranty rights and responsibilities, you should contact Hisun Motors Corp., U.S.A., or the U.S. Environmental Protection Agency at 2000 Traverwood Drive, Ann Arbor, MI 48105.

#### **Hisun Motors Corp., U.S.A.**

310 E. University Drive McKinney, TX 75069

Phone: 972-446-0760

Fax: 972-446-0765

Toll-Free: 877-838-6188



For your nearest HISUN dealer, call 1-(972) 446-0760 or visit hisunmotors.com. HISUN Motors Corp USA | McKinney, TX 75069

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